

District I

P.O. Box 1980, Hobbs, NM 88240

District II

P.O. Drawer DD, Artesia, NM 88211

District III

1000 Rio Brazos Rd. Aztec, NM 87410

Denny S. Foust
DEPUTY OIL & GAS INSPECTOR

SEP 26 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 OFFICE

Approved

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 29 - 6 Unit # 89

Well Name

Location: Unit or Qtr/Qtr Sec M SWSW Sec 11 T 29N R 6W County Rio Arriba

Pit Type: Separator X Dehydrator _____ Other _____

Land Type: BLM X State _____ Fee _____ Other _____

Pit Location: Pit dimensions: Length 15 ft, width 17 ft, depth 5 ft (Bedrock)
 (Attach diagram)

Reference: wellhead X other _____

Footage from reference: 55 ft

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

Depth to Ground Water: <u>45 ft</u>	<u>X</u>	Less than 50 feet	(20 points)	
(vertical distance from		50 ft to 99 feet	(10 points)	
contaminants to seasonal		Greater than 100 feet	(0 points)	<u>20</u>
highwater elevation of				
ground water)				

RECEIVED
 JUL 24 1997

Wellhead Protection Area:		Yes	(20 points)	
(less than 200 feet from a private		<u>X</u> No	(0 points)	<u>0</u>
domestic water source, or: less than				
1000 feet from all other water sources)				

OIL CON. DIV.
DIST. 3

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,	<u>X</u>	Greater than 1000 feet	(0 points)	<u>0</u>
irrigation canals and ditches.)				

RANKING SCORE (TOTAL POINTS): 20

Date Remediation Started: 1/4/94 Dated Completed: 11/22/95

Excavation X Approx. cubic yards 18

Landfarmed X Insitu Bioremediation _____

Other _____

Remediation Method: Onsite X Offsite _____

(Check all appropriate
sections)

General Description of Remedial Action- The site was assessed on 1/3/94. The pit was excavated to bedrock at a depth of 5 feet. The sample was tested and provided concentrations above NMOCD and BLM guidelines. A risk assessment was performed to determine risk to human health or environment. Risk analysis determined that vertical extent was established at bedrock and lateral extent was limited to within the excavated area and posed little to no risk to human health or environment. The landfarmed soil was determined to be within NMOCD and BLM guidelines on 11/22/95.

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 Center of pit

Sample depth 5' below ground level (bedrock)

Sample date 11/11/95 Sample time NA

Sample Results

Benzene(ppm) 0.0495

Total BTEX (PPM) 0.65

Field Headspace (ppm) 103

TPH 1230 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 7/22/99 PRINTED NAME Bob Wirtanen

SIGNATURE RA Wirtanen and TITLE Sr. Safety & Environmental Specialist

**Risk Assessment
San Juan 29-6 #89, DK**

Depth to Groundwater	45'
Distance to Water Source	>1000'
Distance to Surface Water	>1000'
TPH Limit (ppm)	100

The subject pit was located in silty sand 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 15' x 17' x 5' deep. Excavated soil amounted to 18 total cubic yards, and was landfarmed on location.

The excavation was assessed by Envirotech on 1/3/94. Two test holes were utilized for assessment. The test holes were established in the center of the pit with a total depth of 5 feet and approximately 10 feet north of the pit (down gradient) to a depth of 5 feet. Both test holes encountered hard bedrock at 5 feet. Headspace analysis of the test holes revealed a concentrations ranging from 277 parts per million (ppm) to 13.2 ppm and TPH levels from 9640 ppm to 22 ppm. Excavation of the walls and bottom was performed on 5/18/94, and 5/11/95. The excavation proceeded to a depth of 5 feet (bedrock) with further excavation along the north wall. Headspace analysis of the walls and bottom showed OVM levels ranging from 266 ppm to 3 ppm, and a TPH levels of 8340 ppm to 1230 ppm, utilizing EPA Method 418.1. A sample from the bottom, bedrock, (103 ppm : Headspace) was analyzed for Benzene, Toluene, ethyl Benzene, and Xylene (BTEX) utilizing EPA Method 8020. Results of the analysis provided concentrations within NMOCD and BLM guidelines (Benzene = 0.0495 ppm, Total BTEX = 0.65 ppm). The landfarm was tested on 11/22/95 by Envirotech and was found to be within closure guidelines (TPH = Non-Detect and an OVM reading of 0.0 ppm).

No groundwater was encountered, and first water was not recorded on the nearby cathodic well until a depth of 45 feet.

Having established vertical extent, hard bedrock at a depth of 5 feet below ground level and walls 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) 632-0615

PIT NO: PA112

C.D.C. NO: _____

FIELD REPORT: SITE ASSESSMENT

JOB No: 93163

PAGE No: 1 of 1

PROJECT: PIT ASSESSMENT

CLIENT: PHILLIPS PETROLEUM COMPANY

CONTRACTOR: ENVIROTECH INC.

EQUIPMENT USED: CASE EXTEND-A-DIG

DATE STARTED: 1-3-94

DATE FINISHED: 1-3-94

ENVIRO. SPCLT: REO

OPERATOR: Cimarron

ASSISTANT: K.S.

LOCATION: LEASE: San Juan 29-6 WELL: #89 QD: 980' FSL, 840' FWL (M)

SEC: 11 TWP: 29N RNG: 6W PM: NM CNTY: R.A. ST: NM PIT: Sep.

LAND USE: Range - Lease # NM 012698

SURFACE CONDITIONS: Earthen Pit - Fenced 22' x 22' - No surface stain

PIT CENTER IS LOCATED APPROXIMATELY 55 FEET N. 60 W. OF WELLHEAD.

CLOSURE STD: 100 ppm TPH

RANKING SCORE: 20

T1: Moist, gray/brown, silty sand - Light odor

T2: Moist, brown, sand - No odor

1412 : Dilute 10:1 = 482x2x10 = 9640 GAC#0350

11 x 2 = 22 GAC#0351

TEST HOLE LOGS

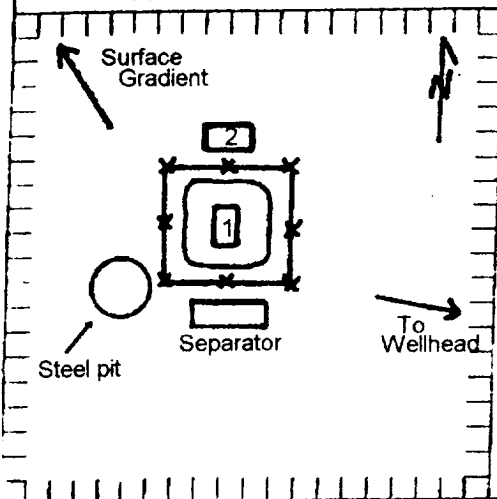
SAMPLE INVENTORY		
SMPL ID	SMPL TYPE	LABORATORY ANALYSIS
T1@ 5'	Soil	9640 ppm
T2@ 5'	Soil	22 ppm

SCALE



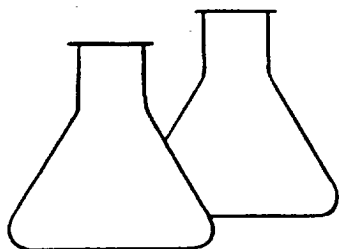
0 10 20 FEET

SITE DIAGRAM



GD	TH# 1			TH# 2			TH# 3			TH# 4		
	SOIL TYPE	SMPL TYPE	QVA/TPH	SOIL TYPE	SMPL TYPE	QVA/TPH	SOIL TYPE	SMPL TYPE	QVA/TPH	SOIL TYPE	SMPL TYPE	QVA/TPH
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												

SOIL TYPE: C - Clay, M - Silt, S - Sand, G - Gravel, P - Peat, L - Lignite, H - Hard, F - Fibrous, B - Bituminous, P - Peat, F - Fibrous, B - Bituminous



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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 @ 5'	Date Analyzed:	1-3-94
Project Location:	San Juan 29-6, #89	Date Reported:	1-6-94
Laboratory Number:	GAC0350	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
-----	-----	-----
Total Recoverable Petroleum Hydrocarbons	9600	100

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	-----	-----	-----
	676	784	15

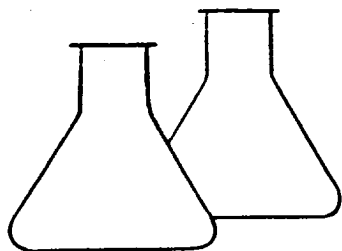
*Administrative Acceptance limits set at 30%.

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

Comments: Separator Pit PA112

R. E. O'Neil
Analyst

M. J. Young
Review



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FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	T2 @ 5'	Date Analyzed:	1-3-94
Project Location:	San Juan 29-6, #89	Date Reported:	1-6-94
Laboratory Number:	GAC0351	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
-----	-----	-----
Total Recoverable Petroleum Hydrocarbons	22	10

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	-----	-----	-----
	676	784	15

*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 PA112

R. E. O'Neill
Analyst

Marisa Young
Review

PIT NO: PAL12

C.D.C. NO: _____

FIELD REPORT: CLOSURE VERIFICATION

JOB NO: 93163

PAGE No: 1 of 1

LOCATION: NAME: San Juan 29-6 WELL #: 89 PIT: Sep.

DATE STARTED: _____
DATE FINISHED: 5-18-94

QUAD/UNIT: M SEC: 11 TWP: 29N RNG: 6W BM: NM CNTY: R.A. ST: NM

ENVIRONMENTAL REO
SPECIALIST: _____

QTR/FOOTAGE: 980' FSL, 840' FWL CONTRACTOR: Cimarron / Phelps

SOIL REMEDIATION: EXCAVATION APPROX. 15 FT. x 15 FT. x 5 FT. DEEP.

DISPOSAL FACILITY: On Site - Landfarm CUBIC YARDAGE:

LAND USE: Range LEASE: NM 012698

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 60 FEET N. 60 W. FROM WELLHEAD.

DEPTH TO GROUNDWATER: 45' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'

NHDCD RANKING SCORE: 20 NHDCD TPH CLOSURE STD: 100 PPM

SOIL AND EXCAVATION DESCRIPTION: Excavated into sandstone bedrock
No stain apparent - slight odor in bottom sandstone

FIELD 418.1 CALCULATIONS

FIELD 4181 CALCULATIONS						
SAMPLE I.D.	LAB No.	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
CB @ 5'	GAC#512	10.00	20	10	417	8340

SCALE

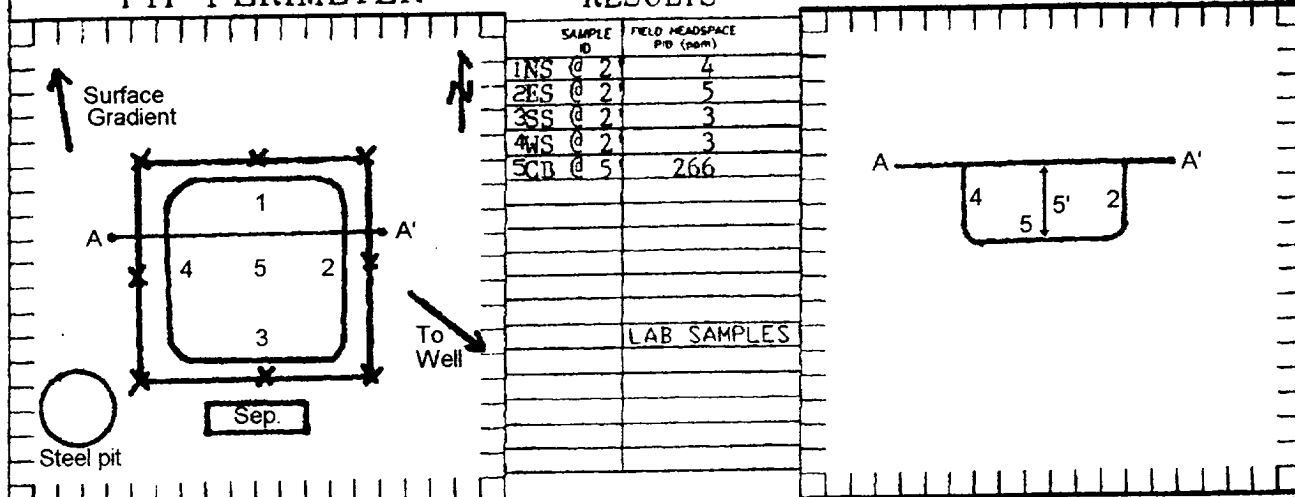
--	--

0 5 10 FEET

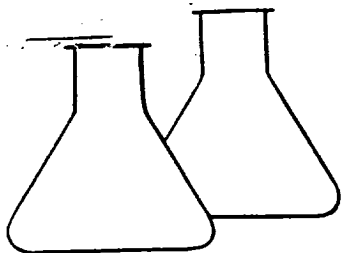
PIT PERIMETER

OVM RESULTS

PIT PROFILE



TRAVEL NOTES: CALLOUT: --- ONSITE: 5-18-94



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FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client: Phillips Petroleum
Sample ID: CB @ 5'
Project Location: San Juan 29-6 #89
Laboratory Number: GAC0512

Project #: 93163
Date Analyzed: 5-18-94
Date Reported: 5-18-94
Sample Matrix: Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	8300	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 PA112

R. E. O'Neil
Analyst

Morris S. Young
Review

CLIENT: PHILLIPS PETROLEUM**ENVIROTECH Inc.**PIT NO: PA1125798 US HWY. 84, FARMINGTON, NM 87401
(505) 832-0815C.O.C. NO: 4194**FIELD REPORT: CLOSURE VERIFICATION**JOB No: 93163PAGE No: 1 of 1LOCATION: NAME: San Juan 29-6 WELL #: 89 PIT: Sep.DATE STARTED: 5-11-95DATE FINISHED: 5-11-95QUAD/UNIT: M SEC: 11 TWP: 29N RNG: 6W BM: NM CNTY: R.A.ST.NMENVIRONMENTAL
SPECIALIST: CJCQTR/FOOTAGE: 980' FSL, 840' FWL CONTRACTOR: EnvirotechSOIL REMEDIATION: EXCAVATION APPROX. 15 FT. x 17 FT. x 5 FT. DEEP.DISPOSAL FACILITY: On-site Landfarm CUBIC YARDAGE: _____LAND USE: _____ LEASE: NM012698FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 54 FEET N 60 W FROM WELLHEAD.DEPTH TO GROUNDWATER: 45' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'NMDCB RANKING SCORE: 20 NMDCB TPH CLOSURE STD: 100 PPM

SOIL AND EXCAVATION DESCRIPTION:

Fail TPH

FIELD 4181 CALCULATIONS

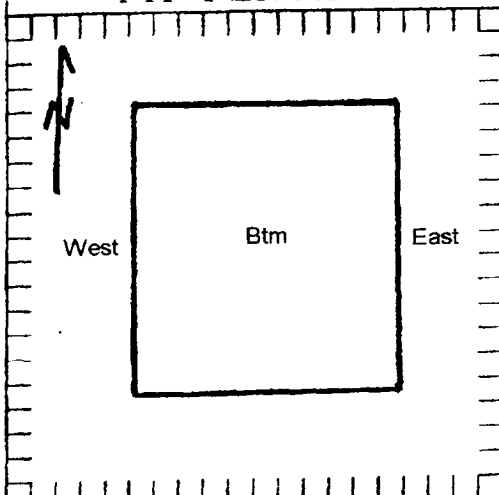
SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm

SCALE



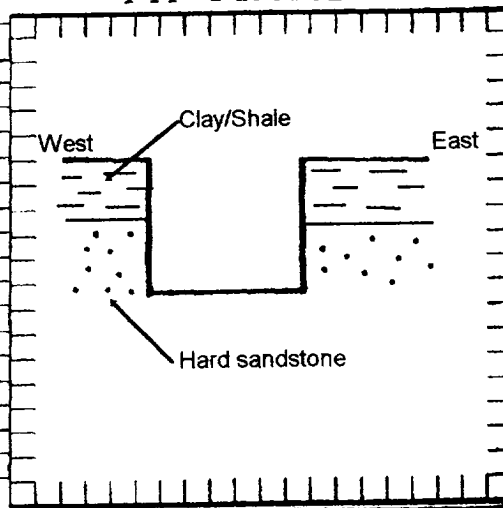
0 10 FEET

PIT PERIMETER

OVM
RESULTS

SAMPLE ID	FIELD HEADSPACE PHD (ppm)
1 Btm@5'	103
2	
3	
4	
5	
LAB SAMPLES	
Btm@5'	TPH 1230
	BTEX

PIT PROFILE



TRAVEL NOTES: CALLOUT: _____ ONSITE: _____

Run BTEX if TPH <100 ppm

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

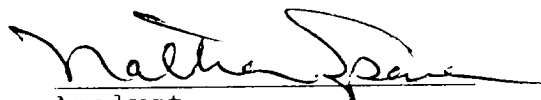
Client:	Phillips	Project #:	93163
Sample ID:	S.J. 29-6 #89	Date Reported:	05-12-95
Laboratory Number:	8489	Date Sampled:	05-11-95
Chain of Custody No:	4194	Date Received:	05-11-95
Sample Matrix:	Soil	Date Extracted:	05-12-95
Preservative:	Cool	Date Analyzed:	05-12-95
Condition:	Cool and Intact	Analysis Needed:	TPH

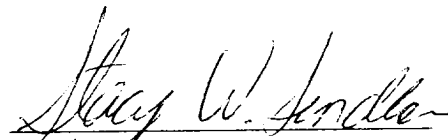
Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
-----	-----	-----
Total Petroleum Hydrocarbons	1230	10.0

ND = Parameter not detected at the stated detection limit.

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

Comments: Bottom @ 5'.


Analyst


Review

ENVIROTECH LABS

~~PRACTICAL SOLUTIONS FOR A BETTER TOMORROW~~

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Phillips	Project #:	93163
Sample ID:	S.J. 29-6 # 89	Date Reported:	05-12-95
Laboratory Number:	8489	Date Sampled:	05-11-95
Chain of Custody:	4194	Date Received:	05-11-95
Sample Matrix:	Soil	Date Analyzed:	05-11-95
Preservative:	Cool	Date Extracted:	05-11-95
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
-----	-----	-----
Benzene	49.5	13.3
Toluene	ND	19.9
Ethylbenzene	ND	19.9
p,m-Xylene	550	39.8
o-Xylene	46.9	19.9

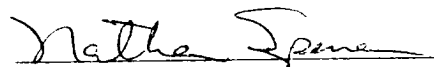
SURROGATE RECOVERIES:	Parameter	Percent Recovery
	-----	-----
	Trifluorotoluene	93 %
	Bromofluorobenzene	99 %

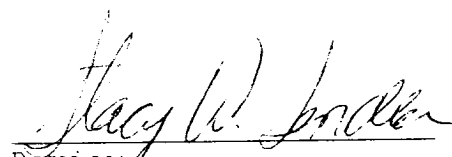
Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating
Solid Waste, SW-846, USEPA, Sept. 1986

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: Bottom @ 5'.


Analyst


Review

ENVIROTECH Inc.

5798 US HWY. 64, FARMINGTON, NM 87401
(505) 632-0815

PIT No: PA112
C.O.C #: _____

FIELD REPORT: REMEDIATION FACILITY CLOSURE VERIFICATION

JOB No: 93163
PAGE No: 1 of 1

FACILITY LOCATION: San Juan 29-6 #89

SOURCE LOCATION: _____

SOURCE LOCATION: _____

SOURCE LOCATION: _____

FACILITY CLASSIFICATION: Landfarm

PIT TYPE: Sep.

DATE STARTED: 10/5/94
DATE FINISHED: 10/5/94

ENVIRONMENTAL
SPECIALIST: CJC

SOIL REMEDIATION: QUANTITY: 13.5 cy # OF COMP. SAMPLES: 1

DIMENSIONS: 27' x 27' x 0.5'

VISIBLE OBSERVATIONS: Clay, tan, dry, slight odor, some rocks

SAMPLING PLAN: 1 5-point composite

FIELD NOTES & REMARKS: FACILITY CENTER LOCATED APPROX 20 YARDS SW FROM WELLHEAD.

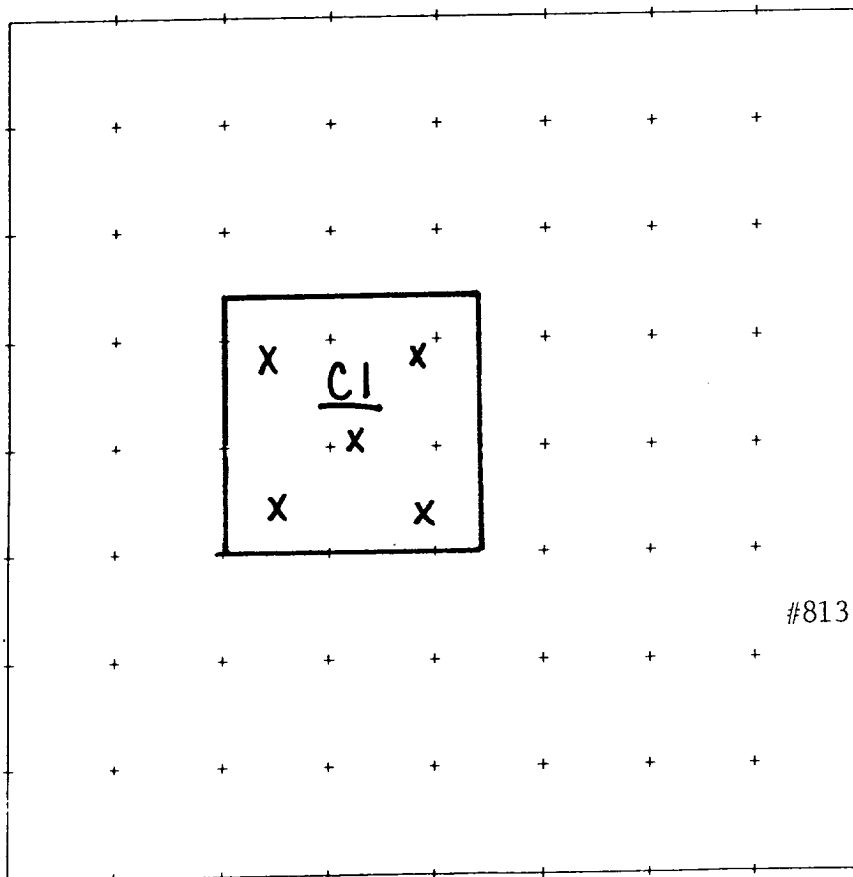
DEPTH TO GROUNDWATER: 45'
NEAREST WATER SOURCE/TYPE: >1000'
NEAREST SURFACE WATER: >1000'
MAX TPH PER NMOC: 100 ppm

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

$$C1 : \frac{20.0 \text{ ml}}{10.21 \text{ g}} \times 10 \times 63 = 1234.1$$

FACILITY DIAGRAM

GRID SCALE: 1" = 20'

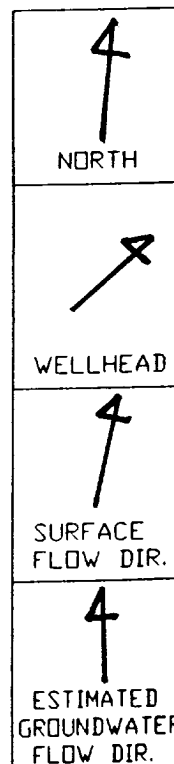


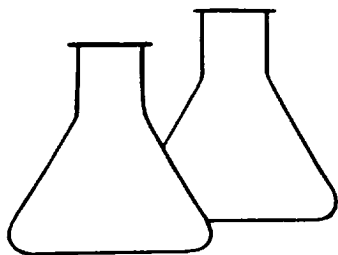
OVM RESULTS

SAMPLE ID:	FIELD HEADSPACE PID (ppm)
C1	6.0

LAB RESULTS

SAMPLE ID:	ANALYSIS REQUESTED:	RESULTS PPM:
C1	TPH	1234





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

FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	C-1	Date Analyzed:	10-05-94
Project Location:	San Juan 29-6 # 89	Date Reported:	10-05-94
Laboratory Number:	GAC0813	Sample Matrix:	Soil

Parameter -----	Result, mg/kg -----	Detection Limit, mg/kg -----
Total Recoverable Petroleum Hydrocarbons	1,234	98

ND = Not Detectable at stated detection limits.

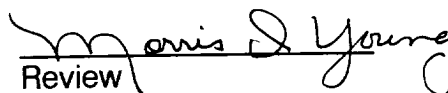
QA/QC:	QA/QC Sample TPH mg/kg -----	Duplicate TPH mg/kg -----	% *Diff. -----
	118	108	9

*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 PA112


Analyst


Review

ENVIROTECH Inc.

5798 US HWY. 64, FARMINGTON, NM 87401
(505) 632-0615

PIT No: PA112
C.O.C #: 4151

FIELD REPORT: REMEDIATION FACILITY CLOSURE VERIFICATION

JOB No: 93163
PAGE No: 1 of 1

FACILITY LOCATION: San Juan 29-6 # 89
SOURCE LOCATION: Section 11, T 29N, R 6W
SOURCE LOCATION:
SOURCE LOCATION:
FACILITY CLASSIFICATION: Landfarm PIT TYPE: Sep.

DATE STARTED: 4-11-95
DATE FINISHED: 4-11-95

ENVIRONMENTAL
SPECIALIST: CJC

SOIL REMEDIATION: QUANTITY: 15 cy # OF COMP. SAMPLES: 1
DIMENSIONS: 27' x 30' x 0.5'

VISIBLE OBSERVATIONS:
SAMPLING PLAN: 1 5-point composite

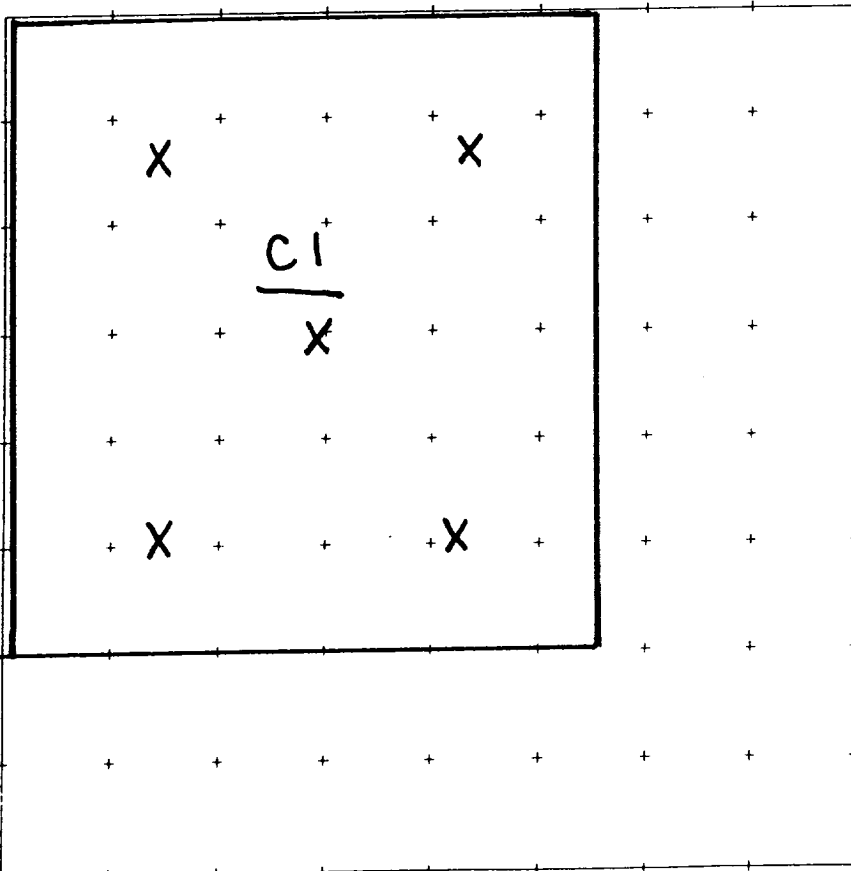
FIELD NOTES & REMARKS: FACILITY CENTER LOCATED APPROX 29 YARDS SW FROM WELLHEAD.

DEPTH TO GROUNDWATER: 45'
NEAREST WATER SOURCE/TYPE: >1000'
NEAREST SURFACE WATER: >1000'
MAX TPH PER NMDCD: 100 ppm

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

FACILITY DIAGRAM

GRID SCALE: 5'



OVM RESULTS

SAMPLE ID:	FIELD HEADSPACE PID (ppm)
C1	0.0

LAB RESULTS

SAMPLE ID:	ANALYSIS REQUESTED	RESULTS PPM
C1	TPH	761

4
↑

NORTH

4
↑

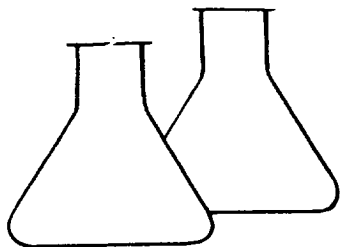
WELLHEAD

4
↙

SURFACE
FLOW DIR.

4
↙

ESTIMATED
GROUNDWATER
FLOW DIR.



ENVIROTECH LABS

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

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

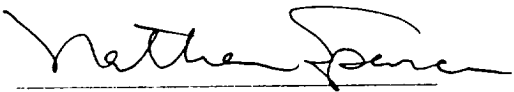
Client:	Phillips	Project #:	93163
Sample ID:	S.J.29-6 #89 C1	Date Reported:	04-13-95
Laboratory Number:	8343	Date Sampled:	04-11-95
Chain of Custody No:	4151	Date Received:	04-12-95
Sample Matrix:	Soil	Date Extracted:	04-12-95
Preservative:	Cool	Date Analyzed:	04-12-95
Condition:	Cool and Intact	Analysis Needed:	TPH

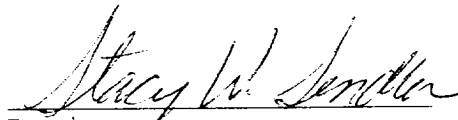
Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
-----	-----	-----
Total Petroleum Hydrocarbons	761	10.0

ND = Parameter not detected at the stated detection limit.

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

Comments:


Analyst


Review

CHAIN OF CUSTODY RECORD

Client/Project Name		Project Location		ANALYSIS/PARAMETERS										
Sample No./ Identification		Sample Date	Sample Time	Lab Number	Chain of Custody Tape No.	No. of Containers	TPH	BTEX						Remarks
S.J. 29-6 #103 C1		4-11-95	901	8341	soil	1	X							
S.J. 29-6 #14 A C1			1001	8342		1	X							
S.J. 29-6 #89 C1			1108	8343		1	X							
S.J. 29-5 #106 C1			1626	8344		1	X							
S.J. 30-5 #47 C1			1357	8345		1	X							
S.J. 31-6 #50 DK C1			1258	8346		1	X							
S.J. 30-5 #73 DK C1			1444	8347		1	X							
S.J. 29-5 #94 C1			1554	8348		1	X							
S.J. 29-5 #87 C1		✓	1707	8349		2	X		X					
S.J. 29-5 #87 C1		4-11-95	1707	8350										
Relinquished by: (Signature) C. Jack Collins		Date 4-12-95		Time 0713	Received by: (Signature) Nathan Speer		Date 4-12-95		Time 0713					
Relinquished by: (Signature)					Received by: (Signature)									
Relinquished by: (Signature)					Received by: (Signature)									

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PIT No: PA112
C.O.C #: _____

FIELD REPORT: REMEDIATION FACILITY CLOSURE VERIFICATION

JOB No: 93163
PAGE No: 1 of 1

FACILITY LOCATION: San Juan 29-6 # 89

DATE STARTED: 5-11-95
DATE FINISHED: 5-11-95

SOURCE LOCATION: _____

ENVIRONMENTAL
SPECIALIST: CJC

SOURCE LOCATION: _____

FACILITY CLASSIFICATION: Landfarm PIT TYPE: Sep.

SOIL REMEDIATION: QUANTITY: 18 cy # OF COMP. SAMPLES: 1
DIMENSIONS: 24' x 27' x .75'

VISIBLE OBSERVATIONS: _____

SAMPLING PLAN: 1 5-point composite

FIELD NOTES & REMARKS: FACILITY CENTER LOCATED APPROX 26 YARDS W FROM WELLHEAD.

DEPTH TO GROUNDWATER: 45'
NEAREST WATER SOURCE/TYPE: >1000'
NEAREST SURFACE WATER: >1000'
MAX TPH PER NMOCB: 100 ppm

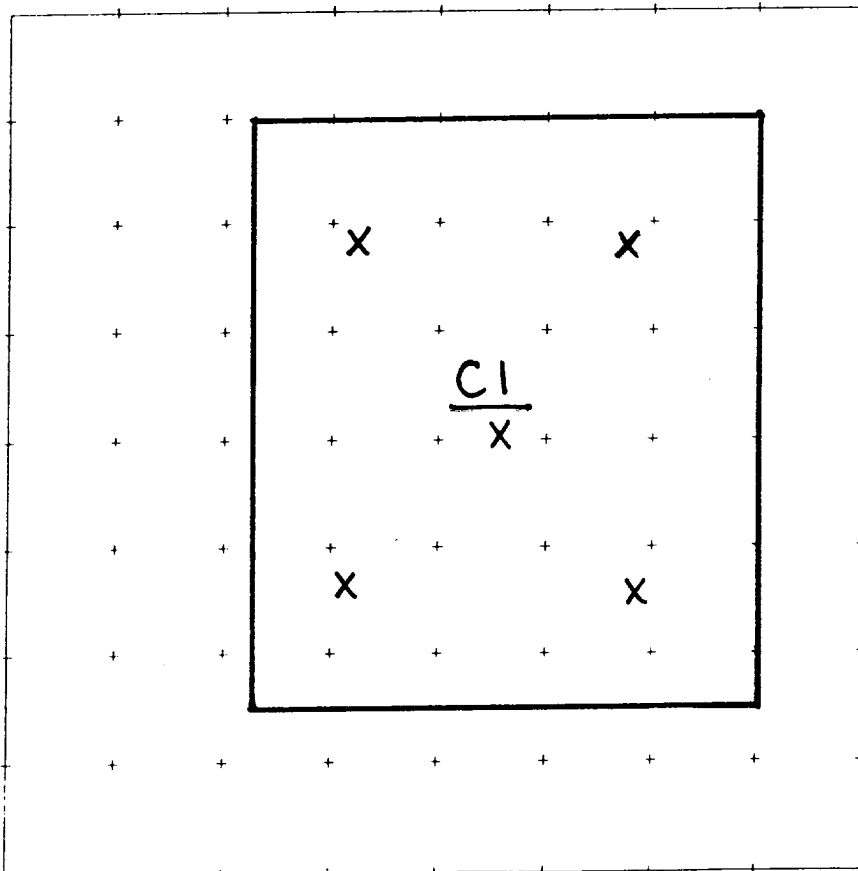
No. OF 5-POINT
COMPOSITE SAMPLES:
YARDAGE--#
0-200=1
201-400=2
401-1000=3
>1000=5

GAC #1064
 $\frac{20}{10.46} \times 1 \times 314 = 600$

Fail: TPH

FACILITY DIAGRAM

GRID SCALE: 5'

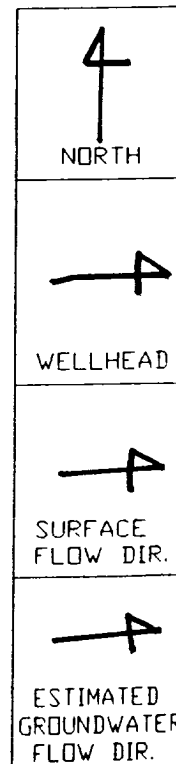


OVM RESULTS

SAMPLE ID:	FIELD HEADSPACE PID (ppm)
C1	4.0

LAB RESULTS

SAMPLE ID:	ANALYSIS REQUESTED	RESULTS PPM
C1	TPH	600



ENVIROTECH LABS

PROTECTING THE SOLUTION FOR A BETTER TOMORROW

FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client: PHILLIPS PETROLEUM
Sample ID: C1
Project Location: San Juan 29-6, #89
Laboratory Number: GAC1064

Project #: 93163
Date Analyzed: 05/11/95
Date Reported: 05/18/95
Sample Matrix: Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	600	10

ND = Not Detectable at stated detection limits.

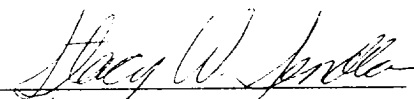
QA/QC:	Original TPH mg/kg	Duplicate TPH mg/kg	% Diff.*
	10	13	26

*Administrative Acceptance limits set at 30%.

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

Comments: Separator Pit # PA112


Analyst


Review

PIT No: PA112
C.O.C 4340

JOB No: 93163
PAGE No: 1 of 1

DATE STARTED: 8-15-95
DATE FINISHED: 8-15-95

ENVIRONMENTAL
SPECIALIST:

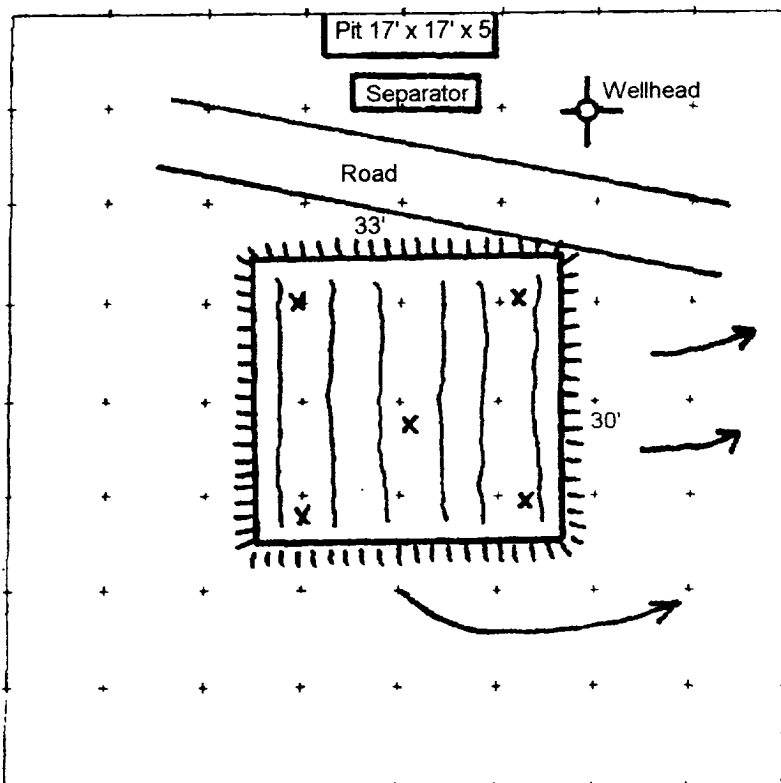
SOIL REMEDIATION: QUANTITY: ± 54 cy Landfarm # OF COMP. SAMPLES: 1
 DIMENSIONS: 30' x 33' x 1.45'
 VISIBLE OBSERVATIONS: Rocky light brown sandy clay, dry, tilled with blade
 SAMPLING PLAN: 1 5-point composite @ 4"-6" below surface

DEPTH TO GROUNDWATER: 45'
NEAREST WATER SOURCE/TYPE: >1000'
NEAREST SURFACE WATER: >1000'
MAX TPH PER NMDCD: 100 ppm

Light petroleum odor

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

GRID SCALE:

[illegible]

SAMPLE ID	ANALYSIS REQUESTED	RESULTS ppm
C1	TPH	280
C1	BTEX	ND,
		207

	NORTH
	WELLHEAD
	SURFACE FLOW DIR.
	ESTIMATED GROUNDWATER FLOW DIR.

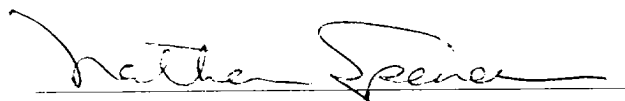
Client:	Phillips Petroleum	Project #:	93163
Sample ID:	San Juan 29-6 #89 DK	Date Reported:	08-16-95
Laboratory Number:	8792	Date Sampled:	08-15-95
Chain of Custody No:	4340	Date Received:	08-15-95
Sample Matrix:	Soil	Date Extracted:	08-16-95
Preservative:	Cool	Date Analyzed:	08-16-95
Condition:	Cool and Intact	Analysis Needed:	TPH

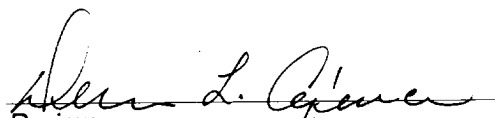
Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	280	10

ND = Parameter not detected at the stated detection limit.

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

Comments: **PA112. Various Landfarms.**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	San Juan 29-6 #89 DK	Date Reported:	08-17-95
Laboratory Number:	8792	Date Sampled:	08-15-95
Chain of Custody:	4340	Date Received:	08-15-95
Sample Matrix:	Soil	Date Analyzed:	08-16-95
Preservative:	Cool	Date Extracted:	08-16-95
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	29.5
Toluene	ND	33.7
Ethylbenzene	45.6	31.5
p,m-Xylene	104	26.9
o-Xylene	57.5	29.2

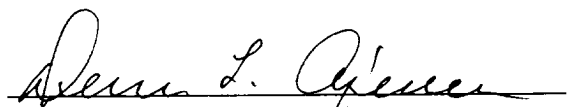
ND - Parameter not detected at the stated detection limit.

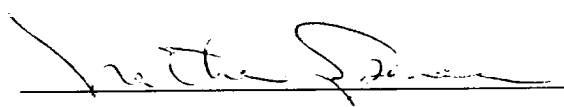
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	97 %
	Bromofluorobenzene	100 %

References: 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. 1994.

Comments: Various Landfarms. PA112.


Analyst


Review

CHAIN OF CUSTODY RECORD

Client/Project Name		Project Location		ANALYSIS/PARAMETERS									
Phillips Petrochem.		Various Land Farms											
Sampler (Signature)				Chain of Custody Tape No.									
Sample No./ Identification				Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH	BTEX	8020	Remarks	
Sample 30-5 #470K 8-15-95				8-15-95	11:48	8791	Soil	1	✓			BTEX IF TPH > 100	
Sample 29-6 #89 DK 8-15-95				8-15-95	13:18	8792	Soil	1	✓			BTEX IF TPH > 100	
Sample 29-6 #103 DK 8-15-95				8-15-95	14:37	8793	Soil	1	✓			BTEX IF TPH > 1000	
Sample 29-5 #104 PC 8-15-95				8-15-95	15:53	8794	Soil	1	✓			BTEX IF TPH > 1000	
Sample 29-5 #87 DK 8-15-95				8-15-95	18:57	8795	Soil	1	✓			No BTEX	
Sample 29-5 #75 DK 8-15-95				8-15-95	17:03	8796	Soil	1	✓			BTEX IF TPH > 1000	
Sample 29-5 #75 DK 8-15-95				8-15-95	17:15	8797	Soil	1	✓			BTEX IF TPH > 1000	
Sample 29-5 #87 PC 8-15-95				8-15-95	19:13	8798	Soil	1	✓			BTEX IF TPH > 100	
Sample 29-5 #87 PC 8-15-95				8-15-95	19:26	8799	Soil	1	✓			No BTEX	
Relinquished by: (Signature)				Date	Time	Received by: (Signature)							
Harlan M. Brown				8-15-95	21:20	Nathan Spencer							
Relinquished by: (Signature)				Date	Time	Received by: (Signature)							
Relinquished by: (Signature)				Date	Time	Received by: (Signature)							

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PIT No: PA112
C.O.C #: 4546

FIELD REPORT: REMEDIATION FACILITY CLOSURE VERIFICATION

JOB No: 93163
PAGE No: 1 of 1

FACILITY LOCATION: San Juan 29-6 # 89

SOURCE LOCATION:

SOURCE LOCATION:

SOURCE LOCATION:

FACILITY CLASSIFICATION:

Landfarm

PIT TYPE:

Sep.

DATE STARTED: 11-22-95

DATE FINISHED: 11-22-95

ENVIRONMENTAL

SPECIALIST: CJC

SOIL REMEDIATION: QUANTITY: 24' x 27' x 0.75' # OF COMP. SAMPLES: 1

DIMENSIONS:

VISIBLE OBSERVATIONS: Dry, hard, clay, tan - No odor

SAMPLING PLAN: 1 5-point composite

FIELD NOTES & REMARKS: FACILITY CENTER LOCATED APPROX 29 YARDS SW FROM WELLHEAD.

DEPTH TO GROUNDWATER: 45'

NEAREST WATER SOURCE/TYPE: >1000'

NEAREST SURFACE WATER: >1000'

MAX TPH PER NMOC: 100 ppm

No. OF 5-POINT
COMPOSITE SAMPLES:

YARDAGE--#

0-200=1

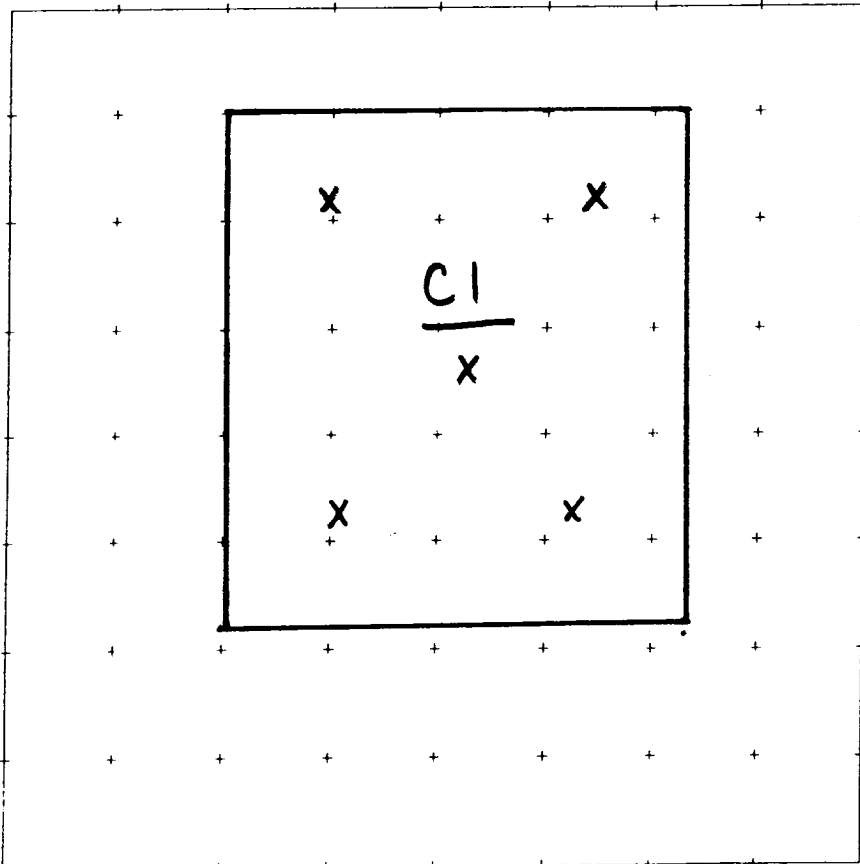
201-400=2

401-1000=3

>1000=5

FACILITY DIAGRAM

GRID SCALE: 1" = 10'



OVM RESULTS

SAMPLE ID:	FIELD HEADSPACE PID (ppm)
C1	0.0

LAB RESULTS

SAMPLE ID:	ANALYSIS REQUESTED:	RESULTS PPM:
C1	8015	
	TPH	ND

4
↑
NORTH

4
↑
WELLHEAD

4
↑
SURFACE
FLOW DIR.

4
↑
ESTIMATED
GROUNDWATER
FLOW DIR.

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

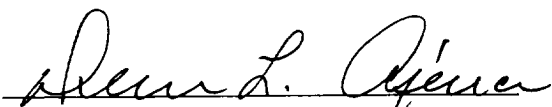
Client:	Phillips	Project #:	93163
Sample ID:	S.J. 29-6 #89 C1-LF	Date Reported:	11-28-95
Laboratory Number:	9689	Date Sampled:	11-22-95
Chain of Custody No:	4546	Date Received:	11-22-95
Sample Matrix:	Soil	Date Extracted:	11-27-95
Preservative:	Cool	Date Analyzed:	11-27-95
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.8
Diesel Range (C10 - C28)	ND	0.5
Total Petroleum Hydrocarbons	ND	0.8

ND - Parameter not detected at the stated detection limit.

References: Method 8015, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Comments: 29-5 & 29-6, San Juan County, NM.


Analyst


Review

CHAIN OF CUSTODY RECORD

Client/Project Name		Project Location		ANALYSIS/PARAMETERS										
Phillips/93/163		29-5-829-4 NM												
Sampler: (Signature) C. J. Collins		Chain of Custody Tape No.												
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH	8015-BTEX							Remarks
29-5-829-4-1	11/22/95	1507	9685	Soil	1	✓								
29-5-829-4-2	11/22/95	1429	9686	Soil	1	✓	✓							
29-5-829-4-3	11/22/95	1445	9687	Soil	1	✓								
29-5-829-4-4	11-22-95	1316	9688	Soil	1	✓								
29-5-829-4-5	11-22-95	1228	9689	Soil	1	✓								
29-5-829-4-6	11-21-95	1142	9690	Soil	1	✓								
Relinquished by: (Signature) C. J. Collins		Date	Time	Received by: (Signature) D. J. Collins		Date	Time							
Relinquished by: (Signature)				Received by: (Signature)		11/22/95	1615							
Relinquished by: (Signature)				Received by: (Signature)										

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