

District I *Denny & Frost*
P.O. Box 1988, Hobbs, NM
District II
P.O. Drawer 119, Artesia, NM 88211
District III
1000 Rio Brazos Rd, Aztec, NM 87401

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

SEP 26 1997

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 # 55 A

Well Name

Location: Unit or Qtr/Qtr Sec J NENW Sec 18 T 29N R 6W County Rio Arriba

Pit Type: Separator X Dehydrator _____ Other Condensate Tank

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

Pit Location: Pit dimensions: Length 60 ft, width 35 ft, depth 20 ft
(Attach diagram)

Reference: wellhead X other _____

Footage from reference: 62 ft

Direction from reference: 30 Degrees _____ East North _____
_____ of _____
X West South X

Depth to Ground Water: 40 ft X 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) 20
highwater elevation of
ground water)

Wellhead Protection Area: _____ Yes (20 points)
(less than 200 feet from a private _____ No (0 points) 0
domestic water source, or: less than
1000 feet from all other water sources.)

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, _____ Greater than 1000 feet (0 points) 0
irrigation canals and ditches.)

RANKING SCORE (TOTAL POINTS): 20

RECEIVED
JUL 24 1997
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DIST. 3

Date Remediation Started: 9/03/93 Dated Completed: 6/3/97

Excavation X Approx. cubic yards 1500

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 9/03/93. The pit was excavated on 8/10/94, 11/8/94, 7/18/95, and 8/7/95, and tested below NMOCD and BLM guidelines. The landfarm was determined to be within guidelines on 4/06/95. The site was risk assessed, down gradient, 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 north (down gradient) of original pit.

Sample depth 21' below ground level

Sample date 6/3/97 Sample time 10:46

Sample Results

Benzene(ppm) ND

Total BTEX (PPM) 1.59

Field Headspace (ppm) 334

TPH 81 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 7/22/96 PRINTED NAME Bob Wirtanen

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

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: 9-3-93
DATE FINISHED: 9-3-93
ENVIRO. SPCLT: REO
OPERATOR: CIMARRON
ASSISTANT: K.S.

LOCATION:	LEASE:	San Juan 29-6	WELL:	#55A	QD:	900' FNL & 1460' FWL (C)
SEC: 18	TWP:	29N	RNG:	6W	PM:	NM
				CNTY:	R.A.	ST: NM
						PIT: Sep.

LAND USE: Range - Fee

SURFACE CONDITIONS: Earthen Pit

IT CENTER IS LOCATED APPROXIMATELY 60 FEET S 60°W OF WELLHEAD.

CLOSURE STD: 100 ppm TPH

Tl : Moist, brown/gray, silty sand.
Definite hydrocarbon odor

RANKING SCORE: 20

T2 : Moist, brown, silty sand - No odor until approx. 12 feet, then strong.

TEST HOLE LOGS

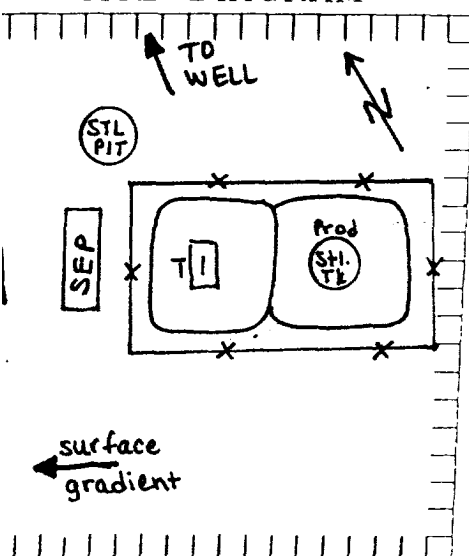
SAMPLE INVENTORY		
SMPL ID:	SMPL TYPE:	LABORATORY ANALYSIS:
T1@6'	Soil	TPH=1756ppm
T1@11'	Soil	TPH=2048
T1@14'	Soil	TPH=3280 (
T2@15'	Soil	TPH=1590
T2@10'	Soil	TPH= 10

SCALE

Pit approx. 20' x 20'

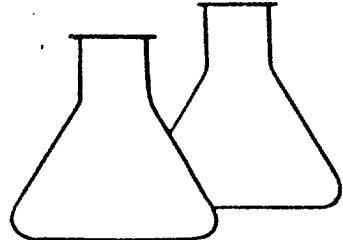
0 10 20 FEET

SITE DIAGRAM



GD	TH#: 1			TH#: 2			TH#:			TH#:		
	SOIL TYPE:	SMPL TYPE:	OVM/TPH	SOIL TYPE:	SMPL TYPE:	OVM/TPH	SOIL TYPE:	SMPL TYPE:	OVM/TPH	SOIL TYPE:	SMPL TYPE:	OVM/TPH
1												
2												
3	Pit	Bottom										
4	SM											
5		Gray		5	SM	GRB 6.0						
6	SM	GRB 685										
7												
8												
9		Gray/Brown										
10				10	SM	GRB 43						
11	SM	GRB 555										
12												
13												
14	SM	GRB 512										
	Total Depth=14'											
	Bedrock			15	SM	GRB 629						
					15'							

SOIL TYPE: C - Clay, M - Sil. S - Sand, G - Gravel Plasticity: L - None, H - 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 @ 6'	Date Analyzed:	09-03-93
Project Location:	San Juan 29-6, #55A	Date Reported:	09-09-93
Laboratory Number:	GAC0203	Sample Matrix:	Soil

<u>Parameter</u>	<u>Result, mg/kg</u>	<u>Detection Limit, mg/kg</u>
Petroleum Hydrocarbons	1800	10

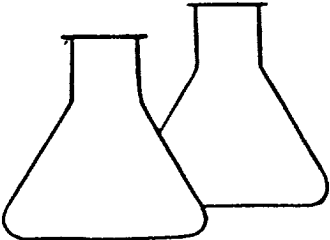
Quality Assurance:	Original TPH mg/kg	Duplicate TPH mg/kg	% Diff.
	15700	14500	8

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

Comments: Separator Pit--PA058

R. E. O'Neill
Analyst

M. D. Young
Review



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FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	T1 @ 11'	Date Analyzed:	09-03-93
Project Location:	San Juan 29-6, #55A	Date Reported:	09-09-93
Laboratory Number:	GAC0204	Sample Matrix:	Soil

<u>Parameter</u>	<u>Result, mg/kg</u>	<u>Detection Limit, mg/kg</u>
Petroleum Hydrocarbons	2000	10

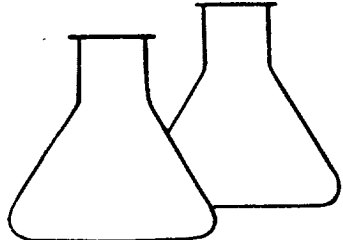
Quality Assurance:	Original TPH mg/kg	Duplicate TPH mg/kg	% Diff.
	15700	14500	8

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

Comments: Separator Pit---PA058

R. E. O'Neil
Analyst

Mari D. Young
Review



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FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client: Phillips Petroleum
Sample ID: T1 @ 14'
Project Location: San Juan 29-6, #55A
Laboratory Number: GAC0205

Project #: 98153
Date Analyzed: 08-03-93
Date Reported: 08-09-93
Sample Matrix: Soil

Parameter -----	Result, mg/kg -----	Detection Limit, mg/kg -----
Petroleum Hydrocarbons	3300	100

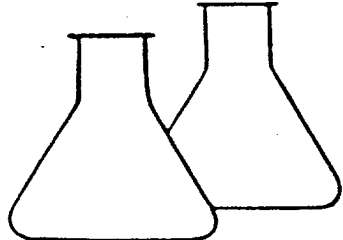
Quality Assurance:	Original TPH mg/kg -----	Duplicate TPH mg/kg -----	% Diff. -----
	15700	14500	8

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

Comments: Separator Pit--PA058

R. E. O'Neil
Analyst

Maria D. Lijang
Review



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FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	T2 @ 15'	Date Analyzed:	09-03-93
Project Location:	San Juan 29-6, #55A	Date Reported:	09-09-93
Laboratory Number:	GAC0206	Sample Matrix:	Soil

Parameter -----	Result, mg/kg -----	Detection Limit, mg/kg -----
Petroleum Hydrocarbons	1600	10

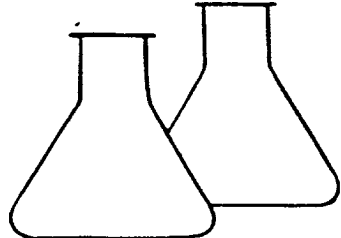
Quality Assurance:	Original TPH mg/kg -----	Duplicate TPH mg/kg -----	% Diff. -----
	15700	14500	8

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

Comments: Separator Pit--PA058

R. E. O'Neil
Analyst

Maria S. Young
Review



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FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	T2 @ 10'	Date Analyzed:	09-03-93
Project Location:	San Juan 29-6, #55A	Date Reported:	09-09-93
Laboratory Number:	GAC0207	Sample Matrix:	Soil

<u>Parameter</u>	<u>Result, mg/kg</u>	<u>Detection Limit, mg/kg</u>
Petroleum Hydrocarbons	10	10

Quality Assurance:	Original TPH mg/kg	Duplicate TPH mg/kg	% Diff.
	15700	14500	8

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

Comments: Separator Pit--PA058

R. E. O'Neil
Analyst

Marie S. Young
Review

CLIENT: PHILLIPS PETROLEUM**ENVIROTECH Inc.**PIT NO: PA0585795 US HWY. 64, FARMINGTON, NM 87401
(505) 832-0815

C.O.C. NO: _____

FIELD REPORT: CLOSURE VERIFICATIONJOB No: 93163PAGE No: 1 of 1LOCATION: NAME: San Juan 29-5 WELL #: 55A PIT: Sep.DATE STARTED: 10 Aug 94DATE FINISHED: 10 Aug 94QUAD/UNIT: C SEC: 18 TWP: 9N RNG: 6W BM: NM CNTY: R.A. ST: NMENVIRONMENTAL
SPECIALIST: FMQTR/FOOTAGE: 900' INL & 1460' FW CONTRACTOR: CimarronSOIL REMEDIATION: EXCAVATION APPROX. 20 FT. x 20 FT. x 14 FT. DEEP.DISPOSAL FACILITY: Land Farm On Site CUBIC YARDAGE: _____LAND USE: Range LEASE: FeeFIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 60 FEET S 30° W FROM WELLHEAD.DEPTH TO GROUNDWATER: 40' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'NMDCD RANKING SCORE: 20 NMDCD TPH CLOSURE STD: 100 PPM

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

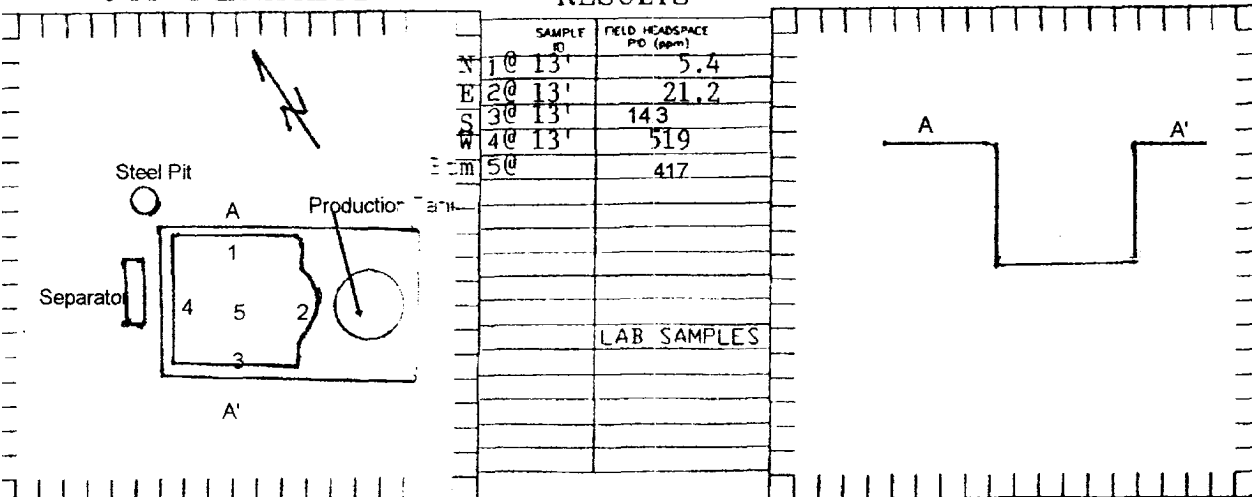
FIELD 418.1 CALCULATIONS

SAMPLE I.D.	LAB No.	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
4 @ 13'	GAC	10	20	10	250	5000

SCALE

0 FEET
PIT PERIMETEROVM
RESULTS

PIT PROFILE



TRAVEL NOTES: CALLOUT: _____ ONSITE: _____



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FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client: Phillips Petroleum
Sample ID: 4 @ 13'
Project Location: San Juan 29-6 #55A
Laboratory Number: GAC0646

Project #: 93163
Date Analyzed: 8-10-94
Date Reported: 8-10-94
Sample Matrix: Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	5,000	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 PA058

Analyst

Review

CLIENT: PHILLIPS PETROLEUM

ENVIROTECH Inc.

PIT NO: PA058

5788 US HWY. 84, FARMINGTON, NM 87401
(505) 832-0815

C.O.C. NO: _____

FIELD REPORT: CLOSURE VERIFICATION

JOB No: 93163

PAGE No: 1 of 1

LOCATION: NAME: San Juan 29-6 WELL #: 55A PIT: Sep.

DATE STARTED: 11/8/94

QUAD/UNIT: C SEC: 18 TWP: 29N RNG: 6W BM: NM CNTY: R.AST: NM

DATE FINISHED: 11/8/94

QTR/FOOTAGE: 900' ENL & 1460' FL CONTRACTOR:

ENVIRONMENTAL
SPECIALIST: CJC

SOIL REMEDIATION: EXCAVATION APPROX. 40 FT. x 35 FT. x 15 FT. DEEP.

DISPOSAL FACILITY: On site Landfarm CUBIC YARDAGE: _____

LAND USE: Range LEASE: Fee

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 60 FEET S 30° W FROM WELLHEAD.

DEPTH TO GROUNDWATER: 40' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'

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

SOIL AND EXCAVATION DESCRIPTION:

0'-8'	Clay Sand, soft, dry, no odor, tan-brown
8'-12'	Sand, fine clay, soft, slight odor
12'-14'	Sandstone fine grey-blue, grey, becoming hard (bedrock), strong odor
16'	Sandstone, grey, fine, hard, strong

FIELD 418.1 CALCULATIONS

SAMPLE I.D.	LAB No	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
N 1 @ 14'	881	10.48	20.0	1	80	153
E 2 @ 14'	882	10.57	20.0	1	11	21
W 4 @ 14'	883	10.37	20.0	1	11	21
Btm 5 @ 16'	884		20.0	1	423	812
S 3 @ 14'	885	10.25	20.0	1	12	23

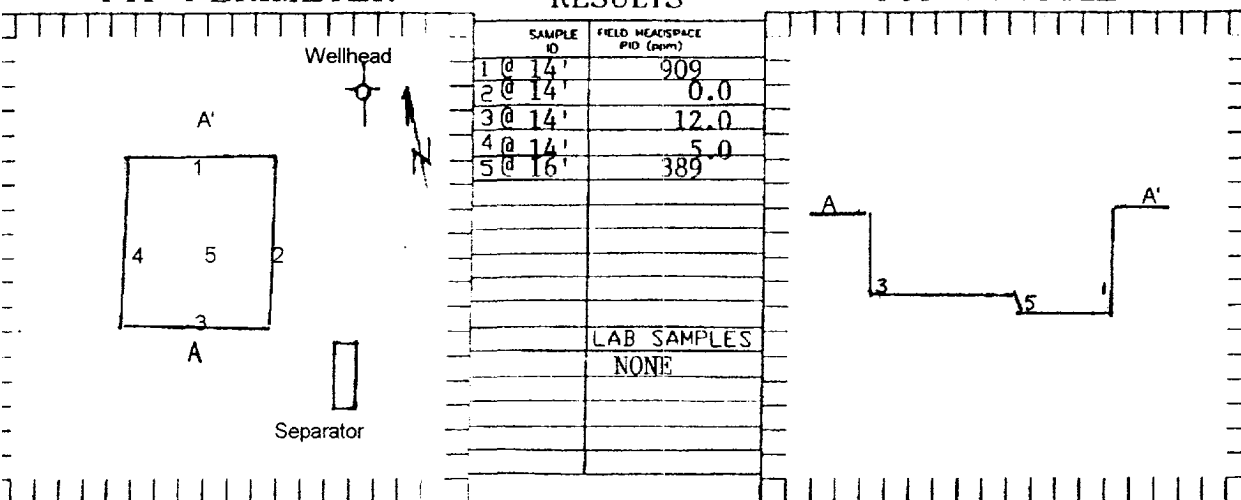
SCALE

0 40 FEET

PIT PERIMETER

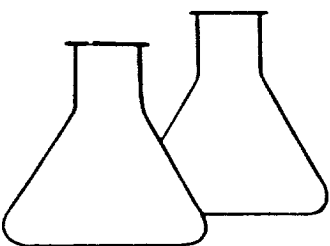
OVM RESULTS

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:	1 @ 14.0'	Date Analyzed:	11-08-94
Project Location:	San Juan 29-6, #55A	Date Reported:	11-08-94
Laboratory Number:	GAC0881	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	150	10

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	760 *	790	4

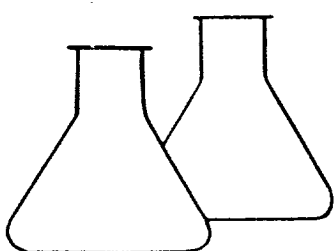
*Administrative Acceptance limits set at 30%.

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

Comments: Separator Pit PA058

Chris Collins
Analyst

Thayne W. Lender
Review



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FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	2 @ 14.0	Date Analyzed:	11-08-94
Project Location:	San Juan 29-6, #55A	Date Reported:	11-08-94
Laboratory Number:	GAC0882	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	21	10

ND = Not Detectable at stated detection limits.

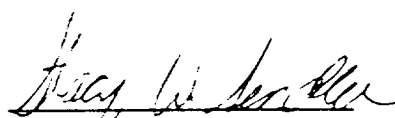
QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	760 *	790	4

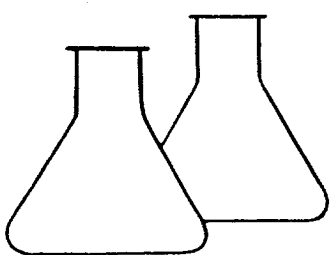
*Administrative Acceptance limits set at 30%.

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

Comments: Separator Pit PA058


Analyst


Reviewer



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FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	4 @ 14.0'	Date Analyzed:	11-08-94
Project Location:	San Juan 29-6, #55A	Date Reported:	11-08-94
Laboratory Number:	GAC0883	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	21	10

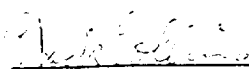
ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% Diff.
	760 *	790	4

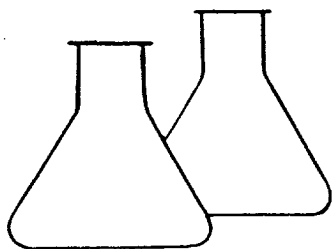
*Administrative Acceptance limits set at 30%.

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

Comments: Separator Pit PA058


Analyst


Review



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FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	5 @ 16.0	Date Analyzed:	11-08-94
Project Location:	San Juan 29-6, #55A	Date Reported:	11-08-94
Laboratory Number:	GAC0884	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	810	10

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	760 *	790	4

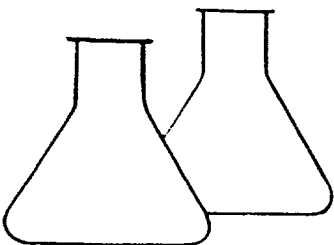
*Administrative Acceptance limits set at 30%.

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

Comments: Separator Pit PA058


Analyst


Review



ENVIROTECH LABS

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PHONE: (505) 632-0613 • FAX: (505) 631-1365

FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	3 @ 14.0'	Date Analyzed:	11-08-94
Project Location:	San Juan 29-6, #55A	Date Reported:	11-08-94
Laboratory Number:	GAC0885	Sample Matrix:	Soil

Parameter	Result mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	23	10

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% Diff.
	760 *	790	4

*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 PA058

Analyst

Review

FIELD REPORT: CLOSURE VERIFICATION

JOB No: 93163

PAGE No: 1 of 1

LOCATION: NAME: San Juan 29-6 WELL #: 55A PIT: Sep.
QUAD/UNIT: C SEC: 18 TWP: 29N RNG: 6W BM: NM CNTY: R.A. ST: NM
QTR/FDOTAGE: 900' ENL & 1460' ENL CONTRACTOR: Rosenbaum

DATE STARTED: 7-18-95
DATE FINISHED: 7-18-95

ENVIRONMENTAL
SPECIALIST: CJC

SOIL REMEDIATION: EXCAVATION APPROX. _____ FT. x _____ FT. x _____ FT. DEEP.

DISPOSAL FACILITY: On-site Landfarm CUBIC YARDAGE: _____

LAND USE: _____ Range _____ LEASE: _____ Fee _____

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 60 FEET S 30° W FROM WELLHEAD.

DEPTH TO GROUNDWATER: 40 NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'

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

SOIL AND EXCAVATION DESCRIPTION: Sand soft unconsolidated fine, tan brown, orange to 12'
dry, no odor
12'-20' Sand fine, orange-tan, strong odor
@20' Sandstone fine - coarse, hard, well partly
cemented, dry-moist, strong odor; blue grey in
color

FIELD 418.1 CALCULATIONS

SAMPLE I.D.	LAB No	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1 NW @ 19'	1109	10.67	20	10	278	5211
2 NW @ 17'	1110	10.61	20	1	29	54

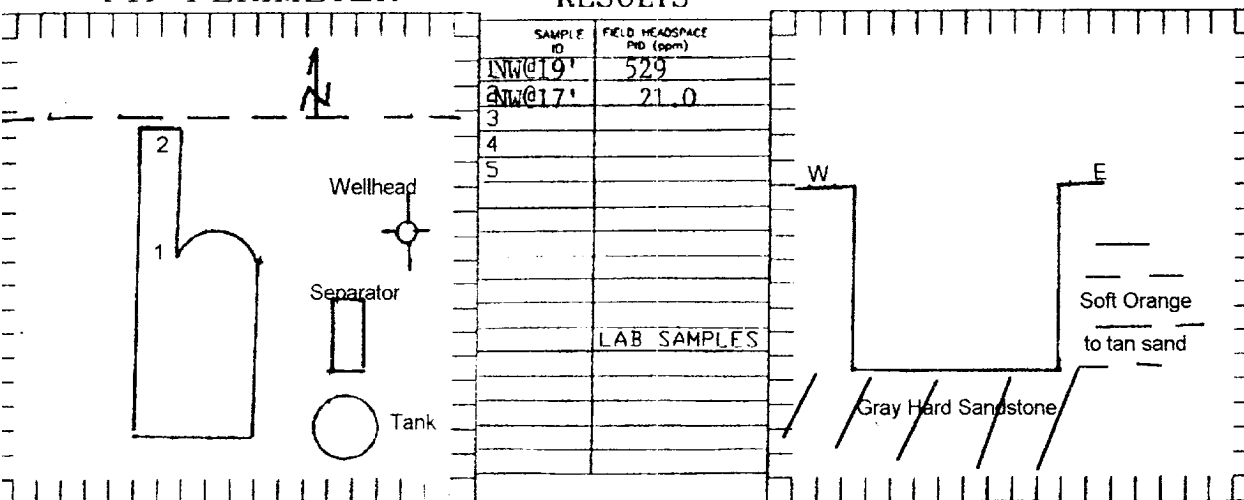
1' = 40'
SCALE

0 20 FEET

PIT PERIMETER

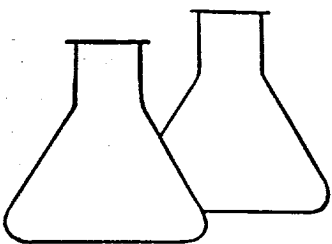
OVM
RESULTS

PIT PROFILE



TRAVEL NOTES:

CALLOUT: _____ CNSITE: _____



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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: N. WALL @ 19.0'
Project Location: San Juan 29-6, #55A
Laboratory Number: GAC1109

Project #: 93163
Date Analyzed: 07-18-95
Date Reported: 07-27-95
Sample Matrix: Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	5,211	100

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	46 *	50	8

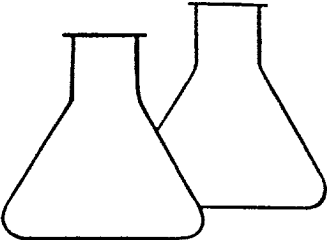
*Administrative Acceptance limits set at 30%.

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

Comments: Separator Pit PA058

C. Jack Collins
Analyst

Kay W. Jendle
Review



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FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	N. WALL @ 17.0'	Date Analyzed:	07-18-95
Project Location:	San Juan 29-6, #55A	Date Reported:	07-27-95
Laboratory Number:	GAC1110	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	55	10

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	46 *	50	8

*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 PA058


Analyst


Review

FIELD REPORT: CLOSURE VERIFICATION

JOB No: 93163

PAGE No: 1 of 1

LOCATION: NAME: San Juan 29-6 WELL #: 55A PIT: Sep.
QUAD/UNIT: C SEC: 18 TWP: 29N RNG: 6W BM: NM CNTYR.A. ST: NM
QTR/FOOTAGE: 900' FNL & 1460' FWL CONTRACTOR: Jays BackhoeDATE STARTED: 8-7-95
DATE FINISHED: 8-7-95ENVIRONMENTAL
SPECIALIST: CJC

SOIL REMEDIATION: EXCAVATION APPROX. 60 FT. x 35 FT. x 20 FT. DEEP.

DISPOSAL FACILITY: On-site Landfarm CUBIC YARDAGE: _____

LAND USE: Range LEASE: Fee

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 62 FEET S 30° W FROM WELLHEAD.

DEPTH TO GROUNDWATER: 40' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'

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

SOIL AND EXCAVATION DESCRIPTION:

FIELD 418.1 CALCULATIONS

SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1 N. Wall@20'		10.81	20	1	170	314
2 N. Wall@20'		10.36	20	1	30	58
3 Btm @ 20'		10.65	20	1	40	75
4 TI @ 20'		10.34	20	1	29	56

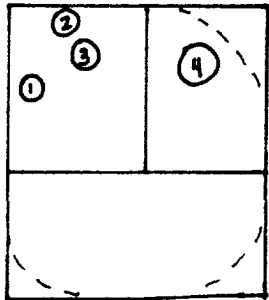
1' = 40'

SCALE



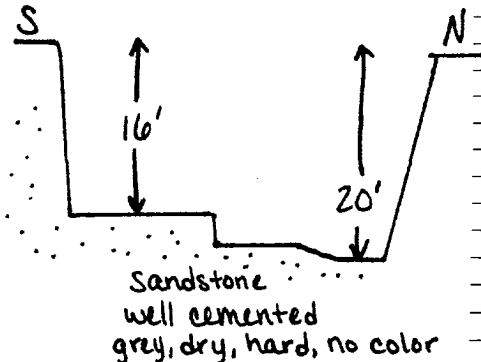
0 20 FEET

PIT PERIMETER

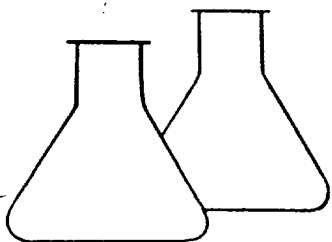
OVM
RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1N Wall@20'	718
2N Wall@20'	29
3Btm@20'	482
4TI @20'	125
5	
LAB SAMPLES	
Btm@20'	BTEX

PIT PROFILE



RAVEL NOTES: CALLOUT: 1030 ONSITE: 1200



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FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	N. WALL @ 20.0'	Date Analyzed:	08-07-95
Project Location:	San Juan 29-6 #55A	Date Reported:	08-08-95
Laboratory Number:	GAC1129	Sample Matrix:	Soil

Parameter -----	Result, mg/kg -----	Detection Limit, mg/kg -----
Total Recoverable Petroleum Hydrocarbons	320	10

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg -----	Duplicate TPH mg/kg -----	% *Diff. -----
	50 *	59	17

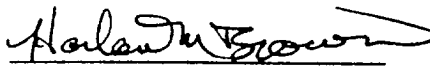
*Administrative Acceptance limits set at 30%.

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

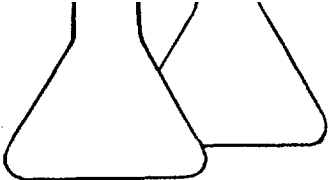
Comments: San Juan 29-6 #55A, Separator Pit # PA058



Analyst



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FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	2-N. WALL @ 20.0'	Date Analyzed:	08-07-95
Project Location:	San Juan 29-6 #55A	Date Reported:	08-08-95
Laboratory Number:	GAC1130	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	58	10

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	320 *	280	13

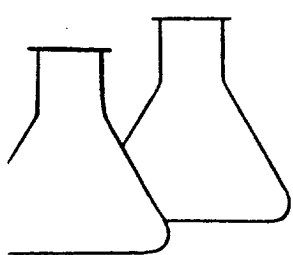
*Administrative Acceptance limits set at 30%.

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

Comments: San Juan 29-6 #55A, Separator Pit # PA058

C. Jack Collins
Analyst

Helen M. Brown
Review



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FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	3-Btm @ 20.0	Date Analyzed:	08-07-95
Project Location:	San Juan 29-6 #55A	Date Reported:	08-08-95
Laboratory Number:	GAC1131	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	75	10

ND = Not Detectable at stated detection limits.

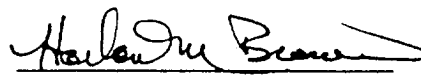
QA/QC	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	320 *	280	13

*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: San Juan 29-6 #55A. Separator Pit # PA058


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FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	4-T1 @ 20.0'	Date Analyzed:	08-07-95
Project Location:	San Juan 29-6 #55A	Date Reported:	08-08-95
Laboratory Number:	GAC1132	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	56	10

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	320 *	280	13

*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: San Juan 29-6 #55A, Separator Pit # PA058


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	BTM @ 20'	Date Reported:	08-08-95
Laboratory Number:	8772	Date Sampled:	08-07-95
Chain of Custody:	4323	Date Received:	08-07-95
Sample Matrix:	Soil	Date Analyzed:	08-08-95
Preservative:	Cool	Date Extracted:	08-08-95
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	223	29.3
Toluene	1,140	33.5
Ethylbenzene	112	31.3
p,m-Xylene	1,970	26.7
o-Xylene	768	29.0

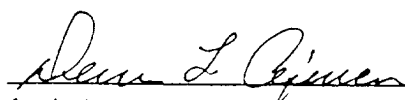
ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	103 %
	Bromofluorobenzene	99 %

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: San Juan 29-6 #55A.


Analyst


Review

[illegible]**ENVIROTECH INC.**

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

QUALITY ASSURANCE / QUALITY CONTROL DOCUMENTATION

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	QA/QC	Project #:	N/A
Sample ID:	Laboratory Blank	Date Reported:	08-08-95
Laboratory Number:	08-08-BTEX.BLANK	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	08-08-95
Condition:	N/A	Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	ND	0.4
Toluene	ND	0.5
Ethylbenzene	ND	0.5
p,m-Xylene	ND	0.4
o-Xylene	ND	0.4

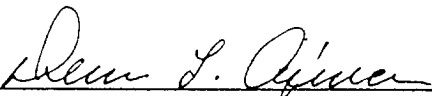
ND - Parameter not detected at the stated detection limit.

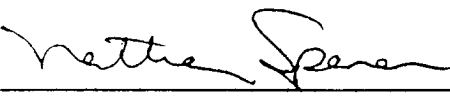
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	102 %
	Bromofluorobenzene	99 %

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: QA/QC for samples 8771 - 8772.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS QUALITY ASSURANCE REPORT

Client:	QA/QC	Project #:	N/A
Sample ID:	Matrix Duplicate	Date Reported:	08-08-95
Laboratory Number:	8771	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	HgCl and Cool	Date Analyzed:	08-08-95
Condition:	Cool and Intact	Analysis Requested:	BTEX

Parameter	Sample Result (ug/L)	Duplicate Result (ug/L)	Percent Diff.	Det. Limit (ug/L)	Dilution Factor
Benzene	46.1	45.8	0.5%	0.4	1
Toluene	12.0	11.9	0.9%	0.5	1
Ethylbenzene	1.5	1.5	1.7%	0.5	1
p,m-Xylene	2.3	2.3	0.0%	0.4	1
o-Xylene	7.1	6.6	7.7%	0.4	1

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria:	Parameter	Maximum Difference
----------------------------	-----------	--------------------

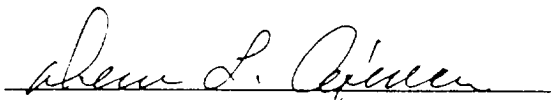
8020 Compounds

30 %

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: QA/QC for samples 8771 - 8772.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS QUALITY ASSURANCE REPORT

Client: QA/QC
Sample ID: Matrix Spike
Laboratory Number: 8771
Sample Matrix: Water
Preservative: Cool
Condition: Cool and Intact

Project #: N/A
Date Reported: 08-08-95
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 08-08-95

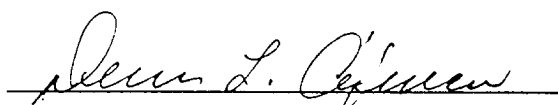
Parameter	Sample Result (ug/L)	Spike Added (ug/L)	Spiked Sample Result (ug/L)	Det. Limit (ug/L)	Percent Recovery	SW-846 % Rec. Accept. Range
Benzene	46.1	50.0	95.3	0.4	99%	39-150
Toluene	12.0	50.0	61.3	0.5	99%	46-148
Ethylbenzene	1.5	50.0	51.9	0.5	101%	32-160
p,m-Xylene	2.3	100.0	103	0.4	100%	46-148
o-Xylene	7.1	50.0	57.1	0.4	100%	46-148

ND - Parameter not detected at the stated detection limit.

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: QA/QC for samples 8771 - 8772.


Analyst


Review

FIELD REPORT: REMEDIATION FACILITY
CLOSURE VERIFICATION

JOB No: 93163
PAGE No: 1 of 1

FACILITY LOCATION: San Juan 29-6 #55A
SOURCE LOCATION: Sec. 18, T29N, R6W Rio Arriba Co., NM
SOURCE LOCATION:
SOURCE LOCATION:
FACILITY CLASSIFICATION: Landfarm PIT TYPE: Sep.
DATE STARTED: 4-6-95
DATE FINISHED: 4-6-95
ENVIRONMENTAL SPECIALIST: CJC

SOIL REMEDIATION: QUANTITY: # OF COMP. SAMPLES: 1
DIMENSIONS:
VISIBLE OBSERVATIONS:
SAMPLING PLAN: 1 7-point composite

FIELD NOTES & REMARKS: FACILITY CENTER LOCATED APPROX 28 YARDS NE FROM WELLHEAD.

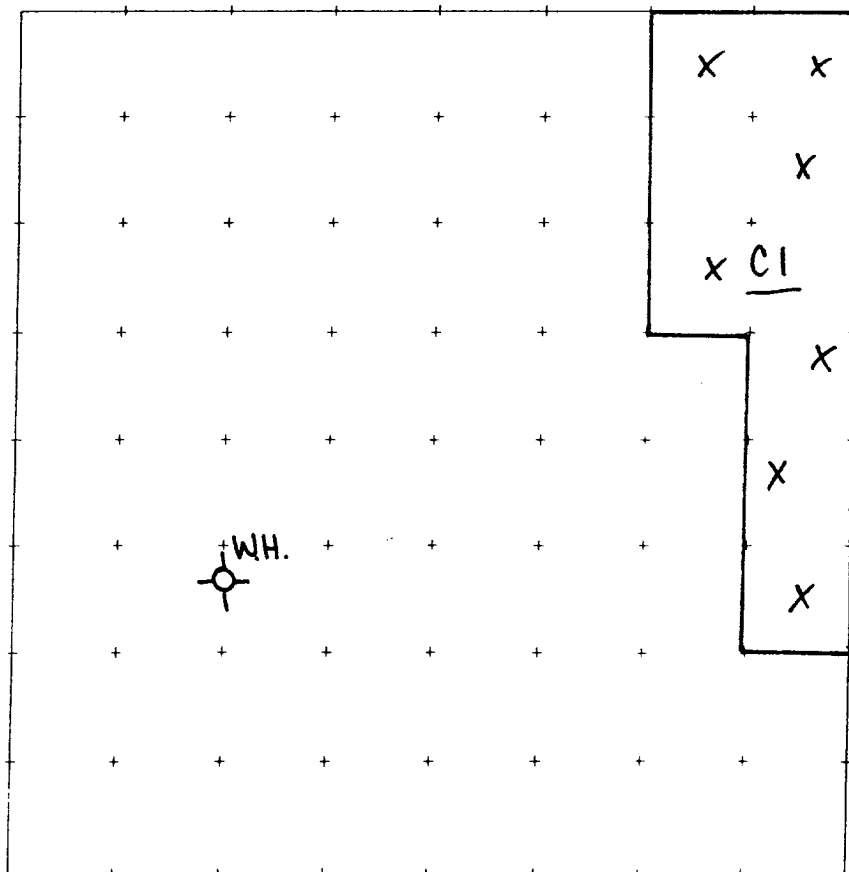
DEPTH TO GROUNDWATER: 40'
NEAREST WATER SOURCE/TYPE: >1000'
NEAREST SURFACE WATER: >1000'
MAX TPH PER NMOC: 100 ppm

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

CLOSE

FACILITY DIAGRAM

GRID SCALE: 20'

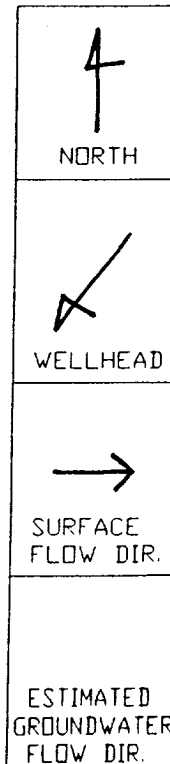


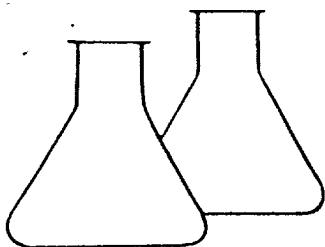
OVM
RESULTS

SAMPLE ID:	FIELD HEADSPACE PID (ppm)
C1	10.0

LAB
RESULTS

SAMPLE ID:	ANALYSIS REQUESTED:	RESULTS PPM:
C1	TPH	55





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EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

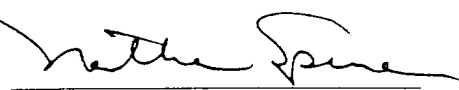
Client:	Phillips	Project #:	93163
Sample ID:	29-5 #55A	Date Reported:	04-13-95
Laboratory Number:	8340	Date Sampled:	04-06-95
Chain of Custody No:	4150	Date Received:	04-06-95
Sample Matrix:	Soil	Date Extracted:	04-12-95
Preservative:	Cool	Date Analyzed:	04-12-95
Condition:	Cool and Intact	Analysis Needed:	TPH

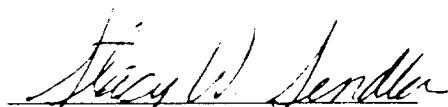
Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	55.1	10.0

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

Client/Project Name		Project Location		ANALYSIS/PARAMETERS									
Phillips / 93163													
Sampler: (Signature)		Chain of Custody Tape No.											
P. Jack Collins													
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers								Remarks
29-5 #59	4-6-95	1448	8332	50; 1	1								
29-5 #9-26	" "	1537	8333	↓	1								
29-5 #91	" "	1611	8334		2								
29-6 #58A	" "	1126	8335		1								
29-5 #41	" "	1421	8336		1								
29-5 #58	" "	1342	8337		1								
29-6 #100	" "	1312	8338		1								
29-6 #25A	" "	1224	8339		1								
29-5 #55A	" "	1024	8340		1								
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time			
P. Jack Collins		4-6-95		1741		Nathan Speer		4-6-95		1741			
Relinquished by: (Signature)						Received by: (Signature)							
Relinquished by: (Signature)						Received by: (Signature)							

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 Farmington, New Mexico 87401
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**Risk Assessment
San Juan 29-6 #55A**

Depth to Groundwater	40'
Distance to Water Source	>1000'
Distance to Surface Water	>1000'
TPH Limit (ppm)	100

The subject pit was located in sandy silt soil. The initial size of the pit was 20'x20'x3' deep. The stained soil was excavated to a final pit size of 60' x 35' x 20'(avg) deep. Excavated soil amounted to 1500 total cubic yards, and was landfarmed on location.

The excavation was assessed by Envirotech on 9/03/93. Two test holes were utilized for assessment. Test hole # 1 was established in the deepest part of the pit with a total depth of 14 feet where bedrock was encountered. Headspace analysis of the test hole # 1 at 14 feet revealed a concentration of 512 parts per million (ppm). Test hole # 2 was established approximately 20 feet West of the pit to a total depth of 15 feet where bedrock was encountered. Sampling of test hole # 2 revealed concentrations above NMOCD and BLM closure guidelines. Excavation of the walls and bottom was performed on 8/10/94, 11/8/94, 7/18/95, and 8/7/95. The excavation proceeded to a depth of 20 (average) feet with further excavation of the pit walls. Following excavation, BTEX analysis of the bottom showed a Benzene level of 0.223 ppm and a Total BTEX concentration of 4.21 ppm, and a TPH level of 75 ppm utilizing EPA Method 418.1. The landfarm was tested on 4/6/95 by Envirotech and was found to be within closure guidelines (TPH = 55 ppm and an OVM reading of 10 ppm).

On June 3, 1997, Cimarron Oilfield Services, utilizing a Geoprobe, bore three test holes for risk assessment analysis. The bore holes were established approximately 10 feet North (down gradient) of the previous excavation, to depths ranging from 10 to 21 feet. Bedrock and a hard shale were encountered at each bore hole. Differences in depth to bedrock and the hard shale were due to the contour of the location and not the gradient of the bedrock. A sample was retrieved from the bottom of each bore hole and headspace analysis was performed. Headspace analysis concentrations ranged from 334 ppm to 0.0 ppm. Bore hole # 1 at 21 feet in depth was re-sampled and delivered to Intermountain Laboratories for TPH analysis utilizing EPA Method 8015 and BTEX analysis utilizing EPA Method 8020. Results of the analysis determined a concentration of 81 ppm of petroleum hydrocarbons present, a non-detect concentration of Benzene and 1.59 ppm concentration of Total BTEX in the soil. No groundwater was encountered, and first water was not recorded on the nearby cathodic well until a depth of 40 feet. The bore holes were 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.

ant : Phillips Petroleum

Date Started : 3 June 1997

Date Completed : 3 June 1997

Location : San Juan 29-6 # 55A		Overview of Pit Location and Sampling :			
Quad : "C"	Section : 18				
Township: 29-N Range: 6-W					
Pit : Separator					
Reference : 60 ft					
S 30 degrees W					
From Wellhead					
Pit Size : 20' x 20' x 3' deep					
		Sample #	Location	OVM	TPH
		1	Bh#1@21'	334	
		2	Bh#2@19'	0	
		3	Bh#3@10'	0	
		4			
		5			
		6			
		7			
		8			
		9			
		10			
		11			
		12			
Depth to Groundwater : 40 ft		Soil Type : Silty sand			
Blanking Score: 20		Bedrock Encountered : Yes			
Closure Standard : 100 ppm		Groundwater Encountered : No			
Comments :		Bore Hole # 1: Soil is slightly moist, Brown Silty Sand			
		No hydrocarbon staining or odor			
		Total Depth @ 21 feet due to Bedrock			
		Bore Hole #2: Soil is slightly moist, brown silty sand, with NO hydrocarbon staining or odor			
		Total Depth @ 19 feet due to bedrock			
		Bore Hole #3: Soil is slightly moist, brown silty sand with No hydrocarbon staining or odor.			
		Total Depth @ 10 feet due to hard shale, unable to penetrate with Geoprobe.			
		NOTE: Differences in depth of bore holes is due to contour of location and differences in elevations.			

Ground Level

Borings Angle

Edge of Location

Bore Hole # 1

Bore Hole # 2

Bore Hole # 3

Electric Box

Wellhead

Original

Excavation

Production Tank

Steel Pit

Depth (ft)	Bore #1	Bore #2	Bore #3
1	Brown	Brown	Brown
2			Silty
3			Sand
4			No
5			Hydro-Carbon
10	Sand	No	Staining or odor
15	No	Staining or odor	Sample #3
18	Staining or		Hard
20	Odor	Sample#2	Unable to penetrate
21	Bedrock	Bedrock	Shale

NOTE: Differences in depth of bore holes is due to contour of location and differences in elevations.

PHILLIPS PETROLEUM

Case Narrative

On June 4, 1997, two soil samples were submitted to Inter-Mountain Laboratories - Farmington for analysis, by Frank McDonald of Cimarron Oilfield Services. The samples were received cool and intact and were identified by Projects "SJ 29-6 #55A and SJ 29-6 #35MV". The samples were analyzed for the parameters indicated on the accompanying Chain of Custody documents # 47873 and 47874.

It is the policy of this laboratory to employ, whenever possible, preparatory and analytical methods which have been approved by regulatory agencies. The methods used in the analyses of the samples reported herein are found in Test Methods For Evaluation of Solid Waste, SW-846, USEPA, 1986, and Methods For Chemical Analysis of Water and Wastes, EPA-600/4-79-020, USEPA, 1983.

Quality control reports appear at the end of the analytical package and may be identified by title. If there are any questions regarding the information presented in this package, please feel free to call at your convenience.

Sincerely,

A handwritten signature in cursive script, appearing to read "Sharon Williams".

Sharon Williams
Organic Analyst

DIESEL RANGE ORGANICS - DRO

1160 Research Drive
Bozeman, Montana 59718

Client: PHILLIPS PETROLEUM COMPANY

Sample ID: Bore Hole #1 @ 21'

Project ID: S.J. 29-6 #55A

Lab ID: B973000 0397G00100

Matrix: Soil

Date Reported: 06/19/97

Date Sampled: 06/03/97

Date Received: 06/06/97

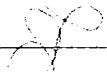
Date Extracted: 06/12/97

Date Analyzed: 06/18/97

Parameter	Result	PQL	Units
Diesel Range Organics	46	5.0	mg/kg
Diesel Range Organics as Diesel	46	5.0	mg/kg
Total Extractable Hydrocarbons	56	5.0	mg/kg

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: DRO - USEPA Method for Determination of Diesel Range Organics. Revision 3, 05/08/92.
WTPH-D Total Petroleum Hydrocarbons Analytical Methods for Soil, Washington State Department of Ecology, Revision 3, October 1991.

Analyst 

Reviewed 

GASOLINE RANGE ORGANICS - GRO

1160 Research Drive
Bozeman, Montana 59718

Client: **PHILLIPS PETROLEUM COMPANY**

Sample ID: Bore Hole #1 @ 21'

Project ID: S.J. 29-6 #55A

Lab ID: B973000 0397G00100

Matrix: Soil

Date Reported: 06/18/97

Date Sampled: 06/03/97

Date Received: 06/06/97

Date Extracted: 06/12/97

Date Analyzed: 06/12/97

Parameter	Result	PQL	Units
Gasoline Range Organics	35	5.0	mg/kg
Gasoline Range Organics as Gasoline	35	5.0	mg/kg
Total Purgeable Hydrocarbons	50	5.0	mg/kg
QUALITY CONTROL - Surrogate Recovery	%	QC Limits	
Bromofluorobenzene	195 ##	40 - 163	

ND - Not Detected at Practical Quantitation Level (PQL)

- Surrogate Recovery not within control limits due to matrix/dilution effect.

Reference: GRO - USEPA Method for Determination of Gasoline Range Organics, Rev. 5, February 1992.
WTPH-G Total Petroleum Hydrocarbons Analytical Methods for Soil, Washington State Department of Ecology, Revision 6, 08/18/93.

Analyst Sp

Reviewed 

EPA METHOD 8020
AROMATIC VOLATILE COMPOUNDS
BETX

1160 Research Drive
Bozeman, Montana 59718

Client: **PHILLIPS PETROLEUM COMPANY**

Sample ID: Bore Hole #1 @ 21'

Project ID: S.J. 29-6 #55A

Lab ID: B973000 C397G00100

Matrix: Soil

Date Reported: 06/18/97

Date Sampled: 06/03/97

Date Received: 06/06/97

Date Extracted: 06/12/97

Date Analyzed: 06/12/97

Parameter	Result	PQL	Units
Benzene	ND	0.2	mg/kg
Ethylbenzene	0.89	0.2	mg/kg
m,p-Xylene	ND	0.2	mg/kg
o-Xylene	ND	0.2	mg/kg
Toluene	0.7	0.2	mg/kg

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: Method 8020, Volatile Organic Compounds, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods United States Environmental Protection Agency, SW-846, Volume IB, September 1994. Analysis Method: Gas Chromatograph / Purge and Trap / PID.

Analyst Sh

Reviewed 

