

Denny E. Frost
P.O. Box 1980, Hobbs, NM
DISTRICT III
DEPUTY OIL & GAS INSPECTOR
P.O. Drawer DD, Artesia, NM 88211
District III
1000 Rio Brazos Rd., Aztec, NM 87401
OCT 28 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

PIT REMEDIATION AND CLOSURE REPORT

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

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

Facility Or: San Juan 29-5 Unit # 106 MV
Well Name

Location: Unit or Qtr/Qtr Sec NESW Sec 25 T 29N R 5W County Rio Arriba

Pit Type: Separator X Dehydrator Other Condensate Tank

Land Type: BLM X State Fee Other

Pit Location: Pit dimensions: Length 35 ft width 60 ft depth 10 ft

(Attach diagram)

Reference: wellhead X other

Footage from reference: 60 ft

Direction from reference: 15 Degrees East North

X West South X

Depth to Ground Water: 280 ft Less than 50 feet (20 points)
(vertical distance from 50 ft to 99 feet (10 points)
contaminants to seasonal X Greater than 100 feet (0 points) 0
highwater elevation of
ground water)

Wellhead Protection Area: Yes (20 points)
(less than 200 feet from a private X 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, X Greater than 1000 feet (0 points) 0
irrigation canals and ditches.)

P:\pits\PrC@WK3

RANKING SCORE (TOTAL POINTS): 0

RECEIVED
AUG 14 1997
OIL CON. DIV.
DIST. 3

Date Remediation Started: 9/16/94 Date Completed: 7/7/97

Excavation X Approx. cubic yards 750

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 and excavated to bedrock at a depth of 11 feet on 9/16/94 and again on 10/12/94, 10/13/94, 5/9/95, and 4/16/97. A sample provided concentrations above NMOCD and BLM guidelines. The landfarm was tested on 4/11/95 and 7/7/97 and was found to be below NMOCD and BLM guidelines. The site was risk assessed on 6/2/97 and a sample provided concentrations below 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 Approximately 20 feet east (down gradient) of original pit.

Sample depth 12' below ground level

Sample date 6/2/97 Sample time 11:07

Sample Results

Benzene(ppm) _____

Total BTEX (PPM) _____

Field Headspace (ppm) 0.0

TPH ND

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

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

DATE: 8-8-97 PRINTED NAME Bob Wirtanen

SIGNATURE RAW and TITLE Sr. Safety & Environmental Specialist

CLIENT: Phillips Petroleum

ENVIROTECH Inc.

PIT NO: PA2565798 US HWY. 64, FARMINGTON, NM 87401
(505) 632-0815C.O.C. NO: 3918

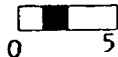
FIELD REPORT: CLOSURE VERIFICATION

JOB No: 93163PAGE No: 1 of 1LOCATION: NAME San Juan 29-5 WELL #: 106 MV PIT: Sep.DATE STARTED: 9/16/94QUAD/UNIT: K SEC: 25 TWP: 29N RNG: 5W BM: NM CNTY: R.Ast. NMDATE FINISHED: 9/16/94QTR/FOOTAGE: 1950' ESL & 1450' FWL CONTRACTOR:ENVIRONMENTAL
SPECIALIST: CJCSOIL REMEDIATION: EXCAVATION APPROX. 21 FT. x 22 FT. x 11 FT. DEEP.
DISPOSAL FACILITY: Landfarm CUBIC YARDAGE: 234 (loose)
LAND USE: Forest Service LEASE: SF-078917FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 51 FEET SW FROM WELLHEAD.DEPTH TO GROUNDWATER: 280' NEAREST WATER SOURCE: NA NEAREST SURFACE WATER: NANMDCD RANKING SCORE: 0 NMDCD TPH CLOSURE STD: 5000 PPMSOIL AND EXCAVATION DESCRIPTION: 0' - 6' Clay, tan, brown, dry, soft, no odor
6' - 8' Clay & shale, some sand, yellow tan, dry, no odor, firm
8' - 11' Shale & sandstone, dry, hard, slight odor

FIELD 4181 CALCULATIONS

SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
3 @ 10'	756	10	20	20	126	2520
1 @ 10'	757	10	20	2	68	132
5 @ 11'	758	10	20	2	337	674
2 @ 10'	759	10	20	20	101	2020
4 @ 10'	760	10	20	2	27	54

SCALE

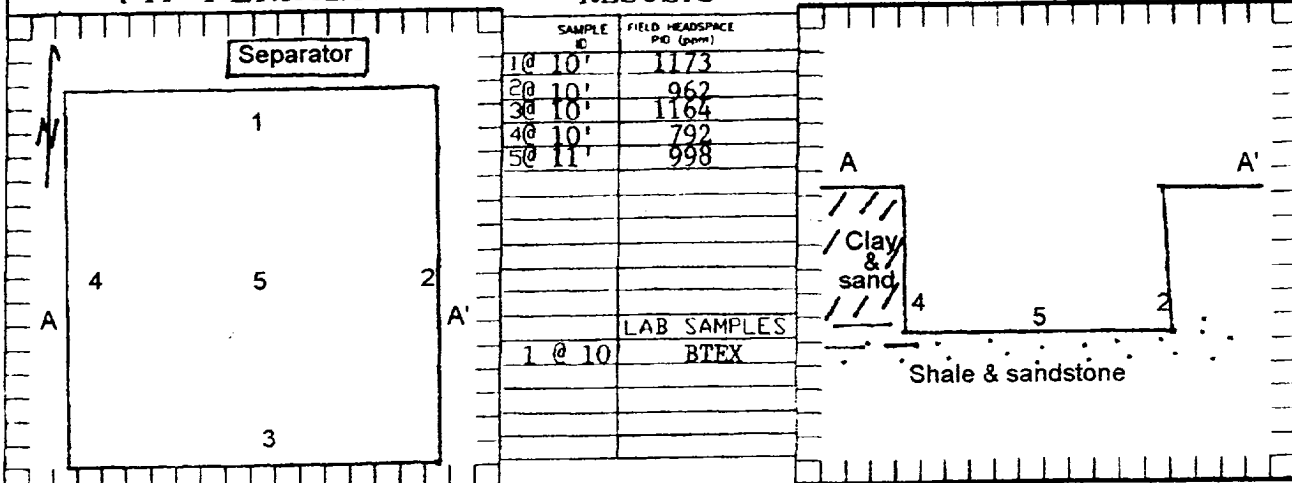


0 5' FEET

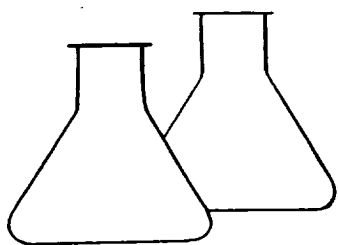
PIT PERIMETER

OVM
RESULTS

PIT PROFILE



TRAVEL NOTES: CALLOUT: _____ ONSITE: _____



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:	1 @ 10.0'	Date Analyzed:	9-16-94
Project Location:	San Juan 29-5 # 106 MV	Date Reported:	9-26-94
Laboratory Number:	GAC0757	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	136	10

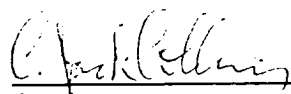
ND = Not Detectable at stated detection limits.

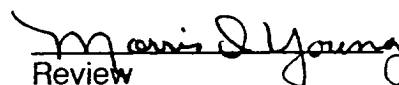
QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	920	900	2

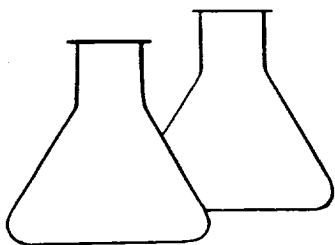
*Administrative Acceptance limits set at 30%.

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

Comments: Separator Pit PA257


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:	2 @ 10.0'	Date Analyzed:	9-16-94
Project Location:	San Juan 29-5 # 106 MV	Date Reported:	9-26-94
Laboratory Number:	GAC0759	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	2,020	100

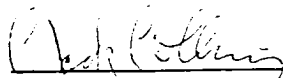
ND = Not Detectable at stated detection limits.

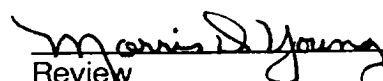
QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	920	900	2

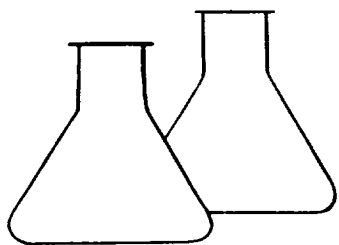
*Administrative Acceptance limits set at 30%.

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

Comments: Separator Pit PA257


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:	3 @ 10.0'	Date Analyzed:	9-16-94
Project Location:	San Juan 29-5 # 106 MV	Date Reported:	9-26-94
Laboratory Number:	GAC0756	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	2,520	100

ND = Not Detectable at stated detection limits.

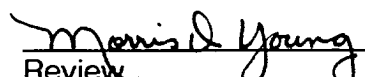
QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	920	900	2

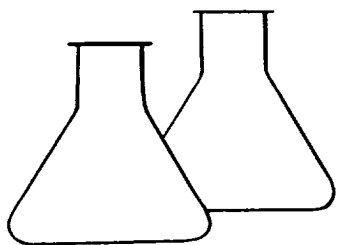
* Administrative Acceptance limits set at 30%.

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

Comments: Separator Pit PA257


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
Sample ID: 4 @ 10.0'
Project Location: San Juan 29-5 # 106 MV
Laboratory Number: GAC0760

Project #: 93163
Date Analyzed: 9-16-94
Date Reported: 9-26-94
Sample Matrix: Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	54	10

ND = Not Detectable at stated detection limits.

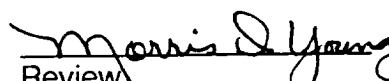
QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	126	142	12

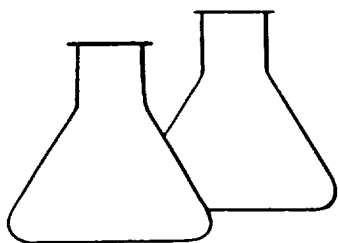
*Administrative Acceptance limits set at 30%.

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

Comments: Separator Pit PA257


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:	5 @ 11.0'	Date Analyzed:	9-16-94
Project Location:	San Juan 29-5 # 106 MV	Date Reported:	9-26-94
Laboratory Number:	GAC0758	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	674	10

ND = Not Detectable at stated detection limits.

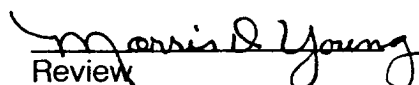
QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	920	900	2

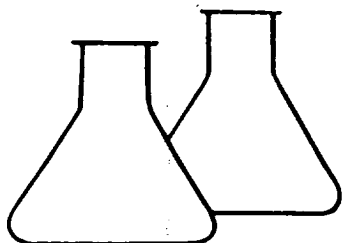
*Administrative Acceptance limits set at 30%.

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

Comments: Separator Pit PA257


Analyst


Review



ENVIROTECH LABS

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

EPA METHOD 8030 AROMATIC VOLATILE ORGANICS

Client:	Phillips	Project #:	93126
Sample ID:	1 C10'	Date Reported:	09-23-94
Laboratory Number:	78912TEN.	Date Sampled:	09-16-94
Sample Matrix:	Soil	Date Received:	09-16-94
Preservative:	Cool	Date Extracted:	09-22-94
Condition:	Cool & Intact	Date Analyzed:	09-23-94
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	197.0
Toluene	17400	497.0
o-xylene	10000	290.0
m-xylene	7800	297.0
p-xylene	41400	290

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	35 %
	Bromofluorobenzene	155 %

Method: Method 8030, Purge-and Trap, Test Methods for
Evaluating Solid Waste, SW-846, USEPA, July 1991

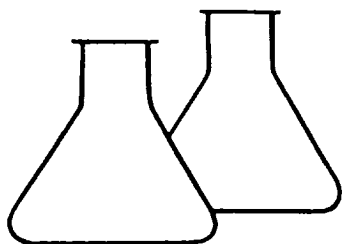
Method 8030, Aromatic Volatile Organics, Test Methods
for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

ND - Parameter not detected at the stated detection limit.

Comments: San Juan 29-5 # 106 HV
excessive surrogate recover due to coelution

Reyl. Haiff
Analyst

Maria D. Young
Review



ENVIROTECH LABS

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

Continuing Calibration
Aromatic Volatile Organics
BTEX - Purge & Trap

I-Cal Date: 09-22-94 14:26
C-Cal Date: 09-23-94 14:22

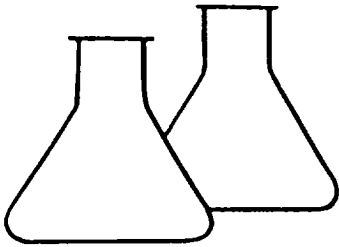
C-Cal Standard Concentration (ug/L): 20

Parameter	Retention Time	Peak Area	C-CAL RF	I-CAL RF	Difference
Benzene	6.260	76379	2.619E-04	2.693E-04	2.8
Toluene	11.264	464568	4.305E-05	4.576E-05	5.9
EthylBenz	13.534	378269	5.267E-05	5.687E-05	7.9
m-Xylene	13.700	343382	2.108E-05	2.282E-05	7.9
Xylene	14.371	178991	5.305E-05	5.716E-05	7.7
TFE	9.260	329133	1.285E-04	1.211E-04	-6.1
BTD	14.948	1178751	4.242E-05	4.162E-05	-1.9

A new calibration curve must be prepared if there is a percent difference greater than +/- 15%.

Rep. Hoff
Reviewed

Date



ENVIROTECH LABS

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

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	NA	Project #:	NA
Sample ID:	Laboratory Blank	Date Reported:	09-14-94
Laboratory Number:	0013AM.ELK	Date Sampled:	NA
Sample Matrix:	Water	Date Received:	NA
Preservative:	NA	Date Analyzed:	09-13-94
Condition:	NA	Analysis Requested:	BTEX

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

SUBSTITUTE COMPOUNDS:	Parameter	Percent Recovery
	Trifluorotoluene	81 %
	Bromofluorobenzene	92 %

Method: Method 8030A, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1991

Method 8021, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1980

ND - Parameter not detected at the stated detection limit.

Comments:

Rey L. Naiff
Analyst

Mavis D. Young
Reviewer

San Juan Repro Form 578-B1

PIT NO: PA 256

C.D.C. NO: _____

FIELD REPORT: CLOSURE VERIFICATION

JOB No: 93163

PAGE No: 1 of 1

LOCATION: NAME: San Juan 29-5 WELL #: 106 MV PIT: Sep.

DATE STARTED: 10-12-94

DATE FINISHED: 10-12-94

QUAD/UNIT: K SEC: 25 TWP: 29N RNG: 5W BM: NM CNTY: R.AST. NM

ENVIRONMENTAL SPECIALIST: HMB

QTR/FOQTAGE: 1950' FSL & 1450' FWL. CONTRACTOR: Cimarron

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

DISPOSAL FACILITY: Landfarm CUBIC YARDAGE:

LAND USE: Forest Service LEASE: SF-078917

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 51 FEET SW FROM WELLHEAD.

DEPTH TO GROUNDWATER: 280' NEAREST WATER SOURCE: N/A NEAREST SURFACE WATER: N/A

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

SOIL AND EXCAVATION DESCRIPTION: 0' - 6' Reddish-brown clay
6' -10' Greenish gray sandy clay
10' -11' Yellow/orange sandstone--Black stains @ + 1'
horizon

FIELD 418.1 CALCULATIONS

FIELD 4181 CALCULATIONS						
SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
6 @ 7'	827	10.29	20	10	76	1477

SCALE

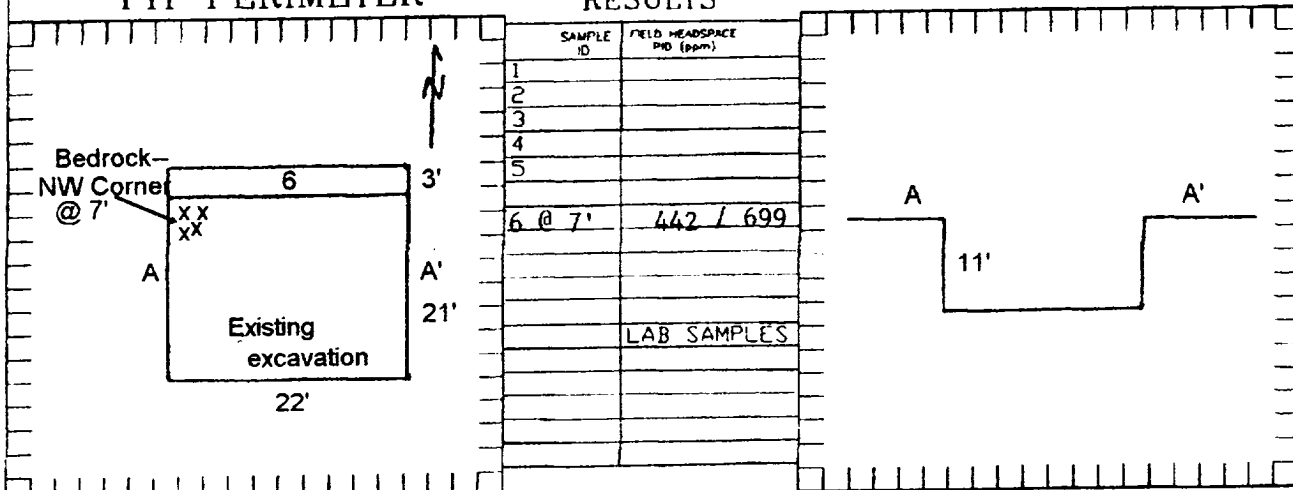


0 FEET

PIT PERIMETER

OVM RESULTS

PIT PROFILE

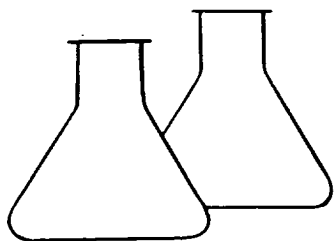


TRAVEL NOTES:

CALLOUT:

ON SITE:

NOTE : On OVM Field Headspace, immediate spike @ 442 699



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: 6 @ 7.0'
Project Location: San Juan 29-5 # 106 MV
Laboratory Number: GAC0827

Project #: 93163
Date Analyzed: 10-12-94
Date Reported: 10-17-94
Sample Matrix: Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	1,477	97

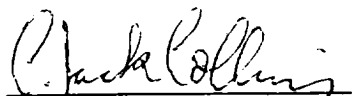
ND = Not Detectable at stated detection limits.

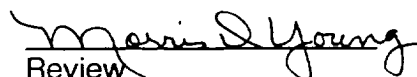
QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	98 *	96	1

*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 PA256


Analyst


Review

PIT NO: PA256

C.O.C. NO: _____

FIELD REPORT: CLOSURE VERIFICATION

JOB No: 93163

PAGE No: 1 of 1

LOCATION: NAME: San Juan 29-5 WELL #: 106 MV PIT: Sep.

DATE STARTED: 10/13/94

DATE FINISHED: 10/13/94

QUAD/UNIT: K SEC: 25 TWP: 29N RNG: 5W BM: NM CNTY: R.A. ST: NM

ENVIRONMENTAL SPECIALIST: CJC

QTR/FOOTAGE: 1950' FSL & 1450' FWL CONTRACTOR:

SOIL REMEDIATION: EXCAVATION APPROX. 31 FT. x 21 FT. x 8.5 FT. DEEP.

DISPOSAL FACILITY: On-site landfarm CUBIC YARDAGE:

LAND USE: Forest Service LEASE: SF-078917

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 51 FEET SW FROM WELLHEAD.

DEPTH TO GROUNDWATER: 280' NEAREST WATER SOURCE: N/A NEAREST SURFACE WATER: N/A

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

SOIL AND EXCAVATION DESCRIPTION: 0' - 5' Clay, tan, brown, dry
5' - 7' Clay & shale, blue, grey, maroon, dry, no odor
7' - 8.5' Shale & clay stone, hard, dry, yellow, tan, no
odor, BEDROCK

FIELD 4181 CALCULATIONS

FIELD 4181 CALCULATIONS						
SAMPLE I.D.	LAB No.	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1 @ 8'	833	9.75	20	1	29	59

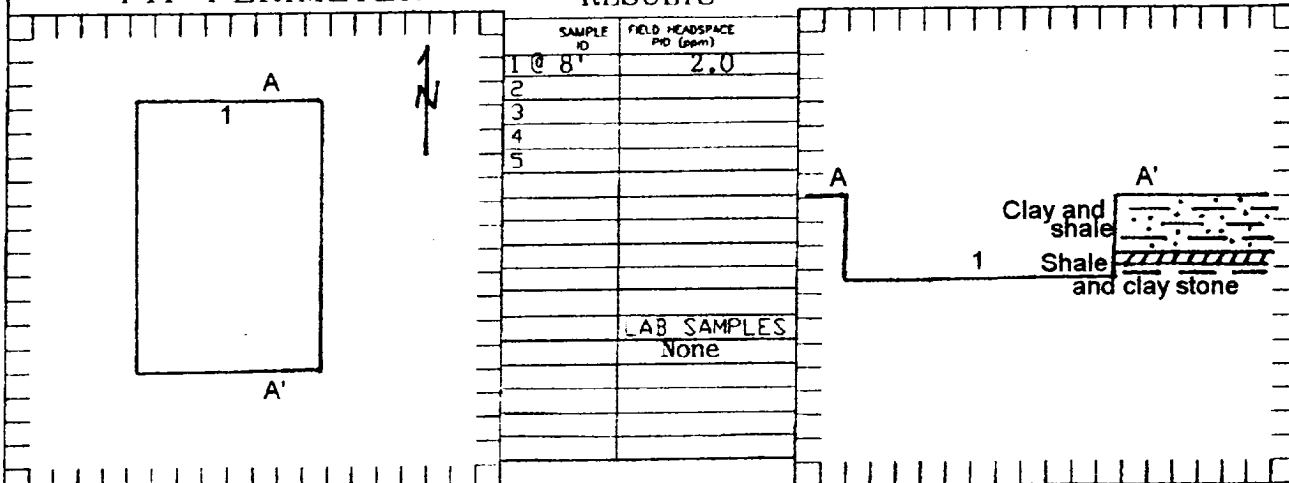
SCALE

0 10' FEET

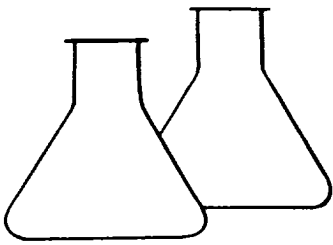
PIT PERIMETER

OVM RESULTS

PIT PROFILE



TRAVEL NOTES: _____ CALLOUT: _____ ONSITE: _____



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:	1 @ 8.0'	Date Analyzed:	10-13-94
Project Location:	San Juan 29-5 # 106 MV	Date Reported:	10-17-94
Laboratory Number:	GAC0833	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	59	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 PA256

Jack Collins
Analyst

Maris D Young
Review

ENVIROTECH Inc.

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

PIT No: PA256
C.O.C #: _____

FIELD REPORT: REMEDIATION FACILITY CLOSURE VERIFICATION

JOB No: 93163
PAGE No: 1 of 1

FACILITY LOCATION: San Juan 29-5 # 106 MV
SOURCE LOCATION: San Juan 29-5 # 106 MV
SOURCE LOCATION: San Juan 29-5 # 106 PC
SOURCE LOCATION: _____
FACILITY CLASSIFICATION: Landfarm

DATE STARTED: 4-11-95
DATE FINISHED: 4-11-95
ENVIRONMENTAL SPECIALIST: CJC

PIT TYPE: Sep.

SOIL REMEDIATION: QUANTITY: 170 cy # OF COMP. SAMPLES: 1
DIMENSIONS: 84' x 73' x .75' deep

VISIBLE OBSERVATIONS: _____

SAMPLING PLAN: 1 6-point composite

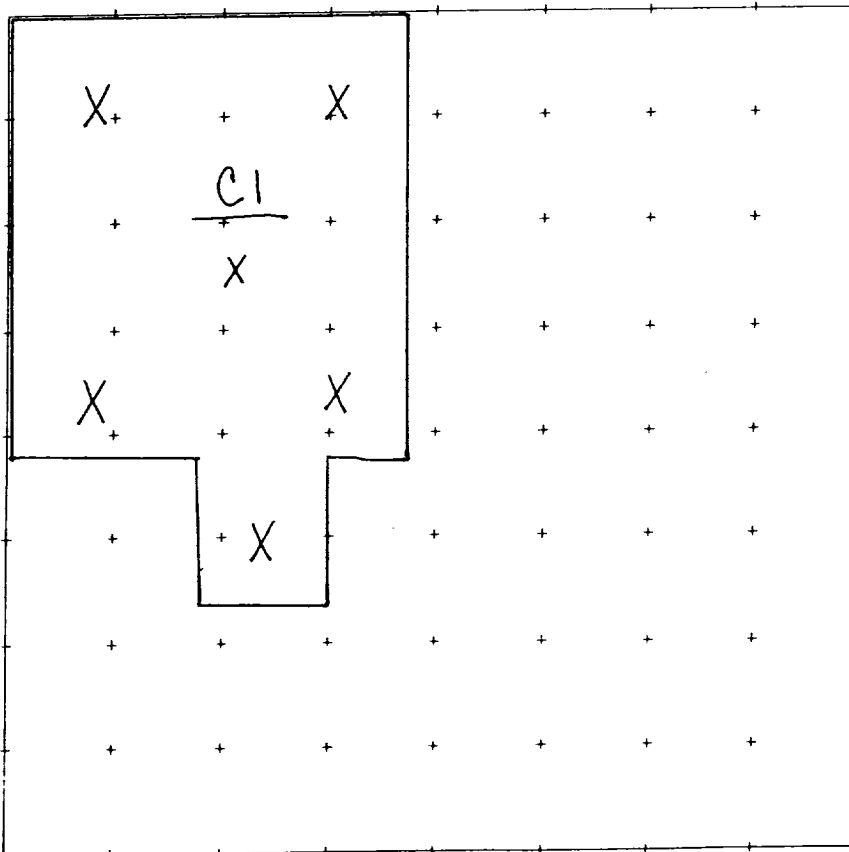
FIELD NOTES & REMARKS: FACILITY CENTER LOCATED APPROX 24 YARDS N FROM WELLHEAD.

DEPTH TO GROUNDWATER: 280'
NEAREST WATER SOURCE/TYPE: N/A
NEAREST SURFACE WATER: N/A
MAX TPH PER NMDCD: 5000 ppm

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

FACILITY DIAGRAM

GRID SCALE: 20'

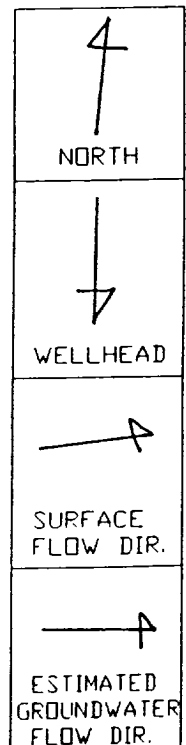


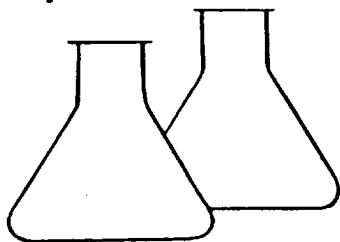
OVM RESULTS

SAMPLE ID:	FIELD HEADSPACE PID (ppm)
C1	10.0

LAB RESULTS

SAMPLE ID:	ANALYSIS REQUESTED	RESULTS PPM:
C1	TPH	1480





ENVIROTECH LABS

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

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips	Project #:	93163
Sample ID:	S.J. 29-5 #106 C1	Date Reported:	04-13-95
Laboratory Number:	8344	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	1480	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:

Nathan Spence
Analyst

Stacy W. Sander
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 4151	BTEX						Remarks
PH-11195/93136														
Sampler: (Signature) <i>C. Jack Collins</i>														
SJ 29-6 #103 C1	4/1/95	901	8341	soil		1	X							
SJ 29-6 #114 AC1		1001	8342			1	X							
SJ 29-6 #89 C1		1108	8343			1	X							
SJ 29-5 #106 C1		1626	8344			1	X							
SJ 30-5 #47 C1		1357	8345			1	X							
SJ 31-6 #50 DK C1		1258	8346			1	X							
SJ 30-5 #73 DK C1		1444	8347			1	X							
SJ 29-5 #94 C1		1584	8348			1	X							
SJ 29-5 #87 C1	✓	1707	8349			2	X	X						
Relinquished by: (Signature) <i>C. Jack Collins</i>		Date 4-11-95		Time 1707		Received by: (Signature) <i>Nathan Spence</i>		Date 4-12-95		Time 0713				
Relinquished by: (Signature)						Received by: (Signature)								
Relinquished by: (Signature)						Received by: (Signature)								

ENVIROTECH INC.

5796 U.S. Highway 64-3014

Farmington, New Mexico 87401

(505) 632-0615

CLIENT: Phillips Petroleum

ENVIROTECH Inc.

PIT NO: PA2565798 US HWY. 84, FARMINGTON, NM 87401
(505) 832-0815C.O.C. NO: 4190

FIELD REPORT: CLOSURE VERIFICATION

JOB No: 93163PAGE No: 1 of 1LOCATION: NAME San Juan 29-5 WELL #: 106 MPIT: Sep.DATE STARTED: 5-9-95DATE FINISHED: 5-9-95QUAD/UNIT: K SEC: 25 TWP. 29N RNG: 5W BM NM CNTY: R.AST NMENVIRONMENTAL
SPECIALIST: CJCQTR/FOOTAGE: 1950' FSL & 1450' FWL CONTRACTOR:SOIL REMEDIATION: EXCAVATION APPROX. 24 FT. x 30 FT. x 9 FT. DEEP.DISPOSAL FACILITY: Landfarm CUBIC YARDAGE: _____LAND USE: Forest Service LEASE: SF-078917FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 51 FEET SW FROM WELLHEAD.DEPTH TO GROUNDWATER: 280' NEAREST WATER SOURCE: N/A NEAREST SURFACE WATER: N/ANMDCD RANKING SCORE: 0 NMDCD TPH CLOSURE STD: 5000 PPM

SOIL AND EXCAVATION DESCRIPTION:

FIELD 4181 CALCULATIONS

SAMPLE I.D.	LAB No.	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
NW @ 9'	1026	10.63	20	1	19	36
EW @ 9'	1027	10.41	20	1	48	92
Btm @ 9'	1028	10.65	20	1	34	64
SW @ 9'	1029	10.60	20	1	43	81
WW @ 9'	1030	10.52	20	1	13	25

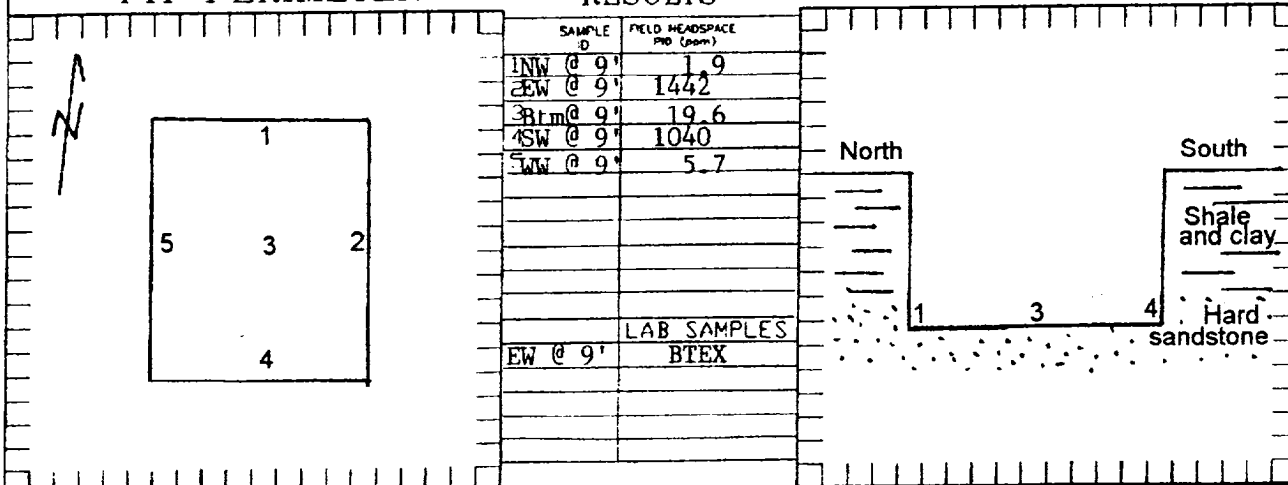
SCALE

0 10 FEET

PIT PERIMETER

OVM
RESULTS

PIT PROFILE



TRAVEL NOTES: CALLOUT: _____ ONSITE: _____

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	PHILLIPS PETROLEUM	Project #:	93163
Sample ID:	N. Wall @ 9'	Date Analyzed:	05/09/95
Project Location:	San Juan 29-5, #106MV	Date Reported:	05/18/95
Laboratory Number:	GAC1026	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	36	10

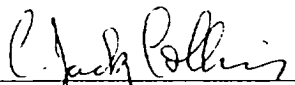
ND = Not Detectable at stated detection limits.

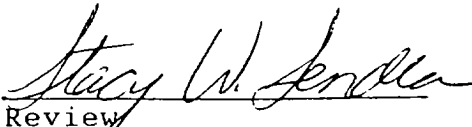
QA/QC:	Original TPH mg/kg	Duplicate TPH mg/kg	% Diff.*
	10	13	26

*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 # PA256


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client: PHILLIPS PETROLEUM
Sample ID: E. Wall @ 9'
Project Location: San Juan 29-5, #106MV
Laboratory Number: GAC1027

Project #: 93163
Date Analyzed: 05/09/95
Date Reported: 05/18/95
Sample Matrix: Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	92	10

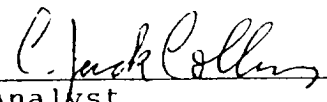
ND = Not Detectable at stated detection limits.

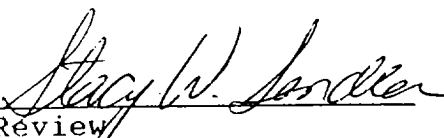
QA/QC:	Original TPH mg/kg	Duplicate TPH mg/kg	% Diff.*
	10	13	26

*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 # PA256


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client: PHILLIPS PETROLEUM
Sample ID: Bottom @ 9'
Project Location: San Juan 29-5, #106MV
Laboratory Number: GAC1028

Project #: 93163
Date Analyzed: 05/09/95
Date Reported: 05/18/95
Sample Matrix: Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	64	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 # PA256

C. Jack Collins
Analyst

Steve W. Jendler
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	PHILLIPS PETROLEUM	Project #:	93163
Sample ID:	S. Wall @ 9'	Date Analyzed:	05/09/95
Project Location:	San Juan 29-5, #106MV	Date Reported:	05/18/95
Laboratory Number:	GAC1029	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	81	10

ND = Not Detectable at stated detection limits.

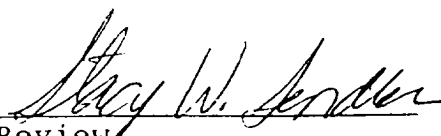
QA/QC:	Original TPH mg/kg	Duplicate TPH mg/kg	% Diff.*
	10	13	26

*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 # PA256


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	PHILLIPS PETROLEUM	Project #:	93163
Sample ID:	W. Wall @ 9'	Date Analyzed:	05/09/95
Project Location:	San Juan 29-5, #106MV	Date Reported:	05/18/95
Laboratory Number:	GAC1030	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	25	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 # PA256

P. Jack Collins
Analyst

Harry W. Jordan
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Phillips	Project #:	93163
Sample ID:	E. Wall @ 9'	Date Reported:	05-11-95
Laboratory Number:	8478	Date Sampled:	05-09-95
Chain of Custody:	4190	Date Received:	05-09-95
Sample Matrix:	Soil	Date Analyzed:	05-10-95
Preservative:	Cool	Date Extracted:	05-10-95
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
-----	-----	-----
Benzene	17.4	13.3
Toluene	42.0	20.0
Ethylbenzene	47.5	26.6
p,m-Xylene	230	53.2
o-Xylene	36.3	20.0

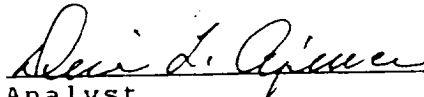
SURROGATE RECOVERIES:	Parameter	Percent Recovery
	-----	-----
	Trifluorotoluene	100 %
	Bromofluorobenzene	93 %

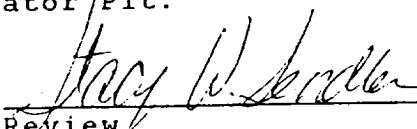
Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating
Solid Waste, SW-846, USEPA, Sept. 1986

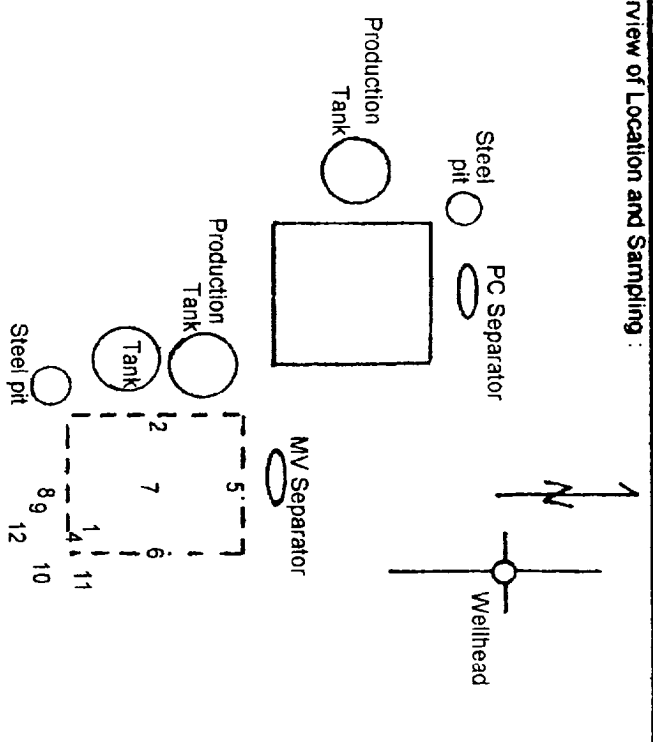
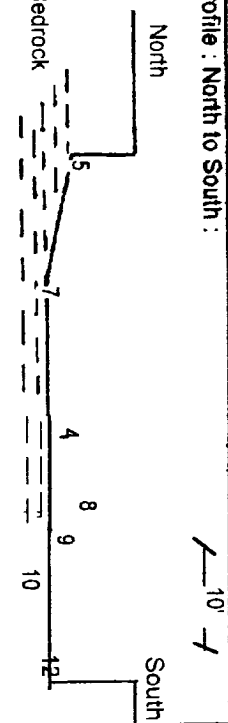
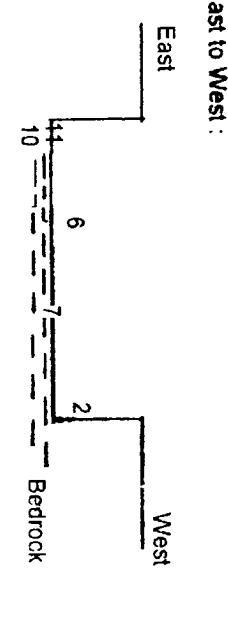
Method 8020, Aromatic Volatile Organics, Test Methods for
Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

ND - Parameter not detected at the stated detection limit.

Comments: San Juan 29-5 #106 MV Separator/Pit.


Analyst


Review

Location : <u>San Juan 29-5 # 106 MV</u>		Overview of Location and Sampling :	
Quad : <u>K</u>	Section : <u>25</u>		
Range : <u>5W</u>	Township: <u>28N</u>		
Pit : <u>Sep.</u>			
Reference : <u>60' S. 15 degrees W.</u>	Sample #	Location	OVM
Initial Size : <u>0' x 0' x 0' deep</u>	1	SE Corner	844
Final Size : <u>35' x 60' x 10' deep</u>	2	W. Wall @ 6'	0.0
Yds. Excavated : <u>760 cy</u>	3	N. Wall @ 7'	767
	4	S. Wall @ 8'	772
	5	N. Wall @ 8'	0.0
	6	E. Wall @ 7'	0.0
	7	Btm. @ 10'	0.0
Depth to Groundwater: <u>280'</u>	8	S. Wall @ 5'	767
Nearest Water Source: <u>N/A</u>	9	S. Wall @ 8'	767
Nearest Surface Water: <u>N/A</u>	10	S. Wall @ 12'	767
NMOCD Ranking Score: <u>0</u>	11	E. Wall @ 10'	14
TPH Closure Standard: <u>5000 ppm</u>	12	S. Wall @ 10'	174
Comments : Pit has been backfilled. Bedrock on north side at 7.5'. Bedrock slopes toward SE corner. Soil is gray and black stained, moist, brown, silty clay. Bedrock on bottom. Excavated soil was segregated and clean fill was returned to pit. Sample #12 sent to Inter-Mountain Laboratories Inc. for TPH 8015 and BTEX 8020.			
Pit Profile : North to South :		Pit Profile : East to West :	
			

GASOLINE RANGE ORGANICS - GRO

1160 Research Drive
Bozeman, Montana 59718

Client: PHILLIPS PETROLEUM COMPANY

Sample ID: S. Wall @ 10'

Project ID: S.J. 29-5 #106

Lab ID: B972022

0397G00665

Matrix: Soil

Date Reported: 05/01/97

Date Sampled: 04/21/97

Date Received: 04/23/97

Date Extracted: 04/24/97

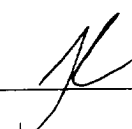
Date Analyzed: 04/29/97

Parameter	Result	PQL	Units
Gasoline Range Organics	7800	100	mg/kg
Gasoline Range Organics as Gasoline	7800	100	mg/kg
Total Purgeable Hydrocarbons	8300	100	mg/kg
QUALITY CONTROL - Surrogate Recovery	%	QC Limits	
Bromofluorobenzene	220 ##	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 Sr2Reviewed 

DIESEL RANGE ORGANICS - DRO1160 Research Drive
Bozeman, Montana 59718Client: **PHILLIPS PETROLEUM COMPANY**

Sample ID: S. Wall @ 10'

Project ID: S.J. 29-5 #106

Lab ID: B972022

0397G00665

Matrix: Soil

Date Reported: 05/05/97

Date Sampled: 04/21/97

Date Received: 04/23/97

Date Extracted: 04/24/97

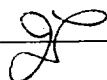
Date Analyzed: 04/28/97

Parameter	Result	PQL	Units
Diesel Range Organics	1200	5.0	mg/kg
Diesel Range Organics as Diesel	1200	5.0	mg/kg
Total Extractable Hydrocarbons	2000	5.0	mg/kg

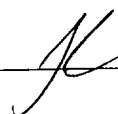
ND - Not Detected at Practical Quantitation Level (PQL)

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



VOLATILE AROMATIC HYDROCARBONS

Phillips Petroleum Company

Project ID:	San Juan 29-5 #106 MV	Report Date:	04/22/97
Sample ID:	S. Wall @ 10'	Date Sampled:	04/21/97
Lab ID:	0397G00665	Date Received:	04/22/97
Sample Matrix:	soil	Date Extracted:	NA
Condition:	Cool/Intact	Date Analyzed:	04/22/97

Target Analyte	Concentration (ppb)	Detection Limit (ppm)
Benzene	8,980	10.0
Toluene	119,700	10.0
Ethylbenzene	22,000	10.0
m,p-Xylenes	474,300	10.0
o-Xylene	65,300	10.0

ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Bromofluorobenzene	99%	70%-130%

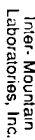
Reference: Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

Comments:



Analyst

Review



CHAIN OF CUSTODY RECORD

Client/Project Name				Project Location		ANALYSES / PARAMETERS					
Sampler: (Signature)		Chain of Custody Tape No.		Matrix		No. of Containers		Remarks			
Sample No./ Identification	Date	Time	Lab Number	Date	Time	Received by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
1633 Terra Avenue Sheridan, Wyoming 82801 Telephone (307) 672-8945	1701 Phillips Circle Gillette, Wyoming 82718 Telephone (307) 682-8945	2506 West Main Street Farmington, NM 87401 Telephone (505) 326-4737	1160 Research Dr. Bozeman, Montana 59715 Telephone (406) 586-8450	11183 SH 30 College Station, TX 77845 Telephone (409) 776-8945							

**Risk Assessment
San Juan 29-5 #106, MV**

Depth to Groundwater	280'
Distance to Water Source	>1000'
Distance to Surface Water	>1000'
TPH Limit (ppm)	5000

The subject pit was located in hard, well cemented sandstone at a depth ranging from approximately 7 feet to 12 feet sloping to the SouthEast. The initial size of the pit was 24' x 30' x 1' deep. The stained soil was excavated to a final pit size of 35' x 60' x 10' deep (average). Excavated soil amounted to approximately 750 total cubic yards, and was landfarmed on location.

On April 16, 1997 Cimarron Oilfield Services began excavation of the walls and bottom of the separator pit. Excavation was ceased on 4/21/97. The excavation was excavated to bedrock with a depth average of 10 feet and width and length of pit walls to 35 feet by 60 feet. Headspace analysis of the walls and bottom showed OVM levels ranging from 844 ppm to 0.0 ppm. A sample was retrieved from the South wall at a depth of 10 feet (174 ppm) and analyzed utilizing EPA Method 8020 for determination of Benzene, Toluene, ethyl Benzene, and Xylene (BTEX). Analysis of the sample produced levels above pit closure guidelines (Benzene = 8.98 ppm, and Total BTEX = 690.28 ppm). The landfarm had been tested on 4/11/95 by Envirotech and was found to be within closure guidelines (TPH = 1480 ppm and an OVM reading of 10.0 ppm). The soil excavated from 4/16/97 - 4/21/97 was landfarmed and was tested on 7/7/97 and was found to be within closure guidelines (TPH = 110 ppm and an OVM reading of 57 ppm).

On June 2, 1997, Cimarron Oilfield Services, utilizing a Geoprobe, bore two test holes for risk assessment analysis. Bore hole # 1 was established approximately 35 feet South (down gradient) of the existing pit, to a depth of 10 feet where bedrock was encountered. Headspace analysis revealed an OVM reading of Non-Detect. Bore hole #2 was established approximately 20 feet East of the existing pit, to a depth of 12 feet, where bedrock was encountered. Headspace analysis revealed an OVM reading of Non-Detect. A sample from 12 feet was analyzed for TPH utilizing EPA Method 418.1. Results of the analysis determined no detection of petroleum hydrocarbons present in the soil. No groundwater was encountered, and first water was not recorded on the nearby cathodic well until a depth of 280 feet. The bore holes were backfilled with the well cuttings.

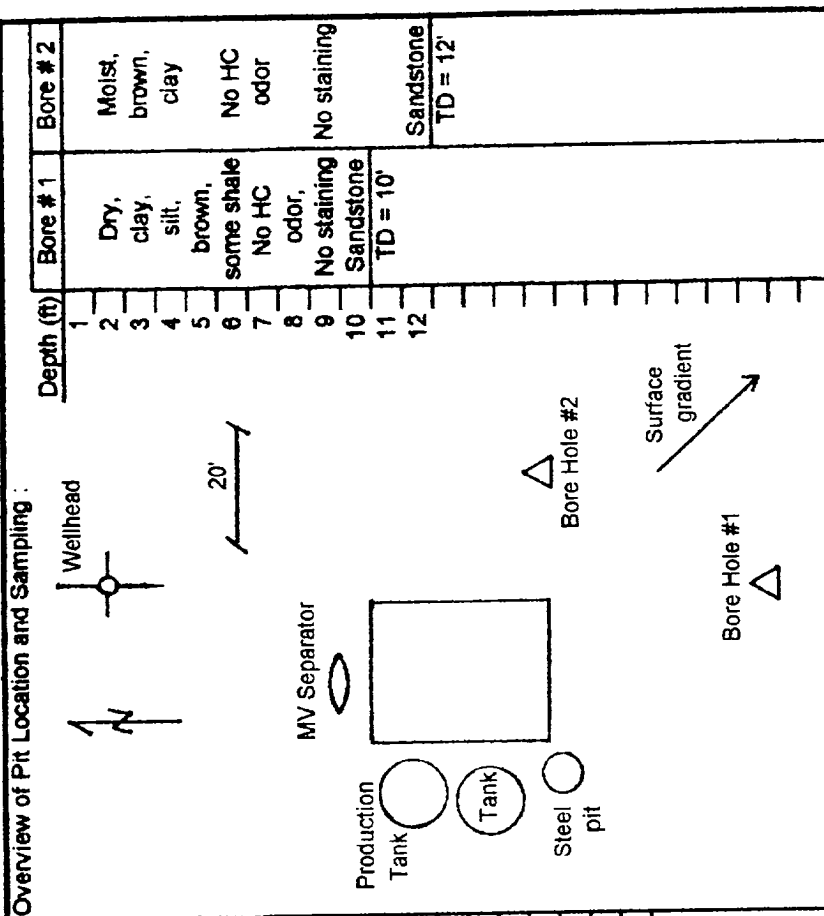
Having achieved action levels below NMOCD and BLM requirements this pit should be considered to have reached "final closure". Phillips Petroleum has removed and remediated all soils to the extent practical. By filling the excavation, the driving force created by additional fluids will be eliminated.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

Location : San Juan 29-5 # 106 MV			
Quad :	K	Section :	25
Township:	29N	Range:	5W

Pit :	Sep.	Sample #	Location	OVM	TPH
Reference : 60' S. 15 degrees W. From Wellhead Pit Size : 25' x 30' x 8' deep		1	BH#1 @ 10'	0.0	—
		2	BH#2 @ 12'	0.0	ND
		3			
		4			
		5			
		6			
		7			
		8			
		9			
		10			
		11			
		12			

Depth to Groundwater : 280'	Soil Type : Clayey silt
Ranking Score: 0	Bedrock Encountered : Yes at 10'-12'
Closure Standard : 5000 ppm	Groundwater Encountered : No

Comments :	Bore Hole #1 : Dry, clayey silt, brown, no hydrocarbon odor or staining, some shale
	Total Depth @ 10'
	9' - 10' Sandstone, unable to penetrate past 10'
	Bore Hole #2 : Moist, brown clay, sandstone @ 12'
	Sample #2 sent to Inter-Mountain Laboratories, Inc. for TPH 418.1 analysis



Depth (ft)	Bore # 1	Bore # 2
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

**TOTAL PETROLEUM HYDROCARBONS
EPA METHOD 418.1**

Client: **Phillips Petroleum**
Project: **SJ 29-5 #106, MV**
Matrix: **Soil**
Condition: **Intact/Cool**

Date Reported: **06/19/97**
Date Sampled: **06/02/97**
Date Received: **06/03/97**
Date Extracted: **06/05/97**
Date Analyzed: **06/05/97**

Sample ID	Lab ID	Result mg/kg	Detection Limit mg/kg
BH #2 @ 12'	0397G00984	ND	20

ND - Analyte not detected at stated detection level.

Method 418.1:

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

Method 3550:

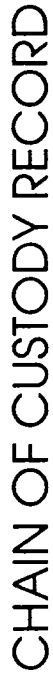
Ultrasonic Extraction of Non-Volatile and Semi-Volatile Organic Compounds from Solids, USEPA SW-846, Rev. 1, July 1992.

Reported By



Reveiwed By





Inter-Mountain Laboratories, Inc.

Location : <u>San Juan 29-5 Unit No. 106 MV</u>																																										
Quad : <u>K</u>	Section : <u>25</u>																																									
Township: <u>29 N</u> Range: <u>5 W</u>																																										
Pit : <u>Sep.</u> Reference : <u>30' N 45 E</u> <u>from wellhead.</u> Size : <u>125' X 95' X 5'</u> Yds : <u>530 cy</u> 4 <u>5 - Point Composites</u>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 10%;">Sample #</th> <th style="width: 40%;">Location</th> <th style="width: 50%;">OVM</th> </tr> <tr><td>1</td><td>pts 1-5</td><td>4.1</td></tr> <tr><td>2</td><td>pts 6-10</td><td>1.3</td></tr> <tr><td>3</td><td>pts 11-15</td><td>57</td></tr> <tr><td>4</td><td>pts 16-20</td><td>1.8</td></tr> <tr><td>5</td><td></td><td></td></tr> <tr><td>6</td><td></td><td></td></tr> <tr><td>7</td><td></td><td></td></tr> <tr><td>8</td><td></td><td></td></tr> <tr><td>9</td><td></td><td></td></tr> <tr><td>10</td><td></td><td></td></tr> <tr><td>11</td><td></td><td></td></tr> <tr><td>12</td><td></td><td></td></tr> </table>			Sample #	Location	OVM	1	pts 1-5	4.1	2	pts 6-10	1.3	3	pts 11-15	57	4	pts 16-20	1.8	5			6			7			8			9			10			11			12		
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10																																										
11																																										
12																																										
Overview of Landfarm and Sampling :																																										
Comments :																																										
Moist, brown, clay - silt. No apparent odor or staining. Sample #3 was sent to IML labs for GRO/DRO 8015.																																										
Environmental Specialist : <u>VEC</u>																																										

CASE NARRATIVE

Client: PHILLIPS PETROLEUM COMPANY
Project: S.J. 29-5 #106 Received on: 07/09/97
Set ID: 0597H03630 # samples: 1

Suites: TPH (DRO), TPH (GRO)

The sample was received for analysis at Inter-Mountain Laboratories (IML), Bozeman, Montana. Enclosed are the results of these analyses.

Limits of detection for each instrument/analysis are determined by sample matrix effects, instrument performance under standard conditions, and dilution requirements to maintain chromatography output within calibration ranges. Quantitations have been calculated on an as received basis.

Quality Control reports have been included for your information and use. These 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 contact me at (800) 828-1413.



Wes Harvey
IML-Bozeman

DIESEL RANGE ORGANICS - DRO

Client: **PHILLIPS PETROLEUM COMPANY**
Sample ID: Column B - Sample #3
Project ID: S.J. 29-5 #106
Lab ID: B973630 0397G01344
Matrix: Soil

Date Reported: 07/28/97
Date Sampled: 07/07/97
Date Received: 07/09/97
Date Extracted: 07/22/97
Date Analyzed: 07/23/97

Parameter	Result	PQL	Units
Diesel Range Organics	70	5.0	mg/kg
Diesel Range Organics as Diesel	70	5.0	mg/kg
Total Extractable Hydrocarbons	110	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: Column B - Sample #3
Project ID: S.J. 29-5 #106
Lab ID: B973630 0397G01344
Matrix: Soil

Date Reported: 07/21/97
Date Sampled: 07/07/97
Date Received: 07/09/97
Date Extracted: 07/17/97
Date Analyzed: 07/18/97

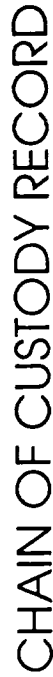
Parameter	Result	PQL	Units
Gasoline Range Organics	ND	5.0	mg/kg
Gasoline Range Organics as Gasoline	ND	5.0	mg/kg
Total Purgeable Hydrocarbons	ND	5.0	mg/kg
QUALITY CONTROL - Surrogate Recovery	%	QC Limits	
Bromofluorobenzene	103	40 - 163	

ND - Not Detected at Practical Quantitation Level (PQL)

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 SD

Reviewed SD



CHAIN OF CUSTODY RECORD

01-4360