Form 3160-5
(June 1990)

Denny G. Foust
DEPUTY OIL & GAS INSPECTOR

JUN 16 1997

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

Approved

5. Lease Designation and Serial No.: NM-03471-A

6. If Indian, Allottee or Tribe Name:

7. If Unit or CA, Agreement Designation: San Juan 29-6 Unit

1. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.: SJ 29-6 Unit #87

2. Name of Operator: Phillips Petroleum Company

9. API Well No.: 30-039-07492

3. Address and Telephone No.: 5525 Highway 64, NBU 3004, Farmington, NM 87401 505-599-3400

10. Field and Pool, or Exploratory Area: Basin Dakota

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Unit H, 1500' FNL & 880' FEL
Section 33, T29N, R6W

11. County or Parish, State: Rio Arriba, NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
☒ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☒ Other Pit Closure	☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

The pit associated with the subject well's separator has been closed and replaced with a double bottom steel tank. Details of the closure are attached.

RECEIVED
MAR 20 1997
OIL CON. DIV.
DIST. 3

14. I hereby certify that the foregoing is true and correct

Signed _____ Title Sr Safety & Environ. Spclst. Date 3-18-97

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

District I
P.O. Box 1980. Hobbs, NM
District II
P.O. Drawer DD, Ariesia NM 88211
District III
1000 Rio Brazos Rd, Aztec NM 874 1 0

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

SUBMIT 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, NBU 3004, Farmington, NM 87401

Facility Or: San Juan 29 - 6 Unit # 87
Well Name

Location: Unit or Qtr/Qtr Sec H SENE Sec 33 T 29N R 6W County Rio Arriba

Pit Type: Separator X Dehydrator _____ Other _____

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

Pit Location: (Attach diagram)

Pit dimensions: Length 19 ft, width 18 ft, depth 12 ft

Reference-. wellhead X other _____

Footage from reference: 65 ft

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

Depth to Ground Water: (vertical distance from contaminants to seasonal highwater elevation of ground water) 70 ft	____	Less than 50 feet	(20 points)	
	X	50 ft to 99 feet	(1 0 points)	
	____	Greater than 1 00 feet	(0 points)	10
Wellhead Protection Area: (less than 200 feet from a private domestic water source, or: less than I 000 feet from all other water sources).	____	Yes	(20 points)	
	X	No	(0 points)	0
Distance to Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches.)	____	Less than 200 feet	(20 points)	
	____	200 feet to I 000 feet	(1 0 points)	
	X	Greater than I 000 feet	(0 points)	0

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OIL CON. DIV.
DIST. 3

P:\pits\PrrC@.WK3

RANKING SCORE (TOTAL POINTS): 10

Date Remediation Started: 7/31/95 Dated Completed: 2/24/97

Excavation X Approx. cubic yards 114.5

Landfarmed X Insitu Bioremediation _____

Other _____

Remediation Method: Onsite X Offsite _____

(Check all appropriate sections)

General Description of Remedial Action- Based on the initial assessment, soils were excavated to a depth of 7.5 feet below the original pit bottom. The excavated soils were landfarmed on location. The landfarm tested clean on 7/31/95. The landfarmed soils were then used to fill the excavation. A risk assessment was performed on 2/24/97 with samples received from 20 feet below the original pit depth. Based on the risk assessment there is little or 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 Individual samples were collected from each wall, the bottom of the excavation, and the bottom of the boring.

Sample depth 20 feet

Sample date 2/24/97 Sample time 10:30

Sample Results

Benzene(ppm) _____

Total BTEX (PPM) _____

Field Headspace (ppm) 3.5

TPH 2.1

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 3-18-97 PRINTED NAME BobWirtanen

SIGNATURE Robert A. Wirtanen and TITLE -Sr. Safety & Environmental Specialist

ENVIROTECH Inc.

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

PIT NO: PA069

C.O.C. NO: 3166

FIELD REPORT: SITE ASSESSMENT

JOB NO: 93163
PAGE NO: 1 of 1

PROJECT: PIT ASSESSMENT
CLIENT: PHILLIPS PETROLEUM
CONTRACTOR: ENVIROTECH, INC.
EQUIPMENT USED: CASE EXTEND-A-DIG

DATE STARTED: 11-8-93
DATE FINISHED: 11-8-93
ENVIR. SPCLT: FCC
OPERATOR: CIMARRON
ASSISTANT: [illegible]

LOCATION: LEASE: SAN JUAN 29-6 WELL: # 87 QD: 1500'N, 880'E. (H)
SEC: 33 TWP: 29N RNG: 6W PM: NM CNTY: R.A. ST: NM PIT: SEP.

LAND USE: RANGE - LEASE # NM 03471-A
SURFACE CONDITIONS: EARTHEN PIT - FENCED APPROX.

FIELD NOTES & REMARKS: PIT IS LOCATED APPROXIMATELY 55 FEET N.75°W. OF WELLHEAD.

CLOSURE STD: 5000 PPM TPH

T1: MOIST, BLACK - SANDY, ROCKY - SOME ODOR.

RANKING SCORE: 0

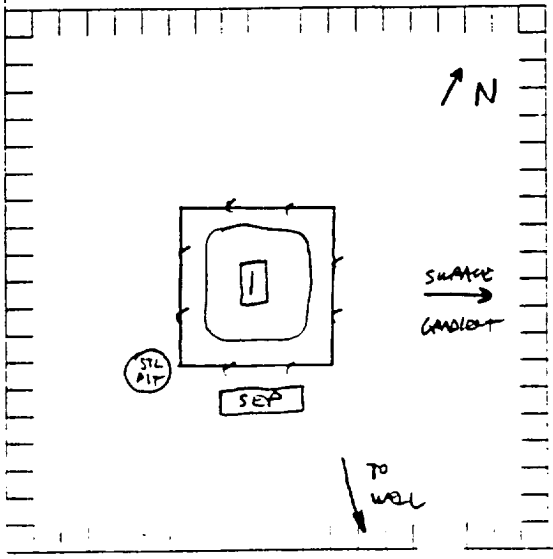
SAMPLE INVENTORY

SMPL ID:	SMPL TYPE	LABORATORY ANALYSIS:
T1@7.5'	SOIL	4000 PPM
T1@7.5'	SOIL	BTEX

(990:: DILUTE 1:10 = 200 x 2 x 10 = 4000 PPM) GAC° 0298

SCALE
0 10 20 FEET

SITE DIAGRAM



TEST HOLE LOGS:

TH#: 1

SOIL TYPE:	SMPL TYPE:	OVM TPH
SP	GAB	222
BLACK		
SP	GAB	611
T.D. = 7.5'		

TH#: _____ TH#: _____ TH#: _____

SOIL TYPE:	SMPL TYPE:	OVM TPH

6 5 1 2 3 4 5 6 7 8 9 10

SOIL TYPE: C = Clay M = Silt S = Sand G = Gravel Formation: C = Clay S = Sand G = Gravel Lithology: P = Paper R = Rock W = Wood

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FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	T1 @ 7.5'	Date Analyzed:	11-08-93
Project Location:	San Juan 29-6, #87	Date Reported:	11-15-93
Laboratory Number:	GAC0298	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	4,000	100

ND = Not Detectable at stated detection limits.

QA/QC:

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

*Administrative Acceptance limits set at 30%.

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

Comments: Separator Pit PA069

R. E. O'Neill
Analyst

Review

CHAIN OF CUSTODY RECORD

PAGE 9

Client/Project Name	Project Location	ANALYSIS/PARAMETERS
PHILLIPS # 93163	SAN JUAN 29-6 #87 SEP. PIT	
Sampler: (Signature) R. E. O'Neill	Chain of Custody Tape No.	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	BTEX						Remarks
T1 @ 7.5'	11-8-93	1018	6452	Soil	1	✓						

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Tim
R. E. O'Neill	11-8-93	1642	Jean L. Cannon	11-8-93	1642
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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Farmington, New Mexico 87401
(505) 632-0615

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EPA METHOD 8020
AROMATIC VOLATILE ORGANICS

Client:	Phillips	Project #:	93163
Sample ID:	T 1 @ 7.5'	Date Reported:	11-09-93
Laboratory Number:	6452	Date Sampled:	11-08-93
Sample Matrix:	Soil	Date Received:	11-08-93
Preservative:	Cool	Date Extracted:	11-09-93
Condition:	Cool & Intact	Date Analyzed:	11-09-93
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	41.5	29.7
Toluene	339	19.8
Ethylbenzene	610	19.8
p,m-Xylene	3,620	19.8
o-Xylene	2,640	19.8

SURROGATE RECOVERIES:

Parameter	Percent Recovery
Trifluorotoluene	92 %
Bromofluorobenzene	96 %

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

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

ND - Parameter not detected at the stated detection limit.

Comments: San Juan 29-6 #87 Separator Pit PA069

Analyst

Review

ENVIROTECH Inc.

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

PIT NO: PA069
C.O.C. NO: 4316

FIELD REPORT: SITE ASSESSMENT

JOB No: 93163
PAGE No: 1 of 1

PROJECT: PIT ASSESSMENT
CLIENT: Phillips
CONTRACTOR: ENVIROTECH, INC.
EQUIPMENT USED:

DATE STARTED: 7-31-95
DATE FINISHED:
ENVIRO. SPCL: CJC
OPERATOR:
ASSISTANT:

LOCATION: LEASE: San Juan 29-6 WELL: #87 QD:
SEC: TWP: RNG: PM: CNTY: ST: PIT: Sep.

LAND USE: Range
SURFACE CONDITIONS:

PIT CENTER IS LOCATED APPROXIMATELY 66 FEET W. OF WELLHEAD.

FIELD 418.1 CALCULATIONS

SAMPLE I.D.	LAB No.	WEIGHT (g)	mL. FREON DILUTION	READING	CALC. ppm
T1 Bottom	1123	9.95	20 10	106	2131
T1@12'	1124	9.83	20 1	120	240

DEPTH TO GROUNDWATER: >100'
NEAREST WATER SOURCE/TYPE
NEAREST SURFACE WATER
NMOCD RANKING SCORE
NMOCD TPH CLOSURE STD: 1000 ppm

SAMPLE INVENTORY

SMPL ID:	SMPL TYPE:	LABORATORY ANALYSIS
T1@12'	Soil	BTEX

TH#: 1

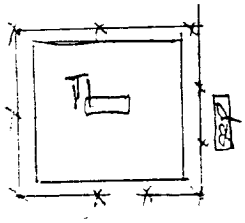
SOIL TYPE:	SMPL TYPE:	OVM TPU

2 — Pit Bottom
Clay Tan
4 — Silt
Sandy
10 — 45/2131
Silt & clay green 222/205
12 — Bedrock Sandstone/Shale

TH#: _____ TH#: _____ TH#: _____

SCALE
0 10 FEET

SITE DIAGRAM



N

WH

SOIL TYPE: C = Clay, M = Silt, 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 @ 10.0'	Date Analyzed:	07-31-95
Project Location:	San Juan 29-6 #87	Date Reported:	08-01-95
Laboratory Number:	GAC1123	Sample Matrix:	Soil

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

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 #87, Separater Pit # PA069, T1 @ 10.0'**

Analyst

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FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	T1 @ 12.0'	Date Analyzed:	07-31-95
Project Location:	San Juan 29-6 #87	Date Reported:	08-01-95
Laboratory Number:	GAC1124	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	240	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 #87, Separater Pit # PA069, T1 @ 12.0'**

Analyst

Review

4316

CHAIN OF CUSTODY RECORD

Client/Project Name	Project Location	ANALYSIS/PARAMETERS
Phillips/93163	S.J. 29-6 #87 Sep	
Sampler: (Signature) C. Jack Collins	Chain of Custody Tape No.	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	BTEX						Remarks
TP @ 12'	7/31/95	1022	8762	Soil	1	✓						

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
C. Jack Collins	7/31/95	1516	[signature]	7-31-95	1516
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

san juan repro Form 578-81

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8020
AROMATIC VOLATILE ORGANICS

Client:	Phillips	Project #:	93163
Sample ID:	T 1 @ 12'	Date Reported:	08-01-95
Laboratory Number:	8762	Date Sampled:	07-31-95
Chain of Custody:	4316	Date Received:	07-31-95
Sample Matrix:	Soil	Date Analyzed:	08-01-95
Preservative:	Cool	Date Extracted:	08-01-95
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**293**	**29.8**
Toluene	**ND**	**34.1**
Ethylbenzene	**314**	**31.9**
p,m-Xylene	**3,250**	**27.2**
o-Xylene	**1,350**	**29.6**

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	**105 %**
	Bromofluorobenzene	**103 %**

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: **S. J. 29 - 6 #87 Sep.**

Analyst

Review

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CLIENT: Phillips

ENVIROTECH Inc.

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

PIT NO: PA069

LOC NO: _____

FIELD REPORT: CLOSURE VERIFICATION

JOB No: 93163
PAGE No: 1 of 1

LOCATION: NAME San Juan 29-6 WELL # 87 PIT: Sep
QUAD/UNIT: SEC: TWP: RNG: BM: CNTY: ST:
QTR/FOOTAGE: CONTRACTOR: Jays Backhoe

DATE STARTED: 7-31-95
DATE FINISHED: 7-31-95
ENVIRONMENTAL SPECIALIST: CJC

SOIL REMEDIATION: EXCAVATION APPROX. 19 FT. x 18 FT. x 12 FT. DEEP.
DISPOSAL FACILITY: Land CUBIC YARDAGE: _____
LAND USE: Range LEASE: _____

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 65' FEET W FROM WELLHEAD
DEPTH TO GROUNDWATER: 70' NEAREST WATER SOURCE: _____ NEAREST SURFACE WATER: _____
NMOCD RANKING SCORE: 10 NMOCD TPH CLOSURE STD: 1000 PPM

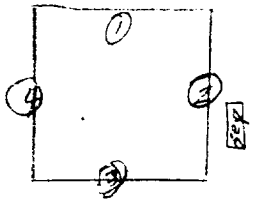
SOIL AND EXCAVATION DESCRIPTION: 0-10' Clay, shale, soft, tan, black, blue gray, strong odor;
10'-12' Shale siltstone, sandstone, hard, dry, gray-green, no odor;
BTM. samples from T1 on Site Assessment form.

FIELD 418.1 CALCULATIONS

SAMPLE ID.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
② E.Wall @ 12'	1125	10.39	20	1	46	88.5
③ S.Wall @ 12'	1126	10.74	20	1	76	141.5
④ W.Wall	1127	10.162	20	1	141	265.5
① N.Wall	1128	10.15	20	1	36	70.9

SCALE 1" = 10'
0 10 FEET

PIT PERIMETER



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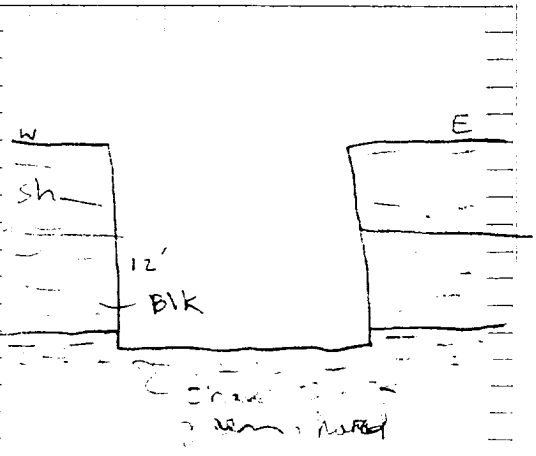
OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
E.Wall @ 12'	253
S.Wall @ 12'	292
W.Wall @ 12'	319
N.Wall @ 12'	113

LAB SAMPLES

PIT PROFILE



TRAVEL NOTES: ON SITE 730 Am ON SITE 900 Am

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FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	E. WALL @ 12.0'	Date Analyzed:	07-31-95
Project Location:	San Juan 29-6 #87	Date Reported:	08-01-95
Laboratory Number:	GAC1125	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	89	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 #87, Separater Pit # PA069, E. WALL @ 12.0'**

C. Jack Collins
Analyst

Review

ENVIROTECH LABS

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

FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	S. WALL @ 12.0'	Date Analyzed:	07-31-95
Project Location:	San Juan 29-6 #87	Date Reported:	08-01-95
Laboratory Number:	GAC1126	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	140	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 #87, Separater Pit # PA069, S. WALL @ 12.0'**

C. Jack Collins
Analyst

Review

ENVIROTECH LABS

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

FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	W. WALL @ 12.0'	Date Analyzed:	07-31-95
Project Location:	San Juan 29-6 #87	Date Reported:	08-01-95
Laboratory Number:	GAC1127	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	270	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 #87, Separater Pit # PA069, W. WALL @ 12.0'**

Analyst

Review

ENVIROTECH LABS

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

FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	N. WALL @ 12.0'	Date Analyzed:	07-31-95
Project Location:	San Juan 29-6 #87	Date Reported:	08-01-95
Laboratory Number:	GAC1128	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	71	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 #87, Separater Pit # PA069**

Analyst

Review

ENVIROTECH Inc.

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

PIT No. PA069
C.O.C # 4546

FIELD REPORT: REMEDIATION FACILITY CLOSURE VERIFICATION

JOB No. 93163
PAGE No. 1 of 1

FACILITY LOCATION: San Juan 29-6 #87
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: # OF COMP. SAMPLES: 1
DIMENSIONS: 48'X 70'X 1'
VISIBLE OBSERVATIONS:
SAMPLING PLAN:

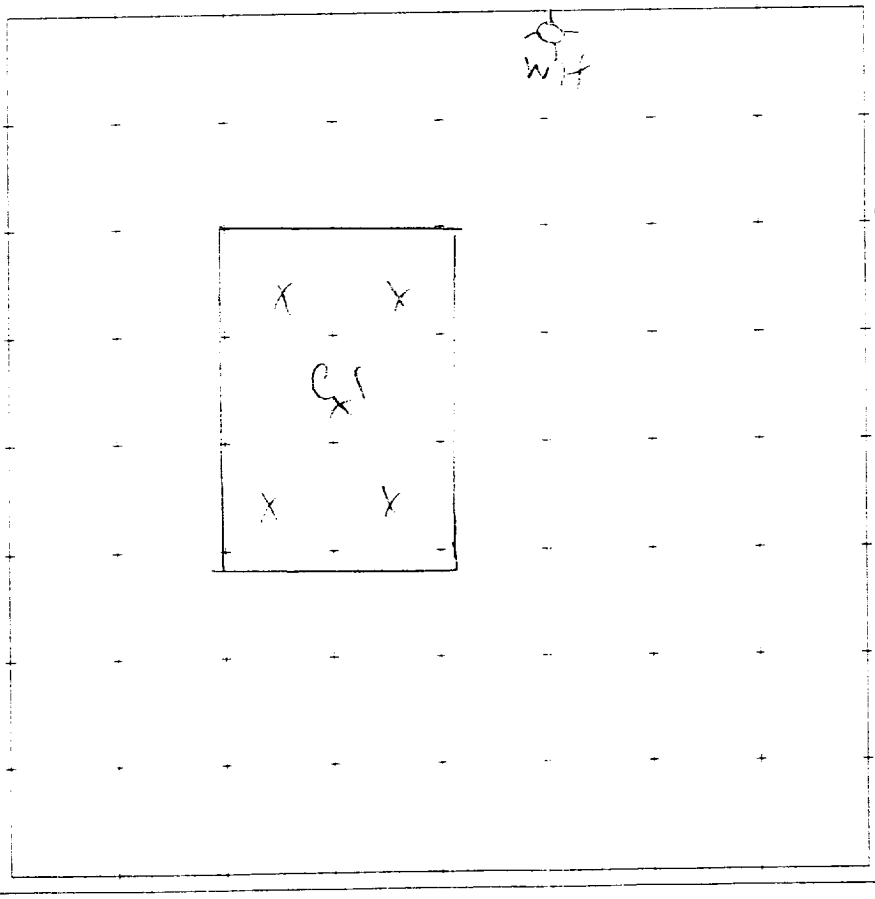
FIELD NOTES & REMARKS: FACILITY CENTER LOCATED APPROX 27 YARDS SW FROM WELLHEAD.

DEPTH TO GROUNDWATER: 70'
NEAREST WATER SOURCE: TYPE
NEAREST SURFACE WATER:
MAX TPH PER NMOCD: 1000 ppm

NMOCD RANKING SCORE	TPH CLEAN UP LEVEL
10 OR MORE	100 PPM
0-9	1000 PPM

FACILITY DIAGRAM

NOT TO SCALE



OVM RESULTS

SAMPLE ID:	FIELD HEADSPACE PID (ppm)
C1	11.3

LAB RESULTS

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

NORTH

WELLHEAD

SURFACE FLOW DIR.

ESTIMATED GROUNDWATER FLOW DIR.

4546

CHAIN OF CUSTODY RECORD

Client/Project Name	Project Location	ANALYSIS/PARAMETERS
Phillips/93163	29-5 & 29-6 S.J. Co. NM	
Sampler: (Signature) C. Jack Collins	Chain of Custody Tape No.	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH 8015	BTEX					Remarks
S.J. 29-6 #87 Cl-LF	11/22/95	1507	9685	Soil	1	✓						
S.J. 29-6 #48-35 Cl-LF	11/22/95	1429	9686	Soil	1	✓	✓					
SJ 29-6 #48-35 C2-LF	11/22/95	1445	9687	Soil	1	✓						
SJ 29-6 #103 Cl-LF	11-22-95	1316	9688	Soil	1	✓						
SJ 29-6 #89 Cl-LF	11-22-95	1228	9689	Soil	1	✓						
SJ 29-5 #104 Cl-LF	11-22-95	1142	9690	Soil	1	✓						

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
C. Jack Collins	11/22/95	1615	Glenn L. Spence	11/22/95	1615
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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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 #87 C1-LF	Date Reported:	11-28-95
Laboratory Number:	9685	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

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Risk Assessment
San Juan 29-6 #87

Depth to Groundwater	70'
Distance to Water Source	>1000'
Distance to Surface Water	>1000'
TPH Limit (ppm)	1000

The subject pit was located in hard, well cemented sandstone below a hard, 9 foot layer of shale. The initial size of the pit was 15'x15'x4.5' deep. The stained soil was excavated to a final pit size of 19' x 18' x 12' deep. Excavated soil amounted to 114.5 total cubic yards, and was landfarmed on location.

The excavation was assessed by Envirotech on 11/8/93. The bottom of the excavation (7.5 ft. below ground level) had a high TPH reading of 4000 ppm and an OVM reading of 611 ppm.. A second assessment was performed by Envirotech on 7/31/95. The bottom of the excavation (12 ft below ground level) had a high TPH reading of 240 ppm with Benzene concentration of 0.293 ppm and a Total BTEX of 5.21 ppm. Excavation of the walls and bottom were performed on 7/31/95. The walls showed OVM levels ranging from 319 ppm on the West wall to 113 ppm on the North wall with TPH levels ranging from 265.5 ppm on the West wall to 70.9 ppm on the North wall. The landfarm had been tested on 11/22/95 by Envirotech and was found to be within closure guidelines (TPH = Non-Detect and an OVM reading of 11.3 ppm. The pit was subsequently filled utilizing the landfarm soil.

On February 24, 1997, Cimarron Oilfield Services, utilizing a Geoprobe, bore a hole to approximately 20 feet in depth, and at an angle of 22.5 degrees from vertical for purposes of determining vertical extent of stained soils. At 20 feet, a hard, well cemented sandstone was encountered below a 9 foot layer of hard shale. A sample at 20 feet was retrieved and tested utilizing an OVM and the field headspace method for BTEX and a TPH sample submitted to Envirotech Labs for TPH analysis utilizing EPA Method 8015. Results provided an OVM reading of 3.5 ppm and a TPH level of 2.1 ppm. No groundwater was encountered, and first water was not recorded on the nearby cathodic well until a depth of 70 feet. The bore hole was 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.

Client : **Phillips Petroleum**

Date Started : **24 Feb. 1997** Date Finished : **24 Feb. 1997**

Location : **San Juan 29 - 6 # 87**

Quad : "H" Section : 33

Township: 29N Range: 6W

Pit : Separator

Reference : "55' N 60 W From Wellhead

Pit Size : 20' x 20' x 2'

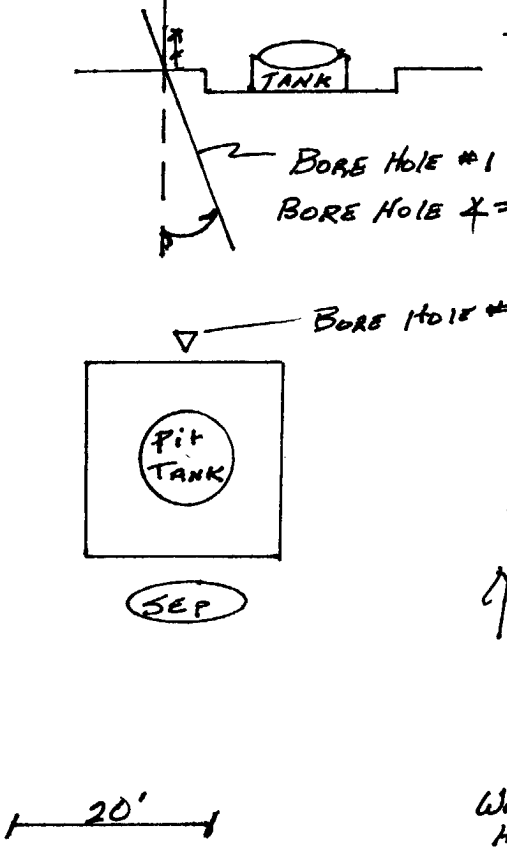
Sample #	Location	OVM(ppm)	TPH
1	18' to 20'	3.5	
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

Depth to Groundwater : 70' Soil Type : Clayey Silt

Ranking Score: 10 Bedrock Encountered : Yes @ 20'

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

Overview of Pit Location and Sampling :



Depth (ft)	Bore # 1	Bore # 2
1		
2		
3	Moist	
4		
5	Brown	
	Clayey	
	Silt	
10		
11	Gm/Clay	
	Dry	
	Gray	
	Shale	
18		
	Sample #1	
20	Bedrock	

Comments :

Bore Hole # 1 : 0 to 10' ; Soil is brown clayey silt, moist

"@ 10' soil is green clay, moist

Bore Hole # 1 is located 15' from center of pit with a drilling angle of 22.5 degrees from vertical

From 11' to 20' soil is dry, hard gray shale

Split spoon sample retrieved from 18' to 20' depth, 100 % recovery

TPH 8015 sample retrieved from 20' depth

Bore hole is backfilled with Bentonite and well cuttings

5079

CHAIN OF CUSTODY RECORD

Client/Project Name	Project Location	ANALYSIS/PARAMETERS
Phillips Petroleum	San Juan 29-6 #87, Sep Pit	

Sampler: (Signature)	Chain of Custody Tape No.
Frank M Daniel	93163

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH 8015						Remarks
Bore Hole #1 @ 20'	2/24/97	10:30	A976	Soil	1	X						

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Frank M Daniel	2/24/97	15:50	[signature]	2/24/97	1550
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	Bore Hole #1 @ 20'	Date Reported:	02-25-97
Laboratory Number:	A976	Date Sampled:	02-24-97
Chain of Custody No:	5079	Date Received:	02-24-97
Sample Matrix:	Soil	Date Extracted:	02-25-97
Preservative:	Cool	Date Analyzed:	02-25-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**2.1**	**0.1**
Total Petroleum Hydrocarbons	**2.1**	**0.2**

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: **San Juan 29-6 #87, Sep. Pit.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

QUALITY ASSURANCE / QUALITY CONTROL

DOCUMENTATION

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Laboratory Blank	Date Reported:	02-25-97
Laboratory Number:	02-25-TPH.BLANK	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	02-25-97
Condition:	N/A	Analysis Requested:	TPH

Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Gasoline Range C5 - C10	**ND**	**0.2**
Diesel Range C10 - C28	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**0.2**

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: **QA/QC for samples A975 - A976.**

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Matrix Duplicate	Date Reported:	02-25-97
Laboratory Number:	A975	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	Cool	Date Analyzed:	02-25-97
Condition:	Cool and Intact	Analysis Requested:	TPH

Parameter	Sample Result (mg/Kg)	Duplicate Result (mg/Kg)	Percent Difference
Gasoline Range (C5 - C10)	**19.0**	**19.5**	**2.2%**
Diesel Range (C10 - C28)	**3.4**	**3.3**	**4.7%**
Total Petroleum Hydrocarbons	**22.4**	**22.8**	**1.1%**

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria:	Parameter	Max Difference
	Petroleum Hydrocarbons	**30%**

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

Comments: **QA/QC for samples A975 - A976.**

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Hydrocarbons
Total Petroleum Hydrocarbons
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Matrix Spike	Date Reported:	02-25-97
Laboratory Number:	A975	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Analysis Requested:	TPH	Date Analyzed:	02-25-97
Condition:	N/A		

Parameter	Sample Result (mg/kg)	Spike Added (mg/kg)	Spiked Sample Result (mg/kg)	Det. Limit (mg/kg)	Percent Recovery
Gasoline Range (C5 - C10)	**19.0**	**250**	**267**	**0.2**	**99%**
Diesel Range (C10 - C28)	**3.4**	**250**	**251**	**0.1**	**99%**
Total Petroleum Hydrocarbons	**22.4**	**500**	**518**	**0.2**	**99%**

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria:	Parameter	Acceptance Range
	Petroleum Hydrocarbons	**75 - 125%**

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

Comments: **QA/QC for samples A975 - A976.**

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