District I
P.O. Box 1980, Hobbs, NM
District II
P.O. Drawer DD, Artesia NM 88211
District III
1000 Rio Brazos Rd, Aztec NM 87410

Bennie E. Faust
DEPUTY OIL & GAS INSPECTOR
JUN 24 1997

State of New Mexico
Energy, Minerals and Natural Resources Department

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

SUBMIT 1 COPY TO APPROPRIATE DISTRICT OFFICE AND 1 COPY TO SANTA FE OFFICE

Approved

PIT REMEDIATION AND CLOSURE REPORT

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

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

Facility Or: San Juan 29 - 5 Unit # 104 PC
Well Name

Location: Unit or Qtr/Qtr Sec B NWNE Sec 10 T 29N R 5W County Rio Arriba

Pit Type: Separator X Dehydrator _____ Other _____

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

Pit Location: (Attach diagram)

Pit dimensions: Length 15 ft, width 27 ft, depth 7 ft

Reference: wellhead X other _____

Footage from reference: 66 ft

Direction from reference: 30 Degrees _____ East North X 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	(10 points)
		_____	Greater than 100 feet	(0 points) 10
Wellhead Protection Area: (less than 200 feet from a private domestic water source, or: less than 1000 feet from all other water sources)		_____	Yes	(20 points)
		X	No	(0 points) 0
Distance to Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches.)		_____	Less than 200 feet	(20 points)
		_____	200 feet to 1000 feet	(10 points)
		X	Greater than 1000 feet	(0 points) 0

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DIST. 3

P:\pits\PitC@.WK3

RANKING SCORE (TOTAL POINTS): 10

Date Remediation Started: 8/31/94 Date Completed: 8/1/96

Excavation X Approx. cubic yards 112

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 4 feet below pit bottom. The excavated soils were landfarmed on location. The landfarm tested clean on 8/1/96. The landfarmed soils were then used to fill the excavation.

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, and the bottom of the excavation.

Sample depth 7 feet

Sample date 5/10/95 Sample time ____

Sample Results

Benzene (ppm) ____

Total BTEX (PPM) ____

Field Headspace (ppm) 0.0

TPH 46

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 4-22-97 PRINTED NAME Bob Wirtanen

SIGNATURE [signature] and TITLE Sr. Safety & Environmental Specialist

ENVIROTECH Inc.

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

PIT NO: PA240
C.O.C. NO: 3902

FIELD REPORT: SITE ASSESSMENT

JOB No: 93163
PAGE No: 1 of 1

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

DATE STARTED: 8/31/94
DATE FINISHED: 8/31/94
ENVRO. SPCLT: CJC
OPERATOR:
ASSISTANT:

LOCATION: LEASE: SF-078642 WELL: San Juan 29-5 QD: Unit No. 104 PC
SEC: 10 TWP: 29N RNG: 5W PM: NM CNTY: Rio Arriba ST: NM PIT: Sep

LAND USE: Range
SURFACE CONDITIONS: Earthen Pit

PIT CENTER IS LOCATED APPROXIMATELY 66 FEET N30°W OF WELLHEAD.

0'-3' Clay black, soft, wet, some odor
3'-4' Clay tan, brown, soft, dry, no odor

FIELD 418.1 CALCULATIONS

SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
T1 @ 4'	702	10	20	2	18	36
T1 @ 6'	703	10	20	20	337	6740

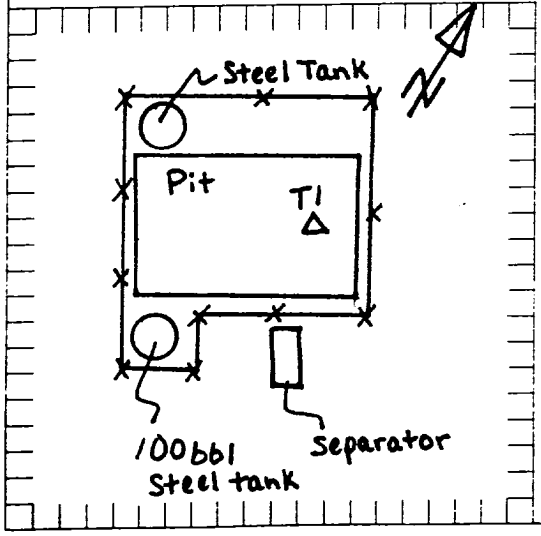
DEPTH TO GROUNDWATER: 70
NEAREST WATER SOURCE/TYPE: >1000'
NEAREST SURFACE WATER: >1000'
NMOCD RANKING SCORE: 10
NMOCD TPH CLOSURE STD: <1000

SAMPLE INVENTORY

SMPL ID:	SMPL TYPE:	LABORATORY ANALYSIS:
T1@6'	Soil	BTEX

SCALE
0 20 FEET

SITE DIAGRAM



TH#: 1

	SOIL TYPE:	SMPL TYPE:	OVM/TPH
1	Clay, black, wet		
2			
3	Pit bottom Clay, tan dry		140/36
4			
5			168/6740
6			

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

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:	T-1 @ 4.0'	Date Analyzed:	8-31-94
Project Location:	San Juan 29-5 #104PC	Date Reported:	9-23-94
Laboratory Number:	GAC0702	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:

QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
2	2	0

*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 PA240

C. Jack Collins
Analyst

Review

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FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	T-1 @ 6.0'	Date Analyzed:	8-31-94
Project Location:	San Juan 29-5 #104PC	Date Reported:	9-23-94
Laboratory Number:	GAC0703	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	**6,740**	**100**

ND = Not Detectable at stated detection limits.

QA/QC:

QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
2	2	0

*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 PA240

C. Jack Collins
Analyst

Review

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EPA METHOD 8020
AROMATIC VOLATILE ORGANICS

Client:	Phillips	Project #:	93163
Sample ID:	TI@6	Date Reported:	09-07-94
Laboratory Number:	7873	Date Sampled:	08-31-94
Sample Matrix:	Soil	Date Received:	08-31-94
Preservative:	Cool	Date Extracted:	09-02-94
Condition:	Cool & Intact	Date Analyzed:	09-07-94
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	69	19.3
Toluene	93	19.3
thylbenzene	560	12.9
p,m-Xylene	224	19.3
o-Xylene	181	19.3

SURROGATE RECOVERIES:

Parameter	Percent Recovery
Trifluorotoluene	115 %
Bromofluorobenzene	99 %

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 29-5 #104 PC

Analyst

Review

3902

CHAIN OF CUSTODY RECORD

Client/Project Name	Project Location	ANALYSIS/PARAMETERS
Phillips Petroleum	San Juan, 29-5 #104 PC	
Sampler: (Signature) C. Jack Pollin	Chain of Custody Tape No.	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	BTEX						Remarks
T1 @ 6"	8/31/94	1245	7873	Soil	1	✓						

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
C. Jack Pollin	8/31/94	1700	Ref & Staff	09/01/94	8 00
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.

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

PIT NO: PA240
C.O.C. NO: ____

FIELD REPORT: CLOSURE VERIFICATION

JOB No: 93163
PAGE No: 1 of 1

LOCATION: NAME: San Juan 29-5 WELL #: 104PC PIT: Sep
QUAD/UNIT: B SEC: 10 TWP: 29N RNG: 5W BM: NM CNTY: R.A ST: NM
QTR/FOOTAGE: 950' FNL & 1720' FEL CONTRACTOR:

DATE STARTED: 5-10-95
DATE FINISHED: ____
ENVIRONMENTAL SPECIALIST: CJC

SOIL REMEDIATION: EXCAVATION APPROX. 15 FT. x 27 FT. x 7 FT. DEEP.
DISPOSAL FACILITY: Land Farm--On Site CUBIC YARDAGE: 105
LAND USE: Range LEASE: SF-078642

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 66 FEET N 30° W FROM WELLHEAD.
DEPTH TO GROUNDWATER: 70 NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'
NMOCD RANKING SCORE: 10 NMOCD TPH CLOSURE STD: 1000 PPM

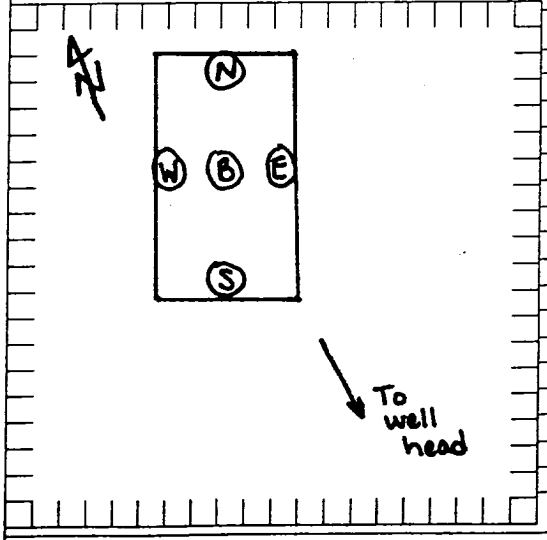
SOIL AND EXCAVATION DESCRIPTION:

FIELD 418.1 CALCULATIONS

SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
E W @ 7'	1044	10.55	20.0	1	33	63
S W @ 7'	1045	10.75	20.0	1	17	32
Btm @ 7'	1046	10.36	20.0	1	24	46
W W @ 7'	1047	10.16	20.0	1	17	33
N W @ 7'	1048	10.65	20.0	1	16	30

SCALE
0 10 FEET

PIT PERIMETER

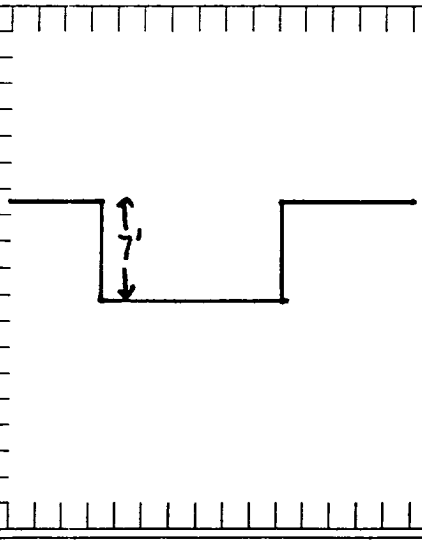


OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 EW @ 7'	0.0
2 SW @ 7'	0.0
3 Btm @ 7'	0.0
4 WW @ 7'	0.0
5 NW @ 7'	0.0

LAB SAMPLES
NONE

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:	E. Wall @ 7'	Date Analyzed:	05/10/95
Project Location:	San Juan 29-5, 104PC	Date Reported:	05/18/95
Laboratory Number:	GAC1044	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	63	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 # PA240

C. Jack Collins
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:	S. Wall @ 7'	Date Analyzed:	05/10/95
Project Location:	San Juan 29-5, 104PC	Date Reported:	05/18/95
Laboratory Number:	GAC1045	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	32	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 # PA240

C. Jack Collins
Analyst

Stacy W. Sendler
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:	Bottom @ 7'	Date Analyzed:	05/10/95
Project Location:	San Juan 29-5, 104PC	Date Reported:	05/18/95
Laboratory Number:	GAC1046	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	46	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 # PA240

C. Jack Collins
Analyst

Stacy W. Sendler
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 @ 7'	Date Analyzed:	05/10/95
Project Location:	San Juan 29-5, 104PC	Date Reported:	05/18/95
Laboratory Number:	GAC1047	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	33	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 # PA240

C. Jack Pollins
Analyst

Stacy W. Sendler
Review

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FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	PHILLIPS PETROLEUM	Project #:	93163
Sample ID:	N. Wall @ 7'	Date Analyzed:	05/10/95
Project Location:	San Juan 29-5, 104PC	Date Reported:	05/18/95
Laboratory Number:	GAC1048	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	30	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 # PA240

C. Jack Collins
Analyst

Stacy W. Sendler
Review

ENVIROTECH Inc.

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PIT No: PA240
C.O.C #:

FIELD REPORT: REMEDIATION FACILITY CLOSURE VERIFICATION

JOB No: 93163
PAGE No: 1 of 1

FACILITY LOCATION: San Juan 29-5 #104 PC
SOURCE LOCATION:
SOURCE LOCATION:
SOURCE LOCATION:
FACILITY CLASSIFICATION: Landfarm PIT TYPE: Sep

DATE STARTED: 5-10-95
DATE FINISHED:

ENVIRONMENTAL SPECIALIST: CJC

SOIL REMEDIATION: QUANTITY: 47 cy # OF COMP. SAMPLES: 1
DIMENSIONS: 60' x 42' x 0.5'
VISIBLE OBSERVATIONS: Oil Stain, Clay and Sand
SAMPLING PLAN: 1 5-point composite

FIELD NOTES & REMARKS: FACILITY CENTER LOCATED APPROX 54 YARDS NW FROM WELLHEAD.

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

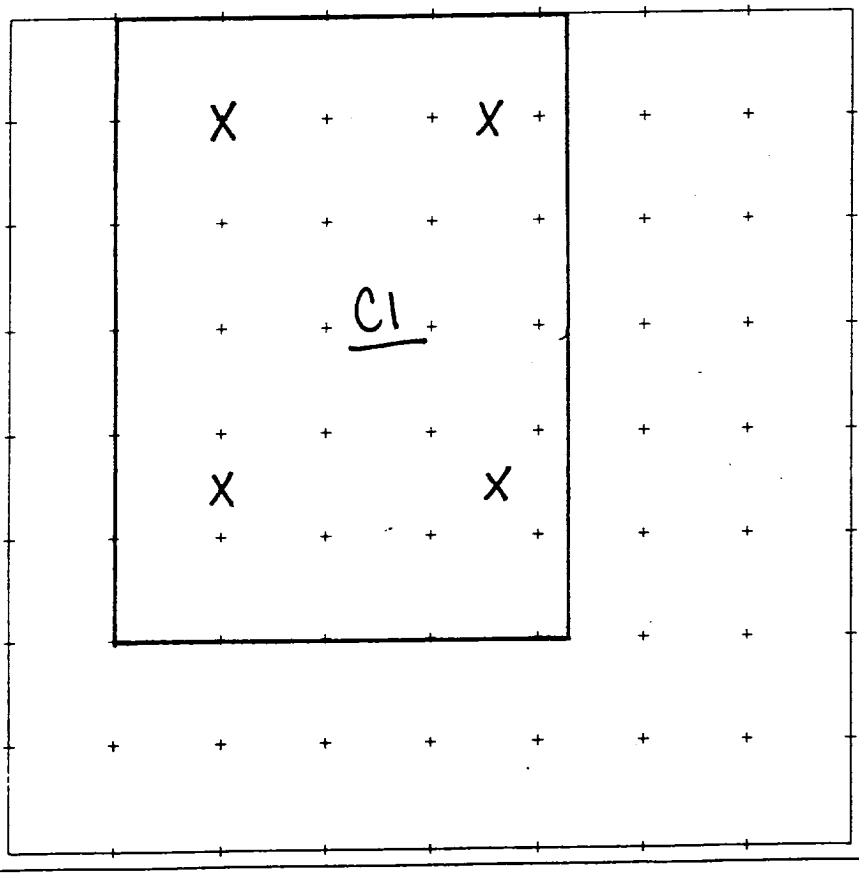
No. OF 5-POINT COMPOSITE SAMPLES:
YARDAGE--#
0-200=1
201-400=2
401-1000=3
>1000=5

GAC #1043

$\frac{20}{10.12} \times 269 \times 100 = 53{,}200$ ppm

FACILITY DIAGRAM

GRID SCALE: 10'



OVM RESULTS

SAMPLE ID:	FIELD HEADSPACE PID (ppm)
C1	53

LAB RESULTS

SAMPLE ID:	ANALYSIS REQUESTED: GAC	RESULTS PPM:
C1	TPH	53200

NORTH
WELLHEAD
SURFACE FLOW DIR.
ESTIMATED GROUNDWATER FLOW DIR.

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	PHILLIPS PETROLEUM	Project #:	93163
Sample ID:	C1	Date Analyzed:	05/10/95
Project Location:	San Juan 29-5, 104PC	Date Reported:	05/18/95
Laboratory Number:	GAC1043	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	53,000	1,000

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 # PA240

C. Jack Collins
Analyst

Review

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PIT No: PA240
C.O.C #: 4340

FIELD REPORT: REMEDIATION FACILITY CLOSURE VERIFICATION

JOB No: 93163
PAGE No: 1 of 1

FACILITY LOCATION: San Juan 29-5 # 104 PC Sec. 10, T29N, R5W, R.A.C. N.M.
SOURCE LOCATION:
SOURCE LOCATION:
SOURCE LOCATION:
FACILITY CLASSIFICATION: On site landfarm PIT TYPE: Separator

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

ENVIRONMENTAL SPECIALIST: HMB

SOIL REMEDIATION: QUANTITY: 112 cy # OF COMP. SAMPLES: 1
DIMENSIONS: 45'x 66'x 1'
VISIBLE OBSERVATIONS: Well tilled; some oilstains; cloddy on the surface
SAMPLING PLAN: 5 pt. composite @ 4" - 6" below surface

FIELD NOTES & REMARKS: FACILITY CENTER LOCATED APPROX 54 YARDS NNW FROM WELLHEAD.

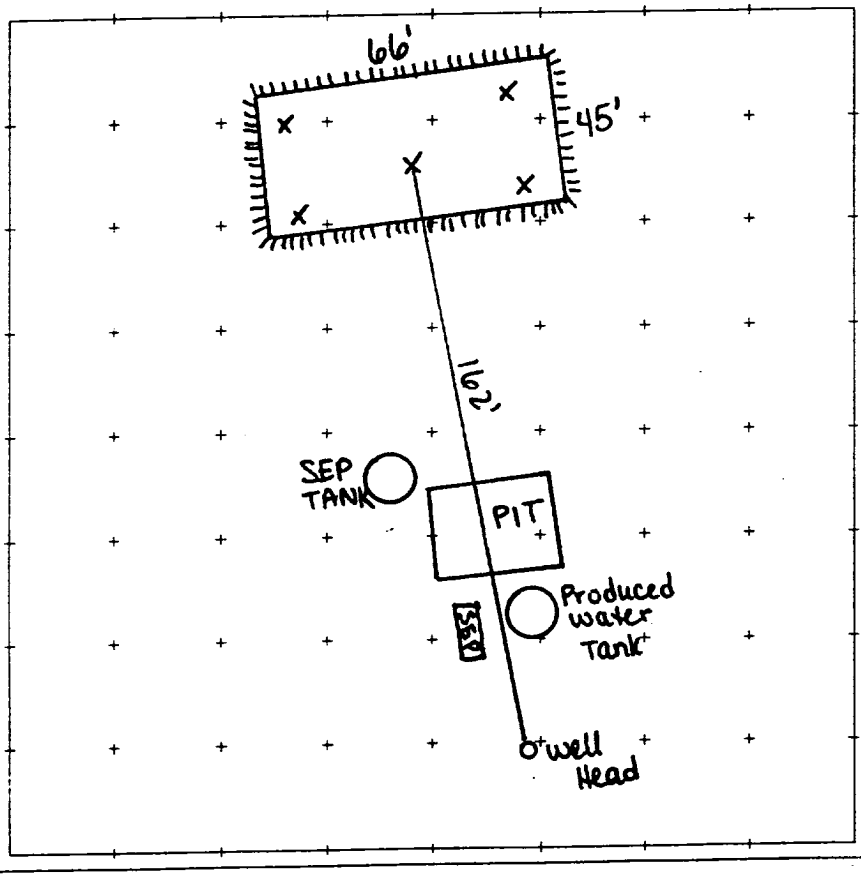
DEPTH TO GROUNDWATER: 70'
NEAREST WATER SOURCE/TYPE: >1000'
NEAREST SURFACE WATER: >1000'
MAX TPH PER NMOCD: 1000 ppm

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

Surface appears well tilled, soil @ 2" very hard, hand to hand auger samples for composite, sampling interval 4"-6" oily, some paraffin, noticeable petroleum odor 4 of 5 composite locations

FACILITY DIAGRAM

GRID SCALE:



OVM RESULTS

SAMPLE ID:	FIELD HEADSPACE PID (ppm)
C1	137ppm

LAB RESULTS

SAMPLE ID:	ANALYSIS REQUESTED:	RESULTS PPM:
C1	TPH	11,800
C 1	BTEX	ND, 214

NORTH

WELLHEAD

SURFACE FLOW DIR.

ESTIMATED GROUNDWATER FLOW DIR.

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	San Juan 29-5 #104 PC	Date Reported:	08-16-95
Laboratory Number:	8794	Date Sampled:	08-15-95
Chain of Custody No:	4340	Date Received:	08-15-95
Sample Matrix:	Soil	Date Extracted:	08-16-95
Preservative:	Cool	Date Analyzed:	08-16-95
Condition:	Cool and Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/kg)	DF =	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**11,800**	**5**	**50**

ND = Parameter not detected at the stated detection limit.

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

Comments: **PA240. Various Landfarms.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8020
AROMATIC VOLATILE ORGANICS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	San Juan 29-5 #104 PC	Date Reported:	08-17-95
Laboratory Number:	8794	Date Sampled:	08-15-95
Chain of Custody:	4340	Date Received:	08-15-95
Sample Matrix:	Soil	Date Analyzed:	08-16-95
Preservative:	Cool	Date Extracted:	08-16-95
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**ND**	**44.4**
Toluene	**ND**	**50.8**
Ethylbenzene	**ND**	**47.5**
p,m-Xylene	**ND**	**40.5**
o-Xylene	**214**	**44.0**

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	**95 %**
	Bromofluorobenzene	**96 %**

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

Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1994.

Comments: **Various Landfarms. PA240.**

Analyst

Review

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4340

CHAIN OF CUSTODY RECORD

Client/Project Name	Project Location	ANALYSIS/PARAMETERS
93163 Phillips Petroleum	VARIOUS LANDFARMS	
Sampler: (Signature) Harbon M Brown	Chain of Custody Tape No.	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH 418.1	BTEX 8020					Remarks
San Juan 30-5 #470K	8-15-95	11:48	8791	Soil	1	✓						BTEX IF TPH >100
San Juan 29-6 #89 DK	8-15-95	13:18	8792	Soil	1	✓						BTEX IF TPH >100
San Juan 29-6 #103 DK	8-15-95	14:37	8793	Soil	1	✓						BTEX IF TPH >1000
San Juan 29-5 #104 PC	8-15-95	15:53	8794	Soil	1	✓						BTEX IF TPH >1000
San Juan 29-5 #87 PC C1	8-15-95	18:57	8795	Soil	1	✓						No BTEX
San Juan 29-5 #75 DK C1	8-15-95	17:03	8796	Soil	1	✓						BTEX IF TPH >1000
San Juan 29-5 #75 DK C2	8-15-95	17:15	8797	Soil	1	✓						BTEX IF TPH >1000
San Juan 29-5 #87 PC C2	8-15-95	19:13	8798	Soil	1	✓						BTEX IF TPH >100
San Juan 29-5 #87 PC C3	8-15-95	19:26	8799	Soil	1	✓						No BTEX

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Harbon M Brown	8-15-95	21:20	Nathan Spencer	8-15-95	21:20
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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PIT No: PA240
C.O.C #: 4546

FIELD REPORT: REMEDIATION FACILITY CLOSURE VERIFICATION

JOB No: 93163
PAGE No: 1 of 1

FACILITY LOCATION: San Juan 29-5 #104 PC
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: 80 cy # OF COMP. SAMPLES: 1
DIMENSIONS: 54' x 40' x 1.0'
VISIBLE OBSERVATIONS: Clay, some oil stain, hard, well compacted
SAMPLING PLAN: 1 5-point composite

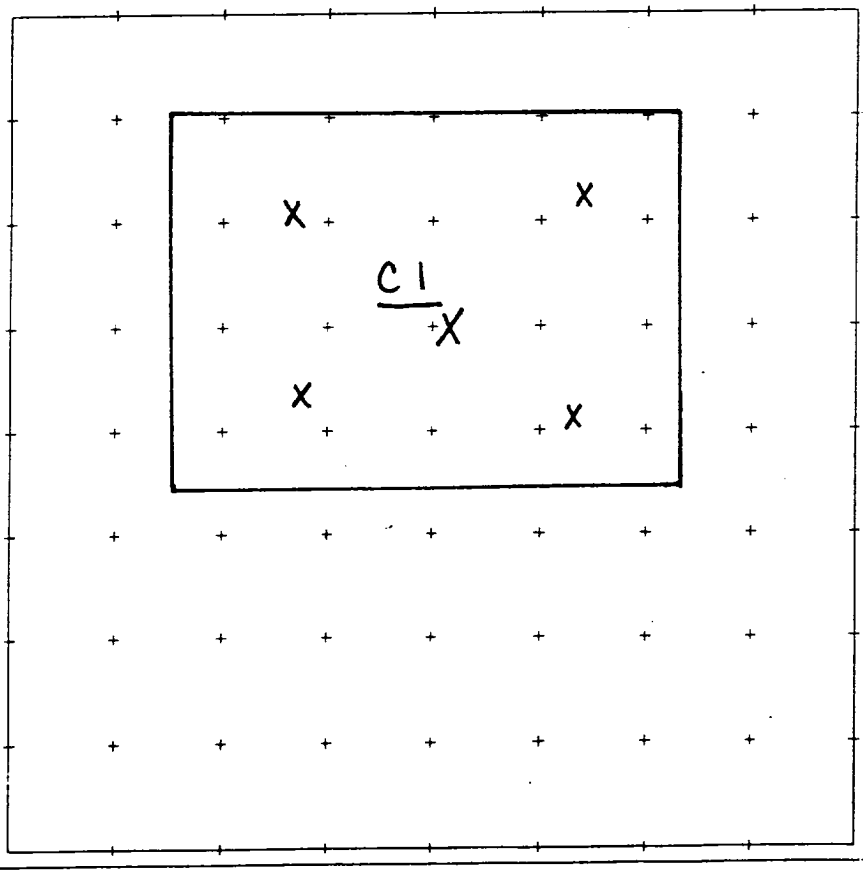
FIELD NOTES & REMARKS: FACILITY CENTER LOCATED APPROX 42 YARDS NW FROM WELLHEAD.

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

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

FACILITY DIAGRAM

GRID SCALE: 1" = 20'



OVM RESULTS

SAMPLE ID:	FIELD HEADSPACE PID (ppm)
C1	4.8

LAB RESULTS

SAMPLE ID:	ANALYSIS REQUESTED: 8015	RESULTS PPM:
C1	TPH	1630

NORTH

WELLHEAD

SURFACE FLOW DIR.

ESTIMATED GROUNDWATER FLOW DIR.

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Phillips	Project #:	93163
Sample ID:	S.J. 29-5 #104 C1-LF	Date Reported:	11-28-95
Laboratory Number:	9690	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)	**1,630**	**0.5**
Total Petroleum Hydrocarbons	**1,630**	**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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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 C1-LF	11/22/95	1507	9685	Soil	1	✓						
S.J. 29-6 #48-35 C1-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 C1-LF	11-22-95	1326	9688	Soil	1	✓						
SJ 29-6 # 89 C1-LF	11-22-95	1228	9689	Soil	1	✓						
SJ 29-5 #104 C1-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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PIT No: PA240
C.O.C #: 4846

FIELD REPORT: REMEDIATION FACILITY CLOSURE VERIFICATION

JOB No: 93163
PAGE No: 1 of 1

FACILITY LOCATION: San Juan 29-5 # 104 PC
SOURCE LOCATION:
SOURCE LOCATION:
SOURCE LOCATION:
FACILITY CLASSIFICATION: On site landfarm PIT TYPE: Sep.

DATE STARTED: 8-1-96
DATE FINISHED: 8-1-96

ENVIRONMENTAL SPECIALIST: CJC

SOIL REMEDIATION: QUANTITY: 112 yd. # OF COMP. SAMPLES: 1
DIMENSIONS: 45' x 66' x 1'
VISIBLE OBSERVATIONS:
SAMPLING PLAN: 5 pt. composite

FIELD NOTES & REMARKS: FACILITY CENTER LOCATED APPROX 54 YARDS NW FROM WELLHEAD.

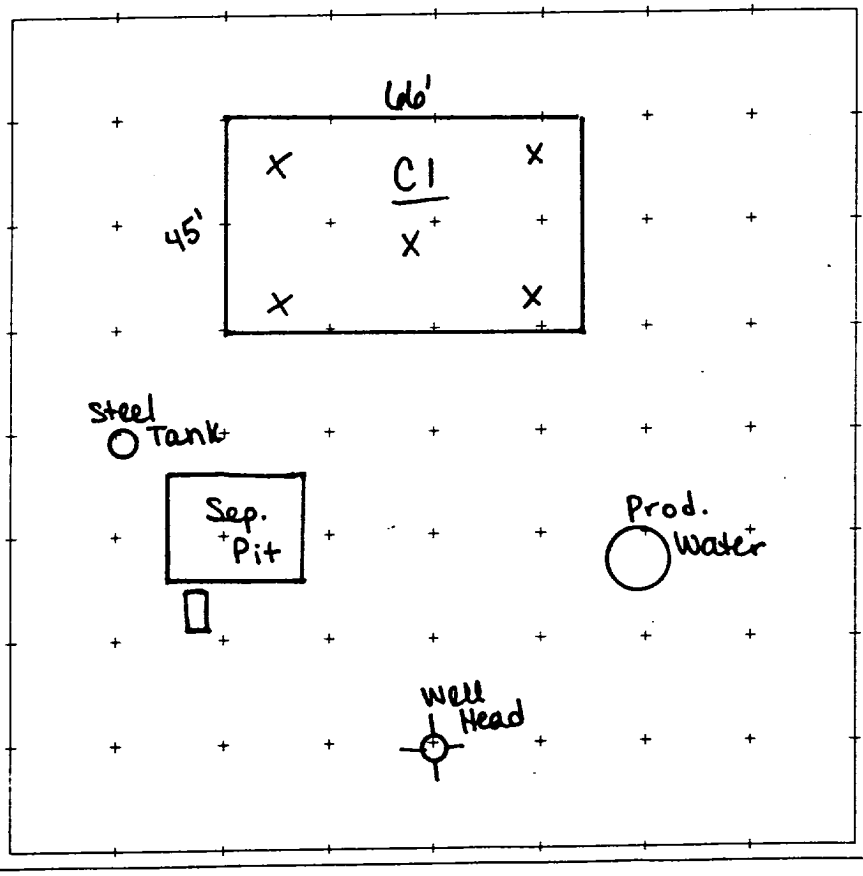
DEPTH TO GROUNDWATER: 70'
NEAREST WATER SOURCE/TYPE: >1000'
NEAREST SURFACE WATER: >1000'
MAX TPH PER NMOCD: 1000ppm

Hard, dry, brown, tan clay and fine sand, no odor, no visible hydrocarbons

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	13.0

LAB RESULTS

SAMPLE ID:	ANALYSIS REQUESTED: TPH	RESULTS PPM:
C1	8015	923

NORTH
WELLHEAD
SURFACE FLOW DIR.
ESTIMATED GROUNDWATER FLOW DIR.

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	C1 L.F.	Date Reported:	08-02-96
Laboratory Number:	A442	Date Sampled:	08-01-96
Chain of Custody No:	4846	Date Received:	08-01-96
Sample Matrix:	Soil	Date Extracted:	08-02-96
Preservative:	Cool	Date Analyzed:	08-02-96
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)	**923**	**0.1**
Total Petroleum Hydrocarbons	**923**	**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 29-5 104 PC L.F., Pit #PA240.**

Analyst

Review

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4846

CHAIN OF CUSTODY RECORD

Client/Project Name	Project Location	ANALYSIS/PARAMETERS
Phillips Petroleum	San Juan 29-5 104 PC L.F	
Sampler: (Signature) C. Jack Collins	Chain of Custody Tape No. 93163	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH 8015						Remarks
C1 L.F.	8/1/96	0937	A442	Soil	1	✓						Pit # PA240

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
C. Jack Collins	8/1/96	1119	Glenn L. Spence	8/1/96	1119
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

QUALITY ASSURANCE / QUALITY CONTROL

DOCUMENTATION

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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:	Laboratory Blank	Date Reported:	08-02-96
Laboratory Number:	08-02-TPH.BLANK	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	08-02-96
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 sample A442.**

Analyst

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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:	08-02-96
Laboratory Number:	A442	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	Cool	Date Analyzed:	08-02-96
Condition:	Cool and Intact	Analysis Requested:	TPH

Parameter	Sample Result (mg/Kg)	Duplicate Result (mg/Kg)	Percent Difference
Gasoline Range (C5 - C10)	**ND**	**ND**	**0.0%**
Diesel Range (C10 - C28)	**923**	**927**	**0.5%**
Total Petroleum Hydrocarbons	**923**	**927**	**0.5%**

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 sample A442.**

Analyst

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ENVIROTECH LABS

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:	08-02-96
Laboratory Number:	A442	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Analysis Requested:	TPH	Date Analyzed:	08-02-96
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)	**ND**	**250**	**248**	**0.2**	**99%**
Diesel Range (C10 - C28)	**923**	**250**	**1,173**	**0.1**	**100%**
Total Petroleum Hydrocarbons	**923**	**500**	**1,421**	**0.2**	**100%**

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 sample A442.**

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