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

Denny G. Foust
DEPUTY OIL & GAS INSPECTOR
JAN 16 1998
Approved

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) 599-3462

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

Facility Or Well Name: San Juan 32 - 7 Unit # 47

Location: Unit or Qtr/Qtr Sec NENE Sec 35 T 32N R 7W County San Juan

Pit Type: Separator X Dehydrator ____ Other ____

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

Pit Location: (Attach diagram)   Pit dimensions: Length 28 ft, width 36 ft, depth 14 ft

Reference-. wellhead X other ____

Footage from reference: 60 ft

Direction from reference: 62 Degrees X East of West ____ North X South ____

Depth to Ground Water: (vertical distance from contaminants to seasonal highwater elevation of ground water)	60 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

PhplisFrrC/a.WK3

RANKING SCORE (TOTAL POINTS): 10

Date Remediation Started: [illegible]3/94 Dated Completed: 9/9/94

Excavation X Approx. cubic yards 419

Landfarmed X Insitu Bioremediation _____

Other _____

Remediation Method: Onsite X Offsite _____

(Check all appropriate sections)

General Description of Remedial Action- The pit was assessed and excavated on 8/2/94, 14 feet below original pit bottom and determined to be within NMOCD and BLM Closure Guidelines. The landfarm was determined to be within guidelines on 9/9/94. 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: (Attach Sampling Results and Diagram of Sample Locations and Depths)

Sample location See pit closure verification field report form

Sample depth [illegible] below ground level

Sample date [illegible]3/94 Sample time NA

Sample Results

Benzene (ppm) ND (south sample)

Total BTEX (PPM) 0.36 (south sample)

Field Headspace (ppm) 695 (south sample)

TPH [illegible] (south sample)

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 9/22/97 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: PA 220
C.O.C. NO: 3676

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:
DATE FINISHED: 7/13/94
ENVRO. SPCLT: CLG
OPERATOR: cimarron
ASSISTANT:

LOCATION: LEASE: San Juan 32-7 WELL: 47 QD: 1040' FNL & 1160' FEL (A)
SEC: 35 TWP: 32N RNG: 7W PM: NM CNTY: SJ ST: NM PIT: sep/dehy/prod

LAND USE: Range Lease # SF-078543
SURFACE CONDITIONS: Pit surface was oily/wet ; pit has been excavated to 14' (rock)

PIT CENTER IS LOCATED APPROXIMATELY 60 FEET N62E OF WELLHEAD.

CLOSURE STD: 1000 ppm
RANKING SCORE: 10

Depth to Ground Water = 60 ft

T1 : (Original Pit) 0-3' = Dark red/brown, clay silt ; 3'-7' = brown/light gray clay silt ; 7'-14' = green/gray claystone. Rock @ 14 ft (odor throughout, moist)
T1 final dimensions : 28' X 36' X 14' (south 4' only to 6' deep)
(E-W) (N-S)

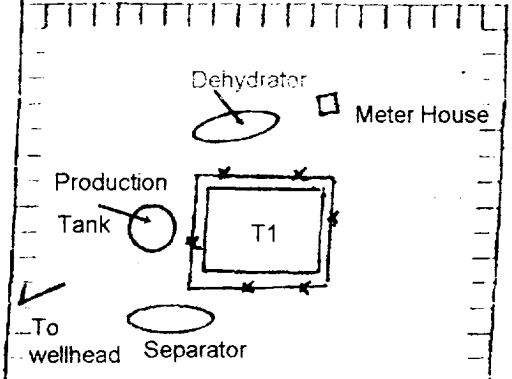
T1(CB) @ 14' = 121 X 2 = 242 ppm
T1(east) @ 6' = 71 X 2 = 142 ppm
T1(west) @ 6' = 124 X 2 = 248 ppm
T1(south) @ 6' = 32 X 2 = 64 ppm

SAMPLE INVENTORY

	SMPL ID:	SMPL TYPE:	LABORATORY ANALYSIS:
CB	T1@14'	soil	418.1
east	T1@6'	soil	418.1
west	T1@6'	soil	418.1
south	T1@6'	soil	418.1
south	T1@6'	soil	BTEX

SCALE
0 FEET

SITE DIAGRAM



TEST HOLE LOGS

GD	TH# 1 SOIL TYPE	TH# 1 SMPL TYPE	TH# 1 OVM/TPH	TH# 1 SOIL TYPE	TH# 1 SMPL TYPE	TH# 1 OVM/TPH	TH# 1 SOIL TYPE	TH# 1 SMPL TYPE	TH# 1 OVM/TPH	TH# SOIL TYPE	TH# SMPL TYPE	TH# OVM/TPH
1												
2												
3	East	CH	Grb 688									
4												
5												
6	East	CM	Grb 694	West	CM	Grb 681	South	CM	Grb 695			
7												
8												
9												
10												
11												
12												
13												
14	CG	Grb 677										

TD = 14' ; Bedrock

Pit Closure Verification
San Juan 32-7 #47

Depth to Groundwater	60'
Distance to Water Source	>1000'
Distance to Surface Water	>1000'
TPH Limit (ppm)	1000

The subject pit was located in moist, silty clay soil. The initial size of the pit was 20' x 20' x 4' deep. The stained soil was excavated to a final pit size of 28' x 36' x 14' deep. Excavated soil amounted to 419 total cubic yards, and was landfarmed on location.

The excavation was assessed by Envirotech on 7/13/94. One test hole was utilized for assessment. The test hole was established in the deepest part of the pit with a total depth of 14 feet. Headspace analysis of the test hole at 14 feet revealed a concentration of 672 parts per million (ppm). Total Petroleum Hydrocarbons (TPH) analysis at 14 feet utilizing USEPA Method 418.1 provided a concentation of 242 ppm. Excavation of the walls and bottom was performed on 7/13/94. The excavation proceeded to a depth of 14 feet with further excavation of the pit walls. Headspace and TPH analysis of the walls and bottom was performed. A sample from the South Wall at 6 feet in depth was utilized for pit closure. The sample depth at 6 feet from the South Wall demonstrated a high OVM concentration of 695 ppm and a TPH concentration of 64 ppm (See Pit Assessment Field Notes). The sample was re-sampled and analyzed for BTEX concentration using USEPA Method 8020. Results of the re-sampling provided a Benzene concentration of Non-Detect and a Total BTEX concentration of 0.36 ppm. The landfarm was tested on 9/9/94 by Envirotech and was found to be within closure guidelines (TPH = 104 ppm, Benzene concentration of 0.050 ppm and a Total BTEX concentration of 0.22 ppm).

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

ENVIROTECH LABS

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FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	T1 (CB) @ 14'	Date Analyzed:	7-13-94
Project Location:	San Juan 32-7 #47	Date Reported:	7-13-94
Laboratory Number:	GAC0605	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	242	10

ND = Not Detectable at stated detection limits.

QA/QC:

QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
11,000	12,600	14

*Administrative Acceptance limits set at 30%.

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

Comments: Separator/Production/Dehydrator Pit PA220

C L Gauthier
Analyst

Review

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FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	T1 (east) @ 6'	Date Analyzed:	7-13-94
Project Location:	San Juan 32-7 #47	Date Reported:	7-13-94
Laboratory Number:	GAC0606	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	142	10

ND = Not Detectable at stated detection limits.

QA/QC:

QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
11,000	12,600	14

*Administrative Acceptance limits set at 30%.

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

Comments: Separator/Production/Dehydrator Pit PA220

A Gunther
Analyst

Review

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FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	T1 (west) @ 6'	Date Analyzed:	7-13-94
Project Location:	San Juan 32-7 #47	Date Reported:	7-13-94
Laboratory Number:	GAC0607	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	248	10

ND = Not Detectable at stated detection limits.

QA/QC:

QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
11,000	12,600	14

*Administrative Acceptance limits set at 30%.

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

Comments: Separator/Production/Dehydrator Pit PA220

Analyst

Review

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FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	T1 (south) @ 6'	Date Analyzed:	7-13-94
Project Location:	San Juan 32-7 #47	Date Reported:	7-13-94
Laboratory Number:	GAC0608	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:

QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
11,000	12,600	14

*Administrative Acceptance limits set at 30%.

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

Comments: Separator/Production/Dehydrator Pit PA220

Analyst

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EPA METHOD 8020
AROMATIC VOLATILE ORGANICS

Client:	Phillips	Project #:	931631
Sample ID:	TI(south)06'	Date Reported:	07-27-94
Laboratory Number:	7721	Date Sampled:	07-13-94
Sample Matrix:	Soil	Date Received:	07-13-94
Preservative:	Cool	Date Extracted:	07-18-94
Condition:	Cool & Intact	Date Analyzed:	07-26-94
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	20.2
Toluene	97	20.2
Ethylbenzene	ND	13.5
p,m-Xylene	168	20.2
o-Xylene	92	20.2

SURROGATE RECOVERIES:

Parameter	Percent Recovery
Trifluorotoluene	112 %
Bromofluorobenzene	106 %

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 32-7 #47 Sep/Prod/dehyd pit PA220.

Rex L Griffin
Analyst

Review

3676

PA220

CHAIN OF CUSTODY RECORD

Client/Project Name	Project Location
Phillips 93163	San Juan 32-7 #47
Sampler: (Signature)	Chain of Custody Tape No.
Cl Gunther	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	BTEX (8020)						Remarks
T1 (south) @ 6'	7/13/94	1325	7721	soil	1	✓						sep/prod/dehyd. pit

ANALYSIS/PARAMETERS

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Cl Gunther	7/13/94	1540		7/13/94	1540
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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EPA METHOD 8020
AROMATIC VOLATILE ORGANICS

Client:	NA	Project #:	NA
Sample ID:	Laboratory Blank	Date Reported:	07-27-94
Laboratory Number:	0726BTLB	Date Sampled:	NA
Sample Matrix:	Water	Date Received:	NA
Preservative:	NA	Date Analyzed:	07-26-94
Condition:	NA	Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	ND	0.3
Toluene	ND	0.3
Ethylbenzene	ND	0.2
p,m-Xylene	ND	0.3
o-Xylene	ND	0.3

SURROGATE RECOVERIES:

Parameter	Percent Recovery
Triflucrotoluene	106 %
Bromofluorobenzene	108 %

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:

Analyst

Review

ENVIROTECH Inc

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PIT No: PA 225
C.O.C #:

FIELD REPORT: REMEDIATION FACILITY CLOSURE VERIFICATION

JOB No: 93163
PAGE No: 1 of 1

FACILITY LOCATION: San Juan 32-7 # 47, PC
SOURCE LOCATION:
SOURCE LOCATION:
SOURCE LOCATION:
FACILITY CLASSIFICATION: PIT TYPE: Separator

DATE STARTED: 9/9/94
DATE FINISHED: 9/9/94

ENVIRONMENTAL SPECIALIST: CJC

SOIL REMEDIATION: QUANTITY: 419 cubic yards # OF COMP. SAMPLES: 2
DIMENSIONS: 111' X 102' X 1'
VISIBLE OBSERVATIONS: Gray, tan, and brown clay, dry, slight odor
SAMPLING PLAN:

FIELD NOTES & REMARKS: FACILITY CENTER LOCATED APPROX 65 YARDS NE FROM WELLHEAD.

DEPTH TO GROUNDWATER: 60 ft
NEAREST WATER SOURCE/TYPE: >1000 ft
NEAREST SURFACE WATER: >1000 ft
MAX TPH PER NMOCD: 1000 ppm

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

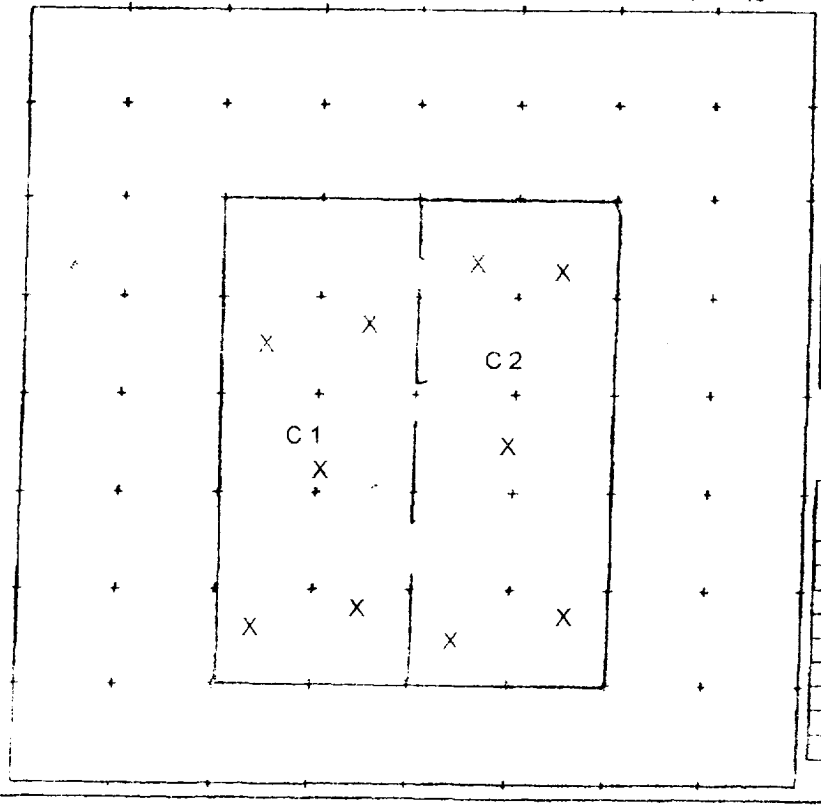
C 1 : 52 X 2 = 104 ppm

C 2 : 27 X 2 = 54 ppm

C 1 submitted for BTEX analysis

FACILITY DIAGRAM

GRID SCALE: 1" = 40'



OVM RESULTS

SAMPLE ID:	FIELD HEADSPACE PID (ppm)
C 1	506
C 2	5

LAB RESULTS

SAMPLE ID:	ANALYSIS REQUESTED	RESULTS PPM:
C 1	TPH	104
C 2	TPH	54

NORTH

WELLHEAD

SURFACE FLOW DIR.

ESTIMATED GROUNDWATER FLOW DIR.

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FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	C-1	Date Analyzed:	9-09-94
Project Location:	San Juan 32-7 #47 PC	Date Reported:	9-26-94
Laboratory Number:	GAC0728	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	104	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: Landfarm of Soil From Separator Pit PA220

Analyst

Review Morris D Young

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FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	C-2	Date Analyzed:	9-09-94
Project Location:	San Juan 32-7 #47 PC	Date Reported:	9-26-94
Laboratory Number:	GAC0729	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.
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: Landfarm of Soil From Separator Pit PA220

Analyst

Review

3911

CHAIN OF CUSTODY RECORD

Client/Project Name	Project Location	ANALYSIS/PARAMETERS
Phillips Petroleum	San Juan 32-7 #47R	

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
21 Landfarm	9/9/94	1435	7883	Soil	1	1						

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
C. Jack Collins	9/9/94	1705	Rafael Trujillo	9/9/94	1730
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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san juan repro Form 578-81

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EPA METHOD 8020
AROMATIC VOLATILE ORGANICS

Client:	Phillips Petro	Project #:	93163
Sample ID:	CI landfarm	Date Reported:	09-14-94
Laboratory Number:	7883	Date Sampled:	09-09-94
Sample Matrix:	Soil	Date Received:	09-09-94
Preservative:	Cool	Date Extracted:	09-13-94
Condition:	Cool & Intact	Date Analyzed:	09-13-94
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	50	13.3
Toluene	70	33.2
Ethylbenzene	ND	19.9
p,m-Xylene	53	26.6
o-Xylene	50	19.9

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	102 %
	Bromofluorobenzene	105 %

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 32-7 #47 PC

Analyst

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EPA METHOD 8020
AROMATIC VOLATILE ORGANICS

Client:	NA	Project #:	NA
Sample ID:	Laboratory Blank	Date Reported:	09-14-94
Laboratory Number:	0913AM.BLK	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
Ethylbenzene	ND	0.3
p,m-Xylene	ND	0.5
o-Xylene	ND	0.4

SURROGATE RECOVERIES:

Parameter	Percent Recovery
Trifluorotoluene	81 %
Bromofluorobenzene	83 %

Method: Method 5030A, 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:

Analyst

Review