

Denny L. Frost
DEPUTY OIL & GAS INSPECTOR

FEB 11 1999

JICARILLA APACHE TRIBE
ENVIRONMENTAL PROTECTION OFFICE
P.O. BOX 507
DULCE, NEW MEXICO 87528

PIT REMEDIATION AND CLOSURE REPORT

RECEIVED
DEC 14 1998
OIL & GAS ADMINISTRATION
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OIL & GAS DEPT
OIL & GAS ADMINISTRATION

Operator: Marathon Oil Co. Telephone: 505-326-2783
Address: P.O. Box 1439 Farmington, N.M. 87499
Facility or Well Name: Jicarilla Apache #9E
Location: Unit or Qtr/ Qtr Sec 0 Sec 28 T 26N R 5W County Rio Arriba
Pit Type: Separator ☒ Dehydrator ☐ Other ☐
Land Type: Jicarilla Apache

Pit Location: Pit dimensions length 30 width 21 depth 15
(Attach diagram)
Reference: wellhead ☒ other ☐
Feetage from reference 144'
Direction from reference _____ Degrees _____ East North _____
_____ West South _____

Depth To Groundwater: (Vertical distance from contaminants to seasonal high water elevation of groundwater)
Less than 50 feet (20 points)
51 feet to 99 feet (10 points)
Greater than 100 feet (0 points) 0

Distance to an Ephemeral Stream (Downgradient dry wash greater than ten feet in width)
Less than 100 feet (10 points)
Greater than 100 feet (0 points) 10

Distance to Nearest Lake, Playa, or Watering Pond (Downgradient lakes, playas and livestock or wildlife watering ponds)
Less than 100 feet (10 points)
Greater than 100 feet (0 points) 0

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)
No (0 points) 0

Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)
Less than 100 feet (20 points)
100 feet to 1000 feet (10 points)
Greater than 1000 feet (0 points) 0

RANKING SCORE (TOTAL POINTS): 10

Date Remediation Started: 7-8-97 Date Completed: 10-31-97

Remediation Method: Excavation X Approx. cubic yards 350

(Check all appropriate sections) Landfilled X Insitu Bioremediation _____

Other _____

Remediation Location: Onsite X Offsite _____
(i.e. landfilled onsite, name and location of offsite facility)

General Description of Remedial Action: Spread 6" thick on location for natural bio remediation

Groundwater Encountered: No X Yes _____ Depth _____

Final Pit: Sample location each sidewalk

Closure Sampling: _____
(if multiple samples, attach sample results and diagram of sample locations and depths) Sample depth: 15'

Sample date 7-18-97 Sample time 0930

Sample Results

Soil Benzene (ppm)	_____	Air Benzene (ppb)	_____
Total BTEX (ppm)	<u>.075</u>	Toluene (ppb)	_____
Field Head space (ppm)	<u>27</u>	Ethylbenzene (ppb)	_____
TPH (ppm)	<u>ND</u>	Total Xylenes (ppb)	_____

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

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

DATE 7-29-97 PRINTED NAME GARY W. Donaghey

SIGNATURE Gary W. Donaghey TITLE Production Supervisor

AFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES X NO _____ REASON: Spread + Close

SIGNED: [Signature] DATE: 7-30-97

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Marathon Oil	Project #:	95047
Sample ID:	Jicarilla #22 Walls	Date Reported:	07-22-97
Laboratory Number:	B679 9E	Date Sampled:	07-18-97
Chain of Custody:	5316	Date Received:	07-18-97
Sample Matrix:	Soil	Date Analyzed:	07-21-97
Preservative:	Cool	Date Extracted:	07-21-97
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	8.8
Toluene	13.3	8.4
Ethylbenzene	7.8	7.6
p,m-Xylene	34.8	10.8
o-Xylene	19.4	5.2
Total BTEX	75.3	0.075 ppm

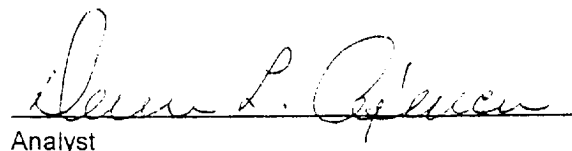
ND - Parameter not detected at the stated detection limit.

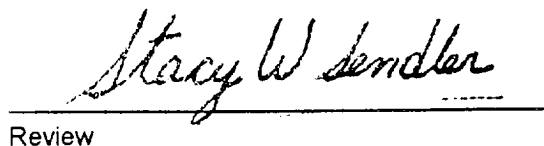
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	101 %
	Bromofluorobenzene	101 %

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: Jicarilla Pits. 4 - PNT COMP.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR THE ENVIRONMENT

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

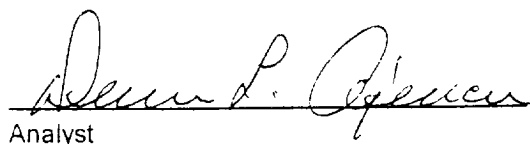
Client:	Marathon Oil	Project #:	95047
Sample ID:	Jicarilla # 3E Walls	Date Reported:	07-22-97
Laboratory Number:	B679 9E	Date Sampled:	07-18-97
Chain of Custody No:	5316	Date Received:	07-18-97
Sample Matrix:	Soil	Date Extracted:	07-21-97
Preservative:	Cool	Date Analyzed:	07-21-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

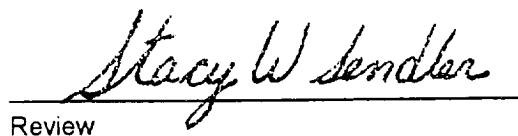
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

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: Jicarilla Pits. 4 - Pnt. Comp.


Analyst


Review

Well # 9E

1

5' - 283 ppm

10' - 146 ppm

N - 68

E - 23

W - 12

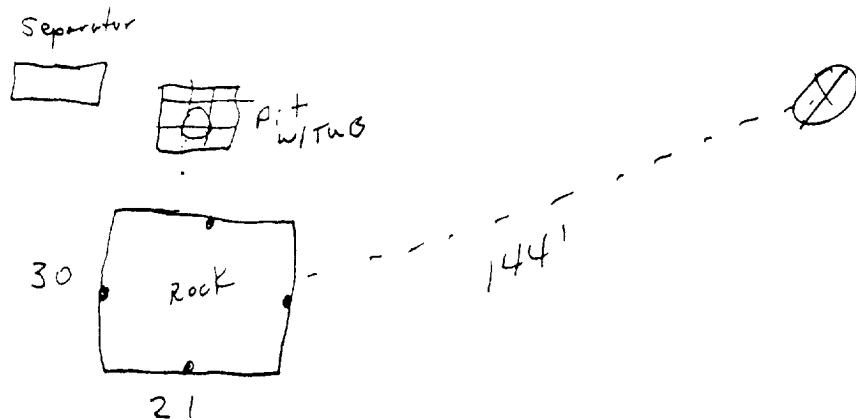
S - 44

Bottom - Rock

pit 30' x 21' x 15'
350 cu yds

1/2

E



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NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

Operator: Marathon Oil Co. Telephone: 505-326-2783
Address: P.O. Box 1439 Farmington, N. M. 87499
Facility or Well Name: Jicarilla Apache well # 9E
Location: Unit or Qtr/Qtr Sec 0 Sec 28 T 26N R 5W County Rio Arriba
Land Type: Jicarilla Apache

Date Remediation Started: 7-18-97 Date Completed: 31 OCT 97
Remediation Method: Landfarmed ☒ Approx. cubic yards 350
Composted ☐
Other ☐

Depth To Groundwater: (pts.) <u>0</u>	Final Closure Sampling:
Distance to an Ephemeral Stream (pts.) <u>10</u>	Sampling Date: <u>9-24-97</u> Time: _____
Distance to Nearest Lake, Playa, or Watering Pond (pts.) <u>0</u>	Sample Results:
Wellhead Protection Area: (pts.) <u>0</u>	Field Headspace (ppm) <u>16</u>
Distance To Surface Water: (pts.) <u>0</u>	TPH (ppm) <u>7.5</u> Method <u>8015 MOD</u>
	Other _____
RANKING SCORE (TOTAL POINTS): <u>10</u>	

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

DATE 10-14-97 PRINTED NAME Gary W. Donaghey
SIGNATURE Gary W. Donaghey AND TITLE Production Supervisor

AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES ☒ NO ☐ (REASON) _____

SIGNED: Ken C. Marshall DATE: 10-15-97

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

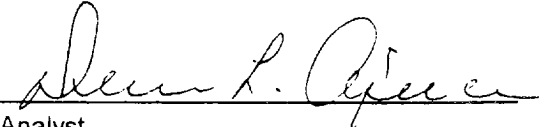
Client:	Marathon Oil Co.	Project #:	95047
Sample ID:	Jicarilla 9E	Date Reported:	09-26-97
Laboratory Number:	C159	Date Sampled:	09-24-97
Chain of Custody No:	5464	Date Received:	09-25-97
Sample Matrix:	Soil	Date Extracted:	09-25-97
Preservative:	Cool	Date Analyzed:	09-26-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

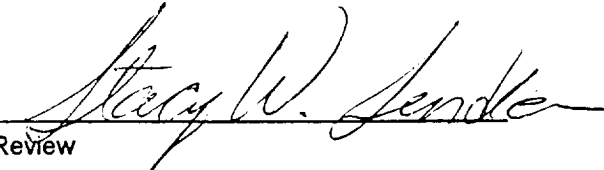
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	3.1	0.2
Diesel Range (C10 - C28)	4.4	0.1
Total Petroleum Hydrocarbons	7.5	0.2

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: **Jicarilla.**


Analyst


Review

9E

Hand
made

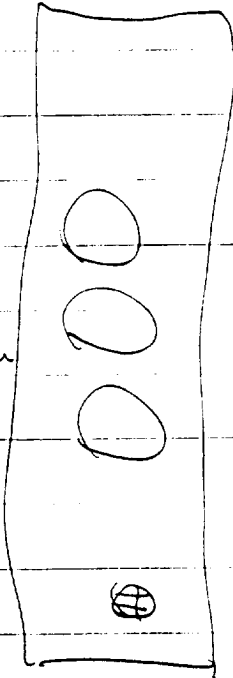
152



240'

N

E - 4" 1.3 ppm
W - 2" 8.8 ppm
S - 6" 22.8 ppm
E - 3" .4
N - 1" 12.2
Composite - 16



Prism

