

Denny E. Frost
DEPUTY OIL & GAS INSPECTOR

FEB 11 1999

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

SUBMIT COPY TO
NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION

RECEIVED
DEC 14 1998

Approved
PIT REMEDIATION AND CLOSURE REPORT

Operator: Marathon Oil Co. Telephone: 505-326-2783

Address: P.O. Box 1439 Farmington, N.M. 87499

Facility or Well Name: Jicarilla Apache #4

Location: Unit or Qtr Qtr Sec P Sec 34 T 26N R 5W County Rio Arriba

Pit Type: Separator ☒ Dehydrator ☐ Other ☐

Land Type: Jicarilla Apache

Pit Location: Pit dimensions Length 15' Width 15' depth 10'

Reference Wellhead ☒

Footage from reference 25'

Direction from reference _____ Degrees _____ East _____ North _____
of _____
☒ West _____ South _____

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

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

Wellhead Protection Area: (Less than 100 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: 9-28-96 Date Completed: 10-20-96

Remediation Method: Excavation ☒ Approx. cubic yards 83

Remediation Location: Onsite ☒ Offsite

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General Description of Remedial Action: Spread on location for natural

bio remediation

Groundwater Encountered: No ☒ Yes Depth

Final Pit: Sample location 4 pt. composite each side wall

Closure Sampling: Rock on bottom

of multiple samples

attach sample results

and diagram of sample

locations and depths

Sample date 9-28-96 Sample time 1:04 pm

Sample Results

Soil Benzene (ppm) Water: Benzene (ppb)

Total BTEX (ppm) .068 Toluene (ppb)

Field Headspace (ppm) 56.8 Ethylbenzene (ppb)

TPH (ppm) .9 Total Xylenes (ppb)

Groundwater Sample: Yes No ☒ (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 10-7-96 PRINTED NAME Gary W. Donaghey

SIGNATURE Gary W. Donaghey AND 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 ☒ NO (REASON) Spray / Close

SIGNED: DATE: 10/10/96

ENVIROTECH LABS

~~ENVIRONMENTAL ANALYSIS~~

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Marathon Oil Company	Project #:	95047
Sample ID:	Jicarilla #4	Date Reported:	10-01-96
Laboratory Number:	A619	Date Sampled:	09-28-96
Chain of Custody No:	4938	Date Received:	09-30-96
Sample Matrix:	Soil	Date Extracted:	09-30-96
Preservative:	Cool	Date Analyzed:	09-30-96
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

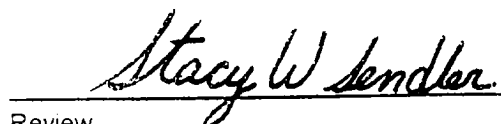
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	0.9	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	0.9	0.2

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

ENVIROTECH LABS

~~PRACTICAL SOLUTIONS FOR A BETTER TOMORROW~~

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Marathon Oil Co.	Project #:	95047
Sample ID:	Jicarilla #4	Date Reported:	10-01-96
Laboratory Number:	A619	Date Sampled:	09-28-96
Chain of Custody:	4938	Date Received:	09-30-96
Sample Matrix:	Soil	Date Analyzed:	09-30-96
Preservative:	Cool	Date Extracted:	09-30-96
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	9.9	11.7
Toluene	31.0	11.1
Ethylbenzene	4.5	10.1
p,m-Xylene	15.6	14.4
o-Xylene	7.1	6.9
Total BTEX	68.1	.068 ppm

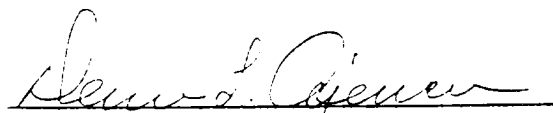
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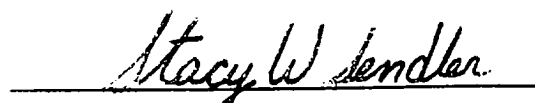
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	99 %
	Bromofluorobenzene	101 %

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.


Analyst


Review

NOTES/REMARQUES/NOTAS

9-28-96

Jicarilla #4

S' - 264.5

N 69.8

S 24.3

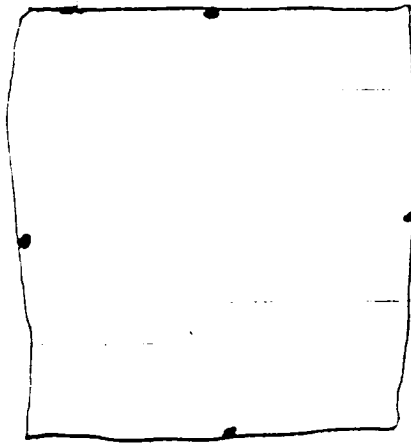
E 83.4

W - 66.6

B - Rock 104T

N

Composite 56.8



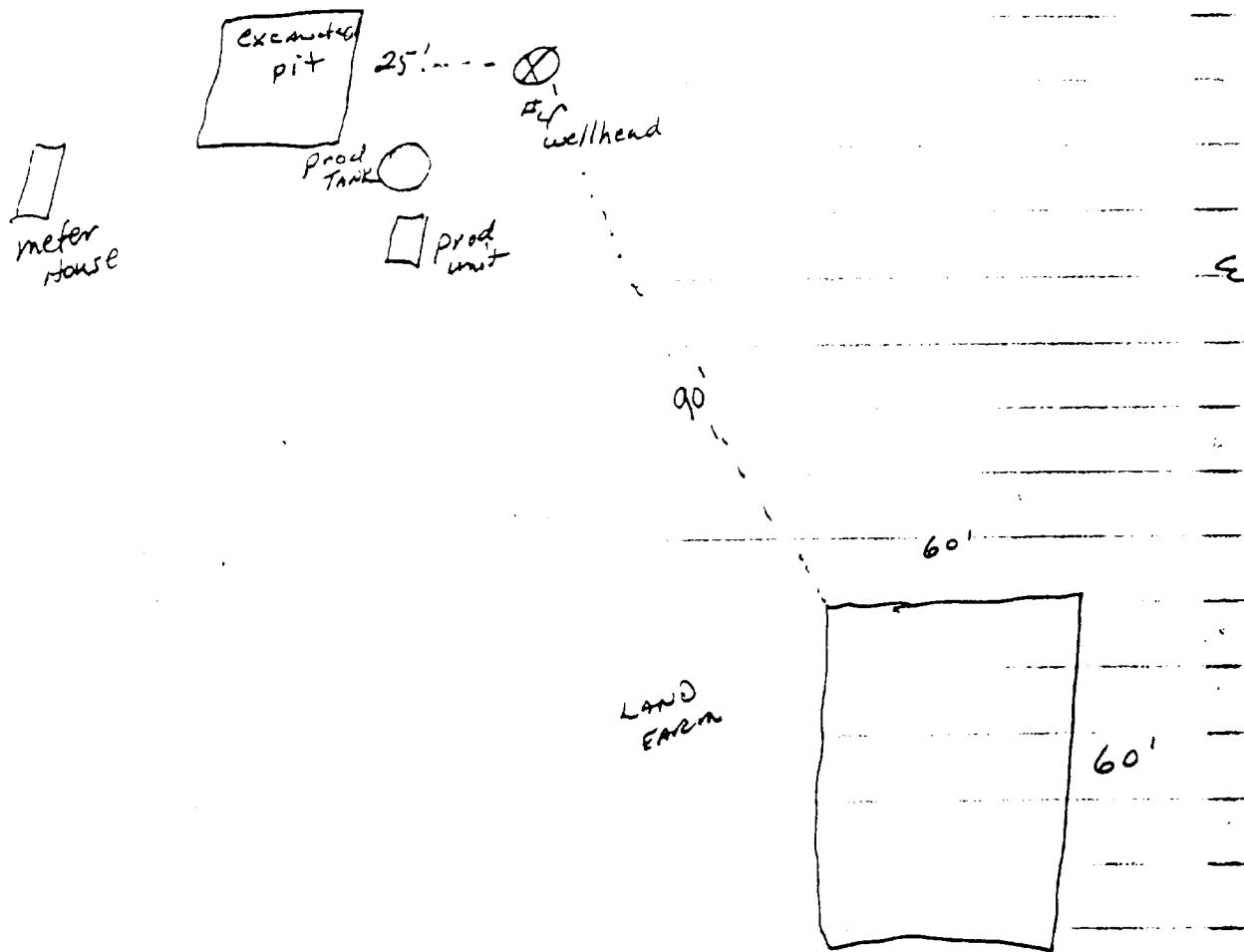
W

E

S

#4

2



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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 #4
Location: Unit or Qtr/Qtr Sec P Sec 34 T 26N R 5W County Rio Arriba
Land Type: Jicarilla Apache

Date Remediation Started: 9-28-96 Date Completed: 31 Oct 97
Remediation Method: Landfarmed ☒ Approx. cubic yards 83
Composted ☐
Other ☐

		Final Closure Sampling:	
Depth To Groundwater:	(pts.) <u>0</u>	Sampling Date:	<u>9-24-97</u> Time: _____
Distance to an Ephemeral Stream	(pts.) <u>0</u>	Sample Results:	
Distance to Nearest Lake, Playa, or Watering Pond	(pts.) <u>0</u>	Field Headspace (ppm)	<u>0</u>
Wellhead Protection Area:	(pts.) <u>0</u>	TPH (ppm)	<u>2.3</u> Method <u>8015 MOD</u>
Distance To Surface Water:	(pts.) <u>0</u>	Other	_____

RANKING SCORE (TOTAL POINTS): 0

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. Dougherty
SIGNATURE Gary W. Dougherty 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: Kenn C. Manna DATE: 10-15-97

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

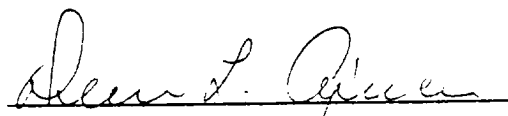
Client:	Marathon Oil Co.	Project #:	95047
Sample ID:	Jicarilla 4	Date Reported:	09-26-97
Laboratory Number:	C155	Date Sampled:	09-24-97
Chain of Custody No:	5464	Date Received:	09-25-97
Sample Matrix:	Soil	Date Extracted:	09-25-97
Preservative:	Cool	Date Analyzed:	09-25-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

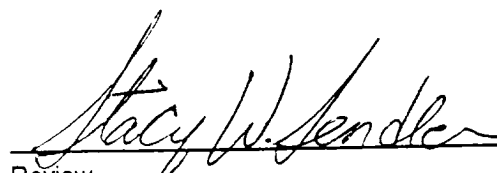
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	2.3	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	2.3	0.2

ND - Parameter not detected at the stated detection limit.

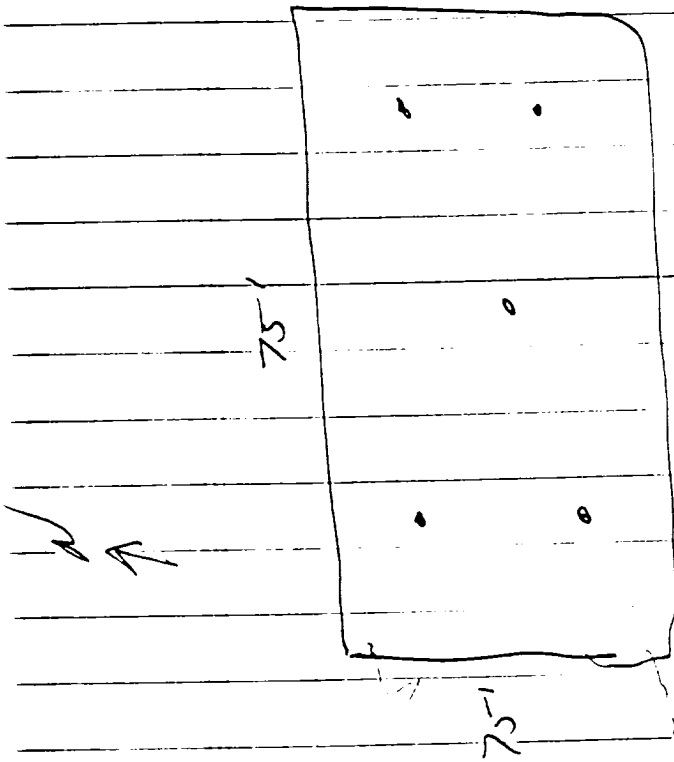
References: Method 8015, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Comments: **Jicarilla.**


Analyst


Review

#4



NE 8" O

NW 6" O

E 4" O

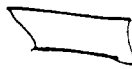
SE 1" O

SW - 2" O

Composite - O

75'

proposed
pit



capped pit

