

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

SUBMIT 1 COPY TO
NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION

21

PIT REMEDIATION AND CLOSURE REPORT

Operator: DUGAN PRODUCTION CORP. Telephone: 505-325-1821
Address: P.O. Box 420, FARMINGTON, NM 87499
Facility or Well Name: JICARILLA OTERO #2
Location: Unit or Qtr/Qtr Sec G Sec 28 T 24N R 5W County RIO ARriba
Pit Type: Separator ☒ Dehydrator ☐ Other ☐
Land Type: RANGE

Pit Location: Pit dimensions: length 24, width 15, depth 16
(Attach diagram) Reference: wellhead ☒, other ☐
Footage from reference: 140
Direction from reference: 60 Degrees East North ☐
☒ West of South ☒

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

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: 9-25-98 Date Completed: 9-29-98

Remediation Method: Excavation ☒ Approx. cubic yards 180
Check all appropriate (actions) Landfarmed ☒ Insitu Bioremediation _____
Other _____

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

General Description of Remedial Action: Excavation

Groundwater Encountered: No ☒ Yes _____ Depth _____

Final Pit: Sample location see Attached Documents
Closure Sampling: _____
(if multiple samples, attach sample results and diagram of sample locations and depths)
Sample depth 16'
Sample date 9-29-98 Sample time 1053
Sample Results

Soil: Benzene	(ppm)	<u>0.49</u>	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	<u>25.75</u>	Toluene	(ppb)	_____
Field Headspace	(ppm)	_____	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>4,860</u>	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 10-26-98 PRINTED NAME JEFFREY C. BLAGG
SIGNATURE Jeffrey C. Blagg AND TITLE NMPE 11607

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) _____

SIGNED: Kenn C. Marshall DATE: 10-27-98

ON SITE:

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

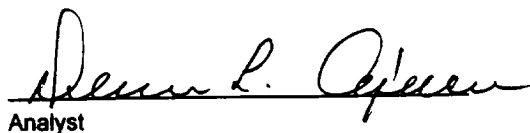
Client:	Blagg / Dugan	Project #:	04034-10
Sample ID:	Separator C @ 16'	Date Reported:	10-01-98
Laboratory Number:	D996	Date Sampled:	09-29-98
Chain of Custody No:	6335	Date Received:	09-29-98
Sample Matrix:	Soil	Date Extracted:	09-29-98
Preservative:	Cool	Date Analyzed:	09-30-98
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	699	0.2
Diesel Range (C10 - C28)	4,160	0.1
Total Petroleum Hydrocarbons	4,860	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Jicarilla Otero #2.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / Dugan	Project #:	04034-10
Sample ID:	Separator C @ 16'	Date Reported:	10-01-98
Laboratory Number:	D996	Date Sampled:	09-29-98
Chain of Custody:	6335	Date Received:	09-29-98
Sample Matrix:	Soil	Date Analyzed:	09-30-98
Preservative:	Cool	Date Extracted:	09-29-98
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	498	8.8
Toluene	3,400	8.4
Ethylbenzene	2,920	7.6
p,m-Xylene	12,720	10.8
o-Xylene	6,210	5.2
Total BTEX	25,750	

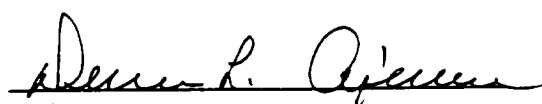
ND - Parameter not detected at the stated detection limit.

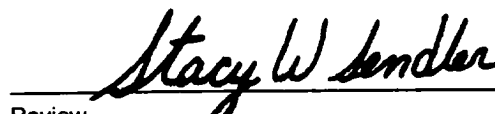
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	98 %
	Bromofluorobenzene	98 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Jicarilla Otero #2.


Analyst


Review

6355

ENVIROTECH INC.

**5796 U.S. Highway 64
Farmington, New Mexico 87401
(505) 632-0615**

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

COC# 7086
SUBMIT 1 COPY TO
NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

Operator: DUGAN PROD. CORP. Telephone: 325-1821
Address: 709 E MURRAY DR. FARMINGTON NM. 87401
Facility or Well Name: JICARILLA OTERO #2
Location: Unit or Qtr/Qtr Sec G Sec 28 T 24N R 5W County RIO ARIZONA
Land Type: RANGE

Date Remediation Started: 9-25-98 Date Completed: 7-15-99
Remediation Method: Landfarmed ☒ Approx. cubic yards 180
Composted ☐
Other ☐

Final Closure Sampling:	
Depth To Groundwater: (pts.) <u>0</u>	Sampling Date: <u>7-13-99</u> Time: <u>0900</u>
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>180.5</u> TPH (8015)
Wellhead Protection Area: (pts.) <u>0</u>	TPH (ppm) <u>2500</u> Method <u>BTEX (8021)</u>
Distance To Surface Water: (pts.) <u>0</u>	Other <u>BENZENE = 543 ppb</u>
RANKING SCORE (TOTAL POINTS): <u>0</u>	<u>TOT. BTEX = 14.300 ppb</u>

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

DATE 9-24-99 PRINTED NAME JEFFREY C. BLAGG
SIGNATURE Jeffrey C. Blagg AND TITLE NMPE 11607

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: K. C. McNeill DATE: 9-27-99

CLIENT: <u>DUGAN</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: _____ C.D.C. NO: <u>7086</u>
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FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME <u>JICARILLA OTERO</u> WELL #: <u>2</u> PITS: <u>SEP</u>	DATE STARTED: <u>7.13.99</u> DATE FINISHED: <u>7.15.99</u>
QUAD/UNIT <u>G</u> SEC: <u>28</u> TWP: <u>24N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u>	ENVIRONMENTAL SPECIALIST: <u>REP</u>
STR/FOOTAGE: <u>1650N - 1650E</u> CONTRACTOR: <u>FOUTZ</u>	

SOIL REMEDIATION:

REMEDIATION SYSTEM: <u>LANDFARM</u>	APPROX. CUBIC YARDAGE: <u>180</u>
LAND USE: <u>RANGE</u>	LIFT DEPTH (ft): <u>1'</u>

FIELD NOTES & REMARKS:

DEPTH TO GROUNDWATER >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER >1000'

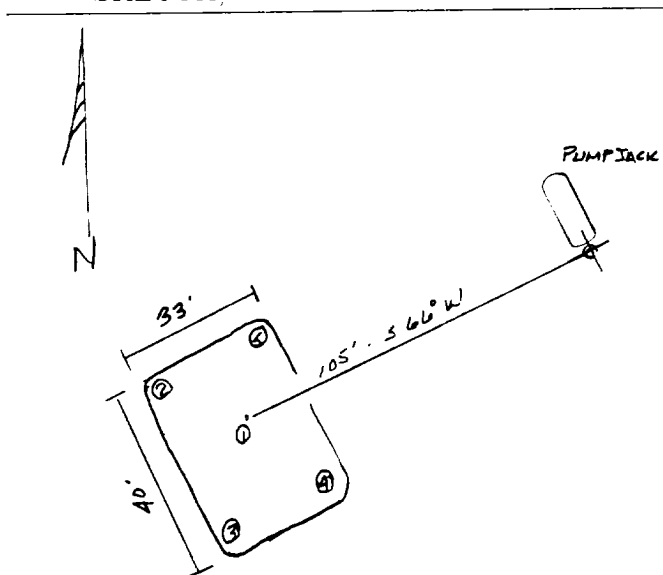
NMDEI BANKING SCORE 0 NMDEI TPH CLOSURE STD: 5000 PPM

DK OLIVE GREY SAND, NON COHESIVE, MOIST, FIEM. STAINING OBSERVED IN ENTIRE LANDFARM AREA, HC ODOR DETECTED IN SAMPLING PTS. ①, ②, ④ + ⑤. SAMPLING DEPTHS RANGE FROM 6" - 10" COLLECTED A SPT. COMPOSITE SAMPLE FOR LAB ANALYSIS.

FIELD 418.1 CALCULATIONS

SAMP	TIME	SAMPLE I.D.	LAB No	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC.	ppm

SKETCH/SAMPLE LOCATIONS



OVM RESULTS

LAB SAMPLES

SAMPLE ID	FIELD HEADSPACE PID (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	180.5	LF-1	TPH (8015)	2700	
		//	BENTENE	"	543 ppb
		//	TOT. BTEX	"	14300 ppb

SCALE



TRAVEL NOTES	CALLOUT: <u>NA</u>	ONSITE: <u>7.13.99</u>
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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

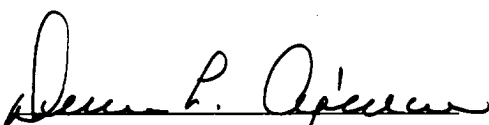
Client:	Blagg / Dugan	Project #:	403410
Sample ID:	LF - 1	Date Reported:	07-15-99
Laboratory Number:	F665	Date Sampled:	07-13-99
Chain of Custody No:	7086	Date Received:	07-14-99
Sample Matrix:	Soil	Date Extracted:	07-14-99
Preservative:	Cool	Date Analyzed:	07-14-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	134	0.2
Diesel Range (C10 - C28)	2,370	0.1
Total Petroleum Hydrocarbons	2,500	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Jicarilla Otero - 2 5 Pt. Composite.


Analyst


Review

CHAIN OF CUSTODY RECORD

7086

Client / Project Name			Project Location			ANALYSIS / PARAMETERS													
BLAKEY/DUKAL			SICARILLA OTEEB - 2																
Sampler: REP			Client No. 403410																
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH (8015)		BTEX (8021)		Remarks									
LF-1	7.13.99	0900	50465	5014	1	✓	✓	STP. CARBON SITE											
SAMPLES PRESERVED																			
COOL																			
Relinquished by: (Signature)			Date	Time	Received by: (Signature)			Date	Time										
[Signature]			7.14.99	7:35	[Signature]			7.14.99	7:35										
Relinquished by: (Signature)																			
Received by: (Signature)																			
ENVIROTECH INC. 5796 U.S. Highway 64 Farmington, New Mexico 87401 (505) 632-0615																			
Sample Receipt <table border="1"> <tr> <td>Received Intact</td> <td>Y</td> <td>N</td> <td>N/A</td> </tr> <tr> <td>Cool - Ice/Blue Ice</td> <td>✓</td> <td></td> <td></td> </tr> </table>												Received Intact	Y	N	N/A	Cool - Ice/Blue Ice	✓		
Received Intact	Y	N	N/A																
Cool - Ice/Blue Ice	✓																		

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / DUGAN	Project #:	403410
Sample ID:	LF - 1	Date Reported:	07-22-99
Laboratory Number:	F665	Date Sampled:	07-13-99
Chain of Custody:	7086	Date Received:	07-14-99
Sample Matrix:	Soil	Date Analyzed:	07-22-99
Preservative:	Cool	Date Extracted:	07-14-99
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	543	8.8
Toluene	3,230	8.4
Ethylbenzene	1,120	7.6
p,m-Xylene	6,530	10.8
o-Xylene	2,880	5.2
Total BTEX	14,300	

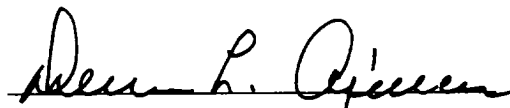
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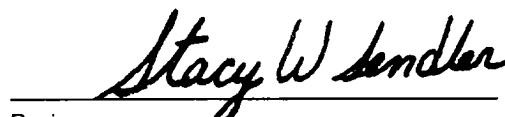
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	100 %
	Bromofluorobenzene	100 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Jicarilla Otero - 2 5 Pt. Composite.


Analyst


Review