

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

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

PIT REMEDIATION AND CLOSURE REPORT

*Field Report
not printed*

Operator: DUGAN PRODUCTION CORP. Telephone: 505-325-1821
Address: P.O. Box 420, FARMINGTON NM 87499
Facility or Well Name: JICARILLA OTERO COM 1
Location: Unit or Qtr/Qtr Sec M Sec 22 T24N R5W County RIO ARriba
Pit Type: Separator ☒ Dehydrator ☐ Other ☐
Land Type: RANGE

Pit Location: Pit dimensions: length 18, width 21, depth 13
(Attach diagram) Reference: wellhead ☒, other ☐
Footage from reference: 90
Direction from reference: 15 Degrees ☐ East of 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: 9-22-98 Date Completed: 9-22-98

Remediation Method: Excavation ☒ Approx. cubic yards 175
Check all appropriate sections) 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 13'

Sample date 9-22-98 Sample time 1215

Sample Results

Soil: Benzene	(ppm)	<u>0.69</u>	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	<u>20.48</u>	Toluene	(ppb)	_____
Field Headspace	(ppm)	_____	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>897</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: Jeffrey C. Blagg DATE: 10-27-98

TRAVEL NOTES: CALLOUT: 9-22-98 ONSITE: 9-22-98

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Blagg / Dugan
Sample ID: C @ 13'
Laboratory Number: D951
Chain of Custody No: 6273
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

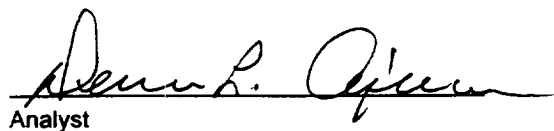
Project #: 04034-10
Date Reported: 09-23-98
Date Sampled: 09-22-98
Date Received: 09-23-98
Date Extracted: 09-23-98
Date Analyzed: 09-23-98
Analysis Requested: 8015 TPH

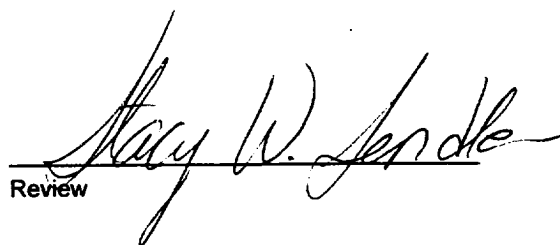
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	91.2	0.2
Diesel Range (C10 - C28)	806	0.1
Total Petroleum Hydrocarbons	897	0.2

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 Com #1.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / Dugan	Project #:	04034-10
Sample ID:	C @ 13'	Date Reported:	09-23-98
Laboratory Number:	D951	Date Sampled:	09-22-98
Chain of Custody:	6273	Date Received:	09-23-98
Sample Matrix:	Soil	Date Analyzed:	09-23-98
Preservative:	Cool	Date Extracted:	09-23-98
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	690	8.8
Toluene	1,590	8.4
Ethylbenzene	1,470	7.6
p,m-Xylene	14,100	10.8
o-Xylene	2,630	5.2
Total BTEX	20,480	

ND - Parameter not detected at the stated detection limit.

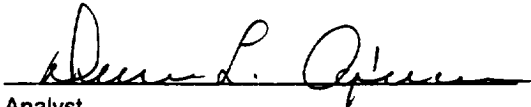
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	98 %
	Bromofluorobenzene	98 %

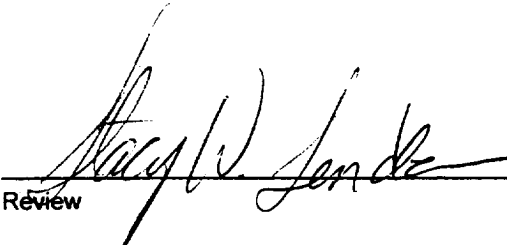
References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

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

Comments: Jicarilla Otero Com #1 - 5 Pt. Compostie.

NO - SAMPLE C@13'
JCS 10/26/98


Analyst


Review

6275

[illegible]

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P.O. BOX 507
DULCE, NEW MEXICO 87528

COC# 7087
SUBMIT 1 COPY TO
NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

Operator: DUGAN PROD. COEP. Telephone: 325-1821

Address: 709 E MURRAY DR. FARMINGTON NM. 87401

Facility or Well Name: JICARILLA OTERO COM # 1

Location: Unit or Qtr/Qtr Sec M Sec 22 T 24N R 5W County RIO ARriba

Land Type: _____

Date Remediation Started: 9-22-98 Date Completed: 7-15-99

Remediation Method: Landfarmed ☒ Approx. cubic yards 175
Composted _____
Other _____

Depth To Groundwater: (pts.) 0

Distance to an Ephemeral Stream (pts.) 0

Distance to Nearest Lake, Playa,
or Watering Pond (pts.) 0

Wellhead Protection Area: (pts.) 0

Distance To Surface Water: (pts.) 0

RANKING SCORE (TOTAL POINTS): 0

Final Closure Sampling:

Sampling Date: 7-13-99 Time: 0950

Sample Results:

Field Headspace (ppm) 10.7
TPH (ppm) 901 Method TPH (8015)
Other _____

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 Mando DATE: 9-27-99

CLIENT: <u>DUGAN</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: _____ C.O.C. NO: <u>7087</u>
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FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: <u>JICARUAOTERO COM</u> WELL #: <u>1</u> PITS: <u>SEP</u>	DATE STARTED: <u>7.13.99</u> DATE FINISHED: <u>7.15.99</u>
QUAD/UNIT: <u>M</u> SEC: <u>22</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>
QTR/FOOTAGE: <u>890S-990W</u> CONTRACTOR: <u>FOUTZ</u>	

SOIL REMEDIATION:

REMEDIATION SYSTEM: <u>LANDFARM</u>	APPROX. CUBIC YARDAGE: <u>175</u>
LAND USE: <u>RANGE</u>	LIFT DEPTH (ft): <u>1'</u>

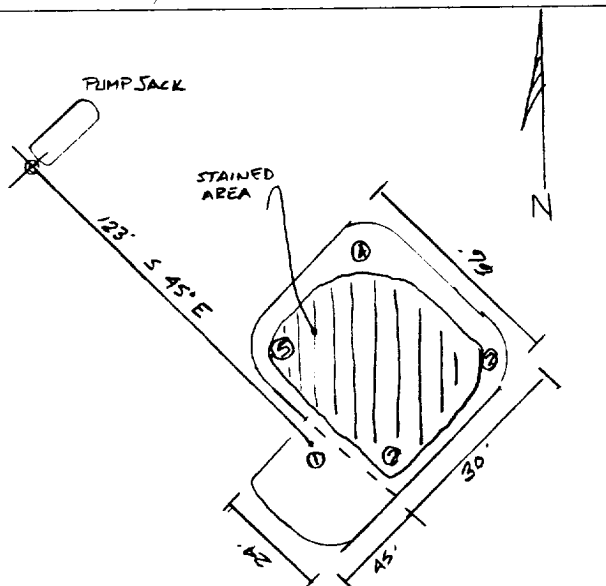
FIELD NOTES & REMARKS:

DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'
 NMOC RANKING SCORE: 0 NMOC TPH CLOSURE STD: 5000 PPM
 MODERATE-LT. YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM.
 LARGE AREA OF STAINING OBSERVED IN LANDFARM AREA. (SEE SKETCH BELOW)
 HC ODOR DETECTED IN SAMPLING PTS. ① + ③. 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	10.7	LF-1	TPH (DDIS)	0950	901

SCALE



TRAVEL NOTES:

CALLOUT: NA ONSITE: 7.13.99

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

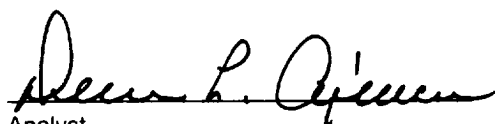
Client:	Blagg / Dugan	Project #:	403410
Sample ID:	LF - 1	Date Reported:	07-15-99
Laboratory Number:	F666	Date Sampled:	07-13-99
Chain of Custody No:	7087	Date Received:	07-14-99
Sample Matrix:	Soil	Date Extracted:	07-14-99
Preservative:	Cool	Date Analyzed:	07-14-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

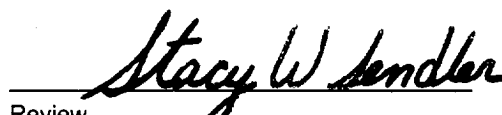
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1.0	0.2
Diesel Range (C10 - C28)	900	0.1
Total Petroleum Hydrocarbons	901	0.2

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 Com - 1 5 Pt. Composite.


Analyst


Review

7087

Client / Project Name			Project Location			ANALYSIS / PARAMETERS						
BLAKE/DUGAN			SIERRA OTERO COM-1									
Sampler: REP			Client No. 403410			Remarks						
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers							
LF-1	7/8/99	0950	F666	SOL	1 ✓	SPT CORROSIVE						
						SAMPLE PRESERVE						
						COOL						
Relinquished by: (Signature)			Date	Time	Received by: (Signature)	Date						
[Signature]			7/14/99	7:35	[Signature]	7/14/99 7:35						
Relinquished by: (Signature)			Received by: (Signature)									
Relinquished by: (Signature)			Received by: (Signature)									
ENVIROTECH INC.												
5796 U.S. Highway 64 Farmington, New Mexico 87401 (505) 632-0615												
Sample Receipt												
Received Intact					Y N N/A							
Cool - Ice/Blue Ice					✓							