

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

PIT REMEDIATION AND CLOSURE REPORT

Operator: DUGAN PRODUCTION CORP. Telephone: 505-325-1821
Address: P.O. Box 420, FARMINGTON, NM
Facility or Well Name: JICARILLA OTERO 4
Location: Unit or Qtr/Qtr Sec D Sec 27 T 24N R 5W County RIO ARriba
Pit Type: Separator ☒ Dehydrator ☐ Other ☐
Land Type: RANGE

Pit Location: Pit dimensions: length 15, width 21, depth 12
(Attach diagram) Reference: wellhead ☒, other ☐
Footage from reference: 120
Direction from reference: 12 Degrees ☒ East of North ☐
West 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 SurfaceWater: (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: 9-25-98

Remediation Method: Excavation ☒ Approx. cubic yards 135
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 12'
Sample date 9-25-98 Sample time 1130
Sample Results

Soil: Benzene	(ppm)	<u>0.23</u>	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	<u>0.30</u>	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>-</u>	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>1.1</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: Kate C Mandle DATE: 10-27-98

CLIENT: <u>DUGAN</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: _____ C.O.C. NO: <u>6328</u>																																								
FIELD REPORT: CLOSURE VERIFICATION		PAGE No: <u>1</u> of <u>1</u>																																								
LOCATION: NAME: <u>JERRUA OTERO</u> WELL #: <u>4</u> PIT: <u>SEP</u> QUAD/UNIT: <u>D</u> SEC: <u>27</u> TWP: <u>24N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u> QTR/FOOTAGE: <u>NW/4</u> <u>NW/4</u> CONTRACTOR: <u>FOLTZ</u>		DATE STARTED: <u>9-25-98</u> DATE FINISHED: <u>9-25-98</u> ENVIRONMENTAL SPECIALIST: <u>JCB</u>																																								
EXCAVATION APPROX. <u>15</u> FT. x <u>21</u> FT. x <u>12</u> FT. DEEP. CUBIC YARDAGE: <u>135</u> DISPOSAL FACILITY: <u>ON SITE</u> REMEDIATION METHOD: <u>LANDFARM</u> LAND USE: <u>RANGE</u> LEASE: <u>JIC 12</u> FORMATION: <u>GALLUP</u>																																										
FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>120</u> FT. <u>S12°E</u> FROM WELLHEAD. DEPTH TO GROUNDWATER: <u>>100</u> NEAREST WATER SOURCE: <u>>1000</u> NEAREST SURFACE WATER: <u>>1000</u> NMDCD RANKING SCORE: <u>0</u> NMDCD TPH CLOSURE STD: <u>5000</u> PPM SOIL AND EXCAVATION DESCRIPTION: <u>Soil TYPE Silty SAND. Black Discoloration from 0'-6', Gray Discoloration from 6'-11', BROWN soil, No Discoloration from 11'-12'.</u>																																										
CHECK ONE: ☒ PIT ABANDONED ☐ STEEL TANK INSTALLED ☐ FIBERGLASS TANK INSTALLED																																										
FIELD 418.1 CALCULATIONS																																										
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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

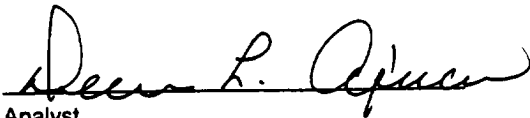
Client:	Blagg / Dugan	Project #:	04034-10
Sample ID:	Separator C @ 12'	Date Reported:	09-28-98
Laboratory Number:	D987	Date Sampled:	09-25-98
Chain of Custody No:	6328	Date Received:	09-28-98
Sample Matrix:	Soil	Date Extracted:	09-28-98
Preservative:	Cool	Date Analyzed:	09-28-98
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

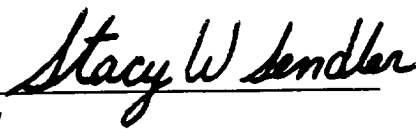
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1.1	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	1.1	0.2

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 #4.


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 @ 12'	Date Reported:	09-28-98
Laboratory Number:	D987	Date Sampled:	09-25-98
Chain of Custody:	6328	Date Received:	09-28-98
Sample Matrix:	Soil	Date Analyzed:	09-28-98
Preservative:	Cool	Date Extracted:	09-28-98
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	230	8.8
Toluene	10.9	8.4
Ethylbenzene	12.0	7.6
p,m-Xylene	41.0	10.8
o-Xylene	8.2	5.2
Total BTEX	302	

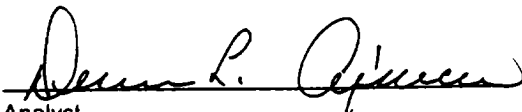
ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	97 %
	Bromofluorobenzene	97 %

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 #4.


Analyst


Review

6328

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RECEIVED
OCT 15 1999
OIL CON. DIV.
EST. 3

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

COL# 7088
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 #4

Location: Unit or Qtr/Qtr Sec D Sec 27 T 24N R 5W County RIO ARriba

Land Type: RANGE

Date Remediation Started: 9-25-98 Date Completed: 7-13-99

Remediation Method: Landfarmed ☒ Approx. cubic yards 135

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: 1045

Sample Results:

Field Headspace (ppm) 48.9

TPH (ppm) 2,820 Method (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. M...ll 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>7088</u>
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FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: <u>JICARILLA OTERO</u>	WELL #: <u>4</u>	PITS: <u>SEP</u>	DATE STARTED: <u>7.13.99</u>	DATE FINISHED: <u>7.15.99</u>
QUAD/UNIT <u>D</u> SEC: <u>27</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>790N-890W</u>		CONTRACTOR: <u>FOUTZ</u>		

SOIL REMEDIATION:

REMEDIATION SYSTEM: <u>LANDFARM</u>	APPROX. CUBIC YARDAGE: <u>135</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'

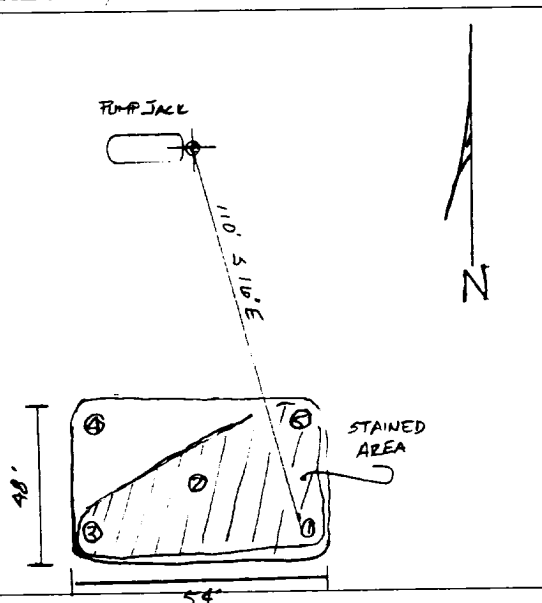
NMDD RANKING SCORE: 0 NMDD TPH CLOSURE STD: 5000 PPM

DK YELLOWISH BROWN CLAYEY SAND. COHESIVE, SLIGHTLY MOIST, FIRM.
 LG AREA OF STAINING OBSERVED IN LANDFARM AREA (SEE SKETCH BELOW)
 HC ODOOR DETECTED IN SAMPLING PTS. ①, ③ + ⑤. SAMPLING DEPTHS RANGE FROM 6" - 10" COLLECTED A 5PT. 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

SAMPLE ID	FIELD HEADSPACE PID (ppm)
LF-1	48.9

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	TPH (2015)	1045	2,820

SCALE

0 1 FT

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

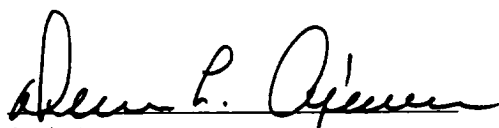
Client:	Blagg / Dugan	Project #:	403410
Sample ID:	LF - 1	Date Reported:	07-15-99
Laboratory Number:	F667	Date Sampled:	07-13-99
Chain of Custody No:	7088	Date Received:	07-14-99
Sample Matrix:	Soil	Date Extracted:	07-14-99
Preservative:	Cool	Date Analyzed:	07-14-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	34.1	0.2
Diesel Range (C10 - C28)	2,790	0.1
Total Petroleum Hydrocarbons	2,820	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 - 4 5 Pt. Composite.


Analyst


Review

7088

[illegible]