

OK
RECEIVED
JUL 13 1999

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

BT690
Denny E. Faust
DEPUTY OIL & GAS INSPECTOR
SUBMIT 1 COPY TO
NATURAL RESOURCE DEPT
REGISTRATION

AUG 13 1999

OIL CON. DIV.
DIST. 3

PIT REMEDIATION AND CLOSURE REPORT

Approved

Operator: AMOCO PRODUCTION COMPANY

Telephone: (505) 326-9200

Address: 200 Amoco Court, Farmington, NM 87401

Facility or Well Name: JICARILLA A #3

Location: Unit or Qtr/Qtr Sec A Sec 19 T 26N R 5W County RIO ARriba

Pit Type: Separator ☒ Dehydrator ☐ Other ☐

Land Type: RANGE

Pit Location:
(Attach diagram)

Pit dimensions: length 34', width 28', depth 20'

Reference: wellhead ☒, other ☐

Footage from reference: 127'

Direction from reference: 31 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) 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) 0

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): 0

Date Remediation Started: _____ Date Completed: 11/30/98

Remediation Method: Excavation ☒ Approx. cubic yards 630
 (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, BEDROCK BOTTOM.

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 14' (EAST SIDEWALL)

Sample date 11/28/98 Sample time 0905

Sample Results

Soil: Benzene	(ppm)	<u>ND</u>	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	<u>1780</u>	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>164.8</u>	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>7.3</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 11/30/98 PRINTED NAME Buddy D. Shaw

SIGNATURE Buddy D. Shaw AND TITLE Environmental Coordinator

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: Ken C. Mamm DATE: 12-24-98

00428

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>85690</u> C.O.C. NO: <u>0310</u>																																
FIELD REPORT: CLOSURE VERIFICATION		PAGE No: <u>1</u> of <u>1</u>																																
LOCATION: NAME: <u>SICABILLA</u> A WELL # <u>3</u> PIT: <u>SEP</u>		DATE STARTED: <u>11-28-98</u> DATE FINISHED: _____																																
QUAD/UNIT: <u>A</u> SEC: <u>19</u> TWP: <u>20N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>EA</u> ST: <u>NM</u>		ENVIRONMENTAL SPECIALIST: <u>NV</u>																																
QTR/FOOTAGE: <u>900N/990E</u> CONTRACTOR: <u>P+S</u>																																		
EXCAVATION APPROX. <u>34'</u> FT. x <u>28'</u> FT. x <u>20'</u> FT. DEEP. CUBIC YARDAGE: <u>630</u>																																		
DISPOSAL FACILITY: <u>ON SITE</u> REMEDIATION METHOD: <u>LANDFARM</u>																																		
LAND USE: <u>RANGE</u> LEASE: <u>SIC. A</u> FORMATION: <u>DK/69</u>																																		
FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>127'</u> FT. <u>S 31° 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:																																		
<p>SIDEWALLS - TOP HALF DK YELLOWISH ORANGE SAND BET. (0-8'), DK YELLOWISH BROWN CLAY, PLASTIC, SLIGHTLY MOIST, STIFF - VERY STIFF. NO APPARENT STAINING OBSERVED, STRONG HC ODOR IN NORTH AND EAST SIDEWALL OVM SAMPLES ONLY.</p> <p>BOTTOM - BEDROCK (SHALE), MED. GRAY IN COLOR, HARD, HC ODOR IN OVM SAMPLE.</p>																																		
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <p><u>BEDROCK BOTTOM</u></p> <p><u>CLOSED.</u></p> <p>SCALE</p> <p>0 FT</p> </div> <div style="width: 65%;"> <p>FIELD 418.1 CALCULATIONS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>TIME</th> <th>SAMPLE I.D.</th> <th>LAB No.</th> <th>WEIGHT (g)</th> <th>mL. FREON</th> <th>DILUTION</th> <th>READING</th> <th>CALC. ppm</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table> </div> </div>			TIME	SAMPLE I.D.	LAB No.	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm																								
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<p>PIT PERIMETER <u>AN</u></p>	<p>OVM RESULTS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>SAMPLE ID</th> <th>FIELD HEADSPACE PID (ppm)</th> </tr> </thead> <tbody> <tr><td>1 @ 16'</td><td>144.4</td></tr> <tr><td>2 @ 14'</td><td>104.8</td></tr> <tr><td>3 @ 13'</td><td>0.0</td></tr> <tr><td>4 @ 14'</td><td>65.8</td></tr> <tr><td>5 @ 20'</td><td>117.0</td></tr> </tbody> </table>	SAMPLE ID	FIELD HEADSPACE PID (ppm)	1 @ 16'	144.4	2 @ 14'	104.8	3 @ 13'	0.0	4 @ 14'	65.8	5 @ 20'	117.0	<p>PIT PROFILE</p>																				
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TRAVEL NOTES: CALLOUT: _____ ONSITE: _____																																		

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

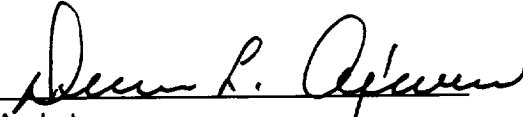
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	2 @ 14'	Date Reported:	11-30-98
Laboratory Number:	E225	Date Sampled:	11-28-98
Chain of Custody No:	6316	Date Received:	11-30-98
Sample Matrix:	Soil	Date Extracted:	11-30-98
Preservative:	Cool	Date Analyzed:	11-30-98
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	2.8	0.2
Diesel Range (C10 - C28)	4.5	0.1
Total Petroleum Hydrocarbons	7.3	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 A #3 Separator Pit.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	2 @ 14'	Date Reported:	11-30-98
Laboratory Number:	E225	Date Sampled:	11-28-98
Chain of Custody:	6316	Date Received:	11-30-98
Sample Matrix:	Soil	Date Analyzed:	11-30-98
Preservative:	Cool	Date Extracted:	11-30-98
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	8.8
Toluene	54.2	8.4
Ethylbenzene	199	7.6
p,m-Xylene	1,060	10.8
o-Xylene	467	5.2
Total BTEX	1,780	

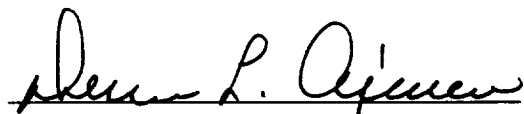
ND - Parameter not detected at the stated detection limit.

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 A #3 Separator Pit.


Analyst


Review

6316

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**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

ON-SITE SOIL REMEDIATION REPORT

Operator: <u>AMOCO PRODUCTION COMPANY</u>		Telephone: <u>(505) 326-9200</u>
Address: <u>200 Amoco Court, Farmington, NM 87401</u>		
Facility or Well Name: <u>JICARILLA A. 3</u>		
Location: Unit or Qtr/Qtr Sec <u>A</u> Sec <u>19</u> T <u>20N</u> R <u>5W</u> County <u>RIO ARriba</u>		
Land Type: <u>RANGE</u>		
Date Remediation Started: <u>11 28 98</u>		Date Completed: <u>6/2/99</u>
Remediation Method: Landfarmed <input checked="" type="checkbox"/>		Approx. cubic yards <u>630</u>
Composted <input type="checkbox"/>		
Other <input type="checkbox"/>		
Depth To Groundwater: (pts.) <u>0</u>	Final Closure Sampling: Sampling Date: <u>6 1 99</u> Time: <u>1140</u> Sample Results: Field Headspace (ppm) <u>40.4</u> TPH (ppm) <u>127</u> Method <u>TPH (8015)</u> Other _____	
Distance to an Ephemeral Stream (pts.) <u>0</u>		
Distance to Nearest Lake, Playa, or Watering Pond (pts.) <u>0</u>		
Wellhead Protection Area: (pts.) <u>0</u>		
Distance To Surface Water: (pts.) <u>0</u>		
RANKING SCORE (TOTAL POINTS): <u>0</u>		
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF DATE <u>6/2/99</u> PRINTED NAME <u>Buddy D. Shaw</u> SIGNATURE <u>Buddy D. Shaw</u> AND TITLE <u>Environmental Coordinator</u>		
AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE. APPROVED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> (REASON) _____ SIGNED: <u>[Signature]</u> DATE: <u>6-18-99</u>		

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>85690</u> C.D.C. NO: <u>7055</u>
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FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: <u>JICARILLA</u> A WELL #: <u>3</u> PITS: <u>SEP</u>	DATE STARTED: <u>6-1-99</u> DATE FINISHED: _____
QUAD/UNIT: <u>A</u> SEC: <u>19</u> TWP: <u>26N</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>NE/4 NE/4</u> CONTRACTOR: <u>P+S</u>	

SOIL REMEDIATION:

REMEDICATION SYSTEM: LANDFARM

APPROX. CUBIC YARDAGE: 630

LAND USE: RANGE

LIFT DEPTH (ft): 1'

FIELD NOTES & REMARKS:

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

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

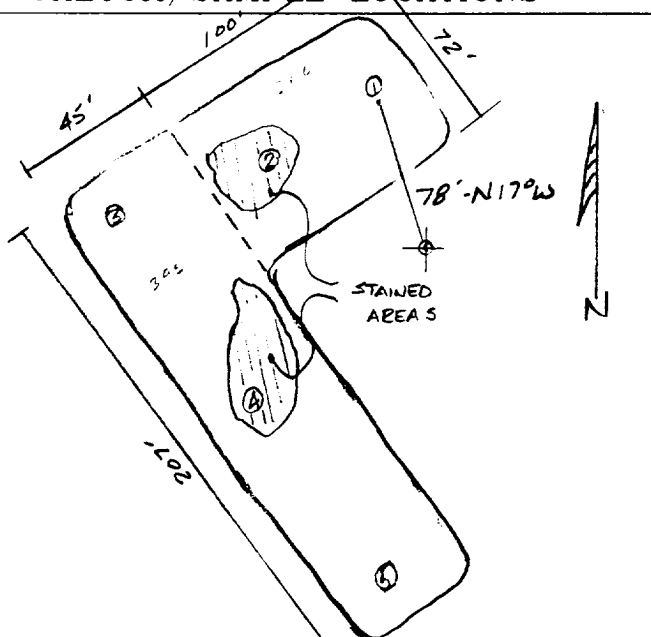
MODERATE YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM
TWO SMALL AREAS OF STAINING OBSERVED IN LANDFARM AREA (SEE SKETCH BELOW)
NO HC ODOR DETECTED. SAMPLING DEPTHS RANGE FROM 6"-10". COLLECTED
A 5 FT. COMPOSITE SAMPLE FOR LAB ANALYSIS

CLOSED

FIELD 418.1 CALCULATIONS

SAMP. TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	m. 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	40.4	LF-1	TPH (8015)	1140	127

SCALE



0 FT

TRAVEL NOTES:

CALLOUT: NA

ONSITE: 6-1-99

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

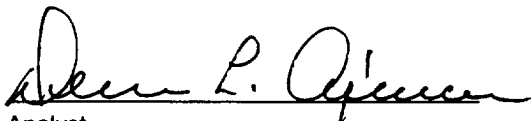
Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	LF - 1	Date Reported:	06-02-99
Laboratory Number:	F445	Date Sampled:	06-01-99
Chain of Custody No:	7055	Date Received:	06-02-99
Sample Matrix:	Soil	Date Extracted:	06-02-99
Preservative:	Cool	Date Analyzed:	06-02-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH


Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	15.6	0.2
Diesel Range (C10 - C28)	111	0.1
Total Petroleum Hydrocarbons	127	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 A - 3 Landfarm. 5 Pt. Composite.


Analyst


Review

7055

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