

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

87676

OK
SUBMIT 1 COPY TO
NATURAL RESOURCE DEPT

RECEIVED
AUG 16 1999

**OIL CON. DIV.
DIST. 3**

PIT REMEDIATION AND CLOSURE REPORT

Operator: AMOCO PRODUCTION COMPANY **Telephone:** (505) 326-9200
Address: 200 Amoco Court, Farmington, NM 87401
Facility or Well Name: JICARILLA CONTRACT #146-20
Location: Unit or Qtr/Qtr Sec A Sec 4 T25N R5W County RIO ARriba
Pit Type: Separator ☐ Dehydrator ☐ Other COMPRESSOR
Land Type: RANGE

Pit Location: Pit dimensions: length 21', width 24', depth 20'
(Attach diagram) Reference: wellhead X, other _____
Footage from reference: 150'
Direction from reference: 29 Degrees ☒ East ☒ 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 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: _____ Date Completed: 10/27/98

Remediation Method: Excavation ☒ Approx. cubic yards 300
 (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: Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths)

Sample location see Attached Documents

Sample depth 18' (WEST SIDEWALK)

Sample date 10/23/98 Sample time 1445

Sample Results

Soil: Benzene	(ppm)	<u>1.170</u>	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	<u>21.070</u>	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>157</u>	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>4,335</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 10/27/98 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: Karl M. [Signature] DATE: 12-28-98

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>8J676</u> C.D.C. NO: <u>6321</u>
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FIELD REPORT: CLOSURE VERIFICATION	PAGE No: <u>1</u> of <u>1</u>
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LOCATION: NAME: <u>JIC CONT 146</u> WELL #: <u>20</u> PIT: <u>COMPRESSOR</u>	DATE STARTED: <u>1</u> DATE FINISHED: <u>10/23/95</u>
QUAD/UNIT: <u>A SEC: 4</u> TWP: <u>25N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u>	ENVIRONMENTAL SPECIALIST: <u>JCE</u>
QTR/FOOTAGE: <u>NE/4 NE/4</u> CONTRACTOR: <u>PAUL</u>	

EXCAVATION APPROX. <u>21</u> FT. x <u>24</u> FT. x <u>20</u> FT. DEEP. CUBIC YARDAGE: <u>300</u>
DISPOSAL FACILITY: <u>ONSITE</u> REMEDIATION METHOD: <u>LANDFARM</u>
LAND USE: <u>RANGE</u> LEASE: <u>JIC CONT 146</u> FORMATION: _____

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>150</u> FT. <u>N29W</u> FROM WELLHEAD.
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DEPTH TO GROUNDWATER: <u>>100</u> NEAREST WATER SOURCE: <u>>1000</u> NEAREST SURFACE WATER: <u>>1000</u>

NMOC D RANKING SCORE: <u>0</u> NMOC D TPH CLOSURE STD: <u>5000</u> PPM
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SOIL AND EXCAVATION DESCRIPTION:	CHECK ONE: <input checked="" type="checkbox"/> PIT ABANDONED <input type="checkbox"/> STEEL TANK INSTALLED <input type="checkbox"/> FIBERGLASS TANK INSTALLED
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YELLOW ORANGE TAN SILTY SAND, DRY TO MOIST, FIRM,
NON COHESIVE, HC ODOR ON ALL SAMPLES NO HC STAINING.

<p><u>CLOSED</u></p> <p>SCALE</p> <p>0 FT</p>	FIELD 418.1 CALCULATIONS							
	TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm

<p>PIT PERIMETER</p>	<p>OVM RESULTS</p> <table border="1"> <tr> <th>SAMPLE ID</th> <th>FIELD HEADSPACE PID (ppm)</th> </tr> <tr><td>1NE 18</td><td>152</td></tr> <tr><td>2EE 18</td><td>139</td></tr> <tr><td>3SE 18</td><td>112</td></tr> <tr><td>4WE 18</td><td>157</td></tr> <tr><td>5CE 20</td><td>102</td></tr> </table>	SAMPLE ID	FIELD HEADSPACE PID (ppm)	1NE 18	152	2EE 18	139	3SE 18	112	4WE 18	157	5CE 20	102	<p>PIT PROFILE</p>
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<p>LAB SAMPLES</p> <table border="1"> <tr> <th>SAMPLE ID</th> <th>ANALYSIS</th> <th>TIME</th> </tr> <tr> <td>④ WE 18</td> <td>TPH/BTEX</td> <td>1445</td> </tr> <tr> <td colspan="3"><u>BOTH PASSED</u></td> </tr> </table>	SAMPLE ID	ANALYSIS	TIME	④ WE 18	TPH/BTEX	1445	<u>BOTH PASSED</u>							
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④ WE 18	TPH/BTEX	1445												
<u>BOTH PASSED</u>														

TRAVEL NOTES:	CALLOUT: _____	ONSITE: _____
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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:	Comp. W @ 18'	Date Reported:	10-27-98
Laboratory Number:	E100	Date Sampled:	10-23-98
Chain of Custody No:	6321	Date Received:	10-26-98
Sample Matrix:	Soil	Date Extracted:	10-26-98
Preservative:	Cool	Date Analyzed:	10-26-98
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

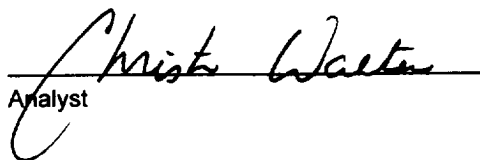
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	874	0.2
Diesel Range (C10 - C28)	461	0.1
Total Petroleum Hydrocarbons	1,335	0.2

ND - Parameter not detected at the stated detection limit.

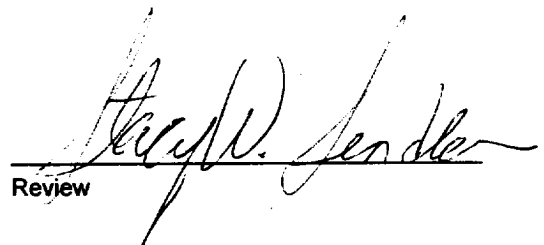
References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Jicarilla Contract 146 Well 20.

Analyst



Review



ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / Amoco	Project #:	04034-10
Sample ID:	Comp. W @ 18'	Date Reported:	10-27-98
Laboratory Number:	E100	Date Sampled:	10-23-98
Chain of Custody:	6321	Date Received:	10-26-98
Sample Matrix:	Soil	Date Analyzed:	10-26-98
Preservative:	Cool	Date Extracted:	10-26-98
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	1,170	8.8
Toluene	6,000	8.4
Ethylbenzene	2,070	7.6
p,m-Xylene	7,410	10.8
o-Xylene	4,420	5.2
Total BTEX	21,070	

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 Contract 146 Well 20.

Analyst

Review

6321

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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: AMOCO PRODUCTION COMPANY Telephone: (505) 326-9200

Address: 200 Amoco Court, Farmington, NM 87401

Facility or Well Name: JICARILLA CONTRACT 146-20

Location: Unit or Qtr/Qtr Sec A Sec 4 T 25N R 5W County RIO ARIZONA

Land Type: RANGE

Date Remediation Started: 10-23-98 Date Completed: 5/12/99

Remediation Method: Landfarmed ☒ Approx. cubic yards 1000

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: 5-11-99 Time: 1100

Sample Results:

Field Headspace (ppm) 6.5

TPH (ppm) 147 Method TPH (8015)

Other ☐

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

DATE 5/12/99 PRINTED NAME Buddy D. Shaw

SIGNATURE Buddy D. Shaw AND TITLE Environmental Coordinator

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: _____ DATE: _____

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>85676</u> C.D.C. NO <u>6917</u>
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FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: <u>SILVERILLA CONTRACTUAL</u> WELL #: <u>20</u> PITS: <u>COMP</u>	DATE STARTED: <u>5.11.99</u>
QUAD/UNIT: <u>A</u> SEC: <u>9</u> TWP: <u>25N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u>	DATE FINISHED: _____
QTR/FOOTAGE: <u>NE/4 NE/4</u> CONTRACTOR: <u>P+S</u>	ENVIRONMENTAL SPECIALIST: <u>REP</u>

SOIL REMEDIATION:

REMEDICATION SYSTEM: LANDFARM APPROX. CUBIC YARDAGE: 1000
LAND USE: RANGE LIFT DEPTH (ft): 2'

FIELD NOTES & REMARKS:

DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'
NMDC BANKING SCORE 0 NMDC TPH CLOSURE STD: 5000 PPM

LT. YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM
LARGE AREA OF STAINING OBSERVED IN LANDFARM AREA #1 (SEE SKETCH BELOW)
HC ODOR DETECTED IN SAMPLING PT. ②. SAMPLING DEPTHS RANGE FROM
6"-18". COLLECTED A 5FT. COMPOSITE SAMPLE FOR LAB ANALYSIS

CLOSED

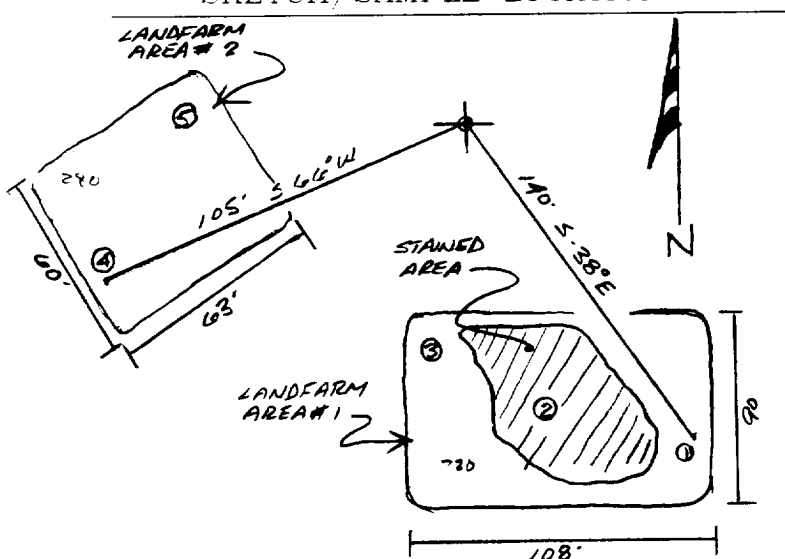
FIELD 418.1 CALCULATIONS

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

NOTE: SOME SOIL WAS MOVED
FROM THE 196.86 TO THIS
LOCATION

APPROX.
700 c.y.

SKETCH/SAMPLE LOCATIONS



OVM RESULTS

LAB SAMPLES

SAMPLE ID	FIELD HEADSPACE PID (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	6.5	LF-1	TPH (8015)	1100	147

SCALE

0 1 FT

TRAVEL NOTES: CALLOUT: N/A ONSITE: 5.11.99

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Blagg / AMOCO
Sample ID: LF - 1
Laboratory Number: F203
Chain of Custody No: 6917
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

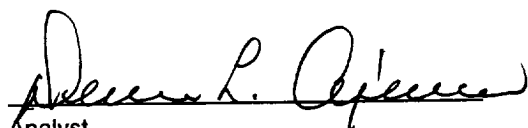
Project #: 403410
Date Reported: 05-12-99
Date Sampled: 05-11-99
Date Received: 05-12-99
Date Extracted: 05-12-99
Date Analyzed: 05-12-99
Analysis Requested: 8015 TPH

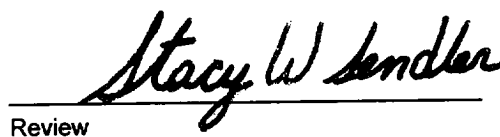
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1.3	0.2
Diesel Range (C10 - C28)	146	0.1
Total Petroleum Hydrocarbons	147	0.2

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 Contract 146 - 20 Landfarm. 5 Pt. Composite.


Analyst


Review

6917

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