

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

Blow - between
87702

SEP - OK

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

PIT REMEDIATION AND CLOSURE REPORT

AUG 27 1999

RECEIVED

OIL CON. DIV.

Operator: AMOCO PRODUCTION COMPANY Telephone: (505) 328-9200
Address: 200 Amoco Court, Farmington, NM 87401
Facility or Well Name: JICARILLA CONTRACT #155-25
Location: Unit or Qtr/Qtr Sec 0 Sec 30 T 26N R 5W County RIO ARriba
Pit Type: Separator Dehydrator Other BLOW
Land Type: RANGE

Pit Location:
(Attach diagram)

Pit dimensions: length 54', width 44', depth 12'
Reference: wellhead X, other
Footage from reference: 250'
Direction from reference: 30 Degrees X East of North
 West of South X

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)	<u>0</u>
Greater than 100 feet	(0 points)	<u> </u>

Distance to an Ephemeral Stream

(Downgradient dry wash greater than
ten feet in width)

Less than 100 feet	(10 points)	<u>0</u>
Greater than 100 feet	(0 points)	<u> </u>

Distance to Nearest Lake, Playa, or Watering Pond

(Downgradient lakes, playas and
livestock or wildlife watering ponds)

Less than 100 feet	(10 points)	<u>0</u>
Greater than 100 feet	(0 points)	<u> </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)	<u>0</u>
Greater than 1000 feet	(0 points)	<u> </u>

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: _____ Date Completed: 12/4/98

Remediation Method: Excavation ☒ Approx. cubic yards 750
(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. RISK ASSESSED.

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 8' (EAST SIDEWALL)

Sample date 12/3/98 Sample time 0920

Sample Results

Soil: Benzene (ppm)	_____	Water: Benzene (ppb)	_____
Total BTEX (ppm)	_____	Toluene (ppb)	_____
Field Headspace (ppm)	<u>0.0</u> / <u>136.3</u> ^{PIT BOTTOM}	Ethylbenzene (ppb)	_____
TPH (ppm)	<u>ND</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 12/4/98 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: K. C. M. [Signature] DATE: 12-28-98

22487

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>85702</u> C.D.C. NO: <u>6419</u>
----------------------	--	---

FIELD REPORT: CLOSURE VERIFICATION	PAGE No: <u>1</u> of <u>1</u>
---	-------------------------------

LOCATION: NAME: <u>JICA. CONTR. 155</u> WELL #: <u>25</u> PIT: <u>BLOW</u> QUAD/UNIT: <u>0</u> SEC: <u>30</u> TWP: <u>26N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u> QTR/FOOTAGE: <u>1080' FSL / 1570' FEL</u> CONTRACTOR: <u>P & S</u>	DATE STARTED: <u>12/3/98</u> DATE FINISHED: _____ ENVIRONMENTAL SPECIALIST: <u>NV</u>
---	---

EXCAVATION APPROX. <u>54</u> FT. x <u>44</u> FT. x <u>12</u> FT. DEEP.	CUBIC YARDAGE: <u>750</u>	
DISPOSAL FACILITY: <u>ON-SITE</u> REMEDIATION METHOD: <u>LANDFARM</u>		
LAND USE: <u>RANGE</u> LEASE: <u>JIC 155</u> FORMATION: <u>MV/CK</u>		

FIELD NOTES & REMARKS:	PIT LOCATED APPROXIMATELY <u>250</u> FT. <u>330E</u> FROM WELLHEAD. 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 SOIL AND EXCAVATION DESCRIPTION:
------------------------	---

CHECK ONE:
☒ PIT ABANDONED
☐ STEEL TANK INSTALLED
☐ FIBERGLASS TANK INSTALLED

SIDEWALLS - MOD. YEL. BROWN SAND TO SILTY SAND, NON COHESIVE SLIGHTLY MOIST, FIRM, NO APPARENT STAINING OBSERVED, NO APPARENT HC ODOR DETECTED W/IN EXCAVATION OR IN ANY OF THE OVM SAMPLES.

BOTTOM - BEDROCK (SANDSTONE) LT. TO DK. GRAY IN COLOR, VERY HARD, HC ODOR DETECTED W/IN OVM SAMPLE.

BEDROCK BOTTOM

RISK ASSESSED

FIELD 418.1 CALCULATIONS

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

SCALE

0 FT

PIT PERIMETER

OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 6'	0.0
2 @ 8'	0.0
3 @ 6'	0.0
4 @ 6'	0.0
5 @ 12'	136.3

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
2 @ 8'	TPH (418.1)	0920
(PASSED)		

PIT PROFILE

TRAVEL NOTES: CALLOUT: _____ ONSITE: _____

Well Name:	Jicarilla Contract 155 #25
Well Site location:	Unit O, Sec. 30, T26N, R5W
Pit Type:	Blow Pit
Producing Formation:	Chacra/Mesa Verde
Pit Category:	Non Vulnerable
Horizontal Distance to Surface Water:	> 1000 ft.
Vicinity Groundwater Depth:	> 100 ft.

RISK ASSESSMENT (non-vulnerable area)

Pit remediation activities were terminated when trackhoe encountered sandstone bedrock at 12 feet below grade.

No past or future threat to surface water or groundwater is likely based on the following considerations:

1. Past production fluids were contained locally by a relatively shallow sandstone bedrock located 12 feet below grade. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below sandstone bedrock.
2. Topographic information does not indicate off site lateral fluid migration near the earthen pit.
3. Daily discharge into the earthen pit has been terminated (pit abandoned). Prior discharge into the pit is believed to be under 5 barrels per day.
4. Well site located within the **non-vulnerable area** and is approximately 0.17 miles northwest of the nearest vulnerable area boundary (Tapacito Creek).

(Refer to Gonzales Mesa Quadrangle, New Mexico - Rio Arriba County, 7.5 Minute Series (Topographic), 1963, (vulnerable area boundary developed by Mr. William C. Olson, Hydrogeologist, Environmental Bureau, New Mexico Oil Conservation Division).

Based upon the information given, we conclude that the sandstone bottom creates enough of an impermeable barrier as to subdue impact to groundwater below it (please refer to AMOCO's report "Post Excavation Pit Closure Investigation Summary, July, 1995", with cover letter dated November 30, 1995). AMOCO requests pit closure approval on this location.

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

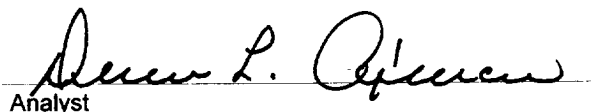
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	2 @ 8'	Date Reported:	12-04-98
Laboratory Number:	E258	Date Sampled:	12-03-98
Chain of Custody No:	6419	Date Received:	12-04-98
Sample Matrix:	Soil	Date Extracted:	12-04-98
Preservative:	Cool	Date Analyzed:	12-04-98
Condition:	Cool and Intact	Analysis Needed:	TPH-418.1


Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	ND	5.0

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: Jicarilla Contract #155 - 25 Blow Pit.


Analyst


Review

85702

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

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

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 #155-25
Location: Unit or Qtr/Qtr Sec 0 Sec 30 T 26N R 5W County RIO ARriba
Pit Type: Separator X Dehydrator Other
Land Type: RANGE

Pit Location: Pit dimensions: length 18', width 9', depth 20'
(Attach diagram) Reference: wellhead X, other
Footage from reference: 165
Direction from reference: 0 Degrees East of North
 West of South X

Depth To Groundwater: (Vertical distance from contaminants to seasonal high water elevation of groundwater)	Less than 50 feet	(20 points)	<u>0</u>
	50 feet to 99 feet	(10 points)	
	Greater than 100 feet	(0 points)	
Distance to an Ephemeral Stream (Downgradient dry wash greater than ten feet in width)	Less than 100 feet	(10 points)	<u>0</u>
	Greater than 100 feet	(0 points)	
Distance to Nearest Lake, Playa, or Watering Pond (Downgradient lakes, playas and livestock or wildlife watering ponds)	Less than 100 feet	(10 points)	<u>0</u>
	Greater than 100 feet	(0 points)	
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)	<u>0</u>
	No	(0 points)	
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 100 feet	(20 points)	<u>0</u>
	100 feet to 1000 feet	(10 points)	
	Greater than 1000 feet	(0 points)	

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: _____ Date Completed: 12/4/98

Remediation Method: Excavation ☒
(Check all appropriate sections) Landfarmed ☒

Approx. cubic yards 175

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:
Closure Sampling:
(if multiple samples,
attach sample results
and diagram of sample
locations and depths)

Sample location see Attached Documents

Sample depth 15' (NORTH SIDEWALL)

Sample date 12/3/98 Sample time 0845

Sample Results

Soil: Benzene	(ppm)	<u>0.0461</u>	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	<u>5.620</u>	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>225</u>	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>4,200</u>	Total Xylenes	(ppb)	_____

3.4 / PIT BOTTOM

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 12/4/98 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. M...ll DATE: 12-28-98

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>85702</u> C.O.C. NO: <u>6419</u>																																								
FIELD REPORT: CLOSURE VERIFICATION		PAGE No: <u>1</u> of <u>1</u>																																								
LOCATION: NAME: <u>JICA CONTR. 155</u> WELL #: <u>25</u> PIT: <u>SEP</u>		DATE STARTED: <u>12/3/98</u> DATE FINISHED: _____																																								
QUAD/UNIT: <u>0</u> SEC: <u>30</u> TWP: <u>26N</u> RNG: <u>5W</u> PM: <u>Nm</u> CNTY: <u>RA</u> ST: <u>Nm</u>		ENVIRONMENTAL SPECIALIST: <u>NV</u>																																								
QTR/FOOTAGE: <u>1080' FSL / 1570' FEL</u> CONTRACTOR: <u>P+S</u>																																										
EXCAVATION APPROX. <u>18</u> FT. x <u>19</u> FT. x <u>20</u> FT. DEEP. CUBIC YARDAGE: <u>175</u>																																										
DISPOSAL FACILITY: <u>ON-SITE</u> REMEDIATION METHOD: <u>LANDFARM</u>																																										
LAND USE: <u>RANGE</u> LEASE: <u>JICA 155</u> FORMATION: <u>MULCR</u>																																										
FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>165</u> FT. <u>DUE S</u> FROM WELLHEAD.																																										
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																																										
SOIL AND EXCAVATION DESCRIPTION:																																										
<p> SIDEWALLS - MOSTLY PALE YELL. BROWN SILTY SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM TO DENSE, HC STAINING OBSERVED ON NORTH SIDEWALL BET. 2'-4' BELOW GRADE, WEST SIDEWALL BET. 1'-7' BELOW GRADE, NO APPARENT HC ODOR DETECTED W/IN EXCAVATION, STRONG HC ODOR IN NORTH SIDEWALL OUM SAMPLE ONLY. </p> <p> BOTTOM - BEDROCK (SANDSTONE), MOD. YELL. GREEN IN COLOR, VERY HARD, NO APPARENT HC ODOR IN OUM SAMPLE. </p>																																										
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <p>BEDROCK Bottom</p> <p>SCALE</p> <p>0 FT</p> </div> <div style="width: 65%;"> <p style="text-align: center;">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>0845</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> <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	0845																															
TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm																																			
0845																																										
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <p style="text-align: center;">PIT PERIMETER</p> </div> <div style="width: 35%;"> <p style="text-align: center;">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 @ 15'</td><td>225</td></tr> <tr><td>2 @ 15'</td><td>0.0</td></tr> <tr><td>3 @ 14'</td><td>3.4</td></tr> <tr><td>4 @ 15'</td><td>0.0</td></tr> <tr><td>5 @ 20'</td><td>3.4</td></tr> </tbody> </table> </div> <div style="width: 30%;"> <p style="text-align: center;">PIT PROFILE</p> </div> </div>			SAMPLE ID	FIELD HEADSPACE PID (ppm)	1 @ 15'	225	2 @ 15'	0.0	3 @ 14'	3.4	4 @ 15'	0.0	5 @ 20'	3.4																												
SAMPLE ID	FIELD HEADSPACE PID (ppm)																																									
1 @ 15'	225																																									
2 @ 15'	0.0																																									
3 @ 14'	3.4																																									
4 @ 15'	0.0																																									
5 @ 20'	3.4																																									
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <p style="text-align: center;">LAB SAMPLES</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>SAMPLE ID</th> <th>ANALYSIS</th> <th>TIME</th> </tr> </thead> <tbody> <tr> <td>0815</td> <td>TPH BTX</td> <td>0845</td> </tr> </tbody> </table> <p style="border: 1px solid black; border-radius: 10px; padding: 2px; text-align: center;">BOTH PASSED</p> </div> <div style="width: 65%;"> <p>TRAVEL NOTES: CALLOUT: _____ ONSITE: _____</p> </div> </div>			SAMPLE ID	ANALYSIS	TIME	0815	TPH BTX	0845																																		
SAMPLE ID	ANALYSIS	TIME																																								
0815	TPH BTX	0845																																								

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

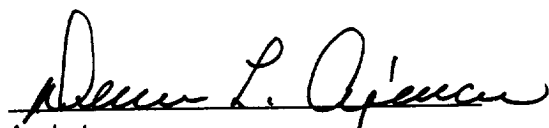
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	1 @ 15'	Date Reported:	12-04-98
Laboratory Number:	E259	Date Sampled:	12-03-98
Chain of Custody No:	6419	Date Received:	12-04-98
Sample Matrix:	Soil	Date Extracted:	12-04-98
Preservative:	Cool	Date Analyzed:	12-04-98
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

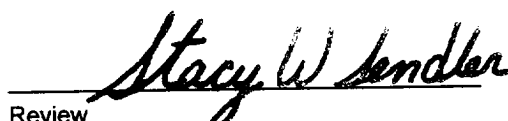
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	642	0.2
Diesel Range (C10 - C28)	3,550	0.1
Total Petroleum Hydrocarbons	4,200	0.2

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 #155 - 25 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:	1 @ 15'	Date Reported:	12-04-98
Laboratory Number:	E259	Date Sampled:	12-03-98
Chain of Custody:	6419	Date Received:	12-04-98
Sample Matrix:	Soil	Date Analyzed:	12-04-98
Preservative:	Cool	Date Extracted:	12-04-98
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	46.1	8.8
Toluene	964	8.4
Ethylbenzene	421	7.6
p,m-Xylene	2,880	10.8
o-Xylene	1,310	5.2
Total BTEX	5,620	

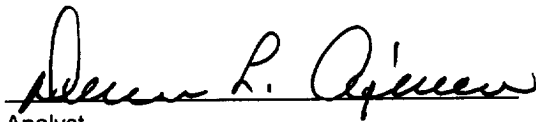
ND - Parameter not detected at the stated detection limit.

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 Contract #155 - 25 Separator Pit.


Analyst


Review

6419

[illegible]

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 CONTRACT 155.25</u>	
Location: Unit or Qtr/Qtr Sec <u>0</u> Sec <u>30</u> T <u>26N</u> R <u>5W</u> County <u>KIOARriba</u>	
Land Type: <u>RANGE</u>	
Date Remediation Started: <u>12.3.98</u> Date Completed: <u>6/9/99</u>	
Remediation Method: Landfirmed <input checked="" type="checkbox"/> Approx. cubic yards <u>925</u>	
Composted <input type="checkbox"/>	
Other <input type="checkbox"/>	
Depth To Groundwater: (pts.) <u>0</u>	Final Closure Sampling:
Distance to an Ephemeral Stream (pts.) <u>0</u>	Sampling Date: <u>6.8.99</u> Time: <u>0920</u>
Distance to Nearest Lake, Playa, or Watering Pond (pts.) <u>0</u>	Sample Results:
Wellhead Protection Area: (pts.) <u>0</u>	Field Headspace (ppm) <u>201.2</u> <u>8015/</u>
Distance To Surface Water: (pts.) <u>0</u>	TPH (ppm) <u>3,610</u> Method <u>8021</u>
RANKING SCORE (TOTAL POINTS): <u>0</u>	Other <u>BENZENE 1.060 ppm</u>
<u>TOT. BTEX 24.080 ppm</u>	
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF	
DATE <u>6/9/99</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 type="checkbox"/> NO <input type="checkbox"/> (REASON) _____	
SIGNED: _____ DATE: _____	

CLIENT: AMOCOBLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199LOCATION NO: 85702C.O.C. NO: 7068

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: SICARILLA CONTRACT 155 WELL #: 25 PITS: SEP, BLOWDATE STARTED: 6.8.99

DATE FINISHED: _____

QUAD/UNIT: 0 SEC: 30 TWP: 26N RNG: 5W PM: NM CNTY: EA ST: NMENVIRONMENTAL
SPECIALIST: REPDTR/FOOTAGE: SW/4 SE/4CONTRACTOR: P+S

SOIL REMEDIATION:

REMEDICATION SYSTEM: LANDFARMAPPROX. CUBIC YARDAGE: 925LAND USE: RANGELIFT DEPTH (ft): 1'

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

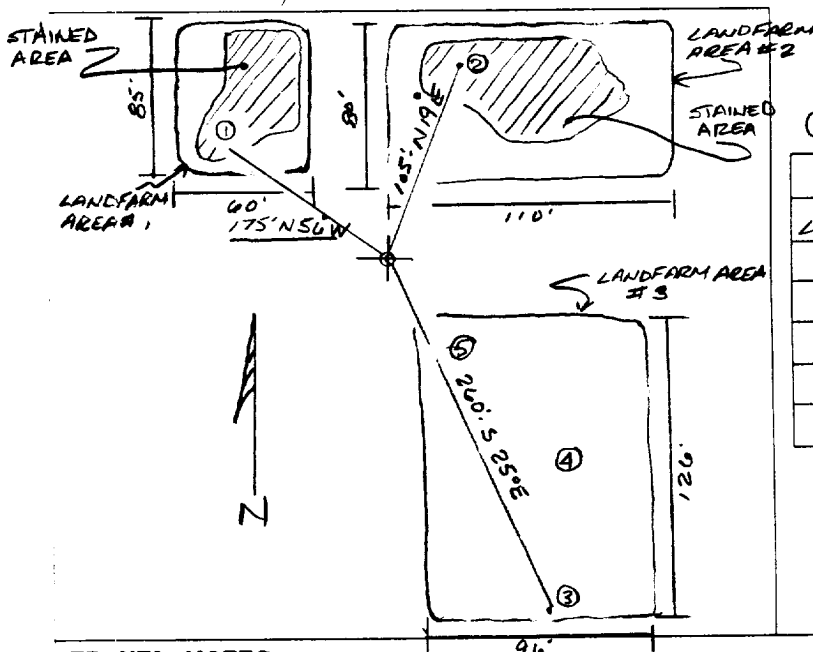
MODERATE YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM
LARGE AREA OF STAINING IN LANDFARM AREA #1 + #2. (SEE SKETCH BELOW)
HC ODOOR DETECTED IN SAMPLING PTS. ① + ②. SAMPLING DEPTHS RANGE
FROM 6" - 10" COLLECTED A 5PT COMPOSITE SAMPLE FOR LAB ANALYSIS

CLOSED

FIELD 418.1 CALCULATIONS

SAMP. TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
190							
325							
450							
600							

SKETCH/SAMPLE LOCATIONS



OVM RESULTS

LAB SAMPLES

SAMPLE ID	FIELD HEADSPACE PID (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	20' 2	LF-1	TPH (8015)	0920	3,610
		"	BENZENE	"	1,060 ppb
		"	TOT. BTEX	"	24,080 ppb

SCALE

0 FT

TRAVEL NOTES:

CALLOUT: NAONSITE: 6.8.99

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

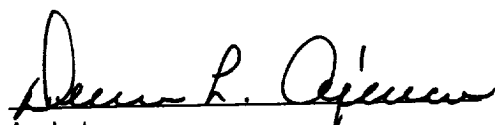
Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	LF - 1	Date Reported:	06-09-99
Laboratory Number:	F470	Date Sampled:	06-08-99
Chain of Custody No:	7068	Date Received:	06-09-99
Sample Matrix:	Soil	Date Extracted:	06-09-99
Preservative:	Cool	Date Analyzed:	06-09-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	699	0.2
Diesel Range (C10 - C28)	2,910	0.1
Total Petroleum Hydrocarbons	3,610	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 155 - 25 Landfarm. 5 Pt. Composite.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	LF - 1	Date Reported:	06-09-99
Laboratory Number:	F470	Date Sampled:	06-08-99
Chain of Custody:	7068	Date Received:	06-09-99
Sample Matrix:	Soil	Date Analyzed:	06-09-99
Preservative:	Cool	Date Extracted:	06-09-99
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	1,060	8.8
Toluene	8,890	8.4
Ethylbenzene	1,060	7.6
p,m-Xylene	8,690	10.8
o-Xylene	4,380	5.2
Total BTEX	24,080	

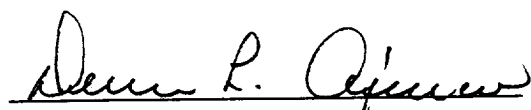
ND - Parameter not detected at the stated detection limit.

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 Contract 155 - 25 Landfarm. 5 Pt. Composite.


Analyst


Review

7068

[illegible]