

Blow - Beltrax
BT703 - beltrax
SUBMIT 1 COPY TO
NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION

RECEIVED
AUG 27 1999

OIL CON. DIV.

DIST. 3

Dis No
:(505) 326-9200

Pit Location:
(Attach diagram)

Pit dimensions: length 28', width 24', depth 6'

Reference: wellhead X, other _____

Footage from reference: 370'

Direction from reference: 28 Degrees X East of North X
_____ West of South _____

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)	<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) 0
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) 2
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)
 100 feet to 1000 feet (10 points)
 Greater than 1000 feet (0 points) 0

RANKING SCORE (TOTAL POINTS): 0

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

Remediation Method: Excavation ☒ Approx. cubic yards 125
 (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. RSK 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 3' (NORTH SIDEWALL)

Sample date 12/3/98 Sample time 1100

Sample Results

Soil: Benzene	(ppm)	_____	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	_____	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>0.0</u>	<u>PT Bottom</u> 232 Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>5.2</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: Ken C. Marshall DATE: 12-28-98

06297

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>85703</u> C.D.C. NO: <u>6420</u>																																								
FIELD REPORT: CLOSURE VERIFICATION		PAGE No: <u>1</u> of <u>1</u>																																								
LOCATION: NAME: <u>JICA. CONTR. 155</u> WELL #: <u>13</u> PIT: <u>BLOW</u>		DATE STARTED: <u>12/3/98</u> DATE FINISHED: _____																																								
QUAD/UNIT: <u>I</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>1620' FSL / 890' FEL</u> CONTRACTOR: <u>P+S</u>																																										
EXCAVATION APPROX. <u>28</u> FT. x <u>24</u> FT. x <u>6</u> FT. DEEP. CUBIC YARDAGE: <u>125</u>																																										
DISPOSAL FACILITY: <u>ON-SITE</u> REMEDIATION METHOD: <u>LANDFILL</u>																																										
LAND USE: <u>RANGE</u> LEASE: <u>JIC 155</u> FORMATION: <u>DK</u>																																										
FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>370</u> FT. <u>N28E</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 - MOD. YELL. BROWN SAND, NON COHESIVE SLIGHTLY MOIST FIRM, NO APPARENT STAINING, NO APPARENT HC ODOR W/IN EXCAVATION OR IN ANY OF THE DUM SAMPLES. </p> <p> BOTTOM - BEDROCK (SANDSTONE) DK. GRAY IN COLOR, VERY HARD, STRONG HC ODOR IN DUM 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: 30%; text-align: center;"> <p>RISK ASSESSED</p> </div> <div style="width: 30%;"> <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>1100</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	1100																															
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<p>PIT PERIMETER</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 @ 3'</td><td>0.0</td></tr> <tr><td>2 @ 3'</td><td>0.0</td></tr> <tr><td>3 @ 3'</td><td>0.0</td></tr> <tr><td>4 @ 3'</td><td>0.0</td></tr> <tr><td>5 @ 6'</td><td>232</td></tr> <tr><td> </td><td></td></tr> <tr><td> </td><td></td></tr> <tr><td> </td><td></td></tr> <tr><td> </td><td></td></tr> <tr><td> </td><td></td></tr> </tbody> </table> <p>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>1 @ 3'</td> <td>TPH (418.1)</td> <td>1100</td> </tr> <tr> <td colspan="3" style="text-align: center;">PASSED</td> </tr> <tr><td> </td><td></td><td></td></tr> <tr><td> </td><td></td><td></td></tr> <tr><td> </td><td></td><td></td></tr> </tbody> </table>	SAMPLE ID	FIELD HEADSPACE PID (ppm)	1 @ 3'	0.0	2 @ 3'	0.0	3 @ 3'	0.0	4 @ 3'	0.0	5 @ 6'	232											SAMPLE ID	ANALYSIS	TIME	1 @ 3'	TPH (418.1)	1100	PASSED												<p>PIT PROFILE</p>
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1 @ 3'	TPH (418.1)	1100																																								
PASSED																																										
TRAVEL NOTES: CALLOUT: _____ ONSITE: _____																																										

Well Name:
Well Site location:
Pit Type:
Producing Formation:
Pit Category:
Horizontal Distance to Surface Water:
Vicinity Groundwater Depth:

Jicarilla Contract 155 #13
Unit I, Sec. 30, T26N, R5W
Blow Pit
Basin Dakota
Non Vulnerable
> 1000 ft.
> 100 ft.

RISK ASSESSMENT (non-vulnerable area)

Pit remediation activities were terminated when trackhoe encountered sandstone bedrock at 6 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 6 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 west 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

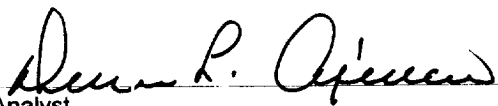
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	1 @ 3'	Date Reported:	12-04-98
Laboratory Number:	E260	Date Sampled:	12-03-98
Chain of Custody No:	6420	Date Received:	12-04-98
Sample Matrix:	Soil	Date Extracted:	12-04-98
Preservative:	Cool	Date Analyzed:	12-04-98
Condition:	Cool and Intact	Analysis Needed:	TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	5.2	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 - 13 Blow Pit.


Analyst


Review

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

Operator: AMOCO PRODUCTION COMPANY		Telephone: (505) 326-9200
Address: 200 Amoco Court, Farmington, NM 87401		
Facility or Well Name: JICARILLA CONTRACT # 155 - 13		
Location: Unit or Qtr/Qtr Sec <u>I</u> Sec <u>30</u> T <u>26N</u> R <u>3W</u> County <u>RIO ARRIBA</u>		
Pit Type: Separator <input checked="" type="checkbox"/> Dehydrator _____ Other _____		
Land Type: <u>RANGE</u>		
Pit Location: Pit dimensions: length <u>30'</u> , width <u>26'</u> , depth <u>19'</u> (Attach diagram)		
Reference: wellhead <u>X</u> , other _____		
Footage from reference: <u>135'</u>		
Direction from reference: <u>17</u> Degrees <input checked="" type="checkbox"/> East of North <input checked="" type="checkbox"/> _____ West South _____		
Depth To Groundwater: (Vertical distance from contaminants to seasonal high water elevation of groundwater)	Less than 50 feet 50 feet to 99 feet Greater than 100 feet	(20 points) (10 points) (0 points)
Distance to an Ephemeral Stream (Downgradient dry wash greater than ten feet in width)	Less than 100 feet Greater than 100 feet	(10 points) (0 points)
Distance to Nearest Lake, Playa, or Watering Pond (Downgradient lakes, playas and livestock or wildlife watering ponds)	Less than 100 feet Greater than 100 feet	(10 points) (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 No	(20 points) (0 points)
Distance To SurfaceWater: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 100 feet 100 feet to 1000 feet Greater than 1000 feet	(20 points) (10 points) (0 points)
		RANKING SCORE (TOTAL POINTS): <u>0</u>

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

Remediation Method: Excavation ☒ Approx. cubic yards 400
(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: Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths)

Sample location see Attached Documents

Sample depth 13' (EAST SIDEWALL)

Sample date 12/3/98 Sample time 1030

Sample Results

Soil: Benzene	(ppm)	<u>2.090</u>	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	<u>43.320</u>	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>696</u>	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>5.770</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) R-A Attached

SIGNED: Ken C. Marshall DATE: 12-28-98

CLIENT: AMOCOBLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199LOCATION NO: 85703C.D.C. NO: 6420

FIELD REPORT: CLOSURE VERIFICATION

PAGE No: 1 of 1LOCATION: NAME: JICA CONTR. 155 WELL #: 13 PIT: SEP.DATE STARTED: 12/3/98

DATE FINISHED: _____

QUAD/UNIT: I SEC: 30 TWP: 26N RNG: 5W PM: DM CNTY: RA ST: NMQTR/FOOTAGE: 1620' EBL 1890' FEL CONTRACTOR: P&SENVIRONMENTAL
SPECIALIST: NVEXCAVATION APPROX. 30 FT. x 26 FT. x 19 FT. DEEP. CUBIC YARDAGE: 400DISPOSAL FACILITY: ON-SITE REMEDIATION METHOD: LANDFARMLAND USE: RANGE LEASE: JIC 155 FORMATION: DRFIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 135 FT. N7E FROM WELLHEAD.DEPTH TO GROUNDWATER: 2100' NEAREST WATER SOURCE: 21000' NEAREST SURFACE WATER: 21000'NMOC D RANKING SCORE: 0 NMOC D TPH CLOSURE STD: 5000 PPM

SOIL AND EXCAVATION DESCRIPTION:

CHECK ONE:

☒ PIT ABANDONED☐ STEEL TANK INSTALLED☐ FIBERGLASS TANK INSTALLED

SIDEWALLS - MOSTLY DR. YELL. ORANGE SAND TO SILTY SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM. (GROUND SURFACE TO APPROX. 12' BELOW GRADE) MED. GRAY CLAY FROM 12'-19' BELOW GRADE, SLIGHTLY PLASTIC TO PLASTIC, SLIGHTLY MOIST TO MOIST, FIRM TO STIFF, DISCOLORATION APPARENTLY ASSOCIATED W/ HC CONTAMINATION NO APPARENT HC ODOR DETECTED W/IN EXCAVATION, STRONG HC ODOR W/ ALL OUM SAMPLES.

BOTTOM - BEDROCK (SHALE), MED. TO DR. GRAY IN COLOR, VERY HARD, STRONG HC ODOR IN OUM SAMPLE.

BEDROCK
BOTTOM

RISK ASSESSED

FIELD 418.1 CALCULATIONS

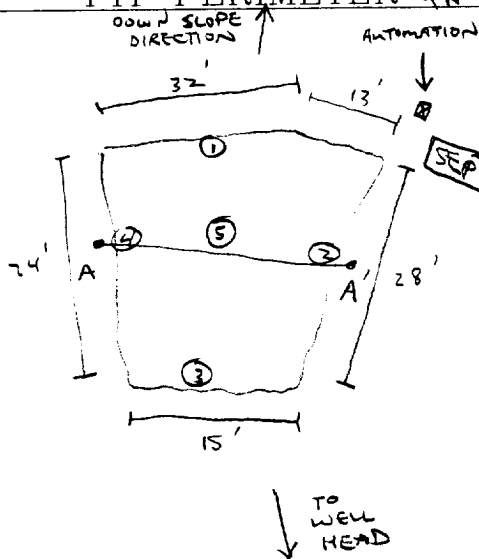
TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1030							

SCALE



0 FT

PIT PERIMETER

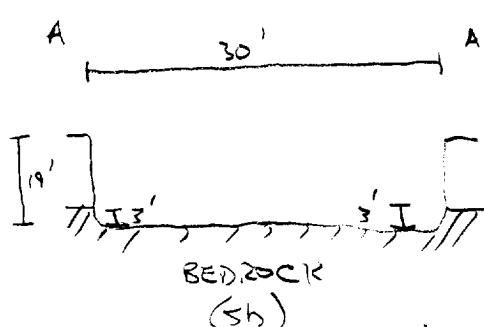
OVM
RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 13'	684
2 @ 13'	696
3 @ 13'	568
4 @ 13'	607
5 @ 19'	448

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
2 @ 13'	TPH/BTEX	1030
TPH - FAILED		
BTEX - PASSED		

PIT PROFILE



TRAVEL NOTES:

CALLOUT: _____

ONSITE: _____

Well Name:	Jicarilla Contract 155 #13
Well Site location:	Unit I, Sec. 30, T26N, R5W
Pit Type:	Separator Pit
Producing Formation:	Basin Dakota
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 shale bedrock at 19 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 shale bedrock located 19 feet below grade. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below shale 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 west 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 subsurface lateral impact from the earthen pit is very limited and that the shale 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 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

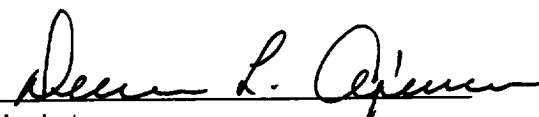
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	2 @ 13'	Date Reported:	12-04-98
Laboratory Number:	E261	Date Sampled:	12-03-98
Chain of Custody No:	6420	Date Received:	12-04-98
Sample Matrix:	Soil	Date Extracted:	12-04-98
Preservative:	Cool	Date Analyzed:	12-04-98
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	3,870	0.2
Diesel Range (C10 - C28)	1,900	0.1
Total Petroleum Hydrocarbons	5,770	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 - 13 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 @ 13'	Date Reported:	12-04-98
Laboratory Number:	E261	Date Sampled:	12-03-98
Chain of Custody:	6420	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	2,090	8.8
Toluene	12,990	8.4
Ethylbenzene	4,440	7.6
p,m-Xylene	15,890	10.8
o-Xylene	7,910	5.2
Total BTEX	43,320	

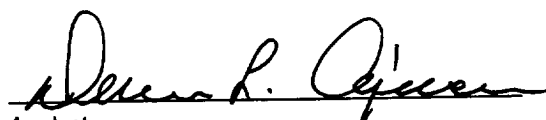
ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	95 %
	Bromofluorobenzene	95 %

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 - 13 Separator Pit.


Analyst


Review

6420

Ref Doc 6417-6421

**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 155-13</u>			
Location: Unit or Qtr/Qtr Sec <u>1</u> Sec <u>30</u> T <u>26N</u> R <u>5W</u> County <u>RIO ARriba</u>			
Land Type: <u>RANGE</u>			
Date Remediation Started: <u>12.3.98</u>		Date Completed: <u>6/9/99</u>	
Remediation Method: Landfarmed <input checked="" type="checkbox"/>		Approx. cubic yards <u>525</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>1100</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>145.7</u>	
Distance To Surface Water: (pts.) <u>0</u>		TPH (ppm) <u>210</u> Method <u>8015/8021</u>	
RANKING SCORE (TOTAL POINTS): <u>0</u>		Other <u>BENZENE 0.104 ppm</u>	
		<u>TOT. BTEX 3.510 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: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>83703</u> C.O.C. NO: <u>7070</u>
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FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: <u>SIERRILLA CONTRACT 155</u> WELL #: <u>13</u> PITS: <u>SEP, BLOW</u>	DATE STARTED: <u>6.8.99</u> DATE FINISHED: _____
QUAD/UNIT: <u>1</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>REP</u>
QTR/FOOTAGE: <u>NE/4 SE/4</u> CONTRACTOR: <u>P+S</u>	

SOIL REMEDIATION:

REMEDICATION SYSTEM: <u>LANDFARM</u>	APPROX. CUBIC YARDAGE: <u>525</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'

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

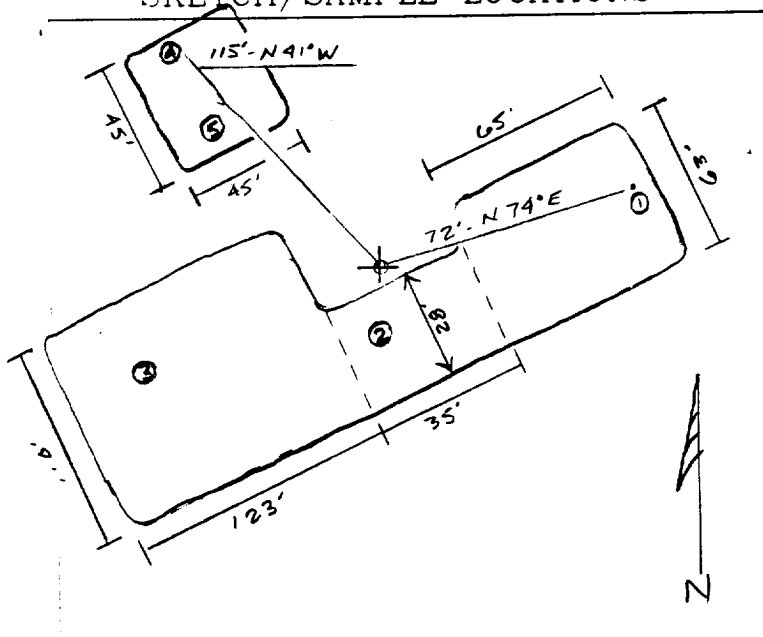
MODERATE YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM
NO APPARENT STAINING, HC ODOR DETECTED IN SAMPLING PTS ① + ④.
SAMPLING DEPTHS RANGE FROM 6" - 10" COLLECTED A SPT. COMPOSITE
SAMPLE FOR LAB ANALYSIS

CLOSED

FIELD 418.1 CALCULATIONS

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

SKETCH/SAMPLE LOCATIONS



OVM RESULTS

LAB SAMPLES

SAMPLE ID	FIELD HEADSPACE PID (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	145.7	LF-1	TPH (8015)	1100	210
		"	BENZENE	"	104 ppm
		"	TOT. BTEX	"	3,510 ppm

SCALE



TRAVEL NOTES:

CALLOUT: NA

ONSITE: 6.8.99

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

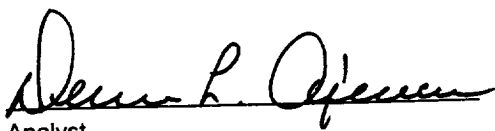
Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	LF - 1	Date Reported:	06-09-99
Laboratory Number:	F472	Date Sampled:	06-08-99
Chain of Custody No:	7070	Date Received:	06-09-99
Sample Matrix:	Soil	Date Extracted:	06-09-99
Preservative:	Cool	Date Analyzed:	06-09-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	96.6	0.2
Diesel Range (C10 - C28)	113	0.1
Total Petroleum Hydrocarbons	210	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 - 13 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:	F472	Date Sampled:	06-08-99
Chain of Custody:	7070	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	104	8.8
Toluene	128	8.4
Ethylbenzene	271	7.6
p,m-Xylene	2,320	10.8
o-Xylene	684	5.2
Total BTEX	3,510	

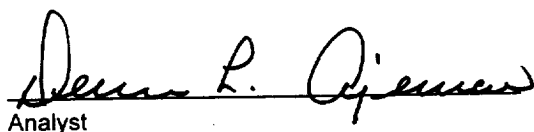
ND - Parameter not detected at the stated detection limit.


Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	96 %
	Bromofluorobenzene	96 %

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 - 13 Landfarm. 5 Pt. Composite.


Analyst


Review

7070

Client / Project Name				Project Location				ANALYSIS / PARAMETERS											
BAGS/AMOCO				STANDARD CONTRACT 155-13															
Sampler: DEP.				Client No. 403410															
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH (8015)	BTEX (8021)			Remarks									
LF-1	6.8.99	1100	F472	SOIL	1	✓	✓			SPT. CONTAMINATE									
										SAMPLE PRESERVE -									
										COOL									
Relinquished by: (Signature)				Date	Time	Received by: (Signature)		Date	Time										
				6.9.99	7:05			6.9.99	7:05										
Relinquished by: (Signature)						Received by: (Signature)													
Relinquished by: (Signature)						Received by: (Signature)													
<div>ENVIROTECH INC.</div> <div>5796 U.S. Highway 64 Farmington, New Mexico 87401 (505) 632-0615</div> <div>Sample Receipt</div> <table><tr><td>Received Intact</td><td>Y</td><td>N</td><td>N/A</td></tr><tr><td>Cool - Ice/Blue Ice</td><td>✓</td><td></td><td></td></tr></table>												Received Intact	Y	N	N/A	Cool - Ice/Blue Ice	✓		
Received Intact	Y	N	N/A																
Cool - Ice/Blue Ice	✓																		