

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

BT 477 Comp - OK  
Blow (F) - OK  
Blow (I) - OK  
SUBMIT 1 COPY TO  
NATURAL RESOURCE DEPT  
LAND & FOREST ADMINISTRATION  
**RECEIVED**  
AUG 27 1999

**PIT REMEDIATION AND CLOSURE REPORT** OIL CON. DIV.  
DIST. 3

**Operator:** AMOCO PRODUCTION COMPANY **Telephone:** (505) 326-9200  
**Address:** 200 Amoco Court, Farmington, NM 87401  
**Facility or Well Name:** JICARILLA GC A #1  
**Location:** Unit or Qtr/Qtr Sec G Sec 31 T 26N R 5W County RIO ARIZONA  
**Pit Type:** Separator      Dehydrator      Other BLOW (I)  
**Land Type:** RANGE

**Pit Location:** Pit dimensions: length 27', width 23', depth 13'  
(Attach diagram) Reference: wellhead X, other       
Footage from reference: 210'  
Direction from reference: 45 Degrees      East      North X  
X West of South     

<b>Depth To Groundwater:</b> (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>20</u>
<b>Distance to an Ephemeral Stream</b> (Downgradient dry wash greater than ten feet in width)	Less than 100 feet (10 points) Greater than 100 feet (0 points)	<u>0</u>
<b>Distance to Nearest Lake, Playa, or Watering Pond</b> (Downgradient lakes, playas and livestock or wildlife watering ponds)	Less than 100 feet (10 points) Greater than 100 feet (0 points)	<u>0</u>
<b>Wellhead Protection Area:</b> (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>
<b>Distance To Surface Water:</b> (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>10</u>

**RANKING SCORE (TOTAL POINTS):** 30

BT 477 / BLOW PIT (I)

Date Remediation Started: \_\_\_\_\_ Date Completed: 12/5/96

Remediation Method: Excavation ☒ Approx. cubic yards 200  
Check all appropriate (ions) 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 14' (PIT BOTTOM)

Sample date 12/5/96 Sample time 1025

Sample Results

Soil: Benzene	(ppm)	_____	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	_____	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>0.0</u>	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 12/5/96 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: [Signature] DATE: 1-23-97

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>BT477</u> C.O.C. NO: _____
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FIELD REPORT: CLOSURE VERIFICATION	PAGE No: <u>1</u> of <u>1</u>
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LOCATION: NAME: <u>JICARILLA GC</u> WELL #: <u>A1</u> PIT: <u>Flow I</u> QUAD/UNIT: <u>6</u> SEC: <u>31</u> TWP: <u>26N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u> QTR/FOOTAGE: <u>SW/4 NE/4</u> CONTRACTOR: <u>P+S</u>	DATE STARTED: <u>11/21/96</u> DATE FINISHED: _____ ENVIRONMENTAL SPECIALIST: <u>NV</u>
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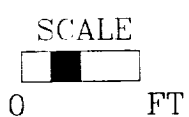
EXCAVATION APPROX. <u>27</u> FT. x <u>23</u> FT. x <u>13</u> FT. DEEP.	CUBIC YARDAGE: <u>200</u>	
DISPOSAL FACILITY: <u>ON-SITE</u>	REMEDIAION METHOD: <u>LANDFARMED</u>	
LAND USE: <u>RANGE</u>	LEASE: _____	FORMATION: <u>PC</u>

FIELD NOTES & REMARKS:	PIT LOCATED APPROXIMATELY <u>210</u> FT. <u>N45W</u> FROM WELLHEAD.	
DEPTH TO GROUNDWATER: <u>&lt;50'</u>	NEAREST WATER SOURCE: <u>&gt;1000'</u>	NEAREST SURFACE WATER: <u>&lt;1000'</u>
NMDCD BANKING SCORE: <u>30</u>	NMDCD TPH CLOSURE STD: <u>100</u> PPM	
SOIL AND EXCAVATION DESCRIPTION:		

CHECK ONE:	
<input checked="" type="checkbox"/>	PIT ABANDONED
<input type="checkbox"/>	STEEL TANK INSTALLED
<input type="checkbox"/>	FIBERGLASS TANK INSTALLED

MOSTLY OK. YELL. ORANGE TO BROWN SAND, NON-COHESIVE, SLIGHTLY MOIST FIRM, NO APPARENT HC ODOR IN ANY OF THE OVM SAMPLES EXCEPT PIT BOTTOM @ 8' (REMOVED). NO APPARENT HC STAINING OR ODOR OBSERVED W/IN EXCAVATION.

CLOSED

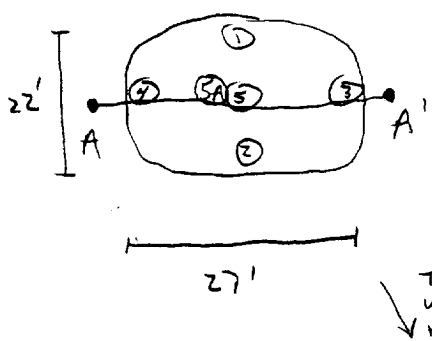


FIELD 413.1 CALCULATIONS								
TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm	
1155								
1025	<u>5A @ 14'</u>	TPH-1861	5	20	1:1	5	ND	

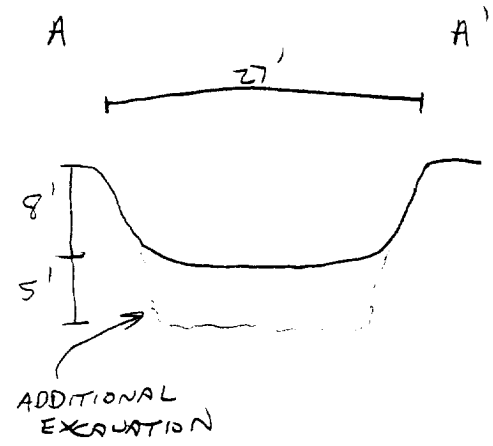
PIT PERIMETER

OVM RESULTS

PIT PROFILE



SAMPLE ID	FIELD HEADSPACE PID (ppm)	
1 @ 4'	2.7	
2 @ 4'	0.0	
3 @ 4'	53.8	
4 @ 3'	0.0	
5 @ 8'	154.2	
12/5 5A @ 14'	0.0	
LAB SAMPLES		
SAMPLE ID	ANALYSIS	TIME



TRAVEL NOTES:	CALLOUT: <u>11/15/96</u>	ONSITE: <u>11/21/96</u>
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**BLAGG ENGINEERING, INC.**

P.O. Box 87, Bloomfield, New Mexico 87413

Phone: (505)632-1199 Fax: (505)632-3903

**FIELD MODIFIED EPA METHOD 418.1  
TOTAL PETROLEUM HYDROCARBONS**

Client: AMOCO  
Sample ID: 5A @ 14'  
Project Location: Jicarilla GC A1  
Laboratory Number: TPH-1861

Project #:   
Date Analyzed: 12-05-96  
Date Reported: 12-06-96  
Sample Matrix: Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	ND	20

ND = Not Detectable at stated detection limits.

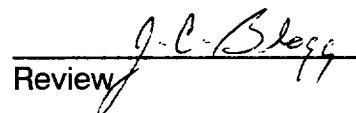
QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	4640	4400	5.31

\*Administrative Acceptance limits set at 30%.

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

Comments: Blow Pit (I) - BJ477

  
Analyst

  
Review

**BLAGG ENGINEERING, INC.**

P.O. Box 87, Bloomfield, New Mexico 87413

Phone: (505)632-1199 Fax: (505)632-3903

**Field TPH-Worksheet**

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Max Characters:

Client:

AMOCO

Project #:

Sample ID:

5A @ 14'

Date Analyzed:

12-05-96

Project Location:

Jicarilla GC A1

Date Reported:

12-06-96

Laboratory Number:

TPH-1861

Sample Matrix:

Soil

Sample Weight:

5.00 grams

Volume Freon:

20.00 mL

Dilution Factor:

1 (unitless)

TPH Reading:

5 mg/kg

TPH Result:

20.0 mg/kg

Reported TPH Result:

20 mg/kg

Actual Detection Limit:

20.0 mg/kg

Reported Detection Limit:

20 mg/kg

QA/QC:

Original  
TPH mg/kg

Duplicate  
TPH mg/kg

%  
Diff.

-----  
4640

-----  
4400

-----  
5.31

Comments:

\*\*\*\*\*Max Characters\*\*\*\*\*

Comments:

Blow Pit (I) - BJ477

8J477

**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:** AMOCO PRODUCTION COMPANY **Telephone:** (505) 326-9200  
**Address:** 200 Amoco Court, Farmington, NM 87401  
**Facility or Well Name:** JICARILLA GC A #1  
**Location:** Unit or Qtr/Qtr Sec G Sec 31 T 26N R 5W County RIO ARriba  
**Pit Type:** Separator      Dehydrator      Other BLOW (II)  
**Land Type:** RANGE

**Pit Location:** (Attach diagram) Pit dimensions: length 20', width 37', depth 25'  
Reference: wellhead X, other       
Footage from reference: 260'  
Direction from reference: 31 Degrees      East      North X  
X West      South     

<b>Depth To Groundwater:</b> (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>20</u>
<b>Distance to an Ephemeral Stream</b> (Downgradient dry wash greater than ten feet in width)	Less than 100 feet (10 points) Greater than 100 feet (0 points)	<u>0</u>
<b>Distance to Nearest Lake, Playa, or Watering Pond</b> (Downgradient lakes, playas and livestock or wildlife watering ponds)	Less than 100 feet (10 points) Greater than 100 feet (0 points)	<u>0</u>
<b>Wellhead Protection Area:</b> (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>
<b>Distance To Surface Water:</b> (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>10</u>

**RANKING SCORE (TOTAL POINTS):** 30

Date Remediation Started: \_\_\_\_\_ Date Completed: 12/5/96

Remediation Method: Excavation ☒ Approx. cubic yards 600  
 (check all appropriate conditions) Landfarmed ☒ Insitu Bioremediation \_\_\_\_\_  
 Other \_\_\_\_\_

Remediation Location: Onsite ☒ Offsite \_\_\_\_\_  
 (i.e. landfarmed onsite, name and location of offsite facility)

General Description of Remedial Action: ExcavationGroundwater 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 26' (PIT BOTTOM)  
 Sample date 12/5/96 Sample time 1030

## Sample Results

Soil: Benzene	(ppm)	_____	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	_____	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>0.0</u>	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>28</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 12/5/96 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: Kenn C. Mammill DATE: 1-23-97

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>BT477</u> C.O.C. NO: _____
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FIELD REPORT: CLOSURE VERIFICATION	PAGE No: <u>1</u> of <u>1</u>
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LOCATION: NAME: <u>JICARILLA GC</u> WELL #: <u>A1</u> PIT: <u>BLOW TL</u> QUAD/UNIT: <u>6</u> SEC: <u>31</u> TWP: <u>26N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u> QTR/FOOTAGE: <u>SW/4 NE/4</u> CONTRACTOR: <u>P+S</u>	DATE STARTED: <u>11/21/96</u> DATE FINISHED: <u>12/5/96</u> ENVIRONMENTAL SPECIALIST: <u>NV</u>
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EXCAVATION APPROX. <u>20</u> FT. x <u>37</u> FT. x <u>25</u> FT. DEEP.	CUBIC YARDAGE: <u>600</u>	
DISPOSAL FACILITY: <u>ON-SITE</u>	REMEDIALATION METHOD: <u>LANDFARMED</u>	
LAND USE: <u>RANGE</u>	LEASE: _____	FORMATION: <u>PC</u>

FIELD NOTES & REMARKS:	PIT LOCATED APPROXIMATELY <u>260</u> FT. <u>N31W</u> FROM WELLHEAD. DEPTH TO GROUNDWATER: <u>&lt;50'</u> NEAREST WATER SOURCE: <u>&gt;1000'</u> NEAREST SURFACE WATER: <u>&lt;1000'</u> NMOC D RANKING SCORE: <u>30</u> NMOC D TPH CLOSURE STD: <u>100</u> PPM
SOIL AND EXCAVATION DESCRIPTION:	<div style="border: 1px solid black; padding: 5px;">           CHECK ONE :  <input checked="" type="checkbox"/> PIT ABANDONED  <input type="checkbox"/> STEEL TANK INSTALLED  <input type="checkbox"/> FIBERGLASS TANK INSTALLED         </div>

MOSTLY DK. YELL. BROWN SILTY SAND TO CLAY, NON-COHESIVE TO COHESIVE, SLIGHTLY MOIST TO SATURATED (PIT BOTTOM @ 26') FIRM TO STIFF, STRONG HC ODOR IN 1ST PIT BOTTOM OVM SAMPLE @ 21' (MED. GRAY TO BLACK CLAY) NO APPARENT HC ODOR IN ANY OF THE OTHER OVM SAMPLES, UNABLE TO DISCERN IF SIDEWALLS REVEAL ANY STAINING DUE TO COOLD TEMP. & DURATION EXCAVATION WAS OPEN PRIOR TO ARRIVAL. PIT BOTTOM @ 26' - DK. YELL. BROWN SAND, NON-COHESIVE, NO APPARENT HC ODOR.

FIELD 418.1 CALCULATIONS

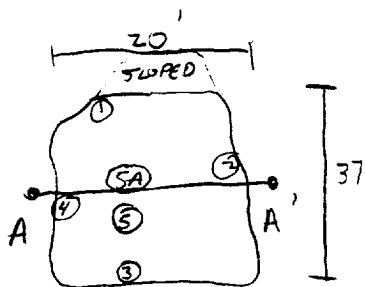
TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1320							
1030	(SA) @ 26' TPH-1862		5	20	1:1	7	28

SCALE



0 FT

PIT PERIMETER OVM RESULTS



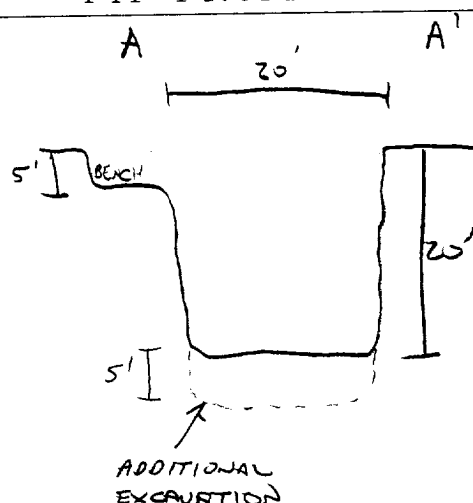
TO WELL HEAD

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 15'	5.2
2 @ 15'	6.7
3 @ 15'	0.0
4 @ 16'	0.0
5 @ 21'	826
12/5 (SA) @ 26'	0.0

LAB SAMPLES		
SAMPLE ID	ANALYSIS	TIME
6 @ 21'	STEX/TPH (8020) (9015)	1320

PIT PROFILE



TRAVEL NOTES:	CALLOUT: <u>11/15/96</u>	ONSITE: <u>11/21/96</u>
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**BLAGG ENGINEERING, INC.**

P.O. Box 87, Bloomfield, New Mexico 87413

Phone: (505)632-1199 Fax: (505)632-3903

**FIELD MODIFIED EPA METHOD 418.1  
TOTAL PETROLEUM HYDROCARBONS**

Client: AMOCO  
Sample ID: 5A @ 26'  
Project Location: Jicarilla GC A1  
Laboratory Number: TPH-1862

Project #:  
Date Analyzed: 12-05-96  
Date Reported: 12-06-96  
Sample Matrix: Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
-----	-----	-----
Total Recoverable Petroleum Hydrocarbons	<b>28</b>	<b>20</b>

ND = Not Detectable at stated detection limits.

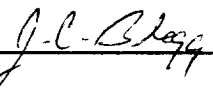
QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	-----	-----	-----
	4640	4400	5.31

\*Administrative Acceptance limits set at 30%.

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

Comments: Blow Pit (II) - BJ477

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Review

**BLAGG ENGINEERING, INC.**

P.O. Box 87, Bloomfield, New Mexico 87413

Phone: (505)632-1199 Fax: (505)632-3903

**Field TPH-Worksheet**

\*\*\*\*\*

Max Characters:

Client:

AMOCO

Project #:

Sample ID:

5A @ 26'

Date Analyzed:

12-05-96

Project Location:

Jicarilla GC A1

Date Reported:

12-06-96

Laboratory Number:

TPH-1862

Sample Matrix:

Soil

Sample Weight:

5.00 grams

Volume Freon:

20.00 mL

Dilution Factor:

1 (unitless)

TPH Reading:

7 mg/kg

TPH Result:

28.0 mg/kg

Reported TPH Result:

28 mg/kg

Actual Detection Limit:

20.0 mg/kg

Reported Detection Limit:

20 mg/kg

QA/QC:

Original  
TPH mg/kg

Duplicate  
TPH mg/kg

%  
Diff.

-----  
4640

-----  
4400

-----  
5.31

Comments:

\*\*\*\*\*Max Characters\*\*\*\*\*

Comments:

Blow Pit ( II ) - BJ477

8J477

**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:** AMOCO PRODUCTION COMPANY **Telephone:** (505) 326-9200  
**Address:** 200 Amoco Court, Farmington, NM 87401  
**Facility or Well Name:** JICARILLA GC A #1  
**Location:** Unit or Qtr/Qtr Sec G Sec 31 T 26N R 5W County RIO ARriba  
**Pit Type:** Separator      Dehydrator      Other COMPRESSOR  
**Land Type:** RANGE

**Pit Location:** Pit dimensions: length 22', width 31', depth 18'  
(Attach diagram) Reference: wellhead X, other       
Footage from reference: 153'  
Direction from reference: 56 Degrees      East North       
X West South X

<b>Depth To Groundwater:</b> (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>20</u>
<b>Distance to an Ephemeral Stream</b> (Downgradient dry wash greater than ten feet in width)	Less than 100 feet (10 points) Greater than 100 feet (0 points)	<u>0</u>
<b>Distance to Nearest Lake, Playa, or Watering Pond</b> (Downgradient lakes, playas and livestock or wildlife watering ponds)	Less than 100 feet (10 points) Greater than 100 feet (0 points)	<u>0</u>
<b>Wellhead Protection Area:</b> (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>
<b>Distance To Surface Water:</b> (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>10</u>

**RANKING SCORE (TOTAL POINTS):** 30

Date Remediation Started: \_\_\_\_\_ Date Completed: 11/20/96Remediation Method: Excavation ☒ Approx. cubic yards 350(Check all appropriate  
ions) Landfarmed ☒ Insitu Bioremediation \_\_\_\_\_

Other \_\_\_\_\_

Remediation Location: Onsite ☒ Offsite \_\_\_\_\_(i.e. landfarmed onsite,  
name and location of  
offsite facility) \_\_\_\_\_General Description of Remedial Action: ExcavationGroundwater Encountered: No ☒ Yes \_\_\_\_\_ Depth \_\_\_\_\_Final Pit: Sample location see Attached DocumentsClosure Sampling:  
(if multiple samples,  
attach sample results  
and diagram of sample  
locations and depths)Sample depth 18'Sample date 11/20/96 Sample time 1045

## Sample Results

Soil: Benzene (ppm) \_\_\_\_\_ Water: Benzene (ppb) \_\_\_\_\_

Total BTEX (ppm) \_\_\_\_\_ Toluene (ppb) \_\_\_\_\_

Field Headspace (ppm) 0.0 Ethylbenzene (ppb) \_\_\_\_\_TPH (ppm) 44 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  
KNOWLEGE AND BELIEFDATE 11/20/96 PRINTED NAME Buddy D. ShawSIGNATURE Buddy D. Shaw AND TITLE Environmental CoordinatorAFTER 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: Kurt Mamm DATE: 1-23-97

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>85477</u> C.O.C. NO: _____
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FIELD REPORT: CLOSURE VERIFICATION	PAGE No: <u>1</u> of <u>1</u>
LOCATION: NAME: <u>JICANILLA GC</u> WELL #: <u>A1</u> PIT: <u>COMPR</u>	DATE STARTED: <u>11/21/96</u> DATE FINISHED: _____
QUAD/UNIT: <u>G</u> SEC: <u>31</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>SW/4</u> <u>NE/4</u> CONTRACTOR: <u>P+S</u>	

EXCAVATION APPROX. 22 FT. x 31 FT. x 18 FT. DEEP. CUBIC YARDAGE: 350

DISPOSAL FACILITY: ON-SITE REMEDIATION METHOD: LANDFARMED

LAND USE: RANGE LEASE: \_\_\_\_\_ FORMATION: PC

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 153 FT. 556W FROM WELLHEAD.

DEPTH TO GROUNDWATER: 650' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: <1000'

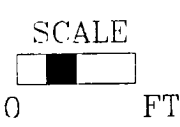
NMOCB RANKING SCORE: 30 NMOCB TPH CLOSURE STD: 100 PPM

SOIL AND EXCAVATION DESCRIPTION:

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

*mostly olive gray clay, slightly plastic, slightly moist, very stiff, No APPARENT HC ODOOR IN ANY OF THE OVM SAMPLES, No APPARENT HC STRAINING OBSERVED w/in EXCAVATION.*

CLOSED



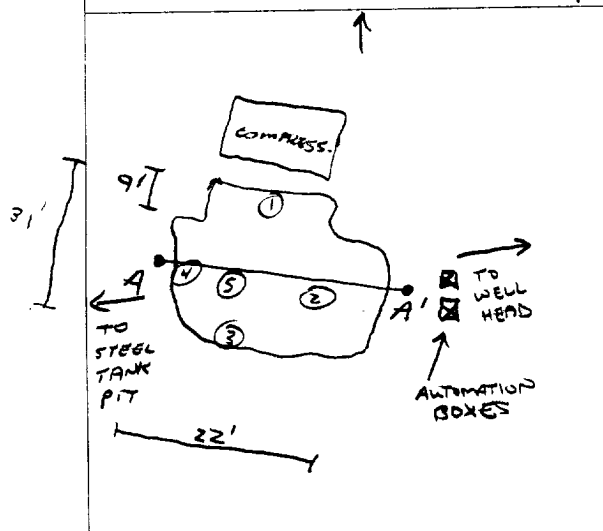
FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1045	⑤ @ 18'	TPH-1859	5	20	1:1	11	44

PIT PERIMETER

OVM RESULTS

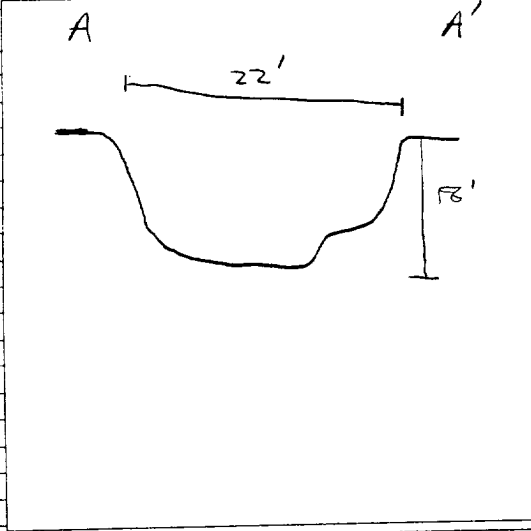
PIT PROFILE



SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 13'	0.0
2 @ 13'	0.0
3 @ 14'	0.0
4 @ 14'	0.0
5 @ 18'	0.0

LAB SAMPLES		
SAMPLE ID	ANALYSIS	TIME



TRAVEL NOTES: CALLOUT: 11/15/96 ONSITE: 11/21/96

**BLAGG ENGINEERING, INC.**

P.O. Box 87, Bloomfield, New Mexico 87413

Phone: (505)632-1199 Fax: (505)632-3903

**FIELD MODIFIED EPA METHOD 418.1  
TOTAL PETROLEUM HYDROCARBONS**

Client: AMOCO  
Sample ID: 5 @ 18'  
Project Location: Jicarilla GC A 1  
Laboratory Number: TPH-1859

Project #:  
Date Analyzed: 11-21-96  
Date Reported: 11-21-96  
Sample Matrix: Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
-----	-----	-----
Total Recoverable Petroleum Hydrocarbons	<b>44</b>	<b>20</b>

ND = Not Detectable at stated detection limits.

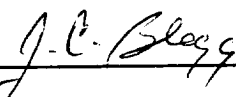
QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	-----	-----	-----
	4640	4400	5.31

\*Administrative Acceptance limits set at 30%.

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

Comments: Compressor Pit - BJ477

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Review

# BLAGG ENGINEERING, INC.

P.O. Box 87, Bloomfield, New Mexico 87413  
Phone: (505)632-1199 Fax: (505)632-3903

## Field TPH-Worksheet

\*\*\*\*\*

Max Characters:

Client:

AMOCO

Project #:

Sample ID:

5 @ 18'

Date Analyzed:

11-21-96

Project Location:

Jicarilla GC A 1

Date Reported:

11-21-96

Laboratory Number:

TPH-1859

Sample Matrix:

Soil

Sample Weight: 5.00 grams  
Volume Freon: 20.00 mL  
Dilution Factor: 1 (unitless)  
TPH Reading: 11 mg/kg

TPH Result: 44.0 mg/kg  
Reported TPH Result: 44 mg/kg  
Actual Detection Limit: 20.0 mg/kg  
Reported Detection Limit: 20 mg/kg

QA/QC:

Original  
TPH mg/kg

Duplicate  
TPH mg/kg

%  
Diff.

-----  
4640

-----  
4400

-----  
5.31

Comments:

\*\*\*\*\*Max Characters\*\*\*\*\*

Comments:

Compressor Pit - BJ477

BJ477

**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 GC A1  
**Location:** Unit or Qtr/Qtr Sec G Sec 31 T 26N R SW County RIO ARriba  
**Land Type:** RANGE

**Date Remediation Started:** 11/21/96 **Date Completed:** 8/25/97  
**Remediation Method:** Landfarmed X Approx. cubic yards 1,150  
Composted \_\_\_\_\_  
Other \_\_\_\_\_

**Depth To Groundwater:** (pts.) 20  
**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.) 10  
**RANKING SCORE (TOTAL POINTS):** 30

**Final Closure Sampling:**  
**Sampling Date:** 8/19/97 **Time:** 1145  
**Sample Results:**  
**Field Headspace (ppm)** 32.2  
**TPH (ppm)** 7.2 **Method** 8015  
**Other** \_\_\_\_\_

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

**DATE** 8/25/97 **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 X NO \_\_\_\_\_ (REASON) \_\_\_\_\_

**SIGNED:** Ken C. Mammill **DATE:** 9-2-97

CLIENT: <u>AMOCO CONOCO</u>	<b>BLAGG ENGINEERING, INC.</b> P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>8J477</u> C.O.C. NO: <u>5387</u>
-----------------------------	---	---

## FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: <u>JICARILLA GC</u> WELL #: <u>A1</u> PITS: <u>COMPR, LOW (2)</u> QUAD/UNIT: <u>6</u> SEC: <u>31</u> TWP: <u>26N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u> QTP/FOOTAGE: <u>SW/4 NE/4</u> CONTRACTOR: <u>P+S</u>	DATE STARTED: <u>8/19/97</u> DATE FINISHED: _____ ENVIRONMENTAL SPECIALIST: <u>NV</u>
--	---

### SOIL REMEDIATION:

 REMEDIATION SYSTEM: LANDFARMED

 APPROX. CUBIC YARDAGE: 1150

 LAND USE: RANGE

 LIFT DEPTH (ft): 12"-18"

### FIELD NOTES & REMARKS:

 DEPTH TO GROUNDWATER: <50' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: <1000'

 NMDCD RAINING SCORE: 30 NMDCD TPH CLOSURE STD: 100 PPM

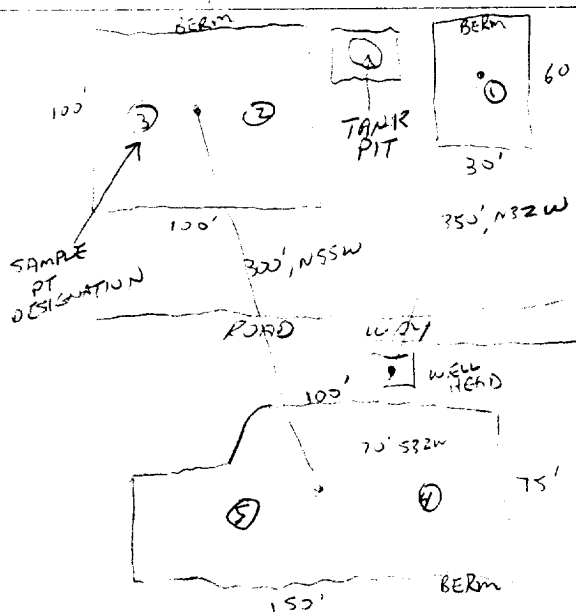
MOSTLY DR. YELL. BROWN SILTY SAND TO SILTY CLAY NON TO SLIGHTLY  
 COHESIVE, SLIGHTLY MOIST, FIRM, SOME DISCOLORATION OBSERVED IN  
 SAMPLE PTS. (2) & (4), SLIGHT HC ODOR OBSERVED IN OVM SAMPLE.  
 5 PT. COMPOSITE COLLECTED FOR LAB ANALYSIS.

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	32.2	LF-1	TPH (8015)	1145	7.2

### SCALE



0 FT

### TRAVEL NOTES:

 CALLOUT: NA

 ONSITE: 8/19/97

# 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:	LF - 1	Date Reported:	08-20-97
Laboratory Number:	B886	Date Sampled:	08-19-97
Chain of Custody No:	5387	Date Received:	08-19-97
Sample Matrix:	Soil	Date Extracted:	08-19-97
Preservative:	Cool	Date Analyzed:	08-20-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

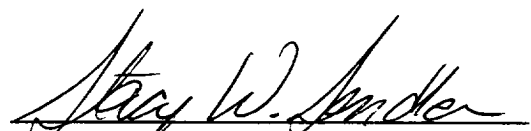
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	7.2	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	7.2	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Comments: Jicarilla GC A #1 Landfarms. 5 pt. Composite.

  
Analyst

  
Review

**(505) 632-0615**