

Blow - OK
RT660
Seg - OK

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

RECEIVED
AUG 20 1999

OIL CON. DIV.
DIST. 689200

Operator: AMOCO PRODUCTION COMPANY **Telephone:** (505) 376-9200
Address: 200 Amoco Court, Farmington, NM 87401
Facility or Well Name: JICARILLA APACHE TRIBAL # 151-4
Location: Unit or Qtr/Qtr Sec C Sec 3 T 26N R 5W County Rio Arriba
Pit Type: Separator Dehydrator Other Blow
Land Type: RNGE

Pit Location: (Attach diagram) Pit dimensions: length 23', width 24', depth 17'
Reference: wellhead X, other
Footage from reference: 215'
Direction from reference: 30 Degrees East of North X
X West of 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: 10/12/98

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' (PIT Bottom)

Sample date 10/12/98 Sample time 1345

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 10/12/98 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: Ker C Ma DATE: 11-18-98

3003920605

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>8J660</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>TCP PP TRAIL 151 WELL # 4</u> PIT: <u>BLW</u> QUAD/UNIT: <u>C</u> SEC: <u>3</u> TWP: <u>26N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u> QTR/FOOTAGE: <u>820 FWL</u> / <u>1600 FWL</u> CONTRACTOR: <u>P&S</u>	DATE STARTED: <u>10/12/98</u> DATE FINISHED: _____ ENVIRONMENTAL SPECIALIST: <u>NV</u>
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EXCAVATION APPROX. <u>23</u> FT. x <u>24</u> FT. x <u>17</u> FT. DEEP.	CUBIC YARDAGE: <u>300</u>
DISPOSAL FACILITY: <u>ON-SITE</u>	REMEDIAL METHOD: <u>LANDFARM</u>
LAND USE: <u>RANGE</u>	LEASE: <u>TIC 151</u> FORMATION: <u>GP</u>

FIELD NOTES & REMARKS:	PIT LOCATED APPROXIMATELY <u>215</u> FT. <u>N30W</u> FROM WELLHEAD. DEPTH TO GROUNDWATER: <u>>100'</u> NEAREST WATER SOURCE: <u>>1000'</u> NEAREST SURFACE WATER: <u>>1000'</u> NMDCD RANKING SCORE: <u>0</u> NMDCD TPH CLOSURE STD: <u>5000</u> PPM
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CHECK ONE:
☒ PIT ABANDONED
☐ STEEL TANK INSTALLED
☐ FIBERGLASS TANK INSTALLED

SOIL AND EXCAVATION DESCRIPTION:

MUSTY OR. YELL. ORANGE SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, NO APPARENT STRAINING, NO APPARENT HC ODOR W/IN EXCAVATION OR IN ANY OF THE OVM SAMPLES.

(CLOSED)

SCALE

0 FT

FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1345	⑤ @ 18'	TPH-2052	5	20	1:1	4	ND

PIT PERIMETER

PIT PROFILE

OVM RESULTS		
SAMPLE ID	FIELD HEADSPACE PID (ppm)	
1 @ 11'	0.0	
2 @ 11'	0.0	
3 @ 11'	0.0	
4 @ 11'	0.0	
5 @ 18'	0.0	

LAB SAMPLES		
SAMPLE ID	ANALYSIS	TIME

TRAVEL NOTES: CALLOUT: 10/9/98 - AFTER. ONSITE: 10/12/98 - AFTER.

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	Project #:	
Sample ID:	5 @ 18'	Date Analyzed:	10-12-98
Project Location:	Jicarilla Apache Tribal # 151 - 4	Date Reported:	10-12-98
Laboratory Number:	TPH-2052	Sample Matrix:	Soil

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

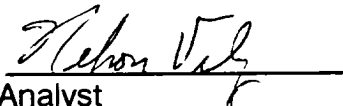
ND = Not Detectable at stated detection limits.

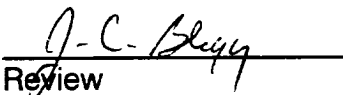
QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	236	220	7.02

*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 - BJ660


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:

Sample ID:

Project Location:

Laboratory Number:

Amoco

5 @ 18'

Jicarilla Apache Tribal # 151 - 4

TPH-2052

Project #:

Date Analyzed:

Date Reported:

Sample Matrix:

10-12-98

10-12-98

Soil

Sample Weight: 5.00 grams
Volume Freon: 20.00 mL
Dilution Factor: 1 (unitless)
TPH Reading: 4 mg/kg

TPH Result: 16.0 mg/kg
Reported TPH Result: 16 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. -----
	236	220	7.02

Comments: *****Max Characters*****

Comments: Blow Pit - BJ660

**JICARILLA APACHE TRIBE
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BJ660

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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 APACHE TRIBAL #151-4
Location: Unit or Qtr/Qtr Sec C Sec 3 T 26N R 5W County RIO ARriba
Pit Type: Separator ☒ Dehydrator ☐ Other ☐
Land Type: RANGE

Pit Location: (Attach diagram) Pit dimensions: length 13', width 24', depth 16'
Reference: wellhead ☒, other ☐
Footage from reference: 168'
Direction from reference: 48 Degrees ☒ East of North ☒
West South

Depth To Groundwater: (Vertical distance from contaminants to seasonal high water elevation of groundwater)	Less than 50 feet (20 points) 50 feet to 99 feet (10 points) Greater than 100 feet (0 points)	<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: 10/14/98

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

Approx. cubic yards 125
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 12' (EAST SIDEWALL)

Sample date 10/12/98 Sample time 1215

Sample Results

Soil: Benzene	(ppm)	<u>0.103</u>	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	<u>15.190</u>	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>983</u>	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>19.8</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 10/14/98 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: Kent C. M... DATE: 11-18-98

FIELD REPORT: CLOSURE VERIFICATION		PAGE No: 1 of 1
		DATE STARTED: 10/12/98

QTR/FOOTAGE: 820 FUL 1600 FUL CONTRACTOR: _____

EXCAVATION APPROX. 13 FT. x 24 FT. x 16 FT. DEEP. CUBIC YARDAGE: 125

DISPOSAL FACILITY: ON-SITE REMEDIATION METHOD: LANDFARM

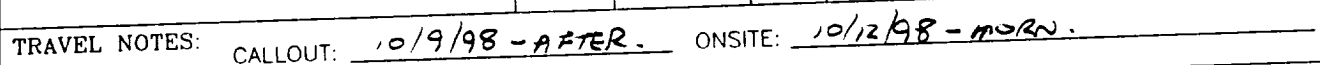
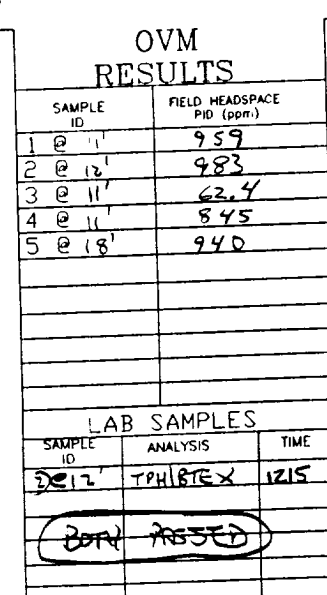
LAND USE: RANGE LEASE: JIC 151 FORMATION: GP

_____ FROM WELL HEAD

DEPTH TO GROUNDWATER: 7.00' NEAREST WATER SOURCE: 7,000' NEAREST SURFACE WATER: CHECK ONE:
 NMOCB RANKING SCORE: 0 NMOCB TPH CLOSURE STD: 5000 PPM
☒ PIT ABANDONED
☐ STEEL TANK INSTALLED
☐ FIBERGLASS TANK INSTALLED

CLOSED

SCALE
0 FT



ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

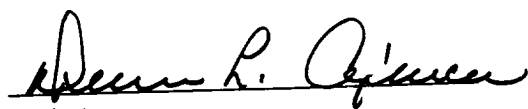
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	2 @ 12'	Date Reported:	10-14-98
Laboratory Number:	E064	Date Sampled:	10-12-98
Chain of Custody No:	6294	Date Received:	10-14-98
Sample Matrix:	Soil	Date Extracted:	10-14-98
Preservative:	Cool	Date Analyzed:	10-14-98
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

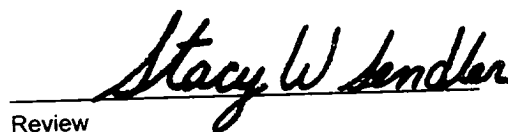
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	17.3	0.2
Diesel Range (C10 - C28)	2.5	0.1
Total Petroleum Hydrocarbons	19.8	0.2

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 Apache Tribal #151 - 4 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 @ 12'	Date Reported:	10-14-98
Laboratory Number:	E064	Date Sampled:	10-12-98
Chain of Custody:	6294	Date Received:	10-14-98
Sample Matrix:	Soil	Date Analyzed:	10-14-98
Preservative:	Cool	Date Extracted:	10-14-98
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	103	8.8
Toluene	1,190	8.4
Ethylbenzene	1,060	7.6
p,m-Xylene	8,980	10.8
o-Xylene	3,860	5.2
Total BTEX	15,190	


ND - Parameter not detected at the stated detection limit.

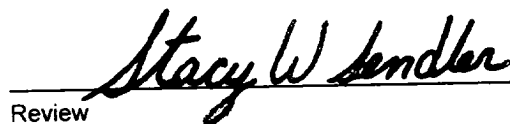
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	100 %
	Bromofluorobenzene	100 %

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 Apache Tribal #151 - 4 Separator Pit.


Analyst


Review

6294

[illegible]

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

85660

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 APACHE TRIBAL 151-4
Location: Unit or Qtr/Qtr Sec C Sec 3 T 26N R 5W County RIO ARriba
Land Type: RANGE

Date Remediation Started: 10.12.98 **Date Completed:** 5/17/99
Remediation Method: Landfarmed ☒ **Approx. cubic yards** 425
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: 5.14.99 **Time:** 1145
Sample Results:
Field Headspace (ppm) 94.3
TPH (ppm) 580 **Method** TPH (8015)
Other _____

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

DATE 5/17/99 **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>B5460</u> C.O.C. NO: <u>6932</u>
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FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION		
LOCATION: NAME: <u>SICABILLA</u> <u>APACHE TRIBAL 151</u>	WELL #: <u>4</u>	PITS: <u>SEP., BLOW</u>
QUAD/UNIT: <u>C</u> SEC: <u>3</u> TWP: <u>26N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u>	DATE STARTED: <u>5.14.99</u> DATE FINISHED: _____	
DEPT/FOOTAGE: <u>NE/4 NW/4</u>	ENVIRONMENTAL SPECIALIST: <u>REP</u>	
CONTRACTOR: _____		

SOIL REMEDIATION:	
REMEDICATION SYSTEM: <u>LANDFARM</u>	APPROX. CUBIC YARDAGE: <u>425</u>
LAND USE: <u>RANGE</u>	LIFT DEPTH (ft): <u>1.5</u>

FIELD NOTES & REMARKS:		
DEPTH TO GROUNDWATER: <u>>100'</u>	NEAREST WATER SOURCE: <u>>1000'</u>	NEAREST SURFACE WATER: <u>>1000'</u>
NMOC RANKING SCORE <u>0</u> NMOC TPH CLOSURE STD: <u>5000</u> PPM		

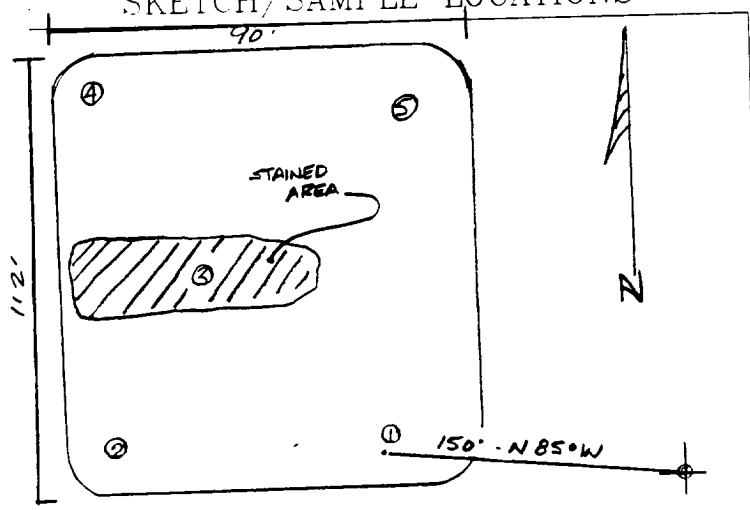
DK. YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM
 SMALL AREA OF STAINING OBSERVED IN LANDFARM. (SEE SKETCH BELOW)
 NO HC ODOR DETECTED. SAMPLING DEPTHS RANGE FROM 6"-12" COLLECTED
 A 5 PT. COMPOSITE SAMPLE FOR LAB ANALYSIS.

CLOSED

FIELD 4181 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	94.3	LF-1	TPH (B015)	1145	580

SCALE



0 FT

TRAVEL NOTES:	CALLOUT: <u>NA</u>	ONSITE: <u>5.14.99</u>
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EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client: Blagg / AMOCO
 Sample ID: LF - 1
 Laboratory Number: F262
 Chain of Custody No: 6932
 Sample Matrix: Soil
 Preservative: Cool
 Condition: Cool and Intact

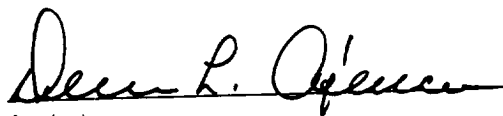
Project #: 403410
 Date Reported: 05-17-99
 Date Sampled: 05-14-99
 Date Received: 05-17-99
 Date Extracted: 05-17-99
 Date Analyzed: 05-17-99
 Analysis Requested: 8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	127	0.2
Diesel Range (C10 - C28)	453	0.1
Total Petroleum Hydrocarbons	580	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 Apache Tribal 151 - 4 Landfarm. 5 Pt. Composite.


 Analyst


 Review

6932
