

District I  
P.O. Box 1980, Hobbs, NM  
District II  
P.O. Drawer DD, Artesia, NM 88211  
District III  
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

010W-04  
Sep-OK

80328

SUBMIT 1 COPY TO  
APPROPRIATE  
DISTRICT OFFICE  
AND 1 COPY TO  
SANTA FE OFFICE

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

Operator: Amoco Production Company Telephone: (505) - 326-9200  
Address: 200 Amoco Court, Farmington, New Mexico 87401  
Facility Or: MARTIN GC B1  
Well Name  
Location: Unit or Qtr/Qtr Sec 6 Sec 31 T28N R10W County SAN JUAN  
Pit Type: Separator    Dehydrator    Other BLOW  
Land Type: BLM X, State   , Fee   , Other   

Pit Location: Pit dimensions: length 32', width 39', depth 10'  
(Attach diagram) Reference: wellhead X, other     
Footage from reference: 166'  
Direction from reference: 82 Degrees    East North X  
of  
X West South   

Depth To Ground Water:  
(Vertical distance from  
contaminants to seasonal  
high water elevation of  
ground water)

Less than 50 feet (20 points)  
50 feet to 99 feet (10 points)  
Greater than 100 feet (0 Points) 10

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) 0

Distance To Surface Water:  
(Horizontal distance to perennial  
lakes, ponds, rivers, streams, creeks,  
irrigation canals and ditches)

Less than 200 feet (20 points)  
200 feet to 1000 feet (10 points)  
Greater than 1000 feet (0 points) 0

RANKING SCORE (TOTAL POINTS): 10

80328

Date Remediation Started: \_\_\_\_\_

Date Completed: 2/5/96Remediation Method: Excavation ☒  
(Check all appropriate sections)Landfarmed ☒Approx. cubic yards 450

Insitu Bioremediation \_\_\_\_\_

Other SOME MATERIAL COMPOSTED. APPROX. 20 C.Y.Remediation Location: Onsite ☒ Offsite \_\_\_\_\_  
(ie. landfarmed onsite,  
name and location of  
offsite facility)

General Description Of Remedial Action: \_\_\_\_\_

Excavation

Ground Water 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 DocumentsSample depth 13'Sample date 2/5/96Sample time 0940

Sample Results

Benzene(ppm) \_\_\_\_\_

Total BTEX(ppm) \_\_\_\_\_

Field headspace(ppm) 2.9TPH 92 ppmGround Water 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 BELIEFDATE 2/5/96

SIGNATURE

B. ShawPRINTED NAME  
AND TITLEBuddy D. Shaw  
ENVIRONMENTAL COORDINATOR

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>80328</u> C.D.C. NO: _____
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FIELD REPORT: CLOSURE VERIFICATION		PAGE No: <u>1</u> of <u>1</u>
LOCATION: NAME: <u>MARTIN GC</u> WELL #: <u>81</u> PIT: <u>BLOW</u>		DATE STARTED: <u>2-5-96</u> DATE FINISHED: _____
QUAD/UNIT: <u>G SEC 31 TWP 28N R10W PM: NM CNTY: SJ ST: NM</u>		ENVIRONMENTAL SPECIALIST: <u>NV</u>
QTR/FOOTAGE: <u>SW 1/4 NE 1/4</u> CONTRACTOR: <u>EPC</u>		

EXCAVATION APPROX. <u>32</u> FT. x <u>39</u> FT. x <u>10</u> FT. DEEP.	CUBIC YARDAGE: <u>450</u>
DISPOSAL FACILITY: <u>ON-SITE</u>	REMEDIALATION METHOD: <u>LANDFARMED/COMPOSTED</u>
LAND USE: <u>RANGE</u>	LEASE: <u>SF - 077315</u> FORMATION: <u>OK</u>

FIELD NOTES & REMARKS:	PIT LOCATED APPROXIMATELY <u>166</u> FT <u>N82W</u> FROM WELLHEAD.
DEPTH TO GROUNDWATER: <u>&lt;100'</u>	NEAREST WATER SOURCE: <u>&gt;1000'</u> NEAREST SURFACE WATER: <u>&gt;1000'</u>
NMDCI BANKING SCORE: <u>10</u>	NMDCI TPH CLOSURE STD: <u>1000</u> PPM
SOIL AND EXCAVATION DESCRIPTION:	<input checked="" type="checkbox"/> CHECK ONE : <input checked="" type="checkbox"/> PIT ABANDONED <input type="checkbox"/> STEEL TANK INSTALLED

OK YELL. BROWN SAND W/ SOME GRAVEL, NON-COHESIVE, SLIGHTLY MOIST, FIRM, NO APPARENT HC ODOR IN ANY OF THE OVM SAMPLES. SOME OF THE HEVIER CONTAMINANTS EXCAVATED (MOSTLY @ PIT SURFACE WILL BE COMPOSTED + REMAINING SOILS LANDFARMED. APPROX. 20 cu. YDS.)

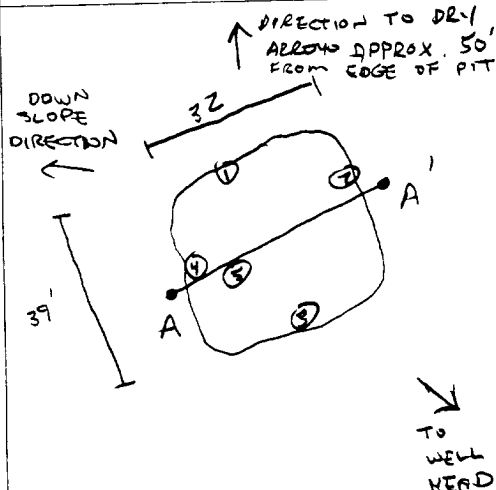
CLOSED

SCALE  
0 FT

#### FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
0940	⑤ @ 13'	TPH-16TY	5	20	1:1	23	92

#### PIT PERIMETER



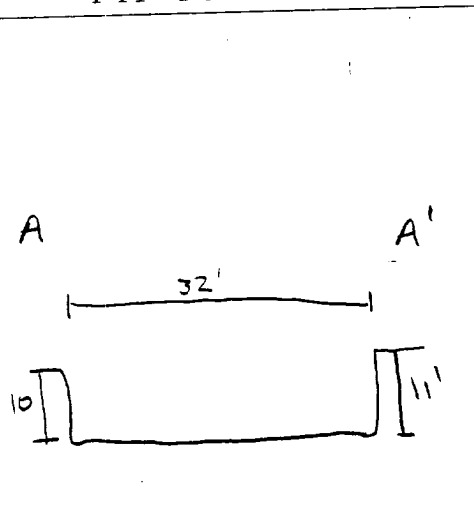
#### OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 5'	0.6
2 @ 4'	0.0
3 @ 5'	0.0
4 @ 6'	0.0
5 @ 13'	2.9

#### LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME

#### PIT PROFILE



#### TRAVEL NOTES:

CALLOUT: 2-5-96 MORN. ONSITE: 2-5-96 MORN.

**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 @ 13'  
Project Location: Martin GC B1  
Laboratory Number: TPH-1677

Project #:   
Date Analyzed: 02-05-96  
Date Reported: 02-05-96  
Sample Matrix: Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	92	20

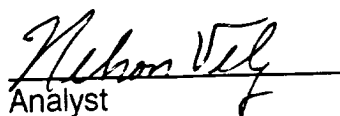
ND = Not Detectable at stated detection limits.

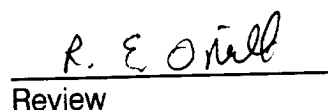
QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	5400	5000	7.69

\*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 - B0328

  
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 @ 13'

Date Analyzed:

02-05-96

Project Location:

Martin GC B1

Date Reported:

02-05-96

Laboratory Number:

TPH-1677

Sample Matrix:

Soil

Sample Weight:

5.00 grams

Volume Freon:

20.00 mL

Dilution Factor:

1 (unitless)

TPH Reading:

23 mg/kg

TPH Result:

92.0 mg/kg

Reported TPH Result:

92 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.

-----  
5400

-----  
5000

-----  
7.69

Comments:

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

Comments:

Blow Pit - B0328

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P.O. Box 1980, Hobbs, NM  
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P.O. Drawer DD, Artesia, NM 88211  
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DISTRICT OFFICE  
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SANTA FE OFFICE

## PIT REMEDIATION AND CLOSURE REPORT

Operator: Amoco Production Company Telephone: (505) - 326-9200  
Address: 200 Amoco Court, Farmington, New Mexico 87401  
Facility Or: MARTIN GC 81  
Well Name  
Location: Unit or Qtr/Qtr Sec G Sec 31 T 28N R 10W County SAN JUAN  
Pit Type: Separator ☒ Dehydrator ☐ Other ☐  
Land Type: BLM ☒, State ☐, Fee ☐, Other ☐

Pit Location: Pit dimensions: length 43', width 40', depth 17'  
(Attach diagram) Reference: wellhead ☒, other ☐  
Footage from reference: 151'  
Direction from reference: 47 Degrees ☐ East North ☐  
of  
☒ West South ☒

Depth To Ground Water: Less than 50 feet (20 points)  
(Vertical distance from 50 feet to 99 feet (10 points)  
contaminants to seasonal Greater than 100 feet (0 Points) 10  
high water elevation of  
ground water)

Wellhead Protection Area: Yes (20 points)  
(Less than 200 feet from a private No (0 points) 0  
domestic water source, or; less than  
1000 feet from all other water sources)

Distance To Surface Water: Less than 200 feet (20 points)  
(Horizontal distance to perennial 200 feet to 1000 feet (10 points)  
lakes, ponds, rivers, streams, creeks, Greater than 1000 feet (0 points) 0  
irrigation canals and ditches)

RANKING SCORE (TOTAL POINTS): 10

80328

Date Remediation Started: \_\_\_\_\_

Date Completed: 2/5/96Remediation Method: Excavation ☒Approx. cubic yards 1150

(Check all appropriate sections)

Landfarmed ☒

Insitu Bioremediation \_\_\_\_\_

Other APPROX. 80 C.Y. COMPOSTED

Remediation Location:

Onsite ☒ Offsite \_\_\_\_\_(ie. landfarmed onsite,  
name and location of  
offsite facility)

General Description Of Remedial Action: \_\_\_\_\_

Excavation - BEDROCK BOTTOM.

Ground Water 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 DocumentsSample depth 13'Sample date 2/5/96Sample time 1030

Sample Results

Benzene(ppm) \_\_\_\_\_

Total BTEX(ppm) \_\_\_\_\_

Field headspace(ppm) 0.0TPH 164 ppmGround Water 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 BELIEFDATE 2/5/96

SIGNATURE

B. ShawPRINTED NAME  
AND TITLEBuddy D. Shaw  
Environmental Coordinator

CLIENT: AMOCO      **BLAGG ENGINEERING, INC.**  
P.O. BOX 87, BLOOMFIELD, NM 87413  
(505) 632-1199

LOCATION NO: 80328  
C.O.C. NO: \_\_\_\_\_

**FIELD REPORT: CLOSURE VERIFICATION**      PAGE No: 1 of 1

LOCATION: NAME: MARTIN GC WELL #: 81 PIT: SEP  
QUAD/UNIT: 6 SEC: 31 TWP: 28N RNG: 10W PM: NM CNTY: SS ST: NM  
QTR/FOOTAGE: SW/4 NE/4 CONTRACTOR: EPC  
DATE STARTED: 2-5-96  
DATE FINISHED: \_\_\_\_\_  
ENVIRONMENTAL SPECIALIST: NV

EXCAVATION APPROX. 43 FT. x 40 FT. x 18 FT. DEEP. CUBIC YARDAGE: 1/50  
DISPOSAL FACILITY: ON-SITE REMEDIATION METHOD: LANDFARMED/COMPOSTED  
LAND USE: RANGE LEASE: SF - 07735 FORMATION: OK

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 151 FT. S47W FROM WELLHEAD.  
DEPTH TO GROUNDWATER: <100' NEAREST WATER SOURCE: 71000' NEAREST SURFACE WATER: 71000'  
NMCD RANKING SCORE: 10 NMCD TPH CLOSURE STD: 1000 PPM

SOIL AND EXCAVATION DESCRIPTION:

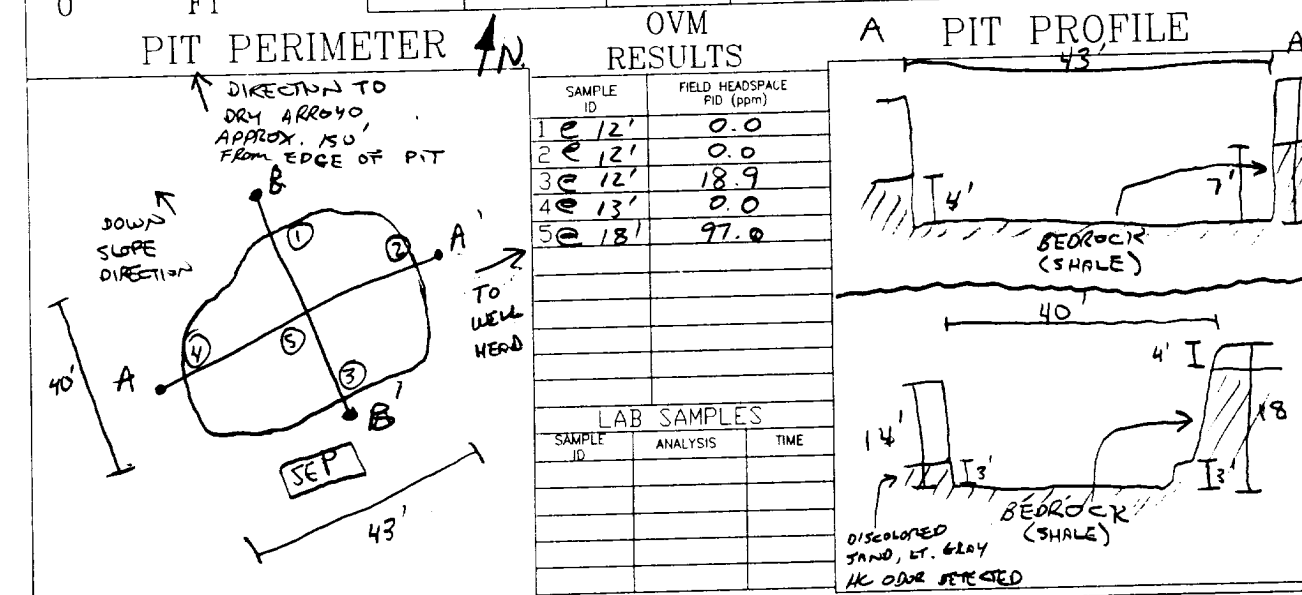
**SIDEWALLS:** MOSTLY OK. YELL. BROWN SAND, NON-COHESIVE SLIGHTLY MOIST, FIRM, SOUTH SIDEWALL MOST SHALE (SEE PIT PROFILE) DENSE MED. DK. GRAY IN COLOR FRIABLE NO APPARENT HC DOOR IN ANY OF THE OVM SAMPLES. APPROX. 80 C.Y. OF MATERIAL COMPOSTED, REMAINING MATERIAL LANDFARMED.  
**BOTTOM - BEDROCK** MOSTLY SHALE, DENSE TO VERY DENSE, SLIGHT HC DOOR IN OVM SAMPLE.

**CLOSED**

SCALE 0 FT

FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1030	④ @ 13'	TAH-1678	5	20	1:1	41	164



TRAVEL NOTES: CALLOUT: 2-5-96 MORN ONSITE: 2-5-96 MORN.



# 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: 4 @ 13'  
Project Location: Martin GC B1  
Laboratory Number: TPH-1678

Project #:   
Date Analyzed: 02-05-96  
Date Reported: 02-05-96  
Sample Matrix: Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	160	20

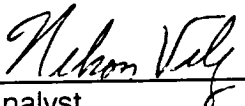
ND = Not Detectable at stated detection limits.


QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% * Diff.
	5400	5000	7.69

\*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: Separator Pit - B0328

  
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

4 @ 13'

Martin GC B1

TPH-1678

Project #:

Date Analyzed:

Date Reported:

Sample Matrix:

02-05-96

02-05-96

Soil

Sample Weight: 5.00 grams  
Volume Freon: 20.00 mL  
Dilution Factor: 1 (unitless)  
TPH Reading: 41 mg/kg

TPH Result: 164.0 mg/kg  
Reported TPH Result: 160 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.
	----- 5400	----- 5000	----- 7.69

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

Comments: Separator Pit - B0328

CLIENT: AMOCOBLAGG ENGINEERING, INC.  
P.O. BOX 87, BLOOMFIELD, NM 87413  
(505) 632-1199LOCATION NO: 80328C.D.C. NO: 5616

## FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: MARTIN GC B WELL #: 1 PITS: BLOW, SEP.DATE STARTED: 11-24-97

DATE FINISHED: \_\_\_\_\_

QUAD/UNIT(G) SEC: 31 TWP: 28N RNG: 10W PM: NM CNTY: SS ST: NMSTR/FOOTAGE SW/4 NE/4 CONTRACTOR: EPCENVIRONMENTAL  
SPECIALIST: NV/EP

## SOIL REMEDIATION:

REMEDATION SYSTEM: LANDFARMAPPROX. CUBIC YARDAGE: 1,600LAND USE: RANGELIFT DEPTH (ft): 6"-24"

## FIELD NOTES &amp; REMARKS:

DEPTH TO GROUNDWATER: <100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'NMDCD RANKING SCORE: 10 NMDCD TPH CLOSURE STD: 1000 PPM

SOIL IS A LIGHT GREY CLAY WITH LIGHT BROWN SILTY SAND, DRY.

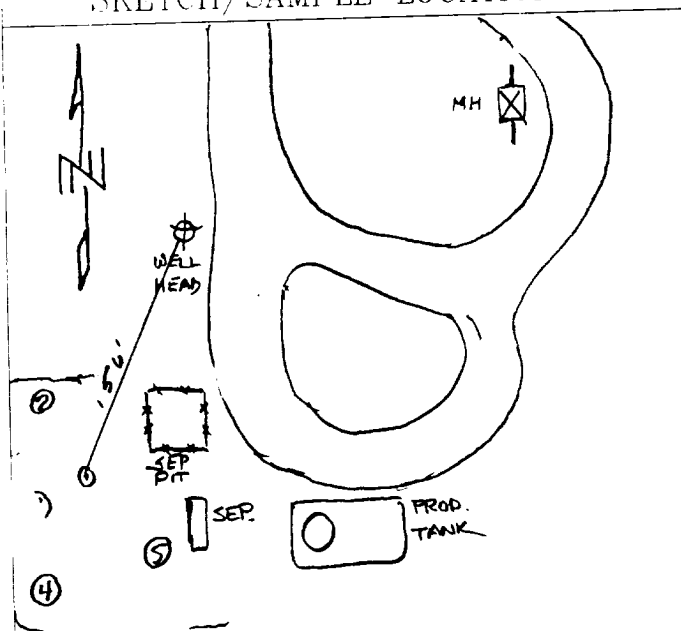
NO STAIN OR HC ODOR

TOOK 5" FT COMPOSITE FOR LAB ANALYSIS

## 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	8.1	LF-1	8015	0900	ND

## SCALE



0 FT

## TRAVEL NOTES:

CALLOUT: N/AONSITE: 11-24-97 0900

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

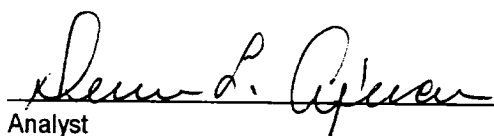
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	LF - 1	Date Reported:	12-03-97
Laboratory Number:	C588	Date Sampled:	11-24-97
Chain of Custody No:	5616	Date Received:	11-26-97
Sample Matrix:	Soil	Date Extracted:	11-26-97
Preservative:	Cool	Date Analyzed:	12-01-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

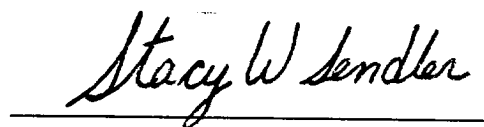
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

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: **Martin GC B #1 Landfarm. 5 Pt. Composite.**

  
Analyst

  
Review

## CHAIN OF CUSTODY RECORD

[illegible]