

OK 2 pits + 1 closed, 1 visited
Risk bedrock
RECEIVED
JUL 13 1999

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

Deangelo S. Foust
DEPUTY OIL & GAS INSPECTOR
SUBMIT 1 COPY TO
NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION
AUG 13 1999

1 CON. DIV.
DIST. 3

PIT REMEDIATION AND CLOSURE REPORT

Approved

Operator: AMOCO PRODUCTION COMPANY Telephone: (505) 326-9200
Address: 200 Amoco Court, Farmington, NM 87401
Facility or Well Name: JICARILLA A #2
Location: Unit or Qtr/Qtr Sec B Sec 18 T 26N R 5W County RIO ARIZONA
Pit Type: Separator Dehydrator Other COMPRESSOR
Land Type: RANGE

Pit Location: Pit dimensions: length 28', width 20', depth 4'
(Attach diagram) Reference: wellhead X, other
Footage from reference: 225'
Direction from reference: 50 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)	
	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>2</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: 12/2/98

Remediation Method: Excavation ☒ Approx. cubic yards 50
 (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. EXCAVATION MOSTLY BEDROCK,
THEREFORE NO TPH ANALYSIS WAS CONDUCTED.

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 1' (NORTH SIDEWALK)

Sample date 12/2/98 Sample time 1015

Sample Results

Soil: Benzene	(ppm)	_____	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	_____	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>83.7</u>	<u>2.5</u> ^{PIT BOTTOM}	Ethylbenzene	(ppb)
TPH	(ppm)	<u>NA</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 12/2/98 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

08136

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>83700</u> C.D.C. NO: _____
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FIELD REPORT: CLOSURE VERIFICATION

PAGE No: 1 of 1

LOCATION: NAME: <u>JICA</u> A WELL #: <u>2</u> PIT: <u>COMPL.</u>	DATE STARTED: <u>12/2/98</u> DATE FINISHED: _____
QUAD/UNIT: <u>B</u> SEC: <u>18</u> TWP: <u>26N</u> RNG: <u>5W</u> PMJUM CNTY: <u>RA</u> ST: <u>NM</u>	ENVIRONMENTAL SPECIALIST: <u>NV</u>
QTR/FOOTAGE: <u>790' RL / 1850' FEL</u> CONTRACTOR: <u>P&S</u>	

EXCAVATION APPROX. 28 FT. x 20 FT. x 4 FT. DEEP. CUBIC YARDAGE: 50
 DISPOSAL FACILITY: ON-SITE REMEDIATION METHOD: LANDFARM
 LAND USE: RANGE LEASE: JICA FORMATION: DIK

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 225 FT. 550E FROM WELLHEAD.DEPTH TO GROUNDWATER: 2100' NEAREST WATER SOURCE: 21000' NEAREST SURFACE WATER: 21000'NMCD RANKING SCORE: 0 NMCD TPH CLOSURE STD: 5000 PPM

SOIL AND EXCAVATION DESCRIPTION:

CHECK ONE:

- ☒ PIT ABANDONED
☐ STEEL TANK INSTALLED
☐ FIBERGLASS TANK INSTALLED

EXCAVATION CONSISTED OF MOSTLY BEDROCK (SHALE), DUSKY RED/LT. GRAY (ALL SIDEWALLS) TO MED. GRAY (PIT BOTTOM), FRIABLE & SOFT @ SIDEWALLS TO VERY HARD @ PIT BOTTOM, NO NOTICEABLE STRIPPING EVIDENT, NO APPARENT HC ODOR W/IN EXCAVATION, SLIGHT HC ODOR IN NORTH SOUTH & WEST SIDEWALL OUM SAMPLES, ALL SAMPLES COLLECTED FROM BEDROCK, THEREFORE NO TPH ANALYSIS WAS CONDUCTED.

EXCAVATION
MOSTLY
BEDROCK

CLOSED

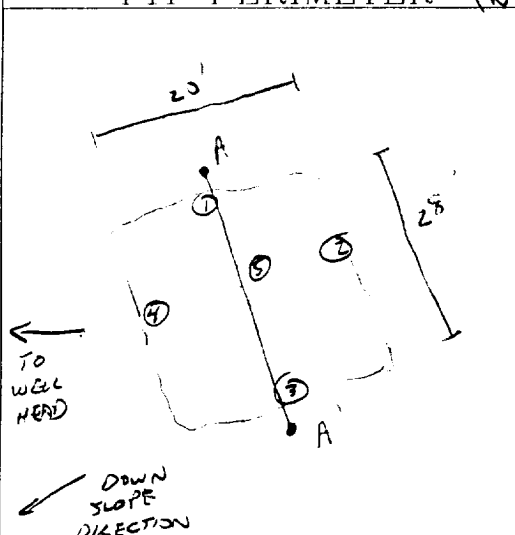
FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No.	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1015							

SCALE

0 FT

PIT PERIMETER



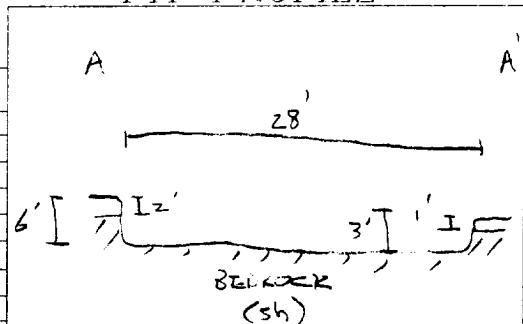
OVM RESULTS

SAMPLE I.D.	FIELD HEADSPACE PID (ppm)
1 @ 1'	83.7
2 @ 2'	6.9
3 @ 2'	43.1
4 @ 2'	46.6
5 @ 5'	2.5

LAB SAMPLES

SAMPLE I.D.	ANALYSIS	TIME

PIT PROFILE



TRAVEL NOTES: CALLOUT: _____ ONSITE: _____

85700

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 A # 2
Location: Unit or Qtr/Qtr Sec B Sec 18 T26N R5W County RIO ARriba
Pit Type: Separator ☒ Dehydrator ☐ Other ☐
Land Type: RANGE

Pit Location: (Attach diagram) Pit dimensions: length 50', width 47', depth 7'
Reference: wellhead ☒, other ☐
Footage from reference: 117'
Direction from reference: 65 Degrees ☐ East of North ☐
☒ 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)	<u>0</u>
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)	
100 feet to 1000 feet	(10 points)	<u>0</u>
Greater than 1000 feet	(0 points)	

RANKING SCORE (TOTAL POINTS): 0

BJ700

SEP. PIT

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

Remediation Method: Excavation ☒ Approx. cubic yards 500
(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: Sample location see Attached Documents

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

Sample depth 4' (NORTH SIDEWALL)

Sample date 12/2/98 Sample time 1040

Sample Results

Soil: Benzene	(ppm)	<u>0.268</u>	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	<u>14.770</u>	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>631</u>	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>2,860</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. M. A. DATE: 12-28-98

CLIENT: AMOCOBLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199LOCATION NO: 87700C.O.C. NO: 6417

FIELD REPORT: CLOSURE VERIFICATION

PAGE No: 1 of 1LOCATION: NAME: JICA A WELL #: 2 PIT: SEPDATE STARTED: 12/2/98QUAD/UNIT: B SEC: 18 TWP: 26N RNG: 5W PM: NM CNTY: RA ST: NM

DATE FINISHED: _____

QTR/FOOTAGE: 790' FULL 1850' FEL CONTRACTOR: P&SENVIRONMENTAL SPECIALIST: NVEXCAVATION APPROX. 50 FT. x 47 FT. x 7 FT. DEEP. CUBIC YARDAGE: 500DISPOSAL FACILITY: ON-SITE REMEDIATION METHOD: LANDFARMLAND USE: RANGE LEASE: JICA FORMATION: DRFIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 117 FT. 565W FROM WELLHEAD.DEPTH TO GROUNDWATER: 2100' NEAREST WATER SOURCE: 21000' NEAREST SURFACE WATER: 21000'NMOCB RANKING SCORE: 0 NMOCB TPH CLOSURE STD: 5000 PPM

CHECK ONE:

☒ PIT ABANDONED☐ STEEL TANK INSTALLED☐ FIBERGLASS TANK INSTALLED

SOIL AND EXCAVATION DESCRIPTION:

SIDEWALLS - DK. YELL. ORANGE TO BROWN (NORTH SIDEWALL ONLY) SAND, NON COHESIVE, SLIGHTLY MOIST FIRM, NO APPARENT STAINING OBSERVED NO HC ODOR DETECTED W/IN EXCAVATION, STRONG HC ODOR IN NORTH SIDEWALL OVM SAMPLE ONLY.

BOTTOM - BEDROCK (SANDSTONE), MED. GRAY IN COLOR, VERY HARD, STRONG HC ODOR IN OVM SAMPLE.

BEDROCK
BOTTOM

CLOSED

FIELD 418.1 CALCULATIONS

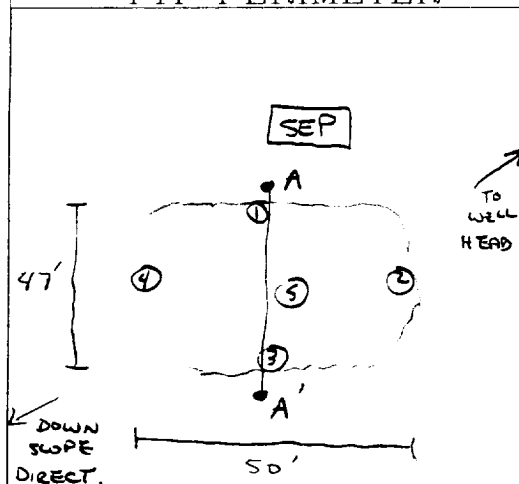
TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1040							

SCALE



0 FT

PIT PERIMETER

OVM
RESULTS

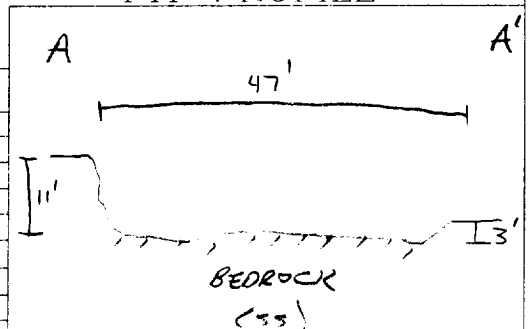
SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 4'	631
2 @ 5'	0.0
3 @ 6'	0.0
4 @ 6'	0.0
5 @ 7'	391

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
0 @ 4'	TPH/BTEX	1040

BOTH PASSED

PIT PROFILE



TRAVEL NOTES:

CALLOUT: _____

ONSITE: _____

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

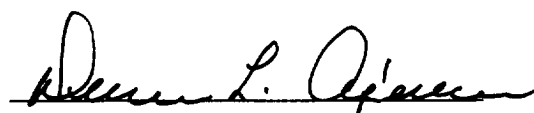
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	1 @ 4'	Date Reported:	12-04-98
Laboratory Number:	E255	Date Sampled:	12-02-98
Chain of Custody No:	6417	Date Received:	12-04-98
Sample Matrix:	Soil	Date Extracted:	12-04-98
Preservative:	Cool	Date Analyzed:	12-04-98
Condition:	Cool and Intact	Analysis Requested:	8015 TPH


Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1,410	0.2
Diesel Range (C10 - C28)	1,450	0.1
Total Petroleum Hydrocarbons	2,860	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 A #2 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 @ 4'	Date Reported:	12-04-98
Laboratory Number:	E255	Date Sampled:	12-02-98
Chain of Custody:	6417	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	268	8.8
Toluene	2,570	8.4
Ethylbenzene	397	7.6
p,m-Xylene	8,050	10.8
o-Xylene	3,480	5.2
Total BTEX	14,770	

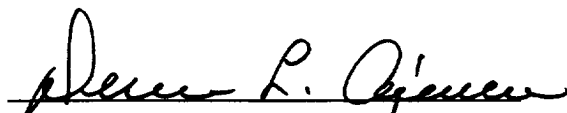
ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	99 %
	Bromofluorobenzene	99 %

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 A #2 Separator Pit.


Analyst


Review

6417

[illegible]

85700

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AND OIL & GAS ADMINISTRATION

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

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 A 2</u>		
Location: Unit or Qtr/Qtr Sec <u>B</u> Sec <u>18</u> T <u>26N</u> R <u>5W</u> County <u>RIO ARriba</u>		
Land Type: <u>RANGE</u>		
Date Remediation Started: <u>12.2.98</u>		Date Completed: <u>6/1/99</u>
Remediation Method: Landfarmed <input checked="" type="checkbox"/>		Approx. cubic yards <u>550</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>5.28.99</u> Time: <u>1215</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>79.1</u>	
Distance To SurfaceWater: (pts.) <u>0</u>	TPH (ppm) <u>356</u> Method <u>TPH (8015)</u>	
RANKING SCORE (TOTAL POINTS): <u>0</u>	Other <input type="checkbox"/>	
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEGE AND BELIEF		
DATE <u>6/1/99</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 checked="" type="checkbox"/> NO <input type="checkbox"/> (REASON) _____		
SIGNED: <u>K. C. Marshall</u> DATE: <u>6-18-99</u>		

CLIENT: AMOCOBLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199LOCATION NO: 85700C.D.C. NO: 6938

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: SICABILLA A WELL #: 2 PITS: SEP, COMP
QUAD/UNIT: B SEC: 18 TWP: 26N RNG: 5W PM: NM CNTY: RA ST: NM
DTP/FOOTAGE: NW/4 NE/4 CONTRACTOR: P+SDATE STARTED: 5-28-99

DATE FINISHED: _____

ENVIRONMENTAL
SPECIALIST: REP

SOIL REMEDIATION:

REMEDIATION SYSTEM: LANDFARMAPPROX. CUBIC YARDAGE: 550LAND USE: RANGELIFT DEPTH (ft): 2.0'

FIELD NOTES & REMARKS:

DEPTH TO GROUNDWATER: > 100' NEAREST WATER SOURCE: > 1000' NEAREST SURFACE WATER: > 1000'NMDD RANKING SCORE: 0 NMDD TPH CLOSURE STD: 5000 PPM

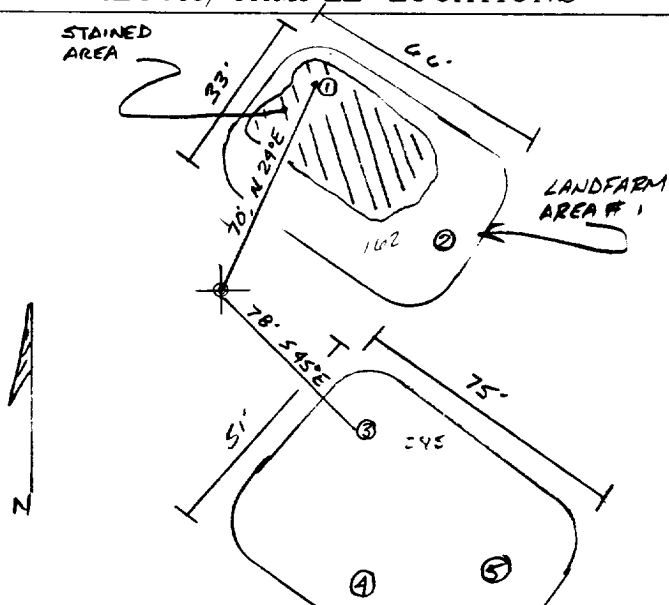
DK. YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM
LARGE AREA OF STAINING OBSERVED IN LANDFARM AREA #1 (SEE SKETCH BELOW)
HC ODDR DETECTED IN SAMPLING PTS. ①, ②, ④, ⑤. SAMPLING DEPTHS RANGE FROM
6" - 18". COLLECTED A 5 PT. COMPOSITE SAMPLE FOR LAB ANALYSIS.

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	79.1	LF-1	TPH (8015)	1215	356

SCALE

0 1 FT

TRAVEL NOTES:

CALLOUT: NAONSITE: 5-28-99

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

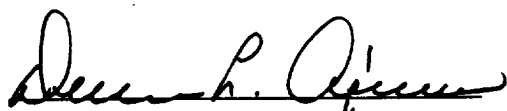
Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	LF - 1	Date Reported:	06-01-99
Laboratory Number:	F436	Date Sampled:	05-28-99
Chain of Custody No:	6938	Date Received:	06-01-99
Sample Matrix:	Soil	Date Extracted:	06-01-99
Preservative:	Cool	Date Analyzed:	06-01-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	48.2	0.2
Diesel Range (C10 - C28)	308	0.1
Total Petroleum Hydrocarbons	356	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 A - 2 Landfarm. 5 Pt. Composite.


Analyst


Review

6938

[illegible]