

Date Remediation Started: _____ Date Completed: 12/7/98

Remediation Method: Excavation Landfarmed Other _____
(Check all appropriate sections)

Approx. cubic yards 75
Insitu Bioremediation _____

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 8' (WEST SIDEWALL)
Sample date 12/4/98 Sample time 0950

Sample Results

Soil: Benzene	(ppm)	_____	Water: Benzene	(ppb)	_____	
Total BTEX	(ppm)	_____	Toluene	(ppb)	_____	
Field Headspace	(ppm)	<u>0.0</u>	<u>0.0</u> <small>PIT BOTTOM</small>	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>4.3</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 12/7/98 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: Karen C M... [Signature] DATE: 12-28-98

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>85706</u> C.D.C. NO: <u>6423</u>
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FIELD REPORT: <u>CLOSURE VERIFICATION</u>	PAGE No: <u>1</u> of <u>1</u>
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LOCATION: NAME: <u>JCA. CONTR. 155</u> WELL #: <u>2</u> PIT: <u>BLOW</u>	DATE STARTED: <u>12/4/98</u> DATE FINISHED: _____
QUAD/UNIT: <u>J SEC: 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>1650' FSL / 1700' FEL</u> CONTRACTOR: <u>P+S</u>	

EXCAVATION APPROX. <u>23</u> FT. x <u>12</u> FT. x <u>13</u> FT. DEEP. CUBIC YARDAGE: <u>75</u>
DISPOSAL FACILITY: <u>ON SITE</u> REMEDIATION METHOD: <u>LANDFARM</u>
LAND USE: <u>RANGE</u> LEASE: <u>JCA 155</u> FORMATION: <u>RC</u>

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 155 FT. S80W FROM WELLHEAD.
 DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'

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

SOIL AND EXCAVATION DESCRIPTION:

CHECK ONE:

PIT ABANDONED

STEEL TANK INSTALLED

FIBERGLASS TANK INSTALLED

SIDEWALLS - MOD. YELL. BROWN SILTY SAND TO SILTY CLAY, COHESIVE, SLIGHTLY MOIST, FIRM TO VERY STIFF, NO APPARENT STAINING OBSERVED, HC ODOR DETECTED W/IN EXCAVATION, NO APPARENT HC ODOR IN ANY OF THE OUM SAMPLES.

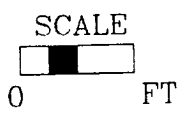
BOTTOM - BEDROCK (SHALE), GRAYISH GREEN IN COLOR, VERY HARD, NO APPARENT HC ODOR IN OUM SAMPLE.

BEDROCK Bottom

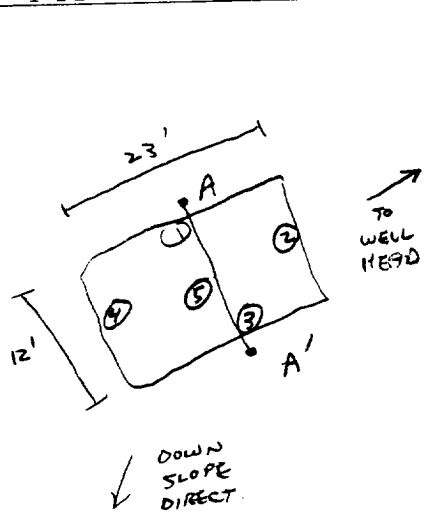
CLOSED

FIELD 418.1 CALCULATIONS

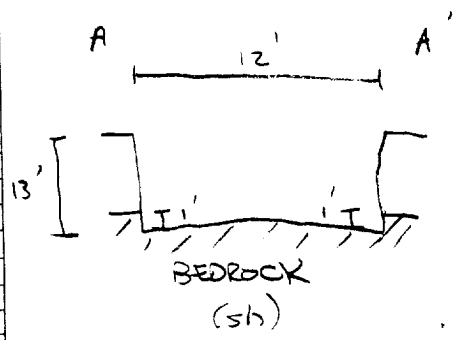
TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
0950							



PIT PERIMETER



PIT PROFILE



OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 9'	0.0
2 @ 8'	0.0
3 @ 9'	0.0
4 @ 8'	0.0
5 @ 13'	0.0

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
4 @ 8'	TPH (8015)	0950
	<u>PASSED</u>	

TRAVEL NOTES: CALLOUT: _____ ONSITE: _____

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

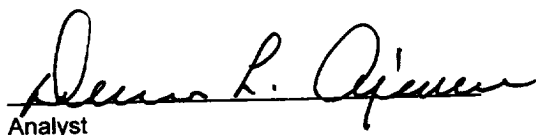
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	4 @ 8'	Date Reported:	12-07-98
Laboratory Number:	E344	Date Sampled:	12-04-98
Chain of Custody No:	6423	Date Received:	12-07-98
Sample Matrix:	Soil	Date Extracted:	12-07-98
Preservative:	Cool	Date Analyzed:	12-07-98
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

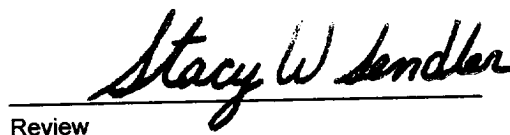
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	2.6	0.2
Diesel Range (C10 - C28)	1.7	0.1
Total Petroleum Hydrocarbons	4.3	0.2

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 - 2 Blow Pit.


Analyst


Review

CHAIN OF CUSTODY RECORD

6423

Client / Project Name			Project Location			ANALYSIS / PARAMETERS									
BRS-6 / Amoco			TERRILL CONTRACT #155-2			BRAV PT									
Sampler: NTV			Client No. 04034-10			Remarks									
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers										
④ e 8	12/4/98	0950	E344	SOIL	1	TPH (8015)	PRESERV - COOL								
Relinquished by: (Signature)			Date			Time			Received by: (Signature)			Date		Time	
<i>[Signature]</i>			12/7/98			0716			<i>[Signature]</i>			12.7.98		0716	
Relinquished by: (Signature)			Date			Time			Received by: (Signature)			Date		Time	
<i>[Signature]</i>									<i>[Signature]</i>						
Relinquished by: (Signature)			Date			Time			Received by: (Signature)			Date		Time	
<i>[Signature]</i>									<i>[Signature]</i>						

ENVIROTECH INC.

5796 U.S. Highway 64
 Farmington, New Mexico 87401
 (505) 632-0615

Sample Receipt

Received Intact	Y	N	N/A
Cool - Ice/Blue Ice	✓		

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 CONTRACT 155-2

Location: Unit or Qtr/Qtr Sec 5 Sec 30 T 26N R 5W County RIO ARriba

Land Type: RANGE

Date Remediation Started: 12-4-98 Date Completed: 6/9/99

Remediation Method: Landfarmed Approx. cubic yards 75
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: 6-8-99 Time: 10:10
Sample Results:
Field Headspace (ppm) 1.4
TPH (ppm) 6.1 Method TPH (0015)
Other _____

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

DATE 6/9/99 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>B3706</u> C.D.C. NO: <u>7069</u>
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FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: <u>SICADILLA CONTRACT 155</u> WELL #: <u>2</u> PITS: <u>BLOW</u>	DATE STARTED: <u>6-8-99</u> DATE FINISHED: _____
QUAD/UNIT: <u>S SEC: 30 TWP: 26N RNG: SW PM: NM CNTY: RA ST: NM</u>	ENVIRONMENTAL SPECIALIST: <u>REP</u>
DTR/FOOTAGE: <u>NW/4 SE/4</u> CONTRACTOR: <u>P+S</u>	

SOIL REMEDIATION:

REMEDICATION SYSTEM: LANDFARM APPROX. CUBIC YARDAGE: 75

LAND USE: RANGE LIFT DEPTH (ft): 1

FIELD NOTES & REMARKS:

DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'

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

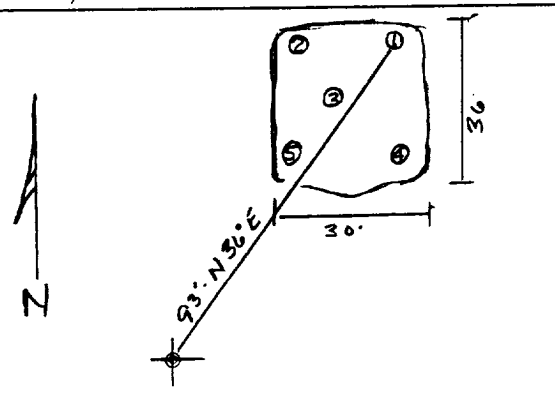
DK. YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM NO APPARENT STRAINING. HC ODOR DETECTED IN SAMPLING FT. ② SAMPLING DEPTHS RANGE FROM 6"-10" COLLECTED A SPT COMPOSITE SAMPLE FOR LAB ANALYSIS.

CLOSED

FIELD 418.1 CALCULATIONS

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

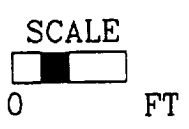
SKETCH/SAMPLE LOCATIONS



OVM RESULTS

LAB SAMPLES

SAMPLE ID	FIELD HEADSPACE PID (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	1.4	LF-1	TPH (B015)	1010	6.1



TRAVEL NOTES: CALLOUT: NA ONSITE: 6-8-99

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

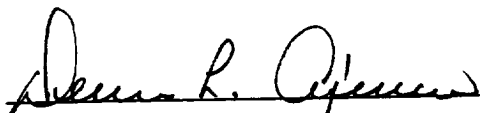
Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	LF - 1	Date Reported:	06-09-99
Laboratory Number:	F471	Date Sampled:	06-08-99
Chain of Custody No:	7069	Date Received:	06-09-99
Sample Matrix:	Soil	Date Extracted:	06-09-99
Preservative:	Cool	Date Analyzed:	06-09-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

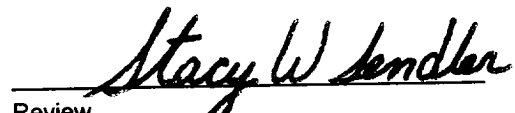
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	5.2	0.2
Diesel Range (C10 - C28)	0.9	0.1
Total Petroleum Hydrocarbons	6.1	0.2

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 - 2 Landfarm. 5 Pt. Composite.


Analyst


Review

CHAIN OF CUSTODY RECORD

7069

Client / Project Name		Project Location			ANALYSIS / PARAMETERS				
BLUES/AMOCO		MAGALLAN CONTRACT 155-2							
Sampler: REP.		Client No. 403410			Remarks				
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers				
LF-1	6/8/99	1010	F471	SOIL	1	TPH (8015)	SPT. COMPOSITE		
							SAMPLE PRESERVED		
							COOL		
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time		
<i>[Signature]</i>		6.9.99	7:05	<i>[Signature]</i>		6.9.99	7:05		
Relinquished by: (Signature)									
Relinquished by: (Signature)									
				Received by: (Signature)					
ENVIROTECH INC. 5796 U.S. Highway 64 Farmington, New Mexico 87401 (505) 632-0615									
Sample Receipt									
Received Intact						Y	N	NA	
Cool - Ice/Blue Ice						✓			