

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

87514
Blow-behavior
Sep - OK
SUBMIT 1 COPY TO
NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION

RECEIVED
AUG 27 1999

PIT REMEDIATION AND CLOSURE REPORT

OIL CON. DIV.

Operator: AMOCO PRODUCTION COMPANY Telephone: (505) 326-9200
Address: 200 Amoco Court, Farmington, NM 87401
Facility or Well Name: JICARILLA EC 35 C # 1
Location: Unit or Qtr/Qtr Sec M Sec 2 T 24N R 5W County RIO ARriba
Pit Type: Separator Dehydrator Other BLOW PIT
Land Type: RANGE

Pit Location: Pit dimensions: length 35', width 52', depth 16'
(Attach diagram) Reference: wellhead X, other
Footage from reference: 170'
Direction from reference: 35 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 SurfaceWater: (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):		<u>0</u>

Blow PIT

BJ514

Date Remediation Started: _____ Date Completed: 12/22/97

Remediation Method: Excavation ☒ Approx. cubic yards 600
ck all appropriate (i.e. landfarmed onsite) 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. APPLIED FERTILIZER TO PIT 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 10' (SOUTH SIDEWALL)

Sample date 12/22/97 Sample time 1000

Sample Results

Soil: Benzene	(ppm)	_____	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	_____	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>0.0</u>	<u>PIT BOTTOM @ 16'-6" B</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 12/22/97 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: Kurt C. Mamm DATE: 1-6-98

3003920244

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>BT514</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>JICA GC 35 C</u> WELL #: <u>1</u> PIT: <u>BLOW</u> QUAD/UNIT: <u>M</u> SEC: <u>2</u> TWP: <u>24N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u> DTE/EQUIDGE: <u>SW SW</u> CONTRACTOR: <u>P&S</u>		DATE STARTED: <u>12/22/97</u> DATE FINISHED: _____ ENVIRONMENTAL SPECIALIST: <u>NV</u>

EXCAVATION APPROX. <u>35</u> FT. x <u>52</u> FT. x <u>16</u> FT. DEEP.	CUBIC YARDAGE: <u>600</u>
DISPOSAL FACILITY: <u>ON-SITE</u>	REMEDIATION METHOD: <u>LANDFARMED</u>
LAND USE: <u>RANGE</u>	LEASE: <u>SWI 4247</u> FORMATION: <u>DR</u>

FIELD NOTES & REMARKS:	PIT LOCATED APPROXIMATELY <u>170</u> FT. <u>N35W</u> FROM WELLHEAD. DEPTH TO GROUNDWATER: <u>2100'</u> NEAREST WATER SOURCE: <u>21000'</u> NEAREST SURFACE WATER: <u>21000'</u> NMOCB PANKING SCORE: <u>0</u> NMOCB TPH CLOSURE STD: <u>5000</u> PPM COIL AND EXCAVATION DESCRIPTION:
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CHECK ONE:
☒ PIT ABANDONED
☐ STEEL TANK INSTALLED
☐ FIBERGLASS TANK INSTALLED

SIDEWALLS MOSTLY MOD. YELL. BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, NO APPARENT STAINING OR HC ODOR OBSERVED SOME DUSKY RED CLAY/SHALE OBSERVED BET. APPROX. 10'-16' BELOW GROUND SURFACE, NO APPARENT HC ODOR IN ANY OF THE OVM SAMPLES.
 BOTTOM - OLIVE GRAY TO MED. GRAY SANDSTONE, VERY HARD, STRONG HC ODOR IN OVM SAMPLE.

SCALE

0 FT

PIT PERIMETER

FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No.	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1000	③ @ 10'	TAH-1949	5	20	1:1	4	ND

RISK ASSESSED

RED ROCK BOTTOM

OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 11'	0.0
2 @ 12'	0.0
3 @ 10'	0.0
4 @ 12'	0.0
5 @ 16'	608

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME

PIT PROFILE

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:	3 @ 10'	Date Analyzed:	12-22-97
Project Location:	Jicarilla GC 35 C # 1	Date Reported:	12-22-97
Laboratory Number:	TPH-1949	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.
	608	568	6.80

*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 - BJ514


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

3 @ 10'

Jicarilla GC 35 C # 1

TPH-1949

Project #:

Date Analyzed:

Date Reported:

Sample Matrix:

12-22-97

12-22-97

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.

608

568

6.80

Comments:

*****Max Characters*****

Comments:

Blow Pit - BJ514

Well Name:

Well Site location:

Pit Type:

Producing Formation:

Pit Category:

Horizontal Distance to Surface Water:

Vicinity Groundwater Depth:

Jicarilla GC 35 C # 1

Unit M, Sec. 2, T24N, R5W

Blow Pit

Basin Dakota

Non Vulnerable

> 1000 ft.

> 100 ft.

RISK ASSESSMENT - (non vulnerable)

Pit remediation activities were terminated when trackhoe encountered sandstone bedrock at 16 feet below grade.

No past or future threat to surface water or groundwater is likely based on the following considerations:

1. Past production fluids were contained locally by a relatively shallow sandstone bedrock located 16 feet below grade. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below sandstone bedrock.
2. Topographic information does not indicate off site lateral fluid migration near the earthen pit.
3. Daily discharge into the earthen pit has been terminated (pit abandoned). Prior discharge into the pit is believed to be under 5 barrels per day.
4. Field headspace readings (OVM/PID) on Basin Dakota type locations do not reflect direct correlation to total BTEX per USEPA Method 8020 concentrations. Listed below are several typical AMOCO Basin Dakota pit soil analyses comparing headspace to Benzene and total BTEX results.

LOCATION	HEADSPACE (ppm)	BENZENE (ppm)	TOTAL BTEX (ppm)
Frost, Jack B 1E	1100	0.011	5.889
Berger A1	482	0.084	0.681
Mudge Com B 1E	684	0.017	16.438
L.C. Kelly #5	1235	0.643	13.908

The comparisons listed above demonstrates that headspace testing is not an accurate measurement to Benzene or total BTEX concentrations when above standards for Basin Dakota type pits.

Based upon the information given, we conclude that the subsurface lateral impact from the earthen pit is very limited and that the sandstone bottom creates an impermeable barrier sufficient to subdue impact to groundwater below it (please refer to AMOCO's report "Post Excavation Pit Closure Investigation Summary, July, 1995", with cover letter dated November 30, 1995). AMOCO requests pit closure approval on this location.

SUBMIT 1 COPY TO
NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION

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 GC 35 C #1</u>		
Location: Unit or Qtr/Qtr Sec <u>M</u> Sec <u>2</u> T <u>24N</u> R <u>5W</u> County <u>RIO ARRIBA</u>		
Pit Type: Separator <input checked="" type="checkbox"/> Dehydrator <input type="checkbox"/> Other <input type="checkbox"/>		
Land Type: <u>RANGE</u>		

Pit Location: (Attach diagram)	Pit dimensions: length <u>32'</u> , width <u>45'</u> , depth <u>16'</u>		
	Reference: wellhead <input checked="" type="checkbox"/> , other <input type="checkbox"/>		
	Footage from reference: <u>150'</u>		
	Direction from reference: <u>82</u> Degrees <input checked="" type="checkbox"/> East of North <input checked="" type="checkbox"/> <div style="display: flex; justify-content: space-around; width: 100%;"> <input type="checkbox"/> West <input type="checkbox"/> South </div>		

Depth To Groundwater: (Vertical distance from contaminants to seasonal high water elevation of groundwater)	Less than 50 feet 50 feet to 99 feet Greater than 100 feet	(20 points) (10 points) (0 points)	<u>0</u> <u>0</u> <u>0</u>
Distance to an Ephemeral Stream (Downgradient dry wash greater than ten feet in width)	Less than 100 feet Greater than 100 feet	(10 points) (0 points)	<u>0</u> <u>0</u>
Distance to Nearest Lake, Playa, or Watering Pond (Downgradient lakes, playas and livestock or wildlife watering ponds)	Less than 100 feet Greater than 100 feet	(10 points) (0 points)	<u>0</u> <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 No	(20 points) (0 points)	<u>0</u> <u>0</u>
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 100 feet 100 feet to 1000 feet Greater than 1000 feet	(20 points) (10 points) (0 points)	<u>0</u> <u>0</u> <u>0</u>
RANKING SCORE (TOTAL POINTS):			<u>0</u>

Date Remediation Started: _____ Date Completed: 12/23/97

Remediation Method: Excavation ☒ Approx. cubic yards 750
(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, APPLIED FERTILIZER TO NORTH, SOUTH, & WEST SIDEWALLS.

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 11' (SOUTH SIDEWALL)

Sample date 12/22/97 Sample time 1100

Sample Results

Soil: Benzene	(ppm)	<u>0.316</u>	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	<u>48.090</u>	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>1,477</u>	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>141</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 12/23/97 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: Kate C. Marshall DATE: 1-6-98

CLIENT: AMOCO

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

LOCATION NO: RJS14
C.O.C. NO: 5665

FIELD REPORT: CLOSURE VERIFICATION

PAGE No: 1 of 1

LOCATION: NAME: JICARUA GC 35 WELL #: 1 PIT: SEP.
QUAD/UNIT: M SEC: 2 TWP: 24N RNG: 5W PM: NM CNTY: RA ST: NM
DIR/ADJUTAGE: SW SW CONTRACTOR: P + S

DATE STARTED: 12/22/97
DATE FINISHED: _____
ENVIRONMENTAL SPECIALIST: NV

EXCAVATION APPROX. 32 FT. x 45 FT. x 16 FT. DEEP. CUBIC YARDAGE: 750
DISPOSAL FACILITY: ON-SITE REMEDIATION METHOD: LANDFARMED
LAND USE: RANGE LEASE: SWI 4247 FORMATION: DK

FIELD NOTES & REMARKS:
PIT LOCATED APPROXIMATELY 150 FT. N82E FROM WELLHEAD.
DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'
NMDCD BANKING SCORE: 0 NMDCD TPH CLOSURE STD: 5000 PPM
COIL AND EXCAVATION DESCRIPTION:
SIDEWALLS - MOD. YELL. BROWN SAND FROM GROUND SURFACE DOWN TO 10' BELOW GROUND SURFACE, NON COHESIVE, SLIGHTLY MOIST FIRM, NO APPARENT STAINING OR HC ODOR OBSERVED; STAINING OBSERVED BELOW 10' ON ALL SIDEWALLS EXCEPT EAST (APPROX. BET. 13'-16' BELOW GRADE) DK. YELL. BROWN SILTY CLAY TO CLAY COHESIVE, SLIGHTLY MOIST, FIRM TO VERY STIFF, STRONG HC ODOR IN NORTH, SOUTH, & WEST SIDEWALL DUM. SAMPLES PIT BOTTOM - MOD. YELL. BROWN SILTY SAND, NO APPARENT HC ODOR OBSERVED IN DUM SAMPLE.

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

CLOSED

SCALE
0 FT

PIT PERIMETER

OVN RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 10'	346
2 @ 11'	0.0
3 @ 11'	1,477
4 @ 11'	1,132
5 @ 17'	2.2

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
3 @ 11'	TPH / BTEX	1100

BOTH PASSED

PIT PROFILE

TRAVEL NOTES: CALLOUT: 12/17/97 ONSITE: 12/22/97 - MORN.

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

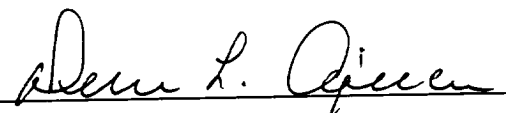
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	3 @ 11'	Date Reported:	12-23-97
Laboratory Number:	C726	Date Sampled:	12-22-97
Chain of Custody No:	5665	Date Received:	12-23-97
Sample Matrix:	Soil	Date Extracted:	12-23-97
Preservative:	Cool	Date Analyzed:	12-23-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

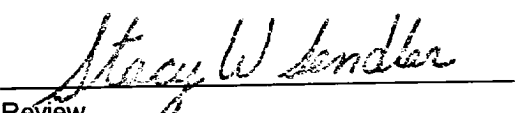
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	50.0	0.2
Diesel Range (C10 - C28)	91.4	0.1
Total Petroleum Hydrocarbons	141	0.2

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 GC 35 C #1 Separator Pit.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	3 @ 11'	Date Reported:	12-23-97
Laboratory Number:	C726	Date Sampled:	12-22-97
Chain of Custody:	5665	Date Received:	12-23-97
Sample Matrix:	Soil	Date Analyzed:	12-23-97
Preservative:	Cool	Date Extracted:	12-23-97
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	316	8.8
Toluene	9,150	8.4
Ethylbenzene	6,240	7.6
p,m-Xylene	16,870	10.8
o-Xylene	15,510	5.2
Total BTEX	48,090	

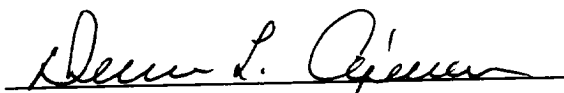
ND - Parameter not detected at the stated detection limit.

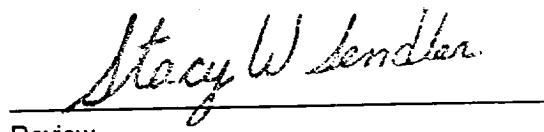
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	97 %
	Bromofluorobenzene	97 %

References: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1994.

Comments: Jicarilla GC 35 C #1 Separator Pit.


Analyst


Review

(505) 632-0615

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

87514
SUBMIT 1 COPY TO
NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION

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 GC 35 C #1</u>		
Location: Unit or Qtr/Qtr Sec <u>M</u> Sec <u>2</u> T <u>24N</u> R <u>5W</u> County <u>RIO ARIZONA</u>		
Land Type: <u>RANGE</u>		
Date Remediation Started: <u>12/22/97</u>		Date Completed: <u>9/10/98</u>
Remediation Method: Landfarmed <input checked="" type="checkbox"/>		Approx. cubic yards <u>1350</u>
Composted <input type="checkbox"/>		
Other <input type="checkbox"/>		
Depth To Groundwater: (pts.) <u>0</u>		Final Closure Sampling: Sampling Date: <u>9/8/98</u> Time: <u>-</u> Sample Results: Field Headspace (ppm) <u>0.0</u> TPH (ppm) <u>58.7</u> Method <u>SOIS</u> Other <u>2ND SAMPLE</u> <u>0.0</u> ppm <u>TIME</u> <u>(LF-2)</u> <u>TPH = 24.7 ppm</u>
Distance to an Ephemeral Stream (pts.) <u>0</u>		
Distance to Nearest Lake, Playa, or Watering Pond (pts.) <u>0</u>		
Wellhead Protection Area: (pts.) <u>0</u>		
Distance To Surface Water: (pts.) <u>0</u>		
RANKING SCORE (TOTAL POINTS): <u>0</u>		
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF		
DATE <u>9/10/98</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>Kurt M...</u>		DATE: <u>10-1-98</u>

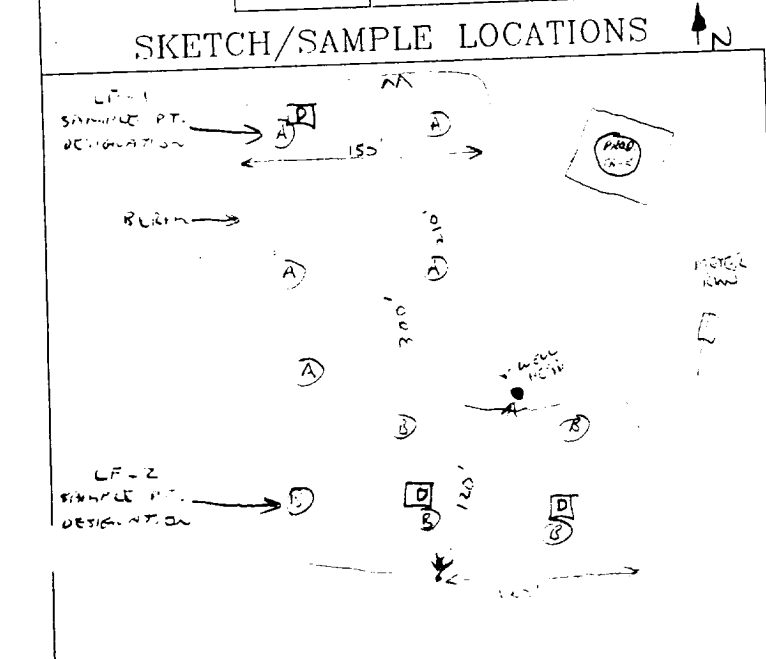
CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>BTS 14</u> C.O.C. NO: <u>6198</u>
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FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION	
LOCATION: NAME: <u>JICA GC 35</u> C WELL #: <u>1</u> PITS: <u>SEP, BLOW</u> QUAD/UNIT: <u>M</u> SEC: <u>2</u> TWP: <u>24N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u> QTR/FOOTAGE: <u>SW/4</u> <u>SW/4</u> CONTRACTOR: <u>P & S</u>	DATE STARTED: <u>9/8/98</u> DATE FINISHED: _____ ENVIRONMENTAL SPECIALIST: <u>NV</u>

SOIL REMEDIATION:	APPROX. CUBIC YARDAGE: <u>1350</u>
REMEDICATION SYSTEM: <u>LANDFARM</u>	LIFT DEPTH (ft): <u>2'</u>
LAND USE: <u>RANGE</u>	

FIELD NOTES & REMARKS:	
DEPTH TO GROUNDWATER: <u>>100'</u>	NEAREST WATER SOURCE: <u>>1000'</u> NEAREST SURFACE WATER: <u>>1000'</u>
NMOCB RANKING SCORE: <u>0</u>	NMOCB TPH CLOSURE STD: <u>5000</u> PPM
SOIL CONSISTED OF DK. YELL. CLAYE TO BROWN SAND TO CLAY, NON COHESIVE TO PLASTIC, SLIGHTLY MOIST FIRM TO STIFF, MED GRAY TO BLACK DISCOLORATION OBSERVED IN THOSE SAMPLE PTS. DESIGNATED W/ LETTER <u>D</u> , SAMPLING DEPTHS RANGE FROM 1'-1 1/2', COLLECTED 5 PT. COMPOSITE SAMPLES FOR LAB ANALYSIS.	
<div style="border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;">CLOSED</div>	

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



SAMPLE ID	FIELD HEADSPACE PID (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	0.0	LF-1	TPH (8015)	0745	58.7
LF-2	0.0	LF-2	TPH (8015)	0845	24.7

SCALE	0	100	FT
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TRAVEL NOTES:	CALLOUT: <u>N/A</u>	ONSITE: <u>9/8/98 - morn.</u>
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EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client: Blagg / AMOCO
Sample ID: LF - 1
Laboratory Number: D909
Chain of Custody No: 6198
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

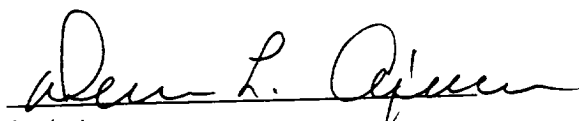
Project #: 04034-10
Date Reported: 09-10-98
Date Sampled: 09-08-98
Date Received: 09-08-98
Date Extracted: 09-10-98
Date Analyzed: 09-10-98
Analysis Requested: 8015 TPH

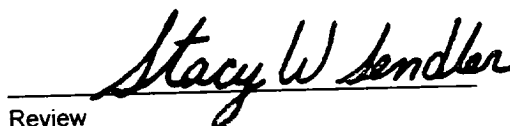
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	11.1	0.2
Diesel Range (C10 - C28)	47.6	0.1
Total Petroleum Hydrocarbons	58.7	0.2

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 GC 35 C #1 Landfarm. 5 Pt. Composite.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

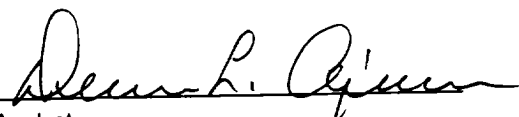
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	LF - 2	Date Reported:	09-10-98
Laboratory Number:	D910	Date Sampled:	09-08-98
Chain of Custody No:	6198	Date Received:	09-08-98
Sample Matrix:	Soil	Date Extracted:	09-10-98
Preservative:	Cool	Date Analyzed:	09-10-98
Condition:	Cool and Intact	Analysis Requested:	8015 TPH


Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	4.7	0.2
Diesel Range (C10 - C28)	20.0	0.1
Total Petroleum Hydrocarbons	24.7	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 GC 35 C #1 Landfarm. 5 Pt. Composite.


Analyst


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Client / Project Name			Project Location			ANALYSIS / PARAMETERS						
BAGG-1 Amoco			TERRERA GC 35 C #1									
Sampler:			Client No.									
NTV			04034-10									
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	Remarks						
LF-1	9/8/98	0745	D909	SOL	1	5 PT. COMPOSITE						
LF-2	9/8/98	0845	D910	SOL	1	5 PT. COMPOSITE						
						BOTH SAMPLES						
						FRESHEN - COOL						
Relinquished by: (Signature)			Date	Time	Received by: (Signature)	Date						
[Signature]			9/8/98	1455	[Signature]	9.8.98						
Relinquished by: (Signature)			Received by: (Signature)									
Relinquished by: (Signature)			Received by: (Signature)									
COCS 6191-6290			ENVIROTECH INC.			Sample Receipt						
5796 U.S. Highway 64 Farmington, New Mexico 87401 (505) 632-0615						Received Intact						
						Cool - Ice/Blue Ice						