



(505) 325-6622

Analysis No. AMO40913
Cust. No. 12300-13610

WELL/LEASE INFORMATION

Company : AMOCO PRODUCTION COMPANY Source : TUBING
Well Name : JICARILLA CONT. #40 Pressure : N/A PSIG
County : RIO ARRIBA Sample Temp. : N/A DEG.F
State : NM Well Flowing : YES
Location : Date Sampled : 08/08/94
Fld/Formation : Sampled By : M.D./ L&L
Cust.Stn.No. : Foreman/Engr : MIKE ROWLAND

Remarks:

ANALYSIS

COMPONENT	MOLE %	GPM**	B.T.U.*	SP.GR.*
NITROGEN	0.827	0.0000	0.00	0.0080
CO2	0.134	0.0000	0.00	0.0020
METHANE	81.906	0.0000	829.13	0.4537
ETHANE	7.757	2.0750	137.59	0.0805
PROPANE	5.001	1.3783	126.12	0.0761
I-BUTANE	1.180	0.3860	38.46	0.0237
N-BUTANE	1.457	0.4594	47.64	0.0292
I-PENTANE	0.592	0.2166	23.74	0.0147
N-PENTANE	0.404	0.1463	16.23	0.0101
HEXANES	0.742	0.3237	38.15	0.0239
TOTAL	100.000	4.9853	1257.06	0.7219

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

** @ 14.730 & 60 DEG. F

COMPRESSIBILITY FACTOR (1/Z) 1.0036
BTU/CU.FT. (DRY) CORRECTED FOR (1/Z) 1261.6
BTU/CU.FT. (WET) CORRECTED FOR (1/Z) 1239.6
REAL SPECIFIC GRAVITY 0.7242

ANALYSIS RUN AT 14.730 PSIA & 60 DEGREES F

CYLINDER # : A008
CYLINDER PRESSURE : 80 PSIG
DATE RUN : 08/09/94
ANALYSIS RUN BY : LINDA SPENCER

Date Remediation Started: _____ Date Completed: 10/6/98

Remediation Method: Excavation ☒ Approx. cubic yards 1,750
 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

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 30'

Sample date 10/6/98 Sample time 1320

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>64</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 10/6/98 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: Kurt C Maull DATE: 11-18-98

3003923159

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>BJ654</u> C.D.C. NO: _____																																								
FIELD REPORT: CLOSURE VERIFICATION		PAGE No: <u>1</u> of <u>1</u>																																								
LOCATION: NAME: <u>TICA CONTR. 146</u> WELL #: <u>40</u> PIT: <u>BLOW</u>		DATE STARTED: <u>10/6/98</u> DATE FINISHED: _____																																								
QUAD/UNIT: <u>N SEC: 3</u> TWP: <u>25N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u>		ENVIRONMENTAL SPECIALIST: <u>NV</u>																																								
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DEPTH TO GROUNDWATER: <u>>100'</u> NEAREST WATER SOURCE: <u>>1000'</u> NEAREST SURFACE WATER: <u>>1000'</u>																																										
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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 @ 30'	Date Analyzed:	10-06-98
Project Location:	Jicarilla Contract # 146 - 40	Date Reported:	10-06-98
Laboratory Number:	TPH-2048	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	64	20

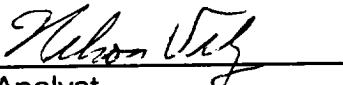
ND = Not Detectable at stated detection limits.


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 - BJ654


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 @ 30'

Date Analyzed:

10-06-98

Project Location:

Jicarilla Contract # 146 - 40

Date Reported:

10-06-98

Laboratory Number:

TPH-2048

Sample Matrix:

Soil

Sample Weight:

5.00 grams

Volume Freon:

20.00 mL

Dilution Factor:

1 (unitless)

TPH Reading:

16 mg/kg

TPH Result:

64.0 mg/kg

Reported TPH Result:

64 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 - BJ654

BJ654

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: <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 CONTRACT #146-40</u>		
Location: Unit or Qtr/Qtr Sec <u>N</u> Sec <u>3</u> T <u>25N</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>26'</u> , width <u>30'</u> , depth <u>24'</u>	
	Reference: wellhead <input checked="" type="checkbox"/> , other <input type="checkbox"/>	
	Footage from reference: <u>125'</u>	
	Direction from reference: <u>30</u> Degrees <input checked="" type="checkbox"/> East of North <input type="checkbox"/> <input type="checkbox"/> West of South <input checked="" type="checkbox"/>	

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>
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>
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>
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>
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>

RANKING SCORE (TOTAL POINTS):	<u>0</u>
--------------------------------------	----------

Date Remediation Started: _____ Date Completed: 10/7/98

Remediation Method: Excavation ☒ Approx. cubic yards 400
 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. CONDITIONAL CLOSURE - TICARILLA EPO,
RISK ASSESSED - NMOCV.

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 27' (PIT BOTTOM)

Sample date 10/6/98 Sample time 1200

Sample Results

Soil: Benzene	(ppm)	<u>1.770</u>	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	<u>62.900</u>	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>653</u>	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>5,650</u>	Total Xylenes	(ppb)	_____

Groundwater Sample: Yes _____ No ☒ (If yes, attach sample results)


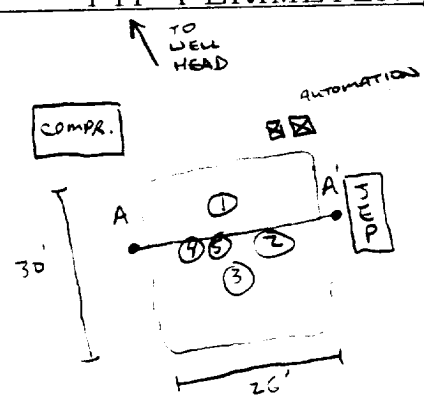
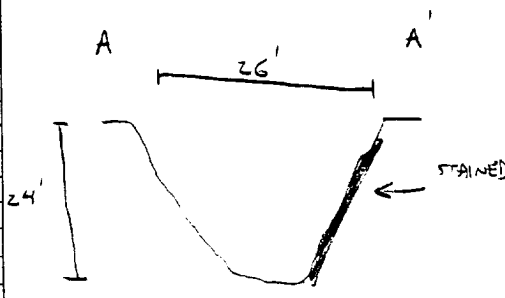
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE 10/7/98 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) Conditional / R.A. Attached

SIGNED: Ken C. Man DATE: 11-18-98

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>BJ654</u> C.O.C. NO: <u>6287</u>																																
FIELD REPORT: CLOSURE VERIFICATION		PAGE No: <u>1</u> of <u>1</u>																																
LOCATION: NAME: <u>JICA, CONTR. 146</u> WELL #: <u>40</u> PIT: <u>SEP</u>		DATE STARTED: <u>10/6/98</u> DATE FINISHED: _____																																
QUAD/UNIT: <u>N</u> SEC: <u>3</u> TWP: <u>25N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u>		ENVIRONMENTAL SPECIALIST: <u>NV</u>																																
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DEPTH TO GROUNDWATER: <u>>100'</u> NEAREST WATER SOURCE: <u>>1000'</u> NEAREST SURFACE WATER: <u>>1000'</u>																																		
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<p> OK. YELL. ORANGE (SOUTH + WEST SIDEWALLS), OLIVE GRAY (NORTH + EAST SIDEWALLS), OLIVE TO MED. GRAY (PIT BOTTOM) SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, NORTH & EAST SIDEWALLS STAINED THROUGHOUT, HC ODOR DETECTED W/IN EXCAVATION, STRONG HC ODOR IN NORTH, EAST SIDEWALLS, + PIT BOTTOM OVM SAMPLES. </p> <div style="border: 1px solid black; border-radius: 15px; padding: 5px; margin: 10px auto; width: fit-content;"> CONDITIONAL - JICARULLA EPO RISK ASSESSED - O < D </div>																																		
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TRAVEL NOTES: CALLOUT: _____ ONSITE: <u>10/6/98</u>																																		

Well Name:	Jicarilla Contract 146 #40
Well Site location:	Unit N, Sec. 3, T25N, R5W
Pit Type:	Separator Pit
Producing Formation:	Fruitland Coal/Mesa Verde/Pictured Cliffs
Pit Category:	Non Vulnerable
Horizontal Distance to Surface Water:	> 1000 ft.
Vicinity Groundwater Depth:	> 100 ft.

RISK ASSESSMENT (non-vulnerable area)

Pit remediation activities were terminated when trackhoe reached practical extent (24 ft. below grade) and for safety concerns (underground piping and surface equipment).

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

1. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below presumed shallow sandstone bedrock (based on informal site observation of adjacent sandstone outcrop).
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. Well site located within the **non-vulnerable area** and is approximately 0.98 miles northeast of the nearest vulnerable area boundary (Gonzales Canyon wash).

(Refer to Lapis Point Quadrangle, New Mexico - Rio Arriba County, 7.5 Minute Series (Topographic), 1963, (vulnerable area boundary developed by Mr. William C. Olson, Hydrogeologist, Environmental Bureau, New Mexico Oil Conservation Division).

Based upon the information given, we conclude that the subsurface vertical impact to groundwater is very unlikely. AMOCO requests pit closure approval on this location.

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

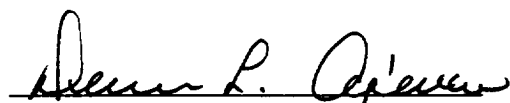
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	5 @ 27'	Date Reported:	10-07-98
Laboratory Number:	E034	Date Sampled:	10-06-98
Chain of Custody No:	6287	Date Received:	10-07-98
Sample Matrix:	Soil	Date Extracted:	10-07-98
Preservative:	Cool	Date Analyzed:	10-07-98
Condition:	Cool and Intact	Analysis Requested:	8015 TPH


Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1,470	0.2
Diesel Range (C10 - C28)	4,180	0.1
Total Petroleum Hydrocarbons	5,650	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 #146 - 40 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:	5 @ 27'	Date Reported:	10-07-98
Laboratory Number:	E034	Date Sampled:	10-06-98
Chain of Custody:	6287	Date Received:	10-07-98
Sample Matrix:	Soil	Date Analyzed:	10-07-98
Preservative:	Cool	Date Extracted:	10-07-98
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	1,770	8.8
Toluene	15,030	8.4
Ethylbenzene	6,300	7.6
p,m-Xylene	24,910	10.8
o-Xylene	14,890	5.2
Total BTEX	62,900	

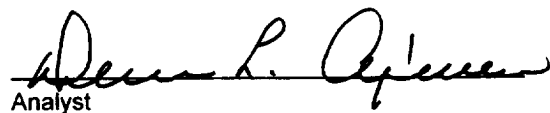
ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	96 %
	Bromofluorobenzene	96 %

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 Contract #146 - 40 Separator Pit.


Analyst


Review

6287

Ref COC's 6284-6287

ENVIROTECH INC.

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

Sample Receipt			
	Y	N	N/A

**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: <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 CONTRACT 146.40</u>			
Location: Unit or Qtr/Qtr Sec <u>N</u> Sec <u>3</u> T <u>25N</u> R <u>5W</u> County <u>BIO ARIZONA</u>			
Land Type: <u>RANGE</u>			
Date Remediation Started: <u>10-6-98</u>		Date Completed: <u>6/16/99</u>	
Remediation Method: Landfarmed <input checked="" type="checkbox"/>		Approx. cubic yards <u>2850</u>	
Composted <input type="checkbox"/>			
Other <input type="checkbox"/>			
Depth To Groundwater: (pts.) <u>0</u>		Final Closure Sampling: Sampling Date: <u>6/14/99</u> Time: <u>0930</u> Sample Results: Field Headspace (ppm) <u>166.4</u> TPH (ppm) <u>3,130</u> Method <u>8015/8021</u> Other <u>BENZENE 0.339 ppm</u> <u>TOT. BTEX 8.760 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>6/16/99</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 type="checkbox"/> NO <input type="checkbox"/> (REASON) _____			
SIGNED: _____		DATE: _____	

CLIENT: <u>Amoco</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>BSU54</u> C.O.C. NO: <u>0914</u>
----------------------	--	---

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: <u>JICARILLA CONTRACT 146 WELL # 40</u>	PITS: <u>SEP, BLOW</u>	DATE STARTED: <u>5-6-99</u>
QUAD/UNIT: <u>N</u> SEC: <u>3</u> TWP: <u>25N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u>		DATE FINISHED: _____
QTR/FOOTAGE: <u>SE/4 SW/4</u>	CONTRACTOR: <u>P+S</u>	ENVIRONMENTAL SPECIALIST: <u>REP</u>

SOIL REMEDIATION:

REMEDICATION SYSTEM: LANDFARM

APPROX. CUBIC YARDAGE: 2850

LAND USE: RANGE

LIFT DEPTH (ft): 1-1.5

FIELD NOTES & REMARKS:

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

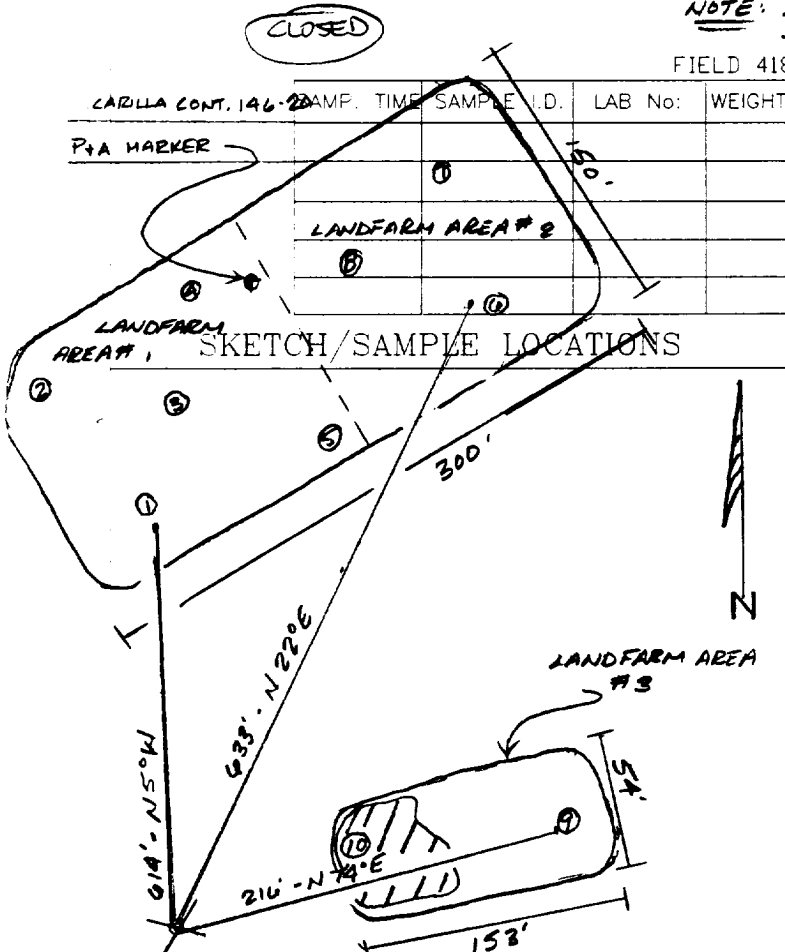
NMDCD RANKING SCORE 0 NMDCD TPH CLOSURE STD: 5000 PPM

MODERATE YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM.
LARGE AREA OF STAINING, OBSERVED IN LANDFARM #3 AREA (SEE SKETCH BELOW)
HC ODDR DETECTED IN SAMPLING PTS. ①, ② & ⑩. SAMPLING DEPTHS RANGE FROM 6"-12" COLLECTED 2 SPT. COMPOSITE SAMPLES FOR L&E ANALYSIS.

NOTE: SOME SOIL WAS LANDFARMED ON THE JIC. CONT. 146-20 (P&A LOCATION, SEE SKETCH BELOW)

FIELD 418.1 CALCULATIONS (APPROX. 700 C.Y.)

CARILLA CONT. 146-20	DAMP. TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm



LF-3 SAMPLED ON 6/14/99
(RESAMPLE OF LF-1)

OVM RESULTS

LAB SAMPLES

SAMPLE ID	FIELD HEADSPACE PID (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	106.4	LF-1	TPH (8215)	1035	7799
		"	BENZENE	"	339 ppb
		"	TOT. BTEX	"	8760 ppb
LF-2	29.3	LF-2	TPH (8215)	1115	43.9
LF-3		LF-3		0930	

SCALE

0 FT

TRAVEL NOTES:

CALLOUT: NA

ONSITE: 5-6-99

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

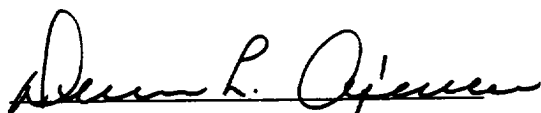
Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	LF - 1	Date Reported:	05-10-99
Laboratory Number:	F179	Date Sampled:	05-07-99
Chain of Custody No:	6914	Date Received:	05-10-99
Sample Matrix:	Soil	Date Extracted:	05-10-99
Preservative:	Cool	Date Analyzed:	05-10-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH


Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	329	0.2
Diesel Range (C10 - C28)	7,470	0.1
Total Petroleum Hydrocarbons	7,800	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 146 - 40 Landfarm. 5 Pt. Composite.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

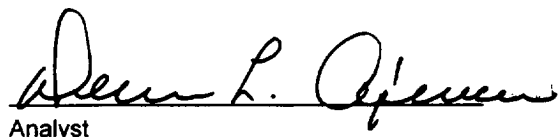
Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	LF - 2	Date Reported:	05-10-99
Laboratory Number:	F180	Date Sampled:	05-07-99
Chain of Custody No:	6914	Date Received:	05-10-99
Sample Matrix:	Soil	Date Extracted:	05-10-99
Preservative:	Cool	Date Analyzed:	05-10-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	3.2	0.2
Diesel Range (C10 - C28)	40.7	0.1
Total Petroleum Hydrocarbons	43.9	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 146 - 40 Landfarm. 5 Pt. Composite.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

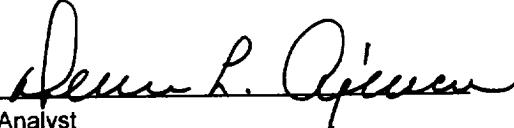
Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	LF - 3	Date Reported:	06-16-99
Laboratory Number:	F511	Date Sampled:	06-14-99
Chain of Custody No:	7077	Date Received:	06-15-99
Sample Matrix:	Soil	Date Extracted:	06-16-99
Preservative:	Cool	Date Analyzed:	06-16-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH


Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	546	0.2
Diesel Range (C10 - C28)	2,580	0.1
Total Petroleum Hydrocarbons	3,130	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 146 - 40 Landfarm. 5 Pt. Composite.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	LF - 1	Date Reported:	05-10-99
Laboratory Number:	F179	Date Sampled:	05-07-99
Chain of Custody:	6914	Date Received:	05-10-99
Sample Matrix:	Soil	Date Analyzed:	05-10-99
Preservative:	Cool	Date Extracted:	05-10-99
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	339	8.8
Toluene	1,880	8.4
Ethylbenzene	646	7.6
p,m-Xylene	3,530	10.8
o-Xylene	2,370	5.2
Total BTEX	8,760	

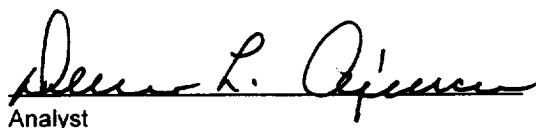
ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	101 %
	Bromofluorobenzene	101 %

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.


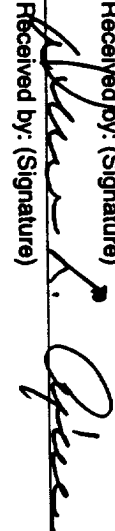
Comments: Jicarilla Contract 146-40 Landfarm. 5 Pt. Composite.


Analyst


Review

CHAIN OF CUSTODY RECORD

6914

Client / Project Name			Project Location			ANALYSIS / PARAMETERS					
BLAUG/AMOCO			SCAZUA COMBET 140-40								
Sampler: REP			Client No. 403410			No. of Containers			Remarks		
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix							
LF-1	5/1/99	1035	F-179	5012	1	✓	✓	5 PT. COMPOSITE			
LF-2	5/1/99	1115	F-180	5012	1	✓		SAMPLES PRESERVE			
								Cool			
Relinquished by: (Signature)			Date	Time	Received by: (Signature)			Date	Time		
			5/1/99	7:20				5-10-99	220		
Relinquished by: (Signature)					Received 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	N/A
Cool - Ice/Blue Ice	✓		

7077

[illegible]