

Date Remediation Started: _____ Date Completed: 11/30/98

Remediation Method: Excavation ☒ Approx. cubic yards 250
 (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. RISK ASSESSED.

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 2' (SOUTH SIDEWALL)

Sample date 11/30/98 Sample time 1130

Sample Results

Soil: Benzene	(ppm)	_____	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	_____	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>150.1</u>	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 11/30/98 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: Kee C M...ll DATE: 12-28-98

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>87494</u> C.O.C. NO: _____
----------------------	--	---

FIELD REPORT: CLOSURE VERIFICATION	PAGE No: <u>1</u> of <u>1</u>
------------------------------------	-------------------------------

LOCATION: NAME: <u>JICA CONTR. 155</u> WELL #: <u>20E</u> PIT: <u>BLOW</u>	DATE STARTED: <u>11/30/98</u>
QUAD/UNIT: <u>C</u> SEC: <u>29</u> TWP: <u>26N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u>	DATE FINISHED: _____
QTR/FOOTAGE: <u>810' FNL</u> <u>1700' FNL</u> CONTRACTOR: <u>P & S</u>	ENVIRONMENTAL SPECIALIST: <u>NV</u>

EXCAVATION APPROX. <u>44</u> FT. x <u>43</u> FT. x <u>6</u> FT. DEEP.	CUBIC YARDAGE: <u>250</u>
DISPOSAL FACILITY: <u>ON-SITE</u>	REMEDIALATION METHOD: <u>LANDFARM</u>
LAND USE: <u>RANGE</u>	LEASE: <u>JIC 155</u> FORMATION: <u>CK/DK</u>

FIELD NOTES & REMARKS:	PIT LOCATED APPROXIMATELY <u>175</u> FT. <u>N40W</u> FROM WELLHEAD.
DEPTH TO GROUNDWATER: <u>>100'</u>	NEAREST WATER SOURCE: <u>>1000'</u> NEAREST SURFACE WATER: <u>>1000'</u>
NMOC D RANKING SCORE: <u>0</u>	NMOC D TPH CLOSURE STD: <u>5000</u> PPM
SOIL AND EXCAVATION DESCRIPTION:	

EXCAVATION CONSISTED OF MOSTLY BEDROCK (SHALE), MD, YELL. ORANGE TO MED. GRAY IN COLOR, FRIABLE ON SIDEWALLS TO VERY HARD @ PIT BOTTOM, MED. GRAY COLOR POSSIBLY ASSOCIATED W/ STAINING, NO APPARENT HC ODOR DETECTED W/IN EXCAVATION, STRONG HC ODOR W SOUTH SIDEWALL OVM SAMPLE ONLY ALL SAMPLES COLLECTED FROM BEDROCK, THEREFORE NO TPH ANALYSIS WAS CONDUCTED.

EXCAVATION
MOSTLY
BEDROCK

RISK ASSESSED

FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1130							

SCALE

0 FT

PIT PERIMETER

OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 2'	82.8
2 @ 2'	36.7
3 @ 2'	150.1
4 @ 2'	9.0
5 @ 6'	11.3

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME

PIT PROFILE

TRAVEL NOTES: CALLOUT: _____ ONSITE: _____

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

190000 01/00/00
BJ694 Sep - bedrock
SUBMIT 1 COPY TO
NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION

RECEIVED
AUG 27 1999

PIT REMEDIATION AND CLOSURE REPORT

OIL CON. DIV.

DIST. 3

Operator: AMOCO PRODUCTION COMPANY

Telephone: (505) 326-9200

Address: 200 Amoco Court, Farmington, NM 87401

Facility or Well Name: JICARILLA CONTRACT # 155 - 20E

Location: Unit or Qtr/Qtr Sec C Sec 29 T 26N R 5W County RIO ARriba

Pit Type: Separator Dehydrator Other blow

Land Type: RANGE

Pit Location:
(Attach diagram)

Pit dimensions: length 44', width 43', depth 6'

Reference: wellhead X, other

Footage from reference: 75'

Direction from reference: 40 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 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

Well Name:	Jicarilla Contract 155 #20E
Well Site location:	Unit C, Sec. 29, T26N, R5W
Pit Type:	Blow Pit
Producing Formation:	Chacra/Basin Dakota
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 encountered shale bedrock at 6 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 shale bedrock located 6 feet below grade. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below shale 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. Well site located within the **non-vulnerable area** and is approximately 0.33 miles northwest of the nearest vulnerable area boundary (Tapacito Creek).

(Refer to Gonzales Mesa 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 lateral impact from the earthen pit is very limited and that the shale bottom creates enough of an impermeable barrier as 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.

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

85694

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

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 CONTRACT # 155-20E
Location: Unit or Qtr/Qtr Sec C Sec 29 T 26N R 5W County RIO ARriba
Pit Type: Separator ☒ Dehydrator ☐ Other ☐
Land Type: RANGE

Pit Location: (Attach diagram) Pit dimensions: length 33', width 23', depth 4'
Reference: wellhead ☒, other ☐
Footage from reference: 170'
Direction from reference: 8 Degrees ☒ East of North ☒
West 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 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: 11/30/98Remediation Method:
(Check all appropriate
sections)Excavation ☒Landfarmed ☒

Other _____

Approx. cubic yards 100

Insitu Bioremediation _____

Remediation Location:
(i.e. landfarmed onsite,
name and location of
offsite facility)Onsite ☒ Offsite _____General Description of Remedial Action: Excavation. EXCAVATION MOSTLY BEDROCK, THEREFORENO TPH ANALYSIS WAS CONDUCTED. RISK ASSESSED.

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 DocumentsSample depth 4' (PIT BOTTOM)Sample date 11/30/98Sample time 1030

Sample Results

Soil: Benzene (ppm) _____

Total BTEX (ppm) _____

Field Headspace (ppm) 138.0TPH (ppm) NA

Water: Benzene (ppb) _____

Toluene (ppb) _____

Ethylbenzene (ppb) _____

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

11/30/98

PRINTED NAME

Buddy D. Shaw

SIGNATURE

Buddy D. Shaw

AND TITLE

Environmental CoordinatorAFTER 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. MendenhallDATE: 12-28-98

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>BJ694</u> C.D.C. NO: _____
----------------------	---	---

FIELD REPORT: CLOSURE VERIFICATION	PAGE No: <u>1</u> of <u>1</u>
---	-------------------------------

LOCATION: NAME: <u>JICA CONTR. 155</u> WELL #: <u>20E</u> PIT: <u>SEP</u> QUAD/UNIT: <u>C SEC: 29 TWP: 26N RNG: 5W PM: NM CNTY: RA ST: NM</u> QTR/FOOTAGE: <u>810' FNL/1700' FNL</u> CONTRACTOR: <u>P+S</u>	DATE STARTED: <u>11/30/98</u> DATE FINISHED: _____ ENVIRONMENTAL SPECIALIST: <u>NV</u>
---	--

EXCAVATION APPROX. <u>33</u> FT. x <u>23</u> FT. x <u>4</u> FT. DEEP.	CUBIC YARDAGE: <u>100</u>
DISPOSAL FACILITY: <u>ON-SITE</u>	REMEDIATION METHOD: <u>LANDFARM</u>
LAND USE: <u>RANGE</u>	LEASE: <u>JICA 155</u> FORMATION: <u>CL/DK</u>

FIELD NOTES & REMARKS:	PIT LOCATED APPROXIMATELY <u>170</u> FT. <u>NBE</u> FROM WELLHEAD. DEPTH TO GROUNDWATER: <u>2100'</u> NEAREST WATER SOURCE: <u>21000'</u> NEAREST SURFACE WATER: <u>21000'</u> NMOCD RANKING SCORE: <u>0</u> NMOCD TPH CLOSURE STD: <u>5000</u> PPM <u>SOIL AND EXCAVATION DESCRIPTION:</u>
------------------------	--

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

EXCAVATION CONSISTED OF MOSTLY BEDROCK (SHALE) PREDOMINATELY LT. GRAY IN COLOR, FRIABLE IN SIDEWALLS TO VERY HARD @ PIT BOTTOM, NO NOTICEABLE STAINING OBSERVED OR HC ODOR W/IN EXCAVATION, STRONG HC ODOR IN PIT BOTTOM DURN SAMPLE ONLY, ALL SAMPLES COLLECTED FROM BEDROCK, THEREFORE NO TPH ANALYSIS WAS CONDUCTED.

EXCAVATION
MOSTLY
BEDROCK

RISK ASSESSED

FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1030							

SCALE

0 FT

PIT PERIMETER

PIT PROFILE

OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 2'	0.0
2 @ 2'	0.0
3 @ 2'	0.0
4 @ 2'	44.3
5 @ 4'	138.0

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME

TRAVEL NOTES:	CALLOUT: _____	ONSITE: _____
---------------	----------------	---------------

Well Name:	Jicarilla Contract 155 #20E
Well Site location:	Unit C, Sec. 29, T26N, R5W
Pit Type:	Separator Pit
Producing Formation:	Chacra/Basin Dakota
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 encountered shale bedrock at 4 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 shale bedrock located 4 feet below grade. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below shale 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. Well site located within the **non-vulnerable area** and is approximately 0.33 miles northwest of the nearest vulnerable area boundary (Tapacito Creek).

(Refer to Gonzales Mesa 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 shale bottom creates enough of an impermeable barrier as 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.

**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 155-20E</u>			
Location: Unit or Qtr/Qtr Sec <u>C</u> Sec <u>29</u> T <u>26N</u> R <u>5W</u> County <u>RIO ARriba</u>			
Land Type: <u>RANGE</u>			
Date Remediation Started: <u>11-30-98</u>		Date Completed: <u>6/8/99</u>	
Remediation Method: Landfarmed <input checked="" type="checkbox"/>		Approx. cubic yards <u>350</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>6-7-99</u> Time: <u>0920</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>103.2</u>	
Distance To Surface Water: (pts.) <u>0</u>		TPH (ppm) <u>1,930</u> Method <u>80151</u>	
RANKING SCORE (TOTAL POINTS): <u>0</u>		Other <u>BEFORE</u> <u>0.219</u> ppm	
		<u>TOT. BTEX</u> <u>5.620</u> ppm	
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF			
DATE <u>6/8/99</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>BSJ694</u> C.O.C. NO: <u>7063</u>
----------------------	--	--

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: <u>JICARILLA CONTRACT ISS</u> WELL #: <u>20E</u> PITS: <u>SEP. BLOW</u>	DATE STARTED: <u>6-7-99</u> DATE FINISHED: _____
QUAD/UNIT: <u>C</u> SEC: <u>29</u> TWP: <u>26N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u>	ENVIRONMENTAL SPECIALIST: <u>REP</u>
QTR/FOOTAGE: <u>NE/4 NW/4</u> CONTRACTOR: <u>P+S</u>	

SOIL REMEDIATION:

REMEDICATION SYSTEM: LANDFARM

APPROX. CUBIC YARDAGE: 350

LAND USE: RANGE

LIFT DEPTH (ft): 1'

FIELD NOTES & REMARKS:

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

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

DK - MODERATE YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, TWO LARGE AREAS OF STAINING OBSERVED IN LANDFARM AREA (SEE SKETCH BELOW) HC ODOR DETECTED IN SAMPLING PTS. ③ & ⑤. SAMPLING DEPTHS RANGE FROM 6"-10". COLLECTED A EPT. COMPOSITE SAMPLE FOR LAB ANALYSIS.

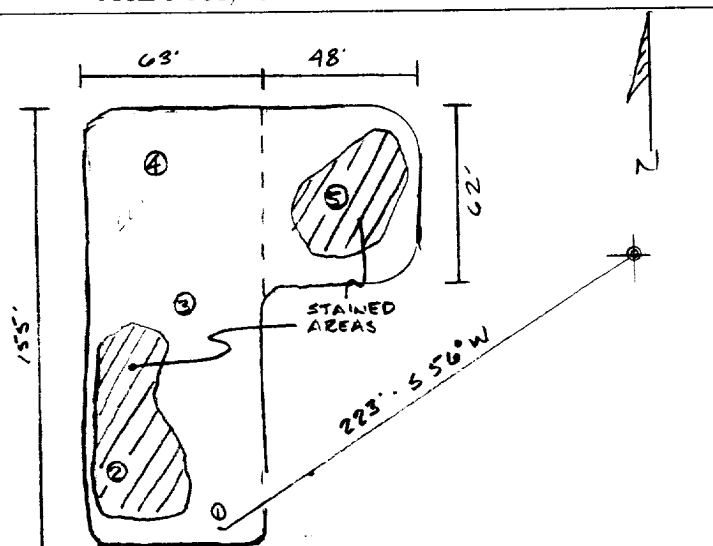
CLOSED

NOTE: SOIL WAS MOVED AND LANDFARMED ON THE ISS-36. DIST. + BEARING TAKEN FROM THE ISS 20E WELL HEAD.

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	103.2	LF-1	TPH (8015)	0920	1,930
		"	BENZENE	"	219 ppb
		"	TOT. BTEX	"	5,420 ppb

SCALE

0 FT

TRAVEL NOTES:	CALLOUT: <u>NA</u>	ONSITE: <u>6-7-99</u>
---------------	--------------------	-----------------------

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

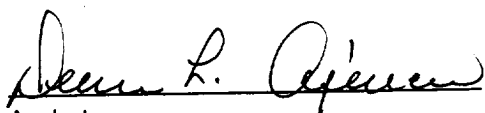
Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	LF - 1	Date Reported:	06-08-99
Laboratory Number:	F461	Date Sampled:	06-07-99
Chain of Custody No:	7063	Date Received:	06-08-99
Sample Matrix:	Soil	Date Extracted:	06-08-99
Preservative:	Cool	Date Analyzed:	06-08-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	258	0.2
Diesel Range (C10 - C28)	1,670	0.1
Total Petroleum Hydrocarbons	1,930	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 - 20E 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:	06-08-99
Laboratory Number:	F461	Date Sampled:	06-07-99
Chain of Custody:	7063	Date Received:	06-08-99
Sample Matrix:	Soil	Date Analyzed:	06-08-99
Preservative:	Cool	Date Extracted:	06-08-99
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	219	8.8
Toluene	277	8.4
Ethylbenzene	521	7.6
p,m-Xylene	2,530	10.8
o-Xylene	2,070	5.2
Total BTEX	5,620	

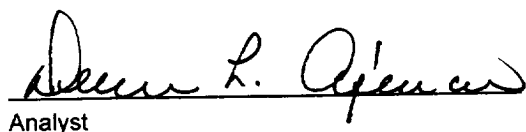
ND - Parameter not detected at the stated detection limit.

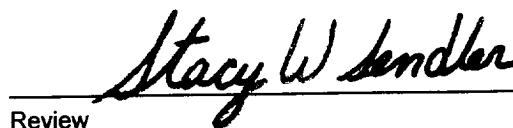
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	99 %
	Bromofluorobenzene	99 %

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 Contract 155 - 20E Landfarm. 5 Pt. Composite.


Analyst


Review

7063

[illegible]