

Denny S. Faust
DEPUTY OIL & GAS INSPECTOR

AUG 24 1999

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

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

PIT REMEDIATION AND CLOSURE REPORT

Operator: CONOCO, INC. Telephone: (505) 324-5884
Address: 3315 Bloomfield Hwy., Farmington, NM 87401
Facility or Well Name: JICARILLA #5
Location: Unit or Qtr/Qtr Sec D Sec 29 T26N R4W County RIO ARRIBA
Pit Type: Separator Dehydrator Other PRODUCTION TANK
Land Type: RANGE

Pit Location: Pit dimensions: length 46', width 54', depth 9'
(Attach diagram) Reference: wellhead X, other _____
Footage from reference: 210'
Direction from reference: 8 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):			<u>0</u>

Date Remediation Started: _____ Date Completed: 6/24/98

Remediation Method: Excavation Approx. cubic yards 750

Check all appropriate methods) Landfarmed Insitu Bioremediation _____

Other _____

Remediation Location: Onsite _____ Offsite JICARILLA #1

(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 5' (EAST SIDEWALK)

Sample date 6/24/98 Sample time 0820

Sample Results

Soil: Benzene	(ppm) _____	Water: Benzene	(ppb) _____
Total BTEX	(ppm) _____	Toluene	(ppb) _____
Field Headspace	(ppm) <u>1,324</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 6/24/98 PRINTED NAME Jeffrey C. Blagg, P.E. #11607

SIGNATURE Jeffrey C. Blagg AND TITLE President

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) R.A. Attached

SIGNED: Kent M... DATE: 9-9-98

Well Name:	Jicarilla # 5
Well Site location:	Unit D, Sec. 29, T26N, R4W
Pit Type:	Production Tank pit
Producing Formation:	Gallup/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 sandstone bedrock at 9 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 9 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. Well site located within the **non-vulnerable area** and is greater than 0.6 miles south of the nearest vulnerable area boundary (Tapacito Creek).

(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 lateral impact from the earthen pit is very limited and that the sandstone 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). CONOCO requests pit closure approval on this location.

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

LOCATION NO: CA565
 C.D.C. NO: _____

FIELD REPORT: CLOSURE VERIFICATION PAGE No: 1 of 1

LOCATION: NAME: JICARILLA WELL # 5 PIT: PROD.
 QUAD/UNIT: 0 SEC: 29 TWP: 26N RNG: 4W PM: NM CNTY: RA ST: NM
 DATE STARTED: 6/24/98
 DATE FINISHED: _____
 DTF/FOOTAGE: mw/4 mw/4 CONTRACTOR: TVC
 ENVIRONMENTAL SPECIALIST: NV

EXCAVATION APPROX. 46 FT. x 54 FT. x 9 FT. DEEP. CUBIC YARDAGE: 750
 DISPOSAL FACILITY: JICARILLA #1 REMEDIATION METHOD: LANDFARM
 LAND USE: RANGE LEASE: CONTRACT #12 FORMATION: GP/DK

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 210 FT. N8W FROM WELLHEAD.

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

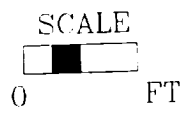
- CHECK ONE:
- PIT ABANDONED
 - STEEL TANK INSTALLED
 - FIBERGLASS TANK INSTALLED

SOIL AND EXCAVATION DESCRIPTION:

SIDEWALLS - BOTTOM HALF CONSIST OF BEDROCK DR. YELL. BROWN OLIVE GRAY TO DR. GRAY, FRIABLE NEAR GROUND SURFACE TO VERY HARD, STAINING & HC ODOR EVIDENT, ALL OVM SAMPLES COLLECTED FROM BEDROCK, THEREFORE NO TPH ANALYSIS WAS CONDUCTED.

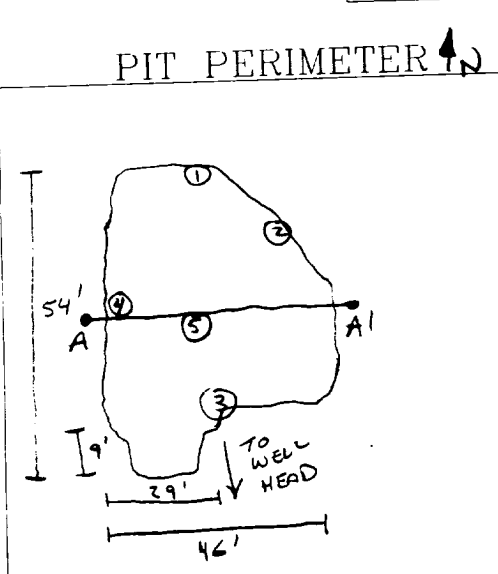
BOTTOM - BEDROCK (SANDSTONE), MED TO DR. GRAY, VERY HARD, STRONG HC ODOR IN OVM SAMPLE.

EXCAVATION MOSTLY BEDROCK RISK ASSESSED



FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
0820							

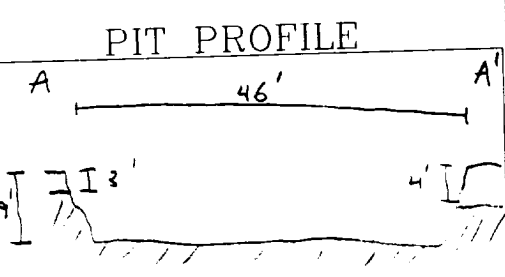


OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 5'	1,197
2 @ 5'	1,324
3 @ 5'	1,062
4 @ 5'	1,037
5 @ 9'	741

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME



TRAVEL NOTES: CALLOUT: 6/23/98 - MORN. ONSITE: 6/24/98 - MORN.

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

CAS65

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

PIT REMEDIATION AND CLOSURE REPORT

Operator: CONOCO, INC. **Telephone:** (505) 324-5884

Address: 3315 Bloomfield Hwy., Farmington, NM 87401

Facility or Well Name: JICARILLA # 5

Location: Unit or Qtr/Qtr Sec D Sec 29 T 26N R 4W County RIO ARIZONA

Pit Type: Separator Dehydrator Other

Land Type: RANGE

Pit Location: Pit dimensions: length 67', width 70', depth 15'
(Attach diagram)

Reference: wellhead , other

Footage from reference: 108'

Direction from reference: 3 Degrees East 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):			<u>0</u>

Date Remediation Started: _____ Date Completed: 6/18/98

Remediation Method: Excavation Landfarmed Other _____
Approx. cubic yards 2,000
Insitu Bioremediation _____

Remediation Location: Onsite Offsite JICARILLA #1 (CONOCO)
(i.e. landfarmed onsite, name and location of offsite facility) D-30-26-4

General Description of Remedial Action: Excavation. BEDROCK BOTTOM, RISK ASSESSED.

Groundwater Encountered: No Yes _____ Depth _____

Final Pit: Sample location see Attached Documents. BTEX & TPH RESULTS
Closure Sampling: FROM SIDEWALL COMPOSITE SAMPLE.
(if multiple samples, attach sample results and diagram of sample locations and depths)
Sample depth 15' (BEDROCK)
Sample date 6/16/98 Sample time 1115

Sample Results

Soil: Benzene	(ppm)	<u>0.0586</u>	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	<u>4.650</u>	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>2,602</u>	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>39.2</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 6/18/98 PRINTED NAME Jeffrey C. Blagg, P.E. #11607
SIGNATURE Jeffrey C. Blagg AND TITLE President

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) R.A. Attached

SIGNED: Kevin M... DATE: 9-9-98

CLIENT: CONOCO BLAGG ENGINEERING, INC. LOCATION NO: CAS65
 P.O. BOX 87, BLOOMFIELD, NM 87413 C.O.C. NO: 6031
 (505) 632-1199

FIELD REPORT: CLOSURE VERIFICATION PAGE No: 1 of 1

LOCATION: NAME: JICARILLA WELL #: 5 PIT: SEP DATE STARTED: 6/11/98
 QUAD/UNIT: D SEC: 29 TWP: 26N RNG: 4W PM: NM CNTY: RA ST: NM DATE FINISHED: _____
 GTP/FOOTAGE: 890 FNL 880 FUL CONTRACTOR: JVC ENVIRONMENTAL SPECIALIST: NV

EXCAVATION APPROX. 67 FT. x 70 FT. x 15 FT. DEEP. CUBIC YARDAGE: 2,000
 DISPOSAL FACILITY: ON-SITE / JICARILLA #1 REMEDIATION METHOD: LANDFARM
 LAND USE: RANGE LEASE: CONTRACT #12 FORMATION: _____

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 108 FT. N3W FROM WELLHEAD.
 DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'
 NMOC D BANKING SCOPE: 0 NMOC D TPH CLOSURE STD: 5000 PPM
 SOIL AND EXCAVATION DESCRIPTION:

- CHECK ONE:
- PIT ABANDONED
 - STEEL TANK INSTALLED
 - FIBERGLASS TANK INSTALLED

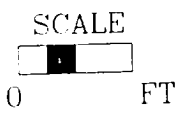
SIDEWALLS - VARYING FROM OR. YELL. ORANGE SAND (NORTH SIDEWALL) TO MED. GRAY CLAY, NON COHESIVE TO LIGHTLY PLASTIC, SLIGHTLY MOIST, FIRM TO STIFF, STRONG HC ODOR IN WEST SIDEWALL OUM SAMPLE ONLY, STAINING APPARENT IN WEST SIDEWALL (MAINLY W NORTHWEST CORNER) & NORTH SIDEWALL (NORTH EAST CORNER - BLACK DISCOLORATION), STRONG HC ODOR DETECTED IN WEST SIDEWALL AREA ONLY. COLLECTED 4 PT. COMPOSITE FROM SIDEWALLS FOR LAB ANALYSIS.
 BOTTOM - BEDROCK, OLIVE GRAY IN COLOR, VERY HARD, STAINING EVIDENT, STRONG HC ODOR IN OUM SAMPLES.

BEDROCK BOTTOM

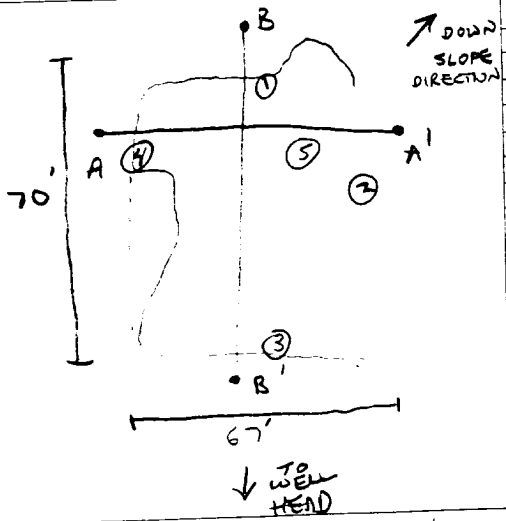
RISK ASSESSED

FIELD 418.1 CALCULATIONS

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



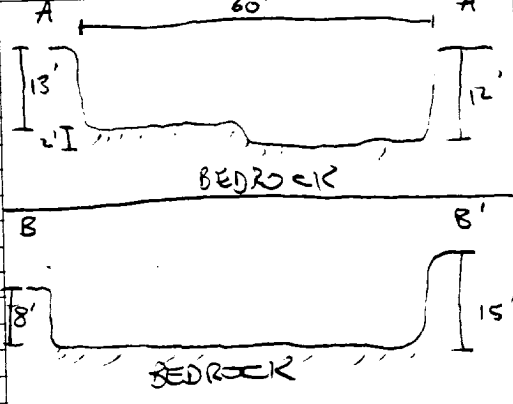
PIT PERIMETER



OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 8'	0.0
2 @ 8'	25.9
3 @ 7'	0.0
4 @ 6'	467
5 @ 15'	2,602
SW-C	59.5

PIT PROFILE



LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
SW-C	TPH BTX (805)(802)	1115

TRAVEL NOTES: CALLOUT: 6/10/98 - morn. ONSITE: 6/11/98 - morn.

Well Name:

Well Site location:

Pit Type:

Producing Formation:

Pit Category:

Horizontal Distance to Surface Water:

Vicinity Groundwater Depth:

Jicarilla # 5
Unit D, Sec. 29, T26N, R4W
Separator pit
Gallup/Basin Dakota
Non Vulnerable
> 1000 ft.
> 100 ft.

RISK ASSESSMENT (Non Vulnerable Area)

Pit remediation activities were terminated when trackhoe encountered shale bedrock at 15 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 15 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 greater than 0.6 miles south of the nearest vulnerable area boundary (Tapacito Creek).

(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 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). CONOCO 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

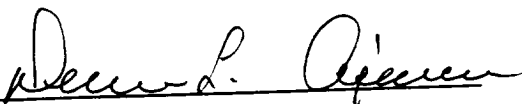
Client:	Blagg / Conoco	Project #:	04034-10
Sample ID:	SW - C	Date Reported:	06-17-98
Laboratory Number:	D429	Date Sampled:	06-16-98
Chain of Custody No:	6031	Date Received:	06-16-98
Sample Matrix:	Soil	Date Extracted:	06-17-98
Preservative:	Cool	Date Analyzed:	06-17-98
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

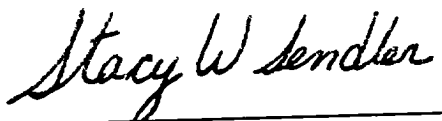
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	17.1	0.2
Diesel Range (C10 - C28)	22.1	0.1
Total Petroleum Hydrocarbons	39.2	0.2

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 #5 Separator Pit. 4 Pt. composite of Sidewalls.**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / Conoco	Project #:	04034-10
Sample ID:	SW - C	Date Reported:	06-17-98
Laboratory Number:	D429	Date Sampled:	06-16-98
Chain of Custody:	6031	Date Received:	06-16-98
Sample Matrix:	Soil	Date Analyzed:	06-17-98
Preservative:	Cool	Date Extracted:	06-17-98
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	58.6	8.8
Toluene	58.9	8.4
Ethylbenzene	307	7.6
p,m-Xylene	3,360	10.8
o-Xylene	862	5.2
Total BTEX	4,650	

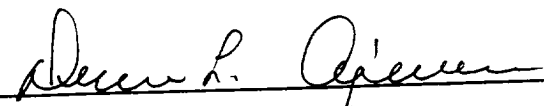
ND - Parameter not detected at the stated detection limit.

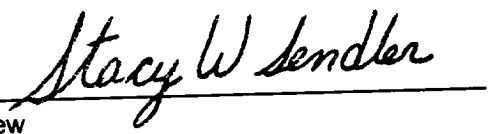
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	97 %
	Bromofluorobenzene	97 %

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 #5 Separator Pit. 4 Pt. Composite of Sidewalls.


Analyst


Review

CHAIN OF CUSTODY RECORD

6031

Client / Project Name <i>BRAC / Conoco</i>			Project Location <i>SEPARATOR PIT</i>			ANALYSIS / PARAMETERS		
Sampler: <i>NTV</i>			Client No. <i>04034-10</i>			Remarks <i>RESERV - COOL</i>		
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH (8015)	BTEX (8021)	
<i>SW-C</i>	<i>6/16/98</i>	<i>1115</i>	<i>0429</i>	<i>5012</i>	<i>1</i>	<i>✓</i>	<i>✓</i>	<i>4 PT. COMPOSITE OF SIDEWAYS</i>
Relinquished by: (Signature) <i>[Signature]</i>			Date <i>6/16/98</i>	Time <i>1439</i>	Received by: (Signature) <i>[Signature]</i>	Date <i>6.16.98</i>	Time <i>1439</i>	
Relinquished by: (Signature)			Received by: (Signature)					
<p style="text-align: center;">ENVIROTECH INC.</p> <p style="text-align: center;">5796 U.S. Highway 64 Farmingington, New Mexico 87401 (505) 692-0615</p>								
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: Conoco, Inc. **Telephone:** (505) 324-5884
Address: 3315 Bloomfield Hwy., Farmington, NM 87401
Facility or Well Name: JICARILLA #5
Location: Unit or Qtr/Qtr Sec D Sec 29 T 26N R 4W County RIO ARRIBA
Land Type: RANGE

Date Remediation Started: 6/16/98 **Date Completed:** 5/19/99
Remediation Method: Landfarmed **Approx. cubic yards** 225
 Composted
 Other _____

Depth To Groundwater: (pts.) <u>0</u>	Final Closure Sampling: Sampling Date: <u>5/17/99</u> Time: <u>1100</u> Sample Results: Field Headspace (ppm) <u>0.0</u> TPH (ppm) <u>14.1</u> Method <u>8015</u> Other _____
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 5/19/99 **PRINTED NAME** Jeffrey C. Blagg, P.E. #11607
SIGNATURE Jeffrey C. Blagg **AND TITLE** President

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: Ken C. M... [Signature] **DATE:** 6-3-99

CLIENT <u>CONOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>CA565</u> C.D.C. NO: <u>6678</u>
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FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION NAME <u>TICARILLA</u>	WELL #: <u>5</u>	PITS: <u>PROD., SEP.</u>	DATE STARTED: <u>5/17/99</u>
QUAD/UNIT: <u>D</u>	SEC: <u>29</u>	TWP: <u>26N</u>	RNG: <u>4W</u>
PM: <u>NM</u>	CNTY: <u>RA</u>	ST: <u>NM</u>	DATE FINISHED: _____
STR. FOOTAGE <u>NW1/4 NW1/4</u>	CONTRACTOR: <u>JUC</u>	ENVIRONMENTAL SPECIALIST: <u>NV</u>	

SOIL REMEDIATION:

REMEDIATION SYSTEM: <u>LANDFARM</u>	APPROX. CUBIC YARDAGE: <u>225</u>
LAND USE: <u>RANGE</u>	LIFT DEPTH (ft): <u>1.5</u>

FIELD NOTES & REMARKS:

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

WELL PANKING SCORE: 0 NMDCD TPH CLOSURE STD 5000 PPM 6/16/98

OLIVE TO MED. GRAY SILTY CLAY TO CLAY W/ SHALE FRAGMENTS, PLASTIC, SLIGHTLY MOIST TO MOIST, FIRM TO SLIGHTLY STIFF, SAMPLING DEPTHS RANGE FROM 6-15 INCHES, NO APPARENT DISCOLORATION OR STAINING OBSERVED, NO APPARENT HC ODOR DETECTED IN OVM SAMPLE, COLLECTED 5 PT. COMPOSITE FOR LAB ANALYSIS.

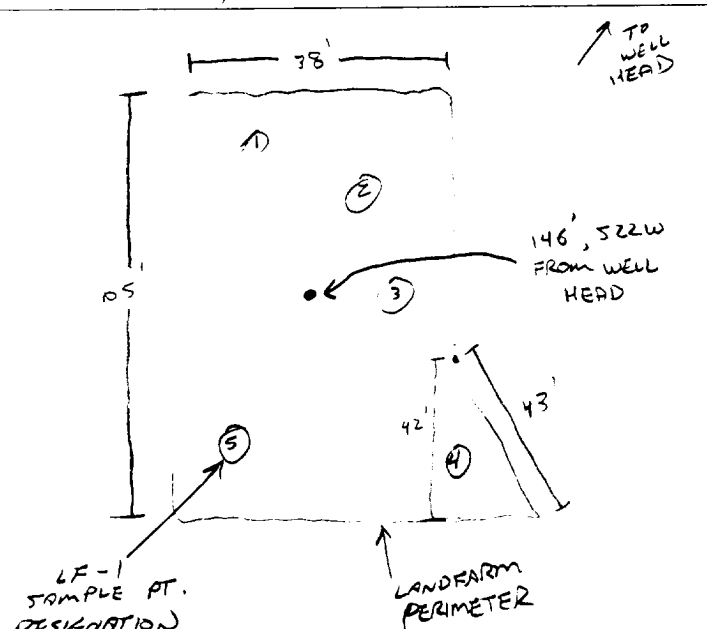
CLOSED

APPROX. 2225 C.Y. DEPOSITED TO TICA. #1

FIELD 418: CALCULATIONS

SAMP. TIME	SAMPLE ID	LAB No:	WEIGHT (g)	ML. FREON	DILUTION	READING	CALC. ppm

SKETCH/SAMPLE LOCATIONS

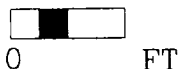


OVM RESULTS

LAB SAMPLES

SAMPLE ID	FIELD HEADSPACE PID (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	0.0	LF-1	TPH (8015)	1100	14.1

SCALE



TRAVEL NOTES: CALLOUT: NA ONSITE: 5/17/99

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

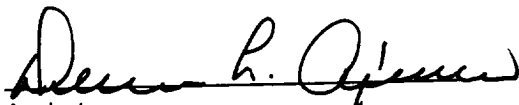
Client:	Blagg / CONOCO	Project #:	403410
Sample ID:	LF - 1	Date Reported:	05-19-99
Laboratory Number:	F272	Date Sampled:	05-17-99
Chain of Custody No:	6678	Date Received:	05-18-99
Sample Matrix:	Soil	Date Extracted:	05-18-99
Preservative:	Cool	Date Analyzed:	05-19-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

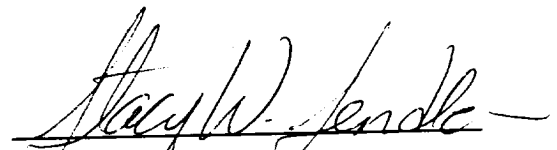
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	14.1	0.1
Total Petroleum Hydrocarbons	14.1	0.2

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 #5 Landfarm. 5 Pt. Composite.


Analyst


Review

CHAIN OF CUSTODY RECORD

6678

Client / Project Name		Project Location			ANALYSIS / PARAMETERS																		
<i>BASE / CONOCO</i>		<i>TICRILLA #5</i>			<i>LANDFARM</i>																		
Sampler: <i>NTV</i>		Client No. <i>403410</i>			<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">No. of Containers</th> <th style="width: 15%;">Remarks</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"><i>1 (805)</i></td> <td><i>5 PT. COMPOSITE</i></td> </tr> </tbody> </table>					No. of Containers	Remarks	<i>1 (805)</i>	<i>5 PT. COMPOSITE</i>										
No. of Containers	Remarks																						
<i>1 (805)</i>	<i>5 PT. COMPOSITE</i>																						
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix																			
<i>LF-1</i>	<i>5/17/99</i>	<i>1100</i>	<i>F272</i>	<i>SOIL</i>																			
Relinquished by: (Signature)		Date			Time		Received by: (Signature)			Date	Time												
<i>[Signature]</i>		<i>5/18/99</i>			<i>0705</i>		<i>[Signature]</i>			<i>5/18/99</i>	<i>705</i>												
Relinquished by: (Signature)		Received by: (Signature)																					
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Relinquished by: (Signature)		Received by: (Signature)																					
<i>[Signature]</i>		<i>[Signature]</i>																					
ENVIROTECH INC. 5796 U.S. Highway 64 Farmington, New Mexico 87401 (505) 632-0615																							
Sample Receipt								<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Received Intact</th> <th style="width: 12.5%;">Y</th> <th style="width: 12.5%;">N</th> <th style="width: 12.5%;">N/A</th> </tr> </thead> <tbody> <tr> <td> </td> <td style="text-align: center;">✓</td> <td> </td> <td> </td> </tr> <tr> <td>Cool - Ice/Blue Ice</td> <td style="text-align: center;">✓</td> <td> </td> <td> </td> </tr> </tbody> </table>				Received Intact	Y	N	N/A		✓			Cool - Ice/Blue Ice	✓		
Received Intact	Y	N	N/A																				
	✓																						
Cool - Ice/Blue Ice	✓																						

CA 387

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: Conoco, Inc. Telephone: (505) 324-5884
 Address: 3315 Bloomfield Hwy., Farmington, NM 87401
 Facility or Well Name: JICARILLA #1
 Location: Unit or Qtr/Qtr Sec D Sec 30 T 26N R 4W County RIO ARRIBA
 Land Type: RANGE

Date Remediation Started: 6/16/98 Date Completed: 5/19/99
 Remediation Method: Landfarmed ✓ Approx. cubic yards 2525
 Composted _____
 Other SOIL DEPOSED FROM JICARILLA #5 2750

Depth To Groundwater: (pts.) <u>10</u>	Final Closure Sampling: Sampling Date: <u>5/17/99</u> Time: <u>1200/1300</u> Sample Results: <u>LF-2 & LF-3</u> Field Headspace (ppm) <u>0.0</u> <u>LF-2</u> TPH (ppm) <u>30.5</u> Method <u>8015</u> Other _____
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>10</u>	

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

DATE 5/19/99 PRINTED NAME Jeffrey C. Blagg, P.E. #11607
 SIGNATURE Jeffrey C. Blagg AND TITLE President

AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES X NO _____ (REASON) _____

SIGNED: Ker C. M... [Signature] DATE: 6-3-99

CLIENT <u>CONOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>CA387</u> C.O.C. NO: <u>6679</u>
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FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION NAME: <u>JICARILLA</u>	WELL #: <u>1</u>	PITS: <u>NA</u>	DATE STARTED: <u>5/17/99</u>
QUAD/UNIT: <u>D</u>	SEC: <u>30</u>	TWP: <u>26N</u>	RNG: <u>4W</u>
PM: <u>NM</u>	CNTY: <u>RA</u>	ST: <u>NM</u>	DATE FINISHED: _____
STR/POSTAGE: <u>NW/4 NW/4</u>	CONTRACTOR: <u>JVC</u>	ENVIRONMENTAL SPECIALIST: <u>NV</u>	

SOIL REMEDIATION:

REMEDIATION SYSTEM: LANDFARM APPROX. CUBIC YARDAGE: 2525

LAND USE: RANGE LIFT DEPTH (ft): 1.5

FIELD NOTES & REMARKS:

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

NMDCS RANKING SCORE: 10 NMDCS TPH CLOSURE STD: 1000 PPM 1/16/98

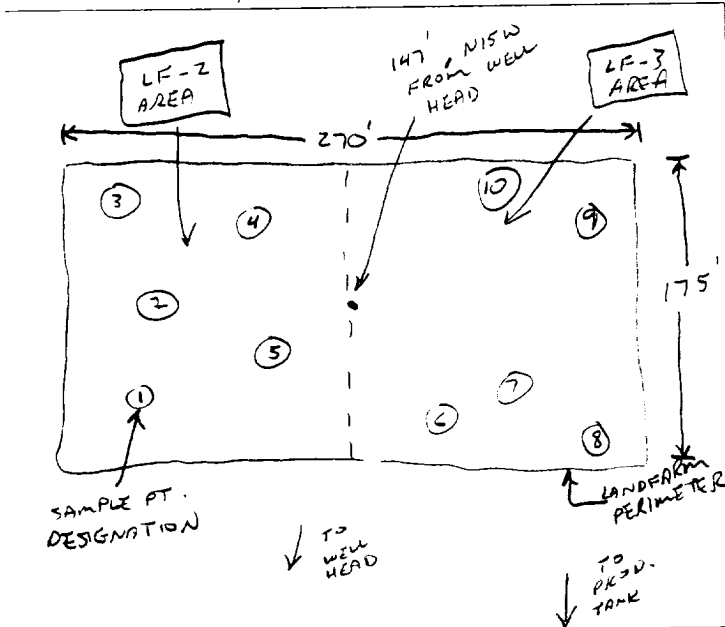
SOIL DEPOSED FROM JICARILLA #5, ORIGINAL ON-SITE LANDFARM CLOSED 8/22/97. OLIVE GRAY TO MED. GRAY SILTY CLAY w/ SHALE FRAGMENTS, SLIGHTLY PLASTIC, SLIGHTLY MOIST, FIRM, SAMPLING DEPTHS RANGE FROM 6-12 INCHES, NO APPARENT DISCOLORATION OR STAINING OBSERVED, NO APPARENT HC OR DRX DETECTED IN OVM SAMPLES, COLLECTED 5 PT. COMPOSITE SAMPLES FOR LAB ANALYSIS.

CLOSED

FIELD 418.1 CALCULATIONS

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

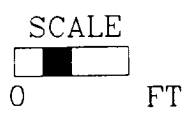
SKETCH/SAMPLE LOCATIONS



OVM RESULTS

LAB SAMPLES

SAMPLE ID	FIELD HEADSPACE PID (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-2	0.0	LF-7	TPH (2015)	1200	30.5
LF-3	0.0	LF-3	TPH (2015)	1300	1.8



TRAVEL NOTES: CALLOUT: _____ ONSITE: 5/17/99

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

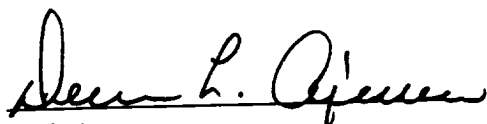
Client:	Blagg / CONOCO	Project #:	403410
Sample ID:	LF - 2	Date Reported:	05-19-99
Laboratory Number:	F273	Date Sampled:	05-17-99
Chain of Custody No:	6679	Date Received:	05-18-99
Sample Matrix:	Soil	Date Extracted:	05-18-99
Preservative:	Cool	Date Analyzed:	05-19-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

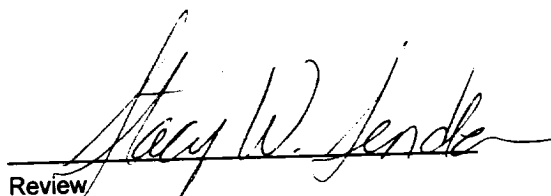
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	5.1	0.2
Diesel Range (C10 - C28)	25.4	0.1
Total Petroleum Hydrocarbons	30.5	0.2

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 #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

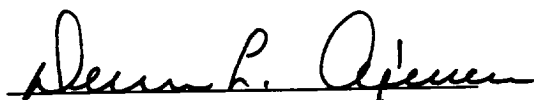
Client:	Blagg / CONOCO	Project #:	403410
Sample ID:	LF - 3	Date Reported:	05-19-99
Laboratory Number:	F274	Date Sampled:	05-17-99
Chain of Custody No:	6679	Date Received:	05-18-99
Sample Matrix:	Soil	Date Extracted:	05-18-99
Preservative:	Cool	Date Analyzed:	05-19-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

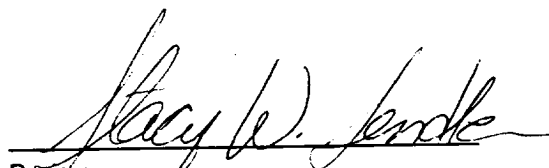
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1.8	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	1.8	0.2

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 #1 Landfarm. 5 Pt. Composite.


Analyst


Review

CHAIN OF CUSTODY RECORD

6679

Client / Project Name		Project Location		ANALYSIS / PARAMETERS											
BAGE / CONDOS		TICARUA #1		LANDFARM											
Sampler: NTV		Client No. 403410		No. of Containers		Remarks									
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	TPH (90'S)										
LF-2	5/17/99	1200	F273	SOIL	1 ✓	5 PT. COMPOSITE									
LF-3	5/17/99	1300	F274	SOIL	1 ✓	5 PT. COMPOSITE									
Relinquished by: (Signature)		Date	Time	Received by: (Signature)	Date	Time									
<i>[Signature]</i>		5/18/99	0705	<i>[Signature]</i>	5/18/99	205									
Relinquished by: (Signature)		Received by: (Signature)													
<i>[Signature]</i>		<i>[Signature]</i>													
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: left;"> <p>ENVIROTECH INC.</p> <p>5796 U.S. Highway 64 Farmington, New Mexico 87401 (505) 632-0615</p> </div> <div style="text-align: right;"> <p>Sample Receipt</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Received Intact</td> <td>Y</td> <td>N</td> <td>N/A</td> </tr> <tr> <td>Cool - Ice/Blue Ice</td> <td>✓</td> <td></td> <td></td> </tr> </table> </div> </div>								Received Intact	Y	N	N/A	Cool - Ice/Blue Ice	✓		
Received Intact	Y	N	N/A												
Cool - Ice/Blue Ice	✓														