

CA390

Denny E. Faust
DEPUTY OIL & GAS INSPECTOR

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

MAY 04 1998

PIT REMEDIATION AND CLOSURE REPORT

Approved

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

Address: 3315 Bloomfield Hwy., Farmington, NM 87401

Facility or Well Name: JICARILLA #3

Location: Unit or Qtr/Qtr Sec D Sec 31 T26N R4W County RIO ARriba

Pit Type: Separator _____ Dehydrator _____ Other PRODUCTION TANK

Land Type: RANGE

Pit Location: Pit dimensions: length 16', width 13', depth 12'
(Attach diagram)

Reference: wellhead X, other _____

Footage from reference: 108'

Direction from reference: 37 Degrees X East of North _____
_____ West of South X

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: 8/1/96

Remediation Method: Excavation ☒ Approx. cubic yards 80
 (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 & Haul.Groundwater Encountered: No ☒ Yes _____ Depth _____

Final Pit: Sample location see Attached Documents, MULTIPLE SAMPLES
 Closure Sampling: _____
 (if multiple samples, attach sample results and diagram of sample locations and depths) Sample depth 8'
 Sample date 7/31/96 Sample time 1100

Sample Results

Soil: Benzene	(ppm)	<u>0.483</u>	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	<u>134.4</u>	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>948</u>	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>3296</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 8/1/96 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) ConditionsSIGNED: Robert J. [Signature] DATE: 8/5/96

CLIENT: <u>CONOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>CA390</u> C.O.C. NO: <u>4882</u>
-----------------------	--	---

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

LOCATION: NAME: <u>JICARILLA</u> WELL #: <u>3</u> PIT: <u>PROD.</u>	DATE STARTED: <u>7/31/96</u> DATE FINISHED: _____
QUAD/UNIT: <u>D</u> SEC: <u>31</u> TWP: <u>26N</u> RNG: <u>4W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u>	ENVIRONMENTAL SPECIALIST: <u>NV</u>
QTR/FOOTAGE: <u>NW1/4 NW1/4</u> CONTRACTOR: <u>ACME / PLS</u>	

EXCAVATION APPROX. <u>16</u> FT. x <u>13</u> FT. x <u>12</u> FT. DEEP. CUBIC YARDAGE: <u>80</u>
DISPOSAL FACILITY: <u>ON-SITE</u> REMEDIATION METHOD: <u>LANDFARMED</u>
LAND USE: <u>RANGE</u> LEASE: <u>CONTRACT #120</u> FORMATION: <u>DK</u>

FIELD NOTES & REMARKS:	PIT LOCATED APPROXIMATELY <u>108</u> FT. <u>S37E</u> FROM WELLHEAD.
DEPTH TO GROUNDWATER: <u>7100'</u>	NEAREST WATER SOURCE: <u>71000'</u> NEAREST SURFACE WATER: <u>71000'</u>
NMOCB RANKING SCORE: <u>0</u>	NMOCB TPH CLOSURE STD: <u>5000</u> PPM
SOIL AND EXCAVATION DESCRIPTION:	

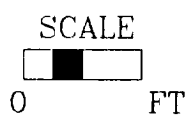
CHECK ONE:	
<input checked="" type="checkbox"/>	PIT ABANDONED
<input type="checkbox"/>	STEEL TANK INSTALLED

DIR. YELL. BROWN SAND TO SILTY CLAY COHESIVE SLIGHTLY MOIST FIRM TO STIFF NO APPARENT HC ODOR IN ANY OF THE OVM SAMPLES EXCEPT SOUTH SIDEWALL, UNDERGROUND PIPE & PROD. TANK HINDERING ANY ADDITIONAL EXCAVATION. SEE ATTACHED RISK ASSESSMENT.

CONDITIONAL

FIELD 418.1 CALCULATIONS

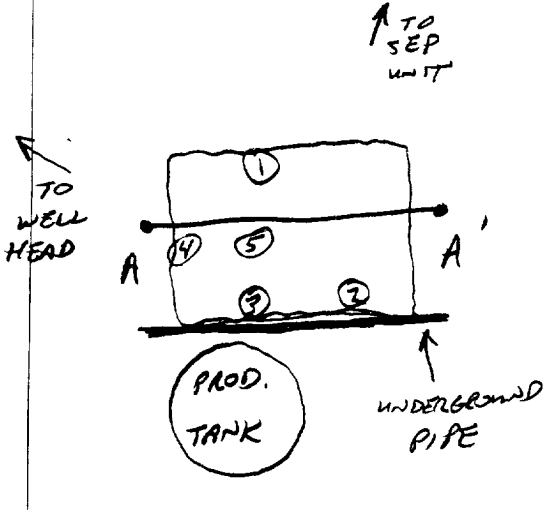
TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1100	③E8'	TPH-1755	5	20	1:1	824	3295
1105	⑤E13'	TPH-1756	5	20	1:1	11	44



PIT PERIMETER

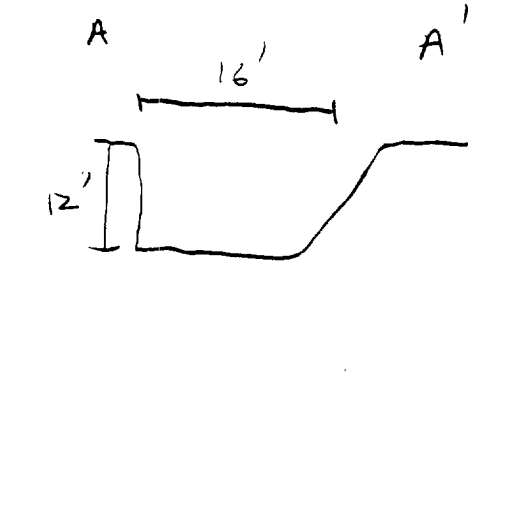
OVM RESULTS

PIT PROFILE



SAMPLE ID	FIELD HEADSPACE PID (ppm)
1E8'	0.0
2E9'	2.4
3E8'	948
4E9'	0.0
5E13'	0.0

SAMPLE ID	ANALYSIS	TIME
③E8'	BTEX	1100



TRAVEL NOTES:	CALLOUT: <u>7/30/96</u>	ONSITE: <u>7/31/96 MORN.</u>
---------------	-------------------------	------------------------------

Well Name:	Jicarilla # 3
Well Site location:	Unit D, Sec. 31, T26N, R4W
Pit Type:	Production Tank pit
Producing Formation:	Lindrieth Gallup 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 reached vertical extent at 13 feet below grade.

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

1. Pit bottom and all sidewalls except south perimeter revealed OVM levels below 100 ppm. Extent of contamination contained within the south sidewall appears to be limited in quantity.
2. 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 topographic and informal site survey of nearby bedrock outcrop information.
3. Topographic information does not indicate off site lateral fluid migration near the earthen pit.
4. 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.

Based upon the information given, we conclude that the subsurface lateral impact from the earthen pit is limited. In addition, the below standards for both OVM and TPH at the center source area vertical extent of the excavation also demonstrates the low probability of groundwater impact from the contamination remaining in place. CONOCO requests pit closure approval on this location.

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: CONOCO

Sample ID: 3 @ 8'

Project Location: Jicarilla #3

Laboratory Number: TPH-1755

Project #:

Date Analyzed: 07-31-96

Date Reported: 07-31-96

Sample Matrix: Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
-----	-----	-----
Total Recoverable Petroleum Hydrocarbons	3,300	20

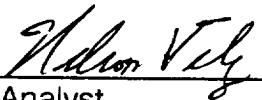
ND = Not Detectable at stated detection limits.

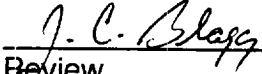
QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	-----	-----	-----
	4420	3640	19.35

*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: Production Tank Pit - CA390


Analyst


Review

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: CONOCO
Sample ID: 5 @ 13'
Project Location: Jicarilla #3
Laboratory Number: TPH-1756

Project #:
Date Analyzed: 07-31-96
Date Reported: 07-31-96
Sample Matrix: Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	44	20

ND = Not Detectable at stated detection limits.


QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	4420	3640	19.35

*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: Production Tank Pit - CA390


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Blagg / Conoco	Project #:	04034
Sample ID:	3 @ 8'	Date Reported:	08-01-96
Laboratory Number:	A440	Date Sampled:	07-31-96
Chain of Custody:	4882	Date Received:	08-01-96
Sample Matrix:	Soil	Date Analyzed:	08-01-96
Preservative:	Cool	Date Extracted:	08-01-96
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	483	17.5
Toluene	8,210	16.7
Ethylbenzene	25,640	15.2
p,m-Xylene	48,440	21.6
o-Xylene	51,660	10.4
Total BTEX	134,400	

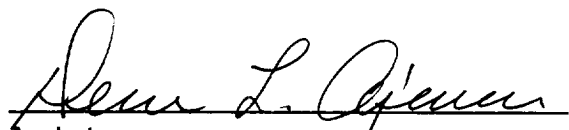
ND - Parameter not detected at the stated detection limit.

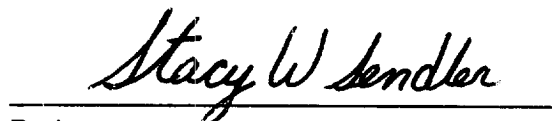
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	100 %
	Bromofluorobenzene	101 %

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 #3, Prod. Tank Pit.


Analyst


Review

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

CA390

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

ON-SITE SOIL REMEDIATION REPORT

Operator: <u>Conoco, Inc.</u>		Telephone: <u>(505) 324-5884</u>	
Address: <u>3315 Bloomfield Hwy., Farmington, NM 87401</u>			
Facility or Well Name: <u>JICARILLA #3</u>			
Location: Unit or Qtr/Qtr Sec <u>D</u> Sec <u>31</u> T26N R 4W County <u>RIO ARriba</u>			
Land Type: <u>RANGE</u>			
Date Remediation Started: <u>7/31/96</u>		Date Completed: <u>8/18/97</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>8/15/97</u> Time: <u>1230</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>25.3</u>	
Distance To Surface Water: (pts.) <u>0</u>		TPH (ppm) <u>6.8</u> Method <u>8015</u>	
RANKING SCORE (TOTAL POINTS): <u>0</u>		Other _____	
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF			
DATE <u>8/18/97</u>		PRINTED NAME <u>Jeffrey C. Blagg, P.E. #11607</u>	
SIGNATURE <u>Jeffrey C. Blagg</u>		AND TITLE <u>President</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>Kenneth M. M... [Signature]</u>		DATE: <u>9-2-97</u>	

CLIENT: <u>CONOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>CA390</u> C.D.C. NO: <u>5380</u>
-----------------------	---	---

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION NAME: <u>JICARILLA</u>	WELL #: <u>3</u>	PITS: <u>AND</u>	DATE STARTED: <u>8/15/97</u>
QUAD/UNIT: <u>D SEC: 31 TWP: 26N RNG: 4W</u>	PM: <u>NM</u>	CNTY: <u>RA</u>	ST: <u>NM</u>
DIR/FOOTAGE: <u>NW/4 NW/4</u>			CONTRACTOR: <u>ACME</u>
			ENVIRONMENTAL SPECIALIST: <u>NV</u>

SOIL REMEDIATION:

 REMEDIATION SYSTEM: LANDFARM

 APPROX. CUBIC YARDAGE: 350

 LAND USE: RANGE

 LIFT DEPTH (ft): 12"-24"

FIELD NOTES & REMARKS:

 DEPTH TO GROUNDWATER: 2100' NEAREST WATER SOURCE: 21000' NEAREST SURFACE WATER: 21000'

 NMOCID PARKING SCORE: 0 NMOCID TPH CLOSURE STD: 5000 PPM

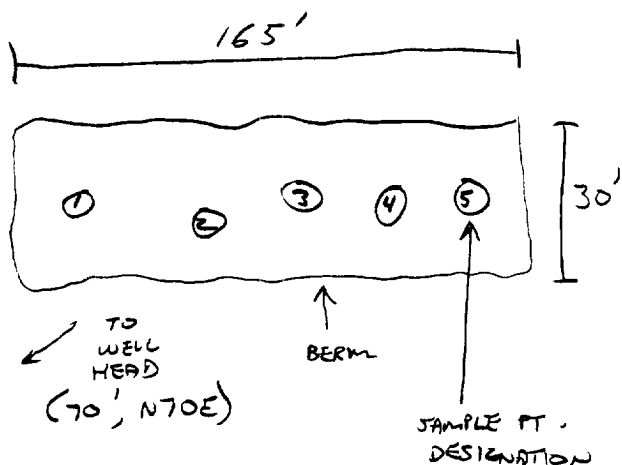
MOSTLY DK. YELL. BROWN SAND NON COHESIVE, SLIGHTLY MOIST, FIRM, SLIGHT HC ODOOR OBSERVED W/IN OVM SAMPLE, 5 PT. COMPOSITE COLLECTED FOR LAB ANALYSIS.

CLOSED

FIELD 418.1 CALCULATIONS

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

SKETCH/SAMPLE LOCATIONS ↗ N



OVM RESULTS

LAB SAMPLES

SAMPLE ID	FIELD HEADSPACE PID (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	25.3	LF-1	TPH (8015)	1230	6.8

SCALE



TRAVEL NOTES:

 CALLOUT: NA

 ONSITE: 8/15/97

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

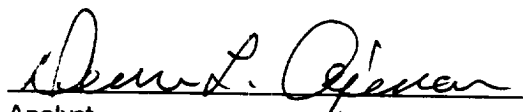
Client:	Blagg / Conoco	Project #:	04034-10
Sample ID:	LF - 1	Date Reported:	08-18-97
Laboratory Number:	B864	Date Sampled:	08-15-97
Chain of Custody No:	5380	Date Received:	08-15-97
Sample Matrix:	Soil	Date Extracted:	08-18-97
Preservative:	Cool	Date Analyzed:	08-18-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

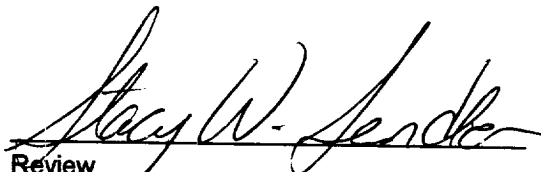
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	0.7	0.2
Diesel Range (C10 - C28)	6.1	0.1
Total Petroleum Hydrocarbons	6.8	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Comments: Jicarilla #3 Landfarm. 5 Pt. Composite.


Analyst


Review

CHAIN OF CUSTODY RECORD

Client/Project Name Boes/Conoco			Project Location LANDFARM			ANALYSIS/PARAMETERS					
Sampler: (Signature) John Vef			Chain of Custody Tape No. 04034-10								
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	Remarks					
LF-1	8/15/97	1230	8864	SOIL	1						
						Sample received call's introduction PRESEN - COOL 5 PT. COMPOSITE					
Relinquished by: (Signature) John Vef			Date 8/15/97	Time 1418	Received by: (Signature) Alvin D. Ojeda	Date 8-15-97					Time 1418
Relinquished by: (Signature)					Received by: (Signature)						
Relinquished by: (Signature)					Received by: (Signature)						

ENVIROTECH INC.

5796 U.S. Highway 64-3014

Farmington, New Mexico 87401

(505) 632-0615