

Denny G. Faust
DEPUTY OIL & GAS INSPECTOR

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

CA642 *CF-105*

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

AUG 24 1999

PIT REMEDIATION AND CLOSURE REPORT

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

Address: 3315 Bloomfield Hwy., Farmington, NM 87401

Facility or Well Name: JICARILLA E #11

Location: Unit or Qtr/Qtr Sec C Sec 22 T 26N R 4W County RIO ARriba

Pit Type: Separator Dehydrator Other COMPRESSOR

Land Type: RANGE

Pit Location: Pit dimensions: length 17', width 14', depth 6'
(Attach diagram) Reference: wellhead , other _____
Footage from reference: 18'
Direction from reference: 50 Degrees East of North
_____ 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: 9/21/98

Remediation Method: Excavation Approx. cubic yards 40
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. BEDROCK BOTTOM. ROK 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 3' (NORTH SIDEWALL) PIT BOTTOM @ 7' OURL = 761 ppm
Sample date 9/21/98 Sample time 1130

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>ND</u>	Total Xylenes (ppb) _____

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

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

DATE 9/21/98 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) RA. Attached

SIGNED: Ken C. Marshall DATE: 10-1-98

Well Name:	Jicarilla E #11
Well Site location:	Unit C, Sec. 22, T26N, R4W
Pit Type:	Compressor Pit
Producing Formation:	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 encountered sandstone 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 sandstone 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 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 approximately 0.01 miles southwest of the nearest vulnerable area boundary (Wild Horse Canyon wash).

(Refer to Schmitz Ranch 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.

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	Project #:	
Sample ID:	1 @ 3'	Date Analyzed:	09-21-98
Project Location:	Jicarilla E # 11	Date Reported:	09-21-98
Laboratory Number:	TPH-2040	Sample Matrix:	Soil

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

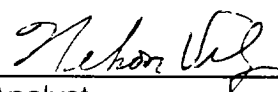
ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	236	220	7.02

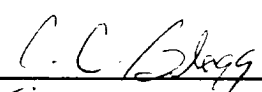
*Administrative Acceptance limits set at 30%.

Method: Modified Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

Comments: Compressor Pit - CA642



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:

Conoco

Project #:

Sample ID:

1 @ 3'

Date Analyzed:

09-21-98

Project Location:

Jicarilla E # 11

Date Reported:

09-21-98

Laboratory Number:

TPH-2040

Sample Matrix:

Soil

Sample Weight: 5.00 grams
Volume Freon: 20.00 mL
Dilution Factor: 1 (unitless)
TPH Reading: 3 mg/kg

TPH Result: 12.0 mg/kg
Reported TPH Result: 12 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: Compressor Pit - CA642

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

CAG42

SUBMIT 1 COPY TO
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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 E #11

Location: Unit or Qtr/Qtr Sec C Sec 22 T 26N R 4W County RIO ARRIBA

Land Type: RANGE

Date Remediation Started: 9/21/98 **Date Completed:** 5/19/99

Remediation Method: Landfarmed **Approx. cubic yards** 40

Composted

Other

Depth To Groundwater: (pts.) <u>0</u>	Final Closure Sampling: Sampling Date: <u>5/19/99</u> Time: <u>1000</u> Sample Results: Field Headspace (ppm) <u>0.0</u> TPH (ppm) <u>3.6</u> Method <u>8015</u> Other <u> </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 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: Keith M. [Signature] DATE: 6-3-99

CLIENT CONOCO

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

LOCATION NO CA642

C.B.C. NO 5677

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

WELL NAME JICARILLA E WELL #: 11 PITS: COMPR.

DATE STARTED 5/17/99

QUAD UNIT C SEC: 22 TWP: 26N RNG: 4W PM: NM CNTY: RA ST: NM

DATE FINISHED _____

WELL FOOTAGE NE/4 NW/4 CONTRACTOR: JUC

ENVIRONMENTAL SPECIALIST NV

WELL REMEDIATION:

REMEDICATION SYSTEM: LANDFARM

APPROX. CUBIC YARDAGE: 40

LAND USE: RANGE

LIFT DEPTH (ft): 2

WELL NOTES & REMARKS:

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

WELL ID NA NMOOD TPH CLOSURE STD 5000 PPM 1/21/98

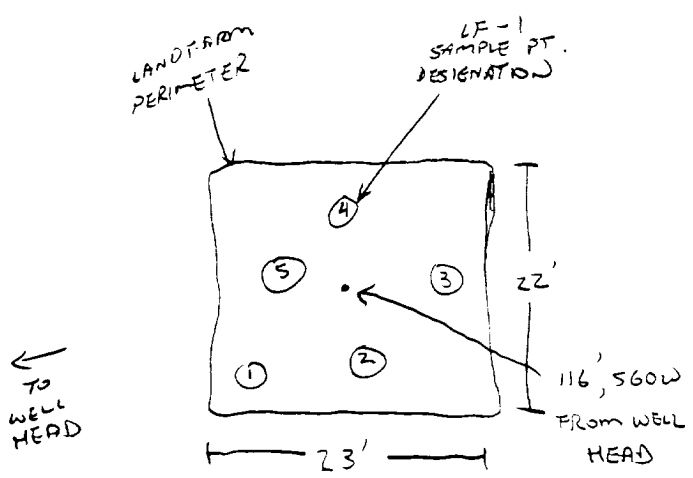
OK YELL. BROWN SAND, NON COHESIVE SLIGHTLY MOIST FIRM SAMPLING DEPTHS RANGE FROM 12-18" INCHES, NO APPARENT DISCOLORATION OR STAINING OBSERVED NO APPARENT HC ODDR DETECTED IN OVM SAMPLE, COLLECTED 5 FT. COMPOSITE FOR LAB ANALYSIS.

CLOSED

FIELD 418: CALCULATIONS

SAMPLE TIME	SAMPLE ID	LAB NO.	WEIGHT (g)	ML FREON	DILUTION	READING	CALC	PPM

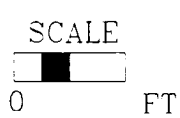
SKETCH/SAMPLE LOCATIONS 



OVM RESULTS

LAB SAMPLES

SAMPLE ID	FIELD HEADSPACE (in)	SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	0.0	LF-1	TPH (GIS)	1000	3.6



TRAVEL NOTES:

CALCULATIONS NA

ON SITE 5/17/99

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

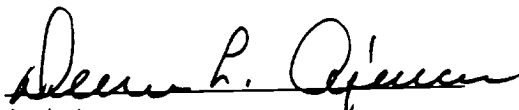
Client:	Blagg / CONOCO	Project #:	403410
Sample ID:	LF - 1	Date Reported:	05-19-99
Laboratory Number:	F271	Date Sampled:	05-17-99
Chain of Custody No:	6677	Date Received:	05-18-99
Sample Matrix:	Soil	Date Extracted:	05-18-99
Preservative:	Cool	Date Analyzed:	05-19-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

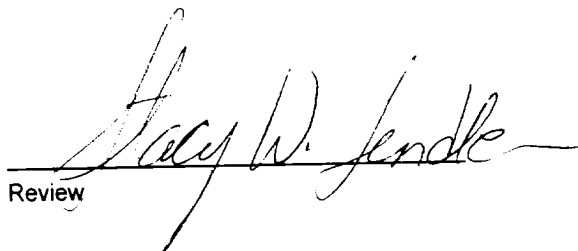
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	3.6	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	3.6	0.2

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 E #11 Landfarm. 5 Pt. Composite.


Analyst


Review

