

Denny E. Faust
DEPUTY OIL & GAS INSPECTOR

MAY 04 1998

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

CA 443
SUBMIT 1 COPY TO
NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION

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 K #13
Location: Unit or Qtr/Qtr Sec E Sec 11 T 25N R 5W County RIO ARABA
Pit Type: Separator X Dehydrator Other
Land Type: RANGE

Pit Location: Pit dimensions: length 40', width 35', depth 20'
(Attach diagram) Reference: wellhead X, other
Footage from reference: 135'
Direction from reference: 35 Degrees X East of North
 West 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: 9-12-96 Date Completed: 9/24/96
Remediation Method: Excavation ☒ Approx. cubic yards 900
(check all appropriate sections) Landfarmed ☒ Insitu Bioremediation _____
Other _____
Remediation Location: Onsite _____ Offsite ☒ JICARILLA LANDFARM #7
(i.e. landfarmed onsite, name and location of offsite facility)
General Description of Remedial Action: Excavation. BEDROCK BOTTOM.
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 _____
Sample date 9/23/96 Sample time 0945
Sample Results
Soil: Benzene (ppm) _____ Water: Benzene (ppb) _____
Total BTEX (ppm) _____ Toluene (ppb) _____
Field Headspace (ppm) 1,207 Ethylbenzene (ppb) _____
TPH (ppm) 10,000 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 9/24/96 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) conditional closure till PA & well

SIGNED: John C. Marshall Dated TPH limit 5000 ppm
DATE: _____

CLIENT: CONOCOBLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199LOCATION NO: CA443C.O.C. NO: 4911

FIELD REPORT: CLOSURE VERIFICATION

PAGE No: 1 of 1LOCATION: NAME: JICARILLA K WELL #: 13 PIT: SEPDATE STARTED: 9/23/96

DATE FINISHED: _____

QUAD/UNIT: E SEC: 11 TWP: 25N RNG: 5W PM: NM CNTY: RA ST: NMENVIRONMENTAL
SPECIALIST: NVDTP/EGOTAGE: SW/4 NW/4 CONTRACTOR: ACME/GARZAEXCAVATION APPROX. 40 FT. x 35 FT. x 20 FT. DEEP. CUBIC YARDAGE: 900DISPOSAL FACILITY: JICARILLA LANDFARM #7 REMEDIATION METHOD: LANDFARMEDLAND USE: RANGE LEASE: CONTRACT #145 FORMATION: DKFIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 135 FT. S35E FROM WELLHEAD.DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'NMDCD BANKING SCORE: 0 NMDCD TPH CLOSURE STD: 5000 PPM

CHECK ONE:

☐ PIT ABANDONED☒ STEEL TANK INSTALLED

SOIL AND EXCAVATION DESCRIPTION:

SIDEWALLS - LT. OLIVE GRAY TO DK. YELL. BROWN SAND TO SILTY SAND, SLIGHTLY
COHESIVE FIRM TO STIFF BEDROCK OBSERVED 12' FROM GROUND SURFACE
ON SOUTH SIDEWALL + 14' FROM GROUND SURFACE ON WEST SIDEWALL,
APPARENT HC STAINING OBSERVED ON WEST & NORTH SIDEWALLS.BOTTOM - BEDROCK, SANDSTONE, LT. MED. GRAY IN COLOR, HARD, SLIGHT HC COLOR
IN OUM SAMPLE.

FIELD 418.1 CALCULATIONS

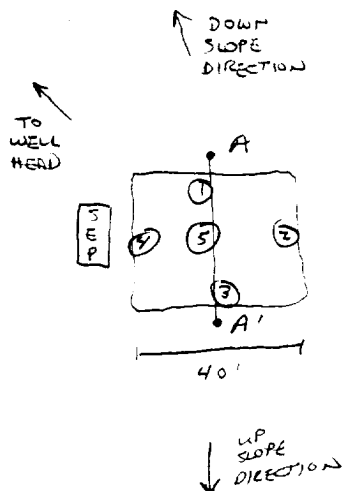
CONDITIONAL

SCALE



0 FT

PIT PERIMETER

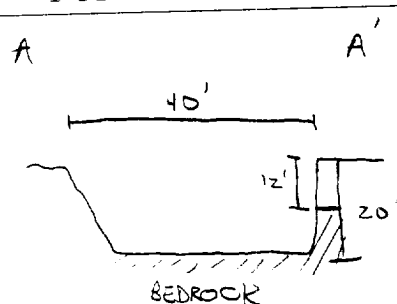
OVM
RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 15'	81.6
2 @ 15'	90.6
3 @ 14'	366
4 @ 15'	1207
5 @ 20'	43.8

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
4 @ 15'	TPH/BTEX	0945
	8015	
	FAILED	

PIT PROFILE



TRAVEL NOTES:

CALLOUT: 9/20/96ONSITE: 9/23/96 MORN.

Well Name:	Jicarilla K # 13
Well Site location:	Unit E, Sec. 11, T25N, R5W
Pit Type:	Separator Pit
Producing Formation:	Basin Dakota
Pit Category:	Non Vulnerable
Horizontal Distance to Surface Water:	> 1000 ft.
Vicinity Groundwater Depth:	> 100 ft.

RISK ASSESSMENT

Pit remediation activities were terminated when trackhoe encountered sandstone bedrock at 20 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 20 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 (steel tank installed). Prior discharge into the pit is believed to be under 5 barrels per day.
4. Field headspace readings (OVM/PID) on Basin Dakota type locations do not reflect direct correlation to total BTEX per USEPA Method 8020 concentrations. Listed below are several typical AMOCO Basin Dakota pit soil analyses comparing headspace to Benzene and total BTEX results.

LOCATION	HEADSPACE (ppm)	BENZENE (ppm)	TOTAL BTEX (ppm)
Frost, Jack B 1E	1100	0.011	5.889
Berger A1	482	0.084	0.681
Mudge Com B 1E	684	0.017	16.438
L.C. Kelly #5	1235	0.643	13.908

The comparisons listed above demonstrates that headspace testing is not an accurate measurement to Benzene or total BTEX concentrations when above standards for Basin Dakota type pits.

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 a 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

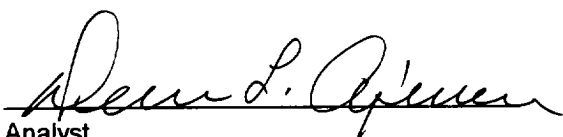
Client:	Blagg / Conoco	Project #:	04034
Sample ID:	4 @ 15'	Date Reported:	09-24-96
Laboratory Number:	A585	Date Sampled:	09-23-96
Chain of Custody No:	4911	Date Received:	09-24-96
Sample Matrix:	Soil	Date Extracted:	09-24-96
Preservative:	Cool	Date Analyzed:	09-24-96
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	4,550	0.2
Diesel Range (C10 - C28)	5,450	0.1
Total Petroleum Hydrocarbons	10,000	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 K #13 Sep. Pit.


Analyst


Review

CHAIN OF CUSTODY RECORD

Client/Project Name BURB / CONOCO			Project Location SEP. PIT		ANALYSIS/PARAMETERS												
Sampler: (Signature) <i>William V. L.</i>			Chain of Custody Tape No.		Remarks												
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers												
④ E 15'	9/23/96	0945	A685	SC12	1	✓	✓						PRESERV. - COOL				
													IF TPH < 5000 ppm, THEN RUN BTEX				
Relinquished by: (Signature) <i>William V. L.</i>			Date 9/24/96	Time 0734	Received by: (Signature) <i>Don J. Cyren</i>						Date 9-24-96	Time 0734					
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