District I P.O. Box 1980, Hobbs, NM District II P.O. Drawer DD, Artesia, NM \$8211 strict III 1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico Energy, Minerals and Natural Resources Deparkment

SUBLIT 1 COPY TO APPROPRIATE DISTRICT OFFICE AND 1 COPY TO

FE OFFICE

OIL CONSERVATION DIVISION P.O. Box 2088 Santa Fe, New Mexico 87504-2088 OIL CONSERVATION DIVISION P.O. Box 2088 AUG 1 2 195 CONTO PIT REMEDIATION AND CLOSURE REPOR

Operator:	Amoco Production Company	Telephone: (505) - 326-9200								
Address:										
Facility Or:	GONZALES GC	<u>H</u> F!								
MOIT NAME										
Location: Unit	or Qtr/Qtr Sec Se	ac ZO T Z9N R 10W county 5AN JUAN								
Pit Type: Sepa	rator Dehydrator O	ther blow								
	M, State, Fee X									
Pit Location: Pit dimensions: length zo', width Z5', depth 8' Attach diagram) Reference: wellhead X, other										
	Footage from reference: 45' Direction from reference: 20 Degrees X East North of West South X									
Depth To Groun (Vertical distant contaminants to high water elevat ground water)	ce from seasonal	Less than 50 feet (20 points) 50 feet to 99 feet (10 points) Greater than 100 feet (0 Points) /6								
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)								
	ance to perennial vers, streams, creeks,	Less than 200 feet (20 points) 200 feet to 1000 feet (10 points) Greater than 1000 feet (0 points)								
		RANKING SCORE (TOTAL POINTS): 30								

		Date Completed:_	8/30/97
Date Remediation St			'
.emediation Method: (Check all appropriate		Approx. cubic yards	
sections)	Landfarmed 🔀	Insitu Bioremediation	
	Other		
Remediation Locatio (ie. landfarmed onsite,		ffsite	
name and location of			•
offsite facility)	of Demodial Actio	nn•	
General Description		ssom. Lisiz AssessED.	
Excavati	on DEUSCOCK Be	2) 1/2 / 1/2 / 1/2 / 1/2 / 1/2 / 1/2 / 1/2 / 1/2 / 1/2 / 1/2 / 1/2 / 1/2 / 1/2 / 1/2 / 1/2 / 1/2 / 1/2 / 1/2 /	
Ground Water Encoun	itered: No 🔀	Yes Depth	
ı 			
Final Pit:	Sample location	see Attached Documents	
Closure Sampling: (if multiple samples,			
attach sample results and diagram of sample	Sample depth	8' (PIT BOSTON)	
locations and depths)		26/93 Sample time	1145
	Sample Results	•	
	Benzene(ppm)	ALO	
		ppm) <u>zz.930</u>	
		pace(ppm) 849	
	TPH 520 P	pm.	
		\Z	wa mii 1 4 - 1
Ground Water Sample	Yes No	(If yes, attach sample	resuits)
		N ABOVE IS TRUE AND COMPLE	TE TO THE BEST
→F MY KNOWLEDGE AND	DEDIEL		
of my knowledge and $8/39/93$		D NAME BUDGED S	1 .

Peportell Lat Resurs to PAVE Velasquez 8/31/43 @1320 - Recompressed	Acraha on For
ENVIROTECH Inc.	Coc 2946
5796 US HWY. 64. FARMINGTON, NM 87401	(4245)
(505) 632-0615	
FIELD REPORT: CLOSURE VERIFICATION	JC9 No: 92140
	PAGE No: _/_ of _/
LOCATION: LEASE: GONZALES GAS COM "A" WELL: No. QD: NE/4 SE/4 (I) SEC: 20 TYP: 29N RNG: 10W BM: NMPM CNTY: SJ ST: NM PIT: BLOW	DATE STARTED: <u>8-26-93</u> DATE FINISHED: <u>8-26-93</u>
CONTRACTOR: PAUL VELASOUGZ EQUIPMENT USED: TRACK-HOG	
Eddii MENT OCES IRPAR-ROG	ENVIRONMENTAL RMY
SOIL REMEDIATION: QUANTITY: 20'x25'x 8'deep /25 C.Y.	90
DISPOSAL PACILITY: ON-SITE LANDFAME.	
SURFACE CONDITIONS: PET EXCAVATED UPON ARREVAL BEDROCK @ 8'	
FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 15 YARDS S	70° FROM WELLHEAD
DEPTH TO GROUNDWATER: 50'-100' NEAREST WATER SOURCE: >1000'?	R 418.1 AND BTOK ANALYSES
NEAREST SURFACE WATER	e:
Recommend closure if sample is bel	OW ALTION LEVELS.
Recommend Acrahon of	
SAMPLE IS ABOVE A	ection LEVELS.
BEDROCK (LISK PSSESSED)	
Bottom at	
SAMPLE I.D. LAB No: WEIGHT (a) MI FREON DILUTION READING!	
SAMPLE I.D. LAB No: WEIGHT (g) mL. FREON DILUTION READING	JALC. ppm
SCALE A SURFACE	•
FLOW	
O 5 % FEET N OVM PIT PERIMETER PESITIFS PIT	
RESULIS	PROFILE
SAMPLE FIELD MEADSPACE PIO (ppm) 05' CWEW 0.5 UNIFOR 207/ GW/SW 0.5 UNI	
105' CUE 0.5 UNIFOR 207' GW/SW 0.5	em PROFILES -
36 4/ Gw/sw 0.1	RAVGUS, AND SANDS. COOSE.
	Jans. COMPSING, NO
	DISTOLE DISCOLURATION ZD) APPARENT HE ODOR _
(4) (5) (2)	
F. BEDA	20CK@8' -
	_
	-
	_
	-
	-
TRAVEL NOTES: CALLOUT: ONSITE:	
ONSITE.	

Well Name:

Well Site location:

Pit Type:

Producing Formation:

Pit Category:

Horizonal Distance to Surface Water:

Vicinity Groundwater Depth:

Gonzales GC A #1

Unit I, Sec. 20, T29N, R10W

Blow Pit Pictured Cliffs

Vulnerable

< 200 ft.

< 100 ft.

RISK ASSESSMENT

Pit remediation activities were terminated when trackhoe encountered sandstone bedrock at 8 feet below grade.

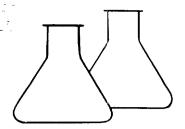
No past or future threat to surface water or groundwater is likely based on the following considerations:

- 1. Past production fluids were contained locally by a relatively shallow sandstone bedrock located 8 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. Field headspace readings (OVM/PID) on Pictured Cliffs type locations do not reflect direct correlation to total BTEX per USEPA Method 8020 concentrations. Listed below are several typical AMOCO Pictured Cliffs pit soil analyses comparing headspace to Benzene and total BTEX results.

LOCATION	HEADSPACE (ppm)	BENZENE (ppm)	TOTAL BTEX (ppm)
E.E. Elliott C2	649	ND	26.330
Elliott GC L1	808	ND	14.073
W.D. Heath A13	1069	ND	4.455
Daum LS #4	564	0.034	10.725

The comparisons listed above demonstrates that headspace testing is not an accurate measurement to Benzene or total BTEX concentrations when above standards for Pictured Cliffs 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). AMOCO therefore request pit closure approval on this location.



ENVIROTECH LABS

5796 US Highway 64-3014 • FARMINGTON, New Mexico 87401 Phone: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client: Amoco Project #: 92140 Sample ID: Pit Bottom @ 8' Date Sampled: 08-26-93 Laboratory Number: 5954 Date Received: 08-26-93 Sample Matrix: Soil 08-27-93 Date Analyzed: Preservative: Cool Date Reported: 08-27-93 Condition: Cool & Intact Analysis Needed: TPH

Concentration Limit
Parameter (mg/kg) (mg/kg)
Total Petroleum
Hydrocarbons 520 5.0

ND = Parameter not detected at the stated detection limit. N/A = Not applicable

Method: Method 418.1, Petroleum Hydrocarbons, Total

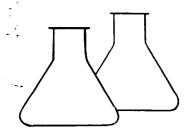
Recoverable, Chemical Analysis of Water and

Waste, USEPA Storet No.4551, 1078

Comments: Gonzales GC "A" 1, Blow Pit, C4245.

analyst Chaharley

monia young



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401 PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	Pit Bottom @ 8'	Date Reported:	08-30-93
Laboratory Number:	5954	Date Sampled:	08-26-93
Sample Matrix:	Soil	Date Received:	08-26-93
Preservative:	Cool	Date Extracted:	08-27-93
Condition:	Cool & Intact	Date Analyzed:	08-30-93
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)			
Benzene	ND	13.0			
Toluene	230	32.6			
Ethylbenzene	ND	13.0			
p,m-Xylene	10,200	19.5			
o-Xylene	12,500	13.0			

SURROGATE RECOVERIES	3: Parameter	Percent Recovery
	Trifluorotoluene	99 %
	Bromofluorobenzene	95 %

Method: Method 5030, Purge-and-Trap, Test Methods for

Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

ND - Parameter not detected at the stated detection limit.

Comments: Gonzales GC "A" 1 Blow Pit C4245

Alexand. Cejeuar

Review Journe

		Remarks							Date Time	8-26.28 1430		-	
	ANALYSIS/PARAMETERS								, , , , , , , , , , , , , , , , , , ,	k	9		
DY RECORD	64245	/	No. o Contain (8/7)	7					Received by: (Signature)	h Charles	Received by: (Signature)	Received by: (Signature)	INC. 4.3014 to 87401
CHAIN OF CUSTODY RECORD	H" I BLOW POT		Sample Matrix	Soz					Time	227	Receive	Receive	ENVIROTECH INC. 5796 U.S. Highway 64:3014 Farmington, New Mexico 87401 (505) 632-0615
	Project Location GONIALES GC.	Chain of Custody Tape No.	Lab Number	7954					Date	8-14-51			
			Sample Time	1145		-							
		ż	Sample Date	8.26-53						ķ			
	AMOCO 92140	Sampler: (Signature)		Fr Borne 8"					Relinquished by: (Signature)	Bert M Vour	Relinquished by: (Signature)	Relinquished by: (Signature)	

CLIENT: AMOCO BLAGG ENGIN	EERING, INC.	LOCATION NO: C4245								
	P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199									
FIELD REPORT: LANDFARM/COMPO	ST PILE CLOSUI	RE VERIFICATION								
LOCATION: NAME: GONZALES GC A WELL #: 1		DATE STARTED: //-Zo 97 DATE FINISHED:								
QUAD/UNIT: (N SEC: 20 TWP: 29N RNG: 10W PM QTR/FOOTAGE: NELY SELY CONTRACTOR: P		ENVIRONMENTAL SPECIALIST: NVIEP								
SOIL REMEDIATION:										
REMEDIATION SYSTEM: LANDFARM	APPROX. CUBIC	YARDAGE: <u>148</u>								
LAND USE: RANGE	LIFT DEPTH (ft	t): <u>NA</u>								
FIELD NOTES & REMARKS:										
DEPTH TO GROUNDWATER: < 100 NEAREST WATER SOURCE:		FACE WATER: < 200 /								
NMOCD RANKING SCORE: 30 NMOCD THE CLOSURE STD: 501L IS A PRY DARK YELLOW SITGHT BROWN SILTY.										
NO STAIN OR HCODOR. TOOKSPT COMP. SAMPLE FOR LAB AMALYSIS.	saan,									
NO ACTURE LANDFROM OBSERVED ON WELL	511€ -									
,										
FIELD 418.1 (SAMP. TIME SAMPLE I.D. LAB No: WEIGHT (9)	CALCULATIONS	VDING CALC ODM								
SAMP. TIME SAMPLE T.U. LAB NO. WEIGHT (g)	THE TREON DECITION REP	CONTROL ONLO.								
SKETCH/SAMPLE LOCATIONS										
	OVM RESULTS	LAB SAMPLES								
		MPLE ANALYSIS TIME RESULTS								
	.F.1 0.0 LF.	1 8015 1220 ND								
	SCALE									
WELL SEP. PIT.	O FT									
TRAVEL NOTES: CALLOUT: N/A	ONSITE: 11.26.96	1220								



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	LF - 1	Date Reported:	12-05-97
Laboratory Number:	C624	Date Sampled:	11-26-97
Chain of Custody No:	5636	Date Received:	12-03-97
Sample Matrix:	Soil	Date Extracted:	12-03-97
Preservative:	Cool	Date Analyzed:	12-04-97
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)	ND	0.1
Total Petroleum Hydrocarbons	ND	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:

Gonzales GC A#1 Landfarm. 5 Pt. Composite.

Analyst

Review

Stacy W Sendler

Rep cocis	Relinquished by: (Signature)	Relinquished by: (Signature)	Heinquisned by: (Signature) E. A. Fitte					1-47	Sample No./ Identification	Ca for	Sampler: (Signature)	4	Client/Project Name	
2695 - 2695	•	Sel						11/20/97	Sample Date	X 42		Amoco		
563			200			-		1220	Sample Time	7		A		
~		/2/	4/					C624	Lab Number	01-450 10	Chain of Custody Tape No.	GONZAUES	Project Location	
ENVIROTECH INC. 57% U.S. Highway 64-3014 Farmington, New Mexico 87401 (505) 632-0615	T	13/97 08/7	Date Time F					26)2	Sample Matrix	-10	vo.	GC A#1	LANDERRA	HAIN OF CUS
	Received by: (Signature)	Received by: (Signature)	Received by: (Signature)	KECEINED COOL				\ \ -		o. of tainers)			CHAIN OF CUSTODY RECORD
		i Oden c	N	* (N)(N=)								ANALYSIS/PARAMETERS		
		(153 (9. 621)	Date Time 12/2/97 0700	BU#-				1	MOSEN COL		Remarks	ERS		