

3R - 116

REPORTS

DATE:

Feb 19, 1999

BLAGG ENGINEERING, INC.

P.O. Box 87, Bloomfield, New Mexico 87413
Phone: (505) 632-1199 Fax: (505) 632-3903

February 17, 1999

RECEIVED

FEB 19 1999

**ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION**

Mr. William C. Olson -Hydrogeologist
Environmental Bureau
New Mexico Oil Conservation Division
2040 Pacheco
State Land Building
Santa Fe, New Mexico 87505

RE: Cross Timbers Oil Co. (Amoco) Pit Closure/Groundwater Monitoring Reports
San Juan County, New Mexico

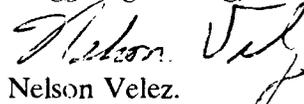
Dear Mr. Olson:

The attached reports on pit closure/groundwater monitoring at nineteen (19) previously owned Amoco well locations is being submitted for your review. These well sites have been acquired by Cross Timbers Co. as of December, 1997. The well names are listed on the following page of this correspondence. The reports for each individual well site are laid out in the following order;

- 1) Pit Closure documentation and/or a brief description of all activities which occurred during the investigation, sampling procedures, and/or interpretations, conclusions, and possible recommendations.
- 2) A summary spreadsheet (when applicable) containing laboratory BTEX, general chemistry (if applicable), and any other pertinent information.
- 3) When applicable: site and groundwater gradient maps, boring logs, and monitor well detail schematics.
- 4) Laboratory reports for each sampling event.
- 5) Quality Assurance/Quality Control data.

A copy of this report is also being submitted to Mr. Denny Foust at the Aztec NMOCD office. If you have any questions or comments concerning this report, please contact Blagg Engineering at 632-1199.

Respectfully submitted,
Blagg Engineering, Inc.


Nelson Velez.
Staff Geologist

Attachments: Pit Closure/Groundwater Monitoring Reports

xc: Denny Foust, NMOCD Aztec Office; Nina Hutton, Cross Timbers Oil Co.

NJV/njv

FEB99-PC.COV

Cross Timbers Oil Company
Pit Closure/Groundwater Monitoring Reports
Well Sites being submitted, February 1999

- | | | |
|-----|--------------------|-----------------------------|
| 1) | Abrams GC C # 1 | Unit F, Sec. 25, T29N, R10W |
| 2) | Abrams L # 1A | Unit I, Sec. 26, T29N, R10W |
| 3) | Anderson GC A # 1 | Unit C, Sec. 28, T29N, R10W |
| 4) | Armenta GC A # 1 | Unit D, Sec. 27, T29N, R10W |
| 5) | Baca GC A # 1 | Unit H, Sec. 26, T29N, R10W |
| 6) | Baca GC A # 1A | Unit F, Sec. 26, T29N, R10W |
| 7) | Chavez GC C # 1R | Unit J, Sec. 23, T29N, R10W |
| 8) | Federal GC 3-1 | Unit N, Sec. 23, T29N, R10W |
| 9) | Garcia GC B # 1E | Unit M, Sec. 21, T29N, R10W |
| 10) | Haney GC B # 1E | Unit M, Sec. 20, T29N, R10W |
| 11) | Hare GC C # 1 | Unit M, Sec. 25, T29N, R10W |
| 12) | Hare GC C # 1E | Unit F, Sec. 25, T29N, R10W |
| 13) | Hare GC F # 1 | Unit G, Sec. 23, T29N, R11W |
| 14) | Lefkovitz GC B # 1 | Unit A, Sec. 25, T29N, R10W |
| 15) | Masden GC # 1 | Unit A, Sec. 28, T29N, R11W |
| 16) | Romero GC A # 1 | Unit K, Sec. 27, T29N, R10W |
| 17) | Stedje GC # 1 | Unit F, Sec. 27, T30N, R12W |
| 18) | Stedje GC # 1E | Unit A, Sec. 27, T30N, R12W |
| 19) | Trujillo GC A # 1 | Unit C, Sec. 28, T29N, R10W |

C4163

District I
P.O. Box 1980, Hobbs, NM
District II
P.O. Drawer DD, Artesia, NM 88211
District III
Rio Brazos Rd, Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

SUBMIT 1 COPY TO
APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

RECEIVED

APPROVED

FEB 19 1999 **PIT REMEDIATION AND CLOSURE REPORT**

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Operator: Amoco Production Company **Telephone:** (505) - 326-9200

Address: 200 Amoco Court, Farmington, New Mexico 87401

Facility Or: HARE GC F #1
Well Name

Location: Unit or Qtr/Qtr Sec 6 Sec 23 T29N R 11W County 95 KITO SAN JUAN

Pit Type: Separator Dehydrator Other

Land Type: BLM , State , Fee , Other

Pit Location: Pit dimensions: length 30', width 30', depth 9'
(attach diagram)

Reference: wellhead , other

Footage from reference: 315'

Direction from reference: 60 Degrees East North
of West South

Depth To Ground Water: (Vertical distance from contaminants to seasonal high water elevation of ground water)	Less than 50 feet (20 points)	
	50 feet to 99 feet (10 points)	
	Greater than 100 feet (0 Points)	<u>20</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)	<u>0</u>
	No (0 points)	<u> </u>
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 200 feet (20 points)	
	200 feet to 1000 feet (10 points)	<u>20</u>
	Greater than 1000 feet (0 points)	<u> </u>
RANKING SCORE (TOTAL POINTS):		<u>40</u>

Date Remediation Started: _____ Date Completed: 11/10/93

Remediation Method: Excavation Approx. cubic yards _____
(Check all appropriate sections) Landfarmed Insitu Bioremediation _____
Other _____

Remediation Location: Onsite Offsite _____
(ie. landfarmed onsite, name and location of offsite facility)

General Description Of Remedial Action: _____
Excavation. GROUNDWATER ENCOUNTERED.

Ground Water Encountered: No _____ Yes Depth 9'

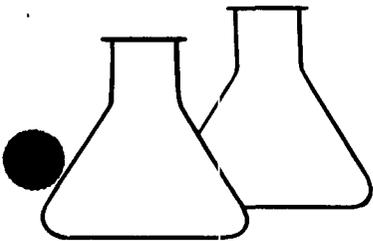
Final Pit: Sample location see Attached Documents

Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths)
Sample depth 9'
Sample date 11/9/93 Sample time 1140

Sample Results
Benzene (ppm) _____
Total BTEX (ppm) _____
Field headspace (ppm) _____
TPH _____

Ground Water 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 11/10/93
SIGNATURE B. Shaw PRINTED NAME AND TITLE Buddy D. Shaw Environmental Coordinator



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 Water	Date Reported:	11-10-93
Laboratory Number:	6460	Date Sampled:	11-09-93
Sample Matrix:	Water	Date Received:	11-09-93
Preservative:	HgCl and Cool	Date Analyzed:	11-10-93
Condition:	Cool and Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
-----	-----	-----
Benzene	4.0	1.0
Toluene	52	1.5
Ethylbenzene	8.1	1.5
p,m-Xylene	153	2.0
o-Xylene	45.2	2.0

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	-----	-----
	Trifluorotoluene	99 %
	Bromofluorobenzene	96 %

Method: Method 5030A, 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. 1986

ND - Parameter not detected at the stated detection limit.

Comments: Hare GC "F" 1 Separator Pit C4163

Kevin L. Geener
Analyst

Mavis D. Young
Review

3173

CHAIN OF CUSTODY RECORD

Client/Project Name		Project Location		ANALYSIS/PARAMETERS											
A111060 92140		HARE GC F-1		C4163		94463		No. of Containers		RETEX		1		Remarks	
Sampler: (Signature)		Chain of Custody Tape No.		Lab Number	Sample Matrix	Date	Time	Received by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Received by: (Signature)	
Robert M Young				6460	WATER	11/09/93	1140	Tony Trestano	11/09/93	1300					
Per WATER															
Relinquished by: (Signature)															
Robert M Young															
Relinquished by: (Signature)															
Relinquished by: (Signature)															

ENVIROTECH INC.
 5796 U.S. Highway 64-3014
 Farmington, New Mexico 87401
 (505) 632-0615

CLIENT: AMOCO

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

LOCATION NO: C4163

C.D.C. NO: 5654

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: HARE GC F WELL #: 1 PITS: SEP.
QUAD/UNIT: (G) SEC: 23 TWP: 29N RNG: 11W PM: NM CNTY: SJ ST: NM
QTR/FOOTAGE: SW/4 NE/4 CONTRACTOR: MOSS

DATE STARTED: 12.13.97

DATE FINISHED: _____

ENVIRONMENTAL SPECIALIST: NV/EP

SOIL REMEDIATION:

REMEDICATION SYSTEM: LANDFARM

APPROX. CUBIC YARDAGE: 300

LAND USE: RANGE

LIFT DEPTH (ft): NA

FIELD NOTES & REMARKS:

DEPTH TO GROUNDWATER: < 50' NEAREST WATER SOURCE: > 1000' NEAREST SURFACE WATER: < 200'

NMDCD RANKING SCORE: 40 NMDCD TPH CLOSURE STD: 100 PPM

SOIL IS A SLIGHTLY MOIST NONCOHESIVE DL YELLOW W/LT. GRAY SILTY SAND.

NO STAIN OR HC ODOR. NO LANDFARM ON LOCATION.

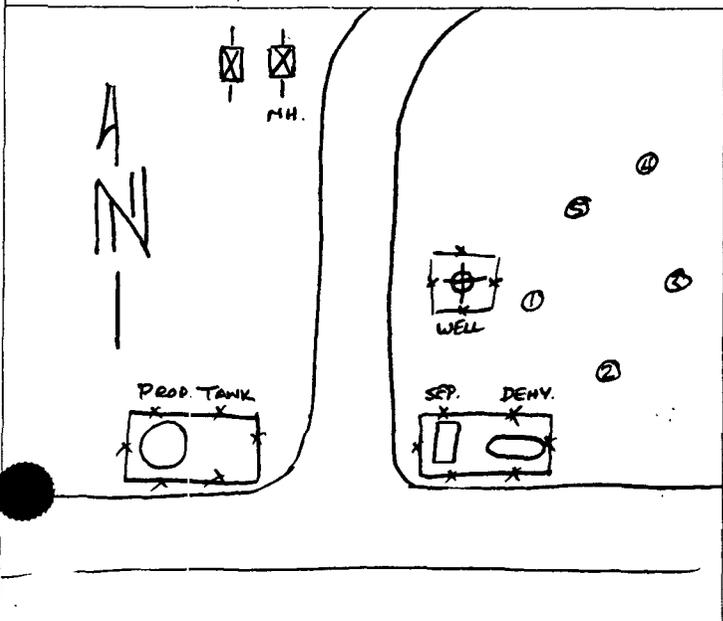
TOOK 5 PT COMPOSITE FOR LAB ANALYSIS.

NO ACTUAL LANDFARM OBSERVED ON WELL LOCATION.

FIELD 418.1 CALCULATIONS

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

SKETCH/SAMPLE LOCATIONS

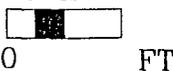


OVM RESULTS

LAB SAMPLES

SAMPLE ID	FIELD HEADSPACE PID (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
<u>LF-1</u>	<u>0.0</u>	<u>LF-1</u>	<u>8015</u>	<u>1125</u>	<u>ND</u>

SCALE



TRAVEL NOTES:

CALLOUT: N/A

ONSITE: 12.13.97 1125

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	LF - 1	Date Reported:	12-16-97
Laboratory Number:	C697	Date Sampled:	12-13-97
Chain of Custody No:	5654	Date Received:	12-15-97
Sample Matrix:	Soil	Date Extracted:	12-15-97
Preservative:	Cool	Date Analyzed:	12-16-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

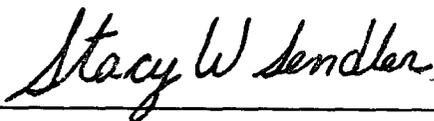
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

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: Hare GC F #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

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	12-16-TPH QA/QC	Date Reported:	12-16-97
Laboratory Number:	C696	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	12-16-97
Condition:	N/A	Analysis Requested:	TPH

Calibration	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept. Range
Gasoline Range C5 - C10	10-28-97	2.9715E-04	3.1083E-04	4.60%	0 - 15%
Diesel Range C10 - C28	10-28-97	2.9167E-04	3.0670E-04	5.15%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

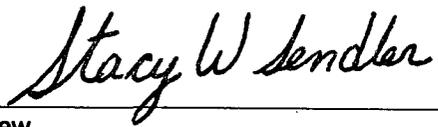
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	250	100%	75 - 125%
Diesel Range C10 - C28	ND	250	250	100%	75 - 125%

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: QA/QC for samples C696 - C699.


Analyst


Review

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

C4163

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other	5. Lease Designation and Serial No.
2. Name of Operator Amoco Production Company	6. If Indian, Allottee or Tribe Name
3. Address and Telephone No. 200 Amoco Court, Farmington, N.M. 87401 Tel: (505) 326-9200	7. If Unit or CA, Agreement Designation
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) SW/4 NE/4 SEC. 23, T29 N, R11 W, N.M.P.M. 1930' FNL / 2340' FEL	8. Well Name and No. HARE GC F #1
	9. API Well No. 3004523549
	10. Field and Pool, or Exploratory Area OTER CHACRA
	11. County or Parish, State SAN JUAN, N.M.

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input checked="" type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other <u>Pit closure</u>
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Pit closure verification - see attached documentation.

① SEPARATOR PIT - ABANDONED GROUNDWATER ENCOUNTERED, CLOSED UNDER AMOCO'S GW PLAN (SEC. 1.2).

14. I hereby certify that the foregoing is true and correct

Signed B. Shaw Title Enviro. Coordinator Date 7/26/98

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any: