

3R - 131

**GENERAL
CORRESPONDENCE**

YEAR(S):

1999-1994



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

April 21, 1999

CERTIFIED MAIL

RETURN RECEIPT NO: Z-274-520-641

Ms. Nina Hutton
Cross Timbers Oil Company
810 Houston St., Suite 2000
Fort Worth, Texas 76102-6298

RE: SAN JUAN BASIN GROUND WATER MONITORING REPORTS

Dear Ms. Hutton:

The New Mexico Oil Conservation Division (OCD) has reviewed Cross Timbers Oil Company's (CTOC) February 11, 1999 "CROSS TIMBERS OIL CO. GROUNDWATER MONITORING (AMOCO) 1996-1998 REPORTS, SAN JUAN COUNTY, NEW MEXICO" which was submitted on behalf of CTOC by their consultant Blagg Engineering, Inc. This document contains the results of CTOC's investigation, remediation and monitoring of ground water contamination related to the disposal of oilfield wastes in unlined pits at 7 sites in the San Juan Basin.

Based upon a review of the above referenced documents, the OCD has the following comments and requirements:

1. The downgradient and/or lateral extent of chloride and/or total dissolved solids contamination at the sites listed below has not been completely defined. The OCD requires that CTOC completely define the extent of these contaminants at each site pursuant to the previously approved ground water management plan for these sites.

-	Bergin GC #1E	Unit F, Sec. 21, T29N, R11W
-	Rowland GC #1	Unit P, Sec. 25, T30N, R12W
-	State GC BS #1	Unit F, Sec. 21, T29N, R11W
-	Sullivan GC D#1	Unit B, Sec. 26, T29N, R11W

2. The downgradient and/or lateral extent of benzene, toluene, ethylbenzene, xylene (BTEX), chloride and/or total dissolved solids contamination at the sites listed below has not been completely defined. The OCD requires that CTOC completely define the extent of these contaminants at each site pursuant to the previously approved ground water management plan for these sites.

-	Bruington GC #1	Unit E, Sec. 14, T29N, R11W
-	Valdez A #1E	Unit G, Sec. 24, T29N, R11W

3. A review of the sampling data shows that during some samplings only ground water from the monitor wells at the source is sampled and there is no downgradient monitoring to show that contaminated ground water is contained. In order to effectively monitor contaminant migration, the OCD requires that the ground water monitoring plan be modified to include additional ground water sampling of all monitor wells at each site on an annual basis. During the annual sampling event ground water from all monitor wells will be sampled and analyzed for BTEX, TDS, polynuclear aromatic hydrocarbons (PAH) and New Mexico Water Quality Control Commission (WQCC) cations and anions and metals using EPA approved methods and quality assurance/quality control procedures. Specific analytes may be dropped from the annual sampling event for certain sites if that analyte has not been found to be above WQCC standard in the sites source areas and the reasons for dropping those analytes are included in the annual reports. This sampling requirement will also be added to the ground water monitoring plan for all future ground water sampling at all CTOC sites with contaminated ground water.
4. CTOC recently purchased a number of well sites in the San Juan Basin from Amoco. Some of these sites were found to have ground water contamination which was discovered by Amoco during pit closure activities. The OCD does not have a listing of status of these sites. Please provide the OCD with a listing of all CTOC well sites in the San Juan Basin at which the presence of ground water was discovered during pit assessment or closure activities and the status of each site.

If you have any questions, please contact me at (505) 827-7154.

Sincerely,



William C. Olson
Hydrologist
Environmental Bureau

xc: Denny Foust, OCD Aztec District Office
Nelson Velez, Blagg Engineering, Inc.

BLAGG ENGINEERING, INC.

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

RECEIVED

FEB 15 1999

February 11, 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. Groundwater Monitoring (Amoco) 1996-1998 Reports
San Juan County, New Mexico

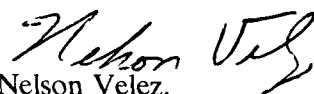
Dear Mr. Olson:

The attached reports on groundwater monitoring at eight (8) 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) Brief description of all activities which occurred during the investigation, sampling procedures, and/or interpretations, conclusions, and possible recommendations.
- 2) A summary spreadsheet contains laboratory BTEX, general chemistry (if applicable), and any other pertinent information.. The latest quarter/annual sampling results are shown along with all previous sampling conducted at the specified locations for comparison purposes.
- 3) Site and groundwater gradient maps, boring logs, and monitor well detail schematics.
- 4) Laboratory reports for each quarter/annual sampling event and a field summary spreadsheet revealing well elevations, water elevations, depth to water information, etc.
- 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: Quarter/Annual Monitor Well Sampling Reports

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

NJV/njv

FEB99-WO.COV

Cross Timbers Oil Company
Groundwater Monitoring Reports 1996-1998
Well Sites being submitted, February 1999

- | | | |
|----|-------------------|-----------------------------|
| 1) | Abrams J # 1 | Unit I, Sec. 29, T29N, R10W |
| 2) | Bergin GC # 1E | Unit F, Sec. 21, T29N, R11W |
| 3) | Bruington GC # 1 | Unit E, Sec. 14, T29N, R11W |
| 4) | Rowland GC # 1 | Unit P, Sec. 25, T30N, R12W |
| 5) | State GC BS # 1 | Unit K, Sec. 23, T29N, R11W |
| 6) | Sullivan GC D # 1 | Unit B, Sec. 26, T29N, R11W |
| 7) | Valdez A # 1E | Unit G, Sec. 24, T29N, R11W |

P.O. Box 1980, Hobbs, NM

Distance 11

P.O. Drawer DD, Artesia, NM 87211

Distance 111

1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

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

PIT REMEDIATION AND CLOSURE REPORT

Denier
GW above limit
No confirm result

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

Address: 200 Amoco Court, Farmington, New Mexico 87401

Facility Or: SULLIVAN GC D1
Well Name

Location: Unit or qtr/qtr sec B sec 26 T 29N R 11W County SAN JUAN

Pit Type: Separator Dehydrator Other BLOW

Land Type: BLM , State , Fee , Other

Pit Location: Pit dimensions: length 100', width 150', depth 7'
(Attach diagram)

Reference: wellhead X, other

Footage from reference: 160'

Direction from reference: 12 Degrees East North X
X of West South

Depth To Ground Water: Less than 50 feet (20 points)
(Vertical distance from 50 feet to 99 feet (10 points)
contaminants to seasonal Greater than 100 feet (0 Points) 20
high water elevation of
ground water)

Wellhead Protection Area: Yes (20 points)
(Less than 200 feet from a private No (0 points) 0
domestic water source, or; less than
1000 feet from all other water sources)

Distance To Surface Water: Less than 200 feet (20 points)
(Horizontal distance to perennial 200 feet to 1000 feet (10 points) 10
lakes, ponds, rivers, streams, creeks,
irrigation canals and ditches) Greater than 1000 feet (0 points)

RANKING SCORE (TOTAL POINTS): 30

Date Remediation Started: _____ Date Completed: 5/5/94

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: _____

Ground Water Encountered: No _____ Yes ☒ Depth 5'

Final Pit: Sample location REFER TO "CLOSURE VERIFICATION" SHEET

Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths)
Sample depth 5' + 9'

Sample date 5-5-94 Sample time _____

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 5/6/94

SIGNATURE B. Shaw

PRINTED NAME
AND TITLE

Buddy D. Shaw
Environmental Coordinator

CLIENT: <u>Amoco</u>	<u>ENVIROTECH Inc.</u>	PIT NO: <u>C4229</u>
5796 US HWY. 64, FARMINGTON, NM 87401 (505) 632-0615		C.O.C. NO: <u>3574</u>

FIELD REPORT: CLOSURE VERIFICATION	JOB No: <u>92140</u>
LOCATION: LEASE: <u>Sullivan GC D</u> WELL #: <u>1</u> PIT: <u>blow</u>	PAGE No: <u>1</u> of <u>1</u>
UNIT: <u>B</u> SEC: <u>26</u> TWP: <u>29N</u> RNG: <u>11W</u> BM: <u>NM</u> CNTY: <u>SJ</u> ST: <u>Nm</u>	DATE STARTED: <u>5/5/94</u>
CONTRACTOR: <u>P. Velazquez</u>	DATE FINISHED: <u>5/5/94</u>
	ENVIRONMENTAL SPECIALIST: <u>NV</u>

SOIL REMEDIATION: EXCAVATION APPROX. 100 FT. x 150 FT. x 9 FT. DEEP.
DISPOSAL FACILITY: landfirmed on-site
LAND USE: BLM

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 160 FEET N12W FROM WELLHEAD.
DEPTH TO GROUNDWATER: <50 NEAREST SURFACE WATER: <1000 NEAREST WATER SOURCE: >1000
NMOCB RANKING SCORE: 30 NMOCB TPH CLOSURE STD: 100 PPM
SOIL AND EXCAVATION DESCRIPTION: previously excavated

collected 2 water samples for BTEX(8020) @ 5'; 9' ^{#1 #2}
time: 1155; 1200

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

SCALE

0 100 FEET

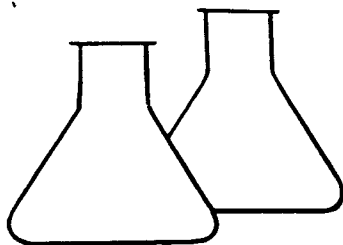
PIT PERIMETER

OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)

PIT PROFILE

TRAVEL NOTES: CALLOUT: 5/4/94 ONSITE: 5/5/94



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:	1 @ 5'	Date Reported:	05-06-94
Laboratory Number:	7357	Date Sampled:	05-05-94
Sample Matrix:	Water	Date Received:	05-06-94
Preservative:	HgCl and Cool	Date Analyzed:	05-06-94
Condition:	Cool and Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
-----	-----	-----
Benzene	1.9	0.2
Toluene	26.4	0.4
Ethylbenzene	12.0	0.3
p,m-Xylene	114	0.4
o-Xylene	23.2	0.4

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	-----	-----
	Trifluorotoluene	97 %
	Bromofluorobenzene	101 %

Method: Method 5030A, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

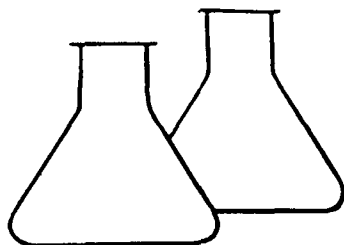
Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

ND - Parameter not detected at the stated detection limit.

Comments: Sullivan GC D1 Blow Pit C4229

Dennis L. Clemen
Analyst

Morris D. Young
Review



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:	2 @ 9'	Date Reported:	05-06-94
Laboratory Number:	7358	Date Sampled:	05-05-94
Sample Matrix:	Water	Date Received:	05-06-94
Preservative:	HgCl and Cool	Date Analyzed:	05-06-94
Condition:	Cool and Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	62	0.2
Toluene	58	0.4
Ethylbenzene	33.8	0.3
p,m-Xylene	477	0.4
o-Xylene	17.6	0.4

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	96 %
	Bromofluorobenzene	100 %

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: Sullivan GC D1 Blow Pit C4229

Dennis L. Jensen
Analyst

Morris D. Young
Review

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

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
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Amoco Production Company

3. Address and Telephone No.

200 Amoco Court, Farmington, N.M. 87401 Tel: (505) 326-9200

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

NW/NE S. 26. T 29N. R 11W

5. Lease Designation and Serial No.

Fed # 94000209

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

COM. AGMT. # SW 209

8. Well Name and No.

SULLIVAN GC D #1

9. API Well No.

3004507733

10. Field and Pool, or Exploratory Area

DAKOTA

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 type="checkbox"/> Change of Plans
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other Pit closure	<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 drill give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Pit closure verification - see attached documentation.

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

Signed

B. Shaw

Title

Enviro. Coordinator

Date

5/12/94

(This space for Federal or State office use)

Approved by

Title

Date

Conditions of approval, if any:

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law and regulations. Any necessary special in-

structions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

SPECIFIC INSTRUCTIONS

Item 4—If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 13—Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive

zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et. seq., 351 et. seq., 25 U.S.C. et. seq.; 43 CFR 3160.

PRINCIPAL PURPOSE — The information is to be used to evaluate, when appropriate, approve applications, and report completion of secondary well operations, on a Federal or Indian lease.

ROUTINE USES:

- (1) Evaluate the equipment and procedures used during the proposed or completed subsequent well operations.
- (2) Request and grant approval to perform those actions covered by 43 CFR 3162.3-2(2).
- (3) Analyze future applications to drill or modify operations in light of data obtained and methods used.
- (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

EFFECT OF NOT PROVIDING INFORMATION — Filing of this notice and report and disclosure of the information is mandatory once an oil or gas well is drilled.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501, et. seq.) requires us to inform you that:

This information is being collected in order to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

This information will be used to report subsequent operations once work is completed and when requested, to obtain approval for subsequent operations not previously authorized.

Response to this request is mandatory for the specific types of activities specified in 43 CFR Part 3160.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 25 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management, (Alternate) Bureau Clearance Officer, (WO-771), 18 and C Streets, N.W., Washington, D.C. 20240, and the Office of Management and Budget, Paperwork Reduction Project (1004-0135), Washington, D.C. 20503.