

3R - 106

**GENERAL  
CORRESPONDENCE**

**YEAR(S):**

2000-1999

**BLAGG ENGINEERING, INC.**

P.O. Box 87, Bloomfield, New Mexico 87413

Phone: (505)632-1199 Fax: (505)632-3903

April 19, 2000

Mr. William C. Olson - Hydrologist  
State of New Mexico Oil Conservation Division  
2040 South Pacheco  
State Land Office Building  
Santa Fe, NM 87505

**RECEIVED**

APR 27 2000

**RE: 1999 ANNUAL GROUNDWATER REPORTS  
SAN JUAN COUNTY, NEW MEXICO**

ENVIRONMENTAL BUREAU  
OIL CONSERVATION DIVISION

Dear Mr. Olson:

Blagg Engineering, Inc., on behalf of Cross Timbers Oil Company, respectfully submits the attached 1999 annual groundwater reports in which quarterly and/or annual sampling is currently being undertaken. This reporting adheres to the NMOCD's previously approved groundwater management plan.

A total of seven (7) well sites, listed on the following page, are associated with this correspondence. All work performed on these well sites have been incorporated into individual packets. Pit and/or landfarm closure documentation was included in the previous submitted reports.

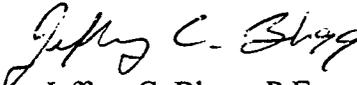
The summary, conclusions, and/or recommendations made within these reports are based on information made available from the enclosed material. Any site specific inquiries should be examined within the individual packets.

If you have questions, please call and contact either myself or Jeffrey C. Blagg. Thank you for your cooperation and assistance.

Sincerely,  
**BLAGG ENGINEERING, INC.**

  
Nelson Velez  
Staff Geologist

Reviewed by:

  
Jeffrey C. Blagg, P.E.  
President

**Attachments: Individual Well site packets**

cc: Denny Foust, Environmental Geologist, NMOCD District III Office, Aztec, NM  
Nina Hutton, Environmental & Safety Manager, Cross Timbers Oil Company, Ft. Worth, TX

NV/nv

PREV-99.CVL

**Cross Timbers Oil Co. 1999 Annual Groundwater Reports**

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



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

February 11, 1999

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.

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FEB 15 1999

ENVIRONMENTAL BUREAU  
OIL CONSERVATION DIVISION

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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 |