CHECKLIST for ADMINISTRATIVE INJECTION APPLICATIONS

Operator: SONAT EXPLORATION CO. Well: BRAN SWD WELL No. 1

Contact: GLENN CARTER Title: DRLG & PROD. ENG. Phone: (915) 684-0905

DATE IN 11-19-96 RELEASE DATE 12-4-96 DATE OUT 12-10-96

Proposed Injection Application is for: ___ **WATERFLOOD** ___ Expansion ___ Initial

Original Order: R- _____ ___ Secondary Recovery ___ Pressure Maintenance

SENSITIVE AREAS Y **SALT WATER DISPOSAL** ___ Commercial Well

___ WIPP ___ Capitan Reef ___ Other _____

Data is complete for proposed well(s)? ___ Additional Data Req'd _____

AREA of REVIEW WELLS

1 Total # of AOR — ✓ # of Plugged Wells

YES Tabulation Complete — ___ Schematics of P & A's

4 Cement Tops Adequate SQZ — ___ AOR Repair Required

INJECTION FORMATION

Injection Formation(s) DELAWARE

Source of Water or Injectate ARCO PRODUCTION Compatible Analysis YES

PROOF of NOTICE

YES Copy of Legal Notice — YES Information Printed Correctly

✓ Correct Operators — ✓ Copies of Certified Mail Receipts

N/A Objection Received — ✓ Set to Hearing _____ Date

NOTES: * SQUEEZE LOTOS #2 TO 4000' PRIOR TO INJECTING.

APPLICATION QUALIFIES FOR ADMINISTRATIVE APPROVAL? YES

COMMUNICATION WITH CONTACT PERSON:

1st Contact: ___ Telephoned ___ Letter _____ Date Nature of Discussion _____

2nd Contact: ___ Telephoned ___ Letter _____ Date Nature of Discussion _____

3rd Contact: ___ Telephoned ___ Letter _____ Date Nature of Discussion _____

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

FORM C-108
Revised 7-1-81

649

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage
Application qualifies for administrative approval? ☐ yes ☐ no

RECEIVED
NOV 19 1996

II. Operator: Sonat Exploration Company - Midland

Address: 110 W. Louisiana Suite 500 Midland, Texas 79701

Contact party: Glenn Carter Phone: (915) 684-0405

III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? ☐ yes ☒ no
If yes, give the Division order number authorizing the project _____.

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

* VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)

* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: K. Glenn Carter Title Sr. Drlg & Prod Engr.

Signature: K. Glenn Carter Date: 11/05/96

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal. Open hole logs previously submitted by Bran Oil Corp in 1987.

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division district office.

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this applicatio The data must be both in tabular and schematic form and shall include:

(1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.

(2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

(3) A description of the tubing to be used including its size, lining material, and setting depth.

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

(1) The name of the injection formation and, if applicable, the field or pool name.

(2) The injection interval and whether it is perforated or open-hole.

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

(4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.

(5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisemer must include:

(1) The name, address, phone number, and contact party for the applicant;

(2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;

(3) the formation name and depth with expected maximum injection rates and pressures; and

(4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

III. Well Data On Proposed SWD Well

A. Proposed: Re-entry of Bran Oil Company's Bran-Bettis Fed No. 1
Proposed Bran SWD Well No. 1
660' FSL and 660' FEL, Unit Letter P
Section 11, T24S, R31E
Eddy County, New Mexico

The well was originally drilled and abandoned by Bran Oil Corp in 1987.

8-5/8" 24# J55 STC surface casing was set at 410' in 12-1/4" hole, and was cemented to surface with 250 sx Class C with 2% CaCl2. 12 sx of cement was circulated to the pit. Bran drilled 7-7/8" hole to 6794', ran open hole logs, then abandoned the well.

Proposed: 5-1/2" 15.50 J55 STC production casing will be set at 4850' in 7-7/8" hole, and cemented to surface with 1700 sx of 35/65 Poz C with 6% gel, 5# salt, and 1/4# FC (12.8 ppg, 1.94 ft3/sx) followed by 500 sx Class H with 2% CaCl2 (15.6 ppg, 1.19 ft3/sx). The cement volume was calculated using the open hole caliper plus 30% excess plus 300 sx. This calculation should result in circulating 300 sx cement to the pit.

Proposed: 2-7/8" 6.5# J55 8rd EUE internally plastic coated tubing will be set at ±4800'.
A Guiberson G-6 IPC packer (or equivalent) will be set at ±4800'.

B. Produced water will be injected into the Delaware formation in the open hole from 4850'- 6794'.

There are no known shallower producing zones within a 1/2 mile radius.
The nearest deeper producing zone is in Sonat's Lotos "11-F" Federal No. 2, located 1/2 mile north of the proposed SWD well. The shallowest perforation in that well is at 6886'.

Merit's SWD located in Section 11, Unit Letter F, T24S, R31E is perforated from 4962' - 5212'.
Sonat's SWD located in Section 11, Unit Letter B, T24S, R31E is completed from 4580' - 4900'.
Wellbore diagrams for both are attached.

PROPOSED

To Re-enter & Complete As A SWD Well In The Delaware

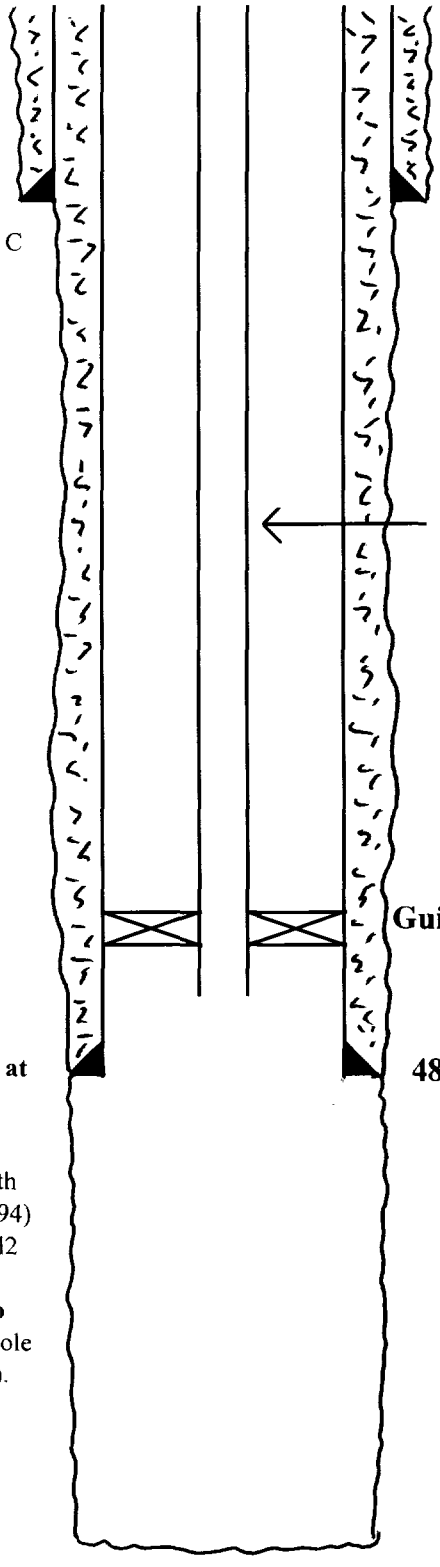
Bran SWD Well No. 1

660' FSL & 660' FEL,

Section 11, Unit Letter P, T24S, R31E,

Eddy County, New Mexico

Elevation 3552' GL



8-5/8" 24# J55 STC
Surface Casing set at 410'
in 12-1/4" hole with 250 sx Class C with 2% CaCl2.
Circ 12 sx cmt to pit.

448'

2-7/8" IPC Tubing

4270' - Base Salt

4493' - Top Delaware

Guiberson G-6 packer at ±4800'.

4850'

Proposed Production Casing:
5-1/2" 15.50 J55 STC casing set at 4850' in 7-7/8" hole.

Proposed Cement Program:
Lead - 1700 sx 35/65 Poz "C" with 6% gel, 5# salt, 1/4# FC (12.8, 1.94)
Tail - 500 sx Class H w/ 2% CaCl2 (15.6 ppg, 1.19 ft3/sx)
Calculated to circulate 300 sx to pit. (30% excess over open hole caliper plus 300 sx to circ 300 sx).

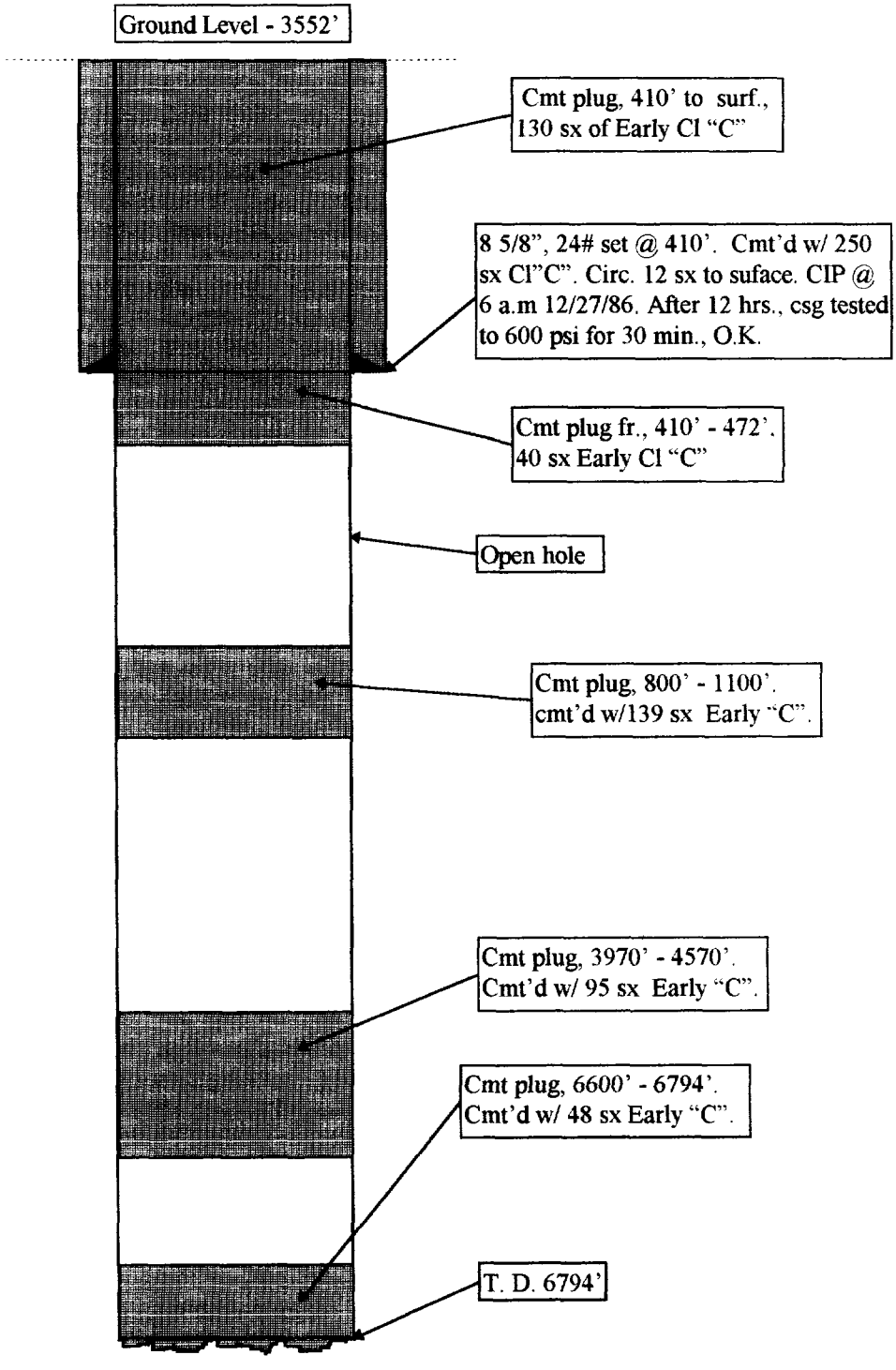
7-7/8" Open Hole 4850' - 6794'.

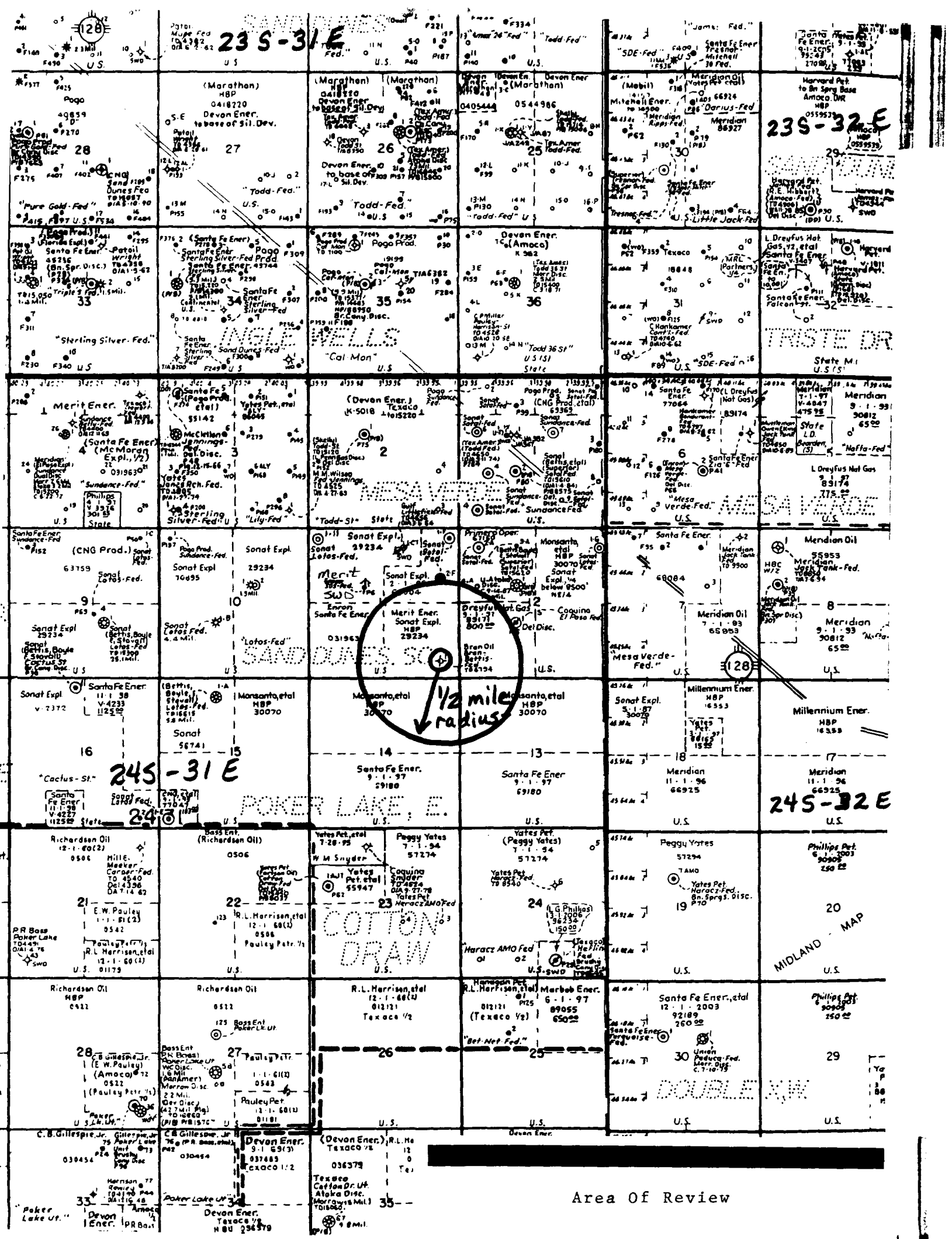
TD 6794'

Present

BRAN-BETTIS FEDERAL #1
OPERATOR - BRAN OIL CORPORTATION
660' FSL & 660' FEL, Section 11
T24S - R31E, NMPH
Eddy County, New Mexico

Spud - 12/26/86
P&A'D 1/9/87




23 S - 31 E
24 S - 31 E
23 S - 32 E
24 S - 32 E
1/2 mile radius
Area Of Review

VI. Tabulation Of Data On All Wells Within The Area Of Review

Lotos "11-F" Federal No. 2 (Sonat Exploration)
1780' FNL and 660' FEL, Unit Letter H,
Section 11, T24S, R31E
Eddy, County New Mexico

11-3/4" 42# WC40 STC surface casing set at 412' in 14-3/4" hole.
Cemented to surface with 200 sx Class C with 4% gel and 2% CaCl2 and
200 sx Class C with 2% CaCl2. Circulated 184 sx cement to surface.

8-5/8" 23# M50 STC intermediate casing set at 4430' in 11" hole with
Lead: 1200 sx 35/65 Poz C with 6% gel, 5# salt, 1/4# FC (12.4 ppg, 2.14 ft3/sx).
Tail: 200 sx Class H with 2% CaCl2 (15.6 ppg, 1.19 ft3/sx).
Circulated 80 sx cement to surface.

5-1/2" 15.50 and 17# K55 LTC production casing set at 8621' (TD) in 7-7/8" hole.
Fume Silica Lead: 340 sx Class C with fume silica and additives (11.5 ppg, 3.14 ft3/sx).
Tail: 500 sx 50/50 Poz H with 2% gel, 5# salt, 0.15% D59 FLA (14.2 ppg, 1.35 ft3/sx).
TOC at 5520' by CBL.

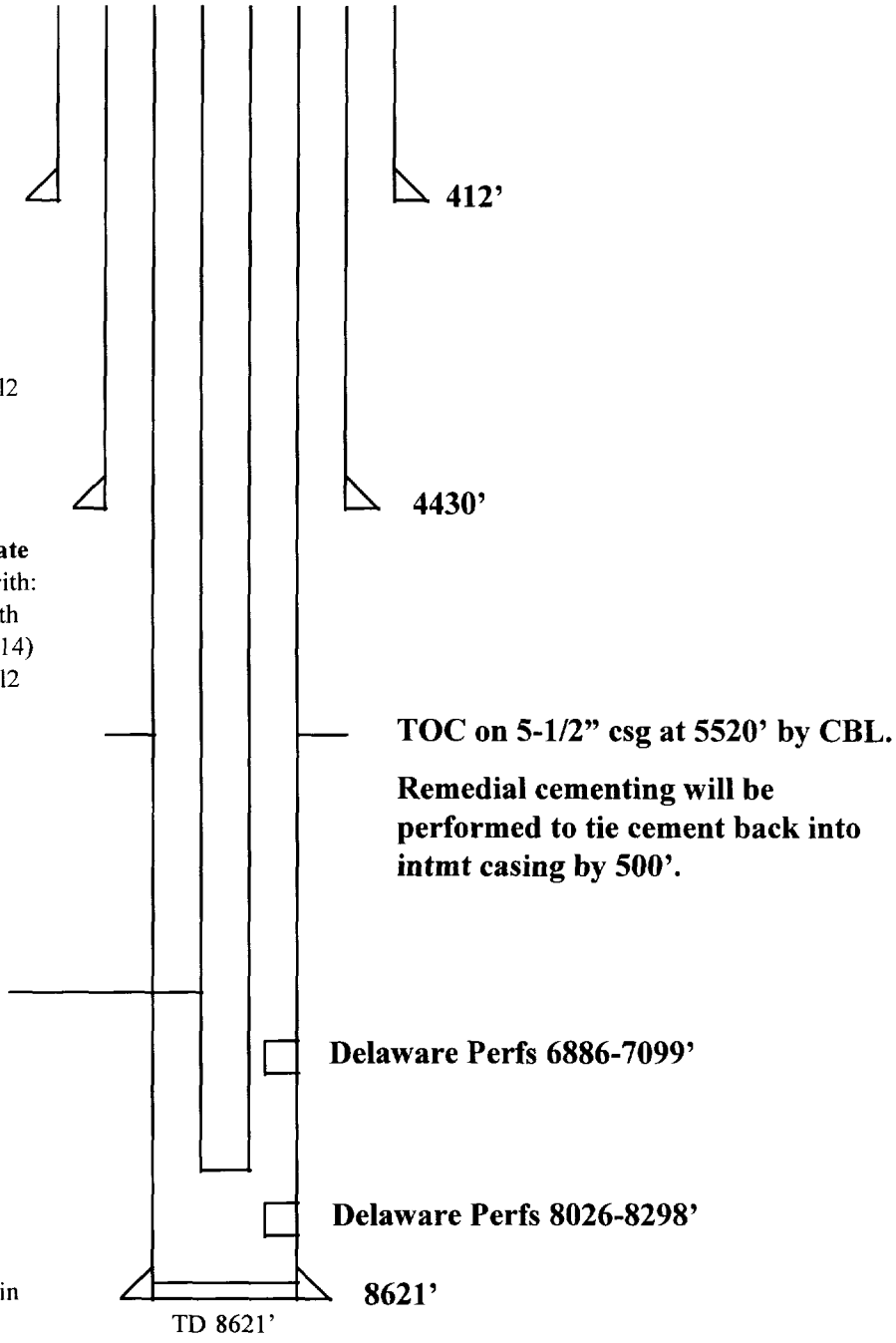
Delaware Perfs 8026'-8298' were acidized and sand fraced.
Delaware Perfs 6886'-7099' were acidized.
The well is currently on rod pump, producing from the Delaware.

The well was drilled and completed in early 1996.

Prior to converting the Bran well to SWD, Sonat will perform remedial cement work on the Lotos "11-F" Federal No. 2. Squeeze holes will be shot at $\pm$5420', and cement tied back into the intermediate casing by at least 500'.

Lotos "11-F" Federal No. 2

1780' FNL, 660' FEL,
Section 11, Unit Letter H, T24S, R31E,
Eddy County, New Mexico
KB 18' AGL



11-3/4" 42# WC40 STC
Surface Casing set at 412' in 14-3/4" hole with:
Lead - 200 sx Class C w/ 4% gel, 2% CaCl2 (13.5 ppg, 1.74 ft3/sx)
Tail - 200 sx Class C w/ 2% CaCl2 (14.8 ppg, 1.32 ft3/sx).
Circ 184 sx cmt to pit.

8-5/8" 23# M50 STC intermediate casing set at 4430' in 11" hole with:
Lead - 1200 sx 35/65 Poz "C" with 6% gel, 5# salt, 1/4# FC (12.4, 2.14)
Tail - 200 sx Class H w/ 2% CaCl2 (15.6 ppg, 1.19 ft3/sx)
Circ 80 sx cement to pit.

2-7/8" 6.50 N80 8rd EUE USED tubing

5-1/2" 15.50 and 17# K55 LTC
Production Casing set at 8621' in 7-7/8" hole. Single Stage Cement Job: Fume Silica Lead: 340 sx Class C with 3 gps fume silica D44, 0.09% D604AM (FLA and disp), 0.4% L10 (anti-settling), 0.03% M45 (antifoam) (11.5 ppg, 3.14 ft3/sx)
Tail: 500 sx 50/50 Poz H w/ 2% gel, 5# salt, 0.15% D59 FLA (14.2, 1.35).
TOC at 5520 by CBL.

VII. Data On Proposed Operation

1. The average daily injection rate will be 1,000 BWPD.
   The maximum daily injection rate will be 3,000 BWPD.

2. The system will be closed.

3. The proposed maximum injection pressure is 900 psig.
   The top of the open hole interval will be at 4850'.
   (0.2 psi/ft) x (4500') = 900 psi

4. The injected fluid will be Delaware produced water, which will be reinjected into the Delaware. Therefore, the formation fluid and injected fluid will be compatible.

5. The proposed disposal zone is not productive of oil or gas within 1 mile of the proposed SWD well. A Delaware (Bell Canyon) water analysis is attached from Sonat's Lotos "C" Federal No. 901. This water analysis was obtained during an unsuccessful Bell Canyon recompletion in 1996.

VIII. Geologic Information

The top of the Delaware is at 4493' in the proposed SWD well. The Delaware is a sequence of sand and shales that is approximately 3800' thick at this location. These numerous sandstones are generally porous, permeable, and water bearing. Immediately above the Delaware is a massive anhydrite and salt section from approximately 1100' to 4493' in depth. The only fresh water in the area is above 320. The nearest fresh water well is located in Unit Letter F, Section 2, T24S, R31E, which is approximately 1-1/2 miles north, north-east of the proposed Bran SWD Well No. 1. This water well is located on Sonat's Todd "2" State lease, and we refer to it as the Todd "2" State Water Well No. 1. A water analysis from this well is attached.

IX. Proposed Stimulation Program - The open hole interval from 4850' to 6794' will be acidized. If necessary, a sand fracture treatment will be performed to obtain adequate injection rates.

X. Open hole logs were submitted to the NMOCD by Bran Oil Corp in 1987.

XI. A water analysis is attached for Sonat's Todd "2" State Water Well No. 1 located in Section 2, T24S, R31E. A search of this area reveals that there are no other fresh water wells located within 2 miles of this location.

XII. The available geologic and engineering data has been reviewed, and no evidence was found of open faults or other hydrologic connection between the disposal zone and any underground source of drinking water.

In Sonat's Lotos "11-F" Federal No. 2, the top of cement on the production casing is at 5520' (TOC by CBL). The fresh water zones above 320' are protected by 11-3/4" surface casing (cement circulated), and by 8-5/8" intermediate casing (cement circulated). To prevent possible communication of injected fluids to the surface, Sonat will perform remedial cementing on the production casing and tie back cement into the intermediate casing prior to converting the Bran well to SWD.

cc: ELT JLC
MJL KSJ
TMM Well File

P. O. BOX 1468
MONAHANS, TEXAS 79756
PH 943-3234 OR 563-1040

Martin Water Laboratories, Inc.

709 W. INDIANA
MIDLAND, TEXAS 79701
PHONE 683-4521

RESULT OF WATER ANALYSES

LABORATORY NO. 596215
SAMPLE RECEIVED 5-17-96
RESULTS REPORTED 5-29-96

TO: Mr. Tom Myers
110 W. Louisiana, Ste 500, Midland, TX 79701

COMPANY Sonat Exploration LEASE Lotos "C"
FIELD OR POOL Poker Lake
SECTION ____ BLOCK ____ SURVEY ____ COUNTY Eddy STATE NM
SOURCE OF SAMPLE AND DATE TAKEN:
NO. 1 Produced water - taken from Lotos "C" #901.
NO. 2
NO. 3
NO. 4

REMARKS:

Lotos "C" Federal No. 901
Bell Canyon
Perfs 4832-5064

Sample after 247 BFW swabbed.

CHEMICAL AND PHYSICAL PROPERTIES	NO. 1
Specific Gravity at 60° F.	1.1052
pH When Sampled	
pH When Received	6.40
Bicarbonate as HCO_3	85
Supersaturation as $CaCO_3$	
Undersaturation as $CaCO_3$	
Total Hardness as $CaCO_3$	35,500
Calcium as Ca	10,100
Magnesium as Mg	2,491
Sodium and/or Potassium	48,105
Sulfate as SO_4	0
Chloride as Cl	99,427
Iron as Fe	106
Barium as Ba	256
Turbidity, Electric	
Color as Pt	
Total Solids, Calculated	160,464
Temperature °F	
Carbon Dioxide, Calculated	
Dissolved Oxygen,	
Hydrogen Sulfide	0.0
Resistivity, ohms/m at 77° F	0.066
Suspended Oil	
Filtrable Solids as mg/l	
Volume Filtered, ml	

Rw = .05 @ 102° F

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks: When we compare the above with our records in this field, we find it has characteristics reasonably similar to what we would expect from a natural Delaware except it has no sulfate and has a significant amount of barium, which is contrary to our records. However, different Delaware intervals occasionally have slight differences in regard to these two components. We also find the water has ratios of salts that are very similar to Morrow water, but this water shows significantly higher levels of salts. If this is a Morrow producer, then it would be possible that it is receiving some water from the Delaware in conjunction with some water from the Morrow.

Form No. 3

By Waylan C. Martin, M.A.

Todd "2" State Water Well No. 1

Martin Water Laboratories, Inc.

P. O. BOX 1468
MONAHANS, TEXAS 79756
PH. 943-3234 OR 563-1040

709 W. INDIANA
MIDLAND, TEXAS 79701
PHONE 683-4521

RESULT OF WATER ANALYSES

TO: Mr. Selden Jones
110 W. Louisiana, Ste 500, Midland, TX 79701

LABORATORY NO. 596167
SAMPLE RECEIVED 5-17-96
RESULTS REPORTED 5-23-96

COMPANY Sonat Exploration LEASE
FIELD OR POOL
SECTION BLOCK SURVEY COUNTY Eddy STATE NM

SOURCE OF SAMPLE AND DATE TAKEN:

NO. 1 Drinking water - taken from Todd fresh water well

NO. 2 Maximum contents for drinking water as recommended by the Texas Dept. of Health.

NO. 3

NO. 4

WELL FILE

REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES

	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0020			
pH When Sampled				
pH When Received	6.57			
Bicarbonate as HCO_3	239			
Supersaturation as $CaCO_3$				
Undersaturation as $CaCO_3$				
Total Hardness as $CaCO_3$	334			
Calcium as Ca	69			
Magnesium as Mg	39			
Sodium and/or Potassium	110			
Sulfate as SO_4	288	300		
Chloride as Cl	55	300		
Iron as Fe	0.52	0.3		
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	801	1,000		
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen,				
Hydrogen Sulfide	0.0			
Resistivity, ohms/m at 77° F.	9.73			
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				
Nitrate, as N	0.2	10.0		

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks Based on the determinations performed herein, we find this water exceeds State recommended maximum contents for drinking water in the level of iron only. It should be clarified that iron is a highly variable component due to corrosion and may not necessarily be consistently above the standard on the basis of this single analysis.

Form No. 3

By
Waylan C. Martin, M.A.

Martin Water Laboratories, Inc.
WATER CONSULTANTS SINCE 1953
BACTERIAL AND CHEMICAL ANALYSES

P. O. BOX 1468
MONAHANS, TEXAS 79756
(915) 943-3234 or 563-1040

709 W. INDIANA
MIDLAND, TEXAS 79701
(915) 683-4521

To: Mr. Selden Jones
110 W. Louisiana, Suite 500
Midland, TX 79701

Laboratory No. B59634
Sample received 5-17-96
Results reported 5-23-96

Company: Sonat Exploration
County: Eddy, NM
Field:
Lease:

Subject: To determine the presence or absence of coliform bacteria.

Method: Recommended by the American Public Health Association as follows: Each of five tubes of multiple strength lactose broth inoculated with 10 ml of the sample for the presumptive test. If any tubes are positive, they are in turn inoculated into brilliant green lactose bile broth for confirmative tests.

Source of sample and date taken
#1. Drinking water - taken from Todd fresh water well. 5-17-96

	#1 Number of Positive Tubes	
Incubation period	24 hours	48 hours
Presumptive test	0	1
Confirmed test	0	1

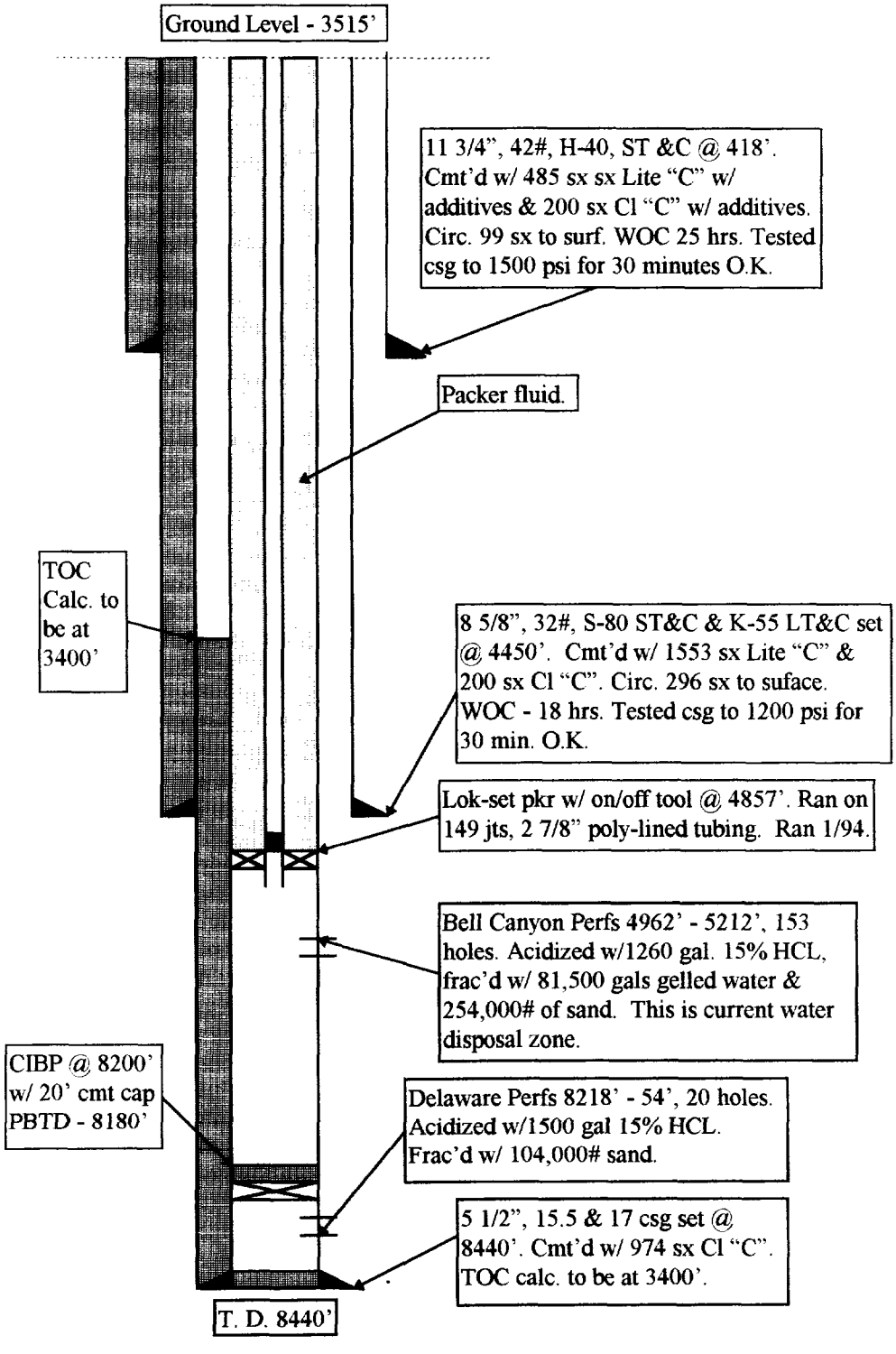
Remarks: Based on the determinations performed above, this water is not indicated to be satisfactory for human consumption.

Waylan C. Martin, M.A.

Not Inside Area of Review

SDS "11" FEDERAL #1 -SWD
OPERATOR - MERIT ENERGY CORPORTATION
2090' FNL & 1980' FWL
Section 11, Unit Letter "F"
T24S - R31E
Eddy County, New Mexico

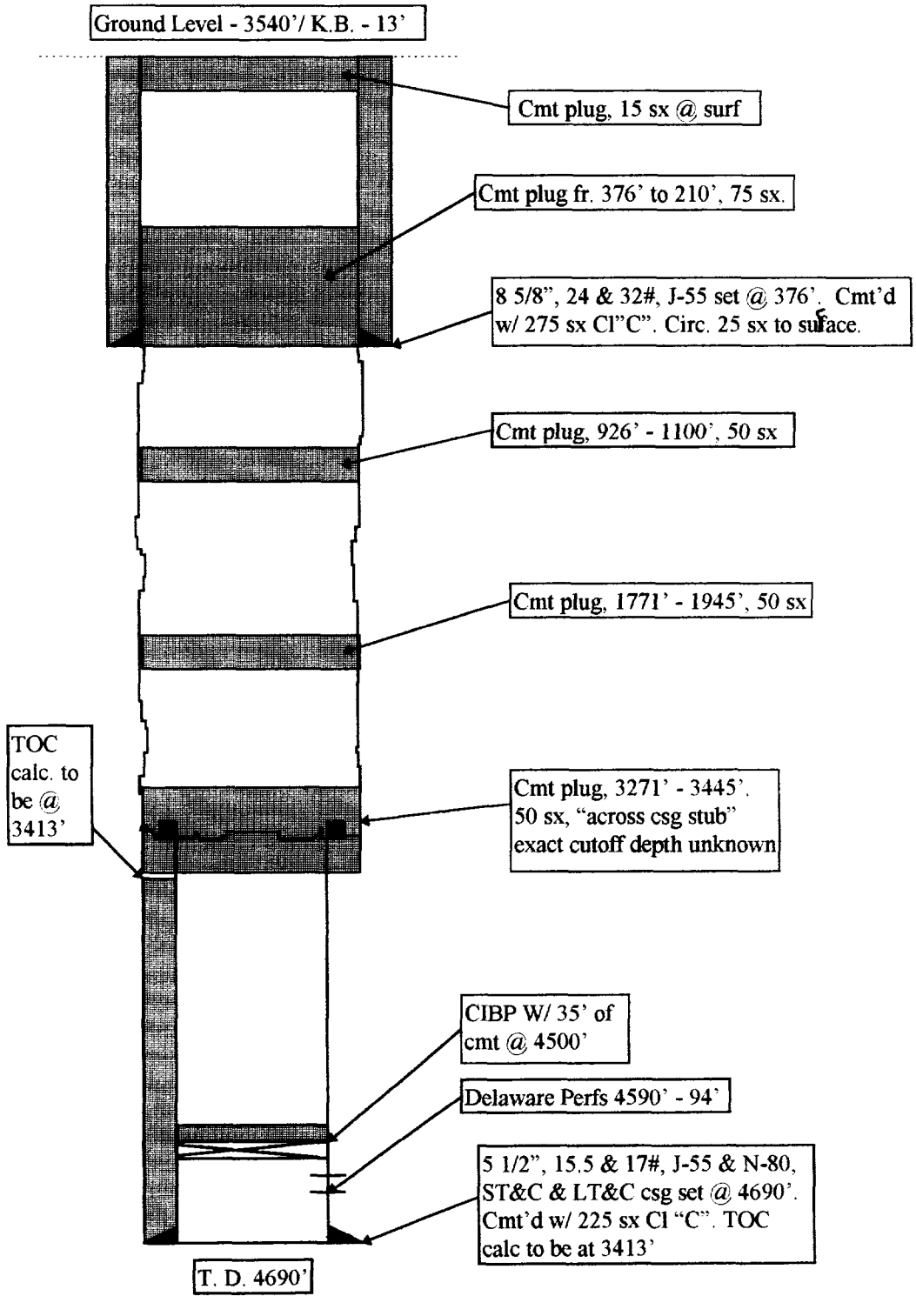
Spud - 08/12/93
Currently - SWDW rate 2000 bwpd



Not Inside Area of Review

El PASO FEDERAL #1
OPERATOR - COQUINA OIL CORPORTATION
1980' FSL & 1980' FWL
Section 12, Unit Letter "K"
T24S - R31E
Eddy County, New Mexico

Spud - 05/25/78
P&A'D - 04/09/79



Affidavit of Publication

№ 17420

State of New Mexico,
County of Eddy, ss.

Amy McKay,
being first duly sworn, on oath says:

That she is Business Manager of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the state wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

September 7, 19 96
_____, 19___
_____, 19___
_____, 19___
_____, 19___
_____, 19___

That the cost of publication is $ 16.35, and that payment thereof has been made and will be assessed as court costs.

Amy McKay

Subscribed and sworn to before me this
9th day of September, 1996

Edith L Farm

My commission expires 01/18/98
Notary Public

September 7, 1996

SONAT EXPLORATION has applied to re-enter the Bran Oil Corp Bran-Bettis Fed No. 1 well located 660' FSL and 660' FEL of Sec. 11, T24S, R31E, Eddy County, New Mexico for the purpose of making a salt water disposal well. The proposed open hole injection interval is from 4500' to 6794' in the Delaware formation. The maximum expected injection rate is 3,000 BWPD. The maximum injection pressure will be 900 psig. Interested parties must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501 within 15 days of this notice. Questions should be directed to Mr. Glenn Carter, c/o Sonat Exploration, 110 W. Louisiana, Suite 500, Midland, Texas 79701. 915-684-0400

Schedule of Operators within a one-half mile radius of the Bran Federal Well No. 1, located in unit letter "P" of Section 11, T-24-S, R-31-E, N.M.P.M., Eddy County, New Mexico.

✓ **Louis Dreyfus Natural Gas Corporation**
14000 Quail Springs Parkway, Suite 600
Oklahoma City, OK 73134

✓ **Merit Energy Company**
12222 Merit Drive, Suite 1500
Dallas, TX 75251

✓ **Pogo Producing Company**
Post Office Box 10340
Midland, Texas 79702-7340

✓ **Santa Fe Energy Operating Partners, L. P.**
550 West Texas, Suite 1330
Midland, TX 79701

Sonat Exploration Company
110 West Lousiana, Suite 500
Midland, Texas 79701

Surface Owner and Surface Tenant
for the Bran Federal Well No. 1, located in unit letter "P" of Section 11,
T-24-S, R-31-E, N.M.P.M.,Eddy County, New Mexico.

I. SURFACE OWNERS:

✓ **United States of America**
Post Office Box 27115
Santa Fe, New Mexico 87502-0115

II. SURFACE TENANTS:

✓ **Jimmy Ray Richardson**
J. R. ENGINEERING & CONSTRUCTION COMPANY
P. O. Box 487
Carlsbad, New Mexico 88221

Letter to offset operators.

November 5, 1996

Re: Proposed SWD Well - Sonat Exploration's Bran-Bettis Federal No. 1
660' FSL & 660' FEL, Section 11, T24S, R31E
Eddy County, New Mexico

Gentlemen:

Sonat Exploration intends to re-enter the Bran-Bettis Federal No. 1, and convert the well to salt water disposal in the Delaware formation. The New Mexico Oil Conservation Division requires a copy of the SWD application be furnished, by registered or certified mail, to all offset operators and the surface owner. The subject SWD application is attached. The proposed injection interval in the Delaware is similar to that of two other SWD wells in the same section.

Offset operators and the surface owner have 15 days to file any objections or request a hearing with the NMOCD, P. O. Box 2088, Santa Fe, New Mexico 87501.

If you have any questions, please feel free to call me at (915) 684-0405.

Sincerely,

K. Glenn Carter
Drilling Superintendent

Attachments

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "*Return Receipt Requested*" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Louis Dreyfus Nat Gas
14000 Quail Springs Pkwy
Ste 600
Oklahoma City, OK 73134

4a. Article Number
P 268 435 751

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
11-7-96

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X

PS Form 3811, December 1994 — Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

SENDER:
- Complete items 1 and/or 2 for additional services.
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I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Merit Energy Company
12222 Merit Dr. Ste 1500
Dallas, TX 75251

4a. Article Number
P 268 [illegible]

4b. Service Type
☐ Registered ☐ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
11-7-96

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X

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MIDLAND/ODESSA TX 797 11:07/96 21:01

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
POGO Producing Company
P. O. Box 10340
Midland, Tx 79702-7340

4a. Article Number
P 268 437 044

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
11-7-96

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X

MIDLAND, TX DELIVERY NOV 7 1996 USPS

PS Form 3811, December 1994 — Domestic Return Receipt

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I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Santa Fe Energy Operating
550 West Texas, Ste 1330
Midland, Tx 79701

4a. Article Number
P 268 437 043

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
11-8-96

5. Received By: (Print Name)
Cathy Gentry

8. Addressee's Address (*Only if requested and fee is paid*)

6. Signature: (Addressee or Agent)
X Cathy Gentry

PS Form **3811**, December 1994 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

SENDER:
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- Complete items 3, 4a, and 4b.
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I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
United States of America
P. O. Box 27113
Santa Fe, N.M. 87502-0115

4a. Article Number
P 268 437 042

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
NOV 8 1996

5. Received By: (Print Name)
Tony

8. Addressee's Address (*Only if requested and fee is paid*)

6. Signature: (Addressee or Agent)
X

PS Form **3811**, December 1994 Domestic Return Receipt

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2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
J.R. Engineering
Attn: Jimmy Ray Richardson
P. O. Box 487
Carlsbad, New Mexico 88221

CARLSBAD NM NOV 12 1996 USPS

4a. Article Number
P 268 437 041

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

5. Received By: (Print Name)

8. Addressee's Address (*Only if requested and fee is paid*)

6. Signature: (Addressee or Agent)
X