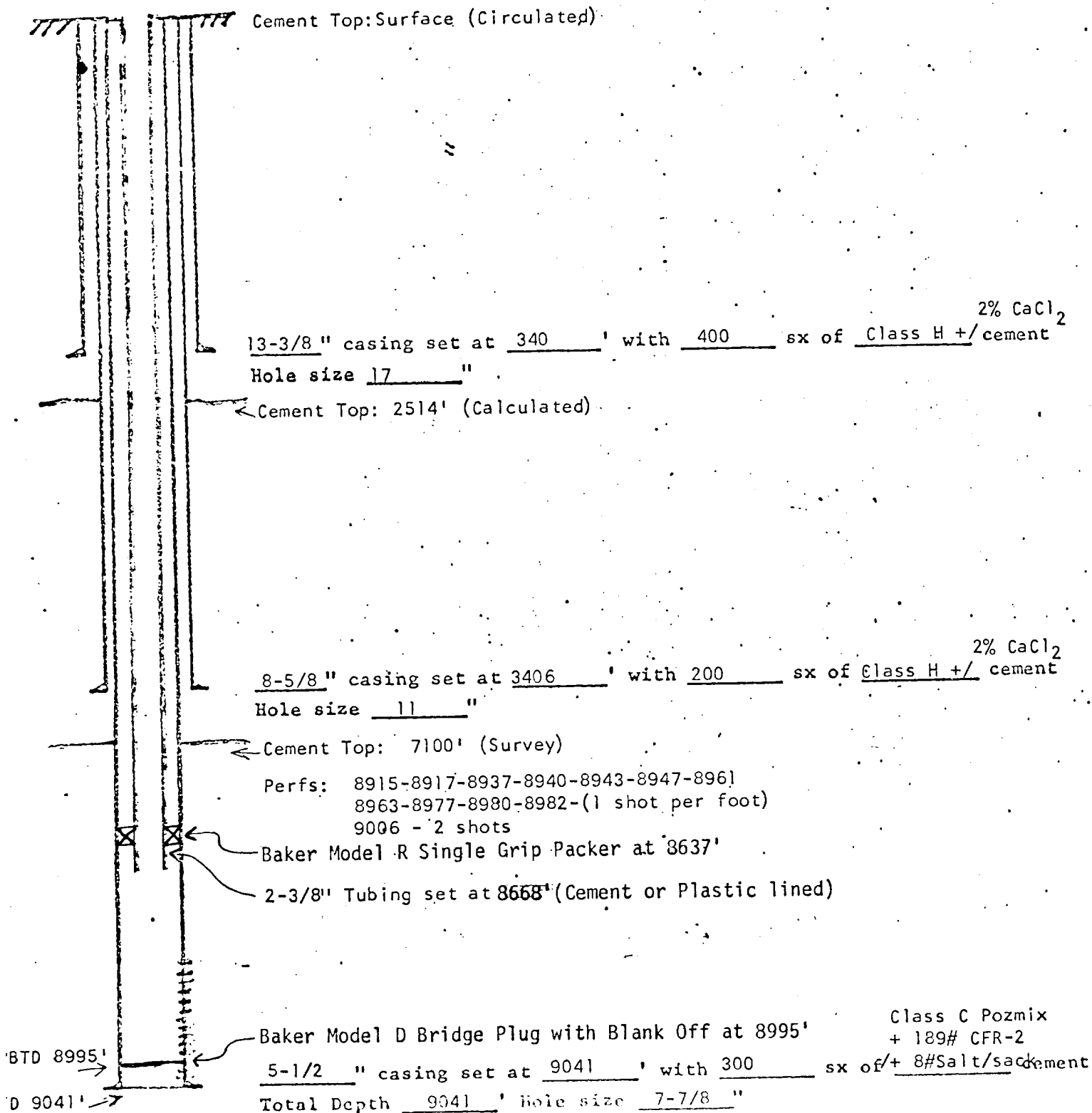
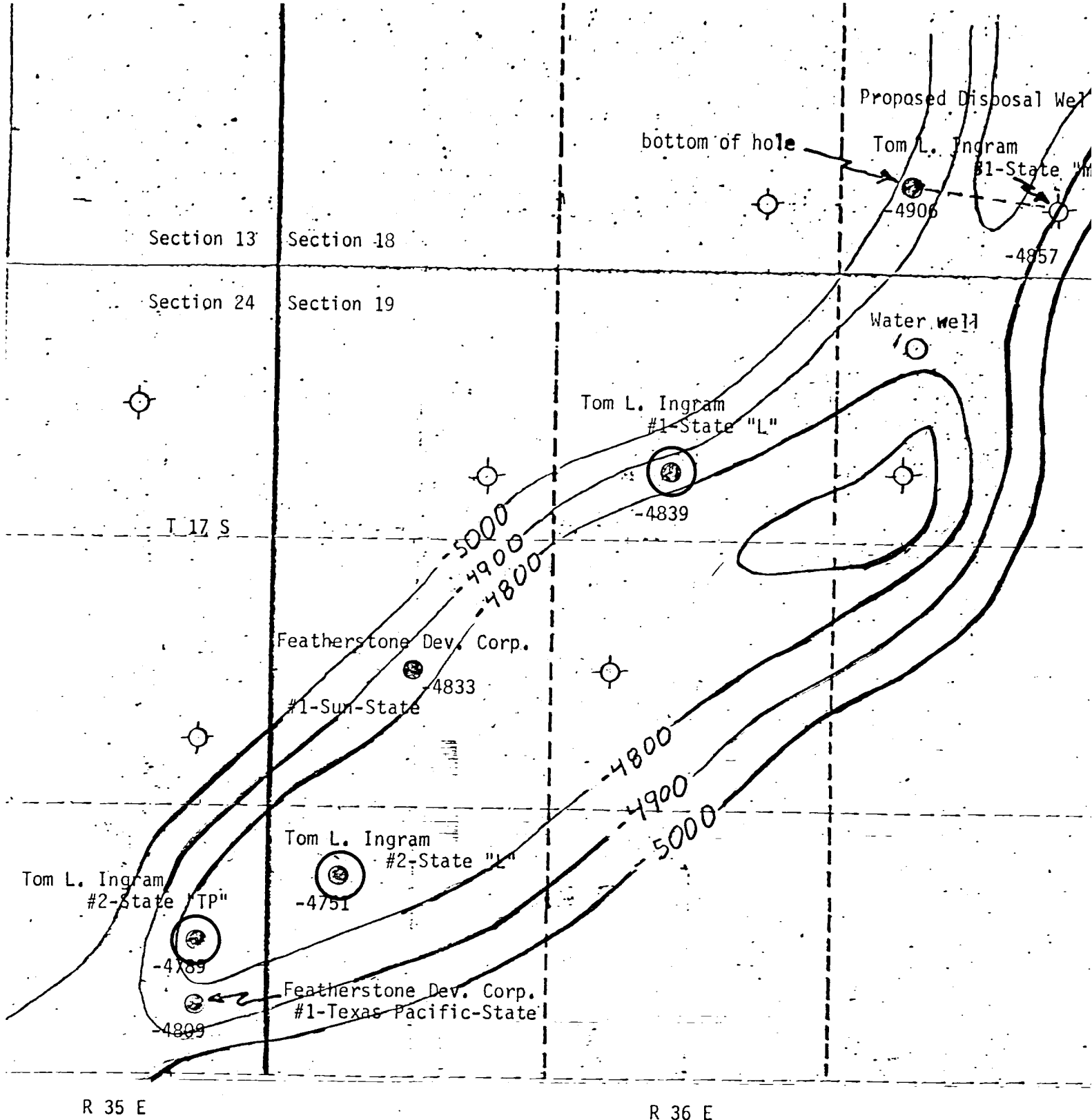


*NOTE: Should waivers from the State Engineer, the surface owner, and all operators within one-half mile of the proposed injection well not accompany this application, the New Mexico Oil Conservation Commission will hold the application for a period of 15 days from the date of receipt by the Commission's Santa Fe office. If at the end of the 15-day waiting period no protest has been received by the Santa Fe office, the application will be processed. If a protest is received, the application will be set for hearing, if the applicant so requests. SEE RULE 701.*

|                          |                           |                                                 |
|--------------------------|---------------------------|-------------------------------------------------|
| FIELD<br>Vacuum Abo Reef | OPERATOR<br>Tom L. Ingram | DATE<br>April 10, 1978                          |
| LEASE<br>State M         | WELL No<br>1              | LOCATION<br>Unit Letter G Sec. 18 - T17S - R36E |





Structure Contour Map  
 Vacuum Abo Reef Field  
 Lea County, New Mexico

Disposal Well

Datum, Top of Abo Reef  
 C.I. 100'  
 April 1978  
 Joe Ingram

Water Source



## HALLIBURTON DIVISION LABORATORY

HALLIBURTON SERVICES

MIDLAND DIVISION

HOBBS, NEW MEXICO 88240

## LABORATORY WATER ANALYSIS

RECEIVED MAR 30 1978

No. W78-317To Tom L. IngramDate 3-29-78Box 1757Roswell, New Mexico

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Submitted by \_\_\_\_\_ Date Rec. 3-29-78Well No. As Marked Depth \_\_\_\_\_ Formation ABO Reef

County \_\_\_\_\_ Field \_\_\_\_\_ Source \_\_\_\_\_

|                                  | State "L" #1  | State "L" #2  | State "M" #1  |
|----------------------------------|---------------|---------------|---------------|
| Resistivity                      | 0.086 @ 74°F. | 0.049 @ 74°F. | 0.073 @ 74°F. |
| Specific Gravity                 | 1.057         | 1.102         | 1.068         |
| pH                               | 6.4           | 6.2           | 6.5           |
| Calcium (Ca)                     | 5,800         | 13,750        | 5,000 *MPL    |
| Magnesium (Mg)                   | Nil           | 2,100         | 960           |
| Chlorides (Cl)                   | 48,500        | 90,500        | 58,000        |
| Sulfates (SO <sub>4</sub> )      | 2,950         | 1,600         | 3,200         |
| Bicarbonates (HCO <sub>3</sub> ) | 1,020         | 315           | 185           |
| Soluble Iron (Fe)                | Nil           | Nil           | Nil           |

Remarks:

\*Milligrams per liter

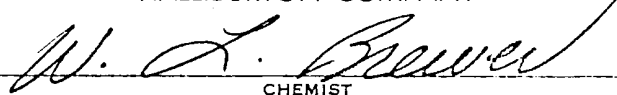
Respectfully submitted,

Analyst: Brewer

cc:

HALLIBURTON COMPANY

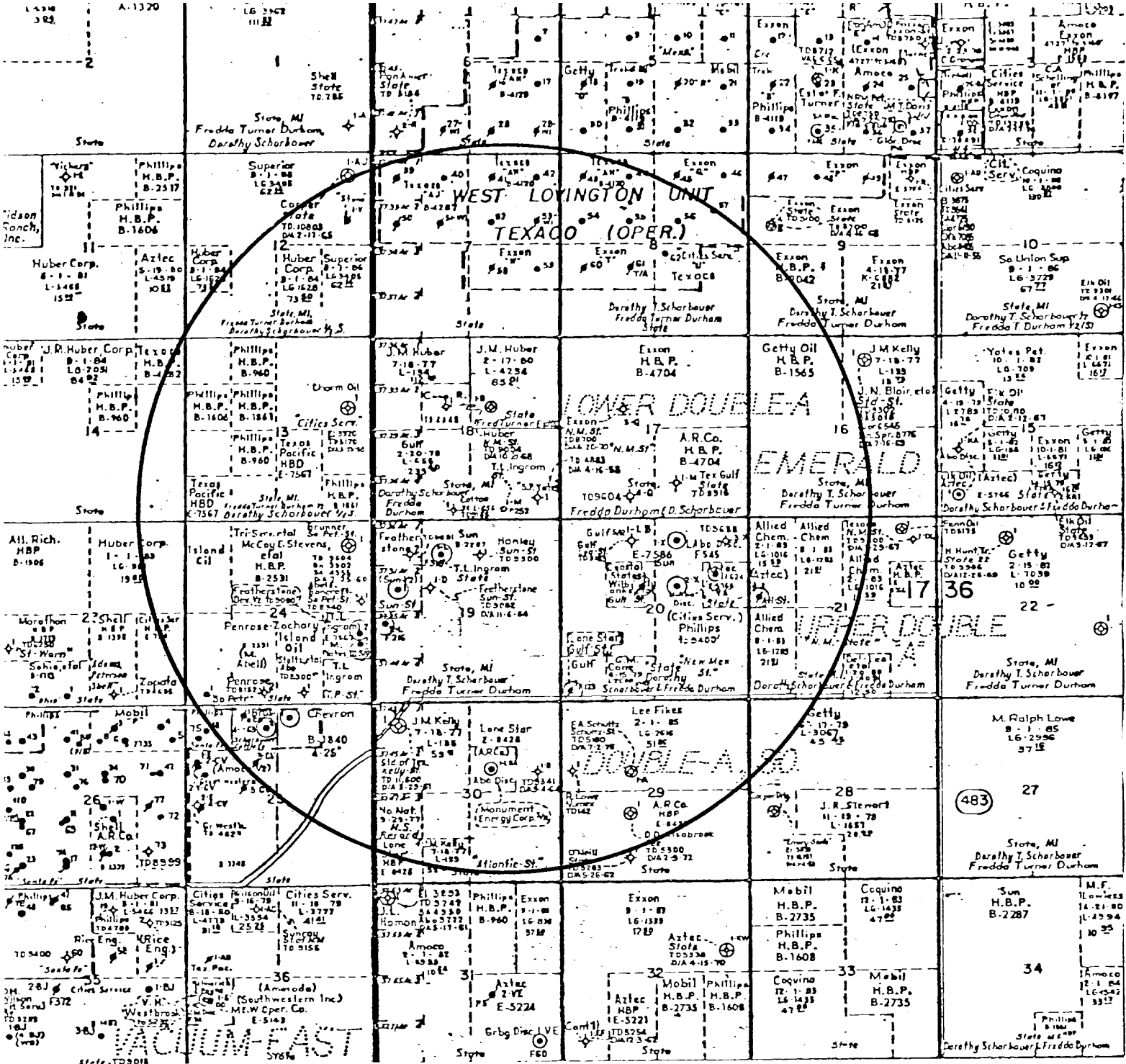
By



CHEMIST

## NOTICE

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Plat showing location of proposed disposal well, Tom L. Ingram #1 State "M" •  
330'FSL and 1650'FEL Sec.18, T 17 S, R 36 E

Producing formations within two mile radius of disposal well are:

- San Andres
- ⊙ Abo

Disposal is to be into the Abo Reef formation at a depth of 8915-8992 feet.

Liquid will be salt water produced from:

- Tom L. Ingram #1 State "L" 990'FWL and 1890'FWL, Sec.19, T 17 S, R 36 E
- Tom L. Ingram #2 State "L" 2310'FSL and 330'FWL, Sec.19, T 17 S, R 36 E
- Tom L. Ingram #2 State "TP" 1980'FSL and 330'FEL, Sec.24, T 17 S, R 35 E

Volume will be from 100 to 300 bbls of salt water per day.

COUNTY LEA  
FIELD or  
LOC ON VACUUM (ABO)  
WELL STATE "M" #1  
COMPANY TOM L. INGRAM

COMPANY TOM L. INGRAM  
WELL STATE "M" #1  
FIELD VACUUM (ABO)  
COUNTY LEA STATE NEW MEXICO  
Location: 1650' FEL & 330' FSL  
Other Services: DLL, MLL-ML, MOP  
Sec. 18 Twp. 17-S Rge. 36-E

Permanent Datum: G.L.; Elev.: 3886  
Log Measured From K.B., 11 Ft. Above Perm. Datum; Elev.: K.B. 3897  
Drilling Measured From K.B.; D.F. 3886  
G.L. 3886

Date 6-16-71  
Run No. ONE  
Type Log EPI THERMAL  
Depth—Driller 8965  
Depth—Logger 8966  
Bottom logged interval 8965  
Top logged interval 0  
Type fluid in hole SALT MUD  
St. ility, PPM Cl. 46000  
Density 9.0  
Level FULL  
Max rec. temp., deg F. 131  
Operating rig time 5 HRS  
Recorded by BROWN  
Witnessed by INGRAM

| BORE-HOLE RECORD |       |      |      | CASING RECORD |       |      |      |
|------------------|-------|------|------|---------------|-------|------|------|
| Run No.          | Bit   | From | To   | Size          | Wgt.  | From | To   |
| 1                | 7 7/8 | 3406 | 8965 | 8 5/8         | 24/32 | 10   | 3406 |
| 2                | 7 7/8 | CSG  | T.D. | 8 5/8         |       | 10   | 350  |
|                  |       |      |      |               |       |      | 5407 |

