



June 25, 1997

State of New Mexico
Energy, Minerals & Natural Resources Department
Oil Conservation Division
2040 South Pacheco
Santa Fe New Mexico 87505

RE: Expansion of Waterflood Project
Northeast Drinkard Unit
North Eunice Blinbry-Tubb-Drinkard Oil & Gas Pool
Well Nos. 116, 210, 215, 218, 408 & 611
Lea County, New Mexico

Gentlemen:

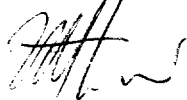
Altura Energy Ltd. hereby requests administrative approval for expansion of the subject waterflood project. Division Order No. R-8541, granted 11-9-87, and prior expansion by application dated June 26, 1995 (both in the name of Altura's predecessor Shell Western E&P Inc.), authorized the existing Northeast Drinkard Unit Waterflood Project within the subject pool.

The following information is submitted in support of this request:

1. Form C-108, with miscellaneous data attached;
2. A map reflecting the location of each of the proposed injection wells. Each map identifies wells and leases located within a two mile radius of each of the proposed injectors and reflects a one-half mile radius around the proposed injectors, this latter area being described as the well's Area of Review;
3. An Injection Well Data Sheet for each of the proposed injectors;
4. Tabulation of Data on wells located within the Area of Review;
5. List of Offset Operators and Surface Owners. These entities have been notified by certified mail; and
6. An Affidavit of Publication and "legal Notice" newspaper clipping.

Should you need additional information or have any questions regarding this application, please feel free to contact the undersigned at 281-544-3226.

Yours very truly,



Jeff A. Dethrow CPL
Contract Landman

cc: Mr. Chris Williams
Oil Conservation Division
State of New Mexico
Energy, Minerals & Natural Resources Department
P.O. Box 1980
Hobbs NM 88241

State of New Mexico
Office of Land Commissioner
P.O. Box 1148
Santa Fe NM 87504

Offset Operators (see attached list)

Surface Owners (see attached list)

**NORTHEAST DRINKARD UNIT
LIST OF OFFSET OPERATORS & SURFACE OWNERS**

OFFSET OPERATORS

Conoco, Inc.
1410 N. West County Road
Hobbs NM 88240

Chevron Inc.
P.O. Box 1635
Houston TX 77251

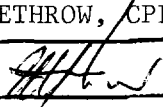
SURFACE OWNERS

State of New Mexico
Office of Land Commissioner
P.O. Box 1148
State Land Office Bldg.
Santa Fe NM 87504-1148

G.P. Sims Estate
P.O. Box 1046
Eunice NM 88331

Will N. Terry Trust
Wm.F. McNeill
Marilyn McNeill Gates
Marcia Blackburn
P.O. Box 686
Hobbs NM 88241

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: XX Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? XX Yes No
- II. OPERATOR: ALTURA ENERGY LTD.
ADDRESS: P O BOX 4294, WCK5236, HOUSTON TX 77210-4294
CONTACT PARTY: JEFF A DETHROW, CONTRACT LANDMAN PHONE: 281-544-3226
- III. WELL DATA: Complete the data required on the reverse side of this form for each well processed for injection. Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project: XX Yes No
If yes, give the Division order number authorizing the project R-8541
- 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 sources 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: JEFF A DETHROW, CPL TITLE: CONTRACT LANDMAN/PERMITTING
SIGNATURE:  DATE: 06-25-97
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstance of the earlier submittal. Hearing Sept. 24, 1987,
- Case No. 9232, Order No. 8541 & supplemental application dated 06-26-95.
- ~~Submit one copy to Santa Fe with one copy to the appropriate District Office~~

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. 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 advertisement 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, PO Box 2088, Santa Fe, NM 87504-2088 within 15 days.

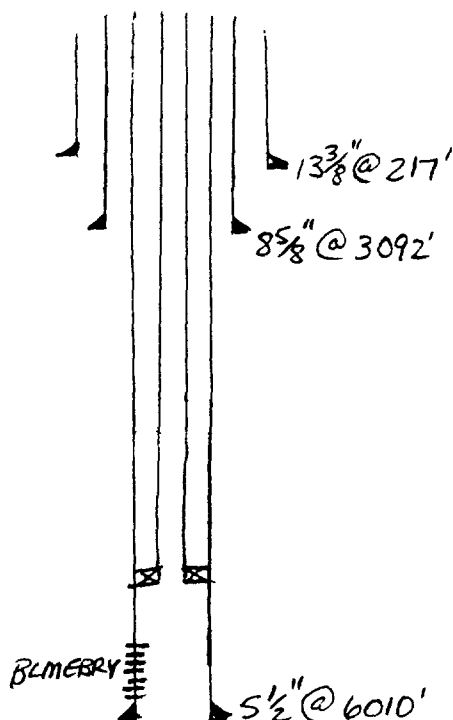
NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

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.

INJECTION WELL DATA SHEET

OPERATOR ALTURA ENERGY LTD. LEASE NORTHEAST DRINKARD UNIT (formerly AZTEC)
 WELL NO. 116 PORTAGE LOCATION 5790 FSL 8660 FWL SECTION 2 TOWNSHIP T21S RANGE R37E
ST. E-8

Schematic



Tabular Data

Surface Casing

Size 13 3/8 " Cemented with 225 sx.
 TOC SURFACE feet determined by CIRC
 Hole size 17 1/4 "

Intermediate Casing

Size 8 5/8 " Cemented with 2100 sx.
 TOC SURFACE feet determined by CIRC
 Hole size 11 "

Long string

Size 5 1/2 " Cemented with 225 sx.
 TOC 4200 feet determined by TEMP. SURVEY
 Hole size 7 7/8 "
 Total depth 6010

Injection interval

5790 feet to 6000 feet perforated
 (perforated or open-hole, indicate which)

Tubing size 2 3/8 " lined with FIBERGLASS EPOXY set in a
 (material)
GUIBERSON UNI II packer at 5700 feet
 (brand and model)

(or describe any other casing-tubing seal).

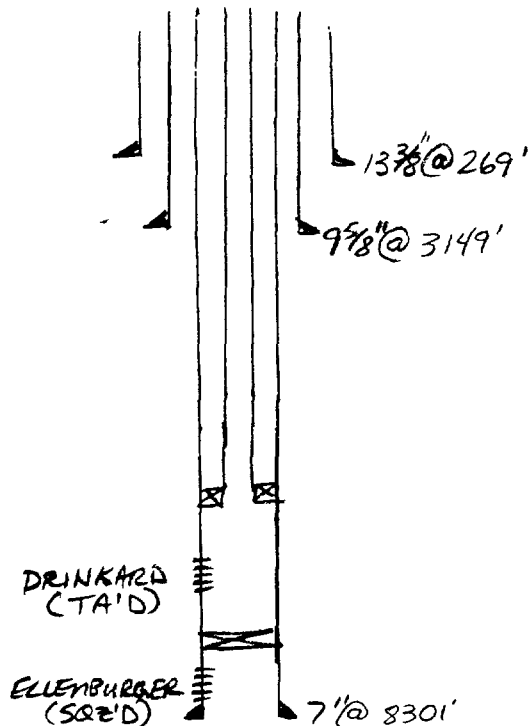
Other Data

- Name of the injection formation BLINEBRY/TUBB/DRINKARD
- Name of field or Pool (if applicable) N. EUNICE B/T/D OIL & GAS POOL
- Is this a new well drilled for injection? Yes ☐ No ☒
 If no, for what purpose was the well originally drilled? BLINEBRY OIL & GAS PERFORATIONS 5792-5832, 5878-5910, 5944-54, 5980-90
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used)
NO
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

INJECTION WELL DATA SHEET

OPERATOR ALTURA ENERGY LTD. LEASE NORTHEAST DRINKARD UNIT (formally CONOCO) Hawk B-3 #10
WELL NO. 210 FOOTAGE LOCATION 2970 FSL & 1650 FEL SECTION 3 TOWNSHIP T21S RANGE R37E

Schematic



Tabular Data

Surface Casing

Size 13 3/8 " Cemented with 260 sx.

TOC SURFACE feet determined by CIRC.

Hole size _____

Intermediate Casing

Size 9 5/8 " Cemented with 1360 sx.

TOC 600' feet determined by Temp. Survey

Hole size _____

Long string

Size 7 " Cemented with 940 sx.

TOC 3125 feet determined by Temp. Survey

Hole size _____

Total depth 8301'

Injection interval

6550 feet to 6790 feet perforated
(perforated or open-hole, indicate which)

Tubing size 2 3/8 " lined with FIBERGLASS EPOXY set in a
(material)
GUIBERSON UNI II packer at 6500 feet
(brand and model)
(or describe any other casing-tubing seal).

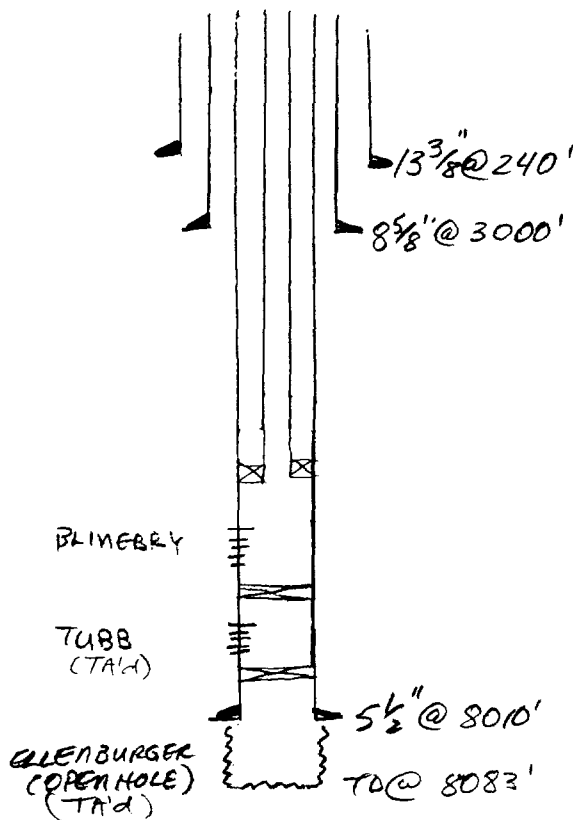
Other Data

- Name of the injection formation BLINERY/TUBB/DRINKARD
- Name of Field or Pool (if applicable) N. EUNICE B/T/D OIL & GAS POOL
- Is this a new well drilled for injection? Yes ☐ No ☒
If no, for what purpose was the well originally drilled? ELLENBURGER OIL & GAS
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) ELLENBURGER (8166'-8266') SQ'D w/ 100 SX, CIBP @ 6790', DRINKARD (6576'-6760') TA'D
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

INJECTION WELL DATA SHEET

OPERATOR ACTURA ENERGY LTD. LEASE NORTHEAST DRINKARD UNIT (formerly MERIDIAN)
 WELL NO. 215 FOOTAGE LOCATION 3175' FSL 4660' FWL SECTION 2 TOWNSHIP T21S RANGE R37E
ST. Sec. 2 #3

Schematic



Tabular Data

Surface Casing

Size 13 3/8 " Cemented with 200 sx.
 TOC SURFACE feet determined by CIRC.
 Hole size _____

Intermediate Casing

Size 8 5/8 " Cemented with 1800 sx.
 TOC SURFACE feet determined by CIRC.
 Hole size _____

Long string

Size 5 1/2 " Cemented with 550 sx.
 TOC 4060 feet determined by Temp Survey
 Hole size _____

Total depth 8083'

Injection interval

5760 feet to 6060 feet perforated
 (perforated or open-hole, indicate which)

Tubing size 2 3/8 " lined with FIBERGLASS EPOXY set in a
 (material)
GUIBERSON UNI II packer at 5700 feet
 (brand and model)

(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation BLINEBRY / TUBB / DRINKARD
- Name of field or Pool (if applicable) N. EUNICE B/T/D OIL & GAS POOL
- Is this a new well drilled for injection? Yes ☐ No ☒
 If no, for what purpose was the well originally drilled? ELLENBURGER OIL & GAS

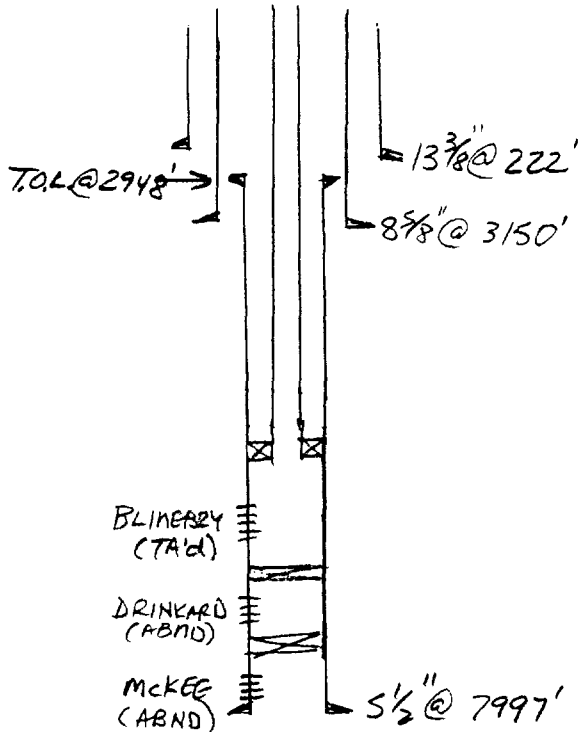
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) ELLENBURGER OPENHOLE (8010'-8083') CIRP @ 6600', TUBB (6343'-6510') CIRP @ 6300' BLINEBRY (5767'-5949') TA'd

- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. _____

INJECTION WELL DATA SHEET

OPERATOR ALTURA ENERGY LTD. LEASE NORTHEAST DRINKARD UNIT Annally SHELL
 WELL NO. 218 PORTAGE LOCATION 3546' FNL & 1700' FNL SECTION 2 TOWNSHIP T21S RANGE R37E
ST. SEC. 2 #16

Schematic



Tabular Data

Surface Casing

Size 13 3/8 " Cemented with 200 sx.
 TOC SURFACE feet determined by CIRC
 Hole size _____

Intermediate Casing

Size 8 5/8 " Cemented with 1800 sx.
 TOC SURFACE feet determined by CIRC
 Hole size _____

Long string

Size 5 1/2 " Cemented with 825 sx.
 TOC 2948 feet determined by TOP OF LINER
 Hole size _____
 Total depth 7997'

Injection interval

5790 feet to 6100 feet per forated
 (perforated or open-hole, indicate which)

Tubing size 2 3/8 " lined with FIBERGLASS EPOXY set in a
GUIBERSON UNI VII packer at 5600 feet
 (brand and model)

(or describe any other casing-tubing seal).

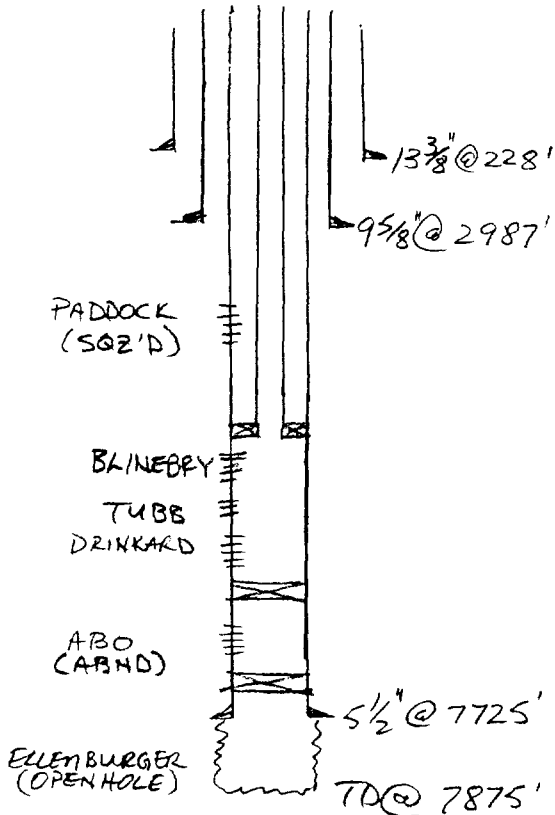
Other Data

- Name of the injection formation BLINEBRY / TUBA / DRINKARD
- Name of Field or Pool (if applicable) N. EUNICE B/T/D OIL & GAS POOL
- Is this a new well drilled for injection? Yes ☐ No ☒
 If no, for what purpose was the well originally drilled? MCKEE OIL & GAS
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) MCKEE (7668-7976) CIBP @ 7510', DRINKARD (6641-6704) CIBP @ 6550', BLINEBRY (5786-5928')
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. _____

INJECTION WELL DATA SHEET

OPERATOR ALTURA ENERGY LTD. LEASE NORTHEAST DRINKARD UNIT (formally DAURON #1)
 WELL NO. 408 FOOTAGE LOCATION 660 FAL & 660 FEL SECTION 10 TOWNSHIP T21S RANGE R37E

Schematic



Tabular Data

Surface Casing

Size 13 3/8 " Cemented with 175 sx.
 TOC SURFACE feet determined by CIRC.
 Hole size _____

Intermediate Casing

Size 9 5/8 " Cemented with 1200 sx.
 TOC 780 feet determined by Temp Survey
 Hole size _____

Long string

Size 5 1/2 " Cemented with 500 sx.
 TOC 4815 feet determined by Temp Survey
 Hole size _____

Total depth 7875

Injection interval

5730 feet to 6740 feet perforated
 (perforated or open-hole, indicate which)

Tubing size 2 3/8 " lined with FIBERGLASS EPOXY set in a
 (material)
GUIBERSON UNI II packer at 5650 feet
 (brand and model)

(or describe any other casing-tubing seal).

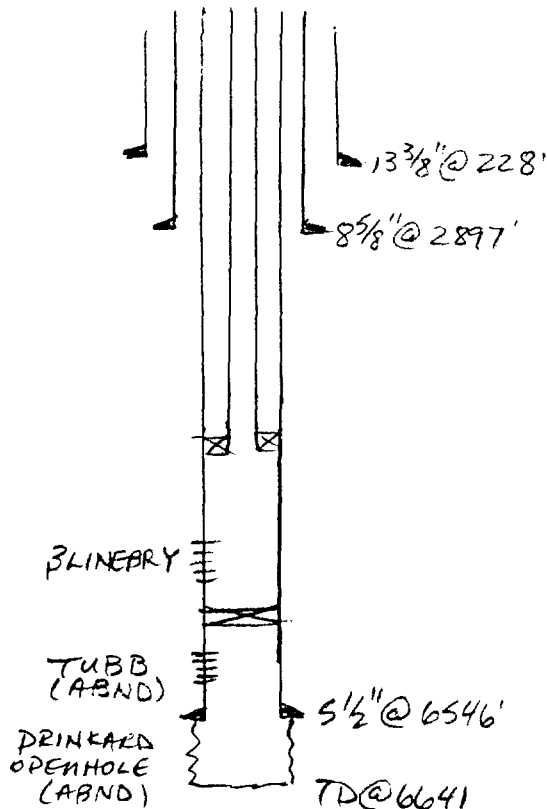
Other Data

- Name of the injection formation BLINEBRY/TUBB/DRINKARD
- Name of Field or Pool (if applicable) N. EUNICE B/T/D OIL & GAS POOL
- Is this a new well drilled for injection? Yes ☐ No ☒
 If no, for what purpose was the well originally drilled? ELLENBURGER OIL & GAS
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) ELLENBURGER OPEN HOLE (7725-7815) CIBP @ 7650', ABO (6850-7390) CIBP @ 6750', Paddock (5290-5590) SQZ'D, BLINEBRY/TUBB/DRINKARD (5736-6717) CURRENTLY OPEN
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. _____

INJECTION WELL DATA SHEET

OPERATOR ALTURA ENERGY LTD. LEASE NORTHEAST DRINKARD UNIT (formally SWEP)
 WELL NO. 611 FOOTAGE LOCATION 1980' FAL & 1978' FEL SECTION 15-T21S-R37E ST. S#15

Schematic



Tabular Data

Surface Casing

Size 13 3/8" Cemented with 250 sx.
 TOC SURFACE feet determined by CIRC.
 Hole size 17"

Intermediate Casing

Size 8 5/8" Cemented with 1200+ sx.
 TOC SURFACE feet determined by CIRC.
 Hole size 11"

Long string

Size 5 1/2" Cemented with 1200 sx.
 TOC SURFACE feet determined by CIRC.
 Hole size 7 7/8"
 Total depth 6641

Injection interval

5730 feet to 5910 feet
 (perforated or open-hole, indicate which)

Tubing size 2 3/8" lined with FIBERGLASS EPOXY set in a
 (material)
GUIBERSON UNI II packer at 5650 feet
 (brand and model)

(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation BLINEBRY/TUBB/DRINKARD
- Name of Field or Pool (if applicable) N. EUNICE B/T/D OIL & GAS POOL
- Is this a new well drilled for injection? Yes ☒ No ☐
 If no, for what purpose was the well originally drilled? DRINKARD OIL & GAS

- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) NO

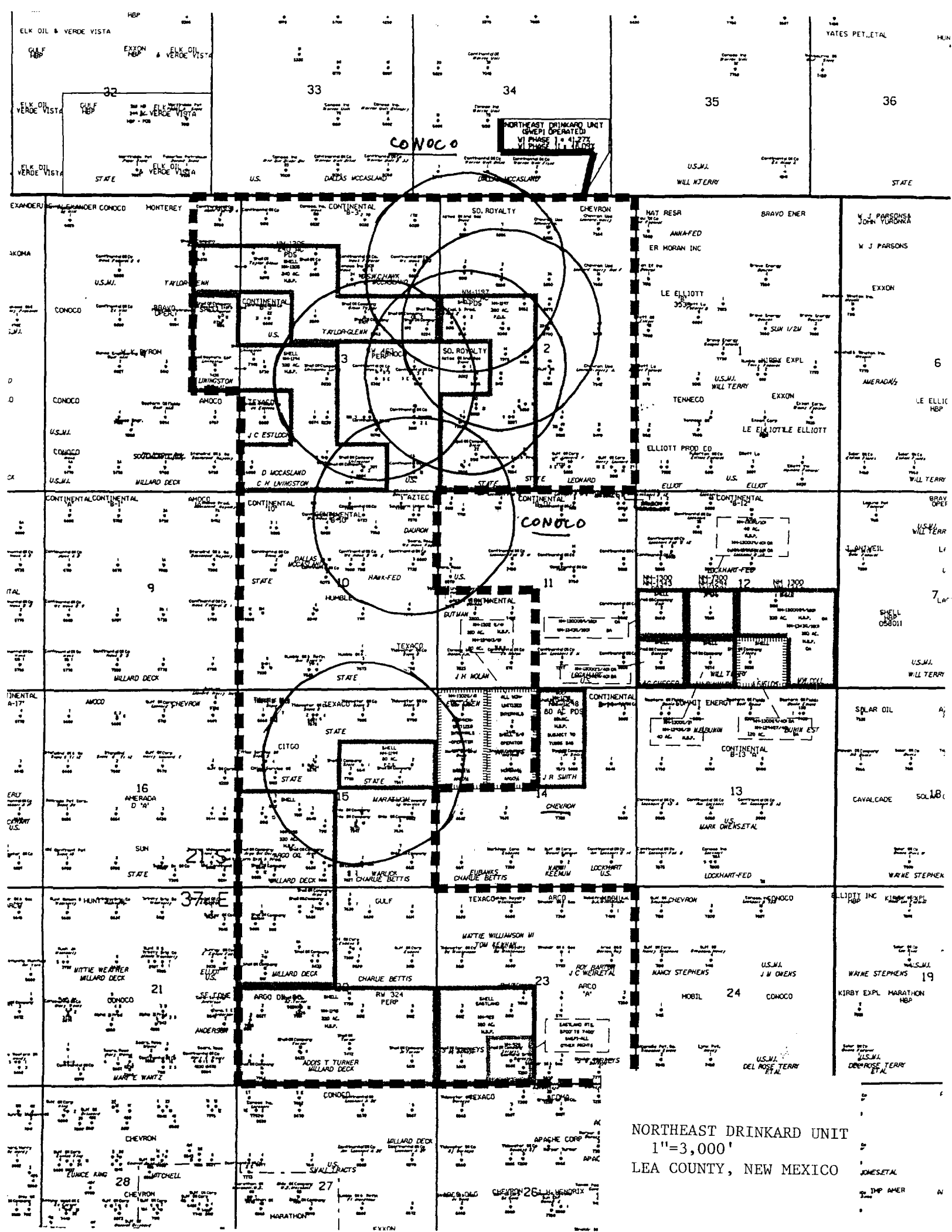
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

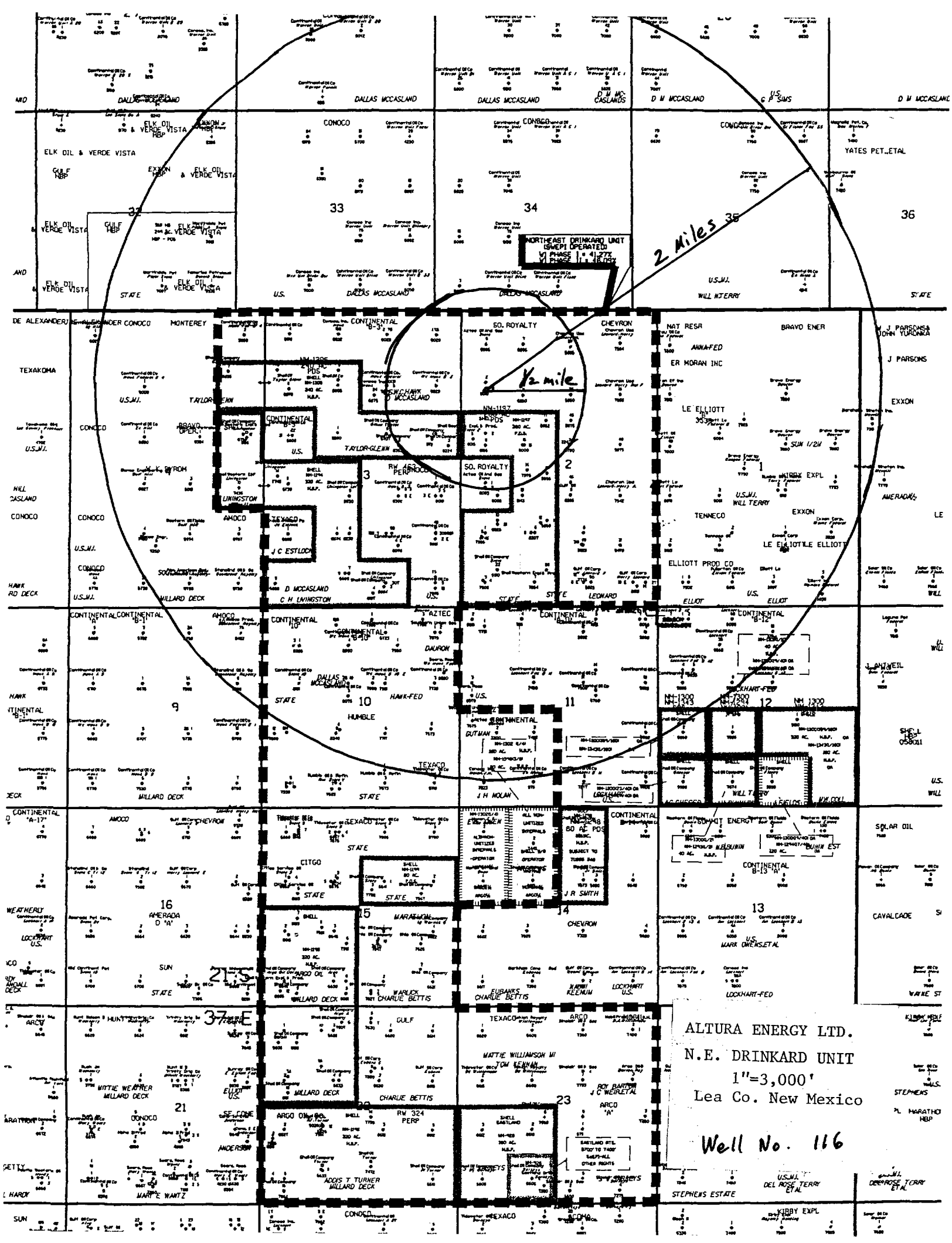
III. WELL DATA

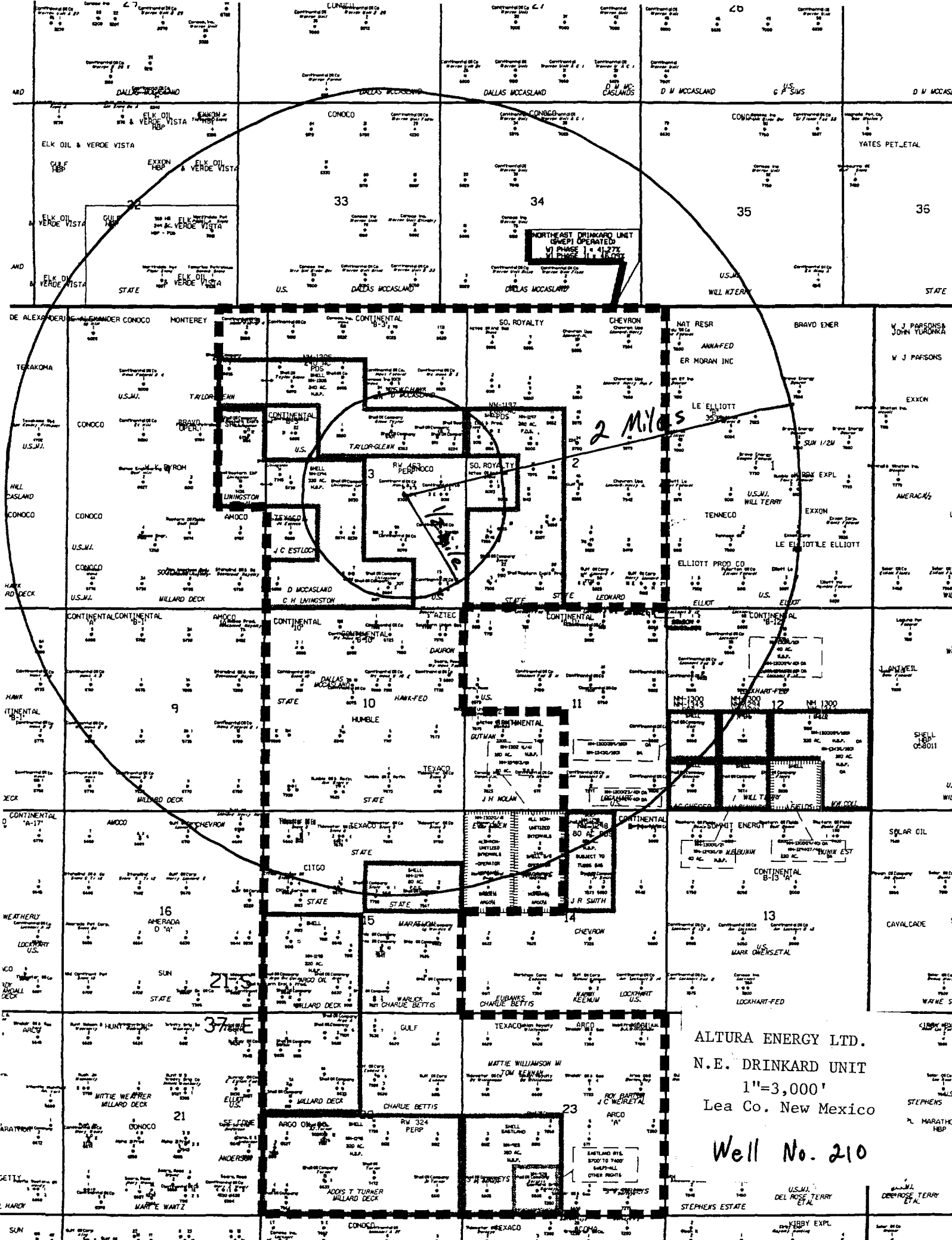
VII. PROPOSED OPERATION

- IX. STIMULATION PROGRAM

Acid treatment schedule will be determined following evaluation of GR/CNL/CCL (to be run prior to perforating the unitized interval)



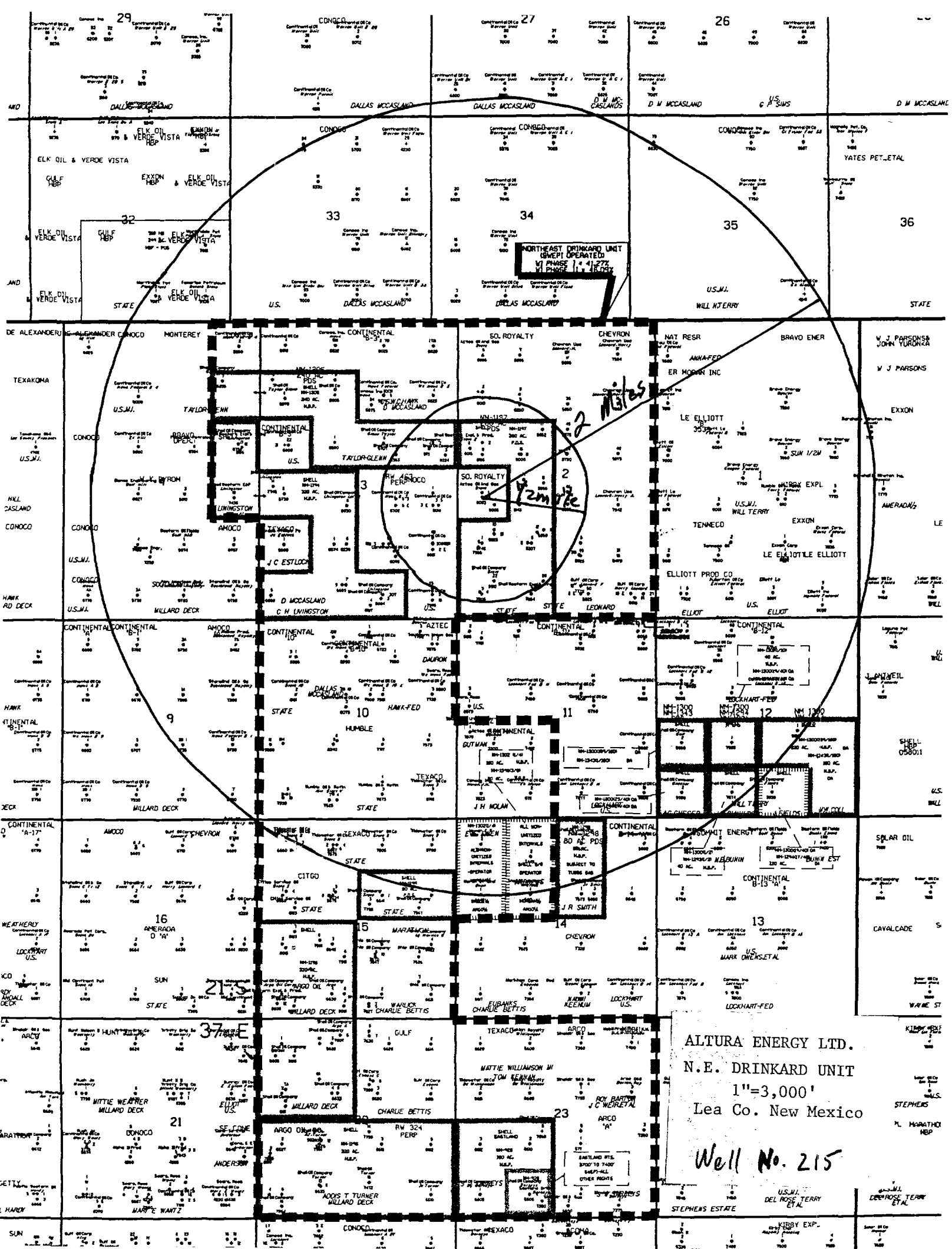




NORTHEAST DRINKARD UNIT
(SWPT OPERATED)
V. PHASE 1 - 41,272
V. PHASE 2 - 16,075

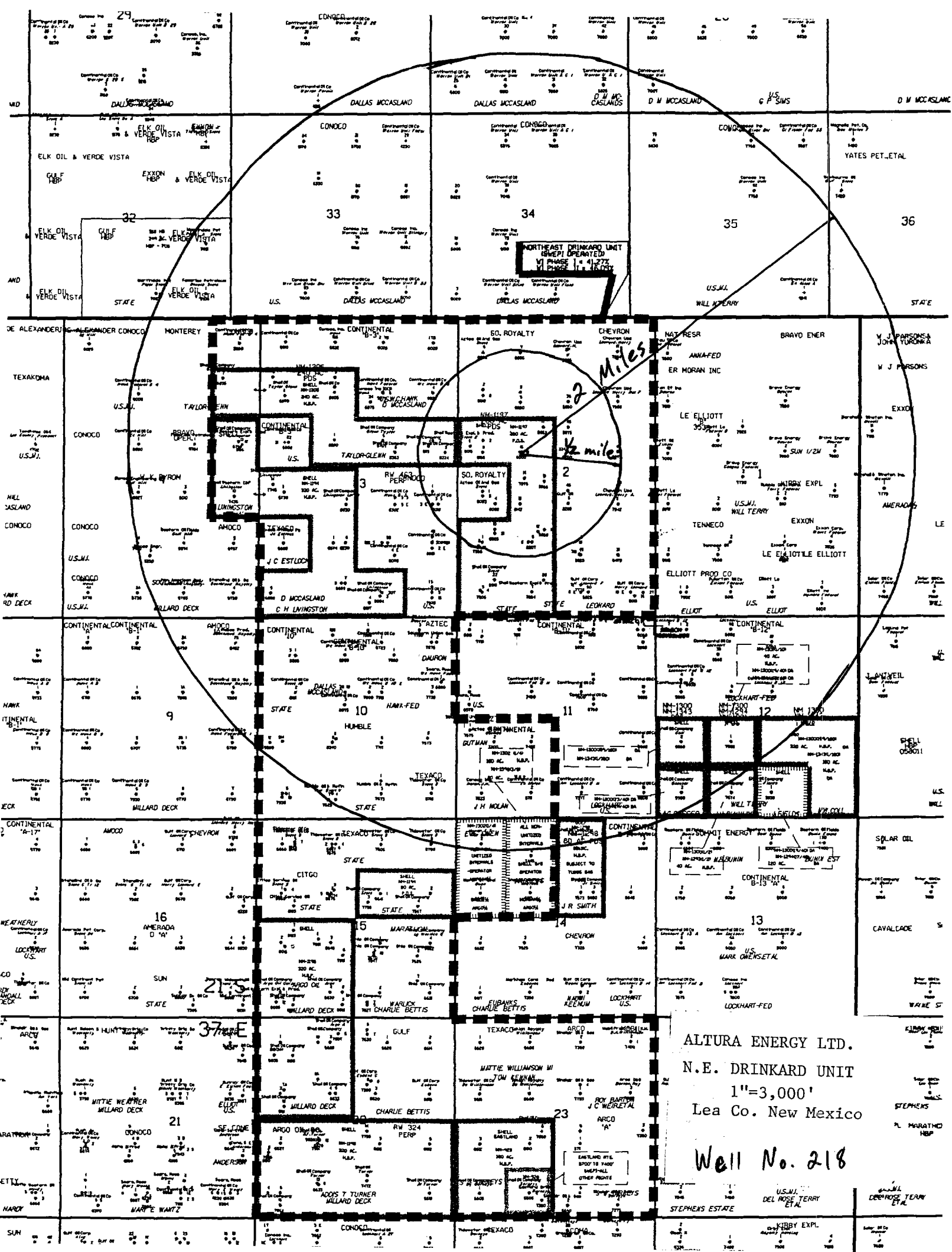
2 M.Y.S.

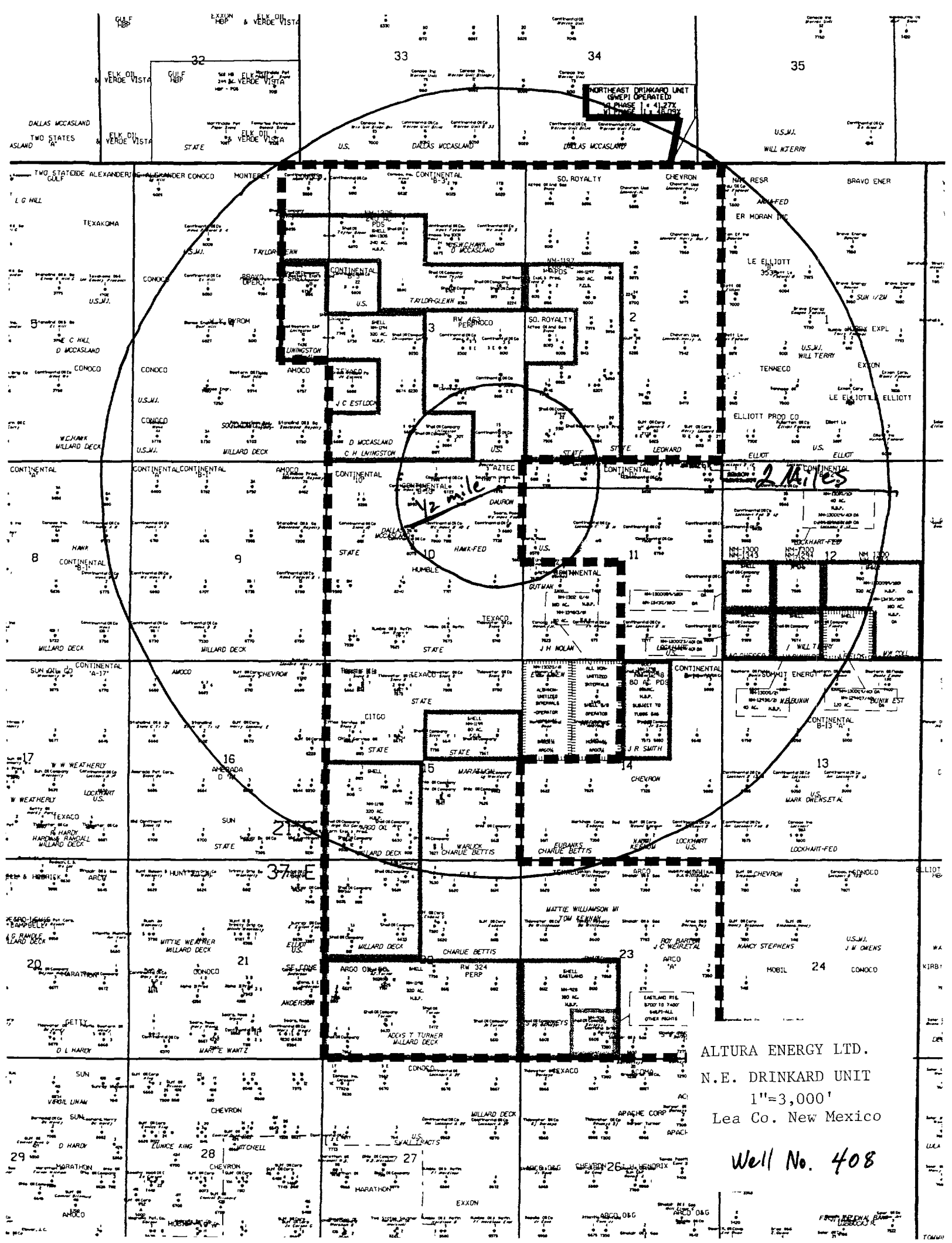
ALTURA ENERGY LTD.
N.E. DRINKARD UNIT
1"=3,000'
Lea Co. New Mexico
Well No. 210

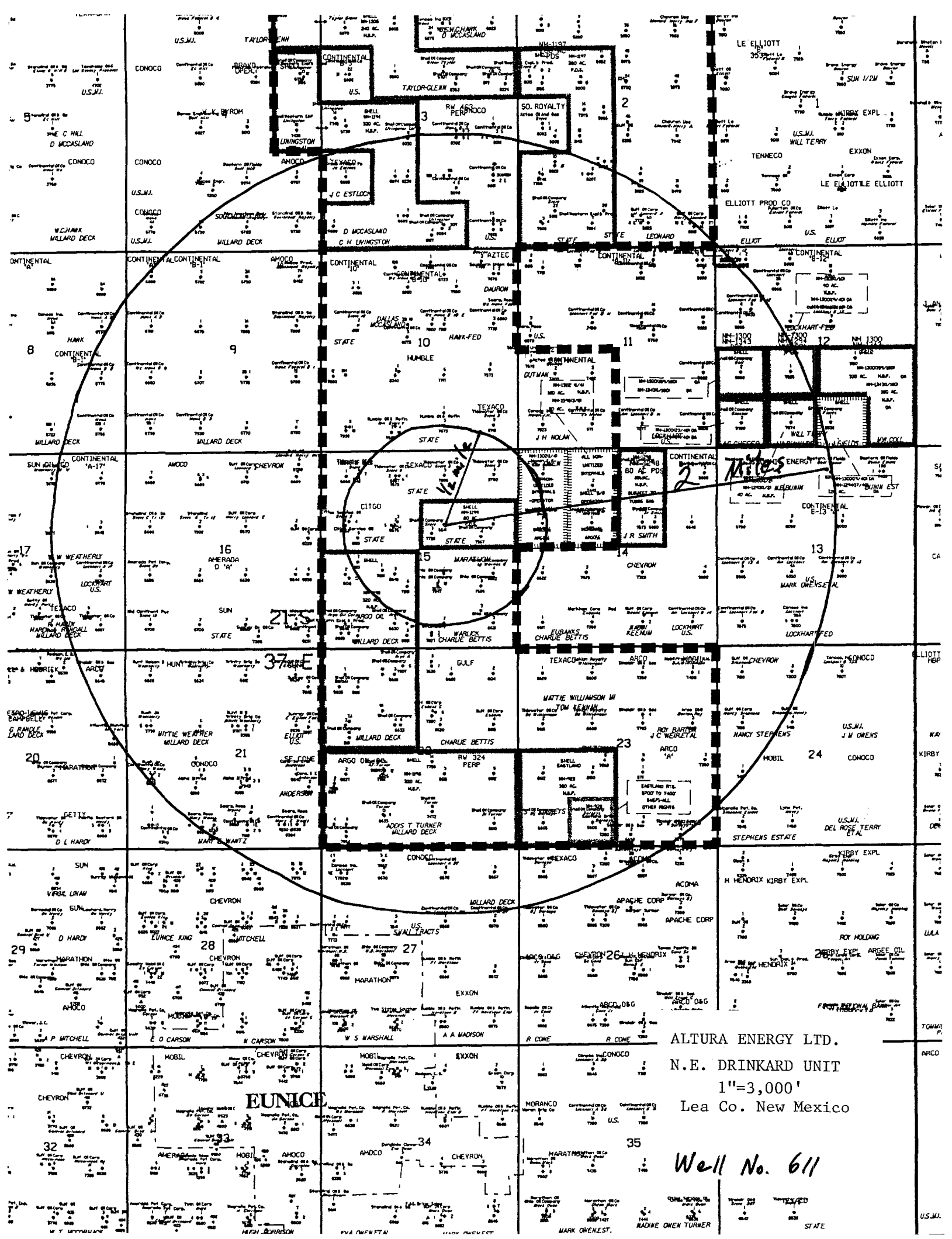


ALTURA ENERGY LTD.
N.E. DRINKARD UNIT
1"=3,000'
Lea Co. New Mexico

Well No. 215







ALTURA ENERGY LTD.

N.E. DRINKARD UNIT

1"=3,000'

Lea Co. New Mexico

Well No. 611

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, KATHI BEARDEN

Publisher

of the Hobbs Daily News-Sun, a
daily newspaper published at
Hobbs, New Mexico, do solemnly
swear that the clipping attached
hereto was published once a
week in the regular and entire
issue of said paper, and not a
supplement thereof for a period.

of 1
_____ weeks.

Beginning with the issue dated

June 15 1997

and ending with the issue dated

June 15 1997

Kathi Bearden by JH

Publisher

Sworn and subscribed to before

me this 16th day of

June 1997

Jodi Benson

Notary Public.

My Commission expires
October 18, 2000
(Seal)

This newspaper is duly qualified
to publish legal notices or adver-
tisements within the meaning of
Section 3, Chapter 167, Laws of
1937, and payment of fees for
said publication has been made.

LEGAL NOTICE

June 15, 1997

Notice is hereby given of the application of Altura Energy
Ltd., Attn: J.A. Dethrow, Permitting, P.O. Box 4294, Houston
TX 77210-4294; (281) 544-3226, to the Oil Conservation Divi-
sion, New Mexico Energy, Minerals and Natural Resources
Department, for approval of the following injection wells for the
purpose of secondary recovery.

Pool Name: North Eunice Blinbry-Tubb-Drinkard Oil & Gas
Lease/Unit Name: Northeast Drinkard Unit

All wells are located in Lea County, New Mexico

Well No. 116 - (formerly Meridian State Sec. 2 No. 8)

Location: 5790' FSL & 660' FWL Section 2, T21S-R37E Unit E

Well No. 210 - (formerly Conoco Hawk B-3 #10)

Location: 2970' FSL & 1650' FEL Section 3, T21S-R37E Unit G

Well No. 215 - (formerly Meridian State Sec. 2 No. 3)

Location: 3175' FSL & 660' FWL Section 2, T21S-R37E Unit M

Well No. 218 - (formerly Shell State Sec. 2 No. 16)

Location: 3546' FNL & 1700' FWL Section 2, T21S-R37E Unit K

Well No. 408 - (formerly Meridian Dauron No. 1)

Location: 660' FNL & 660' FEL Section 10, T21S-R37E Unit A

Well No. 611 - (formerly Shell State Sec. 15 No. 1)

Location: 1980' FNL & 1978' FEL Section 15, T21S-R37E Unit G

The injection formations are the Blinbry, Tubb and Drinkard
located between the intervals of 5500' MD to 6800' MD below
the surface of the ground. Expected maximum injection rate is
2000 barrels per day and the expected maximum injection
pressure is 1200 psi. Interested parties must file objections or
requests for hearing with the Oil Conservation Division, 2040
S. Pacheco, Santa Fe, NM 87505 within fifteen days.
#15272

02101173000 01508572

Altura Energy LTD.

P. O. Box 4294

a/c #434005

Houston, TX 77210-4294