WFX 12/10/96

maralo inc.

November 22, 1996

Engineering Department
New Mexico Energy & Minerals Department
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

RE: Form C-108 Application of Maralo, Inc. for Salt Water Disposal, Lea County, New Mexico

Attention: David Catanach

Under the provisions of Rule 701 (B), enclosed please find Form C-108 application with attachments for authorization to inject into the **Maralo Jalmat Yates Unit, Well #2, API #30-025-09748,** located 2310 feet from the South line and 1650 feet from the East line (Unit J) of Section 12, Township 25 South, Range 36 East, NMPM, Lea County, New Mexico.

Sincerely,

Dorothea Logan

Dorothea Logan
Regulatory Analyst

Enclosures/Attachments

cc: OCD/Hobbs w/attachments

Jalmat Yates Unit
WF Project

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

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: [X] Secondary Recovery [ ] Pressure Maintenance [ ] Disposal [ ] Storage
Application qualifies for administrative approval? [ ] yes [ ] no

II. Operator: **MARALO, INC.**

Aodress: **P. O. BOX 832, MIDLAND, TX 79702**

Contact party: **RICHARD GILL, PETROLEUM ENGINEER** Phone: **(915) 684-7441**

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? [XX] yes [ ] no
If yes, give the Division order number authorizing the project **R-5816**.

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: **DOROTHEA LOGAN** Title **REGULATORY ANALYST**

Signature: Dorothea Logan Date: **NOVEMBER 22, 1996**

* 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.

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 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 applicatior. 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, 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.

C-108

Application For Authorization To Inject
Maralo, Inc
Maralo Jalmat Yates Unit, Well #2
UL J, Section 12-T25S-R36E
Lea County, New Mexico

I. The purpose of completing this well is to make a disposal well for produced Yates water into the Yates formation.

Maralo, Inc. plans to convert this well to a waterflood unit water injection well in the Yates formation.

II. Operator: Maralo, Inc.
P. O. Box 832
Midland, TX 79702
Richard A. Gill (915) 684-7441

III. Well Data : See Exhibit "A" and "A1"

IV. This is an expansion of existing project R-5816.

V. See attached map, Exhibit "B" and "B1"

VI. There are 26 wells within the area of review which penetrate the proposed injection zone.
See Exhibit "C" for tabular data of all wells.
See Exhibit "D" for schematics of plugged wells.

VII. 1. Estimated average rate is 500 bbls/day.
Estimated maximum rate is 1000 bbls/day.

2. This will be a closed system.

3. Average injection pressure---500 psi
Maximum injection pressure--1000 psi.

4. Sources of injected water would be produced water from the Yates. See Exhibit "E" water analysis.

5. Water injection will be into a zone currently productive of oil and gas.

VIII. 1. The proposed injection interval is a portion of the Yates formation consisting of a series of sand lenses at a depth of 3050'.

VIII. continued

2. The Santa Rosa fresh water zone overlies the proposed injection formations at a depth of approximately 520'. There are no fresh water zones underlying the formation.

IX. The proposed disposal interval may be acidized with 15% HCL acid and a small frac treatment.

X. Well Logs are filed at the Hobbs OCD office.

XI. The location of fresh water wells and windmills existing within a one mile radius of the subject location are noted on the map. Water Analysis is Exhibit "F".

XII. Maralo, Inc. has examined geologic and engineering data and has found that there is no evidence of faulting or other hydrologic communication between potential fresh water aquifers and the desired injection zone.

XIII. Proof of Notice

A copy of Form C-108 with the Statement of Compliance and associated exhibits has been sent by certified mail as follows:

A. Surface Owner: Clay Osborn
P. O. Box 1285
Jal, NM 88252

B. Offset Operators: Prime Operating Company
731 Wadley Avenue, Bldg. L
North Park Executive Center
Suite L-220
Midland, TX 79705

Tenison Oil Company
8140 Walnut Lane, Suite 601
Dallas, TX 75231

MNA Enterprises Ltd. Company
Box 755
Hobbs, NM 88241

Offset Operators: Doyle Hartman
500 North Main
Midland, TX 79701

Lynx Petroleum Consultants, Inc.
3325 Enterprise Drive
Hobbs, NM 88240

See Exhibit "G" for Proof of Publication in the Hobbs Daily News Sun.

MARALO, INC.
MARALO JALMAT YATES UNIT #2
J-12-25S-36E
LEA COUNTY, NEW MEXICO

Exhibit "A"
Page 1

III. Well Data

A. 1. Lease Name/Location
MARALO JALMAT YATES UNIT, Well #2
J 12-25S-36E
2310' FSL & 1650' FEL

2. Casing Strings:
Present Well Condition:
10-3/4" @ 600' w/300 sx (circ)
5-1/2" @ 2885' w/350 sx TOC @ 935'

3. Proposed Well Condition:
Casing same as above.
2-7/8" 6.5# K-55 duo-line plastic coated injection tubing @ 2800'.

4. Propose to use Baker nickel-plated Loc-Set packer set at +/- 2800'.

B. 1. Injection Formation: Yates
Field/Pool: Tansill-Yates-7 Rivers

2. Injection Interval will be through open hole to a depth of 3049'.

3. Well was original drilled as a Yates oil well. The well was plugged and abandoned in December, 1991, and will be a waterflood injection well (Yates) when work is completed.

4. See attached schematic for additional well data.

5. The Tansill/7Rvrs oil zone is within the area of interest.

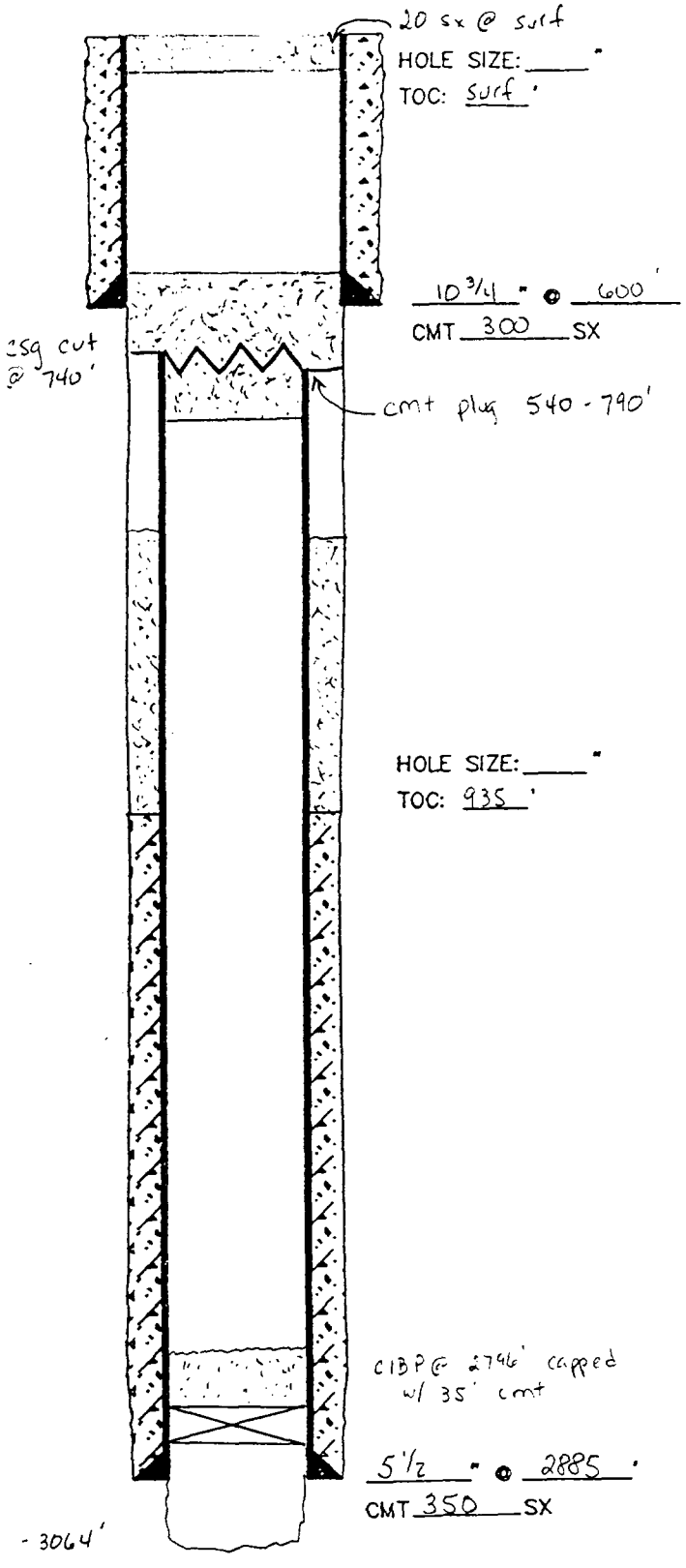
EXHIBIT A1

WELLBORE SKETCH

LEASE & WELL NAME: Jalmat Yates Unit # 2
FIELD: Jalmat COUNTY: Lea ST.: NM
LOCATION: 2310' FSL & 1650' FEL, Sec 12, T-25-S R-36-E

DATE: 10/8/96 BY: RAG REV.: BY:

CURRENT



PROPOSED

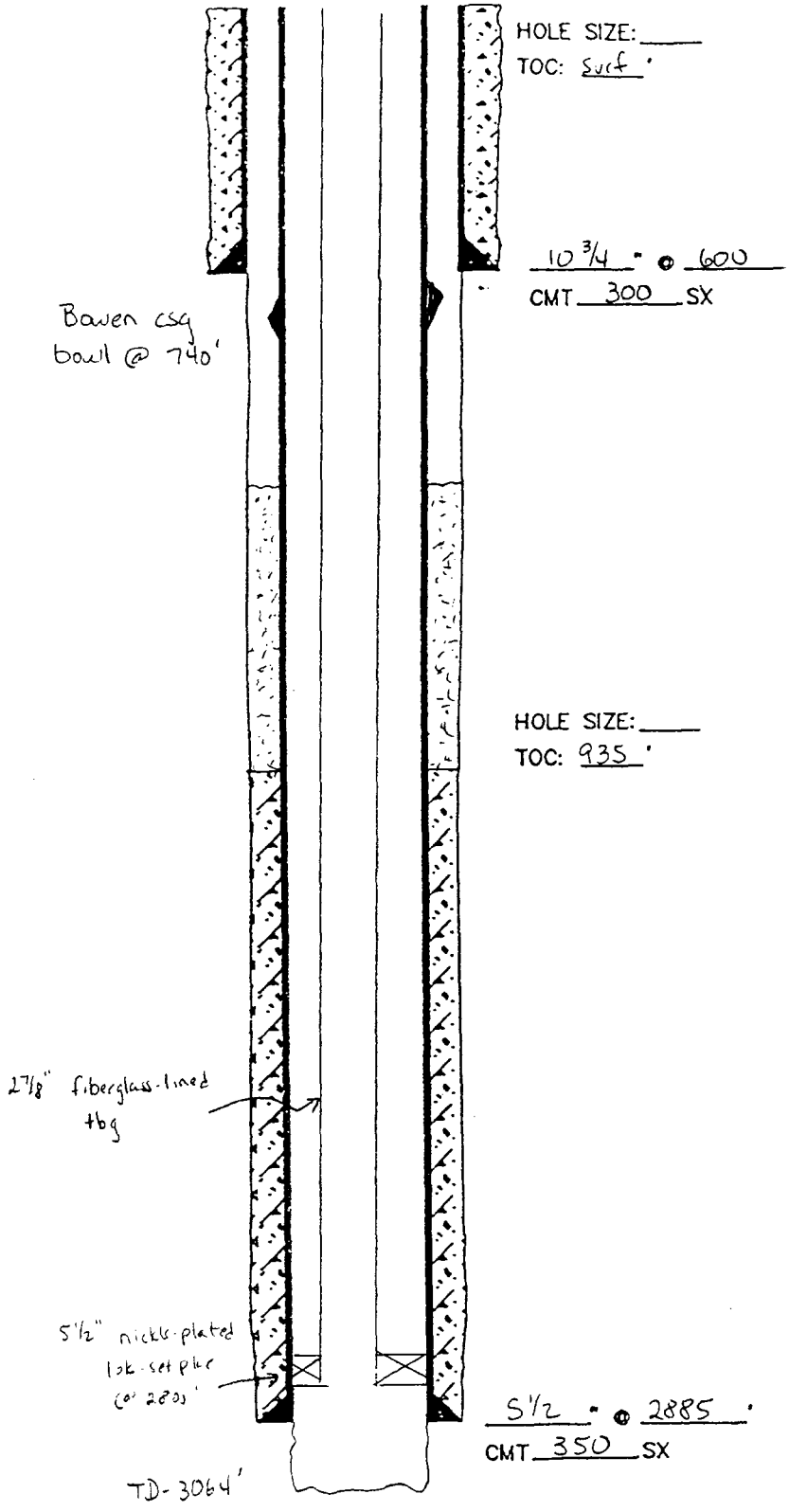
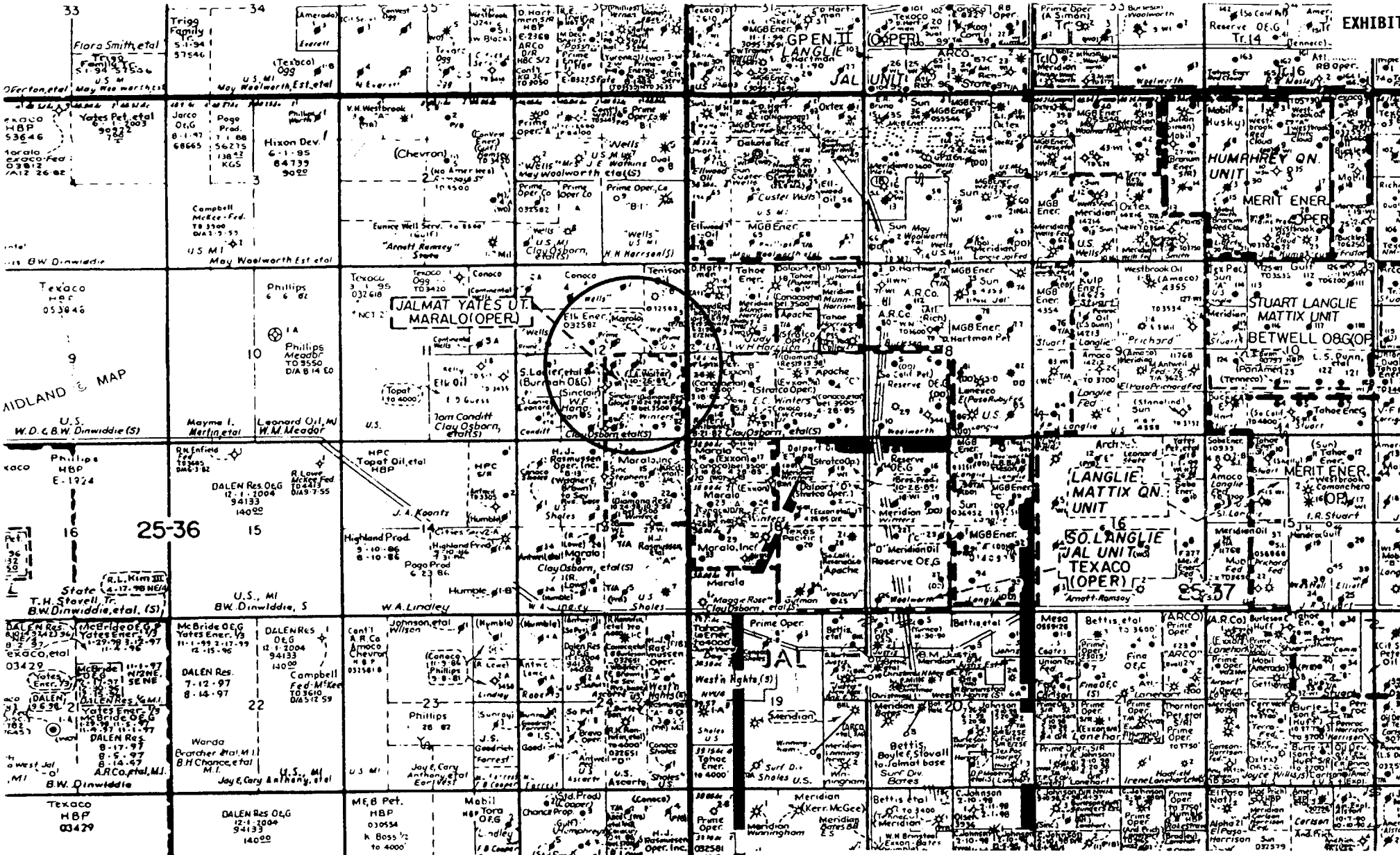


EXHIBIT "B"



marala INC.

JALMAT YATES UNIT

LEA COUNTY, NEW MEXICO

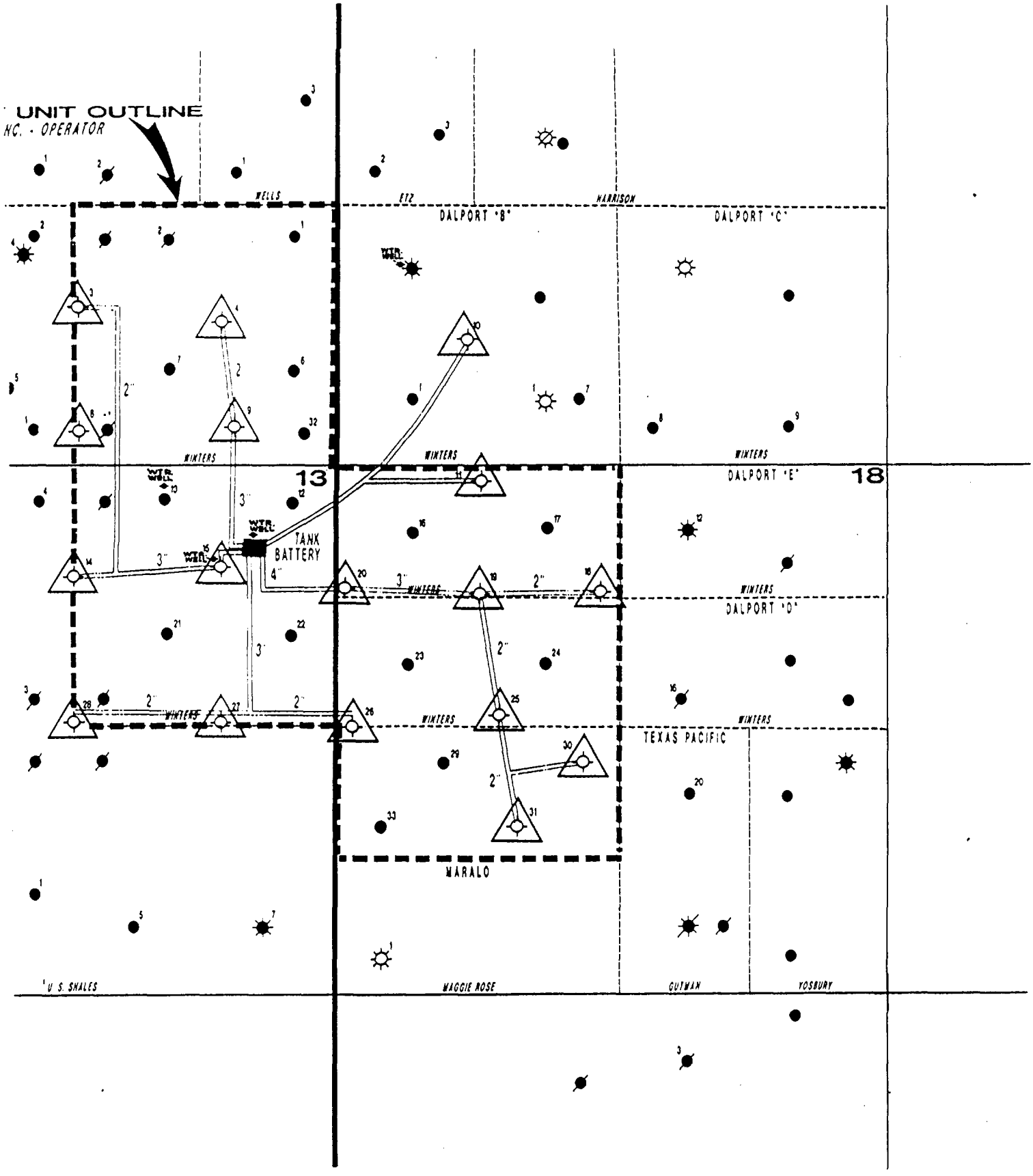
LAND MAP

SCALE : 1" = 4,000'

EXHIBIT "B1"

R 36 E

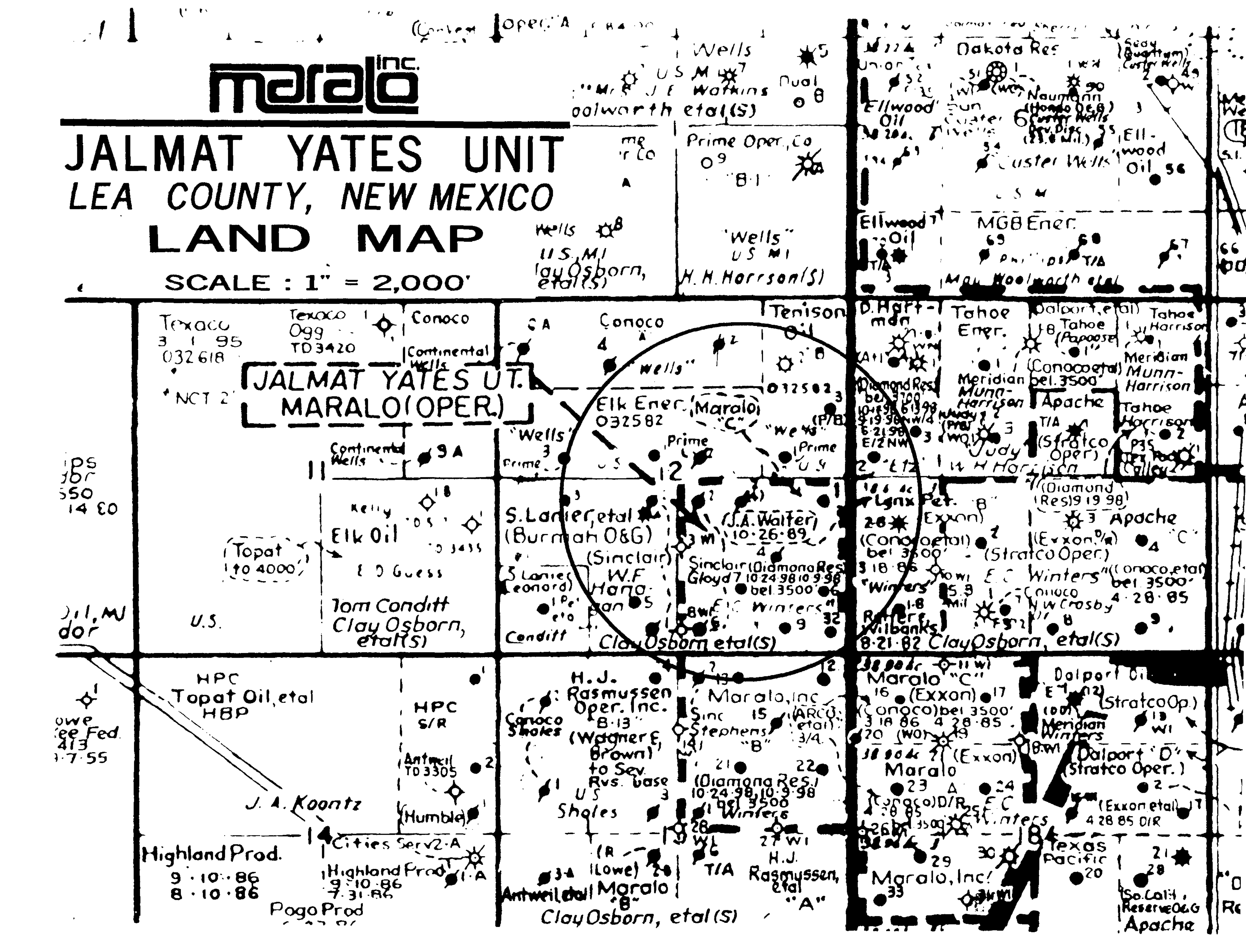
R 37 E



marala inc.

JALMAT YATES UNIT

LEA COUNTY, NEW MEXICO



maralo inc.
JALMAT YATES UNIT
LEA COUNTY, NEW MEXICO
LAND MAP
SCALE : 1" = 2,000'
JALMAT YATES U.T.
MARALO (OPER.)
Wells
Prime Oper. Co
"Wells"
H. H. Harrson (S)
Dakota Res
Custer Wells
MGB Ener.
Ellwood Oil
Texaco
Conoco
Continental Wells
Tenison Oil
Tahoe Ener.
Meridian Munn-Harrison
Apache
Elk Ener. (Maralo)
"Wells"
Prime
S. Lanier, etal
(Burmah O&G)
(Sinclair)
W.F. Hanagan
(J.A. Walter)
Lynx Pet.
(Exxon)
(Stratco Oper.)
E. C. Winters
Topat to 4000
Elk Oil
Tom Conditt
Clay Osborn, etal(S)
U.S.
Condit
Clay Osborn etal(S)
HPC
Topat Oil, etal
HBP
H.J. Rasmussen Oper. Inc.
Maralo, Inc
Maralo "C"
(Exxon)
Dalport Oil
(Stratco Op.)
Dalport "D"
(Stratco Oper.)
Conoco Shakes
U.S. Shakes
Maralo
J. A. Koontz
Humble
Cities Serv 2-A
Highland Prod.
9 · 10 · 86
8 · 10 · 86
Highland Prod.
Pogo Prod
Antweil
Maralo "B"
Clay Osborn, etal (S)
H.J. Rasmussen, etal "A"
Maralo, Inc.
Texas Pacific
So. Calif. Reserve O&G
Apache

EXHIBIT "C"

TABULAR SUMMARY
OF WELLS WITHIN A ONE-HALF MILE RADIUS

MARALO, INC.

Maralo Jalmat Yates Unit No. 2

Section 12, T-25S, R-36E

Tenison Oil Company -E. J. Wells B #2 - API# 42-025-09743
Worldwide Energy Corporation - Wells #2
originally drilled: Kan-Mex Corporation - Wells #2
UL. A - 990' FNL & 990' FEL-
Spud 7/16/52, Completed 7/14/52, Type: Gas
Casing: 9-5/8" @ 565' w/350 sxs
5-1/2" @ 2801 w/450 sxs
TD: 3032'
Formation: Yates

Continental Oil Company, Wells A-12 #2
UL. B - 660' FNL & 1980' FEL
Plugged oil well - no OCD information available

Prime Operating Company - E. J. Wells #3
formerly: Tenneco - Wells #3
UL. E - 2310' FNL & 990' FWL
TD: 3100' - Perfs @ 2900-3100', Type: 7R Oil Well

Prime Operating Company - Wells #1
UL. F -2310 FNL & 2310 FWL
Completed 7-5/52, Type: Oil
12-1/2" w/200 sx TOC - surface
9-5/8" w/700 sx TOC - surface
5-1/2" w/100 sx @ 2924'
TD: 3346', Perfs @ 2924-3051'

Prime Operating Company - E. J. Wells #2
UL. G - 2310' FNL & 2310' FEL
Original Completion 11-4-35 - Type: Injection Well
Casing: 16" @ 223' w/200 sxs - circ
10" @ 1633' w/600 sxs - circ
7: @ 3310' w/ 300 sxs - calc.
TD: 3400' Perfs @ 3176-3215' 3267',
Inj. Interval: 2920-3134'
Formation: Yates

Worldwide Energy Corporation - Wells #1
Kan-Mex Corporation - Wells #1
UL. H - 2310' FNL & 990' FEL
Spud: 2/16/52, Completed 4/25/52, Type: Oil
Casing: 9-5/8" @ 565' w/325 sxs
5-1/2" @ 2867' w/350 sxs
TD: 3059'
Formation: Yates

Worldwide Energy Corporation - E. J. Wells #3
UL. H - 1650' FNL & 330' FEL
Spud 5/23/83, Completed 7/20/83, Type: Oil
Casing: 14" @ 40' w/ready mix
10-3/4" @ 349' w/225 sxs
7" @ 3853' w/1080 sxs
Formation: 7 Rivers
TD: 3855', PBTD: 3018' w/perfs @ 2889-3011' - Yates

Maralo, Inc., Maralo Jalmat Yates Unit #1
originally drilled - Ralph Lowe Winters "C" #2
UL. I - 2310' FSL & 330' FEL
completed 3/8/51 Type: Oil Well
Casing: 10-3/4" @ 600' w/300 sxs
7" @ 2853' w/350', TOC @ 2930'
TD. 3243' TA'D
Formation: Yates

Maralo, Inc., Maralo Jalmat Yates Unit #4
UL. I - 1440' FSL & 1150' FEL
Spud 10/25/79, Completed 12/11/79, Type: WIW
Casing: 8-5/8" @ 401' w/300 sxs
5-1/2" @ 3500' w/800 sxs
TD: 3500' Perfs: 2917 - 3002'
Formation: Yates

Maralo, Inc., Gloyd #2
UL. J - 2310' FSL & 2310' FEL
Spud 1/28/35, Completed 3/15/35, Type Oil
Casing: 15-1/2" @ 78' w/100 sxs
10" @ 1439' w/700 sxs
7" @ 3291' w/500 sxs
TD: 3325', Originally P&A'd 10/1/42 no record available
Maralo, Inc. re-plugged: 2/3/80
Formation: Yates
See Exhibit "D" for schematic

Maralo, Inc., Maralo Jalmat Yates Unit #3
UL. J - 1550' FSL & 2500' FEL
Spud 9/29/80, Completed 10/15/96, Type: Injection
Casing: 8-5/8" @ 424' 300 sxs circ
4-1/2" @ 3496' 1800 sxs
TD. 3496'
Formation: Yates/7Rvs

Maralo, Inc. W. F. Hanagan #2
UL. K - 2310' FSL & 2310' FWL
Spud: 12/7/34, Completed 2/9/34, Type: Oil
Casing: 15-1/2" @ 52' w/100 sxs
10" @ 1450' w/600 sxs
7" @ 3323' w/375 sxs
TD: 3347', re-plugged 2-1-80
Formation: Yates
See Exhibit "D" for schematic

Sinclair O&G Co. W. F. Hannagan #4
UL. K - 2173' FSL & 2173' FWL
Spud 2-5-53, Compl 4-4-53, Type: 7R Oil Well, Recomplete
Yates gas well, Converted to SWD 1/30/70.
Casing: 13-3/8" @ 267' w/250 sxs
10-3/4" @ 721' /set
7" @ 2917' w/500 sxs
TD: 3164', PB 3130' Perfs @ 2892-2914'

MNA Enterprises Ltd. Co., W. F. Hanagan #3
UL. L - 2310' FSL & 990' FWL
Spud 01/36, Compl 02/28/36, Type: Oil
Casing: 9-5/8" 36# csg @ 1242' w/500 sxs
7" 24# csg @ 3368' w/400 sxs
Treated well w/1000 gals acid from 3375 - 3387'
TD: 3387', Top brown lime 2715', base of lime 3387'

Arco Oil & Gas Company - W. F. Hanagan #5
UL. N - 760' FSL & 2080' FWL
Spud 3/8/80, Completed 3/12/80, Type: Oil Well
Casing: 8-5/8" @ 1100' w/370 sxs
5-1/2" @ 3200' w/750 sxs
TD. 3200'
Formation: Yates

Maralo, Inc., W. F. Hanagan #1
UL. N - 330' FSL & 2310' FWL
Spud: 9/7/34, Completed 10/3/34, Type Oil
Casing: 15-1/2" @ 54' w/50 sxs
10" @ 1399' w/700 sxs
7" @ 3275' w/375 sxs
TD: 3322',re-plugged 2/6/80
Formation: Yates
See Exhibit "D" for schematic

Maralo, Inc, Maralo Jalmat Yates Unit #7
UL. O - 990' FSL & 1650' FEL
originally drilled: Ralph Lowe, Winters "C" #3
Spud: 4/25/51, Completed 5/30/51, Type: Oil Well
Casing: 10-3/4" @ 620' w/225 sxs
5-1/2" @ 2852' w/400 sxs
TD: 3079'
Formation: Yates

Maralo, Inc., Gloyd #1
UL. O - 330' FSL & 2310' FEL
Spud: 9/14/34, Completed 10/31/34, Type Oil
Casing: 15-1/2" @ 68' w/50 sxs
10" @ 1392' w/700 sxs
7" @ 3296' w/375 sxs
TD: 3332', re-plugged 1/15/80
Formation: Yates
See Exhibit "D" for schematic

Maralo, Inc., Maralo Jalmat Yates Unit #8
UL. O - 350' FSL & 2500' FEL
Spud: 9/4/80, Completed 9/28/80, Type: Injection
Casing: 8-5/8: @ 411' w/300 sxs
4-1/2" @ 3479' w/1800 sxs
TD: 3550'
Formation: Yates

Maralo, Inc., Maralo Jalmat Yates Unit #6
UL. P - 990' FSL & 330' FEL
originally drilled: Ralph Lowe, Winters "C" #1
Spud: 11/9/50, Completed 12/23/50, Type: Oil
Casing: 10-3/4" @ 602' w/300 sxs
7" @ 2851 w/350 sxs
TD: 2973'
Formation: Yates

Maralo, Inc., Maralo Jalmat Yates Unit #32
UL. P - 330' FSL & 330' FEL
Spud: 3/16/85, Completed 5/17/85, Type: Oil Well
Casing: 8-5/8" @ 400' w/275 sxs
5-1/2" @ 3250' W/575 sxs
TD: 3250'
Formation: Yates

Maralo, Inc., Maralo Jalmat Yates Unit #9
UL. P - 400' FSL & 1000' FEL
Spud 9/6/79, Completed 10/4/79, Type: Injection
Casing: 8-5/8" @ 400' w/300 sxs
5-1/2" @ 3557' w/1200 sxs
TD: 3557'
Formation: Lower Yates

Section 13, T-25S R-36E

Maralo, Inc., Maralo Jalmat Yates Unit #13
UL. B - 330' FNL & 1650' FEL
originally drilled: Ralph Lowe, Winters "B" #3
Spud 2/26/51, Completed 4/10/51, Type: Oil
Casing: 10-3/4" @ 602' w/250 sxs
5-1/2" @ 2870' w/450 sxs
Formation: Yates
TD: 3195', PBTD: 3060' w/perfs @ 2950-3060' - Yates

Maralo, Inc. Stephens "A" #2
UL. B - 330' FNL & 2310' FEL
originally drilled: Repollo Oil Company, E.C. Stephens "A"
Spud: 7/19/34, Completed 08/19/34, Type: Oil
Casing: 15-1/2" @ 472' w/250 sxs
10" @ 1360' w/ 475 sxs
7" @ 3270' w/250 sxs
Formation: Yates
TD: 3330', P & A: 1/20/80
See Exhibit "D" for schematic

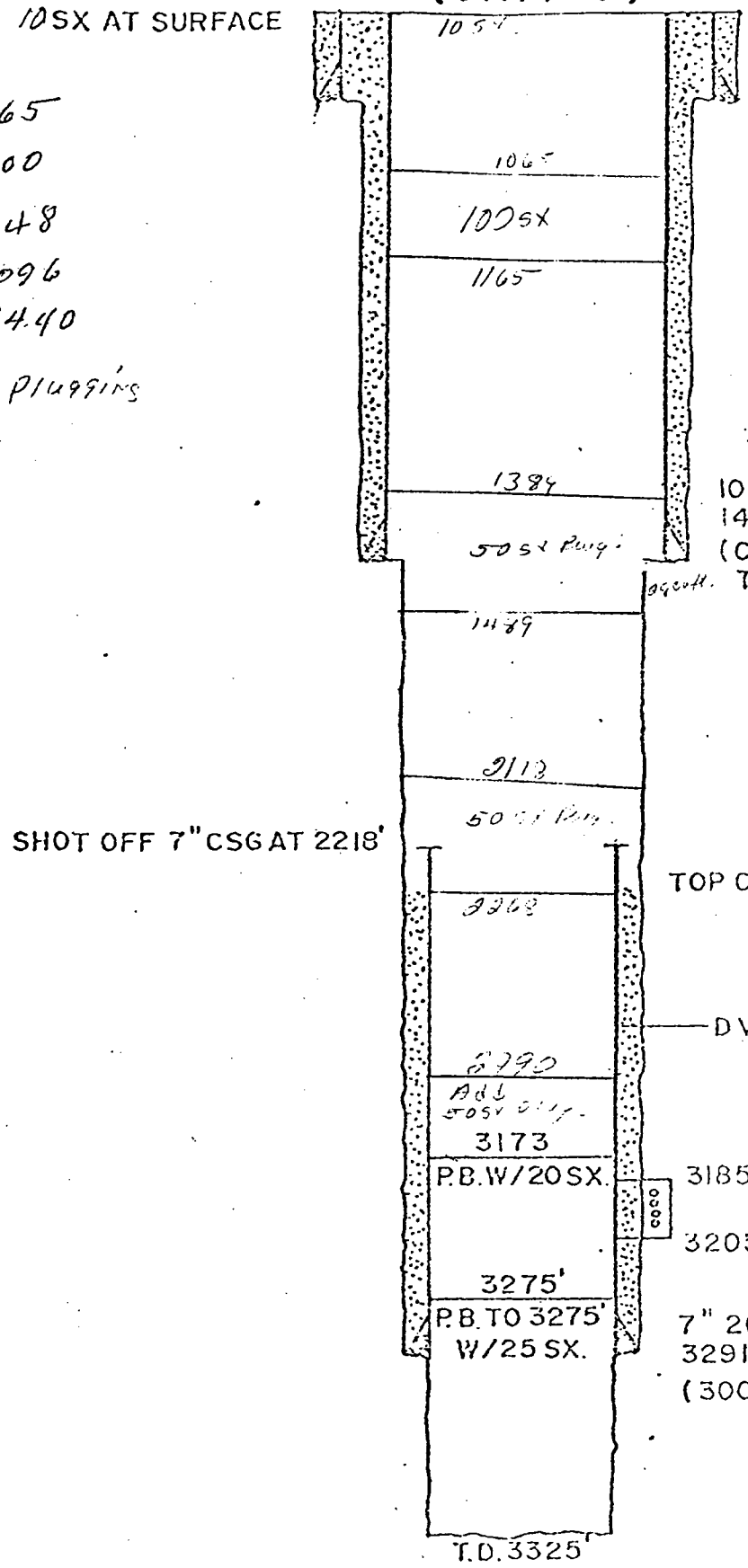
Section 7, T-25S, R-36E

Lynx Petroleum Consultants, Inc., Elydia C. Winters "B" #2
UL. L - 1980' FSL & 660' FWL
originally drilled: Humble Oil & Refining Co.
Spud: 8-4-51, Completed 8-26-51, Type: Oil
Casing: 8-5/8" @ 302' w/150 sxs
5-1/2" @ 2875' w/900 sxs
Formation: Yates
TD: 3034', Perfs @ 2950-3034'

Hartman, Doyle, Etz #2
UL. E - 2310' FNL & 430' FWL
Completed 10/18/78, Type: Oil
Casing: 8-5/8" w 250 sxs TOC to Surf
5-1/2" w/750 sxs
Formation: J-T-Y
TD: 3560, Perfs @ 2874-3233'

EXHIBIT "D"

ATLANTIC (SINCLAIR REPOLLO)
GLOYD NO. 2
2310' FSL & 2310' FEL
SECTION 12 T-25-S, R-36-E
(UNIT J)



ANHY - 1165
ISALT 2700
BASE 2848
QUEEN 3096
GRAYBURG 3440

Proposed Plugging Procedure

EXHIBIT "D"

HANAGAN NO 1
2310' FSL & 2310' FWL
SECTION 12 T-25-S, R-36-E
(UNIT K)

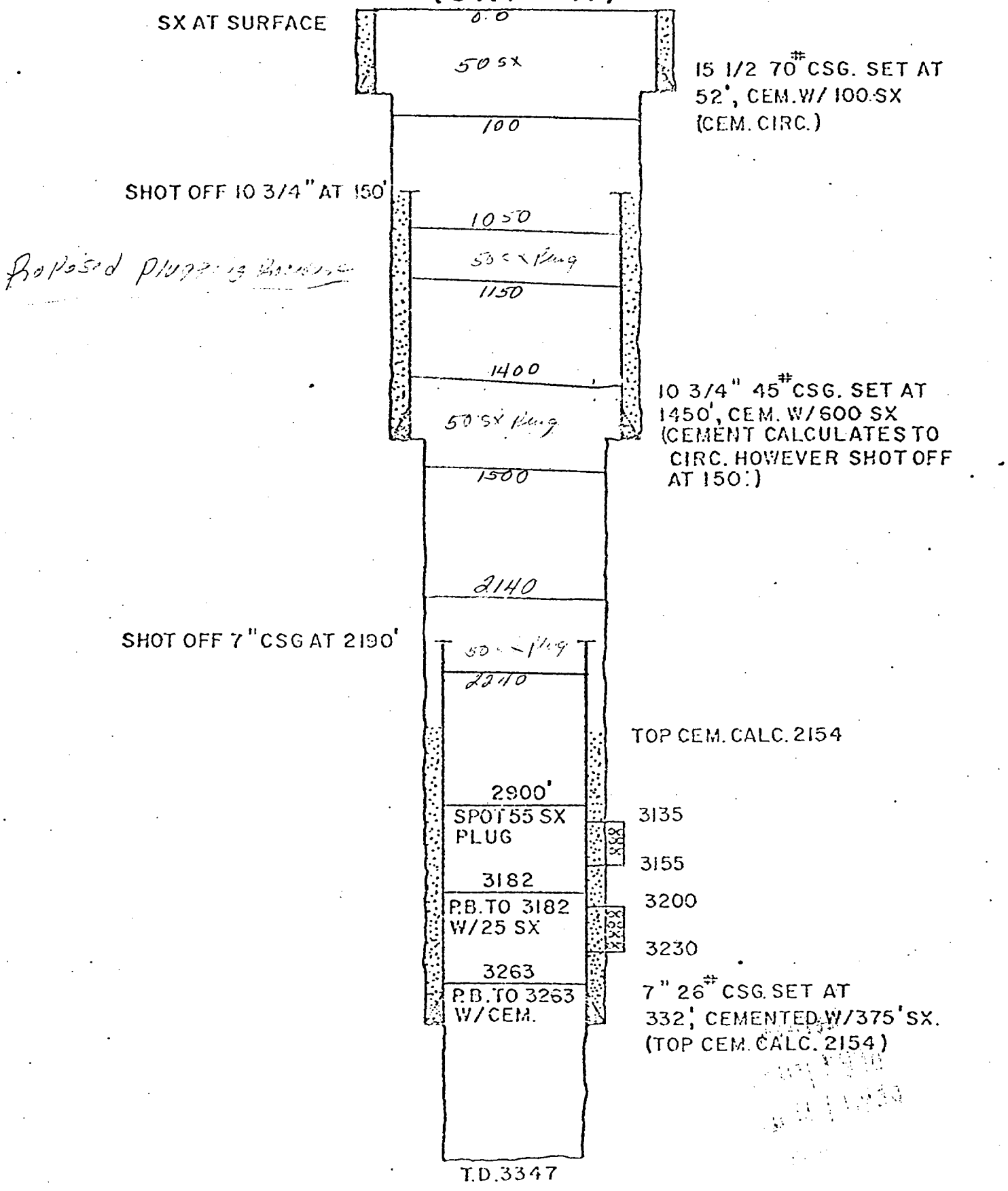


EXHIBIT "D"

F. HANAGAN NO. 1

330' FSL & 2310' FWL

SECTION 12 T-25-S, R-36-E

UNIT N

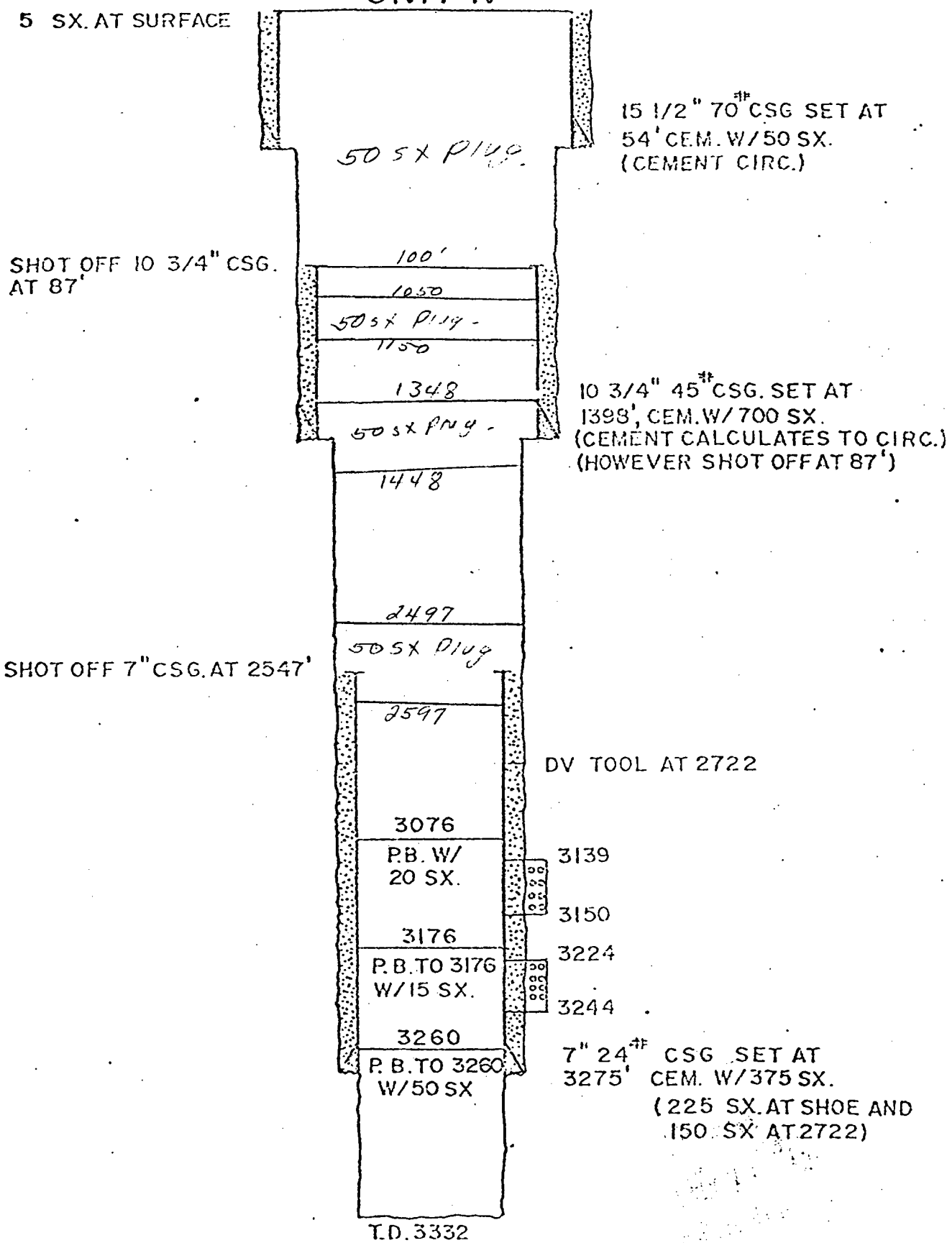


EXHIBIT "D"

ATLANTIC (SINCLAIR REPOLLO)
GLOYD NO. 1
330' FSL & 2310' FEL
SECTION 12 T-25-S, R-36-E
(UNIT O)

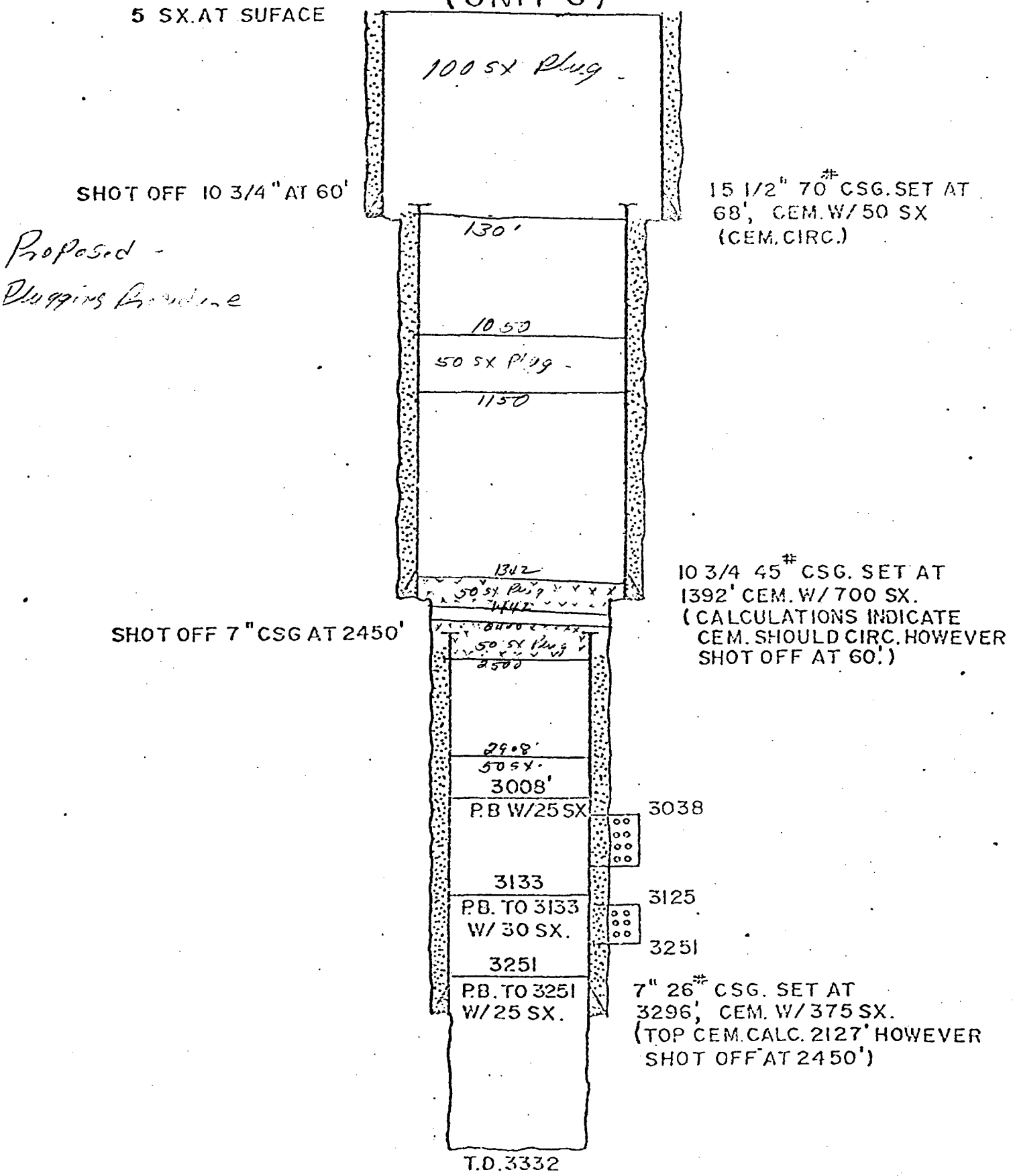
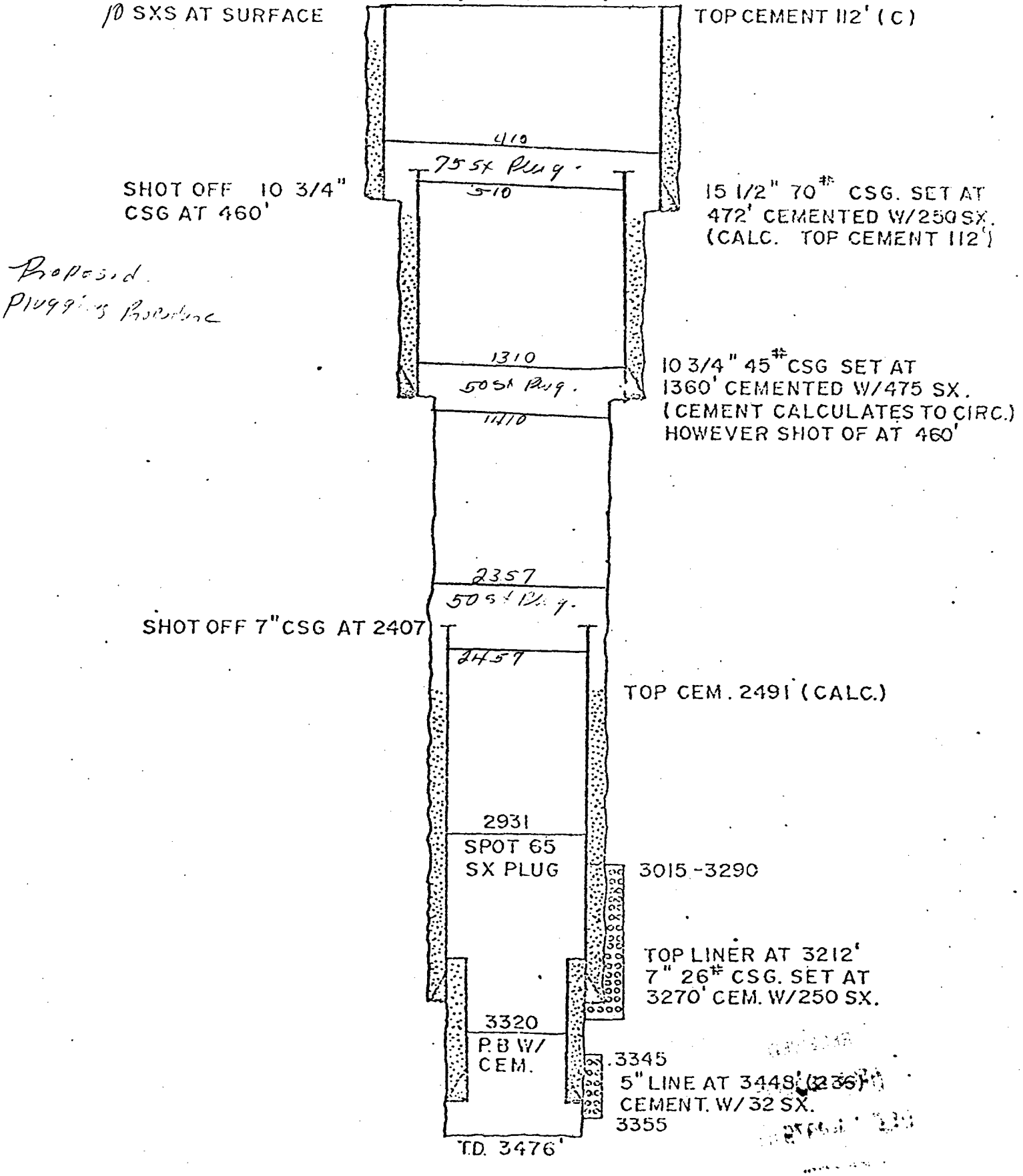


EXHIBIT "D"

ATLANTIC (SINCLAIR REPOLLO)
STEPHENS A. NO. 2
330' FNL & 2310' FEL
SECTION 13 T-25-S R-36-E
(UNIT B)



Champion Technologies, Inc.
Committed to Improvement

Saturation Index Calculations

Champion Technologies, Inc.
(Based on the Tomson-Oddo Model)

Site Information

Company	Maralo
Field	Jal Mat Yates
Point	Injection Water
Date	11/20/96

Water Analysis (mg/L)

Calcium	922
Magnesium	729
Barium	0
Strontium	0
Sodium*	8077
Bicarbonate Alkalinity	1,220
Sulfate	2,036
Chloride	14,000

* - Calculated Value

Appended Data

Dissolved CO2	149 mg/L
Dissolved O2	N/A PPB
H2S	222 mg/L
Iron	0 mg/L
TDS	27022 mg/L
Total Hardness	5300 mg/L

Physical Properties

Ionic Strength*	0.53
pH†	6.84
Temperature	86°F
Pressure	100 psia

* - Calculated Value † - Known/Specified Value

Calcite Calculation Information

Calculation Method	*Value*
pH	6.84
Bicarbonate Alkalinity Correction(s)	***Value***
None Used	---

SI & PTB Results

Scale Type	*SI*	*PTB*
Calcite (Calcium Carbonate)	0.29	147.8
Gypsum (Calcium Sulfate)	-0.57	N/A
Hemihydrate (Calcium Sulfate)	-0.49	N/A
Anhydrite (Calcium Sulfate)	-0.82	N/A
Barite (Barium Sulfate)	N/A	N/A
Celestite (Strontium Sulfate)	N/A	N/A

Champion Technologies, Inc.

Committed To Improvement

Saturation Index Calculations

Champion Technologies, Inc.
(Based on the Tomson-Oddo Model)

Site Information

Company	Maralo
Field	Jal Mat Yates
Point	WSW #1
Date	11/20/96

Water Analysis (mg/L)

Calcium	140
Magnesium	109
Barium	0
Strontium	0
Sodium*	283
Bicarbonate Alkalinity	353
Sulfate	267
Chloride	600

* - Calculated Value

Appended Data

Dissolved CO2	0 mg/L
Dissolved O2	N/A PPB
H2S	2 mg/L
Iron	0 mg/L
TDS	1759 mg/L
Total Hardness	800 mg/L

Physical Properties

Ionic Strength*	0.04
pH†	6.72
Temperature	86°F
Pressure	100 psia

* - Calculated Value † - Known/Specified Value

Calcite Calculation Information

Calculation Method	*Value*
pH	6.72
Bicarbonate Alkalinity Correction(s)	*Value*
None Used	---

SI & PTB Results

Scale Type	*SI*	*PTB*
Calcite (Calcium Carbonate)	-0.32	N/A
Gypsum (Calcium Sulfate)	-1.82	N/A
Hemihydrate (Calcium Sulfate)	-1.58	N/A
Anhydrite (Calcium Sulfate)	-2.10	N/A
Barite (Barium Sulfate)	N/A	N/A
Celestite (Strontium Sulfate)	N/A	N/A

EXHIBIT "G"

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

September 24, 1996

and ending with the issue dated

September 24, 1996

Kathi Bearden

Publisher

Sworn and subscribed to before

me this 3 day of

October, 1996

Sandra Cattett

Notary Public.

My Commission expires
August 29, 1998
(Seal)

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

LEGAL NOTICE
September 24, 1996

Maralo, Inc., P. O. Box 832, Midland, Texas 79702, is filing Form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division seeking administrative approval for secondary recovery into the Maralo Jalmat Yates Unit. The proposed well, the Maralo Jalmat Yates Unit #2 is located 2310' FSL and 1650' FEL, Section 12, Township 25 South, Range 36 East, Lea County, New Mexico, will be used for water injection. Disposal waters from the Tansill-Yates-Seven Rivers formation will be injected into the Yates formation at a depth of 3050 feet with a maximum pressure of 1000 psi and a maximum rate of 1000 BWPD.

All interested parties opposing the aforementioned must file objections or requests for a hearing with the Oil Conservation Division, P. O. Box 6429, Santa Fe, New Mexico, 87505-6429, within 15 days. Additional information can be obtained by contacting R. A. Lowery at (915) 684-7441.

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