

Mobil Producing Texas & New Mexico Inc.

January 20, 1986

P.O. BOX 633
MIDLAND, TEXAS 79702

Oil Conservation Division (2)
Post Office Box 2088
Santa Fe, New Mexico 87051

7.01
WATER INJECTION WELLS
MOBIL PRODUCING TX. & N.M., INC.
NORTH VACUUM ABO UNIT
WELL NOS. 131, 134, 135, 146, 152,
158, 160, 162, 164, 165, 170, 200,
201, 214, 224, 229 AND 302
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

Gentlemen:

Mobil Producing Tx. & N. M., Inc. (MPTM) respectfully requests authority to inject fresh water into the Abo formation in the subject wells.

Conversion of these wells to water injection wells is necessary to complete an efficient production and injection pattern for the North Vacuum Abo Unit.

The supporting information for this application is organized in accordance with Form C-108.

MPTM has examined the available geological and engineering data and finds no evidence of open faults or any other hydrological connection between the Abo zone and any underground source of drinking water.

Yours very truly,

C.E. Smith

for G. E. Tate
Environmental & Regulatory Manager

CCS/dwc

Attachments

cc: Offset Operators
New Mexico State Land Office
County Clerk, Loving, New Mexico
District Director OCD - Hobbs

A:M6020DCA.CCS

INDEX OF ATTACHMENTS
ORGANIZED IN ACCORDANCE WITH FORM C-108

PROPOSED WATER INJECTION WELLS
NORTH VACUUM ABO UNIT
WELL NOS. 131, 134, 135, 146, 152,
158, 160, 162, 164, 165, 170,
200, 201, 214, 224, 229 & 302
LEA COUNTY, NEW MEXICO

1. Form C-108
2. III. A. Well Data for each well proposed for injection and schematic for "Typical Proposed Injector".
3. V. A. Map of area of review with two mile radius circle drawn.
B. Map of area of review with one-half mile radius circle drawn.
4. VI. Tabulation of data on all wells of public record within area of review and schematics and/or completion reports.
5. IX. Stimulation program
6. XI. Chemical analysis of fresh water.
7. XIII. Proof of Notice:
 - A. List of surface owner and offset operators.
 - B. Copies of letters with proof of notice attached.
 - C. Copy of legal advertisement which was published in the Lovington Daily Leader and affidavit.
 - D. Copy of letter to County Clerk.

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☒ Secondary Recovery ☐ Pressure Maintenance ☐ Disposal ☐ Storage
Application qualifies for administrative approval? ☒ yes ☐ no
- II. Operator: Mobil Producing Texas & New Mexico, Inc.
Address: P. O. Box 633, Midland, Texas 79702
Contact party: C. C. Smith Phone: (915) 688-1776
- 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 R-4430.
- 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: G. E. Tate Title Env. & Reg. Manager
Signature: C. C. Smith - for Date: 01-20-86
- * 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. R-4430 - 10-27-72, PMX-51 - 9-20-73, PMX-138 - 11-16-85

MOBIL PRODUCING TEXAS & NEW MEXICO INC.
PROPOSED WATER INJECTION WELLS
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

Well Data

- III A. 1. North Vacuum Abo Unit #131
790' FNL & 1980' FEL, Sec. 10, Unit B, 17-S, 34-E
2. 12-3/4" @ 255' w/450 sx circ.
8-5/8" @ 2356' w/1400 sx circ.
5-1/2" @ 8850' w/2300 sx circ.
3. 2-3/8" N-80 Buttress Tubing
4. Baker Model NB Packer @ 8550'
- B. 1. Abo
2. 8663' - 8672'
3. Originally drilled for production
4. None
5. Next higher perfs, Blinbry
Next lower perfs, Wolfcamp
- VII 1. Maximum 600 BBL/day/well avg 250 BBL/day/well
2. Closed system
3. Maximum pressure 4350 psi, avg. 4150 psi
4. Ogallala water will be injected because of the adverse affects of produced water on the tight formation of the Abo zone.

VACUUM (ABO) NORTH FIELD

LEA COUNTY, NM

B-10-175-34E

Elevation:

BJ cmt w/ 450 SX Class H

cmt w/ $\frac{1}{4}$ # celloflake/SX + 2%

CaCl₂/SX. cmt. circ.

BJ cmt w/ 1200 SX TLW w/

$7\frac{1}{2}$ # salt/SX + 200 SX Class C

cmt w/ 2.6 # salt/SX. cmt circ.

9 JTS $12\frac{3}{4}$ 33# J-55

LTFC CSG set @ 255'

2007'

76 JTS $8\frac{5}{8}$ 28# STFC

L.B. FOSTER CSG set @ 235'

TBG: 64 JTS $2\frac{7}{8}$ to 2007'

212 JTS $2\frac{7}{8}$, GUIB

TA CATCHER, 5 JTS $2\frac{7}{8}$
to 8795'

GUIB TA set @ 8606'

w/ 21000 # T

ABO PERFS: 8663; 67; 75; 86;
8699'

8704; 08; 10; 13;

8721' w/ 21SPF
- 20 holes

TBG PERFS: 8762-65'

PBTD 8817'

269 JTS $5\frac{1}{2}$ 17# 15#

STFC & LTFC CSG set @ 8850'

SN @ 8761'

w/ cmt w/ 2100 SX TLW w/ $\frac{1}{4}$ #

Flocele/SX in 1st 1000 SX + 200 SX

Class C Most cmt. cmt circ.

TD 8850'

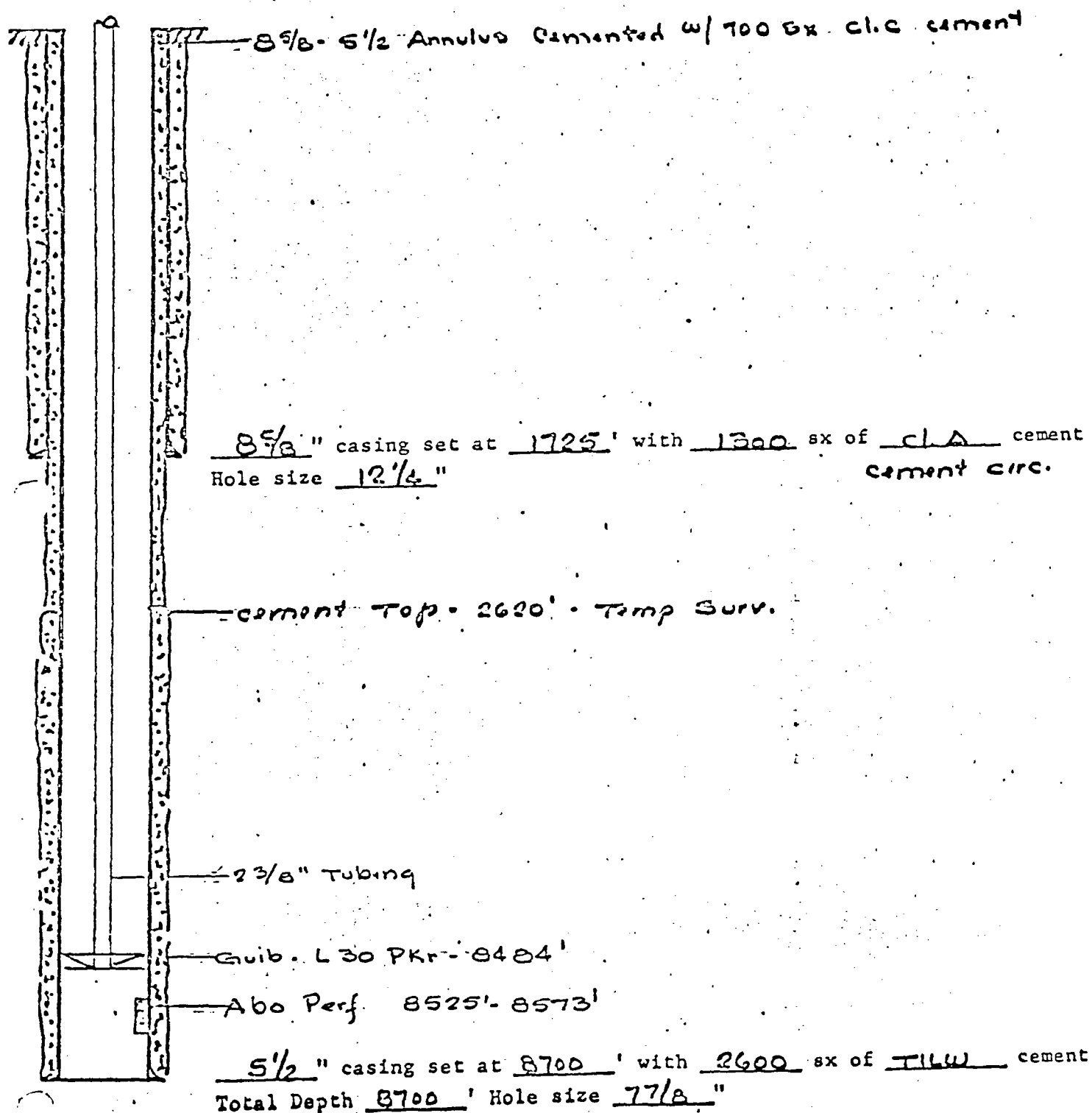
PBTD 8817'

MOBIL PRODUCING TEXAS & NEW MEXICO INC.
PROPOSED WATER INJECTION WELLS
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

Well Data

- III A. 1. North Vacuum Abo Unit #134
660' FNL & 790' FWL, Sec. 12, Unit L, 17-S, 34-E
2. 8-5/8" @ 1725' w/1300 sx circ.
5-1/2" @ 8700' w/3300 sx circ.
3. 2-3/8" N-80 Buttress Tubing
4. Baker Model NB Packer @ 8550'
- B. 1. Abo
2. 8525' - 8573'
3. Originally drilled for production
4. None
5. Next higher perms, Blinbry
Next lower perms, Wolfcamp
- VII 1. Maximum 600 BBL/day/well avg 250 BBL/day/well
2. Closed system
3. Maximum pressure 4350 psi, avg. 4150 psi
4. Ogalalla water will be injected because of the adverse
affects of produced water on the tight formation of the
Abo zone.

FIELD	Vacuum Abo North	OPERATOR	Mobil Oil Corp	DATE	5-11-76
EASE	North Vacuum Abo Unit	WELL No	134	LOCATION	L. Sec 12, T17S, R34E

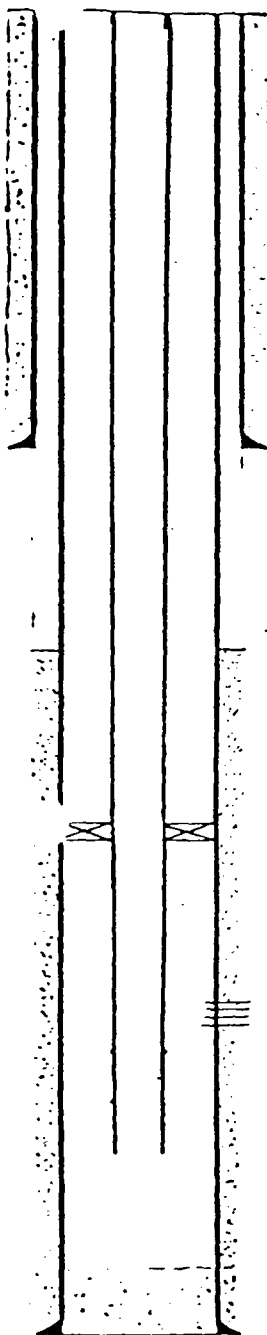


MOBIL PRODUCING TEXAS & NEW MEXICO INC.
PROPOSED WATER INJECTION WELLS
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

Well Data

- III A. 1. North Vacuum Abo Unit #135
660' FNL & 860' FWL, Sec. 11, Unit L, 17-S, 34-E
 - 2. 8-5/8" @ 1720' w/1300 sx circ.
5-1/2" @ 8700' w/3100 sx circ. - TOC @ 1765'
 - 3. 2-3/8" N-80 Buttress Tubing
 - 4. Baker Model NB Packer @ 8550'
- B. 1. Abo
 - 2. 8610' - 8649'
 - 3. Originally drilled for production
 - 4. None
 - 5. Next higher perfs, Blinbry
Next lower perfs, Wolfcamp
- VII 1. Maximum 600 BBL/day/well avg 250 BBL/day/well
 - 2. Closed system
 - 3. Maximum pressure 4350 psi, avg. 4150 psi
 - 4. Ogallala water will be injected because of the adverse affects of produced water on the tight formation of the Abo zone.

35 WELL NO. 133 LEASE Bridges State
 L-11-17S-34E COUNTY Lea STATE New Mexico
 SIGNED M. P. Maurin
 GL 4047
 DF 4060
 KB 4061
 ZERO 14 161



- 1720' $8\frac{5}{8}$ ", 24" + 20" csg ; $12\frac{1}{4}$ " hole
 cemented on bottom w/ 1100 sx Class A 8% gel cement
 + 200 sx Class A neat; cement circulated. All cement
 contained 2% CaCl
- 1765' Top of cement
- $7\frac{7}{8}$ " hole
- 8544' Guib. Anchor w/ 15000# tension
- 8610'-8649' Abo parts, 2 JSPP, 22 holes, 11' net pay.
- ±8671' $2\frac{3}{8}$ tbg
- 8686' PBTD
- 8700' $5\frac{1}{2}$ ", 17" + 15.0" csg ; $7\frac{7}{8}$ " hole
 cemented on bottom w/ 2900 sx TILW w/ $\frac{1}{8}$ " flange
 per sx in 1st 1000 sx + 200 sx Incon Neat cement.

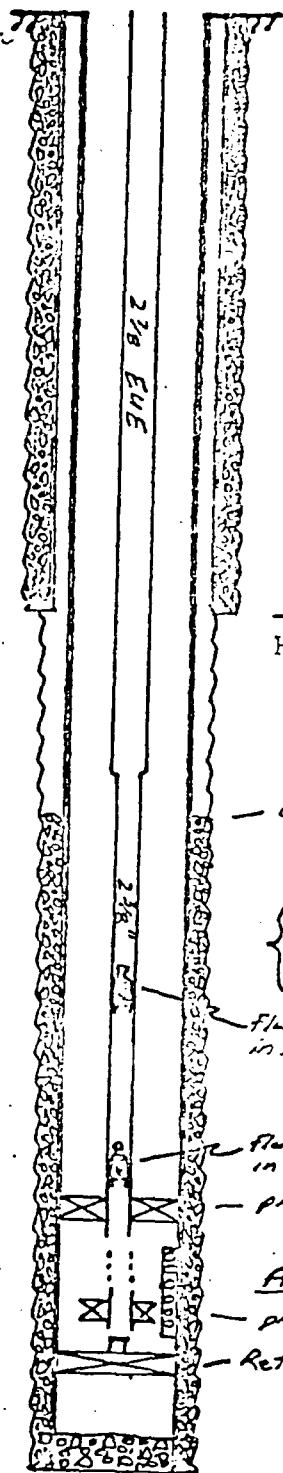
MOBIL PRODUCING TEXAS & NEW MEXICO INC.
PROPOSED WATER INJECTION WELLS
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

Well Data

- III A. 1. North Vacuum Abo Unit #146
534'FNL & 2134' FEL, Sec. 14, Unit B, 17-S, 34-E
2. 8-5/8" @ 1705' w/1000 sx circ.
5-1/2" @ 8700' w/3100 sx circ. - TOC @ 2625' (Temp. Survey)
3. 2-3/8" N-80 Buttress Tubing
4. Baker Model NB Packer @ 8550'
- B. 1. Abo
2. 8516' - 8590'
3. Originally drilled for production
4. None
5. Next higher perms, Blinbry
Next lower perms, Wolfcamp
- VII 1. Maximum 600 BBL/day/well avg 250 BBL/day/well
2. Closed system
3. Maximum pressure 4350 psi, avg. 4150 psi
4. Ogallala water will be injected because of the adverse
affects of produced water on the tight formation of the
Abo zone.

FIELD	Vacuum Abo (North)	OPERATOR	Mobil Oil Corporation	DATE	9/1/78
LEASE	North Vacuum Abo Unit	WELL NO.	146	LOCATION	B Sec 14 - T175-R34E

Treating Schematic



8 5/8 " casing set at 1705 ' with 1,000 sx of H^{1/2} gel cement
Hole size 12 1/4 " circ.

— Cement Top 2625' (Temp. Survey)

{ 2 7/8" EUE 8rd (2090')
2 3/8" EUE 8rd (6500')

Fluid Control Valve
in S.N. 900' above pkr

Fluid Control Valve
in S.N. above pkr

— pkr @ 8480'

Abo

— pkr run to 8590'

— Retr. BP @ 8610'

Existing Perfs

8516', 23', 25', 27', 33', 34',
45', 55', 57', 59', 61', 62', 63',
65', 68', 69', 71', 73', 80', 82'

Total: 21 shots

Additional Perfs

8524', 26', 32', 34', 36', 37', 38',
44', 46', 56', 58', 60', 64', 66', 67',
70', 72', 74', 81', 83', 88', 8590'

Total: 22 shots

15.5 x 17 1/4 STCL and LTCL 8rd.

5 1/2 " casing set at 8700 ' with 3,100 sx of TLW cement

Total Depth 8700 ' Hole size 7 7/8 "

PBTD 8669'

RDE 9/1/78

MOBIL PRODUCING TEXAS & NEW MEXICO INC.
PROPOSED WATER INJECTION WELLS
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

Well Data

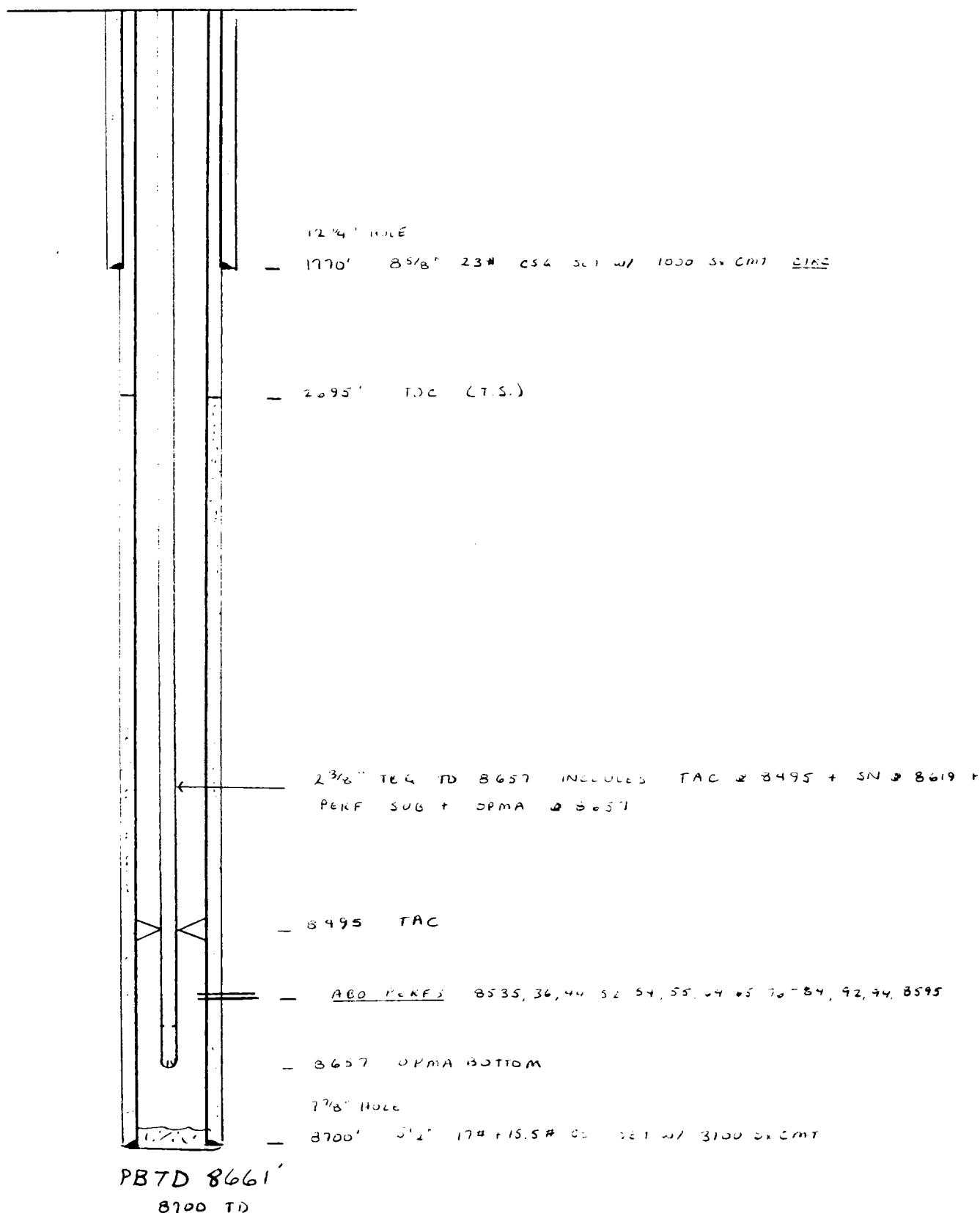
- III A. 1. North Vacuum Abo Unit #152
660' FSL & 2180' FEL, Sec. 13, Unit B, 17-S, 34-E
2. 8-3/8" @ 1770' w/1000 sx circ.
5-1/2" @ 8700' w/3100 sx circ. - TOC @ 2695' (Temp. Survey)
3. 2-3/8" N-80 Buttress Tubing
4. Baker Model NB Packer @ 8550'
- B. 1. Abo
2. 8535' - 8595'
3. Originally drilled for production
4. None
5. Next higher perms, Blinbry
Next lower perms, Wolfcamp
- VII 1. Maximum 600 BBL/day/well avg 250 BBL/day/well
2. Closed system
3. Maximum pressure 4350 psi, avg. 4150 psi
4. Ogallala water will be injected because of the adverse
affects of produced water on the tight formation of the
Abo zone.

DATE 8-16-85 WELL NO. 152 LEASE NVAU FIELD VACUUM HISS N

LOCATION 13-L 7-17-S R-34-E
660 FNL 2180 FEL
Lea County, NM

SIGNED ME VASICER
R.W. Petty

G.L. 4024'
D.F. 4036'
K.B. 4038'
ZERO KB
14' AGL



MOBIL PRODUCING TEXAS & NEW MEXICO INC.
PROPOSED WATER INJECTION WELLS
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

Well Data

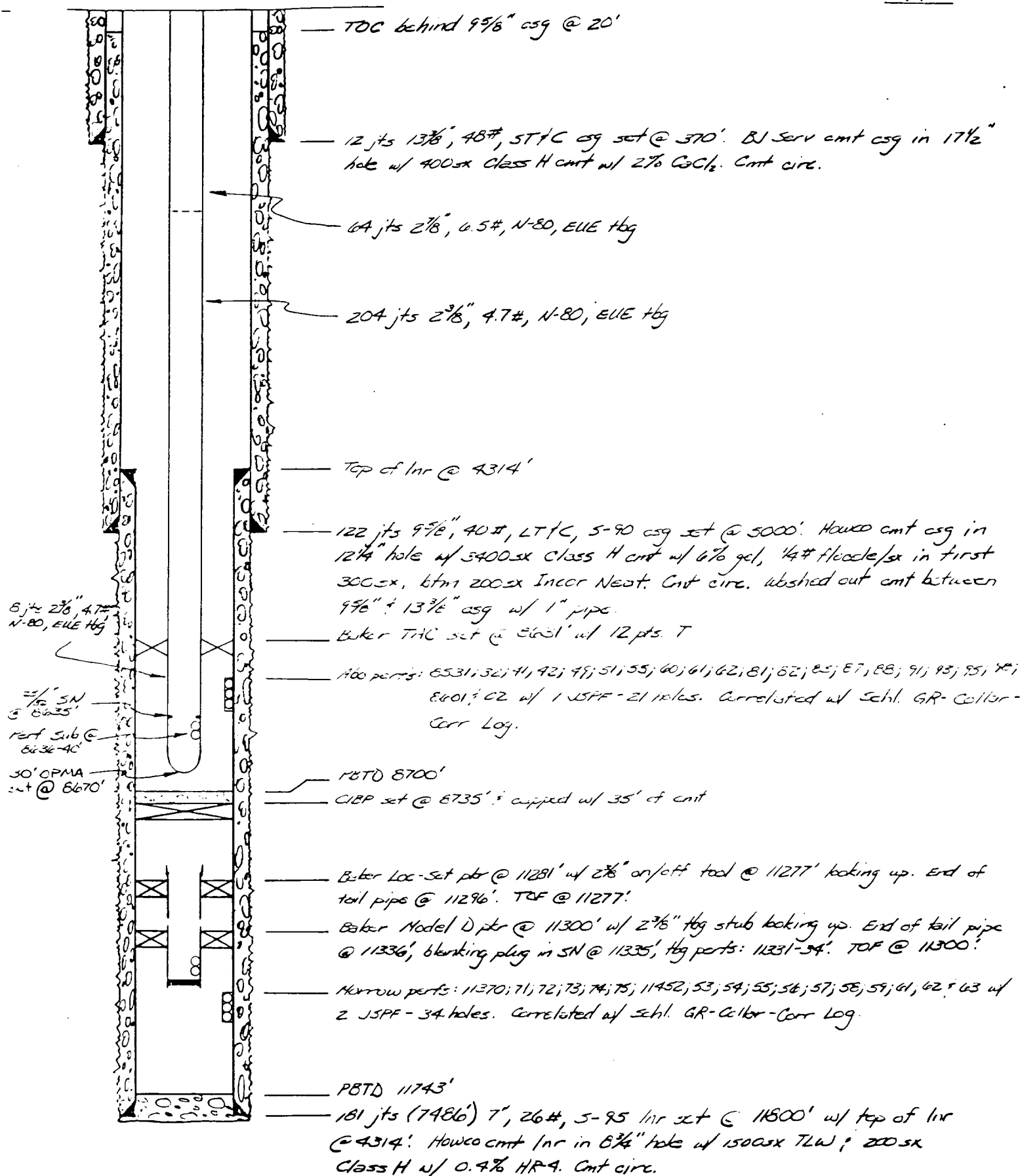
- III A. 1. North Vacuum Abo Unit #158
1980' FSL & 1780' FEL, Sec. 12, Unit J, 17-S, 34-E
2. 13-3/8" @ 370' W/400 SX circ.
9-5/8" @ 5000' w/3600 sx circ.
7" Liner @ 11800' w/1700 sx circ. - TOC @ 4314' (TOL)
3. 2-3/8" N-80 Buttress Tubing
4. Baker Model NB Packer @ 8550'
- B. 1. Abo
2. 8531' - 8602'
3. Originally drilled for production
4. None
5. Next higher perms, Blinbry
Next lower perms, Wolfcamp
- VII 1. Maximum 600 BBL/day/well avg 250 BBL/day/well
2. Closed system
3. Maximum pressure 4350 psi, avg. 4150 psi
4. Ogallala water will be injected because of the adverse
affects of produced water on the tight formation of the
Abo zone.

DATE 8/28/81 WELL NO. 158 LEASE N. Vacuum Abo Unit FIELD N. Vacuum Abo

LOCATION J-12-175-34E Lea County, New Mexico

WT Burnett

G.L. 4025'
D.F. 4043'
K.B. 4044'
ZERO 19'

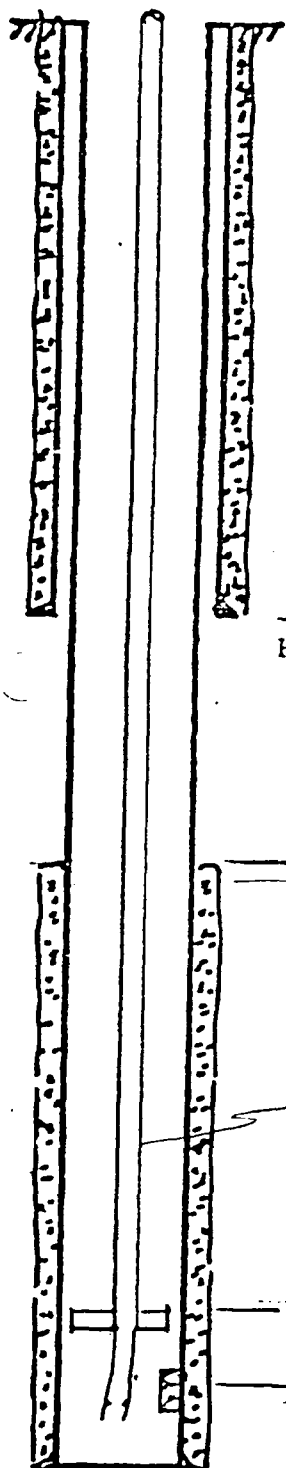


MOBIL PRODUCING TEXAS & NEW MEXICO INC.
PROPOSED WATER INJECTION WELLS
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

Well Data

- III A. 1. North Vacuum Abo Unit #160
660' FNL & 1780' FEL, Sec. 12, Unit B, 17-S, 34-E
2. 8-5/8" @ 1775' w/900 sx circ.
5-1/2" @ 8800' w/3100 sx circ. - TOC @ 2500' (Temp. Survey)
3. 2-3/8" N-80 Buttress Tubing
4. Baker Model NB Packer @ 8550'
- B. 1. Abo
2. 8581' - 8641'
3. Originally drilled for production
4. None
5. Next higher perfs, Blinbry
Next lower perfs, Wolfcamp
- VII 1. Maximum 600 BBL/day/well avg 250 BBL/day/well
2. Closed system
3. Maximum pressure 4350 psi, avg. 4150 psi
4. Ogalalla water will be injected because of the adverse
affects of produced water on the tight formation of the
Abo zone.

FIELD	Vacuum, Abo, North	OPERATOR	Mobil Oil Corp	DATE	5-13-76
LEASE	North Vacuum Abo Unit	WELL No	160	LOCATION	B. Sec 12, T17S, R34E



8 5/8" casing set at 1775' with 900 sx of CLH + gel cement
Hole size 12 1/4" cement circ.

Cement Top - 2500' - Temp Survey

2 3/8" tbg to 8754'
SN @ 8726'

Baker T.A. Catcher - 8537' w/ 12,000 lb T.

Abo Perf. - 8581' - 8641' Total 21 holes
15.5 lb to 6765' 17 lb to bottom

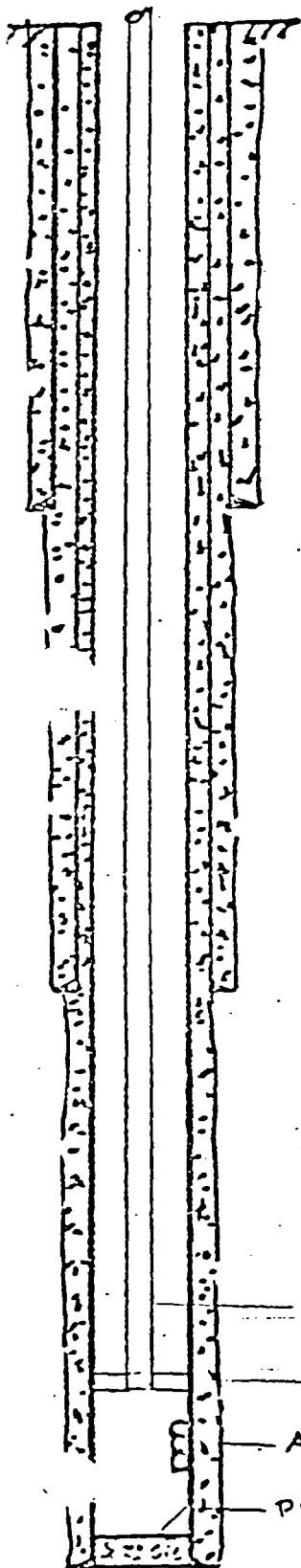
5 1/2" casing set at 8800' with 3100 sx of TLLW cement
Total Depth 8800' Hole size 7 7/8"

MOBIL PRODUCING TEXAS & NEW MEXICO INC.
PROPOSED WATER INJECTION WELLS
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

Well Data

- III A. 1. North Vacuum Abo Unit #162
1980' FSL & 2180' FEL, Sec. 11, Unit J, 17-S, 34-E
2. 13-3/8" @ 260' W/450 sx circ.
8-5/8" @ 3070' w/1900 sx circ.
5-1/2" @ 8750' w/2900 sx circ.
3. 2-3/8" N-80 Buttress Tubing
4. Baker Model NB Packer @ 8550'
- B. 1. Abo
2. 8561' - 8613'
3. Originally drilled for production
4. None
5. Next higher perms, Blinbry
Next lower perms, Wolfcamp
- VII 1. Maximum 600 BBL/day/well avg 250 BBL/day/well
2. Closed system
3. Maximum pressure 4350 psi, avg. 4150 psi
4. Ogallala water will be injected because of the adverse
affects of produced water on the tight formation of the
Abo zone.

FIELD	Vacuum, Abo, North	OPERATOR	Mobil Oil Corp	DATE	5-13-76
LEASE	North Vacuum Abo Unit	WELL NO	162	LOCATION	J-5ec 11, T17S, R34E



13 3/8" casing set at 260' with 450 sx of CLH cement
Hole size 17 1/2" cement circ.

8 5/8" casing set at 3070' with 1900 sx of TLW cement
Hole size 12 1/4" cement circ.

2 3/8" Tubing
Guib. T.A. 8549'
Abo Perf - 8561'-8613'
POTD - 8693'

5 1/2" casing set at 8750' with 2900 sx of TLW cemen
Total Depth 8750' Hole size 7 7/8" cement cir

MOBIL PRODUCING TEXAS & NEW MEXICO INC.
PROPOSED WATER INJECTION WELLS
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

Well Data

- III A. 1. North Vacuum Abo Unit #164
660' FNL & 1980' FEL, Sec. 15, Unit B, 17-S, 34-E
2. 12-3/4" @ 250' w/400 sx circ.
8-5/8" @ 3100' w/1400 sx circ.
5-1/2" @ 8850' w/2300 sx circ.
3. 2-3/8" N-80 Buttress Tubing
4. Baker Model NB Packer @ 8550'
- B. 1. Abo
2. 8677' - 8734'
3. Originally drilled for production
4. None
5. Next higher perfs, Blinbry
Next lower perfs, Wolfcamp
- VII 1. Maximum 600 BBL/day/well avg 250 BBL/day/well
2. Closed system
3. Maximum pressure 4350 psi, avg. 4150 psi
4. Ogallala water will be injected because of the adverse affects of produced water on the tight formation of the Abo zone.

164

VACUUM ABO NORTH
LEA COUNTY, NEW MEXICO

B-15-TTS-7ME

Elevation:

Dowell cont w/ 400sx clch
cont w/ 2% C&C. cont circ.

6 JTS 12 3/4" 38# CSG
set @ 250'

Dowell cont w/ 1200sx TILW
w/ 7 1/2 # salt/sx + 200sx C&C
cont w/ 2.6 # salt/sx. cont circ.

77 JTS 8 5/8" L.B. FOSTER
25 # ST=C CSG set @ 3100

211 JTS 2 3/8" TBG

BAKER TA set @ 8634' w/
21000 # T

SN @ 8760'
TBG PERFS: 8761-64'

ABO PERFS:
8671, 78;
8710, 21, 22, 31, 32, 33, 34
w/ 21SPF - 18 holes

8794'

Dowell cont w/ 2100sx TILW w/
4 # Floeak in 1st 1000sx + 200sx
C&C Neat. cont circ.

TD 8850'

271 JTS 17 1/2 # 15.5 # ST=C
+ LT=C CSG set @ 8500
4000' 17 # on 511 # 15.5 #
to surf.

MOBIL PRODUCING TEXAS & NEW MEXICO INC.
PROPOSED WATER INJECTION WELLS
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

Well Data

- III A. 1. North Vacuum Abo Unit #165
660' FNL & 860' FWL, Sec. 13, Unit D, 17-S, 34-E
2. 13-3/8" @ 360' w/450 sx circ.
9-5/8" @ 5000' w/3100 sx circ.
7" Liner @ 10542' w/1400 sx circ. - TOC @ 4299' (TOL)
3. 2-3/8" N-80 Buttress Tubing
4. Baker Model NB Packer @ 8550'
- B. 1. Abo
2. 8493' - 8553'
3. Originally drilled for production
4. None
5. Next higher perfs, Blinbry
Next lower perfs, Wolfcamp
- VII 1. Maximum 600 BBL/day/well avg 250 BBL/day/well
2. Closed system
3. Maximum pressure 4350 psi, avg. 4150 psi
4. Ogallala water will be injected because of the adverse
affects of produced water on the tight formation of the
Abo zone.

NVAU. - 165

DATE 10-8-85 WELL NO. 165 LEASE Bridges State #165 FIELD Vacuum M. Penn

Vacuum Abo North

LOCATION 660' FNL & 860' FWL
D-13-T175-R34E
Lea County, New Mexico

SIGNED R.W. Petty

G.L. NA

D.F. NA

K.B. NA

ZERO KB

12.5' AGL

13 3/8", 48", H40, STFC csg @ 360'. Cmt'd w/ 400 sx.
 Cmt circ.

Penn string - MA, PN, Baker Seal Assembly, 1jt +bg,
 parallel anchor, 4' sub, SN, 327jts 2 3/8"
 8RD N80 Tbg

BWS hydraulic liner hanger @ 4299'
 9 5/8", 40" & 36" N80 J55, STFC csg @ 5000'. Cmt'd. w/
 2900 sx. Cmt circ.

Abo string - J latch w/ LH release, 55jts 2 3/8" Butt +bg,
 2 3/8" SN, 222jts 2 3/8" Butt +bg, 61jts 2 3/8" butt +bg.

Abo perfs: 8493', 98', 99', 8504'-07', 25', 33'-37', 41'-45', 50'-53'.
 1JSPF. 22 holes.

Baker Model D pkr @ 10360'.

Middle Penn perfs: 10393'-10400', 10405'-10', 14'-16', 18'-20',
 10423'-27'. 1JSPF. 25 holes.

7", 23", 595' N80 csg @ 10,599'. Cmt'd w/ 1400 sx Cmt.
 Cmt circ.

TD 10,600'
 PBTD 10,542'

MOBIL PRODUCING TEXAS & NEW MEXICO INC.
PROPOSED WATER INJECTION WELLS
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

Well Data

- III A. 1. North Vacuum Abo Unit #170
660' FNL & 740' FWL, Sec. 14, Unit D, 17-S, 34-E
2. 12-3/4" @ 270' w/450 sx circ.
8-5/8" @ 3060' w/1700 sx circ.
5-1/2" @ 8800' w/2600 sx circ.
3. 2-3/8" N-80 Buttress Tubing
4. Baker Model NB Packer @ 8550'
- B. 1. Abo
2. 8579' - 8634'
3. Originally drilled for production
4. None
5. Next higher perfs, Blinbry
Next lower perfs, Wolfcamp
- VII 1. Maximum 600 BBL/day/well avg 250 BBL/day/well
2. Closed system
3. Maximum pressure 4350 psi, avg. 4150 psi
4. Ogalalla water will be injected because of the adverse affects of produced water on the tight formation of the Abo zone.

FIELD	Vacuum, Abo North	OPERATOR	Mobil Oil Corp	DATE	5-14-76
USE	North Vacuum Abo Unit	WELL NO.	170	LOCATION	D. Sec 14, T. 17S, R. 34E

12 3/4 " casing set at 270 ' with 450 sx of C.I.H cement
Hole size 17 1/2 " cement circ.

8 3/4 " casing set at 3060 ' with 1700 sx of T.L.W cement
Hole size 11 " cement circ.

— 2 3/8" Tubing —

— Baker T.A. Catcher - 8490'

— Abo. Perf. - 8579' - 8634'

5 1/2 " casing set at 8800 ' with 2600 sx of TLW cement
Total Depth 8800 ' Hole size 7 7/8 " cement circ

MOBIL PRODUCING TEXAS & NEW MEXICO INC.
PROPOSED WATER INJECTION WELLS
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

Well Data

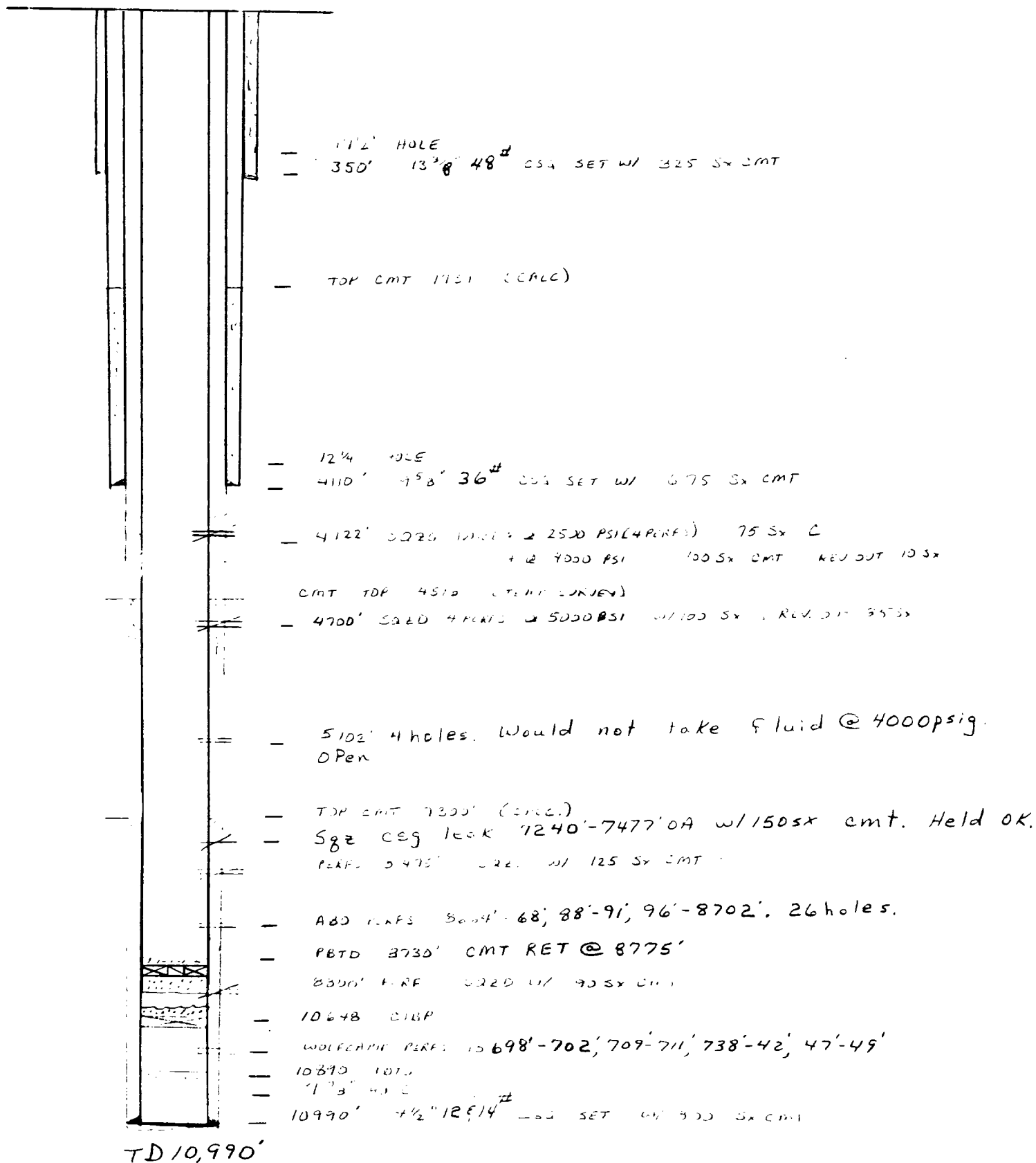
- III A. 1. North Vacuum Abo Unit #200
1980' FSL & 660' FWL, Sec. 2, Unit L, 17-S, 34-E
2. 13-3/8" @ 350' w/325 sx circ.
9-5/8" @ 4110' w/675 sx circ. - TOC @ 1739' (TOL)
4-1/2" @ 10990' w/800 sx circ. - TOC @ 7300' (calc.)
3. 2-3/8" N-80 Buttress Tubing
4. Baker Model NB Packer @ 8550'
- B. 1. Abo
2. 8664' - 8702'
3. Originally drilled for production
4. 8475' sqzd w/125 sx cmt.
4700' sqzd w/100 sx cmt.
4122' sqzd w/75 sx cmt.
5. Next higher perms, Blinbry
Next lower perms, Wolfcamp
- VII 1. Maximum 600 BBL/day/well avg 250 BBL/day/well
2. Closed system
3. Maximum pressure 4350 psi, avg. 4150 psi
4. Ogallala water will be injected because of the adverse affects of produced water on the tight formation of the Abo zone.

DATE 1-16-85 WELL NO. 200 LEASE NVAU FIELD N VACUUM

LOCATION L-2-175-34E
Lea County, NM

SIGNED ME. J. H.
R.W. Petty

G.L. 4053'
D.F. 4069'
K.B. 4070'
ZERO 17' AGL



MOBIL PRODUCING TEXAS & NEW MEXICO INC.
PROPOSED WATER INJECTION WELLS
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

Well Data

- III A. 1. North Vacuum Abo Unit #201
1980' FSL & 1980' FEL, Sec. 10, Unit J, 17-S, 34-E
2. 13-3/8" @ 354' w/350 sx circ.
9-5/8" @ 5010' w/2000 sx circ.
5-1/2" @ 12740' w/3100 sx circ. - TOC @ 350' (calc.)
3. 2-3/8" N-80 Buttress Tubing
4. Baker Model NB Packer @ 8550'
- B. 1. Abo
2. 8679' - 8729'
3. Originally drilled for production
4. None
5. Next higher perfs, Blinbry
Next lower perfs, Wolfcamp
- VII 1. Maximum 600 BBL/day/well avg 250 BBL/day/well
2. Closed system
3. Maximum pressure 4350 psi, avg. 4150 psi
4. Ogallala water will be injected because of the adverse affects of produced water on the tight formation of the Abo zone.

DATE 1-7-86 WELL NO. 201 LEASE No. Vacuum Abo Unit FIELD Vacuum Abo N.

LOCATION 1980' FSL § 1980' FEL
J-10-17S-34E
Lea County, NM

SIGNED R. W. Petty

G.L. 4041.4'
D.F. 4060'
K.B. 4061.4'
ZERO DF 18.6' AGL

— 17 1/2" hole

— 13 3/8", 48" csg set @ 354' w/ 350 sx cmt.
Cmt circ.

— 12 1/4" hole

— 9 5/8", 36 § 40" csg set @ 5010' w/ 2000 sx cmt
Calculated TOC @ 350'

— 8 3/4" hole

— Abo perfs: 8679', 81', 8701', 03', 06'-12', 15'-17', 20', 29'.
16 holes.

— PBTD 8906'

— 5 1/2", 15.5 § 17" csg set @ 10,995' w/ 1875 sx cmt.
DV tool @ 9008'. Calculated TOC @ 5000' by hole caliper.

— 12450'-250': 80 sx plug § 11,500'-250': 100 sx plug.

TD 12740'

MOBIL PRODUCING TEXAS & NEW MEXICO INC.
PROPOSED WATER INJECTION WELLS
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

Well Data

- III A. 1. North Vacuum Abo Unit #214
790' FNL & 790' FWL, Sec. 11, Unit D, 17-S, 34-E
2. 13-3/8" @ 27' w/10 sx redimix circ.
8-5/8" @ 1681' w/1120 sx circ.
5-1/2" @ 8714' w/1250 sx circ. - TOC @ 1240' (Temp. survey)
3. 2-3/8" N-80 Buttress Tubing
4. Baker Model NB Packer @ 8550'
- B. 1. Abo
2. 8616' - 8659'
3. Originally drilled for production
4. None
5. Next higher perms, Blinbry
Next lower perms, Wolfcamp
- VII 1. Maximum 600 BBL/day/well avg 250 BBL/day/well
2. Closed system
3. Maximum pressure 4350 psi, avg. 4150 psi
4. Ogallala water will be injected because of the adverse affects of produced water on the tight formation of the Abo zone.

DATE 12-29-82 WELL NO. 214 LEASE NVAU FIELD Vacuum Abo North

LOCATION Sec 11-D T172 R34E

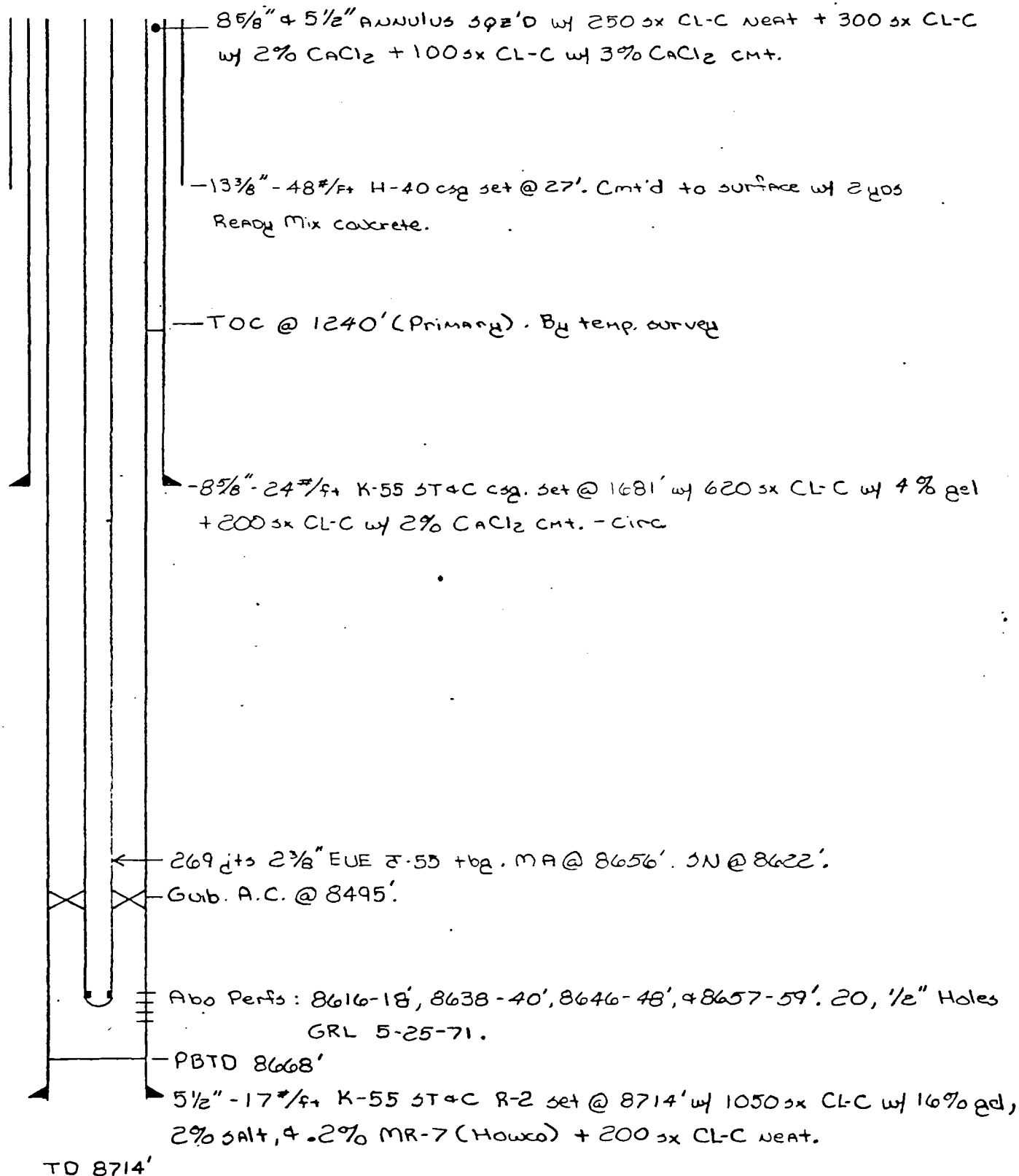
SIGNED M.W. DEER

G.L. 4050

D.F. 4063

K.B. 4064

ZERO 14' AGL

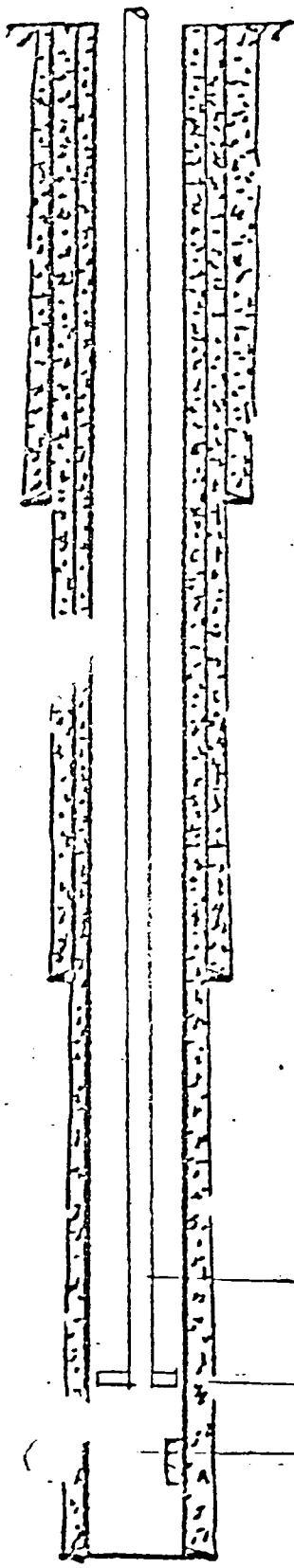


MOBIL PRODUCING TEXAS & NEW MEXICO INC.
PROPOSED WATER INJECTION WELLS
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

Well Data

- III A. 1. North Vacuum Abo Unit #224
745' FNL & 1880' FEL, Sec. 11, Unit B, 17-S, 34-E
2. 12-3/4" @ 260' w/450 sx circ.
8-5/8" @ 3140' w/1400 sx circ.
5-1/2" @ 8730' w/2000 sx circ.
3. 2-3/8" N-80 Buttress Tubing
4. Baker Model NB Packer @ 8550'
- B. 1. Abo
2. 8588' - 8632'
3. Originally drilled for production
4. None
5. Next higher perms, Blinbry
Next lower perms, Wolfcamp
- VII 1. Maximum 600 BBL/day/well avg 250 BBL/day/well
2. Closed system
3. Maximum pressure 4350 psi, avg. 4150 psi
4. Ogallala water will be injected because of the adverse
affects of produced water on the tight formation of the
Abo zone.

FIELD	Vacuum, Abo North	OPERATOR	Mobil Oil Corp	DATE	5-19-76
LEASE	North Vacuum Abo Unit	WELL NO	224	LOCATION	B - Sec 11, T17S, R34E



12 3/4" casing set at 260 ' with 450 sx of CLH cement
 Hole size 17 1/2" cement circ

8 5/8" casing set at 3140 ' with 1400 sx of TILW cement
 Hole size 11" cement circ

2 3/8" Tubing

Guib-TA. 8539

Abo Perf. 8588'-8632'

5 1/2" casing set at 8730 ' with 2000 sx of TILW cement
 Total Depth 8730 ' Hole size 7 7/8" cement circ.

MOBIL PRODUCING TEXAS & NEW MEXICO INC.
PROPOSED WATER INJECTION WELLS
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

Well Data

- III A. 1. North Vacuum Abo Unit #229
2000' FSL & 660' FWL, Sec. 10, Unit L, 17-S, 34-E
2. 8-5/8" @ 1635' w/1100 sx circ.
5-1/2" @ 8987' w/1250 sx circ.
 3. 2-3/8" N-80 Buttress Tubing
 4. Baker Model NB Packer @ 8550'
- B. 1. Abo
2. 8745' - 8803'
 3. Originally drilled for production
 4. None
 5. Next higher perms, Blinbry
Next lower perms, Wolfcamp
- VII 1. Maximum 600 BBL/day/well avg 250 BBL/day/well
2. Closed system
 3. Maximum pressure 4350 psi, avg. 4150 psi
 4. Ogallala water will be injected because of the adverse affects of produced water on the tight formation of the Abo zone.

ION L-10-17S-34E

SIGNED R.W. Petty

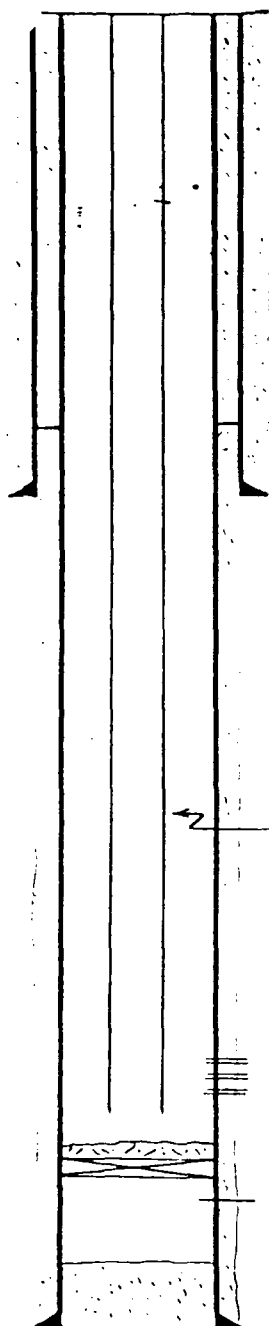
G.L. 4020

D.F. 4064

K.B. 4036

ZERO 16 AGL

NVAU #229



— 1635'

8 5/8" csg; 11" hole

cemented w/ 900 sx class C w/ 2% CaCl_2 + 4% gel +
200sx class C w/ 2% CaCl_2 . cmt circ.

— 2 7/8" tbg

8745', 55', 75', 80', 92', 8800', 03'. 1 JS PF. 7 holes.

— 5 1/2" CIBP. Capped w/ 10' cmt. PBTD @ 8870'.

— Abo perfs: 8901', 06', 24. 1 JS PF 3 holes

— 8945'

— 8987' 5 1/2", 17" csg; 7 7/8" hole

cemented w/ 250 sx Class H neat and 1000 sx Class C neat.

MOBIL PRODUCING TEXAS & NEW MEXICO INC.
PROPOSED WATER INJECTION WELLS
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

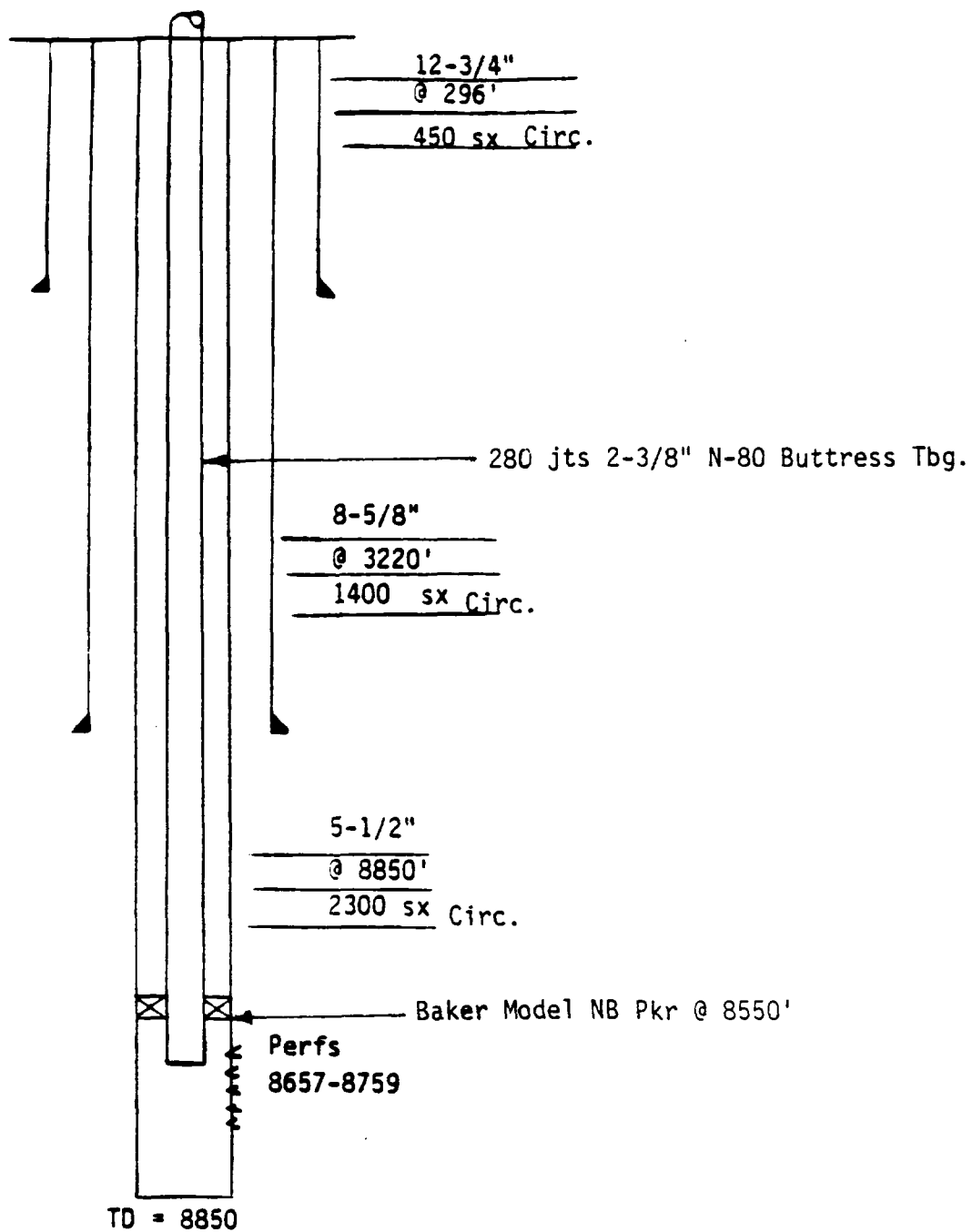
Well Data

- III A. 1. North Vacuum Abo Unit #302
1980' FSL & 1980' FEL, Sec. 3, Unit J, 17-S, 34-E
2. 12-3/4" @ 296' w/450 sx circ.
8-5/8" @ 3200' w/1400 sx circ.
5-1/2" @ 8850' w/2300 sx circ.
3. 2-3/8" N-80 Buttress Tubing
4. Baker Model NB Packer @ 8550'
- B. 1. Abo
2. 8657' - 8759'
3. Proposed water injection well
4. None
5. Next higher perfs, Blinbry
Next lower perfs, Wolfcamp
- VII 1. Maximum 600 BBL/day/well avg 250 BBL/day/well
2. Closed system
3. Maximum pressure 4350 psi, avg. 4150 psi
4. Ogallala water will be injected because of the adverse affects of produced water on the tight formation of the Abo zone.

Typical Proposed Injector

North Vacuum Abo Unit #302

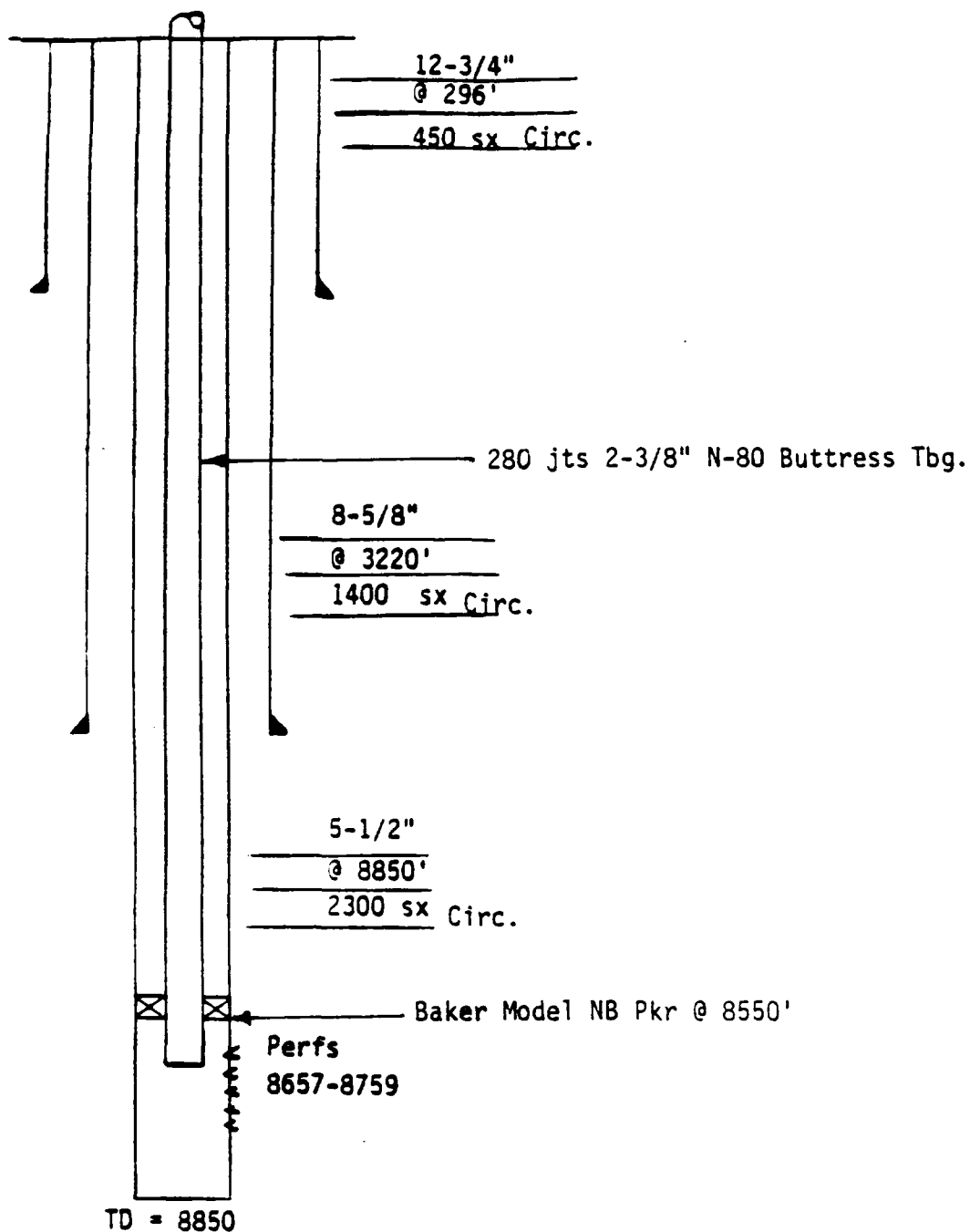
Lea County, New Mexico

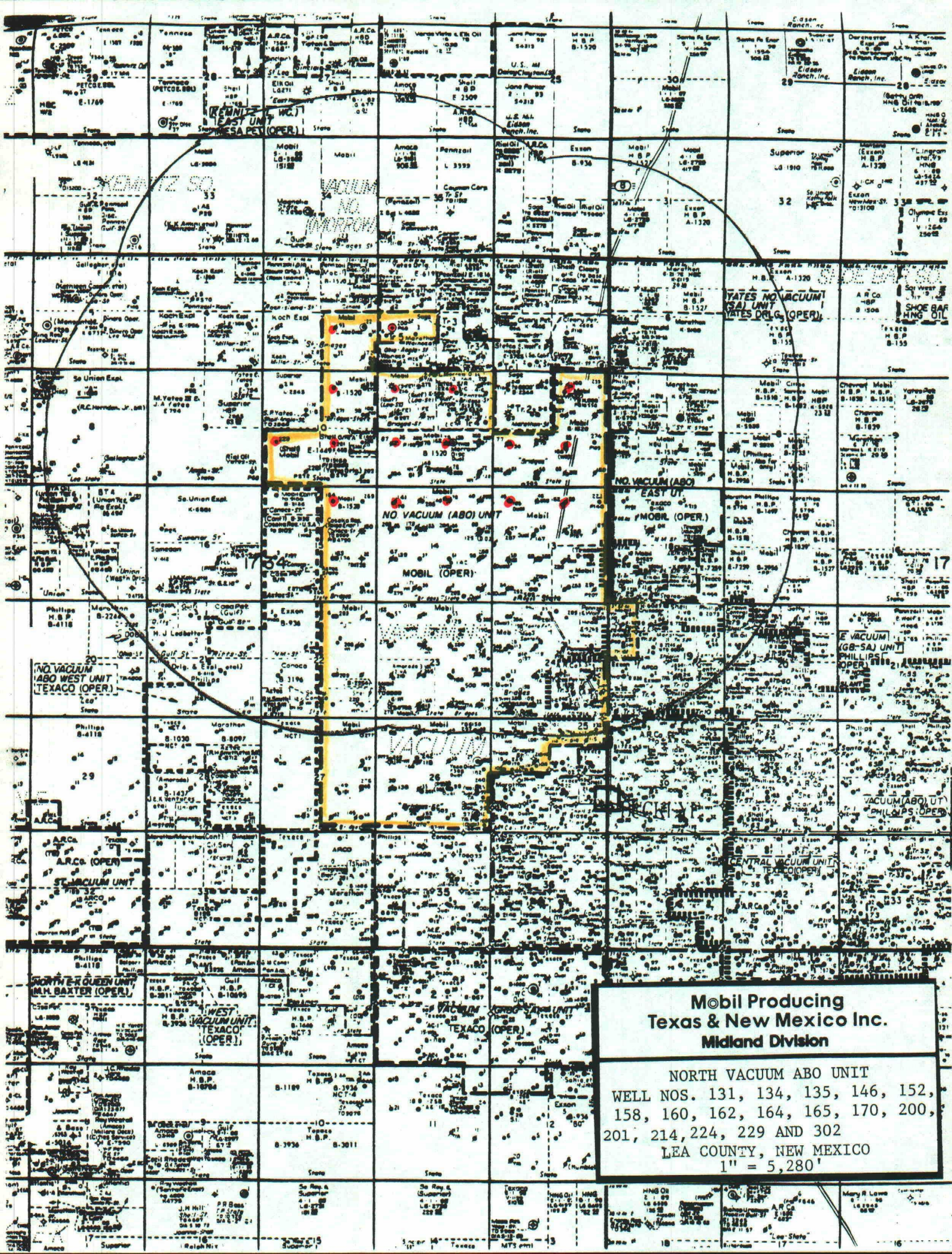


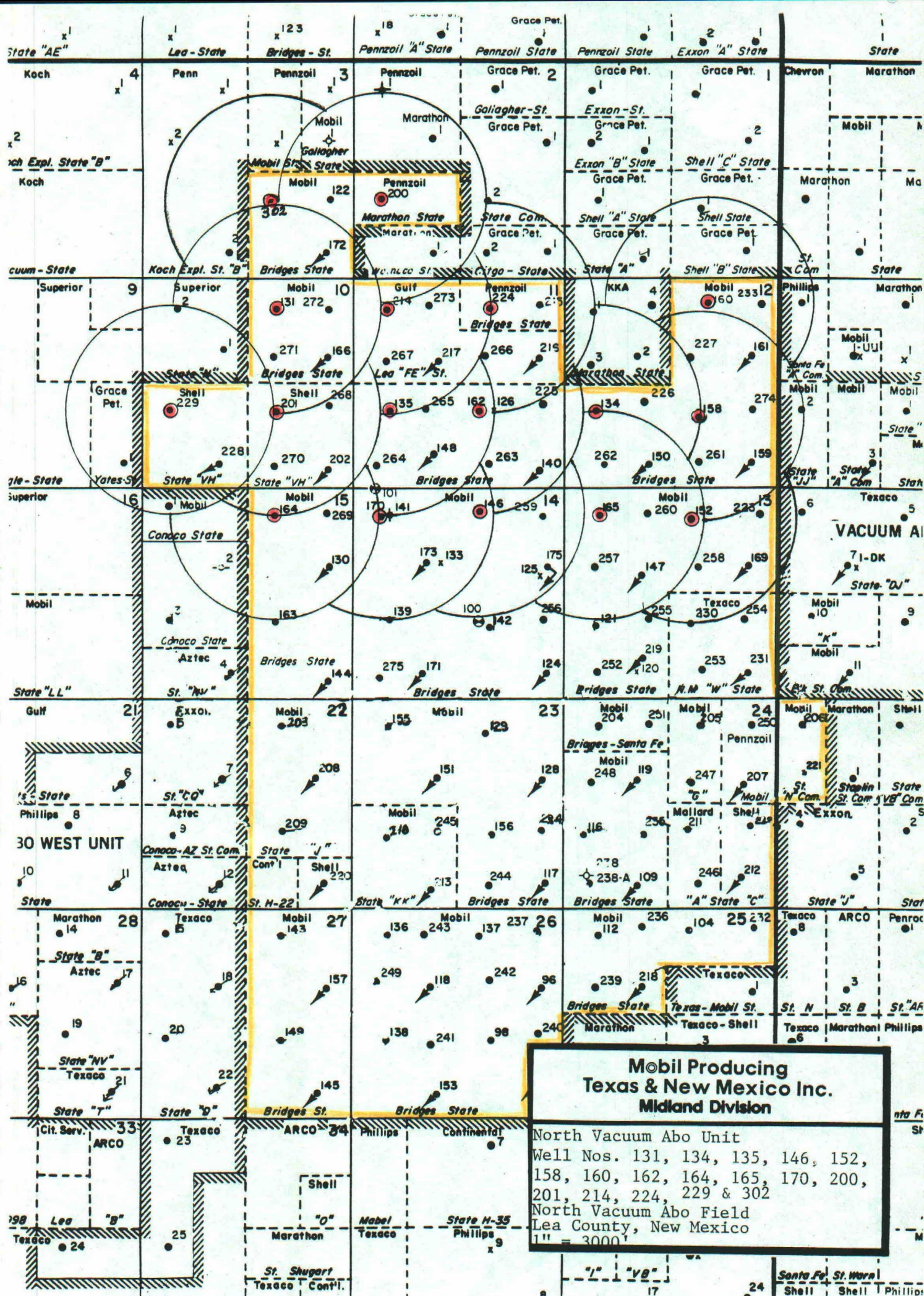
Typical Proposed Injector

North Vacuum Abo Unit

Lea County, New Mexico







MOBIL PRODUCING TEXAS & NEW MEXICO, INC.

PROPOSED WATER INJECTION WELLS

NOS. 131, 134, 135, 146, 152,
158, 160, 162, 164, 165, 170,
200, 201, 214, 224, 229 & 302

NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

TABULATED DATA ON ALL WELLS ON PUBLIC RECORD WITHIN AREA OF REVIEW

OPERATOR LEASE	WELL NO.	LOCATION	WELL TYPE	DATE DRILLED	DEPTH	COMPLETION INTERVAL
Mobil Producing Texas & New Mexico Inc. North Vacuum Abo Unit	122	1980' FSL & 660' FEL Sec. 3, Unit I, 17-S, 34-E	P	8-67	10,840	Abo 8,662' - 8,698'
	125	2180' FNL & 660' FEL Sec. 14, Unit H, 17-S, 34-E	P	2-68	11,890	Morrow 11,465' - 11,651'
	126	1980' FSL & 1830' FEL Sec. 11, Unit J, 17-S, 34-E	P	6-68	12,046	Morrow 11,855' - 11,932'
	130	1980' FNL & 660' FEL Sec. 15, Unit H, 17-S, 34-E	I	9-70	8,750	Abo 8,678' - 8,711'
	133	1880' FNL & 2150' FWL Sec. 14, Unit F, 17-S, 34-E	P	2-70	12,215	Morrow 11,693' - 11,897'
	139	1980' FSL & 860' FWL Sec. 14, Unit L, 17-S, 34-E	I	7-70	8,750	Abo 8,587' - 8,661'
	140	460' FSL & 660' FEL Sec. 11, Unit P, 17-S, 34-E	I	9-70	8,700	Abo 8,518' - 8,579'
	141	660' FNL & 860' FWL Sec. 14, Unit D, 17-S, 34-E	P&A'd	11-70	8,750	Abo 8,571' - 8,642'

NORTH VACUUM ABO FIELD

PAGE 2

<u>OPERATOR LEASE</u>	<u>WELL NO.</u>	<u>LOCATION</u>	<u>WELL TYPE</u>	<u>DATE ORILLED</u>	<u>DEPTH</u>	<u>COMPLETION INTERVAL</u>
Mobil Producing Texas & New Mexico Inc. North Vacuum Abo Unit	147	2080' FNL & 1780' FWL Sec. 13, Unit F, 17-S, 34-E	I	11-70	11,315	Abo 8,503' - 8,552' Penn 10,442' - 10,469'
	148	860' FSL & 1980' FWL Sec. 11, Unit N, 17-S, 34-E	I	1-71	8,700	Abo 8,562' - 8,620'
	150	660' FSL & 1980' FWL Sec. 12, Unit N, 17-S, 34-E	I	2-71	8,665	Abo 8,531' - 8,605'
	159	660' FSL & 660' FEL Sec. 12, Unit P, 17-S, 34-E	I	5-71	8,750	Abo 8,561' - 8,614'
	161	1980' FNL & 660' FEL Sec. 12, Unit H, 17-S, 34-E	I	6-71	8,800	Abo 8,584' - 8,638'
	163	1980' FSL & 1980' FEL Sec. 15, Unit J, 17-S, 34-E	I	8-71	8,850	Abo 8,710' - 8,753'
	166	1980' FNL & 660' FEL Sec. 10, Unit H, 17-S, 34-E	I	8-71	8,850	Abo 8,628' - 8,781'
	169	1980' FNL & 660' FEL Sec. 13, Unit H, 17-S, 34-E	I	3-72	8,742	Abo 8,607' - 8,666'
	172	660' FSL & 660' FEL Sec. 3, Unit P, 17-S, 34-E	I	4-72	8,800	Abo 8,643' - 8,681'
	173	1840' FNL & 1840' FWL Sec. 14, Unit F, 17-S, 34-E	I	3-72	8,712	Abo 8,572' - 8,629'
	175	1980' FNL & 485' FEL Sec. 14, Unit H, 17-S, 34-E	I	2-73	8,712	Abo 8,484' - 8,535'

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North Vacuum Abo Field

Page 3

<u>OPERATOR LEASE</u>	<u>WELL NO.</u>	<u>LOCATION</u>	<u>WELL TYPE</u>	<u>DATE DRILLED</u>	<u>DEPTH</u>	<u>COMPLETION INTERVAL</u>
Mobil Producing Texas & New Mexico Inc. North Vacuum Abo Unit	202	460' FSL & 660' FEL Sec. 10, Unit P, 17-S, 34-E	I	2-71	8,900	Abo 8,659' - 8,692'
	215	710' FNL & 610' FEL Sec. 11, Unit A, 17-S, 34-E	I	3-70	13,370	Abo 8,574' - 8,617'
	216	2180' FNL & 610' FEL Sec. 11, Unit H, 17-S, 34-E	I	4-71	8,685	Abo 8,560' - 8,608'
	217	2080' FNL & 2080' FWL Sec. 11, Unit F, 17-S, 34-E	I	4-71	8,700	Abo 8,595' - 8,648'
	223	660' FNL & 460' FEL Sec. 13, Unit A, 17-S, 34-E	P	9-75	8,750	Abo 8,590' - 8,641'
	225	2121' FSL & 519' FEL Sec. 11, Unit I, 17-S, 34-E	P	8-76	8,700	Abo 8,545' - 8,595'
	226	2180' FSL & 1980' FWL Sec. 12, Unit K, 17-S, 34-E	P	9-76	8,700	Abo 8,536' - 8,601'
	227	2180' FNL & 2162' FEL Sec. 12, Unit G, 17-S, 34-E	P	9-76	8,700	Abo 8,554' - 8,613'
	228	660' FSL & 2000' FWL Sec. 10, Unit N, 17-S, 34-E	I	1-72	8,925	Abo 8,718' - 8,781'
	230	1880' FSL & 2130' FEL Sec. 13, Unit J, 17-S, 34-E	I	7-77	10,269	Abo 8,546' - 8,587'
	233	660' FNL & 460' FWL Sec. 12, Unit A, 17-S, 34-E	P	12-82	8,800	Abo 8,690' - 8,666'
	255	1980' FSL & 2099' FWL Sec. 13, Unit K, 17-S, 34-E	P	8-84	8,700	Abo 8,512' - 8,553'

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NORTH VACUUM ABO FIELD

PAGE 4

OPERATOR LEASE	WELL NO.	LOCATION	WELL TYPE	DATE DRILLED	DEPTH	COMPLETION INTERVAL
Mobil Producing Texas & New Mexico Inc. North Vacuum Abo Unit	257	1980' FNL & 739' FWL Sec. 13, Unit E, 17-S, 34-E	P	8-84	8,750	Abo 8,490' - 8,617'
	258	1993' FNL & 1915' FEL Sec. 13, Unit G, 17-S, 34-E	P	8-84	8,680	Abo 8,604' - 8,616'
	259	660' FNL & 580' FEL Sec. 14, Unit A, 17-S, 34-E	P	9-84	8,700	Abo 8,506' - 8,639'
	260	660' FNL & 2080' FWL Sec. 13, Unit C, 17-S, 34-E	P	9-84	8,700	Abo 8,529' - 8,573'
	261	660' FSL & 1980' FEL Sec. 12, Unit O, 17-S, 34-E	I	10-84	8,708	Abo 8,560' - 8,602'
	262	620' FSL & 580' FWL Sec. 12, Unit M, 17-S, 34-E	P	10-84	8,750	Abo 8,528' - 8,641'
	263	610' FSL & 1880' FEL Sec. 11, Unit O, 17-S, 34-E	P	9-84	8,700	Abo 8,532' - 8,594'
	264	561' FSL & 610' FWL Sec. 11, Unit M, 17-S, 34-E	P	11-84	8,800	Abo 8,608' - 8,638'
	265	1980' FSL & 1831' FWL Sec. 11, Unit K, 17-S, 34-E	P	10-84	8,700	Abo 8,591' - 8,615'
	266	1980' FNL & 1980' FEL Sec. 11, Unit F, 17-S, 34-E	P	12-84	8,807	Abo 8,551' - 8,708'
	267	817' FNL & 2105' FWL Sec. 11, Unit E, 17-S, 34-E	P	12-84	8,800	Abo 8,583' - 8,639'
	268	1980' FSL & 660' FEL Sec. 10, Unit I, 17-S, 34-E	P	1-85	8,792	Abo 8,629' - 8,677'

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NORTH VACUUM ABO FIELD

PAGE 5

<u>OPERATOR LEASE</u>	<u>WELL NO.</u>	<u>LOCATION</u>	<u>WELL TYPE</u>	<u>DATE DRILLED</u>	<u>DEPTH</u>	<u>COMPLETION INTERVAL</u>
Mobil Producing Texas & New Mexico Inc. North Vacuum Abo Unit	269	660' FNL & 660' FEL Sec. 15, Unit A, 17-S, 34-E	P	11-84	8,830	Abo 8,664' - 8,704'
	270	540' FSL & 1980' FEL Sec. 10, Unit O, 17-S, 34-E	P	12-84	8,800	Abo 8,702' - 8,737'
	271	1980' FEL & 1980' FNL Sec. 10, Unit G, 17-S, 34-E	P	12-84	8,800	Abo 8,592' - 8,556'
	272	780' FNL & 610' FEL Sec. 10, Unit A, 17-S, 34-E	P	2-85	8,850	Abo 8,636' - 8,682'
	273	710' FNL & 1880' FWL Sec. 11, Unit C, 17-S, 34-E	P	12-84	8,800	Abo 8,592' - 8,656'
Grace Petroleum	274	1980' FSL & 660' FWL Sec. 12, Unit I, 17-S, 34-E	P	10-84	8,800	Abo 8,572' - 8,629'
	1-J	1760' FSL & 1980' FEL Sec. 1, Unit J, 17-S, 34-E	P	7-72	8,850	Abo 8,669' - 8,719'
	1-N	660' FSL & 1980' FWL Sec. 1, Unit N, 17-S, 34-E	P	1-73	8,795	Abo 8,662' - 6,683'
	1-P	660' FSL & 860' FEL Sec. 1, Unit D, 17-S, 34-E	P	2-73	8,830	Abo 8,712' - 8,735'
Koch Exploration						
Miller "B" State	2-N	660' FSL & 2105' FWL Sec. 3, Unit N, 17-S, 34-N	P	8-72	8,877	Abo 8,687' - 8,742'

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North Vacuum Abo Field

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<u>OPERATOR LEASE</u>	<u>WELL NO.</u>	<u>LOCATION</u>	<u>WELL TYPE</u>	<u>DATE DRILLED</u>	<u>DEPTH</u>	<u>COMPLETION INTERVAL</u>
Marathon Exploration Co.						
State E-619-A	1-F	1980' FNL & 1980' FWL Sec. 2, Unit F, 17-S, 34-E	P	1-77	8,900	Abo 8,688' - 8,730'
Warnoco E-619-B a/c 3	1-N	660' FSL & 1980' FWL Sec. 2, Unit N, 17-S, 34-E	P	10-72	8,900	Abo 8,627' - 8,774'
Pennzoil Co.						
Mobil State	1-G	1874' FNL & 1874' FEL Sec. 3, Unit G, 17-S, 34-E	P	4-67	10,859	Lower Wolfe 10,719' - 10,732'
Phillips Petroleum Co.						
Santa Fe "A" Com.	1-D	660' FNL & 619' FWL Sec. 7, Unit D, 17-S, 35-E	P	N/A	8,900	Abo 8,691' - 8,734'
Sage Energy Co.						
Cities Service State	1-P	660' FSL & 460' FEL Sec. 2, Unit P, 17-S, 34-E	P	7-75	8,720	Abo 8,617' - 8,639'
Cities Service State	3-0	460' FSL & 1680' FEL Sec. 2, Unit O, 17-S, 34-E	P	4-85	8,789	Abo 8,626' - 8,642'
Marathon State	1-D	860' FNL & 660' FWL Sec. 12, Unit D, 17-S, 34-E	P	2-71	8,680	Abo 8,559' - 8,603'
Marathon State	2-F	1980' FNL & 1780' FWL Sec. 12, Unit F, 17-S, 34-E	P	3-71	8,675	Abo 8,545' - 8,596'
Marathon State	3-E	2180' FNL & 660' FWL Sec. 12, Unit E, 17-S, 34-E	P	2-76	8,750	Abo 8,542' - 8,584'
A:M6006DCA.CCS						

North Vacuum Abo Field

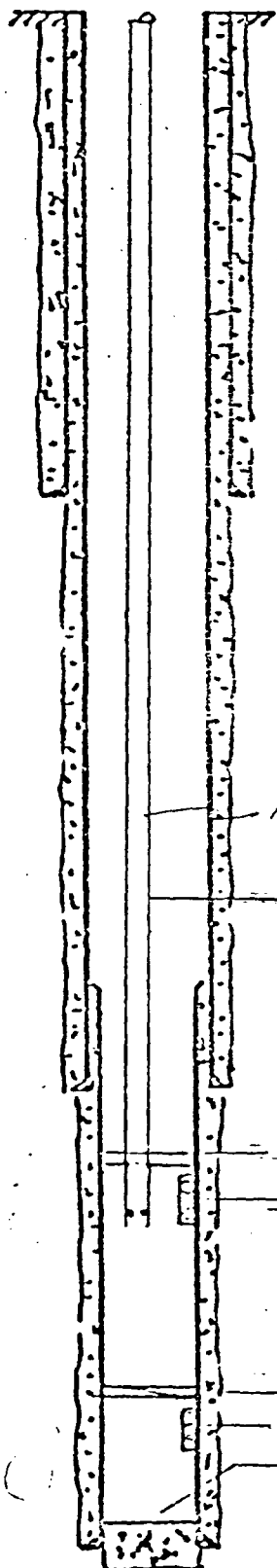
Page 7

<u>OPERATOR LEASE</u>	<u>WELL NO.</u>	<u>LOCATION</u>	<u>WELL TYPE</u>	<u>DATE DRILLED</u>	<u>DEPTH</u>	<u>COMPLETION INTERVAL</u>
Marathon State	4-C	2180' FNL & 660' FWL Sec. 12, Unit C, 17-S, 34-E	P	10-76	8,790	Abo 8,564' - 8,609'
State Com	2-J	1980' FSL & 1980' FEL Sec. 2, Unit J, 17-S, 34-E	P	8-75	8,775	Abo 8,694' - 8,709'
Yates State	1-P	660' FSL & 460' FEL Sec. 9, Unit P, 17-S, 34-E	P	12-75	9,044	Abo 8,826' - 8,858'

FIELD	Vacuum, Aba North	OPERATOR	Mobil Oil Corp	DATE	5-11-76
LEASE	North Vacuum Aba Unit	WELL No	122	LOCATION	T. Sec 3, T17S, R34E

19.80 FSL

660 FEL



103 1/4" casing set at 420' with 250 sx of C.I.A cement
Hole size 15" Cement Circ.

Tag volume = 1600 yd

142 jts 2 7/8" tag

2 3/8 tubing

4561' Liner top

7 5/8" ^{26.4 lb/ft} casing set at 4770' with 2325 sx of cement
Hole size 9 7/8" Cement Circ

Guib T.A 8606' set w/ 1500 lbs Tension

Aba Perf. 8662'-8698'

8662', 63', 64', 65', 92', 94', 96', 98'

16 total shots

2 JSPP

Baker CIBP 10700'

Wolfcomp Perf 10736'-10784'

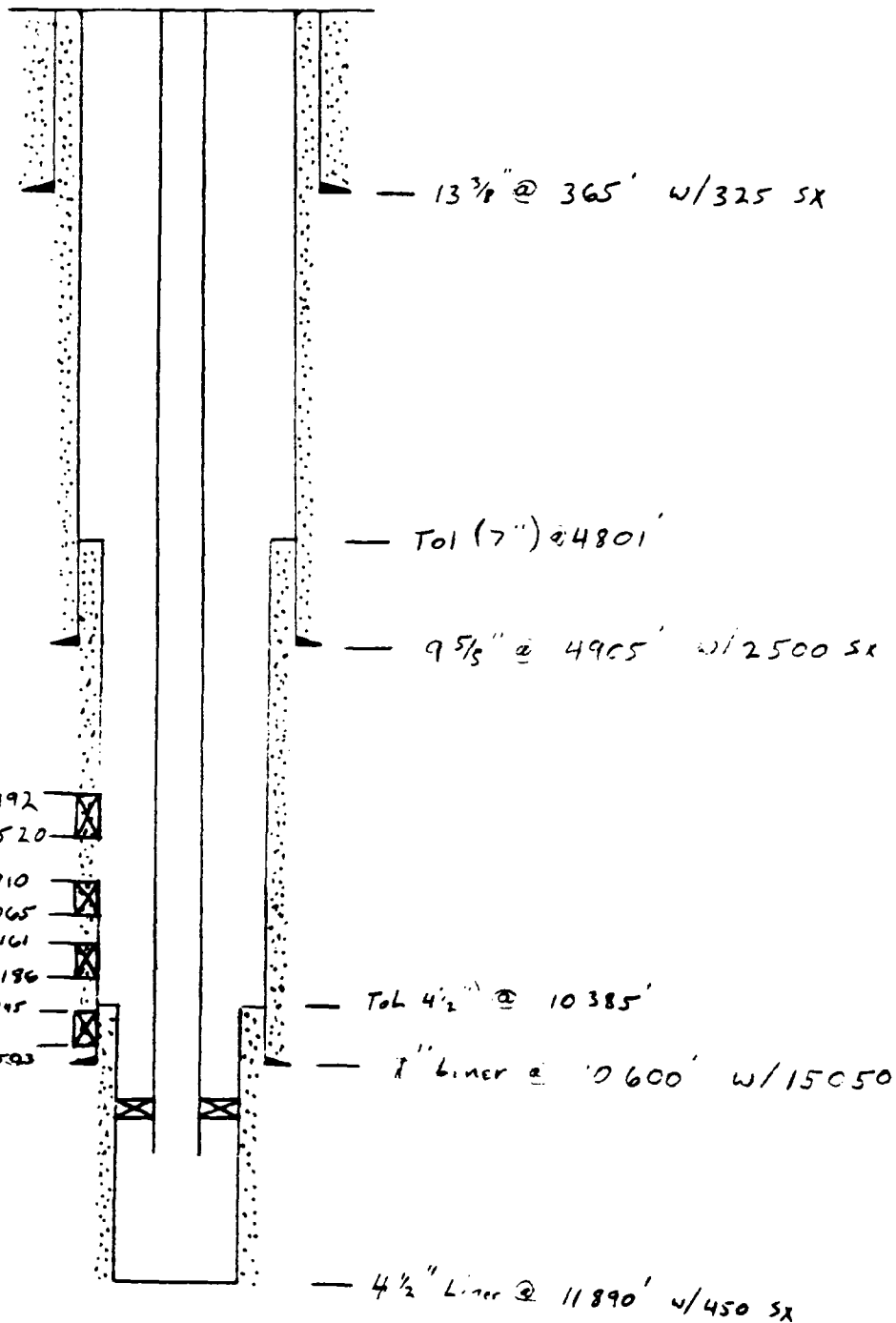
PBTD 10825'

5 1/2" ^{15.5 x 17 lb/ft} liner set at 10838' with 800 sx of TILU cement
Total Depth 10840' Hole size 6 3/4" Cement Circ

NORTH VACUUM ABO UNIT WELL # 125

LOCATION: 2180 FNL & 660 FEL
H, 14, 17- S, 34- E

DATE DRILLED: 2/68

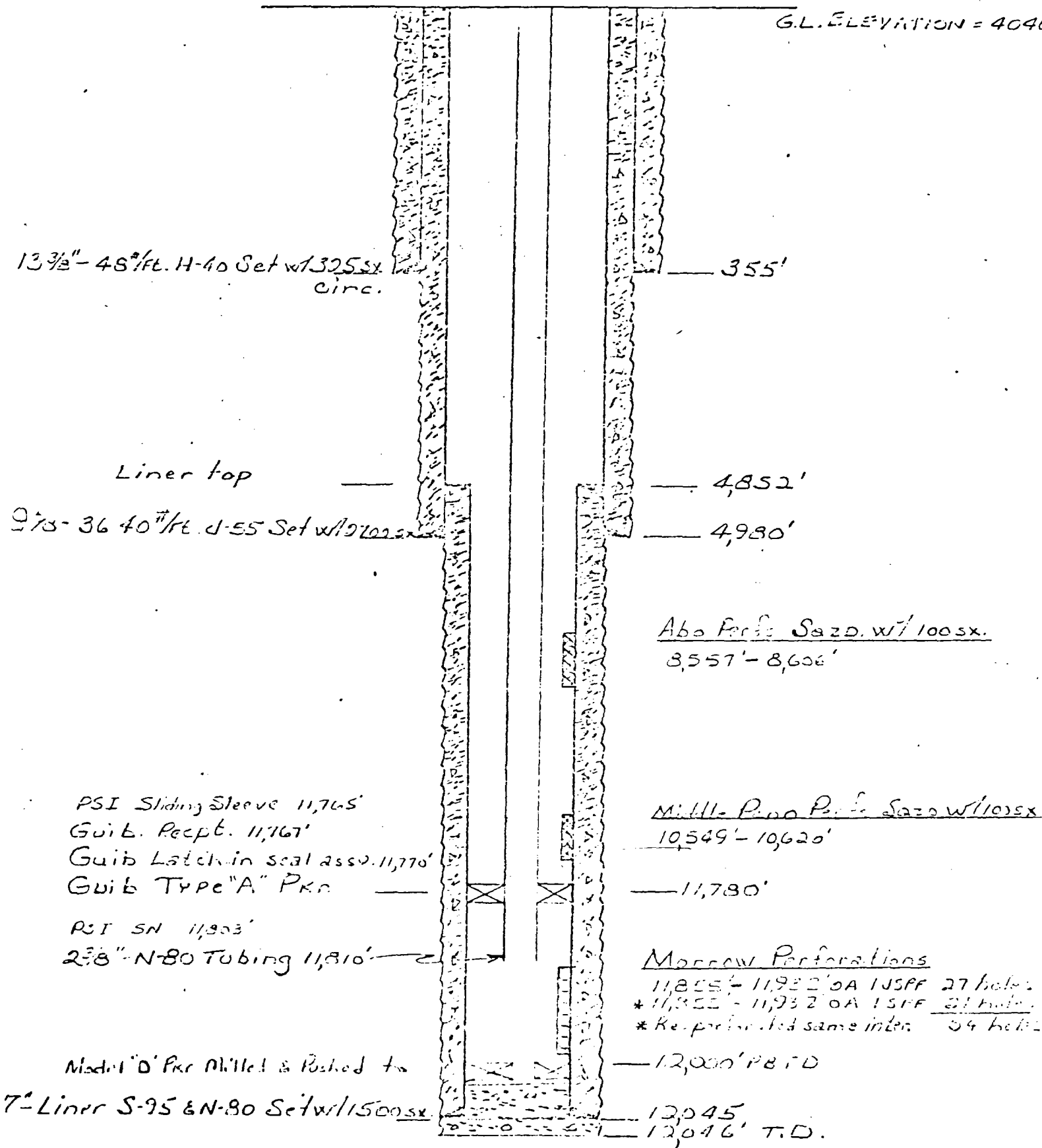


DIAGRAMMATIC WELL LOG
THE NEW STATE WELL 126
NORTH VACUUM MORGAN FIELD
LEA COUNTY, NEW MEXICO

1980 FSL, 1830 FEL

J, 11, 17-3, 34-E

G.L. ELEVATION = 4040.5

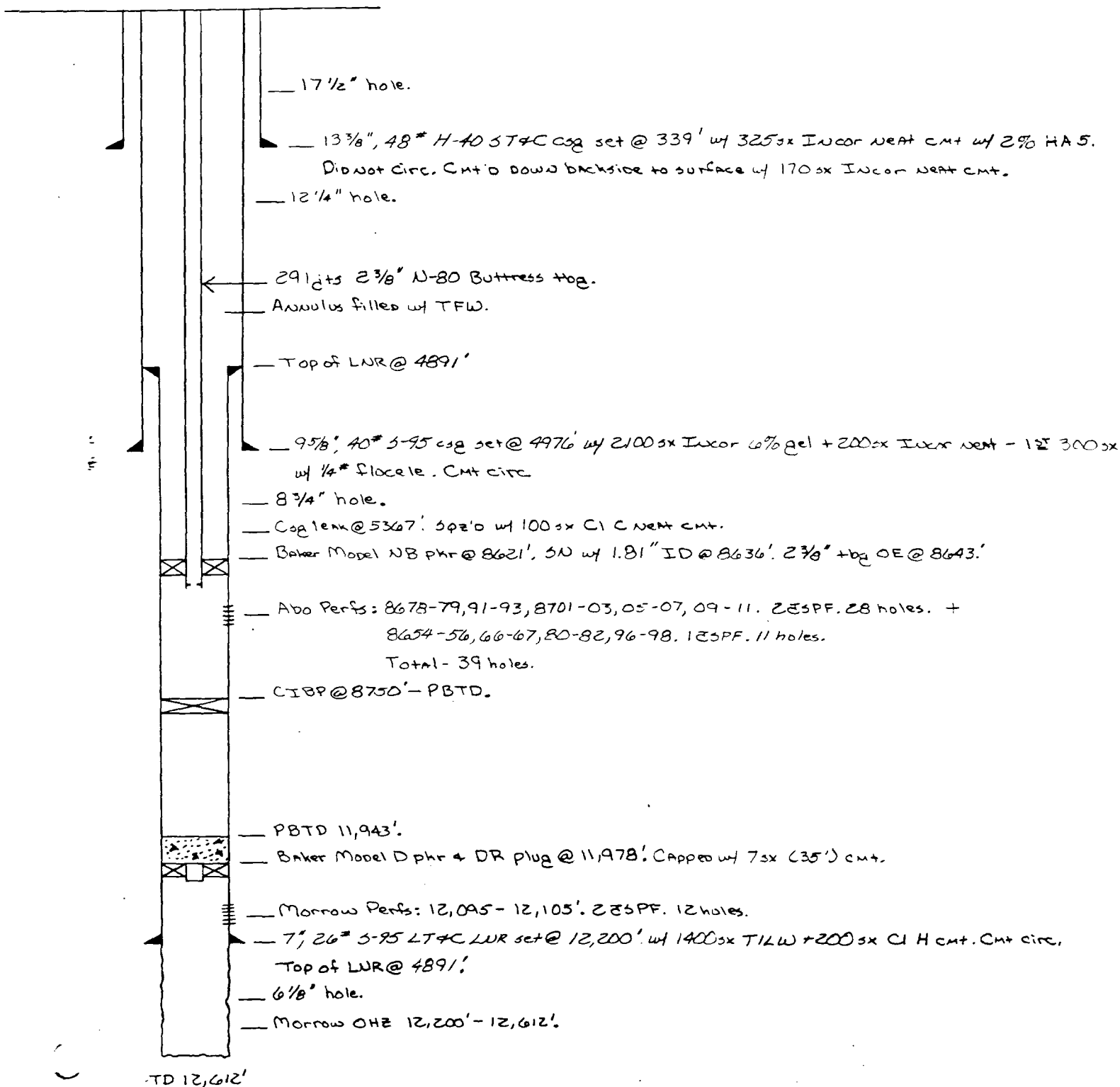


DATE 3-23-83 WELL NO. 130 LEASE No. Vacuum Abo Unit FIELD Vacuum Abo North

LOCATION H-15-173-34E
1980' FNL AND 660' FEL
Lea County, New Mexico

SIGNED M. W. DEER

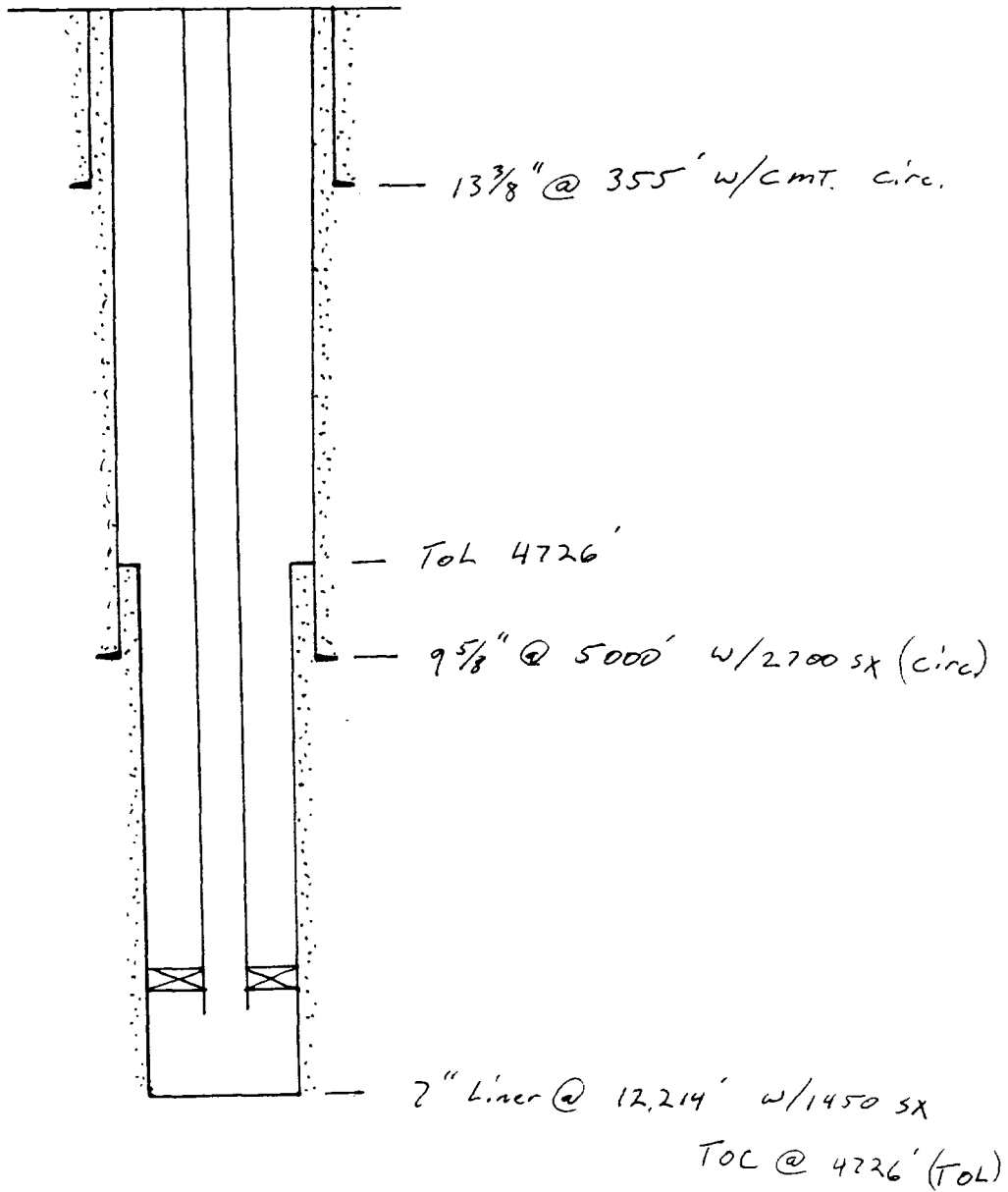
G.L. 4045'
D.F. 4058'
K.B. 4060'
ZERO 15' AGL



NORTH VACUUM ABO UNIT WELL # 133

LOCATION: 1880 FNL & 2150 FWL
F, 14, 17-S, 34-E

DATE DRILLED: 2/70



NORTH VACUUM ABO UNIT 139

Unit L, Sec 14, 175;34-E

Lea County, New Mexico

North Vacuum Abo Pool

1715' - 8 5/8", 23#
J-55, 1200sx
cmt. circ.

2285' - top of cement

2029' - top - 4 1/2" FJ Liner
8551' - btm

8729 - PBTD
8750' - 5 1/2" 15.5# 417.0#
J-55, 3100sx
cmt,

Perfs - 8587-8661' (OA) w/ 19 holes

DATE 3-23-83 WELL NO. 140 LEASE No. VACUUM Abo Unit FIELD VACUUM Abo North

LOCATION P-11-173-34 E

SIGNED M.W. DEER

G.L. 4030'

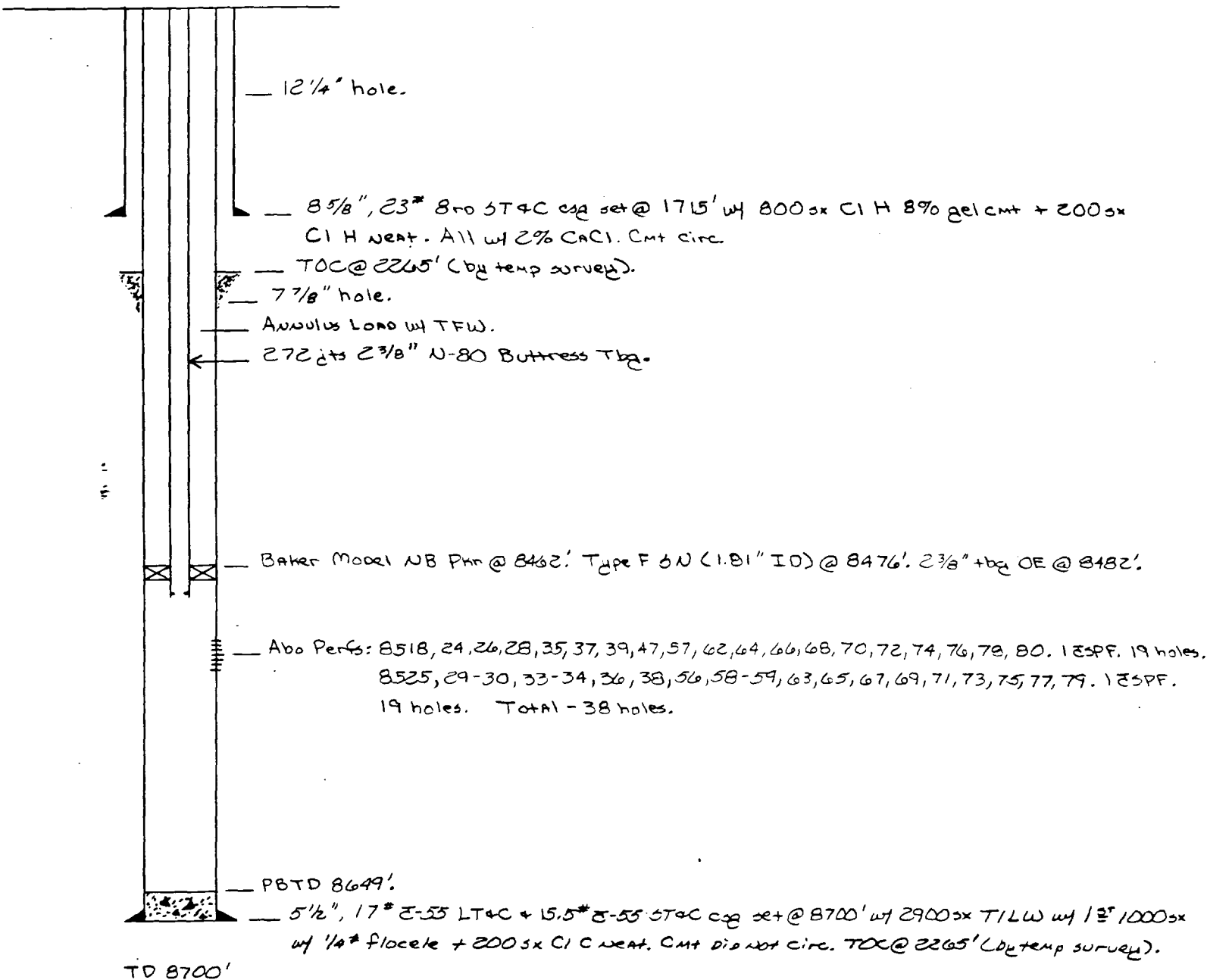
D.F. N/A

K.B. 4044'

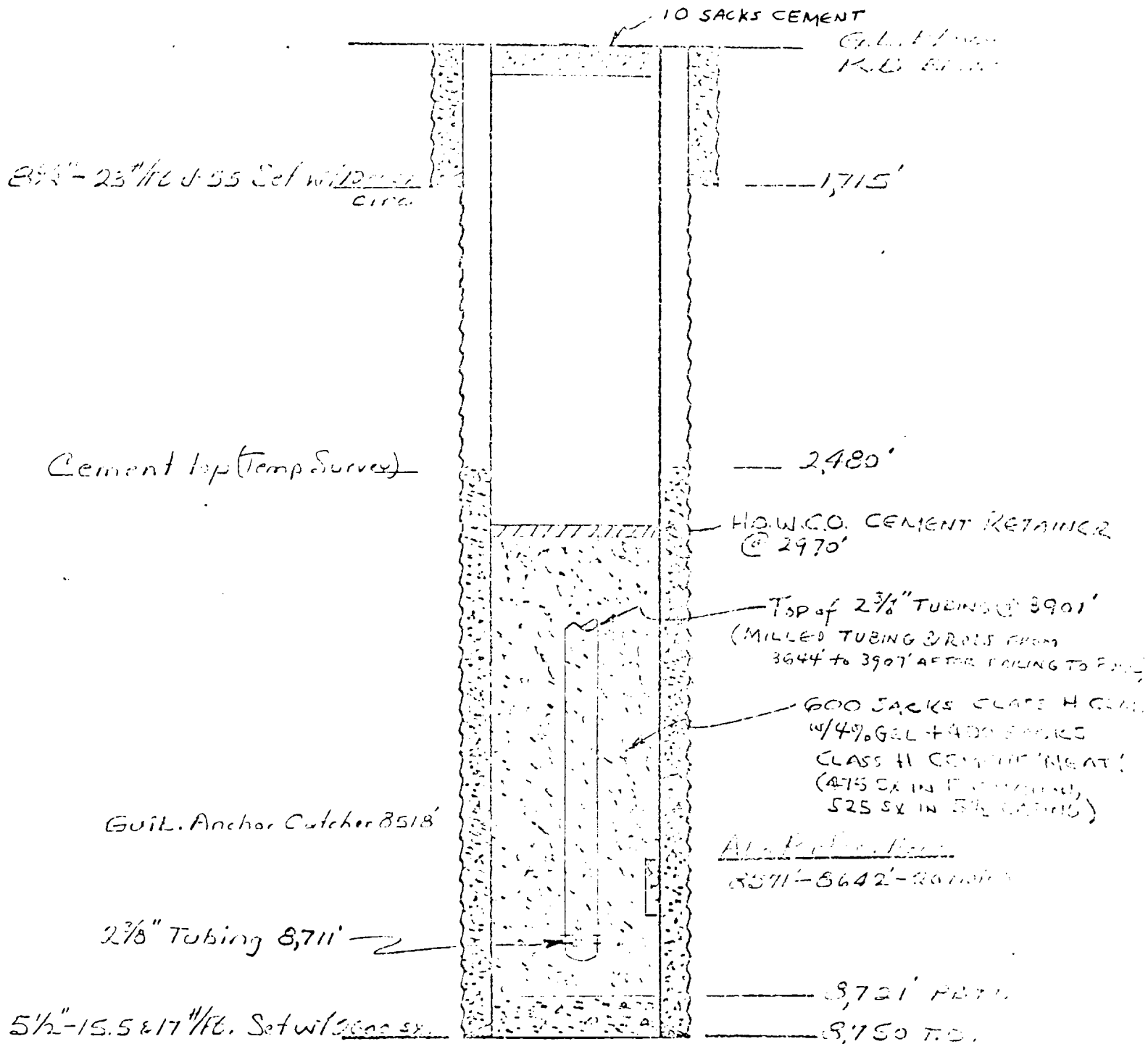
ZERO 14' AGL

460' FSL and 660' FEL

Lea County, New Mexico



D. J. FARMER, WELL SILENT
 BRIDGES SILENT, No. 141
 VICTORIA, AKA. Pool
 LEO, COUNTY, Nevada 1950



1EW.

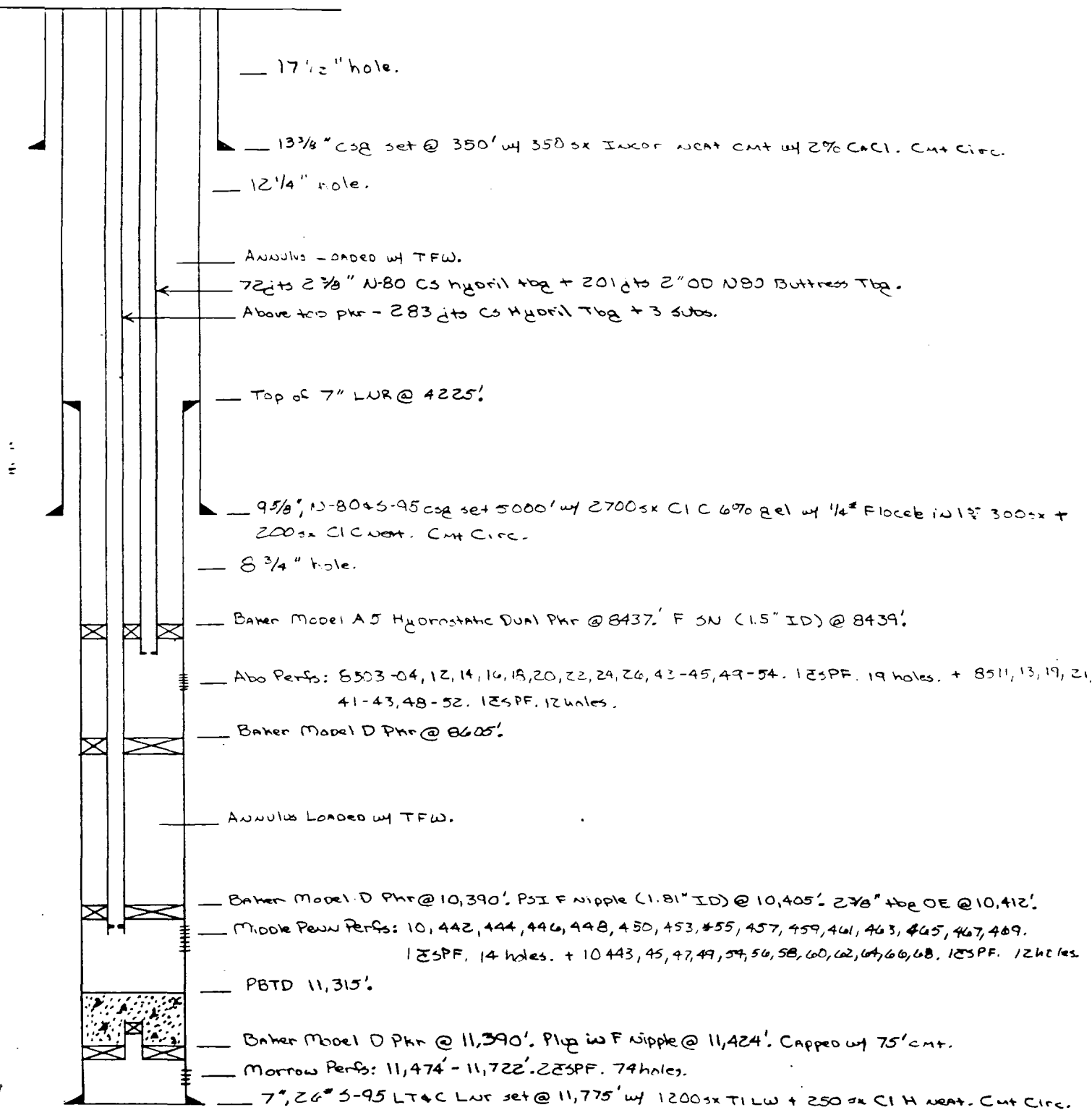
X

DATE 3-23-83 WELL NO. 147 LEASE No. Vacuum Abu Unit FIELD Vacuum Abu North

LOCATION F-13-175-34E
2080' FWL AND 1780' FWL
Lea County, New Mexico

SIGNED M.W. DEER

G.L. 4021'
D.F. 4037'
K.B. 4039'
ZERO 18' AGL



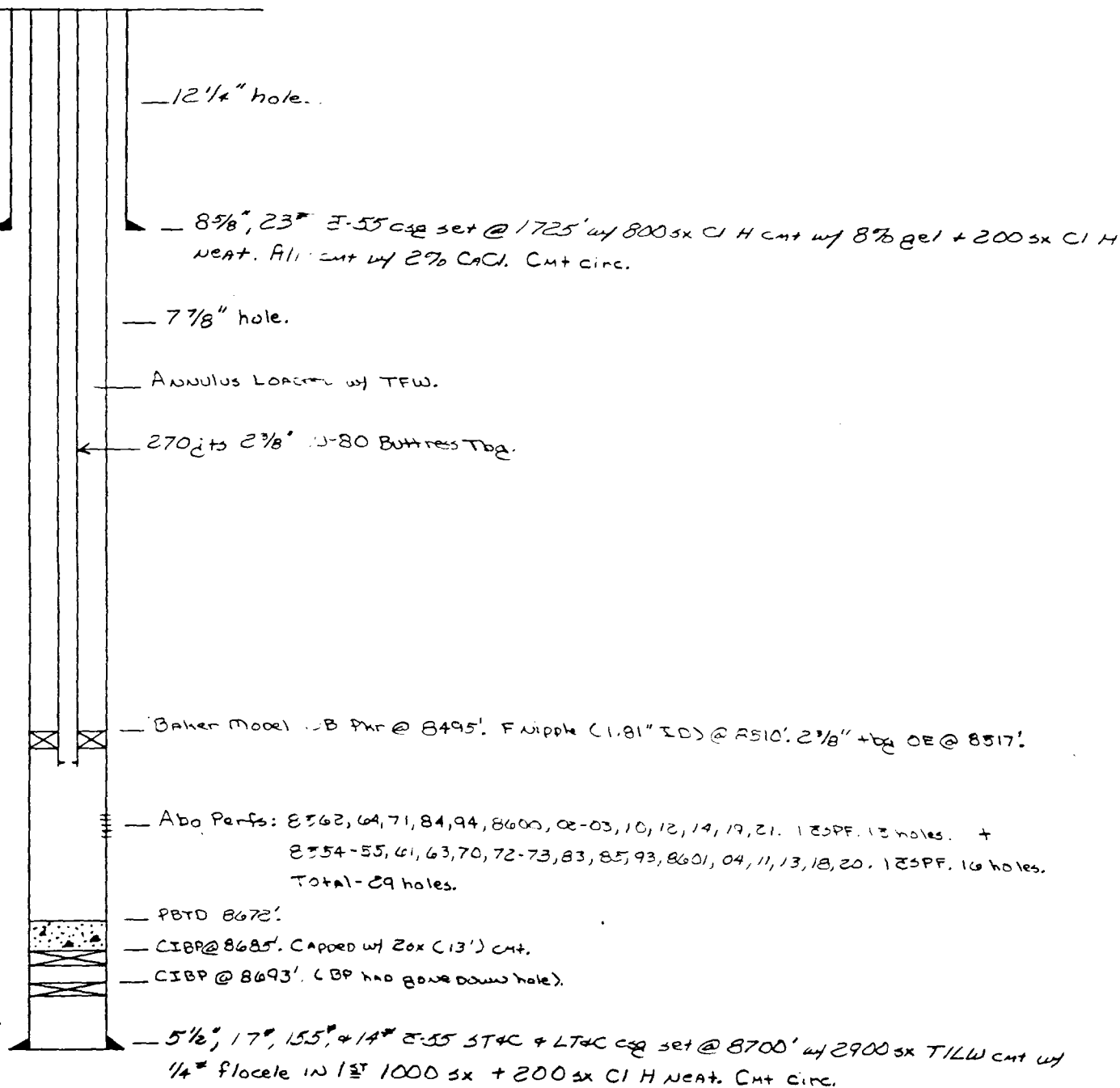
TD 11775'

DATE 3-24-83 WELL NO. 148 LEASE No Vacuum Abo Well FIELD Vacuum Abo North

LOCATION N-11-175-34E
860' FSL AND 1980' FSL
Lea County, New Mexico

SIGNED M.W. DEER

G.L. 4095'
D.F. 4059'
K.B. 4057'
ZERO 14' AGL



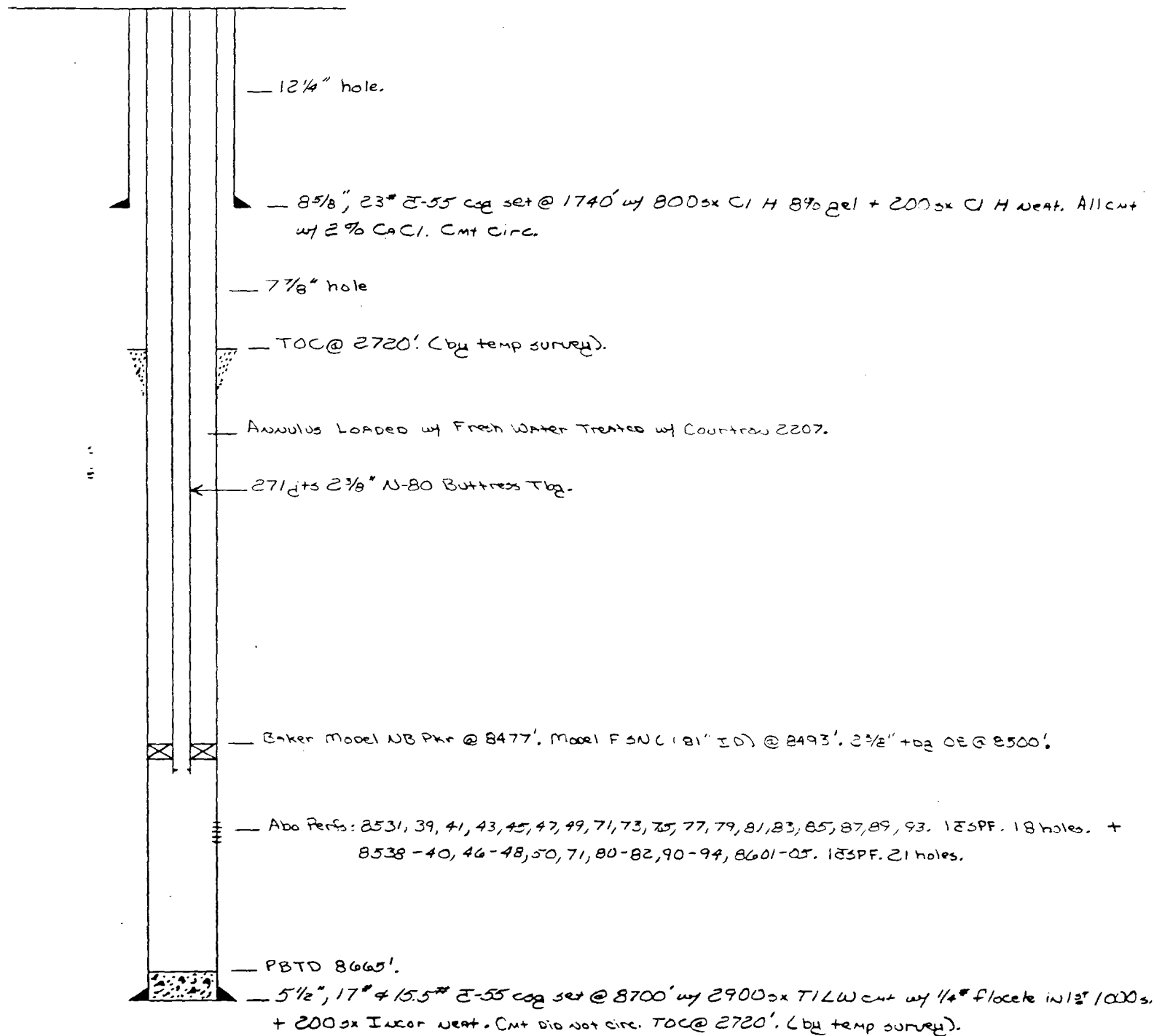
TD 8700'

DATE 3-24-82 WELL NO. 150 LEASE No. VACUUM Abo Unit FIELD VACUUM Abo North

LOCATION N-12-173-34E

SIGNED M.W. DEER

G.L. 4028'
D.F. 4042'
K.B. 4043'
ZERO 19' AGL

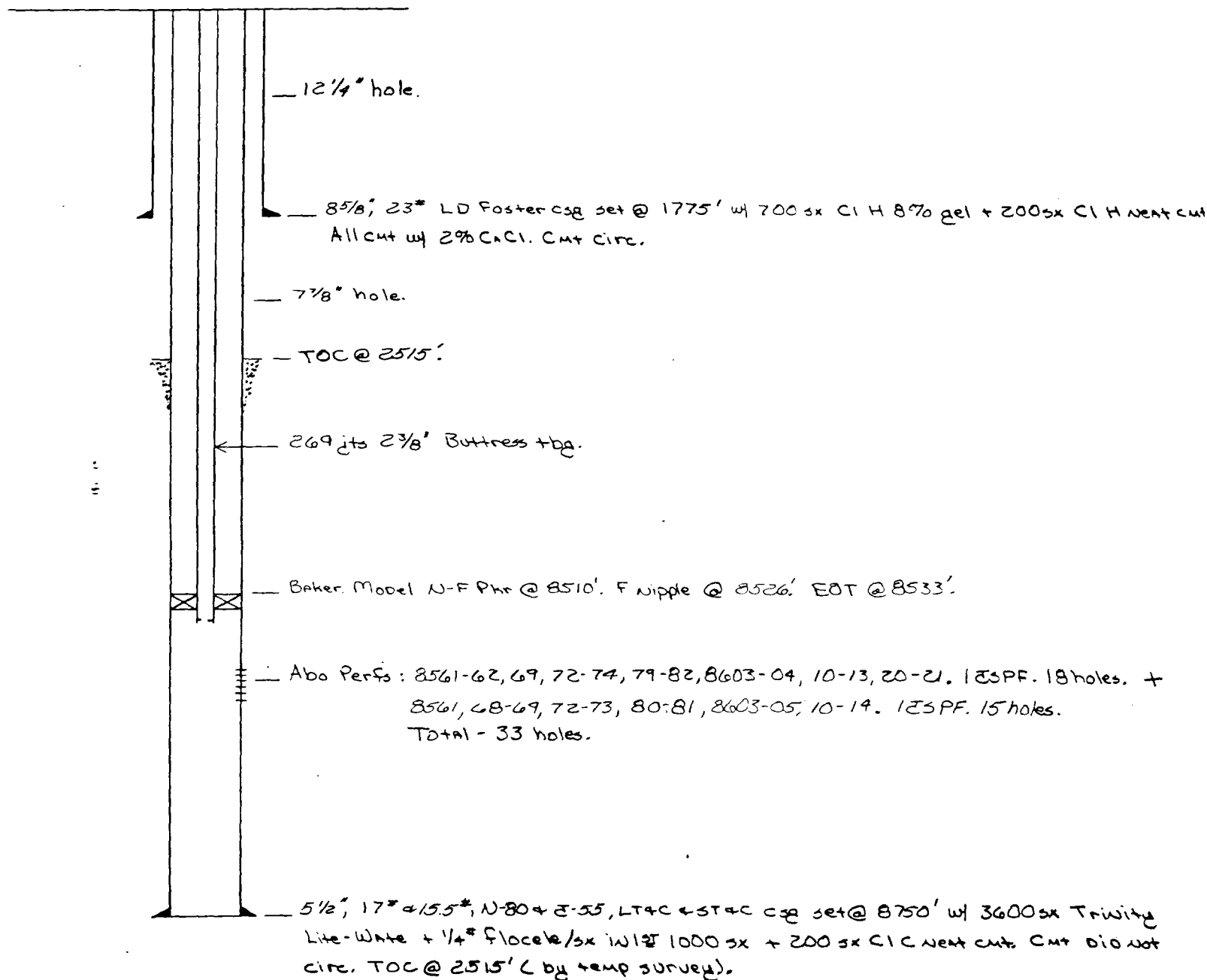


DATE 3-28-83 WELL NO. 159 LEASE No. Vacuum Abo Unit FIELD Vacuum Abo North

LOCATION P-12-173-34 E
660' FSL + 660' FEL
Lea County, New Mexico

SIGNED M. W. DEER

G.L. 4016'
D.F. 4028'
K.B. 4030'
ZERO 14' AGL

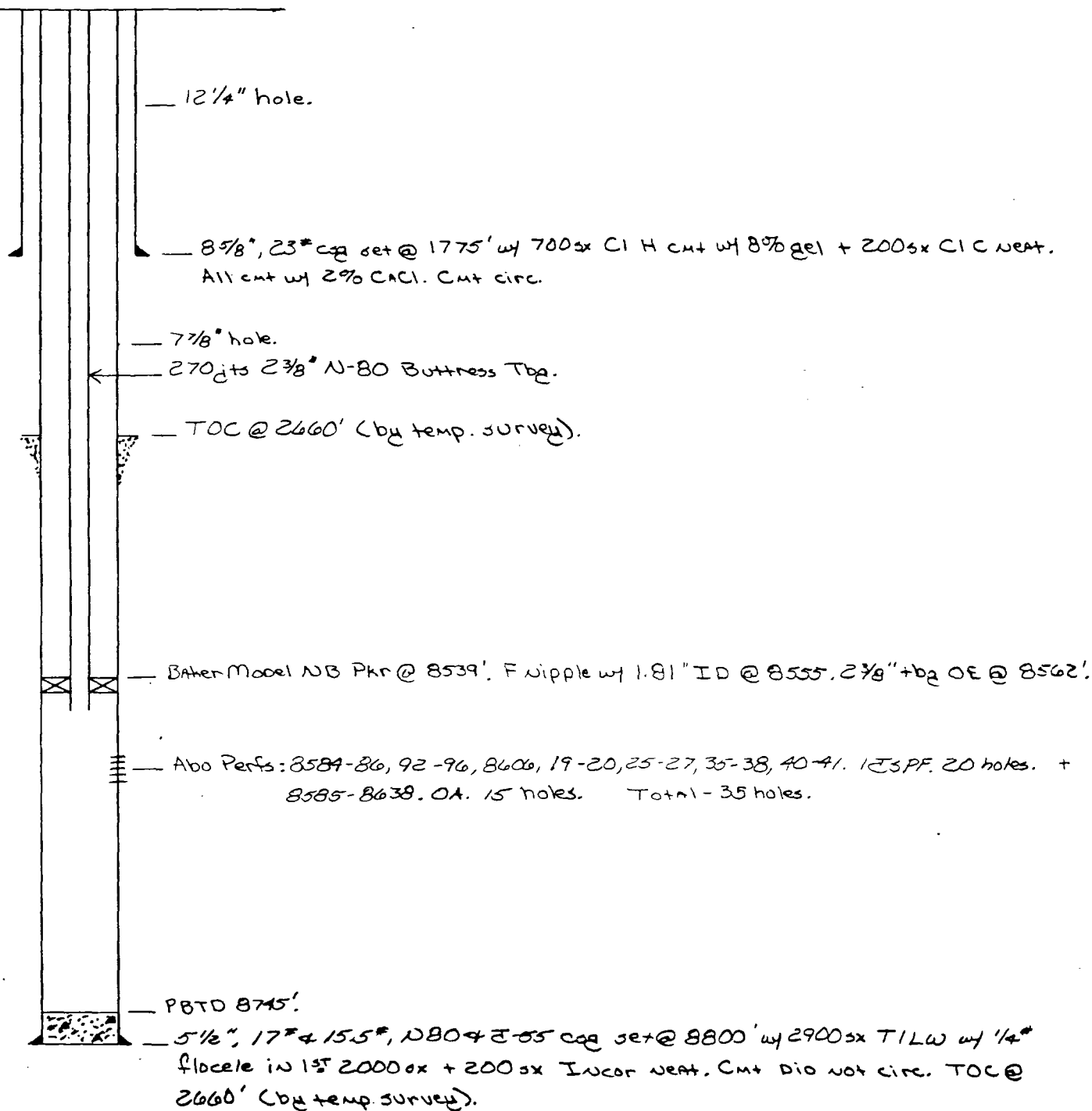


DATE 3-28-83 WELL NO. 161 LEASE No. Vacuum Abo Unit FIELD Vacuum Abo North

LOCATION H-12-173-34E
1980' FNL and 660' FEL
Lea County, New Mexico

SIGNED M.W. DEER

G.L. 4021'
D.F. 4033'
K.B. 4034'
ZERO 13' AGL



TO 8800'

NORTH VACUUM ABO UNIT WELL # 163

VACUUM ABO NORTH FIELD

LEA COUNTY, NEW MEXICO

J-15-T175-R34E

Elevation:

Howco cement w/ 400sx class H
cement w/ 2% CaCl. cement circle

9 JTS 12 3/4", 33.38 #
CSG set @ 260'

Howco cement w/ 1300sx TILW
w/ 17% salt/sx + 200sx class C
Neat w/ 2.6 # salt/sx. cement circle.

65 JTS 2 7/8" TBG

6 5/8", 28#, H-40 CSG
set @ 3100'

214 JTS 2 7/8" TBG

GUIDE TA set @ 8649' w/
13000 # T

SUC 8777'
TBG PERFS: 8778-81'
8812'

ABO PERFS:
8710; 11; 21; 22; 26; 28; 29;
30; 38; 46; 47; 48; 49; 50;
51; 52; 53 w/ LBPF-17hc

Howco cement w/ 2500sx TILW w/
1/4# floccle in 1st 1000sx + 200sx
Class C Neat. cement circle.

TD 8850'
PBD 8820'

272 JTS 5 1/2", 17# f 15.5
J-55 LTFC + STFC CSG
set @ 8850. 17#; BE50-5
15.5 #; 5996-0'

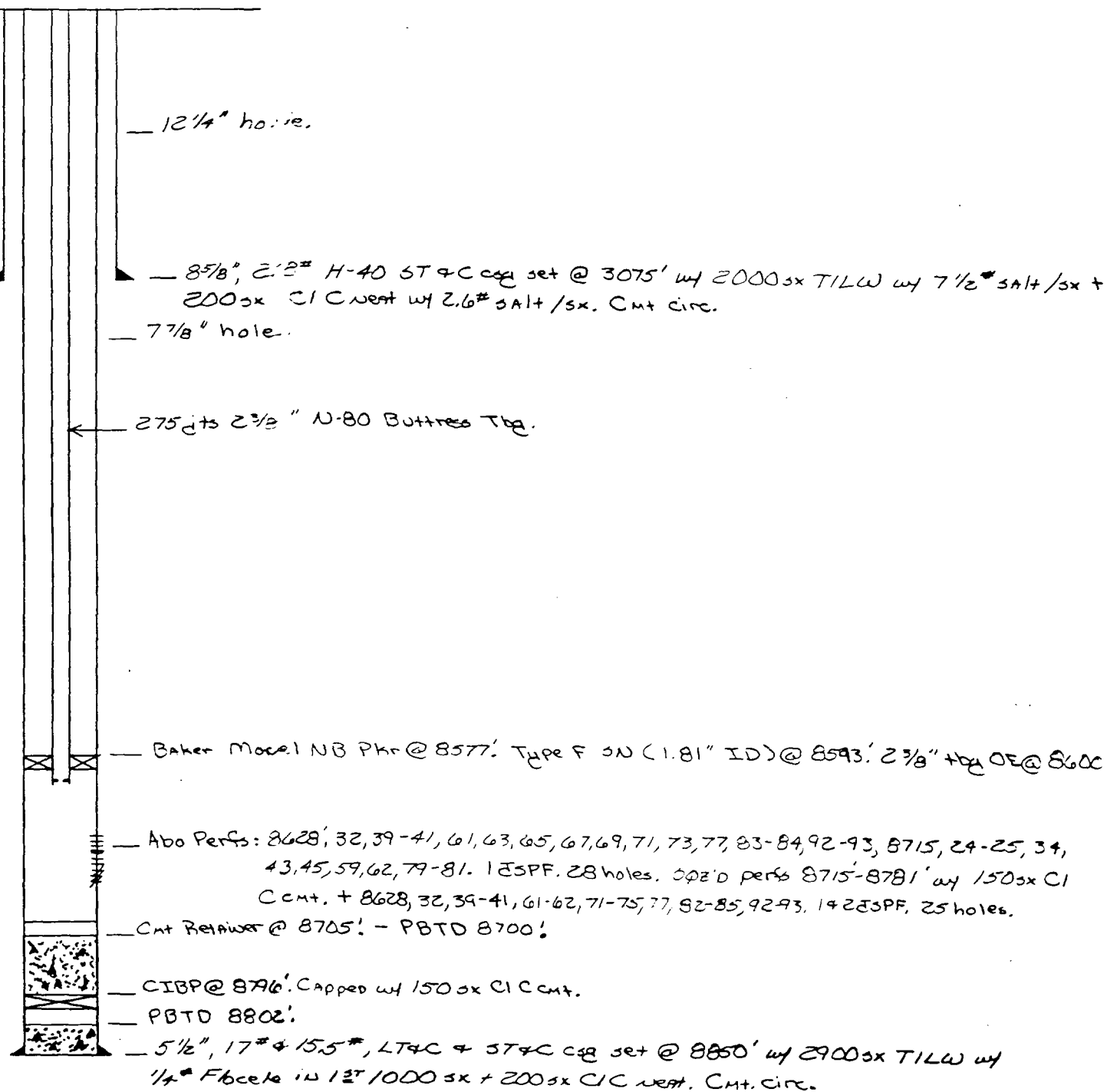
etc sls/bi

DATE 3-28-83 WELL NO. 166 LEASE No. Vacuum Abo Unit FIELD Vacuum Abo North

LOCATION H-10-175-34 E
1980' FUL AND 660' FEL
Lea County, New Mexico

SIGNED M. W. DEER

G.L. 4052'
D.F. 4065'
K.B. 4066'
ZERO 14' AGL



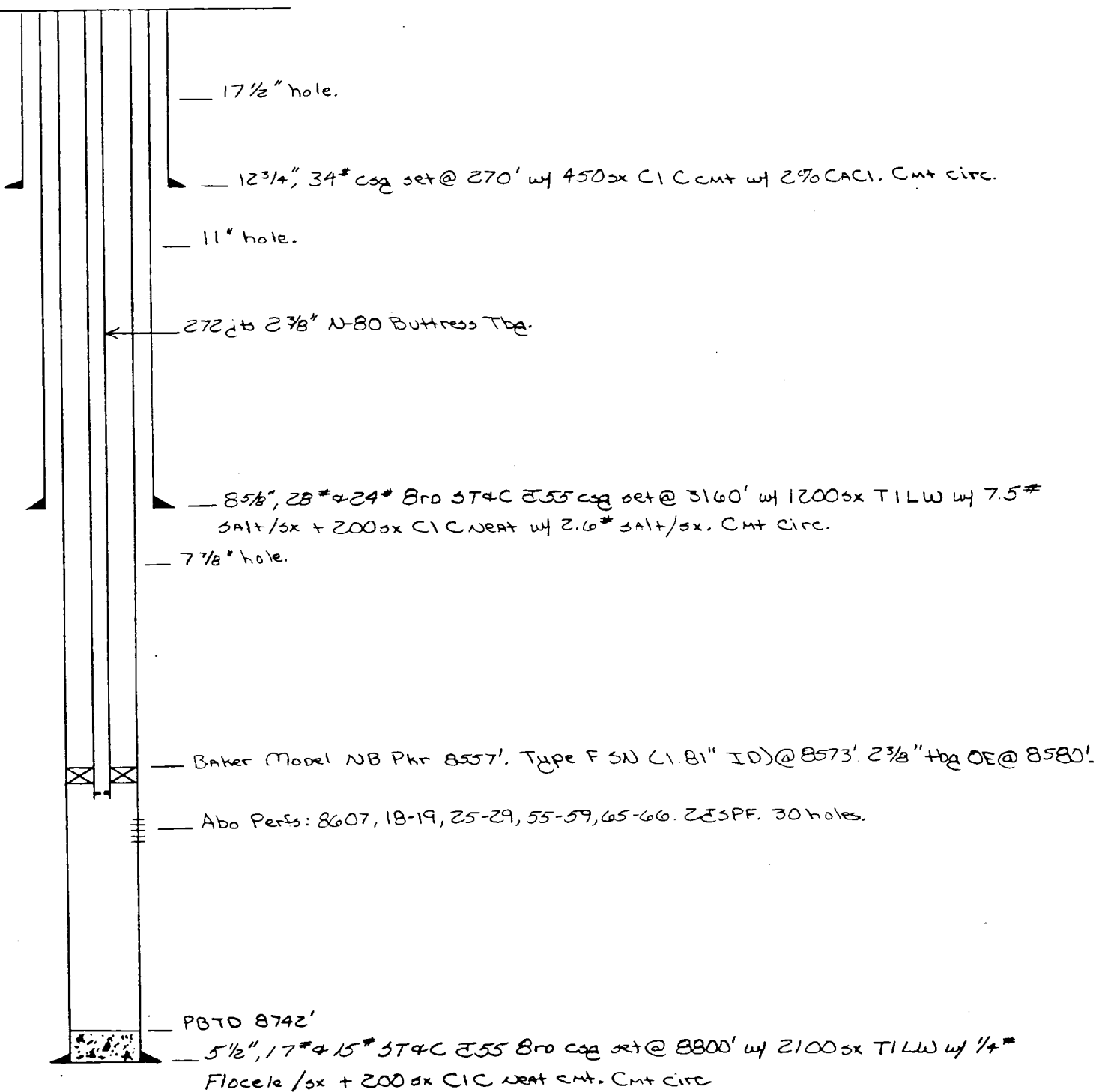
TD 8850'

DATE 3-28-69 WELL NO. 169 LEASE No. Vacuum Abo Unit FIELD Vacuum Abo North

LOCATION H-13-175-34E
1980' FNL AND 660' FEL
Lea County, New Mexico

SIGNED M.W. DEER

G.L. 4020'
D.F. 4032'
K.B. 4033'
ZERO 13' AGL



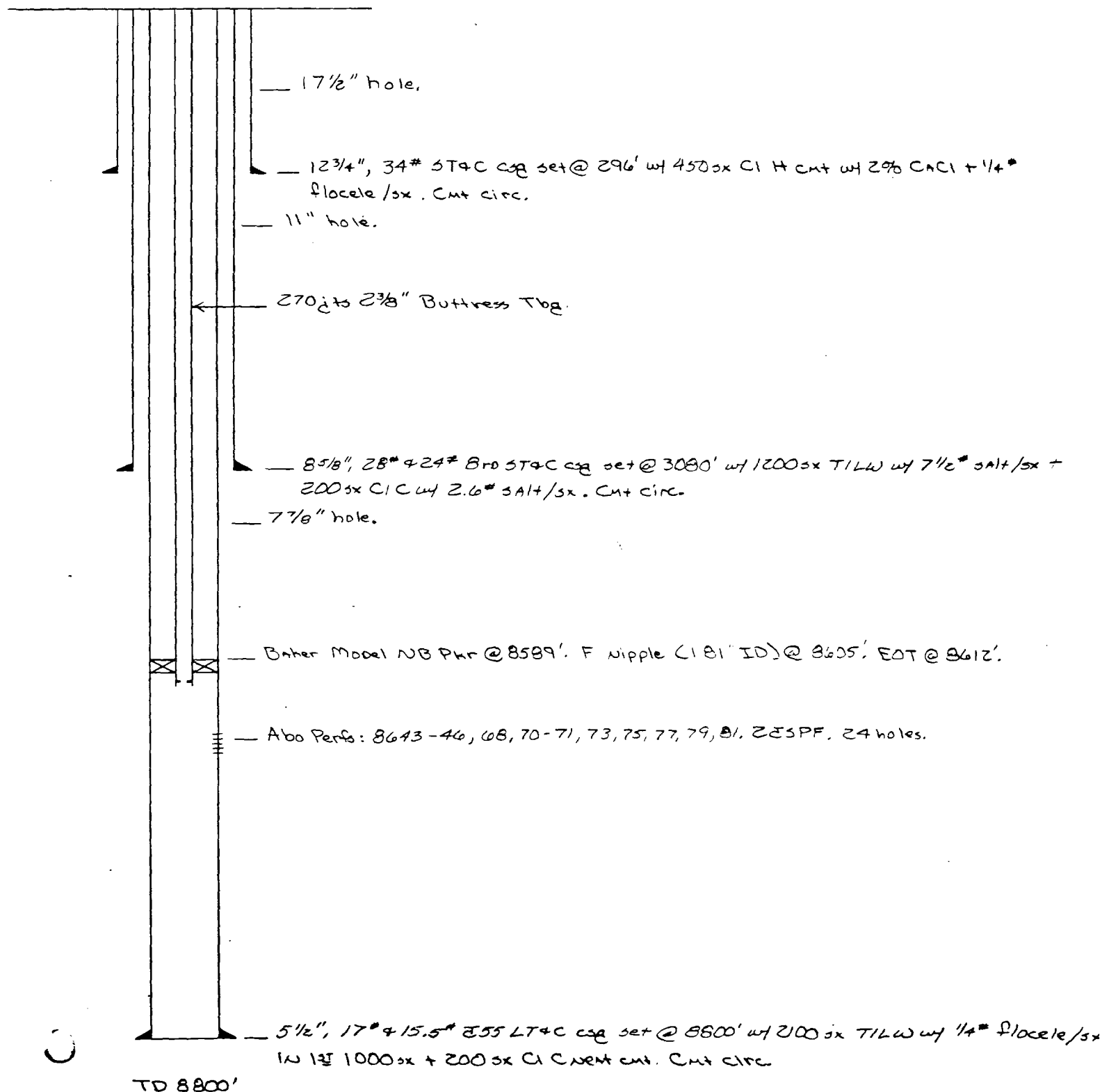
TO 8800'

DATE 3-28-83 WELL NO. 172 LEASE No. Vacuum Abo Unit FIELD Vacuum Abo North

LOCATION P-3-172-34E
660' FSL AND 660' FEL
Lea County, New Mexico

SIGNED M.W. DEER

G.L. 4059'
D.F. 4072'
K.B. 4075'
ZERO 14' AGL

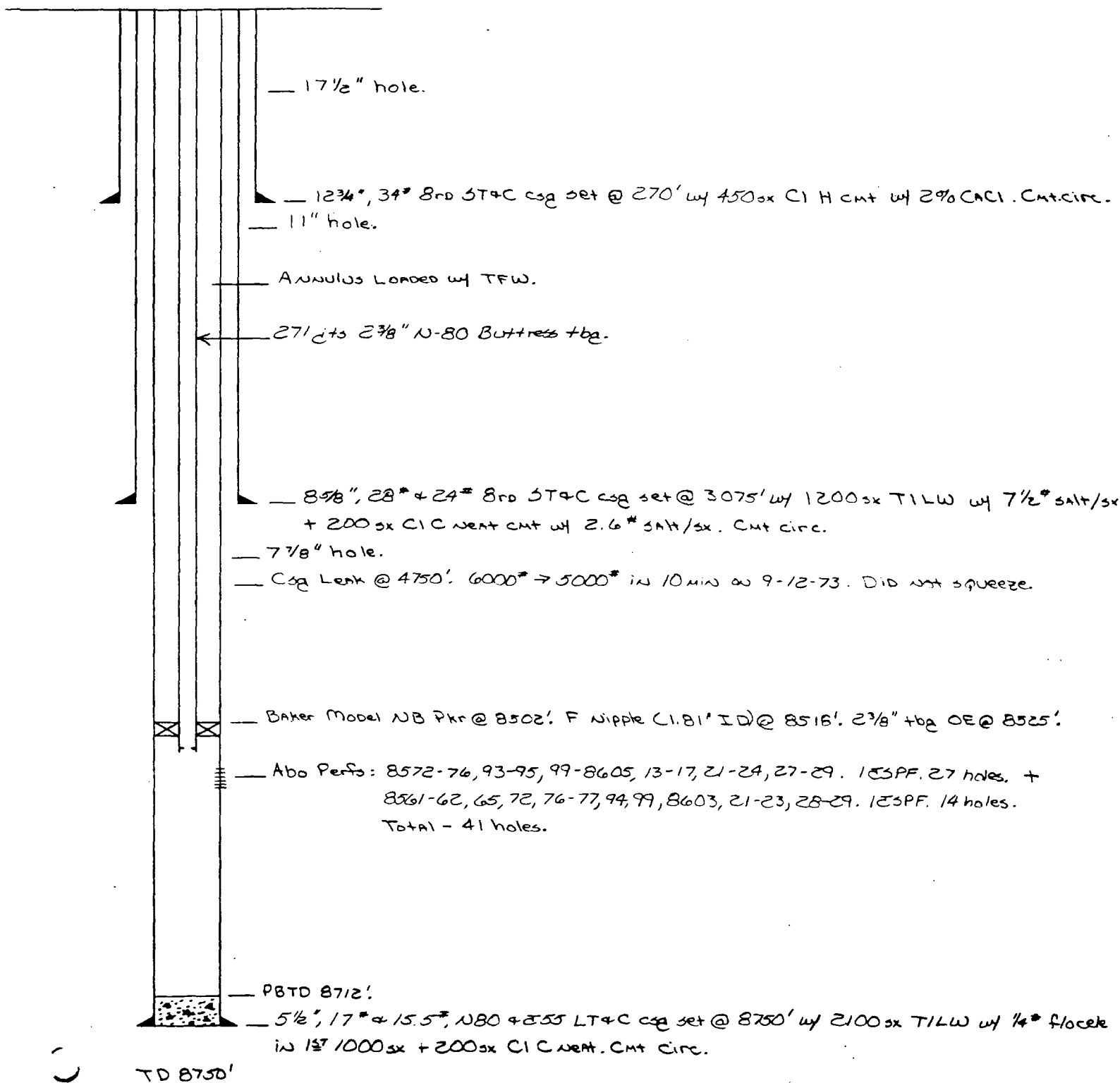


DATE 3-29-83 WELL NO. 173 LEASE No. Vacuum Abo Unit FIELD Vacuum Abo North

LOCATION F-14-173-34E
1840' FNL and 1840' FWL
Lea County, New Mexico

SIGNED M.W. DEER

G.L. 4041'
D.F. 4054'
K.B. 4055'
ZERO 14' AGL

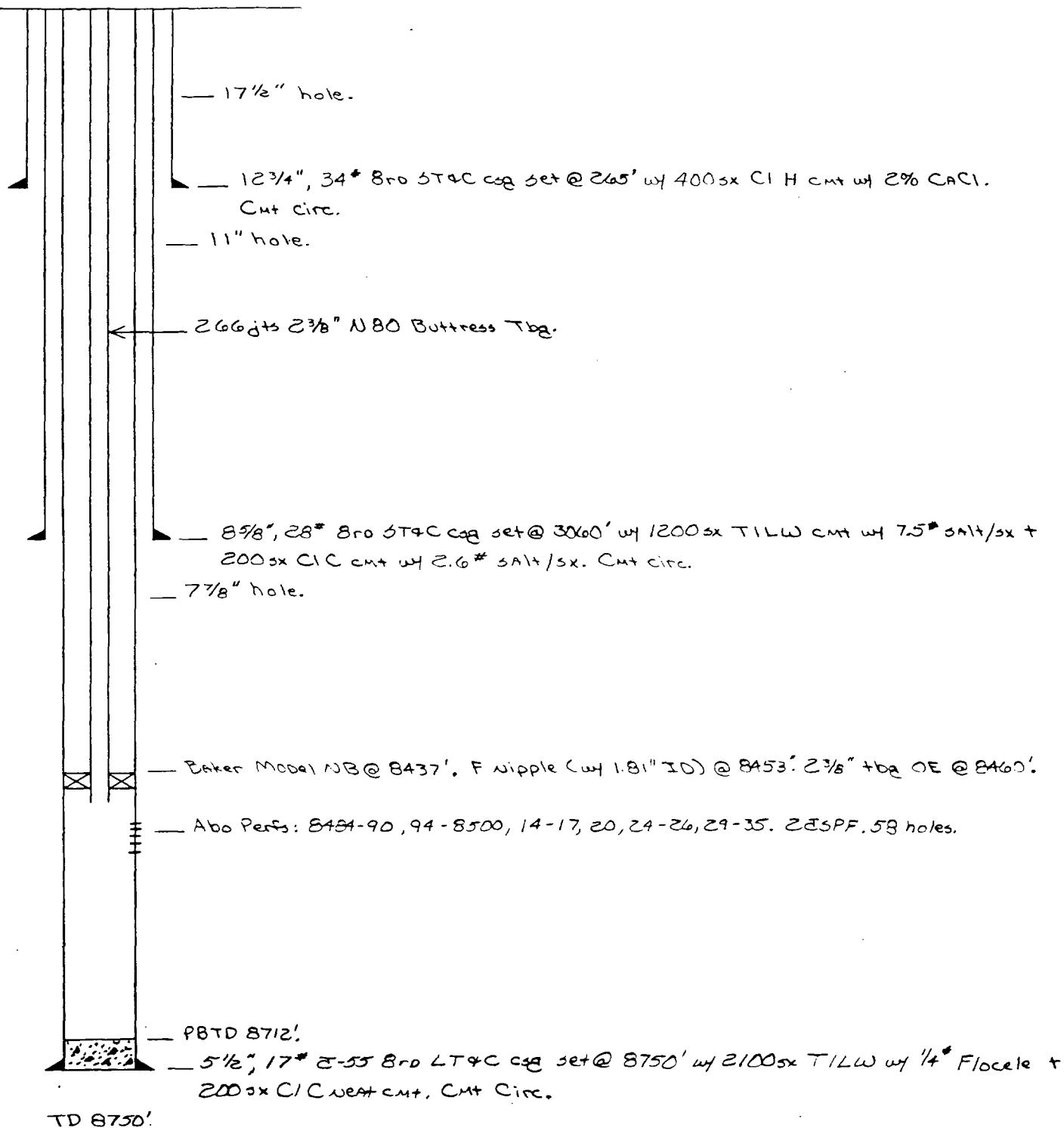


DATE 3-29-83 WELL NO. 175 LEASE No. Vacuum Abo Unit FIELD Vacuum Abo North

LOCATION H-14-175-34E
1980' FUL and 485' FEL
Len County, New Mexico

SIGNED M. W. DEER

G.L. 4024'
D.F. ---
K.B. 4036'
ZERO 12' AGL

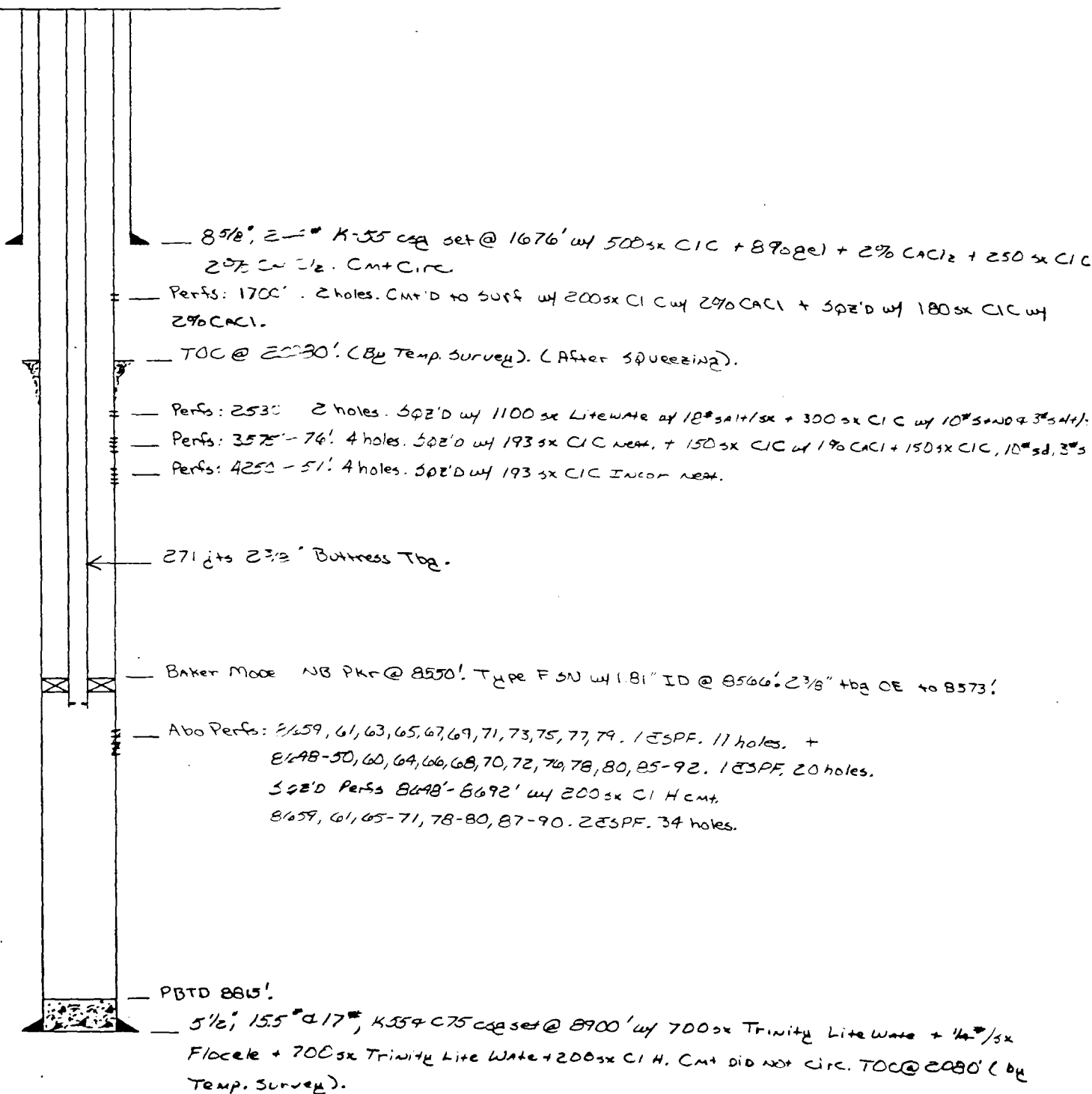


DATE 3-29-83 WELL NO. 202 LEASE No. Vacuum Abn Unit FIELD Vacuum Abn North

LOCATION P-10-173-34
660 FEL AND 46: FSL
Lea County, New Mexico

SIGNED M. W. DEER

G.L. 4040'
D.F. 4056'
K.B. 4057'
ZERO 17' AGL



TD 8900'

DATE 5-27-85 WELL NO. 215 LEASE NVALL FIELD Vacuum Abo North

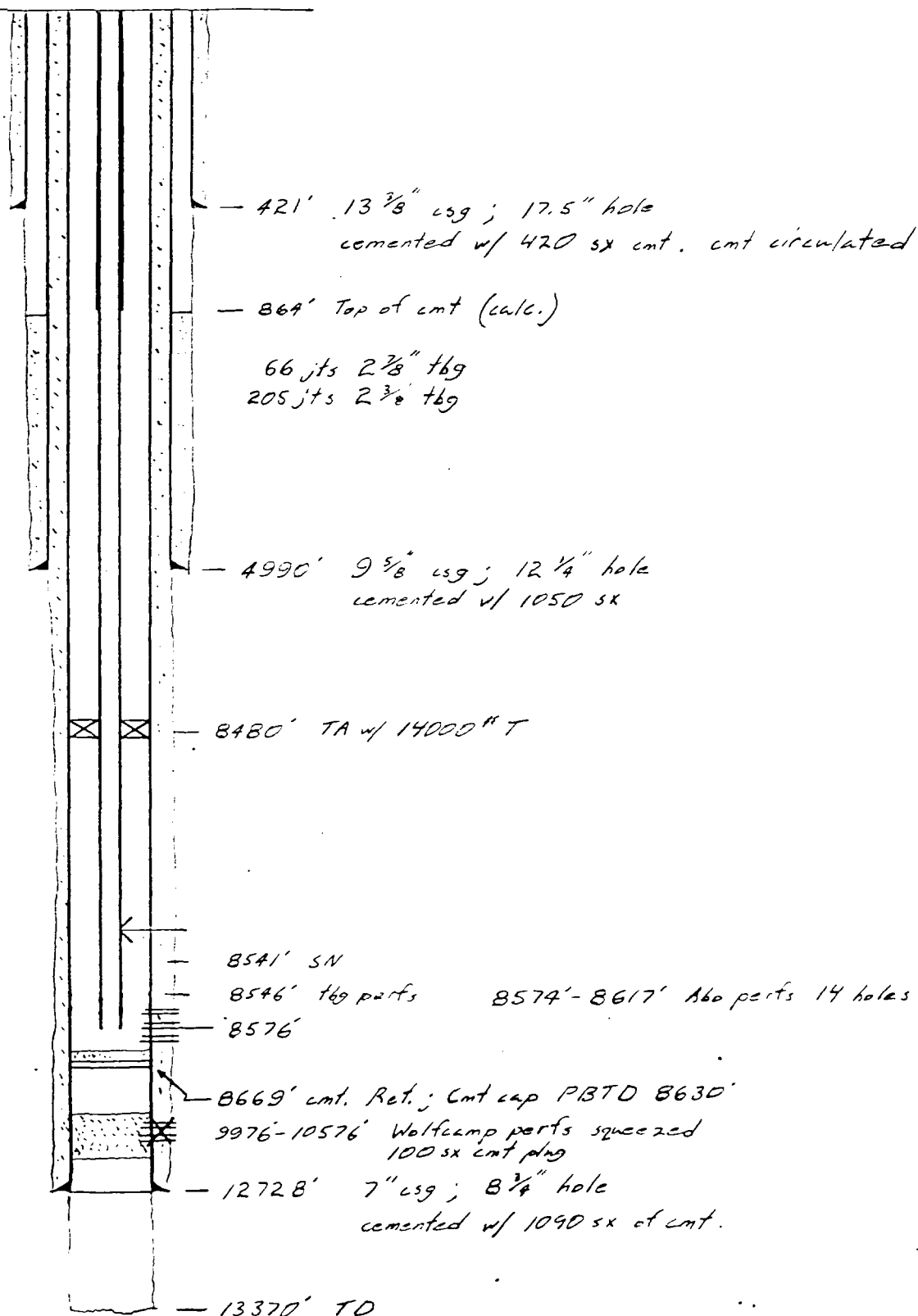
LOCATION A-11-175-34E SIGNED M.P. Mancin

G.L. _____

D.F. _____

K.B. _____

ZERO _____

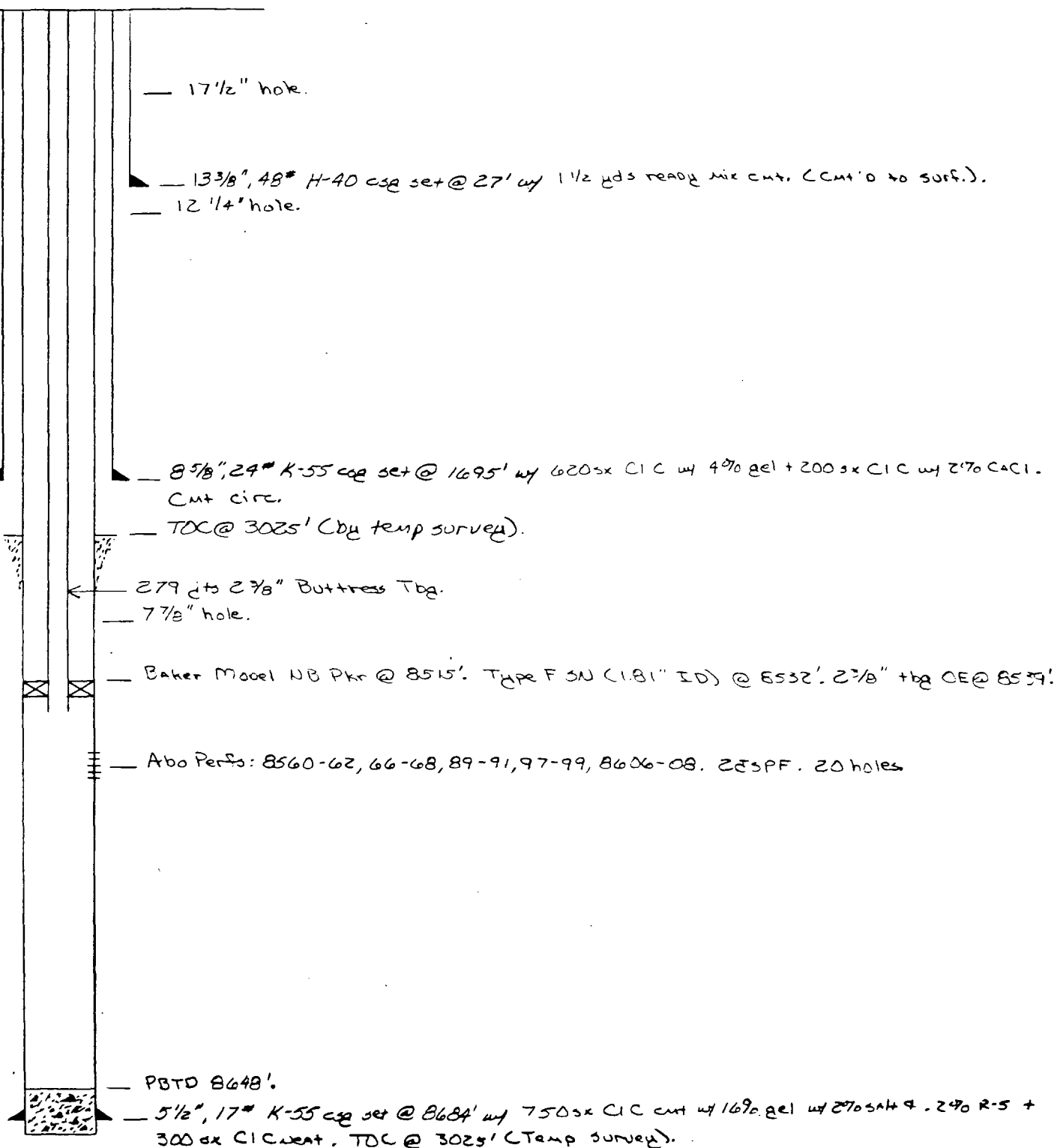


DATE 4-4-83 WELL NO. 216 LEASE Abn Vacuum Abn Unit FIELD Vacuum Abn North

LOCATION H-11-175-34E
2180' FUL AND 610' FEL
Lea County, New Mexico

SIGNED M.W. DEER

G.L. 4039'
D.F. 4057'
K.B. 4058'
ZERO 19' 164

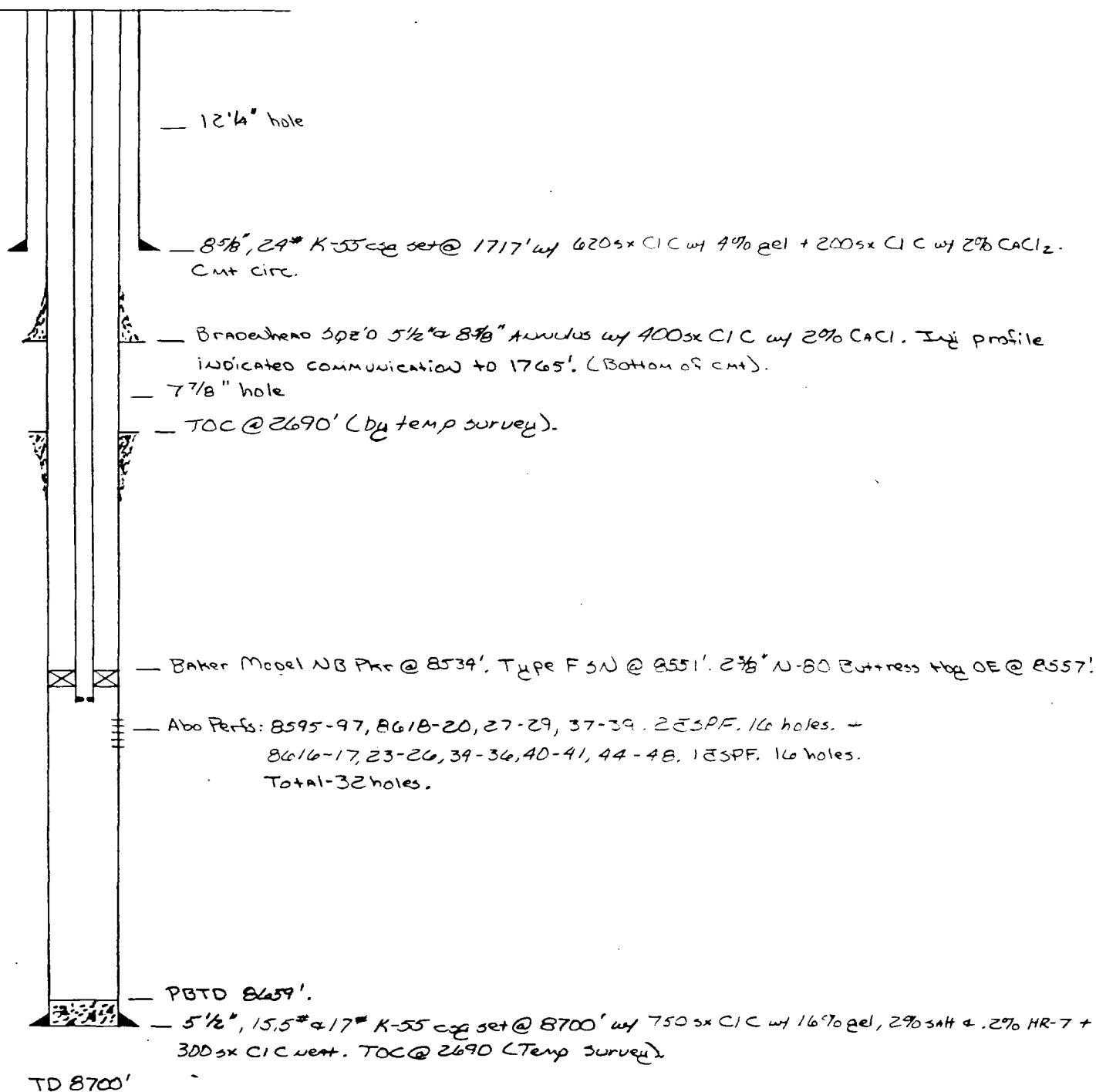


TD 8685'

DATE 4-4-83WELL NO. 217LEASE No. Vacuum Abs UnitFIELD Vacuum Abs NorthLOCATION F-11-175-34ESIGNED M.W. DEERG.L. 4048'D.F. 4064'K.B. 4065'ZERO 17' AGL

2080' FWL and 2080' FWL

Lea County, New Mexico



DATE 7-16-85 WELL NO. 223 LEASE NVAU FIELD N VACUUM

LOCATION 660 FNL 460 FEE SEC 13, T-17-S, R-34-E SIGNED M E VASICER

G.L. _____
D.F. _____
K.B. _____
ZERO _____

— 17 1/2" HOLE

— 263' 12 3/4" CS4 SET W/ 510 SV CIRC

— 11" HOLE

— 3140' 3 5/8" 32# - 24# - 20# CS4 SET W/ 1600 SV CIRC

ABD PERFS 8590 - 8641 (28 HOLES)

— 8704 PSTD

— 7 7/8" HOLE

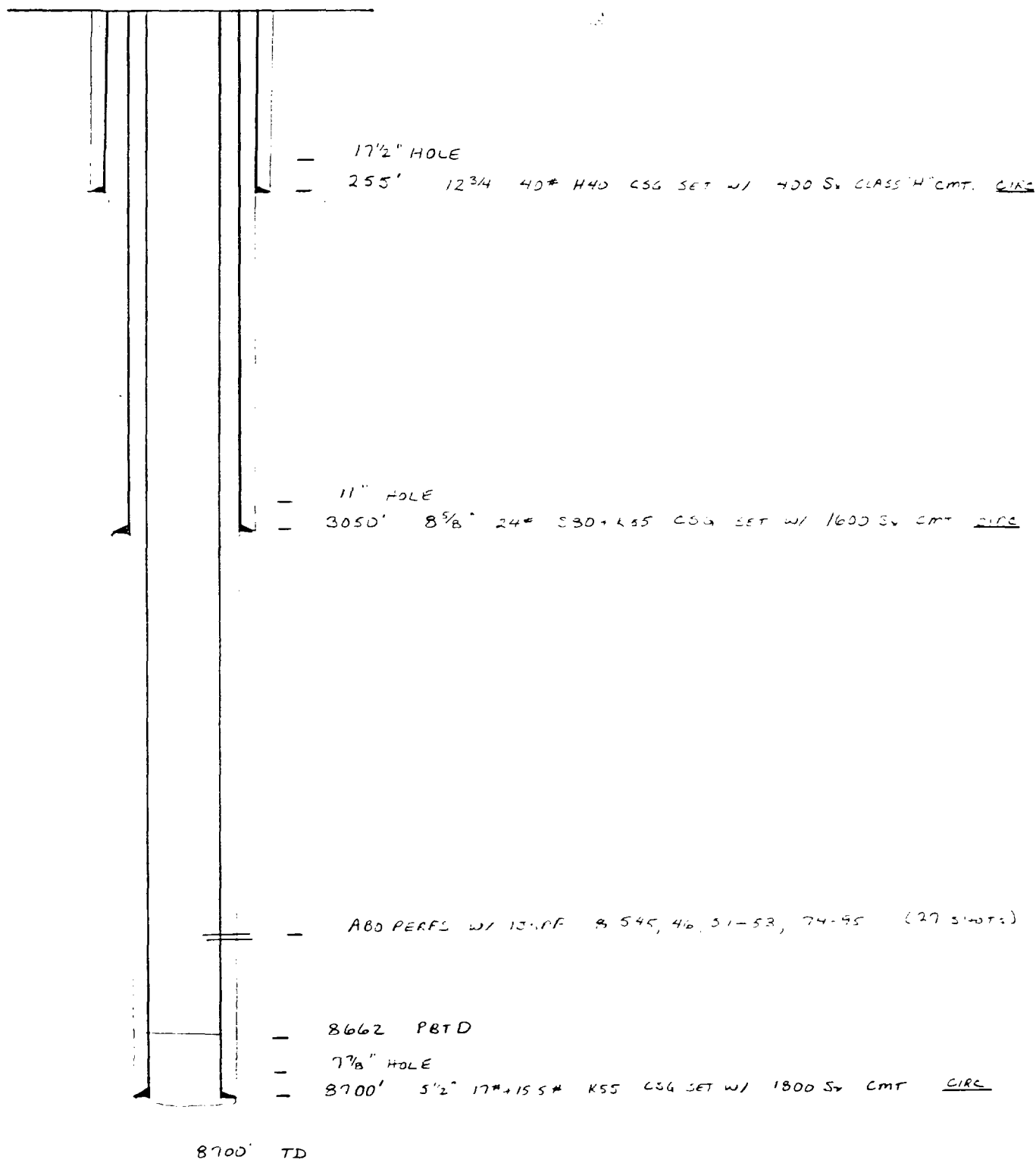
— 8750' 5 1/2" 17# K-55 CS4 SET W/ 2000 SV CIRC

TD 8750

DATE 7-16-85 WELL NO. 225 LEASE NVAU FIELD N. VACUUM

LOCATION 2121 FSL, 519 FEL SEC II T-17S, R-34-E SIGNED M.E. VASICEK
LEA CO. N.M.

G.L. _____
D.F. _____
K.B. _____
ZERO

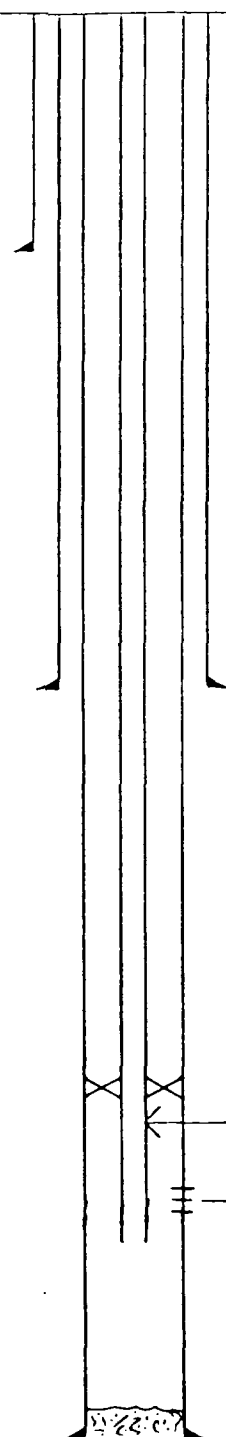


DATE 2-12-85 WELL NO. 226 LEASE North Vacuum Abo FIELD Vacuum Abo North
Unit

LOCATION 1980' FWL & 2180' FSL
Sec 12, T17-S, R34E
Lea County, New Mexico

SIGNED R. W. Petty

G.L. 4025'
D.F. NA
K.B. 4041'
ZERO 16' AGL



— 12 ³/₄" 40[#] csg @ 250' w/ 400 sx Cl. H + 2% CaCl₂.
Cmt circ.

— 8 ⁵/₈" 24[#] 580' K55 csg @ 3070' w/ 1200 sx TLW + 7 ¹/₂"
salt/sx + 200 sx Cl. C + 2.6[#] salt/sx. Cmt circ.

← 2 ⁷/₈" tbg

Abo perfs: 8536'-42', 62'-66', 69'-77', 81'-86', 93'-8601'.
1JSPF, 36 holes.

TD-8700' — 5 ¹/₂" 17[#]-15.5[#] N80-K55 (17" on bot-5800') @ 8700' w/
PBTD-8657' 1800 sx TLW + ¹/₄"³/₈" FC in 1st 1000 sx + 200 sx Cl. C.
Cmt Circ.

SE 5-24-B5 WELL NO. 227 LEASE NVAU FIELD Vacuum Abo Neri

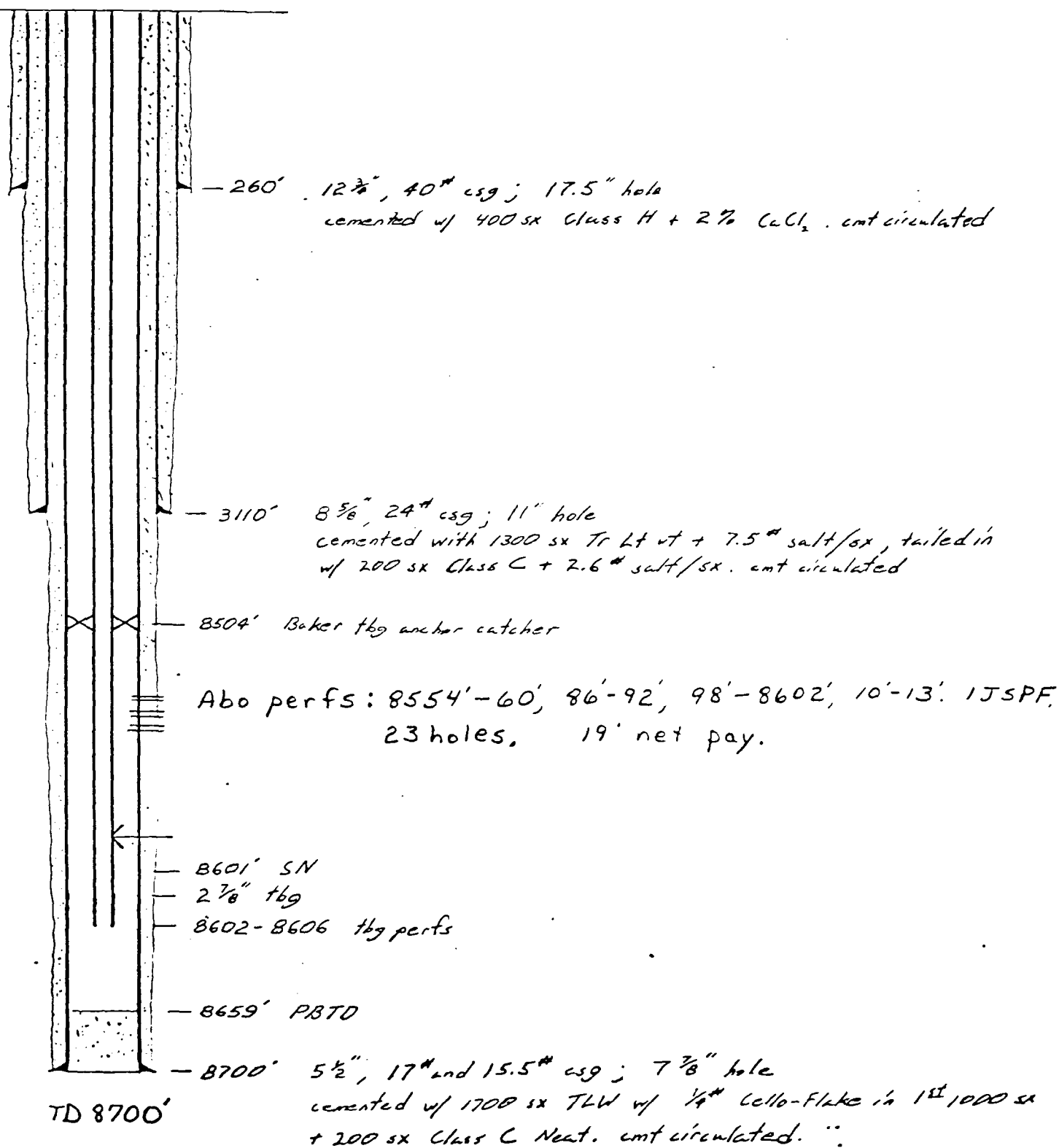
LOCATION G-12-17S-34E SIGNED M P Maurin

G.L. 4020

D.F. —

K.B. 4036

ZERO 16 AGL

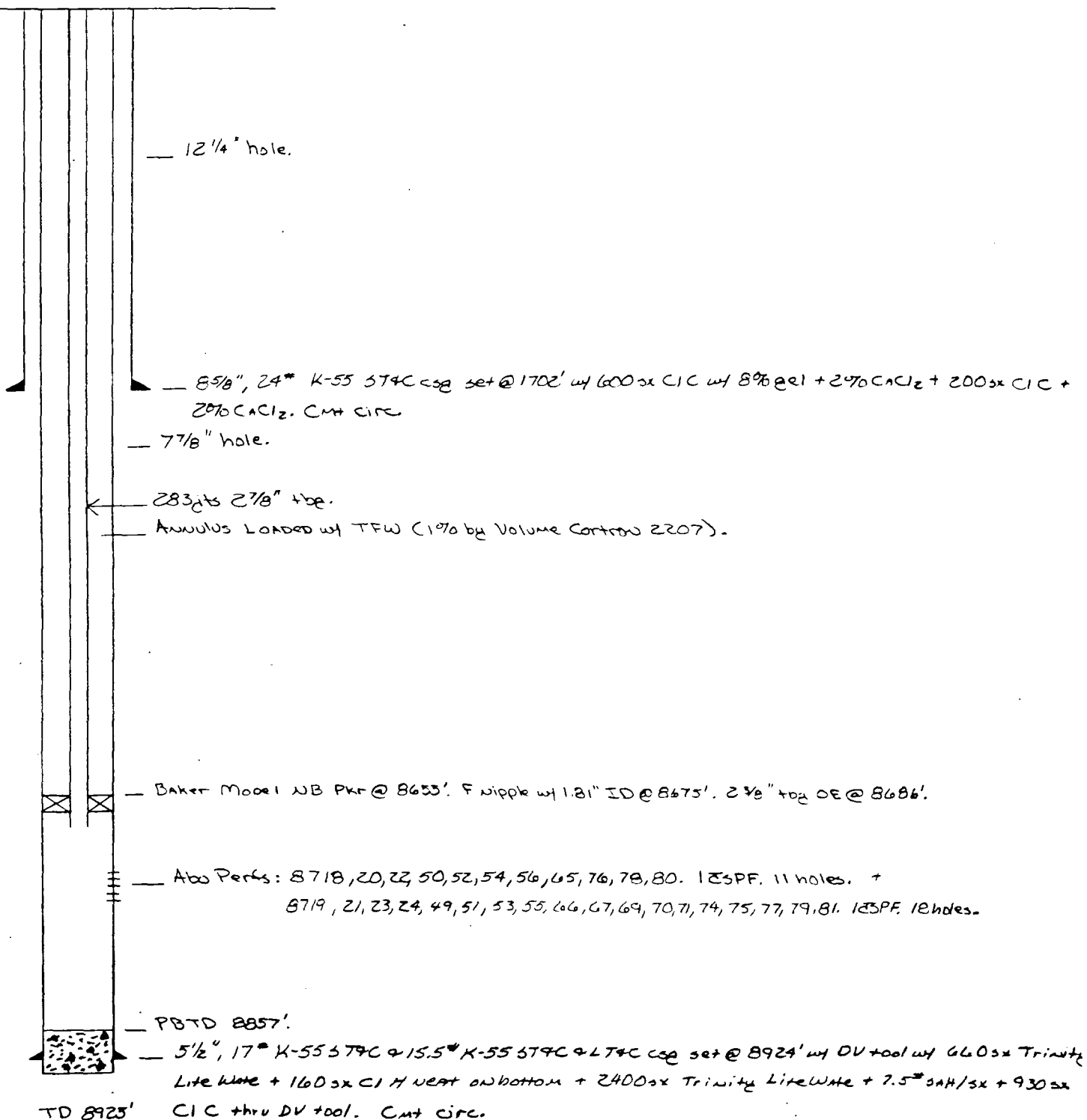


DATE 4-4-83 WELL NO. 228 LEASE No. Vacuum Area Unit FIELD Vacuum Area North

LOCATION N-10-175-34E
660' FSL AND 2000' FWL
Lea County, New Mexico

SIGNED M.W. DEER

G.L. 4045'
D.F. 4055'
K.B. 4055.4'
ZERO 10.4' AGL

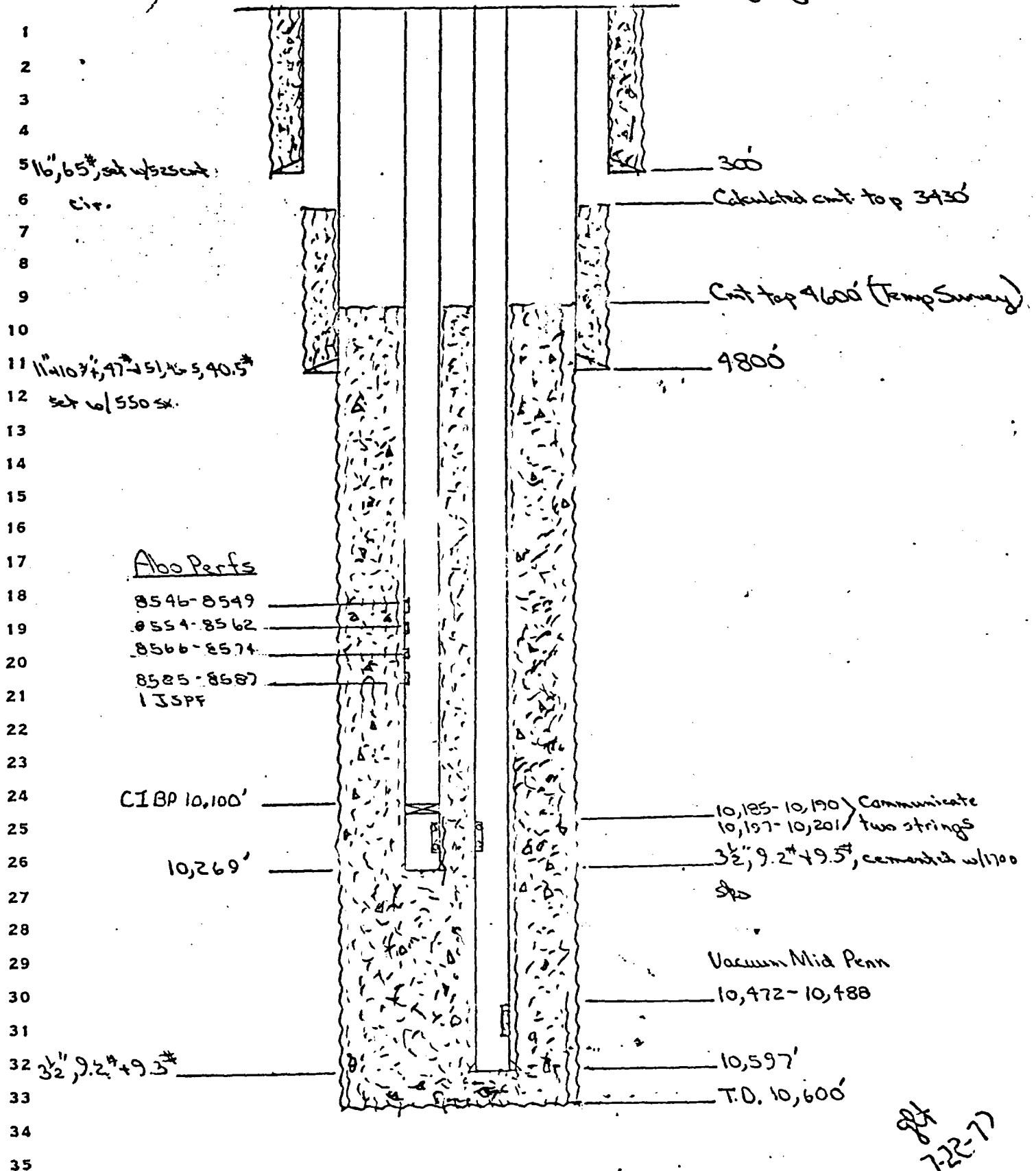


CALCULATION AND DATA SHEET

50-22-77

UNIT North Vac in Abo
 FOR North Vacuum Abo
 LOCATION J-13-17-534-E, Lea County, New Mex
 SUBJECT North Vacuum Abo Unit #230

FILE NO. _____
 JOB OR AUTH. NO. _____
 PAGE _____
 DATE 7-22-77
 BY agony thunders

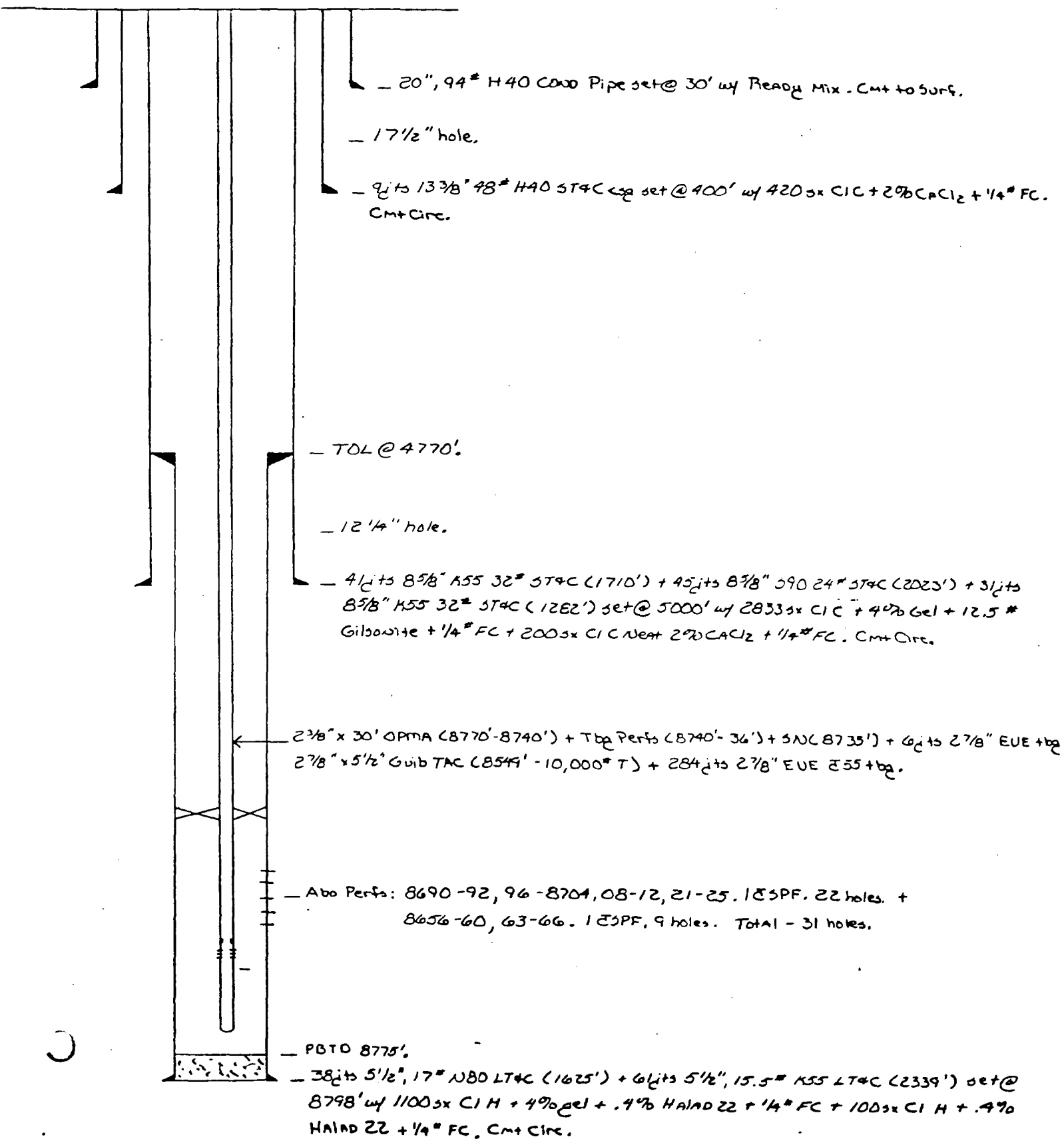


DATE 3-23-84 WELL NO. 233 LEASE No. Vacuum Abo Unit FIELD Vacuum Abo North

LOCATION 660' FNL & 460' EEL
A-12-123-34E
Lea Co., NM

SIGNED M. W. DEER

G.L. 4016
D.F. 4027
K.B. 4028
ZERO 12' AGL



TD-8800'

DATE 11-28-84 WELL NO. 255 LEASE North Vacuum FIELD Vacuum Abo

Abo Unit

LOCATION 2099' FWL & 1980' FSL
Sec. 13, T17S, R34E
Lea County, New Mexico

SIGNED R. W. Petty

North
G.L. 4011'
D.F. NA
K.B. 4025'
ZERO 14' AGL

— 17 1/2" hole

— 13 3/8", 48#, H40, STFC set @ 405' w/400 sk C.I.C cmt,
2% CaCl₂, 1/4 #/sk FC. Circ 105 sk cmt.

— 12 1/4" hole

— TOL @ 4210'

— 8 5/8", 32#, S80# K55, STFC set @ 5000' w/2350 sk C.I.C cmt,
4% gel, 15 #/sk Salt, 5 #/sk gilsonite; 1/4 #/sk FC + 300 sk C.I.C cmt,
2% CaCl₂ + 1/4 #/sk FC. Circ 60 sk cmt.

— 7 7/8" hole

— 2 7/8" + bg: OPMA @ 8679' + 4' perf sub + 2 3/8 SN + 2 7/8 SN @ 8643'
TAC @ 8403' set w/12,000# Ten.

— Abo Perfs: 8512'-18', 21'-23', 40'-53'. 1 JS PF. 24 holes.

— 5 1/2", 17 #/15.5#, K55, STFC set @ 8699' w/700 sk C.I.H cmt, 4% gel,
.3% HA9, 1/4 #/sk FC + 300 sk C.I.H cmt, .3% HA9, 1/4 #/sk FC.
PB TD 8697'
TD 8700'

DATE 11-28-84 WELL NO. 257 LEASE North Vacuum FIELD Vacuum Abo
Abo Unit North
LOCATION 739' FWL 1980' FNL SIGNED R.W. Petty G.L. 4023'
Sec. 13, T17S, R34E D.F. 4039.5'
Lea County, New Mexico K.B. 4040.5'
ZERO 17.5' AGL

— 17½" hole

— 13⅜", 48#, H40, STFC set @ 412' w/400 sk Cl.C cmt,
2% CaCl₂, ¼#_{sk} FC. Circ 102 sk cmt.

— 12¼" hole

— TOL @ 4'99'

— 8⅝", 32#, S80#K55, STFC set @ 5000' w/2750 sk Cl.C cmt,
4% gel, 5#_{sk} Salt, 5#_{sk} gilsonite; ¼#_{sk} FC + 200 sk Cl.C cmt,
2% CaCl₂ + ¼#_{sk} FC. Circ 440 sk cmt.

— 7⅞" hole

— 2⅞" +bg: CPMA @ 8847' + 4' perf sub + 2⅞" SN + 2⅞" SN @ 8811'
TAC @ 8435' set w/14,000# Ten.

— Abo Perfs: 8612'-17' 1JS PF. 6 holes. 8490'-97' 8518'-31' 1JS PF. 22 holes.

— 5½", 17#K55, STFC set @ 9099' w/700 sk Cl.H cmt, 4% gel,
PBTD 8750' .3% HA9, ¼#_{sk} FC + 300 sk Cl.H cmt, .3% HA9, ¼#_{sk} FC.
TD 9100'

DATE 11-28-84 WELL NO. 258 LEASE North Vacuum FIELD Vacuum Abo
Abo Unit North
LOCATION 1993' FNL & 1915' FEL SIGNED R. W. Petty G.L. 4022'
Sec. 13, T17S, R34E Lea County, New Mexico D.F. 4039'
K.B. 4040'
ZERO 18' AGL

— 17½" hole

— 13⅜", 48[#], K-55, STFC set @ 428' w/400 sk Cl. C cmt,
2% CaCl₂, ¼[#]/sk FC. Circ 125 sk cmt.

— 12¼" hole

— TOL @ 4132'

— 8⅝", 32[#], S80[#] K55, STFC set @ 5000' w/2000 sk Cl. C cmt,
4% gel, 15[#]/sk Salt, 5[#]/sk gilsonite; ¼[#]/sk FC + 300 sk Cl. C cmt,
2% CaCl₂ + ¼[#]/sk FC. Circ 300 sk cmt.

— 7⅞" hole

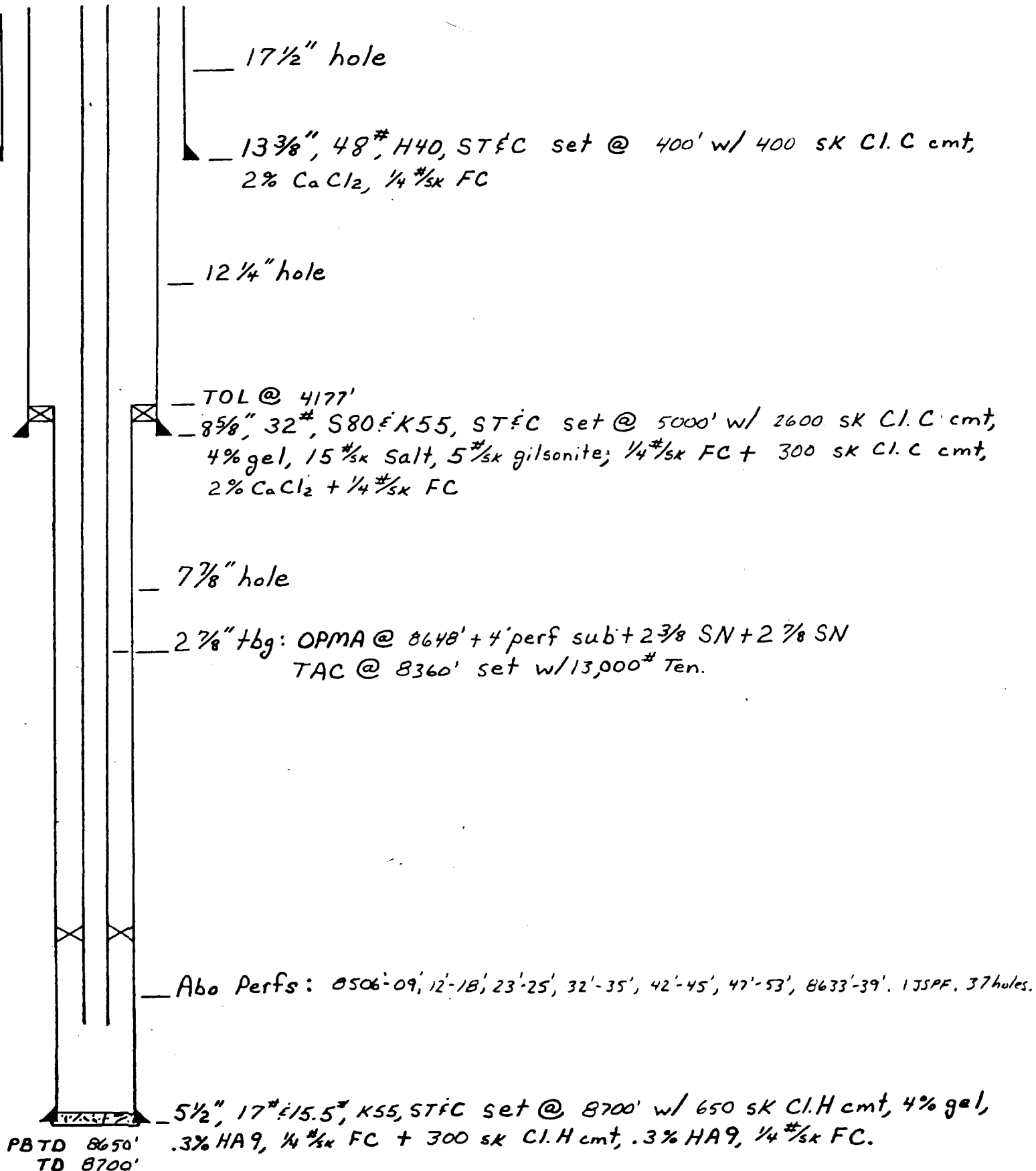
— 2⅞" tbg: OPMA @ 8651' + 4' perf sub + 2⅞" SN + 2⅞" SN @ 8616'
TAC @ 8428' set w/15,000[#] Ten.

— Abo Perfs: 8604'-10', 14'-16'. 2 JS PF. 20 holes.

5½", 17[#] N80 LTFC & 15.5[#] J55 STFC set @ 8699' w/750 sk Cl. H
cmt, 4% gel, .3% HA9, ¼[#]/sk FC + 300 sk Cl. H cmt, .3% HA9, ¼[#]/sk FC.

PB TO 8680'
TD 8700'

DATE 12-20-84 WELL NO. 259 LEASE North Vacuum FIELD Vacuum Abo
Abo Unit North
LOCATION 660' FNL & 580' FFL SIGNED KS OGIER G.L. 4028'
Sec. 14 T17S, R34E D.F. N/A
Lea County, New Mexico K.B. 4044'
ZERO 16' AGI



DATE 12-21-84 WELL NO. 260 LEASE North Vacuum FIELD Vacuum Abo
Abo Unit North

LOCATION 660' FNL; 2080' FWL
Sec. 13 T17S, R34E
Lea County, New Mexico

SIGNED KS O'GIER

G.L. N/A
D.F. N/A
K.B. N/A
ZERO 18' AGL

— 17 1/2" hole

— 13 3/8", 48#, H40, STFC set @ 405' w/ 400 sk Cl. C cmt,
2% CaCl₂, 1/4 #/sk FC

— 12 1/4" hole

— TOL @ 4180'

— 8 5/8", 32#, S80# K55, STFC set @ 5000' w/ 2600 sk Cl. C cmt,
4% gel, 15 #/sk Salt, 5 #/sk gilsonite; 1/4 #/sk FC + 300 sk Cl. C cmt,
2% CaCl₂ + 1/4 #/sk FC

— 7 7/8" hole

— 2 7/8" tbg: OPMA @ 8635' + 4' perf sub + 2 3/8 SN + 2 7/8 SN
TAC @ 8352' set w/ 12,000# Ten.

— Abo Perfs: 8529-33, 51-57, 59-64, 69-73. 1 JS PF, 23 holes.

— 5 1/2", 17# 15.5#, K55, STFC set @ 8699' w/ 600 sk Cl. H cmt, 4% gel,
.3% HA9, 1/4 #/sk FC + 300 sk Cl. H cmt, .3% HA9, 1/4 #/sk FC.
PBTD 8651'
TD 8700'

DATE 11-27-84 WELL NO. 261 LEASE North Vacuum Abo U. FIELD Vacuum Abo Nert

LOCATION 660 FSL # 1980 FEL
UL. O, Sec 12, T17S, R34E
Lea County, New Mexico

SIGNED R. W. Petty

G.L. 4022'
D.F. NA
K.B. 4039'
ZERO 17' AGL

— 17½" hole

— 13⅜", 48#, H40 STFC @ 425' cmt w/ 400 sk Cl. C + 2% CaCl₂
+ ¼# FC/sk. Circ 100 sk cmt.

— 12¼" hole
— TOL @ 4191'

— 8⅝", 32#, S80 #K55, STFC @ 5000' cmt w/ 2400 sk Cl. C, 4% gel,
15# salt, 5# gilsonite, ¼# FC + 300 sk Cl. C, 2% CaCl₂,
¼# FC. Circ 300 sk cmt.

— 7⅞" hole

— 2⅞" + bg. OPMA @ 8660' + 4' perf sub + 2⅞ SN + 2⅞ SN.
TAC @ 8377 set w/ 12000# ten.

— Abo Perfs: 8560'-63', 82'-84', 89'-95', 8599'-8602'. 1JSPP. 18 holes.

5½", 17# 15.5#, K55, STFC @ 8707 cmt w/ 600 sk Cl. H, 4% gel, .3% HA9,
— ¼# FC, + 300 sk Cl. H, .3% HA9, ¼# FC. PBTD 8680'

TD 8708'

DATE 11-27-84 WELL NO. 262 LEASE North Vacuum FIELD Vacuum Abo
Abo Unit North
 LOCATION 620' FSL & 580' FEL SIGNED R. W. Petty G.L. 4028'
Sec 12, T17S, R34E D.F. NA
Lea County, NM K.B. 4045'
ZERO 17' AGL

— 17½" hole

— 13⅜", 48[#], H40, ST&C set @ 400' w/ 400 sk Cl. C cmt,
 2% CaCl₂, ¼[#]/sk FC. Circ 75 sk cmt.

— 12¼" hole

— TOL @ 4190'

— 8⅝", 32[#], S80' K55, ST&C set @ 5000' w/ 2550 sk Cl. C cmt,
 4% gel, 15[#]/sk Salt, 5[#]/sk gilsonite; ¼[#]/sk FC + 300 sk Cl. C cmt,
 2% CaCl₂ + ¼[#]/sk FC. Circ 225 sk cmt.

— 7⅞" hole

— 2⅞" +bg: OPMA @ 8676' + 4' perf sub + 2⅞ SN + 2⅞ SN
 TAC @ 8488' set w/ 12,000[#] Ten.

— Abo Perfs: 8528'-33', 55'-57', 59'-63', 67'-71', 84'-87',
 8638'-41'. 1JSPF. 27 holes.

— 5½", 17[#] & 15.5[#], K55, ST&C set @ 8749' w/ 600 sk Cl. H cmt, 4% gel,
 .3% HA9, ¼[#]/sk FC + 300 sk Cl. H cmt, .3% HA9, ¼[#]/sk FC
 PBTD 8701'
 TD 8750'

DATE 12-21-84 WELL NO. 263 LEASE North Vacuum FIELD Vacuum Abo
Abo Unit North

LOCATION 610' FSL, 1880' FEL
Sec. 11 T17S, R34E
Lea County, New Mexico

SIGNED KS OGIER

G.L. 4041'
D.F. N/A
K.B. N/A
ZERO CKB

— 17½" hole

— 13⅜", 48[#], H40, STFC set @ 403' w/ 400 sk Cl. C cmt,
2% CaCl₂, ¼[#]/sk FC

— 12¼" hole

— TOL @
— 8⅝", 32[#], S80[#] K55, STFC set @ 5000' w/ 2250 sk Cl. C cmt,
4% gel, 15[#]/sk Salt, 5[#]/sk gilsonite; ¼[#]/sk FC + 300 sk Cl. C cmt,
2% CaCl₂ + ¼[#]/sk FC

— 7⅞" hole

— 2⅞" tbg: OPMA @ 8642 + 4' perf sub + 2⅜ SN + 2⅞ SN
TAC @ 8353' set w/ 12,000[#] Ten.

— Abo Perfs: 8532-44, 62-76, 82-85, 90-94. 1 JSPP. 37 holes.

— 5½", 17[#] 15.5[#], K55, STFC set @ 8700' w/ 700 sk Cl. H cmt, 4% gel,
PBTD 8650' .3% HA9, ¼[#]/sk FC + 300 sk Cl. H cmt, .3% HA9, ¼[#]/sk FC.
TD 8700'

DATE 11-27-84 WELL NO. 264 LEASE North Vacuum FIELD Vacuum Abo
Abo Unit North
 LOCATION 561' FSL : 610' FWL SIGNED R. W. Petty G.L. 4045
Sec. 11, T17S, R34E D.F. 4053
Lea County, NM K.B. 4054
ZERO 9' AGL

— 17½" hole

— 13⅜", 48#, H40, STFC set @ 400' w/ 400 SK C.I.C cmt,
 2% CaCl₂, ¼# SK FC. Circ 100 SK cmt.

— 12¼" hole

— TOL @ 4185'
 — 8⅝", 32#, S80# K55, STFC set @ 4955' w/ 4900 SK C.I.C cmt,
 4% gel, 15# SK Salt, 5# SK gilsonite; ¼# SK FC + 300 SK C.I.C cmt,
 2% CaCl₂ + ¼# SK FC. Circ 400 SK cmt.

— 7⅞" hole

— 2⅞" tbg: OPMA @ 8723' + 4' perf sub + 2⅞ SN + 2⅞ SN
 TAC @ 8495' set w/ 12,000# Ten.

— Abo Perfs: 8608'-38'. 1 JS PF. 31 holes.
 Perf 8603' : 8638'. 4 JS PF. 8 holes. Sg'd w/ 75 SK C.I.C cmt, .2% HA 14
 + 25 SK C.I.C cmt. Rev out 50 SK.

— 5½", 17# : 15.5# K55, STFC set @ 8799' w/ 1000 SK C.I.H cmt, 4% gel,
 .3% HA 9, ¼# SK FC + 300 SK C.I.H cmt, .3% HA 9, ¼# SK FC
 PB TD 8756'
 TD 8800'

DATE 11-27-84 WELL NO. 265 LEASE North Vacuum FIELD Vacuum Abo
Abo Unit North

LOCATION 1980' FSL ± 1831' FWL
Sec 11, T17S, R34E
Lea County, NM

SIGNED R. W. Petty

G.L. 4048
D.F. 4060
K.B. 4061
ZERO 13' AGL

— 17½" hole

— 13⅜", 48#, H40, STFC set @ 407' w/ 400 SK Cl. C cmt,
2% CaCl₂, ¼#_{SK} FC. Circ 125 SK cmt.

— 12¼" hole

— TOL @ 4203'

— 8⅝", 32#, S80# K55, STFC set @ 5000' w/ 2200 SK Cl. C cmt,
4% gel, 15#_{SK} Salt, 5#_{SK} gilsonite; ¼#_{SK} FC + 300 SK Cl. C cmt,
2% CaCl₂ + ¼#_{SK} FC. Circ 311 SK cmt.

— 7⅞" hole

— 2⅞" tbg: OPMA @ 8624' + 4' perf sub + 2⅜ SN + 2⅞ SN
TAC @ 8404' set w/ 12,000# Ten.

— Abo Perfs: 8591'-94', 8596'-8604', 8607'-15'. 1 JS PF. 22 holes.

— 5½", 17# ± 15.5#, K55, STFC set @ 8699' w/ 775 SK Cl. H cmt, 4% gel,
PB TD 8660', .3% HA9, ¼#_{SK} FC + 300 SK Cl. H cmt, .3% HA9, ¼#_{SK} FC
TD 8700'

DATE 12-14-84 WELL NO. 266 LEASE North Vacuum FIELD Vacuum Abo
Abo Unit North

LOCATION 1980' FEL & 1980' ENL
Sec. 11 T17S, R34E
Lea Co., New Mexico

SIGNED R. W. Petty

G.L. 4022'
D.F. 4034'
K.B. 4035'
ZERO 13' AGL

— 17½" hole

— 13⅜", 48#, H40, STFC set @ 409' w/400 sk Cl. C cmt,
2% CaCl₂, ¼#sk FC. Circ 123 sk cmt.

— 12¼" hole

— TOL @ 4181'

— 8⅝", 32#, S80#K55, STFC set @ 5000' w/2600 sk Cl. C cmt,
4% gel, 15#sk Salt, 5#sk gilsonite; ¼#sk FC +300 sk Cl. C cmt,
2% CaCl₂ + ¼#sk FC. Circ 833 sk cmt.

— 7⅞" hole

— 2⅞" tbg: OPMA @ 8788' + 4' perf sub + 2⅞" SN + 2⅞" SN @ 8752'
TAC @ 8508 set w/12,000# Ten.

— Abo Perfs: 8551'-56', 75'-78', 88'-90', 94'-97', 8622'-25',
8706'-08', 16'-20'. 155PF. 29 holes.

— 5½", 17# & 15.5# K55, STFC set @ 8806' w/900 sk Cl. H cmt, 4% gel,
PBTD 8800' .3% HA9, ¼#sk FC + 300 sk Cl. H cmt, .3% HA9, ¼#sk FC
TD 8807'

DATE 12-14-84 WELL NO. 267 LEASE North Vacuum FIELD Vacuum Abo
Abo Unit North

LOCATION 817' FNL & 2105' FWL
Sec. 11 T17S, R34E
Lea County, New Mexico

SIGNED R.W. Petty

G.L. 4051'
D.F. 4060'
K.B. 4061'
ZERO 10' AGT

— 17½" hole

— 13⅞", 48[#], H40, STFC set @ 410' w/ 400 sk Cl. C cmt,
2% CaCl₂, ¼[#]/sk FC. Circ 100 sk cmt.

— 12¼" hole

— TOL @ 4173'
— 8⅝", 32[#], S80 & K55, STFC set @ 5000' w/ 3000 sk Cl. C cmt,
4% gel, 15[#]/sk Salt, 5[#]/sk gilsonite; ¼[#]/sk FC + 300 sk Cl. C cmt,
2% CaCl₂ + ¼[#]/sk FC. Circ 445 sk cmt.

— 7⅞" hole

— 2⅞" tbg: OPMA @ 8685' + 4' perf sub + 2⅞" SN + 2⅞" SN @ 8648'
TAC @ 8468' set w/ 12,000[#] Ten.

— Abo Perfs: 8583'-88', 8606'-11', 13'-20', 25'-28', 34'-39'. 175 PF. 30 holes

— 5½", 17[#] & 15.5[#], K55, STFC set @ 8800' w/ 900 sk Cl. H cmt, 4% gel,
.3% HA9, ¼[#]/sk FC + 300 sk Cl. H cmt, .3% HA9, ¼[#]/sk FC
PBTD 8751'
TD 8800'

DATE 2-7-85 WELL NO. 268 LEASE North Vacuum FIELD Vacuum Abo
Abo Unit North
LOCATION 1980' FSL & 660' FEL SIGNED R. W. Petty G.L. 4048'
Sec. 10, T17S, R34E D.F. 4056'
Lea County, New Mexico K.B. 4057'
ZERO KB 9' AGL

— 17½" hole

— 13⅜", 48#, H40, STFC set @ 420' w/ 450 sk Cl. C cmt,
2% CaCl₂, ¼#_{sk} FC. Circ 255 sk cmt.

— 12¼" hole

— TOL @ 4188'

— 8⅝", 32#, S80# K55, STFC set @ 5000' w/ 3500 sk Cl. C cmt,
4% gel, 15#_{sk} salt, 5#_{sk} gilsonite; ¼#_{sk} FC + 300 sk Cl. C cmt,
2% CaCl₂ + ¼#_{sk} FC. Circ 300 sk cmt.

— 7⅞" hole

— 2⅞" + bg: OPMA @ 8720' + 4' perf sub + 2⅞" SN + 2⅞" SN @ 8686'
TAC @ 8443' set w/ 12,000# Ten.

— Abo Perfs: 8629'-34', 52'-55', 58'-65', 67'-70', 75'-77'. 1 JS PF.
25 holes.

— 5½", 17# & 15.5#, K55, STFC set @ 8791' w/ 800 sk Cl. H cmt, 4% gel,
PB TD 8745', .3% HA9, ¼#_{sk} FC + .300 sk Cl. H cmt, .3% HA9, ¼#_{sk} FC.
TD 8792'

DATE 11-27-84 WELL NO. 269 LEASE North Vacuum FIELD Vacuum Abo
Abo Unit North

LOCATION 660' FNL & 660' FEL
Sec 15. T17S, R34E
Lea County, NM

SIGNED R. W. Petty

G.L. 4048'
D.F. NA
K.B. 4066'
ZERO 18' AGL

— 17½" hole

— 13⅜", 48#, H40, STFC set @ 406' w/500 SK Cl. C cmt,
2% CaCl₂, ¼#_{SK} FC. Circ 150 SK cmt.

— 12¼" hole

— TOL @ 4203'
— 8⅝", 32#, S80#K55, STFC set @ 5000' w/2600 SK Cl. C cmt,
4% gel, 15#_{SK} Salt, 5#_{SK} gilsonite; ¼#_{SK} FC + 300 SK Cl. C cmt,
2% CaCl₂ + ¼#_{SK} FC. Circ 300 SK cmt.

— 7⅞" hole

— 2⅞" tbg: OPMA @ 8752' + 4' perf sub + 2⅞" SN + 2⅞" SN
TAC @ 8564' set w/12,000# Ten.

— Abo Perfs: 8664'-77', 80'-86', 92'-96', 8699'-8704'. 1 JS PF. 32 holes.

— 5½", 17# & 15.5# K55, STFC set @ 8829' w/650 SK Cl. H cmt, 4% gel,
.3% HA9, ¼#_{SK} FC + 300 SK Cl. H cmt, .3% HA9, ¼#_{SK} FC
PB TD 8786'
TD 8830'

DATE 12-14-84 WELL NO. 270 LEASE North Vacuum FIELD Vacuum Abo
Abo Unit North

LOCATION 540' FSL & 1980' FEL
Sec 10, T17S, R34E
Lea County, NM

SIGNED R.W. Petty

G.L. 4054'
D.F. 4070'
K.B. 4071'
ZERO 17' AGL

— 17½" hole

— 13⅜", 48[#], H40, STFC set @ 432' w/400 sk Cl. C cmt,
2% CaCl₂, ¼[#]/sk FC. Circ 345K cmt.

— 12¼" hole

— TOL @ 4176'

— 8⅝", 32[#], S80' K55, STFC set @ 5000' w/2100 sk Cl. C cmt,
4% gel, 15[#]/sk Salt, 5[#]/sk gilsonite; ¼[#]/sk FC + 300 sk Cl. C cmt,
2% CaCl₂ + ¼[#]/sk FC. Circ 920 sk cmt.

— 7⅞" hole

— 2⅞" +bg: OPMA @ 8769' + 4' perf sub + 2⅞" SN + 2⅞" SN @ 8733'
TAC @ 8546' set w/12,000[#] Ten.

— Abo Perfs: 8702'-23', 29'-37'. 1JSPF. 31 holes.

— 5½", 17[#] & 15.5[#], K55, STFC set @ 8800' w/650 sk Cl. H cmt, 4% gel,
PB TD 8790', .3% HA9, ¼[#]/sk FC + 300 sk Cl. H cmt, .3% HA9, ¼[#]/sk FC
TD 8800'

DATE 12-18-84 WELL NO. 271 LEASE North Vacuum FIELD Vacuum Abo
Abo Unit North

LOCATION 1980' FEL & 1980' FNL
Sec. 10 T17S, R34E
Lea County, New Mexico

SIGNED R.W. Petty

G.L. 4060'
D.F. 4072'
K.B. 4073'
ZERO 13' AGL

— 17 1/2" hole

— 13 3/8", 48#, H40, STFC set @ 422' w/450 sk Cl. C cmt,
2% CaCl₂, 1/4 #/sk FC. Circ 115 sk cmt.

— 12 1/4" hole

— TOL @ 4188'

— 8 5/8", 32#, S80# K55, STFC set @ 5000' w/2300 sk Cl. C cmt,
4% gel, 15 #/sk Salt, 5 #/sk gilsonite; 1/4 #/sk FC + 300 sk Cl. C cmt,
2% CaCl₂ + 1/4 #/sk FC. Circ 170 sk cmt.

— 7 7/8" hole

— 2 7/8" tbg: OPMA @ 8770' + 4' perf sub + 2 3/8 SN + 2 7/8 SN @ 8733'
TAC @ 8640' set w/12,000# Ten.

— Abo Perfs: 8592'-74', 98'-8604', 24'-47', 51'-56'. 1 JSPF. 40 holes.

— 5 1/2", 17# #15.5#, K55, STFC set @ 8799' w/700 sk Cl. H cmt, 4% gel,
PBTD 8790' .3% HA9, 1/4 #/sk FC + 300 sk Cl. H cmt, .3% HA9, 1/4 #/sk FC.
TD 8800'

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**NEW MEXICO OIL CONSERVATION COMMISSION
WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

Form O-105
Revised 11-1-84

1. Indicate Type of Lease	
Date ☒	Fee ☐
2. State of this Lease No.	
B-1520-1	

3. TYPE OF WELL	
OIL WELL ☒	GAS WELL ☐ DRY ☐ OTHER ☐
4. TYPE OF COMPLETION	
NEW WELL ☒ WORK OVER ☐ DEEPEN ☐	PLUG BACK ☐ DIFF. RESVR. ☐ OTHER ☐

5. Unit & Horizontal Name
North Vacuum Abo Unit
6. Name of Lease Name

7. Name of Operator	
Mobil Producing TX. & N.M. Inc.	
8. Address of Operator	
Nine Greenway Plaza, Suite 2700, Houston, Texas 77046	
9. Location of Well	

9. Well No.
272
10. Field and Pool, or Wildcat
Vacuum Abo, North

11. LETTER	A	12. LOCATED	780	13. FEET FROM THE	North	14. LINE AND	610	15. FEET FROM
16. East LINE OF SEC. 10 TWP. 17S RGE. 34E NMPM								

17. Locality
Lea

18. Date Spudded	19. Date T.D. Reached	20. Date Compl. (Ready to Prod.)	21. Elevations (D.F., RKB, RT, GR, etc.)	22. Elev. Casinghead
11-30-84	12-29-84	1-29-85		

23. Total Depth	24. Plug Back T.D.	25. If Multiple Compl., How Many	26. Intervals Entered By	27. Rotary Tools	28. Cable Tools
8850	8800			0-8850	

29. Producing Interval(s), of this completion - Top, Bottom, Name		30. Was Directional Survey Made
Pf. 8636-8682 Abo		No
31. Type Electric and Other Logs Run		32. Was Well Cored

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB. FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	48#	430'	17-1/2"	450/x Class C	
8-5/8"	32#	4375'	12-1/4"	2600/x Class C	

LINER RECORD

TUBING RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
5-1/2"	4214'	8849'	1125/x		2-7/8"	8756	8507

33. Perforation Record (Interval, size and number)
8636-38, 8642-46, 8663-68, 8671-82 w/1 JSPF (26 holes)

34. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
8636-8682	Acidize w/1000 gal 15% DINE FE HCL + 5500 gal 15% DINE FE HCL + 66 RCNBS

PRODUCTION

35. First Production		36. Production Method (Flowing, gas lift, pumping - Size and type pump)		37. Well Status (Prod. or Shut-in)	
1-29-85		2" x 1 1/2" x 26' Pump		Producing	
38. Date of Test	39. Hours Tested	40. Choke Size	41. Prof'n. Per Test Period	42. Oil - Bbl.	43. Gas - MCF
2-6-85	24			68	91
44. Flow Tubing Press.	45. Casing Pressure	46. Calculated 24-Hour Rate	47. Oil - Bbl.	48. Gas - MCF	49. Water - Bbl.
50. Disposition of Gas (Sold, used for fuel, vented, etc.)				51. Test Witnessed By	
Sold				T.J. Auld	

52. List of Attachments	
C-104, Record of Inclination, 1 set of logs.	
I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.	

SIGNED	<i>Randy Lewis</i>	TITLE	Authorized Agent	DATE	2-12-85
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DATE 12-20-84 WELL NO. 273 LEASE North Vacuum FIELD Vacuum Abo
Abo Unit North

LOCATION 710' ENL & 1880' FWL
Sec. 11 T17S, R34E
Lea Co., New Mexico

SIGNED R. W. Petty

G.L. 4040'
D.F. 4055'
K.B. 4056'
ZERO 16' AGL

— 17½" hole

— 13⅜", 48#, H40, STFC set @ 413' w/400 sk Cl. C cmt,
2% CaCl₂, ¼#_{sk} FC. Circ 5sk cmt.

— 12¼" hole

— TOL @ 4185'
— 8⅝", 32#, S80# K55, STFC set @ 5000' w/3050 sk Cl. C cmt,
4% gel, 15#_{sk} Salt, 5#_{sk} gilsonite; ¼#_{sk} FC + 300sk Cl. C cmt,
2% CaCl₂ + ¼#_{sk} FC. Circ 350 sk cmt.

— 7⅞" hole

— 2⅞" tbg: OPMA @ 8766' + 4' perf sub + 2⅞" SN + 2⅞" SN @ 8730'
TAC @ 8487' set w/10,000# Ten.

— f o Perfs: 8592'-94', 98'-8604', 24'-47', 51'-56'. 15sPF 40 holes.

— 5½", 17# & 15.5# K55, STFC set @ 8799' w/900 sk Cl. H cmt, 4% gel,
PBTD 8790' .3% HA9, ¼#_{sk} FC + 300 sk Cl. H cmt, .3% HA9, ¼#_{sk} FC
TD 8800'

DATE 11-27-84 WELL NO. 274 LEASE North Vacuum FIELD Vacuum Abo
Abo Unit North
LOCATION 1980' FSL & 660' FEL SIGNED R. W. Petty G.L. 4019'
Sec 12, T17S, R34E D.F. 4033'
Lea County, NM K.B. 4034'
ZERO 15' AGL

— 17 1/2" hole

— 13 3/8", 48#, H40, STFC set @ 412' w/ 400 sk Cl. C cmt,
2% CaCl₂, 1/4 #/sk FC. Circ 100 sk cmt.

— 12 1/4" hole

— TOL @ 4207'

— 8 5/8", 32#, S80# K55, STFC set @ 5000' w/ 2000' sk Cl. C cmt,
4% gel, 15 #/sk Salt, 5 #/sk gilsonite; 1/4 #/sk FC + 300 sk Cl. C cmt,
2% CaCl₂ + 1/4 #/sk FC. Did not circ cmt. TOC @ 395' Temp Sur.

— 7 7/8" hole

— 2 7/8" tbg: OPMA @ 8726' + 4' perf sub + 2 3/8 SN + 2 7/8 SN @ 8689'
TAC @ 8504' set w/ 12,000# Ten.

— Abo Perfs: 8572'-75', 83'-88', 8615'-20', 24-29. 1 JS PF. 22 holes.

— 5 1/2", 17 #/15.5#, K55, STFC set @ 8799' w/ 750 sk Cl. H cmt, 4% gel,
3% HA9, 1/4 #/sk FC + 300 sk Cl. H cmt, .3% HA9, 1/4 #/sk FC
PB TD 8757'
TD 8800'

COUNTY LEA FIELD Vacuum, N. STATE NM 32-025-24076
 OPR AMINI OIL CO. W.P.
 1 Shell - State
 Sec 1, T-17-S. R-34-E CO-RED
 1780' FSL, 1980' FEL of Sec
 Spd 6-22-72
 Cmp 7-30-72 CLASS EL

	FORMATION	DATUM	FORMATION	DATUM
CSG & SX - TUBING				
12 3/4" at 365' w/375 sx				
8 5/8" at 3244' w/200 sx				
5 1/2" at 8850' w/1000 sx				
LOGS EL GR RA IND HC A				
	TD 8850'; PBD 8805'			

IP (Abo) Perfs 8669-8719' F 110 BOPD. Pot based on 24 hr test thru 12/64" chk. GOR 710; Grav 36; GP Fkr; TP 110#

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CONT. Marcum PROP DEPTH 8300' W.P. RT
 DATE

F.R. 6-19-72; Opr's Elev. 4031' GL
 PD 8800' RT (Abo)
 Contractor - Marcum
 6-26-72 AMEND LOCATION: Formerly reported as 1780' FSL,
 2000' FEL of Sec
 6-27-72 TD 3244'; WOC
 7-10-72 Drlg. 8086' lm
 7-17-72 TD 8850'; WOC
 7-25-72 TD 8850'; "Tight"
 8-1-72 TD 8850'; "Tight"
 8-7-72 TD 8850'; PBD 8805'; COMPLETE
 Perf 8669-8719' w/16 shots
 Acid (8669-8719') 10,500 gals
 LOG TOPS: Anhydrite 1700', Yates 2980', Queen
 3910', San Andres 4705', Glorieta 6140', Tubb 7400',
 Abo 8395'
 8-12-72 COMPLETION REPORTED

COUNTY LEA FIELD Vacuum, N. STATE NM 30-025-24193
 OPR KOCH EXPLORATION CO. MAP
2 Miller "B" State
Sec 3, T-17-S, R-34-E CO-ORD
660' FSL, 2105' FWL of Sec
Spd 7-24-72 CLASS GL EL 40612
Cmp 8-30-72

	FORMATION	DATUM	FORMATION	DATUM
CSG & SX - TUBING				
13 3/8" at 370' w/400 sx				
8 5/8" at 3100' w/375 sx				
5 1/2" at 8877' w/400 sx				
LOGS EL GR RA IND HC A				
	TD 8877'; PBD 8835'			

IP (Abo) Perfs 8687-8742' P 85 BOPD. Pot based on 24 hr test.
 GOR NR; Grav NR

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CONT. Moran PROP DEPTH 8900' TYPE RT
 DATE

F.R. 7-17-72; Opr's Elev. 4064' GL
 PD 8900' RT (Abo)
 Contractor - Moran
 7-26-72 Drlg. 2795'
 8-1-72 Drlg. 5928'
 DST 3840-3930', open 1 hr, rec 30' mud, NS, 1 hr
 30 min ISIP 148#, FP 63-63#, 2 hr FSIP 63#
 8-7-72 Drlg. 7730' lm
 8-14-72 TD 8877'; Rng 5 1/2" csg
 DST 8694-8877', open 1 hr, rec 300' DM, ISIP
 2995#, FP 71-142#, FSIP 2896#
 8-21-72 TD 8877'; WO Comp
 8-28-72 TD 8877'; WO Comp
 9-5-72 TD 8877'; PBD 8835'; RU Pmp
 Perf 8687-91', 8708-12', 8715-26', 8729-32',
 8735-42' w/2 SPF
 Acid (8687-8742') 500 gals
 Swbd 58 BLW & Swbd dry (8687-8742')

COUNTY LEA FIELD Vacuum, N. STATE NM AD 30-025-24001
 OPER AMINI OIL CO. SERIAL
 NO 1 LEASE Shell State "A" MAP
 Sec 1, T-17-S, R-34-E CO-ORD
 660' FSL, 1980' FWL ELEV OF

SPD 12-10-72 CMP 1-14-73		CLASS		GL	
CSG & SX		FORMATION	DATUM	FORMATION	DATUM
12 3/4" at 370' w/425 sx 8 5/8" at 2922' w/300 sx 4 1/2" at 8795' w/950 sx					
LOGS EL GR RA NO HC A		TO 8795'		PBD	

IP (Abo) Perfs 8662-83' F 120 EOPD + 4 BW. Pot based on 24 hr test thru 24/64" chk. GOR 800; Grav 36; CP Pkr; TP 110#

CONTR Marcum Drlg. OPER ELEV 4042 GL PD 8800' TYPE RT

FR 12-4-72
 (Abo)
 12-12-72 Drlg. 2270'
 12-18-72 Drlg. 5216'
 1-2-73 TD 8795'; Prep run csg
 1-8-73 TD 8795'; WO Comp
 1-29-73 TD 8795'; WO Comp
 Perf 8662-83' w/1 SPF
 Acid (8662-83') 1500 gals
 2-5-73 TD 8795'; COMPLETE
 LOG TOPS: Anhydrite 1690', Yates 2950', Seven
 Rivers 3240', Queen 3885', San Andres 4684',
 Glorieta 6105', Tubb 7360', Abo 8365'
 2-10-73 COMPLETION REPORTED

4-7-73 COMPLETION REPORTED

DEA
KROCH EXPLORATION CO.

Vacuum, N.
2 Miller "B" State

NM Sec 3, T17S, R34E
Page #2

"-5-72

Continued

Acid (8687-8742') 12,000 gals
Swbd 46 BF (70% oil) in 5 hrs

"-11-72

TD 8877'; PBD 8835'; TO Pmp

"-18-72

TD 8877'; PBD 8835'; TO Pmp

"-25-72

TD 8877'; PBD 8835'; COMPLETE

"-30-72

COMPLETION REPORTED

COUNTY	LEA	FIELD	Vedatum, N.	STATE	NM
OPR	MARATHON OIL CO.	API	10-025-35378		
NO	1	LEASE	State E-619 "A"	SERIAL	2-1-35 NM
	Sect 2, T17S, R34E	MAP			
	1980' EAT, 1980' FWL of Sgs	CO-ORD			
	4 ml N/buckeye	ELEV.			L.S.S
SPD	11-5-36	CMP	1-18-77	WELL CLASS:	INT D
CSG				FIN	D
	10 3/8" at 271' w/350 ex	FORMATION	DATUM	FORMATION	DATUM
	8 5/8" at 3241' w/1200 ex				
	4 1/2" at 8900' w/1150 ex				
		TD	8900' (ABO)	PBD	
IP (Abn) Perf. 8-88-8730' P 30 ROPD + 4 EW. Prod based on 24 hr test. GOR 338; Cty 33.6					
CONTR	4-150	OPR'S ELEV	40-3' CL	40-0' DE	PD 9000' RT

F.E. 11-1-76
(Abo)
11-9-76 Drlg 1776'
11-16-76 Drlg 3747' 1m
11-30-76 Drlg 8520'
12-7-76 ID 8900'; WOCU
12-14-76 ID 8900'; WOCU
1-4-77 ID 8900'; WOSP
Perf (Abo) @ 8688', 8689', 8694', 8695', 8696',
8719', 8720', 8721', 8722', 8726-30' w/1 SPF
Acid (8688-8730') 12,000 gals
Ppd 71 EO + 13 EW in 24 hrs (8688-8730')
1-31-77 ID 8900'; Complete
LOG IOPS: Yates 2905', Grayburg 3867', San Andres
4650', Glorieta 6074', Tubb 7390', Abo 8129'

2-1-35 NM

COUNTY LEA FIELD Vacuum, N. STATE NM 30-025-24220

OPR MARATHON OIL CO. MAP

1 Wainoco "E" 619 State A/C-B

Sec 2, T-17-S, R-34-E CO-ORD

660' FSL, 1980' FWL of Sec

Spd 8-17-72

Cmp 10-1-72

CSG & SX - TUBING

12 3/4" at 280' w/350 sx

8 5/8" at 3189' w/1200 sx

4 1/2" at 8900' w/1000 sx

LOGS EL GR RA IND HC A

TD 8900'

IP (Abo) Perfs 8627-8774' P 126 BOPD + trace wtr. Pot based on

24 hr test. GOR 789; Grav NR

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CONT. Marcum PROP DEPTH 8900' TYPE RT

DATE

F.R. 8-14-72; Opr's Elev. 4063' DF

PD 8900' RT (Abo)

Contractor - Marcum

8-21-72 TD 3190'; Rng 8 5/8" csg

8-28-72 Drlg. 6225' lm

9-5-72 Drlg. 8309' lm & sh

9-11-72 TD 8900'; Prep Run csg

Ran Logs to TD

9-18-72 TD 8900'; Swbg

Perf 8627-33', 8660-70', 8672-78', 8734-39',

8751-53', 8760-68', 8771-74'

Acid (8627-8774') 12,000 gals

Swbd 40 BO + 25 BLW in 11 hrs

9-25-72 TD 8900'; WO Elec

COUNTY SEA FIELD Vacuum, North STATE NY
OPR PENNZON COMPANY MAP
1 Mobil-State
Sec. 3, T-17-S, R-34-E CO. ORD
1211 EML 1874 EEL DE S-4. 31-11-1967
Std 2-19-67
Ctd 4-8-67 CLASS EL 1

31-11-67

CSG & SX - TUBING	FORMATION	DATUM	FORMATION	DATUM
13 3/8" 320' 350				
8 5/8" 3325' 670				
4 1/2" 10854' 1200				
LOGS EL GR RA IND HC A				

Approx:
80
ow,
th as to working

TD 10859' - PED 10814'
IF Lower Wolfcamp Perfs 10719-732' Flwd 452 BOPD. Pot. Based on
24 hr test thru 16.64" chk., TE 1150#, gravity 40., GOR 1921.

rs been consoli-

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CONT Lowe Drilg. Co. PROP DEPTH 11,000' TYPE RT
DATE

reverse side of
ion, unitization.
by the Commis-

S.R. 2-16-67
FD 11,000' - Penn.
Contr. - Lowe Drilg. Co.
2-20-67 Drilg. 295' RB
2-28-67 Drilg. 4415' lm.
3-6-67 Drilg. 6453' dolo.
3-14-67 Drilg. 8317' lm & sh.
3-20-67 Drilg. 9622' lm.
3-27-67 Drilg. 10812' lm & sh.
DST 10859-104', open 2 hrs 30 mins,
Rec 7801' gas in DP + 100' O&DM,
1 hr ESTP 846#, WF 56-69#,
1 hr 30 min ESTP 3126#, HI 5115-5039#.

CATION
the information con-
and complete to the
and belief.

Huddleston

lg. & Engr.

MPANY

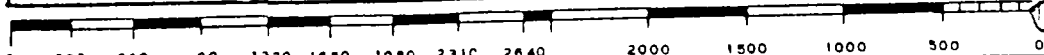
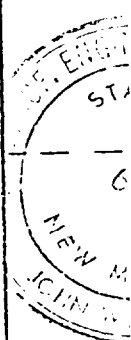
, 1967

st the well location
as plotted from field
veys made by me or
s, and that the same
to the best of my
f.

Date received
FEB. 9, 1967

Required for transmission to
and to be received

John W West



1. Outline the acreage dedicated to the subject well by color

Ground Level Elev.	4065.5
Producing Formation	Lower Wolfcamp
Feet from the	NORTH
Actual Footage Location of Well	1874
Section	3
Lease	MOBIL STATE
Range	34 EAST
Feet from the	EAST
Producing Formation	Lower Wolfcamp
Ground Level Elev.	4065.5

Form G-102
Supervisor's
Initials
Date

LEA Vacuum, North
PENNZOIL CO., #1 Mobil-State

NM

Sec. 3-17S-24E

Page #2

7-67

Cont.

DST 10187-263', open 4 hrs,
GTS 57 mins @ stab. rate of 8.74 MCFGPD,
Rec 20' HO&GO Drlg Fluid + 360' VHC&MCO
(Gravity 43.)

1 hr 30 min ISIP 2184#, FP 82-184#.
3 hr FSIP 3013#, HP 5128-5128#.

4-4-67

TD 10859', WOC.

DST 10635-705', open 3 hrs 30 mins,
GTS 6 mins @ stab. rate of 68.5 MCFGPD
Rec 910' oil + 90' filtrate wtr,
1 hr 30 min ISIP 3854#, FP 81-285#,
2 hr FSIP 3854#.

DST 10706-730', open 4 hrs 10 mins,
GTS 3 mins, OTS 5 mins,
Flwd 32.45 BO 1st hr thru 1/4" chk., SFP 900#;
Flwd 28.89 BO 2nd hr thru 1/4" chk.
Flwd 35.89 BO 3rd hr thru 3/8" chk., SFP 800#;
Flwd 31.68 BO 4th hr thru 1/4" chk., SFP 900#;
Rev out 26.19 BO

Rec 120' GCO below sub,
2 hr ISIP 3854#, FP 935-3255#,
2 hr FSIP 3854#, HP 5358-5358#.

4-10-67

TD 10859', PED 10814', WO Pot.
Barf @ 10719', 10724', 10725', 10732' W/2 SPI
Spotted 500 gals acid (10719-732')
Flwd 378 BO in 24 hrs thru 16/64" chk., FP 1150#,
Gravity 40., GOR 1820.

4-17-67

TD 10859', PED 10814', COMPLETE.
103 WOPS: Arhy 1650', Yates 2915', SA 4635',
Flor 6080', Tubb 7360', Abd 8030'.

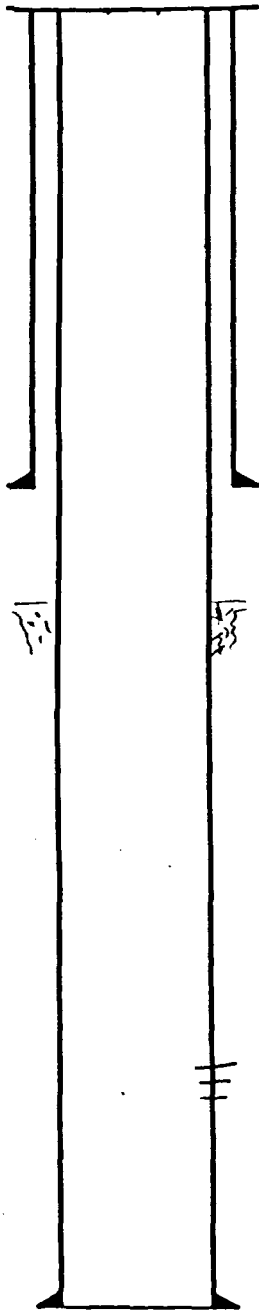
DATE 1-8-86 WELL NO. 1 LEASE Santa Fe "A" Com FIELD Vacuum Abo No.

LOCATION 660' FNL & 619' FWL
D-7-175-35E
Lea County, NM

SIGNED R.W. Petty

G.L. 4012'
D.F. 4023'
K.B. NA
ZERO NA

Phillips Petr. Co.



- 12 1/4" hole

- 8 5/8", 24 & 32# K55, STFC csg set @ 1795' w/
6505x cmt. Cmt circ.

- TOC @ 2850' by Temp. Survey.

- 7 7/8" hole

- Abo perfs: 8691-94, 8700-03, 31-34.

TD 8900'

- 5 1/2", 17, 15.5 & 14# K55, STFC csg
set @ 8900' w/ 26005x cmt.
TOC @ 2850' by temp. survey

WELL CLASS:	INT	D	FIN	DO
-------------	-----	---	-----	----

[illegible]

8720' (ABO)	PSO
-------------	-----

CONTR KKA OPR'S ELEV 4038' GL PD 9000' RE

8-4-15 NM

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U.S.G.S.
LOCAL OFFICE
OPERATOR

NEW MEXICO OIL CONSERVATION COMMISSION
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

4. Indicate Type of Lease
State ☒ Fee ☐
5. State Oil & Gas Lease No.
E 754

6. TYPE OF WELL
OIL WELL ☒ GAS WELL ☐ DRY ☐ OTHER ☐
7. TYPE OF COMPLETION
NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ OTHER ☐
Name of Operator
Sage Energy Company
Address of Operator
P. O. Drawer 3068, Midland, Texas 79702
Location of Well

7. Unit Agreement Name
"O"
8. Farm or Lease Name
Cities Service-State
9. Well No.
3
10. Field and Pool, or Willcat
North Vacuum (Abo)

11. LETTER O LOCATED 460' FEET FROM THE South LINE AND 1680' FEET FROM East
LINE OF SEC. 2 TWP. 17S RGE. 34E NMPM

12. County
Lea

13. Date Spudded 3-26-85 16. Date T.D. Reached 4-23-85 17. Date Compl. (Ready to Prod.) 6-3-85 18. Elevations (DF, RKB, RT, GR, etc.) 4045.5 GL 19. Elev. Casinghead
20. Total Depth 8789' 21. Plug Back T.D. 8769' 22. If Multiple Compl., How Many No 23. Intervals Drilled By Rotary Tools X Cable Tools
24. Producing Interval(s), of this completion - Top, Bottom, Name Abo 8626 to 8642 25. Was Directional Survey Made yes
26. Type Electric and Other Logs Run Compensated Neutron Gamma Ray 27. Was Well Cored no

CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
12 3/4"	34#	435'	15"	250 sxs Class "C"	
7"	24#	4903'	8 3/4"	1400 sxs Class "C"	
4 1/2"	11.60#	8789'	6"	180 sxs Class "H"	

LINER RECORD				30. TUBING RECORD			
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2 3/8"	8648'	none

28. Perforation Record (Interval, size and number)
8626 to 8642
29. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.
DEPTH INTERVAL 8626' - 8642' AMOUNT AND KIND MATERIAL USED 10,000 gals 15% NE FE acid

31. PRODUCTION
a. First Production 6-4-85 Production Method (Flowing, gas lift, pumping - Size and type pump) pump 1 1/4 X 22' Well Status (Prod. or Shut-in) producing
b. Date of Test 6-5-84 Hours Tested 24 Choke Size NA Prod'n. For Test Period 35 Oil - Bbl. 60 Gas - MCF TSTM Gas-Oil Ratio 1714
c. Tubing Press. Casing Pressure 50# Calculated 24-Hour Rate 35 Oil - Bbl. 60 Gas - MCF TSTM Water - Bbl. Oil Gravity - API (Corr.) 35
Disposition of Gas (Sold, used for fuel, vented, etc.) Sold Test Witnessed By

I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.
SIGNED Francis Halzgras TITLE Production Clerk DATE June 5, 1985

COUNTY IEA FIELD VACUUM, IS STATE IN 30 000 20000
 ORR AMINI CL. CFI. MAP
 1 Marathon - State
 Sec 12, T=17-S, R=34-E CO-ORD
 860' FNL, 660' FWL of sec
 Spd 12-24-70
 Ctp 2-10-71 CLASS EL - 660' 48"

FORMATION	DATUM	FORMATION	DATUM
CSG & SX - TUBING			
3 5/8" at 1672' w/1100 SX			
3 1/2" at 8680' w/1700 SX.			
LOGS EL GR RA IND HC A			

TD 8680

1 (-10) Perfs 8559-8603' F 150 gr. . Per. c s-c l. - br. l. l.
 CR 893, Grav 42.

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CONT MARYCUT PROP DEPTH 5' 0" TYPE D
 DATE

11-24-70, Apr's elev. 400'
 rd 8700' rd 8700'
 1-15-71 AMEND IEAIE NAME, formerly, reported
 redesignated.
 12-29-70 AMEND LOGAILON, formerly, reported
 620' FWL of sec
 1-2-71 Orig. 5030' wnh.
 1-11-71 Orig. 7207
 1-18-71 Orig. 8577
 1-1-71 EL 6680 ; Rng 10E
 2-1-71 EL 8680' ; WO comp. l. l.
 2-5-71 EL 8680' ; RSE
 Perfs 8559' ; 8600' ; 8701' ; 8702' ; 8703'
 8588 ; 8590' ; 8591' ; 8592' ; 8593' ; 8594'
 8601' ; 8602' ; 8603' w/1 11
 Add (8559-8603') 10,000 g l=

IEA Vacuum, N. NM Sec 12, T17S, R34E
AMINI OIL CORP. 1 Marathon - State Page #2

2-15-71 TD 8680'; COMPLETE
LOG TOPS: Yates 2920', Queen 3874',
San Andres 4643', Glorieta 6110', Tubb
7340', Abo 8050'
2-18-71 COMPLETION REPORTED

COUNTY IFA FIELD Vacuum, N. STATE NM 30-025-23-04

OPR AMINI OIL CORP. MAP

2 Marathon - State

Sec 12, T-17-S, R-34-E

CO-ORD

1980' FWL, 1780' FWL of Sec

Spd 2-15-71

CLASS

EL 4035E

Cmp 3-31-71

FORMATION

DATUM

FORMATION

DATUM

LOG & SX TUBING

8 5/8" at 1708' w/1300 SX

5 1/2" at 8650' w/1700 SX

LOGS EL GR RA IND HC A

TD 8675'; PBD 8638'

IP (Abo) Perf 8545-96' P 175 BOPD. Fc. based on 24 hr test.

GOR 637; Crsv 42.

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CONT. Ard
DATE

PROP DEPTH 8'00' TYPE E

F.R. 2-16-71; Opr's Elev. 4026' CL

PD 8700' RT (Abo)

Contractor - Ard

2-16-71

Drlg. 637'

2-23-71

Drlg. 4515'

3-1-71

Drlg. 6318'

3-9-71

Drlg. 8252' lm & dolo

3-15-71

TL 8675'; WD Completion

3-22-71

TD 8675'; WD Completion

3-29-71

TD 8675'; PBD 8638'; Swtg

Perf 8545-53', 8578-86', 8591-96' w/2 STF

Acid (8545-96') 10,000 gals

4-5-71

TD 8675'; PBD 8638'; COMPLETE

REV

ADD

4-1

4-1

Vacuum, N. NM Sec 12, T17S, R34E
2 Marathon - State Page #2

Continued

LOW TOPS: Yates 2920', Seven Rivers 3220',
Queen 3874', San Andres 4643', Clarieta
6110', Tubb 7340', Abo 8050'
COMPLETION REPORTED

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COUNTY	IEA	FIELD	Vacuum, N.	STATE	NM
OPR	AMINI, K. K.	APR	30-025-25207		
NO	3	LEASE	Marathon-State	SERIAL	3-2-17 NM
	Sec 12, T17S, R34E	MAP			
	2180' FNI, 660' FWL of Sec	CO-ORD			
	3 1/2 ml N/Buck-ye	ELEV			6.3
SPO	1-6-76	CMP	2-23-76	WELL CLASS	D
CSG				FIN	DO

12 3/4" at 390' w/450 sx
 8 5/8" at 3218' w/1000 sx
 4 1/2" at 8750' w/1050 sx

FORMATION	DATUM	FORMATION	DATUM
TO	8750' (ABO)	PBO	

IP (Abo) perfs 8542-84' P 160 BOED. Pot based on 24 hr test.
 GOR 1200; Grav 36

CONTR	KKA Drlg.	OPR'S ELEV	4030' GL	PD	8700' RT
-------	-----------	------------	----------	----	----------

	E.R. 1-12-76
	(Abo)
1-19-76	Drlg 6315'
1-27-76	Drlg 8435'
2-2-76	ID 8750'; WOCU
2-9-76	ID 8750'; WOCU
2-17-76	ID 8750'; Prep Acid
	Perf (Abo) 8542-84' w/12 shots (overall)
2-24-76	ID 8750'; Fpg Ld
	Acid (8542-84') 20,000 gals
3-1-76	ID 8750'; TO Pmp
3-8-76	ID 8750'; Complete
3-13-76	COMPLETION ISSUED

3-2-17 NM
 IC 30-025-70008-76

TE (Abn) Perfs 8564-8609' F 86 BOPD. Pot based on 24 hr test.
GOR 1050; gey 36

CONTR 723A OPR'S ELEV 4023' GL PD 8800' RT

F.R. 8-9-76
(Abo)
8-24-76 Drlg 4831'
9-3-76 Drlg 7060'
9-8-76 Drlg 8347'
9-14-76 TD 8790'; WOC
10-4-76 TD 8790'; WOCU
10-11-76 TD 8790'; WOSF
Perf (Abo) @ 8564', 8565', 8587', 8592', 8593',
8594', 8595', 8596', 8597', 8598', 8606', 8607',
8608', 8609' w/l SPI
Acid (8564-8609') 20,500 gals
Fpd 86 BO in 24 hrs, GOR 1050 (8564-8609')
10-25-76 TD 8790'; Complete
10-30-76 COMPLETION ISSUED

10-5-8 NM
IC 30-025-70137-76

NEW MEXICO OIL CONSERVATION COMMISSION
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5a. Indicate Type of Lease
State ☒ Fee ☐
5. State Oil & Gas Lease No.
E-754

7. Unit Agreement Name
COM
8. Farm or Lease Name
State-COM
9. Well No.
2
10. Field and Pool, or Wildcat
North Vacuum ABO

12. County
Lea

13. Elev. Casinghead
4045.1 G.L.
14. Date Spudded
6/17/75
15. Date T.D. Reached
7/6/75
16. Date Compl. (Ready to Prod.)
8/17/75
17. Elevations (DF, RKB, RT, GR, etc.)
4045.1 G.L.
18. Elev. Casinghead
4045.1 G.L.

19. Elev. Casinghead
4045.1 G.L.

20. Total Depth
8775
21. Plug Back T.D.
22. If Multiple Compl., How Many
23. Intervals Drilled By
Rotary Tools
Cable Tools
Yes
No

24. Producing Interval(s), of this completion - Top, Bottom, Name
8694'-8703.5' ABO
25. Was Directional Survey Made
No

26. Type Electric and Other Logs Run
Compensated Beutron Log
27. Was Well Cored
No

28. CASING RECORD (Report all strings set in well)
29. LINER RECORD
30. TUBING RECORD
31. PERFORATION RECORD (Interval, size and number)
32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

33. PRODUCTION
34. Disposition of Gas (Sold, used for fuel, vented, etc.)
35. LIST of Attachments
36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED
TITLE
DATE

STATE OF NEW MEXICO
September 18, 1975
676

at the well known
was plotted from the
veys made by me
n and that the sta
to the best of

Outline the acreage dedicated to the subject well by colored pencil or hatchure mark

4066	Vacuum Abo	North Vacuum Abo
660	South	460
P	17 South	34 East
	Yates State	Leo

K. K. Amiri

WELL LOCATION AND ACREAGE DEDICATION PLAT

UNITED STATES OF AMERICA

DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

ALL DISTANCES MUST BE FROM THE OUTER BOUNDARIES OF THE SECTION

U A

AMIRI, K. K.

Vacuum, N.

1 Yates State

Sec 9, T17S, R34E

NM

Page #2

12-17-75

12-20-75

ID 9044'; PFD 9036'; Complete

COMPLETION ISSUED

12-3-23 NM

IC 30 025 70043 75

MOBIL PRODUCING TEXAS & NEW MEXICO INC.
NORTH VACUUM ABO UNIT
WELL NOS. 131, 134, 135, 146, 152,
158, 160, 162, 164, 165, 170,
200, 201, 214, 224, 229 & 302
LEA COUNTY, NEW MEXICO

IX. Stimulation Program

Acidize with 5000 gals of 15% NE FE HCl + 5% by volume of
mutual solvent + ball sealers. The acid will be displaced
with fresh water.

UNICHEM INTERNATIONAL

707 NORTH LEECH

P.O.BOX 1499

HOBBS, NEW MEXICO 88240

COMPANY : MOBIL PRODUCING TX & NM

DATE : 08/13/85

FIELD, LEASE & WELL : BRIDGES STATE

SAMPLING POINT: WELL #11-W - SE4 SE4, Unit P, Sec. 22

DATE SAMPLED : 08/07/85

SPECIFIC GRAVITY = 1

TOTAL DISSOLVED SOLIDS = 544

PH = 7.31

		ME/L	MG/L
CATIONS			
CALCIUM	(CA)+2	3.8	76.1
MAGNESIUM	(MG)+2	1.6	17.4
SODIUM	(NA).CALC.	2.7	62.0

		ME/L	MG/L
ANIONS			
BICARBONATE	(HCO3)-1	4	244.
CARBONATE	(CO3)-2	0	0
HYDROXIDE	(OH)-1	0	0
SULFATE	(SO4)-2	1.1	53
CHLORIDES	(CL)-1	3	90

		ME/L	MG/L
DISSOLVED GASES			
CARBON DIOXIDE	(CO2)	NOT RUN	
HYDROGEN SULFIDE	(H2S)	NOT RUN	
OXYGEN	(O2)	NOT RUN	

IRON(TOTAL)	(FE)		.4
BARIUM	(BA)+2	0	.2
MANGANESE	(MN)	NOT RUN	

IONIC STRENGTH (MOLAL) = .011

SCALING INDEX	TEMP
	300
	86F
CARBONATE INDEX	1.97
CALCIUM CARBONATE SCALING	LIKELY
CALCIUM SULFATE INDEX	-17.
CALCIUM SULFATE SCALING	UNLIKELY

UNICHEM INTERNATIONAL

707 NORTH LEECH

P.O.BOX 1499

HOBBS, NEW MEXICO 88240

COMPANY : MOBIL PRODUCING TX & NM

DATE : 08/13/85

FIELD, LEASE & WELL : BRIDGES STATE

SAMPLING POINT: WATER SOURCE WELL #1 *WSW* - NE4 NW4, Unit C, Sec. 25

DATE SAMPLED : 08/07/85

SPECIFIC GRAVITY = 1

TOTAL DISSOLVED SOLIDS = 453

PH = 7.02

		ME/L	MG/L
CATIONS			
CALCIUM	(CA)+2	2.6	52.1
MAGNESIUM	(MG)+2	2.6	31.6
SODIUM	(NA), CALCD.	1.9	43.5
ANIONS			
BICARBONATE	(HCO3)-1	3	183.7
CARBONATE	(CO3)-2	0	0
HYDROXIDE	(OH)-1	0	0
SULFATE	(SO4)-2	1.1	53
CHLORIDES	(CL)-1	3	90
DISSOLVED GASES			
CARBON DIOXIDE	(CO2)	NOT RUN	
HYDROGEN SULFIDE	(H2S)	NOT RUN	
OXYGEN	(O2)	NOT RUN	
IRON(TOTAL)	(FE)		.3
BARIUM	(BA)+2	0	.2
MANGANESE	(MN)	NOT RUN	

IONIC STRENGTH (MOLAL) = .01

SCALING INDEX	TEMP
	30C
	86F
CARBONATE INDEX	1.53
CALCIUM CARBONATE SCALING	LIKELY
CALCIUM SULFATE INDEX	-18.
CALCIUM SULFATE SCALING	UNLIKELY

UNICHEM INTERNATIONAL

707 NORTH LEECH

P.O.BOX 1499

HOBBS, NEW MEXICO 88240

COMPANY : MOBIL PRODUCING TX & NM

DATE : 08/13/85

FIELD, LEASE & WELL : BRIDGES STATE - Phillips WSW

SAMPLING POINT: WATER SOURCE WELL #2 - SE4 NE4 Unit H, Sec. 24

DATE SAMPLED : 08/07/85

SPECIFIC GRAVITY = 1

TOTAL DISSOLVED SOLIDS = 427

PH = 7.46

		ME/L	MG/L
CATIONS			
CALCIUM	(CA)+2	1.2	24.0
MAGNESIUM	(MG)+2	2	24.3
SODIUM	(NA), CALCD.	3.5	81.1

		ME/L	MG/L
ANIONS			
BICARBONATE	(HCO3)-1	2.2	134.
CARBONATE	(CO3)-2	0	0
HYDROXIDE	(OH)-1	0	0
SULFATE	(SO4)-2	1.5	73.3
CHLORIDES	(CL)-1	3	90

		ME/L	MG/L
DISSOLVED GASES			
CARBON DIOXIDE	(CO2)	NOT RUN	
HYDROGEN SULFIDE	(H2S)	NOT RUN	
OXYGEN	(O2)	NOT RUN	

IRON(TOTAL)	(FE)		.8
BARIUM	(BA)+2	0	.1
MANGANESE	(MN)	NOT RUN	

IONIC STRENGTH (MOLAL) = 9E-03

SCALING INDEX	TEMP
	30C
	86F
CARBONATE INDEX	1.65
CALCIUM CARBONATE SCALING	LIKELY
CALCIUM SULFATE INDEX	-18.
CALCIUM SULFATE SCALING	UNLIKELY

MOBIL PRODUCING TEXAS & NEW MEXICO INC.
NORTH VACUUM ABO UNIT
WELL NOS. 131, 134, 135, 146, 152,
158, 160, 162, 164, 165, 170, 200,
201, 214, 224, 229 AND 302
LEA COUNTY, NEW MEXICO

This application was sent to the surface owner of the land on which these wells are located and to each lease operator within one-half mile radius of the well location.

OFFSET OPERATORS

Grace Petroleum Corp.
Post Office Drawer 2358
Midland, Texas 79702

Sage Energy Co.
Post Office Drawer 3068
Midland, Texas 79702

Koch Exploration Co.
Post Office Box 2256
Wichita, Kansas 67201

Phillips Petroleum
4001 Penbrook
Odessa, Texas 79762

Marathon Oil Co.
Post Office Box 2409
Hobbs, New Mexico 88240

Texaco, Inc.
Post Office Box 728
Hobbs, New Mexico 88240

Pennzoil Company
Post Office Box 2967
Houston, Texas 77001

SURFACE OWNER

New Mexico State Land Office
Post Office Box 1148
Santa Fe, New Mexico 87501

Mobil Producing Texas & New Mexico Inc.

January 6, 1986

PO BOX 633
MIDLAND, TEXAS 79702

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Grace Petroleum Corp.
Post Office Drawer 2358
Midland, Texas 79702

7.01
NOTICE OF APPLICATION FOR
WATER INJECTION WELLS
MOBIL PRODUCING TX. & N.M., INC.
NORTH VACUUM ABO UNIT
WELL NOS. 131, 134, 135, 146, 152,
158, 160, 162, 164, 165, 170, 200,
201, 214, 224, 229 AND 302
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

Gentlemen:

Mobil Producing Tx. & N. M., Inc. (MPTM) has made application to the Oil Conservation Division of New Mexico for authority to inject fresh water into a reservoir productive of oil or gas in the above captioned wells.

A copy of this application is furnished to you for your information.

Yours very truly,

C. C. Smith

al & Regulatory Manager

SENDER: Complete items 1, 2, 3 and 4. Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.	
1. ☒ Answer to whom, date and address of delivery.	
2. ☐ Restricted Delivery.	
3. Article Addressed to: Grace Petroleum Corp. P.O. Drawer 2358 Midland, TX 79702	
4. Type of Service: ☐ Registered ☐ Certified ☐ Express Mail	Article Number P547380695
Always obtain signature of addressee or agent and DATE DELIVERED.	
5. Signature of Addressee X <i>[Signature]</i>	
6. Signature of Agent X <i>[Signature]</i>	
7. Date of Delivery JAN 6, 1986	
8. Addressee's Address (ONLY if requested for the addressee) JAN 6, 1986 USPO	

DOMESTIC RETURN RECEIPT

Mobil Producing Texas & New Mexico Inc.

January 6, 1986

P.O. BOX 633
MIDLAND TEXAS 79702

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Koch Exploration Co.
Post Office Box 2256
Wichita, Kansas 67201

7.01
NOTICE OF APPLICATION FOR
WATER INJECTION WELLS
MOBIL PRODUCING TX. & N.M., INC.
NORTH VACUUM ABO UNIT
WELL NOS. 131, 134, 135, 146, 152,
158, 160, 162, 164, 165, 170, 200,
201, 214, 224, 229 AND 302
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

Gentlemen:

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A copy of this application is furnished to you for your information.

Yours very truly,

C. C. Smith

for G. E. Tate

tal & Regulatory Manager

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1. ☐ Show to whom, date and address of delivery.	
2. ☐ Restricted Delivery.	
3. Article Addressed to: Koch Exploration Co. P.O. BOX 2256 Wichita, Kansas 67201	Article Number P547380692
4. Type of Service: ☐ Registered ☐ Insured ☐ Certified ☐ COD ☐ Express Mail	
Always obtain signature of addressee or agent and DATE DELIVERED.	
5. Signature - Addressee X	
6. Signature - Agent X	
7. Date of Delivery	
8. Addressee's Address (ONLY if requested and fee paid)	

DOMESTIC RETURN RECEIPT

Mobil Producing Texas & New Mexico Inc.

January 6, 1986

P.O. BOX 533
MIDLAND TEXAS 79702

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Marathon Oil Co.
Post Office Box 2409
Hobbs, New Mexico 88240

7.01
NOTICE OF APPLICATION FOR
WATER INJECTION WELLS
MOBIL PRODUCING TX. & N.M., INC.
NORTH VACUUM ABO UNIT
WELL NOS. 131, 134, 135, 146, 152,
158, 160, 162, 164, 165, 170, 200,
201, 214, 224, 229 AND 302
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

Gentlemen:

Mobil Producing Tx. & N. M., Inc. (MPTM) has made application to the Oil Conservation Division of New Mexico for authority to inject fresh water into a reservoir productive of oil or gas in the above captioned wells.

A copy of this application is furnished to you for your information.

Yours very truly,

C. C. Smith

for G. E. Tate

tal & Regulatory Manager

SENDER: Complete items 1, 2, 3 and 4. Put your address in the "RETURN TO" space on the reverse side. Failure to do so will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.	
1. ☒ Show to whom, date and address of delivery.	
2. ☐ Restricted Delivery.	
3. Article Addressed to: Marathon Oil Co. P.O. Box 2409 Hobbs, NM 88240	
4. Type of Service: ☐ Registered ☐ Certified ☐ Express Mail	Article Number P547380691
Always obtain signature of addressee or agent and DATE DELIVERED.	
5. Signature - Addressee X	
6. Signature - Agent X	
7. Date of Delivery <i>Jan 8 1986</i>	
8. Addressee's Address (ONLY if requested and fee paid) <i>Marathon Oil / Gary M. Tate</i>	

Mobil Producing Texas & New Mexico Inc.

January 6, 1986

P.O. BOX 533
MIDLAND TEXAS 79702

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Pennzoil Company
Post Office Box 2967
Houston, Texas 77001

7.01
NOTICE OF APPLICATION FOR
WATER INJECTION WELLS
MOBIL PRODUCING TX. & N.M., INC.
NORTH VACUUM ABO UNIT
WELL NOS. 131, 134, 135, 146, 152,
158, 160, 162, 164, 165, 170, 200,
201, 214, 224, 229 AND 302
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

Gentlemen:

Mobil Producing Tx. & N. M., Inc. (MPTM) has made application to the Oil Conservation Division of New Mexico for authority to inject fresh water into a reservoir productive of oil or gas in the above captioned wells.

A copy of this application is furnished to you for your information.

Yours very truly,

C. C. Smith

for - G. E. Tate

Legal & Regulatory Manager

SENDER: Complete items 1, 2, 3 and 4. Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box (es) for service(s) requested.	
1. ☐ Show to whom, date and address of delivery.	2. ☐ Restricted Delivery.
3. Article Addressed to: <i>Pennzoil Company P.O. Box 2967 Houston, TX 77001</i>	
4. Type of Service: ☐ Registered ☐ Certified ☐ Express Mail	Article Number <i>P 547 380 696</i>
Always obtain signature of addressee or agent and DATE DELIVERED.	
5. Signature - Addressee <i>X</i>	6. Signature - Agent <i>X</i>
7. Date of Delivery <i>JAN 16 1986</i>	
8. Addressee's Address (ONLY if requested and fee paid)	

Mobil Producing Texas & New Mexico Inc.

January 6, 1986

P.O. BOX 533
MIDLAND, TEXAS 79702

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Sage Energy Co.
Post Office Drawer 3068
Midland, Texas 79702

7.01
NOTICE OF APPLICATION FOR
WATER INJECTION WELLS
MOBIL PRODUCING TX. & N.M., INC.
NORTH VACUUM ABO UNIT
WELL NOS. 131, 134, 135, 146, 152,
158, 160, 162, 164, 165, 170, 200,
201, 214, 224, 229 AND 302
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

Gentlemen:

Mobil Producing Tx. & N. M., Inc. (MPTM) has made application to the Oil Conservation Division of New Mexico for authority to inject fresh water into a reservoir productive of oil or gas in the above captioned wells.

A copy of this application is furnished to you for your information.

Yours very truly,

C.C. Smith

for - G. E. Tate
Environmental & Regulatory Manager

SENDER: Complete items 1, 2, 3 and 4. Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.	
1. ☐ Show to whom, date and address of delivery.	2. ☐ Restricted Delivery.
3. Article Addressed to: Sage Energy Co. P.O. Drawer 3068 Midland, TX 79702	
4. Type of Service: ☐ Registered ☐ Certified ☐ Express Mail	Article Number P547 380 697
Always obtain signature of addressee or agent and DATE DELIVERED:	
5. Signature - Addressee X	6. Signature - Agent X
7. Date of Delivery	8. Addressee's Address (ONLY if requested and fee paid)

Mobil Producing Texas & New Mexico Inc.

January 6, 1986

P.O. BOX 533
MIDLAND TEXAS 79702

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Phillips Petroleum
4001 Penbrook
Odessa, Texas 79762

7.01
NOTICE OF APPLICATION FOR
WATER INJECTION WELLS
MOBIL PRODUCING TX. & N.M., INC.
NORTH VACUUM ABO UNIT
WELL NOS. 131, 134, 135, 146, 152,
158, 160, 162, 164, 165, 170, 200,
201, 214, 224, 229 AND 302
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

Gentlemen:

Mobil Producing Tx. & N. M., Inc. (MPTM) has made application to the Oil Conservation Division of New Mexico for authority to inject fresh water into a reservoir productive of oil or gas in the above captioned wells.

A copy of this application is furnished to you for your information.

Yours very truly,

C. C. Smith

cc - G. E. Tate

Cal & Regulatory Manager

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1. ☐ Show to whom, date and address of delivery.	
2. ☐ Restricted Delivery.	
3. Article Addressed to: <i>Phillips Petroleum 4001 Penbrook Odessa, TX 79762</i>	
4. Type of Service: ☐ Registered ☐ Certified ☐ Express Mail	Article Number <i>P547380716</i>
Always obtain signature of addressee <u>or</u> agent and DATE DELIVERED:	
5. Signature - Addressee <i>[Signature]</i>	
6. Signature - Agent <i>[Signature]</i>	
7. Date of Delivery <i>1-8-86</i>	
8. Addressee's Address (ONLY if requested and fee paid)	

DOMESTIC RETURN RECEIPT

Mobil Producing Texas & New Mexico Inc.

January 6, 1986

P.O. BOX 533
MIDLAND, TEXAS 79702

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Texaco, Inc.
Post Office Box 728
Hobbs, New Mexico 88240

7.01
NOTICE OF APPLICATION FOR
WATER INJECTION WELLS
MOBIL PRODUCING TX. & N.M., INC.
NORTH VACUUM ABO UNIT
WELL NOS. 131, 134, 135, 146, 152,
158, 160, 162, 164, 165, 170, 200,
201, 214, 224, 229 AND 302
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

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Yours very truly,

C. E. Smith

for - G. E. Tate

Legal & Regulatory Manager

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1. ☒ Follow to whom, date and address of delivery.	
2. ☐ Restricted Delivery.	
3. Article Addressed to: <i>Texaco, Inc. P.O. Box 728 Hobbs, NM 88240</i>	Article Number <i>P547380694</i>
4. Type of Service: ☐ Registered ☐ Insured ☐ Certified ☐ COD ☐ Express Mail	
Always obtain signature of addressee or agent and DATE DELIVERED.	
5. Signature - Addressee <i>X Bill Rayburn</i>	
6. Signature - Agent <i>X</i>	
7. Date of Delivery <i>JAN 8 1986</i>	
8. Addressee's Address (ONLY if registered and fee paid) <i>Wm</i>	

DOMESTIC RETURN RECEIPT

Mobil Producing Texas & New Mexico Inc.

January 6, 1986

P.O. BOX 533
MIDLAND TEXAS 79702

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

New Mexico State Land Office
Post Office Box 1148
Santa Fe, New Mexico 87501

7.01
NOTICE OF APPLICATION FOR
WATER INJECTION WELLS
MOBIL PRODUCING TX. & N.M., INC.
NORTH VACUUM ABO UNIT
WELL NOS. 131, 134, 135, 146, 152,
158, 160, 162, 164, 165, 170, 200,
201, 214, 224, 229 AND 302
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

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Yours very truly,

C.C. Smith

tal & Regulatory Manager

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1. ☐ Show to whom, date and address of delivery.	2. ☐ Restricted Delivery.
3. Article Addressed to: New Mexico State Land Office P.O. Box 1148 Santa Fe, NM 87501	
4. Type of Service: ☐ Registered ☐ Certified ☐ Insured ☐ COD ☐ Express Mail	Article Number P 547 380 715
Always obtain signature of addressee or agent and DATE DELIVERED.	
5. Signature of Addressee X <i>Horacio Mappinas</i>	6. Signature - Agent X
7. Date of Delivery JAN 9 1986	
8. Addressee's Address (ONLY if requested and fee paid)	

DOMESTIC RETURN RECEIPT

Affidavit of Publication

STATE OF NEW MEXICO)
) ss.
COUNTY OF LEA)

Joyce Clemens being first duly sworn on oath deposes and says that he is **Adv. Director** of THE LOVINGTON DAILY LEADER, a daily newspaper of general paid circulation published in the English language at Lovington, Lea County, New Mexico; that said newspaper has been so published in such county continuously and uninterruptedly for a period in excess of Twenty-six (26) consecutive weeks next prior to the first publication of the notice hereto attached as hereinafter shown; and that said newspaper is in all things duly qualified to publish legal notices within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico.

That the notice which is hereto attached, entitled

Application For Authorization To

Inject

and numbered in the
..... Court of Lea
County, New Mexico, was published in a regular and
entire issue of THE LOVINGTON DAILY LEADER and
not in any supplement thereof, once each week on the
same day of the week, for **one (1)**
consecutive weeks, beginning with the issue of
January 9, 19 **86**
and ending with the issue of
....., 19.....

And that the cost of publishing said notice is the
sum of \$ **19.61**

which sum has been (Paid) ~~assessed~~ as Court Costs

Joyce Clemens
Subscribed and sworn to before me this **14th**

day of **January**, 19**86**

Wm. Jean Serier
Notary Public, Lea County, New Mexico

My Commission Expires **Sept. 28**, 19 **86**

LEGAL NOTICE APPLICATION FOR

AUTHORIZATION TO INJECT

1. Mobil Producing Tx. & N.M. Inc,
P.O. Box 633, Midland, Texas 79702

Attention: G. E. Tate 915/688-1776
will apply for permission to inject
Fresh Water into the following
well/wells for the purpose of: Secondary Recovery.

2. Well Name and Number:
North Vacuum Abo Unit No.131
790' FNL & 1980' FEL
Sec. 10, Unit B, 17-S, 34-E

North Vacuum Abo Unit No.134
660' FNL & 790' FWL
Sec. 12, Unit L, 17-S, 34-E

North Vacuum Abo Unit No.135
660' FNL & 1980' FSL
Sec. 11, Unit L, 17-S, 34-E

North Vacuum Abo Unit No.146
534' FNL & 2134' FEL
Sec. 14, Unit B, 17-S, 34-E

North Vacuum Abo Unit No.152
780' FNL & 2135' FEL
Sec. 13, Unit B, 17-S, 34-E

North Vacuum Abo Unit No.158
1795' FSL & 1980' FEL
Sec. 12, Unit J, 17-S, 34-E

North Vacuum Abo Unit No.160
660' FNL & 1780' FEL
Sec. 12, Unit B, 17-S, 34-E

North Vacuum Abo Unit No. 162
1980' FSL & 2180' FEL
Sec. 11, Unit J, 17-S, 34-E

North Vacuum Abo Unit No.164
660' FNL & 1980' FEL
Sec. 15, Unit B, 17-S, 34-E

North Vacuum Abo Unit No.165
660' FNL & 860' FWL
Sec. 13, Unit D, 17-S, 34-E

North Vacuum Abo Unit No.170
660' FNL & 740' FWL
Sec. 14, Unit D, 17-S, 34-E

North Vacuum Abo Unit No.200
1980' FSL & 660' FWL
Sec. 2, Unit L, 17-S, 34-E

North Vacuum Abo Unit No. 201
1980' FSL & 1980' FEL
Sec. 10, Unit J, 17-S, 34-E

North Vacuum Abo Unit No.214
790' FNL & 790' FWL
Sec. 11, Unit D, 17-S, 34-E

North Vacuum Abo Unit No.224
745' FNL & 1980' FEL
Sec. 11, Unit B, 17-S, 34-E

North Vacuum Abo Unit No.229
2000' FSL & 660' FWL
Sec. 10, Unit L, 17-S, 34-E

North Vacuum Abo Unit No.302
1980' FSL & 1980' FEL
Sec. 3, Unit J, 17-S, 34-E

3. Formation Name: North Vacuum
Abo
Injection Interval: 8657' to 8159'
Maximum Injection Rate: 600
BBL/day/well
Maximum Pressure: 4,350 psi

4. Interested parties, who can show
that they are adversely affected by
this application, must file objections
or requests for hearing with the
Energy and Minerals Department,
Oil Conservation Division, P.O. Box
2088, Santa Fe, New Mexico 87501
within 15 days after this publication.

Published in the Lovington Daily
Leader January 9

Mobil Producing Texas & New Mexico Inc.

January 20, 1986

P.O. BOX 633
MIDLAND, TEXAS 79702

County Clerk
Ms. Pat Snipes
Post Office Box 1507
Lovington, New Mexico 88260

7.01
NOTICE OF APPLICATION FOR
WATER INJECTION WELLS
MOBIL PRODUCING TX. & N.M., INC.
NORTH VACUUM ABO UNIT
WELLS NOS. 131, 134, 135, 146,
152, 158, 160, 162, 164, 165, 170,
200, 201, 214, 224, 229 & 302
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

Dear Ms. Snipes:

Mobil Producing Tx. & N.M., Inc. (MPTM) has made application to the Oil Conservation Division of New Mexico for authority to inject fresh water into a reservoir productive of oil or gas in the above captioned wells.

The Oil Conservation Division requires that the enclosed application be sent to you for public information notice in the county in which the wells are located. Please post the attached application as you desire.

Very truly yours,

G. E. Tate

for -

G. E. Tate
Environmental & Regulatory Manager

CCS/dwc

Attachments

cc: Oil Conservation Division (w/attach)

A:M6020DCE.CCS



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE
January 7, 1986

TONEY ANAYA
GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88240
(505) 393-6161

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

RE: Proposed:

MC	_____
DHC	_____
NSL	_____
NSP	_____
SWD	_____
WFX	_____
PMX	_____ X _____

Gentlemen:

I have examined the application for the:

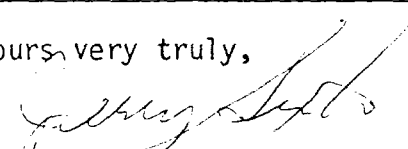
Mobil Prod.TX. & N.M.Inc. North Vacuum Abo Unit #121,129, 139, 142,143,149,155,163,203,204,
Operator Lease & Well No. Unit S-T-R 206,209, & 230

and my recommendations are as follows:

David--I feel this flood has been looked at before so I'm going to pass on these.

If your records do not show this, let me know--J.S.

Yours very truly,


Jerry Sexton
Supervisor, District 1

/mc



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

TONEY ANAYA
GOVERNOR

November 17, 1986

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

Mobil Producing Texas &
New Mexico, Inc.
P. O. Box 633
Midland, Texas 79702

Attn: M. E. Sweeney

Re: Injection Pressure Increase
North Vacuum Abo Ut
Lea County, New Mexico

Dear Sir:

Reference is made to your request of October 16, 1986 to increase the surface injection pressure on five wells within the North Vacuum Abo Unit. This request is based on step rate tests conducted on the wells during September and October, 1986. The results of the test have been reviewed by my staff and we feel an increase in injection pressure on these wells is justified at this time.

You are therefore authorized to increase your surface injection pressure on the following wells:

<u>Well & Location</u>	<u>Maximum Injection Surface Pressure</u>
NVAU Well No. 156 1893 FSL & 1800 FEL Unit J, Section 23	2485 PSIG
NVAU Well No. 203 660 FNL & 1780 FEL Unit B, Section 22	2205 PSIG
NVAU Well No. 209 1980 FSL & 1780 FEL Unit J, Section 22	2771 PSIG
NVAU Well No. 211 2054 FSL & 2162 FEL Unit J, Section 24	2998 PSIG

NVAU Well No. 302
1980 FSL & 1980 FEL
Unit J, Section 3

3108 PSIG

All located in Township 17 South, Range 34 East, NMPM,
Lea County, New Mexico.

The Division Director may rescind this injection
pressure increase if it becomes apparent that the injected
water is not being confined to the injection zone or it is
endangering any fresh water aquifers.

Sincerely,

A handwritten signature in black ink, appearing to read "R. L. Stamets", with a long horizontal flourish extending to the right.

R. L. STAMETS
Director

RLS/DRC/et

cc: Oil Conservation Division - Hobbs
D. McDonald
D. Catanach
PMX-140
PMX-138
WFX-557