

HEARD BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION

ON BEHALF OF:

STRATA PRODUCTION COMPANY

**HIGH ANGLE/HORIZONTAL DIRECTIONAL DRILLING PILOT PROJECT,
SPECIAL OPERATING RULES THEREFOR, A NON-STANDARD
OIL PRORATION UNIT, AND A SPECIAL PROJECT ALLOWABLE**

CASE No. 11295

JUNE 1, 1995

BEFORE EXAMINER CATANACH OIL CONSERVATION DIVISION <u>Strata</u> EXHIBIT NO. <u>1</u> CASE NO. <u>11295</u>
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**PECOS PETROLEUM ENGINEERING, INC.
ROSWELL, NEW MEXICO**

**STRATA PRODUCTION COMPANY
SUNRISE HORIZONTAL WELL PROJECT
SECTION 21-T7S-R34E
ROOSEVELT COUNTY, NEW MEXICO**

CASE No. 11295

JUNE 1, 1995

Strata Production Company seeks approval to initiate a high angle/ horizontal directional drilling project from the existing plugged and abandoned Murphy Operating Corporation Sunrise Federal #1 (originally the Reading and Bates Petroleum R & B Federal "21" #2), located 1980' FNL & 660' FEL of section 21-T7S-R34E. The well will be kicked off at +/- 4170' and drilled with a 300 ft. radius curve to be horizontal at 4770' in the bottom of the San Andres P-2 porosity. The horizontal section will be drilled due east 2,000 ft. through the P-2 porosity.

Three proration units will be developed by drilling this well horizontally, the SE/NE of section 21 and the S/2 NW/4 of section 22-T7S-R34E. This will form a nonstandard 120-acre oil spacing and proration unit for the Undesignated Chaveroo-San Andres Pool. An increased allowable of 240 barrels of oil per day is requested, since this well will combine three 40 acre proration units, with a statewide allowable of 80 barrels of oil per day each.

The project area covers the E/2 of section 21 and the W/2 of section 22-T7S-R34E, 640 acres MOL. This corresponds to the area contained in the federal oil and gas lease, number NM-84732. Strata seeks the promulgation of special operating rules and procedures, including the designation of a target window such that the horizontal or producing portion of the wellbore shall be no closer than 330 feet to any boundary of the project area. Further, all offset operators and lease owners were determined from lease ownership maps and public records and notified by Certified Mail of the planned horizontal project.

The planned reentry candidate had a show of oil on a DST of the P-2 zone plus good log shows. Geological interpretation indicates a "high" located east of the existing location, with an increase in structure of +/- 50'. By drilling horizontally through the main producing interval, fracture systems are anticipated to be encountered. These fracture systems should provide the necessary permeability necessary to develop commercial production from this interval.

Once the horizontal section is completed, 5 1/2" casing will be set, with a formation packer shoe, in the top of the P-1 zone at approximately 4340' TVD. This will allow production from the P-1 and P-2 zones, while eliminating water production from zones above the P-1 interval.

The project area is located approximately 8 miles west-northwest of Milnesand, New Mexico.

Lowe Ld. Co. etal
D.W. Brown

J.L. McClellan
6-1-2003
90909

Gart.
TD5000
D/A 4-14-67

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Permian
F.S.

Yates Pet. etal
6-1-57
89062
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U.S., M.I.
D.W. Brown(S)

U.S.

Mildred Fielder(S)

U.S.

(S)

U.S., M.I.
D.W. Brown(S)

Yates Pet. etal
4-1-93
V 2559
3750

J.L. McClellan
6-1-2003
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J.L. McClellan
6-1-2003
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Yates Pet. etal.
8-1-94
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J.L. McClellan
6-1-2003
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U.S., M.I.

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Yates Pet. etal
3-1-94
VA-203 1610

D.W. Brown(S)

J.L. McClellan
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Wilson
Cuccia Fed.
TD4887
Joyce Anderson
Joan Ashabranner
W.A. Strawn

M. H. Baxter
Smelt. St.
TD4613
D/A 2-13-66

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U.S.

Clinton Oil
HBP
0142393

Murphy Oper.
6-1-95
84732
150⁰⁰

Don Opp

U.S., M.I. REFFed
D.W. Brown(S) TD4608

Seth
Alston, Esq
Fred
Hender
son

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JEM Pet.
Dilly
TD4708
J&M Pet.
T.E. Davis, Jr.
M.E.E. H.H.,
Paul Davis

Murphy Oper.
6-1-95
84732
150⁰⁰

U.S.

U.S.

J.C. Ainsworth
Exaler Howard

M.M. Wilson
Carol
TD10061
D/A 1-4-70
J.C.
Ainsworth
Exaler Howard

Seth
Alston

Don C
Mary Dav
Leon E

E.R.
Bruno, etal
1-1-93
VA-142
2313

Murphy Oper
6-1-95
84733
150⁰⁰

U.S.

Bi-State Loans
11-5-91

M.R. Antweil
Sample
TD4690
D/A 3-30-67

Staun
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JENNIFER CHAVAROO
(SA) UNIT

T.E. Davis, Jr.
M.E., H.H., E.
Paul Davis

Sabine Roy, M.I.
W.H. Harding
Frank Goodwin, etal

J.C. Ainsworth
Exaler Howard
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C.R. Yador 1/4
Jones Robinson Co.

Kerr, McGee
Davis
E1 4267
TD 4665
SA 3700
D/A 5-15-58
M.W. Howard 1/2

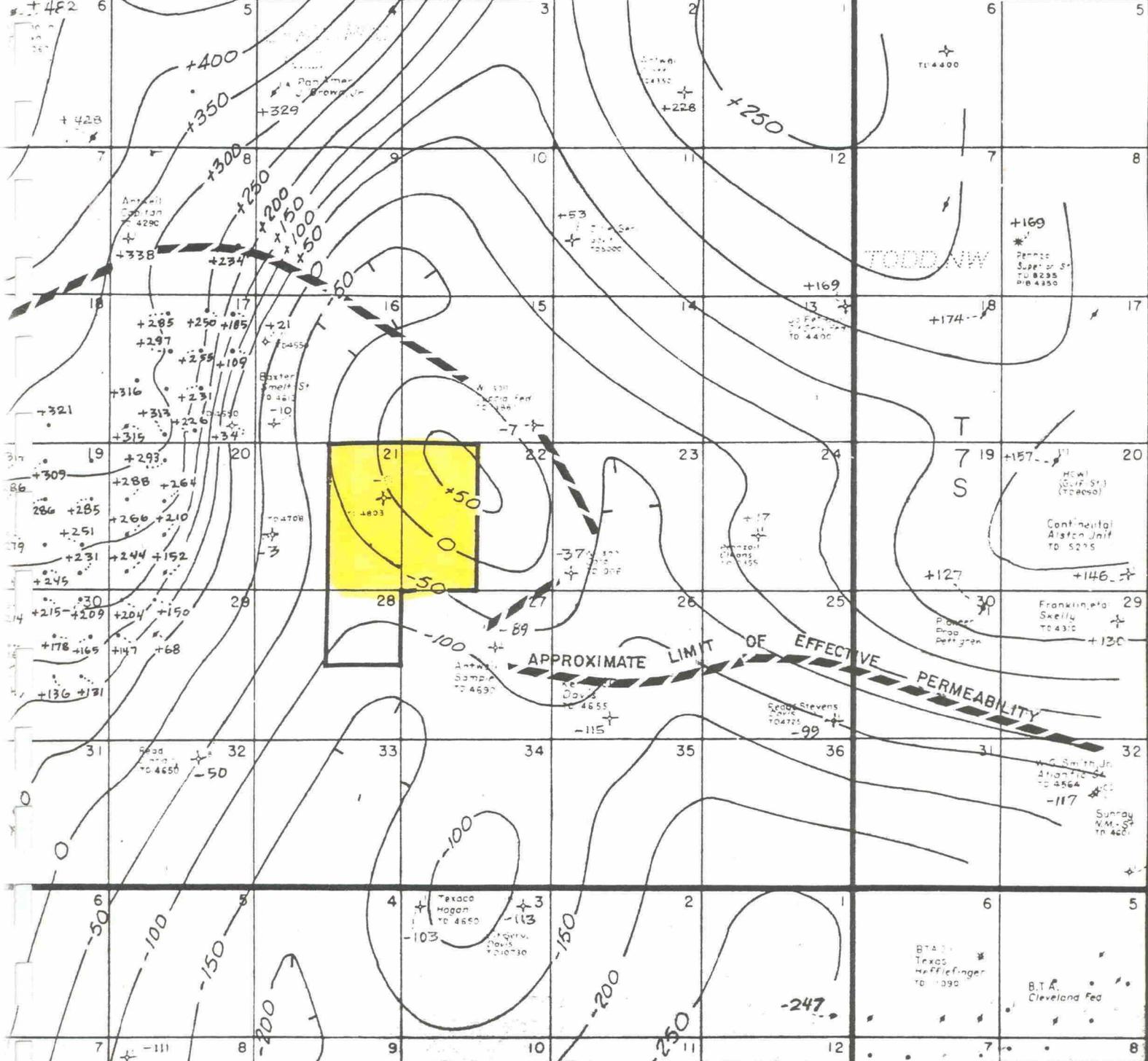
H.H.
M.W.

LAND OWNERSHIP MAP
PAGE 1

C.S.
Fitzgera
Mary Youi
W.H. Hard.

T.E. Davis, Jr.

Reed
Inclair



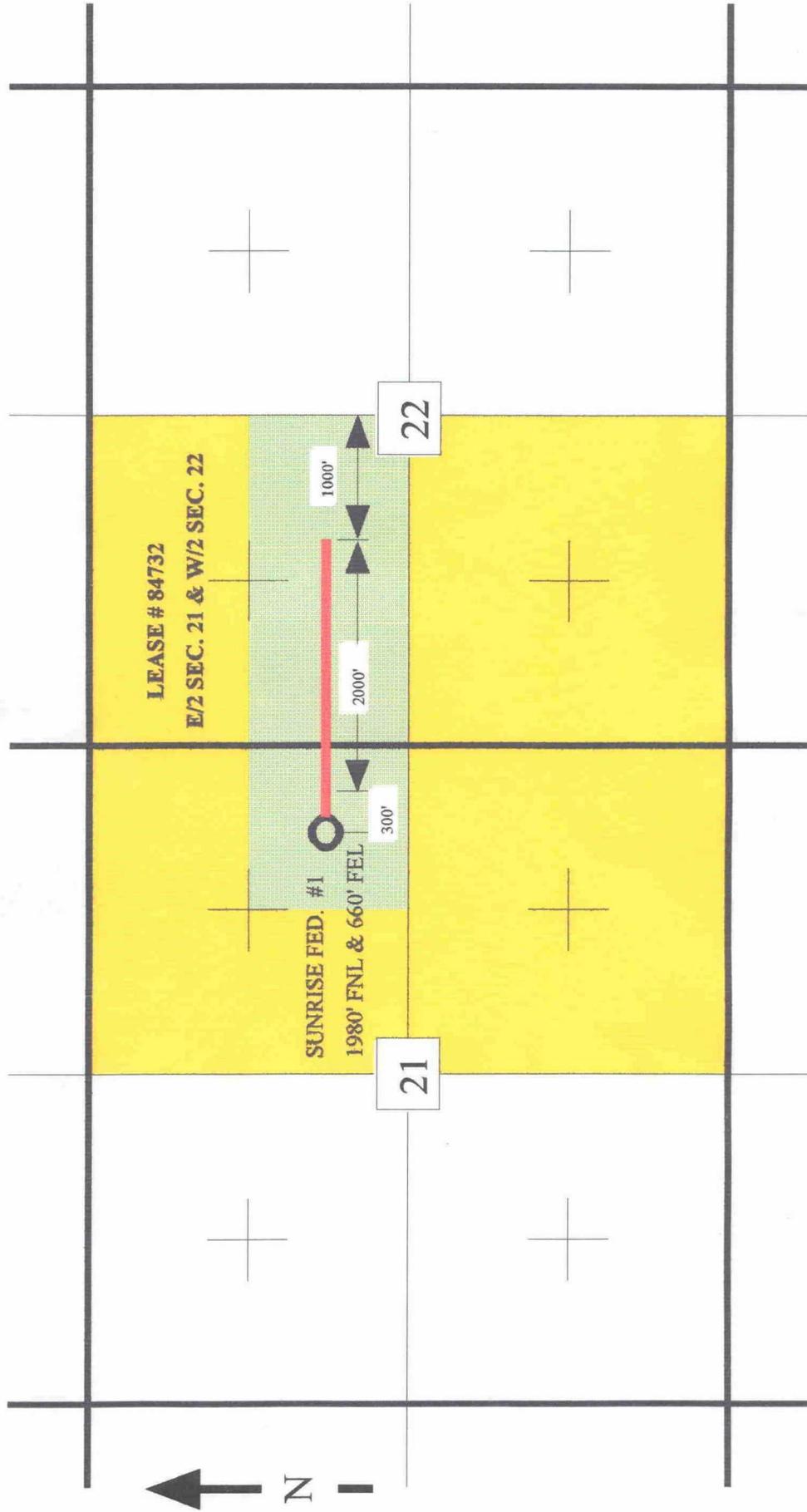
MURPHY OPERATING CORPORATION
 SUNRISE-EAST CHAVEROO SAN ANDRES PROSPECT
 ROOSEVELT COUNTY, NEW MEXICO
SUBSURFACE STRUCTURAL MAP
 CONTOUR HORIZON: TOP OF ANHYDRITE BED ABOVE I'
 P-I ZONE OF SAN ANDRES FM.
 CONTOUR INTERVAL: 50 FEET
 SCALE: 1 INCH = 5000 FEET

GEORGE L. SCOTT, JR.
 MARK B. MURPHY

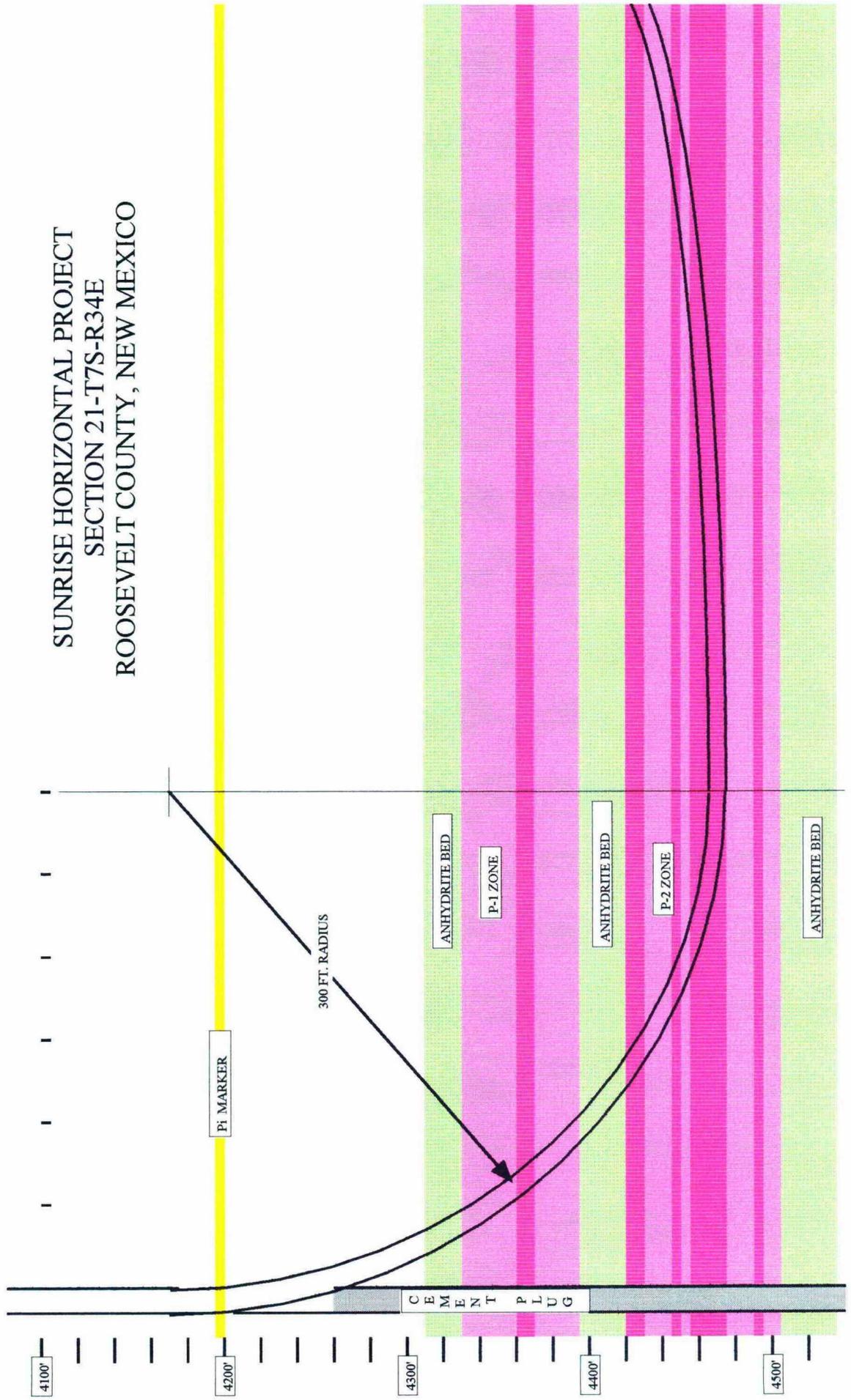
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SUNRISE HORIZONTAL PROJECT

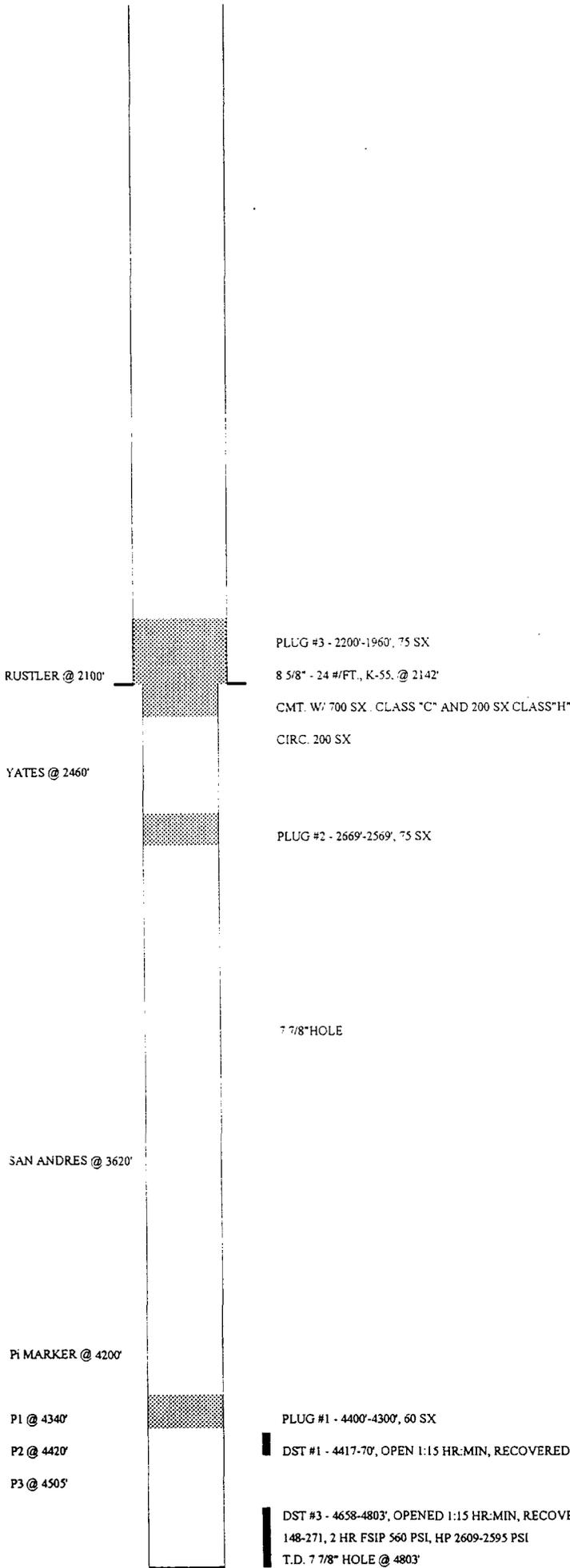
T-7S-R34E



SUNRISE HORIZONTAL PROJECT
SECTION 21-T7S-R34E
ROOSEVELT COUNTY, NEW MEXICO



STRATA PRODUCTION COMPANY
SUNRISE FEDERAL #1
1980' FNL & 660' FEL
SECTION 21-T7S-R34E
ROOSEVELT COUNTY, N. M.
LEASE No.: NM-84732
 (FORMERLY READING & BATES PET. R & B FED. #2-21)
SPUD DATE: 8/14/81



PLUG #3 - 2200'-1960', 75 SX
 8 5/8" - 24 #/FT., K-55, @ 2142'
 CMT. W/ 700 SX . CLASS "C" AND 200 SX CLASS"H"
 CIRC. 200 SX

PLUG #2 - 2669'-2569', 75 SX

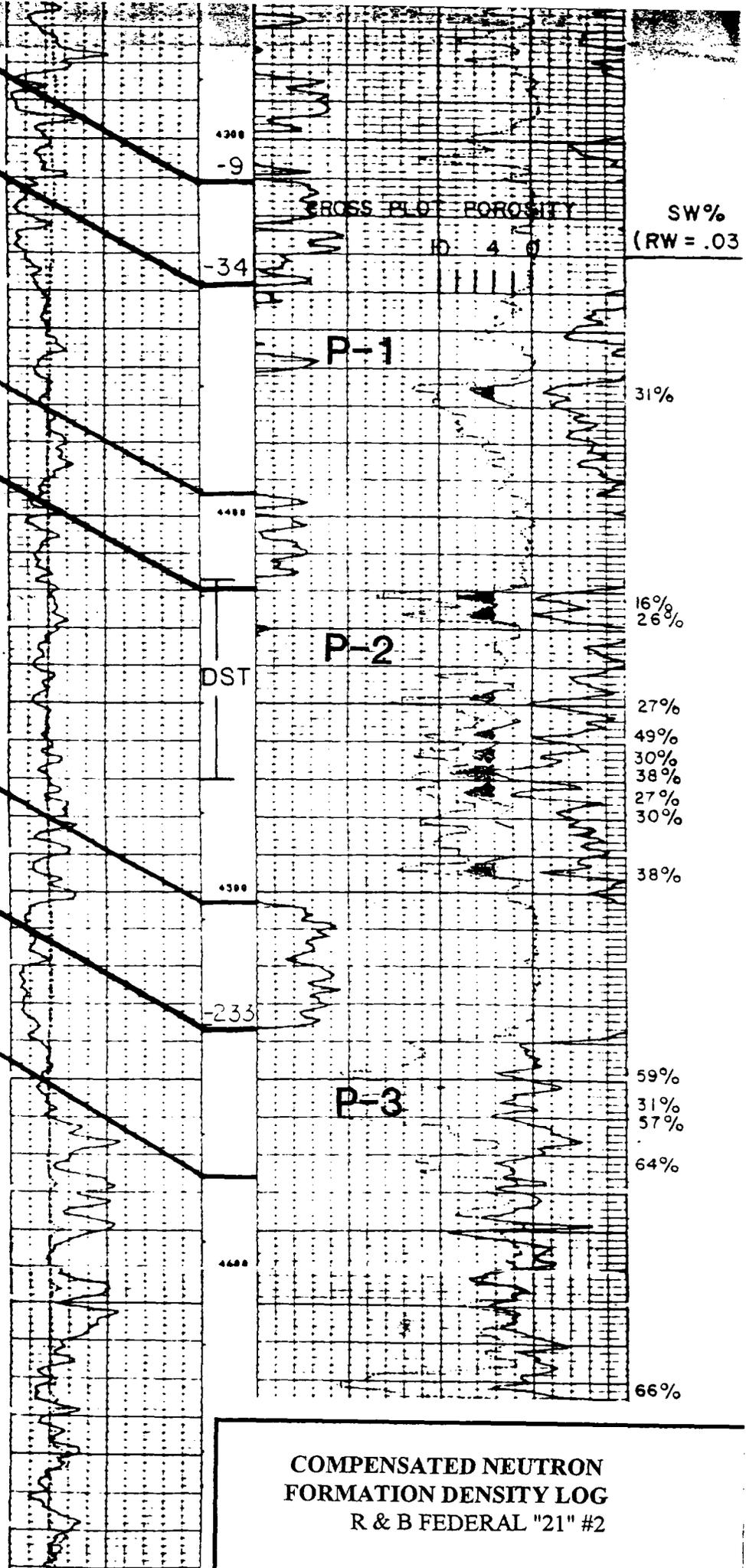
7 7/8" HOLE

PLUG #1 - 4400'-4300', 60 SX
 DST #1 - 4417-70', OPEN 1:15 HR-MIN, RECOVERED 1300' SO&GCM, 30 MIN I.S.I.P. 1484 PSI, FP 143-973 PSI, 2 HR. FSIP 1493, HYD. 2488-2483 PSI
 DST #3 - 4658-4803', OPENED 1:15 HR-MIN, RECOVERED 180' DRILLING FLUID + 220' SULPHUR WATER, 30 MIN ISIP 1547 PSI, FP 148-271, 2 HR FSIP 560 PSI, HP 2609-2595 PSI
 T.D. 7 7/8" HOLE @ 4803'

WELLBORE DIAGRAM

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DST #1 (Upper San Andres) 4417-4470',
 no cushion, 15 min. pre-flow, 30 min.
 shut-in, 60 min. final flow, 120 min. final shut-in.
 I.H.P. 2488#, I.F.P. 143# End I.F.P.
 392# I.S.I.P. 1484#, F.F.P. 422#,
 Er. FFP 973# F.S.I.P. 1493#, F.H.P.
 241#.
 Recovered 1300' slightly oil & gas
 cut. Mud & no gas.



COMPENSATED NEUTRON
 FORMATION DENSITY LOG
 R & B FEDERAL "21" #2