

STATE OF NEW MEXICO  
DEPARTMENT OF ENERGY AND MINERALS  
OIL CONSERVATION DIVISION

MARCH 26, 1980

EXHIBITS

TENNECO OIL COMPANY  
1980 BLOOMFIELD AREA DRILLING PROGRAM  
WELL SUMMARY

CHACRA-MESA VERDE-DAKOTA WELLS

<u>WELL</u>	<u>LOCATION</u>
1. Marquis G. Eaton A1E	NE-25-29-11
2. Elvin J. Payne A1E	SW-19-29-10
3. Sullivan Frame Gas A1E	NE-30-29-10
4. Sullivan Gas A1E	SW-25-29-11
5. Valdez Gas A1E	NE-24-29-11

CHACRA-MESA VERDE WELLS

<u>WELL</u>	<u>LOCATION</u>
1. Bunce Com 1	NW-29-29-10
2. Eaton Com B-1	SW-25-29-11
3. Bruce Sullivan Com B-1	NW-25-29-11
4. Sullivan Frame Com B-1	NW-30-29-10
5. Valdez Com B-1	SE-24-29-11

REGULATORY EXAMINER STAMETS  
OIL CONSERVATION DIVISION

EXHIBIT NO. 1

FILE NO. 6847

DATE 3/21/80

BY

TYPE LOG  
**CHACRA FM.**

GETTY OIL COMPANY  
HANLEY B# 1  
SW/4 SEC. 18, T29N-R10W  
SAN JUAN COUNTY, NEW MEXICO

IPF: 791 MCFD  
48/64 CK  
PERF: 2932-38  
SWFR 21,000 GALS.  
30,000 LBS. SAND  
TP 46, CP 290, GTY 60

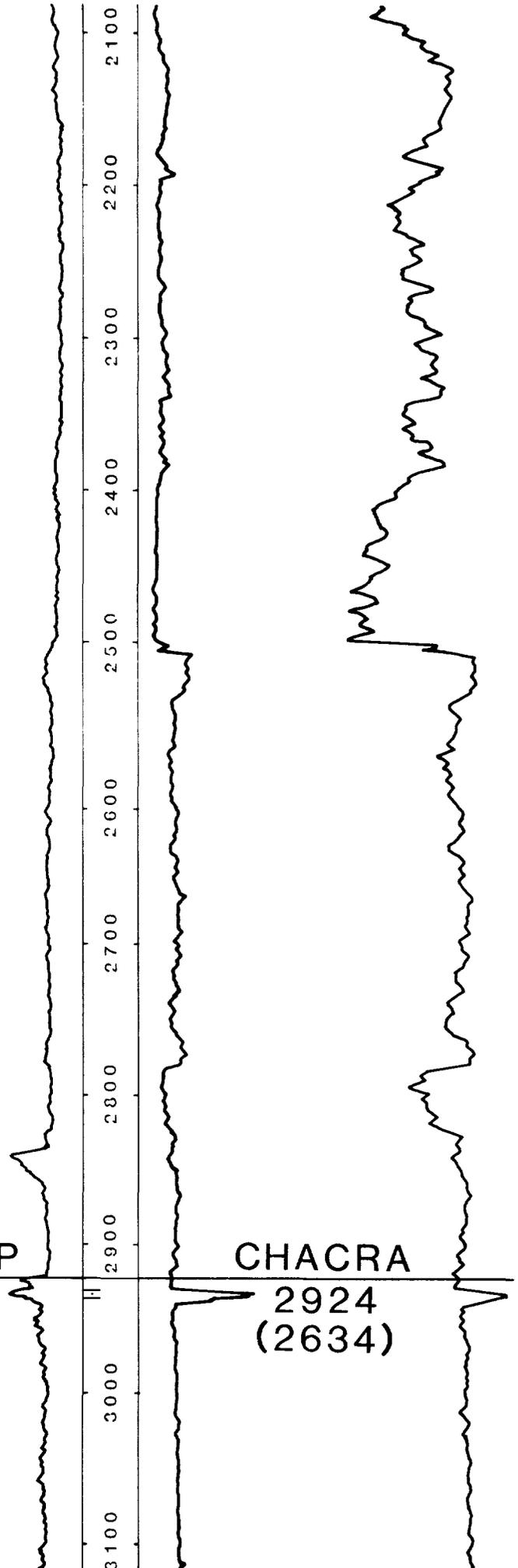
DATUM

TOP

CHACRA

2924  
(2634)

BEFORE EXAMINED STRIP OIL CONSERVATION DIVISION
EXHIBIT NO. <u>4</u>
CASE NO. <u>6847</u>
Checked by _____
Reading Date _____



RPT-ASL

358

U.S. PASSPORT AUTHORITY  
CINCINNATI AIRPORT

RPT DATE 09 15 79  
ANAL DATE 09 17 79

*Getty Ch.*  
METER LABORATORY  
11111 11111

11111 11111  
11111 11111

TYPE CODE	SAMPLE DATE	REF. DATE	UNIT	SCALE	NET WEIGHT	WEIGHT
00	09 15 79	05 19 79		1	0.000*	0.000
			NORMAL			
			MOLE			0.000
C 3 2			00.01			0.000
H 2 5			00.00*			0.000
N2			00.27			0.000
METHANE			00.07			0.000
ETHANE			07.10			0.000
PROPANE			01.01			0.000
ISO-BUTANE			00.47			0.000
NORM-BUTANE			00.02			0.000
ISO-PENTANE			00.03			0.000
NORM-PENTANE			00.10			0.000
HEXANE PLUS			00.01			0.000
TOTALS			100.00			0.000

SPECIFIC GRAVITY

0.00

MIXTURE HEATING VALUE

(BTU/LF @ 14.73 PSIA, 60 DEGREE F, HV)

1173

RATIO OF SPECIFIC HEATS

1.00

\* NO TEST SECURED FOR DETERMINATION M.S. CONTROL

EXAMINER'S SIGNATURE  
 DATE OF EXAMINATION  
 ANALYST NO. 9  
 6847

**ILLEGIBLE**

Submitted by

Receiving Date



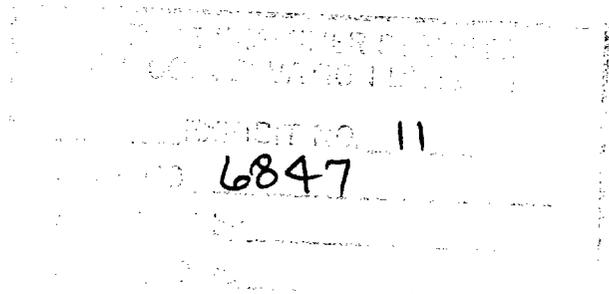
TENNECO OIL COMPANY  
1980 BLOOMFIELD AREA DRILLING PROGRAM  
DRILLING AND COMPLETION PROCEDURE  
COMMINGLED MESA VERDE-CHACRA WELLS

DRILLING

1. Drill 12-1/4" hole to 250'.
2. Set 9-5/8" casing and cement to surface.
3. Drill 8-3/4" hole thru Chacra to  $\approx$  3100'.
4. Set 7" csg and cement to surface.
5. Drill 6-1/4" hole thru Mesa Verde to  $\approx$  4500'.
6. Run open hole logs over Mesa Verde and cased hole logs over Chacra.
7. Set 4-1/2" liner from 4500' to 2900'.
8. Cement liner in place.

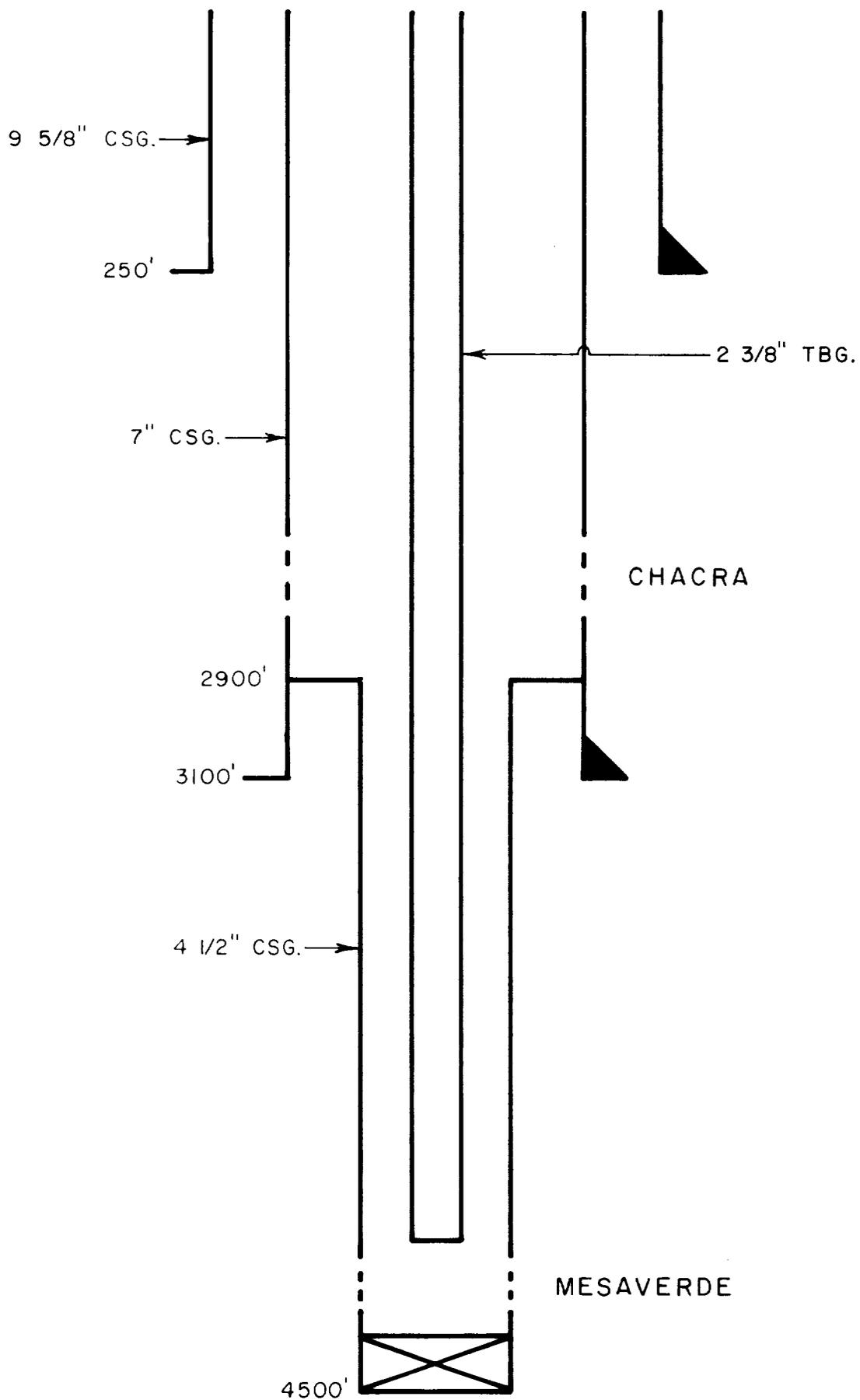
COMPLETION

1. Drill out to plug back total depth.
2. Perforate Mesa Verde ( $\approx$  50') with 2 shots per foot.
3. Acidize Mesa Verde with 1000 gals 15% HCL and ball sealers.
4. Frac Mesa Verde with 175,000# 20/40 sand in 1% KCl water.
5. Set retrievable bridge plug between Chacra and Mesa Verde.
6. Perforate Chacra ( $\approx$  10') with 2 shots per foot.
7. Acidize Chacra with 500 gals 15% HCL and ball sealers.
8. Frac Chacra with 30,000# 10/20 sand in 70% quality foam.
9. Retrieve bridge plug.
10. Land tubing above Mesa Verde perforations.
11. Flow well to cleanup frac fluid.
12. Shut-in well for AOF test.



TENNECO OIL COMPANY  
BLOOMFIELD AREA  
T 29 N - R 10 & 11 W  
SAN JUAN COUNTY, NEW MEXICO

MESAVERDE - CHACRA COMINGLED  
WELLBORE SCHEMATIC



6847 12

TENNECO OIL COMPANY  
1980 BLOOMFIELD AREA DRILLING PROGRAM  
DRILLING AND COMPLETION PROCEDURE  
DAKOTA DUALED WITH COMMINGLED CHACRA-MESA VERDE

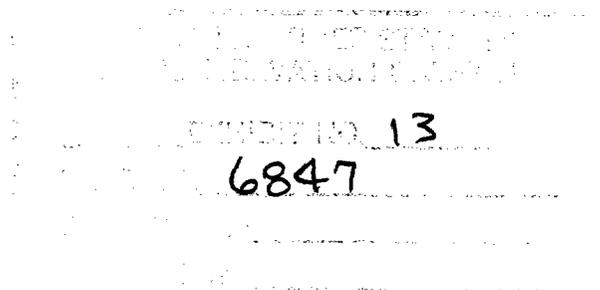
DRILLING

1. Drill 12-1/4" hole to 250'.
2. Set 9-5/8" csg and cement to surface.
3. Drill 8-3/4" hole thru Mesa Verde to  $\approx$  4500'.
4. Set 7" csg and cement to surface using 2 stage cement job with DV tool at 2950'
5. Drill 6-1/4" hole thru Dakota to  $\approx$  6400'.
6. Run open hole logs over Dakota and cased hole log in 4-1/2" casing.
7. Set 4-1/2" liner from 6400' to 4300'.
8. Cement liner in place.

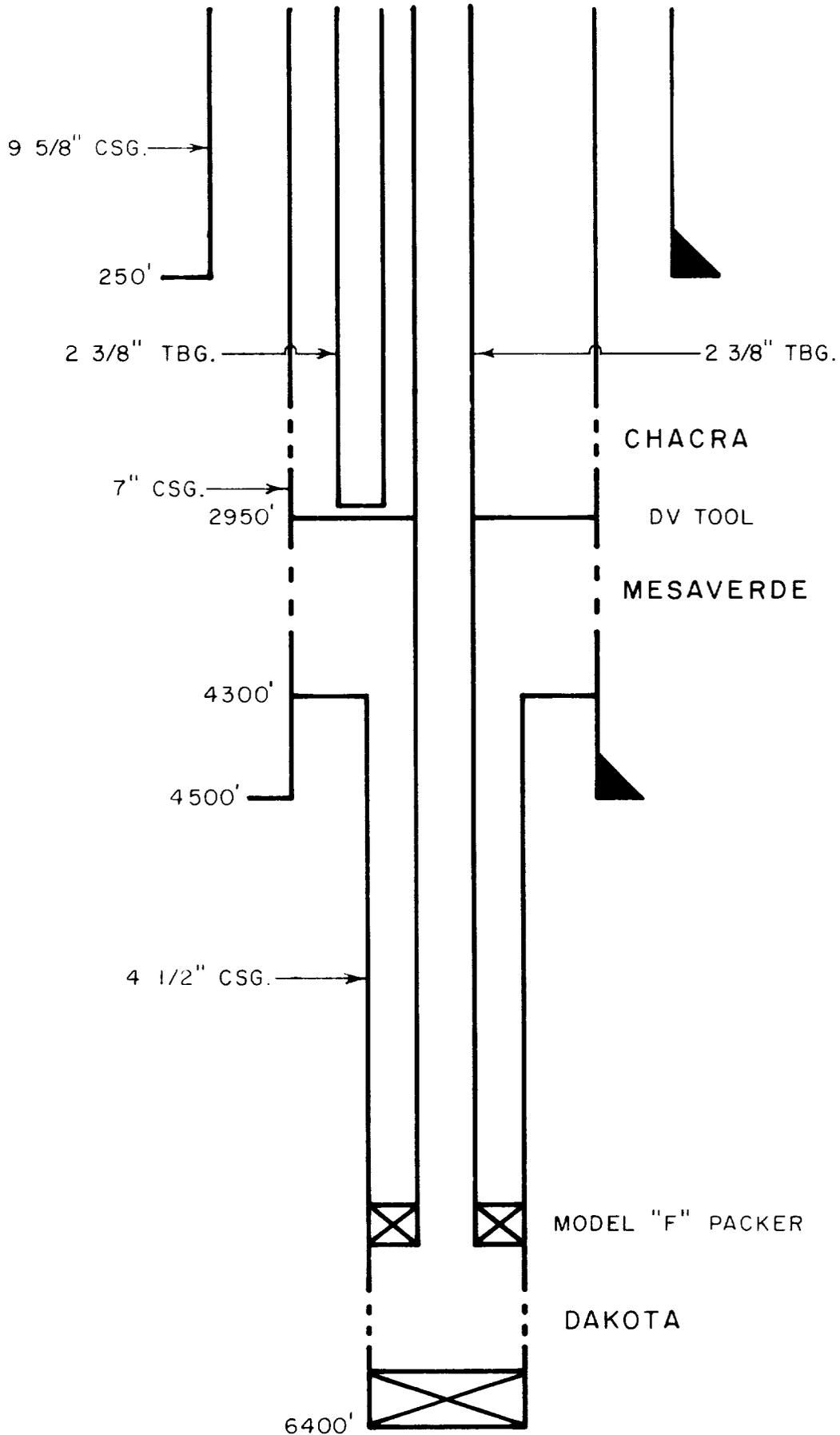
:

COMPLETION

1. Drill out to plug back total depth.
2. Perforate Dakota ( $\approx$  50') with 2 shots per foot.
3. Acidize Dakota with 1500 gals 15% HCL and ball sealers.
4. Frac Dakota with 105,000# sand in 30# cross-linked gelled water.
5. Set Model "F" packer with expendable plug above Dakota.
6. Perforate Mesa Verde ( $\approx$  50') with 2 shots per foot.
7. Acidize Mesa Verde with 1000 gals 15% HCL and ball sealers.
8. Frac Mesa Verde with 175,000# 20/40 sand in 1% KCl water.
9. Set retrievable bridge plug between Chacra and Mesa Verde.
10. Perforate Chacra ( $\approx$  10') with 2 shots per foot.
11. Acidize Chacra with 500 gal 15% HCL and ball sealers.
12. Frac Chacra with 30,000# 10/20 sand in 70% quality foam.
13. Retrieve bridge plug.
14. Run in hole and land Dakota tubing string in Model "F" packer.
15. Run in hole and land Mesa Verde-Chacra tubing string above Mesa Verde.
16. Flow well to cleanup frac fluid.
17. Shut-in well for AOF test.



TENNECO OIL COMPANY  
 BLOOMFIELD AREA  
 T 29 N - R 10 & 11 W  
 SAN JUAN COUNTY, NEW MEXICO  
 DAKOTA DUAL WITH  
 MESAVERDE - CHACRA COMINGLED  
 WELLBORE SCHEMATIC



RECEIVED  
COURT NO. 14  
6847

TENNECO OIL COMPANY  
1980 BLOOMFIELD AREA DRILLING PROGRAM  
ESTIMATED GROSS RESERVES

<u>ZONE</u>	<u>RESERVES (MMCF)</u>
Chacra	170
Mesa Verde	160
Dakota	1350

REVISION 15  
6847



TENNECO OIL COMPANY  
1980 BLOOMFIELD AREA DRILLING PROGRAM  
WELLS WITH MESA VERDE AND CHACRA POTENTIAL  
COST COMPARISON

I. Proposed Completion-Commingle Zones

Cost: \$327,000

:

II. Alternative Without Commingling

<u>Alternative</u>	<u>Cost</u>	<u>Cost Over Commingled Alternative (\$M)</u>
1. Dually Complete Chacra & Mesa Verde	349	22

APPROVED  
DATE: 3/21/80  
BY: [Signature]  
6847 17

TENNECO OIL COMPANY  
 1980 BLOOMFIELD AREA DRILLING PROGRAM  
 ECONOMIC SUMMARY  
 MESA VERDE-CHACRA WELL

---

TYPE WELL	AFTER TAX RATE OF RETURN (%)	DISCOUNTED PROFIT @10% (M\$)	RESERVES (MMCF)	PAYOUT (YEARS)
-----------	------------------------------------	------------------------------------	--------------------	-------------------

COMMINGLED

Mesa Verde-Chacra	22.6	80.9	360	3.2
-------------------	------	------	-----	-----

DUAL

Mesa Verde-Chacra	14.0	28.6	330	3.9
-------------------	------	------	-----	-----

6847 18

TENNECO OIL COMPANY  
 1980 BLOOMFIELD AREA DRILLING PROGRAM  
 WELLS WITH CHACRA, MESA VERDE, AND DAKOTA POTENTIAL  
 COST COMPARISON

---

I. Proposed Completion-Dakota Dual With Mesa Verde & Charca Commingled

Cost: \$461,000

II. Alternatives Without Commingling

<u>Alternative</u>	<u>Cost</u>	<u>Cost Over Commingled Alternative (\$M)</u>
1. Drill 3 Single Completions	750	289
2. Drill 1 Dual MV-Dakota	449	-
Drill 1 Single Chacra	<u>140</u>	-
Total 2 Wells	589	128
3. Drill 1 Dual MV-Chacra	349	-
Drill 1 Single Dakota	<u>347</u>	-
Total 2 Wells	696	235
4. Drill 1 Dual Dakota-Chacra	401	-
Drill 1 Single Mesa Verde	<u>263</u>	-
Total 2 Wells	664	203

6847 19

STATE OF NEW MEXICO  
DEPARTMENT OF ENERGY AND MINERALS  
OIL CONSERVATION DIVISION

MARCH 26, 1980

EXHIBITS

TENNECO OIL COMPANY  
1980 BLOOMFIELD AREA DRILLING PROGRAM  
WELL SUMMARY

---

CHACRA-MESA VERDE-DAKOTA WELLS

<u>WELL</u>	<u>LOCATION</u>
1. Marquis G. Eaton A1E	NE-25-29-11
2. Elvin J. Payne A1E	SW-19-29-10
3. Sullivan Frame Gas A1E	NE-30-29-10
4. Sullivan Gas A1E	SW-25-29-11
5. Valdez Gas A1E	NE-24-29-11

CHACRA-MESA VERDE WELLS

<u>WELL</u>	<u>LOCATION</u>
1. Bunce Com 1	NW-29-29-10
2. Eaton Com B-1	SW-25-29-11
3. Bruce Sullivan Com B-1	NW-25-29-11
4. Sullivan Frame Com B-1	NW-30-29-10
5. Valdez Com B-1	SE-24-29-11

STATE EVALUATOR GEORGETS  
CRUDE REGULATION DIVISION

PERMIT NO. 1

NO. 6847

TYPE LOG  
**CHACRA FM.**

GETTY OIL COMPANY  
HANLEY B#1  
SW/4 SEC. 18, T29N-R10W  
SAN JUAN COUNTY, NEW MEXICO

IPF: 791 MCFD  
48/64 CK  
PERF: 2932-38  
SWFR 21,000 GALS.  
30,000 LBS. SAND  
TP 46, CP 290, GTY 60

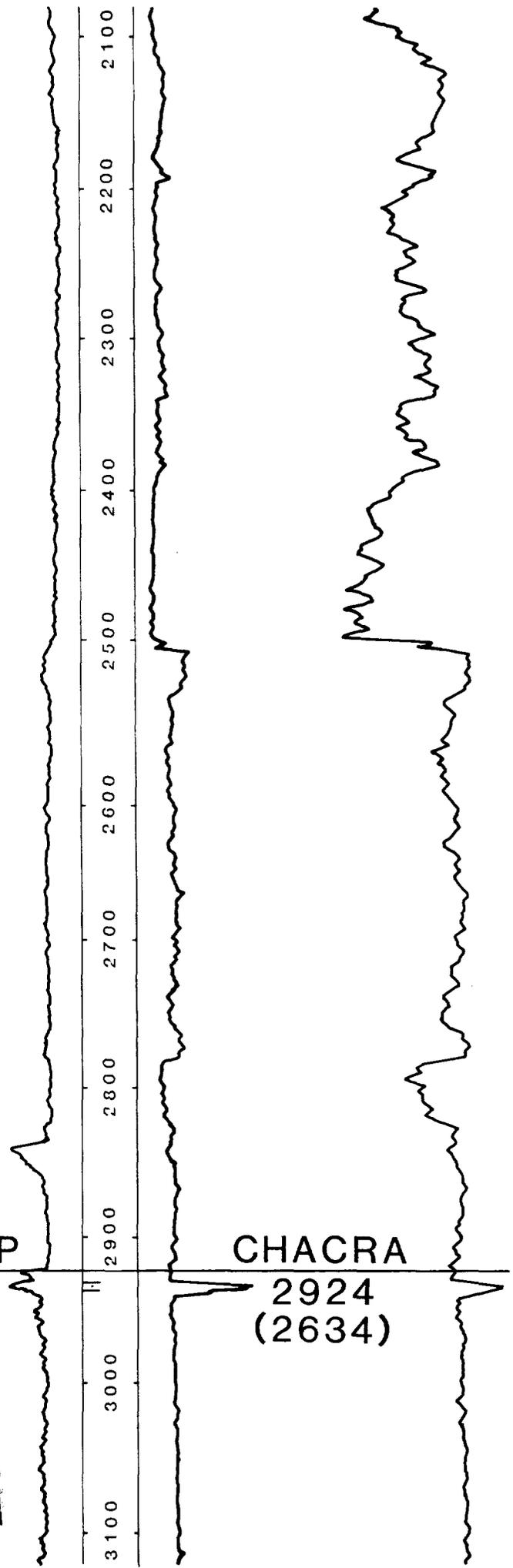
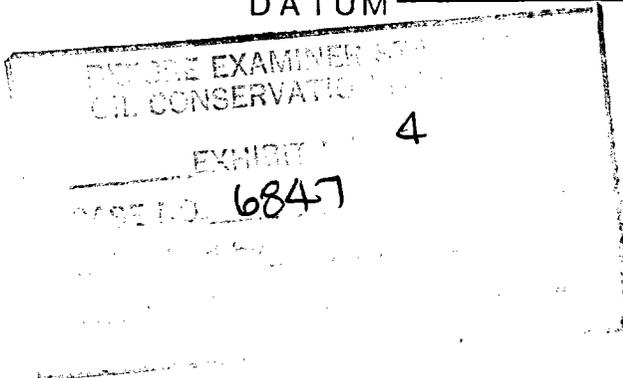
*SICP  
1012*

TOP

DATUM

CHACRA

2924  
(2634)



TYPE LOG  
**MESAVERDE FM.**

GETTY OIL COMPANY  
 HANLEY B# 1  
 SW/4 SEC. 18, T29N-R10W  
 SAN JUAN CO., NEW MEXICO

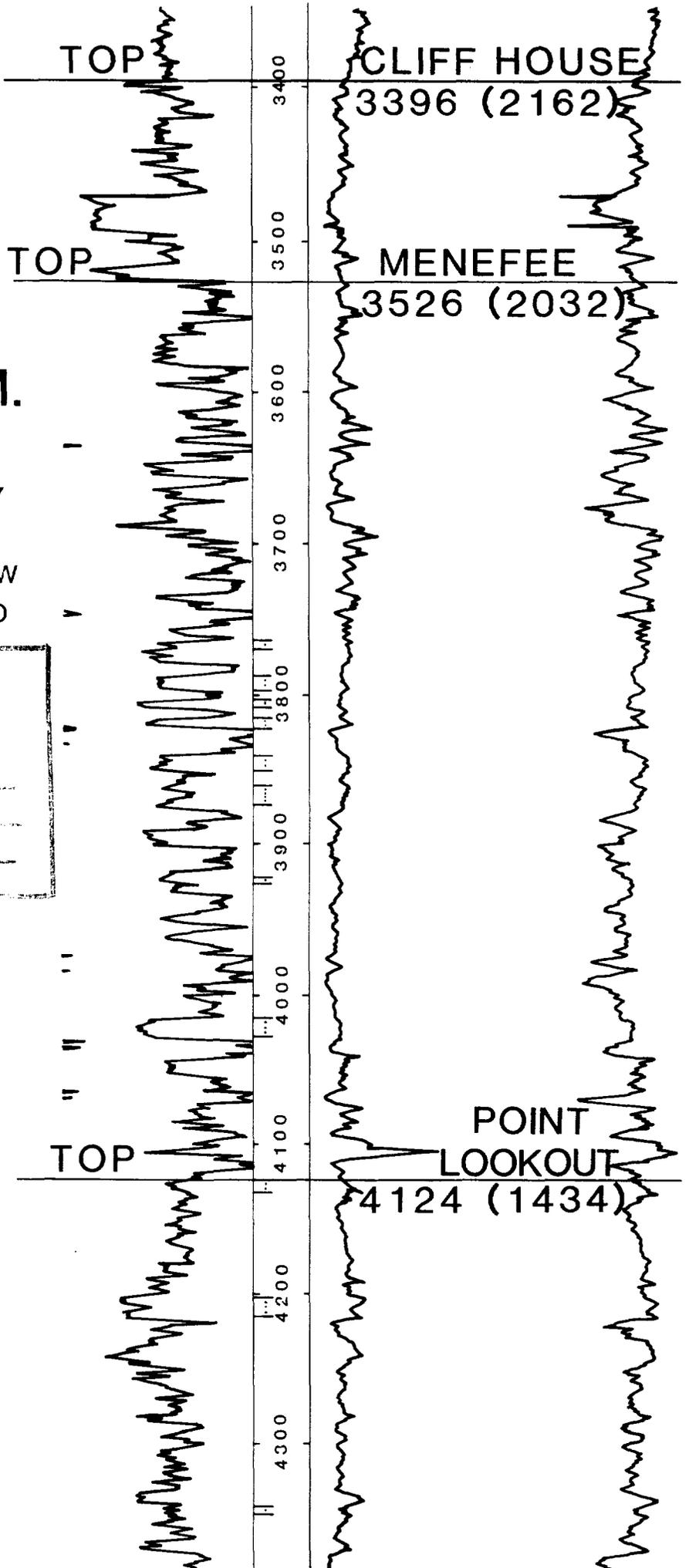
BEFORE EXAMINER SIGNATURES OIL CONSERVATION DIVISION	
EXHIBIT NO	6
CASE NO.	6847
Submitted by	
Received by	

IPF: 2 BCPD 2117 MCFD  
 PERF: 3764-69, 3787-97,  
 3804-10, 3818-22,  
 3842-52, 3861-76,  
 3924-28, 4017-29,  
 4126-32, 4202-17,  
 4243-44, 4344-49

SWFR 3764 3876  
 73,000 GALS.  
 75,000 LBS. SAND

SWFR 3924-4349  
 48,310 GALS.  
 55,000 LBS. SAND

TP 148 CPO, GTY 60



TENNECO OIL COMPANY  
BLOOMFIELD AREA  
MESAVERDE PRODUCTION HISTORY

— · — · —	Houck	B #1	NE/4 Sec. 13, T29N-R11W
- - - - -	Hanley	A #1	NW/4 Sec. 18, T29N-R10W
— — — — —	Hanley	B #1	SW/4 Sec. 18, T29N-R10W
- · - · - · -	Bunce	A #1	NE/4 Sec. 19, T29N-R10W

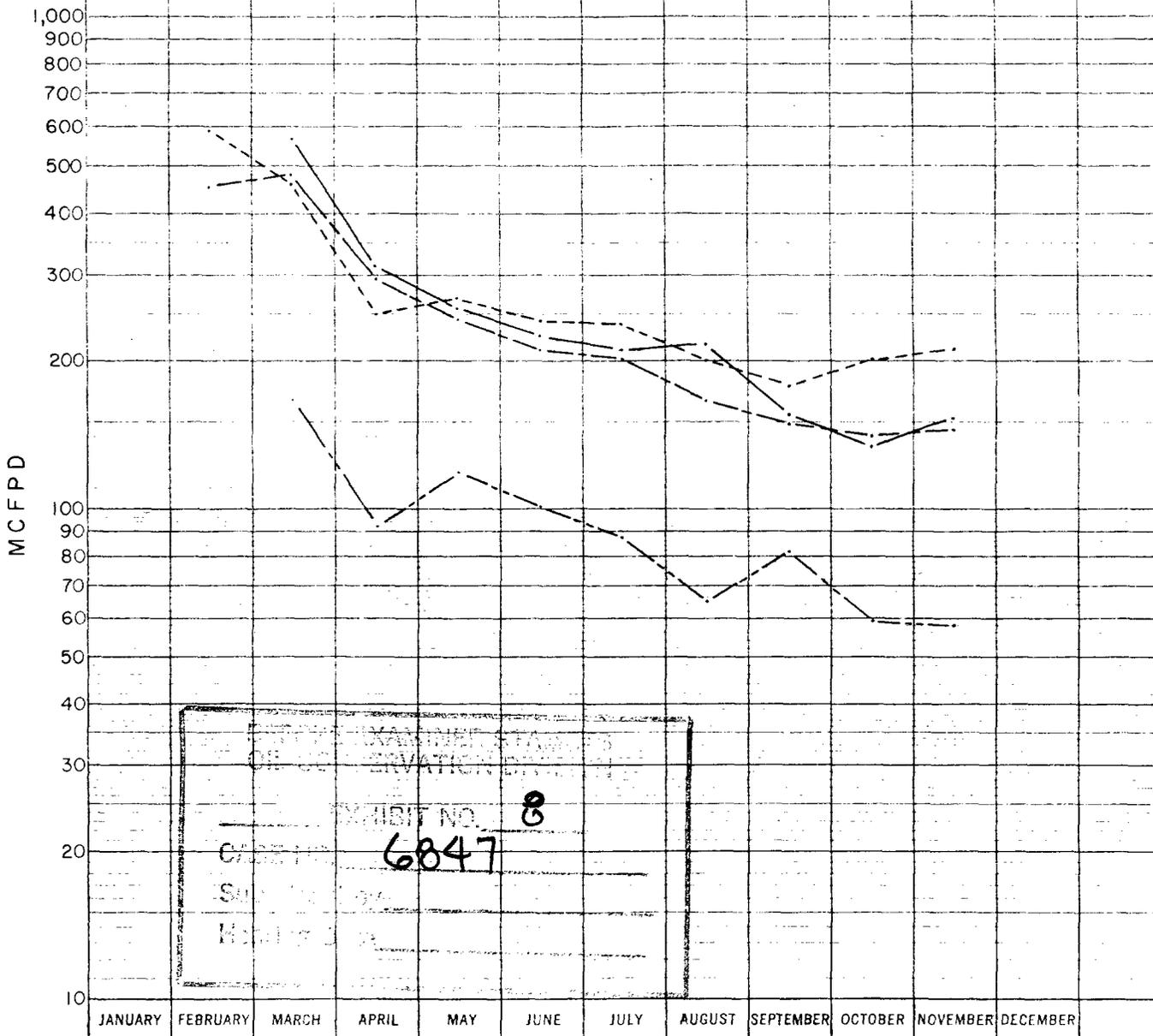


EXHIBIT NO. 8  
6847

RPT-ASL 370 EL PASO NATURAL GAS COMPANY  
 CHROMATOGRAPHIC ANALYSIS REPORT

RPT DATE 09 15 79  
 ANAL DATE 09 17 79

*Deety Ch.*  
 METER CALIBRATION  
 JULY 1979

4115 214 40019  
 2000 4000

TYPE CODE 00 SAMPLE DATE 09 15 79 OFF. DATE 09 19 79 SCALE 1 H2S STAIN 0000\* LOCATION 4 2 75

	PERCENT	WT%
C 3 2	00.21	0.000
H 2 5	00.00*	0.000
N2	00.27	0.000
METHANE	06.37	0.000
ETHANE	07.10	1.905
PROPANE	00.61	0.435
ISOBUTANE	00.47	0.154
NORBUTANE	00.62	0.258
ISOPENTANE	00.23	0.064
NORPENTANE	00.18	0.065
HEXANE PLUS	00.41	0.177
TOTALS	100.00	3.584

SPECIFIC GRAVITY 1.264

MIXTURE HEATING VALUE (BTU/CF @ 14.73 PSIA, 60 DEGREE F) 1173

RATIO OF SPECIFIC HEATS 1.219  
 \* NO TEST SECURED FOR DETERMINATION H2S CORRECT.

LABORATORY EXAMINER STAFF'S  
 OIL CONSERVATION DIVISION

EXHIBIT NO. 9

CASE NO. 6847

Submitted by \_\_\_\_\_

Hearing Date \_\_\_\_\_

**ILLEGIBLE**



TENNECO OIL COMPANY  
1980 BLOOMFIELD AREA DRILLING PROGRAM  
DRILLING AND COMPLETION PROCEDURE  
COMMINGLED MESA VERDE-CHACRA WELLS

DRILLING

1. Drill 12-1/4" hole to 250'.
2. Set 9-5/8" casing and cement to surface.
3. Drill 8-3/4" hole thru Chacra to  $\approx$  3100'.
4. Set 7" csg and cement to surface.
5. Drill 6-1/4" hole thru Mesa Verde to  $\approx$  4500'.
6. Run open hole logs over Mesa Verde and cased hole logs over Chacra.
7. Set 4-1/2" liner from 4500' to 2900'.
8. Cement liner in place.

;

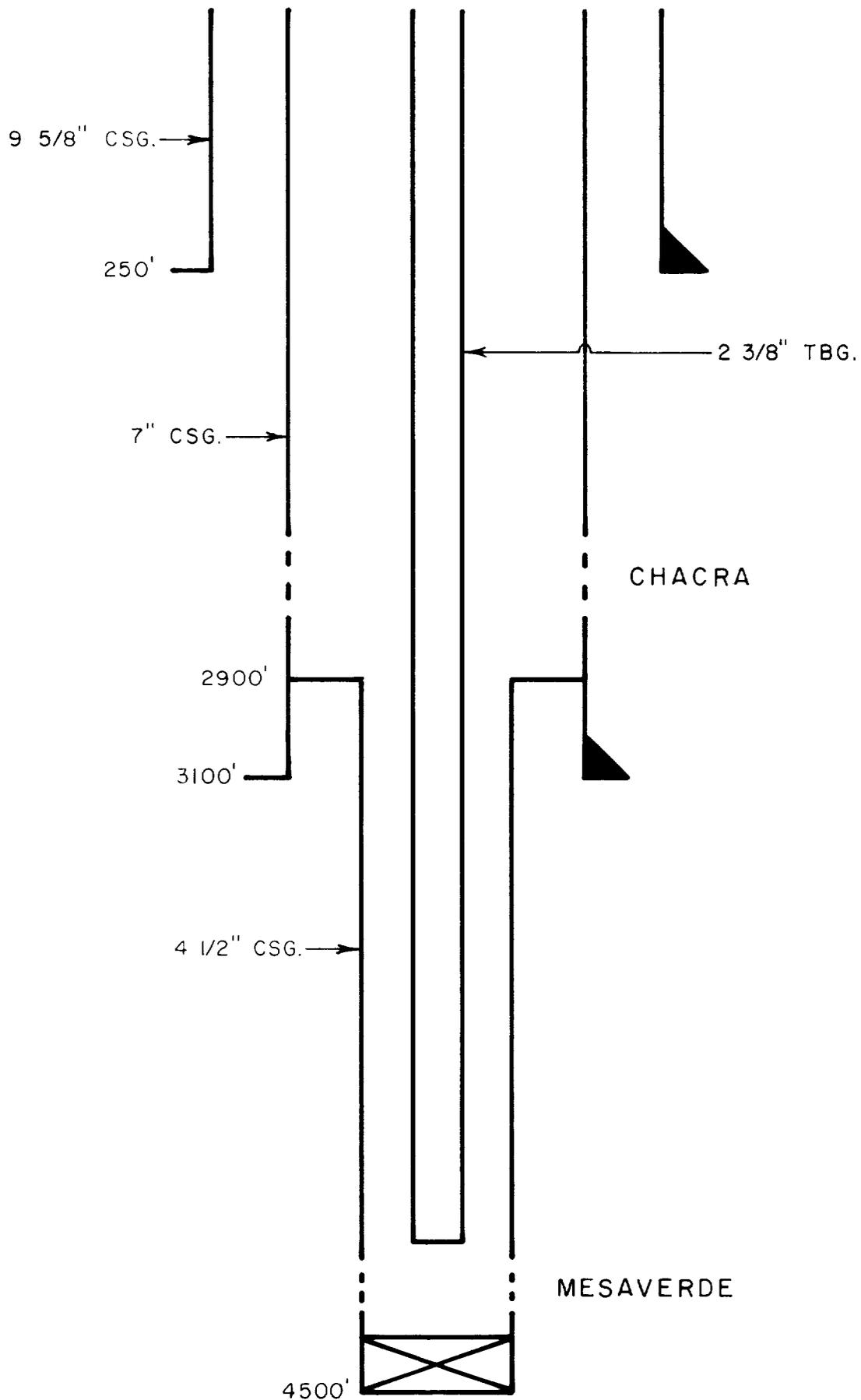
COMPLETION

1. Drill out to plug back total depth.
2. Perforate Mesa Verde ( $\approx$  50') with 2 shots per foot.
3. Acidize Mesa Verde with 1000 gals 15% HCL and ball sealers.
4. Frac Mesa Verde with 175,000# 20/40 sand in 1% KCl water.
5. Set retrievable bridge plug between Chacra and Mesa Verde.
6. Perforate Chacra ( $\approx$  10') with 2 shots per foot.
7. Acidize Chacra with 500 gals 15% HCL and ball sealers.
8. Frac Chacra with 30,000# 10/20 sand in 70% quality foam.
9. Retrieve bridge plug.
10. Land tubing above Mesa Verde perforations.
11. Flow well to cleanup frac fluid.
12. Shut-in well for AOF test.

EXAMINER'S STAMP OIL CONSERVATION DIVISION
EXHIBIT NO. <u>11</u>
<u>6847</u>

TENNECO OIL COMPANY  
BLOOMFIELD AREA  
T 29 N - R 10 & 11 W  
SAN JUAN COUNTY, NEW MEXICO

MESAVERDE - CHACRA COMINGLED  
WELLBORE SCHEMATIC



STATE EXAMINER OFFICE  
OKLAHOMA DEPARTMENT OF LABOR

... .. CREDIT NO. 12

... .. 6847

TENNECO OIL COMPANY  
1980 BLOOMFIELD AREA DRILLING PROGRAM  
DRILLING AND COMPLETION PROCEDURE  
DAKOTA DUALED WITH COMMINGLED CHACRA-MESA VERDE

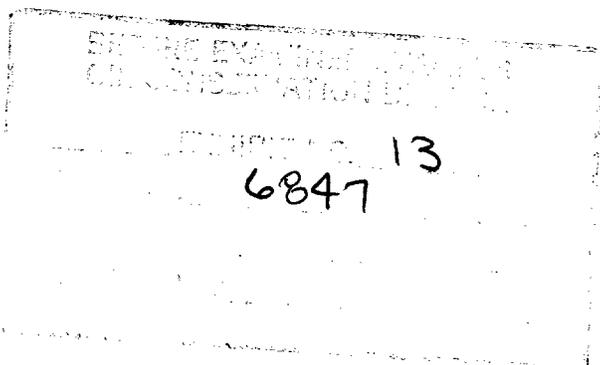
DRILLING

1. Drill 12-1/4" hole to 250'.
2. Set 9-5/8" csg and cement to surface.
3. Drill 8-3/4" hole thru Mesa Verde to  $\approx$  4500'.
4. Set 7" csg and cement to surface using 2 stage cement job with DV tool at 2950'
5. Drill 6-1/4" hole thru Dakota to  $\approx$  6400'.
6. Run open hole logs over Dakota and cased hole log in 4-1/2" casing.
7. Set 4-1/2" liner from 6400' to 4300'.
8. Cement liner in place.

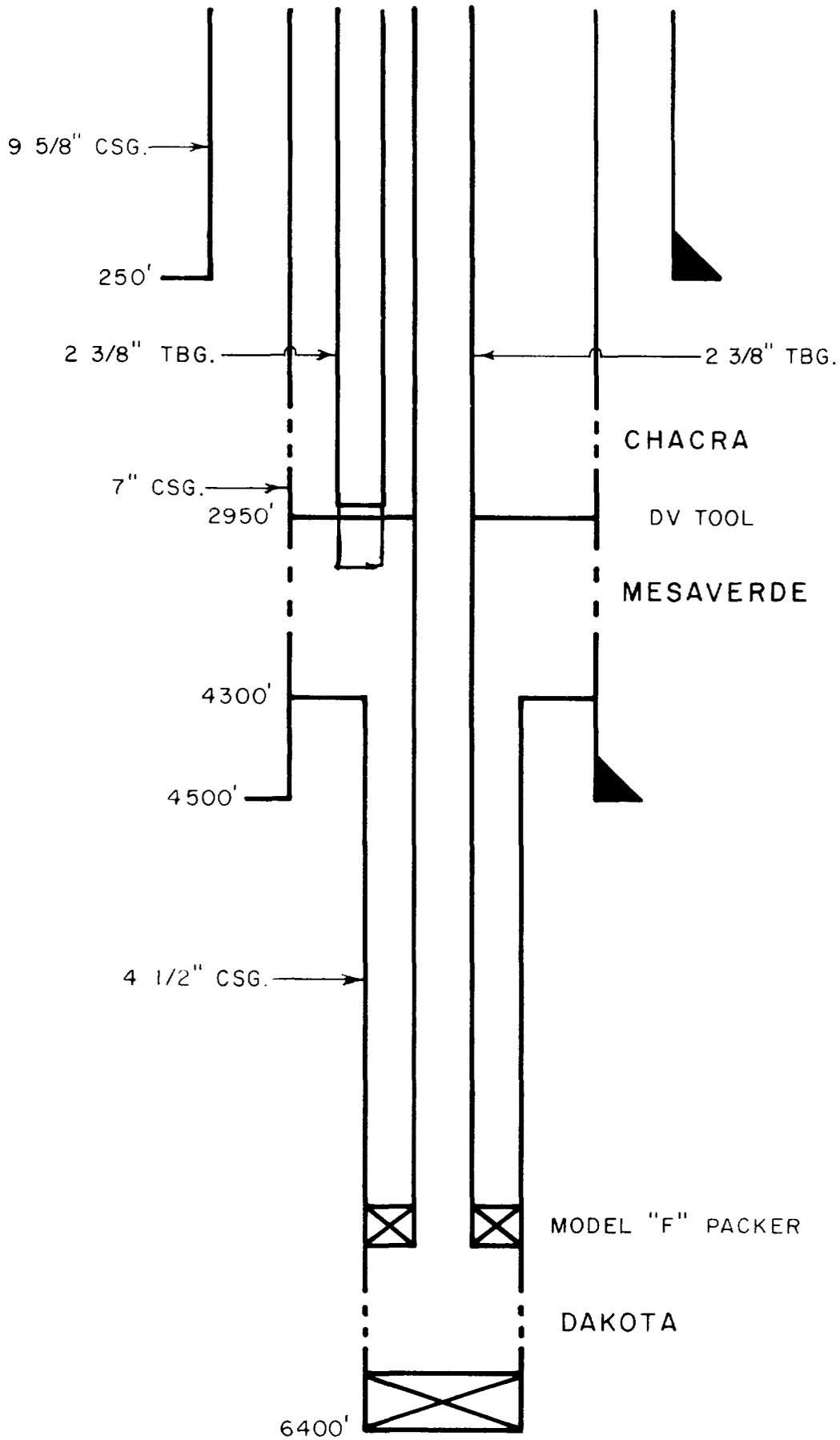
:

COMPLETION

1. Drill out to plug back total depth.
2. Perforate Dakota ( $\approx$  50') with 2 shots per foot.
3. Acidize Dakota with 1500 gals 15% HCL and ball sealers.
4. Frac Dakota with 105,000# sand in 30# cross-linked gelled water.
5. Set Model "F" packer with expendable plug above Dakota.
6. Perforate Mesa Verde ( $\approx$  50') with 2 shots per foot.
7. Acidize Mesa Verde with 1000 gals 15% HCL and ball sealers.
8. Frac Mesa Verde with 175,000# 20/40 sand in 1% KCl water.
9. Set retrievable bridge plug between Chacra and Mesa Verde.
10. Perforate Chacra ( $\approx$  10') with 2 shots per foot.
11. Acidize Chacra with 500 gal 15% HCL and ball sealers.
12. Frac Chacra with 30,000# 10/20 sand in 70% quality foam.
13. Retrieve bridge plug.
14. Run in hole and land Dakota tubing string in Model "F" packer.
15. Run in hole and land Mesa Verde-Chacra tubing string above Mesa Verde.
16. Flow well to cleanup frac fluid.
17. Shut-in well for AOF test.



TENNECO OIL COMPANY  
 BLOOMFIELD AREA  
 T 29 N - R 10 & 11 W  
 SAN JUAN COUNTY, NEW MEXICO  
 DAKOTA DUAL WITH  
 MESAVERDE - CHACRA COMINGLED  
 WELLBORE SCHEMATIC

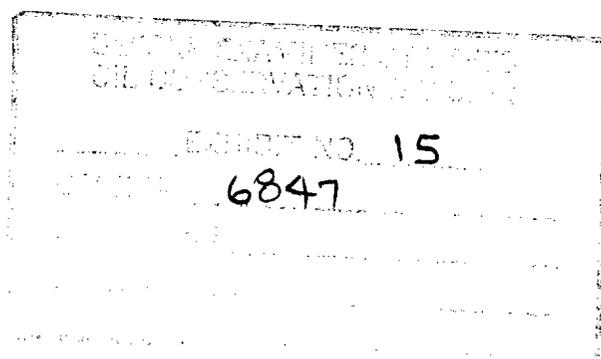


6847

14

TENNECO OIL COMPANY  
1980 BLOOMFIELD AREA DRILLING PROGRAM  
ESTIMATED GROSS RESERVES

<u>ZONE</u>	<u>RESERVES (MMCF)</u>
Chacra	170
Mesa Verde	160
Dakota	1350



TENNECO OIL COMPANY  
 1980 BLOOMFIELD AREA DRILLING PROGRAM  
ALTERNATIVE COST SUMMARY

<u>TYPE WELL</u>	<u>TOTAL COST</u> ( $\$$ M)
<u>Single Completion</u>	
Mesa Verde	263
Dakota	347
Chacra	140
	<u>750</u>
<u>Duals Without Commingling</u>	
Dakota-Mesa Verde	449
Mesa Verde-Chacra	349
Dakota-Chacra	401
<u>Commingled Charca-Mesa Verde</u>	
Mesa Verde-Chacra	327
<u>Three Zones With Two Commingled</u>	
Dakota Dualed with Chacra & Mesa Verde Commingled	461

6847 16

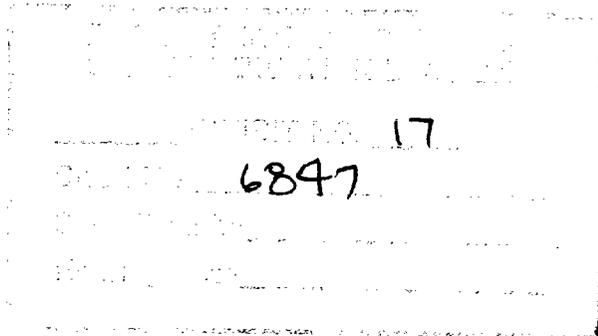
TENNECO OIL COMPANY  
1980 FLOOMFIELD AREA DRILLING PROGRAM  
WELLS WITH MESA VERDE AND CHACRA POTENTIAL  
COST COMPARISON

I. Proposed Completion-Commingle Zones

Cost: \$327,000

II. Alternative Without Commingling

<u>Alternative</u>	<u>Cost</u>	<u>Cost Over Commingled Alternative (\$M)</u>
1. Dually Complete Chacra & Mesa Verde	349	22



TENNECO OIL COMPANY  
 1980 BLOOMFIELD AREA DRILLING PROGRAM  
 ECONOMIC SUMMARY  
 MESA VERDE-CHACRA WELL

6847 18

<u>TYPE WELL</u>	<u>AFTER TAX RATE OF RETURN (%)</u>	<u>DISCOUNTED PROFIT @10% (M\$)</u>	<u>RESERVES (MMCF)</u>	<u>PAYOUT (YEARS)</u>
------------------	---	---	----------------------------	---------------------------

COMMINGLED

Mesa Verde-Chacra 22.6 80.9 360 3.2

DUAL

Mesa Verde-Chacra 14.0 28.6 330 3.9

TENNECO OIL COMPANY  
 1980 BLOOMFIELD AREA DRILLING PROGRAM  
 WELLS WITH CHACRA, MESA VERDE, AND DAKOTA POTENTIAL  
 COST COMPARISON

---

I. Proposed Completion-Dakota Dual With Mesa Verde & Charca Commingled

Cost: \$461,000

II. Alternatives Without Commingling

<u>Alternative</u>	<u>Cost</u>	<u>Cost Over Commingled Alternative (\$M)</u>
1. Drill 3 Single Completions	750	289
2. Drill 1 Dual MV-Dakota	449	-
Drill 1 Single Chacra	<u>140</u>	-
Total 2 Wells	589	128
3. Drill 1 Dual MV-Chacra	349	-
Drill 1 Single Dakota	<u>347</u>	-
Total 2 Wells	696	235
4. Drill 1 Dual Dakota-Chacra	401	-
Drill 1 Single Mesa Verde	<u>263</u>	-
Total 2 Wells	664	203

6847<sup>19</sup>

Dockets Nos. 9-80 and 10-80 are tentatively set for April 9 and 23, 1980. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - MARCH 26, 1980

9 A.M. - OIL CONSERVATION DIVISION CONFERENCE ROOM,  
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Richard L. Stamets, Examiner, or Daniel S. Nutter, Alternate Examiner:

- CASE 6838: Application of Amax Chemical Corporation for the amendment of Order No. R-111-A, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-111-A to extend the boundaries of the Potash-Oil Area by the inclusion of certain lands in Sections 11, 12, and 13, Township 19 South, Range 30 East, and Sections 7 and 18, Township 19 South, Range 31 East.
- CASE 6839: Application of Kimbell Oil Company for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Otero-Chacra and South Blanco-Pictured Cliffs production in the wellbore of its Salazar Well No. 4-26 to be located in Unit D of Section 26, Township 25 North, Range 6 West.
- CASE 6840: Application of Union Texas Petroleum for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Fruitland and Pictured Cliffs production in the wellbore of its Johnston Federal Well No. 11Y located in Unit N of Section 7, Township 31 North, Range 9 West.
- CASE 6841: Application of CIG Exploration, Inc. for two non-standard gas proration units, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of two non-standard gas proration units in Township 16 South, Range 28 East, the first being 219.6 acres comprising Lots 1 thru 8 of Section 1 and the second being 219.92 acres comprising Lots 1 thru 8 of Section 2, for the Wolfcamp, Pennsylvanian, and Mississippian formations, each unit to be dedicated to a well to be drilled at a standard location thereon.
- CASE 6842: Application of ARCO Oil and Gas Company for an unorthodox gas well location, simultaneous dedication, and approval of infill drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its W. C. Roach Well No. 6, 660 feet from the North line and 1980 feet from the West line of Section 21, Township 20 South, Range 37 East, Eumont Gas Pool, to be simultaneously dedicated with its W. C. Roach Well No. 1 in Unit D to the W/2 of said Section 21. Also sought are findings that the proposed well is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing unit well.
- CASE 6843: Application of Yates Petroleum Corporation for two compulsory poolings, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Yeso formation underlying two 40-acre proration units, the first being the SE/4 SE/4 and the second being the SW/4 SE/4 of Section 6, Township 19 South, Range 25 East, Penasco Draw Field, each unit to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said wells and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the wells and a charge for risk involved in drilling said wells.
- CASE 6844: Application of Arrowhead Oil Corporation for two exceptions to Order No. R-111-A and an unorthodox well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the casing-cementing rules of Order No. R-111-A to complete its Creek Federal Well No. 3 at an unorthodox location 250 feet from the North line and 2350 feet from the East line and its Creek Federal Well No. 4 to be drilled in Unit G, both in Section 23, Township 18 South, Range 30 East, by setting surface casing at a depth of approximately 600 feet and production casing at total depth. The production casing would have cement circulated back to the potash zone in the salt section.
- CASE 6845: Application of Marathon Oil Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a well to be drilled 800 feet from the North line and 200 feet from the East line of Section 30, Township 21 South, Range 23 East, Indian Basin-Upper Pennsylvanian Gas Pool, all of Section 30 or that portion thereof which may be reasonably presumed productive of gas from said pool to be dedicated to the well.

CASE 6846: Application of Doyle Hartman for two compulsory poolings, two non-standard gas proration units, and two unorthodox well locations, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Eumont Gas Pool underlying two 80-acre non-standard gas proration units, the first being the S/2 NE/4 of Section 13, Township 21 South, Range 36 East, to be dedicated to a well to be drilled at an unorthodox location 1650 feet from the North line and 2310 feet from the East line of said Section 13, and the second being the N/2 NE/4 of said Section 13 to be dedicated to a well to be drilled at an unorthodox location 1330 feet from the North line and 2310 feet from the East line of said Section 13. Also to be considered will be the cost of drilling and completing said wells and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the wells and a charge for risk involved in drilling said wells.

CASE 6834: (Continued and Readvertised)

Application of Conoco Inc. for a dual completion and unorthodox well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its SEMU Burger Well No. 107 at an unorthodox location 2615 feet from the South and East lines of Section 19, Township 20 South, Range 38 East, to produce oil from the Blinbry Oil and Gas and Drinkard Pools.

CASE 6837: (Continued from March 12, 1980, Examiner Hearing)

Application of Curtis Little for compulsory pooling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Dakota formation underlying the W/2 of Section 7, Township 25 North, Range 3 West, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 6847: Application of Tenneco Oil Company for dual completions and downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete, in such a manner as to produce gas from the Dakota formation and commingled Chacra and Mesaverde production through parallel strings of tubing, ten proposed wells to be located as follows: in Township 29 North, Range 10 West: Unit C, Section 19; Unit N, Section 19; Unit A, Section 30; and Unit D, Section 30; in Township 29 North, Range 11 West: Unit G, Section 24; Unit O, Section 24; Unit A, Section 25; Unit D, Section 25; Unit M, Section 25; and Unit P, Section 25.

CASE 6818: (Continued from March 12, 1980, Examiner Hearing)

Application of Tenneco Oil Company for an NGPA determination, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks a new onshore reservoir determination for its State HL 11 Well No. 1 located in Unit N of Section 11, Township 19 South, Range 29 East.

CASE 6849: (This is the same matter as was previously designated Case No. 6813.)

Application of Petroleum Development Corporation to amend Order No. R-6196, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks to amend Order No. R-6196 which authorized re-entry of a well at an unorthodox location in the Lusk-Morrow Gas Pool to be dedicated to the N/2 of Section 13, Township 19 South, Range 31 East. Applicant now seeks approval for a new revised location 750 feet from the North line and 660 feet from the West line of said Section 13.

CASE 6848: Application of Petroleum Development Corporation for pool contraction and creation, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the contraction of the Querecho Plains-Bone Spring Pool to comprise the Upper Bone Spring formation only, from 8390 feet to 8680 feet on the log of its McKay West Federal Well No. 1 located in Unit F of Section 34, Township 18 South, Range 32 East, and the creation of the Querecho Plains-Lower Bone Spring Pool to comprise said formation from 8680 feet to the base of the Bone Spring underlying the NW/4 of said Section 34.

CASE 6826: (Continued from March 12, 1980, Examiner Hearing)

Application of Tahoe Oil and Cattle Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Penrose Skelly Pool underlying the SE/4 SE/4 of Section 25, Township 21 South, Range 36 East, to be dedicated to its Bromlee Well No. 1 located thereon. Also to be considered will be the cost of recompleting said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in recompleting said well.

KELLAHIN and KELLAHIN

*Attorneys at Law*

500 Don Gaspar Avenue

Post Office Box 1769

Santa Fe, New Mexico 87501

Telephone 982-4285

Area Code 505

Jason Kellahin  
W. Thomas Kellahin  
Karen Aubrey

March 3, 1980

Mr. Joe Ramey  
Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico

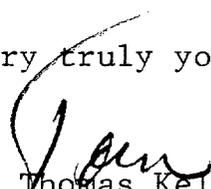
re: Tenneco Oil Company  
Application for Dual Completion  
and Downhole Commingling,  
San Juan County, New Mexico

---

Dear Joe:

Please set the enclosed application for hearing on  
March 26, 1980.

Very truly yours,

  
W. Thomas Kellahin

encl.

cc: Mr. Millard Carr (Tenneco - Denver)

WTK:msf

*Case 6847*



All distances must be from the outer boundaries of the Section.

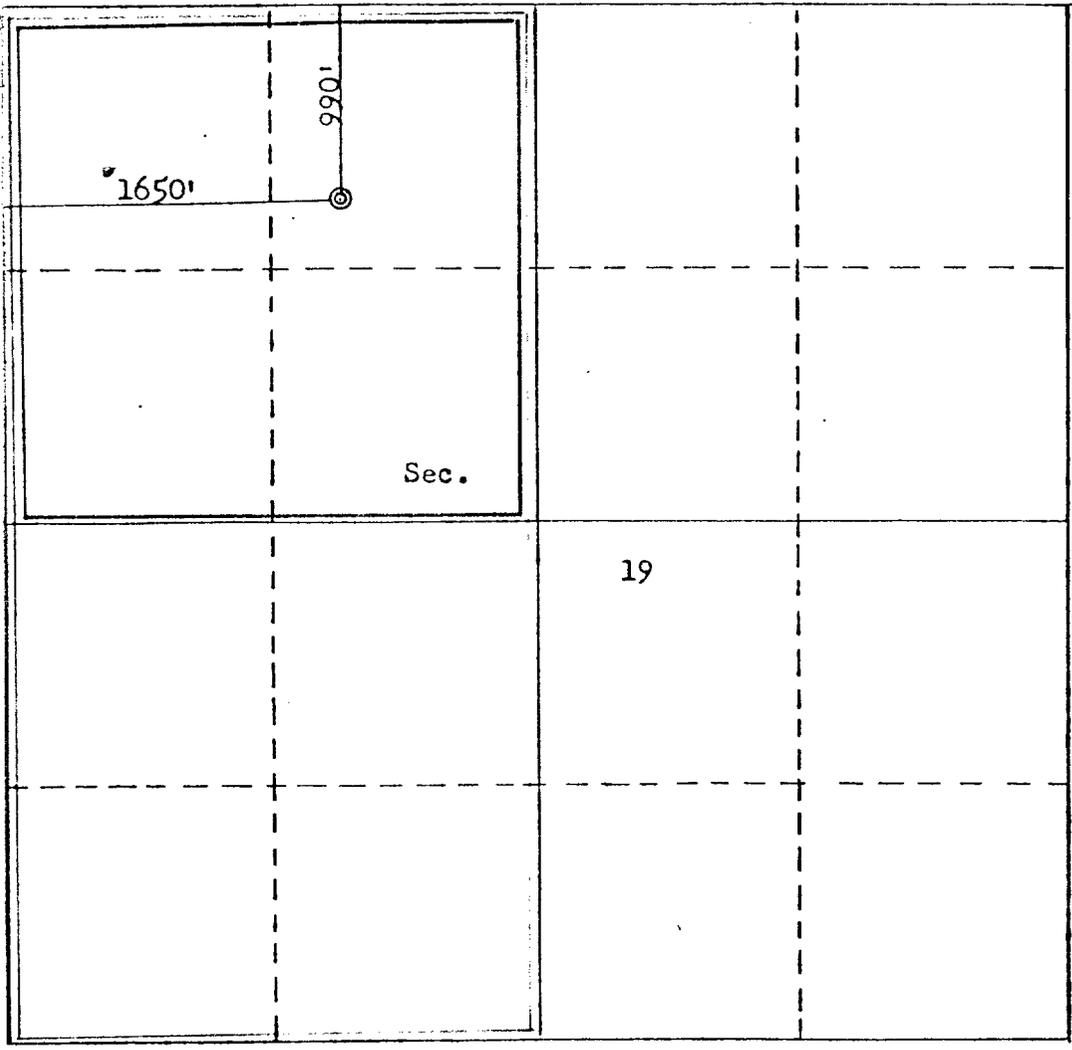
Operator <b>TENNECO OIL COMPANY</b>			Lease <b>BUNCE COM</b>			Well No. <b>1</b>			
Unit Letter <b>C</b>		Section <b>19</b>		Township <b>29N</b>		Range <b>10W</b>		County <b>San Juan</b>	
Actual Footage Location of Well:									
<b>990</b> feet from the <b>North</b> line and			<b>1650</b> feet from the <b>West</b> line						
Ground Level Elev. <b>5521</b>		Producing Formation			Pool		Dedicated Acreage:  Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes  No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



**CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name \_\_\_\_\_

Position \_\_\_\_\_

Company \_\_\_\_\_

Date \_\_\_\_\_

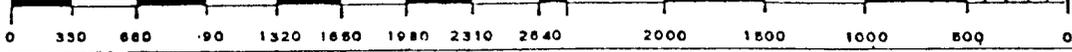
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed  
**November 26, 1979**

Registered Professional Engineer and/or Land Surveyor  
*Fred B. Kerr*

Certificate No. **3950**

**FRED B. KERR, JR.**



OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

Form C-102  
Revised 10-1-78

All distances must be from the outer boundaries of the Section.

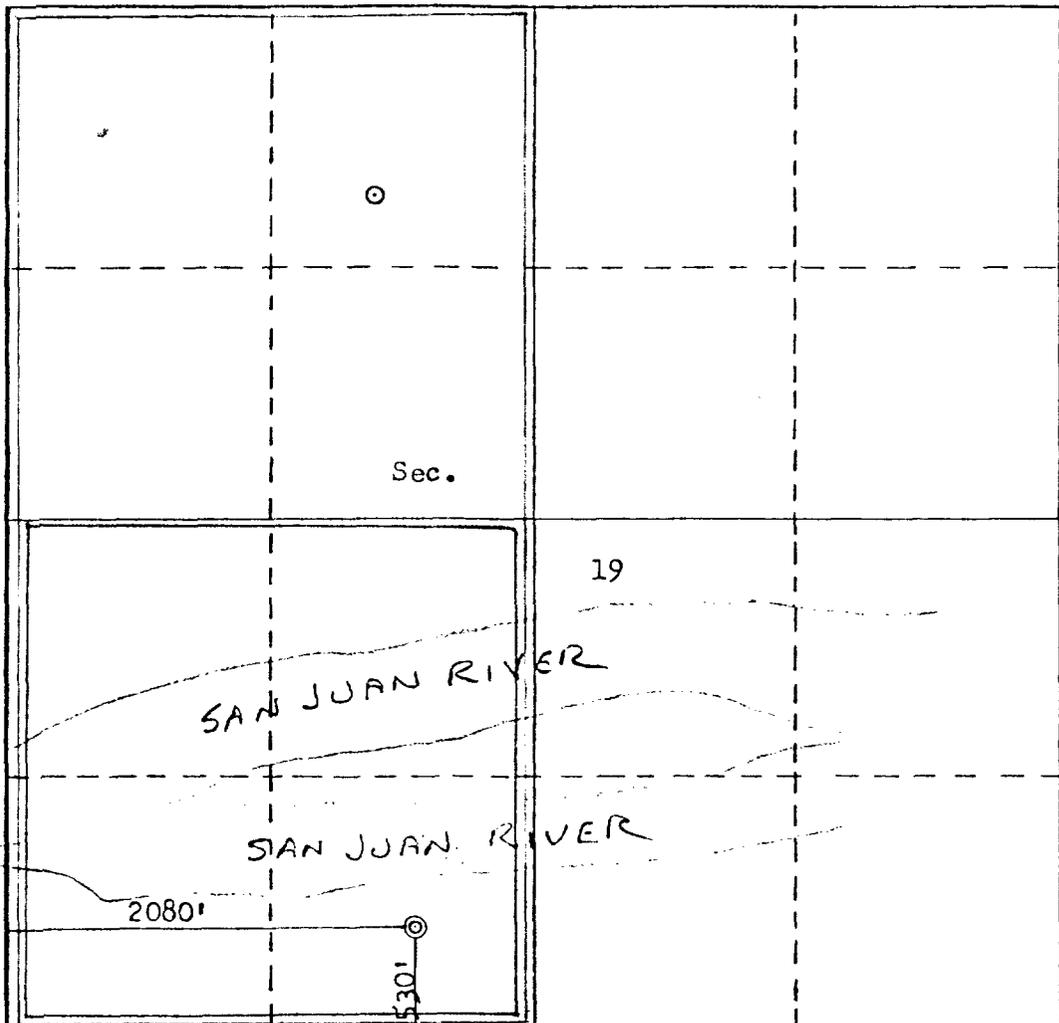
Operator <b>TENNECO OIL COMPANY</b>		Lease <b>ELVIN J. PAYNE GAS UNIT "A"</b>			Well No. <b>1-E</b>
Unit Letter <b>N</b>	Section <b>19</b>	Township <b>29N</b>	Range <b>10W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>530</b> feet from the <b>South</b> line and <b>2080</b> feet from the <b>West</b> line					
Ground Level Elev. <b>5476</b>	Producing Formation		Pool	Dedicated Acreage:  Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes  No If answer is "yes;" type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name

Position

Company

Date

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

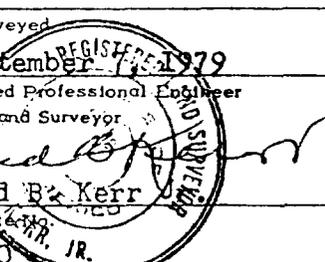
September 14, 1979

Registered Professional Engineer and/or Land Surveyor

Fred B. Kerr, JR.

Certificate No. 3950

3950



OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

Form C-102  
Revised 10-1-78

All distances must be from the outer boundaries of the Section.

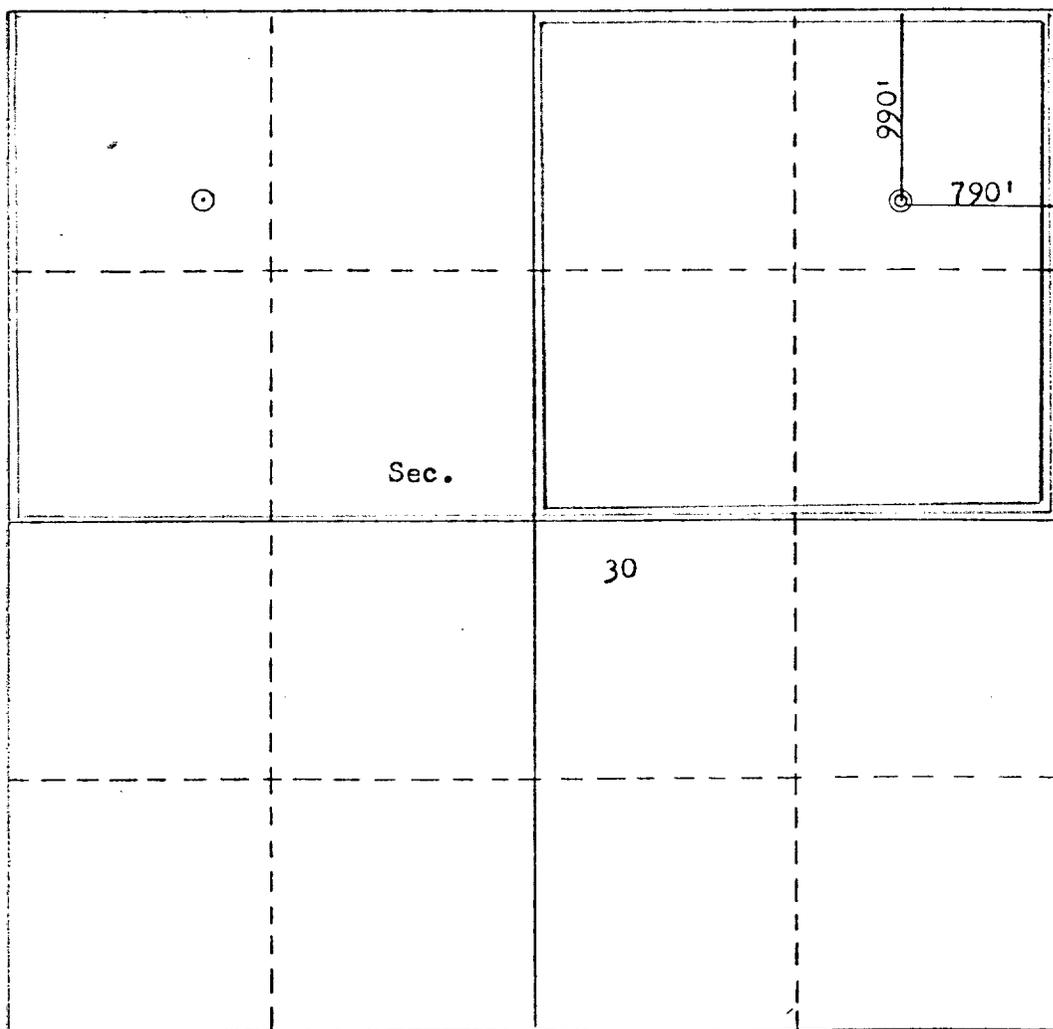
Operator <b>TENNECO OIL COMPANY</b>			Lease <b>SULLIVAN FRAME GAS UNIT "A"</b>		Well No. <b>1-E</b>		
Unit Letter <b>A</b>	Section <b>30</b>	Township <b>29N</b>	Range <b>10W</b>	County <b>San Juan</b>			
Actual Footage Location of Well:							
<b>990</b>	feet from the	<b>North</b>	line and	<b>790</b>	feet from the	<b>East</b>	line
Ground Level Elev. <b>5502</b>	Producing Formation <b>Dakota</b>		Pool <b>Basin Dakota</b>		Dedicated Acreage:  Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes  No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name \_\_\_\_\_

Position \_\_\_\_\_

Company \_\_\_\_\_

Date \_\_\_\_\_

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed  
**September 3, 1979**

Registered Professional Engineer and/or Land Surveyor  
**Fred B. Kerr Jr.**

Certificate No. **3950**



OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
 GEOLGY AND MINERALS DEPARTMENT

P. O. BOX 2088  
 SANTA FE, NEW MEXICO 87501

Form C-107  
 Revised 10-1-78

All distances must be from the outer boundaries of the Section.

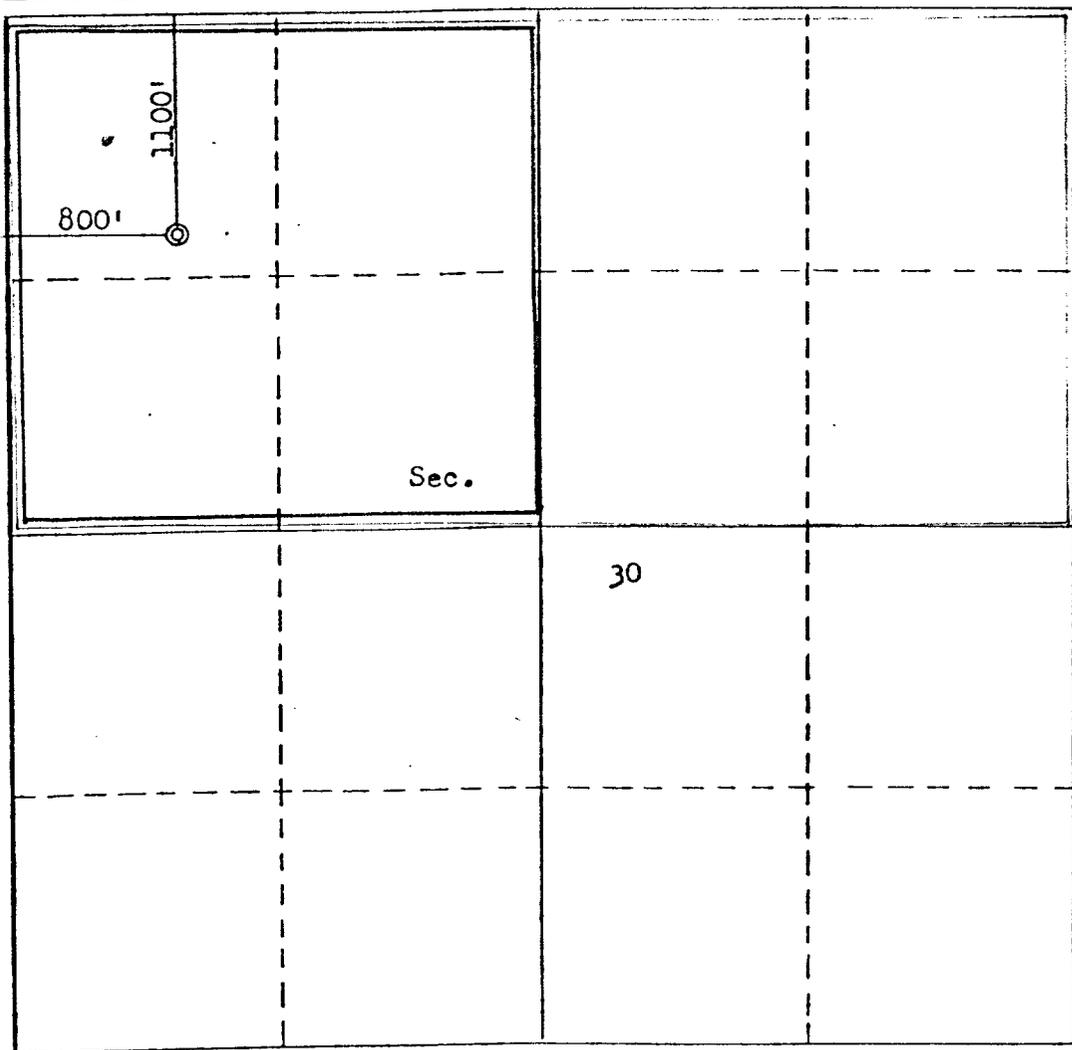
Operator <b>TENNECO OIL COMPANY</b>		Lease <b>SULLIVAN FRAME COM "B"</b>			Well No. <b>1</b>
Grid Letter <b>D</b>	Section <b>30</b>	Township <b>29N</b>	Range <b>10W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>1100</b> feet from the <b>North</b> line and <b>800</b> feet from the <b>West</b> line					
Ground Level Elev. <b>5466</b>	Producing Formation		Pool	Dedicated Acreage: <b>Acres</b>	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes  No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name

Position

Company

Date

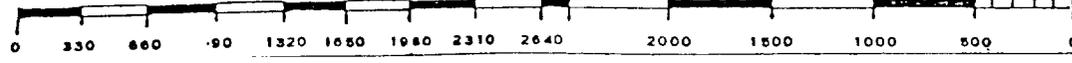
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

November 27, 1978  
 Registered Professional Engineer  
 and/or Land Surveyor No. 3350

*Justin B. Kerr*  
 Fred B. Kerr, Jr.  
 Certificate No. B. KERR.

3950



OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

Form C-102  
Revised 10-1-78

All distances must be from the outer boundaries of the Section

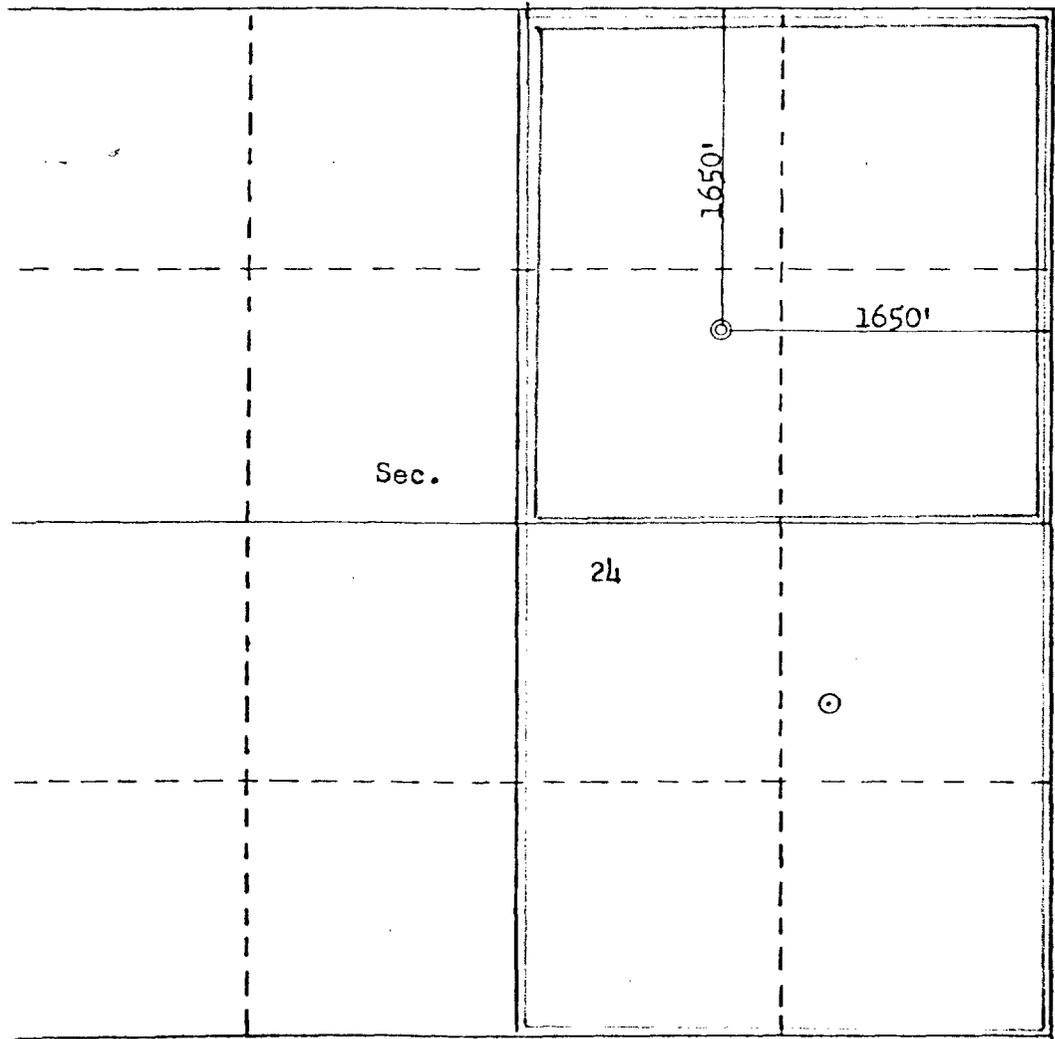
Operator <b>TENNECO OIL COMPANY</b>		Lease <b>VALDEZ GAS UNIT "A"</b>			Well No. <b>1-E</b>
Plot Letter <b>G</b>	Section <b>24</b>	Township <b>29N</b>	Range <b>11W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>1650</b> feet from the <b>North</b> line and <b>1650</b> feet from the <b>East</b> line					
Ground Level Elev. <b>5486</b>	Producing Formation <b>Dakota</b>		Pool <b>Basin Dakota</b>	Dedicated Acreage:  Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes  No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



**CERTIFICATION**

*I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.*

Name \_\_\_\_\_

Position \_\_\_\_\_

Company \_\_\_\_\_

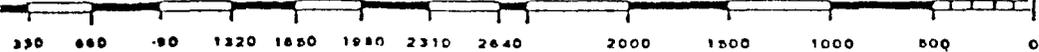
Date \_\_\_\_\_

*I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.*

Date Surveyed: **February 1, 1980**

Registered Professional Engineer and/or Land Surveyor's  
*Fred B. Kerr, Jr.*

Certificate No. **B. KERR, JR.**  
**3950**



OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

Form C-107  
Revised 10-1-

All distances must be from the outer boundaries of the Section.

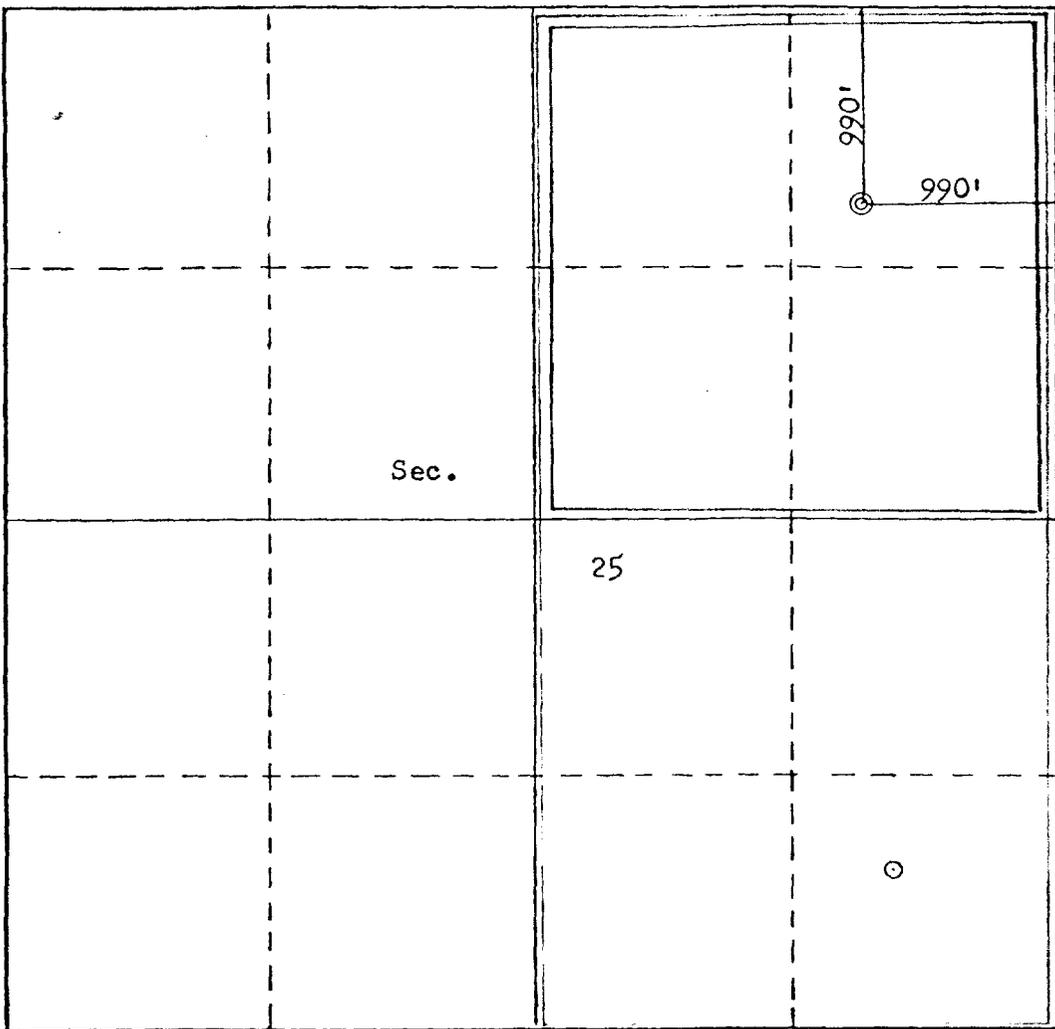
Operator <b>TENNECO OIL COMPANY</b>			Lease <b>MARQUIS G. EATON GAS UNIT "A"</b>		Well No. <b>1-E</b>
Unit Letter <b>A</b>	Section <b>25</b>	Township <b>29N</b>	Range <b>11W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>990</b> feet from the <b>North</b> line and <b>990</b> feet from the <b>East</b> line					
Ground Level Elev. <b>5457</b>	Producing Formation <b>Dakota</b>		Pool <b>Basin Dakota</b>		Dedicated Acreage:  Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes  No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

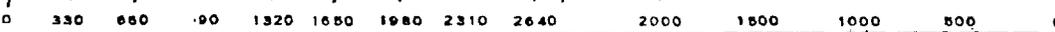
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name \_\_\_\_\_  
Position \_\_\_\_\_  
Company \_\_\_\_\_  
Date \_\_\_\_\_

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed **September 14, 1979**  
Registered Professional Engineer and/or Land Surveyor  
*Fred B. Kerr Jr.*  
**Fred B. Kerr Jr.**  
Certificate No. \_\_\_\_\_

3950





All distances must be from the outer boundaries of the Section.

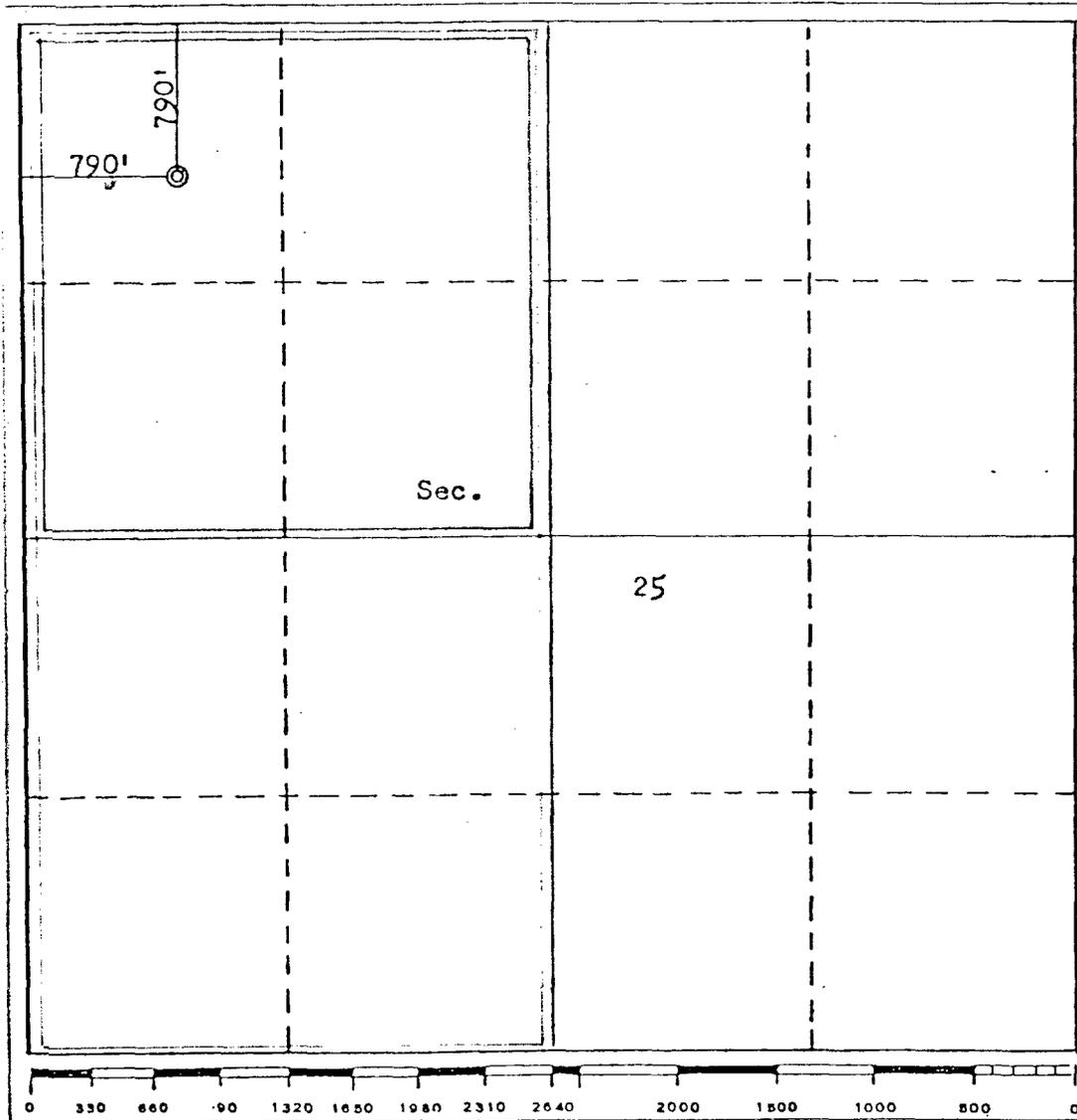
Operator <b>TENNECO OIL COMPANY</b>			Lease <b>BRUCE SULLIVAN COM B</b>			Well No. <b>1</b>		
Unit Letter <b>D</b>	Section <b>25</b>	Township <b>29N</b>	Range <b>11W</b>	County <b>San Juan</b>				
Actual Footage Location of Well:								
<b>790</b> feet from the <b>North</b> line and			<b>790</b> feet from the <b>West</b> line					
Ground Level Elev. <b>5457</b>		Producing Formation		Pool		Dedicated Acreage:  Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes  No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name

Position

Company

Date

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

November 26, 1979

Registered Professional Engineer and/or Land Surveyor

Fred B. Kerr, Jr.

Certification No. B. KERR, JR.

3950

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

Form C-107  
Revised 10-1-78

All distances must be from the outer boundaries of the Section.

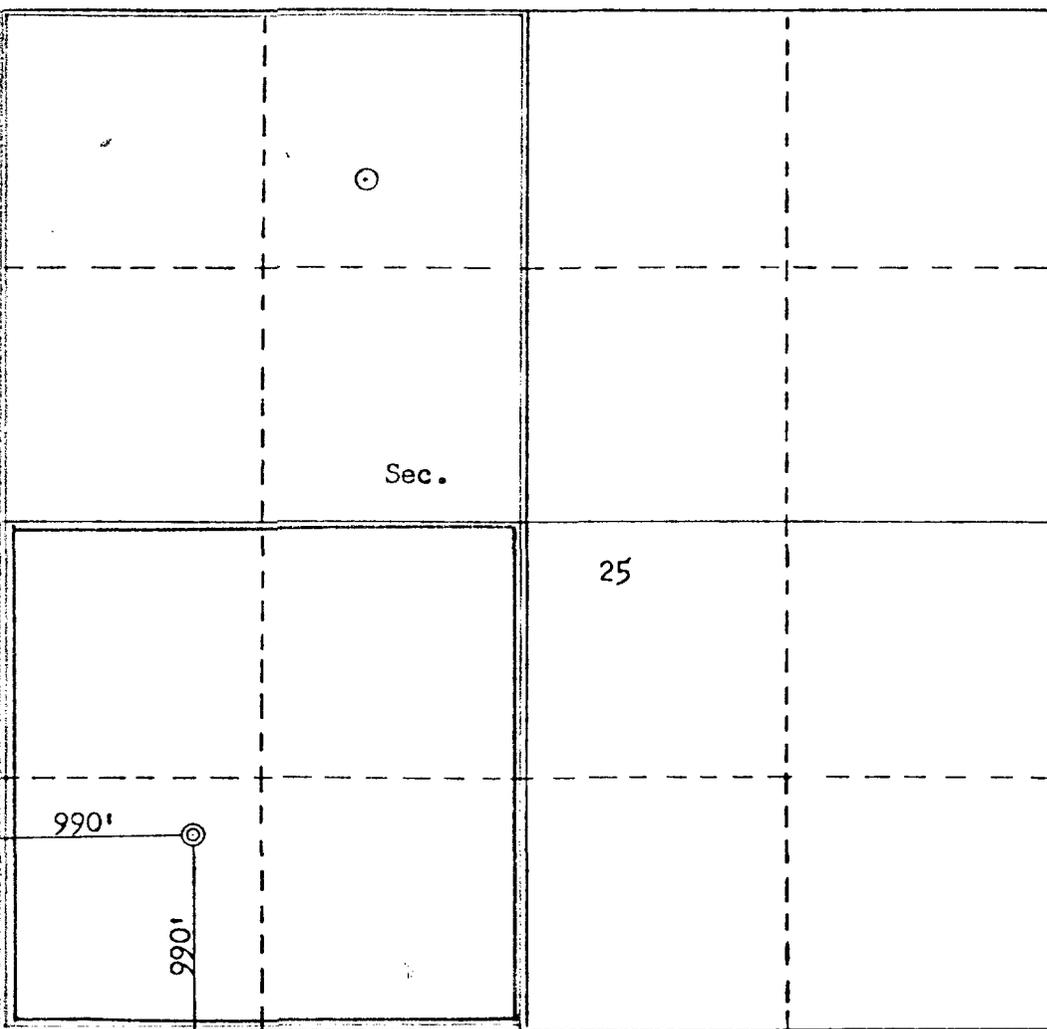
Operator <b>TENNECO OIL COMPANY</b>		Lease <b>SULLIVAN GAS UNIT "A"</b>			Well No. <b>1-E</b>
Unit Letter <b>M</b>	Section <b>25</b>	Township <b>29N</b>	Range <b>11W</b>	County <b>San Juan</b>	
Actual Footage Location of Well:					
990 feet from the <b>South</b> line and		990 feet from the <b>West</b> line			
Ground Level Elev. <b>5583</b>	Producing Formation	Pool	Dedicated Acreage:  Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc.?

Yes  No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name

Position

Company

Date

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

September 11, 1979

Registered Professional Engineer and/or Land Surveyor

*Fred B. Kerr, Jr.*  
Fred B. Kerr, Jr.

Certificate No.

3950  
F. B. KERR, JR.

330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
OIL AND MINERALS DEPARTMENT

P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

Form O-107  
Revised 10-1-78

All distances must be from the outer boundaries of the Section.

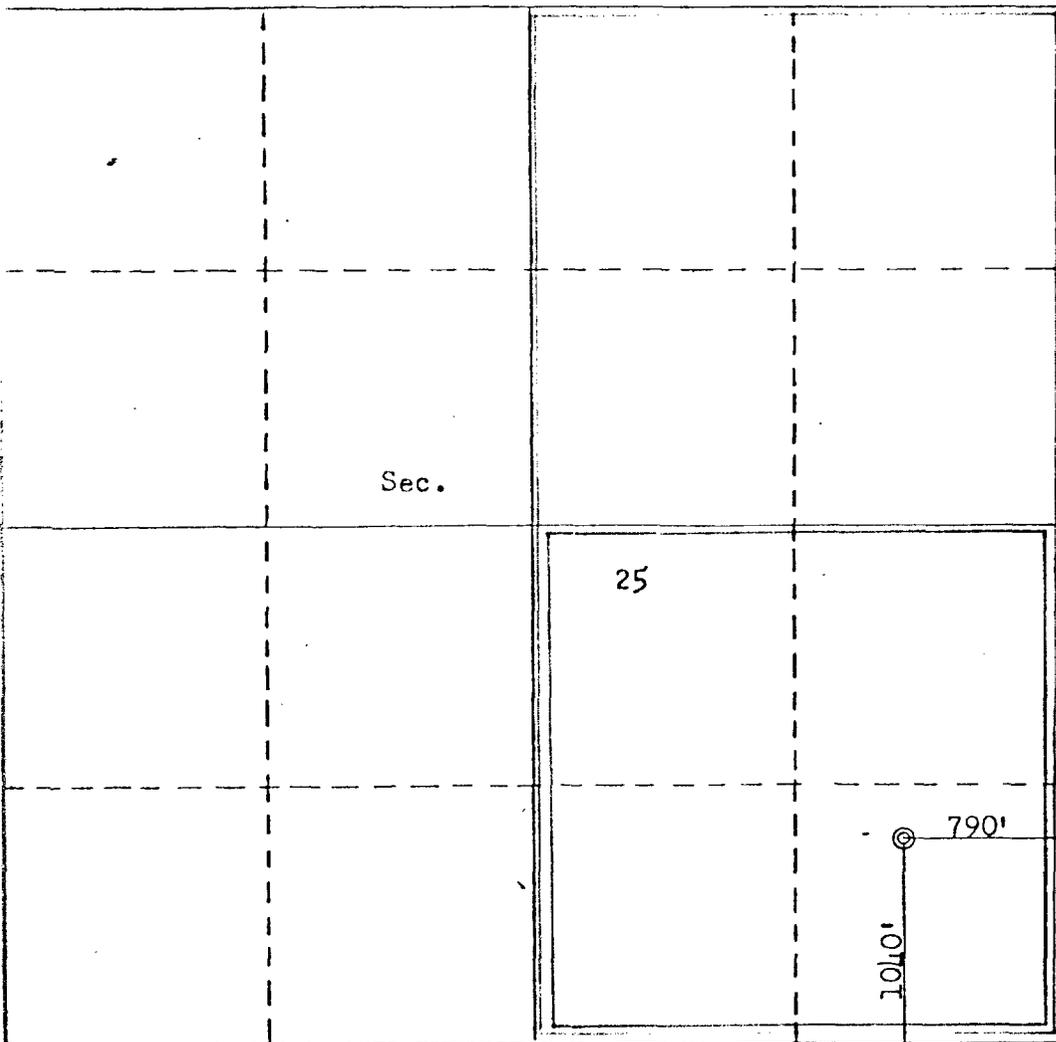
Operator <b>TENNECO OIL COMPANY</b>		Lease <b>EATON COM "B"</b>		Well No. <b>1</b>
Section Letter <b>P</b>	Section <b>25</b>	Township <b>29N</b>	Range <b>11W</b>	County <b>San Juan</b>
Actual Footage Location of Well:				
<b>1040</b>	feet from the	<b>South</b>	line and	<b>790</b>
Ground Level Elev. <b>5562</b>	Producing Formation		Pool	Dedicated Acreage:  Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes  No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



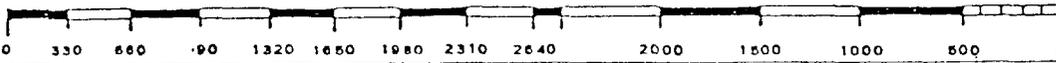
CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

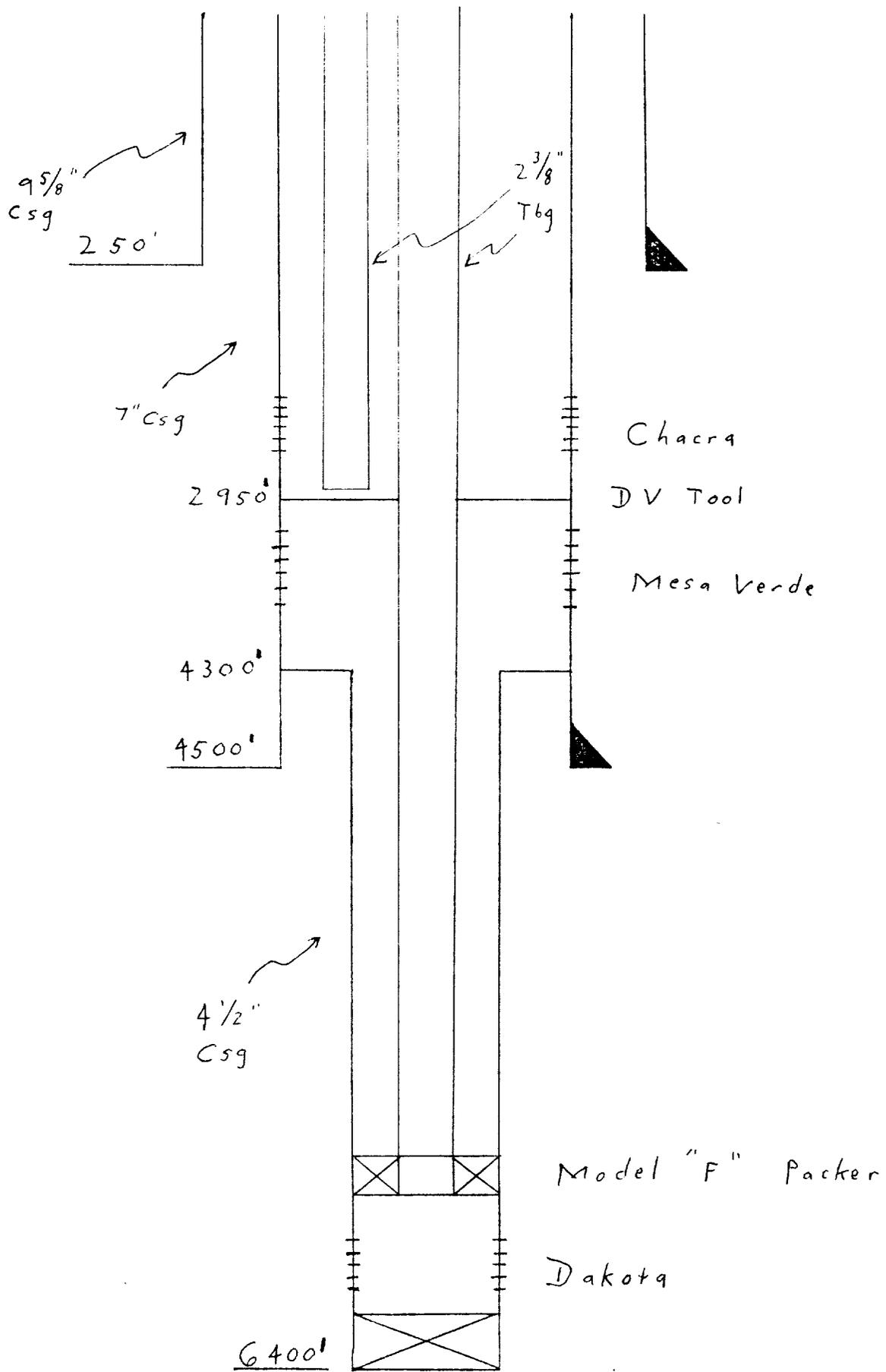
Name
Position
Company
Date

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

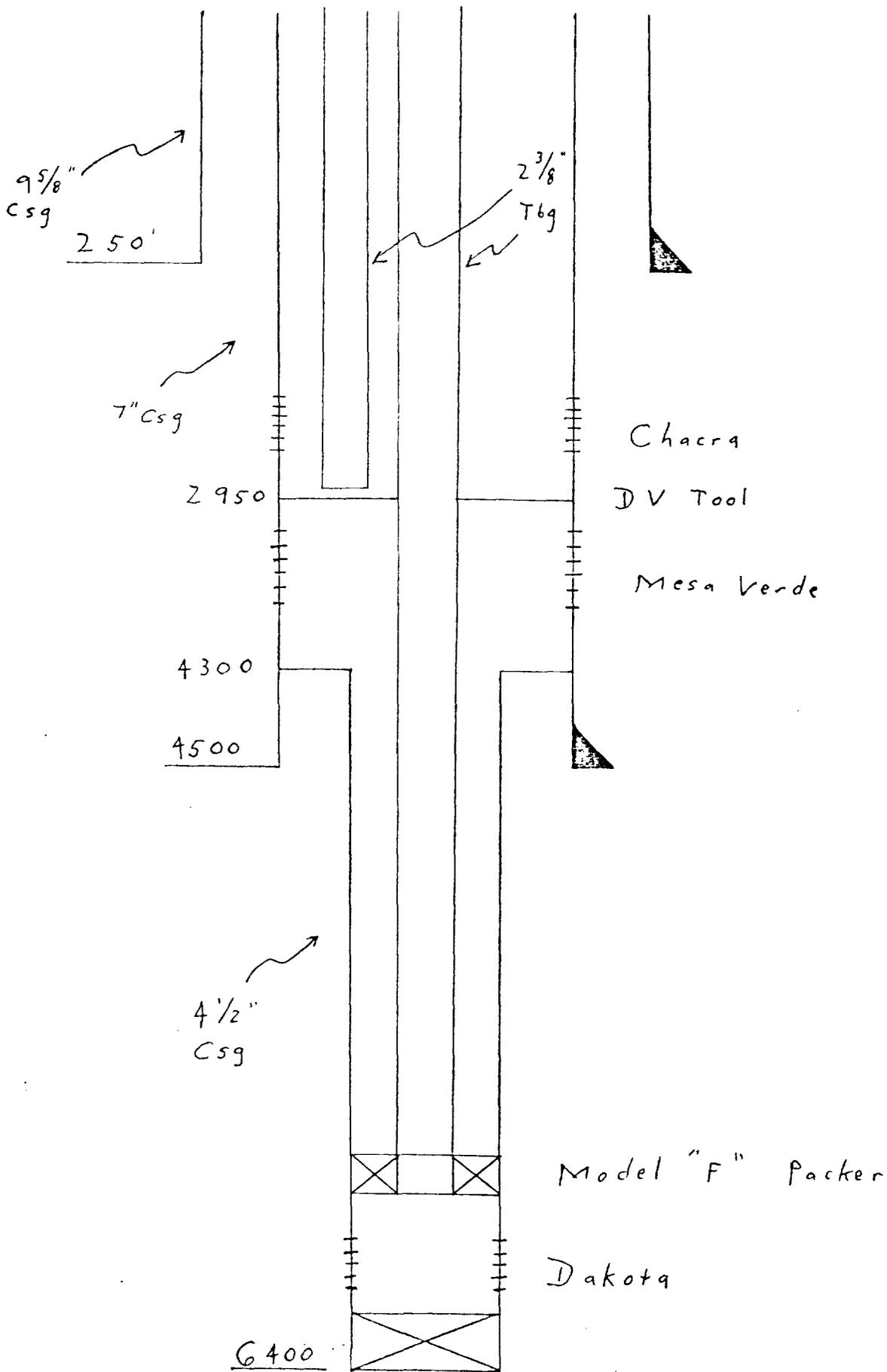
Date Surveyed <b>November 2, 1979</b>
Registered Professional Engineer and/or Land Surveyor <i>Fred B. Kerr, Jr.</i>
Certificate No. <b>3950</b>



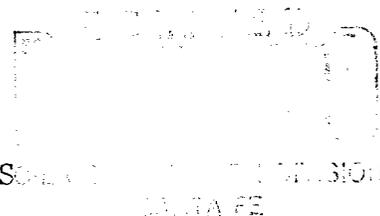
TENNECO OIL COMPANY  
BLOOMFIELD AREA  
R10&11 W, T29N  
SAN JUAN COUNTY, NEW MEXICO  
DAKOTA DUAL WITH MESA VERDE-CHACRA COMINGLE



TENNECO OIL COMPANY  
BLOOMFIELD AREA  
R10#11 W, T29N  
SAN JUAN COUNTY, NEW MEXICO  
DAKOTA DUAL WITH MESA VERDE-CHACRA COMINGLED



STATE OF NEW MEXICO  
DEPARTMENT OF ENERGY AND MINERALS  
OIL CONSERVATION DIVISION



IN THE MATTER OF THE APPLICATION  
OF TENNECO OIL COMPANY FOR DUAL  
COMPLETION AND DOWNHOLE COMMINGLING,  
SAN JUAN COUNTY, NEW MEXICO.

APPLICATION

*Case 6847*

COMES NOW TENNECO OIL COMPANY, by and through its attorneys, KELLAHIN & KELLAHIN, and applies to the New Mexico Oil Conservation Division for approval to drill ten wells in which the Chacra and Mesa Verde production will be commingled and then produced as a dual completion with the Dakota formation, all in San Juan County, New Mexico, and in support thereof would show:

1. Applicant is the operator of each of the units and formations involved in this application as shown on the attached surface plat.

2. Applicant requests approval to commingle production from the Chacra and Mesaverde formations and to dually complete those commingled zones with the Dakota formation for the following wells:

1. Bunce Com Well No. 1, Unit C, Sec. 19, 729N, R10W, NMPM;
2. Elvin J. Paynes Gas Unit "A" Well No. 1-E, Unit N, Sec. 19, T29N, R10W, NMPM;
3. Sullivan Frame Gas Unit "A" Well No. 1-E, Unit A, Sec. 30, T29N, R10W, NMPM;
4. Sullivan Frame Com "B" Well No. 1, Unit D, Sec. 30, T29N, R10W, NMPM;
5. Valdez Gas Unit "A" Well No. 1-E, Unit G, Sec. 24, T29N, R11W, NMPM;
6. Marquis G. Eaton Gas Unit "A" Well No. 1-E, Unit A, Sec. 25, T29N, R11W, NMPM;
7. Valdez Com B-1 Well No. 1, Unit O, Sec. 24, T29N, R11W, NMPM;

8. Bruce Sullivan Com B Well No. 1, Unit D,  
Sec. 25, T29N, R11W, NMPM;
9. Sullivan Gas Unit "A" Well No. 1-E,  
Unit M, Sec 25, T29N, R11W, NMPM;
10. Eaton Com "B" Well No. 1, Unit P,  
Sec. 25, T29N, R11W, NMPM.

Attached hereto and incorporated by reference are Division Forms C-102 for each well.

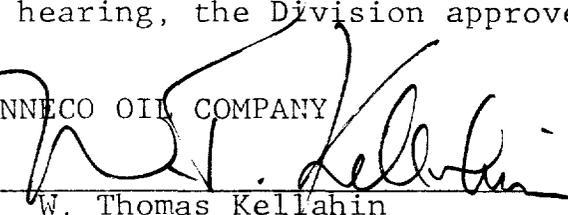
3. Applicant proposes to dedicate a 320-acre Dakota unit to each well and a 160-acre Chacra-Mesaverde unit to each well as shown on the Form C-102 attached hereto and incorporated by reference.

4. Applicant proposes to complete each well as shown on the wellbore schematic attached hereto and incorporated by reference.

5. That approval of the application will be in the best interest of conservation, the prevention of waste and the protection of correlative rights.

WHEREFORE, Applicant requests that this matter be set for hearing and that after notice and hearing, the Division approve the application as requested.

TENNECO OIL COMPANY

By 

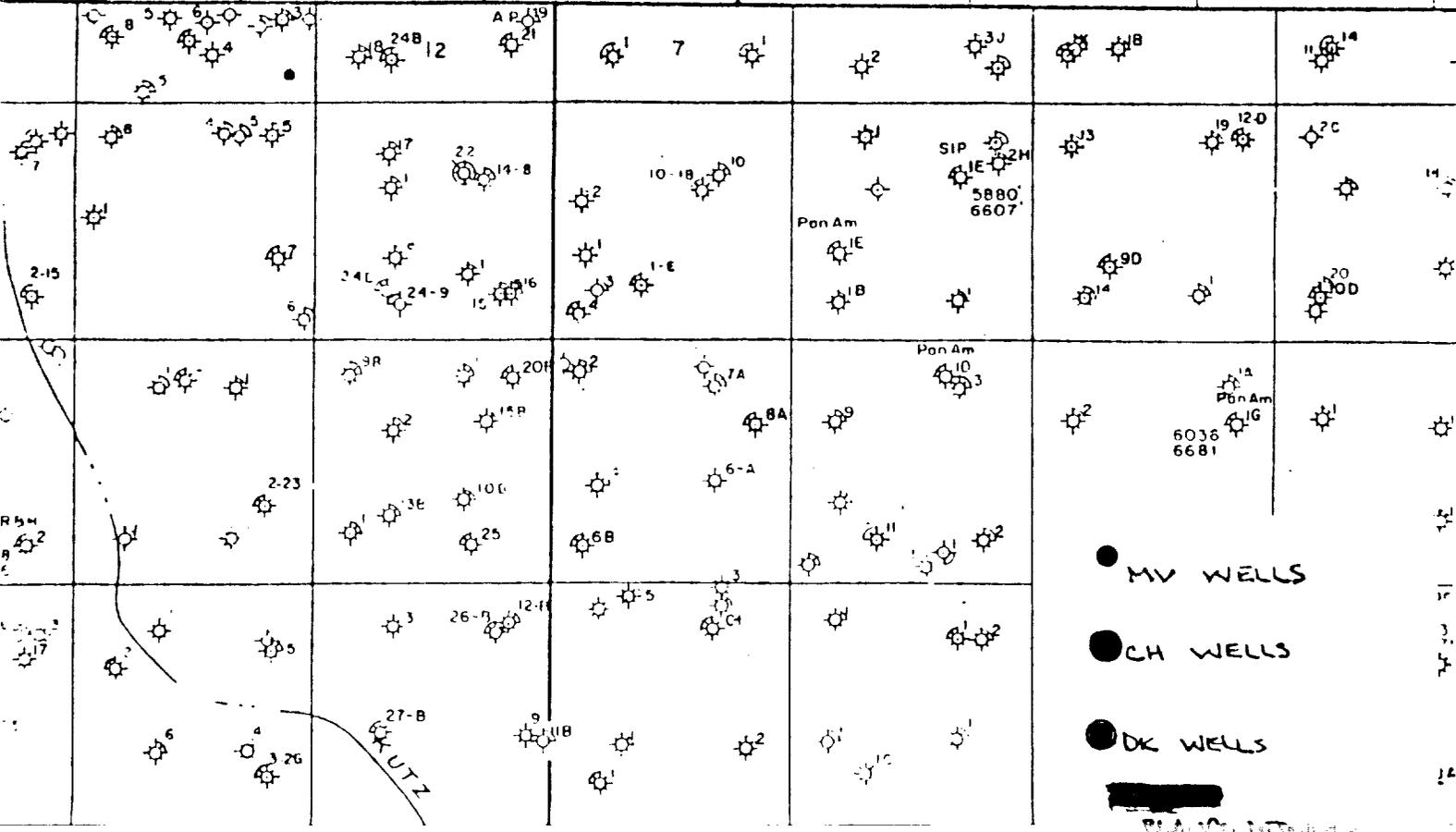
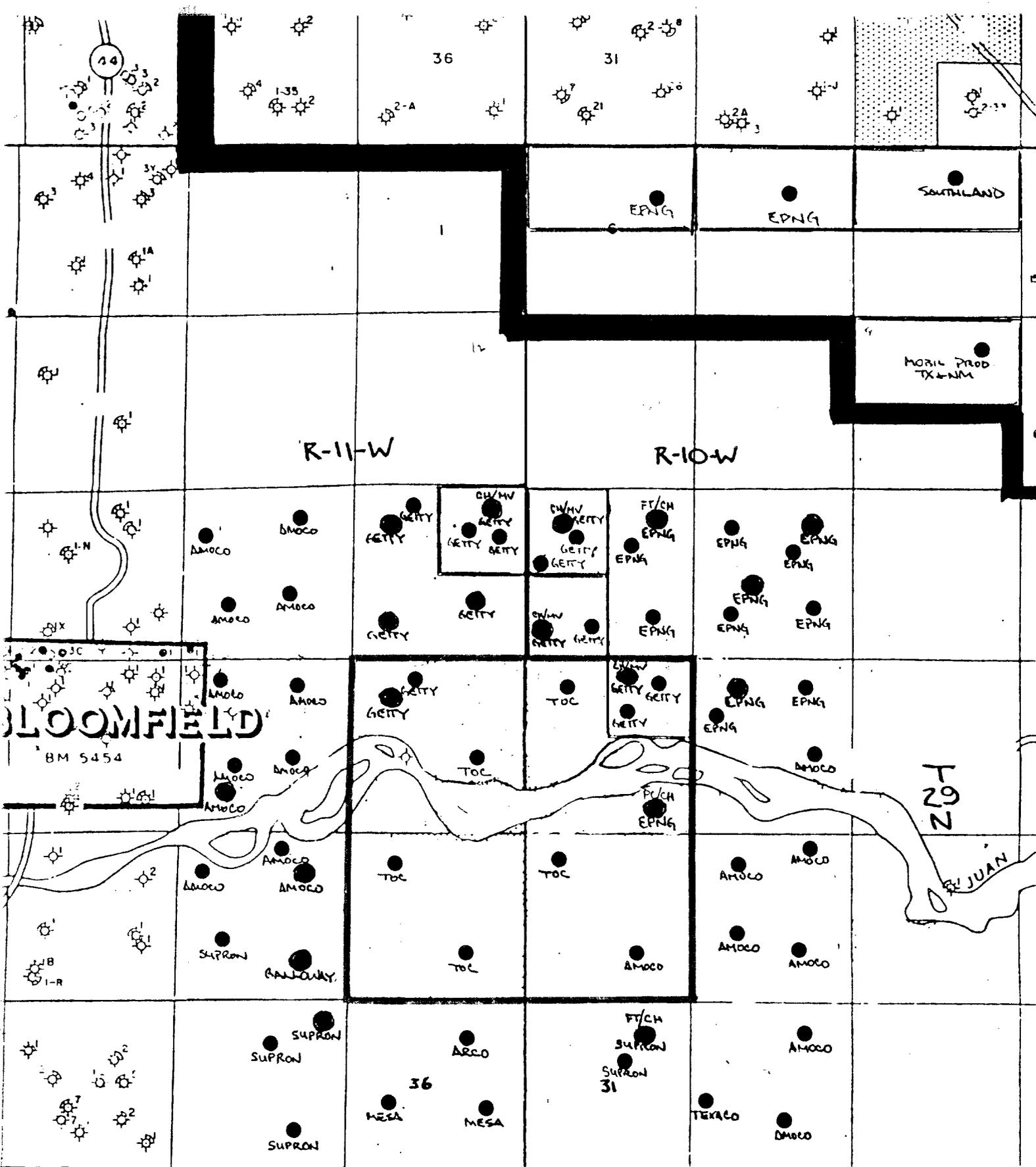
W. Thomas Kellahin

KELLAHIN & KELLAHIN

P. O. Box 1769

Santa Fe, New Mexico 87501

ATTORNEYS FOR APPLICANT



All distances must be from the outer boundaries of the Section.

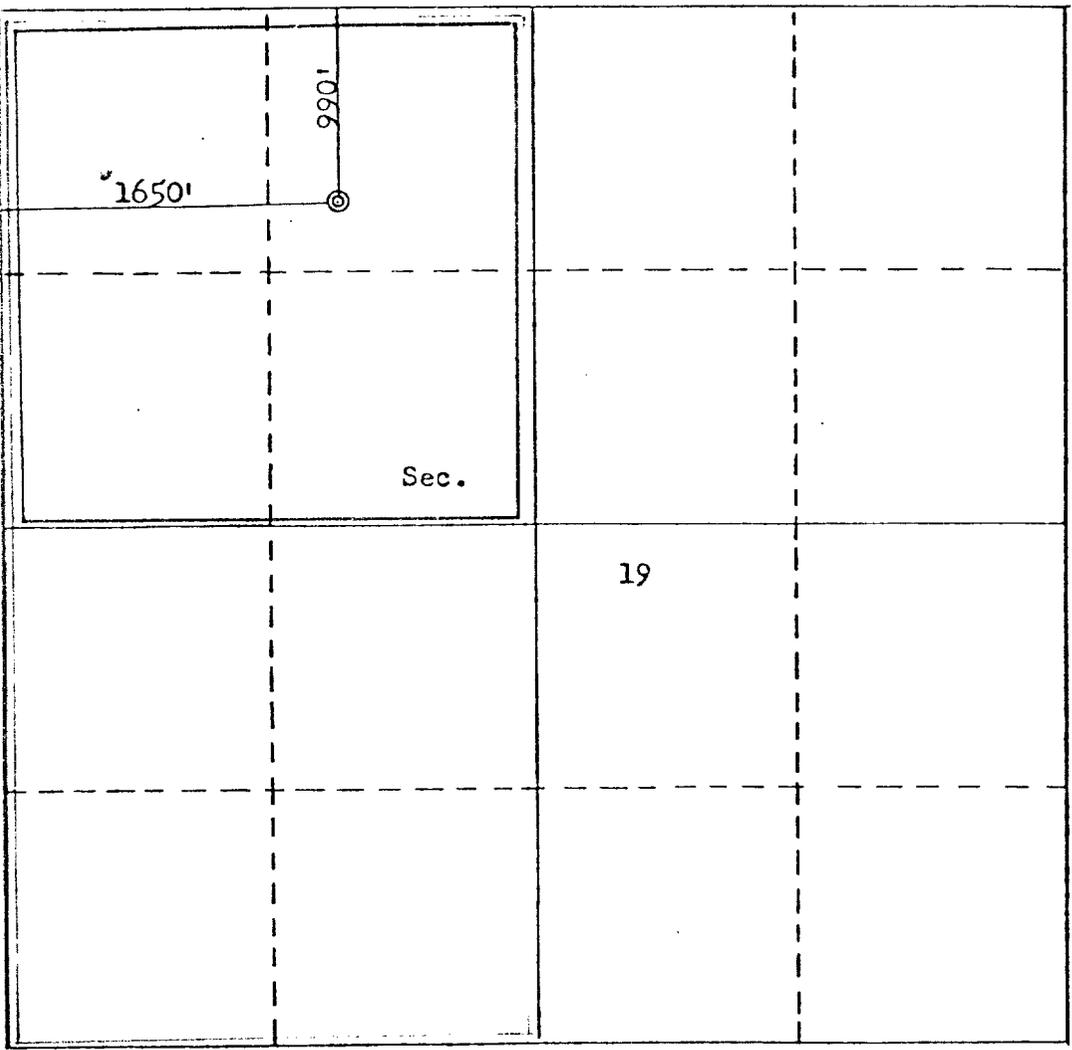
Operator <b>TENNECO OIL COMPANY</b>			Lease <b>BUNCE COM</b>			Well No. <b>1</b>		
Well Letter <b>C</b>	Section <b>19</b>	Township <b>29N</b>	Range <b>10W</b>	County <b>San Juan</b>				
Actual Footage Location of Well:								
<b>990</b> feet from the <b>North</b> line and			<b>1650</b> feet from the <b>West</b> line					
Ground Level Elev. <b>5521</b>	Producing Formation		Pool			Dedicated Acreage:  Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes     No    If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



**CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name

Position

Company

Date

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

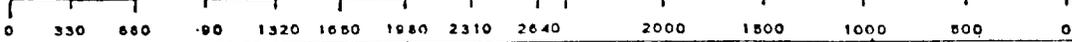
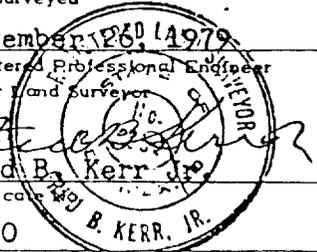
Date Surveyed

**November 26, 1979**

Registered Professional Engineer and/or Land Surveyor

*Fred B. Kerr*  
**Fred B. Kerr**

Certificate No. **3950**



OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

Form C-102  
Revised 10-1-78

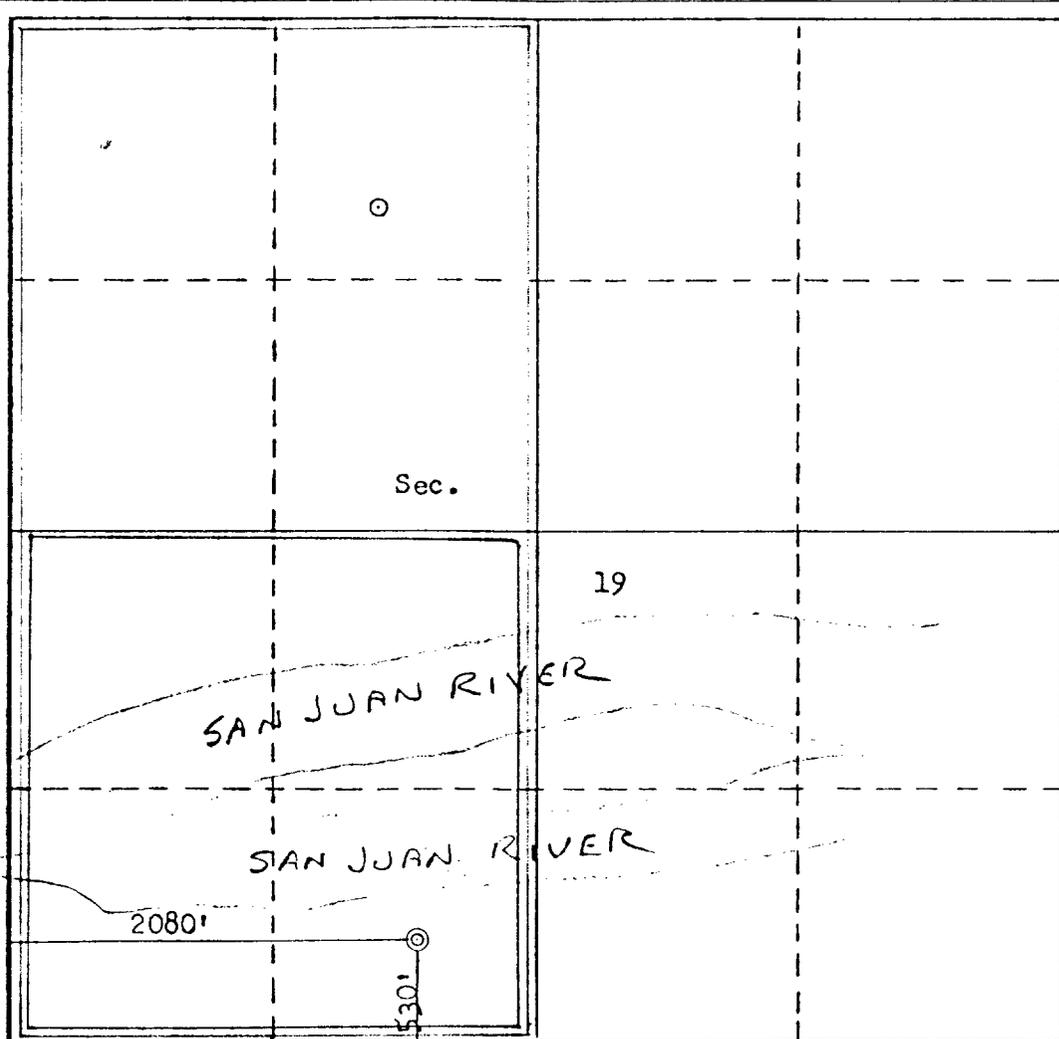
All distances must be from the outer boundaries of the Section

Operator <b>TENNECO OIL COMPANY</b>			Lease <b>ELVIN J. PAYNE GAS UNIT "A"</b>		Well No. <b>1-E</b>
Unit Letter <b>N</b>	Section <b>19</b>	Township <b>29N</b>	Range <b>10W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>530</b> feet from the <b>South</b> line and <b>2080</b> feet from the <b>West</b> line					
Ground Level Elev. <b>5476</b>	Producing Formation	Pool	Dedicated Acreage:  Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?  
 Yes  No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name

Position

Company

Date

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

September 14, 1979

Registered Professional Engineer and/or Land Surveyor

*Fred B. Kerr*  
Fred B. Kerr

Certificate No. 3950  
SANTA FE, N.M.

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

Form C-107  
Revised 10-1-78

All distances must be from the outer boundaries of the Section.

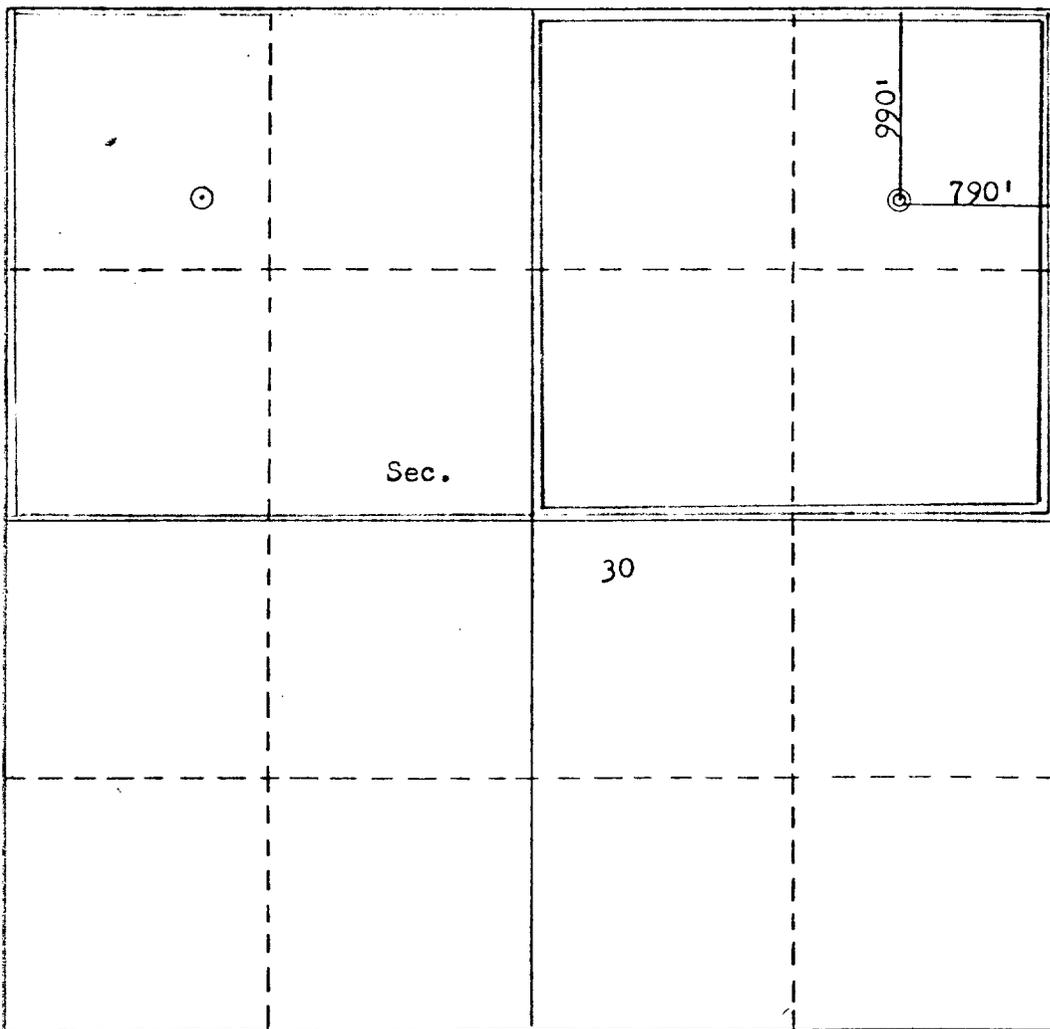
Operator <b>TENNECO OIL COMPANY</b>			Lease <b>SULLIVAN FRAME GAS UNIT "A"</b>			Well No. <b>1-E</b>		
Unit Letter <b>A</b>	Section <b>30</b>	Township <b>29N</b>	Range <b>10W</b>	County <b>San Juan</b>				
Actual Footage Location of Well:								
<b>990</b> feet from the <b>North</b> line and			<b>790</b> feet from the <b>East</b> line					
Ground Level Elev. <b>5502</b>		Producing Formation <b>Dakota</b>		Pool <b>Basin Dakota</b>		Dedicated Acreage:  Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes  No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name

Position

Company

Date

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

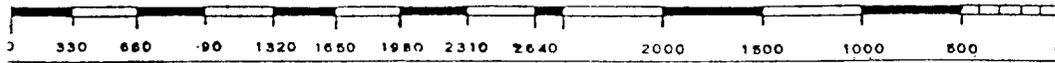
Date Surveyed

September 3, 1979

Registered Professional Engineer and/or Land Surveyor

2 3350  
Fred B. Kerr Jr.  
R.O. Kerr, Jr.

Certificate No. 3950



OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

Form C-107  
Revised 10-1-78

All distances must be from the outer boundaries of the Section.

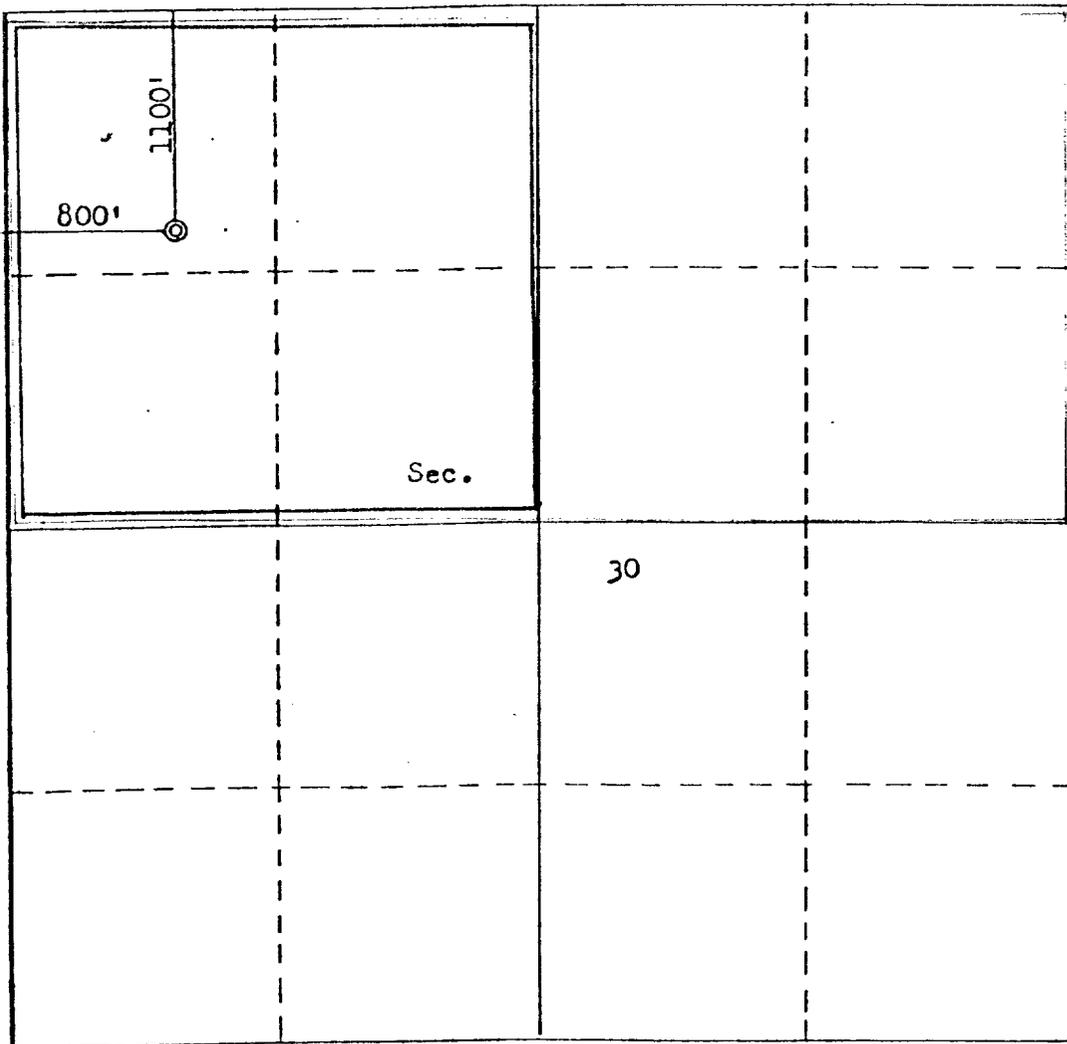
Operator <b>TENNECO OIL COMPANY</b>		Lease <b>SULLIVAN FRAME COM "B"</b>			Well No. <b>1</b>
Unit Letter <b>D</b>	Section <b>30</b>	Township <b>29N</b>	Range <b>10W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>1100</b> feet from the <b>North</b> line and <b>800</b> feet from the <b>West</b> line					
Ground Level Elev. <b>5466</b>	Producing Formation		Pool	Dedicated Acreage:  Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes  No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name

Position

Company

Date

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

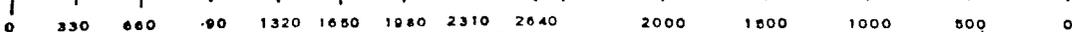
Date Surveyed

November 27, 1978

Registered Professional Engineer and/or Land Surveyor No. 3350

*Fred B. Kerr, Jr.*  
Fred B. Kerr, Jr.  
Certificate No. 3350

3950



OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

Form C-102  
Revised 10-1-78

All distances must be from the corner boundaries of the Section

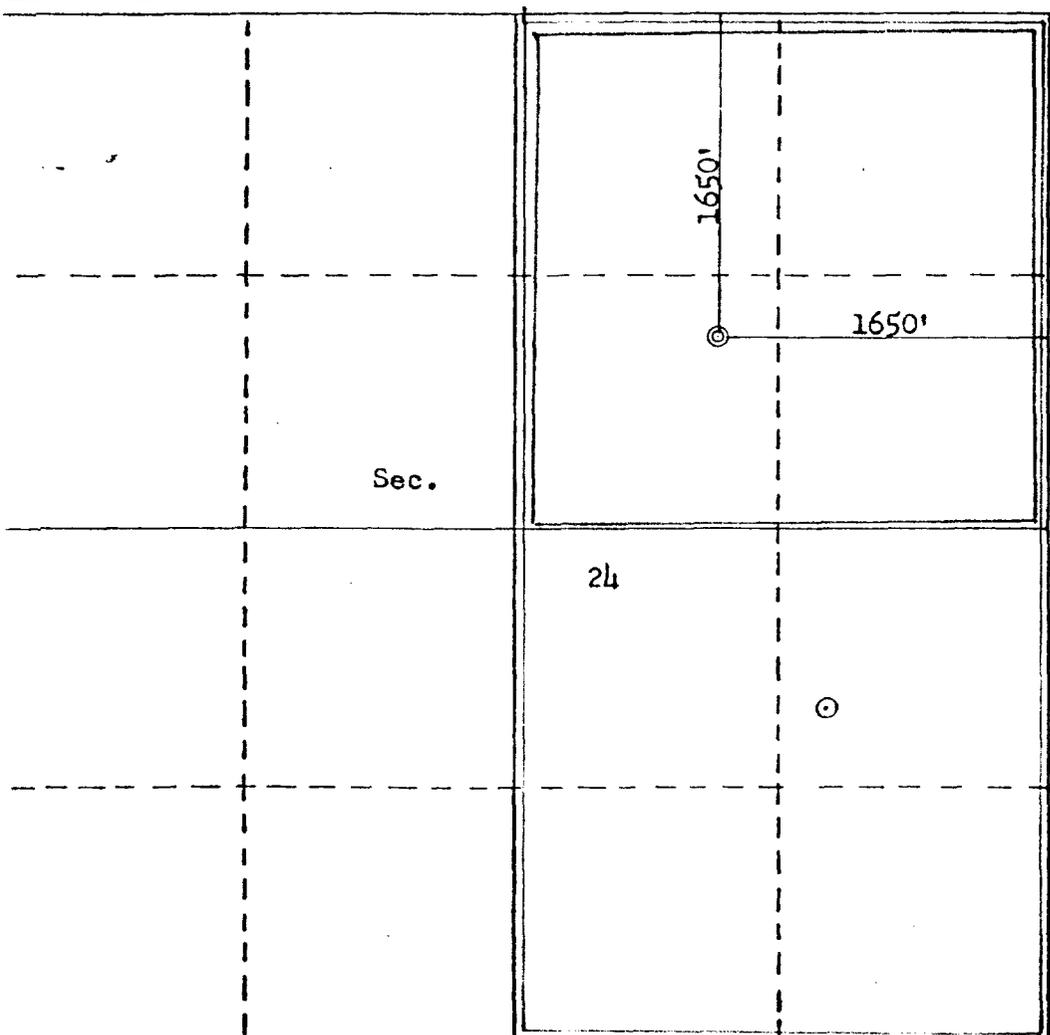
Operator <b>TENNECO OIL COMPANY</b>			Lease <b>VALDEZ GAS UNIT "A"</b>		Well No. <b>1-E</b>
Grid Letter <b>G</b>	Section <b>24</b>	Township <b>29N</b>	Range <b>11W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>1650</b> feet from the <b>North</b> line and <b>1650</b> feet from the <b>East</b> line					
Ground Level Elev. <b>5486</b>	Producing Formation <b>Dakota</b>		Pool <b>Basin Dakota</b>		Dedicated Acreage:  Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes  No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name

Position

Company

Date

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

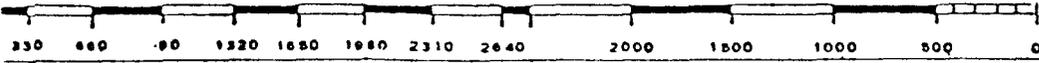
February 1, 1980

Registered Professional Engineer and/or Land Surveyor

*Fred B. Kerr, Jr.*  
Fred B. Kerr, Jr.

Certificate No. B. KERR, JR.

3950



OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

Form C-107  
Revised 10-1

All distances must be from the outer boundaries of the Section.

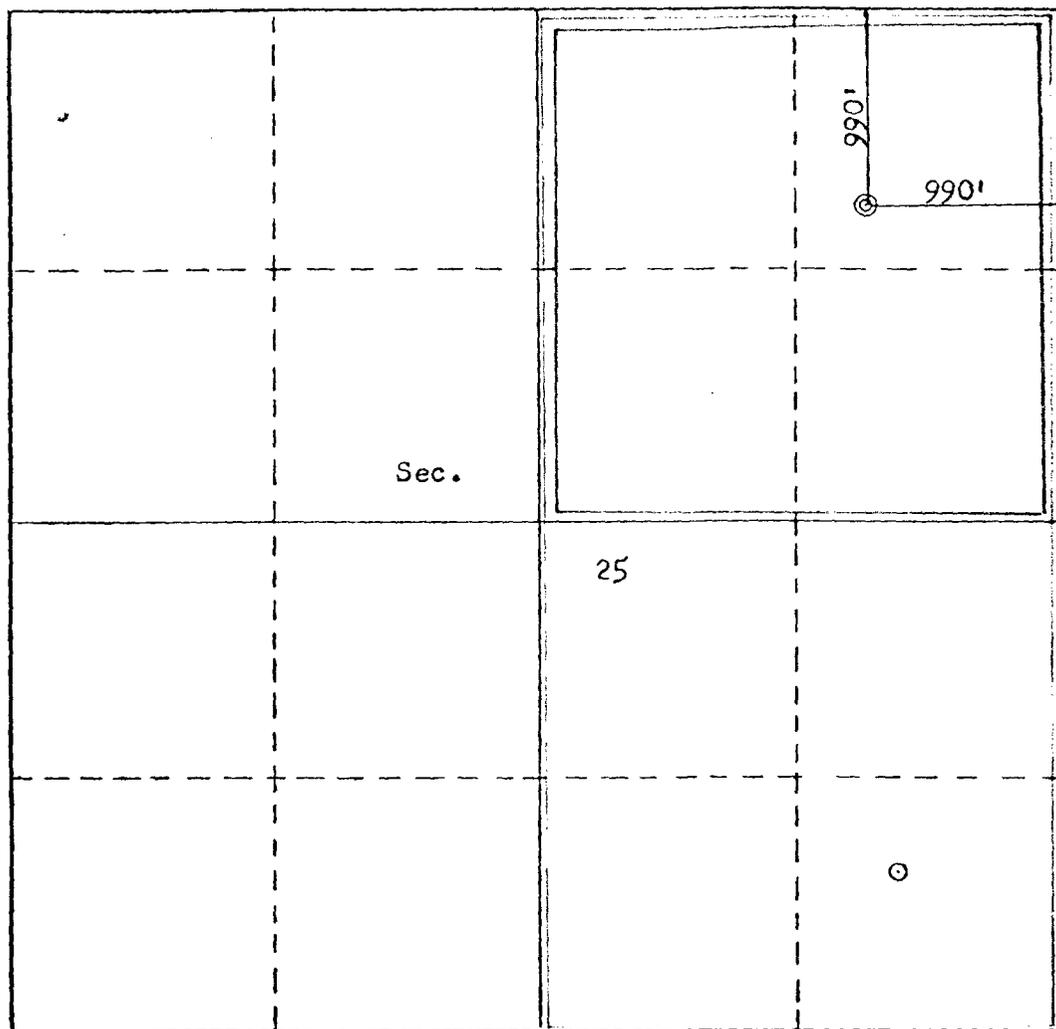
Operator <b>TENNECO OIL COMPANY</b>		Lease <b>MARQUIS G. EATON GAS UNIT "A"</b>		Well No. <b>1-E</b>
Unit Letter <b>A</b>	Section <b>25</b>	Township <b>29N</b>	Range <b>11W</b>	County <b>San Juan</b>
Actual Footage Location of Well: <b>990</b> feet from the <b>North</b> line and <b>990</b> feet from the <b>East</b> line				
Ground Level Elev. <b>5457</b>	Producing Formation <b>Dakota</b>	Pool <b>Basin Dakota</b>		Dedicated Acreage:  Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes  No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name \_\_\_\_\_

Position \_\_\_\_\_

Company \_\_\_\_\_

Date \_\_\_\_\_

I hereby certify that the well location shown on this plat was plotted from notes of actual surveys made by me under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed  
**September 14, 1979**

Registered Professional Engineer and/or Land Surveyor  
*Fred B. Kerr Jr.*  
**Fred B. Kerr Jr.**

Certificate No. **3950**



TEKNECO OIL  
Penthouse  
720 South Colorado Boulevard  
Denver, Colorado 80222

WELL LOCATION PLAT AND DESCRIPTION

Well Name VALDEZ COM B-1

Location: <sup>825</sup> ~~1850~~ FSL <sup>1670</sup> ~~1850~~ FEL Section 24, T 29N, R 11W

1/4-1/4-1/4 Section SE NW SE County San Juan State New Mexico

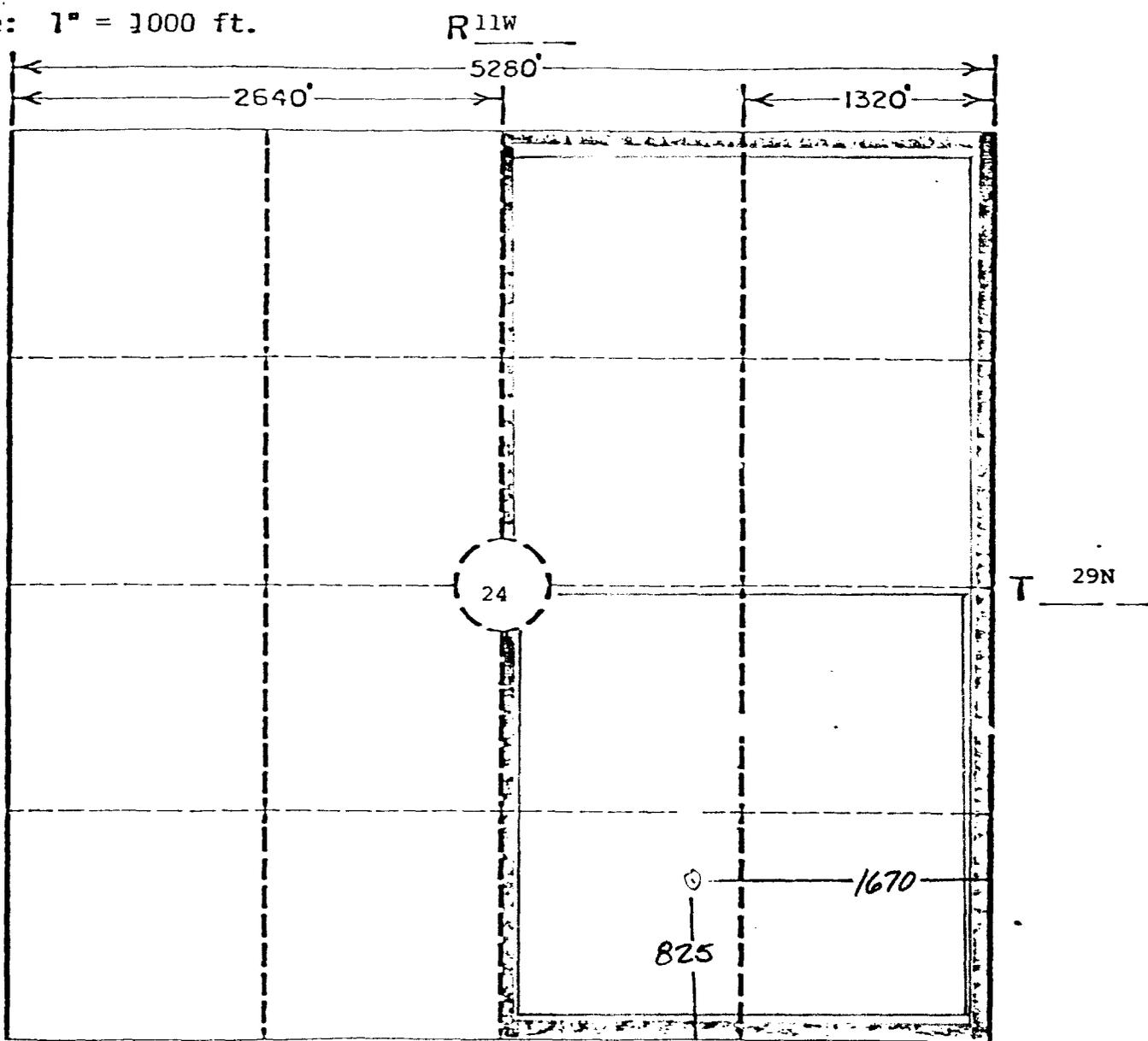
Lease No.: Federal State NM 481 482 483 484 530 Fee MV 320

Spacing Unit chacra 160 Acres: Description Mesaverde: E/2 Chacra: SE/4

Location meets State rules Yes Field Rules Yes

Deepest Objective Mesaverde Est. TD 4500 Est. G.L. Elev 5450

Plat Scale: 1" = 1000 ft.



Preferred direction for relocation within legal boundaries shown SE

If relocation of more than 0 feet is necessary, please contact Carol Peavey  
in the G.E. Section.

Prepared by Doug Brandon Approved by R. H. CASTLE Original Signed By: R. H. CASTLE Date October 24, 1979

cc: Well File  
Land  
Properties  
Administrative  
Drilling

All distances must be from the outer boundaries of the Section.

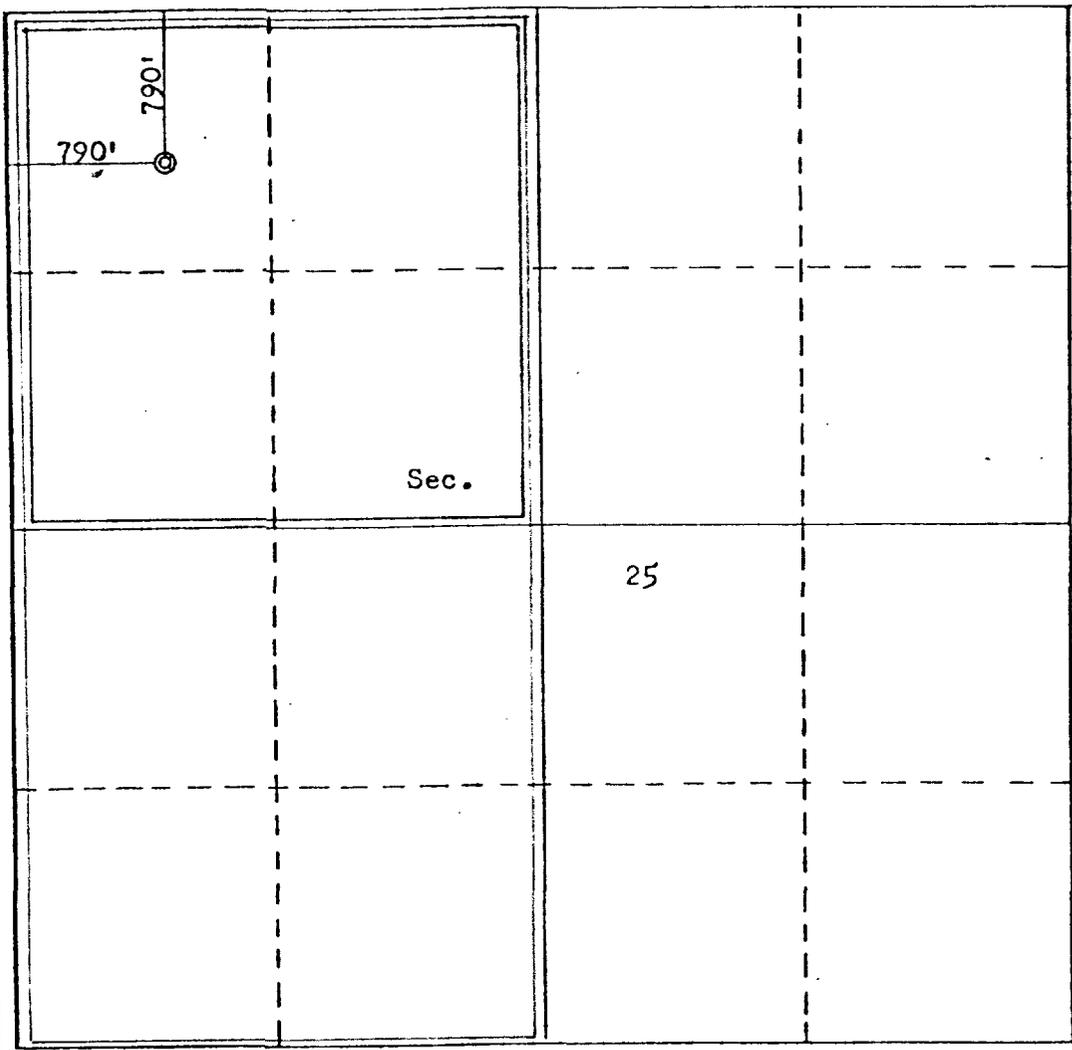
Operator <b>TENNECO OIL COMPANY</b>			Lease <b>BRUCE SULLIVAN COM B</b>			Well No. <b>1</b>		
Unit Letter <b>D</b>	Section <b>25</b>	Township <b>29N</b>	Range <b>11W</b>	County <b>San Juan</b>				
Actual Footage Location of Well:								
<b>790</b> feet from the <b>North</b> line and			<b>790</b> feet from the <b>West</b> line					
Ground Level Elev. <b>5457</b>	Producing Formation		Pool			Dedicated Acreage:  Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes  No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



**CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name \_\_\_\_\_

Position \_\_\_\_\_

Company \_\_\_\_\_

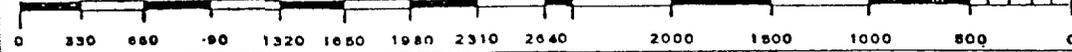
Date \_\_\_\_\_

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed  
**November 26, 1979**

Registered Professional Engineer and/or Land Surveyor  
*Fred B. Kerr, Jr.*

Certification No. **3950**



OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 7088  
SANTA FE, NEW MEXICO 87501

Form C-107  
Revised 10-1-78

All distances must be from the outer boundaries of the Section.

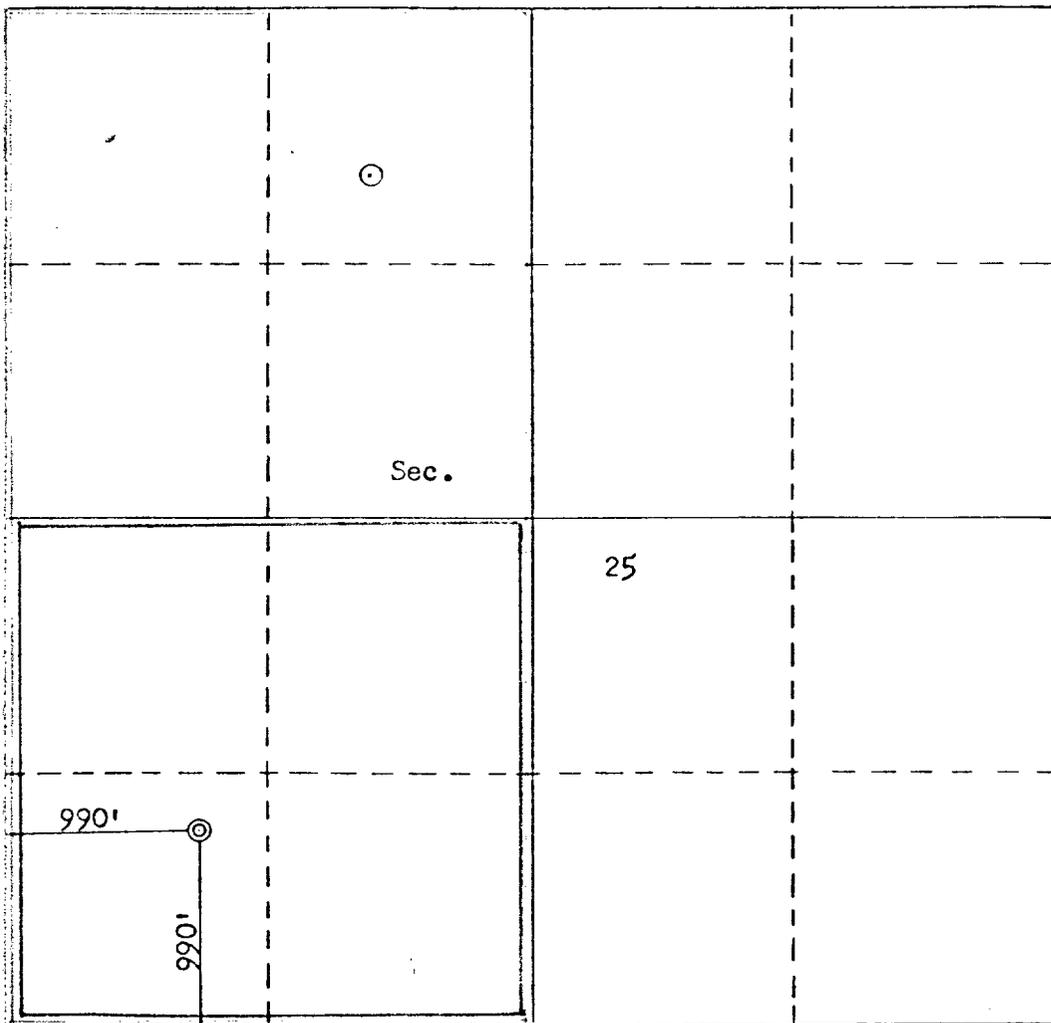
Operator <b>TENNECO OIL COMPANY</b>			Lease <b>SULLIVAN GAS UNIT "A"</b>			Well No. <b>1-E</b>		
Unit Letter <b>M</b>	Section <b>25</b>	Township <b>29N</b>	Range <b>11W</b>	County <b>San Juan</b>				
Actual Footage Location of Well: <b>990</b> feet from the <b>South</b> line and <b>990</b> feet from the <b>West</b> line								
Ground Level Elev. <b>5583</b>	Producing Formation			Pool			Dedicated Acreage: Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes  No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name \_\_\_\_\_

Position \_\_\_\_\_

Company \_\_\_\_\_

Date \_\_\_\_\_

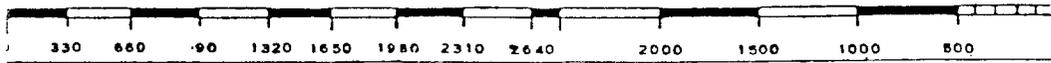
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed **September 21, 1979**

Registered Professional Engineer and/or Land Surveyor

**Fred B. Kerr, Jr.**

Certificate No. **3950**



All distances must be from the outer boundaries of the Section.

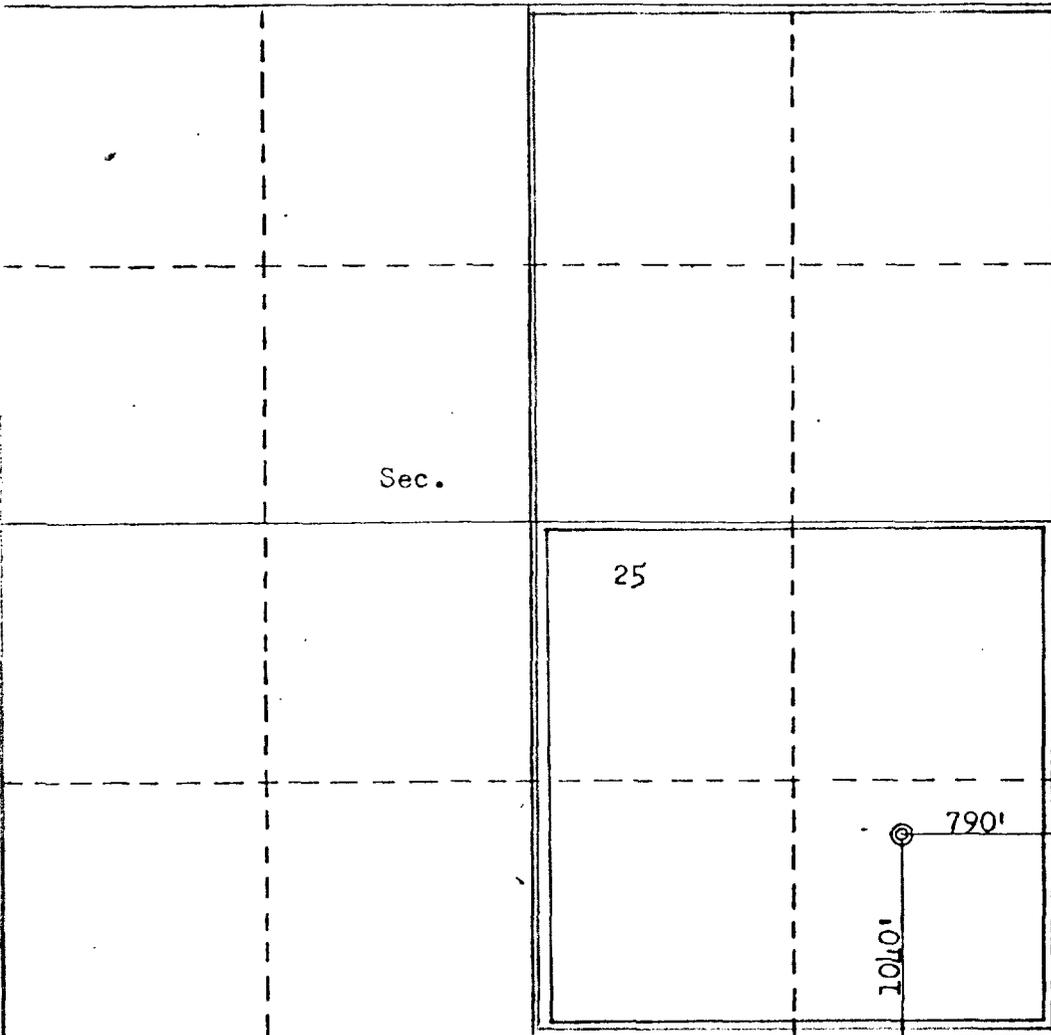
Operator <b>TENNECO OIL COMPANY</b>		Lease <b>EATON COM "B"</b>			Well No. <b>1</b>
II Letter <b>P</b>	Section <b>25</b>	Township <b>29N</b>	Range <b>11W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>1040</b> feet from the <b>South</b> line and <b>790</b> feet from the <b>East</b> line					
Ground Level Elev. <b>5562</b>	Producing Formation		Pool	Dedicated Acreage: Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes  No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name

Position

Company

Date

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

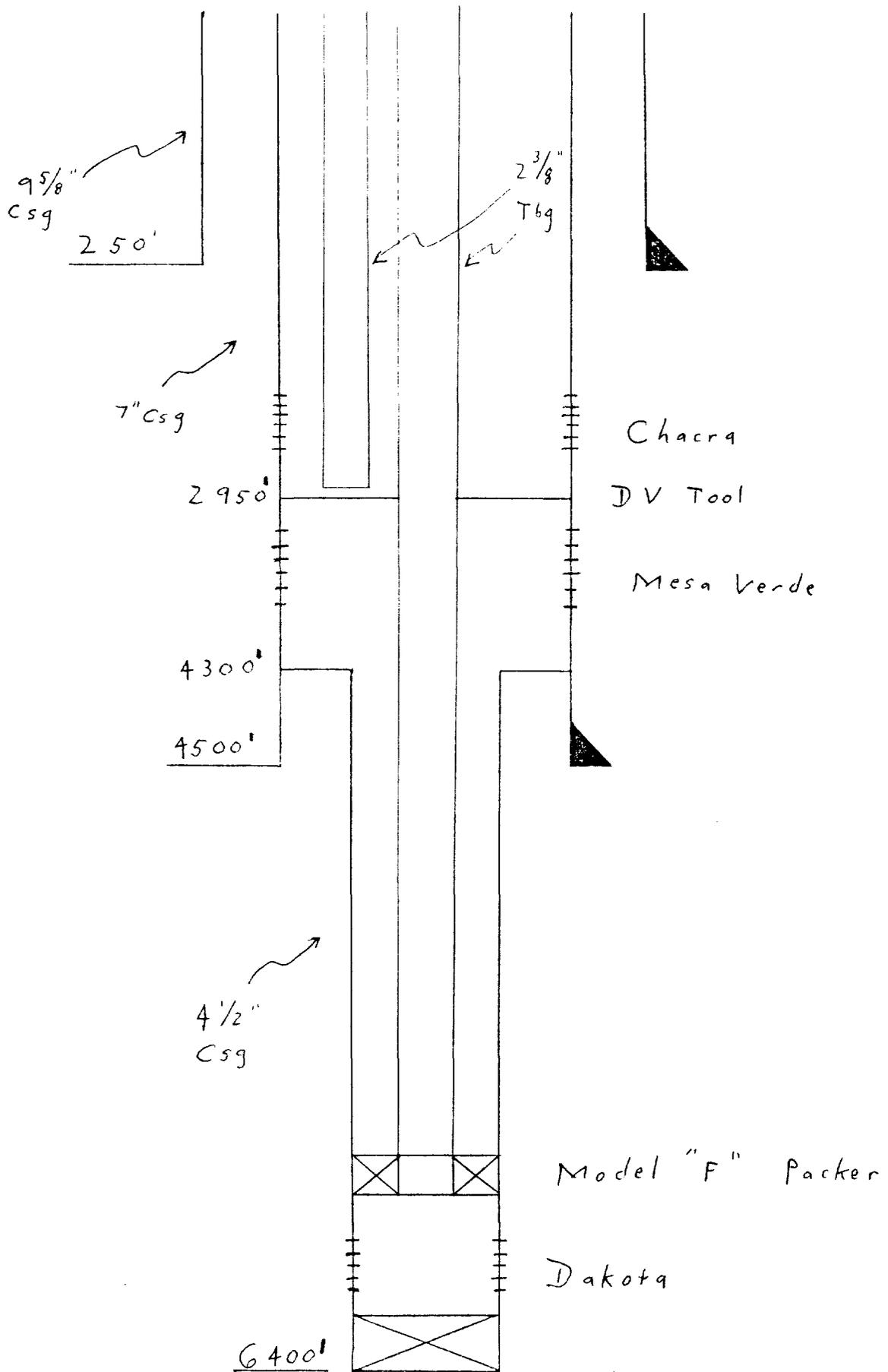
November 14, 1979  
Registered Professional Engineer  
and/or Land Surveyor

*Fred B. Kerr, Jr.*  
Fred B. Kerr, Jr.  
Certification No. 3950

3950



TENNECO OIL COMPANY  
BLOOMFIELD AREA  
R10+11 W, T29 N  
SAN JUAN COUNTY, NEW MEXICO  
DAKOTA DUAL WITH MESA VERDE-CHACRA COMINGLE



TENNECO OIL COMPANY  
 BLOOMFIELD AREA  
 R10&11 W, T29 N  
 SAN JUAN COUNTY, NEW MEXICO  
 DAKOTA DUAL WITH MESA VERDE-CHACRA COMINGLED

