Lowry et al Operating Account

Factual Data Report

South Blanco Tocito Pool

Rio Arriba County, N. M.

POOL INFORMATION

SOUTH BLANCO TOCITO POOL

Rio Arriba County, N. M.

Pool Information:

Sixteen wells had been completed in the South Blanco Tocito Pool as of December 1, 1953. Three of these wells are presently operated by the Johnston Oil and Gas Company, and the remaining thirteen wells are operated by Lowry et al Operating Account.

Of the thirteen wells completed by Lowry in the South Blanco Tocito Pool, eleven are currently oil productive, one well is a gas well and one well is being used as a water injection well. Cumulative oil and gas production from inception through November 30, 1953 for the Lowry et al Operating Account wells is as follows:

	Cumulative Production		
	Oil, Barrels		*Gas, MCF
T-85	2,489		4,284
T-109	40,623		72,562
T-157	123,794		150,729
T-123	0	(Gas well - S.I.)	0
T-125	5,976		6,430
T-127	36,143		32,673
T-129	54,814		51,234
T-132	90,436		108,101
T-134	6,213	(W.I.well-10/7/53)	19,239
T-177	35,319		127,753
T-179	216,767		307,461
T-182	76,747		235,339
T-207	91,791		174,926
	781,112		1,290,731

* Estimated

The completion of Lowry et al Operating Account T-123, located in the NW/4, NE/4, Section 7, Township 26 North, Range 6 West, as a gas well

confirmed the existence of a gas-cap for the South Blanco Tocito Pool. Prior to the drilling of this well, the Pool was considered to be a depletion type reservoir. The gas-oil contact is estimated to be at approximately a subsea datum of -110 feet at the present time for the South Blanco Tocito Pool.

A pressure maintenance program by the injection of water was commenced for the Lowry et al Operating Account properties of the South Blanco Tocito Pool on October 7, 1953. Lowry's T-134 well, located in the NE/4 NW/4 Section 10, Township 26 North, Range 6 West, was converted from an oil producing well to a water injection well. Current injection rate into this well approximates 1500 barrels of water per day at a surface injection pressure of approximately 1900 p.s.i. Cumulative water injection from inception through December 11, 1953, is as follows:

	Water injected, barrels
October, 1953	14,511
November, 1953	41,607
12-1 thru 12-11-53	16,716
	72,834

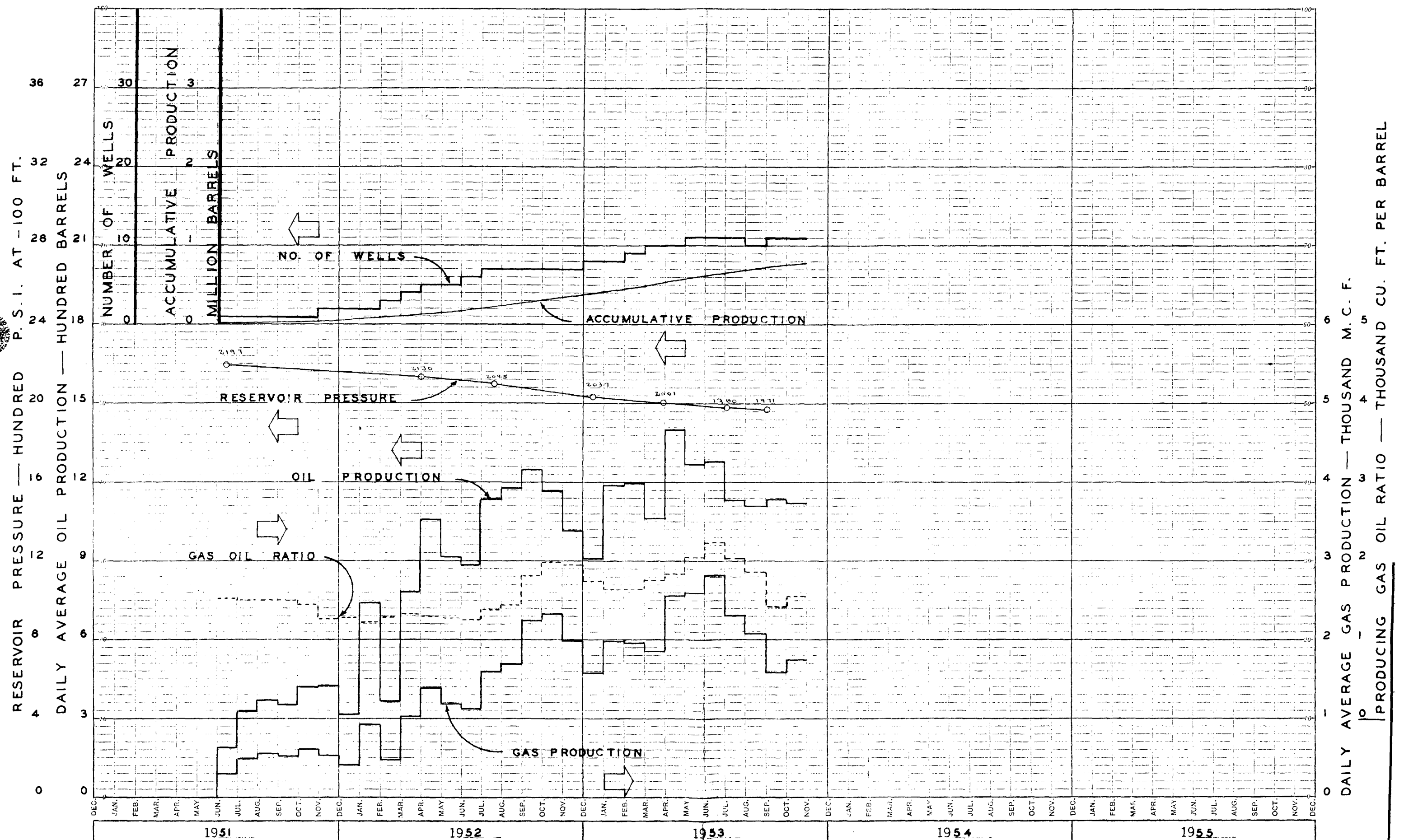
There has been a substantial reduction in the producing gas-oil ratios for some of the wells offsetting the water injection well. These wells that have been affected are presently producing at approximate solution gas-oil ratios. It is too early in the life of the pressure maintenance program to evaluate results, and the program is being continued on an experimental basis.

PRODUCTION
INFORMATION

South Blanco Tocito Pool - Rio Arriba County, NM

Month & Year	Monthly Oil Production, Barrels	Monthly Gas Production, M.C.F.	Gas-Oil Ratio Cu.Ft./Bbl.	Daily Average Oil Production, Barrels	Daily Average Gas Production M.C.F.	Cumulative Oil Production Barrels	Cumulative GAs Production, MCF
1953							
May	43,318	79,376	1832	1397	2561	566,290	889,408
June	38,026	77,806	2046	1268	2594	604,316	967,214
July	39,490	87,591	2218	1274	2825	643,806	1,054,805
August	35,224	71,287	2024	1136	2300	679,030	1,126,092
September	33,285	62,733	1885	1110	2091	712,315	1,188,825
October	35,254	49,392	1401	1137	1593	747,569	1,238,217
November	33,543	52,514	1566	1181	1750	781,112	1,290,731

SOUTH BLANCO TOCITO POOL
RIO ARRIBA COUNTY N M



CODEX BOOK COMPANY, INC. NORWOOD, MASSACHUSETTS
NO. 41120. FIVE YEARS BY MONTHS

BHP INFORMATION

BOTTOMHOLE PRESSURE TESTS

Datum -100 ft.

South Blanco Tocito Pool

Rio Arriba County, N. M.

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Lowry et al Operating Account

Well No.	Date	Hours Shut In	Bottomhole Pressure
T-134	8-3-53	116	1782 p.s.i.
T-179	8-3-53	95	1969 p.s.i.
	10-19-53	116	1963 p.s.i.
T-132	8-3-53	90	1928 p.s.i.
	10-5-53	137	1912 p.s.i.
T-157	8-4-53	82	1885 p.s.i.
	10-5-53	144	1883 p.s.i.
T-109	8-3-53	103	1826 p.s.i.
	10-5-53	152	1828 p.s.i.
T-182	8-3-53	89	1934 p.s.i.
	10-7-53	48 days	1922 p.s.i.
T-207	8-3-53	77	1903 p.s.i.
	10-7-53	171	1906 p.s.i.
T-129	8-4-53	111	2020 p.s.i.
	10-7-53	168	1989 p.s.i.
T-177	8-3-53	81	2041 p.s.i.
	10-7-53	199	2004 p.s.i.
T-127	8-4-53	112	2091 p.s.i.
	10-5-53	76	2070 p.s.i.
T-85	8-4-53	142	1885 p.s.i.
	10-7-53	219	1892 p.s.i.
T-125	10-19-53	240	2108 p.s.i.

Johnston Oil & Gas Company

Rincon 6	10-5-53	72	2114 p.s.i.

Weighted Average Reservoir Pressure

Datum -100 feet

	Date	Bottomhole Pressure, p.s.i.
Original reservoir pressure:	7-26-51	2197
1st General Survey:	5-1-52	2130
2nd General Survey:	8-18 - 8-20-52	2095
3rd General Survey:	1-12 - 1-14-53	2037
4th General Survey:	4-27 - 4-28-53	2001
5th General Survey:	8-3 - 8-4-53	1980
6th General Survey	10-6 - 10-7-53	1971

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OIL & GAS PRODUCTION DATA

South Blanco Tocito Pool

Date	Oil Production Barrels	Gas Production MCF - 15.025 p.s.i.a
5-1-52	130,008	176,439
8-20-52	234,402	311,446
1-14-53	400,133	600,774
4-28-53	518,909	802,889
8-4-53	643,806	1,054,805
10-7-53	716,094	1,194,311

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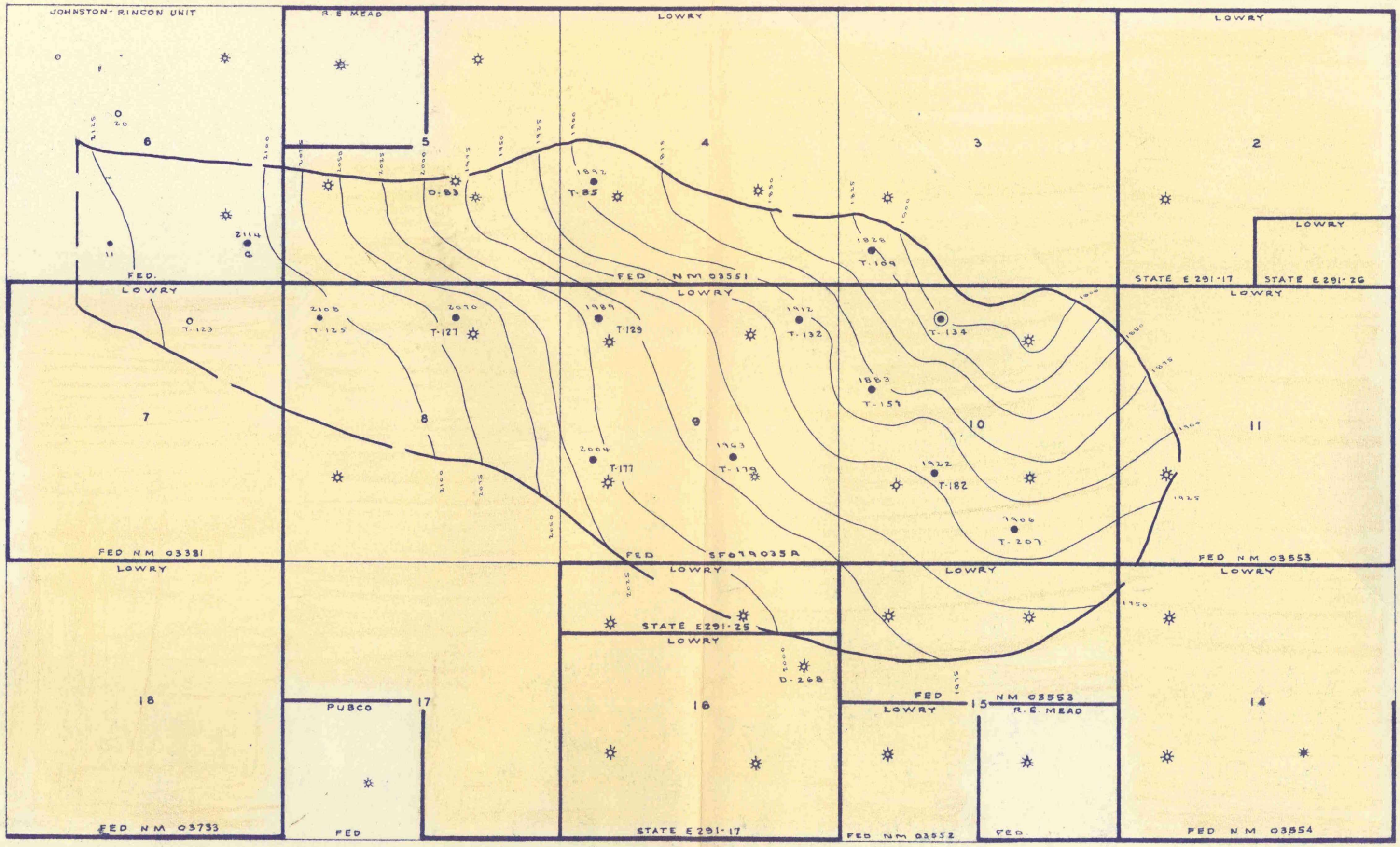


LOWRY OIL COMPANY

T26N - R6W

RIO ARRIBA COUNTY, N. M.

SOUTH BLANCO TOCITO POOL

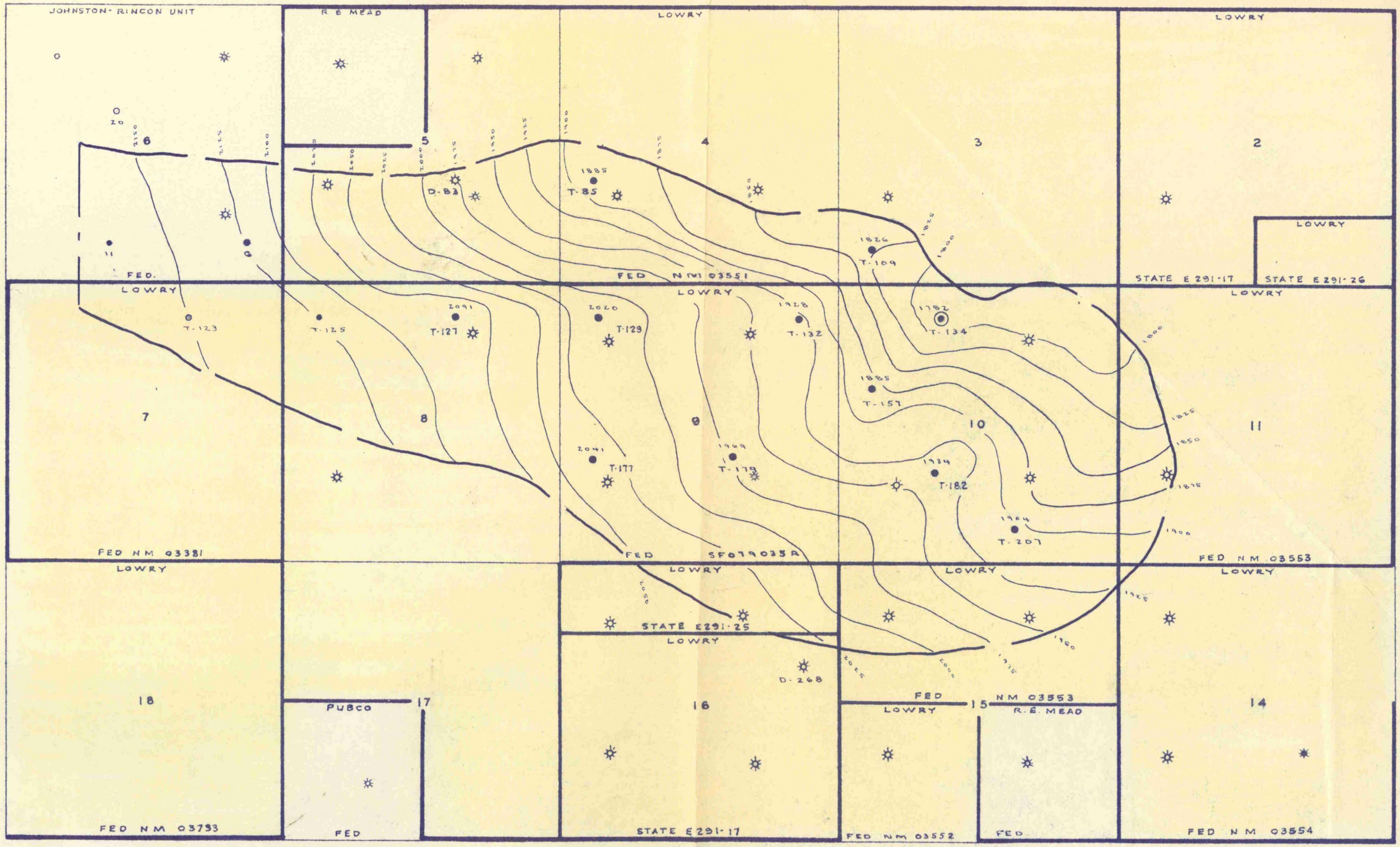
RIO ARRIBA COUNTY, N. M.

ISOBARIC MAP

6 TH GENERAL SURVEY
OCTOBER 5-7 1953

AVG RESERVOIR PRESS.
1971 PSI -100 FT

◎ W.I. WELLS



LOWRY OIL COMPANY

T26N - R6W

RIO ARRIBA COUNTY, N. M.

SOUTH BLANCO TOCITO POOL

RIO ARRIBA COUNTY, N. M.

ISOBARIC MAP

5 TH GENERAL SURVEY

AUGUST 3-4 1953

AVG RESERVOIR PRESS.

1980 PSI -100 FT

◎ W.I. WELLS

GOR INFORMATION

Well No.	Date	Gas-Oil Ratio	Accumulative Oil Production
T-207	6-25-53	2015:1	67,756
	7-6-53	2027:1	69,427
	7-21-53	2399:1	71,962
	8-13-53	2898:1	75,158
	8-23-53	2613:1	77,199
	8-26-53	2288:1	77,710
	8-27-53	2112:1	77,880
	8-28-53	2271:1	78,050
	8-31-53	2108:1	78,366
	10- 53 *	2390:1	85,941
	10-30-53	2311:1	88,135
	12-1-53	2283:1	91,791
T-129	6-12-53	1138:1	27,654
	6-26-53	1231:1	29,857
	7-6-53	1173:1	31,098
	8-19-53	1129:1	38,110
	10-29-53	880:1	50,024
	12-1-53	681:1	54,923
	12-2-53	733:1	55,111
T-177	6-3-53	3287:1	13,888
	6-24-53	4186:1	17,499
	7-6-53	4483:1	19,306
	7-29-53	4577:1	23,125
	8-19-53	4128:1	26,009
	10-31-53	4313:1	33,466
	11-30-53	7252:1	35,319
T-127	5-4-53	818:1	1,721
	6-4-53	951:1	7,160
	6-26-53	883:1	10,845
	7-4-53	883:1	11,879
	8-20-53	988:1	19,225
	10-2-53	870:1	26,541
	12-4-53	789:1	36,552
T-85	6-30-53	1192:1	278
	7-1-53	1256:1	298
	7-29-53	2199:1	788
	8-17-53	2241:1	1068
	10-31-53	1563:1	1993
T-125	10-28-53	1076:1	968

* Monthly production values - measured.
Cumulative oil values include only 1/2 of subject months production.

Gas-Oil Ratio Tests

Well No.	Date	Gas-Oil Ratio	Accumulative Oil Production
T-134	6-26-53	4036:1	5833
	7-13-53	3412:1	6012
	7-26-53	4879:1	6151
T-179	6-14-53	1128:1	190,733
	6-24-53	1227:1	192,232
	7-8-53	1271:1	194,460
	8-8-53	1133:1	199,026
	10-1-53*	1415:1	210,370
	10-29-53	1898:1	211,863
	11 - 53*	1304:1	214,670
T-132	6-13-53	1752:1	73,383
	6-24-53	1626:1	74,484
	7-13-53	1573:1	76,373
	7-29-53	1622:1	77,973
	8-11-53	1548:1	78,934
	10-28-53	1653:1	85,868
	11 - 53*	1375:1	88,353
	12-4-53	1306:1	91,340
T-157	6-10-53	1976:1	96,581
	6-27-53	1540:1	99,176
	7-15-53	1644:1	102,293
	7-28-53	1503:1	104,295
	7-31-53	1768:1	104,806
	8-11-53	1339:1	106,150
	10-31-53	1441:1	119,822
	11-27-53	886:1	123,269
	12-4-53	739:1	124,358
T-109	6-9-53	1494:1	28,882
	6-26-53	1601:1	30,148
	7-14-53	1830:1	31,490
	7-27-53	2608:1	32,453
	8-12-53	2280:1	33,197
	10-28-53	1370:1	38,253
	11-28-53	1379:1	40,550
	12-4-53	682:1	41 ,016
T-182	6-12-53	4826:1	68,513
	6-25-53	5142:1	69,810
	7-5-53	5326:1	70,874
	7-21-53	5615:1	72,463
	8-15-53	5405:1	74,575
	11-30-53	3661:1	76,747

WELL DATA

Location:	1980' FSL, 1980 FEL, Section 5, T26N, R6W
Elevation:	6,570' DF
Drilling Commenced:	June 15, 1953
Drilling Completed:	July 28, 1953
Commenced Producing:	Well was not commercially productive in the Tocito formation and was completed in the Dakota formation.
Surface Pipe:	10-3/4" OD casing set @ 478', with 175 sks cement.
Production Pipe:	7" OD casing set @ 7,446' with 200 sks cement.
Tubing:	2" EUE set @ 7,273'.
Total Depth:	7,452'
Acid Treatment:	None
Shot Record:	Not shot
Initial Potential:	Completed in the Dakota Formation. 1,670 MCF of gas per day.

T - 85

Location:	1980 FSL, 660 FWL, Section 4, T26N, R6W
Elevation:	6,471' GL
Drilling Commenced:	May 6, 1953
Drilling Completed:	June 4, 1953
Commenced Producing:	June 21, 1953
Surface Pipe:	10-3/4" OD casing set @ 445', with 175 sks cement.
Production Pipe:	7" OD casing set @ 6,641' with 200 sks cement.
Tubing:	2" EUE set @ 6,640'
Total Depth:	6,691'
Acid Treatment:	None
Shot Record:	Not shot
Initial Potential:	23.05 barrels of oil per day

T - 123

Location:	700' FNL, 1800' FEL, Section 7, T26N, R6W
Elevation:	6,680' GL
Drilling Commenced:	October 25, 1953
Drilling Completed:	November 24, 1953
Commenced Producing:	December 1, 1953

Surface Pipe: 10-3/4" OD casing set @ 470 feet with 175 sacks of cement.

Production Pipe: 7" OD casing set @ 6843 feet with 200 sacks of cement.

Casing Perforation:	6797 - 6812 feet with 90 shots.
Tubing:	2" E.U.E. set @ 6817 feet.
Total Depth:	6845 feet
Acid Treatment:	None
Shot Record:	Not shot.
Initial Potential:	Flowed 4,635 MCF gas per day through 20/64" choke. CP: 1000 p.s.i. TP: 750 p.s.i.

T - 125

Location:	660 FNL, 660 FWL, Section 8, T26N, R6W
Elevation:	6,693' GL
Drilling Commenced:	September 4, 1953
Drilling Completed:	October 3, 1953
Commenced Producing:	October 9, 1953
Surface Pipe:	10-3/4" OD casing set @ 455', with 175 sks cement.
Production Pipe:	7" OD casing set @ 6,881' with 200 sks cement.
Tubing:	2" EUE set @ 6,859'.
Total Depth:	6,889'.
Acid Treatment:	None
Shot Record:	Not shot
Initial Potential:	612 barrels of oil per day.
Casing Perforation:	6831 - 6846 feet with 90 shots.

CORING RECORD

CORING RECORD

South Blanco Tocito Pool

Rio Arriba County, N. M.

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T-85

Core No. 1: 6644.0 - 6691.5: Cored 47.5 feet. Recovered: 47.5 feet: 13.5 feet black shale; 16 feet tight Tocito sandstone; 18 feet black shale.

D-83

Core No. 1: 6737.0 - 6759.0: Cored 22 feet. Recovered: 21.2 feet: 3 feet black shale; 7 feet tight shaly sandstone; 1 foot porous sandstone; 8.5 feet tight shaly sand; 1.5 feet shale.

Core No. 2: 6759.0 - 6778.0: Cored 19 feet. Recovered 19 feet: 19' shale.

T-125

Core No. 1: 6818.0 - 6858.0: Cored 40 feet. Recovered 19.4 feet: 15.8 feet shale; 3.6 feet sandstone.

Core No. 2: 6858.0 - 6889.0: Cored 31 feet. Recovered: 30.2 feet: Black shale.

T-123

Core No. 1: 6795.0 - 6845.0: Cored 50 feet. Recovered: 21.5 feet: 2 feet shale; 14.5 feet sandstone; 5 feet shale.

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DST RECORD

RECORD OF DRILL STEM TESTS

South Blanco-Tocito Pool

Rio Arriba County, N. M.

D-83:

Drill Stem Test: 6728 - 6778'. Tool open 3-1/2 hours. Weak blow air when tool opened. Died in 32 minutes. After 1 hour, had weak blow air for remainder of test. Recovered: 180' drilling mud. Very small show of oil. Hydrostatic pressure: 3320 p.s.i. Flowing pressure: 0-95 p.s.i. 30-minute shut in bottomhole pressure: 190 p.s.i.

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Well No.	Top of Tocito Sand	Elevation	Subsea Datum Top of Tocito Sand
Federal 1-134	6,718	6,550	-168
Federal 2-179	6,622	6,507	-115
Federal 4-13-132	6,676	6,515	-161
Federal 19-34-157	6,819	6,654	-165
Federal 7-35-109	6,682	6,494	-188
Federal 21-40-182	6,705	6,561	-144
Federal 22-45-207	6,643	6,506	-137
Federal 23-49-129	6,583	6,423	-160
Federal 24-50-177	6,605	6,477	-128
Federal 25-51-127	6,629	6,493	-136
State 1-268	6,602	6,514	-88