

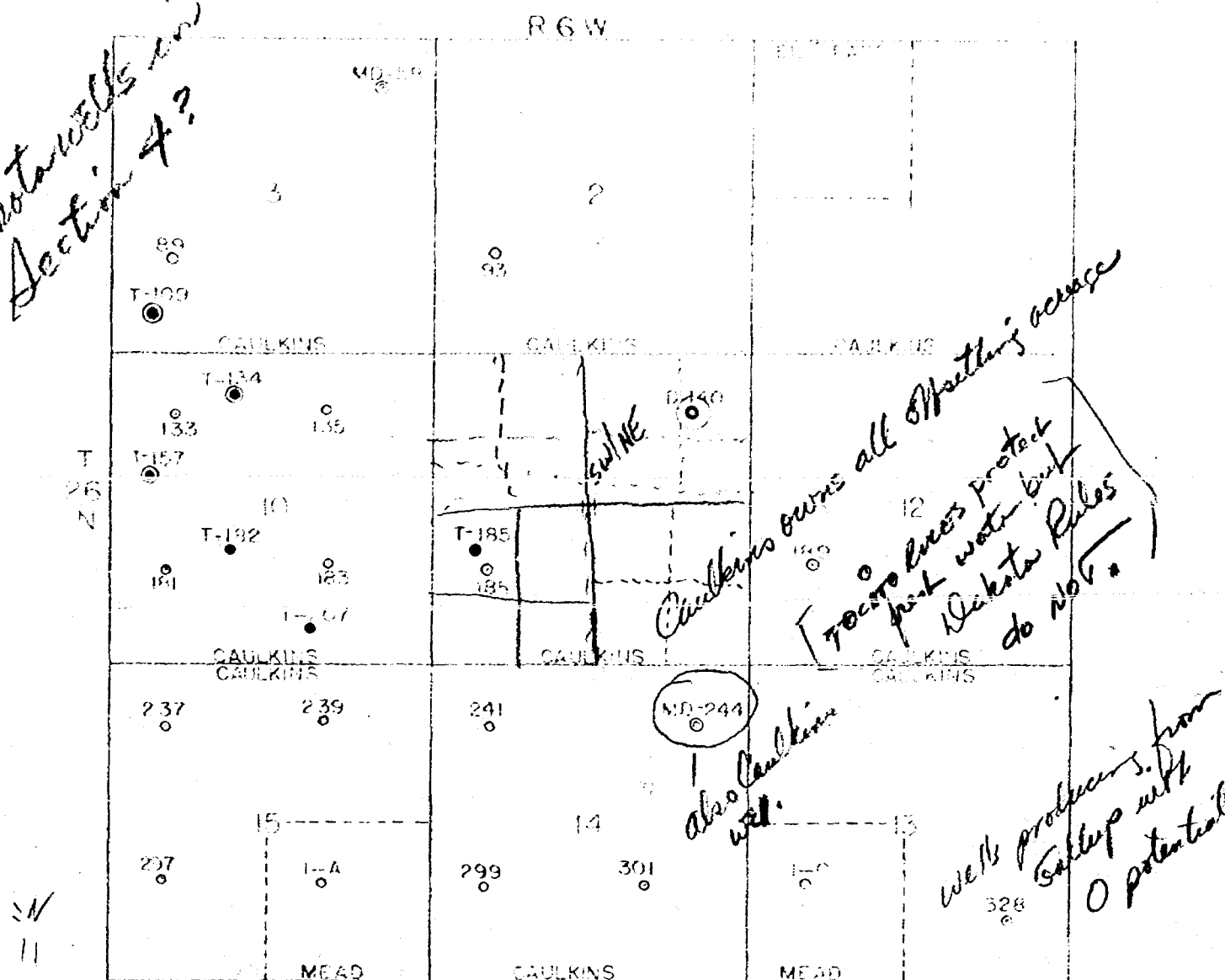
CASE 1924: Application of CAULKINS
For a GAS-OIL dual of its D-140 WELL
and exception to casing requirements
of ORDER R-1191.

Casa No.

1924

Application, Transcript,
Small Exhibits, Etc.

*Dakota wells in
Section 4?*



All wells shown above produce from Pictured Cliffs formation only except Caulkins Oil Company T-109, T-134, T-157, T-182, T-185, T-207, MD-58, MD-244, and D-140. T-109, T-134, and T-157 are water injection wells. MD-58 produces from both the Mesa Verde and Dakota Formations. MD-244 produces from the Dakota formation only. The prefix "T" indicates Tecite well. The prefix "D" indicates Dakota well.

ADDRESSES OF OPERATORS SHOWN ABOVE:

El Paso Natural Gas Company, P.O. Box 997, Farmington, New Mexico
Robert E. Mead, 3333 Republic Bank Building, Dallas, Texas
Caulkins Oil Company, 1130 First National Bank Building,
Denver 2, Colorado

CASE #1924. EXHIBIT # /

AREA SURROUNDING CAULKINS OIL CO. T., D. DUAL COMPLETION (PROPOSED)
WELL NO. D-140 LOCATED 990'N AND 990'E IN SEC 11 T26N R6W
RIO ARRIBA COUNTY, NEW MEXICO

SCALE: 2" = 1 MILE

JASON W. KELLAHIN
ROBERT E. FOX

KELLAHIN AND FOX
ATTORNEYS AT LAW
54 1/2 EAST SAN FRANCISCO STREET
POST OFFICE BOX 1713
SANTA FE, NEW MEXICO

YUCCA 3-9396
YUCCA 2-2991

February 26, 1960

Case 1924

Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Carpenter's?

ATTENTION: Mr. A. L. Porter

Gentlemen:

I am enclosing two applications, in triplicate, together with attached exhibits for filing on behalf of Caulkins Oil Company.

We would like to have these two matters set for hearing as soon as it may be practical, and hearing before an examiner will be satisfactory.

Very truly yours,

Jason W. Kellahin
Jason W. Kellahin

jwk:mas
enclosures 6

*Robert
Miles
3-10-60
RM*

1320
1
970
2320
1340

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF THE STATE OF NEW
MEXICO FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 1420
Order No. R-1191

APPLICATION OF CAULKINS OIL COMPANY
TO AMEND THE SPECIAL POOL RULES FOR
THE SOUTH BLANCO-TOCITO OIL POOL,
RIO ARriba COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on April 16, 1958, at Roswell, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 10th day of June, 1958, the Commission, a quorum being present, having considered the application and the evidence adduced, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Caulkins Oil Company, is the operator of a water injection project in the South Blanco-Tocito Oil Pool in Rio Arriba County, New Mexico.
- (3) That the applicant proposes that the Special Rules and Regulations for the South Blanco-Tocito Oil Pool as promulgated by Order No. R-326, dated May 26, 1953, and by Commission Order No. R-1144, dated March 25, 1958, be amended to provide for a system of transferring allowables within said water injection project and to provide credit against gas-oil ratio limitations for net water injected into the reservoir.
- (4) That amendment of the Special Rules and Regulations for the South Blanco-Tocito Oil Pool to provide that allowables may be transferred from injection wells to other producing wells within the water injection project will not impair correlative rights.
- (5) That production from any one well within the water injection project should be limited to twice the top unit allowable or three hundred (300) barrels a day,

whichever is greater.

(6) That in order to prevent the waste of casinghead gas, a no-flare order should be entered for the South Blanco-Tocito Oil Pool, effective October 1, 1958.

(7) That the Rules and Regulations for the South Blanco-Tocito Oil Pool, as set forth in Commission Order No. R-326, dated May 26, 1953, and Commission Order No. R-1144, dated March 25, 1958, should be superseded by this order so as to consolidate all Special Rules and Regulations for the South Blanco-Tocito Oil Pool and for the South Blanco-Tocito Water Injection Project in one order.

(8) That the findings of the Commission, as recited in Commission Order R-326 and Commission Order R-1144, should be incorporated by reference in this order.

IT IS THEREFORE ORDERED:

(1) That the findings of the Commission, as recited in Commission Order R-326 and Commission Order R-1144, be and the same are hereby incorporated by reference in this order.

(2) That the Rules and Regulations for the South Blanco-Tocito Oil Pool as set forth in Commission Order R-326, dated May 26, 1953, and Commission Order R-1144, dated March 25, 1958, be and the same are hereby superseded.

(3) That Special Pool Rules for the South Blanco-Tocito Pool, Rio Arriba County, New Mexico, be and the same are hereby promulgated as follows, effective July 1, 1958:

SPECIAL RULES AND REGULATIONS
FOR THE SOUTH BLANCO-TOCITO OIL POOL

RULE 1. Any well drilled to or completed in the Tocito formation within one mile of the boundaries of the South Blanco-Tocito Oil Pool shall be spaced, drilled, operated, and prorated in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. All wells projected to or completed in the South Blanco-Tocito Oil Pool shall be located on a tract containing 80 acres, more or less, comprising the East half, West half, North half, or South half of the governmental quarter section in which the well is located. Allowables for wells located on such 80-acre tracts shall be assigned in accordance with the 80-acre proportional factor for pools in the 6,000-to 7,000-foot depth range. Wells located on tracts comprising less than 80 acres shall be assigned an allowable which shall bear the same proportion to the standard 80-acre allowable that the acreage assigned to such well bears to 80 acres.

RULE 3. All wells hereafter projected to or completed in the South Blanco-Tocito Oil Pool shall be located in the center of the Northwest quarter or the Southeast

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quarter of a governmental quarter section, with a tolerance of 100 feet in any direction to avoid surface obstructions.

RULE 4. That all wells hereafter projected to or completed in the South Blanco-Tocito Oil Pool shall be cased in accordance with the following casing rules:

(a) The surface casing shall consist of new or reconditioned pipe with an original mill test of not less than 1000 pounds per square inch, and at least one string of surface casing shall be set at a depth sufficient to protect all potable water-bearing strata encountered, and not less than 450 feet below the surface of the ground. Sufficient cement shall be used to fill the annular space back of the pipe to the bottom of the cellar. Cement shall be allowed to stand a minimum of 24 hours before initiating tests. Before drilling the plug a pump pressure of at least 600 pounds per square inch shall be applied. If at the end of 30 minutes the pressure shows a drop of 100 pounds per square inch, or more, the casing shall be condemned, subject to corrective operations and further testing.

(b) The producing oil string shall consist of new or reconditioned pipe with an original mill test of not less than 2100 pounds per square inch. The producing string shall be set and cemented with sufficient cement to fill the calculated annular space behind the pipe to a minimum of 1000 feet above the guide shoe. Cement shall be allowed to stand a minimum of 72 hours before initiating tests. Before drilling the plug a pump pressure of at least 600 pounds per square inch shall be applied. If at the end of 30 minutes the pressure shows a drop of 100 pounds per square inch, or more, the casing shall be condemned, subject to corrective operations and further testing.

RULE 5. Upon completion of any well in the South Blanco-Tocito Oil Pool and semi-annually, during the months of April and October, a bottom-hole pressure test shall be made and a report thereof filed with the Commission on Commission Form C-124. Bottom hole pressures shall be taken in accordance with the provisions of Rule 302 of the Commission Rules and Regulations except that wells shall remain shut-in for a minimum of 72 hours prior to testing. Tests shall be corrected to a reservoir datum plane of minus 100 (-100) feet.

RULE 6. Upon completion of any well in the South Blanco-Tocito Oil Pool and semi-annually during the months of April and October, a gas-oil ratio test shall be made and a report thereof filed with the Commission on Commission Form C-116.

RULE 7. Prior to making tests required in Rules 5 and 6 above, each operator in the South Blanco-Tocito Oil Pool shall notify all other operators in the pool, as well as the Commission, of the time such tests are to be conducted. Tests may be witnessed by representatives of the other operators and the Commission, if they so desire.

RULE 8. The limiting gas oil ratio for the South Blanco-Tocito Oil Pool shall be two thousand (2,000) cubic feet of gas for each barrel of oil produced.

RULE 9. No casinghead gas produced from any well completed in the South

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Order No. R-1191

Blanco-Tocito Oil Pool shall be flared or vented after October 1, 1958.

RULE 10. All wells drilled to and completed in the South Blanco-Tocito Oil Pool prior to May 26, 1953, whose locations do not conform to the well spacing requirements of Rule 3 above are excepted from the requirements of said Rule and their locations are hereby approved as unorthodox well locations. This approval shall apply to the following wells:

	<u>Well No.</u>	<u>Unit</u>	<u>Sec.</u>	<u>Twp.</u>	<u>Rge.</u>
Caulkins Oil Company	T-132	A	9	26N	6W
" " "	T-134	C	10	26N	6W
" " "	T-157	E	10	26N	6W
" " "	T-182	K	10	26N	6W
" " "	T-207	O	10	26N	6W

RULE 11. In addition to the above Rules for the South Blanco-Tocito Oil Pool, the following Rules shall apply to the operation of all wells completed in the Tocito formation and located within the South Blanco Water Injection Project Area, hereinafter referred to as the "Project."

(a) The project Area shall comprise that area described as follows:

TOWNSHIP 26 NORTH, RANGE 6 WEST, NMPM

Section 3: S/2 SW/4
Section 4: S/2
Section 8: N/2 NE/4
Section 9: N/2 and N/2 S/2
Section 10: NW/4, N/2 SW/4, and SE/4
Section 11: W/2 SW/4

(b) The allowable for the Project shall be the sum of the allowables of the several wells within the project area, including those wells which are shut-in or are used as water injection wells. Allowables for all wells shall be determined in a manner hereinafter prescribed.

(c) Allowables for water injection wells may be transferred to producing wells within the project area, as may be the allowables for producing wells which, in the interest of more efficient operation of the Project, are shut-in or are curtailed in their rate of production.

(d) The project allowable may be produced from any well or wells in the project area in any proportion, provided said rate of production is consistent with

efficient operation of the Project and provided further, that no well shall produce in excess of two times the top unit allowable for the South Blanco-Tocito Oil Pool, or 300 barrels per day, whichever is greater.

(e) The allowable assigned to any water injection well, which is to be transferred to any other well or wells in the Project area for production, shall in no event exceed the producing capacity of the well prior to conversion to water injection, as determined by the average daily rate of production during the last three months the well was produced prior to such conversion.

Conversion of producing wells to water injection, as abandonment of said producing wells is necessitated by water encroachment, shall be made only after approval of such conversion by the Secretary-Director of the Commission. To obtain such approval, the Project operator shall file proper application for conversion with the Commission, providing copies of said application to all interested parties. The Secretary Director may approve the conversion to water injection if, within 20 days after receiving the application, no objection to said conversion is received. The Secretary-Director may grant immediate approval provided waivers of objection are received from all interested parties.

(f) The allowable assigned to any well which is to be shut-in or curtailed and which is to be transferred from said well to any other well or wells in the project area shall in no event exceed the ability of the well to produce oil as determined by a 24-hour test at a stabilized rate of production, which shall be the final 24-hour period of a 72-hour test throughout which the well under test shall be produced in the same manner and at a constant rate. The project operator shall notify all other operators in the South Blanco-Tocito Oil Pool, as well as the Commission, of the time such tests are to be conducted. Tests may be witnessed by representatives of the other operators and the Commission, if they so desire.

(g) The allowable assigned to any well in the Project shall be based upon the ability of the well to produce oil and shall be subject to the limiting gas-oil ratio (2000 to 1) for the South Blanco-Tocito Oil Pool, except that credit for daily average net water injected into the Tocito formation through any injection well or wells located within the project area may be applied to any well or wells producing with a gas-oil ratio in excess of two thousand cubic feet of gas per barrel of oil. Total credit for net water injected in the project area shall be the gas equivalent volume of the daily average net water injected during a one-month period. The daily average gas equivalent of net water injected shall be computed in accordance with the following formula:

$$E_g = (V_{w \text{ inj}} - V_{w \text{ prod}}) \times 5.61 \frac{\text{ft}^3}{\text{bbl}} \times \frac{P_a}{15.025} \times \frac{520^\circ}{635^\circ} \times \frac{1}{Z}$$

where:

$$E_g = \text{Average daily gas equivalent of net water injected}$$

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- $V_w \text{ inj}$ = Average daily volume of water injected, barrels
- $V_w \text{ prod}$ = Average daily volume of water produced, barrels
- P_a = Average reservoir pressure at datum of -100 feet, psig \pm 11.5, as determined from most recent semi-annual survey.
- 15.025 = Pressure base, psi
- 520° = Temperature base of 60°F expressed as absolute temperature
- 635° = Reservoir temperature of 175°F expressed as absolute temperature
- Z = Supercompressibility factor for 0.7 gravity gas at average reservoir pressure, P_a , interpolated from supercompressibility tabulation below:

Pressure	Z	Pressure	Z
2000	0.845	1200	0.889
1900	0.849	1100	0.897
1800	0.853	1000	0.905
1700	0.857	900	0.914
1600	0.861	800	0.923
1500	0.865	700	0.932
1400	0.873	600	0.941
1300	0.881	500	0.950

Distribution of the total calculated average daily gas equivalent volume may be made to any well or wells with gas-oil ratios in excess of two thousand to one. The daily adjusted oil allowable for any such well receiving water injection credit shall be determined as follows:

$$\text{Well's Adjusted Allowable} = \frac{(\text{Top unit allowable} \times 2000) + \text{gas equivalent volume assigned to well}}{\text{Well's gas-oil ratio}}$$

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CASE NO. 1420
Order No. R-1191

provided however, that in no event shall the gas equivalent volume assigned to a well be such as to cause the well's adjusted allowable to exceed the top unit allowable for the pool.

(h) Each month the project operator shall, within three days after the normal unit allowable for Northwest New Mexico has been established, submit to the Commission a South Blanco-Tocito Water Injection Project Operator's Report, on a form prescribed by the Commission, outlining thereon the data required, and requesting allowables for each of the several wells in the Project.

(i) The Commission shall, upon review of the report and after any adjustments deemed necessary, assign allowables to each well in the Project for the next succeeding month in accordance with these rules.

(j) The Special Rules and Regulations for the operation of wells in the project area shall prevail as against the Special Rules and Regulations for the South Blanco-Tocito Oil Pool, if in conflict therewith.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

MURRAY E. MORGAN, Member

A. L. PORTER, Jr., Member and Secretary

S E A L

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BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR THE
PURPOSE OF CONSIDERING:

CASE NO. 537
Order No. R-326

THE MATTER OF THE APPLICATION OF
LOWRY ET AL OPERATING ACCOUNT FOR THE
ESTABLISHMENT OF POOL RULES FOR THE
SOUTH BLANCO-TOCITO POOL (FORMERLY
PETTIGREW-TOCITO POOL), RIO ARRIBA
COUNTY, NEW MEXICO; FIXING THE SPACING
OF WELLS; FIXING GAS-OIL RATIOS; ESTABLISH-
ING A CASING PROGRAM; AND RELATED MATTERS.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on May 19, 1953, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission".

NOW, on this 26th day of May, 1953, the Commission, a quorum being present, having considered the testimony adduced at said hearing and the exhibits received in this cause, and being fully advised in the premises,

FINDS:

(1) That due notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the Pettigrew-Tocito Pool has been duly classified as an oil pool, embracing lands in Rio Arriba County, New Mexico, defined and described as follows:

Township 26 North, Range 6 West, NMPM
SW/4 Section 3, SE/4 Section 4,
Section 9, NW/4 and S/2 Section 10,
NW/4 Section 15, N/2 Section 16

(3) That the Commission, by virtue of Order R-321, changed the name of the Pettigrew-Tocito Pool to South Blanco-Tocito Pool.

(4) That geological and engineering data presented at the hearing, and available to the Commission, indicate that one well completed to the Tocito sand will efficiently and economically drain and develop not less than 80 acres, and that

the drilling of more wells would result in economic loss and earlier reduction of reservoir pressures, without increasing the ultimate recovery of oil from the reservoir, and would constitute waste, and that correlative rights, including those of royalty owners, will be protected by a spacing program in accordance herewith.

(5) That, for the orderly development of the South Blanco-Tocito Pool, a uniform spacing pattern should be established by this Commission, on the basis of one well to each 80 acres in the pool.

(6) That, in order to maintain reservoir pressures and prevent waste of associated gas, or casinghead gas, a limiting gas-oil ratio should be established, and that a ratio of 2,000 cubic feet of gas per barrel of oil produced is a reasonable limitation.

(7) That, in order to protect the producing formation, and potable water-bearing strata encountered in the pool, a uniform casing program should be adopted.

(8) That the operator or operators of the South Blanco-Tocito Pool should present to the Commission semi-annual reports showing pool performance in relation to bottom-hole pressures and gas-oil ratios.

IT IS THEREFORE ORDERED:

(1) That this order shall be known as "The South Blanco-Tocito Pool Rules."

(a) The South Blanco-Tocito Pool Rules shall be applicable to and govern the future development and operation of the South Blanco-Tocito Pool as it now exists or may hereafter be extended by order of the Commission.

(2) That all wells hereafter drilled in the South Blanco-Tocito Pool or any extension thereof shall be located in the center of the northwest quarter or the southeast quarter of each governmental quarter section, with a tolerance of 100 feet in any direction to avoid surface obstructions, except that no well shall be located closer than 660 feet to any lease line without special order of the Commission after due notice and hearing.

(a) That no well shall be drilled or produced in said pool except in conformity with the spacing pattern set forth above without special order of the Commission after due notice and hearing.

(b) That the location of any wells heretofore drilled in the South Blanco-Tocito Pool which does not conform to the provisions of these rules shall be treated as unorthodox locations, which said unorthodox locations are hereby approved. This approval shall include Lowry et al Federal 4-13-132, NE/4 NE/4 Section 9; Federal 1-134, NE/4 NW/4 Section 10; Federal 19-34-157, SW/4 NW/4 Section 9; Federal 21-40-182, NE/4 SW/4 Section 10; Federal 22-45-207, SW/4 SE/4 Section 10;

Case No. 537
Order No. R-326

and Federal 7-35-109, SW/4 SW/4 Section 3, all in Township 26 North, Range 6 West, NMPM.

(3) That a gas-oil ratio limit is hereby set for the South Blanco-Tocito Pool at the rate of 2000 cubic feet of gas for each barrel of oil produced.

(a) Nothing herein shall be construed as prohibiting the production of oil from wells within the pool whose gas-oil ratio exceeds 2000 cubic feet of gas for each barrel of oil produced, at a reduced rate which in the best judgment of the operator is consistent with good reservoir management, until such time as the production of oil in the South Blanco-Tocito Pool is allocated, at which time the provisions of Rule 506 of the Rules and Regulations of this Commission shall apply.

(4) The casing program of all wells hereafter drilled in the pool shall consist of at least two strings of pipe set in accordance with the following regulations:

(a) The surface casing shall consist of new or reconditioned pipe with an original mill test of not less than 1000 pounds per square inch, and at least one string of surface casing shall be set at a depth sufficient to protect all potable water-bearing strata encountered, and not less than 450 feet below the surface of the ground. Sufficient cement shall be used to fill the annular space back of the pipe to the bottom of the cellar. Cement shall be allowed to stand a minimum of 24 hours before initiating tests. Before drilling the plug a pump pressure of at least 600 pounds per square inch shall be applied. If at the end of 30 minutes the pressure shows a drop of 100 pounds per square inch, or more, the casing shall be condemned, subject to corrective operations and further testing.

(b) The producing oil string shall consist of new or reconditioned pipe with an original mill test of not less than 2100 pounds per square inch. The producing string shall be set and cemented with sufficient cement to fill the calculated annular space behind the pipe to a minimum of 1000 feet above the guide shoe. Cement shall be allowed to stand a minimum of 72 hours before initiating tests. Before drilling the plug a pump pressure of at least 600 pounds per square inch shall be applied. If at the end of 30 minutes the pressure shows a drop of 100 pounds per square inch, or more, the casing shall be condemned, subject to corrective operations and further testing.

(5) That upon the completion of any well in the South Blanco-Tocito Pool, the bottom-hole pressure of such well shall be taken, and a report thereof filed with the Commission.

(a) Semi-annual tests of bottom hole pressures of the pool and producing gas-oil ratios shall be made, said tests to be made during the months of April and October of each year. Such tests are to be made in the presence of a representative of the Commission and may be witnessed by the representative of any owner or operator of a producing well in the pool. Tests as designated herein

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Case No. 537

Order No. R-326

shall apply only to flowing wells within the pool.

(b) Bottom-hole pressure tests, as provided in 5-(a), herein, shall be made as follows: The operators shall cause wells to be shut in for a minimum of 72 hours, and all pressures shall be reported at a datum of minus-100 feet, and otherwise as provided by Rule 302 of the Rules and Regulations of the Commission.

(6) That in the event the production of oil from the South Blanco-Tocito Pool is allocated, then and in that event the individual well allowables for wells drilled in conformity with the spacing pattern provided for herein shall be established in accordance with the 90-acre proportional factors as provided in the Rules and Regulations of the Commission.

(a) The operator may at his option designate the proration unit for each well as being the north half, south half, east half, or west half of the governmental quarter section in which the well is located.

(7) That this order shall cover all of the South Blanco-Tocito Pool common source of supply as discovered in the No. 2 Scott Federal Well drilled in the NW/4 SE/4 Section 9, Township 26 North, Range 6 West, NMPM.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

E. S. WALKER, Member

R. R. SPURRIER, Secretary

SEAL

DOCKET: EXAMINER HEARING MARCH 23, 1960

Oil Conservation Commission - 9 a.m., Mabry Hall, State Capitol, Santa Fe
The following cases will be heard before Elvis A. Utz, Examiner, or A. L. Porter, Jr., Secretary-Director:

CASE 1923: Application of Caulkins Oil Company for a gas-gas dual completion and an unorthodox gas well location. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Sanchez Well No. 1, located 560 feet from the North line and 660 feet from the West line of Section 24, Township 26 North, Range 6 West, Rio Arriba County, New Mexico, in such a manner as to permit the production of gas from the South Blanco-Pictured Cliffs Pool and the production of gas from the Dakota Producing Interval through parallel strings of tubing. Applicant further seeks approval of an unorthodox gas well location for said Sanchez Well No. 1.

CASE 1924: Application of Caulkins Oil Company for a gas-oil dual completion, an unorthodox oil well location and an exception to the casing requirements of Order R-1191. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its D-140 Well, located 990 feet from the North and East lines of Section 11, Township 26 North, Range 6 West, Rio Arriba County, New Mexico, in such a manner as to permit the production of gas from the South Blanco-Dakota Pool and the production of oil from the Tocito formation adjacent to the South Blanco-Tocito Oil Pool through parallel strings of tubing. Applicant also seeks an exception to the casing requirements of Order No. R-1191. Applicant further seeks approval of an unorthodox oil well location for said D-140 well.

CASE 1925: Application of Honolulu Oil Corporation for approval of a unit agreement. Applicant, in the above-styled cause, seeks approval of its North Mullis Unit Agreement, which unit will embrace approximately 1922 acres of State, Federal and fee land in Townships 14 and 15 South, Range 29 East, Chaves County, New Mexico.

CASE 1926: Application of Hondo Oil & Gas Company for approval of an automatic custody transfer system. Applicant, in the above-styled cause, seeks an order authorizing it to install an automatic custody transfer system to handle the Empire-Abo Pool production from all wells located on its State 647 Lease consisting of the NE/4 SE/4, S/2 NE/4, and NE/4 NE/4 of Section 6, Township 18 South, Range 28 East, and the E/2 E/2 of Section 31 and the SW/4 and NE/4 of Section 32, all in Township 17 South, Range 28 East, Eddy County, New Mexico.

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Docket No. 9-60

CASE 1927:

Application of J. W. Brown for the establishment of special rules and regulations governing the Brown Pool in Eddy County, New Mexico, to provide for 2½-acre spacing in said pool.

CASE 1928:

Application of Franklin, Aston & Fair, Inc. for an amendment of Order R-1573 and for permission to install an automatic custody transfer system. Applicant, in the above-styled cause, seeks an amendment of Order R-1573 to include the NW/4 NW/4 of Section 5, Township 18 South, Range 28 East, Empire-Abo Pool, Eddy County, New Mexico, in the commingling authorization granted by said order. Applicant further seeks permission to install an automatic custody transfer system to handle the commingled Empire-Abo Pool production from the three leases authorized by Order R-1573.

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
March 23, 1960

EXAMINER HEARING

IN THE MATTER OF:

Application of Caulkins Oil Company for a gas-oil dual completion, an unorthodox oil well location and an exception to the casing requirements of Order R-1191. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its D-140 Well, located 990 feet from the North and East lines of Section 11, Township 26 North, Range 6 West, Rio Arriba County, New Mexico, in such a manner as to permit the production of gas from the South Blanco-Dakota Pool and the production of oil from the Tocito formation adjacent to the South Blanco-Tocito Oil Pool through parallel strings of tubing. Applicant also seeks an exception to the casing requirements of Order No. R-1191. Applicant further seeks approval of an unorthodox oil well location for said D-140 well.

Case 1924

BEFORE:

Mr. Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

MR. UTZ: We will take up next Case No. 1924.

MR. PAYNE: Case 1924: Application of Caulkins Oil Company for a gas-oil dual completion, an unorthodox oil well location and an exception to the casing requirements of Order R-1191.

MR. KELLAHIN: If the Examiner please, Jason Kellahin, I would like the record to show the same appearances as in the preceding case.

DEARNLEY-MEIER REPORTING SERVICE, Inc.

PHONE CH 3-6691

ALBUQUERQUE, NEW MEXICO

MR. PAYNE: Let the record also show that the witness has previously been sworn.

MR. UTZ: The record will so show. Any other appearances in this case?

FRANK GRAY

called as a witness, having been first duly sworn on oath, testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHLIN:

Q Would you state your name, please?

A Frank Gray.

Q Are you the same Mr. Gray who testified in the preceding case and was sworn?

A Yes, sir.

Q Are you familiar with the application in Case 1924?

A Yes, sir.

Q Would you state briefly what is proposed in this application?

A We propose to dually complete the Breech D-140 Well in the Dakota and Tocito sands.

Q Would you describe briefly the location and history of this well?

A Well, the Caulkins Oil Company Breech D-140 is located 990 feet from the north and East lines of Section 11, 26, North, 6 West, Rio Arriba County, New Mexico, on Federal Lease No. NM 03558.

DEARNLEY-MEIER REPORTING SERVICE, Inc.

PHONE CH 3-5691

ALBUQUERQUE, NEW MEXICO



The Caulkins Oil Company is also the operator of all property directly offsetting this well.

This well was drilled with rotary drilling equipment using mud for circulating fluid to a depth of 7700 feet in the Dakota formation, in February, 1960. Tocito sand was encountered at 6815, and a drill stem test from 6751 to 6950 showed approximately 20,000 cubic feet of gas per day. We are reasonably sure that this small show of gas came from the Tocito sand. The top of the Graneros sand was found at 7285, the top of the Dakota at 7410.

5½ inch casing was cemented at 7700 feet in three stages. 350 sacks were used through the shoe of the casing, and by 100 percent calculation should have filled up 1510 feet. This would be 170 percent of the calculated volume necessary to cover the Tocito sand at 6815. Other cement used was 350 sacks through a DV Cementer at 5560 and 190 sacks through a DV Cementer at 3200.

(Whereupon, Applicant's Exhibits Nos. 1, 2, and 3 marked for identification.)

Q Is the information as to the well location and the ownership shown on Exhibit No. 1?

A Yes, sir.

Q Have you prepared a diagrammatic sketch showing the proposed dual completion?

A Yes, sir, I have.

Q Was that marked as Exhibit No. 2?

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A Yes, sir.

Q Would you describe that?

A The diagramatic sketch shows the arrangement of the equipment as it would be left in the well after the dual completion operation is finished. To accomplish this we would perforate, sand frac and flow gas production from the Dakota sand until it's free of frac sand; set a permanent type production packer containing an expendable packer plug to approximately 7250 to temporarily plug off the Dakota zone; perforate, sand frac and test the Tocito sand. The production from this zone would be swabbed or flowed long enough to completely free it of frac sand.

We would then kill the well with oil and run 1-1/4 inch upset tubing to the packer at 7250 and push the expendable bridge plug out and latch the tubing into the packer, spacing the tubing so it would be in slight tension when landed. This string of tubing would include a parallel string latching device, which would be spaced to stop it around 6800 feet.

2-1/16th OD upset tubing with Hydril type CS joints would be run to 6800 feet and latched into the latching device at 6800 feet. This string would also be left in slight tension when landed, and would include the mud anchor, perforations, seating nipple and so forth, so a pump can be run on sucker rods to pump the Tocito production if and when it should be necessary. And well head equipment, separators, tanks, and flow lines, and other equipment necessary to produce each zone and measure the

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production from each separately would be installed.

Q Would all of the production, you say would be separately metered or measured to each zone?

A Yes, actually the Tocito production of oil and gas both would have to be saved and sold to comply with the existing Commission requirements, and if we are fortunate enough to get the commercial production from the locito, it would be piped to what we call a central plant, and its casinghead gas would be saved and compressed and sold to El Paso Natural Gas Company.

Q That is through your presently existing connections?

A Yes.

Q Will this type of dual completion in your opinion achieve effective separation of the two producing horizons?

A Yes, sir.

Q Will it enable you to make such tests and workovers as may be necessary?

A Yes, sir, I believe -- well, I'm certain that we can make all the tests that are required at this time by the Commission for covering or regulating Tocito operations.

Q Now the application asks for an exception to the casing rules of the special pool rules for the Tocito formation. Would you discuss the reasons for that exception?

A The Field rules for the South Blanco-Tocito Pool require 450 feet of surface casing, and that was done to protect a good source of water, shallow water in the vicinity of Section 4.



This particular well has 250 feet or 252 feet, I believe it is, of surface casing cemented from top to bottom, which is about 200 feet less than required for Toccito wells, but it is sufficient to comply with all of the rules covering drilling of Dakota wells.

There have been a number of Dakota wells drilled in the area that used 250 feet or less surface casing. All of the Toccito wells, however, that have been drilled close to Section 4 have used the 400 feet of pipe.

Q Is this surface water source which you described found in the area of this particular well?

A The area, this particular area, we haven't tested it. There is a water well in the shallow sands. I think it's bottomed at 250 feet, about a mile southwest of this well. It was a very poor water well, it actually, it's not -- we didn't get enough water from the well to make it worthwhile to pump it. It was drilled for drilling purposes, but it never did produce enough water that we felt it was worth while to pump it.

Q In your opinion is the present casing program on this well adequate to protect any fresh water zones?

A Yes, sir, I think it is.

Q Is the dual completion, as proposed by Caulkins, in the interest of conservation and the prevention of waste?

A Yes, sir. The show of gas that we had would hardly be enough to justify the drilling of a Toccito well. However, we do think we have justification for spending whatever is necessary to

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test it in this particular hole.

Q Would correlative rights be affected in any way by approval of this application?

A No, sir, I don't believe they would. As pointed out before, Caulkins is the operator of all the acreage directly offsetting the well.

Q Do you have a log of the subject well?

A Yes, sir.

Q Is that marked as Exhibit No. 3?

A Yes, sir.

Q Were Exhibits 1, 2, and 3 prepared by you or under your direction and supervision?

A Yes, sir.

MR. KELLAHIN: I would like to offer in evidence Exhibits 1, 2, and 3.

MR. UTZ: Without objection, Exhibits 1, 2, and 3 will be entered into the record.

MR. KELLAHIN: That's all the questions I have.

A Excuse me, there's one other point that we haven't covered. The Tocito spacing requires that the wells be drilled in the Northwest or Southeast of each Quarter-Section, and this well, of course, is located in the Northeast of the Quarter-Section. It's unorthodox, as far as a Tocito well is concerned, to that extent, but as mentioned before, Caulkins is the operator of all the property immediately around it.

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Q Would it be economical in your opinion to drill a well in the unorthodox well for Tocito production?

A Not unless we have had more encouragement than we have had thus far.

MR. KELLAHIN: That's all the questions I have.

CROSS EXAMINATION

BY MR. UTZ:

Q I believe you said that the top of your cement would be 6200 over your Dakota and Tocito.

A Well, it would be --

Q 1500 --

A -- 1500 feet from 7700 would be 5500.

Q What did you say it would be?

A It would be 7700 minus 1500 would be 6200, excuse me.

Q Yes, sir. The base of the Tocito perforations is 6830?

A Approximately that, yes.

Q Then at 6200 feet, you'll only have 530 feet of cement above the base of the Tocito perforations, is that correct?

A Yes, sir.

Q I believe Order 1191 says that you shall have 1,000 feet above the base of the shoe

This lacks about 1100 feet of cement being enough to comply with 1191?

A Yes, and I had overlooked that requirement on Tocito

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wells. I might point out that in the cementing operation, centralizers and scratchers were run through the Tocito zone with the idea of getting a good cement job so we could explore it, if it ever became necessary.

Q This well is already completed?

A Yes, sir. It was completed, it was drilled and completed as a Dakota well, and rather, in conducting the operation to test the Tocito, we would certainly see to it that we knew we had a good cement job before we ever tried to frac it.

Q Let's see, where was your next squeeze job?

A There's a cementer at 5560.

Q 5560.

A I believe that's it. Yes, 5560, and another at 3200.

A temperature survey was run after the second stage of cement was put away. It showed the top of the cement at 4,090.

Q From 5560 to 4,090?

A Yes, sir.

Q How about the next stage?

A No, sir, there was no temperature survey made.

Q How many sacks did you say were put in?

A 190 sacks, that's 50 percent Posmex, 50 percent cement with two percent Aquagel and 12 pounds of Glelsanita. That gives you a .148 cubic feet a sack of cement, a sack of cement would fill up approximately four feet.

Q You have around 760 feet of cement, then?



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A Yes, sir.

Q It should bring it to about 2500?

A Yes, sir.

Q Is the Pictured Cliff zone in between 2500 and 3200?

A Yes, sir.

Q So you would have the Pictured Cliff protected?

A Yes, sir.

Q And you would have open hole between 2500 and 252 feet?

A Yes, sir.

Q What zones would be in between the 3200 to 4090 foot interval?

A Only the Chocra that has produced gas in the area, and it would be completely isolated, there wouldn't even be a chance for the gas to move from the Cliff House or Pictured Cliff into it. The cement comes above the Cliff House and is cemented below the Pictured Cliff, so it would be completely isolated.

Q So the Mesaverde would be in between the 4,090 and 5560 interval?

A Yes, sir.

Q Do you have any Gallup in this area?

A There are no Gallup wells that I know of anywhere close to that, not within five or, five or six miles.

Q Does your log show any Gallup development?

A It's very skimpy. It shows, well, it's just about non-existent.



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Q What is this reflection up around 6650?

A That would be the Gallup zone, but the only half-way reliable information we have on it is from Schlumber-J log interpretation, and we did run a sonic log on it, so that we have an idea of the porosity values, and it just calculates out that it's, the potential there is practically zero.

Q Actually that interval would be pretty well separated from the Mesaverde and the Tocito?

A We have the base of the cement on the second stage well below the base of the Point Lookout, and then we have the Tocito covered up and that should isolate the Gallup in good fashion.

Q You don't believe that there is any water between the 2252 and 452 feet that could be damaged?

A I don't believe there are, but as I mentioned before, we have no water wells in that area; and of course wouldn't know, but I do know that this one water well is in between this well we're talking about and the good water wells, is a poor well, and so I doubt that there's any water of any particular value in that area. It also would be affected no more by this well than by some of the other wells that have been drilled, some of the Dakota wells that have been drilled in the area.

The 244 Well is approximately the same distance from this water well that I'm referring to as the D-140, and it also has 2250 feet of surface casing in it. That's strictly a Dakota well and there's no question about the surface casing requirements



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in it.

Q How deep is the Ogalalla in this area?

A About twenty-three to twenty-five hundred.

Q And it isn't Artesian?

A No, sir. On the mesa it is not, the fluid levels we operate a well. That produces from sands immediately above it that, for water injection for this Tocito waterflood, and the static level is about, oh, 275 feet.

MR. UTZ: Any other questions of the witness?

MR. PAYNE: Yes.

BY MR. PAYNE:

Q Mr. Gray, if you drilled an additional Tocito well in the Northeast Quarter of Section 11, where would you locate it?

A Well, I believe it would be located in the -- it would be desirable, at least, to locate it in the Southeast -- excuse me, the Southwest.

Q Southwest of the Northeast?

A Yes, sir.

Q In order to get a more uniform drainage pattern in this area?

A Well, we would be moving back to the oil field.

Q So structurally and from a drainage pattern, it would be better?

A Yes, even though it would be --

Q Even though it would be unorthodox?



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A It would be unorthodox, yes, sir.

Q As I understand your testimony, Mr. Gray, the Tocito rules protect whatever fresh water might be available, but the Dakota rules do not, is that right?

A Yes, sir.

Q Are there any Dakota wells in the Section 4 where you said the good fresh water is available, and if so, what was the cementing program on them?

A I can tell you if a well was drilled there, it was cemented with, I mean it was drilled with 450 feet of surface casing. There is no Dakota well at this time in Section 4. There is one in Section 5, and it was cased with 400 feet of pipe, surface casing.

Q Even though the Dakota rules didn't require that, it was felt that would more adequately protect the fresh water?

A It was approved for the Tocito, and dry in the Tocito, but deepened to the Dakota, but we do have the 400.

Q Do you think the Dakota rules ought to be revised that in the area of Section 4, that the surface casing should have to be set at 450 feet?

A I don't know that it would be necessary. The people who are, or rather the interest in protection of water, I think, would be limited to one operator, the Caulkins Oil Company, and we do have a good fresh water supply there and we certainly intend to keep it. Now the wells that would be drilled in the areas



surrounding the Caulkins block would be far enough away from it that I don't think it would make any difference.

Q You think the aquifer actually only extends to the acreage owned by Caulkins and perhaps some adjoining acres?

A The water is spotty, you just don't know where you might run into it, but as far as our supply is concerned, I think it would not be affected by what the operators do on the adjoining acreage. What we do, I mean if we drill a well that would affect it, we would certainly take steps to protect it.

Q Would you have any way of knowing if the water was being adequately protected in time to take remedial action?

A Yes, I think we would, because the only way it would be affected would be for one of the wells to develop a leak, and we are going to know that very quickly, if it happens.

Q Mr. Gray, do you know of any wells producing from the Gallup that have zero potential, as a matter of fact, that shows zero permeability on the logs?

A No, I know of a number of them that have been tried where they had a little more than zero permeability that were very disappointing.

Q You don't know of any in the Bisti-Lower Gallup, for instance, that are producing wells and show zero permeability?

A No, I don't, and I may have given you the wrong idea. The permeability, we know nothing about in the Gallup section in this well, but the porosities we do have an indication of that

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from the sonic log, and we have an indication of the water saturation in the Gallup sand from the electrolog and the sonic log. I might mention, too, that those are certainly not conclusive, but in this particular well, the Gallup is isolated with cement.

Q Now the unorthodox location for this Tocito well won't affect anybody at the present time, since you own all the offsetting acreage?

A Yes, sir.

Q It could affect them in the future, could it not, since when you get one unorthodox location you have to keep drilling on unorthodox locations, and it could affect them when you reach the point that the offset operator wouldn't know where to drill his Tocito well?

A Well, I think if the Tocito sand proves to be productive and warrants drilling more wells, we can correct the spacing irregularities.

Q In such a way that everybody will be protected?

A Yes, sir.

MR. PAYNE: That's all. Thank you.

MR. UTZ: Any other questions? If there are not, the witness may be excused.

(Witness excused.)

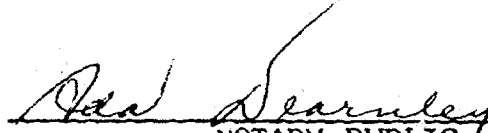
MR. UTZ: Any other statements in this case? The case will be taken under advisement.



STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, ADA DEARNLEY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing was reported by me in Stenotype, and that the same was reduced to typewritten transcript under my personal supervision and contains a true and correct record of said proceedings to the best of my knowledge, skill and ability.

DATED this 29th day of March, 1960, in the City of Albuquerque, County of Bernalillo, State of New Mexico.


NOTARY PUBLIC

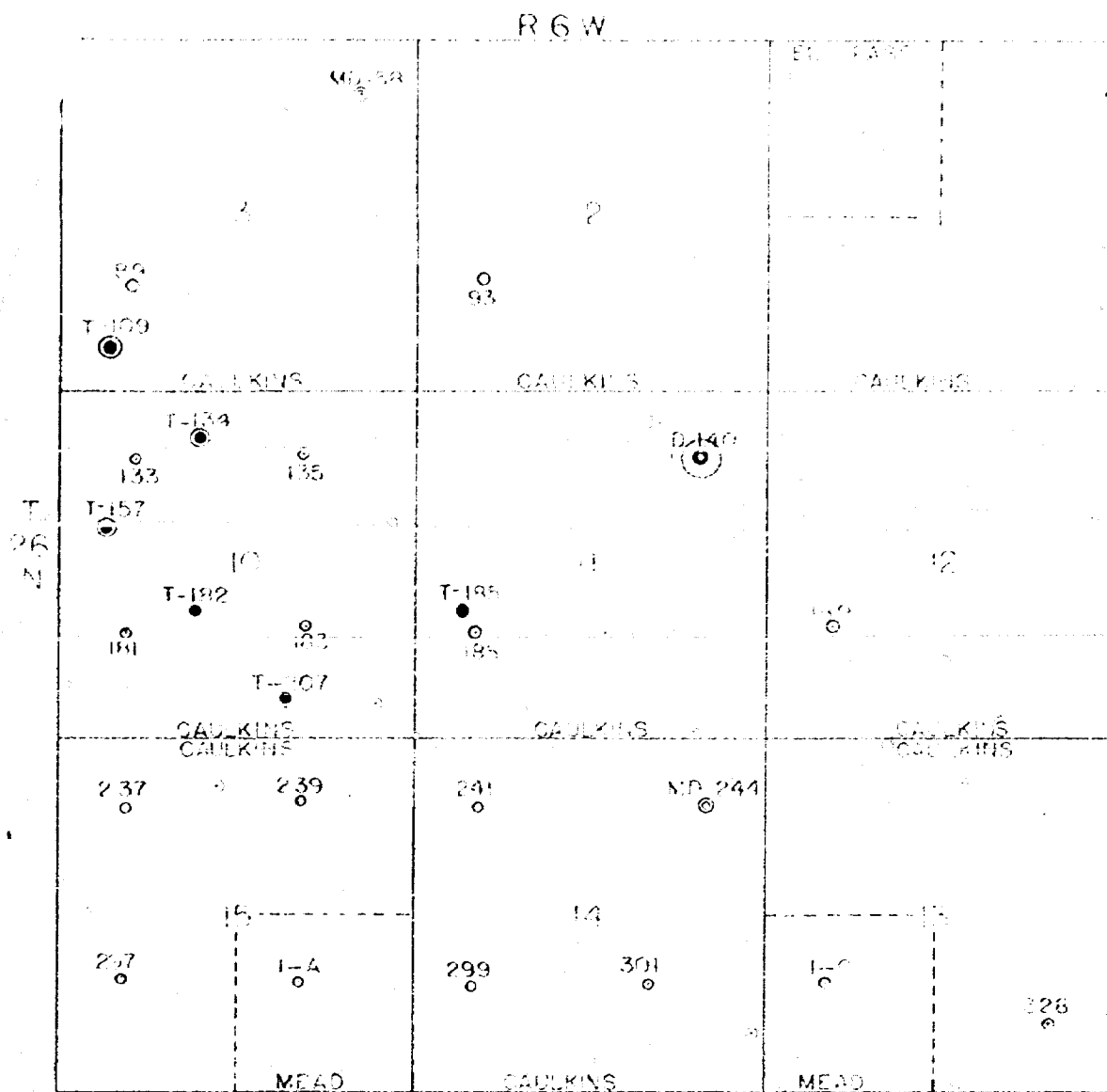
My Commission Expires:
June 19, 1963.

DEARNLEY-MEIER REPORTING SERVICE, Inc.

PHCNE CH 3-6691

ALBUQUERQUE, NEW MEXICO





All wells shown above produce from Pictured Cliffs formation only except Caulkins Oil Company T-109, T-134, T-157, T-182, T-185, T-207, MD-58, MD-244, and D-140. T-109, T-134, and T-157 are water injection wells. MD-58 produces from both the Mesa Verde and Dakota Formations. MD-244 produces from the Dakota formation only. The prefix "T" indicates Tecite well. The prefix "D" indicates Dakota well.

ADDRESSES OF OPERATORS SHOWN ABOVE:

El Paso Natural Gas Company, P.O. Box 997, Farmington, New Mexico
 Robert E. Mead, 3333 Republic Bank Building, Dallas, Texas
 Caulkins Oil Company, 1130 First National Bank Building,
 Denver 2, Colorado

CASE #1924. EXHIBIT # /

AREA SURROUNDING CAULKINS OIL CO. T., D. DUAL COMPLETION (PROPOSED)
 WELL NO. D-140 LOCATED 990'N AND 990'E IN SEC 11 T26N R6W
 RIO ARRIABA COUNTY, NEW MEXICO

SCALE: 2" = 1 MILE

STATE OF NEW MEXICO
BEFORE THE OIL CONSERVATION COMMISSION

A P P L I C A T I O N

Case 1924

Comes now Caulkins Oil Company and applies to the Oil Conservation Commission of New Mexico for an order approving the dual completion of its Well D-140 for production of gas from the Dakota formation and oil from the Tocito formation, and for an unorthodox location for a well completed in the Tocito formation as an exception to the provisions of the South Blanco-Tocito Pool Rules contained in Order R-1191 and amendments thereto, and in support thereof would show:

1. That the Caulkins Oil Company Well D-140 is located 990 feet from the North line and 990 feet from the East line of Section 11, Township 26 North, Range 6 West, and is within the horizontal boundaries of the South Blanco-Dakota gas pool, and within one mile of the horizontal boundaries of the South Blanco Tocito Oil Pool.

2. That applicant proposes to complete said well for production of gas from the Dakota Formation and oil from the Tocito formation through parallel strings of tubing in conformity with practices heretofore approved by the Oil Conservation Commission of New Mexico.

3. That the approval of said dual completion is in the interests of conservation, the greater ultimate recovery of oil and gas, and will prevent waste and protect correlative rights.

*Docket
Mailed
3-10-60
[Signature]*

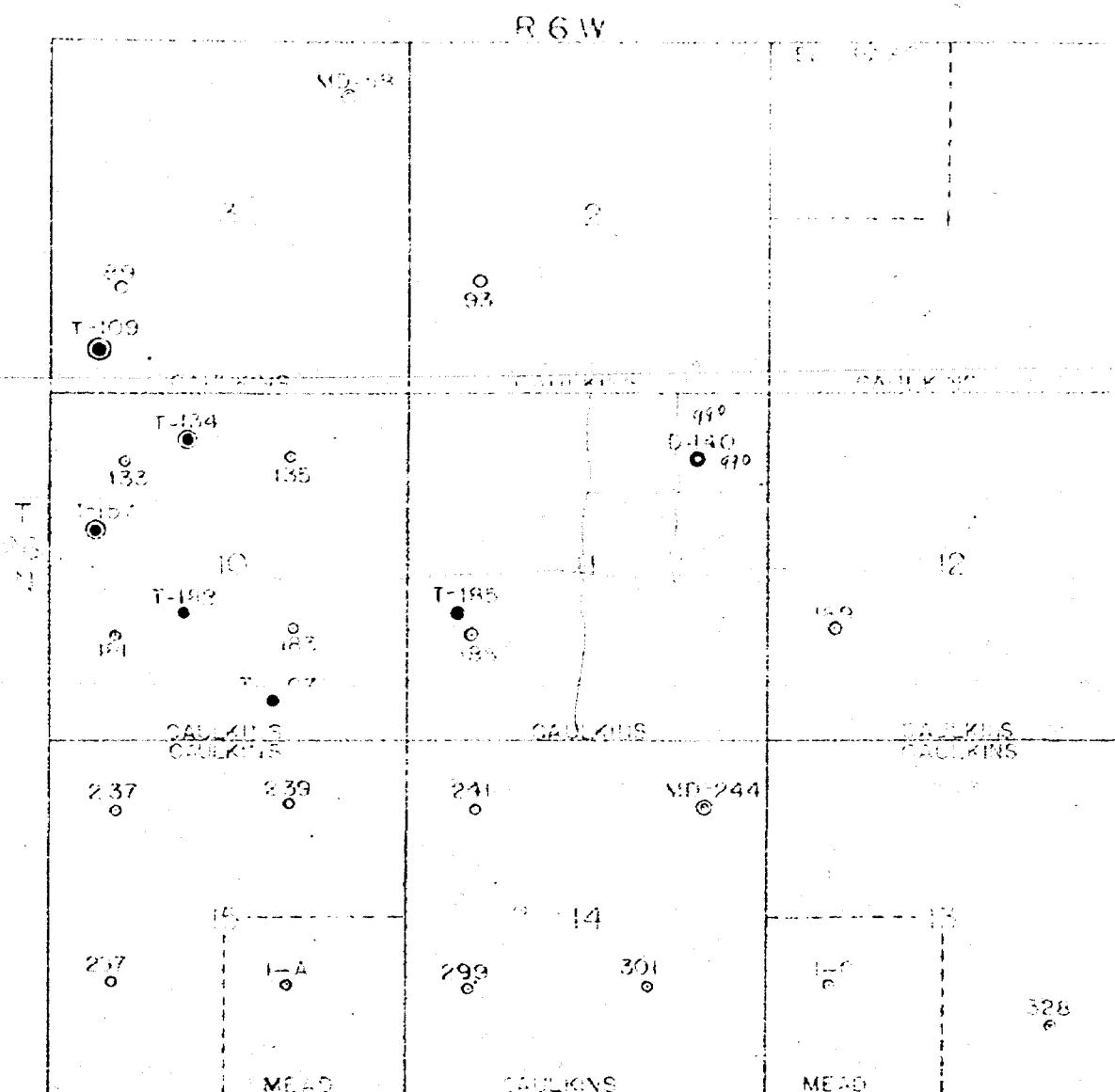
WHEREFORE, applicant prays that this matter be set for hearing before the Commission's duly appointed examiner at as early a date as possible, and after notice and hearing as provided by law, the Commission enter its order approving the dual completion of applicant's Well D-140, and approving location of said well for the production of oil from the Tocito formation.

Respectfully submitted,

CAULKINS OIL COMPANY

By Jason W. Kellahin
Kellahin & Fox
P. O. Box 1713
Santa Fe, New Mexico

ATTORNEYS FOR APPLICANT



All wells shown above produce from Pictured Cliffs formation only except Caulkins Oil Company T-109, T-134, T-157, T-182, T-185, T-207, MD-58, MD-244, and D-140. T-109, T-134, and T-157 are water injection wells. MD-58 produces from both the Mesa Verde and Dakota Formations. MD-244 produces from the Dakota formation only. The prefix "T" indicates Tecite well. The prefix "D" indicates Dakota well.

ADDRESSES OF OPERATORS SHOWN ABOVE:

El Paso Natural Gas Company, P.O. Box 997, Farmington, New Mexico
 Robert E. Mead, 3333 Republic Bank Building, Dallas, Texas
 Caulkins Oil Company, 1130 First National Bank Building,
 Denver 2, Colorado

**AREA SURROUNDING CAULKINS OIL CO. T., D. DUAL COMPLETION (PROPOSED)
 WELL NO. D-140 LOCATED 990'N AND 990'E IN SEC 11 T26N R6W
 RIO ARRIPIA COUNTY, NEW MEXICO**

SCALE: 2" = 1 MILE

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Date 3-23-60

CASE 1924

Hearing Date 3-23-60

My recommendations for an order in the above numbered cases are as follows:

1. Approve Dual completion provided
they,

✓ (a) cement $5\frac{1}{2}$ inch liner back to
5830' to comply with Rule 4 (b) of

R-1191.

✓ (b) Squeeze cement $5\frac{1}{2}$ liner from 450 ft.
to 230' to comply with Rule 4 (a) of

R-1191.

2. Usual Dual order otherwise.

Thos. H. [Signature]

Note: The casing program as written in
R-1191 Rule 4 (a) & (b) was taken from R 326
which was recommended by Birdseye &
Art Holland.

Ed [Signature]

Staff Number

R-1047 1524

MAIN OFFICE OGC
1964 AUG 20 AM 7 54

STATE OF NEW MEXICO)
COUNTY OF SAN JUAN)

I, EARL S. BROWN, being first duly sworn upon
my oath depose and say as follows:

I am an employee of Baker Oil Tools, Inc., and that on July 26,
1964, I was called to the location of the CAULKINS OIL Company
D-110 Well located in the NENE
(Well Number)
of Section 11, Township 26-N, Range 6-W, N.M.P.M., for
advisory service in connection with installation of a production packer. In
my presence, a Baker Model D Production Packer was set in this well
at 7254 feet in accordance with the usual practices and customs of
the industry.

RECEIVED
AUG 20 1964
OIL CON. COM.
DIST. 3

Earl S. Brown

Subscribed and sworn to before me, a Notary Public in and for San Juan
County, New Mexico, the 15TH day of August, 1964.

Philip H. Heston
Notary Public in and for San Juan
County, New Mexico

My commission expires MY COMMISSION EXPIRES APRIL 5, 1967.

DRAFT
OEP:esr
April 4

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

4/5
OEP
4-7-60
Jan 4/8
AEP 4/8

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE No. 1924

Order No. R-1649

APPLICATION OF CAULKINS OIL COMPANY
FOR A GAS-OIL DUAL COMPLETION IN THE
SOUTH BLANCO-DAKOTA POOL AND IN THE
TOCITO FORMATION ADJACENT TO THE
SOUTH BLANCO-TOCITO OIL POOL, RIO
ARRIBA COUNTY, NEW MEXICO, FOR AN
EXCEPTION TO THE CASING REQUIREMENTS
OF ORDER R-1191, AND FOR AN UNORTHODOX
OIL WELL LOCATION.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on
March 23, 1960, at Santa Fe, New Mexico, before Elvis A. Utz,
Examiner duly appointed by the Oil Conservation Commission of New
Mexico, hereinafter referred to as the "Commission," in accordance
with Rule 1214 of the Commission Rules and Regulations.

NOW, on this day of April, 1960, the Commission,
a quorum being present, having considered the application, the
evidence adduced, and the recommendations of the Examiner, Elvis
A. Utz, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required
by law, the Commission has jurisdiction of this cause and the sub-
ject matter thereof.

(2) That the applicant, Caulkins Oil Company, is the owner and operator of the D-140 Well, located 990 feet from the North line and 990 feet from the East line of Section 11, Township 26 North, Range 6 West, NMPM, Rio Arriba County, New Mexico.

(3) That the applicant proposes to dually complete the said D-140 Well in such a manner as to permit the production of gas from the South Blanco-Dakota Pool and the production of oil from the Tocito formation adjacent to the South Blanco-Tocito Oil Pool through parallel strings of tubing.

(4) That the applicant also seeks an exception for said D-140 Well to the requirement of Rule 4 (a) of Order No. R-1191 which provides that the surface casing on wells drilled in the South Blanco-Tocito Oil Pool shall be set at a minimum depth of 450 feet below the surface of the ground.

(5) That the casing program and the mechanics of the proposed dual completion are acceptable provided that the 5½-inch ~~liner~~^{casing} is squeeze-cemented from 450 feet to 230 feet, and provided also that said 5½-inch ~~liner~~^{casing} is cemented back to 5830 feet ~~in order R-1191~~^{in order R-1191}.

(6) That the applicant also seeks approval of an unorthodox oil well location for said D-140 Well.

(7) That approval of the requested unorthodox oil well location will ~~not~~^{will it} cause waste, nor ~~impair~~^{will it} correlative rights inasmuch as Caulkins Oil Company owns all acreage offsetting the said D-140 Well.

IT IS THEREFORE ORDERED:

(1) That the applicant, Caulkins Oil Company, be and the same is hereby authorized to dually complete the D-140 Well, located 990 feet from the North line and 990 feet from the East Line of Section 11, Township 26 North, Range 6 West, NMPM, Rio Arriba County, New Mexico, in such a manner as to permit the production of gas from the South Blanco-Dakota Pool and the production of oil from the Tocito formation adjacent to the South Blanco-Tocito Oil Pool through parallel strings of tubing.

✓ PROVIDED HOWEVER, That the 5½-inch ^{casing}~~liner~~ shall be squeeze-
cemented from 450 feet to 230 feet, and provided also that said
5½-inch ^{casing}~~liner~~ shall be cemented back to 5830 feet as *per the B.M.*

PROVIDED FURTHER, That applicant shall complete, operate,
and produce said well in accordance with the provisions of
Section V, Rule 112-A.

PROVIDED FURTHER, That applicant shall take packer-leakage
tests upon completion and annually thereafter during the Annual
Deliverability Test Period for the South Blanco-Dakota Pool.

(2) That an unorthodox oil well location in the South
Blanco-Tocito Oil Pool be and the same is hereby approved for *the*
said D-140 Well. *no comma*

IT IS FURTHER ORDERED:

That jurisdiction of this cause is hereby retained by the
Commission for such further order or orders as may seem necessary
or convenient for the prevention of waste and/or protection of
correlative rights; upon failure of applicant to comply with
any requirement of this order, the Commission may terminate the
authority hereby granted and require applicant or its successors
and assigns to limit its activities to regular single-zone
production in the interests of conservation.

DONE at Santa Fe, New Mexico-----

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 1924
Order No. R-1649

APPLICATION OF CAULKINS OIL COMPANY
FOR A GAS-OIL DUAL COMPLETION IN THE
SOUTH BLANCO-DAKOTA POOL AND IN THE
TOCITO FORMATION ADJACENT TO THE
SOUTH BLANCO-TOCITO OIL POOL, RIO
ARRIBA COUNTY, NEW MEXICO, FOR AN
EXCEPTION TO THE CASING REQUIREMENTS
OF ORDER R-1191. AND FOR AN UNORTHODOX
OIL WELL LOCATION.

ORDER OF THE COMMISSION

BEFORE THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on March 23, 1960, at Santa Fe, New Mexico, before Elvis A. Utz, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 8th day of April, 1960, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Elvis A. Utz, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Caulkins Oil Company, is the owner and operator of the D-140 Well, located 990 feet from the North line and 990 feet from the East line of Section 11, Township 26 North, Range 6 West, BLM, Rio Arriba County, New Mexico.
- (3) That the applicant proposes to dually complete the said D-140 Well in such a manner as to permit the production of gas from the South Blanco-Dakota Pool and the production of oil from the Tocito formation adjacent to the South Blanco-Tocito Oil Pool through parallel strings of tubing.
- (4) That the applicant also seeks an exception for said D-140 Well to the requirement of Rule 4 (a) of Order No. R-1191

which provides that the surface casing on wells drilled in the South Blanco-Tocito Oil Pool shall be set at a minimum depth of 450 feet below the surface of the ground.

(5) That the casing program and the mechanics of the proposed dual completion are acceptable provided that the 5-1/2 inch casing is squeeze-cemented from 450 feet to 230 feet, and provided also that said 5-1/2 inch casing is cemented back to 5830 feet as required in Order R-1191.

(6) That the applicant also seeks approval of an unorthodox oil well location for said D-140 Well.

(7) That approval of the requested unorthodox oil well location will not cause waste, nor will it impair correlative rights inasmuch as Caulkins Oil Company owns all acreage offsetting the said D-140 Well.

IT IS THEREFORE ORDERED:

(1) That the applicant, Caulkins Oil Company, be and the same is hereby authorized to dually complete the D-140 Well, located 880 feet from the North line and 990 feet from the East line of Section 11, Township 26 North, Range 6 West, NMPM, Rio Arriba County, New Mexico, in such a manner as to permit the production of gas from the South Blanco-Dakota Pool and the production of oil from the Tocito formation adjacent to the South Blanco-Tocito Oil Pool through parallel strings of tubing.

PROVIDED HOWEVER, That the 5-1/2 inch casing shall be squeeze-cemented from 450 feet to 230 feet, and provided also that said 5-1/2 inch casing shall be cemented back to 5830 feet as required in Order R-1191.

PROVIDED FURTHER, That applicant shall complete, operate, and produce the well in accordance with the provisions of Section V, Rule 112-A.

PROVIDED FURTHER, That applicant shall take packer-leakage tests upon completion and annually thereafter during the Annual Deliverability Test Period for the South Blanco-Dakota Pool.

(2) That an unorthodox oil well location in the South Blanco-Tocito Oil Pool be and the same is hereby, approved for the said D-140 Well.

IT IS FURTHER ORDERED:

That jurisdiction of this cause is hereby retained by the Commission for such further order or orders as may seem necessary

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or convenient for the prevention of waste and/or protection of correlative rights; upon failure of applicant to comply with any requirement of this order, the Commission may terminate the authority hereby granted and require applicant or its successors and assigns to limit its activities to regular single-zone production in the interests of conservation.

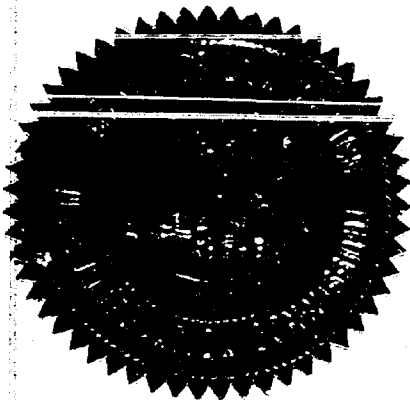
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

John Burroughs
JOHN BURROUGHS, Chairman

Murray E. Morgan
MURRAY E. MORGAN, Member

A. L. Porter, Jr.
A. L. PORTER, JR., Member & Secretary



esr/