

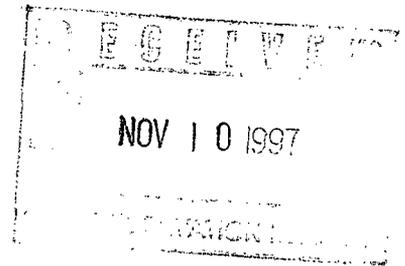
NSL

12/1/97

CAULKINS OIL COMPANY

P.O. BOX 340
BLOOMFIELD, NEW MEXICO 87413

November 7, 1997



State of New Mexico
Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505

Re: NSL State Com 113
990' F/S and 990' F/W
Sec. 2-T26N-R6W
Rio Arriba County, New Mexico

Gentlemen:

We are requesting administrative approval for a non-standard location.

Original approval to drill and complete a Dakota well was received on April 12, 1961.

Well was spudded on April 17, 1961.

TD of 7700' was reached on May 16, 1961.

Permission was received to temporarily plug Dakota zone and test Tocito zone on June 11, 1997.

Perforating and treating has been completed. Commercial oil production from Tocito zone has been developed.

A standard location for South Blanco Tocito well, Order R-326 requires Tocito well be drilled in center of Northwest Quarter of Quarter Section.

Tocito zone dedicated acreage 80 acres.

All off-set acreage to Tocito zone operated be Caulkins Oil Company.

Sincerely,

Charles E. Verquer
Charles E. Verquer
Consultant

enc: State Sundry Notice dated June 11, 1997
State form C-102
Location map showing off-set wells

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

WELL API NO. <p style="text-align: center;">30-039-06662</p>
5. Indicate Type of Lease <p style="text-align: center;">STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/></p>
6. State Oil & Gas Lease No. <p style="text-align: center;">E29138</p>
7. Lease Name or Unit Agreement Name <p style="text-align: center;">STATE COM</p>
8. Well No. <p style="text-align: center;">113</p>
Pool Name or Wildcat <p style="text-align: center;">BASIN DAKOTA</p>

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR TO PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well Oil Well <input checked="" type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <input type="checkbox"/>
2. Name of Operator <p style="text-align: center;">Caulkins Oil Company</p>
3. Address of Operator <p style="text-align: center;">P.O. Box 340, Bloomfield, NM 87413</p>

4. Well Location
Unit Letter M : 990' P/S 990' P/W
 2 Section 26N Township 6W Range NMPM Rio Arriba County

10. Elevation (Show whether DP, RKB, RT, GR, etc.)	6620 GR
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NOTICE OF INTENTION TO: PERFORM REMEDIAL WORK <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> TEMPORARILY ABANDON <input checked="" type="checkbox"/> CHANGE PLANS <input type="checkbox"/> PULL OR ALTER CASING <input type="checkbox"/> OTHER: Recompletion South Blanco Tocito <input type="checkbox"/>	SUBSEQUENT REPORT OF: REMEDIAL WORK <input type="checkbox"/> ALTERING CASING <input type="checkbox"/> COMMENCE DRILLING OPNS. <input type="checkbox"/> PLUG AND ABANDONMENT <input type="checkbox"/> CASING TEST AND CEMENT JOB <input type="checkbox"/> OTHER: <input type="checkbox"/>
--	---

12. Describe Proposed or Completed Operations

6-3-97 It is proposed to recomplete this well from the Basin Dakota to the South Blanco Tocito by the following procedure:

T.O.H. with 2 3/8" tubing.

Set retrievable bridge plug at 7000', above Dakota perforations for temporary abandonment.

Pressure test 5 1/2" casing to 2500#.

Perforate Tocito oil zone from 6872' to 6900'.

Continued on page 2.

RECEIVED
 JUN 11 1997
OIL CON. DIV.
DIST. 3

NOTE: This format is in lieu of State Form C-103.

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

SIGNATURE Robert L. Verquer TITLE Superintendent DATE June 3, 1997
 ROBERT L. VERQUER (505) 632-1544

(This space for State Use)

APPROVED BY ORIGINAL SIGNED BY ERNIE BUSCH DEPUTY OIL & GAS INSPECTOR, DIST. #3 JUN 11 1997
 CONDITIONS OF APPROVAL, IF ANY: Hold C-104 for NSL

Caulkins Oil Company
Sundry Notice
State Com 113
June 3, 1997
Page 2

Nitrogen foam frac with approximately 40,000# 20/40 mesh sand.

T.I.H. with 2 3/8" tubing, clean out wellbore to top of retrievable bridge plug set at 7000'.

Land 2 3/8" tubing at approximately 6900'.

Flow to clean up, test and produce Tocito to sales line.

No new surface will be disturbed, location area will be cleaned up when work is completed.

Estimated starting date: August 18, 1997.

Also attached is a new C-102 for Tocito completion.

Submit to Appropriate District Office
 State Lease - 6 copies
 Fee Lease - 5 copies
 DISTRICT I
 P.O. Box 1980, Hobbs, NM 88240

State of New Mexico
 Energy, Minerals and Natural Resources Department

Form C-105
 Revised 1-1-89

OIL CONSERVATION DIVISION
 P.O. Box 2088
 Santa Fe, New Mexico 87504-2088

DISTRICT II
 P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
 1000 Rio Brazos Rd., Aztec, NM 87410

WELL API NO. 30-039-06662
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. E-291-38

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER _____	7. Lease Name or Unit Agreement Name State Com
b. Type of Completion: NEW WELL <input type="checkbox"/> WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF RESVR <input checked="" type="checkbox"/> OTHER _____	
2. Name of Operator Caulkins Oil Company	8. Well No. 113
3. Address of Operator P.O. Box 340, Bloomfield, NM 87413 Ph. (505) 632-1544	9. Pool name or Wildcat South Blanco Tocito

4. Well Location
 Unit Letter M : 990' Feet From The West Line and 990' Feet From The South Line
 Section 2 Township 26N Range 6W NMPM Rio Arriba County

10. Date Spudded 4-17-61	11. Date T.D. Reached 5-16-61	12. Date Compl. (Ready to Prod.) (5 - 1961) 11-5-97	13. Elevations (DF & RKB, RT, GR, etc.) 6620' GR	14. Elev. Casinghead 6620'
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15. Total Depth 7700'	16. Plug Back T.D. 7607'	17. If Multiple Compl. How Many Zones? _____	18. Intervals Drilled By Rotary Tools 0' - 7700'	Cable Tools _____
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19. Producing Interval(s), of this completion - Top, Bottom, Name Tocito 6876' to 6904'	20. Was Directional Survey Made No
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21. Type Electric and Other Logs Run ES Ind.	22. Was Well Cored No
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CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB/FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
10 3/4"	32#	251'	15"	200	None
5 1/2"	15.5# & 17#	7700'	8 3/4"	750	None

24. LINER RECORD				25. TUBING RECORD			
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2 3/8"	6878'	

26. Perforation record (interval, size, and number) 6876' - 6890' 6899' - 6904'	27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.	
	DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
	6876' - 6904'	370 bbls water, 448,000 SCF nitrogen & 23,000# sand

PRODUCTION

28. Date First Production 11-5-97		Production Method (Flowing, gas lift, pumping - Size and type pump) Swabbing and Flowing				Well Status (Prod. or Shut-in) Shut-in	
Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
11-5-97	3	20/64		95	40	0	421
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (Corr.)	
175#	460#		574	240	0	48	

29. Disposition of Gas (Sold, used for fuel, vented, etc.) Vented	Test Witnessed By
--	-----------------------

30. List Attachments

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature Robert L. Verquer Printed Name Robert L. Verquer Title Superintendent Date 11-6-97

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 25 through 29 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico

Northwestern New Mexico

T. Anhy _____	T. Canyon _____	T. Ojo Alamo _____	T. Penn. "B" _____
T. Salt _____	T. Strawn _____	T. Kirtland-Fruitland _____	T. Penn. "C" _____
B. Salt _____	T. Atoka _____	T. Pictured Cliffs _____	T. Penn. "D" _____
T. Yates _____	T. Miss _____	T. Cliff House _____	T. Leadville _____
T. 7 Rivers _____	T. Devonian _____	T. Menefee _____	T. Madison _____
T. Queen _____	T. Silurian _____	T. Point Lookout _____	T. Elbert _____
T. Grayburg _____	T. Montoya _____	T. Mancos _____	T. McCracken _____
T. San Andres _____	T. Simpson _____	T. Gallup _____	T. Ignacio Otzte _____
T. Glorieta _____	T. McKee _____	Base Greenhorn _____	T. Granite _____
T. Paddock _____	T. Ellenburger _____	T. Dakota _____	T. _____
T. Blinebry _____	T. Gr. Wash _____	T. Morrison _____	T. _____
T. Tubb _____	T. Delaware Sand _____	T. Todilto _____	T. _____
T. Drinkard _____	T. Bone Springs _____	T. Entrada _____	T. _____
T. Abo _____	T. _____	T. Wingate _____	T. _____
T. Wolfcamp _____	T. _____	T. Chinle _____	T. _____
T. Penn _____	T. _____	T. Permian _____	T. _____
T. Cisco (Bough C) _____	T. _____	T. Penn "A" _____	T. _____

OIL OR GAS SANDS OR ZONES

No. 1, from.....to..... No. 3, from.....to.....
 No. 2, from.....to..... No. 4, from.....to.....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....
 No. 2, from.....to.....feet.....
 No. 3, from.....to.....feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness in Feet	Lithology	From	To	Thickness in Feet	Lithology

CAULKINS OIL COMPANY

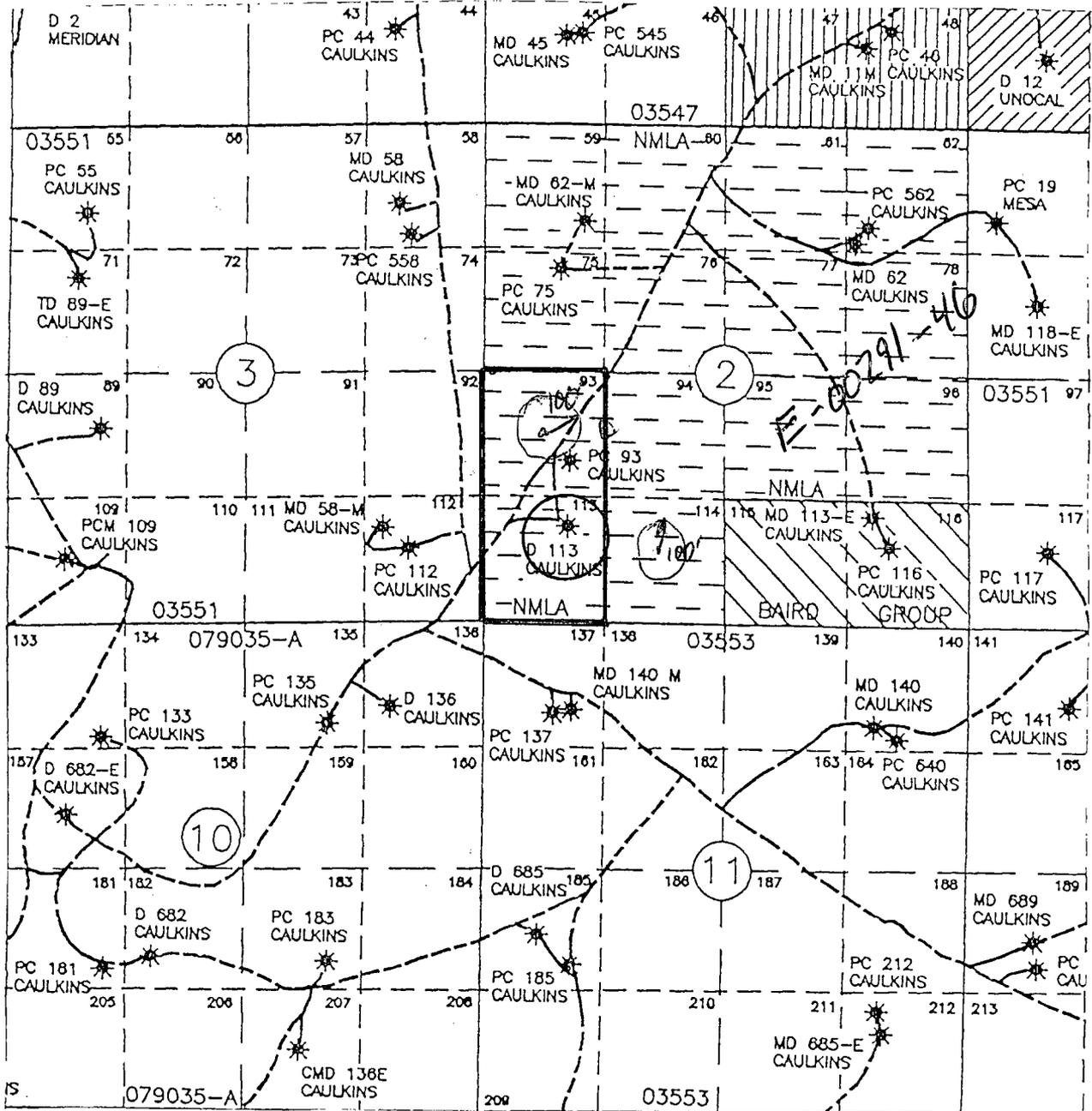
P.O. BOX 340

BLOOMFIELD, NEW MEXICO 87413

State Com 113

SW 1/4 SW 1/4, Sec. 2-26N-6W

Rio Arriba County, New Mexico



113

Identified by circle

Dedicated acreage West half of Southwest Quarter

District I
 PO Box 1980, Hobbs, NM 88241-1980

State of New Mexico
 Energy, Minerals & Natural Resources Department

Form C-104
 Revised February 21, 1994
 Instructions on back

District II
 PO Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION
 PO Box 2088

Submit to Appropriate District Office
 5 Copies

District III
 1000 Rio Brazos Rd., Aztec, NM 87410

Santa Fe, NM 87504-2088

AMENDED REPORT

District IV
 PO Box 2088, Santa Fe, NM 87504-2088

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address Caulkins Oil Company P.O. Box 340 Bloomfield, NM 87413		² OGRID Number 003824
		³ Reason for Filing Code RC
⁴ API Number 30-039-06662	⁵ Pool Name SOUTH BLANCOTOCITO	⁶ Pool Code 06460
⁷ Property Code 014243	⁸ Property Name STATECOM	⁹ Well Number 113

II. ¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South	Feet from the	East/West line	County
M	2	26N	6W		990'	South	990'	West	Rio Arriba

¹¹ Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Lsc Code	¹³ Producing Method Code F	¹⁴ Gas Connection Date 11-5-97	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date				

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ POD	²¹ O/G	²² POD ULSTR Location and Description
025244	Williams Field Services Company Salt Lake City, Utah 84158099	0656530	G	UNIT M, SEC. 2-26N-6W STATECOM 113 location
009018	Giant Refinery Farmington New Mexico 87401	0656510	O	UNIT M, SEC. 2-26N-6W STATECOM 113 location

IV. Produced Water

²³ POD 0656550	²⁴ POD ULSTR Location and Description UNIT M, SEC. 2-26N-6W 990' F/S 990' F/W STATECOM 113 location
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V. Well Completion Data

²⁵ Spud Date 4-17-61	²⁶ Ready Date (5-61) 11-5-97	²⁷ TD 7700'	²⁸ CIB PLUG 6950'	²⁹ Perforations 6876'-6904'
³⁰ Hole Size 15"	³¹ Casing & Tubing Size 10 3/4"	³² Depth Set 251'	³³ Sacks Cement 200	
8 3/4"	5 1/2"	7700'	750	
	2 3/8'	6878'		

VI. Well Test Data

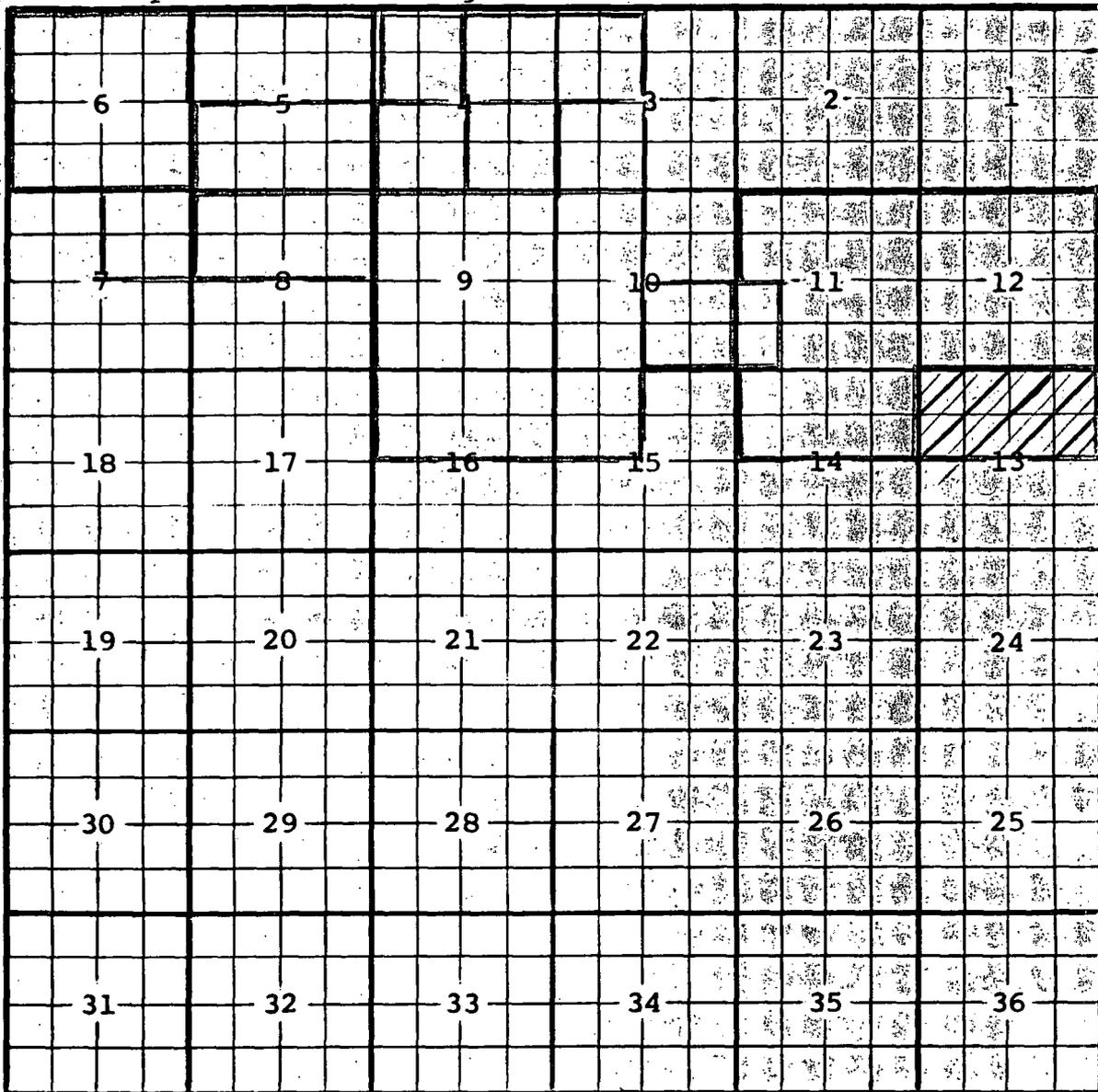
³⁴ Date New Oil 11-5-97	³⁵ Gas Delivery Date	³⁶ Test Date 11-5-97	³⁷ Test Length 3 HOURS	³⁸ Tbg. Pressure 175#	³⁹ Csg. Pressure 460#
⁴⁰ Choke Size 20/64	⁴¹ Oil 95	⁴² Water 0	⁴³ Gas 40	⁴⁴ AOF	⁴⁵ Test Method FLOW

⁴⁶ I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature: <i>Robert L. Verquer</i>	OIL CONSERVATION DIVISION Approved by:
Printed name: Robert L. Verquer	Title:
Title: Superintendent	Approval Date:
Date: November 6, 1997	Phone: (505) 632-1544

⁴⁷ If this is a change of operator fill in the OGRID number and name of the previous operator			
Previous Operator Signature	Printed Name	Title	Date

County Rio Arriba Pool South Blanco-Tecito Oil

Township 26 North Range 6 West NMPM



Description: All Sec. 9; $\frac{1}{2}$ Sec. 10; $\frac{NW}{4}$ Sec. 15; $\frac{1}{2}$ Sec. 16 (R-132, 3-26-52)
Ext: $\frac{SW}{4}$ Sec. 3; $\frac{SE}{4}$ Sec. 4 (R-166, 6-19-52) - $\frac{SE}{4}$ Sec. 10 (R-311, 4-10-53)
Pool Name Change (R-921) - $\frac{SW}{4}$ Sec. 4 (R-366, 9-17-53)
- $\frac{1}{2}$ Sec. 8 (R-394, 11-24-53) - $\frac{1}{2}$ Sec. 5; All Sec. 6 (R-406, 7-26-54)
- $\frac{NE}{4}$ Sec. 7 (R-409, 3-31-54) - $\frac{1}{2}$ $\frac{SW}{4}$ Sec. 11 (R-1239, 9-15-58) - $\frac{N}{2}$, $\frac{SE}{4}$, $\frac{E}{2}$, $\frac{SW}{4}$ Sec. 11;
All Sec. 12; $\frac{N}{4}$ Sec. 13; $\frac{1}{4}$ Sec. 14 (R-2858, 2-1-65)
Deletion: $\frac{N}{2}$ Sec. 13 (R-3281, 8-1-67) Ext: $\frac{NW}{4}$ Sec. 4 (R-7495, 4-5-84)
Ext: $\frac{NW}{4}$ Sec. 3, $\frac{NE}{4}$ Sec. 4 (R-8417, 3-24-87) Ext: $\frac{1}{2}$ Sec. 5 (R-9982, 10-1-93)

SOUTH BLANCO-TOCITO POOL
(Formerly the Pettigrew-Tocito Pool)
Rio Arriba County, New Mexico

Order No. R-1191, Adopting Rules for the South Blanco-Tocito Pool, Rio Arriba County, New Mexico, June 10, 1958, as Amended by Order No. R-1191-A, May 21, 1959, Order No. R-2186, February 14, 1962, and Order No. R-1191-C, February 5, 1964.

Order No. R-1191 supersedes Order No. R-326, May 26, 1953, as Amended by Order No. R-1104, December 14, 1957, Order No. R-1144, March 25, 1958.

Application of Caulkins Oil Company to amend the special pool rules for the South Blanco-Tocito Oil Pool, Rio Arriba County, New Mexico.

CASE NO. 1420
Order No. R-1191

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 6000 to 7000-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 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.

(SOUTH BLANCO-TOCITO (FORMERLY THE PETTIGREW-TOCITO POOL) POOL - Cont'd.)

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. (As Amended by Order No. R-2186, February 14, 1962.) Upon completion of any well in the South Blanco-Tocito Oil Pool and annually, during the month of 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 one hundred feet (-100).

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 (2000) cubic feet of gas for each barrel of oil produced.

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

	Well No.	Unit	Sec.	Twp.	Rge.
Caulkins Oil Company	T-132	A	9	26N	6W
Caulkins Oil Company	T-134	C	10	26N	6W
Caulkins Oil Company	T-157	E	10	26N	6W
Caulkins Oil Company	T-182	K	10	26N	6W
Caulkins Oil Company	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) 1. (As Amended by Order No. R-1191-A, May 21, 1959, and Order No. R-1191-C, February 5, 1964.) The project area shall comprise that area described as follows:

T-26-N, R-6-W S/2 SW/4 Sec. 3; S/2 Sec. 4; S/2 S/2 Sec. 5; Sec. 6; NE/4 Sec. 7; N/2 Sec. 8; N/2, N/2 S/2 Sec. 9; N/2, N/2 SW/4, SE/4 Sec. 10; Secs. 11, 12; N/2 Sec. 13; N/2 Sec. 14.

2. Expansion of the project area to include additional acreage may be approved administratively by the Secretary-Director of the Commission for good cause shown. To obtain such approval, the project operator shall file proper application with the Commission, furnishing copies of said application to all interested parties. "Interested parties" are defined as being working interest owners and royalty owners within the project area and immediately offsetting it. The Secretary-Director may approve the expansion of the project area if, within 20 days after receiving the application, no objection is received from any interested party. The Secretary-Director may grant immediate approval provided waivers of objection are received from all interested parties.

(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

(SOUTH BLANCO-TOCITO POOL - Cont'd.)

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 inj - V-w prod) X

$$5.61 \frac{\text{ft-3} \times \text{P-a} \times 520 \text{ degrees}}{\text{bbl} \times 15.025 \times 625 \text{ degrees}} \frac{\text{X} \text{ 1}}{\text{Z}}$$

where:

- E-g equals Average daily gas equivalent of net water injected
- V-w inj equals Average daily volume of water injected, barrels
- V-w prod equals Average daily volume of water produced, barrels
- P-a equals Average reservoir pressure at datum of -100 feet, psig / 11.5, as determined from most recent semi-annual survey.
- 15.025 equals Pressure base, psi
- 520 degrees equals Temperature base of 60 degrees F expressed as absolute temperature
- 635 degrees equals Reservoir temperature of 175 degrees F expressed as absolute temperature
- Z equals 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:

Well's
Adjusted equals (Top unit allowable X 2000) / gas
Allowable equivalent volume assigned to well
Well's gas-oil ratio

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.

BISTI-LOWER GALLUP POOL
San Juan County, New Mexico

Order No. R-1069-B, Adopting Temporary Operating Rules for the Bisti-Lower Gallup Pool, San Juan County, New Mexico, January 17, 1958, as Amended by Order No. R-1069-F, June 1, 1973, and Order No. R-1069-G, March 23, 1976.

Order No. R-1069-D, February 2, 1959, makes permanent the rules adopted in Order No. R-1069-B.

Application of Sunray Mid-Continent Oil Company for an order extending the horizontal limits of the Bisti-Lower Gallup Oil Pool, in San Juan County, New Mexico, and temporarily establishing uniform 80-acre well spacing and promulgating special rules and regulations for said pool.

CASE NO. 1308
Order No. R-1069-B

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 o'clock a.m., on September 18, 1957, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," and that this cause came on for rehearing before the Commission, upon the petition of Sunray Mid-Continent Oil Company et al, at 9 o'clock a.m. on December 18, 1957 at Santa Fe, New Mexico.

NOW, on this 17th day of January, 1958, the Commission, a quorum being present, having considered the application, the petitions for rehearing, and the evidence adduced at both the original hearing and the rehearing 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 Order No. R-1069 should be superseded by this order.

(3) That the Commission found in Order No. R-1069 that "... the Commission should continue to follow its established policy of extending the horizontal limits of oil and gas pools in the State of New Mexico to include only such acreage as has been proven productive by actual drilling operations."

(4) That the petitioners on rehearing failed to show cause why the Commission should deviate from the aforementioned policy in the Bisti-Lower Gallup Oil Pool.

(5) That sufficient evidence was adduced by the petitioners on rehearing, in addition to the evidence adduced at the original hearing, to justify the establishment of 80-acre proration units in the Bisti-Lower Gallup Oil Pool on a temporary basis.