

BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION

APPLICATION OF SAMUEL GARY JR.  
& ASSOCIATES, INC. FOR THE DRILLING  
OF THREE HORIZONTAL WELLS, AND FOR ONE  
NON-STANDARD SPACING AND PRORATION  
UNIT, WITHIN THE SAN ISIDRO (SHALLOW)  
UNIT, SANDOVAL COUNTY, NEW MEXICO.

No. 10127

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SEP 25 1990

APPLICATION

OIL CONSERVATION DIVISION

Applicant Samuel Gary Jr. & Associates, Inc. hereby applies for approval of three horizontal or high angle directionally drilled wells within the San Isidro (Shallow) Unit ("the Unit"), and for one non-standard spacing and proration unit, and in support thereof states:

1. Applicant is a working interest owner in, and the unit operator of, the Unit, which covers the lands described on Exhibit I attached hereto, located in Sandoval County, New Mexico.

2. The Unit comprises 18,897.16 acres, all of which are federal minerals. One hundred percent of working interests in the Unit are committed to the Unit, and the Bureau of Land Management has approved the Unit.

3. Applicant seeks approval to directionally drill the following horizontal/high angle wells within the Unit:

(a) The SGA Johnson #6-14 Well, with a surface location of 1070 feet from the South line and 1449 feet from the West line of Section 6, Township 20 North, Range 2 West, N.M.P.M.

(b) The SGA San Isidro #12-16 Well, with a

surface location of 928 feet from the South line and 1176 feet from the East line of Section 12, Township 20 North, Range 3 West, N.M.P.M.

(c) The SGA San Isidro #13-14 Well, with a surface location of 660 feet from the South line and 1980 feet from the West line of Section 13, Township 20 North, Range 3 West, N.M.P.M.

Each of the above wells will be drilled vertically to an approximate depth of 3,500 feet, at which point they will kick-off in a north-northwestwardly direction, build angle to approximately 75°-95°, and drill horizontally in the Mancos formation (Rio Puerco-Mancos Oil Pool).

4. In Division Case Nos. 10,099 and 10,100, Applicant requested approval of an initial horizontal well in the Unit and that special rules and operating provisions be instituted for the Unit, including relief from set-back requirements, oversize units, special allowables, and administrative procedures to authorize additional horizontal wells.

5. Applicant will drill the above wells to comply with the special provisions which may be authorized by the Division in Case Nos. 10,099 and 10,100.

6. Applicant intends to dedicate all of Section 12, 20 North-3 West, to the SGA San Isidro #12-16 Well.

7. If the administrative procedures requested in Division Case No. 10,100 are instituted, applicant may dismiss

all or part of this case and seek administrative approval for all or some of the above-described wells. However, due to time constraints and well economics, this case is being filed to obtain a prompt hearing for subsequent wells in the Unit.

8. The proposed well unit in Section 6 comprises 595.72 acres, and Applicant requests permission for a non-standard unit for said well.

9. Applicant requests expedited approval of this Application.

10. The matters requested herein by Applicant are in the interests of conservation, the prevention of waste, and the protection of correlative rights.

WHEREFORE, Applicant requests that the above relief be granted.

Respectfully Submitted,

HINKLE, COX, EATON, COFFIELD &  
HENSLEY

By James Bruce G. O. Hinkle

James Bruce  
500 Marquette, N.W.  
Suite 800  
Albuquerque, New Mexico 87102  
(505) 768-1500

Attorneys for Applicant

Exhibit I

San Isidro (Shallow) Unit Area  
Sandoval County, New Mexico

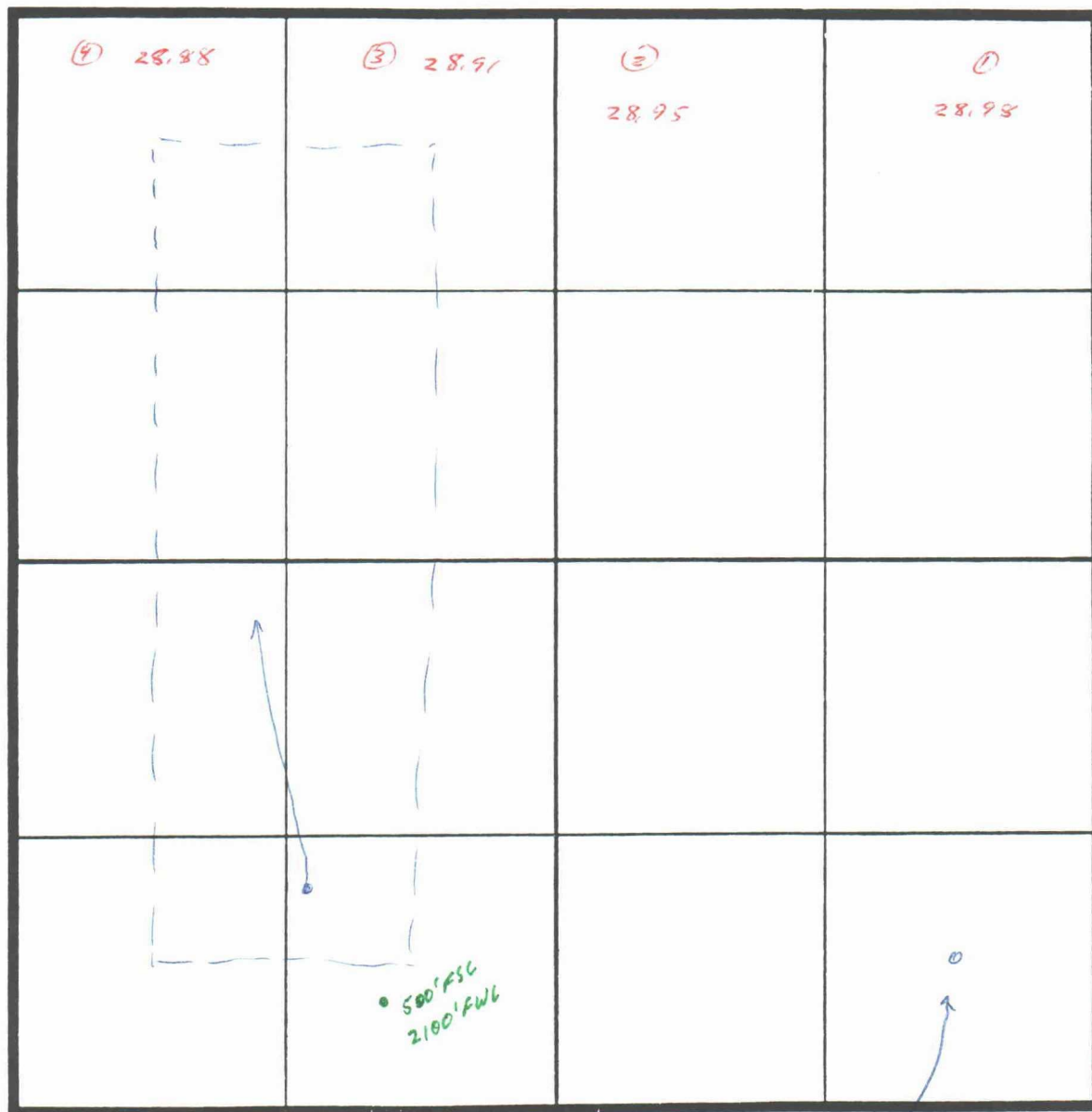
Township 21 North, Range 2 West  
Sections 31, 32 & 33

Township 21 North, Range 3 West  
Sections 35 & 36

Township 20 North, Range 2 West  
Sections 5, 6, 7, 8 & 16

Township 20 North, Range 3 West  
Sections 1, 2, 3, 4, 5, 7, 8, 9,  
10, 11, 12, 13, 14, 15,  
16, 17, 18, 22, 23 & 24

Sec. 6 Township No. 20 North of Range No. 2 West



The Gary Williams Co.  
Johnson 6 well No 16  
660' FSC EL Spud 11/2/84  
Rio Puerco Valley Oil Pool Completion  
E<sub>1/2</sub> dedication

COUNTY Sandoval POOL Rio Puerco-Mancos Oil

TOWNSHIP 20 North RANGE 2 West NMPM

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Description: All Secs. 6 and 7, All Sec. 18 (R-7471, 3-7-84)

Ext: All Secs. 3 through 5, All Secs. 8 through 10, All Secs. 15 through 17  
(R-7471-A, 5-22-85)

## (RIO PUERCO-MANCOS POOL - Cont'd.)

(7) That the reservoir drive mechanism appears to be solution gas drive.

(8) That to ensure maximum efficiency of the solution gas, the limiting gas-oil ratio should be 500 cubic feet per barrel.

(9) That the currently available information indicates that one well in this area should be capable of effectively and efficiently draining 320 acres.

(10) That in order to prevent the economic loss caused by the drilling of unnecessary wells, and to otherwise prevent waste and protect correlative rights, the Rio Puerco-Mancos Oil Pool should be created with temporary Special Rules providing for 320-acre spacing.

(11) That the vertical limits of the Rio Puerco-Mancos Oil Pool should be the Niobrara member of the Mancos shale with horizontal limits as follows:

TOWNSHIP 20 NORTH, RANGE 2 WEST, NMPM  
Sections 6 and 7: All  
Section 18: All

TOWNSHIP 20 NORTH, RANGE 3 WEST, NMPM  
Sections 1 through 4: All  
Sections 9 through 16: All

(12) That the said Temporary Special Rules and Regulations should be established for a two-year period in order to allow the operators in the Rio Puerco-Mancos Oil Pool to gather reservoir information to establish whether the temporary rules should be made permanent.

## IT IS THEREFORE ORDERED:

(1) (As Amended by Order No. R-7471-A, May 22, 1985) That a new pool in Sandoval County, New Mexico, classified as an oil pool for Mancos production is hereby created and designated as the Rio Puerco-Mancos Oil Pool, with the vertical limits comprising the Niobrara member of the Mancos shale and with horizontal limits as follows:

TOWNSHIP 20 NORTH, RANGE 2 WEST, NMPM  
Secs. 3 through 10: All  
Secs. 15 through 18: All

TOWNSHIP 20 NORTH, RANGE 3 WEST, NMPM  
Secs. 1 through 4: All  
Secs. 9 through 16: All  
Secs. 21 through 28: All

TOWNSHIP 21 NORTH, RANGE 2 WEST, NMPM  
Secs. 19 through 22: All  
Secs. 27 through 34: All

TOWNSHIP 21 NORTH, RANGE 3 WEST, NMPM  
Secs. 25 and 26: All  
Secs. 35 and 36: All

(2) That temporary Special Rules and Regulations for the Rio Puerco-Mancos Oil Pool are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS  
FOR THE  
RIO PUERCO-MANCOS OIL POOL

RULE 1. Each well completed or recompleted in the Rio Puerco-Mancos Oil Pool or in a correlative interval within one mile of its boundary, shall be spaced, drilled, operated and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. No more than one well shall be completed or recompleted on a standard unit containing 320 acres, more or less, consisting of the N/2, S/2, E/2, or W/2 of a governmental section.

RULE 3. (As Amended by Order No. R-7471-A, May 22, 1985, as Corrected by Order No. R-7471-A-1, May 31, 1985.) Each well shall be located no nearer than 660 feet to the outer boundary of the spacing or proration unit, nor nearer than 330 feet to a governmental quarter-quarter section line, nor nearer than 1800 feet to any other well completed or drilling within the pool.

RULE 4. The limiting gas-oil ratio shall be 500 cubic feet per barrel of oil.

RULE 5. A standard proration unit (316 through 324 acres) shall be subject to a 320-acre depth bracket allowable of 320 barrels per day. The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 320 acres.

## IT IS FURTHER ORDERED:

(1) That the Special Rules and Regulations for the Rio Puerco-Mancos Oil Pool shall become effective April 1, 1984.

(2) That any well presently producing from the Rio Puerco-Mancos Oil Pool which does not have a standard 320-acre proration unit, an approved non-standard proration unit, or which does not have a pending application for a standard or non-standard proration unit by April 1, 1984, shall be shut-in until a standard or non-standard unit is assigned the well.

(3) That this case shall be reopened at an examiner hearing in April, 1986, at which time the operators in the subject pool should be prepared to appear and show cause why the Rio Puerco-Mancos Oil Pool should not be developed on 40-acre spacing units.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

## (EAST SKAGGS-ABO POOL - Cont'd.)

RIO PUERCO-MANCOS POOL  
Sandoval County, New Mexico

(6) That the discovery well for said pool, the Conoco Inc. Southeast Monument Unit Well No. 71, located 660 feet from the South line and 1830 feet from the East line of said Section 18, is entitled to and should receive a bonus discovery allowable in the amount of 35,145 barrels of oil, based upon the top perforations in said well at 7083 feet, to be assigned over a two-year period.

(7) That the reservoir characteristics of the subject pool justify the establishment of a gas-oil limitation of 6000 cubic feet of gas per barrel of liquid hydrocarbons.

(8) That in order to afford to the owners in the proposed East Skaggs-Abo Pool the opportunity to produce their just and equitable share of the oil and gas in the subject pool and for this purpose to use their just and equitable share of the reservoir energy, a limiting gas-oil ratio of 6000 cubic feet of gas per barrel of liquid hydrocarbons should be established for the subject pool.

## IT IS THEREFORE ORDERED:

(1) That a new pool in Lea County, New Mexico, classified as an oil pool for Abo production, is hereby created and designated the East Skaggs-Abo Pool, with vertical limits comprising the Abo formation and horizontal limits comprising the following described area:

TOWNSHIP 20 SOUTH, RANGE 38 EAST, NMPM  
Section 18: SE/4 and E/2 SW/4  
Section 19: N/2 NE/4 and NE/4 NW/4

(2) That the discovery well for said pool, the Conoco Inc. Southeast Monument Unit Well No. 71, located 660 feet from the South line and 1830 feet from the East line of Section 18, Township 20 South, Range 38 East, NMPM, Lea County, New Mexico, is hereby assigned an oil discovery allowable in the amount of 35,145 barrels of oil, to be produced in addition to said well's regularly assigned allowable, at a rate of 49 barrels of oil per day during the next two years.

(3) That special rules and regulations for the East Skaggs-Abo Pool, Lea County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS  
FOR THE  
EAST SKAGGS-ABO POOL

RULE 1. That the limiting gas-oil ratio for said East Skaggs-Abo Pool shall be 6000 cubic feet of gas for each barrel of oil produced.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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

Order No. R-7471, Creating and Adopting Temporary Operating Rules for the Rio Puerco-Mancos Pool, Sandoval County, New Mexico, April 1, 1984, as Amended by Order No. R-7471-A, May 22, 1985, and Corrected by Order No. R-7471-A-1, May 31, 1985.

Order No. R-7471-B, June 2, 1986, continues in full force and effect the temporary rules adopted in Order No. R-7471, as amended.

Application of Samuel Gary Oil Producers, Inc. for New Pool Creation and Special Pool Rules, Sandoval County, New Mexico.

CASE NO. 8030  
Order No. R-7471

## ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came for hearing at 9:00 a.m. on February 2, 1984, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 7th day of March, 1984, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, 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, Samuel Gary Oil Producers, Inc., seeks an order creating a new oil pool for the Mancos formation with special pool rules including a provision for 320-acre spacing, Sandoval County, New Mexico.

(3) That in companion Case No. 8063, Champlin Petroleum Company seeks an order creating a new oil pool from the Mancos formation, with special pool rules including a provision for 160-acre spacing, Sandoval County, New Mexico.

(4) That Cases 8030 and 8063 were consolidated for the purpose of obtaining testimony.

(5) That the Mancos formation in the area is a fractured reservoir with low porosity and a matrix permeability that should be conducive for wide spacing.

(6) That the oil in the Mancos formation in this area is an under-saturated crude with a solution gas-oil ratio of 340 cubic feet per barrel.



Submit to Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-7-89

OIL CONSERVATION DIVISION

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

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OIL CON. DIV.  
DIST. 3

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

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

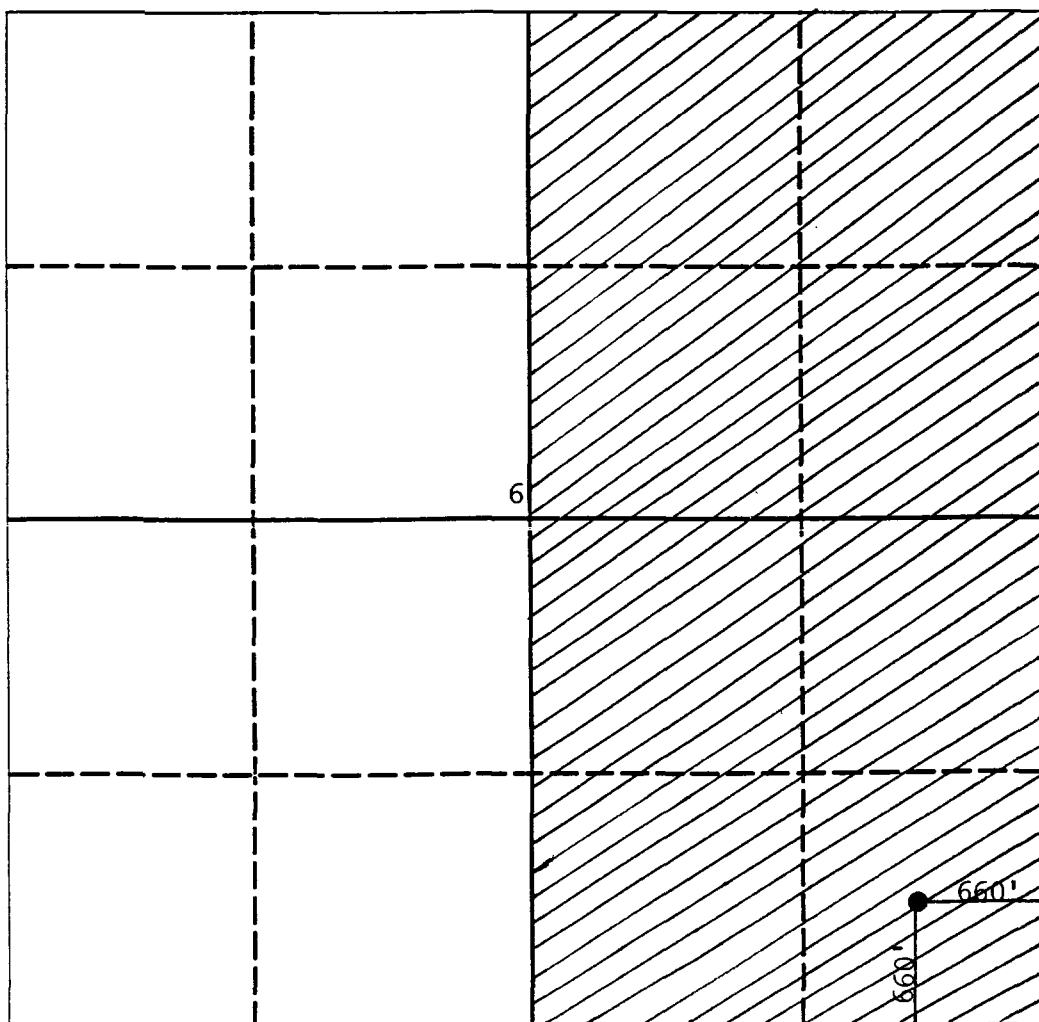
DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section.

Operator The Gary-Williams Company			Lease Johnson 6		Well No. 16
Unit Letter P	Section 6	Township 20N	Range 2W	County Sandoval	NMPM
Actual Footage Location of Well: 660' feet from the South line and 660 feet from the East line					
Ground level Elev. 7091'	Producing Formation Mancos		Pool Rio Puerco	Dedicated Acreage: 320 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?  
☐ Yes ☐ No If answer is "yes" type of consolidation \_\_\_\_\_  
If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary). \_\_\_\_\_  
No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature  
Dan Hall *Dan Hall*  
Printed Name  
Operations Manager  
Position  
The Gary-Williams Company  
Company  
6/26/90  
Date

SURVEYOR CERTIFICATION

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

7/31/84  
Date Surveyed  
See Original Plat  
Signature & Seal of  
Professional Surveyor

Certificate No.

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