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Office
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1625 N. French Dr., Hobbs, NM 88240
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1301 W. Grand Ave., Artesia, NM 88210
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1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised March 25, 1999

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|---|--|---|
| SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.) | | WELL API NO. 30-045-30993 |
| 1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other | | 5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/> |
| 2. Name of Operator Richardson Operating Company | | 6. State Oil & Gas Lease No. |
| 3. Address of Operator 3100 La Plata Highway Farmington, NM 87401 505-564-3100 | | 7. Lease Name or Unit Agreement Name: Ropco 16 |
| 4. Well Location Unit Letter <u>C</u> : 1186 feet from the North line and 1392 feet from the West line Section 16 Township 29N Range 14W NMPM San Juan County | | 7. Well No. 2 |
| 10. Elevation (Show whether DR, RKB, RT, GR, etc.) 5190' UG | | 9. Pool name or Wildcat Bas. Fr. Coal & Tw. Mounds PC |

11. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

- PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐
OTHER: Downhole Commingle Application ☒

SUBSEQUENT REPORT OF:

- REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐
CASING TEST AND CEMENT JOB ☐
OTHER: ☐

12. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompilation.

Richardson Operating Company proposes to downhole commingle the Basin Fruitland Coal and Twin Mounds Pictured Cliffs in this well. Please see the attached for details on downhole commingling these "pre-approved pools."

Your consideration and approval of this application is appreciated.



DHC1284AZ

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

SIGNATURE [Signature] TITLE Operations Manager DATE 07/29/2003

Type or print name Drew Carnes

Telephone No. (505) 564-3100

(This space for State use)

APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 3 DATE AUG -1 2003

Conditions of approval, if any:

Richardson Operating Company

Downhole Commingling Allocation Methodology

This document describes the methodology used in determining the allocation between the proposed pools to be commingled in the Ropco 16 #2 well. Production data was obtained from the OnGard system when possible. The Ropco 4 #3 data was obtained using current production for Richardson Operating Company files. For consistency the average production from the wells was calculated by using a minimum of 6 months of initial production in the well. This average should represent the initial potential of the well. Data was gathered for the Section 4 T29N, R14W and the eight adjacent sections. Analysis was performed in October, 2002.

The data from four sections did not provide a reliable correlation to determine the allocation: Section 34, T29N R14W, Section 5, Section 8, and Section 9 T29N R14W.

Section 32 T30N R14W:

| | | |
|------------------|--------------------------|-------------|
| Fruitland Coal: | Dugan Bi Knobs Com 90 | 23 Mcf/day |
| | Dugan Bi Knobs 91 | 75 Mcf/day |
| Pictured Cliffs: | Dugan Bi Knobs 1 | 52 Mcf/day |
| | Dugan Bi Knobs 2R | 104 Mcf/day |
| | Richardson WF State 32-1 | 42 Mcf/day |

FC avg. = 49

PC avg. = 66

Section 32 allocation = 43% FC, 57% PC

Section 33 T30N R14W:

| | | |
|------------------|-----------------------------|-------------|
| Fruitland Coal: | Richardson WF Federal 33-1 | 203 Mcf/day |
| Pictured Cliffs: | Dugan Cline #1R | 75 Mcf/day |
| | Richardson WF Federal 33 #3 | 555 Mcf/day |

FC avg. = 203

PC avg. = 315

Section 33 allocation = 39% FC, 61% PC

Section 4 T29N R14W:

| | | |
|-------------------|-----------------------|-------------|
| Commingled FC/PC: | Richardson Ropco 4 #3 | 425 Mcf/day |
| Pictured Cliffs: | Richardson Ropco 4 #2 | 231 Mcf/day |
| | Richardson Ropco 4 #4 | 129 Mcf/day |

Comm. avg. = 425

PC avg. = 180

Section 4 allocation = 57% FC, 43% PC

Richardson Operating Company

Downhole Commingling Application

The Ropco 16 #3 is a newly drilled Basin Fruitland Coal/Twin Mounds Pictured Cliffs well. This well is part of Richardson's development program.

Pursuant to Order R-11363, Richardson Operating company seeks approval to downhole commingle the "Pre-approved pools and areas": Basin Fruitland Coal (71629) and Twin Mounds Pictured Cliffs (86620) in this well.

The Basin Fruitland Coal is perforated at 556'-563', and 566'-572'. The Twin Mounds Pictured Cliffs is perforated at 573'-576'.

Due to the intermingled nature of the pools and since neither pool has enough data to prepare a reliable production forecast or predict the ultimate reserves, therefore, based on production from the surrounding sections, Richardson will allocate production as follows:

Pictured Cliffs Production = $0.51 \times \text{Total Production}$.

Fruitland Coal Production = $0.49 \times \text{Total Production}$.

The data used and the corresponding calculations are attached for reference.

The downhole commingling will not reduce the value of the total remaining production of this well.

Ownership between the two pools is not identical.

Richardson Operating Company has sent notice to all interest holders in the spacing units by certified mail (return receipt) of their intent to apply for downhole commingling and no objection was received within 20 days of sending the notice.

Section 3 T29N R14W:

| | | |
|-----------------|----------------------------|-------------|
| Fruitland Coal: | Dugan Federal 1 #99 | 187Mcf/day |
| | Richardson WF Federal 3 #2 | 160 Mcf/day |

| | | |
|------------------|----------------------------|-------------|
| Pictured Cliffs: | Dugan Federal 1 #7 | 266 Mcf/day |
| | Richardson WF Federal 3 #1 | 128 Mcf/day |

FC avg. = 174

PC avg. = 160

Section 3 allocation = 47% FC, 53% PC

Section 10 T29N R14W:

| | | |
|-----------------|---------------------|-------------|
| Fruitland Coal: | Dugan Federal 1 #98 | 165 Mcf/day |
|-----------------|---------------------|-------------|

| | | |
|------------------|------------------------|-------------|
| Pictured Cliffs: | Richardson Ropco 10 #2 | 115 Mcf/day |
|------------------|------------------------|-------------|

FC avg. = 165

PC avg. = 115

Section 10 allocation = 59% FC, 41% PC

Summary:

Section 32 allocation = 43% FC, 57% PC

Section 33 allocation = 39% FC, 61% PC

Section 4 allocation = 57% FC, 43% PC

Section 3 allocation = 47% FC, 53% PC

Section 10 allocation = 59% FC, 41% PC

AVERAGE = 49% FC, 51% PC

The proposed allocation for the Ropco 16 #2 will be 49% Fruitland Coal and 51% Pictured Cliffs.