

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires: January 31, 2004

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an
abandoned well. Use Form 3160-3 (APD) for such proposals.

RECEIVED

2003 SEP -5

SUBMIT IN TRIPLICATE - Other Instructions on reverse side

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Richardson Operating Company

3a. Address

3100 La Plata Highway Farmington, NM 87401

3b. Phone No. (include area code)

505-564-3100

4. Location of Well (Footage, Sec., T, R., M., or Survey Description)

1454' FSL & 1755' FEL

Sec. 19, T30N, R14W

5. Lease Serial No.

NMNM-19163

6. If Indian, Allottee or Tribe Name

N/A

7. If Unit or CA/Agreement, Name and/or No.

Farmington, NM

N/A

8. Well Name and No.

WF Federal 19 #4

9. API Well No.

30-045-31063

10. Field and Pool, or Exploratory Area

B. Fruit. Coal & Twin Mounds PC

11. County or Parish, State

San Juan County, New Mexico

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

☒ Notice of Intent

☐ Subsequent Report

☐ Final Abandonment Notice

TYPE OF ACTION

☐ Acidize

☐ Alter Casing

☐ Casing Repair

☐ Change Plans

☐ Convert to Injection

☐ Deepen

☐ Fracture Treat

☐ New Construction

☐ Plug and Abandon

☐ Plug Back

☐ Production (Start/Resume)

☐ Reclamation

☐ Recomplete

☐ Temporarily Abandon

☐ Water Disposal

☐ Water Shut-Off

☐ Well Integrity

☒ Other Downhole

Commingling App.

3. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Richardson Operating Company proposes to downhole commingle the Basin Fruitland Coal and Harper Hill Pictured Cliffs in this well. Attached is a copy of the application to downhole commingle these "pre-approved pools", as per NMOCD Rule 303C (3) (b) (vii).

CONDITIONS OF APPROVAL

Adhere to previously issued stipulations.

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Drew Carnes

Title Operations Manager

Signature

Date 09/03/2003

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by (Signature)

/s/ Jim Lovato

Name

(Printed/Typed)

Title

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Date SEP 23 2003

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on next page)

NMOCD

Richardson Operating Company

Downhole Commingling Application

The WF Federal 19 #4 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 1021'-1031', 1001'-1002', and 930'-934'. The Twin Mounds Pictured Cliffs is perforated at 1027'-1028'.

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, Richardson Operating Company proposes to allocate the production on a 49/51 basis:

Pictured Cliffs Production = 0.49 x Total Production.

Fruitland Coal Production = 0.51 x Total Production.

Please see the attached document for the methodology used to determine allocation.

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

Ownership between the two pools is identical.

A copy of this application has been submitted via Sundry Notice Form 3160-5 to the Bureau of Land Management.

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 WF Federal 19 #4 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

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
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Pictured Cliffs:	Richardson Ropco 10 #2	115 Mcf/day
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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 WF Federal 19 #4 will be 49% Fruitland Coal and 51% Pictured Cliffs.

Conditions of Approval:

Notice of Intent: Down hole commingle

Richardson Operating Company

WF Federal 19 # 4

1454' FSL & 1755' FEL

Sec 19.T30N.R14W.

API # 3004531063

- 1) Due to the Basin Fruitland Coal and Harper Hill Pictured Cliffs intervals being in Close proximity to each other, and lack of reliable production history to make accurate determinations, you will be given authorization to produce the well with your proposed allocation rates until **October 1, 2004**. At the end of this period, you will be required to resubmit your allocation rates to the Farmington Field Office, to the Attention of Matt Halbert.