Form 3160-5 (September 2001)

#### **UNITED STATES** DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

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

5. Lease Serial No.

**SUNDRY NOTICES AND REPORTS ON WELLS** 

FINMNM-99003

Do not use the	is form for proposals to all. Use Form 3160-3 (APD	drill or to re	-enter an	NUCLIA	6. If Indian, Al	lottee or Tribe Name
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SUBMIT IN TR	IPLICATE - Other instru	uctions on r	everse side	9	7. If Unit or C	A/Agreement, Name and/or No.
1. Type of Well			07(	3 Fairningle	MKINT	
Oil Well Gas Well	Other		6 10 11 13		8. Well Name	and No.
2. Name of Operator			<u>देताण ह</u>	37	WF Federal 3	30 #3
Richardson Operating Company			4	19/33	9. API Well N	lo.
3a. Address			. (inchesparea 200	code) 6	30-045-3072	
3100 La Plata Highway Farming		505-564-316			_1	ool, or Exploratory Area
4. Location of Well (Footage, Sec., 1752' FSL & 1061' FWL	T, R., M., or Survey Description		ONS Z		B. Fruit. Coa	al & Twin Mounds PC
Sec. 30, T30N, R14W			DIST. 3	W. A	11. County of	tuish, suit
		<i>\Sigma</i>	n		San Juan Co	unty, New Mexico
12. CHECK AP	PROPRIATE BOX(ES) TO	DINDICATE	KATURE C	FWOTICE, RI		
TYPE OF SUBMISSION	(NOTATITE DOT(BB) 10	<u> </u>		F ACTION	ar oner, on c	/III.K DILIK
TITE OF BODIMODION			11120	<del></del>	<del></del>	
Notice of Intent	Acidize	Deepen	닏	Production (Start	t/Resume)	Water Shut-Off
14once of Intent	Alter Casing	Fracture Ti		Reclamation	<u>_</u>	Well Integrity
Subsequent Report	Casing Repair	New Const		Recomplete	<b>L</b>	
Final Abandonment Notice	Change Plans	Plug and A	bandon $\bigsqcup$	Temporarily Aba	andon	Commingling App.
rmai Abandonment Notice	Convert to Injection	Plug Back	U	Water Disposal		
Richardson Operating Company copy of the application to downh		roved pools", a 9-/6-0 S OF APPI	s per NMOCE	) Rule 303C (3) (	Pictured Cliffs i (b) (vii).	In this well. Attached is a  ATTACHED FOR  DNS OF APPROVAL
14. I hereby certify that the foregoin Name (PrintedlTyped)	ng is true and correct					
Drew Carnes			Title Operations Manager			
Signature			Date 8/29/206	03		
	THIS SPACE!	FOR FEDERA				
Approved by (Signature) Original Signed: Stephen Mason			Name (Printed/)	Typed)	Ti	itle
Conditions of approval, if any, are attached. Approval of this notice does not war certify that the applicant holds legal or equitable title to those rights in the subject which would entitle the applicant to conduct operations thereon.			ant or lease			DatSEP 1 0 2003
Title 18 U.S.C. Section 1001 and T States any false, fictitious or fraudul	itle 43 U.S.C. Section 1212, makelent statements or representations	e it a crime for a	ny person know vithin its jurisdi	ingly and willfully ction.	to make to any d	epartment or agency of the United

## Richardson Operating Company

#### Downhole Commingling Application

The WF Federal 30 #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 788'-801', 779'-780', 766'-768', and 678'-681'. The Twin Mounds Pictured Cliffs is perforated at 802'-803'.

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:

<u>Pictured Cliffs Production</u> = 0.49 x Total Production. <u>Fruitland Coal Production</u> = 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 30 #3 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
	D D'17 1 01	75 X 4 . C/ 1

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

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 WF Federal 30 #3 will be 49% Fruitland Coal and 51% Pictured Cliffs.

# **Conditions of Approval:**

**Notice of Intent: Down hole commingle** 

Richardson Operating Company WF Federal 30 # 3 1752' FSL & 1061' FWL Sec 30, T30N, R14W API No. 3004530727

Due to the Basin Fruitland Coal and Twin Mounds Pictured Cliffs intervals being Close in proximately 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 this period, you will be required to resubmit your allocation rates to the Farmington Field Office, to the attention of Matt Halbert.