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UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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

OMB No. 1004-0135 Expires: January 31, 2004	
5. Lease Serial No.	

Do not use t	this form for proposals to	drill or to re-enter	an PFC	NMSF-0790	65
abandoned v	vell. Use Form 3160-3 (AP	D) for such proposal	ls.	6. If Indian, A	llottee or Tribe Name
		-	2M2_cco_o	N/A	
SUBMIT IN T	RIPLICATE - Other instr	ructions on reverse	side	7. Mungorg	Agreement, Name and/or No.
1. Type of Well			070 Farm	4	
Oil Well Gas Well	Other		- O rannii	8. Well Name	
2. Name of Operator				1	
Richardson Operating Company	7			F-RPC 20 #3	
3a. Address		3b. Phone No. (include	e area code)	30-045-3112	
3100 La Plata Highway Farmin	gton, NM 87401	505-564-3100	**		ool, or Exploratory Area
Location of Well (Footage, Sec. 660' FSL & 715' FWL	, T, R., M., or Survey Description	n)		A Company of the Comp	l & W. Kutz PC
Sec, 20, T29N, R13W				11. County or I	Parish, State
				Son Ivon Co.	under AT: A C 1
12. CHECK AP	PROPRIATE BOX(ES) TO	O INDICATE NATUE	REOFNOTICE DI	DOD'T OD O	nty, New Mexico
TYPE OF SUBMISSION			PE OF ACTION	EPOKI, OR O	THER DATA
	Acidize				
Notice of Intent	Alter Casing	Deepen	Production (Start/	Resume)	Water Shut-Off
Subsequent Report	Casing Repair	Fracture Treat	Reclamation		Well Integrity
	Change Plans	New Construction	Recomplete		Other Downhole
Final Abandonment Notice	Convert to Injection	Plug and Abandon Plug Back	Temporarily Aba Water Disposal	ndon	Commingling App.
ichardson Operating Company their application to downhole o		gle the Basin Fruitland C d pools", as per NMOCD	Coal and West Kutz Pio Rule 303C (3) (b) (vi	ctured Cliffs in (his well. Attached is a copy
our concurrence of this proposa	is appreciated.				
0 HC (130 AZ	MAR 2003 COMS. DIV. CA		NS OF APPRO'		R 2003
. I hereby certify that the foregoing Name (PrintedlTyped)	partitle and porces	1			APP ATTOMATE
ew Carnes		Title Opera	tions Manager	()O	SEE ATTACHED FOR NOTIONS OF APPRO
Signature		ł			
	THIS SPACE CO	Date 2/27/2		 	
proved by (Signature)	THO OFACE FO	R FEDERAL OR STA		[Ar	CEPTED FOR BECOME
		Name (Printe	e d/Typed)	Title	TOTAL TREATMENT
nditions of approval, if any, are at tify that the applicant holds legal ich would entitle the applicant to cor	nduct operations thereon.	does not warrant or in the subject lease	e		MAR 2 4 2003
le 18 U.S.C. Section 1001 and Title tes any false, fictitious or fraudulent	** ** *		wingly and willfully to n	nake to any depar	HMINGTON BULL DA FEICE
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Richardson Operating Company

Downhole Commingling Application

The F-RPC 20 #3 is a newly drilled Basin Fruitland Coal/West Kutz 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 West Kutz Pictured Cliffs (79680) in this well.

The Basin Fruitland Coal is perforated at 888'-896',1065'-1070' and 1150'-1157'. The West Kutz Pictured Cliffs is perforated at 1163'-1173'.

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:

<u>Pictured Cliffs Production</u> = 0.51 x Total Production. <u>Fruitland Coal Production</u> = 0.49 x 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.

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 F-RPC 20 #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 22 T20N D1 433/

Fruitland Coal:	Dugan Bi Knobs Com 90 Dugan Bi Knobs 91	23 Mcf/day 75 Mcf/day
Pictured Cliffs:	Dugan Bi Knobs 1 Dugan Bi Knobs 2R Richardson WF State 32-1	52 Mcf/day 104 Mcf/day 42 Mcf/day
FC avg. = 49		

r	C	av	g.	==	00		

Section 32	allocation =	= 43% F	'C, 57% PC	7
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Section 33 T30N F	R14W:	
Fruitland Coal:	Richardson WF Federal 33-1	203 Mcf/day
Pictured Cliffs:	Dugan Cline #1R Richardson WF Federal 33 #3	75 Mcf/day 555 Mcf/day
FC avg. = 203 PC avg. = 315	Section 33 allocation = 39	9% FC, 61% PC

Section 4 T29N R14	W:	
Commingled FC/PC:	Richardson Ropco 4 #3	425 Mcf/day
Pictured Cliffs:	Richardson Ropco 4 #2 Richardson Ropco 4 #4	231 Mcf/day 129 Mcf/day
Comm ava = 425		

Comm. avg. = 425

PC avg. = 180Section 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 Ropco 4 #1 will be 49% Fruitland Coal and 51% Pictured Cliffs.

Conditions of Approval:

Notice of Intent: Down hole commingle

Richardson Operating Company F-RPC 20 # 3 600 FSL & 715 FWL Sec 20.,T29N.,R13W.,

1) Due to the Basin Fruitland Coal and West Kutz 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 factors until April 1, 2004. At the end of period, you will be required to resubmit your allocations factors.