Form 3160-5 (September 20-1)

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

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

5. Lease Serial No.

	NOTICES AND		
Do not use this	form for propo	sals to drill	or to re-enter an
abandoned well.	Use Form 316	0-3 (APD) for	such proposals.

6. If Indian, Allottee or Tribe Name

apandoned we	II. USE	FOIII 3100-3 (AF <i>D)</i>	, 10	r such propos	ais.					
SUBMIT IN TRI	PLICA	TE - Other instru	cti	ons on rever	se side	eĵ	004 AUG 1	7. If Unit o	ĘCA.	Agreement, Name and/or No.
1. Type of Well Oil Well Gas Well	Other		~		1		RΕ	8. Well Na	ame a	ınd No.
2. Name of Operator		-					070 FAR	WF Fed	leral	294
Richardson Operating Compar	ıy							9. API We	ll No	).
3a. Address 3b. Phone No. (include area code)						30-045	-3034	48		
3100 La Plata Highway, Farm	ington. N	VM 87401		505-564-3100				10. Field a	nd Po	ool, or Exploratory Area
4. Location of Well (Footage, Sec.,										FS PC / BFC
775' FNL & 735' FWL, Sec 29,	T30N,	R14W						•		arish, State
#1	<del></del>									ounty, New Mexico
12. CHECK APP	ROPR	IATE BOX(ES) TO	IV	DICATE NAT	URE O	)F	NOTICE, RI	EPORT, O	R O	THER DATA
TYPE OF SUBMISSION					TYPE O	)F	ACTION			
✓ Notice of Intent	_	cidize		Deepen Fracture Treat			Production (Start.	/Resume)		Water Shut-Off Well Integrity
		asing Repair	$\bar{\Box}$	New Construction	਼ਰ		Recomplete		$\overline{\nabla}$	Other Approval & Copy
Subsequent Report	=	hange Plans	Ħ	Plug and Abando			Temporarily Aba	ındon	-	NMOCD DHC
Final Abandonment Notice		onvert to Injection	ā	Plug Back			Water Disposal			Application
If the proposal is to deepen direct Attach the Bond under which the following completion of the invotesting has been completed. Find determined that the site is ready for Richardson Operating Compant As per NMOCD Rule 303C (3)  Your consideration, concurrence of the involved proposed propos	e work wilved ope all Abandor final in y propose (b) (vii)	ill be performed or proverations. If the operation of the operation of the performent Notices shall be aspection.)  ses to down-hole comment, attached is a copy of this application.	ride resu file min f th	the Bond No. on filts in a multiple co d only after all rec gle the Basin Fre e application to c	ile with E empletion quirement aitland C downhold	BL of ts,	M/BIA. Require or recompletion in including reclan all with the Twiccommingle thes	ed subsequent a a new inter- nation, have a Mounds F	t repoval, a been ruitli oved	orts shall be filed within 30 days Form 3160-4 shall be filed once completed, and the operator has and Sand- PC in this well.
Charles Neeley	_			Title	Agent/	Pl	E			
Signature Mark		lules		Date		-	1/22/0	4		
0		THIS SPACE FO	OR	FEDERAL OR	STATE	Ξ (	OFFICE USE			
Approved by (Signature)	$\bigcirc$	m bralo			Name (Printed/T)	уре	ed)		Titl	e Petr. Cag
Conditions of approval, if any, are a certify that the applicant holds legal which would entitle the applicant to contain the applicant	ittached. or equitonduoi or	Approval of this notice table title to those right terations thereon.	do s in	es not warrant or the subject lease	Office					Date 8/25/04
Title 18 U.S.C. Section 1001 and Title States any false, fictitious or frauduler	e 43 U.S	c. Section 1212, make ents or representations as	it a to a	crime for any pers	on knowii ts jurisdic	ing Xio	gly and willfully ton.	to make to an	y dep	partment or agency of the United

· Office	trict	State of	f New Me	exico	Form C-103
		Energy, Minerals	s and Natu	ral Resources	March 4, 2004_
District I, 1625 N. French Dr., Hobbs, NM 8824	40	<i>07</i> ,			WELL API NO.
District II					30-045-30348
1301 W. Grand Ave., Artesia, NM 88	OIL CONSERVATION DIVISION				5. Indicate Type of Lease
District III	1220 South St. Francis Dr.				STATE FEE
1000 Rio Brazos Rd., Aztec, NM 874	s Rd., Aztec, NM 87410 Santa Fe, NM 87505				6. State Oil & Gas Lease No.
District IV 1220 S. St. Francis Dr., Santa Fe, NM	1		,		
87505	NOTI	CES AND REPORTS C	N WELLS		7. Lease Name or Unit Agreement Name
(DO NOT USE THIS FORM FOR PI DIFFERENT RESERVOIR. USE "A	ROPOS	ALS TO DRILL OR TO DE	EPEN OR PLI	UG BACK TO A	WF Federal NM-97843
PROPOSALS.)					8. Well Number
I. Type of Well: Oil Well Gas Well	1 🛛	Other			WF Federal 29-4
2. Name of Operator					9. OGRID Number
Richardson Operating Con	nnonz				19219
3. Address of Operator	трапу				10. Pool name or Wildcat
3100 La Plata Highway, Fa	i.,	ton XIM			Twin Mounds FR SD PC/BFC
4. Well Location	ធារារារារ៍	gion, Mivi		····	1 Will Woulds TK SD T C/DFC
Unit LetterC Section	):_ 29	Township	30N	Range 14	
		11. Elevation (Show พ 5580' GL			
Pit or Below-grade Tank Application	n (For	pit or below-grade tank clo	sures, a form	C-144 must be attach	ed)
Pit Location: ULSect7	Γwp	Rng Pit type	D	epth to Groundwater	Distance from nearest fresh water well
				_	
Distance from nearest surface wat				SectI w	pRng;
feet from theline	and	feet from the	line		
	F IN	TENTION TO:			Report or Other Data  SSEQUENT REPORT OF:  RK
TEMPORARILY ABANDON		CHANGE PLANS		COMMENCE DE	
PULL OR ALTER CASING		MULTIPLE COMPLETION		CASING TEST A	ABANDONMENT
		COMPLETION		CEMENT JOB	ABANDONMENT
OTHER: Down-hole Commit	ngling	COMPLETION  Application	3	CEMENT JOB OTHER:	ABANDONMENT
OTHER: Down-hole Commit  13. Describe proposed or of starting any propose or recompletion.  Richardson Operating Commitmed Sand – PC production in the starting commitmed of the starting commitmed comm	ngling comple ed wor npany his we	Application Exercised operations. (Clearly). SEE RULE 1103.  proposes to down-hole ll. Please see the attach	dy state all properties of the	OTHER: pertinent details, as le Completions: As ethe Basin Fruitlas ils on down-hole completions.	ABANDONMENT  and give pertinent dates, including estimated date attach wellbore diagram of proposed completion and Coal with the Twin Mounds Fruitland commingling these "pre-approved" pools.
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# Richardson Operating Company WF Federal 20-3 Downhole Commingling Application

The WF Federal 29-4 is a producing Twin Mounds Pictured Cliffs well completed in March, 2001. As part of Richardson's development program in their WF (West Farmington) field, this well has been perforated and stimulated in the Basin Fruitland Coal.

Pursuant to NMOCD Order R-11363, Richardson Operating Company seeks approval to down-hole commingle the "Pre-approved pools and areas": Twin Mounds Fruitland Sand PC (86620) and Basin Fruitland Coal (79680) pools in this well.

Based on Richardson Operating wells in this township: both zones have similar bottom hole pressures of approximately 200 psi., both zones produce gas with formation water and no liquid hydrocarbons, and fluids from the two zones are compatible.

#### WF Federal 29-4

### **PC Gas Production History**

Although initial gas production rates were encouraging averaging 69.5 mcfpd the first 56 days produced, production made a significant decline in December 2002. Production has averaged 5.3 mcfpd, since that time (389 days) with no measurable decline. Richardson Operating proposes to allocate production based on the recent 5.3 mcfpd production history from the Pictured Cliffs with a constant 5.0 mcfpd or 152 mcfpm (30.4 days) future production forecast. Production allocation attributable to the Fruitland Coal Formation will be based on the difference in the production forecast for the Pictured Cliffs and the commingled gas stream of both intervals.

The monthly production from the Pictured Cliffs is proposed to be 5.0 mcf per day produced.

## Fruitland Coal Production = Total Production for month - Pictured Cliffs production for month

The production history and production curve are attached for your review.

The Twin Mounds Fruitland Sand PC is perforated: 1062' – 1070'. The Basin Fruitland Coal is perforated: 968' – 974', 1025' and 1051' – 1058'.

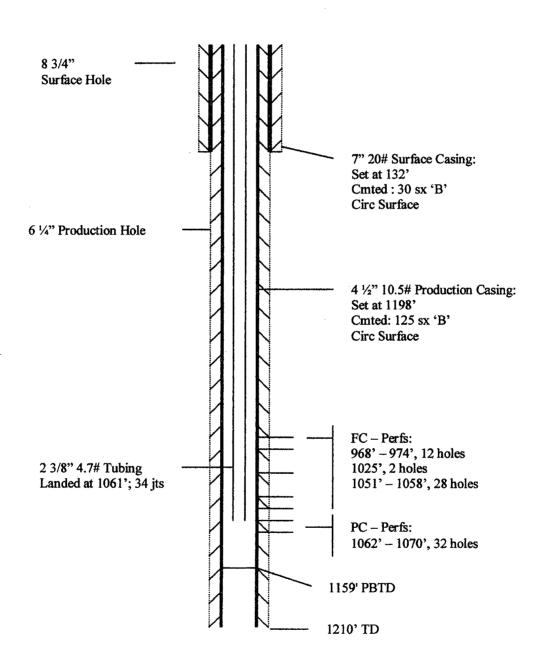
The down-hole commingling will not reduce the value of the total remaining production of this well.

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.

Your consideration and approval of this application is appreciated.

Richardson Operating Company Well: WF Federal 29-4 API No. 30-045-30348 Location: 775' FNL & 735' FWL Sec 29, T30N, R14W, NMPM San Juan, County, New Mexico



Well: Operator: Township: Section: Land Type Total Acres Number of	RICHA 30.0N :F	RDS(	AL 29-4 ON OPER County:	ATING CO Range: Unit: San Juan	14W D	No.: API:	4 3E+09
Accumulat						_	
	Oil:			(BBLS)		Gas:	17177 (MCF)
	Water:		19940	(BBLS)		Days Produ	697 (Days)
Year:	2	001					
			NDS FRUI	ITLAND SA	ND PC (GA	(S)	
Month					•	•	Accum. Gas(MCF)
January	(	Ó	Ó	0	0	, 0	o ` ´
February		0	0	0	0	0	0
March		0	1721	1500	27	0	1721
April		0	2172	1500	29	0	3893
May		0	1920	1500	29	0	5813
June		0	1322	1500	29	0	7135
July		0	2192	1550	31	0	9327
August		0	1935	1550	31	0	11262
September	r	0	0	0	0	0	11262
October		0	0	0	0	0	11262
November		0	0	0	0	0	11262
December		0	0	0	0	0	11262
Total		0	11262	9100	176		
Year:	2	002					
			INDS ERI	IITI AND S	AND PC (G	(AS)	
Month							Accum. Gas(MCF)
January	On(DD	0	0	0	0	0	11262
February		Ö	Ô	Ö	Ŏ	0	11262
March		Ö	ō	ō	Ŏ	Ö	11262
April		ō	0	Ŏ	Ō		11262
May		Ō	0	Ö	ō	Ō	11262
June		Ō	12	Ō	5		11274
July		Ō	55	140	20		11329
August		Ō	997	1020	28		12326
September	r	0	1157	1420	26		13483
October		0	73	720	24	0	13556
November		0	1570	550	29		15126
December		0	132	600	31	0	15258
Total		0	3996	4450	163		
Year:	2	003					
			INDS FRI	IITI AND S	AND PC (G	(SAS)	
Month					•	•	Accum. Gas(MCF)
January	Cir(DDi	0	147	480	المامة المامة. 31	0	15405
February		0	270	660	28	0	15675
. Oblidary		•	2.0	550	20	J	10010

March	0	153	720	31	0	15828
April	0	145	880	30	0	15973
May	0	145	710	31	0	16118
June	0	116	620	30	0	16234
July	0	141	620	31	0	16375
August	0	177	460	31	0	16552
September	0	174	420	30 '	0	16726
October	0	182	370	31	0	16908
November	0	160	450	30	0	17068
December	0	109	450	24	0	17177
Total	0	1919	6840	358		

Year: 2004

Pool Name: TWIN MOUNDS FRUITLAND SAND PC (GAS)

Month	Oil(BBLS)	Gas(MCF)	Water(BBL	Days Produ	Accum. Oi	IAccum. Gas(MCF)
January	0	0	0	0	0	17177
February	0	0	0	0	0	17177
March	0	0	0	0	0	17177
April	0	0	0	0	0	17177
May	0	0	0	0	0	17177
June	0	0	0	0	0	17177
July	0	0	0	0	0	17177
August	0	0	0	0	0	17177
September	r <b>0</b>	0	0	0	0	17177
October	0	0	0	0	0	17177
November	0	0	0	0	0	17177
December	0	0	0	0	0	17177
Total	0	0	0	0		

Oil & Gas Production Linear Curve of Well:

