UNITED STATES

Form 3160-3 (September 2001)

FORM APPROVED OMB No. 1004-0136 Expires January 31, 2004

DEPARTMENT OF THE I	NTERIOR
DEPARTMENT OF THE IT BUREAU OF LAND MANA	GEMENT

070 Farmington, NVs. Lease Serial No.

NMSF-078390

APPLICATION FOR PERMIT TO DR	If Indian, Allottee or Trib N/A	be Name		
1a. Type of Work: XX DRILL REENTER		7. If Unit or CA Agreement, N/A	Name and No. 2	
1b. Type of Well: Oil Well Gas Well Other	ple Zone	8. Lease Name and Well No. Federal 43-11	#3	
 Name of Operator Richardson Operating Company 			9. API Well No. 30-045- 3/9	143
3a Address 3100 La Plata Hwy, Farm. NM	3b. Phone No. (include area code) 564-3100		10. Field and Pool, or Explora Basin Fruitla	tory nd Coal
Location of Well (Report location clearly and in accordance with a At surface 540 FSL & 2245 FEL At proposed prod. zone Same	nny State requirements.*)		O Sec. 11-T28N-R	•
14. Distance in miles and direction from nearest town or post office* 12 miles SE of Blanco, NM			12. County or Parish San Juan	13. State NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	rest se line, ft. 540' 1.851.96			
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 475*	19. Proposed Depth 2800 *		BIA Bond No. on file tionwide # 15829	3308
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6, 267 GL	22. Approximate date work will sta Upon approval	irt*	23. Estimated duration 2 Weeks	
	24. Attachments			
The following, completed in accordance with the requirements of Onshor	e Oil and Gas Order No.1, shall be at	tached to this	form:	
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System Supposed Suppose	Item 20 above). 5. Operator certific	ation. specific info	s unless covered by an existing	,
25. Signature	Name (Printed/Typed) Paul Lehrman	n	Date	24/03
Title Landman			' /	

Application approval does not warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Name (Printed/Typed)

Conditions of approval, if any, are attached.

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.

*(Instructions on reverse)

Approved by (Signature)

Title

This aution is subject to technical and procedura, review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

DRILLING OPERA JONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"."



Date

State of New Mexico Energy. Minerals & Mining Resources Department OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe. NM 87505

MENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

APA Num	266		Pool Code				Peal Name	
30-045- 3	194	3 7	1629		Basin 1	ruitland		
Property Code				Property No	IM-6			Well Number
		FEDERAL 43-11			3			
OGRID No.		Operator Name			Bevation			
19219		RICHARDSON OPERATING COMPANY			6267			
					e Location			
UL or Lot Sec.	Тир.	Rge.	Lot lon	Feet from>	North/South	Feet from>	East/West	County

UL or Lot Sec. Trip. Rge. Let len Feet from North/South Feet from East/Weet County
O II 28 N. 8 W. 540 SOUTH 2245 EAST SAN JUAN

Bottom Hole Location If Different From Surface

UL or Lot	Sec. Tup.	Rge. Lot id	n Feet from North/South	Feet from> Ec	cat/West	County
Dedication	Joint ?	Consolidation		Order i	No.	

NO ALLOWABLE WILL ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED

OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIMSION

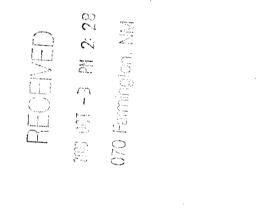
belief.

Signature

ted Name

Landman

√Paul Lehrman





T.29 N.

Dale_{9/24/03} SURVEYOR CERTIFICATION

OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and

I hereby certify that the well location on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey

Signatur of the Structure of the Structu

	14 03 45 M (cdic')	5299 (cdic./
•	Hashed Line \\\\\\\ S/2 Fruitland Coal	Z o
Z 082	Tablet Bille Will 5/2 Fullhand Coal	 1096 0: ₩
2	1	6° from
₹ •	*	
1320.	1	
320 BEA	Existing Richardson Federal 41-11 #2 1280 F¶L/990 FWL	2245
		0 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
	S.89.33. E	5299'

Form 3160-5 (September 2001)

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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

		Expires surrous
į	Lease	Serial No.

	NMSF-078390 '
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Do not use th	is form for proposals to drill dell. Use Form 3160-3 (APD) for s	or to re-enter	an 9-NOV 20 AN 10:	6. If Indian, Allottee		
SUBMIT IN TR	IPLICATE - Other Instruction	s on revers			reement, Name and/or No.	
SUBMIT IN TRIPLICATE - Other Instructions on reverse File Imington, 1. Type of Well				30-0	45-31943	
Oil Well X Gas Well	1 Other		ľ	8. Well Name and I Federal		·
2. Name of Operator				Federal	41-11:43	
Richardson Oper	ating Company		Ī	9. API Well No.		
3a. Address		Phone No. (includ		30-045-		
3100 La Plata Hw	y, Farm., NM 87401	564-310	J	10. Field and Pool, o	r Exploratory Area	
4. Location of Well (Footage, Sec.	, T., R., M., or Survey Description)			Basin Fr	uitland Coal	
	/51 PPI C 11 T29N-1	DQU	}	11. County or Parish,	, State	•
540' FSL & 22	45' FEL-Sec. 11-T28N-	ZOW		San Juan	Co., NM	
12. CHECK AP	PROPRIATE BOX(ES) TO INDI	CATE NATU	RE OF NOTICE, REI	PORT, OR OTHE	ER DATA	
TYPE OF SUBMISSION		TY	TE OF ACTION			
	Acidize De	enen	Production (Start/R	egrme) D We	iter Shut-Off	
Notice of Intent		acture Treat	Reclamation		Il Integrity	
5		w Construction	Recomplete	XX 0:1	_{ler} Change Well	Name
XX Subsequent Report		ug and Abandon	Temporarily Aban-		lei	
Final Abandonment Notice		ug Back	Water Disposal			
changed from the requirements to was the Federal Feder	erating Company request the original APD applithe infill well must be al 41-11 #2. The APD f #3. Therefore the well abmitted to the BLM for 02 is attached.	cation, we the same same same will be same w	ne as the parent of the second	nt well, who e name of the ral 41-11 #	ich in this cas he well as the 3. All other	ie
14. I hereby certify that the foregoin				\ 		AF -
Name (Printed/Typed)		1	Landman		- 1868/2000 mil	,) ² /
	Paul Lehrman	Title	Landman		Colo Pro	
Signature	Val	Date	11/18/03	ACCEPTE	D FOR RECOR	ח
	THIS SPACE FOR FE	DERAL OR S	TATE OFFICE USE			"
		T		 NO\	V 2 1 2003	
Approved by		·	itle	Date		
Conditions of approval, if any, are certify that the applicant holds legs which would entitle the applicant to	attached. Approval of this notice does rail or equitable title to those rights in the conduct operations thereon.	muhiost lassa [ffice	FARMINGTO BY	N DISTRICT OFFICE	

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.

Richardson Operating Company Federal 43-11 #3 540' FSL & 2245' FEL Section 11, T28N, R8W, NMPM San Juan County, New Mexico

DRILLING PROGRAM

1. ESTIMATED FORMATION TOPS:

<u>Formation</u>	GL Depth	KB Depth	Subsea Elevation
San Jose Fm	000'	5'	+6,267'
Nacimiento	350'	355'	+5,617'
Ojo Alamo Ss	1619'	1074'	+4,648'
Kirtland Shale	1962'	1454'	+4,305'
Fruitland Formation	2493'	2114'	+3,774'
Pictured Cliffs Ss	2751'	2350'	+3,516'
Total Depth (TD)*	2800'	2505'	+3,467'

^{*}All elevations reflect the ungraded ground level of 6,267'

2. NOTABLE ZONES:

Gas Zones	Water Zones	Coal Zones
Fruitland	Ojo Alamo	Fruitland Coal
Pictured Cliffs		

Water zones will be protected with casing, cement, and weighted mud. Fresh water encountered during drilling will be recorded by depth, cased, and cemented. Centralizers will be run through the Ojo Alamo. A turbulizing centralizer will be run at the base of the Ojo Alamo to ensure an adequate cement procedure. Oil and gas shows will be tested for commercial potential based on the well site representatives recommendations.

3. PRESSURE CONTROL:

The drilling contract has not yet been awarded, thus the exact BOP model to be used is unknown. (A typical 2,000 psi model has been attached to the end of the drilling program.) Double ram or annular system with a rotating head will be used. All ram preventers and related equipment will be hydraulically tested at nipple up and after any use under pressure to 1000 psi.

Blind rams will be hydraulically activated and checked for operational readiness each time pipe is pulled out of the hole. All checks of the BOP stack and equipment will be noted on the daily drilling report. BOP equipment will include a floor safety valve and choke manifold rated to 2000 psi. Maximum expected pressure is less than 1000 psi.

Drilling Program Richardson Operating Company

Page Two

4. CASING AND CEMENTING PROGRAM:

Hole Size	<u>O.D.</u>	Weight (lb/ft)	<u>Grade</u>	<u>Age</u>	GL Setting Depth
8 3/4"	7"	20	K-55	New	280'
6 1/4"	4 1/2"	10.5	K-55	New	2800'

Surface casing will be cemented to surface with ≈ 100 cu.ft. (≈ 85 sx) Class B + 2% CaCl. Volume is based on 100% excess, yield of 1.18 cu.ft./sk, and slurry weight of 15.6 ppg. WOC = 12 hours. Pressure test surface casing to 600 psi for 30 minutes.

Production casing hole will first be cleaned of rock chips by circulating at least 150% of hole volume with drilling fluid to surface. Thirty barrels of fresh water will then be circulated. Lead with \approx 350 cu.ft. (\approx 175 sx) Class B with 2% metasilicate (yield = 2.06 cu.ft./sk, slurry weight = 12.5 ppg). Tail in with \approx 155 cu.ft. (\approx 132 sx) Class B with 2% CaCl (yield = 1.18 cu.ft./sk, weight = 15.6 ppg). Total cement volume is \approx 505 cu.ft. based on 100% excess and circulating to surface.

Production casing will have 4 ½" cement guide shoe and self fill float collar. Float will be placed one joint above the shoe. Six centralizers will be spaced every other joint starting above the shoe. Six turbolizers will be placed every other joint starting from the top of the well.

5. MUD PROGRAM:

Surface casing hole will be drilled with fresh water. Production casing hole will be drilled with a fresh water polymer mud. Weighting material will be drill solids or, if needed, barite. Maximum expected mud weight will be 8.7 ppg. Sufficient material to maintain mud properties, control lost circulation, and contain a blowout will be available at the well while drilling.

6. CORING, TESTING, & LOGGING:

No cores or DSTs are planned. A cased hole CNL/GR will be run from TD to surface.

7. **DOWNHOLE CONDITIONS:**

No abnormal pressures, temperatures, nor hydrogen sulfide are expected. Maximum pressure will be approximately ≈520 psi.

8. OTHER INFORMATION:

The anticipated spud date is November 1, 2003. It should take 5 days to drill and 1 week to complete the well.