

2004 SEP 30 AM 9 27

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

070 FARMINGTON NM

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMSF-078390	
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A	
2. Name of Operator Richardson Operating Company		7. If Unit or CA Agreement, Name and No. 33054	
3a. Address ** 4601 DTC Blvd, Suite 470 Denver, CO 80237		8. Lease Name and Well No. Federal 32-13 #3Y	
3b. Phone No. (include area code) 303/830-8000		9. API Well No. 30-045- 32597	
4. Location of Well (Report location clearly and in accordance with any State requirements*) At surface 1020' FNL & 1895' FWL At proposed prod. zone Same as above		10. Field and Pool, or Exploratory Basin Fruitland Coal	
14. Distance in miles and direction from nearest town or post office* 13 miles from Blanco, New Mexico		11. Sec. T, R, M, or Blk. and Survey or Area 2 Sec. 13-T28N-R8W, NMPM	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1020'		12. County or Parish San Juan	
16. No. of Acres in lease 1,851.96		13. State NM	
17. Spacing Unit dedicated to this well W/2 320.00 Acres			
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 15'		20. BLM/BIA Bond No. on file BLM Nationwide #158293308	
19. Proposed Depth 3,000.00'			
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6370 GL		22. Approximate date work will start* upon approval	
		23. Estimated duration 2 weeks	

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification. |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature 	Name (Printed/Typed) Paul Lehrman	Date 9/30/04
Title Landman		
Approved by (Signature) 	Name (Printed/Typed) AFM	Date 10-1-04
Title AFM	Office FFC	

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.

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)

** Please return approved APD to 3100 La Plata Highway, Farmington, NM 87401.

OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".

This action is subject to technical and
procedural review pursuant to 43 CFR 3165.3
and appeal pursuant to 43 CFR 3165.4

NMOCD

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

Form C - 102

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

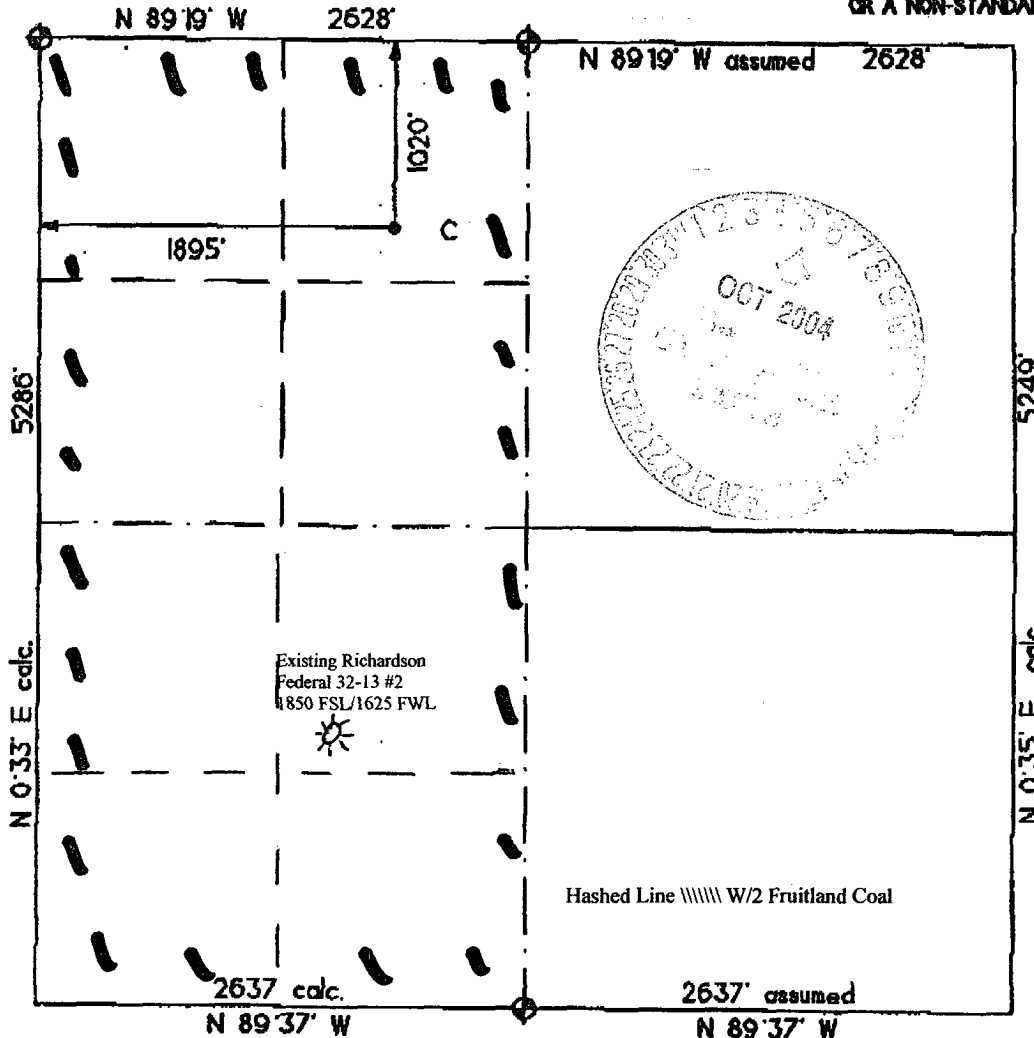
APA Number 30-045 32597	Pool Code 71629	Pool Name Basin Fruitland Coal
Property Code 9640	Property Name FEDERAL 32-13	Well Number 3 Y
OGRI No. 19219	Operator Name RICHARDSON OPERATING COMPANY	Elevation 6370'

Surface Location									County
UL or Lot C	Sec. 13	Twp. 28 N.	Rge. 8 W.	Lot No.	Feet from 1020'	North/South NORTH	Feet from 1895'	East/West WEST	SAN JUAN

Bottom Hole Location if Different From Surface									County
UL or Lot	Sec.	Twp.	Rge.	Lot No.	Feet from	North/South	Feet from	East/West	
Dedication W/2 320	Joint ?	Consolidation	Order No.						

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

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



OPERATOR CERTIFICATION

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

Signature

Printed Name

Paul Lehrman

Title

Landman

Date

9/30/04

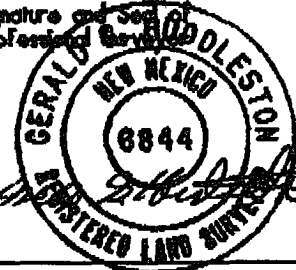
SURVEYOR CERTIFICATION

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

rev. 9/29/04

Signature and Seal of Professional Surveyor



Submit 3 Copies To Appropriate District
Office
District I •
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
May 27, 2004

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO.
30-045-
5. Indicate Type of Lease
~~STATE~~ ~~XXXX~~ ~~FEDERAL~~ ~~XXXX~~ Federal
6. State Oil & Gas Lease No. NMST-078396

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☐ Gas Well ☒ Other

2. Name of Operator
Richardson Operating Company

3. Address of Operator
4601 DTC Blvd, Suite 370, Denver, CO 80237

4. Well Location
Unit Letter C : 1020 feet from the North line and 1895 feet from the West line
Section 13 Township 28 N Range 8W NMPM San Juan County NM

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
6370 GR

Pit or Below-grade Tank Application ☒ For Closure ☐

Pit type Drilling Depth to Groundwater >100' Distance from nearest fresh water well >500' Distance from nearest surface water >1000'

Pit Liner Thickness: 12 mil Below-Grade Tank: Volume _____ bbls; Construction Material _____

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: Pit Permit ☒

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒ a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Paul Lehrman TITLE Landman DATE 9/30/04

Type or print name Paul Lehrman

E-mail address:

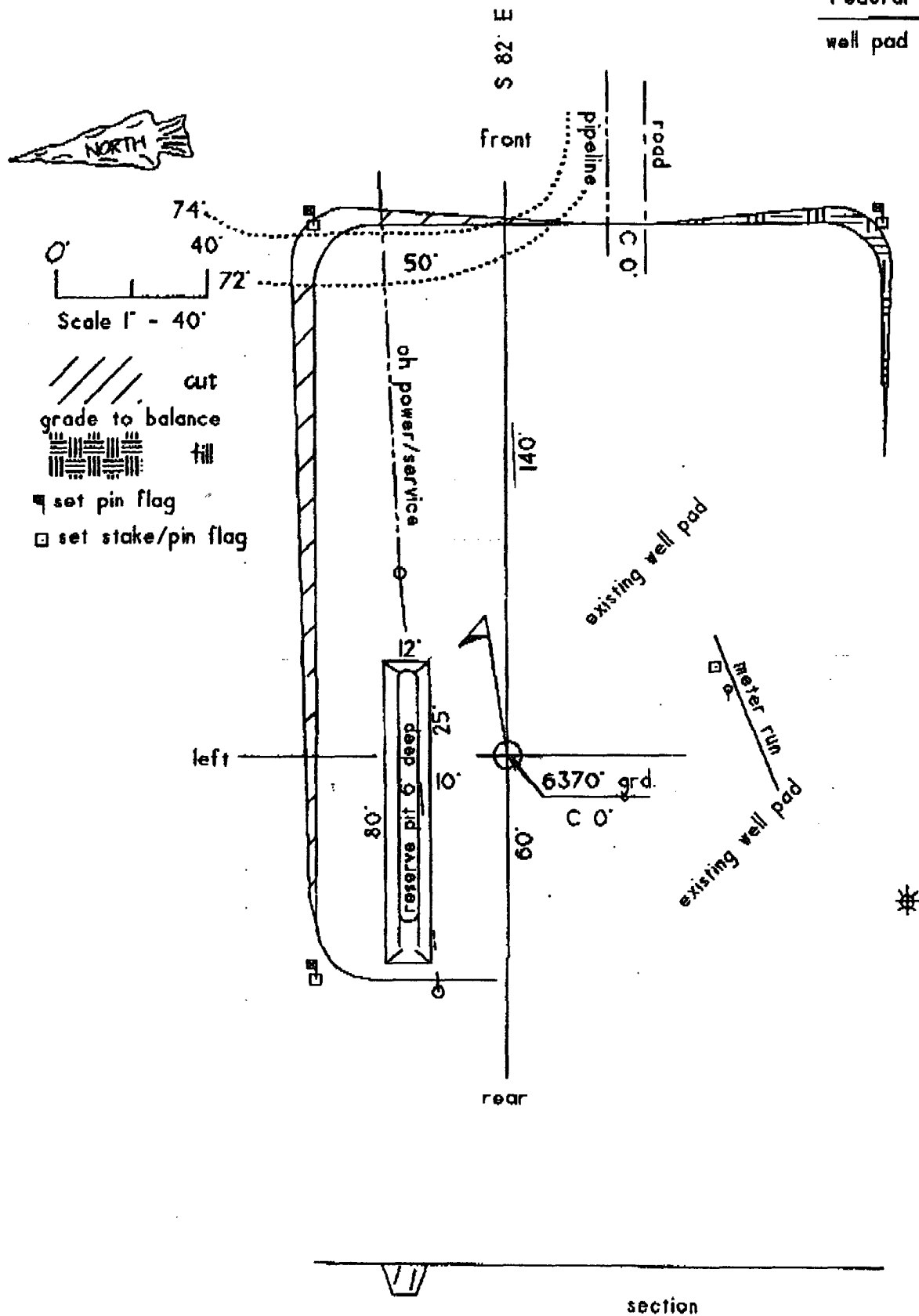
Telephone No.

For State Use Only

APPROVED BY: [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. #3 DATE OCT - 5 2004

Federal 32-13 # 3Y

well pad and section



**Richardson Operating Company
Federal 32-13 #3Y
1020' FNL & 1895' FWL
Section 13, T28N, R8W, NMPM
San Juan County, New Mexico**

DRILLING PROGRAM

1. ESTIMATED FORMATION TOPS:

<u>Formation</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Subsea Elevation</u>
San Jose Fm	000'	5'	+6,370'
Nacimiento	570'	575'	+5,800'
Ojo Alamo Ss	1866'	1871'	+4,504'
Kirtland Shale	2120'	2125'	+4,250'
Fruitland Formation	2640'	2645'	+3,730'
Pictured Cliffs Ss	2932'	2937'	+3,438'
Total Depth (TD)*	3000'	3005'	+3,370'

*All elevations reflect the ungraded ground level of 6,370'

2. NOTABLE ZONES:

<u>Gas Zones</u>	<u>Water Zones</u>	<u>Coal Zones</u>
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, kelly cock 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:

<u>Hole Size</u>	<u>O.D.</u>	<u>Weight (lb/ft)</u>	<u>Grade</u>	<u>Age</u>	<u>GL Setting Depth</u>
8 3/4"	7"	20	K-55	New	300'
6 1/4"	4 1/2"	10.5	K-55	New	3000'

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 ≈ 370 cu.ft. (≈ 180 sx) Class B with 2% metasilicate (yield = 2.06 cu.ft./sk, slurry weight = 12.5 ppg). Tail in with ≈ 155 cu.ft. (≈ 132 sx) Class B with 2% CaCl (yield = 1.18 cu.ft./sk, weight = 15.6 ppg). Total cement volume is ≈ 525 cu.ft. based on 100% excess and circulating to surface.

Production casing will have 4 1/2" 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 October 31, 2004. It should take 5 days to drill and 1 week to complete the well.

BLOW OUT PREVENTER (B.O.P.)

