

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

FORM APPROVED  
OMB No. 1004-0135  
Expires November 30, 2000

5. Lease Serial No.

SF 078477

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.

Nordhaus Federal #5

9. API Well No.

30-039-05948

10. Field and Pool, or Exploratory Area

Ballard Pictured Cliffs

11. County or Parish, State

Rio Arriba County, NM

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Great Western Drilling Co. c/o Walsh Engineering

3a. Address

7415 E. Main, Farmington, NM, 87402

3b. Phone No. (include area code)

505-327-4892

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

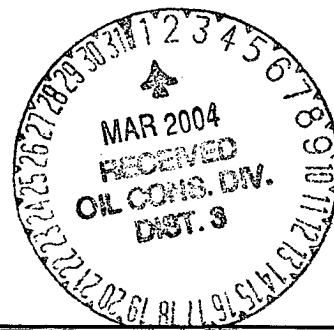
1463' FNL and 1166' FEL, Section 19, T25N, R7W

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleation in a new interval, a Form 3160-4 shall be filed once Testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Great Western Drilling proposes to plug and abandon this well according to the attached procedure.



14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Paul C. Thompson, P.E.

Title

Agent

Signature

*Paul C. Thompson*

Date

February 20, 2004

THIS SPACE FOR FEDERAL OR STATE USE

Approved by

Original Signed: Stephen Mason

Title

Date

FEB 27 2004

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001, 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.

NMOC

Walsh Engineering and Production

Plug and Abandon Procedure for  
Great Western Drilling Company  
Nordhaus #5

Location: NE/4 Sec 19 T25N R7W  
Rio Arriba County, NM

Date: February 20, 2004

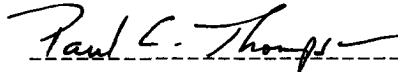
Field: Ballard Pictured Cliffs  
Surface: BLM  
Minerals: BLM SF - 078477

Elev: GL 6484'  
5-1/2" @ 2259'  
PC Perfs 2142 - 2214'

**Procedure:**

1. Dig and line a workover pit. MOL and RU completion rig. Hold safety meeting.
2. NU 2-3/8" relief line. Blow well down and kill with water if necessary.
3. ND tubing head and pull tubing slips. NU BOP. TOH with 104 jts of 1' line pipe. Tubing is landed at 2197' KB. Pick up a 2-3/8" workstring and TIH to approximately 2220'.
4. Pump **Plug #1**. Spot 85 sx (100 cu.ft.) of Cl "B" neat cement from 2220' to approximately ~~1871'~~ <sup>1822'</sup>. Cement is designed to cover from the base of the Pictured Cliffs perfs to 100' above the Fruitland top at ~~1921'~~ <sup>1829'</sup> with 100% excess.
5. POH to 1000' and WOC 4 hrs. Pressure test casing to 1000 psi. TIH and tag cement top.
5. Set tubing at 1631'. Pump **Plug #2**. Pump 20 sx (24 cu.ft.) of Cl "B" neat cement from 1631' to approximately 1531'. Plug is designed to cover 50' above and below the Kirtland top with 50% excess. TOH with the tubing.
6. Perforate 2 holes in the 5-1/2" casing 50' below the Ojo Alamo top at 1471'. Inject down the 5-1/2" casing and attempt to circulate to surface through the bradenhead. If circulation is established then circulate the bradenhead with cement and leave approximately 100' of cement in the casing. **Plug #3** should be approximately 335 sx (395 cu.ft.) of Cl "B" neat cement using a 50% excess.

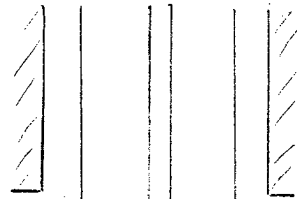
7. If the bradenhead was circulated with cement in step 6, then TIH with 2-3/8" tubing to 157'. **Pump plug #4.** Pump 27 sx (32 cu.ft.) of Cl "B" neat cement from 157' to the surface. Plug is designed to fill the casing from 50' below the surface casing shoe to the surface. If the bradenhead was not circulated with cement in step 6, then perforate 2 holes in the 5-1/2" casing at 157'. Inject down the 5-1/2" casing and attempt to circulate to surface through the bradenhead. **Pump plug #4.** Cement with 55 sx (65 cu.ft.) Do not displace cement. Plug is designed to circulate cement 50' below the surface casing to surface and leave the inside of the 5-1/2" casing full of cement.
8. Remove wellhead and install dryhole marker. Reclaim location as per BLM specifications.

  
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Paul C. Thompson, P.E.

GREAT WESTERN DRILLING  
NORDHAUS FEDERAL #5

GL-6484'

CURRENT STATUS



2 5/8" @ 107'

FORMATION TOPS

OJO ALAMO	1421
KIRTLAND	1581
FRUITLAND	1921
PICTURED CLIFFS	2138

184 JTS OF 1" LINE PIPE  
@ 2197

ASSUME 7 7/8" HOLE

CALC. TOP OF CMT - 1544'

PC PERFS 2142 - 2214

78TD 2223'

5 1/2" @ 2259'

ASSUME 14 #/FT  
CMT W 150 SX

Pot  
2/21/04

GREAT WESTERN DRILLING CO.  
NORDHAUS FEDERAL #5

P&A STATUS

PLUG #4

157

8 5/8" @ 107'

PLUG #3

1371

PERF HOLES @ 1471

- OGS ALAMO 1421

PLUG #2

1531

1631

1921

CALC. TOL  
1544

- KIRTLAND 1581

- FT 1921

214Z

- PC 2138

PLUG #1

2220

2214

PBTD 2223'

5 1/2 @ 2259

Pct 2/21/04

13-392 500 SHEETS FULL 5 SQUARE  
42-381 500 SHEETS EYE-EASE 5 SQUARE  
42-382 100 SHEETS EYE-EASE 5 SQUARE  
42-383 200 SHEETS EYE-EASE 5 SQUARE  
42-384 100 RECYCLED WHITE 5 SQUARE  
42-385 200 RECYCLED WHITE 5 SQUARE  
Made in U.S.A.

