

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.
NMNM 107384

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE – Other instructions on page 2.

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator
Murchison Oil & Gas, Inc. OGRID #015363

3a. Address
1500 Mira Vista Blvd.
Plano, TX 75093

3b. Phone No. (include area code)
972-931-0400

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

8. Well Name and No
Rock Ridge Federal #3H

9. API Well No.
30-015-39543

10. Field and Pool or Exploratory Area
Pierce Crossing; B.S. South (96671)

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
At Surface: 1520' FNL & 350' FEE, Unit H
At Proposed Production Zone: 1650' FNL & 330' FWL

Section 30, T24S, R29E

11. Country or Parish, State
Eddy County, NM

12. CHECK THE 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 checked="" type="checkbox"/> Other Casing Program |
| | <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 Operation. 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 recompleat 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 must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

****Please See Attachment****

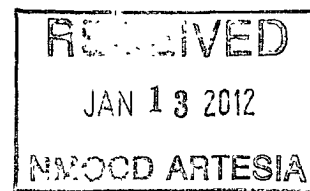
NOTE: The surface and intermediate casing string changes were verbally approved by Ted Morgan in consultation with Chris Walls of the BLM.

Approval Subject to General Requirements
& Special Stipulations Attached

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Accepted for record

NMOCD *CS 1/20/2012*



14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

Donna Stratton

Title Regulatory Agent

Signature

Date 01/03/2012

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

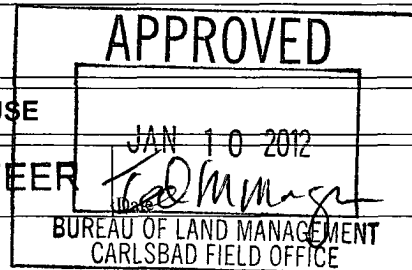
Approved by

PETROLEUM ENGINEER

Title

Office

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.



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 page 2)

In order to use a more conservative casing program for our first well in the area, we propose the following changes:

- Upgrade surface casing from 13-3/8" 48# H-40 STC to 13-3/8" 54.5# J-55 STC.
- Change intermediate hole size from 11" to 12-1/4"
- Change intermediate casing from 8-5/8" 32# J-55 STC to 9-5/8" 36# J-55 STC.
- Change hole size in the pilot hole and curve from 7-7/8" to 8-3/4".
- Increase pilot hole depth from 7400' to 7500'.

The casing program we propose is as follows (as a minimum):

| Casing Size | Hole Size | From – To | Weight | Grade | Connection | Condition |
|-------------|-----------|----------------|--------|-------|------------|-----------|
| 13-3/8" | 17-1/2" | 0' – 500' | 54.5# | J-55 | STC | New |
| 9-5/8" | 12-1/4" | 0' – 2700' | 36# | J-55 | STC | New |
| 5-1/2" | 8-3/4" | 0' – 6500' | 17# | P-110 | LTC | New |
| | 8-3/4" | 6500' – 7547' | 17# | P-110 | BTC | New |
| 5-1/2" | 7-7/8" | 7547' – 11598' | 17# | P-110 | BTC | New |

Note: 7547' is measured depth at the end of the curve.

| Casing Size | Collapse Rating, psi | Safety Factor | Burst Rating, psi | Safety Factor | Tension Rating, Klbs | Safety Factor |
|-------------|----------------------|---------------|-------------------|---------------|----------------------|---------------|
| 13-3/8" | 1130 | 4.93 | 2730 | 5.46 | 514 | 18.9 |
| 9-5/8" | 2020 | 1.42 | 3520 | 1.30 | 394 | 4.1 |
| 5-1/2" | 7460 | 2.12 | 10640 | 1.46 | 445 | 3.6 |
| | 7460 | 2.12 | 10640 | 1.46 | 546 | 4.4 |
| 5-1/2" | 7460 | 2.12 | 10640 | 1.46 | 546 | 4.4 |

One other consideration:

- The rig we plan to use for this drilling project comes with a 5000 psi BOP system. However, the well we are drilling only requires a 3000 psi BOP system. We respectfully request the test requirement be for the BOP system be reduced to 3000 psi, and that the requirement for mud equivalency tests be withdrawn.

Additional considerations/information per conversation with Ted Morgan of the BLM on 01/09/2012:

- Same cement slurries and volumes are planned for 9-5/8" intermediate casing as were planned for 8-5/8" intermediate casing. A fluid caliper will be run and volumes will be adjusted for washout accordingly.
- Pilot hole (8-3/4") will be drilled to a depth ranging from 7400' to 8000', depending on geologic considerations. Pilot hole TD will still remain within the Bone Spring formation.
- Pilot hole (7900' depth assumed for cement example purposes) will be plugged back in one of two ways:
 - 1) Place single 800 sk, 17.5 ppg, 0.95 cf/sk PlugCem H cement plug through 2-7/8" fiberglass tailpipe hanging from drill string, volume as required to fill up pilot hole from bottom to 6600', or 200' above KOP of 6800' (KOP to be adjusted per open hole logs), or

Received by email. TMM 10 Jan 2012

- 2) Place 180' minimum height tail cement plug at the bottom of the pilot hole (e.g. 60 sx 13.2 ppg, 1.62 cf/sk), pull up, WOC, RIH, tag plug, POOH to 7100', spot 500' sidetrack cement plug (265 sx, 17.5 ppg, 0.95 cf/sk).

In either case, dress plug to KOP at 6800' (KOP to be adjusted per open hole logs), initiate sidetrack with time-drilling.

*Received by email
TMM 10 JAN 2012*

Morgan, Ted M

From: Morgan, Ted M
Sent: Tuesday, January 10, 2012 7:51 AM
To: 'Court Adkins'
Cc: Fernandez, Edward; Walls, Christopher
Subject: FW: Murchison - Rock Ridge Federal #3H (30-015-39543) - Sundry attachment with additions
Attachments: Sundry attachment with additions (01-09-2012) - Rock Ridge Federal #3H - Murchison.docx

Court,
The data provided is exactly what our spreadsheet requires for analysis. Since the rig is on the well now, I will insert the attachment with the sundry and continue processing it. Thanks for providing all of the needed information.
Ted Morgan

From: Court Adkins [mailto:Court@rkford.com]
Sent: Monday, January 09, 2012 3:02 PM
To: Morgan, Ted M
Cc: Donna Stratton
Subject: Murchison - Rock Ridge Federal #3H (30-015-39543) - Sundry attachment with additions

Ted,

Attached please find the sundry attachment with the additions I made per our conversation this morning. I apologize if this was not submitted in time for completion Monday afternoon.

I tried to make the additions as clear as possible while leaving Murchison room for decision points as the well progresses.

Please call with any questions.

Thank you,

Court Adkins
R.K. Ford & Associates
O 432-682-0440
M 432-664-1070

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**Rock Ridge Federal #3H
Murchison Oil & Gas Inc
30-015-39543
Jan 9, 2012
Conditions of Approval**

Sundry Requests:

Murchison consultant representative Cort Adkins has submitted the required Notice of Intent for the following:

- Revise/confirm casing program to include 13-3/8" x 9-5/8" x 5-1/2" casings.
- Revise/confirm hole sizes to include 17-1/2" x 12-1/4" x 8-3/4" x 7-7/8" bits.
- Drill a pilot hole to a maximum depth of 8000' staying within the Bone Springs.
- Log the Pilot Hole, then plug back using a single continuous CI H cement plug to include kickoff slurry.
- Utilize 5M BOPE as a 3M system. (The Operator's original APD states the anticipated BHP is 3200 psi maximum, which is 0.44 psi / ft gradient at 7274' TVD.)

Conditions of Approval:

The previous Conditions of Approval dated 10/17/11 remain applicable with the following additions:

- a) **The revised casing program is approved.**
- b) **8-3/4" Pilot Hole:** The addition of an 8-3/4" pilot hole within the Bone Springs formation is approved. If two plugs are set, the BLM is to be contacted (575 361-2822) at least 4 hours in advance prior to the tag of bottom plug. In accordance with Onshore Order #2 .III.G.9, the interval between the two plugs shall be filled with mud of sufficient density to exert hydrostatic pressure exceeding the greatest formation pressure encountered while drilling such interval. **Operator has the option to set one plug from bottom of pilot hole to kick-off point, and save the WOC time for tagging the first plug.**
- c) **The record of the drilling rate along with the GR/N well log run from Pilot Hole TD to surface shall be submitted to the BLM office as well as all other logs run on the borehole and Pilot Hole within 30 days from completion.** If available, a digital copy of the logs is to be submitted in addition to the paper copies.
- d) **Utilization of 5M BOPE equipment as a 3M system is approved.** The 3M system specification eliminates the need for Onshore Order formation Mud Weight Equivalency tests presently included in the Conditions for Approval in the Original APD.

TMM 01/10/2012