



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

Month - Year  
MAY 2 2007  
OCD - ARTESIA, NM

FORM APPROVED  
OMB No. 1004-0137  
Expires: March 31, 2007

**CONDRIY 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.  
NM-8420A

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

Rex Energy (Joe Clement 432-685-0075)

3a. Address  
500 W. Texas Ave. Suite 940 Midland, TX 79701

3b. Phone No. (include area code)  
432-685-0075

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
1780' FNL & 1830' FEL Section 20 T22S-R22E Eddy County NM

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

8. Well Name and No.  
Patterson "20" #1

9. API Well No.

30-015-35451

10. Field and Pool or Exploratory Area  
Rocky Arroyo - Southwest

11. Country or Parish, State  
Eddy CO. New Mexico

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input 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 checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input checked="" 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 checked="" 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.)

See Attached

Deviation Survey attached

Form 3160,4 Well Completion required by 5/31/07,

Accepted for record

NMOCD

MAY 7 2007

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

Name (Printed/Typed)  
Joe N. Clement

Title Vice President & Permian Basin District Manager

Signature

*Joe N. Clement*

Date 04/24/2007

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

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)

ACCEPTED FOR RECORD

APR 30 2007

*Wesley W. Ingram*  
WESLEY W. INGRAM  
PETROLEUM ENGINEER

## GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

## SPECIFIC INSTRUCTIONS

*Item 4* - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

*Item 13* - Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment.

## NOTICES

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

**AUTHORITY:** 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

**PRINCIPAL PURPOSE:** The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

**ROUTINE USES:** Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

**EFFECT OF NOT PROVIDING THE INFORMATION:** Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

**BURDEN HOURS STATEMENT:** Public reporting burden for this form is estimated to average 25 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

April 15, 2007

0600	1200	6.0	Circulate, Wait on orders. Move in & rig up Dowell Schlumberger cement pump.
1200	1330	1.5	Contact Clark Bennett w/ BLM--Carlsbad. On location to witness P&A. Tag bottom w/ DP @ 6100'
1330	1500	1.5	Hold pre job safety meeting. Test lines to 5000 psi. Set plug #1: 6100--5950' w/ 50 sx Class "C" + 3% CaCl <sub>2</sub> , Yld--1.32, Wt--14.8#. Displace w/ 81 bbls mud for balanced plug.
1500	1730	2.5	Pump DP capacity. Pull 5 stands DP. RU LD machine & LD 53 jts DP to 4420'.
1730	1830	1.0	Pump Plug #2: 4420'--4320' w/ 35 sx Class "C" + 3% CaCl <sub>2</sub> . Yld--1.32, Wt--14.8. Plug dn @ 1830 hrs.
1830	2130	3.0	Pull 5 stands, pump DP capacity. WOC 3 hrs. TIH w/ DP to 4420' & did not tag plug.
2130	2230	1.0	Pump Plug #2: 2nd Time f/ 4420'--4320' w/ 35 sx Class "C" + 3% CaCl <sub>2</sub> . Plug Dn @ 2230 hrs, 4/14/07.
2230	0030	2.0	Pull 5 stands, pump DP capacity. WOC 2 hrs. TIH w/ DP to 4420' & did not tag plug.
0030	0130	1.0	Pump Plug #2: 3rd Time f/ 4420'--4320' w/ 50 sx Class "C" + 3% CaCl <sub>2</sub> . Plug dn @ 0130 hrs 4/15/07.
0130	0400	2.5	Pull 5 stands, pump DP capacity. WOC 2 hrs. NO mud losses. TIH w/ DP to 4420' & did not tag plug.
0400	0600	2.0	TIH w/ DP & start picking DP back up off racks to tag cement. GIH w/ DP @ 4955' at report time and still had not tagged any cement.
			Prior to setting Plug #2, hole has not taken any fluid while circulating and waiting on orders.
			Plan to go in hole w/ DP and tag 1st plug then pump 150 sx across WC porosity interval tested w/ DST #1.

April 16, 2007

0600	0730	1.5	TIH w/ DP. Tag cement at 5900' from surface.
0730	0830	1.0	Set cement plug @ 5900: 150 sx Class "C" + 4% CaCl <sub>2</sub> .
0830	1200	3.5	TIH w/ DP. Tag cement at 5530'. LD 37 jts DP to 4420'.
1200	1300	1.0	Set cement plug @ 4420': 35 sx Class "C" + 4% CaCl <sub>2</sub> . Pull 5 stands DP.
1300	1500	2.0	WOC. TIH w/ DP. Did not tag cmt. Pull back up to 4185'.
1500	1600	1.0	Set cement plug @ 4185': 100 sx Class "C" + 4.5% CaCl <sub>2</sub> .
1600	1730	1.5	WOC. TIH w/ DP. Tag @ 4394'. Set 20K on plug.
1730	1830	1.0	Set cement plug @ 4374'. 50 sx Class "C" + 4.5% CaCl <sub>2</sub> .
1830	2100	2.5	WOC. TIH w/ DP. Tag @ 4238'. POH w/ DP to 3800' from surface.
2100	2200	1.0	Set cement plug @ 3800'. 35 sx Class "C" + 4% CaCl <sub>2</sub> .
2200	2300	1.0	WOC. LD DP to 3000'.
2300	2330	0.5	Set cement plug @ 3000': 35 sx Class "C" + 4% CaCl <sub>2</sub> .
2330	0030	1.0	WOC. LD DP to 1965'.
0030	0100	0.5	Set cement plug @ 1965': 70 sx Class "C" + 4% CaCl <sub>2</sub> .
0100	0400	3.0	WOC. TIH w/ DP to 2100'. Had tag on cement.
0400	0500	1.0	Set cement plug at 1965': 100 sx Class "C" + 4.5% CaCl <sub>2</sub> .
0500	0600	1.0	WOC

April 17, 2007

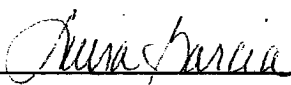
0600	0700	1.0	WOC. TIH w/ DP. Tag cement plug @ 1776'
0700	0800	1.0	LD DP to 1580'
0800	0830	0.5	Set cement plug @ 1580'--1480': 35 sx Class "C" + 4.5% CaCl <sub>2</sub> .
0830	0900	0.5	Lay down DP to 875'.
0900	0930	0.5	Set cement plug @ 875'--775': 35 Sx Class "C" + 4.5% CaCl <sub>2</sub> .
0930	1230	3.0	Lay down DP to 0. Should have had 28 jts, but had 23 jts DP in hole. WOC. TIH w/DP. Tag @ 661'
1230	1400	1.5	TOH w/ DP. PU 8.75" bit, DC, TIH w/ DP.
1400	1500	1.0	Drill out cement from 661' to 750' and fall free. Continue in hole to 925'.
1500	1600	1.0	TOH w/ DP. Break off bit & LD DC. TIH w/ open ended DP, tallying in hole to 913'.
1600	1630	0.5	Set Cement Plug @ 913'--800'. 50 sx Class "C" + 4% CaCl <sub>2</sub> .
1630	1730	1.0	Lay Down DP to surface. GIH w/ 94.5' of DP.
1730	1800	0.5	Set Cement plug @ 94.5' to surface. LD 3 jts DP.
1800	2100	3.0	ND BOP's.
2100	0600	9.0	Jet & clean steel pits and clean out closed loop system. Rig released at 0600 hrs, 4/17/2007.
			Will cut off head and install dry hole marker & fill cellar when rig moves off of location.

WELL NAME AND NUMBER Patterson 20 #1  
LOCATION Section 20,T22S, R22E, 1780 FNL, 1830 FEL, Eddy County  
OPERATOR Rex Energy  
DRILLING CONTRACTOR United Drilling, Inc.

The undersigned hereby certifies that he is an authorized representative of the drilling contractor who drilled the above described well and had conducted deviation test and obtained the following results:

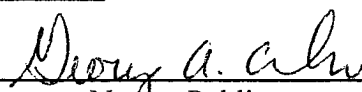
<u>Degrees @ Depth</u>	<u>Degrees @ Depth</u>	<u>Degrees @ Depth</u>
<u>1 @ 269'</u>	<u>1-1/2 @ 2329'</u>	<u>1-1/4 @ 6100'</u>
<u>1-1/2 @ 486'</u>	<u>1-1/2 @ 2834'</u>	<u>                    </u>
<u>1-1/2 @ 517'</u>	<u>1-1/4 @ 3303'</u>	<u>                    </u>
<u>2 @ 702'</u>	<u>2 @ 3775'</u>	<u>                    </u>
<u>1 @ 972'</u>	<u>1-3/4 @ 4309'</u>	<u>                    </u>
<u>1 @ 1368'</u>	<u>1-3/4 @ 4819'</u>	<u>                    </u>
<u>1-3/4 @ 1520'</u>	<u>1-1/2 @ 5300'</u>	<u>                    </u>
<u>1-1/2 @ 1865'</u>	<u>1-1/2 @ 5825'</u>	<u>                    </u>

Drilling Contractor- UNITED DRILLING, INC.

By:   
(Luisa Garcia)

Title: Assistant Office Manger

Subscribed and sworn to before me this 16 day of APRIL, 2007

  
Notary Public  
Chaves NM  
County State

My Commission Expires:

10-8-08