

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

COPY

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

## 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.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

1. Type of Well  
☒ Oil Well ☐ Gas Well ☐ Other2. Name of Operator  
Range Operating New Mexico, Inc.3a. Address 3b. Phone No. (include area code)  
100 Throckmorton St., Ste 1200 Fort Worth TX 76102 (817)869-4145

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

1650 FNL & 2310 FWL  
UL: F, Sec: 34, T: 23S, R: 37E

5. Lease Serial No.

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.

Eva Blinbry B 5

9. API Well No.

30-025-38574

10. Field and Pool, or Exploratory Area  
Blinbry, Tubb and Drinkard

11. County or Parish, State

Lea  
New Mexico

## 12. CHECK 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 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 checked="" 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 recomple 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 recomple 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.)

04/18/08 ☐ Spud well @ 1945 hrs. Drill 12-1/4" hole to 538'04/19/08 ☐ Drill 538' - 931'

04/20/08 Drill 931' - 1070' Run 25 jts 8 5/6" 24# ST&amp;C csg/1076.71' set @ 1070'

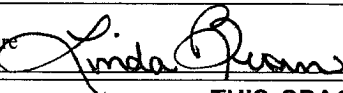
04/21/08 Cmt w/20 bbl FR H2O/200 sx 35/65 'C' POZ w/6% gel &amp; 5% salt; 150 sx 'C'. WOC. Run 1" to cmt tag @ 165'; cmt w/10 bbl H2O/53 sx 'C' w/2% CC. Circ 2 sx cmt to pit. WOC. RU &amp; run 1" to tag cmt @ 24' Cmt w/5 Bbl FR H2O/20 sx 'C' w/2% CC mixed/Cir cmt to top. WOC

04/22/08 ☐ Drilg cmt plug cmt shoe/78' cmt above FC. Drill 7-7/8" hole 1070' - 1400.04/23/08 ☐ Drill 7-7/8" hole 1400' - 2203' (Continued on Page 2 of 4) ☐14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed)

Linda L. Brown

Title Regulatory Analyst

Signature



Date 08/12/2008

## THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

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 PETROLEUM ENGINEER Date

Office



SEP 19 2008

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)

(Summary sent to Wesley Ingram with BLM on 4/29/08)

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A kick was taken on April 22, 2008 while drilling at 2203' which required the well to be shut in. The annular preventer was closed but the resulting pressure caused a union to be separated on the panic line which caused an uncontrolled flow that lasted 40 minutes before the well could be fully shut in. An 88 fph drilling break occurred from 2178' to 2203'. Above the drilling break, the ROP was 23 fph from 2161' to 2178' which apparently provided a barrier to the pressure below. During the kick it was estimated that approximately 310 bbl of water (brine?) was released at the surface which consisted of 260 bbl that remained on the drilling pad which was vacuumed up and an estimated 50 bbl that flowed off the drilling location to a field in the east. To further complicate matters, when the kick occurred, the H<sub>2</sub>S monitors went off which resulted in a immediate complete evacuation of the drilling rig. There are three H<sub>2</sub>S monitors on the rig that provide constant monitoring at the shale shaker, the substructure and the rig floor. As the driller evacuated his crew from the rig floor he noticed that one of the monitors showed a reading of 300 ppm H<sub>2</sub>S. The uncontrolled flow through the panic line lasted for 40 minutes until the driller could suit up with an air pack to go in to shut in the well. Don Robinson, the Range Drilling Manager in charge of the operation arrived on location the following morning to head up the well control operations.

Recognizing the severity of the problem, time was taken to upgrade the surface equipment by installing a Swaco gas buster, replacing the rig's choke manifold and installing flow lines. The closed loop set up complicated the rig up. After the equipment installation was completed, the SIDPP was 950 psi and the SICP was 800 psi so it was assumed that the hole had been completely evacuated. The casing side was opened up to allow the well to flow. Almost immediately the fluid reached the surface dispelling the notion that the hole had been evacuated. Once the fluid reached the mud pit, pumping began down the drillpipe to establish that circulation could in fact be achieved. During this initial flow an H<sub>2</sub>S reading of 800 ppm combined with a LEL (low explosive limits) of 35 confirmed that the gas was highly explosive. This sampling was recorded by the H<sub>2</sub>S safety man using a hand held device at the vent line coming off of the gas buster. During this Surface Circulation #1, most people were removed from location while all personnel that remained on location were under air masks. The other H<sub>2</sub>S monitors showed readings that averaged 15 to 25 ppm. Soon after this point, Gary Seago, a well control specialist with 20 years experience with Boots and Coots (but now with NewTech Engineering) was called out to lead the well control operation.

After establishing that the bit was not plugged, the well was shut back in to consult with the office. Based on having a full column of a 10 ppg brine and a SIDPP of 950 psi, the EMW at 2203 was a shocking 17.9 ppg which translates to an astounding 27 ppg EMW at the 8-5/8" shoe. In view of the fact that Range has no injection or disposal on the lease, this shallow high pressured water flow came as a big surprise. The decision was made to circulate a full hole volume. Several hours later when Surface Circulation #2 was initiated the initial conditions were 975 psi SIDPP and 800 SICP. The maximum recorded H<sub>2</sub>S reading during this second circulation was 53 ppm which was captured at the rig shaker. The other monitors ranged from 17 ppm to 38 ppm. When the gas buster flare line was tested, there was no H<sub>2</sub>S detected. With the extreme EMW found on the well, the assumption was made that there had to be a significant amount of flow taken place along the drill string. It soon became clear that only two options existed, bring in a snubbing unit or cement the drill string in to the well in order to abandon the well. The drill string was valued at \$259M and from past experience it was clear that the cost of the snubbing operation would easily exceed the value of the snubbing operation so the decision was made to cement in the drill string in place.

On April 28th, prior to performing the first of many expected squeeze jobs, a baseline was established by pumping separately on both the drillpipe and annulus at various pump rates and recording the pressures. Then cement squeeze #1 was performed which consisted of pumping 36 bbl of sodium metasilicate

ahead of 41 bbl of 14.6 ppg (150 sks) thixotropic cement followed by overdisplacing the drillstring by 13 bbl.

Today, April 29th, after waiting for 12+ hours, injection rates were reestablished on both the drillpipe and annulus. It was expected that the cement squeeze #1 would create some resistance to the injection rates in the form of higher injection pressures. This did not turn out to be the case as the injection down the drill pipe was actually lower after squeeze #1.

With this in mind, three major modifications were done to Cement Squeeze #2. No sodium metasilicate was run, the cement slurry volume was increased from 150 sks to 400 sks (109 bbl) of thixotropic cement followed by overdisplacing by 5 bbl. The third change was that injection was done down the annulus while cementing down the drill pipe. This annular injection was done in an effort to reduce the suspected flow moving up along the drillstring. A total of 250 bbl of water were pumped down the annulus during cement squeeze #2. The initial SICP was 950 psi while the SIDPP was 1100 psi. While pumping cement squeeze #2, none of desired pressure increases were apparent so the effectiveness of Squeeze #2 is doubtful at best.

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4/30/08 P&A procedure postponed.  
5/1/08 RD pits and ground  
5/3/08 Patterson Rig 63 released @ 1230 hrs.  
05/4/08 Set up Flow-back tree. Safety man on location 24 hrs. SDFN  
05/5/08 - 05/19/08 Flowback well  
5/20/08 Continue to flow back well per OCD instructions  
5/21/08 Well SI and monitoring pressures  
5/22/08 Open casing to flow-back tanks, drill pipe SI. Shut casing in. Well flowed for 11.5 hrs. Total bbl recovered 61,933.  
5/23/08 Open casing and drill pipe to flow-back manifold and tanks. SI casing and drill pipe. Continue to monitor pressures. Total bbl recovered 65,913.  
5/24/08 Open casing and drill pipe and flow to return tanks. SI casing, pump 70 bbl FW down casing. Open casing to flow-back tanks. Continue to flow well on both drill pipe & casing. Total bbl recovered 68,793.  
5/25/08 Well continued to flow on casing and drill pipe. Total recovered 70,297. SWI and monitor pressures.  
5/26/08 Open drill pipe, pump 100 bbl FW down drill pipe. SI drill pipe. RU E-line. Ran to 2089' tagged at same. Ran noise and temp log. Continue to monitor well pressure. SI.  
5/27/08 - 5/31/08 Well SI while monitoring pressures.  
6/1/08 Pump 60 bbl FW down drill pipe. Bled off drill pipe for 1 hour. SI drill pipe. Total bbl recovered 71,805. Casing and drill pipe SI.  
6/2/08 Well SI while monitoring pressures  
6/3/08 Mix mud and barite pill. Pump a total of 68 bbl 15.7# mud. Shut down pump and monitor pressures. Pump 177 bbl 17.7 # barite pill. Pump 25 bbl 10.4# brine water down drill pipe. Open drill and flow for 10 minutes. SI. Open drill pipe to tank and flow for 35 minutes. Pump 186 bbl of barite pill. Displaced with 11.2# light mud. Shut well in and monitor pressures.  
6/4/08 SI while monitoring pressures.  
6/5/08 Ran noise log to 2113' tag at same. Continue to monitor well pressure.

- 6/6/08 Pump 48 bbl 15.9# cement followed by 25 bbl fresh water. Monitor well. RU E-line. Install noise log and CCL to e-line string tested same on surface. Ran to 2114' and logged out of hole. No noise detected in drill collars or drill pipe. SI while monitoring pressures.
- 6/7/08 Received word from Mr. Paul Kautz of the NMOCD to proceed with the pumping of 20 bbl 16.5# class H cement and the under displacement of the drill collars leaving 4 bbl cement remaining in the drill collars. Pump 19 bbl 16.5# class H cement, total displacement 19 bbl. Leaves approximately 4 bbl cement in collars. Shut well in and monitor pressures.
- 6/8/08 Start flowing well back to frac tanks. Total flow time 15.5 hrs. Total bbl recovered 75,485. Well SI
- 6/9/08 Open casing to flow-back tanks.
- 6/10/08 Well continues to flow on casing.
- 6/11/08 Continue to flow well into frac tanks. SI and monitor pressure. Continue to flow well back. Total bbl recovered 80,411.
- 6/12/08 Continue to flow well back. RU wireline and lubricator. RIH w/4' guns, 60 degrees, 6 shots per ft. Perforate drill pipe @ 1350 – 1353'. Communication established. Water flowing through drill pipe. Flow back well. Shut well in and monitor. Continue to flow well back. Start pumping water down drill pipe. Established circulation. Well appeared to be packed off. Flow well back. Total bbl recovered 82,073.
- 6/13/08 Flow back well. Shut well in and monitor pressure. Continue to flow back well.
- 6/14/08 Flow well back. Total bbl recovered 83,697. Shut well in and monitor pressure. Flow well back. Pump 130 bbl 17.0# mud down drill pipe. Line up on back side and bull head 40 bbl down annulus. Shut well in and monitor pressure. Pump 165 bbl 17 ppg mud down drill pipe. Line up on back side and bullhead 35 bbl 17 ppg down annulus. Shut well in and monitor pressure.
- 6/15/08 Monitor SICP.
- 6/16/08 Well shut in. Pump 3 bbl FW ahead of 300 sks class H cement + 2% CACL. Displace w/21 bbl FW. Shut well in and WOC 10 hrs. Open well up and flow back 5 bbl. Pump 2 bbl FR ahead 300 sks class H + 2% CACL. Under displace w/16.5 bbl fresh water. Shut well in and WOC.
- 6/17/08 WOC. RU wireline and go in hole w/sinker bar, tag TOC @ 1252'. RIH w/4' guns, 6 shots per foot, 60 degrees, total of 24 shots. Perforate drill pipe from 1050' – 1054'. Pump 10 bbl water ahead, full circulation, Shut down and monitor flow. Pump 380 sks class H cement. After pumping 50 bbl, had cement to surface. Pump additional 20 bbl for total of 70 bbl. Circulated 20 bbl to pit. Displace w/1 bbl FW. Shut well in.
- 6/18/08 WOC. Cut off drill pipe and remove from BOP. Nipple down BOP and remove from well head. BLM Rep on location. Monitor well.
- 6/19/08 Flanged up wellhead. NU tubing valve w/bull plug and gauge. Shut well in.
- 6/20/08 Continue to monitor well.
- 6/26/08 Install 200 psi gauges on top valve and braidenhead valve. SWI
- 6/30/08 SIP – 390 PSI. SWI. Continue to monitor pressure. Well is temporarily abandoned.