

FORM
5Rev
09/14

State of Colorado

Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303) 894-2100 Fax: (303) 894-2109



DE ET OE ES

Document Number:

401163848

Date Received:

DRILLING COMPLETION REPORT

This form is to be submitted within 30 days of the setting of production casing, the plugging of a dry hole, the deepening or sidetracking of a well, or any time the wellbore configuration is changed. If the well is deepened or sidetracked a new Form 5 is required. If an attempt has been made to complete/produce a well, then the operator shall submit Form 5A (Completed Interval Report.) If the well has been plugged, a form 6 (Well Abandonment Report) is required.

Completion Type ☒ Final completion ☐ Preliminary completion

OGCC Operator Number: 100322

Contact Name: Julie Webb

Name of Operator: NOBLE ENERGY INC

Phone: (720) 587-2223

Address: 1625 BROADWAY STE 2200

Fax:

City: DENVER

State: CO

Zip: 80202

API Number 05-123-19846-00

County: WELD

Well Name: EHRLICH

Well Number: 13-22

Location: QtrQtr: NWNW Section: 13 Township: 4N Range: 67W Meridian: 6

Footage at surface: Distance: 465 feet Direction: FNL Distance: 465 feet Direction: FWL

As Drilled Latitude: 40.317889 As Drilled Longitude: -104.846940

GPS Data:

Date of Measurement: 09/18/2006 PDOP Reading: 4.0 GPS Instrument Operator's Name: David Gipson

** If directional footage at Top of Prod. Zone Dist.: feet. Direction: Dist.: feet. Direction:

Sec: Twp: Rng:

** If directional footage at Bottom Hole Dist.: feet. Direction: Dist.: feet. Direction:

Sec: Twp: Rng:

Field Name: WATTENBERG

Field Number: 90750

Federal, Indian or State Lease Number:

Spud Date: (when the 1st bit hit the dirt) 03/23/2000 Date TD: 03/26/2000 Date Casing Set or D&A: 04/11/2000

Rig Release Date: 04/11/2000 Per Rule 308A.b.

Well Classification:

☐ Dry ☒ Oil ☐ Gas/Coalbed ☐ Disposal ☐ Stratigraphic ☐ Enhanced Recovery ☐ Storage ☐ Observation

Total Depth MD 7432 TVD** Plug Back Total Depth MD 7304 TVD**

Elevations GR 4763 KB 4775 Digital Copies of ALL Logs must be Attached per Rule 308A ☒

List Electric Logs Run:

CBL

CASING, LINER AND CEMENT

Casing Type	Size of Hole	Size of Casing	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Top	Cmt Bot	Status
SURF	12+1/4	8+5/8	24	0	372	260	0	372	VISU
1ST	7+7/8	4+1/2	11.6	0	7,433	720	280	7,433	CALC

STAGE/TOP OUT/REMEDIAL CEMENT

Cement work date: 06/23/2016

Method used	String	Cementing tool setting/perf depth	Cement volume	Cement top	Cement bottom
SQUEEZE	1ST	3,802	50	3,740	3,800
	1ST		25	1,773	2,090

Details of work:

6/16-17/2016 Set RBP at 7145', Ran RBL. Removed RBP
6/20/2016 Set RBP at 3864'. Perf 4 holes at 3802'. Set packer at 3734'.
6/23/2016 Set CICR at 3734'. Pump 50 sks of cement and 3bbls Well Lock.
6/28/2016 Tag cement at 3740'. Pressure test sqz holes to 1500 psi, held for 15 min., ran CBL.
6/29/2016 Perf 4 holes at 2070' and 2 holes at 1940, could not pump into.
6/30/2016 Pump balance plug 25 sks from 2090' to 1768'
7/6/2016 Tagged cement at 1773'.
7/7/2016 Drilled up cement and pulled RBP.

FORMATION LOG INTERVALS AND TEST ZONES

FORMATION NAME	Measured Depth		Check if applies		COMMENTS (All DST and Core Analysis must be submitted to COGCC)
	Top	Bottom	DST	Cored	

Comment:

The Ehrlich 13-22 was slated for plug and abandonment after observing high bradenhead pressure during a spring Form 17 on 4/22/16. The Form 6 was submitted 6/2/2016. It was decided while the rig was moving to location that we should remediate the bradenhead pressure and not abandon the well. The rig was re-routed while a remedial cementing treatment was designed; during this time a gas sample was caught from both the bradenhead and from the production separator (per the approved Form 6). The cement design was approved and the job started 6/15/16. A full-well RBL was run 6/17/16, identifying the original TOC as 5175'. The Sussex was the suspected pressure source, so a plug was designed to be pumped above that zone between an RBP and a CICR. Squeeze holes were shot at 3802' and the job put 3 barrels of Halliburton's WellLock resin atop 50 sacks of cement in the annulus. A CBL on 6/28/16 shows coverage from 3740' down to where it was stopped by the RBP at 3800' (the resin above the cement is incapable of being seen on the CBL). Pressure briefly rose to 135 psi, quickly bled to 75 psi, then bled to below 10 psi. A second squeeze was planned for redundancy, but the rig couldn't establish circulation through squeeze holes shot at 2070' and 1940' on 6/29/16. These holes were plugged off with cement, the plugs were pulled, and the well was monitored. Tubing was re-run in the well 7/11/16. The bradenhead pressure has remained below 10 psi following isolating the Sussex with resin and cement.

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: _____

Print Name: Julie Webb

Title: Senior Regulatory Analyst

Date: _____

Email: jwebb@progressivepcs.net

Attachment Check List

Att Doc Num	Document Name	attached ?	
<u>Attachment Checklist</u>			
401168300	CMT Summary *	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	Core Analysis	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	Directional Survey **	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	DST Analysis	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	Logs	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	Other	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<u>Other Attachments</u>			
401164235	PDF-CBL 1ST RUN	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
401164239	PDF-CEMENT BOND	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
401169794	WELLBORE DIAGRAM	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)