

FORM

2

Rev  
12/05

## State of Colorado

## Oil and Gas Conservation Commission

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



Document Number:

400351547

Date Received:

11/29/2012

PluggingBond SuretyID

20100108

## APPLICATION FOR PERMIT TO:

1. ☒ Drill, ☐ Deepen, ☐ Re-enter, ☐ Recomplete and Operate

## 2. TYPE OF WELL

OIL ☒ GAS ☐ COALBED ☐ OTHER unplanned sidetrack  
 SINGLE ZONE ☒ MULTIPLE ☐ COMMINGLE ☐

Refiling ☐Sidetrack ☒3. Name of Operator: CARRIZO OIL & GAS INC4. COGCC Operator Number: 103385. Address: 500 DALLAS STREET #2300City: HOUSTON State: TX Zip: 770026. Contact Name: Tina Taylor Phone: (713)328-1000 Fax: (713)328-1060Email: tina.taylor@crzo.net7. Well Name: Nelson Well Number: 1-20-9-60

8. Unit Name (if appl): \_\_\_\_\_ Unit Number: \_\_\_\_\_

9. Proposed Total Measured Depth: 10765

## WELL LOCATION INFORMATION

10. QtrQtr: SESE Sec: 17 Twp: 9N Rng: 60W Meridian: 6Latitude: 40.743020 Longitude: -104.108220

Footage at Surface: 280 feet FNL/FSL 273 feet FEL/FWL FEL

11. Field Name: Wildcat Field Number: 9999912. Ground Elevation: 5007 13. County: WELD

## 14. GPS Data:

Date of Measurement: 11/28/2012 PDOP Reading: 2.0 Instrument Operator's Name: Marc Woodard15. If well is ☐ Directional ☒ Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: FNL/FSL 650 FNL 736 FEL 650 FSL 662 FEL 650 FSL 662 FEL 650 FSL 662 FEL  
 Sec: 20 Twp: 9N Rng: 60W Sec: 20 Twp: 9N Rng: 60W

16. Is location in a high density area? (Rule 603b)? ☐ Yes ☒ No17. Distance to the nearest building, public road, above ground utility or railroad: 210 ft18. Distance to nearest property line: 273 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 1328 ft

## 20. LEASE, SPACING AND POOLING INFORMATION

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
Niobrara	NBRR	535-69	640	Sect 20 ALL

21. Mineral Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian Lease #: \_\_\_\_\_22. Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian23. Is the Surface Owner also the Mineral Owner? ☒ Yes ☐ No Surface Surety ID#: \_\_\_\_\_23a. If 23 is Yes: Is the Surface Owner(s) signature on the lease? ☒ Yes ☐ No23b. If 23 is No: ☐ Surface Owners Agreement Attached or ☐ \$25,000 Blanket Surface Bond ☐ \$2,000 Surface Bond ☐ \$5,000 Surface Bond

24. Using standard QtrQtr, Sec, Twp, Rng format enter entire mineral lease description upon which this proposed wellsite is located (attach separate sheet/map if you prefer):

See attached lease

25. Distance to Nearest Mineral Lease Line: 0 ft

26. Total Acres in Lease: 2141

### DRILLING PLANS AND PROCEDURES

27. Is H2S anticipated? ☐ Yes ☒ No If Yes, attach contingency plan.

28. Will salt sections be encountered during drilling? ☐ Yes ☒ No

29. Will salt (>15,000 ppm TDS CL) or oil based muds be used during drilling? ☐ Yes ☒ No

30. If questions 28 or 29 are yes, is this location in a sensitive area (Rule 901.e)? ☐ Yes ☒ No

31. Mud disposal: ☒ Offsite ☐ Onsite

If 28, 29, or 30 are "Yes" a pit permit may be required.

Method: ☐ Land Farming ☐ Land Spreading ☒ Disposal Facility Other: \_\_\_\_\_

Note: The use of an earthen pit for Recompletion fluids requires a pit permit (Rule 905b). If air/gas drilling, notify local fire officials.

Casing Type	Size of Hole	Size of Casing	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
SURF	12+1/4	9+5/8	36	0	1,418	334	1,418	0
1ST	8+3/4	7	23	0	6,453	632		
1ST LINER	6+1/4	4+1/2	11.6	5140	10,765			

32. BOP Equipment Type: ☒ Annular Preventer ☒ Double Ram ☒ Rotating Head ☐ None

33. Comments Open hole sidetrack due to a 30' fault that was encountered and our geological interpretation led us to 30' above the Niobrara targeted TVD. Open hole sidetracked @ 8429'. Original hole well path was left open. TD Reached @ MD 8429' TVD 6421' Sidetrack Casing set size and depths Surface 1418' w 9 5/8" Intermediate 6453' w 7" Production not ran yet Sidetrack due to 30' fault Bottom Plug setting depths, heights and cement volumes No plug set Proposed sidetrack kickoff point @ MD 8429' TVD 6421' Formation - same as original hole BHL for sidetrack is same as original hole. Email approval was given 11/28/12 by Diana Burn

34. Location ID: 422744

35. Is this application in a Comprehensive Drilling Plan ? ☐ Yes ☐ No

36. Is this application part of submitted Oil and Gas Location Assessment ? ☒ Yes ☐ No

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

Signed: \_\_\_\_\_ Print Name: Tina Taylor

Title: Regulatory Compliance Date: 11/29/2012 Email: tina.taylor@crzo.net

Operator must have a valid water right or permit allowing for industrial use or purchased water from a seller that has a valid water right or permit allowing for industrial use, otherwise an application for a change in type of use is required under Colorado law. Operator must also use the water in the location set forth in the water right decree or well permit, otherwise an application for a change in place of use is required under Colorado law. Section 37-92-103(5), C.R.S. (2011).

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: Matthew Lee Director of COGCC Date: 12/4/2012

#### API NUMBER

05 123 36256 01

Permit Number: \_\_\_\_\_ Expiration Date: 12/3/2014

#### CONDITIONS OF APPROVAL, IF ANY:

All representations, stipulations and conditions of approval stated in the Form 2A for this location shall constitute representations, stipulations and conditions of approval for this Form 2 Permit-to-Drill and are enforceable to the same extent as all other representations, stipulations and conditions of approval stated in this Permit-to-Drill.

- 1) Provide cement coverage from base of intermediate casing to a minimum of 200' above Niobrara. Verify coverage with cement bond log.
- 2) Run and submit Directional Survey from TD to base of surface casing. Ensure that the wellbore complies with setback requirements in commission orders or rules prior to producing the well.

### **Applicable Policies and Notices to Operators**

Notice Concerning Operating Requirements for Wildlife Protection.

### **Attachment Check List**

Att Doc Num	Name
400351547	FORM 2 SUBMITTED
400351692	DEVIATED DRILLING PLAN
400351693	WELL LOCATION PLAT
400351694	WELLBORE DIAGRAM
400351712	DIRECTIONAL DATA

Total Attach: 5 Files

### **General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>
Permit	Final Review Completed.	12/4/2012 6:03:11 AM
Permit	Horizontal wellbore crosses lease line. Distance to nearest lease line is 0 feet, distance to nearest unit/pooling boundary is 650 feet.	12/4/2012 5:57:39 AM
Permit	Operator changed SHL due to as built GPS, updated distance to nearest property line, and updated distance to nearest wellbore. The remainder of the form 2 is the same as the original.	12/4/2012 5:53:57 AM
Engineer	Casing tab missing 1st liner information. Entered size of hole, size of casing, top of liner same as original permit and setting depth same as new PTMD.	11/29/2012 4:44:17 PM
Permit	Unplanned sidetrack. LGD and Public comment period waived.	11/29/2012 1:30:51 PM

Total: 5 comment(s)

### **BMP**

<b><u>Type</u></b>	<b><u>Comment</u></b>

Total: 0 comment(s)