

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:

400344672

Date Received:

11/14/2012

PluggingBond SuretyID

20100108

## APPLICATION FOR PERMIT TO:

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

## 2. TYPE OF WELL

OIL ☒ GAS ☐ COALBED ☐ OTHER \_\_\_\_\_  
 SINGLE ZONE ☒ MULTIPLE ☐ COMMINGLE ☐

Refiling ☐Sidetrack ☐

3. Name of Operator: CARRIZO OIL &amp; GAS INC

4. COGCC Operator Number: 10338

5. Address: 500 DALLAS STREET #2300

City: HOUSTON State: TX Zip: 77002

6. Contact Name: Tina Taylor Phone: (713)328-1000 Fax: (713)328-1060

Email: tina.taylor@crzo.net

7. Well Name: Vawter Well Number: 11-31-8-61

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

9. Proposed Total Measured Depth: 10967

## WELL LOCATION INFORMATION

10. QtrQtr: NWNE Sec: 11 Twp: 8N Rng: 61W Meridian: 6

Latitude: 40.683200 Longitude: -104.167450

Footage at Surface: 240 feet FNL/FSL 1336 feet FEL/FWL  
 FNL FEL

11. Field Name: Wildcat Field Number: 99999

12. Ground Elevation: 4991 13. County: WELD

## 14. GPS Data:

Date of Measurement: 12/13/2012 PDOP Reading: 2.8 Instrument Operator's Name: Marc Woodard

15. If well is ☐ Directional ☒ Horizontal (highly deviated) submit deviated drilling plan.

Footage at Top of Prod Zone: FNL/FSL FEL/FWL Bottom Hole: FNL/FSL FEL/FWL  
 650 FNL 2436 FEL 657 FSL 2493 FEL  
 Sec: 11 Twp: 8N Rng: 61W Sec: 11 Twp: 8N Rng: 61W

16. Is location in a high density area? (Rule 603b)? ☐ Yes ☒ No

17. Distance to the nearest building, public road, above ground utility or railroad: 1351 ft

18. Distance to nearest property line: 240 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 1925 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	535-215	640	Sect 11 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#: 2010017023a. 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):

Section 18-T8N-R60W: S2N2 and Section 11-T8N-R61W: NE4

25. Distance to Nearest Mineral Lease Line: 0 ft

26. Total Acres in Lease: 320

### 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	1,400	534	1,400	0
1ST	8+3/4	7	23	0	6,684	678	6,684	1,400
1ST LINER	6+1/4	4+1/2	11.6	5889	10,967			

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

33. Comments Nearest building is a well location NE 1147'. Nearest Building is section 11 1846' SE. No conductor casing will be set. Swell Packer will be set across 600' from section line to keep wellbore from 7" casing shoe to Swell Packer unproduced.

34. Location ID: 424144

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: 11/14/2012 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: 12/18/2012

#### API NUMBER

05 123 33903 00

Permit Number: \_\_\_\_\_ Expiration Date: 12/17/2014

#### 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 48 hour notice prior to spud via electronic Form 42.
- 2) Provide cement coverage from base of intermediate casing to a minimum of 200' above Niobrara. Verify coverage with cement bond log.
- 3) 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
2233184	DEVIATED DRILLING PLAN
2233185	WELL LOCATION PLAT
2544757	SURFACE CASING CHECK
400344672	FORM 2 SUBMITTED
400359004	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. No LGD or public comment received.	12/18/2012 6:23:38 AM
Permit	Horizontal wellbore crosses lease line. Distance to nearest lease line is 0 feet, distance to nearest unit/pooling boundary is 650 feet.	12/18/2012 6:18:47 AM
Permit	Per operator attached new deviated drill plan, directional template, and plat. Per operator corrected total depth, TOP, BHL, and distance to nearest wellbore.	12/17/2012 10:09:09 AM
Engineer	Received from operator the new directional well plan, Directional data template and plat to avoid the DA well within 500' of the Vawter 11-31-8-61 doc # 400344672. The DA well is the Duell #1, API#123-05578. Fwdd to pmtg (SF).	12/17/2012 9:26:18 AM
Engineer	Notified operator of a DA well within 500' (280') of proposed directional plan, that does not have adequate aquifer or Niobrara isolation. Duell #1, API#123-05578, located in NWSE 11-8N-61W.	12/7/2012 10:44:16 AM
Permit	Input distance to nearest wellbore per operator.	12/3/2012 12:03:36 PM
Permit	Requested updated distance to nearest wellbore. Initial review complete.	11/21/2012 11:33:54 AM
Permit	This form passed completeness.	11/15/2012 1:45:32 PM

Total: 8 comment(s)

## **BMP**

<b><u>Type</u></b>	<b><u>Comment</u></b>
Material Handling and Spill Prevention	Operator will ensure 110 percent secondary containment for any volume of fluids contained at the well site during drilling and completion. Operator will implement best management practices to contain any unintentional release of fluids.
Storm Water/Erosion Control	Operator has designed the well pad with insloping and a storm water control ditch to prevent storm water run-on/runoff and the release of fluids from the location. See attached Construction Layout Drawing.
Site Specific	Fresh water for the Fresh Water Storage Pit comes from water provider; water sources permitted for consumable industrial use.
Material Handling and Spill Prevention	Operator shall not allow any fluids to flow back to the Fresh Water Storage Pit/Pond.
Site Specific	Fresh Water Storage Pit shall contain fresh water only and signage prohibiting the use of the pit for any fluid that does not come from municipal, irrigation or surface water source.
Construction	The location will be fenced and the fenced area will include the Fresh Water Storage Pit.
Pre-Construction	The COGCC to be notified 48 hours prior to construction of the Fresh Water Storage Pit.
Planning	A Form 15 Pit Report will be submitted within 30 days of construction of the fresh water storage pit
Site Specific	Operator will participate in the Colorado Oil & Gas Association Voluntary Baseline Groundwater Quality Sampling Program. Operator will implement interim reclamation measures immediately after construction of the location to stabilize cut and fill slopes, stabilize the topsoil and spoil stockpiles, establish desirable vegetation and control weeds on the location.

Total: 9 comment(s)