

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:

400291498

Date Received:

06/01/2012

PluggingBond SuretyID

20100108

APPLICATION FOR PERMIT TO:

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

2. TYPE OF WELL

OIL ☒ GAS ☐ COALBED ☐ OTHER Horizontal  
SINGLE ZONE ☒ MULTIPLE ☐ COMMINGLE ☐

Refiling ☐

Sidetrack ☒

3. Name of Operator: CARRIZO OIL & 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: WEP Well Number: 1-28-11-3-64

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

9. Proposed Total Measured Depth: 12123

WELL LOCATION INFORMATION

10. QtrQtr: NWNW Sec: 28 Twp: 3S Rng: 64W Meridian: 6

Latitude: 39.767170 Longitude: -104.560500

Footage at Surface: 368 feet FNL 1127 feet FWL

11. Field Name: Wildcat Field Number: 99999

12. Ground Elevation: 5580 13. County: ADAMS

14. GPS Data:

Date of Measurement: 05/11/2012 PDOP Reading: 1.6 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 FSL 650 FWL 650 FNL 650 FWL  
Sec: 21 Twp: 3S Rng: 64W Sec: 21 Twp: 3S Rng: 64W

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: 4150 ft

18. Distance to nearest property line: 368 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 1300 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	535-167	640	Sec. 21

21. Mineral Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian Lease #:

22. Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian

23. 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 ☐ No

23b. 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):

Township 3 South, Range 64 West: Section 21 W/2, SE/4.

25. Distance to Nearest Mineral Lease Line: 650 ft

26. Total Acres in Lease: 480

### 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	1,910	534	1,910	0
1ST	8+3/4	7	23	0	7,748	720	7,748	1,400
1ST LINER	6+1/4	4+1/2	11.6	0	12,123	438	12,123	6,357

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

33. Comments No conductor casing will be set. Filed spacing app. for July hearing.

34. Location ID: \_\_\_\_\_

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: 6/1/2012 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:  Director of COGCC Date: 7/12/2012

#### API NUMBER

05 001 09754 01

Permit Number: \_\_\_\_\_ Expiration Date: 7/11/2014

#### 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) Note surface casing setting depth change from 1400' to 1910'. Increase cement coverage accordingly.
- 2) Submit Form 42 electronically to COGCC 48 hours prior to MIRU.
- 3) Comply with Rule 317.i and provide cement coverage from TD to a minimum of 200' above Niobrara. Verify coverage with cement bond log.
- 4) Run and submit Directional Survey from TD to base of surface casing. The operator shall comply with Rule 321, and it shall be the operator's responsibility to ensure that the wellbore complies with setback requirements in commission orders or rules prior to producing the well.

### **Attachment Check List**

Att Doc Num	Name
2532607	SURFACE AGRMT/SURETY
400291498	FORM 2 SUBMITTED
400291506	DEVIATED DRILLING PLAN
400291507	MULTI-WELL PLAN
400291508	WELL LOCATION PLAT
400291515	DIRECTIONAL DATA

Total Attach: 6 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 public comment received. LGD comment received and processed as requested.	7/12/2012 11:06:29 AM
Permit	Verified lease as submitted.	7/12/2012 11:05:27 AM
Permit	The 7" casing shoe is not the top of production zone. However, to prevent from stimulating the illegal bore from the 7" casing shoe to the 600' setback, we will set a swell packer on the 4.5" liner at the planned 650' that will isolate the illegal bore. Per operator 5/31/2012	6/25/2012 8:50:39 AM
LGD	<p>The applicant has agreed to the following best management practices:</p> <ol style="list-style-type: none"> <li>1. Use closed looped systems; and</li> <li>2. Undertake a water quality sampling program (within a 1-mile radius from the wells), including City owned wells that serve the Front Range Airport.</li> </ol> <p>Since the applicant has agreed to these best management practices, would you please attach them as conditions to the permit?</p>	6/15/2012 11:13:44 AM
LGD	This appears to City of Aurora Jurisdiction	3/6/2012 8:39:25 AM
Permit	On hold - SUA may be needed to drill across section line. Depends on lease verification.	3/4/2012 3:21:32 PM
Permit	Changed distance to another well completed in the same formation to 1300 feet to reflect the distance to proposed lateral wellbores being drilled from the same pad.	3/4/2012 3:14:38 PM
Permit	This is the lateral of a pilot/lateral drilling plan and this permit should have a sidetrack designation in the API number. Pilot must be permitted first.	3/4/2012 3:01:39 PM
Permit	On hold - Lease description needs verification. Lease description does not match amount of acres. Section not spaced.	3/4/2012 2:49:10 PM
Permit	Returned to draft. Line 15.	3/4/2012 8:35:23 AM

Total: 10 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.

Total: 8 comment(s)