

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:

400330983

Date Received:

09/28/2012

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: Nelson Well Number: 1-20-9-60

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

9. Proposed Total Measured Depth: 10093

## WELL LOCATION INFORMATION

10. QtrQtr: SESE Sec: 17 Twp: 9N Rng: 60W Meridian: 6

Latitude: 40.743010 Longitude: -104.108180

Footage at Surface: 276 feet FNL/FSL 263 feet FEL/FWL  
 FSL FEL

11. Field Name: Wildcat Field Number: 99999

12. Ground Elevation: 5007.3 13. County: WELD

## 14. GPS Data:

Date of Measurement: 09/10/2012 PDOP Reading: 2.0 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 736 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 ☒ No

17. Distance to the nearest building, public road, above ground utility or railroad: 210 ft

18. Distance to nearest property line: 263 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 1236 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	1,400	334	1,400	0
1ST	8+3/4	7	23	0	5,620	632	5,620	1,400
1ST LINER	6+1/4	4+1/2	11.6	5140	10,093			

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

33. Comments Freshwater Storage pit, Heater Treater, Separators-one high pressure, one low pressure, Jet pump, Flare until pipeline connection ready. No conductor will be set. Swell Packer will be set accross 600' from section line to keep wellbore from 7" casing to Swell Packer unproduced. January 4th hearing date for spacing.

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: 9/28/2012 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: 10/31/2012

API NUMBER

05 123 36256 00

Permit Number: \_\_\_\_\_ Expiration Date: 10/30/2014

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.

Wellhead is 210' to the nearest public road, the rig used to drill the subject well must not have a derrick height of greater 140 feet.

### **Attachment Check List**

Att Doc Num	Name
400330983	FORM 2 SUBMITTED
400331191	WELL LOCATION PLAT
400331192	DEVIATED DRILLING PLAN
400331193	DIRECTIONAL DATA
400332027	OIL & GAS LEASE

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.	10/30/2012 9:46:41 AM
Permit	Horizontal well crosses lease lines within drilling and spacing unit; distance to lease line is 0'; distance to unit boundary is 650'.	10/18/2012 1:12:52 PM
Permit	Corrected lease description, lease acreage, and distance to nearest lease line per operator (C.W.) Initial review complete.	10/15/2012 12:31:39 PM
Permit	Question no. 11 ok as wildcat/99999 per Steve F. This form passed completeness.	10/9/2012 12:35:16 PM
Permit	Return to draft: 1. Question No. 11 does not match GIS mapping and database information for location id no. 422744.  Operator commented no conductor pipe. Operator corrected question no. 34 with location id no. 422744. Operator amended PZL and BHL data values to coincide with well location plat.	10/4/2012 11:42:20 PM
Permit	Return to draft: 1. Conductor casing missing; if no conductor pipe will be used then this must be noted in operator comments section. 2. Question No. 11 does not match GIS mapping and database information. 3. Question No. 34 does not match GIS mapping and database locatin ID information. 4. Question No. 15, production zone and BHL data values do not match well location plat production zone and BHL data values.	10/2/2012 4:40:55 PM

Total: 6 comment(s)

## **BMP**

<u>Type</u>	<u>Comment</u>
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. Portions of the access road will cross highly erodible soil. The road will be built to the minimal width required and ditch vegetation will be established to prevent erosion. Production equipment will be painted with consideration to environmental colors to reduce visual contrast with the surrounding environment. Gas engines will be equipped with mufflers to reduce noise.

Total: 9 comment(s)