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|---|---|---|---|----|----|----|----|
| FORM 2 Rev 12/05 | State of Colorado Oil and Gas Conservation Commission 1120 Lincoln Street, Suite 801, Denver, Colorado 80205 Phone: (303) 894-2100 Fax: (303) 894-2109 |  | <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:25%;">DE</td> <td style="width:25%;">ET</td> <td style="width:25%;">OE</td> <td style="width:25%;">ES</td> </tr> </table> | DE | ET | OE | ES |
| DE | ET | OE | ES | | | | |

APPLICATION FOR PERMIT TO:

1. **Drill,** Deepen, Re-enter, Recomplete and Operate

2. TYPE OF WELL

OIL GAS COALBED OTHER Horizontal

SINGLE ZONE MULTIPLE ZONE COMMINGLE ZONE

Refiling
 Sidetrack

Document Number:
 400176695

Plugging Bond Surety
 20100108

3. Name of Operator: CARRIZO OIL & GAS INC 4. COGCC Operator Number: 10338

5. Address: 1000 LOUISIANA STREET #1500
 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: Rothe Well Number: 12-14-8-61

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

9. Proposed Total Measured Depth: 10696

WELL LOCATION INFORMATION

10. QtrQtr: SW SW Sec: 12 Twp: 8N Rng: 61W Meridian: 6
 Latitude: 40.670086 Longitude: -104.161836

Footage at Surface: 245 feet FSL 245 feet FWL

11. Field Name: Wildcat Field Number: 99999

12. Ground Elevation: 4981 13. County: WELD

14. GPS Data:
 Date of Measurement: 06/01/2011 PDOP Reading: 2.2 Instrument Operator's Name: L.S. C.T. J.I

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: 12 Twp: 8N Rng: 61W Sec: 12 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: 245 ft

18. Distance to nearest property line: 245 ft 19. Distance to nearest well permitted/completed in the same formation: 1493 ft

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 | 535-3 | 640 | SEC 12 |

IMPORTANT: SOME DATA FIELDS HAVE BEEN MODIFIED.

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#: 20100170
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):
Section 12: T8N R61W. W/2SW4, E/2W/2; Section 11: NW/4, SE/4; Section 2: Lots 1, 2, 3, 4, S/2N/2, SE/4
25. Distance to Nearest Mineral Lease Line: 650 ft 26. Total Acres in Lease: 160

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: Landfarm and Evaporation
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 | 1400 | 6,813 | 653 | 6,813 | 1,400 |
| 1ST LINER | 6+1/8 | 4+1/2 | 11.6 | 5813 | 10,696 | 342 | 10,696 | 5,813 |

32. BOP Equipment Type: Annular Preventer Double Ram Rotating Head None
33. Comments No conductor casing will be set. All footages 5280' are 1 mile or greater.

34. Location ID: 424216
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: Compliance Analyst Date: 6/20/2011 Email: tina.taylor@crzo.net

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: David S. Noshin Director of COGCC Date: 7/14/2011

API NUMBER
05 123 33946 01

Permit Number: _____ Expiration Date: 7/13/2013

CONDITIONS OF APPROVAL, IF ANY: _____

IMPORTANT: SOME DATA FIELDS HAVE BEEN MODIFIED.

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 24 hour notice of MIRU to Bo Brown at 970-397-4124 or e-mail at bo.brown@state.co.us.
- 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.

Attachment Check List

| Att Doc Num | Name |
|-------------|------------------------|
| 400176695 | FORM 2 SUBMITTED |
| 400176823 | DEVIATED DRILLING PLAN |
| 400176824 | WELL LOCATION PLAT |

Total Attach: 3 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|--------------------------|--|----------------------------|
| Permit | Operator supplied lease description and spacing info. Permit waiting for comment period to be over. | 6/22/2011 6:41:48 AM |
| Permit | This is a pilot/lateral drilling plan. The permits will be on hold pending the completion of the 20 day public comment period at which time they will be approved together to maintain proper API number designations. | 6/22/2011 6:10:51 AM |
| Permit | Lease description confusing and spacing order or unit size not filled out. | 6/22/2011 5:58:50 AM |

Total: 3 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. |
| 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. |

Total: 7 comment(s)