

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:

400260765

Date Received:

04/25/2012

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 ☐

PluggingBond SuretyID

20110094

3. Name of Operator: NATURAL RESOURCE GROUP INC4. COGCC Operator Number: 103695. Address: 1789 W LITTLETON BLVDCity: LITTLETON State: CO Zip: 801206. Contact Name: Brian Hedberg Phone: (303)797-5417 Fax: (303)797-5418Email: bhedberg@nrgcolo.com7. Well Name: Jenny C Well Number: 1

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

9. Proposed Total Measured Depth: 2250

WELL LOCATION INFORMATION

10. QtrQtr: NWNW Sec: 36 Twp: 26S Rng: 67W Meridian: 6Latitude: 37.746129 Longitude: -104.844176

Footage at Surface: 860 feet FNL 766 feet FWL
 FNL/FSL FEL/FWL

11. Field Name: Wildcat Field Number: 9999912. Ground Elevation: 6050 13. County: HUERFANO

14. GPS Data:

Date of Measurement: 03/09/2012 PDOP Reading: 6.0 Instrument Operator's Name: Gary L. Terry15. 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

Sec: _____ Twp: _____ Rng: _____ Sec: _____ Twp: _____ Rng: _____

16. Is location in a high density area? (Rule 603b)? ☐ Yes ☒ No17. Distance to the nearest building, public road, above ground utility or railroad: 850 ft18. Distance to nearest property line: 766 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 560 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.)
Greenhorn	GRNH			
Niobrara	NBRR			
Timpas	TMPS			

21. Mineral Ownership: ☐ Fee ☒ State ☐ Federal ☐ Indian Lease #: 7861.322. 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 ☐ 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):

All of Sec 36 T26S, R67W 6th P.M.

25. Distance to Nearest Mineral Lease Line: 766 ft

26. Total Acres in Lease: 640

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: Air drilling - No Mud

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
CONDUCTOR	11+3/4	10	26	0	50	100	50	0
SURF	8+1/2	7	17	0	330	200	330	0
1ST	6+1/4	4+1/2	10.5	1500	2,250	250	2,250	1,500

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

33. Comments This well was previously permitted and the permit expired. Existing API number is listed on line 37.

34. Location ID: 324576

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: Brian Hedberg

Title: General Counsel Date: 4/25/2012 Email: bhedberg@nrgcolo.com

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: 10/17/2012

API NUMBER

05 055 06300 00

Permit Number: _____ Expiration Date: 10/16/2014

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) Set at least 330' of surface casing due to WW depths w/in 2 miles. (Receipt #0370786, Permit #0179839, SWSW 20-26S-66W). Cement to surface.
- 3) If production casing is set provide cement coverage to at least 200' above the shallowest completed interval or NBRR, whichever is shallower. Verify coverage with cement bond log.
- 4) If dry hole set the following plugs: 40 sks cement 50' above the Niobrara, 40 sks cement above any DST w/ show, 50 sks cement from 50' below surface casing shoe up into surface casing, 15 sks cement in top of surface casing, cut 4 ft below GL, weld on plate, 5 sks cement each in rat hole and mouse hole.

Attachment Check List

Att Doc Num	Name
1792468	CORRESPONDENCE
2332694	SURFACE CASING CHECK
2515999	CORRESPONDENCE
400260765	FORM 2 SUBMITTED
400264138	LEASE MAP
400265899	TOPO MAP
400270669	WELL LOCATION PLAT
400276860	30 DAY NOTICE LETTER
400277091	SURFACE AGRMT/SURETY

Total Attach: 9 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review completed.	10/17/2012 6:38:54 AM
Permit	Permit received comments from LGD and the public. Public and LGD concerns were addressed in a detailed manner resulting in BMPs and COAs.	10/17/2012 6:34:41 AM
OGLA	Provided letter addressing public comments received on Form 2 and related Form 2A to County Commissioners. Provided copy of same to commenters. Letter attached as CORRESPONDENCE.	10/16/2012 1:22:45 PM
Engineer	Requested operator (Brian H.) confirmation of casing and hole sizes. 7/25/12 - Brian came back with 50' of conductor. 8.5" hole for the 7" surface casing. The 7-7/8" hole size for the 5 1/2" production string is too big to pass through the 7" surface casing. Asked for confirmation of this and conductor depth. Duane B. called to confirm the hole and casing sizes. Changed 1st string hole size from 7-7/8" to 6-1/4" and 1st casing from 5-1/2" to 4-1/2", 15.5# to 10.5#.	7/18/2012 8:38:50 AM
Permit	Distance to nearest well in the same formation changed to 560' as per operator.	5/15/2012 11:32:31 AM
Public	<p>If as per the permit application water is 14 ft from surface there should be 3D seismic studies done on this area to determine geological structures present to mitigate the possibility of water contamination from drilling operations.</p> <p>This permit should be held up until 3D seismic studies are conducted.</p>	5/14/2012 8:57:14 AM
Permit	Requested review of the distance to the nearest well "completed" in the same formation.	5/14/2012 7:38:52 AM
Public	<p>If the water table is 14 feet from the surface (as stated on permit application) wouldn't it be advisable to allow only closed loop system to prevent contamination of ground water. This is worth consideration prior to permit approval. wouldn't this fact deem this site a sensitive area that is held to more stringent rules as per COGCC ?</p>	5/13/2012 9:26:38 AM

Public	<p>As a health care professional for the last 40 years I feel there are many health impact associated with oil and gas development. Research has sited many recommendation to mitigate the negative health impacts associated with industry presence in a community. Listed below are the recommendations that should be considered to accomplish this goal of mitigation; air quality full disclosure of frack and drilling chemicals by CAS number at least 60 days before use. provide MSDS sheets for each chemical. Immediate response to odor complaints. Complete the installation of a fully functional water storage facility and pipelining to decrease truck trips. Use low emissions flow back process. Implement air monitoring program. Prevent the idling of trucks for longer than 10 min. Cover loads of dirt sand aggregate materials drilling cuttings in truck beds. Characterize the geology and hydrogeology and the primary and secondary domestic water supplies. No flaring</p> <p>maintenance of water and soil quality use closed loop system from the very first well drilled. Locate any centralized water storage facility at least a mile from any residential structure or school. No produced water to be placed on any county paved or dirt roads. Conduct soil and surface water testing at all well pad locations and at centralized water facility. Ensure removal of mud from vehicles leaving the well pads. Report all spills within 24 hours to GCOG and COGCC and keep records Notification should be immediate if water sources are impacted. Produce a casing cementing plan that is consistent with industry best management practices. Operators must be required to meet the highest cement and pipe standards and take financial responsibility of their integrity in perpetuity and comply with surface casing and mechanical integrity requirements. Include performance and filing of 3-D cement bond logs. Monitor annular pressure or 5 days after cementing production casing before stimulation. owner must complete remedial cementing operations. The surface production casing annulus should never be shut except during authorized pressure test. Traffic and transportation issues; Develop industrial haul routes to remove traffic from residential roads. Enforce truck speed limits to 20 mph near well pads. establish safe crossing zones. Light and noise issues; sound mitigation to achieve noise levels below 55 dBA in the day and 50 dBA at night. Require noise reduction technology for heavy equipment. Require light abatement strategies. Mitigate noise impacts with the use of sound barriers. Community</p> <p>Wellness issues; Create a drug and alcohol free work place. Encourage use of local business. Work with emergency responders. Disclose all chemicals used on its well pads and MSDS in the emergency response plan. Develop an ongoing fire prevention program. Perform quarterly tests of emergency notification systems. Health impact assessment should be a component of planning for future expansion of activities. Air and water quality monitoring systems and health and social outcome monitoring systems could be established.</p> <p>COGCC should carefully consider these recommendations as part of the approval process. Thank you</p>	5/11/2012 12:47:29 PM
Permit	Received tentative release from Tim Kelley of State Land Board, see correspondence attachment.	5/10/2012 12:41:08 PM
Permit	Contacted Tim Kelley of State Land Board to verify required State Land Board bonding.	5/8/2012 10:12:50 AM
Public	After comments are posted here, who reads them? Who responds and where is the response posted? Do they remain visible online with the approved APD documents, or are they taken down after the APD permitting process is completed?	5/7/2012 3:35:36 PM
Permit	Operator corrected #34, casing information, and deleted surety bond attachment. This form has passed completeness.	5/1/2012 2:11:56 PM
Permit	Returned to draft. Missing #34, invalid casing information, and attachment with surety bond.	4/26/2012 7:06:07 AM

Total: 14 comment(s)

BMP

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

Total: 0 comment(s)