## **FORM** 2

## State of Colorado **Oil and Gas Conservation Commission**



Document Number:

Rev 1120 Lincoln 12/05	Street, Suite 801, Denver,	Colorado 80203 Phone: (303) 894-2	2100 Fax: (303) 894-2109	OIL&	400260765	
APPLICATION FOR PERMIT TO:					Date Received:	
1. 👿 Drill,	Deepen,	Re-enter,	Recor	mplete and Operate	04/25/2012	
2. TYPE OF WELL OIL GAS SINGLE ZONE				<u> </u>	PluggingBond SuretyID 20110094	
3. Name of Operator:	NATURAL RESO	URCE GROUP INC		4. COGCC Oper	rator Number: 10369	
3. Name of Operator: NATURAL RESOURCE GROUP INC  5. Address: 1789 W LITTLETON BLVD  City: LITTLETON State: CO Zip: 80120  6. Contact Name: Brian Hedberg Phone: (303)797-5417 Fax: (303)797-5418  Email: bhedberg@nrgcolo.com  7. Well Name: Jenny C Well Number: 1  8. Unit Name (if appl): Unit Number: 9. Proposed Total Measured Depth: 2250						
		WELL LOCATION				
Latitude: 37.7461  Footage at Surface:	10. QtrQtr: NWNW Sec: 36 Twp: 26S Rng: 67W Meridian: 6  Latitude: 37.746129 Longitude: -104.844176  FNL/FSL FEL/FWL  Footage at Surface: 860 feet FNL 766 feet FWL  11. Field Name: Wildcat Field Number: 99999  12. Ground Elevation: 6050 13. County: HUERFANO					
14. GPS Data:						
Date of Measurement:	03/09/2012 PDC	P Reading: 6.0 Inst	rument Operator's	s Name: Gary L. T	erry	
Footage at Top of Prod	Zone: FNL/FSL	FEL/FWL		FNL/FSL	FEL/FWL	
Sec:	Twp:	Rng:	Sec:	Twp:	Rng:	
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: 850 ft  18. 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 Configuration (N/2, SE/4, etc.)	
Greenhorn	GRNHN					
Niobrara	NBRR					
Timpas	TMPS					
21. Mineral Ownership:	Fee	State Fe	deral	Indian	Lease #: _7861.3	
22. Surface Ownership:	<b>⋉</b> Fee	State Fe	deral	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:	XSurface Ov	wners Agreement A	ttached or	\$25,000 Blanket S	urface Bond \$2	2,000 Surface B	35,000	Surface Bond
24. Using stand	dard QtrQtr, S	Sec, Twp, Rng formet/map if you prefe	nat enter entir					
All of Sec 36 T2	6S, R67W 6th	P.M.						
25. Distance to	Nearest Mine	eral Lease Line:	766 ft	2	6. Total Acres in	n Lease:	640	
		DF	RILLING PLA	ANS AND PROC	EDURES			
27. Is H2S anti	cipated?	Yes	X	o If Yes, attacl	h contingency p	lan.		
28. Will salt se	ctions be enc	ountered during dr	illing?	Yes	<b>⋉</b> No			
29. Will salt (>	15,000 ppm T	DS CL) or oil base	d muds be u	sed during drilling	? <u> </u>	es 👿 No		
30. If questions	s 28 or 29 are	yes, is this location	n in a sensiti	ve area (Rule 901	.e)?	es No		
31. Mud dispos	sal:	Offsite On:	site				8, 29, or 30 are mit may be red	•
Method:	Land Farm	ing 🔲 La	and Spreadin	g Disp	osal Facility	•	Air drilling - No	·
Note: The use	of an earthen	pit for Recompleti	on fluids requ	ıires a pit permit (F	Rule 905b). If air	r/gas drilling, n	otify 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 Na	nme: Brian Hed	berg		
Title: General Counsel Date: 4/25/2012 Email: bhedberg@nrgcolo.com					m			
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: 10/17/2012								
А	PI NUMBER	Permit N	lumber:		Expiration Da	ate: 10/16/2	2014	
05 055 0	6300 00	CONDI	TIONS OF A	DDDOVAL IE /	ANV.			
		CONDIT	IONS OF A	APPROVAL, IF A	AINT.	_		
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>	Comment	Comment Date
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	If as per the permit application water is 14 ft from surface there should be 3D sesmic studys studies done on this area to determine geological stuctures present to mitigate the possiblity of water contamination from drilling operations.  This permit should be held up until 3D sesmic studies are conducted.	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	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 senative area that is held to more stingent rules as per COGCC?	5/13/2012 9:26:38 AM
D. ( . D 40/	17 0040 Dec #4000007051 W. J. Names James O. A	

Date Run: 10/17/2012 Doc [#400260765] Well Name: Jenny C 1

Public		5/11/2012 12:47:29 PM
	As a health care professional for the last 40 years I feel there are many health impact associated with oil and gas development. Reseach has sited many recomendation to mitigate the negative heath impacts associated with industry presence in a community. Listed below are the recomendations that should be considered to accomplish this goal of mitigatiojn; 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 pipeling to decrese truck trips. Uselow emissions fow back process. Implement air monitring 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	
	maintanace 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 loctions 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 sould be immediate if water sources are impacted. Produce a casing cementing plan that is consistat 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 gafter cementing prodiuction casing before stimulation. owner must complete remedial cementin operations. The surface production casing annulus should never be shut except during authorized pressure	
	test.Traffic and transportaion issues;Develop industrial haul routes to remove traffic from residential roads .Wnforse truck speed limits to 20 mph near well pads.establish safe crossing zones.Light and noise issues;sound mitigation to achieve noise levels below 55dbA in the day and 50 dbA at night.Require noise reduction technology for heavey equipment.Require light abatiment statigies.Mitigate noise impacts with the use of sound barriers.Community	
	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 .nAir and water quality monitoring systems and health and social outcome monitoring systems could be establihed.	
	COGCC should carefully consider these recomendations as part of the approval process. Thank you	
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)	
	<u>BMP</u>
<u>Type</u>	Comment
<u>1790</u>	<u> </u>
Total: 0 comment(s)	