

State of Colorado

Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303)894-2100 Fax: (303)894-2109

APPLICATION FOR PERMIT TO:

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

2. TYPE OF WELL
OIL ☐ GAS ☒
SINGLE ZONE ☐ COALBED ☐ OTHER: ☐
MULTIPLE ZONES ☒ COMMINGLE ZONES ☒

Refilling ☐
Sidetrack ☐

20050010
Plugging Bond Surety

3. Name of Operator: Mineral Resources, Inc. 4. COGCC Operator Number: 57667

5. Address: 3109 35th Avenue B101
City: Greeley State: CO Zip: 80634

6. Contact Name: Collin M. Richardson Phone: (970) 352-9446 Fax: (800) 850-9334

7. Well Name: NLB Well Number: 1-3-12

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

9. Proposed Total Measured Depth: 8064'

10. Qtr/Sec: NENW Sec: 12 Twp: 4N Rng: 68W Meridian: 6th
Latitude: 40.33434° North Longitude: 104.95265° West
Footage At Surface: 481' N 2264' W

11. Field Name: Wattenberg Field Number: 90750

12. Ground Elevation: 4972' 13. County: Weld

14. GPS Data:
Date of Measurement: 07/16/2007 PDOP Reading: 1.3 Instrument Operator's Name: Ben Adsit

Complete the Attachment Checklist	OP	COGCC
APD Orig & 1 Copy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Form 2A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Well location plat	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Topo map	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Mineral lease map	<input type="checkbox"/>	<input type="checkbox"/>
Surface agmt/Surety	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
30 Day notice letter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Deviated Drilling Plan	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Exception Location Request	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Exception Loc Waivers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
H2S Contingency Plan	<input type="checkbox"/>	<input type="checkbox"/>
Federal Drilling Permit	<input type="checkbox"/>	<input type="checkbox"/>

15. If well is: ☒ Directional ☐ Horizontal (highly deviated), submit deviated drilling plan. Bottomhole Sec Twp Rng: 12-5N-R65W
- Footage At Top of Prod Zone: 1997' N 1989' E At Bottom Hole: 1997' N 1989' E
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: 406'
18. Distance to Nearest Property Line: 382' 19. Distance to nearest well permitted/completed in the same formation: +/- 2400' 1337'

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/Codell	NBCD	407	80 acres	W/2NE/4
J Sand	JSND	232	320 acres	E/2

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 Qtr/Sec, Twp, Rng format enter entire mineral lease description upon which this proposed wellsite is located (attach separate sheet/map if you prefer):
E/2, Section 12, Township 4 North, Range 68 West, 6th P.M.
25. Distance to Nearest Mineral Lease Line: 664' 26. Total Acres in Lease: 320

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 27 or 28 are yes, is this location in a sensitive area (Rule 903)? ☐ Yes ☒ No If 28, 29 or 30 are "Yes" a pit permit may be required.

31. Mud disposal: ☒ Offsite ☐ Onsite

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.

String	Size of Hole	Size of Casing	Weight Per Foot	Setting Depth	Sacks Cement	Cement Bottom	Cement Top
Surface	12-1/4"	8-5/8"	24#	525'	350 sx	525'	Surface
Production	7-7/8"	4-1/4"	11.6#	8064'	418 sx	8064'	200'
							Above Niobrara

32. BOP Equipment Type: ☒ Annular Preventor ☐ Double Ram ☒ Rotating Head ☐ None
33. Comments: No conductor casing will be used Exception Location 3184A.
34. Initial Rule 306 Consultation took place on (date) 8/29/2007 was waived, or is not required. Provide supporting documentation if consultation has been waived or if good faith effort did not result in consultation.
PERMIT SUBMITTED TO COGCC PRIOR TO COMPLIANCE WITH RULE 306 CONSULTATION SHALL BE RETURNED UNAPPROVED.
I hereby certify that a complete permit package has been sent to the applicable Local Government Designee(s), and all statements made in this form are, to the best of my knowledge, true, correct, and complete.
- Signed: Collin M. Richardson Print Name: Collin M. Richardson
Title: V.P., Operations Date: 8/29/2007 Email: collin@mineralresourcesinc.com

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. Mosher Director of COGCC Date: 12-4-07

Permit Number: 20075215 Expiration Date: 12-3-08

API NUMBER

CONDITIONS OF APPROVAL, IF ANY:

05-123-26635-00

1) Provide 24 hour notice of MIRU to Ed Binkley at 970-506-9834 or e-mail at ed.binkley@state.co.us 2) Comply with Rule 317.i and provide cement coverage from TD 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. 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.

SB5OUT1.TXT
LOCATION: NE1/4 OF NW1/4 OF SEC. 12, T.4n., R.68W. (481 NSL, 2249 WSL) ²²⁶⁴

Ground Elevation: 4972

Number of Acres: 320

AQUIFER	ELEVATION		NET SAND	DEPTH TO		ANNUAL APPROP A-F	STATUS
	BOT.	TOP		BOT.	TOP		
UPPER DAWSON	----	----	----	----	----	----	----
LOWER DAWSON	----	----	----	----	----	----	----
DENVER	----	----	----	----	----	----	----
UPPER ARAPAHOE	----	----	----	----	----	----	----
LOWER ARAPAHOE	----	----	----	----	----	----	----
LARAMIE-FOX HILLS	----	----	----	----	----	----	----

note: E indicates location is at aquifer boundary and values may be more approximate.

Data for the LARAMIE FOX-HILLS may be missing or approximate and should be checked against DENVER BASIN ATLAS NO. 4



SURFACE CASING CHECK

Well Name NLB 1-3-12

☒ New Drill ☐ Refiling ☐ Deepen ☐ Re-Enter ☐ Recomplete and Operate ☐ Plug and Abandon ☐ Casing Repair

SB5 Base of Fox Hills —

Cheyenne Basin Map Base of Fox Hills —

Fox Hills Protection Area 5% Rule .05(8064) = 403

Deepest Water Well w/in One Mile 76

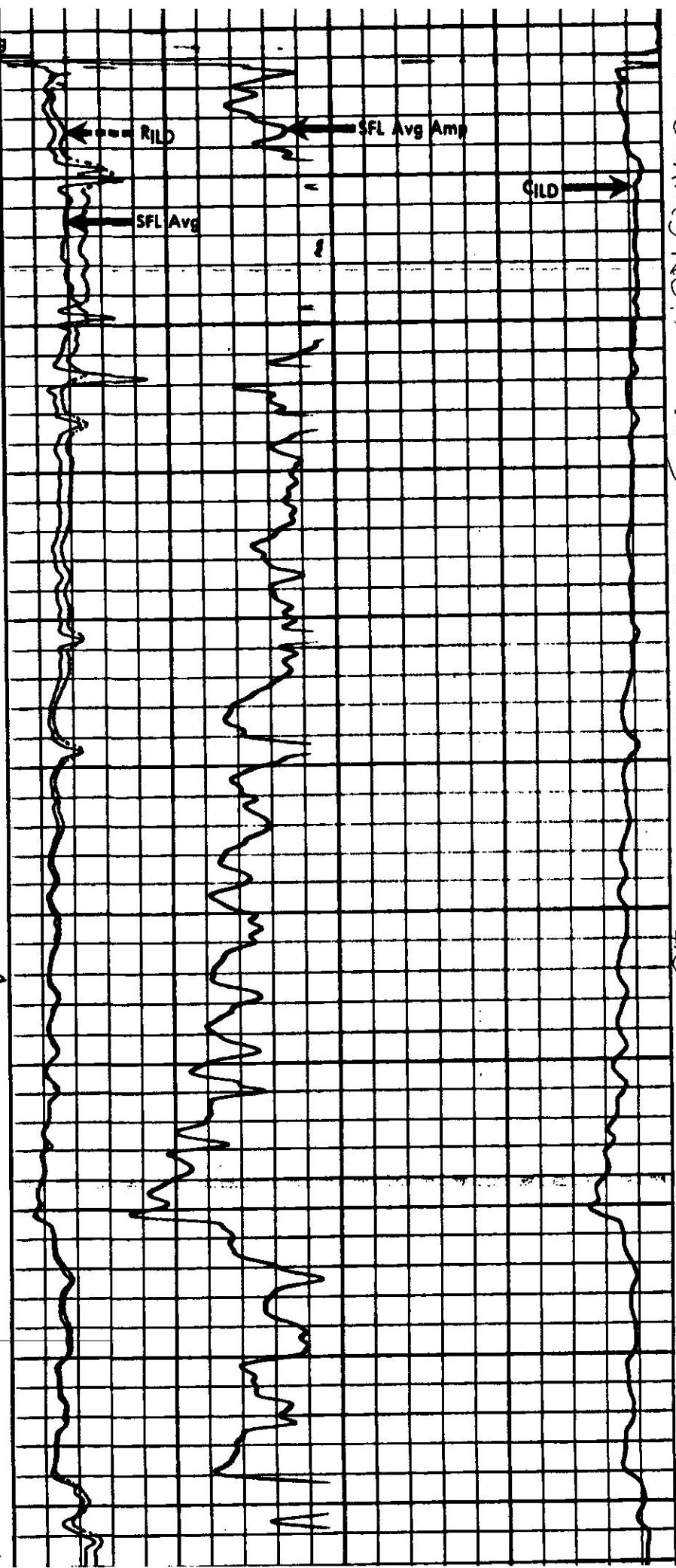
Operator-Proposed Surface Casing Depth 525' DB 9/24/07

Actual Surface Casing Depth —

Change Permit Surface Casing Depth from — to —

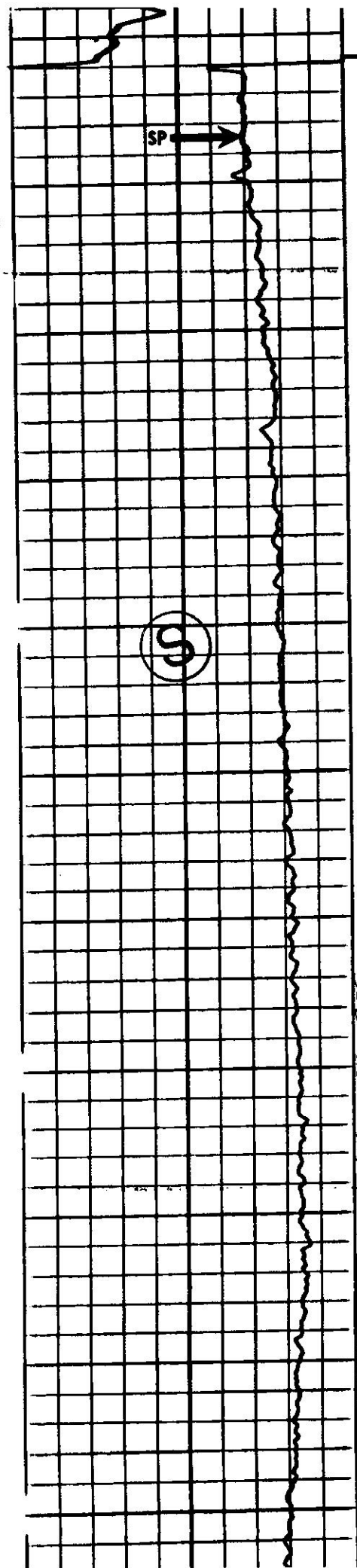
OK on ☐ this well's or ☒ offset well's induction log at 521'

ARBRANS No. 1 123 09981 SWSN 1 4N 68W GR 4968



Casing 0200 0300 0400 0500 0600 0700

Revised SC for
NUG 1-3-0
SAS, GR Casing



Colorado
Oil & Gas Conservation Commission



COGCC Results



Selected Items Report

Oil and Gas Wells Selected						
Filter Results by Formation Include <input checked="" type="checkbox"/> J-CDL <input type="button" value="Filter"/>						
WELL DESCRIPTION		LOCATION	WELL INFORMATION			
05-123-10780, RICE 1 NOBLE ENERGY PRODUCTION INC		SESW 6 4N -67W (6)	Sidetrack TD Formation Status 00 7690 J-CDL CM			

Facilities Selected			
FACILITY DESCRIPTION	LOCATION	PIT INFORMATION	
		Type	Unlined Status

Water Wells Selected From Map					
Filter Results by Depth Greater than <input type="text"/> <input type="button" value="Filter"/>					
WELL DESCRIPTION	LOCATION	WELL INFORMATION			
		Depth	Top Perf	Bottom Perf	Aquifer
Receipt=0505463, Permit=0247791-- SMITH KEITH A	SESE 2 4N-68W	76	0	0	GW
Receipt=0496499C, Permit=0245911-- NORTHERN CO WATER CONSERVANCY DIST	NENW 13 4N-68W	50	40	50	GW



Well name and number:

NLB 1-3-12



Survey Plat Check list

number	Item	
	8-1/2" x 11" scaled drawing of the entire section	✓
1	Dimensions on adjacent exterior section lines sufficient to completely describe the quarter section containing the proposed well shall be indicated	✓
1a	If dimensions are not field measured, state how the dimensions were determined	✓
2	The latitude and longitude of the proposed well location shall be provided on the drawing with a minimum of five (5) decimal places of accuracy and precision using the North American Datum (NAD) of 1983 (e.g.; latitude 37.12345 N, longitude 104.45632 W). If GPS technology is utilized to determine the latitude and longitude, all GPS data shall meet the requirements set forth in Rule 215. a. through h.	✓
2a	PDOP value <7 if GPS used	✓
2b	5 decimal places of accuracy & precision	✓
2c	NAD 1983	✓
3	For directional drilling into an adjacent section, that section shall also be shown on the location plat and dimensions on exterior section lines sufficient to completely describe the quarter section containing the proposed productive interval and bottom hole location shall be indicated. (Additional requirements related to directional drilling are found in Rule 321.)	✓
4	For irregular, partial or truncated sections, dimensions will be furnished to completely describe the entire section containing the proposed well.	✓
5	The field-measured distances from the nearer north/south and nearer east/west section lines shall be measured at ninety (90) degrees from said section lines to the well location and referenced on the plat. For unsurveyed land grants and other areas where an official public land survey system does not exist, the well locations shall be spotted as footages on a protracted section plat using Global Positioning System (GPS) technology and reported as latitude and longitude in accordance with Rule 215.	✓
6	A map legend	✓
7	A North Arrow	✓
8	A scale expressed as an equivalent (e.g. 1" = 1000').	✓
9	A bar scale.	✓
10	The ground elevation.	✓
11	The basis of the elevation (how it was calculated or its source).	✓
12	The basis of bearing or interior angles used.	✓
13	Complete description of monuments and/or collateral evidence found; all aliquot corners used shall be described.	✓
14	The legal land description by section, township, range, principal meridian, baseline and county.	✓
15	Operator name	✓
16	Well name and number	✓
17	Date of completion of scaled drawing	✓
18	All visible improvements within two hundred (200) feet of a wellhead (or, in a high density area within four hundred (400) feet of a wellhead) shall be physically tied in and plotted on the well location plat or on an addendum, with a horizontal distance and approximate bearing from the well location.	✓
18a	Visible improvements shall include, but not be limited to, all buildings, publicly maintained roads and trails, major above ground utility lines, railroads, pipelines, mines, oil wells, gas wells, injection wells, water wells, visible plugged wells, sewers with manholes, standing bodies of water, and natural channels including permanent canals and ditches through which water flows.	✓
18b	If there are no visible improvements within two hundred (200) feet of a wellhead (or in a high density area within four hundred (400) feet of a wellhead), it shall be so noted on the Permit-to-Drill, Form 2.	✓
19	Surface use shall be described within the two hundred (200) foot radius of a wellhead (or in a high density area within the four hundred (400) foot radius of a wellhead).	✓

The survey plat you submitted with your permit was found to be in non-compliance with COGCC rule 303c. See above checklist. If a survey plat is not in compliance with rule 303c the operator will be notified and the permit will be placed on hold until an adequate replacement is supplied to the COGCC.

[Signature]