

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



Document Number:

400250503

Date Received:

02/09/2012

PluggingBond SuretyID

20090043

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: SYNERGY RESOURCES CORPORATION

4. COGCC Operator Number: 10311

5. Address: 20203 HIGHWAY 60

City: PLATTEVILLE State: CO Zip: 80651

6. Contact Name: Kori Thoren Phone: (970)737-1073 Fax: (970)737-1045

Email: kthoren@syrinfo.com

7. Well Name: Avex Well Number: 21-2D

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

9. Proposed Total Measured Depth: 8161

WELL LOCATION INFORMATION

10. QtrQtr: NENW Sec: 2 Twp: 4N Rng: 68W Meridian: 6

Latitude: 40.346201 Longitude: -104.974629

Footage at Surface: 1080 feet FNL/FSL 1568 feet FEL/FWL
 FNL FWL

11. Field Name: Wattenberg Field Number: 90750

12. Ground Elevation: 5003 13. County: WELD

14. GPS Data:

Date of Measurement: 10/07/2011 PDOP Reading: 2.3 Instrument Operator's Name: Steven A. Lund

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
 396 FNL 2144 FWL 396 FNL 2144 FWL
 Sec: 2 Twp: 4N Rng: 68W Sec: 2 Twp: 4N Rng: 68W

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: 1102 ft

18. Distance to nearest property line: 279 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 980 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.)
J-Sand	JSND	232-23	320	W/2
Niobrara/Codell	NB-CD	407-87	80	E/2 NW/4

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):

Please see attached lease

25. Distance to Nearest Mineral Lease Line: 440 ft

26. Total Acres in Lease: 140

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	8+5/8	24	0	550	350	550	0
1ST	7+7/8	4+1/2	11.6	0	8,161	410	8,161	200

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

33. Comments No conductive surface casign will be used.

34. Location ID: _____

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: Craig Rasmuson

Title: Head of Operations Date: 2/9/2012 Email: crasmuson@syrinfo.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:  Director of COGCC Date: 3/6/2012

API NUMBER

05 123 35224 00

Permit Number: _____ Expiration Date: 3/5/2014

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.

Operator must meet water well testing requirements per Rule 318A.

- 1) Provide 24 hour notice of MIRU to COGCC inspector John Montoya via e-mail at John.Montoya@state.co.us. Indicate Spud Notice in the subject line and provide the following information: Operator Name, Well Name and Number, API #, Spud Date, Contact Name, Contact Phone #, E-mail Address. If well spud after April 1, 2012 submit Form 42 electronically to COGCC 48 hours prior to MIRU.
- 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.

Attachment Check List

Att Doc Num	Name
1771590	SURFACE CASING CHECK
400250503	FORM 2 SUBMITTED
400250606	MULTI-WELL PLAN
400250607	WELL LOCATION PLAT
400250610	DEVIATED DRILLING PLAN
400250612	OIL & GAS LEASE
400250617	DIRECTIONAL DATA

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received.	3/2/2012 3:02:21 PM
Permit	I checked the math. Section is small. Well is in drilling window. Okay to pass pending public comment 3/01/12.	2/17/2012 2:41:08 PM
Permit	ON HOLD: Request confirmation of BHL. less than 460' setback.	2/17/2012 2:01:17 PM

Total: 3 comment(s)

BMP

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

Total: 0 comment(s)