

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



DE	ET	OE	ES
----	----	----	----

Document Number:

400220958

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@syrginfo.com

7. Well Name: AVEX Well Number: 31-10D

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

9. Proposed Total Measured Depth: 8195

WELL LOCATION INFORMATION

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

Latitude: 40.331342 Longitude: -104.985111

Footage at Surface: 1500 feet FNL 1487 feet FEL

11. Field Name: Wattenberg Field Number: 90750

12. Ground Elevation: 5038 13. County: WELD

14. GPS Data:

Date of Measurement: 10/07/2011 PDOP Reading: 2.0 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
542 FNL 2120 FEL 484 FNL 2174 FEL
Sec: 10 Twp: 4N Rng: 68W Sec: 10 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: 1137 ft

18. Distance to nearest property line: 1137 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 1000 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	E/2
Niobrara/Codell	NB-CD	407-87	80	N/2 NE/4

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 QtrQtr, Sec, Twp, Rng format enter entire mineral lease description upon which this proposed wellsite is located (attach separate sheet/map if you prefer):

See attached lease

25. Distance to Nearest Mineral Lease Line: 484 ft

26. Total Acres in Lease: 144

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	8,195	410	8,195	200

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

33. Comments No conductive surface casing 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: 11/7/2011 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: David S. Neslin

Director of COGCC Date: 1/29/2012

API NUMBER

05 123 34995 00

Permit Number: _____ Expiration Date: 1/28/2014

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 24 hour notice of MIRU to Jim Precup at 303-469-1902 or e-mail at james.precup@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) Comply with Rule 321. 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.

Will require water well sampling. Form 2A still in draft. On hold for 2A.

Attachment Check List

Att Doc Num	Name
1771421	SURFACE CASING CHECK
400220958	FORM 2 SUBMITTED
400221484	MULTI-WELL PLAN
400221486	WELL LOCATION PLAT
400221487	DEVIATED DRILLING PLAN
400221493	OIL & GAS LEASE

Total Attach: 6 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	All information rec'd. Final review complete	1/26/2012 9:22:04 AM
Permit	Inquired about form 2A & depth & formation clarification with opr.	11/29/2011 2:45:13 PM
Permit	Sent e-mail inquiring about Form 2A	11/17/2011 1:58:27 PM

Total: 3 comment(s)

BMP

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

Total: 0 comment(s)