

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

Document Number:
400250503

PluggingBond SuretyID
20090043

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: 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 1568 feet 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

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 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):

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 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: _____ Email: crasmuson@syrginfo.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: _____

API NUMBER

05

Permit Number: _____ Expiration Date: _____

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.

Attachment Check List

Att Doc Num	Name
400250606	MULTI-WELL PLAN
400250607	WELL LOCATION PLAT
400250610	DEVIATED DRILLING PLAN
400250612	
400250617	DIRECTIONAL DATA

Total Attach: 5 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>

Total: 0 comment(s)

BMP

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

Total: 0 comment(s)