

FORM
2

Rev
12/05

State of Colorado Oil and Gas Conservation Commission

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Document Number:

400397072

Date Received:

03/28/2013

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: Brianne Visconti Phone: (970)737-1073 Fax: (970)737-1045

Email: bvisconti@syrinfo.com

7. Well Name: SRC Union Well Number: 5AHZC

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

9. Proposed Total Measured Depth: 12042

WELL LOCATION INFORMATION

10. QtrQtr: SWNW Sec: 5 Twp: 2N Rng: 68W Meridian: 6

Latitude: 40.170270 Longitude: -105.034802

Footage at Surface: 1640 feet FNL 462 feet FWL

11. Field Name: Wattenberg Field Number: 90750

12. Ground Elevation: 4965 13. County: WELD

14. GPS Data:

Date of Measurement: 04/05/2013 PDOP Reading: 0.7 Instrument Operator's Name: Aaron Demo

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 _____
1005 FNL 510 FWL 1001 FNL 460 FEL
Sec: 5 Twp: 2N Rng: 68W Sec: 5 Twp: 2N 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: 487 ft

18. Distance to nearest property line: 268 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 70 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.)
Codell	CODL		320	GWA

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):

N/2 Section 5, 2N-68W

25. Distance to Nearest Mineral Lease Line: 460 ft 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 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	9+5/8	36	0	550	290	550	0
1ST	8+3/4	7	26	0	7679	125	7679	6810
1ST LINER	6+1/8	4+1/2	11.6	6860	11992			

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

33. Comments No conductor casing will be used. Operator requests approval of a Rule 318Aa exception location: Wellhead is to be located outside of a GWA drilling window. Request and Waiver attached. Proposed Spacing unit: N/2.

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: VP Operations Date: 3/28/2013 Email: crasmuson@syrginfo.com

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: *Matthew Lee* Director of COGCC Date: 11/19/2013

API NUMBER: **05 123 38451 00** Permit Number: _____ Expiration Date: 11/18/2015

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.

Description

- 1) 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) 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.

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

Variance to 318A.m. because waiver from offset operator of Pietrzak #1 123-10241 not received. Well will have gyro survey run prior to drilling of SRC Union 5AHZC to provide anti-collision data. Prior to the hydraulic stimulation of SRC Union 5AHZC, Pietrzak #1 123-10241 will be remediated.

Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.

Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area.

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
1695667	PROPOSED SPACING UNIT
1695971	VARIANCE REQUEST
400397072	FORM 2 SUBMITTED
400397082	30 DAY NOTICE LETTER
400397083	EXCEPTION LOC WAIVERS
400397086	EXCEPTION LOC REQUEST
400404624	WELL LOCATION PLAT
400404626	DEVIATED DRILLING PLAN
400404630	DIRECTIONAL DATA
400405587	OFFSET WELL EVALUATION
400405591	PROPOSED SPACING UNIT

Total Attach: 11 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	ON HOLD for further discussion of the variance request.	11/15/2013 9:22:00 AM
Permit	Final Review Completed. No LGD or public comment received.	11/13/2013 10:33:47 AM
Permit	Received and attached 502.b Variance request letter. ok to pass.	11/13/2013 10:33:44 AM
Permit	ON HOLD: Requesting Operator to submit a 503.b Variance Request letter. Unable to get Waiver from Encana.	11/8/2013 4:30:15 PM
Permit	Requested update on status of waiver. ON HOLD: Requesting corrected distance to nearest well. Requesting a Rule 318A.m Variance Request letter and Waiver from Encana.	10/18/2013 11:14:10 AM
Permit	Requested update on status of waiver. ON HOLD: Requesting corrected distance to nearest well. Requesting a Rule 318A.m Variance Request letter and Waiver from Encana.	7/12/2013 10:13:31 AM
Permit	Received and attached a 30 Day cert letter. Per operator added the anti-collision and Bradenhead BMP. Added to operators comments: "Operator requests approval of a Rule 318Aa exception location: Wellhead is to be located outside of a GWA drilling window. Request and Waiver attached." ON HOLD: Requesting corrected distance to nearest well. Requesting a Rule 318A.m Variance Request letter and Waiver from Encana.	5/1/2013 9:41:41 AM
Permit	ON HOLD: Requesting 30 Day cert letter. Requesting addition of anti-collision and Bradenhead BMP. Requesting corrected distance to nearest well. Requesting a Rule 318A.m Variance Request letter. Requesting addition to operators comments Operator's request for exception location & Proposed Spacing Unit.	4/26/2013 1:43:51 PM
Permit	Operator requests approval of a Rule 318Am exception location: Wellbore is to be located less than 150' from an existing wellbore. Request and waivers attached.	4/26/2013 1:43:28 PM
Permit	Operator requests approval of a Rule 318Aa exception location: Wellhead is to be located outside of a GWA drilling window. Request and Waiver attached.	4/26/2013 1:43:27 PM
Permit	Pass completeness. Wellbore OK.	4/18/2013 9:06:18 AM
Permit	RTD: Proposed spacing unit map still has incorrect setback to section line.	4/17/2013 5:46:21 AM
Permit	RTD: Wellbore is less than 460 feet from unit boundary.	3/29/2013 10:23:30 AM

Total: 13 comment(s)

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	Anti-collision: Prior to drilling operations, Operator will perform an anti-collision scan of existing offset wells that have the potential of being within close proximity of the proposed well. This anti-collision scan will include definitive MWD or gyro surveys of the offset wells with included error of uncertainty per survey instrument, and compared against the proposed wellpath with its respective error of uncertainty. If current surveys do not exist for the offset wells, Operator may have gyro surveys conducted to verify bottomhole location. The proposed well will only be drilled if the anti-collision scan results indicate that there is not a risk for collision, or harm to people or the environment. For the proposed well, upon conclusion of drilling operations, an as-constructed gyro survey will be submitted to COGCC with the Form 5.
2	Drilling/Completion Operations	Operator will comply with COGCC Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area dated May 29, 2012. (attached)

Total: 2 comment(s)