

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



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Document Number:

400177034

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: Klein Well Number: 8PD

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

9. Proposed Total Measured Depth: 7993

WELL LOCATION INFORMATION

10. QtrQtr: SWSE Sec: 8 Twp: 4N Rng: 67W Meridian: 6

Latitude: 40.320793 Longitude: -104.914368

Footage at Surface: 191 feet FSL 2337 feet FEL

11. Field Name: Wattenberg Field Number: 90750

12. Ground Elevation: 4794 13. County: WELD

14. GPS Data:

Date of Measurement: 01/13/2011 PDOP Reading: 1.2 Instrument Operator's Name: Mark Hall

15. If well is ☒ Directional ☐ Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: FNL/FSL FSL FEL FNL/FSL FSL FEL FNL/FSL FSL FEL
1311 2405 1311 2405
Sec: 8 Twp: 4N Rng: 67W Sec: 8 Twp: 4N Rng: 67W

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: 177 ft

18. Distance to nearest property line: 150 ft 19. Distance to nearest well permitted/completed in the same formation: 940 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	160	GWA
Niobrara/Codell	NB-CD	407-87	160	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):

SWSE Sec. 8, T4N - R67W

25. Distance to Nearest Mineral Lease Line: 75 ft

26. Total Acres in Lease: 160

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	360	550	0
1ST	7+7/8	4+1/2	11.6	0	7,993	390	7,993	200

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

33. Comments No conductive surface casing will be used. The rig height is given as 104'. Proposed Spacing unit W/2SE/4 E/2SW/4. Operator requests approval of a Rule 318Aa exception location: Wellhead is to be located outside of a GWA drilling window and will be located more than 50' from an existing well location. Attached Exception Location Request and Waiver.

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: Mgr. of Land & Field Ops Date: 7/15/2011 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: 8/7/2011

API NUMBER

05 123 34126 00

Permit Number: _____ Expiration Date: 8/6/2013

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.

Wellhead is 177' to the nearest building and the rig height is given as 104', the rig used to drill the subject well must not have a derrick height of greater than 2/3rds of 177 feet or 118 feet.

1) Provide 24 hour notice of MIRU to Bo Brown at e-mail bo.brown@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.

Attachment Check List

Att Doc Num	Name
1694210	EXCEPTION LOC WAIVERS
1771332	SURFACE CASING CHECK
400177034	APD APPROVED
400185707	MULTI-WELL PLAN
400185708	WELL LOCATION PLAT
400185709	DEVIATED DRILLING PLAN
400185710	PROPOSED SPACING UNIT
400185711	PROPOSED SPACING UNIT
400185713	OIL & GAS LEASE
400192989	FORM 2 SUBMITTED

Total Attach: 10 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Wellhead is to be located outside of a GWA drilling window and will be located more than 50' from an existing well location: EXCEPTION GRANTED.	7/19/2011 2:22:24 PM
Permit	Operator requests approval of a Rule 318Aa exception location: Wellhead is to be located outside of a GWA drilling window and will be located more than 50' from an existing well location. Attached Exception Location Request and Waiver.	7/19/2011 2:22:23 PM
Permit	The rig height is given as 104'.	7/19/2011 10:03:34 AM
Engineer	Pad depths all seem to be Dakota depth - Jsand + RH=7670' (GR corr'd for offset) - proposed TVD is 7850' - Dakota should probably be included in objective formations. 390 sx cement don't give a TOC of 200 - req'd clarification	7/18/2011 1:03:13 PM

Total: 4 comment(s)

BMP

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

Total: 0 comment(s)