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|--|--|---|--|--------------------------------------|----|----|----|
| 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 |  | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">DE</td> <td style="width: 25%;">ET</td> <td style="width: 25%;">OE</td> <td style="width: 25%;">ES</td> </tr> </table> | DE | ET | OE | ES |
| DE | ET | OE | ES | | | | |
| APPLICATION FOR PERMIT TO: | | | Document Number: 400177043 Plugging Bond Surety 20090043 | | | | |
| 1. <input checked="" type="checkbox"/> Drill, <input type="checkbox"/> Deepen, <input type="checkbox"/> Re-enter, <input type="checkbox"/> Recomplete and Operate | | | | | | | |
| 2. TYPE OF WELL OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> COALBED <input type="checkbox"/> OTHER _____ SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/> COMMINGLE ZONE <input type="checkbox"/> | | Refiling <input type="checkbox"/> Sidetrack <input type="checkbox"/> | | | | | |
| 3. Name of Operator: <u>SYNERGY RESOURCES CORPORATION</u> 4. COGCC Operator Number: <u>10311</u> | | | | | | | |
| 5. Address: <u>20203 HIGHWAY 60</u> City: <u>PLATTEVILLE</u> State: <u>CO</u> Zip: <u>80651</u> | | | | | | | |
| 6. Contact Name: <u>Kori Thoren</u> Phone: <u>(970)737-1073</u> Fax: <u>(970)737-1045</u> Email: <u>kthoren@syrginfo.com</u> | | | | | | | |
| 7. Well Name: <u>Klein</u> Well Number: <u>43-8D</u> | | | | | | | |
| 8. Unit Name (if appl): _____ Unit Number: _____ | | | | | | | |
| 9. Proposed Total Measured Depth: <u>8411</u> | | | | | | | |
| WELL LOCATION INFORMATION | | | | | | | |
| 10. QtrQtr: <u>SWSE</u> Sec: <u>8</u> Twp: <u>4N</u> Rng: <u>67W</u> Meridian: <u>6</u> Latitude: <u>40.320785</u> Longitude: <u>-104.913938</u> | | | | | | | |
| Footage at Surface: <u>191</u> feet FNL/FSL <u>FSL</u> 2217 feet FEL/FWL <u>FEL</u> | | | | | | | |
| 11. Field Name: <u>Wattenberg</u> Field Number: <u>90750</u> | | | | | | | |
| 12. Ground Elevation: <u>4794</u> 13. County: <u>WELD</u> | | | | | | | |
| 14. GPS Data: Date of Measurement: <u>01/13/2011</u> PDOP Reading: <u>1.3</u> Instrument Operator's Name: <u>Mark Hall</u> | | | | | | | |
| 15. If well is <input checked="" type="checkbox"/> Directional <input type="checkbox"/> Horizontal (highly deviated) submit deviated drilling plan. Footage at Top of Prod Zone: FNL/FSL FEL/FWL Bottom Hole: FNL/FSL FEL/FWL <u>1961</u> <u>FSL</u> <u>494</u> <u>FEL</u> <u>1961</u> <u>FSL</u> <u>494</u> <u>FEL</u> Sec: <u>8</u> Twp: <u>4N</u> Rng: <u>67W</u> Sec: <u>8</u> Twp: <u>4N</u> Rng: <u>67W</u> | | | | | | | |
| 16. Is location in a high density area? (Rule 603b)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | | | | | |
| 17. Distance to the nearest building, public road, above ground utility or railroad: <u>176</u> ft | | | | | | | |
| 18. Distance to nearest property line: <u>191</u> ft 19. Distance to nearest well permitted/completed in the same formation: <u>900</u> 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/2SE/4 | | | |

IMPORTANT: SOME DATA FIELDS HAVE BEEN MODIFIED.

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: _____ 494 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 | 8,410 | 390 | 8,410 | 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'. 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: 6/27/2011 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. Nesline Director of COGCC Date: 7/27/2011

API NUMBER

05 123 34054 00

Permit Number: _____ Expiration Date: 7/26/2013

CONDITIONS OF APPROVAL, IF ANY: _____

IMPORTANT: SOME DATA FIELDS HAVE BEEN MODIFIED.

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 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.

Wellhead is 177' to the nearest public road 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.

Attachment Check List

| Att Doc Num | Name |
|-------------|------------------------|
| 1694213 | EXCEPTION LOC WAIVERS |
| 1771332 | SURFACE CASING CHECK |
| 400177043 | FORM 2 SUBMITTED |
| 400179365 | MULTI-WELL PLAN |
| 400179366 | WELL LOCATION PLAT |
| 400179367 | DEVIATED DRILLING PLAN |
| 400179368 | OIL & GAS LEASE |

Total Attach: 7 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|--------------------------|---|----------------------------|
| Permit | Corrected spacing order for J Sand to E/2 per operator. | 7/22/2011 12:23:00 PM |
| Permit | Requesting corrected Spacing Order. | 7/19/2011 2:42:16 PM |
| 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 11:02:16 AM |
| 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 11:02:10 AM |
| Permit | The rig height is given as 104'. | 7/19/2011 10:10:33 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 1:30:32 PM |
| Permit | Requesting exception location letter and waiver, rig height, and spacing corrected. | 7/7/2011 3:22:03 PM |
| Permit | Kori Thoren is not a designated agent for Synergy Resources. NKP 6/29/11 Kori Thoren has been added. NKP | 6/28/2011 11:05:43 AM |

Total: 8 comment(s)

BMP

| <u>Type</u> | <u>Comment</u> |
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Total: 0 comment(s)