

FORM

2

Rev
08/13

State of Colorado

Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109

Document Number:

400534256

APPLICATION FOR PERMIT TO:

☒ Drill
 ☐ Deepen
 ☐ Re-enter
 ☐ Recomplete and Operate

Date Received:

01/06/2014

TYPE OF WELL OIL ☐ GAS ☒ COALBED ☐ OTHER _____Refilling ☐ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐Sidetrack ☐

Well Name: Eberle

Well Number: 13-32NHZ

Name of Operator: SYNERGY RESOURCES CORPORATION

COGCC Operator Number: 10311

Address: 20203 HIGHWAY 60

City: PLATTEVILLE State: CO Zip: 80651

Contact Name: Brianne Visconti

Phone: (970)737-1073

Fax: (970)737-1045

Email: bvisconti@syrginfo.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20090043

WELL LOCATION INFORMATION

QtrQtr: NESE Sec: 32 Twp: 1N Rng: 66W Meridian: 6

Latitude: 40.004155

Longitude: -104.794614

Footage at Surface: 1355 feet FNL/FSL FSL 869 feet FEL/FWL FEL

Field Name: WATTENBERG

Field Number: 90750

Ground Elevation: 5031

County: WELD

GPS Data:

Date of Measurement: 11/08/2013 PDOP Reading: 1.2 Instrument Operator's Name: Aaron A. Demo

If well is ☐ Directional ☒ Horizontal (highly deviated) submit deviated drilling plan.
 Footage at Top of Prod Zone: FNL/FSL FSL 2168 FSL 775 FWL 2165 FSL 475 FWL
 Sec: 32 Twp: 1N Rng: 66W Sec: 32 Twp: 1N Rng: 66W

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ IndianThe Surface Owner is: ☒ is the mineral owner beneath the location.

(check all that apply)

☒ is committed to an Oil and Gas Lease.☒ has signed the Oil and Gas Lease.☐ is the applicant.The Mineral Owner beneath this Oil and Gas Location is: ☒ Fee ☐ State ☐ Federal ☐ Indian

The Minerals beneath this Oil and Gas Location will be developed by this Well: Yes

The right to construct the Oil and Gas Location is granted by: oil and gas lease

Surface damage assurance if no agreement is in place:

Surface Surety ID:

LEASE INFORMATION

Using standard QtrQtr, Sec, Twp, Rng format, describe one entire mineral lease that will be produced by this well (Describe lease beneath surface location if produced. Attach separate description page or map if necessary.)

Part of the NESE of Section 32, Township 1N, Range 66W totaling 20 acres and including the SHL. Lease Map is attached. Wellbore crosses lease lines within drilling and spacing unit; distance to nearest lease line is 0 feet; distance to Unit Boundary is 460' or greater.

Total Acres in Described Lease: 20 Described Mineral Lease is: ☒ Fee ☐ State ☐ Federal ☐ Indian

Federal or State Lease # _____

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 0 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 365 Feet
Building Unit: 564 Feet
High Occupancy Building Unit: 3044 Feet
Designated Outside Activity Area: 4130 Feet
Public Road: 856 Feet
Above Ground Utility: 429 Feet
Railroad: 5280 Feet
Property Line: 200 Feet

INSTRUCTIONS:

- All measurements shall be provided from center of the Proposed Well to nearest of each cultural feature as described in Rule 303.a.(5).
- Enter 5280 for distance greater than 1 mile.
- Building - nearest building of any type. If nearest Building is a Building Unit, enter same distance for both.
- Building Unit, High Occupancy Building Unit, and Designated Outside Activity Area - as defined in 100-Series Rules.

DESIGNATED SETBACK LOCATION INFORMATION

Check all that apply. This location is within a: ☒ Buffer Zone
☐ Exception Zone
☐ Urban Mitigation Area

- Buffer Zone - as described in Rule 604.a.(2), within 1,000' of a Building Unit
- Exception Zone - as described in Rule 604.a.(1), within 500' of a Building Unit.
- Urban Mitigation Area - as defined in 100-Series Rules.

Pre-application Notifications (required if location is within 1,000 feet of a building unit):

Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government: _____

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: 12/06/2013

SPACING and UNIT INFORMATION

Distance from Completed Portion of Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 700 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 475 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): _____ Unit Number: _____

SPACING & FORMATIONS COMMENTS

Operator requests the proposed spacing unit: 320 Acres consisting of the S/2 of Section 32, 1N, 66W.

OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
NIOBRARA	NBRR		320	GWA

DRILLING PROGRAM

Proposed Total Measured Depth: 12022 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 350 Feet (Including plugged wells)

Will a closed-loop drilling system be used? Yes

Is H₂S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No (If Yes, attach an H₂S Drilling Operations Plan)

Will salt sections be encountered during drilling? No

Will salt based (>15,000 ppm Cl) drilling fluids be used? No

Will oil based drilling fluids be used? No

BOP Equipment Type: ☒ Annular Preventor ☒ Double Ram ☒ Rotating Head ☐ None

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 318A

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Methods: Other

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Other

Other Disposal Description:

land farming

Beneficial reuse or land application plan submitted? No

Reuse Facility ID: _____ or Document Number: _____

CASING PROGRAM

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	1400	390	1400	0
1ST	8+3/4	7	26	0	8008	730	8008	
1ST LINER	6+1/8	4+1/2	11.6	6883	12022			

☒ Conductor Casing is NOT planned

DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- ☐ Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)
- ☐ Rule 604.b.(1)A. Exception Location (existing or approved Oil & Gas Location now within a Designated Setback as a result of Rule 604.a.)
- ☐ Rule 604.b.(1)B. Exception Location (existing or approved Oil & Gas Location is within a Designated Setback due to Building Unit construction after Location approval)
- ☐ Rule 604.b.(2) Exception Location (SUA or site-specific development plan executed on or before August 1, 2013)
- ☐ Rule 604.b.(3) Exception Location (Building Units constructed after August 1, 2013 within setback per an SUA or site-specific development plan)

GREATER WATTENBERG AREA LOCATION EXCEPTIONS

Check all that apply:

- ☒ Rule 318A.a. Exception Location (GWA Windows).
- ☐ Rule 318A.c. Exception Location (GWA Twinning).

RULE 502.b VARIANCE REQUEST

- ☐ Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number _____

OTHER LOCATION EXCEPTIONS

Check all that apply:

- ☐ Rule 318.c. Exception Location from Rule or Spacing Order Number _____
- ☐ Rule 603.a.(2) Exception Location (Property Line Setback).

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

OPERATOR COMMENTS AND SUBMITTAL

Comments

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? _____ Yes

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: _____ Print Name: Brianne ViscontiTitle: _____ Date: 1/6/2014 Email: bvisconti@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: _____ Director of COGCC _____ Date: _____

Expiration Date: _____

API NUMBER

05

Conditions Of Approval

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.

COA Type**Description**

	Open hole resistivity and gamma logs shall be run to describe the stratigraphy of the entire well bore and to adequately verify the setting depth of surface casing and aquifer coverage. On a multi-well pad, these open hole logs are only required on one of the first wells drilled on the pad and the Form 5 for every well on the pad shall identify which well was logged.
	Operator shall comply with Buffer Zone Move-In, Rig-Up Notice Policy dated 12-16-2013.
Drilling/Completion Operations	1) Note surface casing depth change from 800' to 1400'. Increase cement volumes accordingly. 2) Submit Form 42 electronically to COGCC 48 hours prior to MIRU. 3) Comply with Rule 317.i and provide cement coverage from end of 7" casing to a minimum of 200' above Niobrara and from 200' below the Sussex to 200' above Sussex. Verify coverage with cement bond log. 4) 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.
Drilling/Completion Operations	Operator acknowledges the proximity of the listed non-operated wells. Operator agrees to provide mitigation Option 3 (per the DJ Basin Horizontal Offset Policy), ensure all applicable documentation is submitted, and submit Form 42(s) ("OFFSET MITIGATION COMPLETED") for the remediated wells, referencing the API Number of the proposed horizontal well(s) stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well. Emma Delventhal Gas Unit #1 (API# 123-08370) well.

Best Management Practices

No	BMP/COA Type	Description
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.

Total: 2 comment(s)

Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.

Attachment Check List

Att Doc Num	Name
400534256	FORM 2 SUBMITTED
400534271	DIRECTIONAL DATA
400534273	DEVIATED DRILLING PLAN
400534279	EXCEPTION LOC REQUEST
400534280	CORRESPONDENCE
400534800	PROPOSED SPACING UNIT
400534804	LEASE MAP
400535918	EXCEPTION LOC WAIVERS
400535949	WELL LOCATION PLAT

Total Attach: 9 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA	Extended comment period 10 days by written request of Weld County LGD.	1/17/2014 9:39:27 PM
Permit	Corrected GPS data to match plat. Corrected TPZ to 775 FEL. Confirmed by operator.	1/17/2014 9:43:04 AM
Permit	Passed completeness.	1/7/2014 11:32:08 AM
Permit	Returned to draft: Bottom hole location in Well Location tab inconsistent with plat map and deviated drilling plan.	1/7/2014 11:05:02 AM
Permit	Returned to draft: Bottom hole location in Well Location tab inconsistent with plat map and deviated drilling plan.	1/7/2014 10:48:34 AM
Permit	Returned to draft for the following: 1. If right to construct is Surface Use Agreement, SUA must be attached. Right to construct should be the oil and gas lease. 2. Missing attached signed waiver for 318A.a location exception request. 3. Water well sampling should be 318A. 4. Surface and bottom hole locations in Well Location tab inconsistent with plat map and deviated drilling plan.	1/7/2014 9:22:03 AM

Total: 6 comment(s)