

FORM
2

Rev
08/16

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:

401341064

APPLICATION FOR PERMIT TO:

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

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____

Refilling ☐

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Date Received:

08/29/2017

Well Name: Sunshine

Well Number: 8-66-30-31N

Name of Operator: ENERPLUS RESOURCES (USA) CORPORATION

COGCC Operator Number: 10177

Address: 950 17TH STREET #2200

City: DENVER

State: CO

Zip: 80202

Contact Name: Sarah Miller

Phone: (720)279-5512

Fax: (720)279-5550

Email: smiller@enerplus.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20170023

WELL LOCATION INFORMATION

QtrQtr: Lot 3 Sec: 19 Twp: 8N Rng: 66W Meridian: 6

Latitude: 40.644034

Longitude: -104.826902

Footage at Surface: 1504 Feet FNL/FSL FSL 1135 Feet FEL/FWL FWL

Field Name: DJ HORIZONTAL NIOBRARA

Field Number: 16950

Ground Elevation: 5266

County: WELD

GPS Data:

Date of Measurement: 06/30/2017 PDOP Reading: 1.5 Instrument Operator's Name: Charles Scott

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		
652	FNL	1760	FEL	650	FSL	1760	FEL
Sec: 30	Twp: 8N	Rng: 66W	Sec: 31	Twp: 8N	Rng: 66W		

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian

The 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: No

The right to construct the Oil and Gas Location is granted by: Surface Use Agreement

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.)

Lots 1, 2, 3, E/2NW/4, NESW - Section 30, T8N-R66W

Total Acres in Described Lease: 276 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: 319 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 800 Feet
Building Unit: 942 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 1109 Feet
Above Ground Utility: 1107 Feet
Railroad: 5280 Feet
Property Line: 156 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: 03/01/2017

SPACING and UNIT INFORMATION

Distance from completed portion of proposed wellbore to nearest completed portion of offset wellbore permitted or completed in the same formation: 2253 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 650 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

The closest well permitted or completed in the same formation is the proposed Evans 8-66-30-31N.

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	535-864	1280	Sec 30 & 31: All

DRILLING PROGRAM

Proposed Total Measured Depth: 17642 Feet

Distance from the proposed wellbore to nearest existing or proposed wellbore belonging to another operator, including plugged wells:

Enter distance if less than or equal to 1,500 feet: 38 Feet ☐ No well belonging to another operator within 1,500 feet

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? Yes

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 609

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Methods: Recycle/reuse

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Beneficial reuse or land application plan submitted?

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
CONDUCTOR	20	16	65	0	80	179	80	0
SURF	13+1/2	9+5/8	36	0	1500	304	1500	0
1ST	8+1/2	5+1/2	20	0	17642	2840	17642	0

☐ 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 Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners is the date the SUA was signed. The only building unit owner within 1000' is the surface owner.

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: Sarah Miller

Title: Permitting Technician Date: 8/29/2017 Email: smiller@enerplus.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:  Director of COGCC Date: 6/20/2018

Expiration Date: 06/19/2020

API NUMBER

05 123 47134 00

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.

<u>COA Type</u>	<u>Description</u>
	Bradenhead tests shall be performed and reported according to the following schedule and Form 17 submitted within 10 days of each test: 1) Within 60 days of rig release and prior to stimulation or 2) If a delayed completion, 6-7 months after rig release and prior to stimulation. 3) Within 30 days after first production, as reported on Form 5A.
	1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU (Spud Notice), for the first well/activity on the pad and provide 48 hour spud notice for all subsequent wells drilled on the pad. 2) Comply with Rule 317.j and provide cement coverage from the end of production casing to a minimum of 200' above Niobrara. Verify coverage with cement bond log. 3) Oil-based drilling fluid is to be used only after all aquifers are covered.
	Operator acknowledges the proximity of the listed non-operated well: Operator agrees to: provide mitigation option 3 (per the DJ Basin Horizontal Offset Policy) to mitigate the situation, ensure all applicable documentation is submitted based on the selected mitigation option chosen, and submit a Form 42 ("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 these wells. BLACK HOLLOW-F BIAMONTE 3 (API NO 123-05441)COLORADO STATE 3 (API NO 123-05472) J NORMAN BROWN 1 (API NO 123-05512)UPRC 9 (API NO 123-05474) UPRR 10 (API NO 123-05461)UPRR 11 (API NO 123-05453) UPRR 1-A (API NO 123-07006)UPRR 8 (API NO 123-05483)
	Operator acknowledges the proximity of the following non-operated listed wells: Operator agrees to: provide mitigation option 1 or 2 (per the DJ Basin Horizontal Offset Policy) to mitigate the situation, ensure all applicable documentation is submitted based on the selected mitigation option chosen, and submit a Form 42 ("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. BAIAMONTE 1 (API NO 123-05444)COLORADO STATE 1 (API NO 123-05462) UPRR 13 (API NO 123-05482)

Best Management Practices

No	<u>BMP/COA Type</u>	<u>Description</u>
1	Material Handling and Spill Prevention	Enerplus will implement a Spill Prevention Control and Countermeasures (SPCC) plan to prevent and address any releases from bulk oil storage located onsite.
2	Dust control	Operator shall employ practices for control of fugitive dust caused by their operations. Such practices shall include but are not limited to the use of speed restrictions, regular road maintenance, restriction of construction activity during high-wind days, and silica dust controls when handling sand used in hydraulic fracturing operations. Additional management practices such as road surfacing, wind breaks and barriers may be used.
3	Emissions mitigation	Associated Gas Flaring BMP – Following the last stage of separation associated gas will flow through a liquid knockout drum to remove entrained liquid phases. Following the liquid knockout drum, associated gas will flow to a smokeless combustion device capable of a 98% control efficiency. The combustion device will be equipped with a continuous pilot gas flame and an auto-ignitor. Enerplus will comply with all applicable Colorado – Air Pollution Control Division requirements to ensure adequate design and operation of the control device is maintained.
4	Odor mitigation	Oil & gas facilities and equipment shall be operated in such a manner that odors and dust do not constitute a nuisance or hazard to public welfare.
5	Drilling/Completion Operations	One of the first wells drilled on the pad will be logged with openhole Resistivity Log and Gamma Ray Log from the kick-off point into the surface casing. All wells on the pad will have a cement bond log with gamma-ray run on production casing (or on intermediate casing if production liner is run) into the surface casing. The horizontal portion of every well will be logged with a measured-while-drilling gamma-ray log. The Form 5, Completion Report, for each well on the pad will list all logs run and have those logs attached. The Form 5 for a well without open-hole logs shall clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which openhole logs were run.

Total: 5 comment(s)

Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.
http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401341064	FORM 2 SUBMITTED
401389800	DIRECTIONAL DATA
401389803	DEVIATED DRILLING PLAN
401389804	WELL LOCATION PLAT
401401800	OffsetWellEvaluations Data
401408945	SURFACE AGRMT/SURETY
401680118	OFFSET WELL EVALUATION

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Added spacing order number. Passed permitting.	06/12/2018
Engineer	Revised the distance from the proposed wellbore to nearest existing or permitted wellbore belonging to another operator from 325, to 38', to the Amoco Production Company- Champlin 369 Amoco 1, DA, API NO 123-09054, on the Drilling & Waste Plans tab. Operator agreed.	06/06/2018
Engineer	Offset Wells Evaluated	06/06/2018
Permit	Passed Completeness.	09/26/2017
Permit	Returned to draft for: - attachment "SURFACE AGRMT/SURETY" is not an SUA	09/20/2017
Permit	Returned to draft --submit corrected OWE --provide email for wellbore integrity contact --correct quarter/quarter designation to Lot 3 --SUA should include map --need distance to lease line --indicate type of lease (fee)	08/30/2017

Total: 6 comment(s)