

FORM
2

Rev
05/22

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:

403022609

Date Received:

06/15/2022

APPLICATION FOR PERMIT TO

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

Amend ☐

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER: _____

Refile ☒

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Well Name: Luseland Well Number: 7-66-3-10-2
Name of Operator: ENERPLUS RESOURCES (USA) CORPORATION COGCC Operator Number: 10177
Address: 950 17TH STREET #2200
City: DENVER State: CO Zip: 80202
Contact Name: Jacob Everhart Phone: (720)2796743 Fax: ()
Email: jeverhart@enerplus.com

FINANCIAL ASSURANCE FOR PLUGGING, ABANDONMENT, AND RECLAMATION

COGCC Financial Assurance

☒ The Operator has provided or will provide Financial Assurance to the COGCC for this Well.

Surety ID Number (if applicable): 20170023

Federal Financial Assurance

☐ In checking this box, the Operator certifies that it has provided or will provide at least this amount of Financial Assurance to the federal government for this Well. (Per Rule702.a.)

Amount of Federal Financial Assurance \$ _____

WELL LOCATION INFORMATION

Surface Location

QtrQtr: SESE Sec: 34 Twp: 8N Rng: 66W Meridian: 6

Footage at Surface: 436 Feet FSL 1237 Feet FEL

Latitude: 40.612567 Longitude: -104.758364

GPS Data: GPS Quality Value: 1.6 Type of GPS Quality Value: PDOP Date of Measurement: 10/23/2019

Ground Elevation: 4996

Field Name: WATTENBERG Field Number: 90750

Well Plan: is ☐ Directional ☒ Horizontal (highly deviated) ☐ Vertical

If Well plan is Directional or Horizontal attach Deviated Drilling Plan and Directional Data.

Subsurface Locations

Top of Productive Zone (TPZ)

Sec: 3 Twp: 7N Rng: 66W Footage at TPZ: 500 FNL 1570 FWL
Measured Depth of TPZ: 8236 True Vertical Depth of TPZ: 7375 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 10 Twp: 7N Rng: 66W Footage at BPZ: 500 FSL 1570 FWL
Measured Depth of BPZ: 17719 True Vertical Depth of BPZ: 7375 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 10 Twp: 7N Rng: 66W Footage at BHL: 500 FSL 1570 FWL
FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: WELD Municipality: N/A

Is the Surface Location of this Well in an area designated as one of State interest and subject to the requirements of § 24-65.1-108 C.R.S.? Yes

Per § 34-60-106(1)(f)(I)(A) C.R.S., the following questions pertain to the Relevant Local Government approval of the siting of the proposed Oil and Gas Location.

SB 19-181 provides that when "applying for a permit to drill," operators must include proof that they sought a local government siting permit and the disposition of that permit application, or that the local government does not have siting regulations. § 34-60-106(1)(f)(I)(A) C.R.S.

Does the Relevant Local Government regulate the siting of Oil and Gas Locations, with respect to this Location? ☒ Yes ☐ No

☒ If yes, in checking this box, I hereby certify that an application has been filed with the local government with jurisdiction to approve the siting of the proposed oil and gas location.

The disposition of the application filed with the Relevant Local Government is: Approved Date of Final Disposition: 09/18/2019

Comments: WOGLA Approved 09/18/2019. WOGLA19-0182

SURFACE AND MINERAL OWNERSHIP AT WELL'S OIL & GAS LOCATION

Surface Owner of the land at this Well's Oil and Gas Location: ☒ Fee ☐ State ☐ Federal ☐ Indian

Mineral Owner beneath this Well's Oil and Gas Location: ☒ Fee ☐ State ☐ Federal ☐ Indian

Surface Owner Protection Bond (if applicable): Surety ID Number (if applicable):

MINERALS DEVELOPED BY WELL

The ownership of all the minerals that will be developed by this Well is (check all that apply):

- ☒ Fee
☐ State
☐ Federal
☐ Indian
☐ N/A

LEASE INFORMATION

Using standard QtrQtr, Section, Township, Range format describe one entire mineral lease as follows:

* If this Well is within a unit, describe a lease that will be developed by the Well.

* If this Well is not subject to a unit, describe the lease that will be produced by the Well.

(Attach a Lease Map or Lease Description or Lease if necessary.)

Township 7 North, Range 66W, 6th PM Section 3: SW

Total Acres in Described Lease: 160 Described Mineral Lease is: ☒ Fee ☐ State ☐ Federal ☐ Indian

Federal or State Lease #

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 408 Feet
Building Unit: 795 Feet
Public Road: 423 Feet
Above Ground Utility: 409 Feet
Railroad: 5280 Feet
Property Line: 436 Feet

INSTRUCTIONS:

- Specify all distances per Rule 308.b.(1).
- 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 – as defined in 100 Series Rules.

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	407-1782	1280	Sec 3 & 10: All

Federal or State Unit Name (if appl): _____

Unit Number: _____

SUBSURFACE MINERAL SETBACKS

Enter 5280 for distance greater than 1 mile.

Is this Well within a unit? Yes

If YES:

Enter the minimum distance from the Completed Zone of this Well to the Unit Boundary: 500 Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well within the same unit permitted or completed in the same formation: 408 Feet

If NO:

Enter the minimum distance from the Completed Zone of this Well to the Lease Line of the described lease: _____ Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well producing from the same lease and permitted or completed in the same formation: _____ Feet

Exception Location

☐ If this Well requires the approval of a Rule 401.c Exception Location, enter the Rule or spacing order number and attach the Exception Location Request and Waivers. _____

SPACING & FORMATIONS COMMENTS

DRILLING PROGRAM

Proposed Total Measured Depth: 17719 Feet

TVD at Proposed Total Measured Depth 7375 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: 1132 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 Plan unless a plan was already submitted with the Form 2A per Rule 304.c.(10).

Will there be hydraulic fracture treatment at a depth less than 2,000 feet in this well? No

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

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: 450526 or Document Number:

CASING PROGRAM

Casing Type	Size of Hole	Size of Casing	Grade	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
CONDUCTOR	24	16	J-55	65	0	80	179	80	0
SURF	13+1/2	9+5/8	J-55	36	0	1500	304	1500	0
1ST	8+1/2	5+1/2	P-110	20	0	17719	2642	17719	

☐ Conductor Casing is NOT planned

POTENTIAL FLOW AND CONFINING FORMATIONS

Zone Type	Formation /Hazard	Top M.D.	Top T.V.D.	Bottom M.D.	Bottom T.V.D.	TDS (mg/L)	Data Source	Comment
Groundwater	Fox Hills	0	0	1687	1687	501-1000	USGS	
Confining Layer	Pierre Shale	1687	1687	4137	3985			
Groundwater	Parkman	4137	3985	4500	4302	1001-10000	Other	DWLS formation water catalog
Confining Layer	Pierre Shale	4500	4302	5490	5199			
Groundwater	Shannon	5490	5199	5650	5325	1001-10000	Other	DWLS formation water catalog
Confining Layer	Pierre Shale	5650	5325	7804	7234			
Confining Layer	Sharon Springs	7804	7234	7837	7254			
Hydrocarbon	Niobrara	7837	7254	17719	7375			Bottom TVD is bottom of the well and not bottom of the formation; the formation is not planned to be exited.

OPERATOR COMMENTS AND SUBMITTAL

Comments

This Form 2 is being submitted as an refile of API:
05-123-46144.

The Weyburn 7-66-3-10-8C (API: 05-123-46138), Melfort 7-66-3-10-4N (API: 05-123-46141), Lloydminster 7-66-3-10-2N (API: 05-123-46412), Prince Albert 7-66-3-10-6C (API: 05-123-46147), and Polaris 8-66-34-33C (API: 05-123-50134) have been drilled and are producing. The well names/numbers, SHL/TPZ/BHZ/BHL/TMD/TVD, cultural distances, spacing, formation, casing grades, nearest well, and PFZ table information are being confirmed or amended for the following wells:

Dante 8-66-34-33 (API:05-123-50137)
Luseland 7-66-3-10-2 (API:05-123-46144)
Moose Jaw 7-66-3-10-5 (API:05-123-46149)
Regina 7-66-3-10-6N (API:05-123-46139)
Saskatoon 7-66-3-10-7 (API:05-123-46137)
Saturn 8-66-34-33 (API:05-123-50135)
Valiant 8-66-34-33 (API:05-123-50136)
Yorkton 7-66-3-10-8 (API:05-123-46140)

There have been no new buildings constructed and no changes to the surrounding land use, mineral lease descriptions from the previously approved APD. The well site has been constructed. There are no proposed changes to the location disturbance or equipment. All previously submitted notices, Surface Use Agreements, and letters are also still valid.

The nearest outside operated well is the Thornton 15E-432 (API: 05-123-36945) PR status.
The nearest well in unit is the Lloydminster 7-66-3-10-2N.

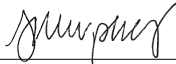
This application is in a Comprehensive Area Plan No CAP #: _____
Oil and Gas Development Plan Name _____ OGDID ID#: _____
Location ID: 453481

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

Signed: _____ Print Name: Jordan Lukasik
Title: Regulatory Analyst I Date: 6/15/2022 Email: regulatory@ascentgeomatics.c

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, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved:  Director of COGCC Date: 8/11/2022
Expiration Date: 08/10/2025

API NUMBER

05 123 46144 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.

Condition of Approval

<u>COA Type</u>	<u>Description</u>
Construction	Operator shall comply with Notice to Operators: Interim Reclamation Procedures for Delayed Operations (dated January 5, 2017).
Construction	If conductors are preset, operator shall comply with Notice to Operators: Procedures for Preset Conductors (dated September 1, 2016).
Drilling/Completion Operations	Per COGCC Order 1-232, Bradenhead tests shall be performed according to the following schedule and Form 17 submitted within 10 days of each test: 1) Within 60 days of rig release, prior to stimulation. If any pressure greater than 200 psi, must contact COGCC engineer prior to stimulation. 2) If a delayed completion, 6 months after rig release and prior to stimulation. If any pressure greater than 200 psi, must contact COGCC engineer prior to stimulation. 3) A post-production test within 60 days after first sales, as reported on the Form 10, Certificate of Clearance.
Drilling/Completion Operations	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 408.j and provide cement coverage from the end of production casing to a minimum of 500' above Niobrara. Verify coverage with cement bond log. 3) Oil-based drilling fluid is to be used only after all aquifers are covered.
4 COAs	

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	Alternative Logging Program: The Lloydminster 7-66-3-10-2N (API 05-123-46142) has been logged with open-hole 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 "Alternative Logging Program- No open-hole logs were run" and shall clearly identify the well Lloydminster 7-66-3-10-2N (API 05-123-46142) in which open-hole logs were run.

Total: 1 comment(s)

Attachment List

<u>Att Doc Num</u>	<u>Name</u>
403022609	FORM 2 SUBMITTED
403079648	WELL LOCATION PLAT
403079650	DEVIATED DRILLING PLAN
403079669	DIRECTIONAL DATA
403080143	OffsetWellEvaluations Data
403133990	OFFSET WELL EVALUATION

Total Attach: 6 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	Revised the "NO", to "YES", on the Drilling Plan tab, in the Beneficial reuse section, per the Operator.	08/01/2022
Permit	With operators concurrence changed from Amend to Refile and corrected Open Hole BMP. Final Review Completed.	07/28/2022
OGLA	The Location and its associated Form 2A materials was fully reviewed during the review of this APD. This APD complies with all COGCC Rules and is adequately protective of public health, safety, welfare, the environment, and wildlife resources. OGLA task passed.	07/13/2022
Engineer	Offset Wells re-Evaluated with this APD.	06/17/2022

Total: 4 comment(s)