

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:

403013900

Date Received:

05/09/2022

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: Cowtown Well Number: 8-67-36-25  
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: SESW Sec: 36 Twp: 8N Rng: 67W Meridian: 6

Footage at Surface: 411 Feet FSL 1903 Feet FWL

Latitude: 40.611611 Longitude: -104.843954

GPS Data: GPS Quality Value: 2.0 Type of GPS Quality Value: PDOP Date of Measurement: 06/05/2018

Ground Elevation: 5182

Field Name: DJ HORIZONTAL NBRR-FTHYS-CODL Field Number: 16953

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: 36 Twp: 8N Rng: 67W Footage at TPZ: 650 FSL 2075 FWL  
Measured Depth of TPZ: 7361 True Vertical Depth of TPZ: 7015 FNL/FSL FEL/FWL

**Base of Productive Zone (BPZ)**

Sec: 25 Twp: 8N Rng: 67W Footage at BPZ: 650 FNL 2075 FWL  
Measured Depth of BPZ: 16736 True Vertical Depth of BPZ: 7015 FNL/FSL FEL/FWL

**Bottom Hole Location (BHL)**

Sec: 25 Twp: 8N Rng: 67W Footage at BHL: 650 FNL 2075 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: Other Date of Final Disposition: \_\_\_\_\_

Comments: Location was constructed prior to the implementation of pre-1041 WOGLA and 1041 regulations.

**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 8 North, Range 67W, 6th PM Section 36: W2

Total Acres in Described Lease: 320 Described Mineral Lease is: ☐ Fee ☒ State ☐ Federal ☐ Indian

Federal or State Lease # 2897.14

## SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 2956 Feet  
Building Unit: 3672 Feet  
Public Road: 3319 Feet  
Above Ground Utility: 2127 Feet  
Railroad: 5280 Feet  
Property Line: 411 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	535-763	640	S 36:W2 & S 25:W2

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: 650 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: 220 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

Order 535-823 captures missed parties on the original order (535-736).

**DRILLING PROGRAM**Proposed Total Measured Depth: 16736 FeetTVD at Proposed Total Measured Depth 7015 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: 1250 Feet ☐ No well belonging to another operator within 1,500 feetWill a closed-loop drilling system be used? YesIs H<sub>2</sub>S gas reasonably expected to be encountered during drilling operations at concentrations greater thanor equal to 100 ppm? No If yes, attach an H<sub>2</sub>S 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? NoWill salt sections be encountered during drilling? NoWill salt based (>15,000 ppm Cl) drilling fluids be used? NoWill oil based drilling fluids be used? YesBOP Equipment Type: ☒ Annular Preventor ☒ Double Ram ☒ Rotating Head ☐ NoneBeneficial reuse or land application plan submitted? YesReuse Facility ID: 450526 or Document Number: **CASING PROGRAM**

<u>Casing Type</u>	<u>Size of Hole</u>	<u>Size of Casing</u>	<u>Grade</u>	<u>Wt/Ft</u>	<u>Csg/Liner Top</u>	<u>Setting Depth</u>	<u>Sacks Cmt</u>	<u>Cmt Btm</u>	<u>Cmt Top</u>
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	1500	16736	2496	16736	0

☐ Conductor Casing is NOT planned**POTENTIAL FLOW AND CONFINING FORMATIONS**

<u>Zone Type</u>	<u>Formation /Hazard</u>	<u>Top M.D.</u>	<u>Top T.V.D.</u>	<u>Bottom M.D.</u>	<u>Bottom T.V.D.</u>	<u>TDS (mg/L)</u>	<u>Data Source</u>	<u>Comment</u>
Groundwater	Fox Hills	0	0	1326	1326	501-1000	USGS	
Confining Layer	Pierre Shale	1326	1326	3532	3528			
Groundwater	Parkman	3532	3528	3800	3770	1001-10000	Other	DWLS formation water catalog
Confining Layer	Pierre Shale	3800	3770	4689	4679			
Groundwater	Shannon	4689	4679	4750	4730	1001-10000	Other	DWLS formation water catalog
Confining Layer	Pierre Shale	4750	4730	6945	6869			
Confining Layer	Sharon Springs	6945	6869	7003	6907			
Hydrocarbon	Niobrara	7003	6907	16736	7015			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	<p>This Form 2 is being submitted as an refile of API: 05-123-44536.</p> <p>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.</p> <p>The nearest outside operated well is the Lindstrom 24-8-67 1H (API #05-123-34284) SI status at 1250' per 2D calculation.</p> <p>The nearest well in unit is the existing Maple 8-67-36-25C (API # 05-123-44539-01) PR status at 220'.</p>
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This application is in a Comprehensive Area Plan No CAP #: \_\_\_\_\_  
Oil and Gas Development Plan Name \_\_\_\_\_ OGDID ID#: \_\_\_\_\_

Location ID: 449800

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: 5/9/2022 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: 8/25/2022

Expiration Date: 08/24/2025

**API NUMBER**

05 123 44536 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>
Interim Reclamation	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.
Drilling/Completion Operations	Operator acknowledges the proximity of the listed non-producing well(s). 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 well(s), referencing the API Number of the proposed horizontal wells stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of the proposed wells.  UPRR # 10 (API NO 123-05461)UPRR # 1-A (API NO 123-07006)
Drilling/Completion Operations	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.  State #2 (API NO 123-05454)
6 COAs	

## Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	Alternative Logging Program: The Maple 8-67-36-25C (API: 05-123-44539) was logged with open-hole resistivity log with 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 state "Alternative Logging Program - No open-hole logs were run", and shall clearly identify the type of log and the well (by API#) in which open-hole logs were run."

Total: 1 comment(s)

## Attachment List

<u>Att Doc Num</u>	<u>Name</u>
2115076	SURFACE USE AGREEMENT
403013900	FORM 2 SUBMITTED
403040924	WELL LOCATION PLAT
403041749	DIRECTIONAL DATA
403041846	OffsetWellEvaluations Data
403042029	DEVIATED DRILLING PLAN
403146504	OFFSET WELL EVALUATION

Total Attach: 7 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA	Operator submitted additional BMPs via Form 4 Sundry, Document #403144033. OGLA Task is PASSED.	08/24/2022
Engineer	Revised the "NO", to "YES", on the Drilling Plan tab, in the Beneficial reuse section, per the Operator.	08/01/2022
Permit	In Process: Operator provided updated SUA. SLB has no concerns with this application. Final Review Completed.	07/13/2022
Permit	ON HOLD: This application has been reviewed by COGCC staff and cannot be approved based on the information submitted; therefore, the COGCC is placing this form ON HOLD until additional information is received from the applicant. In compliance with § 24-65.1-108(1), C.R.S., the COGCC is providing this written request for all additional information necessary for the COGCC to respond to this application. The applicant may provide all requested additional information to COGCC via email. Upon receipt of all requested information, the COGCC will have 60 days in which to approve, deny, or request all additional information necessary to complete the regulatory review. If the applicant no longer requires this application be approved, the applicant may request to withdraw the application. In addition to all standard required information and attachments, the COGCC hereby confirms the following information is necessary for review: 1) Surface Use Agreement from the Colorado State Land Board.	07/07/2022
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.	07/02/2022
Permit	With operators concurrence corrected Changed Amend to Refile, Corrected Field Name to 16953 Changed "No" to location within 1041 WOGLA to "Yes" Corrected DSU number to 535-763 Corrected Open Hole Logging BMP On Hold: Missing Surface Use Agreement	06/27/2022
Permit	Emailed operator requesting: Change Amend to Refile, Correct Field Name Change "No" to location within 1041 WOGLA to "Yes" Correct DSU number Correct Open Hole Logging BMP Missing Surface Use Agreement Emailed the SLB to notify them of this pending application.	06/16/2022
OGLA	Based on the review of the topographic map, an historical drainage, mapped as a a jurisdictional water is identified along the southern perimeter of the Location. Further review of available Location Pictures and historical aerial photographs indicated that the northern most portion of the jurisdictional drainage has been modified by agricultural activities and does not intersect the southern perimeter of the Location.	06/09/2022
Engineer	Offset Wells re-evaluated with this APD.	05/24/2022

Total: 9 comment(s)