

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:  
402989518  
Date Received:  
06/22/2022

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: Ruby West    Well Number: 4  
Name of Operator: BAYSWATER EXPLORATION & PRODUCTION LLC    COGCC Operator Number: 10261  
Address: 730 17TH ST STE 500  
City: DENVER    State: CO    Zip: 80202  
Contact Name: Lauren Walsh    Phone: (720)881 4502    Fax: ( )  
Email: lwalsh@bayswater.us

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): 20080034

**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: NESW    Sec: 7    Twp: 7N    Rng: 65W    Meridian: 6  
Footage at Surface: 2542 Feet    FNL/FSL    FSL    2426    Feet    FEL/FWL    FWL  
Latitude: 40.589530    Longitude: -104.707113  
GPS Data:    GPS Quality Value: 1.9    Type of GPS Quality Value: PDOP    Date of Measurement: 04/27/2020  
Ground Elevation: 4923  
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: 12    Twp: 7N    Rng: 66W    Footage at TPZ: 1420    FNL    470    FEL  
Measured Depth of TPZ: 8244    True Vertical Depth of TPZ: 7196    FNL/FSL    FEL/FWL

Base of Productive Zone (BPZ)

Sec: 11 Twp: 7N Rng: 66W Footage at BPZ: 1420 FNL 470 FWL  
Measured Depth of BPZ: 18002 True Vertical Depth of BPZ: 7196 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 11 Twp: 7N Rng: 66W Footage at BHL: 1420 FNL 470 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? [X] Yes [ ] No

[X] 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: 01/07/2021

Comments: 1041WOGLA20-0073 submitted 10/1/2020, approved 1/7/2021

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

Surface Owner of the land at this Well's Oil and Gas Location: [X] Fee [ ] State [ ] Federal [ ] Indian

Mineral Owner beneath this Well's Oil and Gas Location: [X] 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):

- [X] Fee
- [ ] State
- [X] 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.)

Please see attached lease description.

Total Acres in Described Lease: 292 Described Mineral Lease is:  Fee  State  Federal  Indian

Federal or State Lease # \_\_\_\_\_

## SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 2021 Feet  
Building Unit: 2266 Feet  
Public Road: 2420 Feet  
Above Ground Utility: 109 Feet  
Railroad: 5280 Feet  
Property Line: 109 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	407-3330	1280	All: 12, 11

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: 470 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: 440 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: 18002 Feet TVD at Proposed Total Measured Depth 7196 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: 233 Feet  No well belonging to another operator within 1,500 feetWill a closed-loop drilling system be used? YesIs 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? 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  None

Beneficial reuse or land application plan submitted? \_\_\_\_\_

Reuse Facility ID: \_\_\_\_\_ 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	26	16	N/A	42	0	80	400	80	0
SURF	13+1/2	9+5/8	J55	36	0	1500	660	1500	0
1ST	8+1/2	5+1/2	HCP100	20	0	18002	2477	18002	2500

 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	Quaternary Alluvium	0	0	42	42	501-1000	Groundwater Sample	Sample Site ID 753695, 750020
Groundwater	Laramie/Fox Hills	42	42	440	440	501-1000	Groundwater Sample	Sample Site ID 766369, 753716
Groundwater	Upper Pierre	440	440	1682	1682	501-1000	Other	Area Report Microsoft PowerPoint - UPWQ_PPT_01-29Hearing
Confining Layer	Pierre Shale	1682	1682	4173	3943			
Hydrocarbon	Parkman	4173	3943	4573	4317			
Hydrocarbon	Sussex	4773	4469	5173	4802			
Hydrocarbon	Shannon	5473	5054	5773	5382			
Confining Layer	Pierre Shale	5773	5382	7873	7101			
Confining Layer	Sharon Springs	7873	7101	7973	7137			
Hydrocarbon	Niobrara	7973	7137	18002	7196			Potential Flow Formation Table: The TVD of the deepest hydrocarbon zone is the bottom of the well and not the bottom of the formation. The formation is not planned to be exited.

**OPERATOR COMMENTS AND SUBMITTAL**

Comments



## 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).
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.
3 COAs	

### Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	Alternative Logging Program - One of the first wells drilled on the pad will be logged with Open Hole Resistivity Log and Gamma Ray Log from the kick-off point to 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 (by API#, well name & number) the well in which open-hole logs were run.
2	Drilling/Completion Operations	Blowout Prevention Equipment ("BOPE"): A double ram and annular preventer will be used during drilling. Stabbing valves shall be installed in the event of reverse circulation and shall be prior tested with low- and high-pressure fluid.
3	Drilling/Completion Operations	Bradenhead Monitoring: Operator acknowledges and will comply with COGCC Policy for Bradenhead Monitoring during Hydraulic Fracturing Treatments in the Greater Wattenberg Area dated May 29, 2012.
4	Drilling/Completion Operations	Anti-collision: Operator will perform an anti-collision evaluation of all active (producing, shut in, or temporarily abandoned) offset wellbores that have the potential of being within 150 feet of a proposed well prior to drilling operations for the proposed well. Notice shall be given to all offset operators prior to drilling.

Total: 4 comment(s)

### Attachment List

<u>Att Doc Num</u>	<u>Name</u>
2168542	EXCEPTION LOCATION REQUEST
402989518	FORM 2 SUBMITTED
403063225	OffsetWellEvaluations Data

403063237	DEVIATED DRILLING PLAN
403063238	WELL LOCATION PLAT
403063239	EXCEPTION LOC WAIVERS
403064653	LEGAL/LEASE DESCRIPTION
403064655	DIRECTIONAL DATA
403108698	OFFSET WELL EVALUATION

Total Attach: 9 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	07/14/2022
Permit	Uploaded the updated exception location request PDF from the operator Added the COA for built locations with the operator consent Passed Permit Review	07/13/2022
OGLA	The Commission approved OGDG #481736 on 06/08/2022 for the Oil and Gas Location related to this Form 2. OGLA task passed.	06/27/2022
Engineer	Offset Wells evaluated with this APD.	06/24/2022

Total: 4 comment(s)