

FORM  
2

Rev  
12/20

## 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:

402378536

Date Received:

10/29/2021

#### APPLICATION FOR PERMIT TO:

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

Amend ☐

Refill ☐

Sidetrack ☐

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER: \_\_\_\_\_

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Well Name: Blehm 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: lwash@bayswater.us

#### RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20080034

#### WELL LOCATION INFORMATION

##### Surface Location

QtrQtr: Lot 3 Sec: 18 Twp: 7N Rng: 66W Meridian: 6

Footage at Surface: 2639 Feet FSL 1616 Feet FWL

Latitude: 40.574403 Longitude: -104.826019

GPS Data: GPS Quality Value: 1.8 Type of GPS Quality Value: PDOP Date of Measurement: 02/20/2020

Ground Elevation: 5079

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: 13 Twp: 7N Rng: 67W Footage at TPZ: 1430 FNL 160 FEL  
Measured Depth of TPZ: 8098 True Vertical Depth of TPZ: 7371 FNL/FSL FEL/FWL

###### Base of Productive Zone (BPZ)

Sec: 14 Twp: 7N Rng: 67W Footage at BPZ: 1430 FNL 160 FWL  
Measured Depth of BPZ: 17717 True Vertical Depth of BPZ: 7161 FNL/FSL FEL/FWL

###### Bottom Hole Location (BHL)

Sec: 14 Twp: 7N Rng: 67W Footage at BHL: 1430 FNL 160 FWL  
FNL/FSL FEL/FWL

#### LOCAL GOVERNMENT PERMITTING INFORMATION

County: WELDMunicipality: 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: 01/27/2021

Comments: 1041WOGLA20-0083 submitted 12/3/2020, approved 1/27/2021.

## 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 Financial Assurance (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.)

All, Sec 13, T7N, R67W

Total Acres in Described Lease: 640 Described Mineral Lease is: ☒ Fee ☐ State ☐ Federal ☐ Indian

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

## SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 682 Feet  
Building Unit: 916 Feet  
Public Road: 2081 Feet  
Above Ground Utility: 1148 Feet  
Railroad: 5280 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.

Property Line: 106 Feet

## 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	407-3241	1280	13, 14: 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: 160 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: 455 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: 17717 Feet

TVD at Proposed Total Measured Depth 7161 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: 219 Feet ☐ No well belonging to another operator within 1,500 feet

Will a closed-loop drilling system be used? Yes

Is H<sub>2</sub>S gas reasonably expected to be encountered during drilling operations at concentrations greater than or 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? 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?

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	43	0	80	400	80	0
SURF	13+1/2	9+5/8	J-55	36	0	1500	660	1500	0
1ST	8+1/2	5+1/2	P-110	20	0	17717	2429	17717	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	Laramie/Fox Hills	0	0	205	205	501-1000	Groundwater Sample	Sample Site ID 766369, 753716
Groundwater	Upper Pierre	205	205	1190	1190	501-1000	Other	Area Report Microsoft PowerPoint - UPWQ_PPT_01-29Hearing
Confining Layer	Pierre Shale	1190	1190	3700	3600			
Hydrocarbon	Parkman	3700	3600	4200	3980			
Hydrocarbon	Sussex	4300	4153	4600	4416			
Hydrocarbon	Shannon	5000	4742	5400	5082			
Confining Layer	Pierre Shale	5400	5082	7400	6983			
Confining Layer	Sharon Springs	7400	6983	7450	7025			
Hydrocarbon	Niobrara	7450	7025	17717	7161			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

Nearest wellbore in proposed unit is the Blehm 5 per anti-collision.

Nearest permitted or existing wellbore belonging to another operator is the Stout 1N (API #05-123-50477) DG Status per anti-collision.

This application is in a Comprehensive Area Plan No CAP #: \_\_\_\_\_

OGDP ID#: 480293 OGDP Name: Blehm 18-I Pad Expiration Date: 10/05/2024

Location ID: 481002 Location Name: Blehm 18-I Pad


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

Signed: \_\_\_\_\_ Print Name: Justin Garrett

Title: Regulatory Analyst Date: 10/29/2021 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: 11/19/2021

Expiration Date: 10/05/2024

**API NUMBER**

05 123 51622 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**

**COA Type**

**Description**

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, a second test is required between 6-9 months, of if there is pressure above 200 psi, 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 2 business days prior to MIRU (Spud Notice), for the first well/activity on the pad and provide 2 business days 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.
2 COAs	

## Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	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.
2	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.
3	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.
4	Drilling/Completion Operations	Open Hole Logging Exception: One of the first wells drilled on the pad will be logged with Cased hole Neutron Log with 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 in that well and have those logs attached. The Form 5 for each well shall clearly state "Open Hole Logging Exception - No open-hole logs were run" , will clearly identify the type of log and the well (by API#) in which open hole logs were run.

Total: 4 comment(s)

## Attachment List

<u>Att Doc Num</u>	<u>Name</u>
402378536	FORM 2 SUBMITTED
402484957	SURFACE AGRMT/SURETY
402790828	DIRECTIONAL DATA
402790829	DEVIATED DRILLING PLAN
402790831	WELL LOCATION PLAT
402791156	EXCEPTION LOC REQUEST
402802989	OPEN HOLE LOGGING EXCEPTION
402866113	OffsetWellEvaluations Data
402876884	OFFSET WELL EVALUATION

Total Attach: 9 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	11/16/2021
Engineer	Offset Wells Evaluated	11/12/2021
Permit	Permitting Review Complete.	11/09/2021
OGLA	The Commission approved OGDG # 480293 on 10/6/2021 for the Oil and Gas Location related to this Form 2. OGLA task passed.	11/01/2021

Total: 4 comment(s)