

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:

402989513

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: 1

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: 2587 Feet FSL 2427 Feet FWL

Latitude: 40.589653 Longitude: -104.707111

GPS Data: GPS Quality Value: 1.7 Type of GPS Quality Value: PDOP Date of Measurement: 04/27/2020

Ground Elevation: 4924

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: 100 FNL 470 FEL

Measured Depth of TPZ: 8887 True Vertical Depth of TPZ: 7437 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 11 Twp: 7N Rng: 66W Footage at BPZ: 100 FNL 470 FWL
Measured Depth of BPZ: 18650 True Vertical Depth of BPZ: 7447 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 11 Twp: 7N Rng: 66W Footage at BHL: 100 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: 2022 Feet
Building Unit: 2275 Feet
Public Road: 2420 Feet
Above Ground Utility: 64 Feet
Railroad: 5280 Feet
Property Line: 64 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.)
CODELL	CODL	407-3330	640	7N-66W 1: S2S2; 2: S2S2, 11: N2N2; 12: N2N2

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

WSU 5 & 6 within 407-3330: Township 7 North, Range 66 West, 6th P.M.
Section 1: S $\frac{1}{2}$ S $\frac{1}{2}$
Section 2: S $\frac{1}{2}$ S $\frac{1}{2}$
Section 11: N $\frac{1}{2}$ N $\frac{1}{2}$
Section 12: N $\frac{1}{2}$ N $\frac{1}{2}$

DRILLING PROGRAM

Proposed Total Measured Depth: 18650 Feet TVD at Proposed Total Measured Depth 7447 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: 1129 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? _____

Reuse Facility ID: _____ 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	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	18650	2585	18650	2500

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	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	4273	3943			
Hydrocarbon	Parkman	4273	3943	4673	4317			
Hydrocarbon	Sussex	4873	4469	5273	4802			
Hydrocarbon	Shannon	5573	5054	5973	5382			
Confining Layer	Pierre Shale	5973	5382	8173	7101			
Confining Layer	Sharon Springs	8173	7101	8229	7137			
Hydrocarbon	Niobrara	8229	7137	8473	7326			
Confining Layer	Ft Hays	8473	7326	8573	7378			Not Productive
Hydrocarbon	Codell	8573	7378	18650	7447			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

The nearest well in unit per 2-D calculation is the Ruby West 2 @ 440'.
 The nearest outside operated well per 2-D calculation is the Thornton 11V-404 (API: 05-123-36645) PR Status @ 1129'.

Bayswater plans to move a spudder rig to location as soon as the Form 2s are approved to expedite the drilling of the Ruby 7-J pad wells. Due to the schedule completion of the directly offset Topaz 6-I pad, the window to drill the Ruby wells without interference is small and would drastically delay the production if missed. We respectfully request that this Form be processed as quickly as possible to meet this operational timeline.

The portion of the overhead utility across the Ruby 7-J Pad has been removed, and the remaining portion of the overhead utility off site has been buried

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

Oil and Gas Development Plan Name Ruby 7-J Pad OGDID#: 481736

Location ID: 482392

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: Sr. Regulatory Analyst Date: 6/22/2022 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 type of use is required under Colorado law. 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: 7/18/2022

Expiration Date: 06/07/2025

API NUMBER
05 123 51754 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).
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

No	BMP/COA Type	Description
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

Att Doc Num	Name
2168539	EXCEPTION LOCATION REQUEST
402989513	FORM 2 SUBMITTED
403063088	OffsetWellEvaluations Data
403063121	DEVIATED DRILLING PLAN
403063124	WELL LOCATION PLAT
403063147	EXCEPTION LOC WAIVERS
403064626	LEGAL/LEASE DESCRIPTION
403064627	DIRECTIONAL DATA
403108694	OFFSET WELL EVALUATION

Total Attach: 9 Files

General Comments

User Group	Comment	Comment Date
Permit	Final Review Completed.	07/14/2022
Permit	Added the COA for built locations with the operator consent Uploaded the updated exception location request PDF from the operator 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)