

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:
402742817
Date Received:
07/13/2021

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

Amend
Refile
Sidetrack

TYPE OF WELL OIL GAS COALBED OTHER: _____
ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Well Name: Pickaroon 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: Mark Brown Phone: (720)350 8858 Fax: (303)893 2508
Email: mbrown@bayswater.us

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20080034

WELL LOCATION INFORMATION

Surface Location

QtrQtr: NESE Sec: 7 Twp: 7N Rng: 64W Meridian: 6
Footage at Surface: 1677 Feet FSL 302 Feet FEL
Latitude: 40.584710 Longitude: -104.583890
GPS Data: GPS Quality Value: 1.3 Type of GPS Quality Value: PDOP Date of Measurement: 06/14/2021
Ground Elevation: 4947
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: 7 Twp: 7N Rng: 64W Footage at TPZ: 820 FNL 470 FEL
Measured Depth of TPZ: 8220 True Vertical Depth of TPZ: 7156 FNL/FSL FEL/FWL
Base of Productive Zone (BPZ)
Sec: 12 Twp: 7N Rng: 65W Footage at BPZ: 820 FNL 470 FWL
Measured Depth of BPZ: 17612 True Vertical Depth of BPZ: 7136 FNL/FSL FEL/FWL
Bottom Hole Location (BHL)
Sec: 12 Twp: 7N Rng: 65W Footage at BHL: 820 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? 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: 01/07/2020

Comments: 1041WOGLA19-0030 Submitted 10/7/2019, Approved 1/7/2020

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.)

T7N R65W Section 12: W2, SE

Total Acres in Described Lease: 480 Described Mineral Lease is: Fee State Federal Indian

Federal or State Lease # _____

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 2986 Feet
Building Unit: 3019 Feet
Public Road: 290 Feet
Above Ground Utility: 272 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: 302 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	407-2513	1280	Sec: 7&12 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: 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: 664 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: 17612 Feet TVD at Proposed Total Measured Depth 7136 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: 141 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	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	HCP110	20	0	17612	2412	17612	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	10	10	501-1000	Groundwater Sample	DWR Receipt #0273312
Groundwater	Laramie/Fox Hills	10	10	776	776	0-500	Other	https://pubs.usgs.gov/sir/2014/5051/pdf/sir2014-5051.pdf
Groundwater	Upper Pierre	776	776	1800	1769	1001-10000	Other	https://cogcc.state.co.us/documents/library/AreaReports/DenverBasin/UPWQ_Report_Final_11_07_17.pdf
Confining Layer	Pierre Shale (upper)	1800	1769	4300	3879			
Hydrocarbon	Parkman	4300	3879	4700	4251			
Hydrocarbon	Sussex	4900	4405	5100	4593			
Hydrocarbon	Shannon	5600	4971	6000	5318			
Confining Layer	Pierre Shale (lower)	6000	5318	7700	6963			
Confining Layer	Sharon Springs	7700	6963	7800	6993			
Hydrocarbon	Niobrara	7800	6993	17612	7136			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

This Form 2 is being submitted as a refile of expiring API #05-123-48023. Bayswater has acquired these well permits from Confluence. Signed letter from Confluence in support for Bayswater is attached as correspondence.

There have been no new buildings constructed and no changes to the surrounding land use. The well site has been constructed. The Pickaroon 7-14-2L (API:05-123-48022) has been drilled and was logged. There are also no changes to the Surface & Minerals, Cultural Setbacks, or Spacing & Formations. All previously submitted notices, Surface Use Agreements, and letters are also still valid.

SHL will not change; TPZ and BHL are being respaced across 7-7N-64W & 12-7N-65W within the currently approved DSU boundaries of Order 407-2513.

The Pickaroon 1 (API: 05-123-48023) is using the API and former surface location of the Pickaroon 7-8-2L. The Pickaroon 2 (API: 05-123-48025) is using the API and former surface location of the Pickaroon 7-4-4L. The Pickaroon 3 (API: 05-123-48019) is using the API and former surface location of the Pickaroon 7-9-1L. The Pickaroon 4 (API: 05-123-48020) is using the API and former surface location of the Pickaroon 7-9-3L. The Pickaroon 5 (API: 05-123-48026) is using the API and former surface location of the Pickaroon 7-10-2L. The Pickaroon 6 (API: 05-123-48028) is using the API and former surface location of the Pickaroon 7-11-1L.

The nearest well in unit per anti-collision is updated to the Pickaroon 2. The nearest outside operated well per anti-collision is updated to Owl Creek 23 (API #05-123-12061) DA Status @ 141'. Well is DA Status; no 408.u is required.

This application is in a Comprehensive Area Plan No CAP #:
 OGD ID#: OGD Name: Expiration Date:

Location ID: 457632 Location Name: Pickaroon South

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: 7/13/2021 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: 10/6/2021

Expiration Date: 10/05/2024

API NUMBER
05 123 48023 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	1. If conductors are preset, operator shall comply with Notice to Operators: Procedures for Preset Conductors (dated September 1, 2016, revised October 6, 2016). 2. Operator shall comply with Notice to Operators: Interim Reclamation Procedures for Delayed Operations (dated January 5, 2017)
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.
Drilling/Completion Operations	Offset Wells Evaluated
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.
4 COAs	

Best Management Practices

No	BMP/COA Type	Description
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	Alternative Logging Program – An existing well on the pad was drilled and 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.

Total: 4 comment(s)

Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.
http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf

Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area.
<http://cogcc.state.co.us/documents/reg/Policies/PolicyGwaBradenheadMonitoringFinal.pdf>

Attachment List

Att Doc Num	Name
402742817	FORM 2 SUBMITTED
402743291	OffsetWellEvaluations Data
402743293	DEVIATED DRILLING PLAN
402743294	DIRECTIONAL DATA
402743295	WELL LOCATION PLAT
402745225	CORRESPONDENCE
402832822	OFFSET WELL EVALUATION

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA	Following additional analysis, the Director determined that this application meets the standard for the protection of public health, safety, and welfare and the environment, including wildlife resources set by SB 19-181. The Objective Criteria Review Memo (Doc# 1347855) can be found in the document file for Location ID 457632.	10/05/2021
OGLA	IN PROCESS - received requested information from Operator on 9/15/2021; COGCC review will resume and be conducted within 30 days (by 10/15/2021).	09/15/2021
OGLA	<p>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.</p> <p>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.</p> <p>In addition to all standard required information and attachments, the COGCC hereby confirms the following information is necessary for review:</p> <ol style="list-style-type: none"> 1. BMP – Odor. Provide a BMP addressing odors related to cuttings management. 2. BMP – Sound. Modify the sound BMP to address how long the sound walls will remain on the location. 	09/10/2021
OGLA	<p>Requested information from the operator and a Form 4 to provide BMPs for:</p> <ol style="list-style-type: none"> 1. Light Mitigation 2. Sound Mitigation 3. Odor Mitigation 4. Gas Takeaway. 5. Information on Stormwater Retention Pond. 	09/01/2021
Permit	Final Review Completed.	08/03/2021
Permit	<p>-Received consent from the operator to add/ change the following:</p> <ol style="list-style-type: none"> 1. Added the built location COA for refiles APDs 2. Added the open hole logging BMP <p>-Passed Permit Review</p>	07/30/2021
Permit	<p>-Rounded up the MD of the TPZ as per the directional survey</p> <p>Waiting on the operator's response about the following:</p> <ol style="list-style-type: none"> 1. Adding the built location COA for refiles APDs 2. Adding the open hole logging BMP to the APD. <p>NOTE: A drilled well (API 123-48022) on pad has been logged with resistivity.</p>	07/22/2021

Total: 7 comment(s)