

**APPLICATION FOR PERMIT TO:**

**Drill**       Deepen       Re-enter       Recomplete and Operate

TYPE OF WELL    OIL <input checked="" type="checkbox"/> GAS <input type="checkbox"/> COALBED <input type="checkbox"/> OTHER _____	Refiling <input type="checkbox"/>
ZONE TYPE    SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONES <input type="checkbox"/> COMMINGLE ZONES <input type="checkbox"/>	Sidetrack <input type="checkbox"/>

Date Received:

Well Name: Mojack      Well Number: N-28HN

Name of Operator: BAYSWATER EXPLORATION AND PRODUCTION LLC      COGCC Operator Number: 10261

Address: 730 17TH ST STE 610

City: DENVER      State: CO      Zip: 80202

Contact Name: Jennifer Grosshans      Phone: (303)928-7128      Fax: (303)218-5678

Email: regulatory@petro-fs.com

**RECLAMATION FINANCIAL ASSURANCE**

Plugging and Abandonment Bond Surety ID: 20080034

**WELL LOCATION INFORMATION**

QtrQtr: NWNE      Sec: 28      Twp: 7N      Rng: 64W      Meridian: 6

Latitude: 40.550684      Longitude: -104.551368

Footage at Surface:      230 feet      <sup>FNL/FSL</sup> FNL 1716 feet      <sup>FEL/FWL</sup> FEL

Field Name: WATTENBERG      Field Number: 90750

Ground Elevation: 4900      County: WELD

GPS Data:

Date of Measurement: 02/05/2014      PDOP Reading: 3.8      Instrument Operator's Name: Alan Hnizdo

If well is     Directional       Horizontal (highly deviated)      **submit deviated drilling plan.**

Footage at Top of Prod Zone:	<sup>FNL/FSL</sup>	<sup>FEL/FWL</sup>	Bottom Hole:	<sup>FNL/FSL</sup>	<sup>FEL/FWL</sup>
<u>465</u>	<u>FNL</u> <u>833</u>	<u>FEL</u>	<u>465</u>	<u>FSL</u> <u>861</u>	<u>FEL</u>
Sec: <u>28</u>	Twp: <u>7N</u>	Rng: <u>64W</u>	Sec: <u>28</u>	Twp: <u>7N</u>	Rng: <u>64W</u>

**LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT**

Surface Ownership:     Fee       State       Federal       Indian

The Surface Owner is:     is the mineral owner beneath the location.  
(check all that apply)     is committed to an Oil and Gas Lease.  
    has signed the Oil and Gas Lease.  
    is the applicant.

The Mineral Owner beneath this Oil and Gas Location is:     Fee       State       Federal       Indian

The Minerals beneath this Oil and Gas Location will be developed by this Well:    Yes

The right to construct the Oil and Gas Location is granted by:    oil and gas lease

Surface damage assurance if no agreement is in place: \_\_\_\_\_      Surface Surety ID: \_\_\_\_\_

## LEASE INFORMATION

Using standard QtrQtr, Sec, Twp, Rng format, describe one entire mineral lease that will be produced by this well (Describe lease beneath surface location if produced. Attach separate description page or map if necessary.)

Township 7 North, Range 64 West of the 6th P.M.  
Section 28: NE/4

Total Acres in Described Lease: 159 Described Mineral Lease is:  Fee  State  Federal  Indian

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

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 0 Feet

## CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 2088 Feet  
Building Unit: 2152 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 1704 Feet  
Above Ground Utility: 1686 Feet  
Railroad: 5280 Feet  
Property Line: 690 Feet

### INSTRUCTIONS:

- All measurements shall be provided from center of the Proposed Well to nearest of each cultural feature as described in Rule 303.a.(5).  
- 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, High Occupancy Building Unit, and Designated Outside Activity Area - as defined in 100-Series Rules.

## DESIGNATED SETBACK LOCATION INFORMATION

Check all that apply. This location is within a:  Buffer Zone  
 Exception Zone  
 Urban Mitigation Area

- Buffer Zone – as described in Rule 604.a.(2), within 1,000' of a Building Unit  
- Exception Zone - as described in Rule 604.a.(1), within 500' of a Building Unit.  
- Urban Mitigation Area - as defined in 100-Series Rules.

Pre-application Notifications (required if location is within 1,000 feet of a building unit):

Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government: \_\_\_\_\_

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: \_\_\_\_\_

## SPACING and UNIT INFORMATION

Distance from Completed Portion of Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 174 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 465 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): \_\_\_\_\_ Unit Number: \_\_\_\_\_

## SPACING & FORMATIONS COMMENTS

Nearest wellbore permitted or completed in the same formation is Mojack 1-28 API #05-123-32136.  
NIOBRARA: Proposed Spacing Unit is described as the E2E2 of Section 28.

## 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		160	GWA

## DRILLING PROGRAM

Proposed Total Measured Depth: 11620 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 174 Feet (Including plugged wells)

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 H2S Drilling Operations Plan)

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? No

BOP Equipment Type:  Annular Preventor  Double Ram  Rotating Head  None

## GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 318A

## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Methods: Other

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Other

Other Disposal Description:

Reeves Mud Field COGCC Facility 435839 will be used for offsite disposal.

Beneficial reuse or land application plan submitted? No

Reuse Facility ID: \_\_\_\_\_ or Document Number: \_\_\_\_\_

## CASING PROGRAM

Casing Type	Size of Hole	Size of Casing	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
SURF	12+1/4	9+5/8	36	0	750	333	750	0
1ST	8+3/4	7+0/0	26	0	7280	623	7280	400
1ST LINER	6+1/8	4+1/2	11.6	6980	11620			

Conductor Casing is NOT planned

## DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)
- Rule 604.b.(1)A. Exception Location (existing or approved Oil & Gas Location now within a Designated Setback as a result of Rule 604.a.)
- Rule 604.b.(1)B. Exception Location (existing or approved Oil & Gas Location is within a Designated Setback due to Building Unit construction after Location approval)
- Rule 604.b.(2) Exception Location (SUA or site-specific development plan executed on or before August 1, 2013)
- Rule 604.b.(3) Exception Location (Building Units constructed after August 1, 2013 within setback per an SUA or site-specific development plan)

## GREATER WATTENBERG AREA LOCATION EXCEPTIONS

Check all that apply:

- Rule 318A.a. Exception Location (GWA Windows).
- Rule 318A.c. Exception Location (GWA Twinning).

## RULE 502.b VARIANCE REQUEST

- Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number \_\_\_\_\_

## OTHER LOCATION EXCEPTIONS

Check all that apply:

- Rule 318.c. Exception Location from Rule or Spacing Order Number \_\_\_\_\_
- Rule 603.a.(2) Exception Location (Property Line Setback).

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

## OPERATOR COMMENTS AND SUBMITTAL

Comments Bayswater Exploration & Production, LLC (Bayswater) proposes to drill a well in Section 28, Township 7 North, Range 64 West in Weld County, Colorado, as follows:  
SHL: 230' FNL and 1716' FEL - Falls outside a legal GWA Drilling Window  
Top of Production: 465' FNL and 833' FEL  
BHL: 465' FSL and 861' FEL

Bayswater intends to drill the well to the Niobrara formation at 11,620' MD and 6,998' TVD.

Letter to Director for COGCC Rule 318A.m. Minimum IntraWell Distance is not needed for this well. No wells lie within 150' of the proposed horizontal lateral of the proposed well.

Letter to the Director for COGCC Rules 318A.a. and 318A.c. Exception Location for GWA Windows and GWA Twinning Request, attached as Exception Loc Request.

Letter to Director for COGCC Rule 318A.e. Proposed Spacing Unit, attached as Proposed Spacing Unit.

This application is in a Comprehensive Drilling Plan \_\_\_\_\_ CDP #: \_\_\_\_\_

Location ID: \_\_\_\_\_

Is this application being submitted with an Oil and Gas Location Assessment application? \_\_\_\_\_ Yes \_\_\_\_\_

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

Signed: \_\_\_\_\_ Print Name: Jennifer Grosshans \_\_\_\_\_

Title: Regulatory Technician \_\_\_\_\_ Date: \_\_\_\_\_ Email: regulatory@petro-fs.com \_\_\_\_\_

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: \_\_\_\_\_ Director of COGCC \_\_\_\_\_ Date: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

API NUMBER

05

## 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.

## Best Management Practices

**No BMP/COA Type**

**Description**

No BMP/COA Type	Description
1 Planning	When feasible develop multiple well sites by using directional drilling to reduce cumulative impacts and adverse impacts on wildlife resources.

2	General Housekeeping	<p>Fence the well site after drilling to restrict public and wildlife access. Keep well site location, the road, and the pipeline easement free of noxious weeds, litter and debris.</p> <p>Spray for noxious weeds, and implement dust control, as needed.</p> <p>Operator will not permit the release or discharge of any toxic or hazardous chemicals or wastes on Owner's Land.</p> <p>Construct and maintain gates where any roads used by operator, its employees, or contractors cross through fences on the leased premises.</p>
3	Storm Water/Erosion Control	<p>Use water bars, and other measures to prevent erosion and non-source pollution. Implement and maintain BMPs to control stormwater runoff in a manner that minimizes erosion, transport of sediment offsite, and site degradation.</p> <p>Co-locate gas and water gathering lines whenever feasible, and mitigate any erosion problems that arise due to the construction of any pipeline(s).</p>
4	Dust control	<p>Traffic dust control will be done utilizing water on all County Roads leading up to the pad site.</p>
5	Construction	<p>Remove only the minimum amount of vegetation necessary for the construction of roads and facilities.</p> <p>Conserve topsoil during excavation and reuse as cover on disturbed areas to facilitate regrowth of vegetation.</p> <p>No construction or routine maintenance activities will be performed during periods when the soil is too wet to adequately support construction equipment.</p>
6	Noise mitigation	<p>Sound walls and/or hay bales will be used to surround the well site during drilling operations to mitigate noise.</p>
7	Drilling/Completion Operations	<p>Prior to drilling operations, Operator may perform an anti-collision review of existing offset wells that have the potential of being within close proximity of the proposed well. This anti-collision review may include MWD or gyro surveys and surface locations of the offset wells with included error of uncertainty per survey instrument, and compared against the proposed well path with its respective error of uncertainty. If current surveys do not exist for the offset wells, Operator may have gyro surveys conducted to verify bottom hole location. The proposed well may only be drilled if the anti-collision review results indicate that the risk of collision is sufficiently low as defined by the anticollision plan, with separation factors greater than 1.5, or if the risk of collision has been mitigated through other means including shutting in wells, plugging wells, increased drilling fluid in the event of lost returns or as is appropriate for the specific situation. In the event of an increased risk of collision, that risk will be mitigated to prevent harm to people, the environment or property. For the proposed well, upon conclusion of drilling operations, an as-constructed directional survey will be submitted to the COGCC with the Form 5.</p> <p>Pursuant to COGCC 207.a. ("Policy"), Bayswater Exploration &amp; Production, LLC, acknowledges and will comply with said policy for Bradenhead Monitoring during hydraulic fracturing treatments in the Greater Wattenberg Area (GWA), dated May 29, 2012.</p> <p>A closed-loop drilling mud system will be used to preclude the use of an earthen reserve pit. Light Sources will likewise be directed downwards and away from occupied structures where possible. Once the drilling and completion rigs leave the site, there will be no permanently installed lighting on site.</p>
8	Interim Reclamation	<p>Utilize only such area around each producing well as is reasonably necessary. Restore the remainder of the well site location to its original condition within a reasonable time after the completion of operations. All reseeding shall be done with grasses consistent with the Rocky Mountain native mix or other grasses reasonably requested by surface owner and during planting period suggested by Owner.</p>
9	Final Reclamation	<p>All surface restoration shall be accomplished to the satisfaction of Owner. All reseeding shall be done with grasses consistent with the Rocky Mountain native mix or other grasses reasonably requested by surface owner and during planting period suggested by Owner. Final reclamation shall be completed to the reasonable satisfaction of the Owner as soon as practical after installation (weather permitting) and in accordance with regulatory agency standards (BLM/COGCC).</p>

Total: 9 comment(s)

## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400618491	OffsetWellEvaluations Data
400618681	WELL LOCATION PLAT
400618709	SURFACE AGRMT/SURETY
400618729	DIRECTIONAL DATA
400618748	DEVIATED DRILLING PLAN
400618780	PROPOSED SPACING UNIT
400618829	EXCEPTION LOC REQUEST

Total Attach: 7 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>

Total: 0 comment(s)