

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 _____ ZONE TYPE SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONES <input type="checkbox"/> COMMINGLE ZONES <input type="checkbox"/>	Refiling <input type="checkbox"/> Sidetrack <input type="checkbox"/>
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Date Received:
11/12/2017

Well Name: Ackard North Well Number: 2-35-1NBH

Name of Operator: PETROSHARE CORPORATION COGCC Operator Number: 10454

Address: 9635 MAROON CIRCLE #400

City: ENGLEWOOD State: CO Zip: 80112

Contact Name: Meghan Grimes Phone: (720)441-0720 Fax: ()

Email: mgrimes@petrosharecorp.com

RECLAMATION FINANCIAL ASSURANCE
Plugging and Abandonment Bond Surety ID: 20170053

WELL LOCATION INFORMATION

QtrQtr: SESW Sec: 2 Twp: 2S Rng: 66W Meridian: 6

Latitude: 39.901580 Longitude: -104.745490

Footage at Surface: <u>600</u> Feet	FNL/FSL	<u>1980</u> Feet	FEL/FWL
	FSL		FWL

Field Name: WATTENBERG Field Number: 90750

Ground Elevation: 5201 County: ADAMS

GPS Data:
Date of Measurement: 06/23/2017 PDOP Reading: 1.7 Instrument Operator's Name: Brian Rottinghaus

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

Footage at Top of Prod Zone: <u>460</u> Feet	FNL/FSL	<u>1272</u> Feet	FEL/FWL	Bottom Hole: <u>355</u> Feet	FNL/FSL	<u>1272</u> Feet	FEL/FWL
	FSL		FWL		FNL		FWL

Sec: 2 Twp: 2S Rng: 66W Sec: 35 Twp: 1S Rng: 66W

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: Surface Use Agreement

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 2 South, Range 66 West
Section 2: S/2

Total Acres in Described Lease: 320 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: 701 Feet
 Building Unit: 701 Feet
 High Occupancy Building Unit: 5280 Feet
 Designated Outside Activity Area: 5280 Feet
 Public Road: 568 Feet
 Above Ground Utility: 247 Feet
 Railroad: 5280 Feet
 Property Line: 455 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: 10/27/2017

SPACING and UNIT INFORMATION

Distance from completed portion of proposed wellbore to nearest completed portion of offset wellbore permitted or completed in the same formation: 412 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 460 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): _____ Unit Number: _____

SPACING & FORMATIONS COMMENTS

Proposed drilling and spacing unit application will be filed for January 2018 Hearing. Docket # TBD.
 T2S R66W Sec.2: all
 T1S R66W Sec.35: all

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		1280	See comment

DRILLING PROGRAM

Proposed Total Measured Depth: 17743 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: 572 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 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? Yes

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: Commercial Disposal

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Beneficial reuse or land application plan submitted? _____

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
CONDUCTOR	20	16	40	0	50	100	50	0
SURF	13+1/2	9+5/8	36	0	1800	630	1800	0
1ST	8+1/2	5+1/2	20	0	17743	2750	17743	0

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 The Ackard North 2-35-1NCH, operated by Petroshare Corporation, is the nearest well in the same formation, the distance was measured in 3D.

The nearest wellbore belonging to another operator was measured to Champlin 117 G#4, (API: [#05-001-07335]), operated by Great Western Operating Company. The distance was measured in 3D. The well status is PR.

The BHL location will be drilled past the 460' setback to 355' FNL, however the deepest perforation will be at 460' from the unit boundary. PetroShare affirms the wellbore will not be completed within the 460' boundary setback.

Attached are waivers signed by building unit owners within the 1000' buffer zone & the surface owner waiving the 30 day Pre-App period.

This application is in a Comprehensive Drilling Plan No 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: Christi Ng

Title: Sr. Regulatory Analyst Date: 11/12/2017 Email: cng@progressivepcs.net

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.

COA Type

Description

Best Management Practices

No BMP/COA Type	Description
1 Drilling/Completion Operations	Drill stem tests (Rule 604.c.(2)L) Conventional drill stem tests will not be conducted on DJ Basin horizontal wells currently being executed or planned by Petro Share Corporation. If plans change in the future a well specific drill stem testing plan will be prepared for that particular well. Note that Petro Share Corporation may elect to use one of several available wireline deployed tools for the purpose of measuring down hole formation pressures and/or collecting down hole fluid samples from the target formation(s) of a particular well.
2 Drilling/Completion Operations	Identification of P&A wells (Rule 604.c.(2)U) Petro Share Corporation shall identify the location of the P&A wellbore with a permanent monument as specified in Rule 319.a.(5). The operator shall also inscribe or imbed the well number and date of plugging upon the permanent monument. P&A wellbores shall be cutoff well below ground surface in agricultural areas to provide for landowners to safely farm the reclaimed well area.
3 Drilling/Completion Operations	Green Completions (Rule 604.c.(2)C). As applicable, per COGCC Rule 805, Petro Share Corporation will utilize all reasonable and cost-efficient best practices, including but not limited to those listed in Rule 805, to maximize resource recovery and mitigate releases to the environment. Initial frac and drill out effluent is routed through a sand catcher/trap and a junk/sand tank to remove sand and well frac debris.
4 Drilling/Completion Operations	Wellbore Collision Prevention – Rule 317.r Prior to drilling operations, Petro Share Corporation will perform an anti-collision scan of existing offset wells that have the potential of being within close proximity of the proposed well. This anti-collision scan will include definitive MWD or gyro surveys 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 will only be drilled if the anti-collision scan results indicate that there is not a risk for collision, or harm to people or the environment.
5 Drilling/Completion Operations	Stimulation Setback – Rule 317.s Petro Share Corporation shall obtain signed written consent for any portion of the proposed wellbore's treated interval within 150' of an existing (producing, Shut-in, or temporarily abandoned) or permitted oil and gas well's treated interval belonging to another operator prior to completion of the well.
6 Drilling/Completion Operations	BOPE for well servicing (Rule 604.c.(2)J) A BOPE with a minimum pressure rating of 3,000 psi will be utilized. At a minimum it will consist of 2 ram preventers and 1 annular preventer. The blind rams will be positioned below the pipe rams. A backup system of pressure control will be onsite consisting of at a minimum 1,000 psi accumulator (backup pressure). Accumulator is tested to 1,000 psi. Operator may use fixed sized pipe rams matching the tubular size. The annular preventer will be pressure tested to 250 psi low and 2,000 psi high for 10 minutes each. The ram preventers will be tested to 250 psi low and 2,500 psi high for 10 minutes each. All remaining well control equipment will be tested to 250 psi low and 2,500 psi high for 10 minutes each. The pressure tests will be conducted when the equipment is first installed and every 30 days thereafter. Pipe rams and blind rams will be function tested before every well service operation. Annual BOP inspections and pressure tests will be performed by the service company and will be charted & retained for 1 year. Backup stabbing valves shall be used on operations that require reverse circulation. Valves will be pressure tested before each well service operation in low pressure and high pressure range. The Petro Share Corporation onsite representative will be certified in Well Control Operations by a Well-Cap certified training service.
7 Drilling/Completion Operations	Bradenhead Monitoring Petro Share Corporation will comply with the "COGCC Policy for Bradenhead Monitoring during Hydraulic Fracturing Treatments in the Greater Wattenberg Area", dated May 29, 2012

8	Drilling/Completion Operations	Multi Well Open-Hole Logging – Rule 317.p One of the first wells drilled on the pad will be logged with an open-hole Resistivity and Gamma Ray Log from the kick-off point into the surface casing. All wells on the pad will have a cement bond log with gamma-ray run on production casing (intermediate casing or production liner if run) to the surface casing. The horizontal portion of every well will be logged with a MWD/GR 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 an open hole log shall clearly state “No open-hole logs were run” and shall clearly identify (by API#, well name and number) the well in which open-hole logs were run.
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Total: 8 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

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401447510	FORM 2 SUBMITTED
401452262	OffsetWellEvaluations Data
401452264	WELL LOCATION PLAT
401452265	DEVIATED DRILLING PLAN
401452266	DIRECTIONAL DATA
401454705	EXCEPTION LOC REQUEST
401456296	SURFACE AGRMT/SURETY
401456298	EXCEPTION LOC WAIVERS
401460350	WAIVERS
401460351	WAIVERS

Total Attach: 10 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit (Rejected)	REJECTION COMMENT: This APD is being rejected per the Rejection Process criteria that a pad of Form 2's requiring a total of four or more attachments to be added will be rejected. This pad requires a complete and accurate Offset Well Evaluation for a total of 16 APD's. The Operator and COGCC staff have been consulted.	02/22/2019
Permit	Passed Completeness.	11/20/2017
Permit	Returned to draft per operator's request.	11/15/2017

Total: 3 comment(s)

Public Comments

No public comments were received on this application during the comment period.