

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

Date Received:
06/30/2016

TYPE OF WELL OIL GAS COALBED OTHER _____ Refilling

ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES Sidetrack

Well Name: Bert Federal Well Number: 29-13

Name of Operator: GRMR OIL & GAS LLC COGCC Operator Number: 10524

Address: 370 INTERLOCKEN BLVD SUITE 550

City: BROOMFIELD State: CO Zip: 80021

Contact Name: Kristina Lee Phone: (303)659-9581 Fax: ()

Email: krislee@skybeam.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20140073

WELL LOCATION INFORMATION

QtrQtr: Lot2 Sec: 29 Twp: 5N Rng: 90W Meridian: 6

Latitude: 40.350551 Longitude: -107.525274

Footage at Surface: 648 Feet FSL 886 Feet FWL

Field Name: SAND WASH HORIZONTAL Field Number: 76400

NIOBRARA

Ground Elevation: 6915.6 County: MOFFAT

GPS Data:

Date of Measurement: 02/18/2016 PDOP Reading: 1.4 Instrument Operator's Name: D. PETTY

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

Footage at Top of Prod Zone: FNL/FSL FEL/FWL Bottom Hole: FNL/FSL FEL/FWL

691 FSL 336 FWL 922 FSL 1491 FWL

Sec: 29 Twp: 5N Rng: 90W Sec: 30 Twp: 5N Rng: 90W

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.)

T4N-R90W
Sec10: Lots 1, 2, 3, 4, NESW, SE
Sec11: SW
Sec14: N2NW
Sec15: N2NE
T5N-R90W
Sec29: Lot 2
Sec30: Lot 20
Sec31: Lots 5, 11, 16, SENE, SWSE, E2SE
Sec32: Lots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, NENW, W2W2
Sec33: Lots 4, 5, 6, 9, 10, 11, 12, 13, 14, 15, 16
Sec34: Lots 13, 14"

Total Acres in Described Lease: 2252 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: 2577 Feet
Building Unit: 5280 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 257 Feet
Above Ground Utility: 348 Feet
Railroad: 5280 Feet
Property Line: 452 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 proposed wellbore to nearest completed portion of offset wellbore permitted or completed in the same formation: 1180 Feet

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

Federal or State Unit Name (if appl): WILLIAMS FORK Unit Number: COC074956X

SPACING & FORMATIONS COMMENTS

This well is within a federal unit; spacing is not applicable.

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			

DRILLING PROGRAM

Proposed Total Measured Depth: 8239 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: 60 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? 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 609

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Methods: Commercial Disposal

Cuttings Disposal: ONSITE Cuttings Disposal Method: Cuttings trench

Other Disposal Description:

Water based cuttings and fluids will be dried and buried onsite in a trench. Onsite sifter will be used to monitor TPH levels per 900 series rule and table 910-1 Cuttings that exceed limit will be dried and trucked to offsite disposal facility.

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	26	20	104	0	60	210	60	0
SURF	17+1/2	13+3/8	54.5	0	960	620	960	0
1ST	12+1/4	9+5/8	36	0	3900	380	3900	0
2ND	8+3/4	5+1/2	15.5	0	8239			

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

This application is in a Comprehensive Drilling Plan No CDP #: _____

Location ID: 391914

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: Kristina Lee

Title: Regulatory Consultant Date: 6/30/2016 Email: krislee@skybeam.com

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 and applicable orders and is hereby approved.

COGCC Approved: Matthew Lee Director of COGCC Date: 11/14/2016

Expiration Date: 11/13/2018

API NUMBER
05 081 07833 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.

COA Type

Description

	<p>1)Operator shall comply with the most current revision of the Northwest Notification Policy.</p> <p>2)Minimum surface casing setting depth requirements: 50' below the base of the Morapos Formation with the shoe in Mancos Shale or 960', as proposed by the operator, whichever is deeper. Full cement to surface is required for the surface casing; increase cement volume as necessary to accomplish that objective. Refer to COGCC's comment on this form regarding the operator's prognosed depth to the Morapos Formation.</p> <p>3)Operator shall provide cement coverage from the intermediate casing shoe (9+5/8" First String) to a minimum of 200' above the surface casing shoe to provide provide isolation of all formations that are not otherwise covered by surface casing. Verify intermediate casing cement coverage with a cement bond log.</p>
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Best Management Practices

No BMP/COA Type

Description

1	Storm Water/Erosion Control	A Storm water management plan will be prepared and will meet all requirements of the COGCC & CDPHE. Stormwater BMPs will be put in place to control erosion prior to constructing the well pad and access road.
2	Material Handling and Spill Prevention	Spill Prevention Plans (SPCC) are in place to address material releases and to prescribe materials handling BMPs for the facility. "Good house-keeping" measures will be taken to ensure proper waste disposal
3	Construction	Because the well head location is located on the filled portion of the pad, extra and sufficient compaction measures will be taken to ensure drilling rig stability.
4	Drilling/Completion Operations	Open-hole Resistivity Log with Gamma Ray Log will be run from TD into the surface casing. A Cement Bond Log with Gamma-Ray will be run on production casing, or on intermediate casing if a production liner is run. The Form 5, Completion Report, will list all logs run and have those logs attached.

Total: 4 comment(s)

Applicable Policies and Notices to Operators

Policy
NW Colorado Notification Policy. http://cogcc.state.co.us/documents/reg/Policies/nw_notification_procedures.pdf
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>
2168194	WELL LOCATIONPLAT
401046965	FORM 2 SUBMITTED
401047187	DEVIATED DRILLING PLAN
401047193	DIRECTIONAL DATA
401071168	FED. DRILLING PERMIT
401071169	SURFACE AGRMT/SURETY
401077794	OFFSET WELL EVALUATION

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Operator approves adding the location ID # 391914. Final review complete.	11/10/2016
Permit	Attached missing well location plat from operator. Added plugging bond as per operator. Corrected that right to construct is by lease as per operator. Removed Federal lease number with operator approval. Ready to pass.	09/13/2016
Permit	Lease description for Fed Lands is incorrect. S/B 528 Acres. Distance to lease line corrected to "0" with operator approval. There is not well location plat. What about the Beaver Durham 13-19 is a P&A'd well on this location.	07/25/2016
Engineer	Per operator removed 2nd string cement data. String will be uncemented liner. Operator states that this well will not be hydraulically stimulated.	07/14/2016
Engineer	Emailed operator regarding second string cement and stimulation plans. Attached offset well list. Evaluated offset PA well 081-06267 Beaver-Durham #13-29. Surface casing set at 304', 1st string set at 3479' w/425 sx, slotted liner to 4630'. Liner pulled, well abandoned with CIBP at 3140', hole filled with drilling mud, and 10 sx at surface. Niobrara top reported at 3475'. Mitigation required for offset stimulation. Mitigation will be required if plans change to include hydraulic stimulation. Evaluated offset PR well 081-07659 Harper Hill #2-29. Surface casing set at 850', Morapos reported from 385' to 594'. Well is completed in the Niobrara and meets standards. No mitigation required. Evaluated offset PR well 081-07593 Durham #4-31. Surface casing set at 395' and intermediate casing set at 3003'. Well is completed in the Niobrara and meets standards. No mitigation required. Evaluated offset PR well 081-07592 Durham #7-32. Surface casing set at 435' and intermediate casing set at 3041' cemented to surface. Morapos top reported at 165'. Well is completed in the Niobrara and meets standards. No mitigation required.	07/13/2016
Permit	Passed completeness.	07/06/2016

Total: 6 comment(s)