

FORM
2
Rev
08/16

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:
401616352

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

Date Received:
05/22/2018

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

Refiling
Sidetrack

Well Name: Rinn Valley West Well Number: N18-20-4N
Name of Operator: EXTRACTION OIL & GAS INC COGCC Operator Number: 10459
Address: 370 17TH STREET SUITE 5300
City: DENVER State: CO Zip: 80202
Contact Name: Kelsi Welch Phone: (720)354-4607 Fax: ()
Email: kwelch@extractionog.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20130028

WELL LOCATION INFORMATION

QtrQtr: SESE Sec: 18 Twp: 2N Rng: 68W Meridian: 6
Latitude: 40.132044 Longitude: -105.039275

Footage at Surface: 207 Feet FNL/FSL FSL 729 Feet FEL/FWL FEL

Field Name: WATTENBERG Field Number: 90750
Ground Elevation: 4942 County: WELD

GPS Data:
Date of Measurement: 01/31/2018 PDOP Reading: 1.2 Instrument Operator's Name: Travis Winnicki

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
460 FSL 1120 FEL 2180 FSL 1120 FEL
Sec: 18 Twp: 2N Rng: 68W Sec: 6 Twp: 2N Rng: 68W

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.)

Please see attached mineral lease map.

Total Acres in Described Lease: 219 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: 1732 Feet
 Building Unit: 1844 Feet
 High Occupancy Building Unit: 5280 Feet
 Designated Outside Activity Area: 5280 Feet
 Public Road: 2397 Feet
 Above Ground Utility: 2242 Feet
 Railroad: 5280 Feet
 Property Line: 207 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: 320 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

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	407-2458	1440	6:S2;7:All;18:N2,SE

DRILLING PROGRAM

Proposed Total Measured Depth: 19955 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: 2 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	24	16	42	0	80	100	80	0
SURF	12+1/4	9+5/8	36	0	1500	400	1500	0
1ST	8+1/2	5+1/2	20	0	19955	2689	19955	

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 distance to the completed portion of the nearest well on the "Spacing & Formations" tab was measured to the proposed Rinn Valley West N18-20-5C in 2D via COGCC GIS Mapping. The "Distance from the proposed wellbore to the nearest existing or proposed wellbore belonging to another operator" on the drilling & waste plans tab is measured to Crestone Peak's Williams 3A-18H well. Distance was measured 3D via the anti-collision report (attached as "other") because it is less than 150' from the proposed wellbore.

The subject wellbore will be drilled less than 150' from the treated intervals of the Williams 3A-18H (API#05-123-33423) and Williams 18-16 (API#05-123-19113) owned by Crestone Peak and the Serafini Gas Unit 1 (API#05-123-10290) and Powell 1 (API#05-123-10814) owned by Top Operating. Please see 317.s Stimulation Setback Consents attached.

This well has a bottom-hole location beyond the unit boundary setback. The bottom of the completed interval will be within the unit boundary setback at 2170' FSL and 1120' FEL of Section 6. The wellbore beyond the unit boundary setback will be physically isolated and will not be completed.

The surface owner has waived Rules 318A.a. & 318A.c. in the SUA, highlighted on page 6 of the attached SUA.

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: 455340

Is this application being submitted with an Oil and Gas Location Assessment application? No

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

Signed: _____ Print Name: Kelsi Welch

Title: Regulatory Analyst Date: 5/22/2018 Email: kwelch@extractionog.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:  Director of COGCC Date: 7/25/2018

Expiration Date: 07/24/2020

API NUMBER
05 123 47481 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.

<u>COA Type</u>	<u>Description</u>
	Operator will ensure the wellbore beyond the unit boundary setback is physically isolated and is not completed. In the Operator Comments on the Form 5A the operator will (1) report the footages from the section lines of the bottom of the completed interval, (2) describe how the wellbore beyond the unit boundary setback is physically isolated, and (3) certify that none of the wellbore beyond the setback was completed.
	Operator acknowledges the proximity of the non-operated listed wells. Operator agrees to: provide mitigation option 1 or 2 (per the DJ Basin Horizontal Offset Policy) to mitigate the situation, ensure all applicable documentation is submitted based on the selected mitigation option chosen, and submit a Form 42 ("OFFSET MITIGATION COMPLETED") stating that appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well. 05-123-11075, MAYEDA, JOHN Y. 2 05-123-10814, POWELL 1 05-123-10290, SERAFINI GAS UNIT 1 05-123-11570, REGNIER FARMS B UNIT 1
	1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU (spud notice) for the first well activity with a rig on the pad and provide 48 hour spud notice via Form 42 for all subsequent wells drilled on the pad. 2) Comply with Rule 317.j. and provide cement coverage from TD to a minimum of 200' above Niobrara and from 200' below Shannon to 200' above Sussex. Verify coverage with cement bond log. 3) Oil-based drilling fluid is to be used only after all fresh water aquifers are covered.
	Bradenhead tests shall be performed according to the following schedule and the Form 17 submitted within 10 days of each test: 1) Within 60 days of rig release and prior to stimulation and 2) If a delayed completion, 6 months after rig release and prior to stimulation. 3) Within 30 days after first production, as reported on Form 5A. If a bradenhead test reports a surface casing pressure greater than 200 psig stimulation is not allowed until the Engineering Supervisor has been consulted.

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	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.
2	Drilling/Completion Operations	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	317.p 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 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 "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: 3 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 Check List

<u>Att Doc Num</u>	<u>Name</u>
401616352	FORM 2 RESUBMITTED
401646392	FORM 2 SUBMITTED
401646393	FORM 2 REJECTED
401649361	OffsetWellEvaluations Data
401649386	WELL LOCATION PLAT
401649387	DEVIATED DRILLING PLAN
401649388	DIRECTIONAL DATA
401649391	OTHER
401649393	SURFACE AGRMT/SURETY
401649397	EXCEPTION LOC REQUEST
401649401	MINERAL LEASE MAP
401649406	STIMULATION SETBACK CONSENT
401652282	STIMULATION SETBACK CONSENT
401715154	OFFSET WELL EVALUATION

Total Attach: 14 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review complete.	07/25/2018
Permit	- Added approved spacing order number and deleted "pending docket" comment. - The associated 2A was approved 6/9/2018; deleted the Related Forms doc#, added Loc ID#, and changed "this application was submitted with an OGLA application" to NO. Permitting review complete.	07/12/2018
Permit	Attached signed Stimulation Setback Consent letter per Operator request. Passed completeness.	05/24/2018
Permit	REJECTION COMMENT: This APD is being rejected per the Rejection Process criteria that a pad of Form 2s requiring a total of four or more attachments to be revised will be rejected. This pad requires the anti-collision report (labeled as "Other") to be deleted for a total of 13 APDs. In addition, there are numerous well distance errors and missing data. Operator and COGCC staff have been consulted.	05/18/2018
Permit	- Corrected cultural distance to nearest building, building unit, public road and utility.	05/18/2018
Permit	Status Pending - contacted operator for corrections: - BHL footage (2180 FSL) puts the BHL at ~451' from the unit boundary per measurements shown on the attached well location plat. Request a revision to BHL or a comment that the wellbore will not be completed beyond the 460' unit setback. - revise distance to nearest well in same formation and associated comment; should be measured to the nearest unit well. - unit config data field should not be blank. - add comment that exception location waiver is found on page 6 of SUA.	05/18/2018
Permit	Passed Completeness.	04/30/2018

Total: 7 comment(s)

