

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:
 07/15/2019

Well Name: <u>VIC</u>	Well Number: <u>29W-20-1N</u>
Name of Operator: <u>EXTRACTION OIL & GAS INC</u>	COGCC Operator Number: <u>10459</u>
Address: <u>370 17TH STREET SUITE 5300</u>	
City: <u>DENVER</u>	State: <u>CO</u>
	Zip: <u>80202</u>
Contact Name: <u>Kelsi Welch</u>	Phone: <u>(720)354-4607</u>
	Fax: ()
Email: <u>kwelch@extractionog.com</u>	

RECLAMATION FINANCIAL ASSURANCE
 Plugging and Abandonment Bond Surety ID: 20130028

WELL LOCATION INFORMATION

QtrQtr: SENE Sec: 20 Twp: 7N Rng: 67W Meridian: 6
 Latitude: 40.560843 Longitude: -104.908790

Footage at Surface:	<u>2260</u>	Feet	FNL/FSL	<u>273</u>	Feet	FEL/FWL
	<u>FNL</u>		<u>FNL</u>	<u>273</u>		<u>FEL</u>

Field Name: WATTENBERG Field Number: 90750
 Ground Elevation: 5004 County: WELD

GPS Data:
 Date of Measurement: 05/17/2018 PDOP Reading: 1.3 Instrument Operator's Name: Ross Todd

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
<u>440</u>	<u>FNL</u>	<u>460</u>	<u>440</u>	<u>FNL</u>	<u>460</u>
<u>Sec: 29</u>	<u>Twp: 7N</u>	<u>Rng: 67W</u>	<u>Sec: 30</u>	<u>Twp: 7N</u>	<u>Rng: 67W</u>

LOCAL GOVERNMENT INFORMATION

County: WELD Municipality: N/A

Per § 34-60-106 (1)(f)(I)(A), the following questions pertain to the "local government with jurisdiction to approve the siting of the proposed oil and gas location."

The local government with jurisdiction is: County

Does the local government with jurisdiction regulate the siting of Oil and Gas Locations, with respect to this COGCC application? If the local government has waived its right to precede the COGCC in siting determination, indicate by selecting "NO" here and selecting "Waived" below. 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 local government siting permit type is: WOGLA

The local government siting permit was filed on: 11/01/2018

The disposition of the application filed with the local government is: Approved

Additional explanation of local process:

The WOGLA Application was approved 12/11/2018.

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 67 West
Section 20: E2

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: 401 Feet

Building Unit: 2377 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 259 Feet

Above Ground Utility: 325 Feet

Railroad: 5280 Feet

Property Line: 273 Feet

School Facility: 5280 Feet

School Property Line: 5280 Feet

Child Care Center: 5280 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, Designated Outside Activity Area, School Facility, and Child Care Center – 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 INFORMATIONDistance from completed portion of proposed wellbore to nearest completed portion of offset wellbore permitted or completed in the same formation: 181 FeetDistance 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 Spacing Unit: Lot 4 of Section 19, SESE of Section 20, N2N2 of Section 29 and N2N2 of Section 30 in Township 7 North, Range 67 West.

If this Form 2 is associated with a Drilling and Spacing Unit application, provide docket number: _____

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		400	GWA

DRILLING PROGRAMProposed Total Measured Depth: 17476 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: 811 Feet No well belonging to another operator within 1,500 feetWill a closed-loop drilling system be used? YesIs 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? NoWill salt based (>15,000 ppm Cl) drilling fluids be used? NoWill oil based drilling fluids be used? YesBOP 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 DisposalCuttings 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	17476	2360	17476	1500

 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 Winters 1-29 well and the distance to the nearest well belonging to another operator on the "Drilling & Waste Plans" tab was measured to Alpha-Omega's P&A Cactus Hill1 well in 3D via the anti-collision report attached as "OTHER" because when viewed in 2D via COGCC Mapping, the proposed wellbore appears to intersect the Winters 8-29 and Winters 1-29 wells.

Extraction would like to request exceptions to COGCC Rule 318A.a GWA window. Please find the exception location request letter attached as "EXCEPTION LOCATION REQUEST" and the exception location waiver highlighted on page 4 of the Surface Use Agreement attached.

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

Location ID: 458215

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: 7/15/2019 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, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved: _____



Director of COGCC

Date: 9/14/2019

Expiration Date: 09/13/2021

API NUMBER

05 123 50537 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

Construction	If location is not built by 2A expiration 10/18/2021, Operator must Refile Form 2A for approval prior to location construction.
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.
Drilling/Completion Operations	1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU (Spud Notice), for the first well/activity on the pad and provide 48 hour spud notice for all subsequent wells drilled on the pad. 2) Comply with Rule 317.j and provide cement coverage from the end of production casing to a minimum of 200' above Niobrara. Verify coverage with cement bond log. 3) Oil-based drilling fluid is to be used only after all aquifers are covered.

Best Management Practices

No BMP/COA Type

Description

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	Alternative Logging Program: 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 state "Alternative Logging Program - No open-hole logs were run" and shall clearly identify the type of log and the well (by API#) 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>
2158182	OBJECTIVE CRITERIA REVIEW MEMO
401652598	FORM 2 RESUBMITTED
402098112	FORM 2 REJECTED
402107874	OffsetWellEvaluations Data
402107875	WELL LOCATION PLAT
402107877	DEVIATED DRILLING PLAN
402107879	DIRECTIONAL DATA
402107881	PROPOSED SPACING UNIT
402107883	OTHER
402107885	SURFACE AGRMT/SURETY
402108745	EXCEPTION LOC REQUEST
402176926	OFFSET WELL EVALUATION

Total Attach: 12 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	09/10/2019
Permit	Permitting review complete and task passed. The following changes were made with Operator concurrence: - "Spacing & Formations" tab: corrected distance to nearest well	09/10/2019
Permit	The Objective Criteria Review Memo (Doc# 2158182) is attached to this Form 2 Application for Permit to Drill (APD). Following additional analysis arising out of the Objective Criteria, the Director determined that this application meets the standard for the protection of public health, safety, welfare, the environment and wildlife resources set by SB 19-181.	09/06/2019
Permit	COGCC staff conducted its technical review of this Form 2 Application for Permit to Drill (APD) within the context of SB 19-181 and the required Objective Criteria. This APD met Objective Criteria #1 & #5c.	09/06/2019
Permit	Passed completeness.	07/18/2019
Permit (Rejected)	REJECTION: This APD has been rejected per the COGCC Rejection Process (updated May 21, 2019). There are four or more errors in data or in attachments on multiple Form 2's. This entire form was reviewed by permitting staff.	07/08/2019
Permit	The following changes were made with Operator concurrence: - local government disposition and school/childcare setback distance information entered per information provided by Operator	06/19/2019
Permit	In PROCESS - objection resolved.	05/05/2019
Permit	ON HOLD - GWA Wellbore Unit Objection	02/17/2019
Engineer	Offset Wells Evaluated	12/28/2018
Permit	Passed completeness.	12/20/2018

Total: 11 comment(s)