

FORM
2Rev
12/20

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:

402622567

Date Received:

03/29/2021

APPLICATION FOR PERMIT TO:

☒ Drill
 ☐ Deepen
 ☐ Re-enter
 ☐ Recomplete and Operate
Amend ☐Refile ☒Sidetrack ☐TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER: _____ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Well Name: GP CBJ FED Well Number: 17W-25-04

Name of Operator: EXTRACTION OIL & GAS INC COGCC Operator Number: 10459

Address: 370 17TH STREET SUITE 5200

City: DENVER State: CO Zip: 80202

Contact Name: JEFFREY ANNABLE Phone: (720)354-4590 Fax: ()

Email: JANNABLE@EXTRACTIONOG.COM

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20130028

WELL LOCATION INFORMATION

Surface Location

QtrQtr: NENE Sec: 20 Twp: 5N Rng: 65W Meridian: 6

Footage at Surface: 686 Feet FNL/FSL FNL 1255 Feet FEL/FWL FEL

Latitude: 40.389978 Longitude: -104.682327

GPS Data: GPS Quality Value: 1.9 Type of GPS Quality Value: PDOP Date of Measurement: 03/02/2021

Ground Elevation: 4673

Field Name: WATTENBERG Field Number: 90750

Well Plan: is ☐ Directional ☒ Horizontal (highly deviated) ☐ Vertical

If Well plan is Directional or Horizontal attach Deviated Drilling Plan and Directional Data.

Subsurface Locations

Top of Productive Zone (TPZ)

Sec: 17 Twp: 5N Rng: 65W Footage at TPZ: 961 FSL 1269 FEL

Measured Depth of TPZ: 7589 True Vertical Depth of TPZ: 7006 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 15 Twp: 5N Rng: 65W Footage at BPZ: 954 FSL 460 FEL

Measured Depth of BPZ: 18964 True Vertical Depth of BPZ: 7006 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 15 Twp: 5N Rng: 65W Footage at BHL: 954 FSL 460 FEL

FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: WELDMunicipality: Greeley

Is the Surface Location of this Well in an area designated as one of State interest and subject to the requirements of §

24-65.1-108 C.R.S.? No

Per § 34-60-106(1)(f)(I)(A) C.R.S., the following questions pertain to the Relevant Local Government approval of the siting of the proposed Oil and Gas Location.

SB 19-181 provides that when "applying for a permit to drill," operators must include proof that they sought a local government siting permit and the disposition of that permit application, or that the local government does not have siting regulations. § 34-60-106(1)(f)(I)(A) C.R.S.

Does the Relevant Local Government regulate the siting of Oil and Gas Locations, with respect to this Location? ☒ 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 disposition of the application filed with the Relevant Local Government is: Approved Date of Final Disposition: 07/08/2019Comments: AMENDED USE BY SPECIAL REVIEW WAS APPROVED ON 7/8/19. CITY OF GREELEY APPROVED REPURPOSING WELLS ON PAD VIA EMAIL ON 2/26/21.**SURFACE AND MINERAL OWNERSHIP AT WELL'S OIL & GAS LOCATION**Surface Owner of the land at this Well's Oil and Gas Location: ☒ Fee ☐ State ☐ Federal ☐ IndianMineral Owner beneath this Well's Oil and Gas Location: ☒ Fee ☐ State ☐ Federal ☐ Indian

Surface Owner Protection Financial Assurance (if applicable): _____ Surety ID Number (if applicable): _____

MINERALS DEVELOPED BY WELL

The ownership of all the minerals that will be developed by this Well is (check all that apply):

☒ Fee☐ State☒ Federal☐ Indian☐ N/A**LEASE INFORMATION**

Using standard QtrQtr, Section, Township, Range format describe one entire mineral lease as follows:

* If this Well is within a unit, describe a lease that will be developed by the Well.

* If this Well is not subject to a unit, describe the lease that will be produced by the Well.

(Attach a Lease Map or Lease Description or Lease if necessary.)

TOWNSHIP 5 NORTH, RANGE 65 WEST
SECTION 16: NESWTotal Acres in Described Lease: 40 Described Mineral Lease is: ☒ Fee ☐ State ☐ Federal ☐ Indian

Federal or State Lease # _____

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 499 FeetBuilding Unit: 499 FeetPublic Road: 273 FeetAbove Ground Utility: 465 Feet**INSTRUCTIONS:**

- Specify all distances per Rule 308.b.(1).
- 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 – as defined in 100 Series Rules.

Railroad: 497 Feet
Property Line: 253 Feet

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	407-2896	800	T5N R65W: Sec. 17-SE4; Sec. 15 & 16-S2

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

SUBSURFACE MINERAL SETBACKS

Enter 5280 for distance greater than 1 mile.

Is this Well within a unit? Yes

If YES:

Enter the minimum distance from the Completed Zone of this Well to the Unit Boundary: 460 Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well within the same unit permitted or completed in the same formation: 410 Feet

If NO:

Enter the minimum distance from the Completed Zone of this Well to the Lease Line of the described lease: _____ Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well producing from the same lease and permitted or completed in the same formation: _____ Feet

Exception Location

☐ If this Well requires the approval of a Rule 401.c Exception Location, enter the Rule or spacing order number and attach the Exception Location Request and Waivers. _____

SPACING & FORMATIONS COMMENTS

DRILLING PROGRAM

Proposed Total Measured Depth: 18964 Feet TVD at Proposed Total Measured Depth 7006 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: 380 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 Plan unless a plan was already submitted with the Form 2A per Rule 304.c.(10).

Will there be hydraulic fracture treatment at a depth less than 2,000 feet in this well? No

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

Beneficial reuse or land application plan submitted? _____

Reuse Facility ID: _____ or Document Number: _____

CASING PROGRAM

<u>Casing Type</u>	<u>Size of Hole</u>	<u>Size of Casing</u>	<u>Grade</u>	<u>Wt/Ft</u>	<u>Csg/Liner Top</u>	<u>Setting Depth</u>	<u>Sacks Cmt</u>	<u>Cmt Btm</u>	<u>Cmt Top</u>
CONDUCTOR	24	16	N/A	42	0	80	100	80	0
SURF	12+1/4	9+5/8	J-55	36	0	1500	400	1500	0
1ST	8+1/2	5+1/2	P-110	20	0	18964	2545	18964	

☐ Conductor Casing is NOT planned

POTENTIAL FLOW AND CONFINING FORMATIONS

<u>Zone Type</u>	<u>Formation /Hazard</u>	<u>Top M.D.</u>	<u>Top T.V.D.</u>	<u>Bottom M.D.</u>	<u>Bottom T.V.D.</u>	<u>TDS (mg/L)</u>	<u>Data Source</u>	<u>Comment</u>
Groundwater	Fox Hills	0	0	852	852	0-500	Field Scout Card	Sample Site ID#766287
Groundwater	Upper Pierre	624	624	1363	1359	1001-10000	Field Scout Card	Sample Site ID# 753274
Confining Layer	Parkman	3783	3675	4228	4101			
Hydrocarbon	Sussex	4229	4102	4959	4801			Not Commercial.
Hydrocarbon	Shannon	4960	4802	7021	6759			Not Commercial.
Confining Layer	Sharon Springs	7022	6760	7046	6776			
Hydrocarbon	Niobrara	7047	6777	18964	7006			

OPERATOR COMMENTS AND SUBMITTAL**Comments**

The distance to the completed portion of the nearest well on the "Spacing & Formations" tab was measured to Extraction's proposed GP CBJ FED 17W-25-03 (DOC # 402622554). This distance was measured in 2-dimensional space.

The distance to the nearest well belonging to another operator on the "Drilling & Waste Plans" tab was measured to LORENZ #15-14H5 (API #05-123-18168). This distance was measured in 3-dimensional space.

Changes made to the permit: Bottom hole/lateral moved to different sections, Surface hole moved to a different location on the pad updated offset well evaluation, updated cultural distances.

The Surface Use Agreement is attached to the Scout Card (DOC#401991410)

Location has been constructed.

This application is in a Comprehensive Area Plan No CAP #: _____

Oil and Gas Development Plan Name _____ OGDID ID#: _____

Location ID: 332837

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

Signed: _____ Print Name: JEFFREY ANNABLE

Title: EHSR ASSET COORDINATOR Date: 3/29/2021 Email: JANNABLE@EXTRACTIONOG

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: 7/15/2021

Expiration Date: 07/14/2024

API NUMBER

05 123 50284 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.

Condition of Approval

<u>COA Type</u>	<u>Description</u>
Drilling/Completion Operations	<p>Operator acknowledges the proximity of the listed wells. Operator assures that this offset list will be remediated per the DJ Basin Horizontal Offset Policy (option 4). Operator will submit a Form 42 ("OFFSET MITIGATION COMPLETED") stating that appropriate mitigation will be completed, during the hydraulic stimulation of this well. This Form 42 shall be filed 48 hours prior to stimulation. A Bradenhead test will be performed on the offset wells listed below within 30 days prior to the beginning of stimulation of this well. Surface and production casing pressures of this offset well list will be actively monitored during stimulation of this well. Operator will assure that the offset well's bradenhead is open and actively monitored during the entire stimulation treatment of this pad— a person will monitor for any evidence of fluid. If there is indication of communication between the stimulation treatment and an offset well, treatment will be stopped and COGCC Engineering notified.</p> <p>EXTRACTION OIL & GAS INC 123-40310 GP-JEvans *2-19-19 EXTRACTION OIL & GAS INC 123-41139 GP JACKSON FED *17W-25-4 EXTRACTION OIL & GAS INC 123-41143 GP HILLSIDE FED *20W-20-13 EXTRACTION OIL & GAS INC 123-41145 GP HILLSIDE FED *20W-20-15 EXTRACTION OIL & GAS INC 123-44415 VT-Alles *1-16-18 EXTRACTION OIL & GAS INC 123-44418 VT-LDS *C3-16-18 EXTRACTION OIL & GAS INC 123-44430 GP HILLSIDE FED *20W-20-14 EXTRACTION OIL & GAS INC 123-44432 GP ALLES FED *17W-25-3 EXTRACTION OIL & GAS INC 123-50286 GP Cody Fed *20E-15-1 PDC ENERGY INC 123-43384 Clark *14J-343</p>
Drilling/Completion Operations	<p>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:</p> <ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 1) Submit Form 42 electronically to COGCC 2 business days prior to MIRU (spud notice) for the first well activity with a rig on the pad and provide 2 business day spud notice via Form 42 for all subsequent wells drilled on the pad. 2) Comply with Rule 408.j. and provide cement coverage from TD to a minimum of 500' above Niobrara and from 500' below Sussex to 500' 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.
Interim Reclamation	Operator shall comply with Notice to Operators: Interim Reclamation Procedures for Delayed Operations (dated January 5, 2017).
4 COAs	

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	Alternative Logging Program: An existing well on the pad was logged with open-hole resistivity log with 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.
2	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.

Total: 2 comment(s)

Applicable Policies and Notices to Operators

Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area.
<http://cogcc.state.co.us/documents/reg/Policies/PolicyGwaBradenheadMonitoringFinal.pdf>

Attachment List

<u>Att Doc Num</u>	<u>Name</u>
402622567	FORM 2 SUBMITTED
402642354	OffsetWellEvaluations Data
402642355	DIRECTIONAL DATA
402642358	DEVIATED DRILLING PLAN
402642359	WELL LOCATION PLAT
402748336	OFFSET WELL EVALUATION

Total Attach: 6 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA	This Location and its associated materials was fully reviewed in the review of this APD in accordance with current Rules. See Sundry doc # 402700242 in Location # 332837 file for additional information. This APD complies with all COGCC Rules and is adequately protective of public health, safety, welfare, the environment, and wildlife resources. OGLA task passed.	07/09/2021
Permit	Final Review Completed.	04/12/2021
Permit	The following corrections were made with operator concurrence: Removed incorrect attachments per operator request Corrected logging BMP	03/30/2021
Permit	Returned to Draft - 3/29/2021 -Operator request to make changes to the APD	03/29/2021

Total: 4 comment(s)