

FORM
2
Rev
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:
402955105
Date Received:
02/14/2022

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

Amend

TYPE OF WELL OIL GAS COALBED OTHER: UNPLANNED SIDETRACK

Refile

ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Sidetrack

Well Name: INTERCHANGE A Well Number: S22-30-1C
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: Kate Miller Phone: (303)241-6910 Fax: ()
Email: regulatory@civiresources.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20130028

WELL LOCATION INFORMATION

Surface Location

QtrQtr: SWNW Sec: 10 Twp: 1S Rng: 68W Meridian: 6

Footage at Surface: 2188 Feet FNL/FSL FNL 877 Feet FEL/FWL FWL

Latitude: 39.980646 Longitude: -104.994064

GPS Data: GPS Quality Value: 1.6 Type of GPS Quality Value: PDOP Date of Measurement: 09/28/2017

Ground Elevation: 5236

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: 10 Twp: 1S Rng: 68W Footage at TPZ: 150 FNL 370 FWL

Measured Depth of TPZ: 8871 True Vertical Depth of TPZ: 8104 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 22 Twp: 1S Rng: 68W Footage at BPZ: 460 FSL 366 FWL

Measured Depth of BPZ: 24126 True Vertical Depth of BPZ: 8104 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 22 Twp: 1S Rng: 68W Footage at BHL: 460 FSL 366 FWL

FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: BROOMFIELD Municipality: N/A

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: 10/24/2017

Comments: The local government siting permit type is: Operator Agreement

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 Indian

Mineral 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.)

Please see mineral lease map doc # 401522848.

Total Acres in Described Lease: 147 Described Mineral Lease is: Fee State Federal Indian

Federal or State Lease # _____

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 1009 Feet
 Building Unit: 1013 Feet
 Public Road: 500 Feet
 Above Ground Utility: 868 Feet
 Railroad: 5280 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.

Property Line: 415 Feet

OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
CODELL	CODL		1040	GWA

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: 367 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

Proposed Spacing Unit:
Section 3-1S-68W: SWSW
Section 4-1S-68W: SESE
Section 9-1S-68W: E/2E/2
Section 10-1S-68W: W/2W/2
Section 15-1S-68W: W/2W/2
Section 16-1S-68W: E/2E/2
Section 21-1S-68W: E/2E/2
Section 22-1S-68W: W/2W/2

DRILLING PROGRAMProposed Total Measured Depth: 24126 Feet TVD at Proposed Total Measured Depth 8104 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: 71 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 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? NoWill 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 NoneBeneficial reuse or land application plan submitted? No

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	5-L	42	0	80	100	80	0
SURF	12+1/4	9+5/8	J-55	36	0	1637	575	1637	0
1ST	8+1/2	5+1/2	P-110	20	0	24126	3297	24126	

 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	Arapahoe	0	0	665	665	1001-10000	Groundwater Atlas	USGS HA-647 (Robson & Romero, 1981)
Groundwater	Laramie-Fox Hills	665	665	989	984	501-1000	Groundwater Atlas	USGS HA-650 (Robson et al, 1981)
Confining Layer	Pierre Shale	989	984	1332	1314			
Groundwater	Upper Pierre Aquifer	1332	1314	2155	2084	0-500	Electric Log Calculation	Sharpe 2-10 (05-014-08876 -0000)
Confining Layer	Pierre Shale	2155	2084	4835	4614			
Hydrocarbon	Parkman	4835	4614	4987	4754			
Confining Layer	Pierre Shale	4987	4754	5218	4974			
Hydrocarbon	Sussex	5218	4974	5495	5234			
Confining Layer	Pierre Shale	5495	5234	5707	5434			
Confining Layer	Pierre Shale	5578	5504	7982	7614			
Hydrocarbon	Shannon	5707	5434	5578	5504			
Subsurface Hazard	Sharon Springs	7982	7614	8067	7670			
Hydrocarbon	Niobrara	8067	7670	8653	8088			
Hydrocarbon	Carlile	8175	8128	8768	8206			Did not enter formation, depths estimated
Hydrocarbon	Ft Hays	8653	8088	8751	8111			
Hydrocarbon	Codell	8751	8111	23786	8175			Did not exit formation, bottom of zone = MD/TVD @ TD of well

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)

Attachment List

Att Doc Num	Name
2341327	WELLBORE DIAGRAM
402955105	FORM 2 SUBMITTED
402955107	OffsetWellEvaluations Data
402955297	CORRESPONDENCE

Total Attach: 4 Files

General Comments

User Group	Comment	Comment Date
Permit	Final Review Completed.	02/16/2022
OGLA	The Oil and Gas Location, its associated Form 2A materials, and the Form 2 Application for Permit to Drill were fully reviewed and approved prior to the commencement of drilling operations for this well. Because this is an application for an unplanned sidetrack with drilling in progress, an Oil and Gas Location Assessment review is not applicable to this ongoing operation.	02/15/2022
Permit	The following corrections were made with operator concurrence: Corrected well location information to match the permitted well plat. Corrected question on the local government tab to NO Corrected Submit tab comment Attached wellbore diagram provided by the operator	02/14/2022

Total: 3 comment(s)