

FORM  
2  
Rev  
05/22

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:  
403356299  
Date Received:  
04/24/2023

APPLICATION FOR PERMIT TO

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

Well Name: Blue 3-65    Well Number: 33-32-31-36 2AH  
Name of Operator: CRESTONE PEAK RESOURCES OPERATING LLC    COGCC Operator Number: 10633  
Address: 1801 CALIFORNIA STREET #2500  
City: DENVER    State: CO    Zip: 80202  
Contact Name: Jeff Annable    Phone: (303)312-8529    Fax: ( )  
Email: jannable@civiresources.com

FINANCIAL ASSURANCE FOR PLUGGING, ABANDONMENT, AND RECLAMATION

**COGCC Financial Assurance**  
 The Operator has provided or will provide Financial Assurance to the COGCC for this Well.  
Surety ID Number (if applicable): 20160104

**Federal Financial Assurance**  
 In checking this box, the Operator certifies that it has provided or will provide at least this amount of Financial Assurance to the federal government for this Well. (Per Rule702.a.)  
Amount of Federal Financial Assurance \$ \_\_\_\_\_

WELL LOCATION INFORMATION

**Surface Location**  
QtrQtr: NWSW    Sec: 34    Twp: 3S    Rng: 65W    Meridian: 6  
Footage at Surface: 2283 Feet    FNL/FSL    513 Feet    FEL/FWL  
Latitude: 39.746222    Longitude: -104.657633  
GPS Data:    GPS Quality Value: 1.6    Type of GPS Quality Value: PDOP    Date of Measurement: 10/27/2020  
Ground Elevation: 5593  
Field Name: DJ HORIZONTAL NIOBRARA    Field Number: 16950  
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: 33    Twp: 3S    Rng: 65W    Footage at TPZ: 1820    FNL    330    FEL  
Measured Depth of TPZ: 8126    True Vertical Depth of TPZ: 7696    FNL/FSL    FEL/FWL

Base of Productive Zone (BPZ)

Sec: 36 Twp: 3S Rng: 66W Footage at BPZ: 1280 FNL 330 FWL  
Measured Depth of BPZ: 28656 True Vertical Depth of BPZ: 7696 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 36 Twp: 3S Rng: 66W Footage at BHL: 1280 FNL 330 FWL  
FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: ADAMS Municipality: Aurora

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? [X] Yes [ ] No

[X] 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: 10/13/2021

Comments: Development Application Case Number 2021-6019-00

SURFACE AND MINERAL OWNERSHIP AT WELL'S OIL & GAS LOCATION

Surface Owner of the land at this Well's Oil and Gas Location: [X] Fee [ ] State [ ] Federal [ ] Indian

Mineral Owner beneath this Well's Oil and Gas Location: [X] Fee [ ] State [ ] Federal [ ] Indian

Surface Owner Protection Bond (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):

- [X] Fee
- [X] State
- [X] 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 3 South, Range 65 West  
Section 32: Part of the W2

See attached lease map.

Total Acres in Described Lease: 299 Described Mineral Lease is:  Fee  State  Federal  Indian

Federal or State Lease # \_\_\_\_\_

## SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 2395 Feet  
Building Unit: 3030 Feet  
Public Road: 1891 Feet  
Above Ground Utility: 1871 Feet  
Railroad: 1254 Feet  
Property Line: 365 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.

## 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	535-1428	2560	T3S R65W SEC 31: ALL, SEC 32: ALL, SEC 33: ALL, T3S R66W SEC 36: ALL

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: 330 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: 610 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: 28656 Feet                      TVD at Proposed Total Measured Depth 7696 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: 1294 Feet     No well belonging to another operator within 1,500 feet

Will a closed-loop drilling system be used? Yes

Is H<sub>2</sub>S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No If yes, attach an H<sub>2</sub>S 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

Casing Type	Size of Hole	Size of Casing	Grade	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
CONDUCTOR	26	16	N/A	42	0	100	114	100	0
SURF	13+1/2	9+5/8	J-55	36	0	3240	1099	3240	0
1ST	8+3/4	7	P-110	29	0	7249			
TAPER	8+3/4	5+1/2	P-110	20	7249	28656	4284	28656	

Conductor Casing is NOT planned

## POTENTIAL FLOW AND CONFINING FORMATIONS

Zone Type	Formation /Hazard	Top M.D.	Top T.V.D.	Bottom M.D.	Bottom T.V.D.	TDS (mg/L)	Data Source	Comment
Groundwater	Denver	24	24	717	716	0-500	Groundwater Atlas	USGS HA-646 (Robson & Romero, 1981)
Groundwater	Arapahoe	717	716	1326	1316	0-500	Groundwater Atlas	USGS HA-647 (Robson et al, 1981)
Groundwater	Laramie-Fox Hills	1326	1316	1986	1966	0-500	Groundwater Atlas	USGS HA-650 (Robson et al, 1981)
Confining Layer	Pierre Formation	1986	1966	2483	2456			
Groundwater	Upper Pierre	2483	2456	3152	3116	501-1000	Electric Log Calculation	Flander Industries Inc B-1 (05-005-06536-0000)
Confining Layer	Base of Upper Pierre	3152	3116	4233	4181			
Hydrocarbon	Parkman Sandstone	4233	4181	4360	4306			Not productive in this area
Confining Layer	Pierre Formation	4360	4306	5324	5256			
Hydrocarbon	Sussex Sandstone	5324	5256	5521	5451			Not productive in this area
Confining Layer	Pierre Formation	5521	5451	6110	6031			
Hydrocarbon	Shannon Sandstone	6110	6031	6531	6446			Not productive in this area
Confining Layer	Pierre Formation	6531	6446	7859	7636			
Subsurface Hazard	Sharon Springs	7859	7636	8126	7696			Sloughing shales
Hydrocarbon	Niobrara	8126	7696	28656	7696			

## OPERATOR COMMENTS AND SUBMITTAL

Comments

The distance to the completed portion of the nearest well in the same unit on the "Spacing & Formations" tab is measured to the proposed Blue 3-65 33-32-32-36 1BH. This distance was measured in 2-dimensional space.

The distance to the nearest well belonging to another operator on the "Drilling Plan" tab was measured to the Flander Industries Inc. B-1 (API #05-001-06536). This distance was measured in 3-dimensional space.

Attached as OTHER, is the anti-collision analysis which factors in three dimensional measurements as well as gyro surveys performed on some of the offset wellbores. All measurements to offset wellbores were derived from this analysis.

This application is in a Comprehensive Area Plan Yes

CAP #: 210700116

Oil and Gas Development Plan Name Blue 3-65 33-32-31

OGDP ID#: 481173

Location ID: 482308

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

Signed: \_\_\_\_\_

Print Name: Jeff Annable

Title: Manager, Regulatory

Date: 4/24/2023

Email: jannable@civiresources.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: 6/9/2023

Expiration Date: \_\_\_\_\_

**API NUMBER**  
05 001 10551 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>
Drilling/Completion Operations	Operator will log two (2) wells during the first rig occupation with open-hole resistivity log with gamma-ray log from the kick-off point into the surface casing for the two stratigraphically deepest wells on each side of the pad
Drilling/Completion Operations	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. Verify coverage with a cement bond log. 3) Oil based drilling fluid can only be used after all groundwater has been isolated.
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 is observed or if there is continuous flow, Operator must contact COGCC engineering for approval prior to stimulation. 2) If a delayed completion, a second test is required between 6-9 months after rig release and must be conducted prior to stimulation. If any pressure greater than 200 psi is observed or if there is continuous flow, Operator must contact COGCC engineering for approval prior to stimulation. 3) A post-production test within 60 days after first sales, as reported on the Form 10, Certificate of Clearance.
3 COAs	

## Best Management Practices

<b>No</b>	<b>BMP/COA Type</b>	<b>Description</b>
1	Drilling/Completion Operations	One of the first wells drilled on the pad during the first rig occupation will be logged with open-hole resistivity log with gamma-ray log from the kick-off point into the surface casing for one of the stratigraphically deepest wells on the pad. 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 will state "Alternative Logging Program - No open-hole logs were run" and will 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)

## Attachment List

<b>Att Doc Num</b>	<b>Name</b>
403356299	FORM 2 SUBMITTED
403356303	WELL LOCATION PLAT
403356714	OffsetWellEvaluations Data
403377301	OTHER
403377302	DEVIATED DRILLING PLAN
403377303	DIRECTIONAL DATA
403380751	MINERAL LEASE MAP
403428950	OFFSET WELL EVALUATION

Total Attach: 8 Files

## General Comments

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
Permit	SLB has no concerns with this application. Final Review Completed.	06/08/2023
Permit	Emailed the SLB to notify them of this pending application.	05/23/2023
Permit	With operators concurrence corrected lease information and added Open Hole Logging COA.	05/23/2023
Permit	Requesting confirmation of mineral lease and addition of Open Hole Logging COA.	05/22/2023
OGLA	The Commission approved OGDG #481173 on March 02, 2023 for the Oil and Gas Location related to this Form 2. OGLA task passed.	04/25/2023

Total: 5 comment(s)