

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:

402730420

(SUBMITTED)

Date Received:

08/11/2021

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: State Pikes 4-65 Well Number: 36-31-32 1AH
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: Kathy Denzer Phone: (720)410-8519 Fax: ()
Email: RegulatoryState@crestonepr.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20160104

WELL LOCATION INFORMATION

Surface Location

QtrQtr: SENE Sec: 35 Twp: 4S Rng: 65W Meridian: 6
Footage at Surface: 1945 Feet FNL/FSL 600 Feet FEL/FWL
Latitude: 39.661979 Longitude: -104.624442
GPS Data: GPS Quality Value: 1.4 Type of GPS Quality Value: PDOP Date of Measurement: 02/27/2018
Ground Elevation: 5870
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: 36 Twp: 4S Rng: 65W Footage at TPZ: 440 FNL 330 FWL
Measured Depth of TPZ: 8505 True Vertical Depth of TPZ: 7960 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 32 Twp: 4S Rng: 64W Footage at BPZ: 400 FNL 990 FWL
Measured Depth of BPZ: 19847 True Vertical Depth of BPZ: 7960 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 32 Twp: 4S Rng: 64W Footage at BHL: 400 FNL 990 FWL
FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: ARAPAHOE

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: 11/19/2018

Comments: Administrative Energy Use by Special Review was approved on 11/19/2018.

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 Lease Map

Total Acres in Described Lease: 21037 Described Mineral Lease is: Fee State Federal Indian

Federal or State Lease # 1960.12

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 2284 Feet
Building Unit: 2982 Feet
Public Road: 1938 Feet
Above Ground Utility: 615 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: 5280 Feet
Property Line: 600 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	535-1353	1440	T4S R64W Section 31: All, Section 32: W2W2; T4S R65W Section 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: 640 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: 19847 Feet TVD at Proposed Total Measured Depth 7960 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: _____ 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

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	A53B	42.09	0	100	114	100	0
SURF	13+1/2	9+5/8	J55	40	0	3296	1760	3296	0
1ST	8+1/2	5+1/2	P110	20	0	19847	2802	19847	3296

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	0	0	1555	1555	0-500	Groundwater Atlas	USGS HA-646 (Robson & Romero, 1982)
Groundwater	Laramie	1555	1555	1894	1874	0-500	Groundwater Atlas	USGS HA 650 (Robson & Romero, 1981)
Groundwater	Fox Hills	1894	1874	2142	2119	0-500	Groundwater Atlas	USGS HA-650 (Robson & Romero)
Confining Layer	Pierre Shale	2142	2119	2494	2463			
Groundwater	Upper Pierre Aquifer	2494	2463	3215	3170	501-1000	Electric Log Calculation	Airline Road - State 15-12 (05-005-06590)
Confining Layer	Base of Upper Pierre Aquifer	3215	3170	5143	5062			
Hydrocarbon	Larimer	5143	5062	5471	5384			
Hydrocarbon	Sussex	5471	5384	6299	6195			
Hydrocarbon	Shannon	6299	6195	7882	7705			
Confining Layer	Sharon Springs	7882	7705	7997	7789			
Hydrocarbon	Niobrara	7997	7789	8600	7960			

OPERATOR COMMENTS AND SUBMITTAL

Comments Distance from completed portion of the wellbore to nearest wellbore permitted or completed well in the same formation and within the unit was measured to the proposed State Pikes 4-65-36-31-32 1BH measured in 2-D.

This location has an approved COGCC OGLA that is valid until 9/5/2022 therefore, an OGDG is not required.

This application is in a Comprehensive Area Plan No CAP #: _____
 Oil and Gas Development Plan Name _____ OGDG ID#: _____
 Location ID: 467266

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

Signed: _____ Print Name: Andrea Gross

Title: Permit Agent Date: 8/11/2021 Email: agross@upstreampm.com

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: _____
 Expiration Date: _____

API NUMBER
05

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>

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	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.
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

<u>Att Doc Num</u>	<u>Name</u>
402731719	OffsetWellEvaluations Data
402731721	WELL LOCATION PLAT
402731724	DEVIATED DRILLING PLAN
402731725	DIRECTIONAL DATA
402757164	LEASE MAP

Total Attach: 5 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Emailed the SLB to notify them of this pending application.	08/03/2021
Permit	<ul style="list-style-type: none">- Surety ID invalid.- "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.?" answered incorrectly.- T4S R64W S32 does not appear to be in the State mineral lease; 'Fee' not indicated in addition to 'State' in 'Minerals Developed by Well'- Range incorrect on BPZ & BHL.- Operator should be able to enter Casing Grade now.	08/03/2021

Total: 2 comment(s)



Public Comments

No public comments were received on this application during the comment period.

