

FORM 2 Rev 05/22

State of Colorado Energy & Carbon Management Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303) 894-2100 Fax: (303) 894-2109



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APPLICATION FOR PERMIT TO

Application type checkboxes: Drill (checked), Deepen, Re-enter, Recomplete and Operate, Amend, Refile, Sidetrack. Well type and zone type checkboxes.

Well Name: QUICKSILVER 3-65 Well Number: 16-17-18-13 3BH Name of Operator: CRESTONE PEAK RESOURCES OPERATING LLC ECMC Operator Number: 10633 Address: 555 17TH STREET SUITE 3700 City: DENVER State: CO Zip: 80202 Contact Name: Jeff Annable Phone: (303)312-8529 Fax: () Email: dlrockiespermitting@civiresources.com

FINANCIAL ASSURANCE FOR PLUGGING, ABANDONMENT, AND RECLAMATION

ECMC Financial Assurance: [X] The Operator has provided or will provide Financial Assurance to the ECMC 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: 15 Twp: 3S Rng: 65W Meridian: 6 Footage at Surface: 1360 Feet FSL 510 Feet FWL Latitude: 39.787304 Longitude: -104.657497 GPS Data: GPS Quality Value: 1.4 Type of GPS Quality Value: PDOP Date of Measurement: 12/20/2023 Ground Elevation: 5505 Field Name: DJ HORIZONTAL NIOBRARA Field Number: 16950 Well Plan: is [] Directional [X] Horizontal (highly deviated) [] Vertical

Subsurface Locations: Top of Productive Zone (TPZ) Sec: 16 Twp: 3S Rng: 65W Footage at TPZ: 1680 FSL 150 FEL Measured Depth of TPZ: 7944 True Vertical Depth of TPZ: 7609 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 13 Twp: 3S Rng: 66W Footage at BPZ: 1680 FSL 600 FWL
Measured Depth of BPZ: 28321 True Vertical Depth of BPZ: 7609 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 13 Twp: 3S Rng: 66W Footage at BHL: 1680 FSL 600 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: Other Date of Final Disposition: 05/21/2024

Comments: The City of Aurora has approved the siting of the Aspen 3-65 15-14 South Pad through a City of Aurora Operator Agreement amendment. A site-specific administrative permit (Project # 1834015) is currently in the Public Comment Period (as managed by the City of Aurora).

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
- [] 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, 6th P.M.
Section 15: NE4

Total Acres in Described Lease: 160 Described Mineral Lease is: Fee State Federal Indian

Federal or State Lease # _____

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 1082 Feet
Building Unit: 5280 Feet
Public Road: 496 Feet
Above Ground Utility: 557 Feet
Railroad: 5280 Feet
Property Line: 471 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	535-1498	4475	T3S-R66W-6th PM: Section 13: All; T3SR65W- 6th PM: Section 13: All; Section 14: All; Section 15: All; Section 16: All; Section 17: All; Section 18: 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: 600 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: 319 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: 28321 Feet TVD at Proposed Total Measured Depth 7609 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? No

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	A53JB	36.95	0	80	105	80	0
SURF	13+1/2	9+5/8	J55	36	0	3228	1314	3228	0
1ST	8+3/4	6	P110	24.1	0	28321	4137	28321	

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	754	754	0-500	Groundwater Atlas	USGS HA-646 (Robson & Romero, 1981)
Groundwater	Arapahoe	754	754	1380	1379	0-500	Groundwater Atlas	USGS HA-647 (Robson et al, 1981)
Groundwater	Laramie-Fox Hills Form	1380	1379	1931	1929	0-500	Groundwater Atlas	USGS HA-650 (Robson et al, 1981)
Confining Layer	Pierre Formation	1931	1929	2431	2429			
Groundwater	Upper Pierre Aquifer	2431	2429	2982	2979	501-1000	Electric Log Calculation	
Confining Layer	Base - Upper Pierre Aquif	2982	2979	4148	4144			
Hydrocarbon	Larimer ("Parkman") Sands	4148	4144	4263	4259			
Confining Layer	Pierre Formation	4263	4259	5274	5269			
Hydrocarbon	Terry ("Sussex") Sandston	5274	5269	5449	5444			
Confining Layer	Pierre Formation	5449	5444	6025	6019			
Confining Layer	Hygiene ("Shannon") Sands	6025	6019	6380	6374			
Confining Layer	Pierre Formation	6380	6374	7728	7569			
Subsurface Hazard	Sharon Springs Member	7728	7569	7944	7609			
Hydrocarbon	Niobrara Formation	7944	7609	28321	7609			

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 ASPEN 3-65 15-14-13 3BH . This distance is measured in 2-dimensional space. // There are no wells belonging to another operator within 1500' of the proposed wellbore.

This application is in a Comprehensive Area Plan Yes CAP #: 210700116
 Oil and Gas Development Plan Name Aspen North/South OGD OGD ID#: 487269
 Location ID: 488181

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

Signed: _____ Print Name: Whitney Montonye

Title: Sr. Project Manager Date: 10/17/2024 Email: whitney@fieldinghillllc.com

~~Operator must have 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 ECMC Rules, applicable orders and SB 19-181 and is hereby approved.

ECMC Approved:  Director of ECMC Date: 12/20/2024

Expiration Date: 11/02/2028

API NUMBER
05 001 10625 00

CONDITIONS OF APPROVAL, IF ANY LIST

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
Drilling/Completion Operations	1) Submit Form 42 electronically to ECMC 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.
Drilling/Completion Operations	Operator acknowledges the proximity of the listed wells. Operator assures that this offset list will be remediated per the Offset Well Evaluation and Hydraulic Fracturing Operator Guidance Document Operator using Option 3. Operator will submit a Form 42 ("OFFSET MITIGATION COMPLETED") stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well. 001-07099 Kahn A1 Summit Oil Co 001-08350 UPRR 15-7 Chandler & Associates
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.
Drilling/Completion Operations	Operator will log one (1) additional well 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 stratigraphically deepest wells on each side of the pad for a total of two (2) wells logged.

4 COAs

Best Management Practices

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

<u>Att Doc Num</u>	<u>Name</u>
403913010	FORM 2 SUBMITTED
403913029	DIRECTIONAL DATA
403913031	WELL LOCATION PLAT
403927137	DEVIATED DRILLING PLAN
403949434	OffsetWellEvaluations Data
404036725	OFFSET WELL EVALUATION

Total Attach: 6 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	12/20/2024
Permit	With operator concurrence: - added COA requiring additional well log (total of 2). - corrected minimum distance from completed zone to offset well completed zone and comment with closest offset well - changed wellbore type to horizontal Permit review complete.	12/18/2024
Permit	Emailed operator & submitter regarding: For "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:" - the submitted distances are all less than 20', and appear to be distances between SHLs, not the minimum distance between completed zones.	12/09/2024
Permit	11/7/2024: Emailed the SLB to notify them of this pending application. SLB replied info is missing from operator. Requested resolution by 12/16/2024. 12/2/24: SLB has no concerns with this application.	12/04/2024
OGLA	The Commission approved OGDG #487269 on October 9, 2024 for the Oil and Gas Location related to this Form 2. OGLA task passed.	10/21/2024

Total: 5 comment(s)