

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

Document Number:

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Date Received:

10/26/2023

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: Ramen 1423

Well Number: 06H

Name of Operator: VERDAD RESOURCES LLC

COGCC Operator Number: 10651

Address: 1125 17TH STREET SUITE 550

City: DENVER

State: CO

Zip: 80202

Contact Name: Allison Schieber

Phone: (720)845-6909

Fax: ()

Email: regulatory@verdadresources.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): 20230030

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: NWSE Sec: 12 Twp: 1N Rng: 65w Meridian: 6

 Footage at Surface: 2215 Feet FSL 2299 Feet FEL
 FNL/FSL FEL/FWL

Latitude: 40.064786

Longitude: -104.610904

GPS Data:

GPS Quality Value: 1.6

Type of GPS Quality Value: PDOP

Date of Measurement: 07/22/2023

Ground Elevation: 4971

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: 14 Twp: 1N Rng: 65W

Footage at TPZ: 460

FNL 1718

FEL

Measured Depth of TPZ: 9339

True Vertical Depth of TPZ: 7050

FNL/FSL

FEL/FWL

Base of Productive Zone (BPZ)Sec: 23 Twp: 1N Rng: 65WFootage at BPZ: 460 FSL 1721 FELMeasured Depth of BPZ: 19044True Vertical Depth of BPZ: 7050 FNL/FSL FEL/FWL**Bottom Hole Location (BHL)**Sec: 23 Twp: 1N Rng: 65WFootage at BHL: 370 FSL 1721 FEL

FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATIONCounty: WELDMunicipality: 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.? Yes

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: 10/11/2019Comments: WOGLA19-0156**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 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):

☒ 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.)

T1N R65W. Sec. 23: N2Total Acres in Described Lease: 320Described Mineral Lease is: ☒ Fee ☐ State ☐ Federal ☐ Indian

Federal or State Lease #

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 1942 Feet
Building Unit: 1947 Feet
Public Road: 2185 Feet
Above Ground Utility: 727 Feet
Railroad: 5280 Feet
Property Line: 345 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	407-3518	1280	Sec. 14 & 23 T1N R65W

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: 621 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

Sec. 14 & 23 T1N R65W

DRILLING PROGRAM

Proposed Total Measured Depth: 19134 Feet

TVD at Proposed Total Measured Depth 7050 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	24	16	astm	65	0	80	70	80	0
SURF	13+1/2	9+5/8	j55	36	0	2140	581	2140	0
1ST	8+1/2	5+1/2	p110	20	0	19134	2372	19134	

☐ 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	ARAPAHOE	0	0	410	410	501-1000	USGS	USGS-400237104354401 (600 mg/L)
Groundwater	FOX HILLS	410	410	1006	1000	501-1000	USGS	USGS-400438104355101 (738 mg/L)
Confining Layer	PIERRE	1006	1000	1495	1463			
Groundwater	UPPER PIERRE POROSITY	1495	1463	2078	1970	1001-10000	Other	CO DNR Report Project Number 2141
Confining Layer	PIERRE	2078	1970	4897	4062			
Hydrocarbon	PARKMAN	4897	4062	5129	4233			NON PRODUCING HORIZON
Confining Layer	PIERRE	5129	4233	5275	4340			
Hydrocarbon	SUSSEX	5275	4340	5740	4683			NON PRODUCING HORIZON
Confining Layer	PIERRE	5740	4683	6335	5121			
Hydrocarbon	SHANNON	6335	5121	6768	5440			NON PRODUCING HORIZON
Confining Layer	PIERRE	6788	5440	8747	6873			
Hydrocarbon	SHARON SPRINGS	8747	6873	8808	6906			NON PRODUCING HORIZON
Hydrocarbon	NIOBRARA	8808	6806	19134	7050			

OPERATOR COMMENTS AND SUBMITTAL

Comments The nearest offset well completed in the same formation is the Ramen 1423 07H measured in 2D using GIS mapping. The nearest well belonging to another operator is further then 1500' away measured in 3D using the anti collision report, attached as other.
This well has a bottom hole location beyond the unit boundary setback. The bottom of the completed interval will be within the boundary set back at 460 FSL and 1721 FEL of Section 23. The wellbore beyond the unit setback will be physically isolated and will not be completed.
Verdad is refiling this permit to change the name, surface hole, top and bottom of the production zone and the bottom hole location. These changes required an updated total depth, revisions to the casing and cementing plan, and cultural distance information. This location is built.

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

Oil and Gas Development Plan Name _____ OGDID #: _____

Location ID: 469568

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

Signed: _____ Print Name: Allison Schieber

Title: Sr Regulatory Analyst Date: 10/26/2023 Email: regulatory@verdadresources.c

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: 11/21/2023

Expiration Date: 11/20/2026

API NUMBER

05 123 50679 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.
Interim Reclamation	Operator shall comply with Notice to Operators: Interim Reclamation Procedures for Delayed Operations (dated January 5, 2017).
Construction	If conductors are preset, operator shall comply with Rule 406.e.
Drilling/Completion Operations	Operator will ensure the wellbore beyond the unit boundary setback is physically isolated and is not completed. In the Operator Comments on the Form 5A the operator will (1) report the footages from the section lines of the bottom of the completed interval (2) describe how the wellbore beyond the unit boundary setback is physically isolated and (3) certify that none of the wellbore beyond the setback was completed.
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 ECMC 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 ECMC 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	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. 3) Oil based drilling fluid can only be used after all groundwater has been isolated.
6 COAs	

Best Management Practices

No	BMP/COA Type	Description
1	Drilling/Completion Operations	Operator will perform anti-collision evaluation of all active (producing, shut-in, of temporarily abandoned) offset wellbores that have the potential of being within 150' feet of the proposed well prior to drilling operations. Notice shall be given to all offset operators prior to drilling
2	Drilling/Completion Operations	Upon initial rig-up and at least once every thirty (30) days during drilling operations thereafter, pressure testing of the casing string and each component of the blowout prevention equipment including flange connections shall be performed to seventy percent (70%) of working pressure or seventy percent (70%) of the internal yield of casing, whichever is less. Pressure testing shall be conducted and the documented results shall be retained by the operator for inspection by the Director for a period of one (1) year. Activation of the pipe rams for function testing shall be conducted on a daily basis when practicable.
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 to 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 clearly state "Alternative Logging Program - No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open hole logs were run.
4	Drilling/Completion Operations	Operator will comply with COGCC policy on brandenhead monitoring during hydraulic fracturing treatments in the Greater Wattenberg Area per policy dated may 29 2012.

Total: 4 comment(s)

Attachment List

Att Doc Num	Name
403475432	FORM 2 SUBMITTED
403528384	WELL LOCATION PLAT
403528427	DEVIATED DRILLING PLAN
403528428	OTHER
403528429	DIRECTIONAL DATA
403539033	OffsetWellEvaluations Data
403603863	OFFSET WELL EVALUATION

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	11/16/2023
OGLA	This Location and its associated Form 2A materials was fully evaluated during the review of this APD in accordance with current Rules. See Sundry doc #403587332 in Location #469568 file for additional information. This APD complies with all CECMC Rules and Staff concludes that any potential direct adverse impacts to public health, safety, welfare, the environment, and wildlife resources will be minimized and mitigated by the successful implementation of the BMPs for Location #469568. OGLA task passed.	11/15/2023
Permit	- Cultural Distances were updated by Form 4 (Doc: 403587332) Made the following changes with concurrence from the operator: - Revised Sidetrack to NO - Revised Lat to match attached well location plat. Permit Review Complete	11/15/2023
Permit	Emailed operator for the following: - Confirm Safety Setback distances. - Confirm selecting NO for Sidetrack - Confirm revising Latitude to match attached Well Location Plat	11/06/2023
Engineer	Offset well evaluation completed.	11/02/2023

Total: 5 comment(s)