

FORM

2

Rev  
05/22

## State of Colorado

## Energy &amp; Carbon Management Commission

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

Document Number:

403414514

Date Received:

08/14/2023

## APPLICATION FOR PERMIT TO

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

Well Name: Warner

Well Number: 1708-09H

Name of Operator: VERDAD RESOURCES LLC

COGCC Operator Number: 10651

Address: 1125 17TH STREET SUITE 550

City: DENVER

State: CO

Zip: 80202

Contact Name: Heather Mitchell

Phone: (720)845-6917

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): 20170009

## 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: SESW Sec: 17 Twp: 1N Rng: 64W Meridian: 6

Footage at Surface: 185 Feet FNL/FSL FSL 2472 Feet FEL/FWL FWL

Latitude: 40.044632

Longitude: -104.575292

GPS Data:

GPS Quality Value: 2.0

Type of GPS Quality Value: PDOP

Date of Measurement: 11/18/2022

Ground Elevation: 5069

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: 17 Twp: 1N Rng: 64W

Footage at TPZ: 460

FSL

480

FEL

Measured Depth of TPZ: 7954

True Vertical Depth of TPZ: 7150

FNL/FSL

FEL/FWL

**Base of Productive Zone (BPZ)**Sec: 8 Twp: 1N Rng: 64WFootage at BPZ: 460 FNL 480 FELMeasured Depth of BPZ: 17674True Vertical Depth of BPZ: 7150 FNL/FSL FEL/FWL**Bottom Hole Location (BHL)**Sec: 8 Twp: 1N Rng: 64WFootage at BHL: 370 FNL 480 FELFNL/FSLFEL/FWL**LOCAL GOVERNMENT PERMITTING INFORMATION**County: 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: 06/09/2017Comments: WOGLA17-0031, this is a built location**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 R64W: Sec. 8 ALLTotal Acres in Described Lease: 640Described Mineral Lease is: ☒ Fee ☐ State ☐ Federal ☐ Indian

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

## SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 3243 Feet  
Building Unit: 3243 Feet  
Public Road: 2467 Feet  
Above Ground Utility: 2537 Feet  
Railroad: 5280 Feet  
Property Line: 185 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	407-3457	1280	T1NR64W: Sec. 17 & 8 - 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: 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: 560 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

T1N R64W: Sec. 17 & 8 - ALL

## DRILLING PROGRAM

Proposed Total Measured Depth: 17764 Feet

TVD at Proposed Total Measured Depth 7150 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: 389 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	ASTM	65	0	80	70	80	0
SURF	13+1/2	9+5/8	J55	36	0	2200	597	2200	0
1ST	8+1/2	5+1/2	P110	20	0	17764	2221	17764	

☐ 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	508	508	501-1000	USGS	USGS (USGS-400237104354401 600mg/L, USGS-400202104335801 1040 mg/L)
Groundwater	Fox Hills	508	508	1157	1140	501-1000	USGS	USGS (USGS-400419104334501 770 mg/L)
Confining Layer	Pierre	1157	1140	1621	1576			
Groundwater	Upper Pierre Porosity	1621	1576	2145	2069	1001-10000	Other	CO DNR Report Project Number 2141
Confining Layer	Pierre	2145	2069	4405	4195			
Hydrocarbon	Parkman	4405	4195	4603	4381			Non-productive horizon
Confining Layer	Pierre	4603	4381	4728	4498			
Hydrocarbon	Sussex	4728	4498	4984	4739			Non-productive horizon
Hydrocarbon	Shannon	4984	4739	5068	4818			Non-productive horizon
Subsurface Hazard	Pierre	5068	4818	7341	6917			
Hydrocarbon	Sharon Springs	7341	6917	7381	6945			Non-productive horizon
Hydrocarbon	Niobrara	7381	6948	17764	7282			

## OPERATOR COMMENTS AND SUBMITTAL

Comments

The distance to the nearest well completed or permitted in the same formation was measured to the Warner 1708-08H for a distance of 560 ft.  
The nearest proposed well belonging to another operator is the Grinde 01-64-05-6457CB (API 05-123-49720), Operated by HlghPoint in PR Status measured in 3D at 389 ' taken from the anti-collision plan.  
This well has a Bottom-hole Location beyond the unit boundary setback. The bottom of the completed interval will be within the boundary setback at 460' FNL and 480' FEL of Section 8. The wellbore beyond the unit setback will be physically isolated and will not be completed.  
The Warner 01N-64W-17-2H API: 05-123-45163 was plugged on 8/3/2023 and cut and capped on 8/14/2023. A form 6-subsequent (Document # 403496253) was filed to verify this plug. This permit will replace that well on the pad.

This application is in a Comprehensive Area Plan No CAP #: \_\_\_\_\_  
Oil and Gas Development Plan Name \_\_\_\_\_ OGDID ID#: \_\_\_\_\_  
Location ID: 451659

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

Signed: \_\_\_\_\_ Print Name: Heather Mitchell  
Title: Regulatory Manager Date: 8/14/2023 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: 9/12/2023  
Expiration Date: 09/11/2026

**API NUMBER**

05 123 52209 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	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	Operator acknowledges the proximity of the listed non-operated 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. 123-10886 MCMILLAN #1 123-11425 EAST HUDSON B STATE #1-16
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.
Drilling/Completion Operations	Operator will log one (1) well during the second 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 the pad.
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.
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 Notice to Operators: Procedures for Preset Conductors (dated September 1, 2016).
7 COAs	

## Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
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 measuredwhiledrilling 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 openhole 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 openhole logs were run

Total: 3 comment(s)

## Attachment List

<u>Att Doc Num</u>	<u>Name</u>
403414514	FORM 2 SUBMITTED
403414533	WELL LOCATION PLAT
403414534	DEVIATED DRILLING PLAN
403414535	OTHER
403414536	DIRECTIONAL DATA
403418637	OffsetWellEvaluations Data
403527710	OFFSET WELL EVALUATION

Total Attach: 7 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	09/11/2023
OGLA	This Location and its associated Form 2A materials was fully evaluated during the review of this APD in accordance with the current Rules. This APD complies with all CECMC Rules and Staff does not anticipate any significant potential direct adverse impacts to public health, safety, welfare, the environment, and wildlife resources. OGLA task passed.	09/11/2023
Permit	Emailed operator for the following: - Confirm Sidetrack selection  Made the following changes with concurrence from the operator: - Selected NO for sidetrack  Permit Review Complete	08/31/2023

Total: 3 comment(s)