

## 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:

403402958

Date Received:

05/26/2023

## 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: Shallot

Well Number: 1930-23H

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): 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: NESW Sec: 19 Twp: 1N Rng: 64W Meridian: 6

Footage at Surface: 1875 Feet FSL 1803 Feet FWL

Latitude: 40.034702 Longitude: -104.596373

GPS Data: GPS Quality Value: 1.2 Type of GPS Quality Value: PDOP

Date of Measurement: 04/19/2023

Ground Elevation: 5011

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: 19 Twp: 1N Rng: 64W

Footage at TPZ: 2640 FSL 1209 FEL

Measured Depth of TPZ: 7919

True Vertical Depth of TPZ: 6950 FNL/FSL FEL/FWL

**Base of Productive Zone (BPZ)**Sec: 30 Twp: 1N Rng: 64WFootage at BPZ: 460 FSL 1219 FELMeasured Depth of BPZ: 15388True Vertical Depth of BPZ: 6950 FNL/FSL FEL/FWL**Bottom Hole Location (BHL)**Sec: 30 Twp: 1N Rng: 64WFootage at BHL: 370 FSL 1219 FEL

FNL/FSL

FEL/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: 10/11/2019Comments: :WOGLA19-0202**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.)

Section 19: Lot A,B, and C Located S2 : 1N 64W Please see attached mapTotal Acres in Described Lease: 240Described Mineral Lease is: ☒ Fee ☐ State ☐ Federal ☐ Indian

Federal or State Lease #

## SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 715 Feet  
Building Unit: 1723 Feet  
Public Road: 1779 Feet  
Above Ground Utility: 778 Feet  
Railroad: 5280 Feet  
Property Line: 1803 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	407-3321	2560	Section 7, 18, 19 & 30 1N 64W: 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: 705 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

Section 7, 18, 19 & 30 1N 64W: ALL

## DRILLING PROGRAM

Proposed Total Measured Depth: 15478 Feet

TVD at Proposed Total Measured Depth 6950 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: 112 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	24	16	ASTM	65	0	80	92	80	0
SURF	13+1/2	9+5/8	J55	36	0	2190	589	2190	0
1ST	8+1/2	5+1/2	P110	20	0	15478	1970	15478	

☐ 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
Hydrocarbon	ARAPAHOE	0	0	630	630	501-1000	USGS	USGS-400237104354401 600 mg/L
Hydrocarbon	FOX HILLS	630	630	1154	1140	501-1000	USGS	USGS-400111104354501 738 mg/L
Confining Layer	PIERRE	1154	1140	1641	1591			
Hydrocarbon	UPPER PIERRE POROSITY	1641	1591	2135	2037	1001-10000	Other	CO DNR Report Project Number 2141
Confining Layer	PIERRE	2135	2037	4431	4127			
Hydrocarbon	PARKMAN	4431	4127	4639	4316			Non Productive Horizon
Confining Layer	PIERRE	4639	4316	4775	4439			
Hydrocarbon	SUSSEX	4775	4439	5147	4777			Non Productive Horizon
Confining Layer	PIERRE	5147	4777	5693	5273			
Hydrocarbon	SHANNON	5693	5273	5994	5547			Non Productive Horizon
Confining Layer	PIERRE	5994	5547	7604	6886			
Hydrocarbon	SHARON SPRINGS	7604	6886	7641	6900			Non Productive Horizon
Hydrocarbon	NIOBRARA	7641	6900	15478	6950			

## OPERATOR COMMENTS AND SUBMITTAL

Comments

Verdad is refiling the above referenced permit, changing the name, wellbore path, revising the casing plans and changing the spacing order.  
The nearest well belonging to another operator is further then 1500'. Distance measured using 3D anti collision report, attached as other.  
The minimum distance from the completed zone of this well to the completed zone of an offset well within the same unit was measured from the Shallot 1930 22H.  
This well has a bottom hole location beyond the unit boundary setback. The bottom of the completed interval will be within the boundary setback, labeled as BPZ 460' FSL and 1219' FEL of section 30 1N 64W. The wellbore beyond the unit setback will be physically isolated and will not be completed.

This application is in a Comprehensive Area Plan No CAP #: \_\_\_\_\_  
Oil and Gas Development Plan Name \_\_\_\_\_ OGDID #: \_\_\_\_\_  
Location ID: 470925

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: 5/26/2023 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: 6/30/2023  
Expiration Date: 06/29/2026

**API NUMBER**

05 123 51240 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 four (4) wells 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 four stratigraphically deepest wells on each side of the pad. Two wells from the Chive 2536 and two wells from the Shallot 1930.
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 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 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. 123-07613 ANDREWS #13 123-10611 STEVENS #1 123-15556 BANNER #29-1
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.
7 COAs	

## **Best Management Practices**

<b>No</b>	<b>BMP/COA Type</b>	<b>Description</b>
1	Construction	If conductors are preset, operator shall comply with Rule 406.e.
2	Drilling/Completion Operations	Operator will log two wells during the rig occupation, with open hole resistivity log and gamma ray log from kick off point into the surface casing for the 2 stratigraphically deepest wells, one well from the Chive 2536 and one well from the Shallot 1930. 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 gammaray 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.
3	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.
4	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
5	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.
6	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 non of the wellbore beyond the setback was completed

Total: 6 comment(s)

## **Attachment List**

<b>Att Doc Num</b>	<b>Name</b>
403402958	FORM 2 SUBMITTED
403413644	WELL LOCATION PLAT
403413646	DEVIATED DRILLING PLAN
403413648	OTHER
403413653	DIRECTIONAL DATA
403414825	OffsetWellEvaluations Data
403414832	MINERAL LEASE MAP
403451163	OFFSET WELL EVALUATION

Total Attach: 8 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	06/29/2023
Permit	Made the following changes with concurrence from the operator: <ul style="list-style-type: none"><li>- Revised Order No. to correct Spacing Order No.</li><li>- Revised unit acreage to match acreage of the referenced order</li><li>- Revised Unit Configuration to include all lands in Order.</li><li>- Selected Revise for APD</li><li>- Added reuse API # under submit tab.</li><li>- Added comment under submit tab stating differences from original APD</li></ul> Permit Review Complete	06/26/2023
Permit	Emailed Operator for the following: <ul style="list-style-type: none"><li>- Spacing Order No for Pooling. Need corrected Spacing Order No.</li><li>- Unit Configuration needs revised to include all spaced land in the DSU and correct unit acreage</li><li>- APD needs to be revised to REFILE; provide reuse API and comment explaining difference from original APD</li></ul>	06/22/2023
Engineer	Emailed operator regarding surface casing depth 8-June. Feedback received 12-June. Updated form as per email.	06/22/2023
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 #403437426 in Location #470925 file for additional information. This APD complies with all COGCC 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 proposed BMPs for Location #470925. OGLA task passed.	06/20/2023

Total: 5 comment(s)