

FORM
2

Rev
05/22

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:

403112866

Date Received:

09/15/2022

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: Fawn

Well Number: 2734-08H

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: 22 Twp: 1N Rng: 65W Meridian: 6

Footage at Surface: 244 Feet FSL 2350 Feet FWL

Latitude: 40.030324 Longitude: -104.651196

GPS Data: GPS Quality Value: 1.5 Type of GPS Quality Value: PDOP

Date of Measurement: 05/05/2021

Ground Elevation: 5109

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: 27 Twp: 1N Rng: 65W

Footage at TPZ: 460 FNL 1651 FWL

Measured Depth of TPZ: 7652

True Vertical Depth of TPZ: 7250 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 34 Twp: 1N Rng: 65W Footage at BPZ: 460 FSL 1654 FWL
Measured Depth of BPZ: 17344 True Vertical Depth of BPZ: 7250 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 34 Twp: 1N Rng: 65W Footage at BHL: 370 FSL 1654 FWL
FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: WELD 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.? 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: 05/11/2022

Comments: 1041WOGLA21-0016

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 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.)

T1NR65W Sec. 27:All

Total Acres in Described Lease: 640 Described Mineral Lease is: ☒ Fee ☐ State ☐ Federal ☐ Indian

Federal or State Lease #

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 1332 Feet
Building Unit: 2614 Feet
Public Road: 2798 Feet
Above Ground Utility: 1461 Feet
Railroad: 5280 Feet
Property Line: 244 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 | 407-3364 | 1920 | T1N R65W: Sec. 27 & 34: All, Sec. 28 & 33: E2 |

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: 520 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 R65W: Sec. 27 & 34 - ALL, Sec. 28 & 33: E2

DRILLING PROGRAM

Proposed Total Measured Depth: 17435 Feet

TVD at Proposed Total Measured Depth 7250 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: 106 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 | ASTM | 65 | 0 | 80 | 70 | 80 | 0 |
| SURF | 13+1/2 | 9+5/8 | J55 | 40 | 0 | 2258 | 613 | 2258 | 0 |
| 1ST | 8+1/2 | 5+1/2 | P110 | 20 | 0 | 17435 | 2155 | 17435 | |

☐ 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 | 963 | 963 | 1001-10000 | USGS | USGS-400229104403901 (1720 mg/L) |
| Groundwater | Fox Hills | 963 | 963 | 1228 | 1227 | 0-500 | USGS | USGS-400058104361201 (434mg/L) |
| Confining Layer | Pierre | 1228 | 1227 | 1713 | 1709 | | | |
| Groundwater | Upper Pierre Porosity | 1713 | 1709 | 2204 | 2197 | 1001-10000 | Other | CO DNR Report Project Number 2141 |
| Confining Layer | Pierre | 2204 | 2197 | 4363 | 4342 | | | |
| Hydrocarbon | Parkman | 4363 | 4342 | 4583 | 4561 | | | Non-productive horizon |
| Confining Layer | Pierre | 4583 | 4561 | 4659 | 4637 | | | |
| Hydrocarbon | Sussex | 4659 | 4637 | 4938 | 4914 | | | Non-productive horizon |
| Confining Layer | Pierre | 4938 | 4914 | 5270 | 5244 | | | |
| Hydrocarbon | Shannon | 5270 | 5244 | 5678 | 5649 | | | Non-productive horizon |
| Confining Layer | Pierre | 5678 | 5649 | 6281 | 6249 | | | |
| Hydrocarbon | Sharon Springs | 6281 | 6249 | 7227 | 7114 | | | Non-productive horizon |
| Hydrocarbon | Niobrara | 7227 | 7114 | 17435 | 7479 | | | |

OPERATOR COMMENTS AND SUBMITTAL

Comments

The nearest well permitted or completed in the same formation in the Fawn 2734 09H measured in 2D using GIS mapping.
The nearest well belonging to another operator is the Willow 22-15-3L (05-123-50945) In PR Status operated by Confluence DJ LLC, 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 setback at 460' FSL and 1654' FWL of Section 34. The wellbore beyond the unit setback will be isolated and will not be completed.

This application is in a Comprehensive Area Plan No CAP #: _____
Oil and Gas Development Plan Name Fawn 2734-2833 OGDID #: 482044
Location ID: 482909

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: 9/15/2022 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: 10/21/2022
Expiration Date: 10/20/2025

API NUMBER

05 123 51852 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 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. 123-10319 GLEN YOUNG #1 123-12691 JORDAN #34-6 123-12917 JORDAN #34-7 123-12937 JORDAN #34-9 123-13280 JORDAN #34-8 123-14809 JORDAN-LOUSTAUNAU #34-10 123-19677 HSR-CHERRY KNOLLS #9-33 |
| Drilling/Completion Operations | Operator acknowledges the proximity of the listed wells. Operator agrees to: provide mitigation option 1 or 2 (per the Offset Well Evaluation and Hydraulic Fracturing Operator Guidance Document) to mitigate the situation, ensure all applicable documentation is submitted based on the selected mitigation option chosen, and submit a Form 42 ("OFFSET MITIGATION COMPLETED") stating that appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well. 123-10612 JORDAN, IVAR #1 123-12421 Jordan #34-2 123-12567 Jordan #34-3 123-12670 JORDAN #34-5 123-12709 JORDAN #34-4 |
| 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. |
| 5 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. |

Total: 3 comment(s)

Attachment List

| Att Doc Num | Name |
|--------------------|----------------------------|
| 403112866 | FORM 2 SUBMITTED |
| 403132845 | WELL LOCATION PLAT |
| 403132847 | OTHER |
| 403132850 | DEVIATED DRILLING PLAN |
| 403132852 | DIRECTIONAL DATA |
| 403150008 | OffsetWellEvaluations Data |
| 403167148 | OffsetWellEvaluations Data |
| 403204781 | OFFSET WELL EVALUATION |

Total Attach: 8 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|--|---------------------|
| Permit | Final Review Completed. | 10/18/2022 |
| Permit | Made the following changes with concurrence from the operator: - Added Twp & Rng to Unit Configuration comment. - Corrected Beyond Unit Setback comment from BHL to Bottom-Hole Location under submit tab. Permit Review Complete | 10/17/2022 |
| Permit | Emailed operator for the following: - Provide Surety ID - Confirm adding Twp & Rng to Unit Configuration comment - Confirm correcting Beyond Unit Setback comment from BHL to Bottom-Hole Location Made the following changes with concurrence from the operator: - Added missing Surety ID | 10/11/2022 |
| OGLA | The Commission approved OGDG #482044 on August 31, 2022 for the Oil and Gas Location related to this Form 2. OGLA task passed. | 09/16/2022 |

Total: 4 comment(s)