

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:
402468482

APPLICATION FOR PERMIT TO:

☒ Drill ☐ Deepen ☐ Re-enter ☐ Recomplete and Operate

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER: _____ Refilling ☒
ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐ Sidetrack ☐

Date Received:
08/25/2020

Well Name: Sonic Star Well Number: 1101-09H
Name of Operator: VERDAD RESOURCES LLC COGCC Operator Number: 10651
Address: 1125 17TH STREET SUITE 550
City: DENVER State: CO Zip: 80202
Contact Name: Allison Schieber Phone: (720)845-6909 Fax: ()
Email: regulatory@verdadresources.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20170009

WELL LOCATION INFORMATION

QtrQtr: SESE Sec: 11 Twp: 8N Rng: 60W Meridian: 6
Latitude: 40.670835 Longitude: -104.049105
Footage at Surface: 363 Feet FSL 230 Feet FEL
Field Name: WILDCAT Field Number: 99999
Ground Elevation: 4881 County: WELD
GPS Data: GPS Quality Value: 1.5 Type of GPS Quality Value: PDOP Date of Measurement: 02/24/2018
Instrument Operator's Name: Joe DiGregorio

If well is ☐ Directional ☒ Horizontal (highly deviated) submit deviated drilling plan.

Footage at Top of Prod Zone: FNL/FSL FEL/FWL Bottom Hole: FNL/FSL FEL/FWL
300 FSL 2494 FEL 2694 FSL 2499 FEL
Sec: 12 Twp: 8N Rng: 60W Sec: 1 Twp: 8N Rng: 60W

LOCAL GOVERNMENT INFORMATION

County: WELD Municipality: N/A

Per § 34-60-106 (1)(f)(I)(A), the following questions pertain to the "local government with jurisdiction to approve the siting of the proposed oil and gas location."

The local government with jurisdiction is: County

Does the local government with jurisdiction regulate the siting of Oil and Gas Locations, with respect to this location? If the local government does regulate the siting, but has waived its right to precede the COGCC in siting determination, indicate by selecting "YES" here and selecting "Waived" for the disposition below. ☒ 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 local government siting permit type is: WOGLA

The local government siting permit was filed on: 03/13/2019

The disposition of the application filed with the local government is: Approved

Additional explanation of local process:

WOGLA18-0184 approved 8-9-19

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian

The Surface Owner is: ☐ is the mineral owner beneath the location.

(check all that apply) ☐ is committed to an Oil and Gas Lease.

☐ has signed the Oil and Gas Lease.

☐ is the applicant.

The Mineral Owner beneath this Oil and Gas Location is: ☒ Fee ☐ State ☐ Federal ☐ Indian

The Minerals beneath this Oil and Gas Location will be developed by this Well: No

The right to construct the Oil and Gas Location is granted by: Surface Use Agreement

Surface damage assurance if no agreement is in place: _____ Surface Surety ID: _____

LEASE INFORMATION

Using standard QtrQtr, Sec, Twp, Rng format, describe one entire mineral lease that will be produced by this well (Describe lease beneath surface location if produced. Attach separate description page or map if necessary.)

8N60W: Sec 1 All; Sec 12 All; Sec 13 NE/4

Total Acres in Described Lease: 1454 Described Mineral Lease is: ☐ Fee ☐ State ☒ Federal ☐ Indian

Federal or State Lease # COC-71628

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 0 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 3809 Feet

Building Unit: 5280 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 895 Feet

Above Ground Utility: 5280 Feet

Railroad: 5280 Feet

Property Line: 230 Feet

School Facility: 5280 Feet

School Property Line: 5280 Feet

Child Care Center: 5280 Feet

INSTRUCTIONS:

- All measurements shall be provided from center of the Proposed Well to nearest of each cultural feature as described in Rule 303.a.(5).

- 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, High Occupancy Building Unit, Designated Outside Activity Area, School Facility, and Child Care Center – as defined in 100 Series Rules.

DESIGNATED SETBACK LOCATION INFORMATION

Check all that apply. This location is within a:

-  Buffer Zone
-  Exception Zone
-  Urban Mitigation Area

- Buffer Zone – as described in Rule 604.a.(2), within 1,000' of a Building Unit
- Exception Zone - as described in Rule 604.a.(1), within 500' of a Building Unit.
- Urban Mitigation Area - as defined in 100-Series Rules.

Pre-application Notifications (required if location is within 1,000 feet of a building unit):

Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government:

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners:

SPACING and UNIT INFORMATION

Distance from completed portion of proposed wellbore to nearest completed portion of offset wellbore permitted or completed in the same formation: 335 Feet

| | | |
|--|-----|---|
| Distance from Completed Portion of Wellbore to Nearest Unit Boundary | 300 | Feet (Enter 5280 for distance greater than 1 mile.) |
|--|-----|---|

Federal or State Unit Name (if appl): _____ Unit Number: _____

SPACING & FORMATIONS COMMENTS

T8N R60W
Sec 1: ALL
Sec 12: ALL
Sec 36: ALL
1920 ACRES

If this Form 2 is associated with a Drilling and Spacing Unit application, provide docket number:

OBJECTIVE FORMATIONS

| <u>Objective Formation(s)</u> | <u>Formation Code</u> | <u>Spacing Order Number(s)</u> | <u>Unit Acreage Assigned to Well</u> | <u>Unit Configuration (N/2, SE/4, etc.)</u> |
|-------------------------------|-----------------------|--------------------------------|--------------------------------------|---|
|-------------------------------|-----------------------|--------------------------------|--------------------------------------|---|

| | | | | |
|----------|------|---------|------|-------------------|
| NIOBRARA | NBRR | 535-785 | 1920 | 8N60W1,12,36: All |
|----------|------|---------|------|-------------------|

DRILLING PROGRAM

Proposed Total Measured Depth: 15243 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: 91 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 Operations Plan)

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

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 609

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Methods: Commercial Disposal

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Beneficial reuse or land application plan submitted? No

Reuse Facility ID: _____ or Document Number: _____

CASING PROGRAM

| Casing Type | Size of Hole | Size of Casing | Wt/Ft | Csg/Liner Top | Setting Depth | Sacks Cmt | Cmt Btm | Cmt Top |
|-------------|--------------|----------------|-------|---------------|---------------|-----------|---------|---------|
| CONDUCTOR | 24 | 16 | 65 | 0 | 80 | 70 | 80 | 0 |
| SURF | 13+1/2 | 9+5/8 | 36 | 0 | 1800 | 488 | 1800 | 0 |
| 1ST | 8+1/2 | 5+1/2 | 20 | 0 | 15243 | 1944 | 15243 | |

☐ Conductor Casing is NOT planned

DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- ☐ Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)
- ☐ Rule 604.b.(1)A. Exception Location (existing or approved Oil & Gas Location now within a Designated Setback as a result of Rule 604.a.)
- ☐ Rule 604.b.(1)B. Exception Location (existing or approved Oil & Gas Location is within a Designated Setback due to Building Unit construction after Location approval)
- ☐ Rule 604.b.(2) Exception Location (SUA or site-specific development plan executed on or before August 1, 2013)
- ☐ Rule 604.b.(3) Exception Location (Building Units constructed after August 1, 2013 within setback per an SUA or site-specific development plan)

GREATER WATTENBERG AREA LOCATION EXCEPTIONS

Check all that apply:

- ☐ Rule 318A.a. Exception Location (GWA Windows).
- ☐ Rule 318A.c. Exception Location (GWA Twinning).

RULE 502.b VARIANCE REQUEST

☐ Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number _____

OTHER LOCATION EXCEPTIONS

Check all that apply:

☐ Rule 318.c. Exception Location from Rule or Spacing Order Number _____

☐ Rule 603.a.(2) Exception Location (Property Line Setback).

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

OPERATOR COMMENTS AND SUBMITTAL

Comments

This pad has not been built and has a valid Form 2A.

The following changes from the previously approved Form 2 are being made via this refile.

1. Offset well evaluation updated.
2. Nearest offset well.
3. Nearest well in same formation.

The distance to the nearest completed portion of offset well completed or permitted in the same formation is the Peggy 2501-10H at 335 ft. measured in 2D using the GIS mapping tool.

The distance to the nearest existing or proposed well belonging to another operator is the Boomslang Fed 8-60 14A-13-18-1 (API 05-123-46658) operated by Bison Oil and Gas XX status, measured in 3D using the anti-collision report, please see attached as other

*Verdad will not stimulate nearer than 150' from the offset Bison Boomslang Fed 8-60 14A-13-18-1 well. Rule 317s. and 317.r are null.

*Distances on Offset Well Evaluation may differ due to 2D vs 3D measurement.

Please note, attached SUA was originally executed by Carrizo and was assigned to Verdad upon purchase of the asset. Signed waivers of rules 305 and 306 by the surface owner can be found on page 3 of our Memorandum of Surface Use Agreement for this pad.

This application is in a Comprehensive Drilling Plan _____ No _____ CDP #: _____

Location ID: 442437

Is this application being submitted with an Oil and Gas Location Assessment application? _____ No _____

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: 8/25/2020 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: 12/19/2020

Expiration Date: 12/18/2022

API NUMBER

05 123 48997 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 | If the location has not been built by the Form 2A (Doc #401567505) expiration date of 12/10/2021, Operator must Refile the Form 2A for approval prior to location construction. |
| Drilling/Completion Operations | 1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU (spud notice) for the first well activity with a rig on the pad and provide 48 hour spud notice via Form 42 for all subsequent wells drilled on the pad. 2) Provide cement coverage from TD to a minimum of 500' above Niobrara. Verify coverage with cement bond log. Confirm rule and cement coverage with COGCC Area Engineer prior to drilling this well. 3) Oil-based drilling fluid is to be used only after the surface casing has been set. 4) The Operator will abide by the COGCC Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area, May 29, 2012. 5) Increase setting depth of surface casing to 1800' and adjust cement volume accordingly. |
| Drilling/Completion Operations | Bradenhead Testing 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, must contact COGCC engineer prior to stimulation. 2) If a delayed completion, 6 months after rig release and prior to stimulation. If any pressure greater than 200 psi, must contact COGCC engineer 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 DJ Basin Horizontal Offset Policy (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. COLORADO NATIONAL BANK *1(API 123-05582) |

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 | Rule 604.c.1: 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)

Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.
http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf

Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area.
<http://cogcc.state.co.us/documents/reg/Policies/PolicyGwaBradenheadMonitoringFinal.pdf>

Attachment List

| <u>Att Doc Num</u> | <u>Name</u> |
|--------------------|----------------------------|
| 402468482 | FORM 2 SUBMITTED |
| 402474668 | OTHER |
| 402474951 | OffsetWellEvaluations Data |
| 402557776 | OFFSET WELL EVALUATION |

Total Attach: 4 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|--|---------------------|
| Permit | Corrected lease description and total acreage with operator concurrence. Final Review Completed. | 12/10/2020 |
| Permit | Permit review complete. | 12/10/2020 |
| Permit | Following additional analysis arising out of the Objective Criteria, the Director determined that this application meets the standard for the protection of public health, safety, and welfare and the environment, including wildlife resources set by SB 19-181. The Objective Criteria Review Memo (Doc# 1347992) can be found in the document file for Location ID 442437. | 12/10/2020 |
| Permit | Distance to Nearest Well in the same Formation is incorrect. With operator concurrence, the following was corrected: Distance to Nearest Well was corrected to 335 ft. to the Peggy 2501-10H. | 12/10/2020 |
| Engineer | <ul style="list-style-type: none"> •Surface Casing Check complete •Offset well review complete 317.r - No wells 317.s - No wells •Engineering review complete | 12/02/2020 |
| OGLA | IN PROCESS comment - Received requested information from operator on 10/19/2020. COGCC review will resume and be conducted within 60 days (by 12/18/2020). | 10/19/2020 |
| OGLA | <p>ON HOLD: This application has been reviewed by COGCC staff and cannot be approved based on the information submitted; therefore, the COGCC is placing this form ON HOLD until additional information is received from the applicant. In compliance with § 24-65.1-108(1), C.R.S., the COGCC is providing this written request for all additional information necessary for the COGCC to respond to this application. The applicant may provide all requested additional information to COGCC via email. Upon receipt of all requested information, the COGCC will have 60 days in which to approve, deny, or request all additional information necessary to complete the regulatory review. If the applicant no longer requires this application be approved, the applicant may request to withdraw the application.</p> <p>In addition to all standard required information and attachments, the COGCC hereby confirms the following information is necessary for review:</p> <p>1. This Form 2 application meets one or more Objective Criteria. The applicant must address the Objective Criteria on a Form 4 Sundry Notice submitted to the related Location ID (Loc ID# 442437). The Form 4 shall include updated Best Management Practices to address the following:</p> <ul style="list-style-type: none"> a. Pertaining to Objective Criteria #5c & #8: Provide an updated tank berm BMP for any liner planned to be used in conjunction with the tank area berms. b. Pertaining to Objective Criteria #5c & #8: Provide a BMP for any berm and liner containment surrounding the separators. c. Pertaining to Objective Criteria #5c & #8: Provide a BMP for any liner planned for use under the drilling rig. d. Pertaining to Objective Criteria #5c & #8: Provide a BMP for remote monitoring/shut-in capabilities at the location. e. Pertaining to Objective Criteria #5c and #8: Provide an updated stormwater management BMP providing examples (including but not limited to) of what types of controls are to be implemented on the location. <p>2. The following informational questions relating to the Objective Criteria Review must also be answered, but may be answered in indirect response to this email, rather than via the above mentioned Form 4 Sundry:</p> <ul style="list-style-type: none"> a. Pertaining to Objective Criteria #8: Is there an Emergency Response Plan in place for this location? If so, with which local Emergency Responders? Please add this information to the "Submit" tab comment box for any Sundry submitted to update location BMPs. 3. The following questions relate to the Permitting Technical Review: a. Pertaining to Sonic Star 1101-1H Doc# 402465906: the Distance from completed portion of proposed wellbore to nearest completed portion of offset wellbore permitted or completed in the same formation is incorrect. | 10/19/2020 |
| Permit | Passed Completeness. | 09/08/2020 |
| Permit | Required submit comment missing. Return to draft. | 08/28/2020 |

Total: 9 comment(s)