

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:

403173392

Date Received:

12/20/2022

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: Kiwi 2920

Well Number: 04H

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)8456909

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: SENW Sec: 32 Twp: 2N Rng: 64W Meridian: 6

Footage at Surface: 1955 Feet FNL/FSL 2608 Feet FEL/FWL

Latitude: 40.096935 Longitude: -104.574985

GPS Data: GPS Quality Value: 1.4 Type of GPS Quality Value: PDOP

Date of Measurement: 09/14/2021

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: 29 Twp: 2N Rng: 64W

Footage at TPZ: 460 FSL 2090 FWL

Measured Depth of TPZ: 7646

True Vertical Depth of TPZ: 7000 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 20 Twp: 2N Rng: 64W Footage at BPZ: 460 FNL 2110 FWL
Measured Depth of BPZ: 17273 True Vertical Depth of BPZ: 7000 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 20 Twp: 2N Rng: 64W Footage at BHL: 370 FNL 2110 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: 10/15/2022

Comments: 1041WOGLA22-0012

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.)

W2 LESS AND EXCEPT 6.21 ACRES OF BURLINGTON NORTHERN RAILROAD ROW, 2N 64W

Total Acres in Described Lease: 314 Described Mineral Lease is: ☒ Fee ☐ State ☐ Federal ☐ Indian

Federal or State Lease # _____

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 2100 Feet
Building Unit: 2045 Feet
Public Road: 1925 Feet
Above Ground Utility: 1161 Feet
Railroad: 4108 Feet
Property Line: 707 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	407-3404	1920	W2 Section 20, S2 Section 28, All Section 29, All Section 33 T2N R64W

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: 537 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

W2 Section 20, S2 Section 28, All Section 29, All Section 33 T2N R64W

DRILLING PROGRAM

Proposed Total Measured Depth: 17363 Feet

TVD at Proposed Total Measured Depth 7000 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: 64 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	92	80	0
SURF	13+1/2	9+5/8	J55	36	0	2567	697	2567	0
1ST	8+1/2	5+1/2	P110	20	0	17363	2177	17363	

☐ 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	461	460	1001-10000	USGS	USGS-400701104363401(2330 mg/L)
Groundwater	FOX HILLS	461	460	762	759	501-1000	USGS	USGS-400419104334501(770 mg/L)
Confining Layer	PIERRE	762	759	1483	1453			
Groundwater	UPPER PIERRE POROSITY	1483	1453	2568	2487	1001-10000	Other	CO DNR Report Project Number 2141
Confining Layer	PIERRE	2568	2487	4132	3976			
Hydrocarbon	PARKMAN	4132	3976	4348	4182			NON PRODUCTIVE HORIZON
Confining Layer	PIERRE	4348	4182	4473	4301			
Hydrocarbon	SUSSEX	4473	4301	4781	4594			NON PRODUCTIVE HORIZON
Confining Layer	PIERRE	4781	4594	4870	4679			
Hydrocarbon	SHANNON	4870	4679	5316	5104			NON PRODUCTIVE HORIZON
Confining Layer	PIERRE	5316	5104	7136	6806			
Hydrocarbon	SHARON SPRINGS	7136	6806	7160	6823			NON PRODUCTIVE HORIZON
Hydrocarbon	NIOBRARA	7160	6823	17363	7000			

OPERATOR COMMENTS AND SUBMITTAL

Comments The nearest well completed by another operator is the Starkey 20-03 (05-123-39738) operated by Noble, PA status. 408.u is null in void due to wells PA status.
The nearest well 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 is the Kiwi 2929 05H.
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 2110' FWL of Section 20 2N 64W. The wellbore beyond the unit setback will be physically isolated and will not be completed

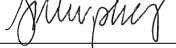
This application is in a Comprehensive Area Plan No CAP #: _____
Oil and Gas Development Plan Name Harambe 2920 OGD ID#: 482695
Location ID: 483467

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: 12/20/2022 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: 1/27/2023
Expiration Date: 01/26/2026

API NUMBER

05 123 52010 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.
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. 123-07158 KAMINSKY #1
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. 123-11702 FOY #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.
7 COAs	

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	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 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 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.
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	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.
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

<u>Att Doc Num</u>	<u>Name</u>
403173392	FORM 2 SUBMITTED
403218483	WELL LOCATION PLAT
403265969	DEVIATED DRILLING PLAN
403265971	OTHER
403265973	DIRECTIONAL DATA
403265979	OffsetWellEvaluations Data
403304706	OFFSET WELL EVALUATION

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	01/25/2023
Permit	Emailed operator for the following: - Confirm referenced well in "nearest well from the completed zone" comment under the submit tab. Made the following changes with concurrence from the operator: - Revised "nearest well from the completed zone" comment from Harambe 2920 to Kiwi 2929 under Submit tab. Permit Review Complete	01/24/2023
OGLA	The Commission approved OGDG #482695 on November 16, 2022 for the Oil and Gas Location related to this Form 2. OGLA task passed.	12/22/2022

Total: 3 comment(s)