

FORM
2

Rev
12/20

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:

402596035

(SUBMITTED)

Date Received:

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: North Carracas 34-4

Well Number: 7F-3

Name of Operator: RED WILLOW PRODUCTION COMPANY

COGCC Operator Number: 81295

Address: P O BOX 369

City: IGNACIO

State: CO

Zip: 81137

Contact Name: Shelly Cowden

Phone: (970)442-1554

Fax: ()

Email: scowden@rwpc.us

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20090057

WELL LOCATION INFORMATION

Surface Location

QtrQtr: SWSW Sec: 7 Twp: 32N Rng: 4W Meridian: N

Footage at Surface: 96 Feet FSL 411 Feet FWL

Latitude: 37.025498 Longitude: -107.333225

GPS Data: GPS Quality Value: 1.8 Type of GPS Quality Value: PDOP

Date of Measurement: 10/16/2020

Ground Elevation: 6174

Field Name: IGNACIO BLANCO

Field Number: 38300

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: 18 Twp: 32N Rng: 4W

Footage at TPZ: 1234 FNL 579 FWL

Measured Depth of TPZ: 3355

True Vertical Depth of TPZ: 2779

Base of Productive Zone (BPZ)

Sec: 23 Twp: 32N Rng: 5W

Footage at TPZ: 974 FNL 423 FEL

Measured Depth of TPZ: 3400

True Vertical Depth of TPZ: 12930

Bottom Hole Location (BHL)

Sec: 23 Twp: 32N Rng: 5W

Footage at BHL: 974 FNL 423 FEL

FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: ARCHULETA

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.? No

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: _____ Date of Final Disposition: _____

Comments: _____

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 Financial Assurance (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.)

T32N-R4W, N.M.P.M., Sec7: ALL
And additional acreage

Total Acres in Described Lease: 12327 Described Mineral Lease is: ☒ Fee ☐ State ☐ Federal ☐ Indian

Federal or State Lease # 750082008

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 696 Feet
Building Unit: 696 Feet
Public Road: 732 Feet
Above Ground Utility: 5280 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.

Railroad: 5280 Feet
Property Line: 660 Feet

OBJECTIVE FORMATIONS

| Objective Formation(s) | Formation Code | Spacing Order Number(s) | Unit Acreage Assigned to Well | Unit Configuration (N/2, SE/4, etc.) |
|------------------------|----------------|-------------------------|-------------------------------|--------------------------------------|
| FRUITLAND COAL | FRLDC | 112-287 | 7389 | See Order |

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: 660 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: 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

DRILLING PROGRAM

Proposed Total Measured Depth: 2759 Feet TVD at Proposed Total Measured Depth 2964 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: 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? Yes

Will oil based drilling fluids be used? No

BOP Equipment Type: ☒ Annular Preventor ☒ Double Ram ☒ Rotating Head ☐ None

Beneficial reuse or land application plan submitted?

Reuse Facility ID: or Document Number:

| <u>Casing Type</u> | <u>Size of Hole</u> | <u>Size of Casing</u> | <u>Grade</u> | <u>Wt/Ft</u> | <u>Csg/Liner Top</u> | <u>Setting Depth</u> | <u>Sacks Cmt</u> | <u>Cmt Btm</u> | <u>Cmt Top</u> |
|--------------------|---------------------|-----------------------|--------------|--------------|----------------------|----------------------|------------------|----------------|----------------|
| CONDUCTOR | 17+1/2 | 13+3/8 | J-55 | 54.5 | 0 | 140 | 200 | 140 | 0 |
| SURF | 12+1/4 | 9+5/8 | J-55 | 36 | 0 | 860 | 430 | 860 | 0 |
| 1ST | 8+3/4 | 7 | J-55 | 23 | 0 | 3794 | 365 | 3794 | 0 |
| 4TH LINER | 6+1/8 | 4+1/2 | J-55 | 11.6 | 3400 | 12930 | | | |

POTENTIAL FLOW AND CONFINING FORMATIONS

| <u>Zone Type</u> | <u>Formation /Hazard</u> | <u>Top M.D.</u> | <u>Top T.V.D.</u> | <u>Bottom M.D.</u> | <u>Bottom T.V.D.</u> | <u>TDS (mg/L)</u> | <u>Data Source</u> | <u>Comment</u> |
|------------------|--------------------------|-----------------|-------------------|--------------------|----------------------|-------------------|--------------------|---|
| Groundwater | Not Present see Coments | 0 | 0 | 100 | 100 | 0-500 | Other | In the area where we are drilling, Upper Animas or Animas McDermott formations are not present, they have been eroded away and the surface formation is San Jose. |
| Confining Layer | San Jose | 0 | 0 | 884 | 881 | 501-1000 | USGS | Sands, Silts, Shale, non potable water |
| Confining Layer | Nacimiento | 884 | 881 | 2033 | 1994 | 501-1000 | USGS | Sands, Silts, Shale, non potable water |
| Confining Layer | Ojo Alamo | 2033 | 1994 | 2247 | 2633 | 1001-10000 | Other | RW Investigation Stateline Sands, Silts, Shale, non potable water |
| Hydrocarbon | Kirtland Shale | 2247 | 2633 | 2774 | 2633 | >10000 | Other | FCGS - Kutz Gas Field NM Shale, siltstone, sands, low gas saturations |
| Hydrocarbon | Kirtland Shale lwr | 2774 | 2633 | 3004 | 2760 | >10000 | Other | FCGS - Kutz Gas Field NM Shale, siltstone, sands, low gas saturations |
| Hydrocarbon | Fruitland Formation | 3004 | 2760 | 3240 | 2860 | >10000 | Other | RMAG Oil and Gas Fields 2014 Shale, siltstone, sands, low gas saturations |
| Hydrocarbon | Fruitland Coal | 3240 | 2860 | 3335 | 2900 | >10000 | Other | RMAG Oil and Gas Fields 2014 Horizontal Target, CBM Coal |
| Hydrocarbon | Pictured Cliffs | 3335 | 2900 | 0 | 0 | >10000 | Other | RMAG Oil and Gas Fields 2014 Gas Charged Marine Sandstone |

| | |
|----------|--|
| Comments | <p>Insofar as this application for Permit to Drill concerns lands within the jurisdiction of the Southern Ute Indian Tribe, it is submitted to the Colorado Oil and Gas Conservation Commission ???COGCC?????in accordance with the terms of the</p> <p>Memorandum of Understanding dated Aug. 22, 1991 between the Bureau of Land Management ???BLM?????and the</p> <p>Commission and the separate Memorandum of Understanding dated Aug. 22, 1991 between the Bureau of Indian Affairs ???BIA???????the BLM and the Southern Ute Indian Tribe.</p> <p>The trajectory of the wellbore will be as follows:</p> <p>This Form 2 is for the Lateral #3.</p> <p>The Completed interval will be within the authorized setbacks.</p> |
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I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: _____

Print Name: Shelly Cowden _____

Title: Sr. Env. Compliance Spec. _____

Date: _____

Email: scowden@rwpc.us _____

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: _____

Expiration Date: _____

API NUMBER

05

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.

COA Type

Description

| | |
|--|--|
| | |
|--|--|

Best Management Practices

No BMP/COA Type

Description

| | |
|--|--|
| | |
|--|--|

Attachment List

Att Doc Num

Name

| | |
|-----------|----------------------|
| 402596037 | DIRECTIONAL DATA |
| 402596038 | WELLBORE DIAGRAM |
| 402596041 | PLAT |
| 402596043 | FED. DRILLING PERMIT |

Total Attach: 4 Files

General Comments

User Group

Comment

Comment Date

| | | |
|--|--|---------------------|
| | | Stamp Upon Approval |
|--|--|---------------------|

Total: 0 comment(s)

Public Comments

No public comments were received on this application during the comment period.

