

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: _____ Refile
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 FNL/FSL FEL/FWL
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 FNL/FSL FEL/FWL
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.)

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: _____

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	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			

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	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

OPERATOR COMMENTS AND SUBMITTAL

Comments

Inssofar 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 Memorandum of Understanding dated Aug. 22, 1991 between the Bureau of Land Management ?????BLM??????and the 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.

The trajectory of the wellbore will be as follows:
 This Form 2 is for the Lateral #3.
 The Completed interval will be within the authorized setbacks.

This application is in a Comprehensive Area Plan No CAP #: _____

Oil and Gas Development Plan Name _____ OGDID #: _____

Location ID: _____

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.

<u>COA Type</u>	<u>Description</u>

Best Management Practices

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

Attachment List

<u>Att Doc Num</u>	<u>Name</u>
402596037	DIRECTIONAL DATA
402596038	WELLBORE DIAGRAM
402596041	PLAT
402596043	FED. DRILLING PERMIT

Total Attach: 4 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)

Public Comments

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

