

FORM
2

Rev
10/24

State of Colorado

Energy & Carbon Management Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

404011101

(SUBMITTED)

Date Received:

12/02/2024

APPLICATION FOR PERMIT TO

Drill Deepen Re-enter Recomplete and Operate Amend

TYPE OF WELL OIL GAS COALBE GEOTHERMAL OTHER: _____

Refile

ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Sidetrack

Well Name: Ardourel 33081718 Well Number: 2HU

Name of Operator: NUEVIDA RESOURCES LLC ECMC Operator Number: 10764

Address: 5950 CEDAR SPRINGS RD STE #100

City: DALLAS State: TX Zip: 75235

Contact Name: Richard Pate Phone: (303)5504880 Fax: ()

Email: dpate@nuevidaresiurces.com

FINANCIAL ASSURANCE FOR PLUGGING, ABANDONMENT, AND RECLAMATION

ECMC Financial Assurance

The Operator has provided or will provide Financial Assurance to the ECMC for this Well.

Surety ID Number (if applicable): 20200199

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: Lot 3 Sec: 18 Twp: 33N Rng: 8W Meridian: N

Footage at Surface: 1753 Feet FSL 295 Feet FWL

Latitude: 37.101138 Longitude: -107.767586

GPS Data: GPS Quality Value: 1.8 Type of GPS Quality Value: PDOP Date of Measurement: 12/22/2020

Ground Elevation: 6719

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: 33N Rng: 8W Footage at TPZ: 600 FSL 600 FWL

Measured Depth of TPZ: 7512 True Vertical Depth of TPZ: 6924 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 17 Twp: 33N Rng: 8W

Footage at BPZ: 600 FSL 600 FEL

Measured Depth of BPZ: 17040

True Vertical Depth of BPZ: 6954 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 17 Twp: 33N Rng: 8W

Footage at BHL: 600 FSL 479 FEL

FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: LA PLATA 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 and §37-90.5-107(2)(b)(I) C.R.S, the following questions pertain to the Relevant Local Government approval of the siting of the proposed Oil and Gas or Geothermal Locations.

The Energy and Carbon Management Act and the Geothermal Resources Act provide 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.

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: 07/21/2022

Comments:

GEOTHERMAL

Well Overview

The following questions determine informational requirements based on Well type:

Which type of Geothermal Well is this? Select one of the following: Production Well

Will this well be constructed using cementing methodologies other than those listed in Rule 408.f? No

If Yes, what method will be used:

Please describe the cementing method to be used in detail:

Geothermal Resource Units

Fill out the information below to submit an application for a Geothermal Resource Unit (GRU) as part of the current permit application. This may also be completed later using a Form 4 Sundry.

Will this Well be in an existing GRU? No

Are you submitting your application for a new GRU as part of the current application? No

SURFACE AND MINERAL OWNERSHIP AT WELL'S OIL & GAS OR GEOTHERMAL LOCATION

Surface Owner of the land at this Well's Oil and Gas Or Geothermal Location: Fee State Federal Indian

Mineral Owner beneath this Well's Oil and Gas Or Geothermal 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.)

Township 33 North, Range 8 West N.M.P.M.
Section 17: All
Section 18: Lots 1 (39.49), 3 (40.23), 4(39.68, E/2W/2. E/2 (a/k/a All)

Total Acres in Described Lease: 1280 Described Mineral Lease is: Fee State Federal Indian
Federal or State Lease # _____

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 2617 Feet
Building Unit: 2617 Feet
Public Road: 1753 Feet
Above Ground Utility: 1230 Feet
Railroad: 5280 Feet
Property Line: 295 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.)
MANCOS	MNCS	112-299	1280	T33N,R8W Sec. 17: All: Section 18: Lots 1,2,3,4,E/1/2W1/2,E1/2 (a.k.a. All)

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: 600 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: 1052 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: 17161 Feet

TVD at Proposed Total Measured Depth 6954 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: 425 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? No

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
SURF	26	20	J55	94.0	0	500	1366	500	0
1ST	17+1/2	13+3/8	K55-HC	54.5	0	3413	2592	3413	0
2ND	12+1/4	9+5/8	L80-HC	40.0	0	6481	1811	6481	0
3RD	8+1/2	5+1/2	P110	20.0	0	17161	2899	17161	2000

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	Animas	10	10	1570	1570	0-500	USGS	WRI 4188
Groundwater	Lower Animas	1600	1570	1832	1797	1001-10000	USGS	WRI 95-4190
Confining Layer	Kirtland	1832	1797	2000	1960		USGS	WRI 95-4190
Hydrocarbon	Farmington Sand	2000	1960	2050	2010		USGS	WRI 95-4190
Confining Layer	Kirtland Shale (lower)	2050	2010	2771	2686		USGS	WRI 4188
Hydrocarbon	Fruitland Coal	2771	2686	3232	3132		USGS	WRI 4188
Hydrocarbon	Picture Cliffs	3232	3132	3332	3227		USGS	WRI 4188
Confining Layer	Lewis Shale	3332	3227	5110	4884		USGS	WRI 4188
Hydrocarbon	Cliff House (MV)	5110	4884	5495	5320		USGS	WRI 4188
Hydrocarbon	Menefee (MV)	5495	5320	5725	5583		USGS	WRI 4188
Hydrocarbon	Point Lookout (MV)	5725	5583	6150	5978		USGS	WRI 95-4190
Confining Layer	Mancos Shale	6150	5978	6940	6700		USGS	WRI 95-4190
Hydrocarbon	Middle Mancos	6940	6700	7512	6954		USGS	WRI 95-4190

OPERATOR COMMENTS AND SUBMITTAL

Comments

1. The well has a bottom hole location beyond the unit boundary setback (apprx 120') for operational/cementing purposes. The bottom of the completed interval will be within the unit boundary of 600' FEL (frac sleeve set at this point).
2. NueVida Resources recently completed 2 horizontal Mancos wells in August 2024 (#3HL: API 05-067-10037 and #4HU-ST1: API 05-067-10038-01). Both the #3HL (TVD @ 7,118') and #4HU-ST1 (TVD @ 6,874 ') are producing from the Middle Mancos interval(s). The #3HL is a W-E lateral located @ 1652' FSL x 600 'FEL; the #4HU-ST1 is a W-E lateral located @ 2566' FNL x 600' FEL.
3. The nearest well (non-operated) in the unit penetrating through the Mancos (per manual calculation) is at 610'. The Harmon #1A well (API: 05-067-08182); Status: PR: DK-MV, TD @ 8,135'.
4. Wells within 150 ft: NONE
5. Wellbore to wellbore distances populated from attached anti-collision report unless otherwise indicated.
6. NueVida Resources will isolate the Animas/Ojo Alamo formation (potential fresh water source) with surface casing set @ 500' and cemented to surface. Deepest water well (SESW 13-T33N-R9W) is approximately 3500' from the Ardourel #2HU wellbore and has a TD=320'.

This application is in a Comprehensive Area Plan No CAP #:
 Oil and Gas Development Plan Name Ardourel OGDP OGDID #: 483343
 Location ID: 484496

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: _____ Print Name: Richard Pate
 Title: COO- VP Enr/Opns Date: 12/2/2024 Email: dpate@nuevidaresiurces.com

Based on the information provided herein, this Application for Permit-to-Drill complies with ECMC Rules, applicable orders, and SB 19-181 and is hereby approved.

ECMC Approved: _____ Director of ECMC Date: _____
 Expiration Date: _____

API NUMBER
05

CONDITIONS OF APPROVAL, IF ANY LIST

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>
0 COA	

Best Management Practices

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

ATTACHMENT LIST

Att Doc Num	Name
404011103	WELL LOCATION PLAT
404011104	DEVIATED DRILLING PLAN
404011105	DEVIATED DRILLING PLAN
404011106	OFFSET WELL EVALUATION
404011167	DIRECTIONAL DATA
404011168	OffsetWellEvaluations Data
404011186	WELLBORE DIAGRAM

Total Attach: 7 Files

General Comments

User Group	Comment	Comment Date
		Stamp Upon Approval

Total: 0 comment(s)

