

FORM

2

Rev  
10/24

## State of Colorado

## Energy &amp; Carbon Management Commission

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

Document Number:

404011171

(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: 5HL  
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@nuevidaresources.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

FNL/FSL

FEL/FWL

Footage at Surface: 1813 Feet FSL 286 Feet FWLLatitude: 37.101301 Longitude: -107.767616GPS Data: GPS Quality Value: 1.8 Type of GPS Quality Value: PDOP Date of Measurement: 12/22/2020Ground Elevation: 6719Field Name: IGNACIO BLANCO Field Number: 38300Well 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: 1900 FNL 600 FWL  
Measured Depth of TPZ: 7710 True Vertical Depth of TPZ: 7093 FNL/FSL FEL/FWL

**Base of Productive Zone (BPZ)**Sec: 17 Twp: 33N Rng: 8WFootage at BPZ: 1900 FNL 600 FELMeasured Depth of BPZ: 17207True Vertical Depth of BPZ: 7110 FNL/FSL FEL/FWL**Bottom Hole Location (BHL)**Sec: 17 Twp: 33N Rng: 8WFootage at BHL: 1900 FNL 479 FELFNL/FSLFEL/FWL**LOCAL GOVERNMENT PERMITTING INFORMATION**County: LA PLATAMunicipality: 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: 07/21/2022Comments:

## 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: 2677 Feet

Building Unit: 2677 Feet

Public Road: 1813 Feet

Above Ground Utility: 1290 Feet

Railroad: 5280 Feet

Property Line: 286 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, Section 17; All; Section 18: Lots 1,2,3,4, E1/2W1/2, 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: 666 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: 17328 Feet

TVD at Proposed Total Measured Depth 7110 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: 43 Feet ☐ No well belonging to another operator within 1,500 feet

Will a closed-loop drilling system be used? Yes

Is H<sub>2</sub>S gas reasonably expected to be encountered during drilling operations at concentrations greater than

or equal to 100 ppm? No If yes, attach an H<sub>2</sub>S 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	3380	2572	3380	0
2ND	12+1/4	9+5/8	L80-HC	40.0	0	6484	1768	6484	0
3RD	8+1/2	5+1/2	P110	20.0	0	17328	2924	17238	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	1600	1570	0-500	USGS	WRI 4188
Groundwater	Lower Animas	1600	1570	1802	1747	1001-10000	USGS	WRI 95-4190
Confining Layer	Kirtland	1802	1747	1970	1930		USGS	WRI 95-4190
Hydrocarbon	Farmington Sand	1970	1930	2020	1980		USGS	WRI 95-4190
Confining Layer	Kirtland Shale (lower)	2020	1980	2741	2656		USGS	WRI 4188
Hydrocarbon	Fruitland Coal	2741	26856	3202	3102		USGS	WRI 4188
Hydrocarbon	Picture Cliffs	3222	3102	3302	3197		USGS	WRI 4188
Confining Layer	Lewis Shale	3302	3197	5080	4854		USGS	WRI 4188
Hydrocarbon	Cliff House (MV)	5080	4854	5465	5290		USGS	WRI 4188
Hydrocarbon	Menefee (MV)	5465	5290	5695	5553		USGS	WRI 4188
Hydrocarbon	Point Lookout (MV)	5695	5553	6120	5948		USGS	WRI 95-4190
Confining Layer	Mancos Shale	6120	5948	6910	6670		USGS	WRI 95-4190
Hydrocarbon	Middle Mancos	6910	6670	7710	7093		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 at 2,566' FNL x 600' FEL.
3. The nearest well (non-operated) in the unit penetrating through the Mancos (per manual calculation) is at 580". The VD Helton #1 well (API: 05-067-05749); Status: PR-DK, TD @ 7,949'.
4. There are 2 wells located within less than 150 ft. Both wells are shallow CBM wells: Julian GU #2 (API: 05-067-09751) TD @ 3040' and Harmon 33-8-17 #3 (API: 05-067-09365) TD @ 3320'. The Ardourel #5HL TVD is projected @ 7110'. Refer to the Attachment for Offset Well Evaluations Data for detail.
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 sources) with surface casing set @ 500' and cemented to surface. Deepest water well (SESW 10-T33N-R9W) is approximately 3500' from the Ardourel #5HL wellbore and has a TD=320'.

This application is in a Comprehensive Area Plan No CAP #: \_\_\_\_\_  
Oil and Gas Development Plan Name Ardourel OGD OGD ID#: 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 Engr/Opns Date: 12/2/2024 Email: dpate@nuevidaresources.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.

### COA Type Description

0 COA	

## Best Management Practices

### No BMP/COA Type Description

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## ATTACHMENT LIST

<u>Att Doc Num</u>	<u>Name</u>
404011178	OffsetWellEvaluations Data
404011179	WELL LOCATION PLAT
404011180	DEVIATED DRILLING PLAN
404011181	DEVIATED DRILLING PLAN
404011182	OFFSET WELL EVALUATION
404011183	WELLBORE DIAGRAM
404011185	DIRECTIONAL DATA

Total Attach: 7 Files

**General Comments**

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

Total: 0 comment(s)

