

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:

402775710

(SUBMITTED)

Date Received:

09/10/2021

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

Amend

Refile

Sidetrack

TYPE OF WELL OIL GAS COALBED OTHER: _____
ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Well Name: SU Spicer 0680 Well Number: 2-5H17
Name of Operator: D90 ENERGY LLC COGCC Operator Number: 10706
Address: 952 ECHO LANE SUITE 480
City: HOUSTON State: TX Zip: 77024
Contact Name: Allen O'Neal Phone: (214)364-6499 Fax: ()
Email: allen@d90energy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20180090

WELL LOCATION INFORMATION

Surface Location

QtrQtr: SWSW Sec: 32 Twp: 7N Rng: 80W Meridian: 6
Footage at Surface: 1049 Feet FNL/FSL 902 Feet FEL/FWL FWL
Latitude: 40.529468 Longitude: -106.403915
GPS Data: GPS Quality Value: 1.3 Type of GPS Quality Value: PDOP Date of Measurement: 10/13/2021
Ground Elevation: 8213
Field Name: WILDCAT Field Number: 99999

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: 5 Twp: 6N Rng: 80W Footage at TPZ: 122 FNL 669 FWL
Measured Depth of TPZ: 6750 True Vertical Depth of TPZ: 6656 FNL/FSL FEL/FWL
Base of Productive Zone (BPZ)
Sec: 17 Twp: 6N Rng: 80W Footage at BPZ: 2666 FNL 680 FWL
Measured Depth of BPZ: 20827 True Vertical Depth of BPZ: 7020 FNL/FSL FEL/FWL
Bottom Hole Location (BHL)
Sec: 17 Twp: 6N Rng: 80W Footage at BHL: 2666 FNL 680 FWL
FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: JACKSON

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.)

T6N-R80W, 6th P.M.. Sec. 5: Lots 5, 6, 7, 8, 9, 10, 11, 12, and 13 and S2SE4 and other lands

Total Acres in Described Lease: 447 Described Mineral Lease is: Fee State Federal Indian

Federal or State Lease # COC 079846

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 2076 Feet
Building Unit: 3039 Feet
Public Road: 410 Feet
Above Ground Utility: 293 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: 274 Feet

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	531-66		

Federal or State Unit Name (if appl): Surprise Unit Unit Number: COC 075017X

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: 122 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: 323 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

Order 531-66 was issued in 2019 to amend Order 531-48 by adding Sec. 5-6N-80W to the Surprise Unit and reducing the federal unit setbacks to 100'/300'. No DSU was created (can't in a federal unit) so there is no unit acreage or unit configuration.

DRILLING PROGRAM

Proposed Total Measured Depth: 20827 Feet TVD at Proposed Total Measured Depth 7020 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? 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	24	16	J55	65	0	90	8	90	0
SURF	12+1/4	9+5/8	J55	36	0	2400	605	2400	0
1ST	8+3/7	5+1/2	P110HC	20	0	20827	3648	20827	0

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	Coalmont Sand	0	0	1200	1200	501-1000	USGS	Site Name: SB00708029BAA1 TD@476' TDS@509
Confining Layer	Coalmont Shale	1200	1200	3500	3485			
Confining Layer	Upper Pierre	3500	3485	5000	4912			
Hydrocarbon	Sussex	5000	4912	5404	5315			
Confining Layer	Pierre Lower (shale)	5404	5315	5660	5571			
Hydrocarbon	Shannon	5660	5571	5800	5711			
Confining Layer	Pierre Lower (shale)	5800	5711	6750	6656			
Hydrocarbon	Niobrara	6750	6656	20827	7020			The TVD of the deepest hydrocarbon zone is the bottom of the well and not the bottom of the formation. The formation is not planned to be exited.

OPERATOR COMMENTS AND SUBMITTAL

Comments

This proposed well will be located on a built location that was approved in 2019 for four wells. No wells have been approved or spud to date. This location does not have any residential building units less than 2000' from the working pad surface and is not located in an area that has been determined to be sensitive for water.

Nearest well in unit (producing zone to producing zone) per manual calculation is the proposed SU 0680 1-5H17.

No well belonging to another operator within 1,500 feet.

A Form 4 (document #402789918) has been submitted to update the Directional Well Plat for this location and related production facility: Surprise Central Facility, Location ID#436676. (Surprise Central Facility also has a location sundry, Document #402791142, in process to change the facility name to Surprise Unit 0680 S4 CTB.)

This application is in a Comprehensive Area Plan _____ CAP #: _____
 Oil and Gas Development Plan Name _____ OGDP ID#: _____
 Location ID: 467526

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

Signed: _____ Print Name: Ann Feldman

Title: Regulatory Manager Date: 9/10/2021 Email: regulatory@ascentgeomatics.c

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</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	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 open-hole logs shall state "No open-hole logs were run" and shall clearly identify the type of log and the well (by API#) in which open-hole logs were run.

Total: 1 comment(s)

Attachment List

<u>Att Doc Num</u>	<u>Name</u>
402799438	DEVIATED DRILLING PLAN
402799475	OffsetWellEvaluations Data
402806502	DIRECTIONAL DATA
402807392	WELL LOCATION PLAT

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.

