

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:

402775709

(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: 3-5H17
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: 1064 Feet FNL/FSL FSL 915 Feet FEL/FWL FWL
Latitude: 40.529510 Longitude: -106.403867
GPS Data: GPS Quality Value: 1.3 Type of GPS Quality Value: PDOP Date of Measurement: 08/13/2021
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: 127 FNL 995 FWL
Measured Depth of TPZ: 6850 True Vertical Depth of TPZ: 6690 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)
Sec: 17 Twp: 6N Rng: 80W Footage at BPZ: 2669 FNL 1010 FWL
Measured Depth of BPZ: 20627 True Vertical Depth of BPZ: 6820 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)
Sec: 17 Twp: 6N Rng: 80W Footage at BHL: 2669 FNL 1010 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: 2057 Feet
Building Unit: 3058 Feet
Public Road: 391 Feet
Above Ground Utility: 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.

Railroad: 5280 Feet
Property Line: 259 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: 127 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: 324 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: 20627 Feet TVD at Proposed Total Measured Depth 6820 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	20627	3648	20627	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	1208	1200	501-1000	USGS	Site Name: SB00708029BAA1 TD@476' TDS@509
Confining Layer	Coalmont Shale	1208	1200	3502	3487			
Confining Layer	Upper Pierre	3502	3487	5018	4925			
Hydrocarbon	Sussex	5018	4925	5431	5335			
Confining Layer	Pierre Lower (shale)	5431	5335	5687	5591			
Hydrocarbon	Shannon	5687	5591	5840	5744			
Confining Layer	Pierre Lower (shale)	5840	5744	6850	6690			
Hydrocarbon	Niobrara	6850	6690	20627	6690			Bottom TVD is bottom of the well and not 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.

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.)

Nearest well in unit (producing zone to producing zone) per manual calculation is the proposed SU 0680 4-5H17.

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

This application is in a Comprehensive Area Plan _____ CAP #: _____

Oil and Gas Development Plan Name _____ OGDID#: _____

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>
402799405	DEVIATED DRILLING PLAN
402799406	OffsetWellEvaluations Data
402806507	DIRECTIONAL DATA
402807383	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.

