

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:

402589881

Date Received:

02/03/2021

#### APPLICATION FOR PERMIT TO:

☐ Drill ☐ Deepen ☐ Re-enter ☒ **Recomplete and Operate**

Amend ☐

Refill ☐

Sidetrack ☐

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER: \_\_\_\_\_

ZONE TYPE SINGLE ZONE ☐ MULTIPLE ZONES ☒ COMMINGLE ZONES ☒

Well Name: Crosby Well Number: 1  
Name of Operator: MULL DRILLING COMPANY INC COGCC Operator Number: 61250  
Address: 1700 N WATERFRONT PKWY B#1200  
City: WICHITA State: KS Zip: 67206-6637  
Contact Name: Mark Shreve Phone: (316)264-6366 Fax: (316)264-6440  
Email: mshreve@mulldrilling.com

#### RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20000063

#### WELL LOCATION INFORMATION

##### Surface Location

QtrQtr: NENW Sec: 28 Twp: 13S Rng: 44W Meridian: 6  
Footage at Surface: 780 Feet FNL 1980 Feet FWL  
Latitude: 38.896940 Longitude: -102.345000  
GPS Data: GPS Quality Value: 1.8 Type of GPS Quality Value: PDOP Date of Measurement: 09/24/2008  
Ground Elevation: 4219  
Field Name: SMOKY CREEK Field Number: 77560

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: \_\_\_\_\_ Twp: \_\_\_\_\_ Rng: \_\_\_\_\_ Footage at TPZ: \_\_\_\_\_  
Measured Depth of TPZ: \_\_\_\_\_ True Vertical Depth of TPZ: \_\_\_\_\_ FNL/FSL \_\_\_\_\_ FEL/FWL \_\_\_\_\_

Base of Productive Zone (BPZ)

Sec: \_\_\_\_\_ Twp: \_\_\_\_\_ Rng: \_\_\_\_\_ Footage at TPZ: \_\_\_\_\_  
Measured Depth of TPZ: \_\_\_\_\_ True Vertical Depth of TPZ: \_\_\_\_\_ FNL/FSL \_\_\_\_\_ FEL/FWL \_\_\_\_\_

Bottom Hole Location (BHL)

Sec: \_\_\_\_\_ Twp: \_\_\_\_\_ Rng: \_\_\_\_\_ Footage at BHL: \_\_\_\_\_  
FNL/FSL \_\_\_\_\_ FEL/FWL \_\_\_\_\_

## LOCAL GOVERNMENT PERMITTING INFORMATION

County: CHEYENNE 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.)

NW/4 Section 28-13S-44W, 6th P.M.

Total Acres in Described Lease: 160 Described Mineral Lease is: ☒ Fee ☐ State ☐ Federal ☐ Indian

Federal or State Lease # \_\_\_\_\_

## SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 944 Feet  
Building Unit: 944 Feet  
Public Road: 780 Feet  
Above Ground Utility: 800 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.)
FORT SCOTT	FRSC			
MARMATON	MRTN			
SPERGEN	SPGN	222-15	80	E/2 NW/4
ST LOUIS	STLS	222-15	80	E/2 NW/4

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: 1193 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

Spacing Order 222-15 allows for 2 wells per 80-acre unit in the Mississippian Formation defined as the St. Louis, Spergen, Warsaw and Osage Formations.

## DRILLING PROGRAM

Proposed Total Measured Depth: 5442 Feet

TVD at Proposed Total Measured Depth 5442 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? \_\_\_\_\_

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

or equal to 100 ppm? \_\_\_\_\_ 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? \_\_\_\_\_

Will salt based (>15,000 ppm Cl) drilling fluids be used? \_\_\_\_\_

Will oil based drilling fluids be used? \_\_\_\_\_

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
SURF	12+1/4	8+5/8	J-55	20	0	287	250	287	0
1ST	7+7/8	5+1/2	J-55	15.5	0	5441	150	5441	4435
S.C. 1.1	7+7/8	5+1/2	J-55	15.5	0	5441	200	3057	1970

☒ 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	High Plains Aquifer	0	0	237	237	0-500	Groundwater Atlas	
Confining Layer	Pierre	300	300	500	500		Other	Logs
Confining Layer	Greenhorn	1735	1735	1990	1990		Other	Logs
Groundwater	Dak-Chyn	1990	1990	2370	2370	1001-10000	Groundwater Atlas	
Confining Layer	Morrison	2370	2370	2440	2440		Groundwater Atlas	
Hydrocarbon	Shawnee	4094	4094	4186	4186		Other	Logs
Hydrocarbon	Marmaton	4686	4686	4763	4763		Other	Logs
Hydrocarbon	Fort Scott	4763	4763	4832	4832		Other	Logs
Hydrocarbon	St. Louis	5279	5279	5359	5359		Other	Logs
Hydrocarbon	Spergen	5359	5359	5442	5442		Other	Logs

## OPERATOR COMMENTS AND SUBMITTAL

Comments

**PROPOSED WORK:**

1. TOH with rods, pump & tubing.
2. Run CBL to confirm cement coverage from 3026' - 1970' and provide to area engineer prior to proceeding with recompletion.
3. Perforate the Fort Scott at 4764' - 4774'.
4. Run RBP, packer and tubing to isolate Fort Scott perfs.
5. Acidize Fort Scott with 250 gals. 15% MCA & 1000 gals 15% NE acid.
6. Swab test the Fort Scott.
7. TOH with tubing, packer and RBP.
8. Run tubing, pump & rods.
9. Put well back on production commingling Fort Scott, St. Louis & Spergen.

This application is in a Comprehensive Area Plan \_\_\_\_\_ CAP #: \_\_\_\_\_  
Oil and Gas Development Plan Name \_\_\_\_\_ OGDID ID#: \_\_\_\_\_  
Location ID: 321552

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

Signed: \_\_\_\_\_ Print Name: Tannis Tritt

Title: Executive Assistant Date: 2/3/2021 Email: ttritt@mulldrilling.com

Operator must have a valid water right or permit allowing for industrial use or purchased water from a seller that has a valid water right or permit allowing for industrial use, otherwise an application for a change in type of use is required under Colorado law. Operator must also use the water in the location set forth in the water right decree or well permit, otherwise an application for a change in place of use is required under Colorado law. Section 37-92-103(5), C.R.S. (2011).

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: 3/23/2021  
Expiration Date: 03/22/2024

**API NUMBER**

05 017 06133 00

## 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>
Drilling/Completion Operations	Prior to recompletion operations a bradenhead test shall be performed if there has not been a reported bradenhead test within the 60 days immediately preceding the start of recompletion operations. 1) If, before opening the bradenhead valve, the beginning pressure is greater than 25 psi, sampling is required. 2) If pressure remains at the conclusion of the test, or if any liquids were present during the test, sampling is required. The Form 17 shall be submitted within 10 days of the test. Sampling shall comply with Operator Guidance - Bradenhead Testing and Reporting Instructions. If samples are collected, copies of all final laboratory analytical results shall be provided to the COGCC within three (3) months of collecting the samples. If there is a need for sampling, contact COGCC engineering prior to commencing recompletion operations.
Drilling/Completion Operations	1) Operator will run a CBL to confirm cement coverage from 3026-1970' prior to recompletion. Submit to COGCC Area Engineer prior to recompletion.
Community Outreach and Notification	COA: Operator will provide notice to the building unit within 2000 feet of the location, at least 7 days prior to the commencement of recomple operations. Notice will include anticipated start date, description and duration of operations, and operator's contact information if the building unit owner/tenant has questions or concerns.

## Best Management Practices

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

## Attachment List

<u>Att Doc Num</u>	<u>Name</u>
402589881	FORM 2 SUBMITTED
402590007	WELLBORE DIAGRAM
402590009	WELLBORE DIAGRAM

Total Attach: 3 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	•Surface Casing Check complete •Engineering review complete	03/18/2021
Permit	Final Review Completed.	03/05/2021
OGLA	This Location and its associated materials was fully reviewed in the review of this APD in accordance with current Rules. See Sundry doc # 402609957 in Location # 321552 file for additional information. This APD complies with all COGCC Rules and is adequately protective of public health, safety, welfare, the environment, and wildlife resources. OGLA task passed.	03/02/2021

Total: 3 comment(s)