

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

(SUBMITTED)

Date Received:

APPLICATION FOR PERMIT TO:

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

Amend

TYPE OF WELL OIL GAS COALBED OTHER: _____

Refile

ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Sidetrack

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.)

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, Spergem, Warsaw and Osage Formations.

DRILLING PROGRAMProposed 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 H₂S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? _____ 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? _____

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	2413	2413	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 perms.
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: _____ Email: ttritt@mulldrilling.com

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 05 017 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>

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	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. 2) Prior approval from the COGCC is required in order to hydraulically fracture this well.
2	Drilling/Completion Operations	Bradenhead Testing 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.

Total: 2 comment(s)

Attachment List

<u>Att Doc Num</u>	<u>Name</u>
402590007	WELLBORE DIAGRAM
402590009	WELLBORE DIAGRAM

Total Attach: 2 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.

