

FORM
2

Rev
08/13

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:

400907235

Date Received:

10/21/2015

APPLICATION FOR PERMIT TO:

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

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____

Refiling ☐

ZONE TYPE SINGLE ZONE ☐ MULTIPLE ZONES ☒ COMMINGLE ZONES ☐

Sidetrack ☐

Well Name: Hair 15-45

Well Number: #1-14

Name of Operator: ANGUS NATURAL RESOURCES LLC

COGCC Operator Number: 10423

Address: 1323 EAST 71ST STREET #400

City: TULSA State: OK Zip: 74136

Contact Name: Jose A. Moncayo

Phone: (918)936-4251

Fax: ()

Email: jmoncayo@angusnr.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20120065

WELL LOCATION INFORMATION

QtrQtr: SWNE Sec: 14 Twp: 15S Rng: 45W Meridian: 6

Latitude: 38.747740

Longitude: -102.414600

Footage at Surface: 2314 feet FNL/FSL FNL 2325 feet FEL/FWL FEL

Field Name: WILDCAT

Field Number: 99999

Ground Elevation: 4354

County: CHEYENNE

GPS Data:

Date of Measurement: 09/10/2015 PDOP Reading: 1.3 Instrument Operator's Name: Elijah Frane

If well is ☐ Directional ☐ Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: FNL/FSL FEL/FWL Bottom Hole: FNL/FSL FEL/FWL

Sec: Twp: Rng: Sec: Twp: Rng:

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian

The Surface Owner is: ☒ is the mineral owner beneath the location.

(check all that apply)

☒ is committed to an Oil and Gas Lease.

☒ has signed the Oil and Gas Lease.

☐ is the applicant.

The Mineral Owner beneath this Oil and Gas Location is: ☒ Fee ☐ State ☐ Federal ☐ Indian

The Minerals beneath this Oil and Gas Location will be developed by this Well: Yes

The right to construct the Oil and Gas Location is granted by: oil and gas lease

Surface damage assurance if no agreement is in place:

Surface Surety ID:

LEASE INFORMATION

Using standard QtrQtr, Sec, Twp, Rng format, describe one entire mineral lease that will be produced by this well (Describe lease beneath surface location if produced. Attach separate description page or map if necessary.)

W/2 E/2 14-15S/45W, 6 PM

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

Federal or State Lease #

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 322 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 4050 Feet
Building Unit: 4145 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 2957 Feet
Above Ground Utility: 2957 Feet
Railroad: 5280 Feet
Property Line: 322 Feet

INSTRUCTIONS:

- All measurements shall be provided from center of the Proposed Well to nearest of each cultural feature as described in Rule 303.a.(5).
- 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, High Occupancy Building Unit, and Designated Outside Activity Area - as defined in 100-Series Rules.

DESIGNATED SETBACK LOCATION INFORMATION

Check all that apply. This location is within a: ☐ Buffer Zone
☐ Exception Zone
☐ Urban Mitigation Area

- Buffer Zone – as described in Rule 604.a.(2), within 1,000' of a Building Unit
- Exception Zone - as described in Rule 604.a.(1), within 500' of a Building Unit.
- Urban Mitigation Area - as defined in 100-Series Rules.

Pre-application Notifications (required if location is within 1,000 feet of a building unit):

Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government:

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners:

SPACING and UNIT INFORMATION

Distance from completed portion of proposed wellbore to nearest completed portion of offset wellbore permitted or completed in the same formation: 5280 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): Unit Number:

SPACING & FORMATIONS COMMENTS

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			
LANSING-KANSAS CITY	LGKC			
MARMATON	MRTN			
MISSISSIPPIAN	MSSP			
MORROW	MRRW			
SHAWNEE	SHWNE			
SPERGEN	SPGN			
ST LOUIS	STLS			

DRILLING PROGRAM

Proposed Total Measured Depth: 5600 Feet

Distance from proposed wellbore to nearest existing or permitted wellbore belonging to another operator:

470 Feet (Including plugged wells)

Will a closed-loop drilling system be used? No

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 Operations Plan)

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? No

BOP Equipment Type: ☒ Annular Preventor ☐ Double Ram ☐ Rotating Head ☐ None

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 609

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: ONSITE Drilling Fluids Disposal Methods: Evaporation

Cuttings Disposal: ONSITE Cuttings Disposal Method: Drilling pit

Other Disposal Description:

Dry and bury

Beneficial reuse or land application plan submitted?

Reuse Facility ID: or Document Number:

CASING PROGRAM

Casing Type	Size of Hole	Size of Casing	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
SURF	17+1/2	13+3/8	48	0	475	320	475	0
1ST	12+1/4	8+5/8	24	0	2215	215	2250	1600
2ND	7+7/8	5+1/2	15.5	0	5600	295	5600	3850

☒ Conductor Casing is NOT planned

DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- ☐ Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)
- ☐ Rule 604.b.(1)A. Exception Location (existing or approved Oil & Gas Location now within a Designated Setback as a result of Rule 604.a.)
- ☐ Rule 604.b.(1)B. Exception Location (existing or approved Oil & Gas Location is within a Designated Setback due to Building Unit construction after Location approval)
- ☐ Rule 604.b.(2) Exception Location (SUA or site-specific development plan executed on or before August 1, 2013)
- ☐ Rule 604.b.(3) Exception Location (Building Units constructed after August 1, 2013 within setback per an SUA or site-specific development plan)

GREATER WATTENBERG AREA LOCATION EXCEPTIONS

Check all that apply:

- ☐ Rule 318A.a. Exception Location (GWA Windows).
- ☐ Rule 318A.c. Exception Location (GWA Twinning).

RULE 502.b VARIANCE REQUEST

☐ Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number _____

OTHER LOCATION EXCEPTIONS

Check all that apply:

☒ Rule 318.c. Exception Location from Rule or Spacing Order Number 318.a. & c

☐ Rule 603.a.(2) Exception Location (Property Line Setback).

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

OPERATOR COMMENTS AND SUBMITTAL

Comments _____

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? Yes

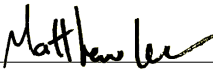
I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: _____ Print Name: Jose A. Moncayo

Title: Reservoir Engineer Date: 10/21/2015 Email: jmoncayo@angusnr.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 and applicable orders and is hereby approved.

COGCC Approved:  Director of COGCC Date: 12/13/2015

Expiration Date: 12/12/2017

API NUMBER

05 017 07807 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.

COA Type

Description

1) Provide 48 hour notice prior to spud via Form 42.
2) Set intermediate casing at least 50' below base of Cheyenne and cement from casing shoe to 50' above top of Dakota (2250' – 1600'). Verify with CBL.
3) If production casing is set provide cement coverage from TD to at least 200' above Spergen, or shallowest completed whichever is shallower. Verify with CBL.
4) If well is a dry hole set the following plugs: 40 sks cement +/- 50' above the Spergen, 40 sks cement +/- 50' above the Ft. Scott, 40 sks cement across any DST w/ oil or gas show, 40 sks cement across intermediate casing shoe, 40 sks cement at 1650', 50 sks cement from 50' below surface casing shoe up into surface casing, 15 sks cement in top of surface csg, cut 4 ft below GL, weld on plate with well ID, 5 sks cement each in rat hole and mouse hole.

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	Open hole Resistivity Log with Gamma Ray Log will be run from TD into the surface casing. A Cement Bond Log with Gamma Ray will be run on production casing, or on intermediate casing if a production liner is run. The Form 5, Completion Report, will list all logs run and have those logs attached.
2	Drilling/Completion Operations	1) Provide 48 hour notice prior to spud via electronic Form 42. 2) Set at least 475' of surface casing for aquifer protection. 3) If production casing is set, provide cement coverage to at least 200' above the shallowest completed interval. Stage cement the Cheyenne/Dakota (2215'-1675'). Run and submit CBL to verify cemented intervals are properly isolated. 4) If the well is a dry hole, set plugs at the following depths: 40 sks cmt +/- 50' above the Spergen, 40 sks cmt +/- 50' above the Shawnee, 40 sks cmt across any DST w/show, 40 sks cmt 100' below Cheyenne (2265'), 40 sks cmt 50' above the Dakota (1675'), 50 sks cmt from 50' below surface casing shoe up into surface casing, 15 sks cmt in top of surface casing, cut 4 ft below GL, weld on plate, 5 sks cmt each in rat hole and mouse hole.

Total: 2 comment(s)

Applicable Policies and Notices to Operators

Policy
Notice Concerning Operating Requirements for Wildlife Protection. http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400907235	FORM 2 SUBMITTED
400908183	WELL LOCATION PLAT
400908199	30 DAY NOTICE LETTER
400908202	OIL & GAS LEASE
400908204	MINERAL LEASE MAP
400908345	EXCEPTION LOC REQUEST

Total Attach: 6 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received.	12/4/2015 2:58:19 PM
Permit	Per operator, building is located 4050 feet to the northeast.	12/4/2015 2:51:15 PM
Permit	Per Operator request, changed Drilling Fluids management to "Onsite, Evaporation" and Drilling Waste Management to "Dry and bury" Per operator, building at 4145' is a building unit, and cultural distance has been corrected.	11/24/2015 1:19:58 PM
Permit	Contacted operator regarding the following items: 1) Is building at 4145' a building unit? 2) Removed distance to nearest unit boundary, as no unit exists in this section.	11/24/2015 1:15:28 PM
Permit	Passed completeness.	10/23/2015 11:33:14 AM

Total: 5 comment(s)