

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.)

NW/4, SE/4 32, 13S, 44W, 6th PM

Total Acres in Described Lease: 320 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: 660 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 5280 Feet

Building Unit: 5280 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 660 Feet

Above Ground Utility: 1980 Feet

Railroad: 5280 Feet

Property Line: 660 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 Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 1368 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			
OSAGE	OSAGE			
SHAWNEE	SHWNE			
SPERGEN	SPGN			
ST LOUIS	STLS			

DRILLING PROGRAM

Proposed Total Measured Depth: 5600 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 1368 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: OFFSITE Drilling Fluids Disposal Methods: Commercial Disposal

Cuttings Disposal: ONSITE Cuttings Disposal Method: Drilling pit

Other Disposal Description:

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	450	300	450	0
1ST	12+1/4	8+5/8	24	0	1600	100	1600	1000
2ND	7+7/8	5+1/2	15.5	0	5600	150	5600	3800

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 _____
- 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: Jake Flora

Title: Petroleum Engineer Date: 11/6/2014 Email: jakeflora@kfrcorp.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: *Matthew Lee* Director of COGCC Date: 12/20/2014

Expiration Date: 12/19/2016

API NUMBER
05 017 07801 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

	Open hole resistivity and gamma logs shall be run to describe the stratigraphy of the entire well bore and to adequately verify the setting depth of surface casing and aquifer coverage. On a multi-well pad, these open hole logs are only required on one of the first wells drilled on the pad and the Drilling Completion Report - Form 5 for every well on the pad shall identify which well was logged.
	1) Provide 48 hour notice prior to spud via Form 42. 2) If production casing is set provide cement coverage from TD to at least 200' above Shawnee. Stage cement Cheyenne/Dakota (2300' – 1750'). Verify with CBL. 3) If well is a dry hole set the following plugs: 40 sks cement +/- 50' above the Spergen, 40 sks cement +/- 50' above the Shawnee, 40 sks cement across any DST w/ show, 40 sks cement at 2300', 40 sks cement at 1750', 50 sks cement from 50' below surface casing shoe up into surface casing, 10 sks cement in top of surface csg, cut 4 ft below GL, weld on plate, 5 sks cement each in rat hole and mouse hole. 4) Monitor gas emissions during operations and comply with Reporting Hydrogen Sulfide (H2S) Notice to Operators and Rule 607.

Best Management Practices

No BMP/COA Type

Description

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Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.

Attachment Check List

Att Doc Num

Name

400705420	FORM 2 SUBMITTED
400706539	OIL & GAS LEASE
400706541	MINERAL LEASE MAP
400714905	30 DAY NOTICE LETTER
400726139	WELL LOCATION PLAT

Total Attach: 5 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review completed; no LGD or public comment received.	12/15/2014 6:28:03 AM
Permit	Distance to public road not consistent with form 2A. 2 revised to coincide with form 2A. per operator.	12/15/2014 6:11:19 AM
Permit	Lease is 320 acres as is shown in lease map. per operator	12/15/2014 6:03:03 AM
Permit	The well location falls within an area that potentially may have measureable levels of H2S gas.	12/15/2014 5:59:16 AM
Permit	Operator submitted oil and gas lease and map for NW4 and SE/4 yet operator states in permit that they have a lease that covers the whole 640 acres of the section.	11/19/2014 5:54:59 AM
Permit	Surface owner has not signed the Addendum to a lease which has been submitted as a surface agreement. However surface owner is the mineral owner and right to construct should be oil and gas lease.	11/19/2014 5:50:00 AM
Permit	Passed Completeness	11/10/2014 2:34:06 PM

Total: 7 comment(s)