

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:

400674524

Date Received:

08/29/2014

#### 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: KLINE

Well Number: 21-23

Name of Operator: SOUTHWESTERN ENERGY PRODUCTION COMPANY

COGCC Operator Number: 10396

Address: 2350 N SAM HOUSTON PKWY EAST #125

City: HOUSTON

State: TX

Zip: 77032

Contact Name: CHERYL ROWELL

Phone: (281)618-7439

Fax: ( )

Email: cheryl\_rowell@swn.com

#### RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20110201

#### WELL LOCATION INFORMATION

QtrQtr: LOT 3 Sec: 23 Twp: 7N Rng: 91W Meridian: 6

Latitude: 40.555672

Longitude: -107.574861

Footage at Surface: 714 feet FNL/FSL FNL 1849 feet FEL/FWL FWL

Field Name: WILDCAT

Field Number: 99999

Ground Elevation: 6571

County: MOFFAT

GPS Data:

Date of Measurement: 06/01/2014 PDOP Reading: 1.8 Instrument Operator's Name: GLEN MCELROY

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.)

Township 7 North-Range 91 West, 6th P.M.  
Section 13: Lots 11(40.45), 12(40.44), 13(40.42), 14(40.42)  
Section 14: Lots 11(40.47), 13(40.42), 14(40.45)  
Section 22: Lots 7(40.52), 8(40.66), 9(40.66), 10 (40.44), 16(40.48)  
Section 23: Lots 1(40.29), 2(40.35), 3(40.41), 4(40.47), 5(40.40), 12(40.32), 13(40.26)  
Section 24: Lots 3(40.40), 4(40.40)  
Section 26: Lots 4(40.25), 5(40.29)  
Section 27: Lots 1(40.46)

Containing 970.13 acres, more or less.

Total Acres in Described Lease: 970 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: 605 Feet

## CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 5280 Feet  
Building Unit: 2570 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 279 Feet  
Above Ground Utility: 2379 Feet  
Railroad: 5280 Feet  
Property Line: 605 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: 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.) |
|------------------------|----------------|-------------------------|-------------------------------|--------------------------------------|
| MANCOS                 | MNCS           |                         |                               |                                      |
| NIOBRARA               | NBRR           |                         |                               |                                      |

## DRILLING PROGRAM

Proposed Total Measured Depth: 10750 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 5280 Feet (Including plugged wells)

Will a closed-loop drilling system be used? Yes

Is H<sub>2</sub>S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No (If Yes, attach an H<sub>2</sub>S Drilling Operations Plan)

Will salt sections be encountered during drilling? No

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

Will oil based drilling fluids be used? Yes

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: OFFSITE Cuttings Disposal Method: Commercial Disposal

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 |
|-------------|--------------|----------------|-------|---------------|---------------|-----------|---------|---------|
| CONDUCTOR   | 24           | 20             | 85    | 0             | 60            | 100       | 60      | 0       |
| SURF        | 17+1/2       | 13+3/8         | 54.50 | 0             | 1200          | 731       | 1200    | 0       |
| 1ST         | 12+1/4       | 9+5/8          | 40    | 0             | 5700          | 1057      | 5700    | 700     |
| 2ND         | 8+3/4        | 5+1/2          | 20    | 0             | 10750         | 1222      | 10750   | 4700    |

☐ 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: 425554

Is this application being submitted with an Oil and Gas Location Assessment application? No

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

Signed: \_\_\_\_\_ Print Name: CHERYL ROWELL

Title: SR. STAFF REG. ANALYST Date: 8/29/2014 Email: CHERYL\_ROWELL@SWN.CO

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: 9/26/2014

Expiration Date: 09/25/2016

### API NUMBER

05 081 07683 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) COMPLIANCE WITH THE MOST CURRENT REVISION OF THE NORTHWEST COLORADO NOTIFICATION POLICY IS REQUIRED. SEE ATTACHED NOTICE.<br><br>(2) CEMENT ON INTERMEDIATE CASING (9-5/8" FIRST STRING) MUST EXTEND INTO THE SURFACE CASING (MINIMUM 200' LAP ABOVE SURFACE CASING SHOE) TO PROVIDE ISOLATION OF ALL CRETACEOUS (INCLUDING MESAVERDE GROUP, LEWIS, FOX HILLS, AND LANCE) AND TERTIARY (INCLUDING FORT UNION) OIL, GAS, AND WATER-BEARING SANDSTONE AND COALBED FORMATIONS THAT ARE NOT OTHERWISE COVERED BY SURFACE CASING. VERIFY INTERMEDIATE CASING (9-5/8" FIRST STRING) CEMENT COVERAGE WITH A CBL. |

### **Best Management Practices**

#### **No BMP/COA Type**

#### **Description**

|  |  |  |
|--|--|--|
|  |  |  |
|--|--|--|

### **Applicable Policies and Notices to Operators**

NW Colorado Notification Policy.

Notice Concerning Operating Requirements for Wildlife Protection.

### **Attachment Check List**

#### **Att Doc Num**

#### **Name**

|           |                         |
|-----------|-------------------------|
| 1345211   | WELLL LOCATION PLAT     |
| 400674524 | FORM 2 SUBMITTED        |
| 400674563 | LEGAL/LEASE DESCRIPTION |
| 400677530 | SURFACE AGRMT/SURETY    |

Total Attach: 4 Files

## General Comments

| <u>User Group</u> | <u>Comment</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <u>Comment Date</u>     |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| Permit            | Final review completed on this refile. No LGD comments.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 9/26/2014<br>9:37:16 AM |
| Permit            | Operator provided corrected lease description, distance to the nearest lease line and total acres.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 9/26/2014<br>9:35:45 AM |
| Permit            | Lease description doesn't include any holding in section. Requested review by operator.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 9/23/2014<br>1:26:41 PM |
| Engineer          | <p>PROPOSED SURFACE CASING OF 1200' MAY NOT PROVIDE FULL COVERAGE OF FORT UNION FORMATION, BASED ON FORT UNION REPORTED LOG TOP IN AN OFFSET WELL. COGCC CONCURS WITH OPERATOR'S PLAN TO CEMENT THE INTERMEDIATE CASING (9-5/8" FIRST STRING) INTO THE SURFACE CASING. MINIMUM INTERMEDIATE CASING CEMENT REQUIREMENTS ARE SPECIFIED IN CONDITION OF APPROVAL #2.</p> <p>THE PROPOSED SURFACE CASING IS MORE THAN 50' BELOW THE DEPTH OF THE DEEPEST WATER WELL WITHIN 1-MILE OF THE SURFACE LOCATION WHEN CORRECTED FOR ELEVATION DIFFERENCES. THE DEEPEST WATER WELL WITHIN 1-MILE IS 560 FEET DEEP.</p> <p>OFFSET WELL EVALUATION: NO EXISTING OFFSET OIL &amp; GAS WELLS WITHIN 1,500 FEET OF THIS PROPOSED WELLBORE.</p> | 9/22/2014<br>9:37:59 AM |
| Engineer          | Changed "Second String" to "First String," and changed "Third String" to "Second String."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 9/22/2014<br>9:32:55 AM |
| Permit            | Operator requested corrections in SHL to match the supplied Well location plat.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 9/4/2014 6:42:25<br>AM  |
| Permit            | Operator requested changing to 'refile" and supplied the APD# 081-07683.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 9/4/2014 6:12:09<br>AM  |
| Permit            | The lat/long on the well location plat don't match lat/longs given on this form. Requested review by operator. Requested the operator consider this form to be a refile of 081-07683.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 9/2/2014 2:43:39<br>PM  |

Total: 8 comment(s)