

FORM  
2

Rev  
12/05

# 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:

400290434

Date Received:

## APPLICATION FOR PERMIT TO:

1.  Drill,  Deepen,  Re-enter,  Recomplete and Operate

### 2. TYPE OF WELL

OIL  GAS  COALBED  OTHER PILOT   
SINGLE ZONE  MULTIPLE  COMMINGLE

Refiling   
Sidetrack

PluggingBond SuretyID

20030028

3. Name of Operator: SWEPI LP

4. COGCC Operator Number: 78110

5. Address: 4582 S ULSTER ST PKWY #1400

City: DENVER State: CO Zip: 80237

6. Contact Name: Anne Baldrige Phone: (303)305-7555 Fax: (303)222-6358

Email: a.baldrige@shell.com

7. Well Name: Dry Sage Well Number: 1-23

8. Unit Name (if appl): Dry Sage Unit Unit Number: COC75106X

9. Proposed Total Measured Depth: 13000

### WELL LOCATION INFORMATION

10. QtrQtr: lot 17 Sec: 23 Twp: 12N Rng: 90W Meridian: 6

Latitude: 40.978047 Longitude: -107.465867

Footage at Surface: 1805 feet FNL/FSL 920 feet FEL/FWL  
FSL FWL

11. Field Name: Wildcat Field Number: 99999

12. Ground Elevation: 6705 13. County: MOFFAT

### 14. GPS Data:

Date of Measurement: 07/11/2011 PDOP Reading: 1.4 Instrument Operator's Name: B.H. (Uintah Surveying)

15. 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: \_\_\_\_\_

16. Is location in a high density area? (Rule 603b)?  Yes  No

17. Distance to the nearest building, public road, above ground utility or railroad: 1954 ft

18. Distance to nearest property line: 920 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 6550 ft

### 20. LEASE, SPACING AND POOLING INFORMATION

| Objective Formation(s) | Formation Code | Spacing Order Number(s) | Unit Acreage Assigned to Well | Unit Configuration (N/2, SE/4, etc.) |
|------------------------|----------------|-------------------------|-------------------------------|--------------------------------------|
| Niobrara Shale         | NBRR           |                         |                               |                                      |

21. Mineral Ownership:  Fee  State  Federal  Indian Lease #: COC65170

22. Surface Ownership:  Fee  State  Federal  Indian

23. Is the Surface Owner also the Mineral Owner?  Yes  No Surface Surety ID#:

23a. If 23 is Yes: Is the Surface Owner(s) signature on the lease?  Yes  No

23b. If 23 is No:  Surface Owners Agreement Attached or  \$25,000 Blanket Surface Bond  \$2,000 Surface Bond  \$5,000 Surface Bond

24. Using standard QtrQtr, Sec, Twp, Rng format enter entire mineral lease description upon which this proposed wellsite is located (attach separate sheet/map if you prefer):

T-12N, R-90W, 6TH PM; SEC. 22: LOTS 2-7, 11-16; SEC. 23: LOTS 1, 11, 13, 14, 17, 18, 21; SEC. 24: LOTS 3-6, 11-14; SEC. 25: LOTS 1-12; SEC. 26: LOTS 1-16. This APD is for the pilot hole that will not be a producing well.

25. Distance to Nearest Mineral Lease Line: 360 ft 26. Total Acres in Lease: 2263

### DRILLING PLANS AND PROCEDURES

27. Is H2S anticipated?  Yes  No If Yes, attach contingency plan.

28. Will salt sections be encountered during drilling?  Yes  No

29. Will salt (>15,000 ppm TDS CL) or oil based muds be used during drilling?  Yes  No

30. If questions 28 or 29 are yes, is this location in a sensitive area (Rule 901.e)?  Yes  No

31. Mud disposal:  Offsite  Onsite

If 28, 29, or 30 are "Yes" a pit permit may be required.

Method:  Land Farming  Land Spreading  Disposal Facility Other: \_\_\_\_\_

Note: The use of an earthen pit for Recompletion fluids requires a pit permit (Rule 905b). If air/gas drilling, notify local fire officials.

| Casing Type | Size of Hole | Size of Casing | Wt/Ft | Csg/Liner Top | Setting Depth | Sacks Cmt | Cmt Btm | Cmt Top |
|-------------|--------------|----------------|-------|---------------|---------------|-----------|---------|---------|
| CONDUCTOR   | 30           | 20             |       | 0             | 90            | 175       | 90      | 0       |
| SURF        | 12+1/4       | 9+5/8          | 36    | 0             | 2,800         | 732       | 2,800   | 0       |
| 1ST         | 8+1/2        | 7              | 29    | 0             | 10,000        | 438       | 10,000  | 6,000   |
| OPEN HOLE   | 6            |                | 0     | 0             | 12,000        | 0         |         |         |

32. BOP Equipment Type:  Annular Preventer  Double Ram  Rotating Head  None

33. Comments Two APDs are being submitted for this well, one for the pilot hole and one for the lateral hole. This APD is for the pilot hole. Below the intermediate casing point, a vertical pilot hole will be drilled to 13,000', or 100' into the Carlile formation. The pilot hole will be evaluated to determine petrophysical and geological properties of the target interval. After evaluation is complete, the pilot hole will be plugged back with cement and/or an open-hole plug back to intermediate casing point, and the lateral wellbore will be sidetracked off cement or plug.

34. Location ID: \_\_\_\_\_

35. Is this application in a Comprehensive Drilling Plan?  Yes  No

36. Is this application part of submitted Oil and Gas Location Assessment?  Yes  No

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

Signed: \_\_\_\_\_ Print Name: Michael Bergstrom

Title: Senior Regulatory Advisor Date: \_\_\_\_\_ Email: michael.bergstrom@shell.com

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: \_\_\_\_\_

API NUMBER

05

Permit Number: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY: \_\_\_\_\_

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.

### Attachment Check List

| Att Doc Num | Name                 |
|-------------|----------------------|
| 400291282   | SURFACE AGRMT/SURETY |
| 400292995   | PLAT                 |
| 400293440   | TOPO MAP             |
| 400294027   | CORRESPONDENCE       |

Total Attach: 4 Files

### General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|----------------|---------------------|
|                   |                |                     |

Total: 0 comment(s)

## BMP

| <u>Type</u>                            | <u>Comment</u>  |
|--|---|
| Wildlife                               | <ol style="list-style-type: none"><li>1. Where oil and gas activities must occur near active Mule Deer Critical Winter Range, conduct these activities outside the time period from December 1 through April 15.</li><li>2. Where oil and gas activities must occur within 4 miles of active greater sage-grouse leks or within other mapped greater sage-grouse breeding or summer habitat, conduct these activities outside the time period from March 1 through June 30.</li><li>3. Restrict post-development well site visitations to between the hours of 9:00 a.m. and 4:00 p.m. from December 1 to June 1 for Mule Deer Critical Winter Range, and greater sage-grouse lekking season.</li><li>4. Muffle or otherwise control exhaust noise from pump jacks and compressors so that operational noise will not exceed 49 dB measured at 30 feet from the edge of the well pad.</li><li>5. Reclaim/restore greater sage-grouse habitats with native grasses and forbs conducive to optimal grouse habitat and other wildlife appropriate to the ecological site. Reclamation of production habitat should include a substantially higher percentage of forbs than other areas. CPW agreed to assist the Espys (landowners) with reclamation seed mixes.</li><li>6. Gate single-purpose roads and restrict general public access to reduce traffic disruptions to wildlife.</li><li>7. Close and immediately reclaim all roads that are redundant, not used regularly, or have been abandoned to the maximum extent possible to minimize disturbance and habitat fragmentation.</li><li>8. Install and utilize bear-proof dumpsters and trash receptacles for all food-related trash on location following COGCC Rule 1204 a-1.</li><li>9. Shell will encourage car pooling to the work site</li><li>10. Shell will inform and hold accountable employees and contractors of their no pets, no firearms, no trash policies.</li><li>11. Shell will use a closed loop drilling system with tanks and no pits.</li></ol> |
| Material Handling and Spill Prevention | Spill Prevention Control & Countermeasure Plans (SPCC) are in place to address material releases and to prescribe materials handling BMPs for the facility. "Good house-keeping" measures will be taken to ensure proper waste disposal.  |
| Storm Water/Erosion Control            | <p>Stormwater Management Plans (SWMP) are in place to comply with both Colorado Department of Public Health and Environment (CDPHE) and Colorado Oil and Gas Conservation Commission (COGCC) stormwater discharge permits. The construction layout for this well details Best Management Practices (BMP) to be installed during initial construction. Note that BMPs may be removed, altered, or replaced with changing conditions in the field and the SWMP will be updated accordingly. The BMPs prescribed for the initial construction phase include, but are not limited to:</p> <ul style="list-style-type: none"><li>• Construction diversion ditch</li><li>• Sediment reservoirs</li><li>• Check dams</li><li>• Level spreaders</li><li>• Stabilized construction entrance</li><li>• Slash</li><li>• Sediment trap</li><li>• Wattle</li><li>• Terrace</li><li>• Secondary containment berms</li><li>• Detention ponds</li></ul>   |

Total: 3 comment(s)