

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:

400327260

Date Received:

10/03/2012

PluggingBond SuretyID

20030028

## APPLICATION FOR PERMIT TO:

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

## 2. TYPE OF WELL

OIL ☒ GAS ☐ COALBED ☐ OTHER \_\_\_\_\_  
 SINGLE ZONE ☒ MULTIPLE ☐ COMMINGLE ☐

Refiling ☐Sidetrack ☐3. Name of Operator: SWEPI LP4. COGCC Operator Number: 781105. Address: 4582 S ULSTER ST PKWY #1400City: DENVER State: CO Zip: 802376. Contact Name: Nancy Feck Phone: (307)367-7934 Fax: (307)367-4285Email: N.Feck@shell.com7. Well Name: North Castor Gulch Well Number: 2-168. Unit Name (if appl): Williams Fork Unit Number: COC74956X9. Proposed Total Measured Depth: 10482

## WELL LOCATION INFORMATION

10. QtrQtr: TR 66 Sec: 16 Twp: 5N Rng: 91W Meridian: 6Latitude: 40.392100 Longitude: -107.605658

Footage at Surface: 1325 feet FNL/FSL 1000 feet FEL/FWL FEL

11. Field Name: WILDCAT Field Number: 9999912. Ground Elevation: 6987 13. County: MOFFAT

## 14. GPS Data:

Date of Measurement: 08/09/2012 PDOP Reading: 1.5 Instrument Operator's Name: B.Hunting (Uintah)15. If well is ☐ Directional ☒ Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: FNL/FSL 931 FNL 1841 FEL 308 FSL 729 FWL 308  
 Bottom Hole: FNL/FSL 308 FSL 729 FWL 308  
 Sec: 16 Twp: 5N Rng: 91W Sec: 16 Twp: 5N Rng: 91W

16. Is location in a high density area? (Rule 603b)? ☐ Yes ☒ No17. Distance to the nearest building, public road, above ground utility or railroad: 3801 ft18. Distance to nearest property line: 998 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 1481 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 #: CO 8473.522. Surface Ownership: ☐ Fee ☒ State ☐ Federal ☐ Indian23. 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 ☐ No23b. 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):

T5N, R91W, 6th P.M; Section 16 all. Item #25 - Distance to the nearest Unit boundary is 765'. Horizontal wellbore crosses one State lease.

25. Distance to Nearest Mineral Lease Line: 308 ft

26. Total Acres in Lease: 640

### 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		90	0
SURF	13+1/2	10+3/4	40.5lbs	0	1,250	688	1,250	0
1ST LINER	7+7/8	5+1/2	17lbs	0	10,482	75	5,001	4,230

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

33. Comments Depending on subsurface conditions, intermediate casing may be used. If intermediate casing is used, the hole will be drilled at 9 7/8". Intermediate casing of 7 5/8" will run from the surface to 5001' with cement from 4831' to 5001'. Production hole will be drilled at 6 3/4". A 5 1/2" production liner will be installed from 4800' to 10482', uncemented. A 9pt. drilling and completion plan outlining this procedure is attached. Item #25 - Distance to the nearest unit boundary is 765'.

34. Location ID: 428533

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: Nancy Feck

Title: Regulatory Technician

Date: 10/3/2012

Email: N.Feck@shell.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: 10/31/2012

#### API NUMBER

05 081 07761 00

Permit Number: \_\_\_\_\_

Expiration Date: 10/30/2014

#### 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.

1) COMPLIANCE WITH THE MOST CURRENT REVISION OF THE NORTHWEST COLORADO NOTIFICATION POLICY IS REQUIRED.

### **Attachment Check List**

Att Doc Num	Name
400327260	FORM 2 SUBMITTED
400329293	WELLBORE DIAGRAM
400329295	WELLBORE DIAGRAM
400330056	DRILLING PLAN
400330064	MINERAL LEASE MAP
400330065	WELL LOCATION PLAT
400330066	DEVIATED DRILLING PLAN
400330067	TOPO MAP
400330068	LEGAL/LEASE DESCRIPTION
400334391	DIRECTIONAL DATA

Total Attach: 10 Files

### **General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>
Permit	State Land Board reviewed and approved location. No LGD or public comments. Final Review--passed.	10/30/2012 10:10:06 AM
Permit	Corrected dist. to nearest min. lease to 308' (from BHL). Notified State Land Board.	10/25/2012 2:23:16 PM
Engineer	THE PROPOSED SURFACE CASING IS MORE THAN 50' BELOW THE DEPTH OF THE DEEPEST WATER WELL WITHIN 1MILE OF THE SURFACE LOCATION WHEN CORRECTED FOR ELEVATION DIFFERENCES. THE DEEPEST WATER WELL WITHIN 1 MILE IS 40 FEET DEEP.	10/17/2012 1:56:58 PM
Permit	Operator attached directional drilling template to properly import, and it coincides with directional drill excel spreadsheet and deviated drill plan. This form passed completeness.	10/9/2012 6:42:52 AM
Permit	Return to draft: directional drilling template is not importing.	10/4/2012 9:18:01 PM

Total: 5 comment(s)

## BMP

<u>Type</u>	<u>Comment</u>
Wildlife	<ol style="list-style-type: none"><li>1. Construct the pad and drill the well outside of the period between December 1 and April 15 for elk and mule deer.</li><li>2. Construct and or drill any subsequent wells outside the period between December 1 and April 15 for elk and mule deer.</li><li>3. Conduct post-development well site visitations between the hours of 10:00am and 3:00pm and reduce well site visitations between the December 1 and April 15; emergencies exempted.</li><li>4. Shell agrees to be in noise abatement compliance with COGCC Rule 802.c for the "Industrial" zone during construction, drilling, and completion of the well, and in compliance with the "Residential/Agricultural/Rural" zone during production operations.</li><li>5. Interim and final reclamation will match existing vegetation.</li><li>6. A weed management plan will be prepared and implemented as part of reclamation.</li><li>7. This is a multi-well pad and interim reclamation will occur within 6 months of completion of all wells and placement of production facilities.</li></ol>
Material Handling and Spill Prevention	Spill Prevention Control and Countermeasure Plans (SPCC) are in place to address material releases and to prescribe materials handling BMP's for the facility. "Good housekeeping" measures will be taken to ensure proper waster disposal.
Storm Water/Erosion Control	<p>Storm Water management plans (SWMP) are in place to comply with both Colorado Department of Public Health and Environment(CDPHE) and Colorado Oil and Gas Conservation(COGCC) stormwater discharge permits. The construction layout for the North Castor Gulch 2-16 details Best Managment Practices (BMP's) prescribed during initial construction. Note that BMP's may be removed, altered, or replaced with changing conditions in the field and the SWMP will be updaed accordingly. The BMP's that were prescribed during the initial construction included:</p> <ul style="list-style-type: none"><li>-Diversion ditch</li><li>-Check dams</li><li>-Level spreaders</li><li>-Stabilized construction entrance</li><li>-Slash</li><li>-Sediment traps</li><li>-Wattles</li><li>-Terrace</li><li>-Secondary containment berms</li><li>-Detention ponds</li></ul>

Total: 3 comment(s)