

FORM  
2

Rev  
12/05

State of Colorado  
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80205 Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

400254178

Date Received:

03/02/2012

PluggingBond SuretyID

20030028

APPLICATION FOR PERMIT TO:

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

2. TYPE OF WELL

OIL ☒ GAS ☐ COALBED ☐ OTHER Horizontal lateral  
SINGLE ZONE ☒ MULTIPLE ☐ COMMINGLE ☐

Refiling ☐

Sidetrack ☒

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: Michael L. Bergstrom Phone: (303)222-6347 Fax: (303)222-6258

Email: Michael.Bergstrom@shell.com

7. Well Name: North Castor Gulch Well Number: 1-16

8. Unit Name (if appl): Williams Fork Unit Number: COC74956X

9. Proposed Total Measured Depth: 9100

WELL LOCATION INFORMATION

10. QtrQtr: TR 66 Sec: 16 Twp: 5N Rng: 91W Meridian: 6

Latitude: 40.392189 Longitude: -107.605392

Footage at Surface: 1294 feet FNL/FSL FNL 925 feet FEL/FWL FEL

11. Field Name: Wildcat Field Number: 99999

12. Ground Elevation: 6992 13. County: MOFFAT

14. GPS Data:

Date of Measurement: 10/24/2011 PDOP Reading: 1.5 Instrument Operator's Name: B. Hunting

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

Footage at Top of Prod Zone: FNL/FSL 1294 FNL 925 FEL 588 FSL 2276 FWL 588  
Sec: 16 Twp: 5N Rng: 91W Sec: 16 Twp: 5N Rng: 91W

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: 3702 ft

18. Distance to nearest property line: 925 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 1850 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 8473.5

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):

T5N, R91W, 6thPM; Section 16 all

25. Distance to Nearest Mineral Lease Line: 585 ft

26. Total Acres in Lease: 680

### 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	80	156	80	0
SURF	13+1/2	10+3/4	40.5	0	800	408	800	0
1ST	9+7/8	7+5/8	29.7	0	4,000	301	4,000	1,500
1ST LINER	6+3/4	5+1/2	17	3800	9,100	0		

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

33. Comments Two APDs are being submitted for North Castor Gulch 1-16; one for the pilot hole and one for the lateral hole. This APD is for the lateral hole. Attachments include a drilling and completion plan. North Castor Gulch is a part of the Williams Fork Federal Unit COC74956X.

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: 3/2/2012

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: 4/13/2012

#### API NUMBER

05 081 07720 01

Permit Number: \_\_\_\_\_ Expiration Date: 4/12/2014

#### 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.

(2) OPERATOR MUST ENSURE 110 PERCENT SECONDARY CONTAINMENT FOR ANY VOLUME OF FLUIDS CONTAINED AT WELL-SITE DURING DRILLING AND COMPLETION OPERATIONS. IF FLUIDS ARE CONVEYED VIA PIPELINE, OPERATOR MUST IMPLEMENT BEST-MANAGEMENT-PRACTICES TO CONTAIN ANY UNINTENTIONAL RELEASE OF FLUIDS.

(3) NO PORTION OF ANY PIT THAT WILL BE USED TO HOLD LIQUIDS SHALL BE CONSTRUCTED ON FILL MATERIAL, UNLESS THE PIT AND FILL SLOPE ARE DESIGNED AND CERTIFIED BY A PROFESSIONAL ENGINEER, SUBJECT TO REVIEW AND APPROVAL BY THE DIRECTOR PRIOR TO CONSTRUCTION OF THE PIT. THE CONSTRUCTION AND LINING OF THE PIT SHALL BE SUPERVISED BY A PROFESSIONAL ENGINEER OR THEIR AGENT. THE ENTIRE BASE OF THE PIT MUST BE IN CUT.

(4) 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 040 FEET DEEP.

(5) CEMENT ON PRODUCTION CASING MUST BE AT LEAST 200' ABOVE TOP OF FT. UNION AND COMPLY WITH RULES 209 AND 317.I. SEGREGATE OIL, GAS, AND FRESH-WATER-BEARING ZONES AND PROTECT COAL SEAMS. VERIFY TOP WITH CBL.

### **Attachment Check List**

Att Doc Num	Name
400254260	TOPO MAP
400254265	WELL LOCATION PLAT
400255412	DIRECTIONAL DATA
400255594	DEVIATED DRILLING PLAN
400257631	DIRECTIONAL DATA

Total Attach: 5 Files

### **General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>
Permit	This is horizontal lateral (-01) to related APD #400254533T. Kelly, State Land Board, confirmed oper. has satisfied lease stip and has surface bond in order. LGD/pub. comments waived. Final Comprehensive Review Status--passed.	4/13/2012 10:12:42 AM
Permit	State Land Board advised that surface restoration bond in place but needs to confirm lease stip with operator regarding wildlife.	4/6/2012 2:37:27 PM
Permit	changed dist. to nearest well to 1850' per oper.'s email.	4/5/2012 7:51:08 AM
Permit	notified Tim Kelly, State Land Board. question on dist. to nearest well.	3/23/2012 11:27:50 AM

Total: 4 comment(s)

## **BMP**

<b><u>Type</u></b>	<b><u>Comment</u></b>
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 North Castor Gulch 1-16 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.</p> <p>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>
Material Handling and Spill Prevention	<p>Spill Prevention Control &amp; 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.</p>

Total: 2 comment(s)