

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



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Document Number:

400184605

PluggingBond SuretyID

20030028

APPLICATION FOR PERMIT TO:

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

2. TYPE OF WELL

OIL ☒ GAS ☐ COALBED ☐ OTHER Lateral  
SINGLE ZONE ☒ MULTIPLE ☐ COMMINGLE ☐

Refilling ☐

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: Hart Gulch Well Number: 1-17

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

9. Proposed Total Measured Depth: 8100

WELL LOCATION INFORMATION

10. QtrQtr: NWSE Sec: 17 Twp: 4N Rng: 90W Meridian: 6

Latitude: 40.312094 Longitude: -107.525186

Footage at Surface: 1577 feet FNL/FSL FSL 1614 feet FEL/FWL FEL

11. Field Name: Waddle Creek Field Number: 90450

12. Ground Elevation: 6911 13. County: MOFFAT

14. GPS Data:

Date of Measurement: 06/24/2011 PDOP Reading: 2.0 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 1490 FSL 1917 FEL FEL Bottom Hole: FNL/FSL 650 FSL 908 FEL/FWL FWL  
Sec: 17 Twp: 4N Rng: 90W Sec: 17 Twp: 4N Rng: 90W

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: 190 ft

18. Distance to nearest property line: 2671 19. Distance to nearest well permitted/completed in the same formation(BHL): 5050 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 #: \_\_\_\_\_

22. Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian

23. Is the Surface Owner also the Mineral Owner? ☐ Yes ☒ No Surface Surety ID#: 20030020

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):

Hart Gulch 1-17 is a part of the Williams Fork Federal Unit COC74956X.

25. Distance to Nearest Mineral Lease Line: 630 ft

26. Total Acres in Lease: 37136

### 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	13+1/2	10+3/4	40.5	0	500	236	500	0
1ST	9+7/8	7+5/8	29.7	0	5,015	72	5,015	4,400
2ND	6+3/4	5+1/2	17	0	7,774	0		

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

33. Comments Two APDs are being submitted for Hart Gulch 1-17; 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. Hart Gulch 1-17 is a part of the Williams Fork Unit COC 74956X.

34. Location ID: 425501

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: 7/27/2011 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: David S. Nash

Director of COGCC Date: 9/25/2011

#### API NUMBER

05 081 07681 01

Permit Number: \_\_\_\_\_ Expiration Date: 9/24/2013

#### 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) 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.

(3) THE MOISTURE CONTENT OF ANY DRILL CUTTINGS IN A CUTTINGS PIT, TRENCH, OR PILE SHALL BE AS LOW AS PRACTICABLE TO PREVENT ACCUMULATION OF LIQUIDS GREATER THAN DE-MINIMIS AMOUNTS. AT THE TIME OF CLOSURE, THE DRILL CUTTINGS MUST ALSO MEET THE APPLICABLE STANDARDS OF TABLE 910-1.

(4) RESERVE PIT MUST BE LINED.

(5) 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.

(6) 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.

(7) THE 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 00 FEET DEEP.

Before placing oil/salt based muds in the pit, operator must file and receive prior approval of a Pit Permit, Form 15. COGCC regulations regarding pit permits can be found in Rule 903.a.(3). PIT PERMITTING/REPORTING REQUIREMENTS.

### **Attachment Check List**

Att Doc Num	Name
2089474	LEASE MAP
2089475	LEGAL/LEASE DESCRIPTION
400184605	FORM 2 SUBMITTED
400185187	WELL LOCATION PLAT
400185188	TOPO MAP
400188877	DEVIATED DRILLING PLAN

Total Attach: 6 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	No public comments Comprehensive Final Review status -- Passed	9/23/2011 11:47:10 AM
Permit	Received and attached lease map and description	9/23/2011 11:38:49 AM
Permit	Added sidetrack checkbox Added lateral hole comment to application Added field as Waddle Creek Removed unit number from lease number location Missing description or map of lease	8/26/2011 4:43:44 PM
Permit	Returned to draft. No statement about conductor pipe, need to have field name filled out. Left phone message with operator about changes that need to be made.	7/28/2011 10:29:20 AM
Permit	Returned to draft. Missing field name information and statement about conductor pipe.	7/28/2011 9:27:23 AM
Permit	Returned to draft. Missing field name information and statement about conductor pipe.	7/28/2011 7:55:12 AM

Total: 6 comment(s)

### BMP

<u>Type</u>	<u>Comment</u>
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	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 Hart Gulch 1-17 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 <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>
Wildlife	1) Shell will use the existing access road and pad. 2) Shell will make a good faith effort to finish drilling at this location by December 1, 2011 3) Interim and final reclamation will match existing vegetation. 4) Shell will include a weed management plan and implement the plan as part of reclamation.

Total: 3 comment(s)