

FORM
2

Rev
12/05

State of Colorado Oil and Gas Conservation Commission

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Date Received:

07/31/2013

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 LP 4. COGCC Operator Number: 78110

5. Address: 4582 S ULSTER ST PKWY #1400
City: DENVER State: CO Zip: 80237

6. Contact Name: Steve Compton Phone: (303)305-4017 Fax: (303)305-7554
Email: C-Steven.Compton@shell.com

7. Well Name: Dill Gulch Well Number: 1-22

8. Unit Name (if appl): Hayden State Unit Number: 127

9. Proposed Total Measured Depth: 10400

WELL LOCATION INFORMATION

10. QtrQtr: NWSW Sec: 22 Twp: 6N Rng: 88W Meridian: 6
Latitude: 40.462247 Longitude: -107.256208

Footage at Surface: 2252 feet FSL 325 feet FWL

11. Field Name: Wildcat Field Number: 99999

12. Ground Elevation: 6550 13. County: ROUTT

14. GPS Data:

Date of Measurement: 09/05/2012 PDOP Reading: 2.1 Instrument Operator's Name: G. McElroy

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: 963 ft

18. Distance to nearest property line: 927 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 7430 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	NBRR			

21. Mineral Ownership: Fee State Federal Indian Lease #: CO90276.00

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):

Please see attached mineral lease map and mineral lease description.

25. Distance to Nearest Mineral Lease Line: 325 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	48	90	0
SURF	12+1/4	9+5/8	36	0	2600	1194	2600	0
1ST	8+1/2	7	29	0	7750	382	7750	2400
OPEN HOLE	6			7750	10400			

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

33. Comments _____

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: Anne Baldrige

Title: Reg & Env Lead - Swan Date: 7/31/2013 Email: a.baldrige@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: *Matthew Lee* Director of COGCC Date: 10/4/2013

API NUMBER: **05 107 06260 00** Permit Number: _____ Expiration Date: 10/3/2015

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.

Description

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

(2) INTERMEDIATE CASING CEMENT MUST PROVIDE COVERAGE OF ALL CRETACEOUS FORMATIONS PENETRATED BY THE INTERMEDIATE HOLE, INCLUDING ANY PORTION OF THE MESAVERDE GROUP THAT IS PRESENT BELOW THE SURFACE CASING SHOE. INTERMEDIATE CEMENT SHALL LAP 200' INTO THE SURFACE CASING. INTERMEDIATE CASING CEMENT COVERAGE VERIFICATION BY CBL IS REQUIRED.

Applicable Policies and Notices to Operators

NW Colorado Notification Policy.

Notice Concerning Operating Requirements for Wildlife Protection.

Attachment Check List

Att Doc Num	Name
2055845	WELLBORE DIAGRAM
2055846	DRILLING PLAN
400425902	FORM 2 SUBMITTED
400427086	WELL LOCATION PLAT
400427087	TOPO MAP
400427088	LEGAL/LEASE DESCRIPTION
400428835	MINERAL LEASE MAP

Total Attach: 7 Files

General Comments

User Group	Comment	Comment Date
Permit	Final review completed. Has LGD comments, no LGD comments on form 2A.	10/2/2013 5:59:10 AM
Engineer	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 20 FEET DEEP.	9/17/2013 11:05:18 AM
Engineer	Casing and cement design modified by COGCC engineering staff per SWEPI's request after discussion of drilling challenges in the Lewis Shale and potential well control and geologic isolation concerns in the Mesaverde Group. Changed surface casing setting depth from 4,250' to 2,600' and changed surface casing cement volume from 1,902 sacks to 1,194 sacks. Changed intermediate (1st string) casing cement top from 6,950' to 2,400' (200' lap into the surface casing) and changed intermediate (1st string) casing cement volume from 57 sacks to 382 sacks. Replaced Drilling Plan and Wellbore Diagram attachments to this Form 2 with revised attachments that reflect these changes.	9/17/2013 10:07:19 AM
Permit	Oper. corrected cement depth.	8/20/2013 8:01:15 AM
Permit	Corrected dist. to min. lease to 325'. Distance to nearest unit boundary is 3012'.	8/19/2013 1:27:05 PM

<p>LGD</p>	<p>LGD Comments</p> <p>Shell/SWEPI</p> <p>Section 22-6-88</p> <p>Dill Gulch 1-22</p> <p>Routt County has a permitting process for all oil/gas operations. The operator is aware that an application must be submitted to Routt County.</p> <p>Routt County has a review process for all county roads used for oil/gas operations. The operator must contact Routt County and comply with road review procedures before operations can be conducted.</p> <p>Routt County requests information from the COGCC after drilling operations are complete for the location of aquifers and showing that casing was completed per minimum requirements of the COGCC regulations to protect all aquifers.</p> <p>The site is located approximately 2.25 miles southwest of the Yampa Valley Regional Airport. The operator is required to file with the FAA an evaluation and receive approval for drilling operations.</p> <p>This site is proposed to be developed into a multiple well site. Routt County requests that the operator be required, at minimum to comply with Rule 609. The well site is located between two separate waterways, less than 0.5 miles and lower in elevation. Stokes Gulch is located to the north and Dry Creek located to the south. There are residences approximately 0.5+ miles north southeast of this site. With the permission of the land owner, testing should be completed for the water source of this residence. Routt County requests that a COA be added under Form 2A for the required testing of these waterways, nearby residences and locate and testing of springs within 0.5 miles.</p> <p>Any access will require a GE permit from Routt County. Due to the site being located between two drainages, any access roads and the well pad must have a comprehensive BMP Plan and continually monitored for protection of these water sources from erosion and contaminants.</p> <p>The US Army Corps of Engineers should be contacted to determine if any permits will be required.</p> <p>Continued best management practices should be used to test or monitor air quality. The COGCC should work with the CDPHE to develop monitoring system requirements and schedules for all operators. New technology should be used to prohibit emissions from tanks, equipment and flares on the onset of production.</p>	<p>8/19/2013 12:14:53 PM</p>
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Total: 6 comment(s)

Best Management Practices

No	BMP/COA Type	Description
1	Storm Water/Erosion Control	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 Commission (COGCC) storm water discharge permits. The construction layout for this location details Best Management Practices (BMP's) to be installed during the initial construction. Note that BMP's may be removed, altered, or replaced with the changing conditions in the field and the SWMP will be updated accordingly. The BMP's prescribed for the initial construction phase include, but are not limited to: <ul style="list-style-type: none">• Construct diversion ditch• Sediment Reservoirs• Check dams• Level spreaders• Stabilized construction entrance• Slash• Sediment Traps• Wattles• Terrace• Secondary containment berms• Detention ponds
2	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 waste disposal.
3	Interim Reclamation	Shell will consult with and follow the recommendations of the County Weed Supervisor

Total: 3 comment(s)