

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

TYPE OF WELL	OIL <input checked="" type="checkbox"/>	GAS <input type="checkbox"/>	COALBED <input type="checkbox"/>	OTHER <u>pilot hole</u>	Refilling <input type="checkbox"/>
ZONE TYPE	SINGLE ZONE <input checked="" type="checkbox"/>	MULTIPLE ZONES <input type="checkbox"/>	COMMINGLE ZONES <input type="checkbox"/>	Sidetrack <input type="checkbox"/>	Date Received: 11/20/2013

Well Name: State Well Number: 4-36

Name of Operator: SWEPI LP COGCC Operator Number: 78110

Address: 4582 S ULSTER ST PKWY #1400

City: DENVER State: CO Zip: 80237

Contact Name: Steve Compton Phone: (303)305-4017 Fax: ()

Email: C-steven.Compton@shell.com

RECLAMATION FINANCIAL ASSURANCE
Plugging and Abandonment Bond Surety ID: 20030028

WELL LOCATION INFORMATION

QtrQtr: NWNW Sec: 36 Twp: 26S Rng: 70W Meridian: 6

Latitude: 37.750053 Longitude: -105.177494

Footage at Surface: 1034 feet FNL/FSL FNL 368 feet FEL/FWL FWL

Field Name: WILDCAT Field Number: 99999

Ground Elevation: 7162 County: HUERFANO

GPS Data:
Date of Measurement: 01/13/2012 PDOP Reading: 1.1 Instrument Operator's Name: J.H, C.M, J.I (Uintah Surveying)

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: _____

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: Fee State Federal Indian

The Surface Owner is: is the mineral owner beneath the location.
(check all that apply) is committed to an Oil and Gas Lease.
 has signed the Oil and Gas Lease.
 is the applicant.

The Mineral Owner beneath this Oil and Gas Location is: Fee State Federal Indian

The Minerals beneath this Oil and Gas Location will be developed by this Well: Yes

The right to construct the Oil and Gas Location is granted by: oil and gas lease

Surface damage assurance if no agreement is in place: _____ Surface Surety ID: _____

LEASE INFORMATION

Using standard QtrQtr, Sec, Twp, Rng format, describe one entire mineral lease that will be produced by this well (Describe lease beneath surface location if produced. Attach separate description page or map if necessary.)

All of Section 36 26S-70W and other lands.

Total Acres in Described Lease: 1080 Described Mineral Lease is: Fee State Federal Indian

Federal or State Lease # 9721.8

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 368 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 5280 Feet

Building Unit: 5280 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 748 Feet

Above Ground Utility: 5280 Feet

Railroad: 5280 Feet

Property Line: 1034 Feet

INSTRUCTIONS:

- All measurements shall be provided from center of the Proposed Well to nearest of each cultural feature as described in Rule 303.a.(5).

- Enter 5280 for distance greater than 1 mile.

- Building - nearest building of any type. If nearest Building is a Building Unit, enter same distance for both.

- Building Unit, High Occupancy Building Unit, and Designated Outside Activity Area - as defined in 100-Series Rules.

DESIGNATED SETBACK LOCATION INFORMATION

Check all that apply. This location is within a: Buffer Zone
 Exception Zone
 Urban Mitigation Area

- Buffer Zone – as described in Rule 604.a.(2), within 1,000' of a Building Unit

- Exception Zone - as described in Rule 604.a.(1), within 500' of a Building Unit.

- Urban Mitigation Area - as defined in 100-Series Rules.

Pre-application Notifications (required if location is within 1,000 feet of a building unit):

Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government: _____

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: _____

SPACING and UNIT INFORMATION

Distance from Completed Portion of Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 5280 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 368 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): Farasita Unit Number: COC76216X

SPACING & FORMATIONS COMMENTS

OBJECTIVE FORMATIONS

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

DRILLING PROGRAM

Proposed Total Measured Depth: 6700 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 5280 Feet (Including plugged wells)

Will a closed-loop drilling system be used? Yes

Is H₂S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No (If Yes, attach an H₂S Drilling Operations Plan)

Will salt sections be encountered during drilling? No

Will salt based (>15,000 ppm Cl) drilling fluids be used? No

Will oil based drilling fluids be used? Yes

BOP Equipment Type: Annular Preventor Double Ram Rotating Head None

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 609

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Methods: Commercial Disposal

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Beneficial reuse or land application plan submitted?

Reuse Facility ID: or Document Number:

CASING PROGRAM

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	0	90	175	90	0
SURF	17+1/2	13+3/8	54.5	0	815	750	815	0
1ST	12+1/4	9+5/8	36	0	3900	800	3900	0
OPEN HOLE	8+3/4			3900	6700			

Conductor Casing is NOT planned

DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)
- Rule 604.b.(1)A. Exception Location (existing or approved Oil & Gas Location now within a Designated Setback as a result of Rule 604.a.)
- Rule 604.b.(1)B. Exception Location (existing or approved Oil & Gas Location is within a Designated Setback due to Building Unit construction after Location approval)
- Rule 604.b.(2) Exception Location (SUA or site-specific development plan executed on or before August 1, 2013)
- Rule 604.b.(3) Exception Location (Building Units constructed after August 1, 2013 within setback per an SUA or site-specific development plan)

GREATER WATTENBERG AREA LOCATION EXCEPTIONS

Check all that apply:

- Rule 318A.a. Exception Location (GWA Windows).
- Rule 318A.c. Exception Location (GWA Twinning).

RULE 502.b VARIANCE REQUEST

Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number

OTHER LOCATION EXCEPTIONS

Check all that apply:

- Rule 318.c. Exception Location from Rule or Spacing Order Number
- Rule 603.a.(2) Exception Location (Property Line Setback).

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

OPERATOR COMMENTS AND SUBMITTAL

Comments This Well was originally permitted by SWEPI LP as the State 2-36 well (API 05-055-06310). Due to major changes in the SHL, the name of the well was changed to State 4-36. At the request of COGCC on 10/3/2013, a new APD package was requested and has been submitted.

SWEPI LP has requested that the State 2-36 API number be abandoned and terminated.

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? _____ Yes _____

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

Signed: _____ Print Name: Trent Miller _____

Title: Env & Reg Consultant _____ Date: 11/20/2013 _____ Email: trent.miller@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: 4/18/2014 _____

Expiration Date: 04/17/2016 _____

API NUMBER
05 055 06313 00

Conditions Of Approval

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.

COA Type	Description
	The pilot hole cannot produce oil and gas without an exception location request because pilot hole is less than the 600' required from lease line/unit line. per Rule 318a.
	1) Provide 48 hour notice prior to spud via electronic Form 42. 2) Set 9 5/8" casing (1st string) at least 50' below top of Pierre. Cement to 50' above base of surface casing. Verify coverage with cement bond log. No salt or oil base mud shall be used until after setting and cementing 1st string. 3) Plugback to 200' above Dakota.
	Open hole resistivity and gamma logs shall be run to describe the stratigraphy of the entire well bore and to adequately verify the setting depth of surface casing and aquifer coverage. On a multi-well pad, these open hole logs are only required on one of the first wells drilled on the pad and the Drilling Completion Report - Form 5 for every well on the pad shall identify which well was logged.

Best Management Practices

No BMP/COA Type	Description

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2519043	DRILLING PLAN
2519044	WELLBORE DIAGRAM
400514187	FORM 2 SUBMITTED
400514223	CORRESPONDENCE
400514231	WELL LOCATION PLAT
400514232	TOPO MAP
400514233	LEGAL/LEASE DESCRIPTION

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review completed. Ready for final approval.	4/15/2014 2:05:56 PM
Permit	This permit is the pilot of a pilot/lateral drilling plan. Approval of this permit must precede the approval of the lateral in order that API sidetrack designations be correct.	4/15/2014 1:58:10 PM
Engineer	Original proposed total depth was 7600' and would have penetrated the Dakota and Entrada sandstones based on the nearest offset well and drilling plan prognosis. After requesting operator to perform DST's of the Dakota and Entrada including detailed analyses of any formation water recovered operator decided to decrease the proposed depth of pilot hole to 6700' and will not be penetrating these formations. Sent us a new WBD and Drilling Plan.	4/7/2014 3:50:25 PM
Permit	Notified State land board. Bond and surface location are in good order. per SLB 1/28/2014	1/27/2014 12:09:57 PM
Permit	Reviewed possible deep water zone. Changed contact information.	1/23/2014 5:05:19 AM
Permit	Total acreage of state lease of 1080 does not match our data that suggests the state lease is a 640 acre consisting of section 36 only. requested clarification.	1/22/2014 3:06:07 PM
Permit	Pilot hole shows that it is plugged off when the lateral is drilled.	1/22/2014 1:27:05 PM
Permit	Removed lease map.	1/22/2014 1:26:42 PM
Permit	Lease map will not open.	1/22/2014 1:05:29 PM

Total: 9 comment(s)