

FORM  
2A

Rev  
04/01

# 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:

400438635

Date Received:

07/03/2013

## Oil and Gas Location Assessment

New Location       Amend Existing Location      Location#: \_\_\_\_\_

Submit original plus one copy. This form is to be submitted to the COGCC prior to any ground disturbance activity associated with oil and gas development operations. This Assessment may be approved as a standalone application or submitted as an informational report accompanying an Application for Permit-To-Drill, Form 2. Approval of this Assessment will allow for the construction of the below specified location; however, it does not supersede any land use rules applied by the local land use authority. This form may serve as notice to land owners and other interested parties, please see the COGCC web site at <http://colorado.gov/cogcc/> for all accompanying information pertinent to this Oil and Gas Location Assessment.

Location ID:

**434069**

Expiration Date:

**09/06/2016**

This location assessment is included as part of a permit application.

### 1. CONSULTATION

- This location is included in a Comprehensive Drilling Plan. CDP # \_\_\_\_\_
- This location is in a sensitive wildlife habitat area.
- This location is in a wildlife restricted surface occupancy area.
- This location includes a Rule 306.d.(1)A.ii. variance request.

### 2. Operator

Operator Number: 78110  
 Name: SWEPI LP  
 Address: 4582 S ULSTER ST PKWY #1400  
 City: DENVER State: CO Zip: 80237

### 3. Contact Information

Name: Steve Compton  
 Phone: (303) 305-4017  
 Fax: ( )  
 email: C-Steven.Compton@Shell.com

### 4. Location Identification:

Name: Williams Number: 1-30  
 County: ROUTT  
 Quarter: NWNE Section: 30 Township: 6N Range: 87W Meridian: 6 Ground Elevation: 6516

Define a single point as a location reference for the facility location. This point should be used as the point of measurement in the drawings to be submitted with this application. When the location is to be used as a well site then the point shall be a well location.

Footage at surface: 796 feet FNL, from North or South section line, and 2528 feet FEL, from East or West section line.  
 Latitude: 40.453697 Longitude: -107.190669 PDOP Reading: 1.2 Date of Measurement: 04/30/2013  
 Instrument Operator's Name: G. McElroy

### 5. Facilities (Indicate the number of each type of oil and gas facility planned on location):

Special Purpose Pits: <input type="checkbox"/>	Drilling Pits: <input type="checkbox"/>	Wells: <input type="checkbox" value="1"/>	Production Pits: <input type="checkbox"/>	Dehydrator Units: <input type="checkbox"/>
Condensate Tanks: <input type="checkbox"/>	Water Tanks: <input type="checkbox" value="1"/>	Separators: <input type="checkbox" value="1"/>	Electric Motors: <input type="checkbox" value="1"/>	Multi-Well Pits: <input type="checkbox"/>
Gas or Diesel Motors: <input type="checkbox" value="1"/>	Cavity Pumps: <input type="checkbox"/>	LACT Unit: <input type="checkbox"/>	Pump Jacks: <input type="checkbox" value="1"/>	Pigging Station: <input type="checkbox"/>
Electric Generators: <input type="checkbox"/>	Gas Pipeline: <input type="checkbox"/>	Oil Pipeline: <input type="checkbox"/>	Water Pipeline: <input type="checkbox"/>	Flare: <input type="checkbox"/>
Gas Compressors: <input type="checkbox"/>	VOC Combustor: <input type="checkbox" value="1"/>	Oil Tanks: <input type="checkbox" value="3"/>	Fuel Tanks: <input type="checkbox" value="1"/>	

Other: \_\_\_\_\_

### 6. Construction:

Date planned to commence construction: 10/15/2013 Size of disturbed area during construction in acres: 3.35  
Estimated date that interim reclamation will begin: 03/17/2014 Size of location after interim reclamation in acres: 1.08  
Estimated post-construction ground elevation: 6515 Will a closed loop system be used for drilling fluids: Yes   
Will salt sections be encountered during drilling: Yes  No  Is H2S anticipated? Yes  No   
Will salt (>15,000 ppm TDS Cl) or oil based muds be used: Yes  No   
Mud disposal: Offsite  Onsite  Method: Land Farming  Land Spreading  Disposal Facility   
Other: \_\_\_\_\_

### 7. Surface Owner:

Name: \_\_\_\_\_ Phone: \_\_\_\_\_  
Address: \_\_\_\_\_ Fax: \_\_\_\_\_  
Address: \_\_\_\_\_ Email: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Date of Rule 306 surface owner consultation: 04/27/2011  
Surface Owner:  Fee  State  Federal  Indian  
Mineral Owner:  Fee  State  Federal  Indian  
The surface owner is:  the mineral owner  committed to an oil and gas lease  
 is the executer of the oil and gas lease  the applicant  
The right to construct the location is granted by:  oil and gas lease  Surface Use Agreement  Right of Way  
 applicant is owner  
Surface damage assurance if no agreement is in place:  \$2000  \$5000  Blanket Surety ID \_\_\_\_\_

### 8. Reclamation Financial Assurance:

Well Surety ID: 20030028  Gas Facility Surety ID: \_\_\_\_\_  Waste Mgnt. Surety ID: \_\_\_\_\_

### 9. Cultural:

Is the location in a high density area (Rule 603.b.): Yes  No   
Distance, in feet, to nearest building: 690, public road: 779, above ground utility: 766,  
railroad: 13200, property line: 796

### 10. Current Land Use (Check all that apply):

Crop Land:  Irrigated  Dry land  Improved Pasture  Hay Meadow  CRP  
Non-Crop Land:  Rangeland  Timber  Recreational  Other (describe): \_\_\_\_\_  
Subdivided:  Industrial  Commercial  Residential

### 11. Future Land Use (Check all that apply):

Crop Land:  Irrigated  Dry land  Improved Pasture  Hay Meadow  CRP  
Non-Crop Land:  Rangeland  Timber  Recreational  Other (describe): \_\_\_\_\_  
Subdivided:  Industrial  Commercial  Residential

### 12. Soils:

List all soil map units that occur within the proposed location. Attach the National Resource Conservation Service (NRCS) report showing the "Map Unit Description" report listing the soil typical vertical profile. This data is to be used when segregating topsoil.

The required information can be obtained from the NRCS web site at <http://soildatamart.nrcs.usda.gov/> or from the COGCC web site GIS Online map page found at <http://colorado.gov/cogcc>. Instructions are provided within the COGCC web site help section.

NRCS Map Unit Name: Dresher very fine sandy loam, 1 to 6 percent

NRCS Map Unit Name: \_\_\_\_\_  
NRCS Map Unit Name: \_\_\_\_\_

**13. Plant Community:**

Complete this section only if any portion of the disturbed area of the location's current land use is on non-crop land.

Are noxious weeds present: Yes  No   
Plant species from:  NRCS or,  field observation Date of observation: \_\_\_\_\_  
List individual species: \_\_\_\_\_

Check all plant communities that exist in the disturbed area.

- Disturbed Grassland (Cactus, Yucca, Cheatgrass, Rye)
- Native Grassland (Bluestem, Grama, Wheatgrass, Buffalograss, Fescue, Oatgrass, Brome)
- Shrub Land (Mahogany, Oak, Sage, Serviceberry, Chokecherry)
- Plains Riparian (Cottonwood, Willow, Aspen, Maple, Poplar, Russian Olive, Tamarisk)
- Mountain Riparian (Cottonwood, Willow, Blue Spruce)
- Forest Land (Spruce, Fir, Ponderosa Pine, Lodgepole Pine, Juniper, Pinyon, Aspen)
- Wetlands Aquatic (Bullrush, Sedge, Cattail, Arrowhead)
- Alpine (above timberline)
- Other (describe): \_\_\_\_\_

**14. Water Resources:**

Rule 901.e. may require a sensitive area determination be performed. If this determination is performed the data is to be submitted with the Form 2A.

Is this a sensitive area:  No  Yes Was a Rule 901.e. Sensitive Areas Determination performed:  No  Yes  
Distance (in feet) to nearest surface water: 415, water well: 2137, depth to ground water: 7  
Is the location in a riparian area:  No  Yes Was an Army Corps of Engineers Section 404 permit filed  No  Yes  
Is the location within a Rule 317B Surface Water Suppl Area buffer zone:  
 No  0-300 ft. zone  301-500 ft. zone  501-2640 ft. zone  
If the location is within a Rule 317B Surface Water Supply Area buffer have all public water supply systems within 15 miles been notified:  No  Yes

**15. Comments:**

The DWR shows one water well located approximately 600' northeast of the proposed well but lists the permit as expired. The permit number is 154181. It is unclear whether this water well was ever drilled or is in use. A copy of the DWR information is attached.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.  
Signed: \_\_\_\_\_ Date: 07/03/2013 Email: C-Steven.Compton@shell.com  
Print Name: Steve Compton Title: Environmental Engineer

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: 9/7/2013

**CONDITIONS OF APPROVAL, IF ANY:** \_\_\_\_\_

All representations, stipulations and conditions of approval stated in this Form 2A for this location shall constitute representations, stipulations and conditions of approval for any and all subsequent operations on the location unless this Form 2A is modified by Sundry Notice, Form 4 or an Amended Form 2A.

**COA Type**

**Description**

	<p>GROUNDWATER SAMPLING COA:</p> <p>Operator shall comply with Rule 609. STATEWIDE GROUNDWATER BASELINE SAMPLING AND MONITORING. The following water well has been identified as an acceptable location:</p> <p>1) Permit No. 121254-Williams, Everett; domestic/stock well; TD - 20' bgs; SWL - 7' bgs; FM - alluvium; located approximately 2087' to the W-SW (upgradient). Documented refusal to grant access by well owner or surface owner (for water well or spring sampling), or if no water wells or springs are located/identified within one-half mile, shall not constitute a violation of this COA.</p>
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GENERAL SITE COAs:

A closed loop system must be implemented during drilling (which operator has indicated on the Form 2A); or, if a closed loop system drilling rig is not used/available, then an amended Form 2A will need to be submitted/approved to include a drilling pit, and a Form 15 Earthen Pit Permit will also need to be submitted/approved prior to construction of the pit (the drilling pit will be required to be lined, fenced, and netted).

All cuttings generated during drilling with oil based muds or high chloride/TDS mud must be kept in containers, a lined/bermed portion of the well pad, or the lined drilling (if permitted and constructed) prior to offsite disposal. 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.

Notify the COGCC 48 hours prior to start of pad construction, rig mobilization, spud, and start of hydraulic stimulation operations using Form 42 (the appropriate COGCC individuals will automatically be email notified, including the LGD for hydraulic stimulation operations).

Operator must implement best management practices to contain any unintentional release of fluids, including any fluids conveyed via temporary surface or buried pipelines.

Operator must ensure secondary containment for any volume of fluids contained at well site during drilling and completion operations (as described on the BMPs tab and shown on the Construction Layout Drawings and Location Drawing attachments); including, but not limited to, construction of a berm or diversion dike, diversion/collection trenches within and/or outside of berms/dikes, site grading, or other comparable measures (i.e., best management practices (BMPs) associated with stormwater management) sufficiently protective of nearby surface water. Any berm constructed at the well pad location will be stabilized, inspected at regular intervals (at least every 14 days), and maintained in good condition.

The moisture content of any freshwater generated 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, if the drill cuttings are to be left onsite, they must also meet the applicable standards of table 910-1.

Flowback and stimulation fluids must be sent to tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline, storage vessel, or lined pit (only if an amended Form 2A has been submitted/approved and a Form 15 Earthen Pit Permitted has been submitted/approved) located on the well pad; or into tanker trucks for offsite disposal. The flowback and stimulation fluid tanks, separators, or other containment/filtering equipment must be placed on the well pad in an area with additional downgradient perimeter berming. The area where flowback fluids will be stored/reused must be constructed to be sufficiently impervious to contain any spilled or released material.

Berms or other containment devices shall be constructed to be sufficiently impervious (preferably corrugated steel with poly liner) to contain any spilled or released material around crude oil, condensate, and produced water storage tanks.

**TEMPORARY SURFACE PIPELINES COAs:**

Operator shall pressure test pipelines in accordance with Rule 1101.e.(1) prior to putting into initial service any temporary surface or permanent buried pipelines and following any reconfiguration of the pipeline network. Operator shall notify the COGCC Oil and Gas Location Assessment (OGLA) Specialist for Western Colorado (Dave Kubeczko; email dave.kubeczko@state.co.us) and the COGCC Field Inspection Supervisor for Northwest Colorado (Shaun Kellerby; email shaun.kellerby@state.co.us) 48 hours prior to testing surface poly or buried steel pipelines.

Operator must implement best management practices to contain any unintentional release of fluids along all portions of the surface pipeline route where temporary pumps and other necessary equipment are located.

Operator must routinely inspect the entire length of the surface pipeline to ensure integrity. Operator shall conduct daily inspections of surface poly pipeline routes for leaks during active transfer of fluids. Inspections shall be conducted by viewing the length of the pipeline; operator will endeavor to minimize surface disturbance during pipeline monitoring. The operator shall maintain records of inspections, findings and repairs, if necessary, for the life of the pipelines.

Operator must ensure 110 percent secondary containment for any potential volume of fluids that may be released from the surface pipeline at all sensitive area crossings, including, but not limited to stream, intermittent stream, ditch, and drainage crossings.

Operator will utilize, to the extent practical, all existing access and other public roads, and/or existing pipeline right-of-ways, when placing/routing the surface pipelines. This will reduce surface disturbance and fragmentation of wildlife habitat in the area.

**Attachment Check List**

<b><u>Att Doc Num</u></b>	<b><u>Name</u></b>
2106708	CORRESPONDENCE
400438635	FORM 2A SUBMITTED
400438971	NRCS MAP UNIT DESC
400438972	SURFACE AGRMT/SURETY
400438975	LOCATION PICTURES
400438981	ACCESS ROAD MAP
400438982	HYDROLOGY MAP
400438983	REFERENCE AREA MAP
400438984	REFERENCE AREA PICTURES
400438987	LOCATION DRAWING
400439008	OTHER
400442926	CONST. LAYOUT DRAWINGS

Total Attach: 12 Files

**General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>
Permit	LGD comments addressed at end of entry by LGD. No public comments. Final Review--passed.	8/21/2013 7:00:56 AM

OGLA	Initiated/Completed OGLA Form 2A review on 07-31-13 by Dave Kubeczko; requested acknowledgement of notification, fluid containment, spill/release BMPs, tank berming, flowback to tanks, use of salt/oil based muds, closed loop and cuttings containment, Rule 609 GW sampling, and cuttings low moisture content COAs from operator on 07-31-13; received acknowledgement of COAs from operator on 07-31-13; changed to sensitive area due to close SW (415'); changed distrubed area to 3.35 acres (pad only); onsite conducted by CPW/COGCC/Routt County in 2013; addressed Routt County LGD comments (dated 07-22-13) after all comments on 07-31-13; passed by CPW on 07-10-13 with operator submitted BMPS acceptable; passed OGLA Form 2A review on (TBD: 08-?-13) by Dave Kubeczko; notification, fluid containment, spill/release BMPs, tank berming, flowback to tanks, use of salt/oil based muds, closed loop and cuttings containment, Rule 609 GW sampling, and cuttings low moisture content COAs.	7/31/2013 8:40:27 AM
Permit	Checked oil and gas lease for right to construct.	7/22/2013 12:38:54 PM
LGD	<p>LGD Comments, Routt County; Dated July 22, 2013 SWEPI LP Williams 1-30 NWNE Sec 30 T6N R87W Doc Nos. 2A#400438635, 2#400437179</p> <p>COGCC'S RESPONSE FOLLOWS THE COMMENTS IN "CAPITAL LETTERS"; Dated July 31, 2013</p> <ol style="list-style-type: none"> <li>1) Routt County has a permitting process for all oil/gas operations. The operator is aware that an application must be submitted to Routt County.</li> <li>2) 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.</li> <li>3) Routt County requests information from the COGCC after drilling operations are complete for the located of aquifers and showing that casing was completed per minimum requirements of the COGCC regulations to protect all aquifers.</li> <li>4) The site is located approximately 1.5 miles SE of the Yampa Valley Regional Airport. The operator is required to file with the FAA an evaluation and receive approval for drilling operations.</li> <li>5) There is a waterbody located near the proposed access and well pad. 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.</li> <li>6) 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.</li> <li>7) There is a dwelling unit located approximately 690' to the northwest of the wellhead. The operator shall work with the surface owner to protect the health, safety and welfare of the residents in this area.</li> <li>8) Overhead powerlines near this location need to meet setback requirements.</li> <li>9) There is surface and water wells within 0.5 mile of this site. The operations shall comply with COGCC Regulation 609.</li> </ol> <p>"AS ROUTT COUNTY REQUIRES THEIR OWN SPECIAL USE PERMIT, COMMENT NOS. 1, 2, 4, and 6 PERTAIN TO THAT PERMITTING PROCESS AND REQUIREMENTS, AND THEREFORE, DO NOT REQUIRE COGCC RESPONSES. COMMENT NOS. 3, 5, 7, 8, and 9 RELATE TO EXISTING COGCC RULES, AND THEREFORE, DO NOT REQUIRE ADDITIONAL COGCC RESPONSES BECAUSE THEY HAVE BEEN ADDRESSED IN THE PERMIT REQUIREMENTS AND BY COGCC COAs."</p>	7/22/2013 9:21:17 AM

DOW	The proposed location is within mapped elk winter concentration area sensitive wildlife habitat (SWH), and is also within 4 miles of a greater sage-grouse lek. Given the surrounding habitat and topography, CPW affirms that the attached BMPs in the wildlife section are sufficient to address wildlife concerns.  Approved: Taylor Elm, 7/10/2013, 8:43 a.m.	7/10/2013 8:59:40 AM
Permit	This form has passed completeness.	7/5/2013 8:44:02 AM

Total: 6 comment(s)

### Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Wildlife	<p>1) This location is mapped as an elk winter concentration area. Given that elk seldom use the surrounding habitat, CPW recommends no elk stipulations.</p> <p>2) This location is within 4 miles of a greater sage-grouse lek. Given the surrounding habitat, CPW recommends no greater sage-grouse stipulations.</p> <p>3) Muffle sound from compressors, pump jacks or other motors necessary to run operations at the site. If mufflers are used, point upward to dissipate sound and vibration.</p> <p>4) Install and utilize bear-proof dumpsters and trash receptacles for all food-related trash on location following COGCC Rule 1204a-1.</p>
2	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 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:</p> <ul style="list-style-type: none"> <li>• Construct 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 Traps</li> <li>• Wattles</li> <li>• Terrace</li> <li>• Secondary containment berms</li> <li>• Detention ponds</li> </ul>
3	Material Handling and Spill Prevention	<p>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.</p>

Total: 3 comment(s)