

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:

400329346

Date Received:

10/02/2012

## Oil and Gas Location Assessment

New Location

Amend Existing Location

Location#: 427213

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:

**427213**

Expiration Date:

**10/25/2015**

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: Nancy Feck

Phone: (307) 367-7934

Fax: (307) 367-4285

email: N.Feck@shell.com

### 4. Location Identification:

Name: Herring Draw Number: 1-33

County: MOFFAT

Quarter: LOT 4 Section: 33 Township: 5N Range: 90W Meridian: 6 Ground Elevation: 6804

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: 1143 feet FNL, from North or South section line, and 914 feet FWL, from East or West section line.

Latitude: 40.345931 Longitude: -107.505956 PDOP Reading: 2.1 Date of Measurement: 06/28/2011

Instrument Operator's Name: D. Nelson

### 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="text" value="4"/>	Production Pits: <input type="checkbox"/>	Dehydrator Units: <input type="checkbox"/>
Condensate Tanks: <input type="checkbox"/>	Water Tanks: <input type="text" value="2"/>	Separators: <input type="text" value="3"/>	Electric Motors: <input type="checkbox"/>	Multi-Well Pits: <input type="checkbox"/>
Gas or Diesel Motors: <input type="text" value="4"/>	Cavity Pumps: <input type="checkbox"/>	LACT Unit: <input type="checkbox"/>	Pump Jacks: <input type="text" value="4"/>	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="text" value="2"/>	Oil Tanks: <input type="text" value="10"/>	Fuel Tanks: <input type="text" value="1"/>	

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

### 6. Construction:

Date planned to commence construction: 06/20/2012 Size of disturbed area during construction in acres: 4.37  
Estimated date that interim reclamation will begin: 07/01/2013 Size of location after interim reclamation in acres: 1.50  
Estimated post-construction ground elevation: 6804 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: 05/17/2012  
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: 6800, public road: 5165, above ground utilit: 1485  
, railroad: 50160, property line: 428

### 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 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: 99-Hesperus fine sandy loam, dry, 2 to 15 percent slopes

NRCS Map Unit Name: 206-Ustorthents, frigid-Borolis compls, 25 to 75 percent slopes  
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: See NRCS Rangeland Productivity and Plant Composition Report submitted with original Form 2A for this location.

- 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: 1030, water well: 6305, depth to ground water: 20  
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:**

This is a multi-well pad and interim reclamation will commence within 6 months of completion of drilling of all wells and facilities installation. Proposed BMP's are shown on Construction & Layout Drawings. Original Form 2A for this location included the closest water well details from the CO. Division of Water Resources Well Info., and an affidavit stating that a Surface Use Agreement is in place with the land owner. Wildlife BMP's were agreed upon by SWEPI LP and CPW during original evaluation of this location.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.  
Signed: \_\_\_\_\_ Date: 10/02/2012 Email: N.Feck@shell.com  
Print Name: Nancy Feck Title: Regulatory Technician

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: 10/26/2012

**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.**

**SITE SPECIFIC COA:**

If the wells are to be hydraulically stimulated/treated, then flowback and stimulation fluids must be sent to tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline or storage vessel 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.

**Attachment Check List**

Att Doc Num	Name
400329346	FORM 2A SUBMITTED
400330375	CONST. LAYOUT DRAWINGS
400330376	MULTI-WELL PLAN
400330377	OTHER

Total Attach: 4 Files

**General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>
Permit	Amended 2A to expand pad and add 3 wells. No LGD or public comment. Final Review--passed.	10/25/2012 6:48:42 AM
Permit	Corrected qtr/qtr. Unchecked "surface owner is mineral owner."	10/24/2012 2:10:59 PM
OGLA	PREVIOUS FORM 2A#400220055 SITE SPECIFIC COA APPLIES TO THIS FORM 2A:  A closed loop system must be implemented during drilling (which operator has indicated on the Form 2A); or, if a drilling is constructed, it must be lined. All cuttings generated during drilling with OBM must be kept in the lined drilling pit, or placed either in containers or on a lined/bermed portion of the well pad; prior to offsite disposal. The moisture content of any drill cuttings in a cuttings container or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts.	10/23/2012 3:43:06 PM
OGLA	Initiated/Completed OGLA Form 2A review on 10-23-12 by Dave Kubeczko; previously submitted and approved (01-06-12) Form 2A#400220055; OGCC Facility ID#427213; same COA applies, lined pit/closed loop and cuttings containment COA and new COA applies, flowback to tanks only; changed disturbed area to 4.37 acres (only pad, not access road); passed by CPW on 10-19-12 with operator agreed to/submitted BMPs acceptable; passed OGLA Form 2A review on 10-24-12 by Dave Kubeczko; lined pit/closed loop and cuttings containment COA.	10/23/2012 3:43:05 PM
DOW	The attached BMPs agreed to by the operator in the Wildlife section are appropriate.  Jacob Davidson, 15:05, 10-19-2012	10/19/2012 3:05:09 PM
Permit	This form passed completeness.	10/3/2012 8:35:13 PM

Total: 6 comment(s)

## BMP

<u>Type</u>	<u>Comment</u>
Wildlife	<p>1) Shell will make a good faith effort to finish drilling at this location outside of the period between December 1 and April 15.</p> <p>2) Shell agrees that for future reentry to this well site, if applicable, will occur outside of the period between Decemeber 1 and April 15.</p> <p>3) Interim and final reclamation will match existing vegetation.</p> <p>4) Avoid aggressive non-native grasses and shrubs in mule deer and elk habitat restoration.</p> <p>5) Shell will include a weed management plan and implement the plan as part of reclamation.</p> <p>6) Conduct post-development will site vistitations between the hours of 10:00am and 3:00pm and reduce weill site visitations between December 1 and April 15 in mule deer and elk winter range.</p> <p>7) Gate single-purpose roads and restrict general public access to the reduce traffic disruptions to wildlife - consistent with the owners goals.</p> <p>If possible please use any existing 2 track or other existing road or semi-road to minimize vegetation disturbance, soil disturbance and potential access to the propoerty.</p>
Storm Water/Erosion Control	<p>Stormwater Managment Plans (SWMP) are in place to comply with both Colorado Department of Public Health and Evnvironment (CDPHE) and Colorad Oil and Gas Conservation Commission (COGCC) stormwater discharge permits. The construction layout for this location details Best Management Practices (BMP) to be installed during the initial construction. Note that BMP's may be removed, altered, or replaced with changing conditions in the field and the stormwater management plan 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 trap</li><li>-Wattle</li><li>-Terrace</li><li>-Secondary containment berms</li><li>-Detention ponds</li></ul>
Site Specific	<p>Shell agrees to perform and followup with ground water monitoring as outlined in the attached Groundwater monitoring Report.</p>
Material Handling and Spill Prevention	<p>Spill Prevention Planns (SPCC) are in place to address material releases and to prescribe materials handling BMP's for the facility. "Good house-keeping" measures will be taken to ensure proper waste disposal.</p>

Total: 4 comment(s)