

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:

400334945

Date Received:

10/25/2012

Oil and Gas Location Assessment

☐ New Location

☒ Amend Existing Location Location#: 428533

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:

428533

Expiration Date:

11/28/2015

☒ 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: North Castor Gulch

Number: 1-16

County: MOFFAT

QuarterQuarter: TR66 Section: 16 Township: 5N Range: 91W Meridian: 6 Ground Elevation: 6992

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: 1294 feet FNL, from North or South section line, and 925 feet FEL, from East or West section line.

Latitude: 40.392189 Longitude: -107.605392 PDOP Reading: 1.5 Date of Measurement: 10/05/2011

Instrument Operator's Name: B.Hunting

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

Special Purpose Pits: <input type="text"/>	Drilling Pits: <input type="text"/>	Wells: <input type="text" value="9"/>	Production Pits: <input type="text"/>	Dehydrator Units: <input type="text"/>
Condensate Tanks: <input type="text"/>	Water Tanks: <input type="text" value="2"/>	Separators: <input type="text" value="3"/>	Electric Motors: <input type="text"/>	Multi-Well Pits: <input type="text"/>
Gas or Diesel Motors: <input type="text" value="9"/>	Cavity Pumps: <input type="text"/>	LACT Unit: <input type="text"/>	Pump Jacks: <input type="text" value="9"/>	Pigging Station: <input type="text"/>
Electric Generators: <input type="text"/>	Gas Pipeline: <input type="text"/>	Oil Pipeline: <input type="text"/>	Water Pipeline: <input type="text"/>	Flare: <input type="text"/>
Gas Compressors: <input type="text"/>	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: 07/01/2012 Size of disturbed area during construction in acres: 7.06
Estimated date that interim reclamation will begin: 04/01/2013 Size of location after interim reclamation in acres: 2.09
Estimated post-construction ground elevation: 6987 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: _____
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 Mgmt. Surety ID: _____

9. Cultural:

Is the location in a high density area (Rule 603.b.): Yes ☐ No ☒
Distance, in feet, to nearest building: 7550, public road: 3702, above ground utilit: 3700
, railroad: 16737, property line: 925

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: 33-Clayburn loam, warm, 3 to 25 percent slopes

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: Please see 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: 943, water well: 5690, depth to ground water: 25

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 Supply 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:

Proposed BMP's are included and shown on the construction layout drawings.

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

Signed: _____ Date: 10/25/2012 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: Matthew Lee Director of COGCC Date: 11/29/2012

**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.

Attachment Check List

Att Doc Num	Name
1293050	PROPOSED BMPs
400334945	FORM 2A SUBMITTED
400335330	CONST. LAYOUT DRAWINGS
400335331	MULTI-WELL PLAN
400335333	PROPOSED BMPs

Total Attach: 5 Files

General Comments

User Group	Comment	Comment Date
Permit	Amended 2A submitted to add locations to existing pad. No LGD or public comments. Final Review--passed.	11/29/2012 6:59:09 AM
DOW	The attached BMPs agreed to by the operator in the Wildlife section are appropriate. Jacob Davidson, 13:01, 11-20-2012	11/20/2012 1:01:46 PM
OGLA	Initiated/Completed OGLA Form 2A review on 11-13-12 by Dave Kubeczko; previously submitted and approved (04-13-12) Form 2A#400254450 and (10-31-12) Form 2A#400327719; OGCC Facility ID#428533; same COAs apply, flowback to tanks, closed loop, and cuttings containment COAs; changed disturbed area to 7.06 acres (only pad, not access road); passed by CPW on 11-20-12 with operator agreed to/submitted BMPs acceptable (timing limitation between 12-1 and 4-15 waived for 2012-2013 by CPW on 11-02-12); passed OGLA Form 2A review on 11-20-12 by Dave Kubeczko; flowback to tanks, closed loop, and cuttings containment COA.	11/13/2012 1:30:03 PM
OGLA	PREVIOUS FORM 2A#400254450 AND FORM 2A#400327719 SITE SPECIFIC COA APPLIES TO THIS FORM 2A: 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. 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.	11/13/2012 1:30:02 PM
Permit	This form passed completeness.	10/26/2012 11:09:33 PM

Total: 5 comment(s)

BMP

<u>Type</u>	<u>Comment</u>
Wildlife	<ol style="list-style-type: none"> 1. Construct the pad and drill the wells outside of the period between December 1 and April 15 for Elk and mule deer (Waived by CPW for 2012-2013 on 11-02-12). 2. Construct and or drill any subsequent wells outside the period between December 1 and April 15 for Elk and mule deer (Waived by CPW for 2012-2013 on 11-02-12). 3. Conduct post-development well site visitations between the hours of 10:00am and 3:00pm and reduce well site visitations between December 1 and April 15; emergencies exempted. 4. Shell agrees to be in noise abatement compliance with COGCC rule 802.c for the "Industrial" zone during construction , drilling and completion of the wells, and in compliance with the "Residential/Agricultural/Rural" zone during production operations. 5. Interim and final reclamation will match existing communities. 6. A weed management plan will be included in relcamation of the site. 7. This is a multi-well pad and interim reclamation will occur within 6 months of completion of all wells and placement of production facilities.
Storm Water/Erosion Control	<p>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 the North Castor Gulch 1-16 location that includes the North Castor Gulch 2-16, 3-16, 4-16, 5-16, 6-16, 7-16, 8-16 & 9-16 wells, 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"> -Construct diversion ditch -Sediment reservoirs -Check dams -Level Spreaders -Stabilized construction entrance -Slash -Sediment traps -Wattles -Terrace -Secondary containment berms -Detention ponds -
Site Specific	Operator has agreed to conduct baseline and follow up sampling in accordance with the attached Groundwater Baseline Monitoring program.
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.
General Housekeeping	Shell will follow the guidelines of the Moffat County Weed and Pest Management Department.

Total: 5 comment(s)