

State of Colorado
Oil and Gas Conservation Commission

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Document Number:

400382539

Date Received:

04/03/2013

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:

432846

Expiration Date:

05/14/2016☒ 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: 69175

Name: PDC ENERGY INC

Address: 1775 SHERMAN STREET - STE 3000

City: DENVER State: CO Zip: 80203

3. Contact Information

Name: Liz Lindow

Phone: (303) 831-3974

Fax: ()

email: liz.lindow@pdce.com

4. Location Identification:

Name: Sorin Natural Resources Number: 2R-HZ Pad

County: WELD

QuarterQuarter: NWNE Section: 2 Township: 4N Range: 66W Meridian: 6 Ground Elevation: 4671

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: 20 feet FNL, from North or South section line, and 1424 feet FEL, from East or West section line.

Latitude: 40.348440 Longitude: -104.739850 PDOP Reading: 1.7 Date of Measurement: 11/21/2012

Instrument Operator's Name: Brian Rottinghaus

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="checkbox"/>	Separators: <input type="checkbox"/>	Electric Motors: <input type="checkbox"/>	Multi-Well Pits: <input type="checkbox"/>
Gas or Diesel Motors: <input type="checkbox"/>	Cavity Pumps: <input type="checkbox"/>	LACT Unit: <input type="checkbox"/>	Pump Jacks: <input type="checkbox"/>	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"/>	Oil Tanks: <input type="checkbox"/>	Fuel Tanks: <input type="checkbox"/>	

Other: 4 three-phase flow lines

6. Construction:

Date planned to commence construction: 05/05/2013 Size of disturbed area during construction in acres: 5.00
Estimated date that interim reclamation will begin: 08/05/2013 Size of location after interim reclamation in acres: 1.00
Estimated post-construction ground elevation: 4671 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: 12/05/2012
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 19990086

8. Reclamation Financial Assurance:

☒ Well Surety ID: 20090078 ☐ 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: 471, public road: 615, above ground utility: 548,
railroad: 5280, property line: 20

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: 3: Aquolls and Aquents, gravelly substratum

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: 130, water well: 435, depth to ground water: 8
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:

Water well permit # 103102 was used to find depth to ground water. The Sorin Natural Resources 2R-403, 2R-223, 2U-203, 2U-443 will be drilled off site. Production facilities will be located approximately 400' to the west.

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

Signed: _____ Date: 04/03/2013 Email: liz.lindow@pdce.com

Print Name: Liz Lindow Title: Regulatory Analyst

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: 5/15/2013

**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.

Attachment Check List

Att Doc Num	Name
400382539	FORM 2A SUBMITTED
400382568	NRCS MAP UNIT DESC
400383408	MULTI-WELL PLAN
400383409	WASTE MANAGEMENT PLAN
400394854	ACCESS ROAD MAP
400394860	HYDROLOGY MAP
400394865	LOCATION PICTURES
400394866	LOCATION DRAWING

Total Attach: 8 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA	Added sound mitigation BMP, CPW is working with the surface owner regarding the SWA issue.	5/13/2013 1:52:37 PM
Public	<p>PDC Energy Inc has proposed oil and gas activity on four (4) locations on property managed by Colorado Parks and Wildlife (CPW) under easement as Webster State Wildlife Area, approximately 2 miles northwest of LaSalle, Colorado. Colorado Parks and Wildlife appreciates the opportunity to work with the operator and surface owner and is in the process of discussing operating practices with them that will accommodate our surface use of the property. We note there are no sensitive wildlife habitats on the property. However, we would appreciate an opportunity to continue to discuss recommended practices to accommodate the ongoing recreational use of the property prior to approval of the pending Form 2a. The recreation easements provide for public hunting, fishing, and outdoor recreation, including hiking, wildlife viewing, and hunting for waterfowl, pheasants, rabbits, and doves. Wildlife recreation uses of the property can be protected by: 1) allowing drilling and other active disturbances during non-hunting seasons from June 1st through August 31st, 2) locating oil and gas facilities outside the footprint of proposed recharge ponds and wetlands, 3) maintaining public access to the designated parking lot during oil and gas activities, 4) to the extent possible, limiting truck traffic during hunting season to mid-day hours, ie: 11 am to 2 pm when hunting is less likely, and 5) consolidating all proposed drill pads and access roads on the property as much as possible.</p> <p>Tom Schreiner</p> <p>Energy Liaison NE Region</p> <p>Colorado Parks and Wildlife</p>	4/24/2013 4:34:05 PM
Permit	Operator confirmed that building at 354 is non-residential. Nearest residential bldg is 471'. Operator confirms that location is on the surface above the 11 acre mineral lease. Ready to pass pending public comment.	4/17/2013 9:06:48 AM
Permit	Requested operator review distance to nearest building. Appears to be 354'. Otherwise, ready to pass.	4/15/2013 2:09:16 PM
OGLA	Requesting sound impact mitigation information and status of consultation with CPW regarding State Wildlife Area.	4/5/2013 12:49:42 PM
Permit	This form has passed completeness.	4/4/2013 11:43:03 AM

Total: 6 comment(s)

BMP

<u>Type</u>	<u>Comment</u>
Drilling/Completion Operations	For sound impact: the rig we use has quiet mufflers on it and we put up hay bales as a sound buffer for drilling, fracing, and light abatement. During production we use mufflers on any compressor and have encased the compressor with sound walls if we have trouble meeting the noise requirements.
Storm Water/Erosion Control	This Stormwater Management Plan contains required elements associated with PDC's construction activities for Area 2, as defined in the CDPS General Permit for Stormwater Discharges Associated with Construction Activity, Authorization to Discharge Under the Colorado Discharge Permit System (Permit No. COR-030000, re-issued and effective July 1, 2007). BMPs for sediment and erosion control will be accomplished through a combination of construction techniques, vegetation and re-vegetation, administrative controls, and structural features.

Total: 2 comment(s)