

**FORM  
2A**Rev  
08/13**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:

400522227

Date Received:

01/03/2014

**Oil and Gas Location Assessment**☒ New Location    ☐ Refile    ☐ Amend Existing Location    Location#: \_\_\_\_\_

Submit signed original form. This Oil and Gas Location Assessment is to be submitted to the COGCC for approval prior to any ground disturbance activity associated with oil and gas operations. Approval of this Oil and Gas Location 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. Please see the COGCC website at <http://cogcc.state.co.us/> for all accompanying information pertinent this Oil and Gas Location Assessment.

Location ID:

**436043**

Expiration Date:

**02/07/2017**☒ This location assessment is included as part of a permit application.**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.

**Operator**Operator Number: 69175Name: PDC ENERGY INCAddress: 1775 SHERMAN STREET - STE 3000City: DENVER    State: CO    Zip: 80203**Contact Information**Name: Liz LindowPhone: (303) 831-3974Fax: ( )email: liz.lindow@pdce.com**RECLAMATION FINANCIAL ASSURANCE**☒ Plugging and Abandonment Bond Surety ID: 20090078☐ Gas Facility Surety ID: \_\_\_\_\_☐ Waste Management Surety ID: \_\_\_\_\_**LOCATION IDENTIFICATION**Name: SunMarkeNumber: 28V-HZ PadCounty: WELDQuarterQuarter: SENE    Section: 28    Township: 4N    Range: 67W    Meridian: 6    Ground Elevation: 4906

Define a single point as a location reference for the facility location. When the location is to be used as a well site then the point shall be a well location.

Footage at surface: 1470 feet FNL from North or South section line211 feet FEL from East or West section lineLatitude: 40.286920    Longitude: -104.886970PDOP Reading: 2.0    Date of Measurement: 08/26/2013Instrument Operator's Name: Mark Angell

## RELATED REMOTE LOCATIONS

(Enter as many Related Locations as necessary. Enter the Form 2A document # only if there is no established COGCC Location ID#)

**This proposed Oil and Gas Location is:**

**LOCATION ID #**

**FORM 2A DOC #**

Well Site is served by Production Facilities

40522219

## FACILITIES

Indicate the number of each type of oil and gas facility planned on location

Wells	4	Oil Tanks		Condensate Tanks		Water Tanks		Buried Produced Water Vaults	
Drilling Pits		Production Pits		Special Purpose Pits		Multi-Well Pits		Temporary Large Volume Above Ground Tanks	
Pump Jacks		Separators		Injection Pumps		Cavity Pumps			
Gas or Diesel Motors		Electric Motors		Electric Generators		Fuel Tanks		Gas Compressors	
Dehydrator Units		Vapor Recovery Unit		VOC Combustor		Flare		LACT Unit	
								Pigging Station	

## OTHER FACILITIES

**Other Facility Type**

**Number**

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Per Rule 303.b.(3)C, description of all oil, gas, and/or water pipelines:

The four oil production lines and four flow lines are 3 inch steel SCH 80FB PE DRL. The nine water production lines and nine low pressure gas vent lines are 2 inch SDR7 poly. The single gas sales line installed and maintained by DCP 6 inch steel .256 FBE.

## CONSTRUCTION

Date planned to commence construction: 02/04/2014      Size of disturbed area during construction in acres: 4.50  
Estimated date that interim reclamation will begin: 05/04/2014      Size of location after interim reclamation in acres: 2.50  
Estimated post-construction ground elevation: 4906

## DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: Yes

Is H<sub>2</sub>S anticipated? No

Will salt sections be encountered during drilling: No

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

Will oil based drilling fluids be used? No

## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE      Drilling Fluids Disposal Method: Recycle/reuse

Cutting Disposal: OFFSITE      Cuttings Disposal Method: Beneficial reuse

Other Disposal Description:

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Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID:      or Document Number:     

Centralized E&P Waste Management Facility ID, if applicable:     

## SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: SunMarke Investments, LLC

Phone:

Address: 515 DTC Parkway, Suite 240

Fax: \_\_\_\_\_

Address: \_\_\_\_\_

Email: \_\_\_\_\_

City: Greenwood State: CO Zip: 80111  
Village

Surface Owner: ☒ Fee ☐ State ☐ Federal ☐ Indian

Check all that apply. The Surface Owner: ☐ is the mineral owner

☐ 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 from or produced to this Oil and Gas Location: Yes

The right to construct this Oil and Gas Location is granted by: Surface Use Agreement

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

Date of Rule 306 surface owner consultation 01/30/2013

## CURRENT AND FUTURE LAND USE

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

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

## CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 330 Feet  
Building Unit: 330 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 200 Feet  
Above Ground Utility: 236 Feet  
Railroad: 5280 Feet  
Property Line: 211 Feet

### INSTRUCTIONS:

- All measurements shall be provided from center of nearest Well or edge of nearest Production Facility to nearest of each cultural feature as described in Rule 303.b.(3)A.  
- 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: 12/16/2013

## SOIL

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.org/> 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: 79—Weld loam, 1 to 3 percent slopes

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

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

## 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): \_\_\_\_\_

## WATER RESOURCES

Is this a sensitive area: ☐ No ☒ Yes

Distance to nearest

downgradient surface water feature: 182 Feet

water well: 3563 Feet

Estimated depth to ground water at Oil and Gas Location 20 Feet

Basis for depth to groundwater and sensitive area determination:

Depth to groundwater based on landowners experience, sensitive area determination due to downgradient surface water within 200'.

Is the location in a riparian area: ☒ No ☐ Yes

Was an Army Corps of Engineers Section 404 permit filed ☒ No ☐ Yes If yes attach permit.

Is the location within a Rule 317B Surface Water Supply Area buffer No 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: \_\_\_\_\_

## GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 318A

## 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)

## RULE 502.b VARIANCE REQUEST

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

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

Drill cuttings will be land applied at PDC spread fields with COGCC Facility ID 425112, 429629, 430649, 431183, or 434889. The following wells will be drilled from this pad: SunMarke 28V-304, 28V-434, 28V-234, 28W-414. Building Unit within the exception zone is a partially boarded up, uninhabited home. Contact was made with the owner of the Building Unit and the owner waived all notice, meeting, and mitigation requirements covered under Rule 305.a, 305.c., 306.e, 604.c.(2).A-W., and the MIRU policy effective Dec. 16, 2013. Waiver 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: 01/03/2014 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:  Director of COGCC Date: 2/8/2014

### **Conditions Of Approval**

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.

<b><u>COA Type</u></b>	<b><u>Description</u></b>
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### **Best Management Practices**

<b><u>No</u></b>	<b><u>BMP/COA Type</u></b>	<b><u>Description</u></b>
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1	Storm Water/Erosion Control	This Stormwater Management Plan contains required elements associated with PDC's construction activities for Areas 1, 2, 3, and 5, 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.
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Total: 1 comment(s)

### **Attachment Check List**

<b><u>Att Doc Num</u></b>	<b><u>Name</u></b>
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400522227	FORM 2A SUBMITTED
400523612	NRCS MAP UNIT DESC
400532741	ACCESS ROAD MAP
400532742	HYDROLOGY MAP
400532743	LOCATION PICTURES
400532744	LOCATION DRAWING
400532745	MULTI-WELL PLAN
400532746	OTHER
400532747	WASTE MANAGEMENT PLAN
400532798	WAIVERS
400532802	SURFACE AGRMT/SURETY

Total Attach: 11 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review complete.	2/6/2014 10:19:12 AM
OGLA	Review completed 1/9/2014.	1/9/2014 2:27:36 PM
Permit	Note that the Pre-applicaion request is included in the attachment "Waivers". Typo on distance to above ground utility corrected form 2360 to 236' as per opr. Ready to pass pending public comment 1/27/14.	1/8/2014 8:22:38 AM
Permit	Passed completeness.	1/6/2014 9:51:18 AM

Total: 4 comment(s)