

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:

400887627

**(SUBMITTED)**

Date Received:

03/16/2016

## Oil and Gas Location Assessment

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

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:

Expiration Date:

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: 10454  
 Name: PETROSHARE CORPORATION  
 Address: 7200 S ALTON WAY #B220  
 City: CENTENNIAL    State: CO    Zip: 80112

### Contact Information

Name: Kimberly Rodell  
 Phone: (303) 942-0506  
 Fax: ( )  
 email: krodell@upstreampm.com

### RECLAMATION FINANCIAL ASSURANCE

- Plugging and Abandonment Bond Surety ID: 20130019     Gas Facility Surety ID: \_\_\_\_\_
- Waste Management Surety ID: \_\_\_\_\_

### LOCATION IDENTIFICATION

Name: Shook Wellpad    Number: 3-1-67  
 County: ADAMS  
 Quarter: NWSE    Section: 3    Township: 1S    Range: 67W    Meridian: 6    Ground Elevation: 5098

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: 2058 feet FSL from North or South section line  
2289 feet FEL from East or West section line

Latitude: 39.992220    Longitude: -104.873700

PDOP Reading: 1.0    Date of Measurement: 10/10/2015

Instrument Operator's Name: Scott Estabrooks

## 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 #

## FACILITIES

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

Wells 14 Oil Tanks\* 1 Condensate Tanks\* \_\_\_\_\_ Water Tanks\* 1 Buried Produced Water Vaults\* \_\_\_\_\_  
Drilling Pits \_\_\_\_\_ Production Pits\* \_\_\_\_\_ Special Purpose Pits \_\_\_\_\_ Multi-Well Pits\* \_\_\_\_\_ Modular Large Volume Tanks \_\_\_\_\_  
Pump Jacks \_\_\_\_\_ Separators\* \_\_\_\_\_ Injection Pumps\* \_\_\_\_\_ Cavity Pumps\* \_\_\_\_\_ Gas Compressors\* \_\_\_\_\_  
Gas or Diesel Motors\* \_\_\_\_\_ Electric Motors \_\_\_\_\_ Electric Generators\* \_\_\_\_\_ Fuel Tanks\* \_\_\_\_\_ LACT Unit\* \_\_\_\_\_  
Dehydrator Units\* \_\_\_\_\_ Vapor Recovery Unit\* \_\_\_\_\_ VOC Combustor\* 1 Flare\* \_\_\_\_\_ Pigging Station\* \_\_\_\_\_

## OTHER FACILITIES\*

Other Facility Type Number

<u>Other Facility Type</u>	<u>Number</u>
Heater Treaters	<u>4</u>
Production Manifold	<u>1</u>

\*Those facilities indicated by an asterisk (\*) shall be used to determine the distance from the Production Facility to the nearest cultural feature on the Cultural Setbacks Tab.

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

1 Gas line: a combination of 4", 6" & 8" 0.188 to 0.219 wall thickness, ARO coated, steel pipeline  
1 Oil Line: 4 inch 0.188 wall thickness, ARO coated, steel pipeline

## CONSTRUCTION

Date planned to commence construction: 05/01/2016 Size of disturbed area during construction in acres: 7.60

Estimated date that interim reclamation will begin: 11/01/2016 Size of location after interim reclamation in acres: 7.60

Estimated post-construction ground elevation: 5096

## 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: Commercial Disposal

Cutting Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Beneficial reuse or land application plan submitted? No

Reuse Facility ID: \_\_\_\_\_ or Document Number: \_\_\_\_\_

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

## SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Sec 2-3 Pheonix LLC

Phone: \_\_\_\_\_

Address: 9200 E. Mineral Ave.

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

Address: Suite 365

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

City: Centennial State: CO Zip: 80112

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: No

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 \_\_\_\_\_

### 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

Provide the distance to the nearest cultural feature as measured from Wells or Production Facilities onsite.

	From WELL	From PRODUCTION FACILITY
Building:	<u>939</u> Feet	<u>898</u> Feet
Building Unit:	<u>895</u> Feet	<u>903</u> Feet
High Occupancy Building Unit:	<u>5280</u> Feet	<u>5280</u> Feet
Designated Outside Activity Area:	<u>5280</u> Feet	<u>5280</u> Feet
Public Road:	<u>996</u> Feet	<u>991</u> Feet
Above Ground Utility:	<u>863</u> Feet	<u>852</u> Feet
Railroad:	<u>5280</u> Feet	<u>5280</u> Feet
Property Line:	<u>220</u> Feet	<u>55</u> 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.
- For measurement purposes only, Production Facilities should only include those items with an asterisk(\*) on the Facilities Tab.

## 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.  
- Large UMA Facility - 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: 10/27/2015

## FOR MULTI-WELL PADS AND PRODUCTION FACILITIES WITHIN DESIGNATED SETBACK LOCATIONS ONLY:

- Check this box if this Oil and Gas Location has or will have Production Facilities that serve multiple wells (onl or offsite) and the Production Facilities are proposed to be located less than 1,000 feet from a Building Unit. *(Pursuant to Rule 604.c.(2)E.i., the operator must evaluate alternative locations for the Production Facilities that are farther from the Building Unit, and determine whether those alternative locations were technically feasible and economically practicable for the same proposed development.)*
- By checking this box, I certify that no alternative placements for the Production Facilities, farther from the nearest Building Unit, were available based on the analysis conducted pursuant to Rule 604.c.(2)E.i.

In the space below, explain rationale for siting the multi-well Production Facility(ies) that supports your Rule 604.c.(2)E.i determination. Attach documentation that supports your determination to this Form 2A.

The production facilities were placed in the proposed location per surface owner request owner as it was the optimal location to use the natural tree barrier and be less impactfull on the value of the future residential development plans of the surface owner/developer.

## 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 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: PIC-Platner loam, 3 to 5 percent slopes

NRCS Map Unit Name: PIB-Platner loam, 0 to 3 percent slopes

NRCS Map Unit Name: W-Water

## 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: Western wheatgrass, Blue grama, Green needlegrass, Needleandthread, Broom snakeweed, Winterfat, Fourwing saltbush, Sand dropseed, Buffalograss

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: 45 Feet

water well: 1521 Feet

Estimated depth to ground water at Oil and Gas Location 640 Feet

Basis for depth to groundwater and sensitive area determination:

Nearest water well is Permit No. 2004004-AB. Groundwater depth was determined by nearest water well with depth to ground water information, Permit No. 3297-F -R. Distance to downgradient surface water is a dry pond.

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: \_\_\_\_\_

Is the Location within a Floodplain?  No  Yes Floodplain Data Sources Reviewed (check all that apply)

Federal (FEMA)

State

County

Local

Other \_\_\_\_\_

## GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 609

## DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- Rule 604.a.(1)A. Exception Zone (within 500' of a Building Unit) and is in an Urban Mitigation Area
- 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

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

Signed: \_\_\_\_\_ Date: 03/16/2016 Email: krodell@upstreampm.com

Print Name: Kimberly Rodell Title: Permit Agent

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: \_\_\_\_\_

### 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.**

#### COA Type

#### Description

<u>COA Type</u>	<u>Description</u>

### Best Management Practices

#### No BMP/COA Type

#### Description

1	Planning	Development from existing well pads: PetroShare is permitting an Oil and Gas Location Assessment - Form 2A as a multi well pad through the Colorado Oil and Gas Conservation Commission (COGCC). This will eliminate the need for multiple well pads which would ultimately require more surface disturbance.
2	Planning	The location was selected due to an existing tree line that will act as a visual barrier.
3	Traffic control	PetroShare will construct all leasehold road to accommodate local emergency vehicle access requirements and will be maintained in a reasonable condition.
4	General Housekeeping	Guy Line Anchors: All guy line anchors left buried for future use will be identified by a marker of bright color not less than four feet in height and not greater than one foot further of the guy line anchor.
5	General Housekeeping	Removal of Surface Trash: PetroShare agrees that all trash, refuse pipe, equipment, liquids, chemicals of other materials that are not necessary for the continued operations of the wells will be removed and disposed of no later than 30 days after completion. No such items will be burned or buried on location.
6	Wildlife	Wildlife and Wildlife Habitat: The proposed oil and gas wells are not within a sensitive wildlife habitat. PetroShare, to the extent possible will not cause significant degradation of wildlife.
7	Storm Water/Erosion Control	PetroShare will maintain a Stormwater Management Plan with site specific measurements to assess erosion control.

8	Material Handling and Spill Prevention	Leak Detection Plan: To ensure protection for the surface during fracturing treatment, the location will be specifically constructed to contain any releases or spills. Secondary containment from any chemical spills or leaks will surround any trucks that carry, mix, or add chemicals to the flow stream as well as connections that could possibly leak fluid. Should any spill or release occur, every reasonable step will be taken to quickly remediate the area disturbed.
9	Material Handling and Spill Prevention	Control of Fire Hazards: PetroShare and its contractor's will employ best management practices during the drilling and production of its wells and facilities. They will comply with appropriate COGCC and any county rules concerning fire and safety. PetroShare will ensure that any flammable material will remain no less than 25 feet from the wellhead (s), tanks and separator(s).
10	Material Handling and Spill Prevention	Berm Construction: A containment berm or structure will be erected around the oil and water storage tanks. The berm will be inspected regularly and maintained in good condition.
11	Material Handling and Spill Prevention	Tank specifications: Tanks shall be constructed and maintained in accordance with the National Fire Protection Association Code 30 (2008 version). All tanks will be visually inspected once a day. Recorded inspections will be conducted once a month pursuant to 40 CFR §112.
12	Dust control	Fresh water, per COGCC rules, or another approved source may be applied to roads and land surfaces for purposes of dust mitigation. No other liquid or substance generated by the production of the oil and gas facility will be applied to the roads and land surfaces.
13	Construction	Pursuant to Rule 804, the tank battery shall be painted in uniform, non-contrasting, non-reflective color tones with the colors matched to but slightly darker than the surrounding landscape. The location was selected due to an existing tree line that will act as a visual barrier.
14	Construction	Fencing: The wellsite will be fenced if requested by the private surface owner.
15	Noise mitigation	PetroShare will abide by all COGCC noise standards for all activities. The location was selected due to an existing tree line that will act as a sound barrier.
16	Odor mitigation	PetroShare will comply with Rule 805 and Department of Public Health and Environment, Air Quality Control Commission, Regulation No. 2 Odor Emission, 5 C.C.R. 1001-4, Regulation No. 3 (5 C.C.R. 1001-5), and Regulation No. 7 Section XVII.B.1 (a-c) and Section XII.
17	Drilling/Completion Operations	All permanent lighting will be directed downward and internally. Temporary lighting shall conform to COGCC rules and regulations and not adversely affect adjacent residential properties.
18	Final Reclamation	Well site cleared. Within 90 days subsequent to the time of plugging and abandonment of the entire site, superfluous debris and equipment shall be removed from the site.
19	Final Reclamation	Final stabilization of the well area will mean revegetation of all areas not including the permanently installed well anchor points. All other areas will be revegetated or covered by permanent materials before they are considered finally stabilized and complete.

Total: 19 comment(s)

## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400887627	FORM 2A SUBMITTED
401009118	ACCESS ROAD MAP
401009120	CONST. LAYOUT DRAWINGS
401009123	FACILITY LAYOUT DRAWING
401009125	HYDROLOGY MAP
401009127	LOCATION DRAWING
401009129	LOCATION PICTURES
401009131	MULTI-WELL PLAN
401009133	REFERENCE AREA MAP
401009135	REFERENCE AREA PICTURES
401009137	RULE 305A CERTIFICATION OF COMPLIANCE
401010147	WASTE MANAGEMENT PLAN
401010192	SURFACE AGRMT/SURETY
401014853	NRCS MAP UNIT DESC

Total Attach: 14 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>

Total: 0 comment(s)