

**FORM  
2A**Rev  
04/01

## State of Colorado

## Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80205 Phone: (303) 894-2100 Fax: (303) 894-2109



DE ET OE ES

Document Number:

400063672

**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 stand alone 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:

Expiration Date:

☐ 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: 10079

Name: ANTERO RESOURCES PICEANCE CORPORATION

Address: 1625 17TH ST STE 300

City: DENVER State: CO Zip: 80202

**3. Contact Information**

Name: Hannah Knopping

Phone: (303) 357-6412

Fax: (303) 357-7315

email: hknopping@anteroresources.com

**4. Location  
Identification:**

Name: Frei Number: A Pad

County: GARFIELD

QuarterQuarter: SWSW Section: 7 Township: 6S Range: 91W Meridian: 6 Ground Elevation: 5607

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: 529 feet, from North or South section line: FSL and 924 feet, from East or West section line: FWL

Latitude: 39.535946 Longitude: -107.603246 PDOP Reading: 2.4 Date of Measurement: 05/10/2010

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

Special Purpose Pits:  Drilling Pits:  Wells:  Production Pits:  Dehydrator Units:   
Condensate Tanks:  Water Tanks:  Separators:  Electric Motors:  Multi-Well Pits:   
Gas or Diesel Motors:  Cavity Pumps:  LACT Unit:  Pump Jacks:  Pigging Station:   
Electric Generators:  Gas Pipeline:  Oil Pipeline:  Water Pipeline:  Flare:   
Gas Compressors:  VOC Combustor:  Oil Tanks:  Fuel Tanks:

Other: See attached List of Facilities for details

6. Construction:

Date planned to commence construction: 06/25/2010 Size of disturbed area during construction in acres: 4.00  
Estimated date that interim reclamation will begin: 12/25/2010 Size of location after interim reclamation in acres: 1.00  
Estimated post-construction ground elevation: 5596 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: JFN Management, LLC Phone: \_\_\_\_\_  
Address: Frei Family Limited Partnership Fax: \_\_\_\_\_  
Address: 287 Mid Valley Drive Email: \_\_\_\_\_  
City: New Castle State: CO Zip: 81647 Date of Rule 306 surface owner consultation: 05/07/2010  
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: 20040071 ☐ 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: 650, public road: 550, above ground utilit: 550  
, railroad: 4950, property line: 311

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): Gravel Pit  
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): Gravel Pit  
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: 34: Ildefonso stony loam, 25 to 45 percent slopes

NRCS Map Unit Name: 55: Potts loam, 3 to 6 percent slopes

NRCS Map Unit Name: 3: Arvada loam, 1 to 6 percent slopes

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: 05/19/2010  
List individual species: N/A: Gravel Pit

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): Gravel Pit

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: 1086, water well: 993, depth to ground water: 50

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:

#1 Consultation: Since this location is in a "Sensitive Wildlife Habitat Area" Antero contacted CDOW prior to submittal of this APD and negotiated a Wildlife Mitigation Plan (see attached summary of Mitigation Plan included in Proposed BMP's).  
#4- The proposed Frei A1 well location was used as the reference point for well distance measurements.  
#14-Water Resources: The depth to ground water determined by using static water level data of nearest water well (Permit#122403/Receipt#0915025).  
We have attached a Riparian map which shows that our proposed well pad is not located in a riparian area.  
Our reference area is undisturbed ground immediately adjacent and to the south of our proposed well pad, as shown in the "South" location photo.

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

Signed: \_\_\_\_\_ Date: \_\_\_\_\_ Email: [hknopping@anteroresources.com](mailto:hknopping@anteroresources.com)

Print Name: Hannah Knopping Title: Permit Representative

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, 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	Doc Description
400063677	HYDROLOGY MAP	Frei A Pad Hydrology Map.pdf
400063678	OTHER	Frei A Pad Riparian Map.pdf
400063679	LOCATION PICTURES	Frei A Pad_Location Pictures.pdf
400063680	NRCS MAP UNIT DESC	Frei A Pad_NRCS Map Unit Descriptions.pdf
400063681	ACCESS ROAD MAP	Frei A Pad_Access Road Map.pdf
400063682	CONST. LAYOUT DRAWINGS	Frei A Pad_Construction Layout Drawing.pdf
400063683	LOCATION DRAWING	Frei A Pad_Location Drawing.pdf
400063684	EQUIPMENT LIST	Frei A Pad_List of Facilities (confirmed).pdf
400063736	PROPOSED BMPs	Proposed BMP List with WMP (revised 3-24-10).pdf
400063765	317B NOTIFICATION	Frei A Pad_Rule 317B Notifications.pdf
400063774	MULTI-WELL PLAN	Frei A Pad Multi Well Plan.pdf

Total Attach: 11 Files