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

Oil and Gas Location Assessment

Document Number: 400276356

Date Received: 04/27/2012

☐ New Location ☒ Amend Existing Location Location#: 335538

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: **335538**

Expiration Date: **05/30/2015**

☒ 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: 10079

Name: ANTERO RESOURCES PICEANCE CORPORATION

Address: 1625 17TH ST STE 300

City: DENVER State: CO Zip: 80202

3. Contact Information

Name: Shauna Redican

Phone: (303) 357-6820

Fax: (303) 357-7315

email: sredican@anteroresources.com

4. Location Identification:

Name: VALLEY FARMS Number: F PAD

County: GARFIELD

QuarterQuarter: NWSW Section: 14 Township: 6S Range: 92W Meridian: 6 Ground Elevation: 5619

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: 2174 feet FSL , from North or South section line, and 272 feet FWL , from East or West section line.

Latitude: 39.525825 Longitude: -107.642797 PDOP Reading: 1.0 Date of Measurement: 04/20/2006

Instrument Operator's Name: Corey Holmes

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

Special Purpose Pits:		Drilling Pits:		Wells:	23	Production Pits:		Dehydrator Units:	
Condensate Tanks:	4	Water Tanks:	6	Separators:	6	Electric Motors:		Multi-Well Pits:	
Gas or Diesel Motors:		Cavity Pumps:		LACT Unit:		Pump Jacks:		Pigging Station:	1
Electric Generators:		Gas Pipeline:	1	Oil Pipeline	1	Water Pipeline:	1	Flare:	
Gas Compressors:				VOC Combustor:	1	Oil Tanks:		Fuel Tanks:	

Other: See attached list of facilities

6. Construction:

Date planned to commence construction: 05/25/2012 Size of disturbed area during construction in acres: 3.29

Estimated date that interim reclamation will begin: 11/25/2012 Size of location after interim reclamation in acres: 1.29

Estimated post-construction ground elevation: 5619 Will a closed loop system be used for drilling fluids: Yes [X]

Will salt sections be encountered during drilling: Yes [ ] No [X] Is H2S anticipated? Yes [ ] No [X]

Will salt (>15,000 ppm TDS Cl) or oil based muds be used: Yes [ ] No [X]

Mud disposal: Offsite [X] Onsite [ ] Method: Land Farming [ ] Land Spreading [ ] Disposal Facility [X]

Other: Onsite if applicable

7. Surface Owner:

Name: _____ Phone: _____

Address: _____ Fax: _____

Address: _____ Email: _____

City: _____ State: _____ Zip: _____ Date of Rule 306 surface owner consultation: 04/24/2007

Surface Owner: [X] Fee [ ] State [ ] Federal [ ] Indian

Mineral Owner: [X] Fee [ ] State [ ] Federal [ ] Indian

The surface owner is: [X] the mineral owner [X] 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: [X] 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:

[X] 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 [X]

Distance, in feet, to nearest building: 728 , public road: 409 , above ground utilit: 5280

, railroad: 5280 , property line: 195

10. Current Land Use (Check all that apply):

Crop Land: [ ] Irrigated [ ] Dry land [ ] Improved Pasture [ ] Hay Meadow [ ] CRP

Non-Crop Land: [X] Rangeland [ ] Timber [ ] Recreational [X] Other (describe): See NRCS Report attached

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: [X] Rangeland [ ] Timber [ ] Recreational [X] Other (describe): See NRCS Report attached

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 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: Unit Symbol #51: Onley Loam, 6 to 12 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: 03/22/2012

List individual species: Sagebrush and Wheatgrasses

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: 836 , water well: 4128 , depth to ground water: 60

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 Suppl 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:

This pad is built, however since we proposing to expand the pad size approximately 85' northeast and 80' northwest, as shown on the Construction Layout Drawing, we are submitting this Form 2A as required. #1 No above ground utility or railroad is located within 5280 feet of the pad location. The Reference Areais undisturbed ground immediately adjacent and to the North ofthe well pad, as shown in the "Looking North" location photo. #4 The Valley Farms F10 well was used as the reference point for well distance measurements. #6 Mud Disposal: Antero will bury cuttings onsite if disposal meets Table 910 and if there is a provision in SUA which allows for such operation. #14 Water Resources: The depth to ground water was determined by using static water level data of Permit 13892F /Receipt 9113630. The distance to nearest surface water was measured to the stream southwest of the pad location. Since location is in a SWH area, Antero contacted CDOW prior to submittal of this APD (see attached BMPs). The multi-well plan has been updated to reflect the proposed BHL change for Valley Farms F23; the permit re-file with the updated BHL for this well will be submitted later this month.

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

Signed: Date: 04/27/2012 Email: sredican@anteroresources.com

Print Name: Shauna Redican 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: 5/31/2012

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.

SITE SPECIFIC COAs:

Operator must implement best management practices to contain any unintentional release of fluids, including any fluids conveyed via temporary surface pipelines or buried permanent pipelines.

If the well is to be hydraulically stimulated, flowback and stimulation fluids must be sent to tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline or pit 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.

Attachment Check List

Att Doc Num	Name
2034378	CORRESPONDENCE
400276356	FORM 2A SUBMITTED
400277160	HYDROLOGY MAP
400277165	MULTI-WELL PLAN
400277167	LOCATION DRAWING
400277168	LOCATION PICTURES
400277169	NRCS MAP UNIT DESC
400277171	OTHER
400277176	CONST. LAYOUT DRAWINGS
400277547	PROPOSED BMPs
400277875	EQUIPMENT LIST
400277966	ACCESS ROAD MAP

Total Attach: 12 Files

General Comments

User Group	Comment	Comment Date
Permit	Spacing & pooling unit approved. LGD passed;pub. comments waived. Final Review--passed.	5/31/2012 2:54:59 PM
OGLA	Initiated/Completed OGLA Form 2A review on 05-15-12 by Dave Kubeczko; requested acknowledgement of spill/release BMPs and flowback to tanks COAs from operator on 05-15-12; received acknowledgement of COAs from operator on 05-22-12; passed by CPW on 05-03-12 with WMP and BMPs acceptable; passed OGLA Form 2A review on 05-28-12 by Dave Kubeczko; fluid containment, spill/release BMPs and flowback to tanks COAs.	5/15/2012 3:55:46 PM
Permit	APD on hold pending spacing & pooling application on May hearing.	5/15/2012 7:42:56 AM
LGD	Passed DB	5/14/2012 4:02:48 PM
DOW	This site is located within the south central portion of the city of Silt.It falls within a Mule Deer Critical Winter Range SWH, and is covered by a CPW coordinated Wildlife Management Plan with Antero.CPW feels that the existing WMP and COGCC drilling regulations in HB1298 sufficiently address our wildlife concerns. Comments by Bill Buchholz on 1 May 2012.	5/1/2012 5:05:26 PM

Total: 5 comment(s)

BMP

Type	Comment
Wildlife	MITIGATION PLAN BEST MANAGEMENT PRACTICES: • Closed loop (pitless) drilling system. • Participation in raptor and other birds (great blue heron) monitoring and surveying with protocol to be developed by CDOW and implemented by Antero when practicable. • Buried water and gas pipelines as means to reduce truck traffic. • Seasonal raptor RSOs for species not included in new COGCC rules will be considered where practicable. • Avoidance/seclusion area in the northeast corner of the CDP (Burning Mountain) unless lease expiration warrants development. • Restricted rig operation to less than 2 per section within the big game seclusion areas during the winter (to be determined in consultation with CDOW). • Maintaining a ¼ mile no surface occupancy buffer around active bald eagle nests. • New pad construction not to exceed 3 acres. • Pad density not to exceed 1 pad per 120 acres. • Bury all gas and water pipelines adjacent to roads whenever possible. • The mitigation opportunities/projects will be defined by the Mitigation Plan for each well pad. • The mitigation opportunities/projects will be determined cooperatively with the CDOW during the annual Antero Mitigation Plan Review. • CDOW Actions to Minimize Adverse Impacts to Wildlife Resources is attached to the March 22, 2010 Mitigation Plan
Planning	PLANNING INFRASTRUCTURE AND DEVELOPMENT ACTIVITIES: • Directional drilling will be implemented to minimize habitat loss and habitat fragmentation • Remote monitoring using SCADA systems to reduce truck traffic, fugitive dust • Water pipeline infrastructure will be installed concurrently with the gas pipeline infrastructure where possible. • SPCC inspections will be conducted quarterly • Water used for well completions will be recycled as practicable • Baseline and post drilling/completion water well testing will be performed for permitted water wells within ½ mile of down-hole location • Annual planning meeting to be conducted with Rifle-Silt-New Castle Community

Site Specific	PUBLIC WATER SYSTEM PROTECTION SECTION 317B: • Best management practices will be implemented to contain any unintentional releases of fluids for locations within 500 feet of surface water • Locations within 500 feet of surface water will ensure 110 percent secondary containment for any volume of fluids contained at a well site during drilling and completion operations
Drilling/Completion Operations	DRILLING AND PRODUCTION: • No reserve, drill cuttings or frac/flowback pits will be constructed • Well pads will be constructed with perimeter berm on downslope area • Well pads, access roads will be graveled to reduce fugitive dust, sediment run-off • Above-ground facilities will be located to minimize visual effects (e.g. production tanks will be low profile tanks and painted to mitigate visual impacts.) • Combustor controls will be used to mitigate odors from production tanks • Well completions will utilize flowback completion technologies and/or flares to reduce odors from plug drillout, and venting of salable and non-salable gas • High level alarms will be installed on production tanks • Production tank containment area will be lined with plastic
General Housekeeping	INVASIVE NON-NATIVE VEGETATION CONTROL: • Weed management plan will be developed and implemented to monitor and control noxious and invasive weeds • Noxious weed control includes three treatments per year • Existing weed infestations will be mapped prior to the development of each pad, access road and pipeline when practicable • Reclamation/revegetation will be used as a weed management tool
Storm Water/Erosion Control	STORWATER MANAGEMENT: • Facilities will be operated with a Water Quality Control Division (WQCD) stormwater construction permit. • Stormwater BMPs in accordance with the Stormwater Management Plan will be implemented in a manner that minimizes erosion, transport of sediment offsite, and site degradation. • Inspections will be conducted every two weeks or monthly and in accordance with WQCD General Permit to confirm that applicable BMPs are in place, maintained and functioning properly.

Total: 6 comment(s)