

State of Colorado
Oil and Gas Conservation Commission

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



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Document Number:

400076537

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:

421223

Expiration Date:

01/19/2014
☒ 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: McLin Number: A Pad

County: GARFIELD

Quarter: SESW Section: 12 Township: 6S Range: 92W Meridian: 6 Ground Elevation: 5608

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: 918 feet FSL, from North or South section line, and 2213 feet FWL, from East or West section line.

Latitude: 39.536908 Longitude: -107.617335 PDOP Reading: 2.4 Date of Measurement: 01/19/2010

Instrument Operator's Name: Scott E. Aibner

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

Special Purpose Pits: <input type="text"/>	Drilling Pits: <input type="text"/>	Wells: <input type="text" value="18"/>	Production Pits: <input type="text"/>	Dehydrator Units: <input type="text"/>
Condensate Tanks: <input type="text" value="2"/>	Water Tanks: <input type="text" value="4"/>	Separators: <input type="text" value="5"/>	Electric Motors: <input type="text"/>	Multi-Well Pits: <input type="text"/>
Gas or Diesel Motors: <input type="text"/>	Cavity Pumps: <input type="text"/>	LACT Unit: <input type="text"/>	Pump Jacks: <input type="text"/>	Pigging Station: <input type="text" value="1"/>
Electric Generators: <input type="text"/>	Gas Pipeline: <input type="text" value="1"/>	Oil Pipeline: <input type="text" value="1"/>	Water Pipeline: <input type="text" value="1"/>	Flare: <input type="text"/>
Gas Compressors: <input type="text"/>	VOC Combustor: <input type="text" value="1"/>	Oil Tanks: <input type="text"/>	Fuel Tanks: <input type="text"/>	

Other: See attached list for details

6. Construction:

Date planned to commence construction: 12/01/2010 Size of disturbed area during construction in acres: 4.00
Estimated date that interim reclamation will begin: 06/01/2011 Size of location after interim reclamation in acres: 2.00
Estimated post-construction ground elevation: 5606 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: Onsite if meet table 910

7. Surface Owner:

Name: _____ Phone: _____
Address: _____ Fax: _____
Address: _____ Email: _____
City: _____ State: _____ Zip: _____ Date of Rule 306 surface owner consultation: 03/17/2010
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: 550, public road: 450, above ground utilit: 460
, railroad: 3770, property line: 450

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: 55: Potts Rolling Loam, 3-6 percent slopes

NRCS Map Unit Name: 56: Potts Rolling Loam, 6-12 percent slopes

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: 08/02/2010

List individual species: NCRS Rangeland Productivity and Plant Composition Report is attached.

Check all plant communities that exist in the disturbed area.

- ☐ Disturbed Grassland (Cactus, Yucca, Cheatgrass, Rye)
☒ Native Grassland (Bluestern, 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: 170, water well: 757, depth to ground water: 48

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 McLin A2 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#66672-F/Receipt#9502317A).

Our reference area is undisturbed ground immediately adjacent and to the west of our proposed well pad, as shown in the "West" 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: 08/25/2010 Email: 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.

Daniel S. Neslin

COGCC Approved: _____

Director of COGCC

Date: 1/20/2011

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.

Because of proximity of the well pad to both nearby surface water (Ward and Reynolds Ditch) and steep slopes to the west and north; operator will grade the well pad surface to slope towards the south/southeast, away from the edges of the ridge. In addition, tertiary containment will be required at the well pad location consisting of two lateral collection trenches/ditches along the south and east sides of the pad (outside of the well pad berm/ditches) The trenches will be graded to flow into an oversized catchment basin located near the southeast corner of the well pad. This basin will be surrounded by straw waddle and/or silt fencing.

Flowback to tanks only. Flowback and stimulation fluids shall be contained within tanks that are placed on the well pad in an area with additional downgradient perimeter berming. In addition, operator must implement odor controls during fracing operations.

Prior to construction of the proposed well pad, soil compaction testing will be conducted along that portion of the existing pipeline trench located within the boundaries of the proposed well pad. Compaction testing shall be engineered and conducted sufficient to prevent the trench from becoming a conduit for water capable of damaging the stability of the location or proximate hillside.

The nearby hillside must be monitored for any day-lighting of drilling fluids throughout the drilling of the surface casing interval.

Operator must implement best management practices to contain any unintentional release of fluids.

No portion of any pit that will be used to hold liquids shall be constructed on fill material, unless the pit and fill slope are designed and certified by a professional engineer, subject to review and approval by the director prior to construction of the pit. The construction and lining of the pit shall be supervised by a professional engineer or their agent. The entire base of the pit must be in cut. (Antero has indicated a closed loop system will be used and no pits will be constructed.)

The access road will be constructed as to not allow any sediment to migrate from the access road to nearby surface water (McLin Ditch) or any drainages leading to other nearby surface waters (Ward-Reynolds Ditch).

Operator will provide records of pressure testing of the pipeline(s) servicing this multi-well location in accordance with COGCC Rule 1101.e.(1) to COGCC or our third party engineer for review prior to putting pipeline segment into service. Documentation should be submitted to Dave Kubeczko.

Operator will provide assurance that if pending litigation with the nearby landowner concerning the pipeline installation cannot be satisfactorily resolved, operator can provide reasonable, safe and effective alternative means of transferring fluids and/or gas to and from the location as necessary to facilitate oil and gas production. Documentation should be submitted to Dave Kubeczko.

The moisture content of any drill cuttings in a cuttings pit, trench, or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts. At the time of closure, the drill cuttings must also meet the applicable standards of table 910-1.

Reserve pit must be lined or closed loop system must be implemented during drilling. (Antero has indicated a closed loop system will be used and no reserve pit will be constructed.)

The location is in an area of high run off/run-on potential from the proposed pad area to the west and north; additionally, the surface soils and materials are very fine-grained; therefore the pad shall be constructed as quickly as possible and appropriate BMPs need to be in place both during and immediately after construction to prevent any stormwater run-on and /or stormwater runoff.

Operator will provide documentation of resolution of Complaint Number 2000287954 to COGCC prior to commencing construction of the McLin A Pad. Resolution of the complaint could, by example, include submittal of the items specified by Garfield County in the letter to the COGCC, dated December 2, 2010. Documentation should be submitted to Dave Kubeczko.

Location is in a sensitive area because of proximity to surface water; therefore, operator must ensure 110 percent secondary containment for any volume of fluids contained at well site during drilling and completion operations; including, but not limited to, construction of a berm or diversion dike, diversion/collection trenches within and/or outside of berms/dikes, site grading, or other comparable measures sufficiently protective of nearby surface water. If fluids are conveyed via pipeline, operator must implement best management practices to contain any unintentional release of fluids.

Prior to startup of these pipelines, the results of the pressure testing required by Rule 1101.e. Pressure testing of flowlines., will be provided to COGCC. Results should be submitted to Dave Kubeczko.

Attachment Check List

Att Doc Num	Name
1641982	CORRESPONDENCE
2033383	CORRESPONDENCE
2033387	CORRESPONDENCE
2033388	PROPOSED BMPs
400076537	FORM 2A SUBMITTED
400085083	ACCESS ROAD MAP
400085085	CONST. LAYOUT DRAWINGS
400085086	HYDROLOGY MAP
400085087	LOCATION DRAWING
400085088	LOCATION PICTURES
400085089	NRCS MAP UNIT DESC
400085090	OTHER
400085092	EQUIPMENT LIST
400085105	317B NOTIFICATION
400086087	LOCATION DRAWING
400087816	SURFACE AGRMT/SURETY
400087818	MULTI-WELL PLAN
400087841	PROPOSED BMPs

Total Attach: 18 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA	Final Draft public comment response, including full list of COAs, sent to Antero for comment 12/15/2010. requested response by 12/17/2010. Received 1 edit and approval from Antero 12/17/2010. Final Draft public comment response, including full list of COAs, sent to Mr. Regulski, Mr. King Lloyd, & Judy Jordan 12/22/2010. Requested response by 12/30/2010.	12/22/2010 3:45:43 PM
OGLA	Received faxed comment from Robert Regulski in opposition to the proposed location. Attached document.	9/21/2010 8:10:51 AM
OGLA	Extended public comment period to 9/20/2010.	9/16/2010 4:04:57 PM

Public	<p>Director Neslin:</p> <p>I am an attorney who represents Robert Regulski, the owner of real property within 500 feet of the McLin A Pad. Mr. Regulski received a letter from Antero Resources dated August 30, 2010, which informed him of the 20 day comment period on the McLin A Pad, per COGCC Rule 305. A copy of the letter from Antero that he received was faxed to Mr. Greg Deranleau earlier today and e-mailed earlier today.</p> <p>Please note that the letter dated August 30 announces to the recipient (in this case Mr. Regulski) that he will have 20 days from the date of the notice to submit comments, or until September 19. I have today learned from Greg Deranleau in your office that the information provided by Antero is incorrect, and untrue. Mr. Deranleau today confirmed that the public comment actually ends today.</p> <p>Antero's letter to Mr. Regulski misinforms him of the ending date for the comment period. It is entirely unclear how many other land owners may have been similarly misinformed by Antero's misrepresentation, and how many comments may not be timely received as a result of Antero's misrepresentation.</p> <p>On behalf of Mr. Regulski and all similarly situated landowners, I therefore formally request that the comment period be extended to and until September 19 to accommodate this misrepresentation, so that no comments in opposition may go unregistered with the COGCC. Mr. Deranleau has instructed me to direct my communication to you.</p> <p>Separately, and in addition, Mr. Regulski wishes to add to his previously submitted public comments summarized by Mr. Deranleau this letter as an additional comment. The very misrepresentation is itself indicative of Mr. Regulski's concerns and allegations related to Antero's trespass, negligent construction of a pipeline on his property (related to the McLin A pad) and fraud. He has sued Antero on these grounds and that litigation is ongoing. A temporary restraining order has been entered from the Garfield County District Court related to Antero's construction at his property. Presently all work there is stopped. Regardless of whether his request for public comment to be extended is granted, he wishes that this letter, his requested, and the copy of Antero's letter to him attached hereto be added to the public comments submitted by him on this matter.</p> <p>Sincerely,</p> <p>Robert C. Gavrell, Esq.</p> <p>Worrell, Durrett Jaynes, P.C.</p> <p>201 8th Street</p> <p>P.O. Box 1089</p> <p>Glenwood Springs, CO 81601</p> <p>Ph: (970) 945-0494; Fax: (970) 945-8449</p> <p>email: rgavrell@wgdj.com</p> <p>www.wdjlaw.net</p>	<p>9/15/2010 4:44:52 PM</p>
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OGLA	Received message from King Lloyd, part owner of Ward-Reynolds Ditch Company requesting opportunity to file a comment about their concerns related to pad construction in proximity to ditch. -historic concerns over destabilization of hillslope impacting ditch, concerned that development would exacerbate the issue -concerns over well pad proximity to edge of cliff, concern about inability to contain contaminants if spilled or released, contaminants in ditch would be carried to crops and livestock -concern that ditch company did not receive notification of planned drilling activity.	9/15/2010 4:35:30 PM
OGLA	Additional correspondence from surface owner 9/14, 9/15. Draft comment added as attachment (Correspondence) and provided to surface owner for review.	9/15/2010 10:26:48 AM
OGLA	Placed ON HOLD following 9/2/2010 phone call from recipient of 500' notification. Public comment expected.	9/3/2010 7:46:19 AM
OGLA	Initiated/Completed OGLA Form 2A review on 08-30-10 by Dave Kubeczko; requested clarifications and acknowledgement of close SW fluid containment, spill/release BMPs, lined pits/closed loop, cuttings low moisture content, no pit in fill, tertiary containment, monitoring of hillside, sediment control access road, pipeline trench compaction testing, stormwater BMP COAs from operator on 08-30-10; received clarifications and acknowledgement of COAs from operator on 09-02-10; passed by CDOW on 08-27-10 with operator submitted BMPs (with permit application and WMP acceptable; passed OGLA Form 2A review on (TBD: 09-16-10 -public) by Dave Kubeczko; close SW fluid containment, spill/release BMPs, lined pits/closed loop, cuttings low moisture content, no pit in fill, tertiary containment, monitoring of hillside, sediment control access road, pipeline trench compaction testing, stormwater BMP COAs.	8/30/2010 6:44:57 PM
DOW	This well pad is located in the boundary of the approved, signed Antero-CDOW Wildlife Mitigation Plan. The BMPs were developed and agreed upon in consultation and development of the Wildlife Mitigation Plan. The BMPs as submitted by the operator were developed for and are appropriate for the site and species affected. by Michael Warren on Friday, August 27, 2010 at 8:20 A.M.	8/27/2010 8:20:49 AM

Total: 9 comment(s)

BMP

Type

Comment

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Total: 0 comment(s)