


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		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">DE</td> <td style="width: 25%;">ET</td> <td style="width: 25%;">OE</td> <td style="width: 25%;">ES</td> </tr> </table> <p>Document Number: 400094416</p>	DE	ET	OE	ES																					
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Oil and Gas Location Assessment			<p>Location ID: 335052</p> <p>Expiration Date: 10/27/2013</p>																									
<p> <input type="checkbox"/> New Location <input checked="" type="checkbox"/> Amend Existing Location Location#: <u>335052</u> </p>																												
<p>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.</p>																												
<p><input checked="" type="checkbox"/> This location assessment is included as part of a permit application.</p>																												
1. CONSULTATION																												
<p> <input type="checkbox"/> This location is included in a Comprehensive Drilling Plan. CDP # _____ <input checked="" type="checkbox"/> This location is in a sensitive wildlife habitat area. <input type="checkbox"/> This location is in a wildlife restricted surface occupancy area. <input type="checkbox"/> This location includes a Rule 306.d.(1)A.ii. variance request. </p>																												
2. Operator		3. Contact Information																										
Operator Number: <u>10079</u> Name: <u>ANTERO RESOURCES PICEANCE CORPORATION</u> Address: <u>1625 17TH ST STE 300</u> City: <u>DENVER</u> State: <u>CO</u> Zip: <u>80202</u>		Name: <u>Hannah Knopping</u> Phone: <u>(303) 357-6412</u> Fax: <u>(303) 357-7315</u> email: <u>hknopping@anteroresources.com</u>																										
4. Location Identification:																												
Name: <u>CSF</u> Number: <u>T Pad</u> County: <u>GARFIELD</u> QuarterQuarter: <u>SWNW</u> Section: <u>8</u> Township: <u>7S</u> Range: <u>91W</u> Meridian: <u>6</u> Ground Elevation: <u>6451</u>																												
<p>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.</p>																												
Footage at surface: <u>1808</u> feet <u>FNL</u> , from North or South section line, and <u>813</u> feet <u>FWL</u> , from East or West section line. Latitude: <u>39.464062</u> Longitude: <u>-107.583509</u> PDOP Reading: <u>2.3</u> Date of Measurement: <u>06/09/2010</u> Instrument Operator's Name: <u>Scott E. Aibner</u>																												
5. Facilities (Indicate the number of each type of oil and gas facility planned on location):																												
<table style="width: 100%;"> <tr> <td>Special Purpose Pits: <input type="text"/></td> <td>Drilling Pits: <input type="text"/></td> <td>Wells: <input type="text" value="7"/></td> <td>Production Pits: <input type="text"/></td> <td>Dehydrator Units: <input type="text"/></td> </tr> <tr> <td>Condensate Tanks: <input type="text" value="2"/></td> <td>Water Tanks: <input type="text" value="7"/></td> <td>Separators: <input type="text" value="2"/></td> <td>Electric Motors: <input type="text"/></td> <td>Multi-Well Pits: <input type="text"/></td> </tr> <tr> <td>Gas or Diesel Motors: <input type="text"/></td> <td>Cavity Pumps: <input type="text"/></td> <td>LACT Unit: <input type="text"/></td> <td>Pump Jacks: <input type="text"/></td> <td>Pigging Station: <input type="text" value="1"/></td> </tr> <tr> <td>Electric Generators: <input type="text" value="1"/></td> <td>Gas Pipeline: <input type="text" value="1"/></td> <td>Oil Pipeline: <input type="text" value="1"/></td> <td>Water Pipeline: <input type="text" value="2"/></td> <td>Flare: <input type="text"/></td> </tr> <tr> <td>Gas Compressors: <input type="text"/></td> <td>VOC Combustor: <input type="text" value="1"/></td> <td>Oil Tanks: <input type="text"/></td> <td>Fuel Tanks: <input type="text"/></td> <td></td> </tr> </table>				Special Purpose Pits: <input type="text"/>	Drilling Pits: <input type="text"/>	Wells: <input type="text" value="7"/>	Production Pits: <input type="text"/>	Dehydrator Units: <input type="text"/>	Condensate Tanks: <input type="text" value="2"/>	Water Tanks: <input type="text" value="7"/>	Separators: <input type="text" value="2"/>	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" value="1"/>	Gas Pipeline: <input type="text" value="1"/>	Oil Pipeline: <input type="text" value="1"/>	Water Pipeline: <input type="text" value="2"/>	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"/>	
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Other: Note: Gas, Oil & water pipelines are planned to be constructed along the proposed access road; See attached List of Facilities for details.																												

6. Construction:

Date planned to commence construction: 11/01/2010 Size of disturbed area during construction in acres: 3.00
 Estimated date that interim reclamation will begin: 05/01/2011 Size of location after interim reclamation in acres: 2.50
 Estimated post-construction ground elevation: 6451 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: Bury onsite if meet 910
 Table

7. Surface Owner:

Name: Bureau of Land Management Phone: _____
 Address: 2300 River Frontage Road Fax: _____
 Address: _____ Email: _____
 City: Silt State: CO Zip: 81652 Date of Rule 306 surface owner consultation: _____
 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: _____ ☐ 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: 1015, public road: 5280, above ground utilit: 5280
 , railroad: 5280, property line: 1808

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: 66: Torrierthents-Camborthids-Rock outcrop, steep

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: 09/21/2010

List individual species: Pinyon-Juniper Woodland; Deciduous Oak Shrubland

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: 35, water well: 6811, depth to ground water: 114

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:

The subject location is an existing/built pad. We are adding a new well location and expanding the pad and therefore are submitting a Form 2A, as required by Rule 303.d.(1). #4- The proposed CSF 12AWI-08-07-91 well location was used as the reference point for well distance measurements. #6: The disturbed area acre amounts include the current disturbed area (and access road) which is approximately 2+ acres along with 0.64 acres of additional pad expansion. #14-Water Resources: The depth to ground water was determined by using static water level data of nearest water well (Permit#167281/Receipt#9500391). The Reference area is undisturbed ground immediately adjacent and to the North of the proposed well pad, as shown in the "Looking North" 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: 09/22/2010 Email: hknopping@anteroresources.com

Print Name: Hannah Knopping Title: Permit Representative

IMPORTANT: SOME DATA FIELDS HAVE BEEN MODIFIED.

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: _____

David G. Neslin

Director of COGCC

Date: 10/28/2010

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.

Any pit constructed to hold fluids must be lined or a closed loop system (which Antero has already indicated on the Form 2A) must be implemented during drilling.

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.

COA 5 - Operator must implement best management practices to contain any unintentional release of fluids.

The location is in an area of high run off/run-on potential; therefore the pad shall be constructed to prevent any stormwater run-on and /or stormwater runoff.

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.

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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.

Attachment Check List

Att Doc Num	Name
2033456	CORRESPONDENCE
400094416	FORM 2A APPROVED
400094422	LOCATION PICTURES
400094423	NRCS MAP UNIT DESC
400094424	LOCATION DRAWING
400094425	ACCESS ROAD MAP
400094427	HYDROLOGY MAP
400094441	MULTI-WELL PLAN
400094443	OTHER
400094448	CONST. LAYOUT DRAWINGS
400094449	EQUIPMENT LIST
400094454	PROPOSED BMPs
400104525	FORM 2A SUBMITTED

Total Attach: 13 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
DOW	CDOW has reviewed the applicant's BMPs and COAs for this permit. CDOW affirms that the BMPs as submitted by the operator and the lease stipulations and conditions of approval assigned to this permit by the BLM suffice to address wildlife habitat and mitigation concerns.	10/22/2010 2:11:03 PM
OGLA	Initiated/Completed OGLA Form 2A review on 09-27-10 by Dave Kubeczko; requested clarifications and acknowledgement of fluid containment, spill/release BMPs, cuttings low moisture, no pit in fill, reserve pit lined/closed loop, stormwater control BMP COAs from operator on 09-27-10; received clarifications and acknowledgement of COAs from operator on 09-?-10; passed by CDOW on 10-22-10 with operator submitted (with permit application) and BLM stipulations and COAs acceptable; passed OGLA Form 2A review on 10-25-10 by Dave Kubeczko; fluid containment, spill/release BMPs, cuttings low moisture, no pit in fill, reserve pit lined/closed loop, stormwater control BMP COAs.	9/27/2010 9:47:31 AM

Total: 2 comment(s)

BMP

<u>Type</u>	<u>Comment</u>

Total: 0 comment(s)