

**FORM  
INSP**Rev  
05/11**State of Colorado****Oil and Gas Conservation Commission**

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303) 894-2100 Fax: (303) 894-2109



DE	ET	OE	ES
----	----	----	----

Inspection Date:

05/07/2013

Document Number:

670200420

Overall Inspection:

**Unsatisfactory****FIELD INSPECTION FORM**

Location Identifier	Facility ID	Loc ID	Inspector Name:	On-Site Inspection
	<u>298101</u>	<u>335539</u>	<u>BURGER, CRAIG</u>	<input type="checkbox"/> 2A Doc Num: _____

**Operator Information:**

OGCC Operator Number: 10079 Name of Operator: ANTERO RESOURCES PICEANCE LLC

Address: 1625 17TH ST STE 300

City: DENVER State: CO Zip: 80202

**Contact Information:**

Contact Name	Phone	Email	Comment
Kellerby, Shaun		Shaun.Kellerby@state.co.us	NW Field Supervisor
Bleil, Robert	720-425-0303	rbleil@ursaresources.com	Regulatory and Environmental Manager

**Compliance Summary:**

QtrQtr: <u>NENW</u>	Sec: <u>16</u>	Twp: <u>6S</u>	Range: <u>92W</u>				
Insp. Date	Doc Num	Insp. Type	Insp Status	Satisfactory /Unsatisfactory	PA P/F/I	Pas/Fail (P/F)	Violation (Y/N)
06/11/2010	200258380	SR	PR	S			N
02/03/2010	200230871	PR	PR	U			Y

**Inspector Comment:**

Inspection is unsatisfactory due to stormwater issues.

**Related Facilities:**

Facility ID	Type	Status	Status Date	Well Class	API Num	Facility Name	
291673	WELL	PR	06/30/2008	GW	045-14477	MCPHERSON A3	<input type="checkbox"/>
291678	WELL	XX	08/05/2011	LO	045-14474	McPherson A1	<input type="checkbox"/>
291679	WELL	PR	05/22/2012	GW	045-14475	McPherson A8	<input type="checkbox"/>
291680	WELL	PR	06/30/2008	GW	045-14476	MCPHERSON A4	<input type="checkbox"/>
298100	WELL	PR	05/17/2012	GW	045-17067	McPherson A6	<input type="checkbox"/>
298101	WELL	PR	09/03/2008	GW	045-17068	MCPHERSON A9	<input checked="" type="checkbox"/>
298102	WELL	PR		GW	045-17069	MCPHERSON A2	<input type="checkbox"/>
298103	WELL	PR	05/23/2012	GW	045-17070	McPherson A12	<input type="checkbox"/>
298104	WELL	PR	05/25/2012	GW	045-17071	McPherson A11	<input type="checkbox"/>
298105	WELL	PR	05/22/2012	GW	045-17072	McPherson A7	<input type="checkbox"/>
423421	WELL	XX	05/31/2011	LO	045-20750	McPherson A10	<input type="checkbox"/>

**Equipment:**Location Inventory

Inspector Name: BURGER, CRAIG

Special Purpose Pits: _____	Drilling Pits: _____	Wells: <u>11</u>	Production Pits: _____
Condensate Tanks: <u>2</u>	Water Tanks: <u>4</u>	Separators: <u>3</u>	Electric Motors: _____
Gas or Diesel Mortors: _____	Cavity Pumps: _____	LACT Unit: _____	Pump Jacks: _____
Electric Generators: _____	Gas Pipeline: <u>1</u>	Oil Pipeline: <u>1</u>	Water Pipeline: <u>1</u>
Gas Compressors: _____	VOC Combustor: <u>1</u>	Oil Tanks: _____	Dehydrator Units: _____
Multi-Well Pits: _____	Pigging Station: <u>1</u>	Flare: _____	Fuel Tanks: _____

### Location

Emergency Contact Number: (S/U/V) \_\_\_\_\_

Corrective Date: \_\_\_\_\_

Comment: \_\_\_\_\_

Corrective Action: \_\_\_\_\_

### Spills:

Type	Area	Volume	Corrective action	CA Date
------	------	--------	-------------------	---------

☐ Multiple Spills and Releases?

### Venting:

Yes/No	Comment
--------	---------

### Flaring:

Type	Satisfactory/Unsatisfactory	Comment	Corrective Action	CA Date
------	-----------------------------	---------	-------------------	---------

### Predrill

Location ID: 335539

### Site Preparation:

Lease Road Adeq.: \_\_\_\_\_

Pads: \_\_\_\_\_

Soil Stockpile: \_\_\_\_\_

Corrective Action: \_\_\_\_\_

Date: \_\_\_\_\_ CDP Num.: \_\_\_\_\_

### Form 2A COAs:

Group	User	Comment	Date
OGLA	kubeczko	<p>GENERAL SITE COAs:</p> <p>Operator must implement best management practices to contain any unintentional release of fluids, including any fluids conveyed via temporary surface pipelines or buried pipelines.</p> <p>Any pit constructed to hold fluids (reserve pit, production pit, frac pit; except for flare pit, if built) must be lined, or a closed loop system (as indicated by operator on the Form 2A) must be implemented .</p> <p>Operator must ensure 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 (i.e., best management practices (BMPs) associated with stormwater management) sufficiently protective of nearby surface water. Any berm constructed at the well pad location will be stabilized, inspected at regular intervals (at least every 14 days), and maintained in good condition.</p> <p>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.</p> <p>Flowback and stimulation fluids must be sent to tanks to allow the sand to settle out before the fluids can be placed into any pipeline or pit located on the well pad. The flowback and stimulation fluid tanks 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 (per Rule 604.a.(4)).</p> <p>Berms or other containment devices shall be constructed in compliance with Rule 604.a.(4) around crude oil, condensate, and produced water storage tanks.</p>	05/10/2011

**Comment:** Berm around location appears to have failed but has been rebuilt.Flowback tanks on location. Berms are in place around tanks.

**CA:**

**Date:**

**Wildlife BMPs:**

BMP Type	Comment
Wildlife	<p>Wildlife Mitigation Plan Supplemental Best Management Practices Antero Rifle-Silt (Gravel Trend) Leasehold – March 24, 2010</p> <p>1.Drilling and Production No reserve, drill cuttings or frac/flowback pits will be constructed</p> <p>Well pads will be constructed with perimeter berm on downslope area</p> <p>Well pads, access roads will be graveled to reduce fugitive dust, sediment run-off</p> <p>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.)</p> <p>Combustor controls will be used to mitigate odors from production tanks</p> <p>Well completions will utilize flowback completion technologies and/or flares to reduce odors from plug drillout, and venting of salable and non-salable gas</p> <p>High level alarms will be installed on production tanks</p> <p>Production tank containment area will be lined with plastic</p> <p>2.Invasive Non-Native Vegetation Control</p>

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  
3.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  
4.Stormwater 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.  
5.Public Water System Protection Section 317B(d)

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

6.Mitigation Plan Best Management Practices

Mitigation Plan signed by Ron Velarde, CDOW NW Regional Manager and Kevin Kilstrom, Antero Resources VP Production, on March 24, 2010.

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

**Comment:** No pits on location. Downslope berm in place. Field flares on location.**CA:** \_\_\_\_\_ **Date:** \_\_\_\_\_**Stormwater:**

Erosion BMPs	Present	Other BMPs	Present

Corrective Action: \_\_\_\_\_ Date: \_\_\_\_\_

Comments: Erosion BMPs: \_\_\_\_\_

Other BMPs: \_\_\_\_\_

**Comment:** \_\_\_\_\_**Staking:****On Site Inspection (305):**Surface Owner Contact Information:

Name: \_\_\_\_\_ Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Cell Phone: \_\_\_\_\_

Operator Rep. Contact Information:

Landman Name: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Date Onsite Request Received: \_\_\_\_\_ Date of Rule 306 Consultation: \_\_\_\_\_

Request LGD Attendance: \_\_\_\_\_

LGD Contact Information:

Name: \_\_\_\_\_ Phone Number: \_\_\_\_\_ Agreed to Attend: \_\_\_\_\_

Summary of Landowner Issues:Summary of Operator Response to Landowner Issues:Onsite Inspection Memorandum Summarizing Discussions at Inspection as Attachment:**Facility**

Facility ID: 298101 Type: WELL API Number: 045-17068 Status: PR Insp. Status: WK

**Workover**

Comment: Workover rig drilling out plugs from recent recompletion operations.

**Environmental**

**Spills/Releases:**

Type of Spill: \_\_\_\_\_ Description: \_\_\_\_\_ Estimated Spill Volume: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Corrective Action: \_\_\_\_\_ Date: \_\_\_\_\_  
 Reportable: \_\_\_\_\_ GPS: Lat \_\_\_\_\_ Long \_\_\_\_\_  
 Proximity to Surface Water: \_\_\_\_\_ Depth to Ground Water: \_\_\_\_\_

**Water Well:**

Lat \_\_\_\_\_ Long \_\_\_\_\_  
 DWR Receipt Num: \_\_\_\_\_ Owner Name: \_\_\_\_\_ GPS : \_\_\_\_\_

**Field Parameters:**

Sample Location: \_\_\_\_\_

Emission Control Burner (ECB): \_\_\_\_\_

Comment: \_\_\_\_\_

Pilot: \_\_\_\_\_ Wildlife Protection Devices (fired vessels): \_\_\_\_\_

**Reclamation - Storm Water - Pit****Interim Reclamation:**

Date Interim Reclamation Started: \_\_\_\_\_ Date Interim Reclamation Completed: \_\_\_\_\_

Land Use: RANGELAND

Comment: \_\_\_\_\_

1003a. Debris removed? \_\_\_\_\_ CM \_\_\_\_\_  
 CA \_\_\_\_\_ CA Date \_\_\_\_\_  
 Waste Material Onsite? \_\_\_\_\_ CM \_\_\_\_\_  
 CA \_\_\_\_\_ CA Date \_\_\_\_\_  
 Unused or unneeded equipment onsite? \_\_\_\_\_ CM \_\_\_\_\_  
 CA \_\_\_\_\_ CA Date \_\_\_\_\_  
 Pit, cellars, rat holes and other bores closed? \_\_\_\_\_ CM \_\_\_\_\_  
 CA \_\_\_\_\_ CA Date \_\_\_\_\_  
 Guy line anchors removed? \_\_\_\_\_ CM \_\_\_\_\_  
 CA \_\_\_\_\_ CA Date \_\_\_\_\_  
 Guy line anchors marked? \_\_\_\_\_ CM \_\_\_\_\_  
 CA \_\_\_\_\_ CA Date \_\_\_\_\_

1003b. Area no longer in use? \_\_\_\_\_ Production areas stabilized ? \_\_\_\_\_

1003c. Compacted areas have been cross ripped? \_\_\_\_\_

1003d. Drilling pit closed? \_\_\_\_\_ Subsidence over on drill pit? \_\_\_\_\_

Cuttings management: \_\_\_\_\_

1003e. Areas no longer needed for drilling or subsequent operations for have been re-vegetated to 80% of pre-existing? \_\_\_\_\_

Production areas have been stabilized? \_\_\_\_\_ Segregated soils have been replaced? \_\_\_\_\_

RESTORATION AND REVEGETATION

Inspector Name: BURGER, CRAIG

Cropland

Top soil replaced \_\_\_\_\_

Recontoured \_\_\_\_\_

Perennial forage re-established \_\_\_\_\_

Non-Cropland

Top soil replaced \_\_\_\_\_

Recontoured \_\_\_\_\_

80% Revegetation \_\_\_\_\_

1003 f. Weeds Noxious weeds? \_\_\_\_\_

Comment: \_\_\_\_\_

Overall Interim Reclamation

**Final Reclamation/ Abandoned Location:**

Date Final Reclamation Started: \_\_\_\_\_

Date Final Reclamation Completed: \_\_\_\_\_

Final Land Use: RANGELAND \_\_\_\_\_

Reminder: \_\_\_\_\_

Comment: \_\_\_\_\_

Well plugged \_\_\_\_\_

Pit mouse/rat holes, cellars backfilled \_\_\_\_\_

Debris removed \_\_\_\_\_

No disturbance /Location never built \_\_\_\_\_

Access Roads Regraded \_\_\_\_\_

Contoured \_\_\_\_\_

Culverts removed \_\_\_\_\_

Gravel removed \_\_\_\_\_

Location and associated production facilities reclaimed \_\_\_\_\_

Locations, facilities, roads, recontoured \_\_\_\_\_

Compaction alleviation \_\_\_\_\_

Dust and erosion control \_\_\_\_\_

Non cropland: Revegetated 80% \_\_\_\_\_

Cropland: perennial forage \_\_\_\_\_

Weeds present \_\_\_\_\_

Subsidence \_\_\_\_\_

Comment: \_\_\_\_\_

Corrective Action: \_\_\_\_\_

Date \_\_\_\_\_

Overall Final Reclamation

Multi-Well Location ☐

**Storm Water:**

Loc Erosion BMPs	BMP Maintenance	Lease Road Erosion BMPs	Lease BMP Maintenance	Chemical BMPs	Chemical BMP Maintenance	Comment
		Ditches	Pass			
Berms	Pass	Waddles	Pass	VT	Fail	
Waddles	Fail	Check Dams	Pass	MHSP	Pass	

S/U/V: **Unsatisfactory**

Corrective Date: **05/24/2013**

Comment: Street sweeper used for vehicle tracking BMP.  
Some frac sand on location needs to be cleaned up before it is tracked off location. Ursa rep stated he would get frac sand cleaned up.  
Site berm failed and has been rebuilt. However, sediment overloaded waddles and was transported off location into downgradient field.

CA: Clean up sediment that transported off location and provide and maintain adequate stormwater BMP. Clean up frac sand.