



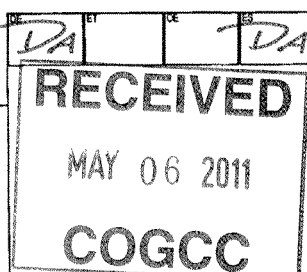
ado  
Commission



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

### SUNDRY NOTICE

Submit original plus one copy. This form is to be used for general, technical and environmental sundry information. For proposed or completed operations, describe in full on Technical Information Page (Page 2 of this form.) Identify well or other facility by API Number or by OGCC Facility ID. Operator shall send an informational copy of all sundry notices for wells located in High Density Areas to the Local Government Designee (Rule 603b.)



1. OGCC Operator Number: <u>10079</u>	4. Contact Name <u>Hannah Knopping</u>	Complete the Attachment Checklist  OP OGCC
2. Name of Operator: <u>Antero Resources Piceance Corporation</u>	Phone: <u>(303) 357-6412</u>	
3. Address: <u>1625 17th Street</u> City: <u>Denver</u> State: <u>CO</u> Zip: <u>80202</u>	Fax: <u>(303) 357-7315</u>	
5. API Number <u>05-045-13926-00</u>	OGCC Facility ID Number	Survey Plat
6. Well/Facility Name: <u>Gentry</u>	7. Well/Facility Number <u>E4</u>	Directional Survey
8. Location (QtrQtr, Sec, Twp, Rng, Meridian): <u>SESW, Section 17, T6S, R92W, 6th P.M.</u>		Surface Eqpm Diagram
9. County: <u>Garfield</u>	10. Field Name: <u>Mamm Creek</u>	Technical Info Page <input checked="" type="checkbox"/>
11. Federal, Indian or State Lease Number:		Other

### General Notice

<input type="checkbox"/> <b>CHANGE OF LOCATION:</b> Attach New Survey Plat (a change of surface qtr/qtr is substantive and requires a new permit)																	
Change of <b>Surface</b> Footage from Exterior Section Lines:	<table border="1"> <tr> <td></td> <td>FNL/FSL</td> <td></td> <td>FEL/FWL</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </table>		FNL/FSL		FEL/FWL												
	FNL/FSL		FEL/FWL														
Change of <b>Surface</b> Footage to Exterior Section Lines:																	
Change of <b>Bottomhole</b> Footage from Exterior Section Lines:																	
Change of <b>Bottomhole</b> Footage to Exterior Section Lines:																	
Bottomhole location Qtr/Qtr, Sec, Twp, Rng, Mer																	
Latitude	Distance to nearest property line																
Longitude	Distance to nearest bldg, public rd, utility or RR																
Ground Elevation	Distance to nearest lease line																
	Is location in a High Density Area (rule 603b)? Yes/No																
	Surface owner consultation date:																
<b>GPS DATA:</b> Date of Measurement PDOP Reading Instrument Operator's Name																	
<input type="checkbox"/> <b>CHANGE SPACING UNIT</b> Formation Formation Code Spacing order number Unit Acreage Unit configuration	<input type="checkbox"/> <b>Remove from surface bond</b> Signed surface use agreement attached																
<input type="checkbox"/> <b>CHANGE OF OPERATOR (prior to drilling):</b> Effective Date: Plugging Bond: <input type="checkbox"/> Blanket <input type="checkbox"/> Individual	<input type="checkbox"/> <b>CHANGE WELL NAME</b> NUMBER From: To: Effective Date:																
<input type="checkbox"/> <b>ABANDONED LOCATION:</b> Was location ever built? <input type="checkbox"/> Yes <input type="checkbox"/> No Is site ready for inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No Date Ready for inspection:	<input type="checkbox"/> <b>NOTICE OF CONTINUED SHUT IN STATUS</b> Date well shut in or temporarily abandoned: Has Production Equipment been removed from site? <input type="checkbox"/> Yes <input type="checkbox"/> No MIT required if shut in longer than two years. Date of last MIT																
<input type="checkbox"/> <b>SPUD DATE:</b>	<input type="checkbox"/> <b>REQUEST FOR CONFIDENTIAL STATUS</b> (6 mos from date casing set)																
<input type="checkbox"/> <b>SUBSEQUENT REPORT OF STAGE, SQUEEZE OR REMEDIAL CEMENT WORK</b> *submit cbl and cement job summaries Method used Cementing tool setting/perf depth Cement volume Cement top Cement bottom Date																	
<input type="checkbox"/> <b>RECLAMATION:</b> Attach technical page describing final reclamation procedures per Rule 1004. Final reclamation will commence on approximately Final reclamation is completed and site is ready for inspection.																	

### Technical Engineering/Environmental Notice

<input checked="" type="checkbox"/> <b>Notice of Intent</b> Approximate Start Date: <u>5/7/2011</u>	<input type="checkbox"/> <b>Report of Work Done</b> Date Work Completed:
Details of work must be described in full on Technical Information Page (Page 2 must be submitted.)	
<input type="checkbox"/> Intent to Recomplete (submit form 2) <input type="checkbox"/> Change Drilling Plans <input type="checkbox"/> Gross Interval Changed? <input type="checkbox"/> Casing/Cementing Program Change	<input type="checkbox"/> Request to Vent or Flare <input checked="" type="checkbox"/> Repair Well <input type="checkbox"/> Rule 502 variance requested <input type="checkbox"/> Other:
<input type="checkbox"/> E&P Waste Disposal <input type="checkbox"/> Beneficial Reuse of E&P Waste <input type="checkbox"/> Status Update/Change of Remediation Plans for Spills and Releases	

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

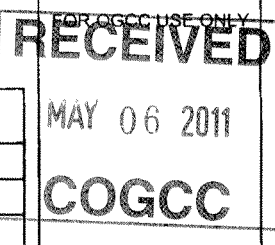
Signed: Hannah Knopping Date: 5/6/2011 Email: hknopping@anteroresources.com  
 Print Name: Hannah Knopping Title: Permit Representative

COGCC Approved: David Title: PE II Date: 5/12/2011  
 CONDITIONS OF APPROVAL, IF ANY:

Submit Form 5 showing new post-remediation wellbore configuration, cement tickets, and CBL after the work is complete, as required by Rule 308A.



## TECHNICAL INFORMATION PAGE



1. OGCC Operator Number: 10079	API Number: 05-045-13926-00
2. Name of Operator: Antero Resources Piceance Corp	OGCC Facility ID #
3. Well/Facility Name: Gentry	Well/Facility Number: E4
4. Location (QtrQtr, Sec, Twp, Rng, Meridian): SESW, Section 17, T6S, R92W, 6th P.M.	

This form is to be completed whenever a Sundry Notice is submitted requiring detailed report of work to be performed or completed. This form shall be transmitted within 30 days of work completed as a "subsequent" report and must accompany Form 4, page 1.

5.

**DESCRIBE PROPOSED OR COMPLETED OPERATIONS**

Antero is submitting a remediation plan for the Gentry E4. Based on a caliper survey that was run on May 6, 2011, there is a casing part at 1,240' (not a hole, as previously suspected). Based on this new information, Antero is planning to pull 1,240' of 5-1/2" casing from the well, and to replace it with new 5-1/2" casing. A 5K external casing patch will be run to latch onto the existing casing string. This patch will be tested to 2000 psi. Following this step, Antero will then address the hole in casing @ 2,470' by pumping a remedial cement job of sufficient volume to bring top of cement above the patch to ~1,000' from surface (100' below surface shoe). The following general procedure will be followed:

- 1) ND wellhead, NU BOPE and test. RU WO rig.
- 2) PU 5-1/2" RBP. TIH on 2-3/8" tubing and set @ 1,500'. Dump 2 sx sand on top. TOOH.
- 3) Unland 5-1/2" casing from b-section and pull 1,240' casing.
- 4) RIH w/ mill on 2-7/8" workstring and dress fish top. TOOH and LD 2-7/8" workstring.
- 5) PU 5K external casing patch and TIH on new 5-1/2", 17#, P-110 casing.
- 6) Latch onto existing 5-1/2" casing and pull tension. Hang off in b-section.
- 7) Pressure test patch to 2,500 psi.
- 8) PU RBP retrieving tool and TIH to RBP @ 1,500'. Release RBP and TOOH w/ tubing. LD retrieving tool and RBP.
- 9) PU cement retainer and TIH on 2-3/8" tubing. Set retainer @ ~2,425'.
- 10) RU Halliburton cement equipment.
- 11) Establish circulation up 5-1/2" x 8-5/8" annulus
- 12) Pump remedial cement job as follows.
  - a. 5 bbl water spacer
  - b. 164 sks of 50/50 Poz Premium. Density is 13 lb/gal, Yield is 1.58 ft<sup>3</sup>/sk.
  - c. 9.4 bbl displacement.Notes: Cement volume is sufficient to bring cement up to 1,000' from surface (~100' below surface shoe).
- 13) Release from cement retainer and reverse circulate to clean tubing.
- 14) TOOH w/ 2-3/8" tubing.
- 15) PU bit and TIH on 2-3/8" tubing. Drill-out cement retainer @ 2,425' and cement to below squeeze @ 2,470'.
- 16) Pressure test squeeze (@ 2,470') to 1,000 psi.
- 17) Continue in hole to top of RBP (@ 5,150'). TOOH.
- 18) RU wireline. Run CBL from 3,000' to 300' above top of cement.

If additional cement work is required, consult with COGCC. Otherwise, proceed as follows:
- 19) PU RBP retrieving tool and TIH to RBP @ 5,150'. Release RBP and TOOH w/ tubing. LD retrieving tool and RBP.
- 20) Commence procedure to fish stuck tubing from wellbore.

Antero will comply with Rule 341 with respect to bradenhead monitoring. Also, Antero will submit a subsequent Form 4 Sundry Notice and updated Form 5 Drilling Completion Report detailing cement squeeze information after the work has been performed on the well.

## Attachments:

- 1) Current Wellbore Diagram
- 2) Proposed Wellbore Diagram

VERBAL APPROVAL WAS GRANTED BY  
DAVE ANDREWS ON 5/6/2011.

D.A.

# Wellbore Diagram

(Current 5/06/11)

Elev. GL: 5,663'  
KB: 5,679'

Spud: 7/21/2007  
TD: 8/03/2007  
Completion: 9/20/2007

Hole Diameters: 12-1/4" & 7-7/8"

8-5/8", 24 & 32#, J-55, ST&C  
Set @ 909' w/ 290 sx  
Circulate cmt to surface

Part in casing @ 1,240'

Hole in casing @ 2470'

Top of Cement at 4,310'

**RECEIVED**

MAY 06 2011

**COGCC**

RBP @ 5,150' (5-4-2011)

Top of Gas at 5,937'

## PERFORATIONS

### Stage 4 perforations, Williams Fork (9/20/07):

5950' - 6384' (164 holes, 4 spf) - Frac'd w/ 14,279 bw &  
431K lbs 30/50 Econo & 20/40 Carbo @ 80 bpm (fg=0.85)

### Stage 3 perforations, Cameo/WF (9/18/07):

6449' - 7079' (152 holes, 4 spf) - Frac'd w/ 8,078 bw &  
187K lbs 30/50 Econo & 20/40 Carbo @ 79 bpm (fg=1.02)

### Stage 2 perforations, Cameo (9/17/07):

7136' - 7602' (164 holes, 4 spf) - Frac'd w/ 14,974 bw &  
468K lbs 30/50 Econo & 20/40 Carbo @ 71 bpm (fg=0.94)

### Stage 1 perforations, Cozzette/Corcoran (9/16/07):

8221' - 8591' (152 holes, 4 spf) - Frac'd w/ 15,030 bw &  
395K lbs 30/50 Econo & 20/40 Carbo @ 79 bpm (fg=0.90)

Fish in hole: ~2,100' of 2-3/8" tbg

Tubing cut @ 5,266' (5-4-11)

Tubing cut @ 5,899' (5-3-11)

## TUBING (1-8-08)

2-3/8", 4.7#, J-55, EUE tubing

"X" Nipple @ 7,341'

EOT @ 7,373'

Cleaned out to 8,640' (104') on 12-16-06

TD 8,720' (driller's depth)

5-1/2", 17#, P-110, LT&C

Cement w/ 700 sx

Float @ 8,654' (logger's depth)

Shoe @ 8,698' (driller's depth)

**Antero Resources Corporation**

**Gentry E4**

API: 05045139260000

MJK, 5/05/11

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