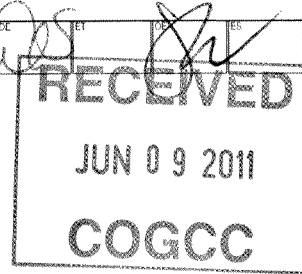




FORM
4
Rev 12/05

State of Colorado
Oil and Gas Conservation 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: 10079 | 4. Contact Name Hannah Knopping | Complete the Attachment Checklist OP OGCC |
| 2. Name of Operator: Antero Resources Piceance Corporation | Phone: (303) 357-6412 | |
| 3. Address: 1625 17th Street City: Denver State: CO Zip: 80202 | Fax: (303) 357-7315 | |
| 5. API Number 05-045-17072-00 | OGCC Facility ID Number | Survey Plat |
| 6. Well/Facility Name: McPherson | 7. Well/Facility Number A7 | Directional Survey <input checked="" type="checkbox"/> |
| 8. Location (Qtr/Qtr, Sec, Twp, Rng, Meridian): NENW, Section 16, T6S, R92W, 6th P.M. | | Surface Eqpmt Diagram |
| 9. County: Garfield | 10. Field Name: Mamm Creek | Technical Info Page <input checked="" type="checkbox"/> |
| 11. Federal, Indian or State Lease Number: | | Other |

General Notice

| | | | | | | | | | | | | | | | | | |
|---|---|------|---|------|---|--|--|--|--|-----|---|------|---|-----|---|------|---|
| <input checked="" type="checkbox"/> CHANGE OF LOCATION: Attach New Survey Plat (a change of surface qtr/qtr is substantive and requires a new permit) | | | | | | | | | | | | | | | | | |
| Change of Surface Footage from Exterior Section Lines: | <table><tr><td>1043</td><td>N</td><td>1556</td><td>W</td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td>263</td><td>N</td><td>2388</td><td>E</td></tr><tr><td>174</td><td>N</td><td>1711</td><td>W</td></tr></table> attach directional survey | 1043 | N | 1556 | W | | | | | 263 | N | 2388 | E | 174 | N | 1711 | W |
| 1043 | N | 1556 | W | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| 263 | N | 2388 | E | | | | | | | | | | | | | | |
| 174 | N | 1711 | W | | | | | | | | | | | | | | |
| Change of Surface Footage to Exterior Section Lines: | | | | | | | | | | | | | | | | | |
| Change of Bottomhole Footage from Exterior Section Lines: | | | | | | | | | | | | | | | | | |
| Change of Bottomhole Footage to Exterior Section Lines: | | | | | | | | | | | | | | | | | |
| Bottomhole location Qtr/Qtr, Sec, Twp, Rng, Mer | NENW, Sec 16, T6S, R92W, 6th P.M. | | | | | | | | | | | | | | | | |
| Latitude 39.5311 | Distance to nearest property line | | | | | | | | | | | | | | | | |
| Longitude 107.67571 | Distance to nearest bldg, public rd, utility or RR | | | | | | | | | | | | | | | | |
| Ground Elevation 5448 | Distance to nearest lease line 174' | | | | | | | | | | | | | | | | |
| | Is location in a High Density Area (rule 603b)? Yes/No | | | | | | | | | | | | | | | | |
| | Distance to nearest well same formation 385' | | | | | | | | | | | | | | | | |
| | Surface owner consultation date: | | | | | | | | | | | | | | | | |
| GPS DATA: | | | | | | | | | | | | | | | | | |
| Date of Measurement 1/4/2011 | PDOP Reading 2.5 | | | | | | | | | | | | | | | | |
| Instrument Operator's Name Scott E. Aibner | | | | | | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> CHANGE SPACING UNIT | | | | | | | | | | | | | | | | | |
| Formation | Formation Code | | | | | | | | | | | | | | | | |
| Williams Fork-Iles | WMFK/ILES | | | | | | | | | | | | | | | | |
| Spacing order number | Unit Acreage | | | | | | | | | | | | | | | | |
| 191-34 | 160 | | | | | | | | | | | | | | | | |
| Unit configuration | | | | | | | | | | | | | | | | | |
| SW/4 | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> Remove from surface bond | | | | | | | | | | | | | | | | | |
| Signed surface use agreement attached | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> CHANGE OF OPERATOR (prior to drilling): | <input type="checkbox"/> CHANGE WELL NAME | | | | | | | | | | | | | | | | |
| Effective Date: | From: | | | | | | | | | | | | | | | | |
| Plugging Bond: <input type="checkbox"/> Blanket <input type="checkbox"/> Individual | To: | | | | | | | | | | | | | | | | |
| | Effective Date: | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> ABANDONED LOCATION: | <input type="checkbox"/> NOTICE OF CONTINUED SHUT IN STATUS | | | | | | | | | | | | | | | | |
| Was location ever built? <input type="checkbox"/> Yes <input type="checkbox"/> No | Date well shut in or temporarily abandoned: | | | | | | | | | | | | | | | | |
| Is site ready for inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No | Has Production Equipment been removed from site? <input type="checkbox"/> Yes <input type="checkbox"/> No | | | | | | | | | | | | | | | | |
| Date Ready for Inspection: | MIT required if shut in longer than two years. Date of last MIT | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> SPUD DATE: | <input type="checkbox"/> REQUEST FOR CONFIDENTIAL STATUS (6 mos from date casing set) | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> SUBSEQUENT REPORT OF STAGE, SQUEEZE OR REMEDIAL CEMENT WORK | | | | | | | | | | | | | | | | | |
| *submit cbl and cement job summaries | | | | | | | | | | | | | | | | | |
| Method used | Cementing tool setting/perf depth | | | | | | | | | | | | | | | | |
| | Cement volume | | | | | | | | | | | | | | | | |
| | Cement top | | | | | | | | | | | | | | | | |
| | Cement bottom | | | | | | | | | | | | | | | | |
| | Date | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> RECLAMATION: Attach technical page describing final reclamation procedures per Rule 1004. | | | | | | | | | | | | | | | | | |
| Final reclamation will commence on approximately | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> Final reclamation is completed and site is ready for inspection. | | | | | | | | | | | | | | | | | |

Technical Engineering/Environmental Notice

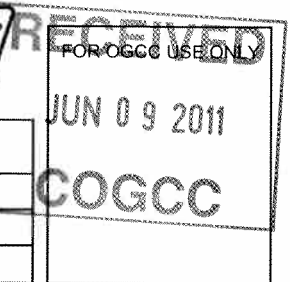
| | | |
|---|--|--|
| <input checked="" type="checkbox"/> Notice of Intent | <input type="checkbox"/> Report of Work Done | |
| Approximate Start Date: 8/1/2011 | Date Work Completed: | |
| Details of work must be described in full on Technical Information Page (Page 2 must be submitted.) | | |
| <input type="checkbox"/> Intent to Recomplete (submit form 2) | <input type="checkbox"/> Request to Vent or Flare | <input type="checkbox"/> E&P Waste Disposal |
| <input checked="" type="checkbox"/> Change Drilling Plans | <input type="checkbox"/> Repair Well | <input type="checkbox"/> Beneficial Reuse of E&P Waste |
| <input type="checkbox"/> Gross Interval Changed? | <input type="checkbox"/> Rule 502 variance requested | <input type="checkbox"/> Status Update/Change of Remediation Plans |
| <input checked="" type="checkbox"/> Casing/Cementing Program Change | <input type="checkbox"/> Other: | 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: 6/7/2011 Email: hknopping@anteroresources.com
Print Name: Hannah Knopping Title: Permit Representative

COGCC Approved: [Signature] Title: EIT3 Date: 8/2/11
CONDITIONS OF APPROVAL, IF ANY:

TECHNICAL INFORMATION PAGE



| | |
|--|-----------------------------|
| 1. OGCC Operator Number: 10079 | API Number: 05-045-17072-00 |
| 2. Name of Operator: Antero Resources Piceance Corp | OGCC Facility ID # |
| 3. Well/Facility Name: McPherson | Well/Facility Number: A7 |
| 4. Location (QtrQtr, Sec, Twp, Rng, Meridian): NENW, Sec 16, 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

To correspond with Antero's new total depth of 7755' (MD), 7645' (TVD), we would like to make the following revisions to our casing/cementing program for the McPherson A7:

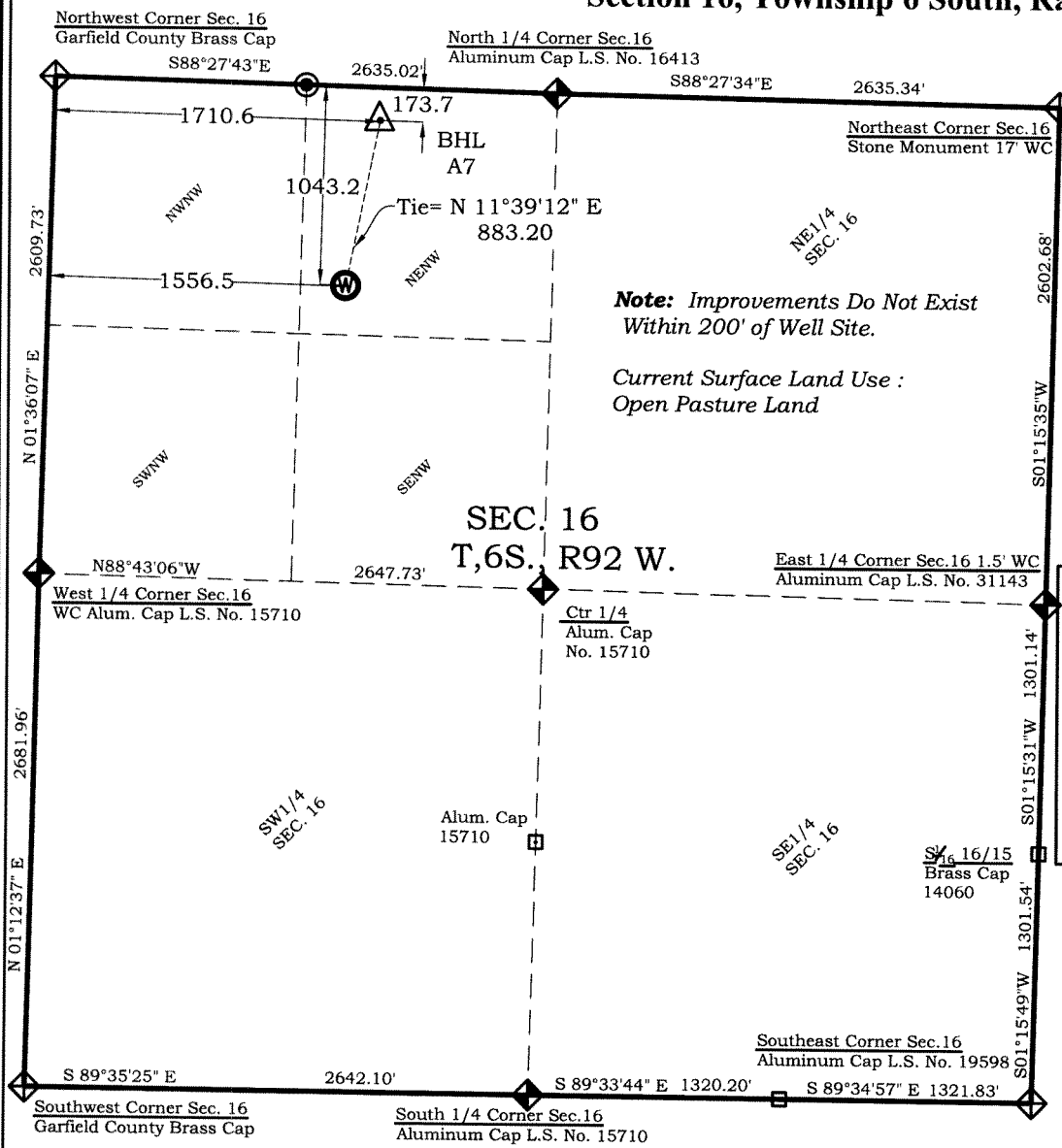
Conductor: In a 24" hole, set 16" casing at 60' and cement from 60' to surface using approximately 177 sacks of cement. ✓
Surface: In a 12-1/4" hole, set 8-5/8" surface casing at 1,000' and cement from 1000' to surface using approximately 416 sacks of cement. ✓
Production: In a 7-7/8" hole, set 4-1/2" production casing at 7755' and cement from TD to >200' above Top of Gas using approximately 356 sacks of cement. ✓
- Same Cement

The well bottomholes in the same mineral lease as previously permitted.

APD → TD was 7948

MCPHERSON A7
Well Location Plat

Section 16, Township 6 South, Range 92 West



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JUN 09 2011
COGCC

500' 0' 1000'

Graphic Scale in Feet
1"= 1000'

Legend

- Field Surveyed Section Corner
- Field Surveyed Quarter Corner
- Calculated Section Corner Location
- Field Surveyed 1/6 Corner

Bottom: McPherson A7

174' FNL
1711' FWL
NAD83
Lat: 39.533500337°N
Long: 107.675179026°W
NAD27
Lat: 39.533519801°N
Long: 107.674563400°W

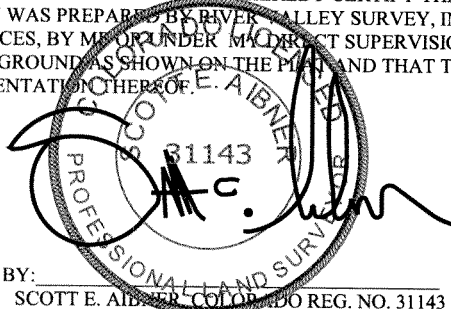
Surface: McPherson A7

1043' FNL
1556' FWL
Gnd El= 5448.3
Pad El= 5448.5
NAD83
Lat: 39.531112744°N
Long: 107.675719897°W
NAD27
Lat: 39.531132206°N
Long: 107.675104283°W
UTM 13 NORTH
NAD 1983
NORTHING
14367217.522
EASTING
885926.077

Prepared For Antero Resources:
Proposed MCPHERSON A7 Well Situate in The NW1/4
Section 16, Township 6 South, Range 92 West of the 6th.
Principal Meridian, County of Garfield, State of
Colorado.

SURVEYOR'S CERTIFICATE

I, SCOTT E. AIBNER, A REGISTERED LAND SURVEYOR, LICENSED UNDER THE LAWS OF THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THE SURVEY SHOWN HEREON WAS PREPARED BY RIVER VALLEY SURVEY, INC., FOR ANTERO RESOURCES, BY MEANS OF MY DIRECT SUPERVISION AND HAS BEEN STAKED ON THE GROUND AS SHOWN ON THE PLAT AND THAT THIS PLAT IS A TRUE REPRESENTATION THEREOF.

BY: 
SCOTT E. AIBNER, COLORADO REG. NO. 31143

Notes:

- LATITUDE AND LONGITUDE COORDINATES ARE DIFFERENTIALLY CORRECTED AND BASED ON PUBLISHED NGS CONTROL STATION "WDP-5". SYSTEM: UTM ZONE: 13 NORTH DATUM: NAD 1983 (CONUS)
- ELEVATIONS ARE BASED ON NAVD OF 1983.
- ALL BOTTOM AND TOP HOLE LOCATIONS ARE MEASURED 90 DEGREES FROM SECTION LINE.
- USGS QUADRANGLE MAP "GIBSON GULCH".
- CURRENT SURFACE LAND USE: OPEN RANGE LAND.
- PDOP AT THE TIME OF LOCATION OF SURFACE WELL = 2.5



River Valley Survey, Inc.
110 East 3rd. Street, Suite 213
Rifle, Colorado 81650
Ph: 970-379-7846

Project: MCPHERSON A PAD

Field Date: 01-04-11

Scale: 1"= 1000'

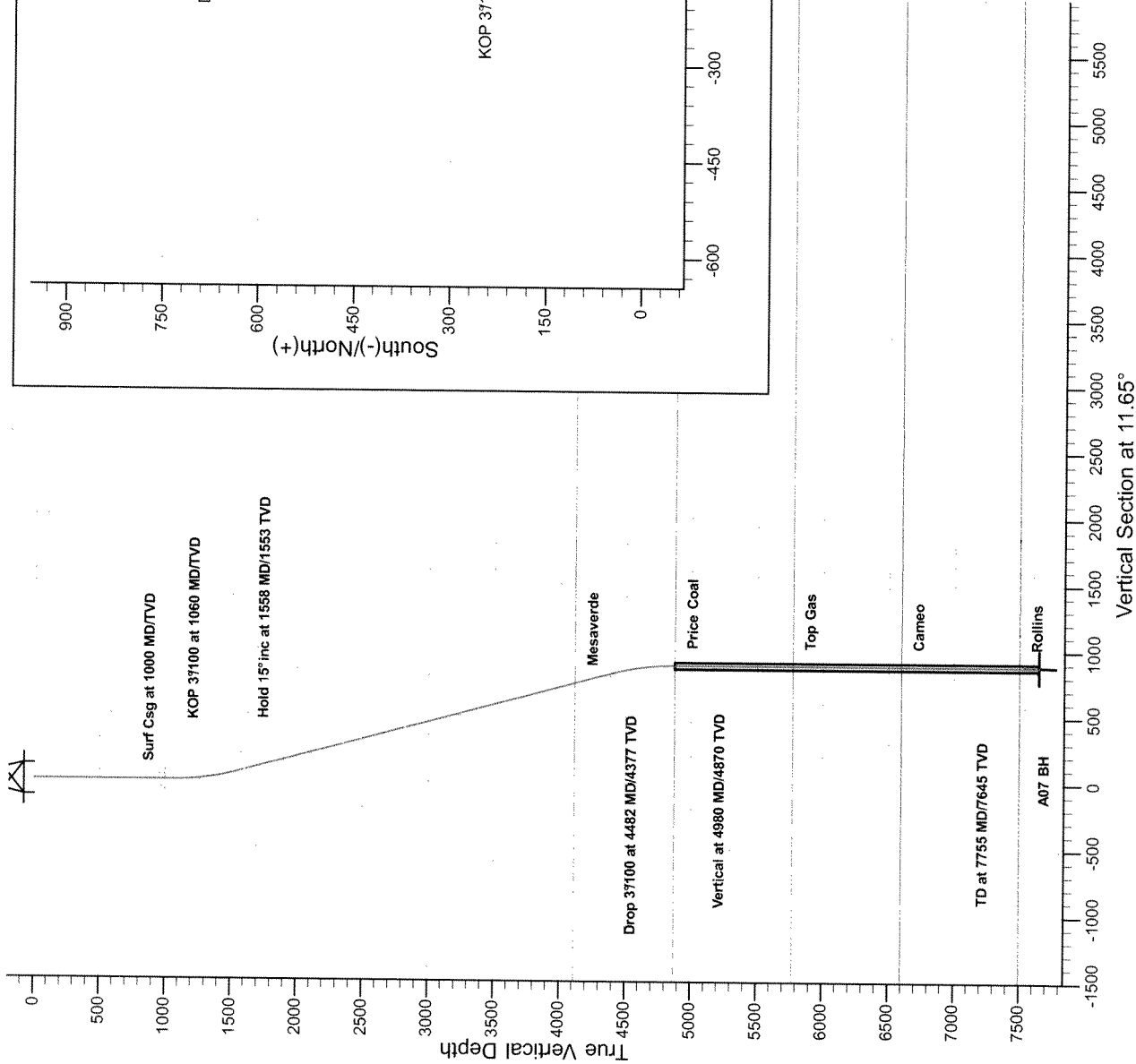
Date: 05-12-11

Sheet: 1 of 11

Well Location Plat
Prepared For Antero Resources

Situate In:
NW1/4 Section 16, T6S., R. 92 W. of the
6th P.M., Garfield County, Colorado





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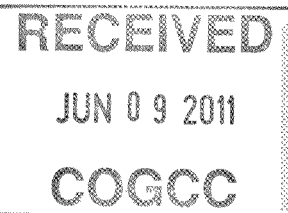
| FORMATION TOP DETAILS | | | |
|-----------------------|---------|------------|--|
| TVDPATH | MDPath | Formation | |
| 4110.00 | 4205.16 | Mesaverde | |
| 4870.00 | 4980.15 | Price Coal | |
| 5770.00 | 5880.15 | Top Gas | |
| 6595.00 | 6705.15 | Cameo | |
| 7495.00 | 7605.15 | Rollins | |

| Magnetic Field Details | |
|---|--|
| Total Correction to Grid N: +11.91° | |
| <div><div><div>G</div><div>T</div><div>M</div></div><div><div>Model: IGRF2010</div><div>Date: 28-Jun-11</div><div>Grid Conv: -1.70</div><div>Mag. Dec: 10.21°</div><div>Field Strength: 52312</div><div>Dip: 65.83°</div></div></div> | |

| SECTION DETAILS | | | | | | |
|-----------------|-------|--------------|---------|--------|--------|-------------------------|
| MD | Inc | Azi | TVD | +N/-S | +E/-W | Dleg TFace Vsect Target |
| 0.00 | 0.00 | 0.00 | 0.00 | -1.10 | 89.99 | 0.00 0.00 0.00 |
| 1060.00 | 0.00 | 0.00 | 1060.00 | -1.10 | 89.99 | 0.00 0.00 0.00 |
| 1558.14 | 14.94 | 11.651552.51 | 62.16 | 103.04 | 3.00 | 11.65 64.60 |
| 4482.01 | 14.94 | 11.654377.49 | 800.63 | 255.34 | 0.00 | 0.00 818.60 |
| 4980.15 | 0.00 | 0.00 | 4870.00 | 863.89 | 268.39 | 3.00 180.00 883.20 |
| 7755.15 | 0.00 | 0.00 | 7645.00 | 863.89 | 268.39 | 0.00 0.00 883.20 A07 BH |

| REFERENCE INFORMATION | |
|---|--|
| Co-ordinate (N/E) Reference: Site McPherson A Pad, Grid North | |
| Vertical (TVD) Reference: KB @ 5472.00ft (Original Well Elev) | |
| Section (VS) Reference: Slot - A07(-1.10N; 89.98E) | |
| Measured Depth Reference: KB @ 5472.00ft (Original Well Elev) | |
| Calculation Method: Minimum Curvature | |

| PROJECT DETAILS: McPherson | |
|--|--|
| Geodetic System: Universal Transverse Mercator | |
| Datum: North American Datum 1983 | |
| Ellipsoid: GRS 1980 | |
| Zone: Zone 13N (108 W to 102 W) | |
| System Datum: Mean Sea Level | |



Antero Resources

McPherson

McPherson A Pad

McPherson A07 (111360) - Slot A07

A07

Plan: McPherson A07 P02

Standard Planning Report - Geographic

16 May, 2011

JUN 09 2011

COGCC

| | | | |
|-----------|------------------------|------------------------------|--|
| Database: | EDM 5000 SERVER DB | Local Co-ordinate Reference: | Well McPherson A07 (111360) - Slot A07 |
| Company: | Antero Resources | TVD Reference: | KB @ 5472.00ft (Original Well Elev) |
| Project: | McPherson | MD Reference: | KB @ 5472.00ft (Original Well Elev) |
| Site: | McPherson A Pad | North Reference: | Grid |
| Well: | McPherson A07 (111360) | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | A07 | | |
| Design: | McPherson A07 P02 | | |

| | | | |
|-------------|-------------------------------|---------------|----------------|
| Project | McPherson | | |
| Map System: | Universal Transverse Mercator | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | |
| Map Zone: | Zone 13N (108 W to 102 W) | | |

| | | | | | |
|-----------------------|---------|-----------------|--------------------|-------------------|-----------------|
| Site | | McPherson A Pad | | | |
| Site Position: | | Northing: | 14,367,218.62 usft | Latitude: | 39.531108419°N |
| From: | Map | Easting: | 885,836.08 usft | Longitude: | 107.676038841°W |
| Position Uncertainty: | 0.00 ft | Slot Radius: | 13.20 in | Grid Convergence: | -1.70 ° |

| | | | | | | |
|----------------------|-----------------------------------|---------------------|-----------|--------------------|-------------|-----------------|
| Well | McPherson A07 (111360) - Slot A07 | | | | | |
| Well Position | +N/-S | 0.00 ft | Northing: | 14,367,217.52 usft | Latitude: | 39.531112743°N |
| | +E/-W | 0.00 ft | Easting: | 885,926.08 usft | Longitude: | 107.675719897°W |
| Position Uncertainty | 0.00 ft | Wellhead Elevation: | | Ground Level: | 5,448.00 ft | |

| | | | | | |
|----------|-----|--|--|--|--|
| Wellbore | A07 | | | | |
|----------|-----|--|--|--|--|

| | | | | | |
|-----------|------------|-------------|-------------|-----------|----------------|
| Magnetics | Model Name | Sample Date | Declination | Dip Angle | Field Strength |
| | | | (°) | (°) | (nT) |
| | IGRF2010 | 6/28/2011 | 10.21 | 65.83 | 52,312 |

| | | | | | |
|--------|-------------------|--|--|--|--|
| Design | McPherson A07 P02 | | | | |
|--------|-------------------|--|--|--|--|

| | | | | | |
|--------------|--------|------|---------------|------|--|
| Audit Notes: | | | | | |
| Version: | Phase: | PLAN | Tie On Depth: | 0.00 | |

| | | | | |
|-------------------|------------------|-------|-------|-----------|
| Vertical Section: | Depth From (TVD) | +N/-S | +E/-W | Direction |
| | (ft) | (ft) | (ft) | (°) |
| | 0.00 | 0.00 | 0.00 | 11.65 |

| | | | | | | | | | | |
|---------------|-------------|---------|----------|--------|--------|-----------|-----------|-----------|--------|--------|
| Plan Sections | | | | | | | | | | |
| Measured | Inclination | Azimuth | Vertical | +N/-S | +E/-W | Dogleg | Build | Turn | TFO | Target |
| Depth | (°) | (°) | Depth | (ft) | (ft) | Rate | Rate | Rate | (°) | |
| (ft) | | | (ft) | | | (°/100ft) | (°/100ft) | (°/100ft) | | |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,060.00 | 0.00 | 0.00 | 1,060.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,558.14 | 14.94 | 11.65 | 1,552.51 | 63.27 | 13.05 | 3.00 | 3.00 | 0.00 | 11.65 | |
| 4,482.01 | 14.94 | 11.65 | 4,377.49 | 801.73 | 165.35 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 4,980.15 | 0.00 | 0.00 | 4,870.00 | 865.00 | 178.40 | 3.00 | -3.00 | 0.00 | 180.00 | |
| 7,755.15 | 0.00 | 0.00 | 7,645.00 | 865.00 | 178.40 | 0.00 | 0.00 | 0.00 | 0.00 | A07 BH |

Planning Report - Geographic

| | | | |
|-----------|------------------------|------------------------------|--|
| Database: | EDM 5000 SERVER DB | Local Co-ordinate Reference: | Well McPherson A07 (111360) - Slot A07 |
| Company: | Antero Resources | TVD Reference: | KB @ 5472.00ft (Original Well Elev) |
| Project: | McPherson | MD Reference: | KB @ 5472.00ft (Original Well Elev) |
| Site: | McPherson A Pad | North Reference: | Grid |
| Well: | McPherson A07 (111360) | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | A07 | | |
| Design: | McPherson A07 P02 | | |

Planned Survey

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Map Northing (usft) | Map Easting (usft) | Latitude | Longitude |
|----------------------------------|-----------------|-------------|---------------------|------------|------------|---------------------|--------------------|----------------|-----------------|
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 14,367,217.52 | 885,926.08 | 39.531112743°N | 107.675719897°W |
| 100.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 14,367,217.52 | 885,926.08 | 39.531112743°N | 107.675719897°W |
| 200.00 | 0.00 | 0.00 | 200.00 | 0.00 | 0.00 | 14,367,217.52 | 885,926.08 | 39.531112743°N | 107.675719897°W |
| 300.00 | 0.00 | 0.00 | 300.00 | 0.00 | 0.00 | 14,367,217.52 | 885,926.08 | 39.531112743°N | 107.675719897°W |
| 400.00 | 0.00 | 0.00 | 400.00 | 0.00 | 0.00 | 14,367,217.52 | 885,926.08 | 39.531112743°N | 107.675719897°W |
| 500.00 | 0.00 | 0.00 | 500.00 | 0.00 | 0.00 | 14,367,217.52 | 885,926.08 | 39.531112743°N | 107.675719897°W |
| 600.00 | 0.00 | 0.00 | 600.00 | 0.00 | 0.00 | 14,367,217.52 | 885,926.08 | 39.531112743°N | 107.675719897°W |
| 700.00 | 0.00 | 0.00 | 700.00 | 0.00 | 0.00 | 14,367,217.52 | 885,926.08 | 39.531112743°N | 107.675719897°W |
| 800.00 | 0.00 | 0.00 | 800.00 | 0.00 | 0.00 | 14,367,217.52 | 885,926.08 | 39.531112743°N | 107.675719897°W |
| 900.00 | 0.00 | 0.00 | 900.00 | 0.00 | 0.00 | 14,367,217.52 | 885,926.08 | 39.531112743°N | 107.675719897°W |
| 1,000.00 | 0.00 | 0.00 | 1,000.00 | 0.00 | 0.00 | 14,367,217.52 | 885,926.08 | 39.531112743°N | 107.675719897°W |
| Surf Csg at 1000 MD/TVD | | | | | | | | | |
| 1,060.00 | 0.00 | 0.00 | 1,060.00 | 0.00 | 0.00 | 14,367,217.52 | 885,926.08 | 39.531112743°N | 107.675719897°W |
| KOP 3°/100 at 1060 MD/TVD | | | | | | | | | |
| 1,100.00 | 1.20 | 11.65 | 1,100.00 | 0.41 | 0.08 | 14,367,217.93 | 885,926.16 | 39.531113875°N | 107.675719641°W |
| 1,200.00 | 4.20 | 11.65 | 1,199.87 | 5.02 | 1.04 | 14,367,222.55 | 885,927.11 | 39.531126608°N | 107.675716757°W |
| 1,300.00 | 7.20 | 11.65 | 1,299.37 | 14.75 | 3.04 | 14,367,232.27 | 885,929.12 | 39.531153455°N | 107.675710675°W |
| 1,400.00 | 10.20 | 11.65 | 1,398.21 | 29.56 | 6.10 | 14,367,247.09 | 885,932.17 | 39.531194341°N | 107.675701413°W |
| 1,500.00 | 13.20 | 11.65 | 1,496.12 | 49.42 | 10.19 | 14,367,266.94 | 885,936.27 | 39.531249155°N | 107.675688996°W |
| 1,558.14 | 14.94 | 11.65 | 1,552.51 | 63.27 | 13.05 | 14,367,280.79 | 885,939.12 | 39.531287371°N | 107.675680339°W |
| Hold 15° inc at 1558 MD/1553 TVD | | | | | | | | | |
| 1,600.00 | 14.94 | 11.65 | 1,592.96 | 73.84 | 15.23 | 14,367,291.36 | 885,941.30 | 39.531316551°N | 107.675673729°W |
| 1,700.00 | 14.94 | 11.65 | 1,689.57 | 99.09 | 20.44 | 14,367,316.62 | 885,946.51 | 39.531386265°N | 107.675657937°W |
| 1,800.00 | 14.94 | 11.65 | 1,786.19 | 124.35 | 25.65 | 14,367,341.87 | 885,951.72 | 39.531455979°N | 107.675642145°W |
| 1,900.00 | 14.94 | 11.65 | 1,882.81 | 149.61 | 30.85 | 14,367,367.13 | 885,956.93 | 39.531525693°N | 107.675626353°W |
| 2,000.00 | 14.94 | 11.65 | 1,979.43 | 174.86 | 36.06 | 14,367,392.39 | 885,962.14 | 39.531595407°N | 107.675610560°W |
| 2,100.00 | 14.94 | 11.65 | 2,076.04 | 200.12 | 41.27 | 14,367,417.64 | 885,967.35 | 39.531665120°N | 107.675594768°W |
| 2,200.00 | 14.94 | 11.65 | 2,172.66 | 225.38 | 46.48 | 14,367,442.90 | 885,972.56 | 39.531734834°N | 107.675578976°W |
| 2,300.00 | 14.94 | 11.65 | 2,269.28 | 250.63 | 51.69 | 14,367,468.15 | 885,977.77 | 39.531804548°N | 107.675563184°W |
| 2,400.00 | 14.94 | 11.65 | 2,365.90 | 275.89 | 56.90 | 14,367,493.41 | 885,982.98 | 39.531874262°N | 107.675547391°W |
| 2,500.00 | 14.94 | 11.65 | 2,462.51 | 301.15 | 62.11 | 14,367,518.67 | 885,988.18 | 39.531943976°N | 107.675531599°W |
| 2,600.00 | 14.94 | 11.65 | 2,559.13 | 326.40 | 67.32 | 14,367,543.92 | 885,993.39 | 39.532013689°N | 107.675515806°W |
| 2,700.00 | 14.94 | 11.65 | 2,655.75 | 351.66 | 72.53 | 14,367,569.18 | 885,998.60 | 39.532083403°N | 107.675500014°W |
| 2,800.00 | 14.94 | 11.65 | 2,752.37 | 376.91 | 77.73 | 14,367,594.44 | 886,003.81 | 39.532153117°N | 107.675484221°W |
| 2,900.00 | 14.94 | 11.65 | 2,848.99 | 402.17 | 82.94 | 14,367,619.69 | 886,009.02 | 39.532222831°N | 107.675468429°W |
| 3,000.00 | 14.94 | 11.65 | 2,945.60 | 427.43 | 88.15 | 14,367,644.95 | 886,014.23 | 39.532292545°N | 107.675452636°W |
| 3,100.00 | 14.94 | 11.65 | 3,042.22 | 452.68 | 93.36 | 14,367,670.21 | 886,019.44 | 39.532362258°N | 107.675436844°W |
| 3,200.00 | 14.94 | 11.65 | 3,138.84 | 477.94 | 98.57 | 14,367,695.46 | 886,024.65 | 39.532431972°N | 107.675421051°W |
| 3,300.00 | 14.94 | 11.65 | 3,235.46 | 503.20 | 103.78 | 14,367,720.72 | 886,029.86 | 39.532501686°N | 107.675405259°W |
| 3,400.00 | 14.94 | 11.65 | 3,332.07 | 528.45 | 108.99 | 14,367,745.98 | 886,035.06 | 39.532571400°N | 107.675389466°W |
| 3,500.00 | 14.94 | 11.65 | 3,428.69 | 553.71 | 114.20 | 14,367,771.23 | 886,040.27 | 39.532641113°N | 107.675373673°W |
| 3,600.00 | 14.94 | 11.65 | 3,525.31 | 578.97 | 119.41 | 14,367,796.49 | 886,045.48 | 39.532710827°N | 107.675357881°W |
| 3,700.00 | 14.94 | 11.65 | 3,621.93 | 604.22 | 124.61 | 14,367,821.74 | 886,050.69 | 39.532780541°N | 107.675342088°W |
| 3,800.00 | 14.94 | 11.65 | 3,718.54 | 629.48 | 129.82 | 14,367,847.00 | 886,055.90 | 39.532850255°N | 107.675326295°W |
| 3,900.00 | 14.94 | 11.65 | 3,815.16 | 654.74 | 135.03 | 14,367,872.26 | 886,061.11 | 39.532919969°N | 107.675310502°W |
| 4,000.00 | 14.94 | 11.65 | 3,911.78 | 679.99 | 140.24 | 14,367,897.51 | 886,066.32 | 39.532989682°N | 107.675294710°W |
| 4,100.00 | 14.94 | 11.65 | 4,008.40 | 705.25 | 145.45 | 14,367,922.77 | 886,071.53 | 39.533059396°N | 107.675278917°W |
| 4,200.00 | 14.94 | 11.65 | 4,105.02 | 730.50 | 150.66 | 14,367,948.03 | 886,076.73 | 39.533129110°N | 107.675263124°W |
| 4,205.16 | 14.94 | 11.65 | 4,110.00 | 731.81 | 150.93 | 14,367,949.33 | 886,077.00 | 39.533132706°N | 107.675262309°W |
| Mesaverde | | | | | | | | | |
| 4,300.00 | 14.94 | 11.65 | 4,201.63 | 755.76 | 155.87 | 14,367,973.28 | 886,081.94 | 39.533198824°N | 107.675247331°W |
| 4,400.00 | 14.94 | 11.65 | 4,298.25 | 781.02 | 161.08 | 14,367,998.54 | 886,087.15 | 39.533268537°N | 107.675231538°W |
| 4,482.01 | 14.94 | 11.65 | 4,377.49 | 801.73 | 165.35 | 14,368,019.25 | 886,091.42 | 39.533325709°N | 107.675218587°W |
| Drop 3°/100 at 4482 MD/4377 TVD | | | | | | | | | |

| | | | |
|-----------|------------------------|------------------------------|--|
| Database: | EDM 5000 SERVER DB | Local Co-ordinate Reference: | Well McPherson A07 (111360) - Slot A07 |
| Company: | Antero Resources | TVD Reference: | KB @ 5472.00ft (Original Well Elev) |
| Project: | McPherson | MD Reference: | KB @ 5472.00ft (Original Well Elev) |
| Site: | McPherson A Pad | North Reference: | Grid |
| Well: | McPherson A07 (111360) | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | A07 | | |
| Design: | McPherson A07 P02 | | |

| Planned Survey | | | | | | | | | |
|---|-----------------|-------------|---------------------|------------|------------|---------------------|--------------------|----------------|-----------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Map Northing (usft) | Map Easting (usft) | Latitude | Longitude |
| 4,500.00 | 14.40 | 11.65 | 4,394.89 | 806.19 | 166.27 | 14,368,023.72 | 886,092.34 | 39.533338030°N | 107.675215795°W |
| 4,600.00 | 11.40 | 11.65 | 4,492.35 | 828.06 | 170.78 | 14,368,045.59 | 886,096.86 | 39.533398396°N | 107.675202120°W |
| 4,700.00 | 8.40 | 11.65 | 4,590.85 | 844.91 | 174.25 | 14,368,062.43 | 886,100.33 | 39.533444890°N | 107.675191587°W |
| 4,800.00 | 5.40 | 11.65 | 4,690.12 | 856.68 | 176.68 | 14,368,074.20 | 886,102.76 | 39.533477385°N | 107.675184226°W |
| 4,900.00 | 2.40 | 11.65 | 4,789.87 | 863.35 | 178.06 | 14,368,080.87 | 886,104.13 | 39.533495791°N | 107.675180056°W |
| 4,980.15 | 0.00 | 0.00 | 4,870.00 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| Vertical at 4980 MD/4870 TVD - Price Coal | | | | | | | | | |
| 5,000.00 | 0.00 | 0.00 | 4,889.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 5,100.00 | 0.00 | 0.00 | 4,989.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 5,200.00 | 0.00 | 0.00 | 5,089.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 5,300.00 | 0.00 | 0.00 | 5,189.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 5,400.00 | 0.00 | 0.00 | 5,289.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 5,500.00 | 0.00 | 0.00 | 5,389.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 5,600.00 | 0.00 | 0.00 | 5,489.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 5,700.00 | 0.00 | 0.00 | 5,589.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 5,800.00 | 0.00 | 0.00 | 5,689.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 5,880.15 | 0.00 | 0.00 | 5,770.00 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| Top Gas | | | | | | | | | |
| 5,900.00 | 0.00 | 0.00 | 5,789.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 6,000.00 | 0.00 | 0.00 | 5,889.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 6,100.00 | 0.00 | 0.00 | 5,989.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 6,200.00 | 0.00 | 0.00 | 6,089.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 6,300.00 | 0.00 | 0.00 | 6,189.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 6,400.00 | 0.00 | 0.00 | 6,289.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 6,500.00 | 0.00 | 0.00 | 6,389.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 6,600.00 | 0.00 | 0.00 | 6,489.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 6,700.00 | 0.00 | 0.00 | 6,589.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 6,705.15 | 0.00 | 0.00 | 6,595.00 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| Cameo | | | | | | | | | |
| 6,800.00 | 0.00 | 0.00 | 6,689.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 6,900.00 | 0.00 | 0.00 | 6,789.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 7,000.00 | 0.00 | 0.00 | 6,889.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 7,100.00 | 0.00 | 0.00 | 6,989.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 7,200.00 | 0.00 | 0.00 | 7,089.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 7,300.00 | 0.00 | 0.00 | 7,189.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 7,400.00 | 0.00 | 0.00 | 7,289.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 7,500.00 | 0.00 | 0.00 | 7,389.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 7,600.00 | 0.00 | 0.00 | 7,489.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 7,605.15 | 0.00 | 0.00 | 7,495.00 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| Rollins | | | | | | | | | |
| 7,700.00 | 0.00 | 0.00 | 7,589.85 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| 7,755.15 | 0.00 | 0.00 | 7,645.00 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| TD at 7755 MD/7645 TVD | | | | | | | | | |

| Design Targets | | | | | | | | | |
|---------------------------|---------------|--------------|----------|------------|------------|-----------------|----------------|----------------|-----------------|
| Target Name | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
| - hit/miss target | | | | | | | | | |
| - Shape | | | | | | | | | |
| A07 BH | 0.00 | 360.00 | 7,645.00 | 865.00 | 178.40 | 14,368,082.52 | 886,104.47 | 39.533500337°N | 107.675179026°W |
| - plan hits target center | | | | | | | | | |
| - Circle (radius 25.00) | | | | | | | | | |

Planning Report - Geographic

| | | | |
|-----------|------------------------|------------------------------|--|
| Database: | EDM 5000 SERVER DB | Local Co-ordinate Reference: | Well McPherson A07 (111360) - Slot A07 |
| Company: | Antero Resources | TVD Reference: | KB @ 5472.00ft (Original Well Elev) |
| Project: | McPherson | MD Reference: | KB @ 5472.00ft (Original Well Elev) |
| Site: | McPherson A Pad | North Reference: | Grid |
| Well: | McPherson A07 (111360) | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | A07 | | |
| Design: | McPherson A07 P02 | | |

| Casing Points | | | | | |
|---------------------|---------------------|-------------------------|----------------------|--------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Name | Casing Diameter (in) | Hole Diameter (in) | |
| 1,000.00 | 1,000.00 | Surf Csg at 1000 MD/TVD | 5.50 | 6.00 | |

| Formations | | | | | | |
|---------------------|---------------------|------------|-----------|---------|-------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Name | Lithology | Dip (°) | Dip Direction (°) | |
| 4,205.16 | 4,110.00 | Mesaverde | | 0.00 | | |
| 4,980.15 | 4,870.00 | Price Coal | | 0.00 | | |
| 5,880.15 | 5,770.00 | Top Gas | | 0.00 | | |
| 6,705.15 | 6,595.00 | Cameo | | 0.00 | | |
| 7,605.15 | 7,495.00 | Rollins | | 0.00 | | |

| Plan Annotations | | | | | |
|---------------------|---------------------|-------------------|------------|----------------------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates | | | |
| | | +N/-S (ft) | +E/-W (ft) | Comment | |
| 1,060.00 | 1,060.00 | 0.00 | 0.00 | KOP 3°/100 at 1060 MD/TVD | |
| 1,558.14 | 1,552.51 | 63.27 | 13.05 | Hold 15° inc at 1558 MD/1553 TVD | |
| 4,482.01 | 4,377.49 | 801.73 | 165.35 | Drop 3°/100 at 4482 MD/4377 TVD | |
| 4,980.15 | 4,870.00 | 865.00 | 178.40 | Vertical at 4980 MD/4870 TVD | |
| 7,755.15 | 7,645.00 | 865.00 | 178.40 | TD at 7755 MD/7645 TVD | |