



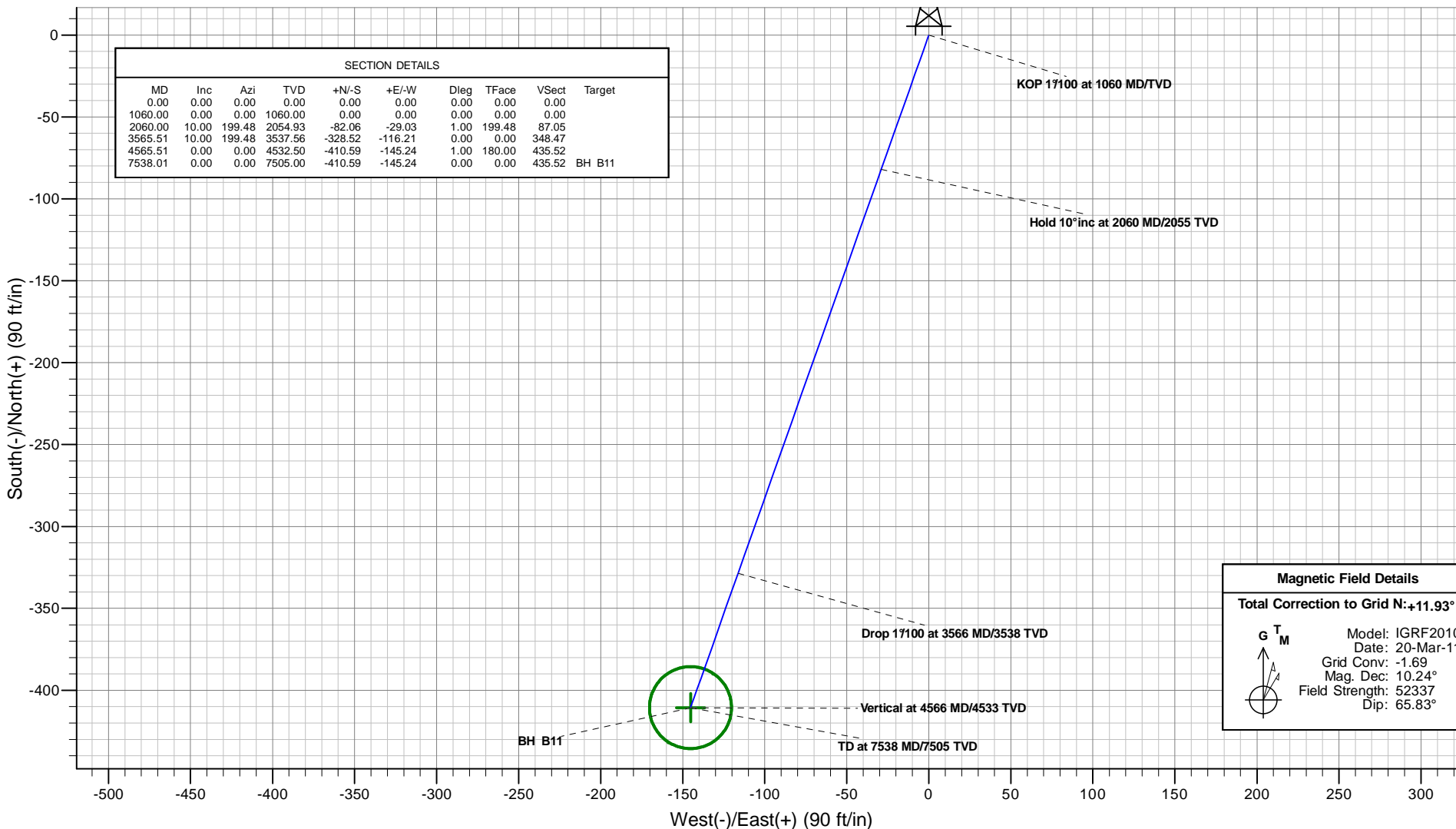
Antero Resources

Antero Dixon B11 (111310)



PLAN VIEW

Project: Dixon (NAD 83)
 Site: Dixon B
 Well: Antero Dixon B11 (111310)
 Wellbore: Antero Dixon B11
 Design: Antero Dixon B11 P01



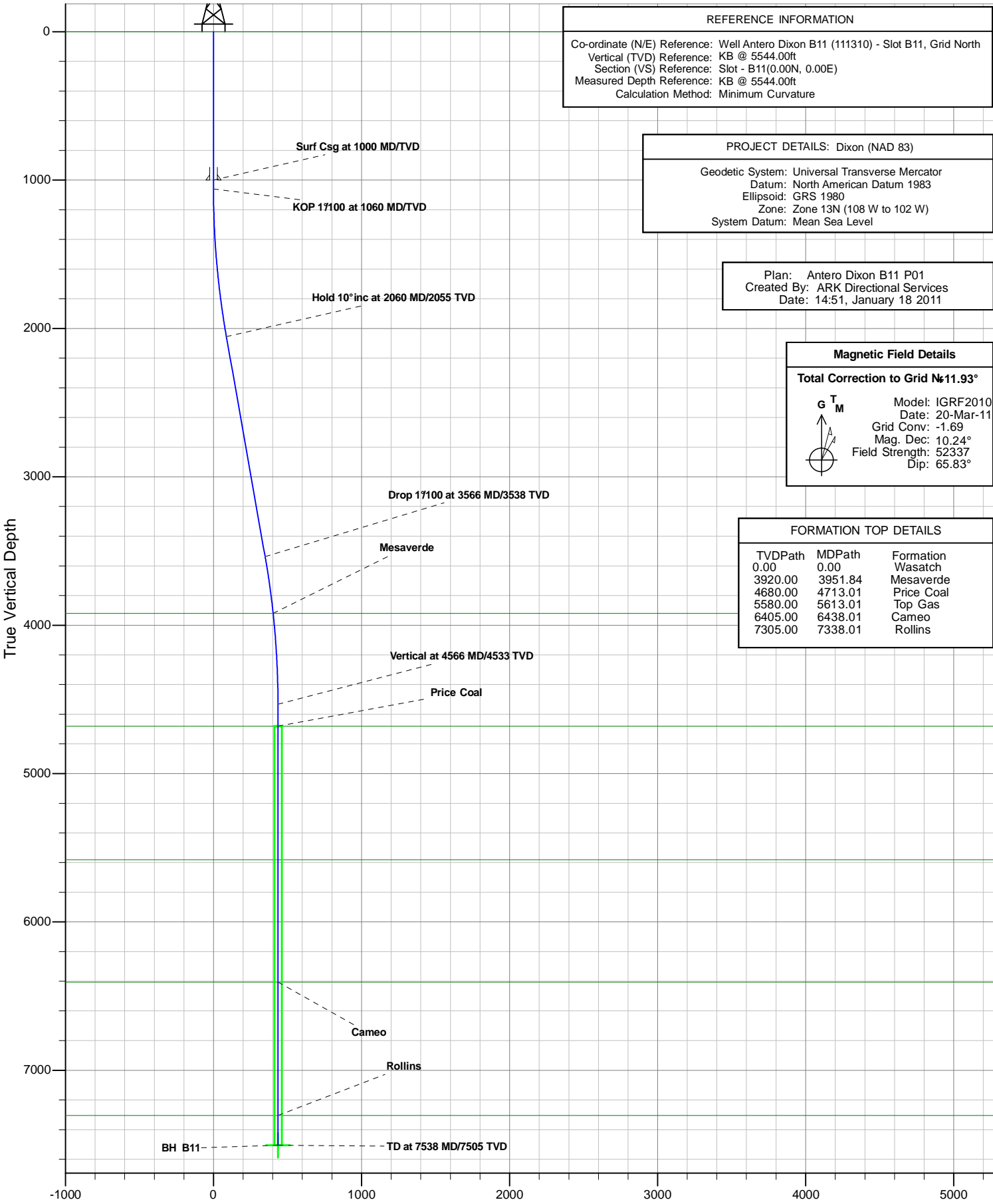
Magnetic Field Details	
Total Correction to Grid N: +11.93°	
	Model: IGRF2010 Date: 20-Mar-11 Grid Conv: -1.69 Mag. Dec: 10.24° Field Strength: 52337 Dip: 65.83°

Plan: Antero Dixon B11 P01
 Created By: ARK Directional Services
 Date: 14:53, January 18 2011

PROJECT DETAILS: Dixon (NAD 83)
 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

REFERENCE INFORMATION
 Co-ordinate (NE) Reference: Well Antero Dixon B11 (111310) - Slot B11, Grid North
 Vertical (TVD) Reference: KB @ 5544.00ft
 Section (VS) Reference: Slot - B11(0.00N, 0.00E)
 Measured Depth Reference: KB @ 5544.00ft
 Calculation Method: Minimum Curvature

VERTICAL SECTION VIEW



REFERENCE INFORMATION	
Co-ordinate (N/E) Reference:	Well Antero Dixon B11 (111310) - Slot B11, Grid North
Vertical (TVD) Reference:	KB @ 5544.00ft
Section (VS) Reference:	Slot - B11(0.00N, 0.00E)
Measured Depth Reference:	KB @ 5544.00ft
Calculation Method:	Minimum Curvature

PROJECT DETAILS: Dixon (NAD 83)	
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

Plan:	Antero Dixon B11 P01
Created By:	ARK Directional Services
Date:	14:51, January 18 2011

Magnetic Field Details	
Total Correction to Grid N=11.93°	
G T M	Model: IGRF2010
	Date: 20-Mar-11
	Grid Conv: -1.69
	Mag. Dec: 10.24°
	Field Strength: 52337
	Dip: 65.83°

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
0.00	0.00	Wasatch
3920.00	3951.84	Mesaverde
4680.00	4713.01	Price Coal
5580.00	5613.01	Top Gas
6405.00	6438.01	Cameo
7305.00	7338.01	Rollins

Vertical Section at 199.48°

Antero Resources

Dixon (NAD 83)

Dixon B

Antero Dixon B11 (111310) - Slot B11

Antero Dixon B11

Plan: Antero Dixon B11 P01

Standard Planning Report - Geographic

18 January, 2011

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well Antero Dixon B11 (111310) - Slot B11
Company:	Antero Resources	TVD Reference:	KB @ 5544.00ft
Project:	Dixon (NAD 83)	MD Reference:	KB @ 5544.00ft
Site:	Dixon B	North Reference:	Grid
Well:	Antero Dixon B11 (111310)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Antero Dixon B11		
Design:	Antero Dixon B11 P01		

Project	Dixon (NAD 83)		
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	Dixon B				
Site Position:		Northing:	14,364,517.556 usft	Latitude:	39.524071000°N
From:	Lat/Long	Easting:	890,418.038 usft	Longitude:	107.659523000°W
Position Uncertainty:	0.00 ft	Slot Radius:	13.20 in	Grid Convergence:	-1.69 °

Well	Antero Dixon B11 (111310) - Slot B11					
Well Position	+N/-S	0.00 ft	Northing:	14,364,528.305 usft	Latitude:	39.524097360°N
	+E/-W	0.00 ft	Easting:	890,379.450 usft	Longitude:	107.659660822°W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,520.00 ft

Wellbore	Antero Dixon B11				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2011/03/20	10.24	65.83	52,337

Design	Antero Dixon B11 P01				
Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	7,505.00	0.00	0.00	199.48	

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
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	
2,060.00	10.00	199.48	2,054.93	-82.06	-29.03	1.00	1.00	0.00	199.48	
3,565.51	10.00	199.48	3,537.56	-328.52	-116.21	0.00	0.00	0.00	0.00	
4,565.51	0.00	0.00	4,532.50	-410.59	-145.24	1.00	-1.00	0.00	180.00	
7,538.01	0.00	0.00	7,505.00	-410.59	-145.24	0.00	0.00	0.00	0.00	BH B11

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well Antero Dixon B11 (111310) - Slot B11
Company:	Antero Resources	TVD Reference:	KB @ 5544.00ft
Project:	Dixon (NAD 83)	MD Reference:	KB @ 5544.00ft
Site:	Dixon B	North Reference:	Grid
Well:	Antero Dixon B11 (111310)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Antero Dixon B11		
Design:	Antero Dixon B11 P01		

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	14,364,528.305	890,379.450	39.524097360°N	107.659660822°W	
Wasatch										
100.00	0.00	0.00	100.00	0.00	0.00	14,364,528.305	890,379.450	39.524097360°N	107.659660822°W	
200.00	0.00	0.00	200.00	0.00	0.00	14,364,528.305	890,379.450	39.524097360°N	107.659660822°W	
300.00	0.00	0.00	300.00	0.00	0.00	14,364,528.305	890,379.450	39.524097360°N	107.659660822°W	
400.00	0.00	0.00	400.00	0.00	0.00	14,364,528.305	890,379.450	39.524097360°N	107.659660822°W	
500.00	0.00	0.00	500.00	0.00	0.00	14,364,528.305	890,379.450	39.524097360°N	107.659660822°W	
600.00	0.00	0.00	600.00	0.00	0.00	14,364,528.305	890,379.450	39.524097360°N	107.659660822°W	
700.00	0.00	0.00	700.00	0.00	0.00	14,364,528.305	890,379.450	39.524097360°N	107.659660822°W	
800.00	0.00	0.00	800.00	0.00	0.00	14,364,528.305	890,379.450	39.524097360°N	107.659660822°W	
900.00	0.00	0.00	900.00	0.00	0.00	14,364,528.305	890,379.450	39.524097360°N	107.659660822°W	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	14,364,528.305	890,379.450	39.524097360°N	107.659660822°W	
Surf Csg at 1000 MD/TVD										
1,060.00	0.00	0.00	1,060.00	0.00	0.00	14,364,528.305	890,379.450	39.524097360°N	107.659660822°W	
KOP 1°/100 at 1060 MD/TVD										
1,100.00	0.40	199.48	1,100.00	-0.13	-0.05	14,364,528.173	890,379.403	39.524096995°N	107.659660973°W	
1,200.00	1.40	199.48	1,199.99	-1.61	-0.57	14,364,526.692	890,378.879	39.524092890°N	107.659662674°W	
1,300.00	2.40	199.48	1,299.93	-4.74	-1.68	14,364,523.567	890,377.774	39.524084225°N	107.659666263°W	
1,400.00	3.40	199.48	1,399.80	-9.51	-3.36	14,364,518.797	890,376.086	39.524071003°N	107.659671741°W	
1,500.00	4.40	199.48	1,499.57	-15.92	-5.63	14,364,512.385	890,373.818	39.524053228°N	107.659679104°W	
1,600.00	5.40	199.48	1,599.20	-23.97	-8.48	14,364,504.332	890,370.970	39.524030905°N	107.659688352°W	
1,700.00	6.40	199.48	1,698.67	-33.66	-11.91	14,364,494.642	890,367.542	39.524004041°N	107.659699481°W	
1,800.00	7.40	199.48	1,797.94	-44.99	-15.91	14,364,483.316	890,363.535	39.523972645°N	107.659712487°W	
1,900.00	8.40	199.48	1,896.99	-57.95	-20.50	14,364,470.359	890,358.952	39.523936725°N	107.659727367°W	
2,000.00	9.40	199.48	1,995.79	-72.53	-25.66	14,364,455.773	890,353.792	39.523896293°N	107.659744117°W	
2,060.00	10.00	199.48	2,054.93	-82.06	-29.03	14,364,446.243	890,350.421	39.523869873°N	107.659755061°W	
Hold 10° inc at 2060 MD/2055 TVD										
2,100.00	10.00	199.48	2,094.32	-88.61	-31.35	14,364,439.695	890,348.104	39.523851720°N	107.659762581°W	
2,200.00	10.00	199.48	2,192.80	-104.98	-37.14	14,364,423.324	890,342.313	39.523806338°N	107.659781381°W	
2,300.00	10.00	199.48	2,291.28	-121.35	-42.93	14,364,406.953	890,336.522	39.523760956°N	107.659800181°W	
2,400.00	10.00	199.48	2,389.77	-137.72	-48.72	14,364,390.582	890,330.731	39.523715574°N	107.659818981°W	
2,500.00	10.00	199.48	2,488.25	-154.09	-54.51	14,364,374.212	890,324.940	39.523670192°N	107.659837781°W	
2,600.00	10.00	199.48	2,586.73	-170.46	-60.30	14,364,357.841	890,319.149	39.523624810°N	107.659856581°W	
2,700.00	10.00	199.48	2,685.21	-186.83	-66.09	14,364,341.470	890,313.358	39.523579428°N	107.659875381°W	
2,800.00	10.00	199.48	2,783.69	-203.21	-71.88	14,364,325.100	890,307.567	39.523534046°N	107.659894180°W	
2,900.00	10.00	199.48	2,882.17	-219.58	-77.67	14,364,308.729	890,301.776	39.523488664°N	107.659912980°W	
3,000.00	10.00	199.48	2,980.65	-235.95	-83.46	14,364,292.358	890,295.985	39.523443282°N	107.659931780°W	
3,100.00	10.00	199.48	3,079.13	-252.32	-89.26	14,364,275.988	890,290.194	39.523397900°N	107.659950579°W	
3,200.00	10.00	199.48	3,177.61	-268.69	-95.05	14,364,259.617	890,284.403	39.523352518°N	107.659969379°W	
3,300.00	10.00	199.48	3,276.09	-285.06	-100.84	14,364,243.246	890,278.612	39.523307136°N	107.659988179°W	
3,400.00	10.00	199.48	3,374.57	-301.43	-106.63	14,364,226.876	890,272.821	39.523261754°N	107.660006978°W	
3,500.00	10.00	199.48	3,473.05	-317.80	-112.42	14,364,210.505	890,267.030	39.523216372°N	107.660025778°W	
3,565.51	10.00	199.48	3,537.56	-328.52	-116.21	14,364,199.781	890,263.236	39.523186644°N	107.660038093°W	
Drop 1°/100 at 3566 MD/3538 TVD										
3,600.00	9.66	199.48	3,571.55	-334.07	-118.18	14,364,194.231	890,261.273	39.523171258°N	107.660044467°W	
3,700.00	8.66	199.48	3,670.28	-349.07	-123.48	14,364,179.231	890,255.967	39.523129677°N	107.660061692°W	
3,800.00	7.66	199.48	3,769.27	-362.45	-128.21	14,364,165.858	890,251.236	39.523092605°N	107.660077049°W	
3,900.00	6.66	199.48	3,868.49	-374.19	-132.37	14,364,154.116	890,247.083	39.523060053°N	107.660090533°W	
3,951.84	6.14	199.48	3,920.00	-379.63	-134.29	14,364,148.672	890,245.157	39.523044962°N	107.660096785°W	
Mesaverde										
4,000.00	5.66	199.48	3,967.91	-384.30	-135.94	14,364,144.008	890,243.507	39.523032032°N	107.660102141°W	
4,100.00	4.66	199.48	4,067.50	-392.77	-138.94	14,364,135.537	890,240.510	39.523008551°N	107.660111868°W	
4,200.00	3.66	199.48	4,167.24	-399.60	-141.36	14,364,128.706	890,238.094	39.522989615°N	107.660119713°W	
4,300.00	2.66	199.48	4,267.08	-404.79	-143.19	14,364,123.518	890,236.259	39.522975231°N	107.660125671°W	

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well Antero Dixon B11 (111310) - Slot B11
Company:	Antero Resources	TVD Reference:	KB @ 5544.00ft
Project:	Dixon (NAD 83)	MD Reference:	KB @ 5544.00ft
Site:	Dixon B	North Reference:	Grid
Well:	Antero Dixon B11 (111310)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Antero Dixon B11		
Design:	Antero Dixon B11 P01		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
4,400.00	1.66	199.48	4,367.01	-408.33	-144.45	14,364,119.973	890,235.005	39.522965404°N	107.660129742°W	
4,500.00	0.66	199.48	4,466.99	-410.23	-145.12	14,364,118.072	890,234.332	39.522960135°N	107.660131924°W	
4,565.51	0.00	0.00	4,532.50	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
Vertical at 4566 MD/4533 TVD										
4,600.00	0.00	0.00	4,566.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
4,700.00	0.00	0.00	4,666.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
4,713.01	0.00	0.00	4,680.00	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
Price Coal										
4,800.00	0.00	0.00	4,766.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
4,900.00	0.00	0.00	4,866.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
5,000.00	0.00	0.00	4,966.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
5,100.00	0.00	0.00	5,066.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
5,200.00	0.00	0.00	5,166.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
5,300.00	0.00	0.00	5,266.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
5,400.00	0.00	0.00	5,366.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
5,500.00	0.00	0.00	5,466.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
5,600.00	0.00	0.00	5,566.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
5,613.01	0.00	0.00	5,580.00	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
Top Gas										
5,700.00	0.00	0.00	5,666.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
5,800.00	0.00	0.00	5,766.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
5,900.00	0.00	0.00	5,866.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
6,000.00	0.00	0.00	5,966.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
6,100.00	0.00	0.00	6,066.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
6,200.00	0.00	0.00	6,166.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
6,300.00	0.00	0.00	6,266.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
6,400.00	0.00	0.00	6,366.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
6,438.01	0.00	0.00	6,405.00	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
Cameo										
6,500.00	0.00	0.00	6,466.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
6,600.00	0.00	0.00	6,566.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
6,700.00	0.00	0.00	6,666.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
6,800.00	0.00	0.00	6,766.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
6,900.00	0.00	0.00	6,866.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
7,000.00	0.00	0.00	6,966.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
7,100.00	0.00	0.00	7,066.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
7,200.00	0.00	0.00	7,166.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
7,300.00	0.00	0.00	7,266.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
7,338.01	0.00	0.00	7,305.00	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
Rollins										
7,400.00	0.00	0.00	7,366.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
7,500.00	0.00	0.00	7,466.99	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
7,538.01	0.00	0.00	7,505.00	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W	
TD at 7538 MD/7505 TVD - BH B11										

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well Antero Dixon B11 (111310) - Slot B11
Company:	Antero Resources	TVD Reference:	KB @ 5544.00ft
Project:	Dixon (NAD 83)	MD Reference:	KB @ 5544.00ft
Site:	Dixon B	North Reference:	Grid
Well:	Antero Dixon B11 (111310)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Antero Dixon B11		
Design:	Antero Dixon B11 P01		

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
BH B11 - hit/miss target - Shape - plan hits target center - Circle (radius 25.00)	0.00	360.00	7,505.00	-410.59	-145.24	14,364,117.719	890,234.208	39.522959157°N	107.660132330°W

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 (°)
0.00	0.00	Wasatch			
3,951.84	3,920.00	Mesaverde			
4,713.01	4,680.00	Price Coal			
5,613.01	5,580.00	Top Gas			
6,438.01	6,405.00	Cameo			
7,338.01	7,305.00	Rollins			

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
1,060.00	1,060.00	0.00	0.00	KOP 1°/100 at 1060 MD/TVD	
2,060.00	2,054.93	-82.06	-29.03	Hold 10° inc at 2060 MD/2055 TVD	
3,565.51	3,537.56	-328.52	-116.21	Drop 1°/100 at 3566 MD/3538 TVD	
4,565.51	4,532.50	-410.59	-145.24	Vertical at 4566 MD/4533 TVD	
7,538.01	7,505.00	-410.59	-145.24	TD at 7538 MD/7505 TVD	