



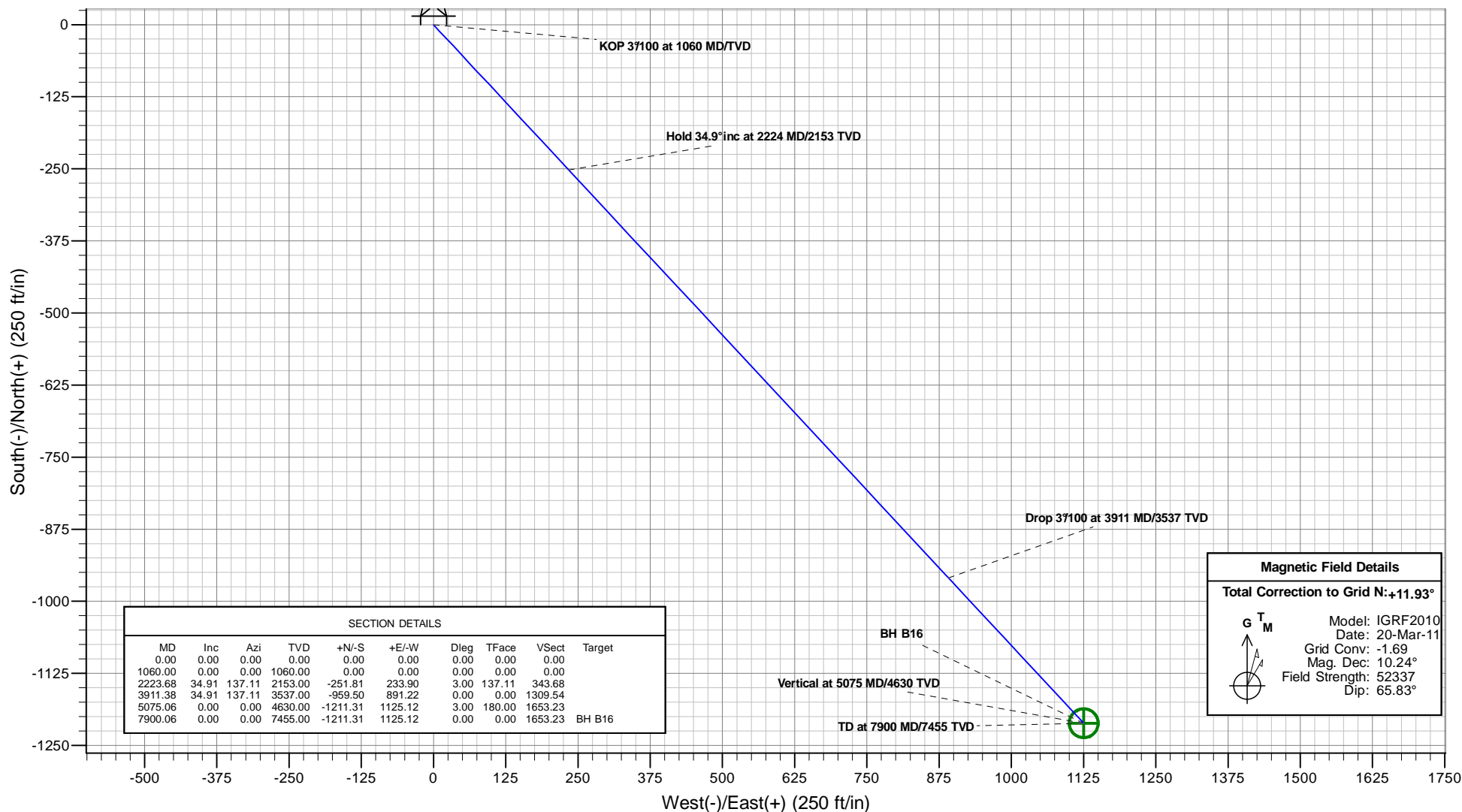
Antero Resources

Antero Dixon B16 (111315)



PLAN VIEW

Project: Dixon (NAD 83)
Site: Dixon B
Well: Antero Dixon B16 (111315)
Wellbore: Antero Dixon B16
Design: Antero Dixon B16 P01



SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1060.00	0.00	0.00	1060.00	0.00	0.00	0.00	0.00	0.00	
2223.68	34.91	137.11	2153.00	-251.81	233.90	3.00	137.11	343.68	
3911.38	34.91	137.11	3537.00	-959.50	891.22	0.00	0.00	1309.54	
5075.06	0.00	0.00	4630.00	-1211.31	1125.12	3.00	180.00	1653.23	
7900.06	0.00	0.00	7455.00	-1211.31	1125.12	0.00	0.00	1653.23	BH B16

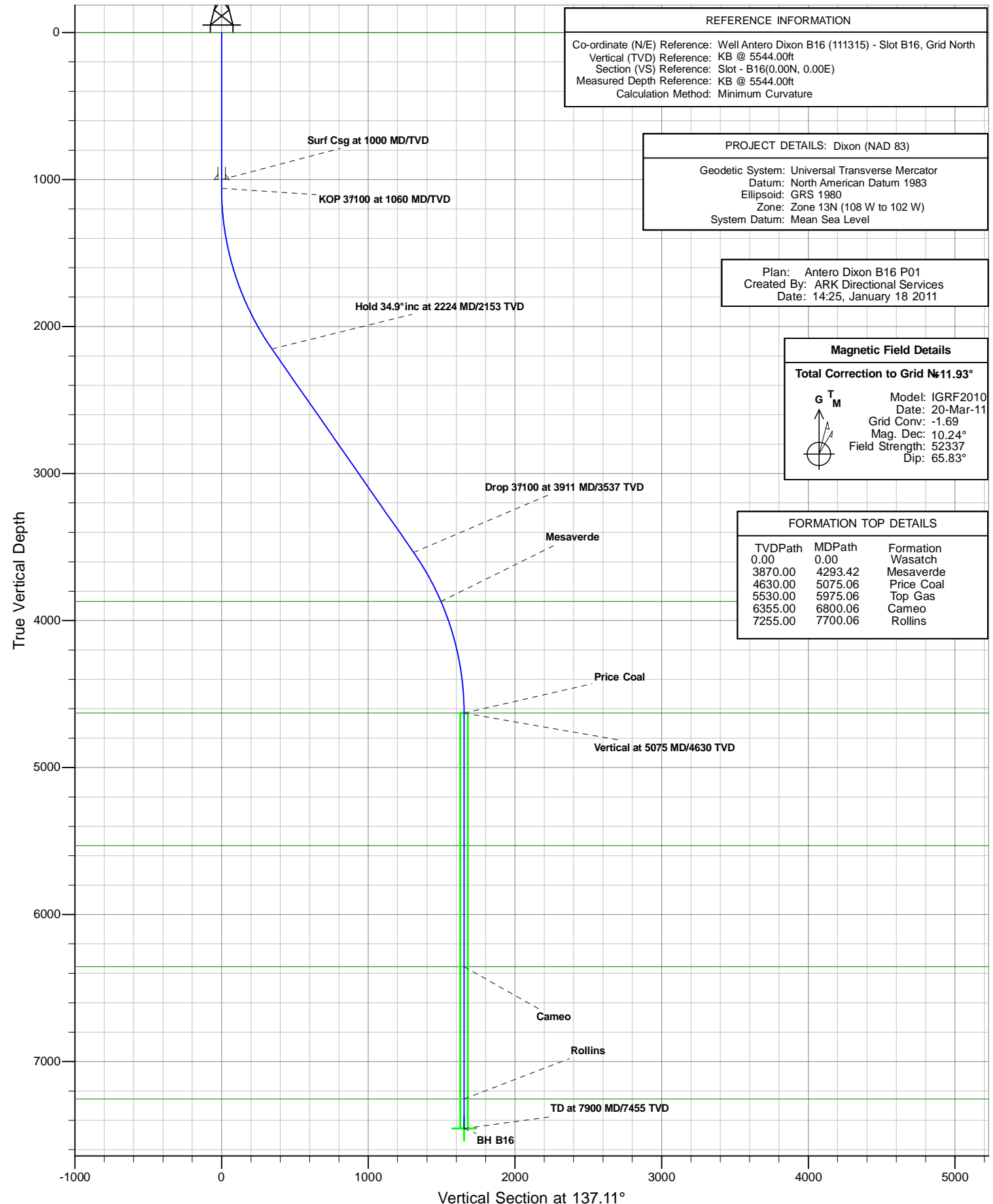
Magnetic Field Details	
Total Correction to Grid N: +11.93°	
	Model: IGRF2010 Date: 20-Mar-11 Grid Conv: -1.69 Mag. Dec: 10.24° Field Strength: 52337 Dip: 65.83°

Plan: Antero Dixon B16 P01
Created By: ARK Directional Services
Date: 14:16, 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 (N/E) Reference: Well Antero Dixon B16 (111315) - Slot B16, Grid North
Vertical (TVD) Reference: KB @ 5544.00ft
Section (VS) Reference: Slot - B16(0.00N, 0.00E)
Measured Depth Reference: KB @ 5544.00ft
Calculation Method: Minimum Curvature

VERTICAL SECTION VIEW



Antero Resources

Dixon (NAD 83)

Dixon B

Antero Dixon B16 (111315) - Slot B16

Antero Dixon B16

Plan: Antero Dixon B16 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 B16 (111315) - Slot B16
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 B16 (111315)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Antero Dixon B16		
Design:	Antero Dixon B16 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 B16 (111315) - Slot B16					
Well Position	+N/-S	0.00 ft	Northing:	14,364,522.998 usft	Latitude:	39.524084364°N
	+E/-W	0.00 ft	Easting:	890,398.734 usft	Longitude:	107.659591954°W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,520.00 ft

Wellbore	Antero Dixon B16				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2011/03/20	10.24	65.83	52,337

Design	Antero Dixon B16 P01				
Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	7,455.00	0.00	0.00	137.11	

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	
2,223.68	34.91	137.11	2,153.00	-251.81	233.90	3.00	3.00	0.00	137.11	
3,911.38	34.91	137.11	3,537.00	-959.50	891.22	0.00	0.00	0.00	0.00	
5,075.06	0.00	0.00	4,630.00	-1,211.31	1,125.12	3.00	-3.00	0.00	180.00	
7,900.06	0.00	0.00	7,455.00	-1,211.31	1,125.12	0.00	0.00	0.00	0.00	BH B16

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well Antero Dixon B16 (111315) - Slot B16
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 B16 (111315)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Antero Dixon B16		
Design:	Antero Dixon B16 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	14,364,522.998	890,398.734	39.524084364°N	107.659591954°W
Wasatch									
100.00	0.00	0.00	100.00	0.00	0.00	14,364,522.998	890,398.734	39.524084364°N	107.659591954°W
200.00	0.00	0.00	200.00	0.00	0.00	14,364,522.998	890,398.734	39.524084364°N	107.659591954°W
300.00	0.00	0.00	300.00	0.00	0.00	14,364,522.998	890,398.734	39.524084364°N	107.659591954°W
400.00	0.00	0.00	400.00	0.00	0.00	14,364,522.998	890,398.734	39.524084364°N	107.659591954°W
500.00	0.00	0.00	500.00	0.00	0.00	14,364,522.998	890,398.734	39.524084364°N	107.659591954°W
600.00	0.00	0.00	600.00	0.00	0.00	14,364,522.998	890,398.734	39.524084364°N	107.659591954°W
700.00	0.00	0.00	700.00	0.00	0.00	14,364,522.998	890,398.734	39.524084364°N	107.659591954°W
800.00	0.00	0.00	800.00	0.00	0.00	14,364,522.998	890,398.734	39.524084364°N	107.659591954°W
900.00	0.00	0.00	900.00	0.00	0.00	14,364,522.998	890,398.734	39.524084364°N	107.659591954°W
1,000.00	0.00	0.00	1,000.00	0.00	0.00	14,364,522.998	890,398.734	39.524084364°N	107.659591954°W
Surf Csg at 1000 MD/TVD									
1,060.00	0.00	0.00	1,060.00	0.00	0.00	14,364,522.998	890,398.734	39.524084364°N	107.659591954°W
KOP 3°/100 at 1060 MD/TVD									
1,100.00	1.20	137.11	1,100.00	-0.31	0.29	14,364,522.691	890,399.019	39.524083546°N	107.659590912°W
1,200.00	4.20	137.11	1,199.87	-3.76	3.49	14,364,519.240	890,402.224	39.524074338°N	107.659579195°W
1,300.00	7.20	137.11	1,299.37	-11.03	10.25	14,364,511.963	890,408.983	39.524054924°N	107.659554491°W
1,400.00	10.20	137.11	1,398.21	-22.12	20.54	14,364,500.882	890,419.276	39.524025357°N	107.659516869°W
1,500.00	13.20	137.11	1,496.12	-36.97	34.34	14,364,486.026	890,433.075	39.523985718°N	107.659466430°W
1,600.00	16.20	137.11	1,592.83	-55.56	51.61	14,364,467.435	890,450.343	39.523936116°N	107.659403313°W
1,700.00	19.20	137.11	1,688.09	-77.84	72.30	14,364,445.161	890,471.031	39.523876687°N	107.659327692°W
1,800.00	22.20	137.11	1,781.62	-103.73	96.35	14,364,419.265	890,495.085	39.523807593°N	107.659239774°W
1,900.00	25.20	137.11	1,873.18	-133.18	123.70	14,364,389.818	890,522.436	39.523729024°N	107.659139799°W
2,000.00	28.20	137.11	1,962.51	-166.10	154.28	14,364,356.901	890,553.011	39.523641196°N	107.659028042°W
2,100.00	31.20	137.11	2,049.36	-202.40	187.99	14,364,320.603	890,586.726	39.523544348°N	107.658904809°W
2,200.00	34.20	137.11	2,133.50	-241.97	224.76	14,364,281.024	890,623.488	39.523438747°N	107.658770438°W
2,223.68	34.91	137.11	2,153.00	-251.81	233.90	14,364,271.183	890,632.629	39.523412489°N	107.658737028°W
Hold 34.9° inc at 2224 MD/2153 TVD									
2,300.00	34.91	137.11	2,215.59	-283.82	263.62	14,364,239.181	890,662.354	39.523327103°N	107.658628379°W
2,400.00	34.91	137.11	2,297.59	-325.75	302.57	14,364,197.249	890,701.302	39.523215222°N	107.658486020°W
2,500.00	34.91	137.11	2,379.60	-367.68	341.52	14,364,155.318	890,740.250	39.523103342°N	107.658343662°W
2,600.00	34.91	137.11	2,461.60	-409.61	380.46	14,364,113.386	890,779.198	39.522991461°N	107.658201304°W
2,700.00	34.91	137.11	2,543.61	-451.54	419.41	14,364,071.454	890,818.145	39.522879580°N	107.658058947°W
2,800.00	34.91	137.11	2,625.61	-493.48	458.36	14,364,029.523	890,857.093	39.522767699°N	107.657916590°W
2,900.00	34.91	137.11	2,707.62	-535.41	497.31	14,363,987.591	890,896.041	39.522655818°N	107.657774233°W
3,000.00	34.91	137.11	2,789.62	-577.34	536.26	14,363,945.659	890,934.989	39.522543937°N	107.657631877°W
3,100.00	34.91	137.11	2,871.63	-619.27	575.20	14,363,903.728	890,973.937	39.522432055°N	107.657489522°W
3,200.00	34.91	137.11	2,953.63	-661.20	614.15	14,363,861.796	891,012.885	39.522320173°N	107.657347167°W
3,300.00	34.91	137.11	3,035.64	-703.13	653.10	14,363,819.864	891,051.832	39.522208291°N	107.657204812°W
3,400.00	34.91	137.11	3,117.64	-745.07	692.05	14,363,777.933	891,090.780	39.522096409°N	107.657062458°W
3,500.00	34.91	137.11	3,199.65	-787.00	731.00	14,363,736.001	891,129.728	39.521984527°N	107.656920104°W
3,600.00	34.91	137.11	3,281.65	-828.93	769.94	14,363,694.069	891,168.676	39.521872644°N	107.656777751°W
3,700.00	34.91	137.11	3,363.66	-870.86	808.89	14,363,652.138	891,207.624	39.521760762°N	107.656635398°W
3,800.00	34.91	137.11	3,445.66	-912.79	847.84	14,363,610.206	891,246.572	39.521648879°N	107.656493046°W
3,900.00	34.91	137.11	3,527.67	-954.73	886.79	14,363,568.274	891,285.519	39.521536996°N	107.656350694°W
3,911.38	34.91	137.11	3,537.00	-959.50	891.22	14,363,563.502	891,289.952	39.521524263°N	107.656334494°W
Drop 3°/100 at 3911 MD/3537 TVD									
4,000.00	32.25	137.11	3,610.82	-995.41	924.58	14,363,527.591	891,323.308	39.521428443°N	107.656212580°W
4,100.00	29.25	137.11	3,696.75	-1,032.87	959.37	14,363,490.131	891,358.102	39.521328492°N	107.656085411°W
4,200.00	26.25	137.11	3,785.24	-1,066.98	991.06	14,363,456.018	891,389.788	39.521237469°N	107.655969602°W
4,293.42	23.45	137.11	3,870.00	-1,095.75	1,017.77	14,363,427.255	891,416.504	39.521160722°N	107.655871956°W
Mesaverde									
4,300.00	23.25	137.11	3,876.04	-1,097.66	1,019.55	14,363,425.344	891,418.278	39.521155625°N	107.655865471°W

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well Antero Dixon B16 (111315) - Slot B16
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 B16 (111315)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Antero Dixon B16		
Design:	Antero Dixon B16 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	20.25	137.11	3,968.91	-1,124.81	1,044.76	14,363,398.195	891,443.496	39.521083183°N	107.655773303°W
4,500.00	17.25	137.11	4,063.59	-1,148.36	1,066.64	14,363,374.644	891,465.371	39.521020343°N	107.655693352°W
4,600.00	14.25	137.11	4,159.82	-1,168.24	1,085.11	14,363,354.755	891,483.844	39.520967276°N	107.655625835°W
4,700.00	11.25	137.11	4,257.35	-1,184.42	1,100.13	14,363,338.585	891,498.864	39.520924129°N	107.655570939°W
4,800.00	8.25	137.11	4,355.89	-1,196.82	1,111.66	14,363,326.176	891,510.390	39.520891018°N	107.655528813°W
4,900.00	5.25	137.11	4,455.19	-1,205.44	1,119.66	14,363,317.562	891,518.391	39.520868036°N	107.655499573°W
5,000.00	2.25	137.11	4,554.96	-1,210.23	1,124.11	14,363,312.769	891,522.843	39.520855245°N	107.655483299°W
5,075.06	0.00	0.00	4,630.00	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
Vertical at 5075 MD/4630 TVD - Price Coal									
5,100.00	0.00	0.00	4,654.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
5,200.00	0.00	0.00	4,754.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
5,300.00	0.00	0.00	4,854.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
5,400.00	0.00	0.00	4,954.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
5,500.00	0.00	0.00	5,054.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
5,600.00	0.00	0.00	5,154.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
5,700.00	0.00	0.00	5,254.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
5,800.00	0.00	0.00	5,354.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
5,900.00	0.00	0.00	5,454.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
5,975.06	0.00	0.00	5,530.00	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
Top Gas									
6,000.00	0.00	0.00	5,554.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
6,100.00	0.00	0.00	5,654.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
6,200.00	0.00	0.00	5,754.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
6,300.00	0.00	0.00	5,854.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
6,400.00	0.00	0.00	5,954.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
6,500.00	0.00	0.00	6,054.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
6,600.00	0.00	0.00	6,154.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
6,700.00	0.00	0.00	6,254.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
6,800.00	0.00	0.00	6,354.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
6,800.06	0.00	0.00	6,355.00	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
Cameo									
6,900.00	0.00	0.00	6,454.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
7,000.00	0.00	0.00	6,554.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
7,100.00	0.00	0.00	6,654.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
7,200.00	0.00	0.00	6,754.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
7,300.00	0.00	0.00	6,854.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
7,400.00	0.00	0.00	6,954.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
7,500.00	0.00	0.00	7,054.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
7,600.00	0.00	0.00	7,154.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
7,700.00	0.00	0.00	7,254.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
7,700.06	0.00	0.00	7,255.00	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
Rollins									
7,800.00	0.00	0.00	7,354.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
7,900.00	0.00	0.00	7,454.94	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
7,900.06	0.00	0.00	7,455.00	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
TD at 7900 MD/7455 TVD - BH B16									

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well Antero Dixon B16 (111315) - Slot B16
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 B16 (111315)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Antero Dixon B16		
Design:	Antero Dixon B16 P01		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
- Shape									
BH B16	0.00	360.00	7,455.00	-1,211.31	1,125.12	14,363,311.688	891,523.847	39.520852362°N	107.655479631°W
- plan hits target center									
- Circle (radius 25.00)									

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

Formations						
Measured Depth	Vertical Depth	Name		Lithology	Dip	Dip Direction
(ft)	(ft)				(°)	(°)
0.00	0.00	Wasatch				
4,293.42	3,870.00	Mesaverde				
5,075.06	4,630.00	Price Coal				
5,975.06	5,530.00	Top Gas				
6,800.06	6,355.00	Cameo				
7,700.06	7,255.00	Rollins				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(ft)	(ft)	+N/-S	+E/-W		
(ft)	(ft)	(ft)	(ft)		
1,060.00	1,060.00	0.00	0.00	KOP 3°/100 at 1060 MD/TVD	
2,223.68	2,153.00	-251.81	233.90	Hold 34.9° inc at 2224 MD/2153 TVD	
3,911.38	3,537.00	-959.50	891.22	Drop 3°/100 at 3911 MD/3537 TVD	
5,075.06	4,630.00	-1,211.31	1,125.12	Vertical at 5075 MD/4630 TVD	
7,900.06	7,455.00	-1,211.31	1,125.12	TD at 7900 MD/7455 TVD	