



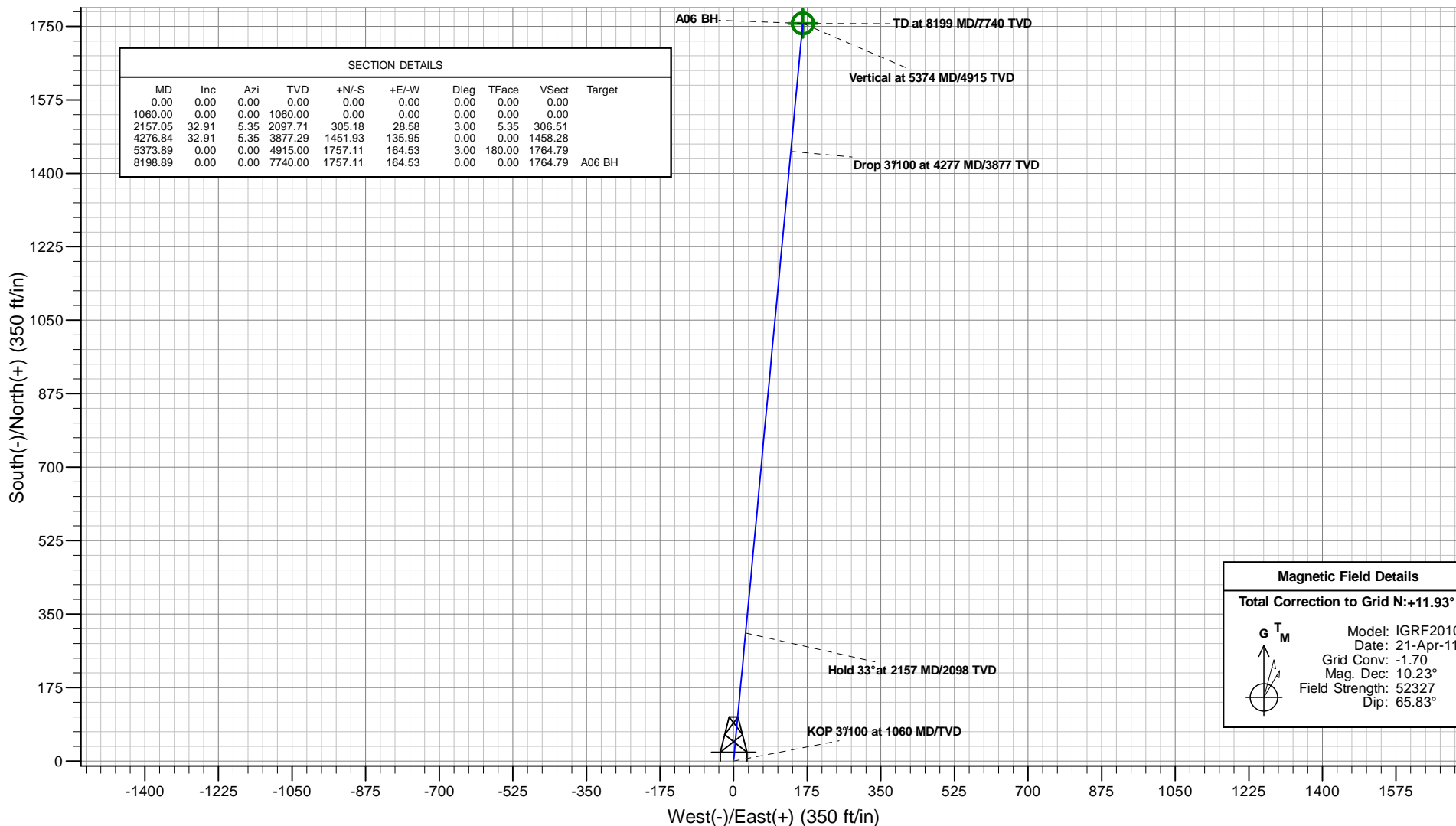
Antero Resources

Burckle A06 (111330)



PLAN VIEW

Project: Burckle
Site: Burckle A Pad
Well: Burckle A06 (111330)
Wellbore: A06
Design: Burckle A06 P01

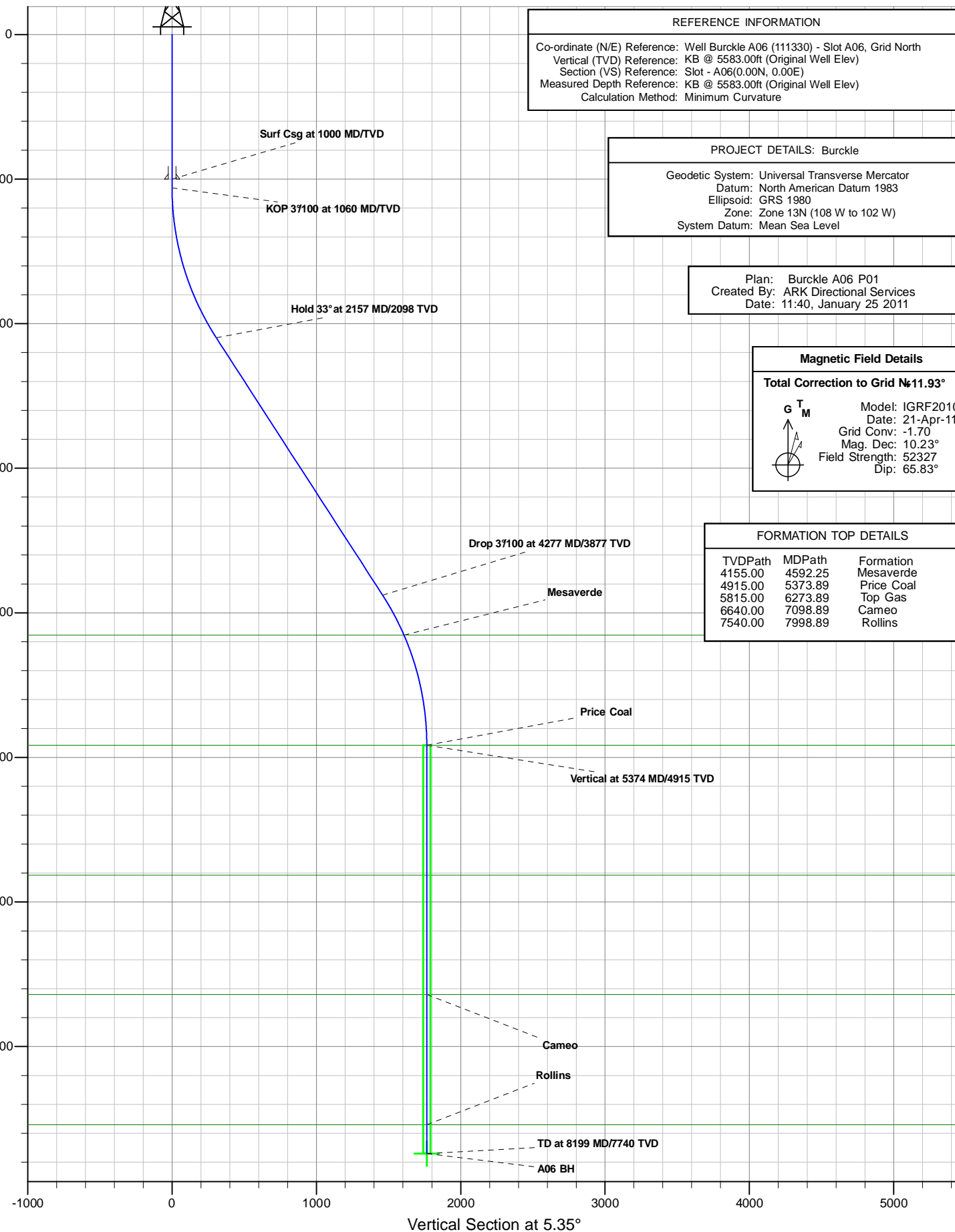


Plan: Burckle A06 P01
Created By: ARK Directional Services
Date: 11:39, January 25 2011

PROJECT DETAILS: Burckle
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 Burckle A06 (111330) - Slot A06, Grid North
Vertical (TVD) Reference: KB @ 5583.00ft (Original Well Elev)
Section (VS) Reference: Slot - A06(0.00N, 0.00E)
Measured Depth Reference: KB @ 5583.00ft (Original Well Elev)
Calculation Method: Minimum Curvature

VERTICAL SECTION VIEW



Antero Resources

Burckle

Burckle A Pad

Burckle A06 (111330) - Slot A06

A06

Plan: Burckle A06 P01

Standard Planning Report - Geographic

25 January, 2011

ARK Directional Services

Planning Report - Geographic

Database:	EDM 5000 SERVER DB	Local Co-ordinate Reference:	Well Burckle A06 (111330) - Slot A06
Company:	Antero Resources	TVD Reference:	KB @ 5583.00ft (Original Well Elev)
Project:	Burckle	MD Reference:	KB @ 5583.00ft (Original Well Elev)
Site:	Burckle A Pad	North Reference:	Grid
Well:	Burckle A06 (111330)	Survey Calculation Method:	Minimum Curvature
Wellbore:	A06		
Design:	Burckle A06 P01		

Project	Burckle		
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		Burckle A Pad			
Site Position:		Northing:	14,365,035.774 usft	Latitude:	39.525250278°N
From:	Map	Easting:	887,434.870 usft	Longitude:	107.670145154°W
Position Uncertainty:	0.00 ft	Slot Radius:	13.20 in	Grid Convergence:	-1.70 °

Well	Burckle A06 (111330) - Slot A06					
Well Position	+N/-S	0.00 ft	Northing:	14,365,055.514 usft	Latitude:	39.525303956°N
	+E/-W	0.00 ft	Easting:	887,429.011 usft	Longitude:	107.670167985°W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,559.00 ft

Wellbore	A06				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	21/04/2011	10.23	65.83	52,327

Design	Burckle A06 P01				
Audit Notes:					
Version:	Phase:	PROTOTYPE		Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	5.35	

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	
2,157.05	32.91	5.35	2,097.71	305.18	28.58	3.00	3.00	0.00	5.35	
4,276.84	32.91	5.35	3,877.29	1,451.93	135.95	0.00	0.00	0.00	0.00	
5,373.89	0.00	0.00	4,915.00	1,757.11	164.53	3.00	-3.00	0.00	180.00	
8,198.89	0.00	0.00	7,740.00	1,757.11	164.53	0.00	0.00	0.00	0.00	A06 BH

ARK Directional Services

Planning Report - Geographic

Database:	EDM 5000 SERVER DB	Local Co-ordinate Reference:	Well Burckle A06 (111330) - Slot A06
Company:	Antero Resources	TVD Reference:	KB @ 5583.00ft (Original Well Elev)
Project:	Burckle	MD Reference:	KB @ 5583.00ft (Original Well Elev)
Site:	Burckle A Pad	North Reference:	Grid
Well:	Burckle A06 (111330)	Survey Calculation Method:	Minimum Curvature
Wellbore:	A06		
Design:	Burckle A06 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	14,365,055.514	887,429.011	39.525303956°N	107.670167985°W
100.00	0.00	0.00	100.00	0.00	0.00	14,365,055.514	887,429.011	39.525303956°N	107.670167985°W
200.00	0.00	0.00	200.00	0.00	0.00	14,365,055.514	887,429.011	39.525303956°N	107.670167985°W
300.00	0.00	0.00	300.00	0.00	0.00	14,365,055.514	887,429.011	39.525303956°N	107.670167985°W
400.00	0.00	0.00	400.00	0.00	0.00	14,365,055.514	887,429.011	39.525303956°N	107.670167985°W
500.00	0.00	0.00	500.00	0.00	0.00	14,365,055.514	887,429.011	39.525303956°N	107.670167985°W
600.00	0.00	0.00	600.00	0.00	0.00	14,365,055.514	887,429.011	39.525303956°N	107.670167985°W
700.00	0.00	0.00	700.00	0.00	0.00	14,365,055.514	887,429.011	39.525303956°N	107.670167985°W
800.00	0.00	0.00	800.00	0.00	0.00	14,365,055.514	887,429.011	39.525303956°N	107.670167985°W
900.00	0.00	0.00	900.00	0.00	0.00	14,365,055.514	887,429.011	39.525303956°N	107.670167985°W
1,000.00	0.00	0.00	1,000.00	0.00	0.00	14,365,055.514	887,429.011	39.525303956°N	107.670167985°W
Surf Csg at 1000 MD/TVD									
1,060.00	0.00	0.00	1,060.00	0.00	0.00	14,365,055.514	887,429.011	39.525303956°N	107.670167985°W
KOP 3°/100 at 1060 MD/TVD									
1,100.00	1.20	5.35	1,100.00	0.42	0.04	14,365,055.931	887,429.050	39.525305104°N	107.670167891°W
1,200.00	4.20	5.35	1,199.87	5.11	0.48	14,365,060.620	887,429.489	39.525318005°N	107.670166828°W
1,300.00	7.20	5.35	1,299.37	14.99	1.40	14,365,070.508	887,430.415	39.525345206°N	107.670164588°W
1,400.00	10.20	5.35	1,398.21	30.05	2.81	14,365,085.566	887,431.825	39.525386633°N	107.670161176°W
1,500.00	13.20	5.35	1,496.12	50.24	4.70	14,365,105.754	887,433.715	39.525442171°N	107.670156603°W
1,600.00	16.20	5.35	1,592.83	75.50	7.07	14,365,131.017	887,436.081	39.525511669°N	107.670150879°W
1,700.00	19.20	5.35	1,688.09	105.77	9.90	14,365,161.284	887,438.915	39.525594937°N	107.670144022°W
1,800.00	22.20	5.35	1,781.62	140.96	13.20	14,365,196.474	887,442.210	39.525691745°N	107.670136049°W
1,900.00	25.20	5.35	1,873.18	180.98	16.95	14,365,236.489	887,445.956	39.525801828°N	107.670126984°W
2,000.00	28.20	5.35	1,962.51	225.71	21.13	14,365,281.220	887,450.145	39.525924886°N	107.670116849°W
2,100.00	31.20	5.35	2,049.36	275.03	25.75	14,365,330.544	887,454.763	39.526060580°N	107.670105674°W
2,157.05	32.91	5.35	2,097.71	305.18	28.58	14,365,360.690	887,457.586	39.526143513°N	107.670098844°W
Hold 33° at 2157 MD/2098 TVD									
2,200.00	32.91	5.35	2,133.77	328.41	30.75	14,365,383.925	887,459.762	39.526207433°N	107.670093580°W
2,300.00	32.91	5.35	2,217.72	382.51	35.82	14,365,438.022	887,464.827	39.526356259°N	107.670081324°W
2,400.00	32.91	5.35	2,301.67	436.61	40.88	14,365,492.120	887,469.893	39.526505084°N	107.670069067°W
2,500.00	32.91	5.35	2,385.62	490.70	45.95	14,365,546.217	887,474.958	39.526653909°N	107.670056811°W
2,600.00	32.91	5.35	2,469.57	544.80	51.01	14,365,600.315	887,480.023	39.526802734°N	107.670044554°W
2,700.00	32.91	5.35	2,553.52	598.90	56.08	14,365,654.413	887,485.089	39.526951560°N	107.670032298°W
2,800.00	32.91	5.35	2,637.47	653.00	61.14	14,365,708.510	887,490.154	39.527100385°N	107.670020041°W
2,900.00	32.91	5.35	2,721.42	707.10	66.21	14,365,762.608	887,495.220	39.527249210°N	107.670007784°W
3,000.00	32.91	5.35	2,805.37	761.19	71.27	14,365,816.705	887,500.285	39.527398036°N	107.669995528°W
3,100.00	32.91	5.35	2,889.33	815.29	76.34	14,365,870.803	887,505.351	39.527546861°N	107.669983271°W
3,200.00	32.91	5.35	2,973.28	869.39	81.41	14,365,924.900	887,510.416	39.527695686°N	107.669971014°W
3,300.00	32.91	5.35	3,057.23	923.49	86.47	14,365,978.998	887,515.482	39.527844511°N	107.669958757°W
3,400.00	32.91	5.35	3,141.18	977.58	91.54	14,366,033.095	887,520.547	39.527993337°N	107.669946501°W
3,500.00	32.91	5.35	3,225.13	1,031.68	96.60	14,366,087.193	887,525.612	39.528142162°N	107.669934244°W
3,600.00	32.91	5.35	3,309.08	1,085.78	101.67	14,366,141.291	887,530.678	39.528290987°N	107.669921987°W
3,700.00	32.91	5.35	3,393.03	1,139.88	106.73	14,366,195.388	887,535.743	39.528439812°N	107.669909730°W
3,800.00	32.91	5.35	3,476.98	1,193.97	111.80	14,366,249.486	887,540.809	39.528588638°N	107.669897473°W
3,900.00	32.91	5.35	3,560.93	1,248.07	116.86	14,366,303.583	887,545.874	39.528737463°N	107.669885216°W
4,000.00	32.91	5.35	3,644.89	1,302.17	121.93	14,366,357.681	887,550.940	39.528886288°N	107.669872959°W
4,100.00	32.91	5.35	3,728.84	1,356.27	126.99	14,366,411.778	887,556.005	39.529035113°N	107.669860702°W
4,200.00	32.91	5.35	3,812.79	1,410.37	132.06	14,366,465.876	887,561.071	39.529183939°N	107.669848445°W
4,276.84	32.91	5.35	3,877.29	1,451.93	135.95	14,366,507.442	887,564.963	39.529298289°N	107.669839027°W
Drop 3°/100 at 4277 MD/3877 TVD									
4,300.00	32.22	5.35	3,896.81	1,464.35	137.11	14,366,519.856	887,566.125	39.529332440°N	107.669836214°W
4,400.00	29.22	5.35	3,982.77	1,515.20	141.88	14,366,570.707	887,570.886	39.529472333°N	107.669824693°W
4,500.00	26.22	5.35	4,071.29	1,561.50	146.21	14,366,617.008	887,575.222	39.529599712°N	107.669814202°W

ARK Directional Services

Planning Report - Geographic

Database:	EDM 5000 SERVER DB	Local Co-ordinate Reference:	Well Burckle A06 (111330) - Slot A06
Company:	Antero Resources	TVD Reference:	KB @ 5583.00ft (Original Well Elev)
Project:	Burckle	MD Reference:	KB @ 5583.00ft (Original Well Elev)
Site:	Burckle A Pad	North Reference:	Grid
Well:	Burckle A06 (111330)	Survey Calculation Method:	Minimum Curvature
Wellbore:	A06		
Design:	Burckle A06 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	
4,592.25	23.45	5.35	4,155.00	1,600.07	149.82	14,366,655.577	887,578.833	39.529705816°N	107.669805463°W	
Mesaverde										
4,600.00	23.22	5.35	4,162.12	1,603.12	150.11	14,366,658.634	887,579.120	39.529714227°N	107.669804770°W	
4,700.00	20.22	5.35	4,255.01	1,639.96	153.56	14,366,695.470	887,582.569	39.529815565°N	107.669796424°W	
4,800.00	17.22	5.35	4,349.71	1,671.91	156.55	14,366,727.416	887,585.560	39.529903448°N	107.669789186°W	
4,900.00	14.22	5.35	4,445.96	1,698.87	159.07	14,366,754.382	887,588.085	39.529977635°N	107.669783076°W	
5,000.00	11.22	5.35	4,543.50	1,720.79	161.13	14,366,776.297	887,590.137	39.530037923°N	107.669778111°W	
5,100.00	8.22	5.35	4,642.05	1,737.59	162.70	14,366,793.099	887,591.710	39.530084146°N	107.669774304°W	
5,200.00	5.22	5.35	4,741.35	1,749.23	163.79	14,366,804.742	887,592.800	39.530116178°N	107.669771666°W	
5,300.00	2.22	5.35	4,841.13	1,755.69	164.39	14,366,811.195	887,593.405	39.530133931°N	107.669770203°W	
5,373.89	0.00	0.00	4,915.00	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
Vertical at 5374 MD/4915 TVD - Price Coal										
5,400.00	0.00	0.00	4,941.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
5,500.00	0.00	0.00	5,041.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
5,600.00	0.00	0.00	5,141.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
5,700.00	0.00	0.00	5,241.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
5,800.00	0.00	0.00	5,341.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
5,900.00	0.00	0.00	5,441.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
6,000.00	0.00	0.00	5,541.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
6,100.00	0.00	0.00	5,641.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
6,200.00	0.00	0.00	5,741.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
6,273.89	0.00	0.00	5,815.00	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
Top Gas										
6,300.00	0.00	0.00	5,841.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
6,400.00	0.00	0.00	5,941.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
6,500.00	0.00	0.00	6,041.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
6,600.00	0.00	0.00	6,141.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
6,700.00	0.00	0.00	6,241.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
6,800.00	0.00	0.00	6,341.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
6,900.00	0.00	0.00	6,441.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
7,000.00	0.00	0.00	6,541.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
7,098.89	0.00	0.00	6,640.00	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
Cameo										
7,100.00	0.00	0.00	6,641.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
7,200.00	0.00	0.00	6,741.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
7,300.00	0.00	0.00	6,841.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
7,400.00	0.00	0.00	6,941.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
7,500.00	0.00	0.00	7,041.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
7,600.00	0.00	0.00	7,141.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
7,700.00	0.00	0.00	7,241.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
7,800.00	0.00	0.00	7,341.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
7,900.00	0.00	0.00	7,441.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
7,998.89	0.00	0.00	7,540.00	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
Rollins										
8,000.00	0.00	0.00	7,541.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
8,100.00	0.00	0.00	7,641.11	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
8,198.89	0.00	0.00	7,740.00	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°W	
TD at 8199 MD/7740 TVD - A06 BH										

ARK Directional Services

Planning Report - Geographic

Database:	EDM 5000 SERVER DB	Local Co-ordinate Reference:	Well Burckle A06 (111330) - Slot A06
Company:	Antero Resources	TVD Reference:	KB @ 5583.00ft (Original Well Elev)
Project:	Burckle	MD Reference:	KB @ 5583.00ft (Original Well Elev)
Site:	Burckle A Pad	North Reference:	Grid
Well:	Burckle A06 (111330)	Survey Calculation Method:	Minimum Curvature
Wellbore:	A06		
Design:	Burckle A06 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									
A06 BH	0.00	0.00	7,740.00	1,757.11	164.53	14,366,812.618	887,593.538	39.530137845°N	107.669769881°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		Dip	Dip Direction
(ft)	(ft)			(°)	(°)
4,592.25	4,155.00	Mesaverde			
5,373.89	4,915.00	Price Coal			
6,273.89	5,815.00	Top Gas			
7,098.89	6,640.00	Cameo			
7,998.89	7,540.00	Rollins			

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)		
1,060.00	1,060.00	0.00	0.00	KOP 3°/100 at 1060 MD/TVD	
2,157.05	2,097.71	305.18	28.58	Hold 33° at 2157 MD/2098 TVD	
4,276.84	3,877.29	1,451.93	135.95	Drop 3°/100 at 4277 MD/3877 TVD	
5,373.89	4,915.00	1,757.11	164.53	Vertical at 5374 MD/4915 TVD	
8,198.89	7,740.00	1,757.11	164.53	TD at 8199 MD/7740 TVD	