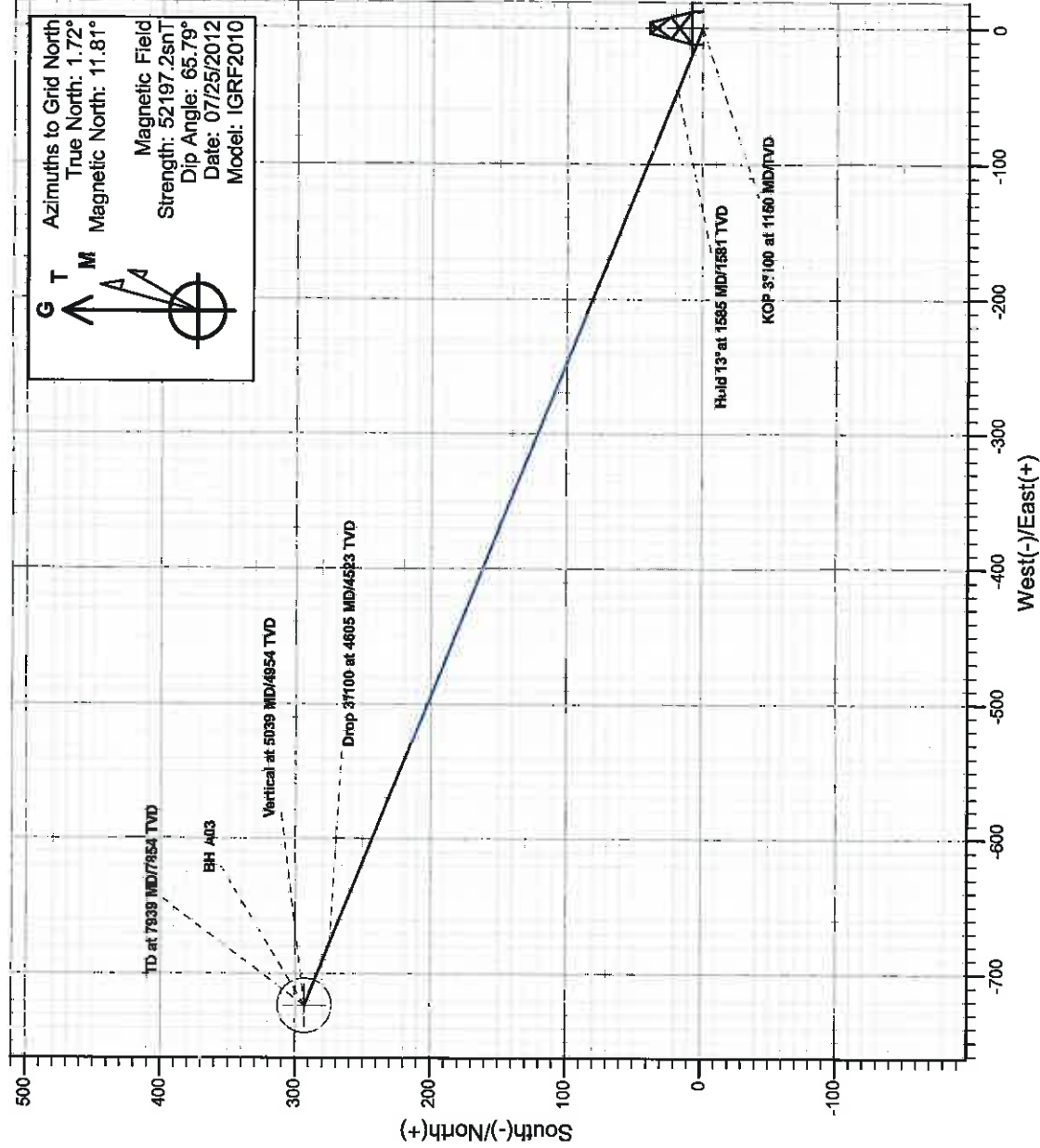


REFERENCE INFORMATION	
ordinate (N/E)	Reference: Well Dixon A03 (112009) - Slot A03, Grid North
erical (TVD)	Reference: KB @ 5559.00ft (Original Well Elev)
Section (VS)	Reference: Slot - A03(0.00N, 0.00E)
asured Depth	Reference: KB @ 5559.00ft (Original Well Elev)
Calculation Method:	Minimum Curvature



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Azimuths to Grid North
True North: 1.72°
Magnetic North: 11.81°

Magnetic Field
Strength: 52197.2snT
Dip Angle: 65.79°
Date: 07/25/2012
Model: IGRF2010

PROJECT DETAILS: Dixon	
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

SECTION DETAILS									
MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSecl	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1150.00	0.00	0.00	1150.00	0.00	0.00	0.00	0.00	0.00	
1584.89	13.05	292.05	1581.24	18.52	-45.72	3.00	292.05	48.32	
4604.49	13.05	292.05	4522.76	274.46	-677.64	0.00	0.00	731.12	
5039.48	0.00	292.05	4954.00	292.98	-723.36	3.00	180.00	780.44	
7839.48	0.00	292.05	7854.00	292.98	-723.36	0.00	292.05	780.44	BH A03

Antero Resources

Dixon

Dixon A

Dixon A03 (112009) - Slot A03

Dixon A03

Plan: Dixon A03 P01

Standard Planning Report - Geographic

26 April, 2012

Planning Report - Geographic

Database:	EDM5000-New	Local Co-ordinate Reference:	Well Dixon A03 (112009) - Slot A03
Company:	Antero Resources	TVD Reference:	KB @ 5559 00ft (Original Well Elev)
Project:	Dixon	MD Reference:	KB @ 5559 00ft (Original Well Elev)
Site:	Dixon A	North Reference:	Grid
Well:	Dixon A03 (112009)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Dixon A03		
Design:	Dixon A03 P01		

Project	Dixon		
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 A				
Site Position:	Northing:	14,366,922.96 usft	Latitude:	39.529609988°N	
From: Map	Easting:	877,460.93 usft	Longitude:	107.705677999°W	
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.72 °

Well	Dixon A03 (112009) - Slot A03					
Well Position	+N/-S	0.00 ft	Northing:	14,366,924.79 usft	Latitude:	39.529605084°N
	+E/-W	0.00 ft	Easting:	877,340.79 usft	Longitude:	107.706103805°W
Position Uncertainty	0.00 ft	Wellhead Elevation:		Ground Level:	5,535.00 ft	

Wellbore	Dixon A03				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	07/25/12	10.08	65.79	52,197

Design	Dixon A03 P01			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	292.05

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth (ft)	(°)	(°)	Depth (ft)	(ft)	(ft)	Rate (°/100ft)	Rate (°/100ft)	Rate (°/100ft)	(°)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,150.00	0.00	0.00	1,150.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,584.99	13.05	292.05	1,581.24	18.52	-45.72	3.00	3.00	0.00	292.05	
4,604.49	13.05	292.05	4,522.76	274.46	-677.64	0.00	0.00	0.00	0.00	
5,039.48	0.00	292.05	4,954.00	292.98	-723.36	3.00	-3.00	0.00	180.00	
7,939.48	0.00	292.05	7,854.00	292.98	-723.36	0.00	0.00	0.00	292.05	BH A03

Planning Report - Geographic

Database:	EDM5000-New	Local Co-ordinate Reference:	Well Dixon A03 (112009) - Slot A03
Company:	Antero Resources	TVD Reference:	KB @ 5559 00ft (Original Well Elev)
Project:	Dixon	MD Reference:	KB @ 5559 00ft (Original Well Elev)
Site:	Dixon A	North Reference:	Grid
Well:	Dixon A03 (112009)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Dixon A03		
Design:	Dixon A03 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	14,366,924.79	877,340.79	39.529605084°N	107.706103805°W
Wasatch									
100.00	0.00	0.00	100.00	0.00	0.00	14,366,924.79	877,340.79	39.529605084°N	107.706103805°W
200.00	0.00	0.00	200.00	0.00	0.00	14,366,924.79	877,340.79	39.529605084°N	107.706103805°W
300.00	0.00	0.00	300.00	0.00	0.00	14,366,924.79	877,340.79	39.529605084°N	107.706103805°W
400.00	0.00	0.00	400.00	0.00	0.00	14,366,924.79	877,340.79	39.529605084°N	107.706103805°W
500.00	0.00	0.00	500.00	0.00	0.00	14,366,924.79	877,340.79	39.529605084°N	107.706103805°W
600.00	0.00	0.00	600.00	0.00	0.00	14,366,924.79	877,340.79	39.529605084°N	107.706103805°W
700.00	0.00	0.00	700.00	0.00	0.00	14,366,924.79	877,340.79	39.529605084°N	107.706103805°W
800.00	0.00	0.00	800.00	0.00	0.00	14,366,924.79	877,340.79	39.529605084°N	107.706103805°W
900.00	0.00	0.00	900.00	0.00	0.00	14,366,924.79	877,340.79	39.529605084°N	107.706103805°W
1,000.00	0.00	0.00	1,000.00	0.00	0.00	14,366,924.79	877,340.79	39.529605084°N	107.706103805°W
Surf Csg at 1000 MD/TVD									
1,100.00	0.00	0.00	1,100.00	0.00	0.00	14,366,924.79	877,340.79	39.529605084°N	107.706103805°W
1,150.00	0.00	0.00	1,150.00	0.00	0.00	14,366,924.79	877,340.79	39.529605084°N	107.706103805°W
KOP 3°/100 at 1150 MD/TVD									
1,200.00	1.50	292.05	1,199.99	0.25	-0.61	14,366,925.03	877,340.19	39.529605708°N	107.706105980°W
1,300.00	4.50	292.05	1,299.85	2.21	-5.46	14,366,927.00	877,335.33	39.529610697°N	107.706123372°W
1,400.00	7.50	292.05	1,399.29	6.13	-15.14	14,366,930.92	877,325.65	39.529620661°N	107.706158108°W
1,500.00	10.50	292.05	1,498.04	12.01	-29.64	14,366,936.79	877,311.15	39.529635574°N	107.706210093°W
1,584.99	13.05	292.05	1,581.24	18.52	-45.72	14,366,943.31	877,295.08	39.529652107°N	107.706267730°W
Hold 13° at 1585 MD/1581 TVD									
1,600.00	13.05	292.05	1,595.86	19.79	-48.86	14,366,944.58	877,291.93	39.529655338°N	107.706278993°W
1,700.00	13.05	292.05	1,693.28	28.26	-69.79	14,366,953.05	877,271.01	39.529678665°N	107.706354037°W
1,800.00	13.05	292.05	1,790.70	36.74	-90.71	14,366,961.53	877,250.08	39.529698392°N	107.706429081°W
1,900.00	13.05	292.05	1,888.11	45.22	-111.64	14,366,970.01	877,229.15	39.529719918°N	107.706504124°W
2,000.00	13.05	292.05	1,985.53	53.69	-132.57	14,366,978.48	877,208.22	39.529741445°N	107.706579168°W
2,100.00	13.05	292.05	2,082.95	62.17	-153.50	14,366,986.96	877,187.29	39.529762971°N	107.706654212°W
2,200.00	13.05	292.05	2,180.37	70.65	-174.43	14,366,995.44	877,166.37	39.529784498°N	107.706729255°W
2,300.00	13.05	292.05	2,277.78	79.12	-195.35	14,367,003.91	877,145.44	39.529806024°N	107.706804299°W
2,400.00	13.05	292.05	2,375.20	87.60	-216.28	14,367,012.39	877,124.51	39.529827550°N	107.706879343°W
2,500.00	13.05	292.05	2,472.62	96.08	-237.21	14,367,020.87	877,103.58	39.529849077°N	107.706954387°W
2,600.00	13.05	292.05	2,570.04	104.55	-258.14	14,367,029.34	877,082.65	39.529870603°N	107.707029431°W
2,700.00	13.05	292.05	2,667.45	113.03	-279.07	14,367,037.82	877,061.73	39.529892129°N	107.707104475°W
2,800.00	13.05	292.05	2,764.87	121.51	-300.00	14,367,046.30	877,040.80	39.529913655°N	107.707179519°W
2,900.00	13.05	292.05	2,862.29	129.98	-320.92	14,367,054.77	877,019.87	39.529935181°N	107.707254563°W
3,000.00	13.05	292.05	2,959.71	138.46	-341.85	14,367,063.25	876,998.94	39.529956707°N	107.707329607°W
3,100.00	13.05	292.05	3,057.12	146.94	-362.78	14,367,071.73	876,978.01	39.529978233°N	107.707404651°W
3,200.00	13.05	292.05	3,154.54	155.41	-383.71	14,367,080.20	876,957.08	39.529999759°N	107.707479696°W
3,300.00	13.05	292.05	3,251.96	163.89	-404.64	14,367,088.68	876,936.16	39.530021285°N	107.707554740°W
3,400.00	13.05	292.05	3,349.38	172.37	-425.56	14,367,097.15	876,915.23	39.530042811°N	107.707629784°W
3,500.00	13.05	292.05	3,446.79	180.84	-446.49	14,367,105.63	876,894.30	39.530064336°N	107.707704828°W
3,600.00	13.05	292.05	3,544.21	189.32	-467.42	14,367,114.11	876,873.37	39.530085862°N	107.707779873°W
3,700.00	13.05	292.05	3,641.63	197.80	-488.35	14,367,122.58	876,852.44	39.530107388°N	107.707854917°W
3,800.00	13.05	292.05	3,739.05	206.27	-509.28	14,367,131.06	876,831.52	39.530128913°N	107.707929962°W
3,900.00	13.05	292.05	3,836.46	214.75	-530.21	14,367,139.54	876,810.59	39.530150439°N	107.708005006°W
4,000.00	13.05	292.05	3,933.88	223.23	-551.13	14,367,148.01	876,789.66	39.530171965°N	107.708080051°W
4,100.00	13.05	292.05	4,031.30	231.70	-572.06	14,367,156.49	876,768.73	39.530193490°N	107.708155095°W
4,200.00	13.05	292.05	4,128.72	240.18	-592.99	14,367,164.97	876,747.80	39.530215015°N	107.708230140°W
4,225.96	13.05	292.05	4,154.00	242.38	-598.42	14,367,167.17	876,742.37	39.530220602°N	107.708249618°W
Mesaverde									
4,300.00	13.05	292.05	4,226.13	248.65	-613.92	14,367,173.44	876,726.87	39.530236541°N	107.708305185°W
4,400.00	13.05	292.05	4,323.55	257.13	-634.85	14,367,181.92	876,705.95	39.530258066°N	107.708380229°W
4,500.00	13.05	292.05	4,420.97	265.61	-655.77	14,367,190.40	876,685.02	39.530279591°N	107.708455274°W

Planning Report - Geographic

Database:	EDM5000-New	Local Co-ordinate Reference:	Well Dixon A03 (112009) - Slot A03
Company:	Antero Resources	TVD Reference:	KB @ 5559 00ft (Original Well Elev)
Project:	Dixon	MD Reference:	KB @ 5559 00ft (Original Well Elev)
Site:	Dixon A	North Reference:	Gnd
Well:	Dixon A03 (112009)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Dixon A03		
Design:	Dixon A03 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
4,600.00	13.05	292.05	4,518.38	274.08	-676.70	14,367,198.87	876,664.09	39.530301117°N	107.708530319°W
4,604.49	13.05	292.05	4,522.76	274.46	-677.64	14,367,199.25	876,663.15	39.530302083°N	107.708533690°W
Drop 3"/100 at 4605 MD/4523 TVD									
4,700.00	10.18	292.05	4,616.30	281.68	-695.47	14,367,206.47	876,645.33	39.530320416°N	107.708597604°W
4,800.00	7.18	292.05	4,715.14	287.35	-709.46	14,367,212.14	876,631.33	39.530334808°N	107.708647781°W
4,900.00	4.18	292.05	4,814.64	291.07	-718.64	14,367,215.86	876,622.15	39.530344250°N	107.708680698°W
5,000.00	1.18	292.05	4,914.52	292.83	-722.98	14,367,217.62	876,617.81	39.530348714°N	107.708696262°W
5,039.48	0.00	292.05	4,954.00	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
Vertical at 5039 MD/4954 TVD - Price Coal									
5,100.00	0.00	292.05	5,014.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
5,200.00	0.00	292.05	5,114.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
5,300.00	0.00	292.05	5,214.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
5,400.00	0.00	292.05	5,314.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
5,500.00	0.00	292.05	5,414.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
5,600.00	0.00	292.05	5,514.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
5,700.00	0.00	292.05	5,614.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
5,739.48	0.00	292.05	5,654.00	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
Top Gas									
5,800.00	0.00	292.05	5,714.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
5,900.00	0.00	292.05	5,814.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
6,000.00	0.00	292.05	5,914.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
6,100.00	0.00	292.05	6,014.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
6,200.00	0.00	292.05	6,114.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
6,300.00	0.00	292.05	6,214.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
6,400.00	0.00	292.05	6,314.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
6,500.00	0.00	292.05	6,414.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
6,600.00	0.00	292.05	6,514.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
6,639.48	0.00	292.05	6,554.00	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
Cameo									
6,700.00	0.00	292.05	6,614.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
6,800.00	0.00	292.05	6,714.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
6,900.00	0.00	292.05	6,814.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
7,000.00	0.00	292.05	6,914.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
7,100.00	0.00	292.05	7,014.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
7,200.00	0.00	292.05	7,114.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
7,300.00	0.00	292.05	7,214.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
7,400.00	0.00	292.05	7,314.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
7,500.00	0.00	292.05	7,414.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
7,600.00	0.00	292.05	7,514.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
7,700.00	0.00	292.05	7,614.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
7,739.48	0.00	292.05	7,654.00	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
Rollins									
7,800.00	0.00	292.05	7,714.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
7,900.00	0.00	292.05	7,814.52	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
7,939.48	0.00	292.05	7,854.00	292.98	-723.36	14,367,217.77	876,617.43	39.530349103°N	107.708697618°W
TD at 7939 MD/7854 TVD									

Planning Report - Geographic

Database:	EDM5000-New	Local Co-ordinate Reference:	Well Dixon A03 (112009) - Slot A03
Company:	Antero Resources	TVD Reference:	KB @ 5559 00ft (Original Well Elev)
Project:	Dixon	MD Reference:	KB @ 5559 00ft (Original Well Elev)
Site:	Dixon A	North Reference:	Grid
Well:	Dixon A03 (112009)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Dixon A03		
Design:	Dixon A03 P01		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
BH A03	0.00	360.00	7,854.00	292.98	-723.36	14,367,217.77	876,617.43	39,530349103°N	107,708697618°W
- plan hits target center									
- Circle (radius 20.00)									

Casing Points				
Measured Depth	Vertical Depth		Casing Diameter	Hole Diameter
(ft)	(ft)	Name	(in)	(in)
1,000.00	1,000.00	Surf Csg at 1000 MD/TVD	5.500	6.000

Formations					
Measured Depth	Vertical Depth			Dip	Dip Direction
(ft)	(ft)	Name	Lithology	(°)	(°)
0.00	0.00	Wasatch			
4,225.96	4,154.00	Mesaverde			
5,039.48	4,954.00	Price Coal			
5,739.48	5,654.00	Top Gas			
6,639.48	6,554.00	Cameo			
7,739.48	7,654.00	Rollins			

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
1,150.00	1,150.00	0.00	0.00	KOP 3°/100 at 1150 MD/TVD
1,584.99	1,581.24	18.52	-45.72	Hold 13° at 1585 MD/1581 TVD
4,604.49	4,522.76	274.46	-677.64	Drop 3°/100 at 4605 MD/4523 TVD
5,039.48	4,954.00	292.98	-723.36	Vertical at 5039 MD/4954 TVD
7,939.48	7,854.00	292.98	-723.36	TD at 7939 MD/7854 TVD