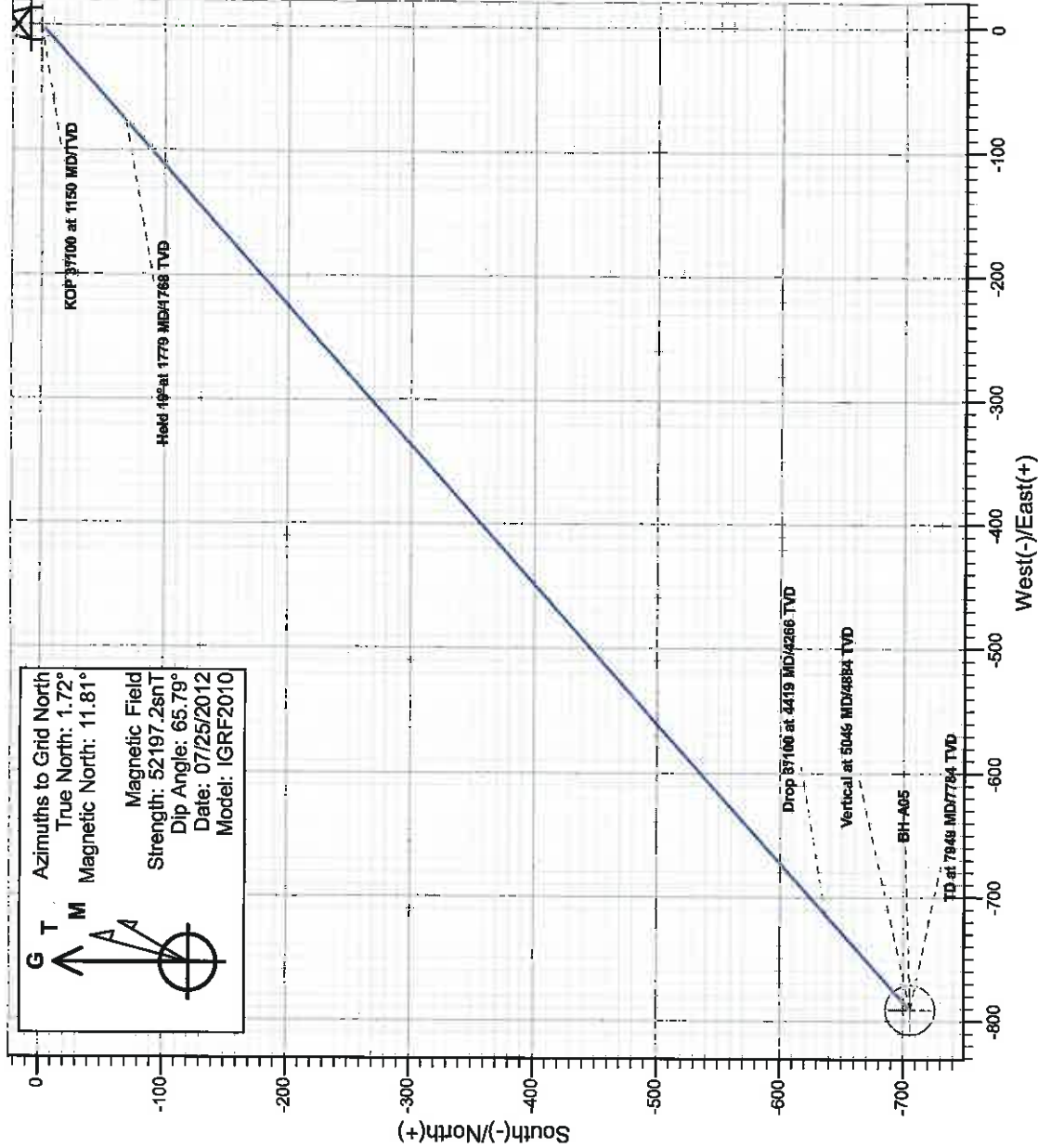
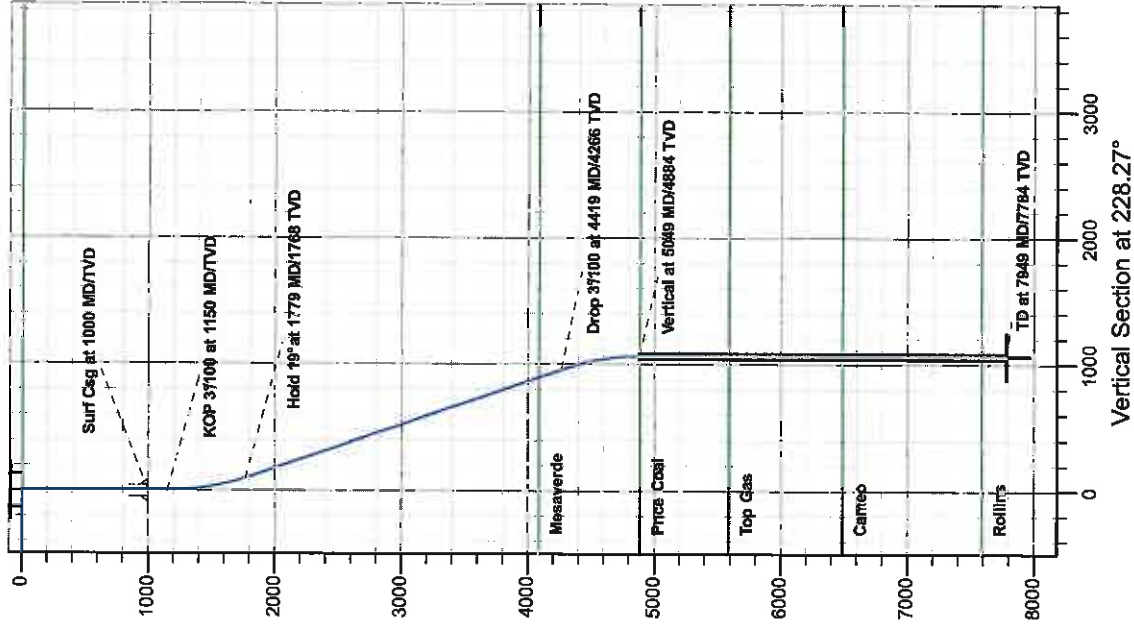




Antero Resources

Dixon A05 (112011)

Dixon A05 P01



REFERENCE INFORMATION	
ordinate (N/E) Reference: Well Dixon A05 (112011) - Slot A05, Grid North	
ritical (TVD) Reference: KB @ 5559.00ft (Original Well Elev)	
Section (VS) Reference: Slot - A05(0.00N, 0.00E)	
asured Depth Reference: KB @ 5559.00ft (Original Well Elev)	
Calculation Method: Minimum Curvature	

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	VSect	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	
1779.44	18.88	228.27	1768.11	-68.42	-76.71	3.00	228.27	102.78	
4419.30	18.88	228.27	4265.89	-637.14	-714.28	0.00	0.00	857.16	
5046.74	0.00	228.27	4884.00	-705.56	-790.99	3.00	180.00	1058.94	
7948.74	0.00	228.27	7784.00	-705.56	-790.99	0.00	228.27	1058.94	BH A05

Antero Resources

Dixon

Dixon A

Dixon A05 (112011) - Slot A05

Dixon A05

Plan: Dixon A05 P01

Standard Planning Report - Geographic

26 April, 2012

Planning Report - Geographic

Database:	EDM5000-New	Local Co-ordinate Reference:	Well Dixon A05 (112011) - Slot A05
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 A05 (112011)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Dixon A05		
Design:	Dixon A05 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
From:	Map	Easting:	877,460.93 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in
		Latitude:	39.529809988°N
		Longitude:	107.705677999°W
		Grid Convergence:	-1.72 °

Well	Dixon A05 (112011) - Slot A05		
Well Position	+N/-S	0.00 ft	Northing:
	+E/-W	0.00 ft	Easting:
Position Uncertainty	0.00 ft	Wellhead Elevation:	
		Latitude:	39.529807401°N
		Longitude:	107.705891182°W
		Ground Level:	5,535.00 ft

Wellbore	Dixon A05				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	07/25/12	10.08	65.79	52,197

Design	Dixon A05 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	228.27

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	
1,150.00	0.00	0.00	1,150.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,779.44	18.88	228.27	1,768.11	-68.42	-76.71	3.00	3.00	0.00	228.27	
4,419.30	18.88	228.27	4,265.89	-637.14	-714.28	0.00	0.00	0.00	0.00	
5,048.74	0.00	228.27	4,884.00	-705.56	-790.99	3.00	-3.00	0.00	180.00	
7,948.74	0.00	228.27	7,784.00	-705.56	-790.99	0.00	0.00	0.00	228.27	BH A05

Planning Report - Geographic

Database:	EDM5000-New	Local Co-ordinate Reference:	Well Dixon A05 (112011) - Slot A05
Company:	Antero Resources	TVD Reference:	KE @ 5559 00ft (Original Well Elev)
Project:	Dixon	MD Reference:	KE @ 5559 00ft (Original Well Elev)
Site:	Dixon A	North Reference:	Grd
Well:	Dixon A05 (112011)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Dixon A05		
Design:	Dixon A05 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	14,366,923.83	877,400.78	39.529607401°N	107.705891182°W
Wasatch									
100.00	0.00	0.00	100.00	0.00	0.00	14,366,923.83	877,400.78	39.529607401°N	107.705891182°W
200.00	0.00	0.00	200.00	0.00	0.00	14,366,923.83	877,400.78	39.529607401°N	107.705891182°W
300.00	0.00	0.00	300.00	0.00	0.00	14,366,923.83	877,400.78	39.529607401°N	107.705891182°W
400.00	0.00	0.00	400.00	0.00	0.00	14,366,923.83	877,400.78	39.529607401°N	107.705891182°W
500.00	0.00	0.00	500.00	0.00	0.00	14,366,923.83	877,400.78	39.529607401°N	107.705891182°W
600.00	0.00	0.00	600.00	0.00	0.00	14,366,923.83	877,400.78	39.529607401°N	107.705891182°W
700.00	0.00	0.00	700.00	0.00	0.00	14,366,923.83	877,400.78	39.529607401°N	107.705891182°W
800.00	0.00	0.00	800.00	0.00	0.00	14,366,923.83	877,400.78	39.529607401°N	107.705891182°W
900.00	0.00	0.00	900.00	0.00	0.00	14,366,923.83	877,400.78	39.529607401°N	107.705891182°W
1,000.00	0.00	0.00	1,000.00	0.00	0.00	14,366,923.83	877,400.78	39.529607401°N	107.705891182°W
Surf Csg at 1000 MD/TVD									
1,100.00	0.00	0.00	1,100.00	0.00	0.00	14,366,923.83	877,400.78	39.529607401°N	107.705891182°W
1,150.00	0.00	0.00	1,150.00	0.00	0.00	14,366,923.83	877,400.78	39.529607401°N	107.705891182°W
KOP 3°/100 at 1150 MD/TVD									
1,200.00	1.50	228.27	1,199.99	-0.44	-0.49	14,366,923.39	877,400.29	39.529606166°N	107.705892666°W
1,300.00	4.50	228.27	1,299.85	-3.92	-4.39	14,366,919.91	877,396.39	39.529596288°N	107.705906329°W
1,400.00	7.50	228.27	1,399.29	-10.88	-12.19	14,366,912.95	877,388.59	39.529676558°N	107.705933219°W
1,500.00	10.50	228.27	1,498.04	-21.29	-23.87	14,366,902.54	877,376.92	39.529547031°N	107.705973461°W
1,600.00	13.50	228.27	1,595.85	-35.13	-39.38	14,366,888.70	877,361.40	39.529507788°N	107.706026945°W
1,700.00	16.50	228.27	1,692.43	-52.35	-58.69	14,366,871.48	877,342.09	39.529458936°N	107.706093525°W
1,779.44	18.88	228.27	1,768.11	-68.42	-76.71	14,366,855.41	877,324.07	39.529413366°N	107.706155631°W
Hold 19° at 1779 MD/1768 TVD									
1,800.00	18.88	228.27	1,787.56	-72.85	-81.67	14,366,850.98	877,319.11	39.529400806°N	107.706172749°W
1,900.00	18.88	228.27	1,882.18	-94.39	-105.82	14,366,829.44	877,294.96	39.529339712°N	107.706256013°W
2,000.00	18.88	228.27	1,976.80	-115.94	-129.98	14,366,807.89	877,270.81	39.529278618°N	107.706339277°W
2,100.00	18.88	228.27	2,071.41	-137.48	-154.13	14,366,786.35	877,246.65	39.529217523°N	107.706422541°W
2,200.00	18.88	228.27	2,166.03	-159.02	-178.28	14,366,764.80	877,222.50	39.529158429°N	107.706505805°W
2,300.00	18.88	228.27	2,260.65	-180.57	-202.43	14,366,743.26	877,198.35	39.529095335°N	107.706589068°W
2,400.00	18.88	228.27	2,355.27	-202.11	-226.58	14,366,721.72	877,174.20	39.529034240°N	107.706672332°W
2,500.00	18.88	228.27	2,449.89	-223.65	-250.74	14,366,700.17	877,150.05	39.528973146°N	107.706755595°W
2,600.00	18.88	228.27	2,544.50	-245.20	-274.89	14,366,678.63	877,125.89	39.528912051°N	107.706838858°W
2,700.00	18.88	228.27	2,639.12	-266.74	-299.04	14,366,657.09	877,101.74	39.528850956°N	107.706922122°W
2,800.00	18.88	228.27	2,733.74	-288.28	-323.19	14,366,635.54	877,077.59	39.528789862°N	107.707005384°W
2,900.00	18.88	228.27	2,828.36	-309.83	-347.34	14,366,614.00	877,053.44	39.528728767°N	107.707088647°W
3,000.00	18.88	228.27	2,922.98	-331.37	-371.50	14,366,592.46	877,029.29	39.528667672°N	107.707171910°W
3,100.00	18.88	228.27	3,017.59	-352.92	-395.65	14,366,570.91	877,005.13	39.528606577°N	107.707255172°W
3,200.00	18.88	228.27	3,112.21	-374.46	-419.80	14,366,549.37	876,980.98	39.528545482°N	107.707338435°W
3,300.00	18.88	228.27	3,206.83	-396.00	-443.95	14,366,527.83	876,956.83	39.528484387°N	107.707421697°W
3,400.00	18.88	228.27	3,301.45	-417.55	-468.10	14,366,506.28	876,932.68	39.528423292°N	107.707504959°W
3,500.00	18.88	228.27	3,396.07	-439.09	-492.26	14,366,484.74	876,908.53	39.528362197°N	107.707588221°W
3,600.00	18.88	228.27	3,490.68	-460.63	-516.41	14,366,463.20	876,884.38	39.528301102°N	107.707671482°W
3,700.00	18.88	228.27	3,585.30	-482.18	-540.56	14,366,441.65	876,860.22	39.528240007°N	107.707754744°W
3,800.00	18.88	228.27	3,679.92	-503.72	-564.71	14,366,420.11	876,836.07	39.528178912°N	107.707838005°W
3,900.00	18.88	228.27	3,774.54	-525.26	-588.86	14,366,398.57	876,811.92	39.528117816°N	107.707921267°W
4,000.00	18.88	228.27	3,869.16	-546.81	-613.02	14,366,377.02	876,787.77	39.528056721°N	107.708004528°W
4,100.00	18.88	228.27	3,963.77	-568.35	-637.17	14,366,355.48	876,763.62	39.527995626°N	107.708087789°W
4,200.00	18.88	228.27	4,058.39	-589.89	-661.32	14,366,333.94	876,739.46	39.527934530°N	107.708171050°W
4,227.06	18.88	228.27	4,084.00	-595.72	-667.86	14,366,328.11	876,732.93	39.527917995°N	107.708193584°W
Mesaverde									
4,300.00	18.88	228.27	4,153.01	-611.44	-685.47	14,366,312.39	876,715.31	39.527873435°N	107.708254310°W
4,400.00	18.88	228.27	4,247.63	-632.98	-709.62	14,366,290.85	876,691.16	39.527812339°N	107.708337571°W

Planning Report - Geographic

Database:	EDM5000-New	Local Co-ordinate Reference:	Well Dixon A05 (112011) - Slot A05
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 A05 (112011)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Dixon A05		
Design:	Dixon A05 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
4,419.30	18.88	228.27	4,265.89	-637.14	-714.28	14,366,286.69	876,686.50	39.527800547°N	107.708353642°W
Drop 3°/100 at 4419 MD/4266 TVD									
4,500.00	16.46	228.27	4,342.78	-653.44	-732.57	14,366,270.39	876,668.22	39.527754303°N	107.708416662°W
4,600.00	13.46	228.27	4,439.37	-670.63	-751.83	14,366,253.20	876,648.95	39.527705570°N	107.708483075°W
4,700.00	10.46	228.27	4,537.19	-684.42	-767.30	14,366,239.41	876,633.49	39.527666447°N	107.708536391°W
4,800.00	7.46	228.27	4,635.96	-694.79	-778.92	14,366,229.04	876,621.86	39.527637042°N	107.708576464°W
4,900.00	4.46	228.27	4,735.41	-701.71	-786.67	14,366,222.12	876,614.11	39.527617435°N	107.708603184°W
5,000.00	1.46	228.27	4,835.26	-705.15	-790.53	14,366,218.69	876,610.26	39.527607680°N	107.708616477°W
5,048.74	0.00	228.27	4,884.00	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
Vertical at 5049 MD/4884 TVD - Price Coal									
5,100.00	0.00	228.27	4,935.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
5,200.00	0.00	228.27	5,035.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
5,300.00	0.00	228.27	5,135.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
5,400.00	0.00	228.27	5,235.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
5,500.00	0.00	228.27	5,335.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
5,600.00	0.00	228.27	5,435.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
5,700.00	0.00	228.27	5,535.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
5,748.74	0.00	228.27	5,584.00	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
Top Gas									
5,800.00	0.00	228.27	5,635.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
5,900.00	0.00	228.27	5,735.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
6,000.00	0.00	228.27	5,835.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
6,100.00	0.00	228.27	5,935.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
6,200.00	0.00	228.27	6,035.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
6,300.00	0.00	228.27	6,135.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
6,400.00	0.00	228.27	6,235.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
6,500.00	0.00	228.27	6,335.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
6,600.00	0.00	228.27	6,435.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
6,648.74	0.00	228.27	6,484.00	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
Cameo									
6,700.00	0.00	228.27	6,535.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
6,800.00	0.00	228.27	6,635.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
6,900.00	0.00	228.27	6,735.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
7,000.00	0.00	228.27	6,835.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
7,100.00	0.00	228.27	6,935.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
7,200.00	0.00	228.27	7,035.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
7,300.00	0.00	228.27	7,135.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
7,400.00	0.00	228.27	7,235.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
7,500.00	0.00	228.27	7,335.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
7,600.00	0.00	228.27	7,435.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
7,700.00	0.00	228.27	7,535.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
7,748.74	0.00	228.27	7,584.00	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
Rollins									
7,800.00	0.00	228.27	7,635.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
7,900.00	0.00	228.27	7,735.26	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
7,948.74	0.00	228.27	7,784.00	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°W
TD at 7949 MD/7784 TVD									

Planning Report - Geographic

Database:	EDM5000-New	Local Co-ordinate Reference:	Well Dixon A05 (112011) - Slot A05
Company:	Antern 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 A05 (112011)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Dixon A05		
Design:	Dixon A05 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 A05	0.00	360.00	7,784.00	-705.56	-790.99	14,366,218.27	876,609.79	39.527606506°N	107.708618077°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			
4,227.06	4,084.00	Mesaverde			
5,048.74	4,884.00	Price Coal			
5,748.74	5,584.00	Top Gas			
6,648.74	6,484.00	Cameo			
7,748.74	7,584.00	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
1,779.44	1,768.11	-68.42	-76.71	Hold 19° at 1779 MD/1768 TVD
4,419.30	4,265.89	-637.14	-714.28	Drop 3°/100 at 4419 MD/4266 TVD
5,048.74	4,884.00	-705.56	-790.99	Vertical at 5049 MD/4884 TVD
7,948.74	7,784.00	-705.56	-790.99	TD at 7949 MD/7784 TVD