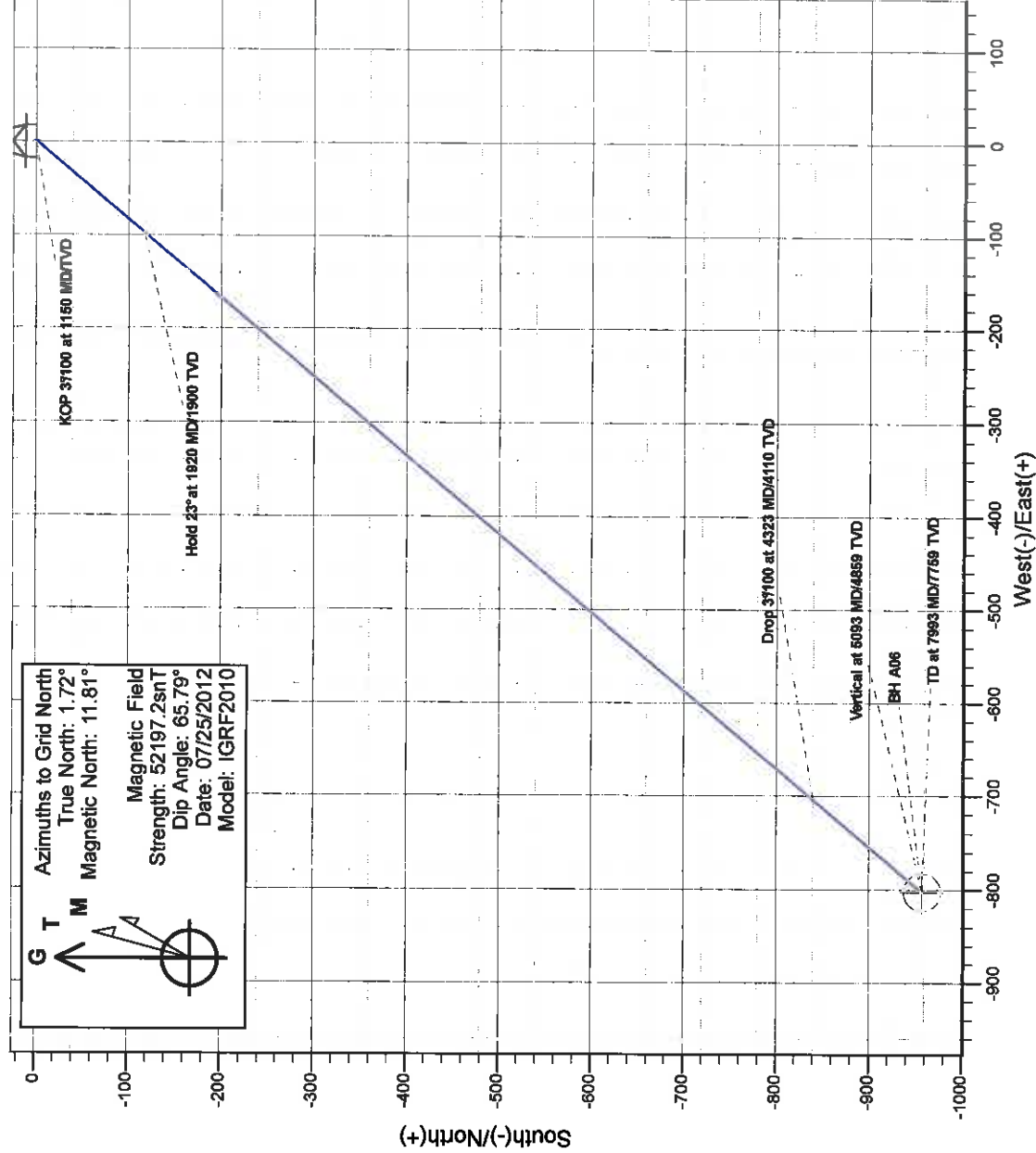


REFERENCE INFORMATION	
rdinate (N/E)	Reference: Well Dixon A06 (112012) - Slot A06, Grid North
erical (TVD)	Reference: KB @ 5559.00ft (Original Well Elev)
Section (VS)	Reference: Slot - A06(0.00N, 0.00E)
asured Depth	Reference: KB @ 5559.00ft (Original Well Elev)
Calculation Method:	Minimum Curvature



G

T

M

A

M

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	VSect	Target
0.00	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	0.00
1920.19	23.11	219.96	1909.48	-117.43	-98.40	3.00	218.96	153.20	0.00
4322.97	23.11	219.96	4109.51	-840.13	-704.03	0.00	0.00	1096.12	0.00
5093.16	0.00	219.96	4859.00	-957.57	-802.43	3.00	180.00	1249.33	0.00
7993.16	0.00	219.96	7769.00	-957.57	-802.43	0.00	219.96	1249.33	BH A06

Antero Resources

Dixon

Dixon A

Dixon A06 (112012) - Slot A06

Dixon A06

Plan: Dixon A06 P01

Standard Planning Report - Geographic

26 April, 2012

Planning Report - Geographic

Database:	EDM5000-New	Local Co-ordinate Reference:	Well Dixon A06 (112012) - Slot A06
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 A06 (112012)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Dixon A06		
Design:	Dixon A06 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 A06 (112012) - Slot A06		
Well Position	+N/-S	0.00 ft	Northing: 14,366,923.67 usft
	+E/-W	0.00 ft	Easting: 877,410.78 usft
Position Uncertainty	0.00 ft	Wellhead Elevation:	Ground Level: 5,535.00 ft

Wellbore	Dixon A06				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	07/25/12	10.08	65.79	52,197

Design	Dixon 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	219.96

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	
1,920.19	23.11	219.96	1,899.49	-117.43	-98.40	3.00	3.00	0.00	219.96	
4,322.97	23.11	219.96	4,109.51	-840.14	-704.03	0.00	0.00	0.00	0.00	
5,093.16	0.00	219.96	4,859.00	-957.57	-802.43	3.00	-3.00	0.00	180.00	
7,993.16	0.00	219.96	7,759.00	-957.57	-802.43	0.00	0.00	0.00	219.96	BHA06

Planning Report - Geographic

Database:	EDM5000-New	Local Co-ordinate Reference:	Well Dixon A06 (112012) - Slot A06
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 A06 (112012)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Dixon A06		
Design:	Dixon 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	14,366,923.67	877,410.78	39.529607788°N	107.705855739°W
Wasatch									
100.00	0.00	0.00	100.00	0.00	0.00	14,366,923.67	877,410.78	39.529607788°N	107.705855739°W
200.00	0.00	0.00	200.00	0.00	0.00	14,366,923.67	877,410.78	39.529607788°N	107.705855739°W
300.00	0.00	0.00	300.00	0.00	0.00	14,366,923.67	877,410.78	39.529607788°N	107.705855739°W
400.00	0.00	0.00	400.00	0.00	0.00	14,366,923.67	877,410.78	39.529607788°N	107.705855739°W
500.00	0.00	0.00	500.00	0.00	0.00	14,366,923.67	877,410.78	39.529607788°N	107.705855739°W
600.00	0.00	0.00	600.00	0.00	0.00	14,366,923.67	877,410.78	39.529607788°N	107.705855739°W
700.00	0.00	0.00	700.00	0.00	0.00	14,366,923.67	877,410.78	39.529607788°N	107.705855739°W
800.00	0.00	0.00	800.00	0.00	0.00	14,366,923.67	877,410.78	39.529607788°N	107.705855739°W
900.00	0.00	0.00	900.00	0.00	0.00	14,366,923.67	877,410.78	39.529607788°N	107.705855739°W
1,000.00	0.00	0.00	1,000.00	0.00	0.00	14,366,923.67	877,410.78	39.529607788°N	107.705855739°W
Surf Csg at 1000 MD/TVD									
1,100.00	0.00	0.00	1,100.00	0.00	0.00	14,366,923.67	877,410.78	39.529607788°N	107.705855739°W
1,150.00	0.00	0.00	1,150.00	0.00	0.00	14,366,923.67	877,410.78	39.529607788°N	107.705855739°W
KOP 3°/100 at 1150 MD/TVD									
1,200.00	1.50	219.96	1,199.99	-0.50	-0.42	14,366,923.17	877,410.36	39.529606377°N	107.705857175°W
1,300.00	4.50	219.96	1,299.85	-4.51	-3.78	14,366,919.16	877,407.00	39.529595096°N	107.705868654°W
1,400.00	7.50	219.96	1,399.29	-12.52	-10.49	14,366,911.15	877,400.29	39.529572566°N	107.705891582°W
1,500.00	10.50	219.96	1,498.04	-24.51	-20.54	14,366,899.16	877,390.24	39.529538847°N	107.705925895°W
1,600.00	13.50	219.96	1,595.85	-40.45	-33.89	14,366,883.22	877,376.89	39.529494033°N	107.705971499°W
1,700.00	16.50	219.96	1,692.43	-60.28	-50.51	14,366,863.39	877,360.27	39.529438247°N	107.706028269°W
1,800.00	19.50	219.96	1,787.52	-83.96	-70.36	14,366,839.71	877,340.42	39.529371640°N	107.706096049°W
1,900.00	22.50	219.96	1,880.87	-111.43	-93.38	14,366,812.24	877,317.41	39.529294396°N	107.706174654°W
1,920.19	23.11	219.96	1,899.49	-117.43	-98.40	14,366,806.24	877,312.38	39.529277527°N	107.706191821°W
Hold 23° at 1920 MD/1900 TVD									
2,000.00	23.11	219.96	1,972.89	-141.43	-118.52	14,366,782.24	877,292.26	39.529210013°N	107.706260524°W
2,100.00	23.11	219.96	2,064.87	-171.51	-143.72	14,366,752.16	877,267.06	39.529125417°N	107.706346609°W
2,200.00	23.11	219.96	2,156.85	-201.59	-168.93	14,366,722.08	877,241.85	39.529040822°N	107.706432695°W
2,300.00	23.11	219.96	2,248.83	-231.67	-194.13	14,366,692.00	877,216.65	39.528956226°N	107.706518780°W
2,400.00	23.11	219.96	2,340.80	-261.74	-219.34	14,366,661.93	877,191.44	39.528871631°N	107.706604864°W
2,500.00	23.11	219.96	2,432.78	-291.82	-244.54	14,366,631.85	877,166.24	39.528787035°N	107.706690949°W
2,600.00	23.11	219.96	2,524.76	-321.90	-269.75	14,366,601.77	877,141.03	39.528702439°N	107.706777034°W
2,700.00	23.11	219.96	2,616.74	-351.98	-294.95	14,366,571.69	877,115.83	39.528617843°N	107.706863118°W
2,800.00	23.11	219.96	2,708.72	-382.06	-320.16	14,366,541.61	877,090.62	39.528533247°N	107.706949202°W
2,900.00	23.11	219.96	2,800.70	-412.14	-345.36	14,366,511.53	877,065.42	39.528448652°N	107.707035286°W
3,000.00	23.11	219.96	2,892.67	-442.21	-370.57	14,366,481.46	877,040.21	39.528364056°N	107.707121369°W
3,100.00	23.11	219.96	2,984.65	-472.29	-395.77	14,366,451.38	877,015.01	39.528279460°N	107.707207453°W
3,200.00	23.11	219.96	3,076.63	-502.37	-420.98	14,366,421.30	876,989.80	39.528194863°N	107.707293536°W
3,300.00	23.11	219.96	3,168.61	-532.45	-446.19	14,366,391.22	876,964.60	39.528110267°N	107.707379619°W
3,400.00	23.11	219.96	3,260.59	-562.53	-471.39	14,366,361.14	876,939.39	39.528025671°N	107.707465702°W
3,500.00	23.11	219.96	3,352.56	-592.61	-496.60	14,366,331.06	876,914.19	39.527941075°N	107.707551784°W
3,600.00	23.11	219.96	3,444.54	-622.68	-521.80	14,366,300.99	876,888.98	39.527856478°N	107.707637866°W
3,700.00	23.11	219.96	3,536.52	-652.76	-547.01	14,366,270.91	876,863.78	39.527771882°N	107.707723949°W
3,800.00	23.11	219.96	3,628.50	-682.84	-572.21	14,366,240.83	876,838.57	39.527687286°N	107.707810031°W
3,900.00	23.11	219.96	3,720.48	-712.92	-597.42	14,366,210.75	876,813.37	39.527602689°N	107.707896112°W
4,000.00	23.11	219.96	3,812.46	-743.00	-622.62	14,366,180.67	876,788.16	39.527518093°N	107.707982194°W
4,100.00	23.11	219.96	3,904.43	-773.08	-647.83	14,366,150.59	876,762.96	39.527433496°N	107.708068275°W
4,200.00	23.11	219.96	3,996.41	-803.15	-673.03	14,366,120.52	876,737.75	39.527348899°N	107.708154356°W
4,268.05	23.11	219.96	4,059.00	-823.62	-690.18	14,366,100.05	876,720.60	39.527291334°N	107.708212932°W
Mesaverde									
4,300.00	23.11	219.96	4,088.39	-833.23	-698.24	14,366,090.44	876,712.55	39.527264303°N	107.708240437°W
4,322.97	23.11	219.96	4,109.51	-840.14	-704.03	14,366,083.53	876,706.76	39.527244873°N	107.708260207°W
Drop 3°/100 at 4323 MD/4110 TVD									

Planning Report - Geographic

Database:	EDM5000-New	Local Co-ordinate Reference:	Well Dixon A06 (112012) - Slot A06
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:	Grd
Well:	Dixon A06 (112012)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Dixon A06		
Design:	Dixon 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
4,400.00	20.79	219.96	4,180.96	-862.21	-722.52	14,366,061.46	876,686.26	39.527182803°N	107.708323366°W
4,500.00	17.79	219.96	4,275.33	-887.53	-743.74	14,366,036.14	876,667.04	39.527111580°N	107.708395838°W
4,600.00	14.79	219.96	4,371.30	-909.04	-761.76	14,366,014.63	876,649.02	39.527051102°N	107.708457377°W
4,700.00	11.79	219.96	4,466.61	-926.66	-776.53	14,365,997.01	876,634.26	39.527001535°N	107.708507813°W
4,800.00	8.79	219.96	4,566.99	-940.36	-788.00	14,365,983.32	876,622.78	39.526963014°N	107.708547010°W
4,900.00	5.79	219.96	4,666.17	-950.09	-796.16	14,365,973.58	876,614.62	39.526935645°N	107.708574859°W
5,000.00	2.79	219.96	4,765.88	-955.83	-800.97	14,365,967.84	876,609.81	39.526919503°N	107.708591283°W
5,093.16	0.00	219.96	4,859.00	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
Vertical at 5093 MD/4859 TVD - Price Coal									
5,100.00	0.00	219.96	4,865.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
5,200.00	0.00	219.96	4,965.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
5,300.00	0.00	219.96	5,065.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
5,400.00	0.00	219.96	5,165.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
5,500.00	0.00	219.96	5,265.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
5,600.00	0.00	219.96	5,365.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
5,700.00	0.00	219.96	5,465.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
5,793.16	0.00	219.96	5,559.00	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
Top Gas									
5,800.00	0.00	219.96	5,565.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
5,900.00	0.00	219.96	5,665.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
6,000.00	0.00	219.96	5,765.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
6,100.00	0.00	219.96	5,865.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
6,200.00	0.00	219.96	5,965.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
6,300.00	0.00	219.96	6,065.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
6,400.00	0.00	219.96	6,165.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
6,500.00	0.00	219.96	6,265.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
6,600.00	0.00	219.96	6,365.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
6,693.16	0.00	219.96	6,459.00	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
Cameo									
6,700.00	0.00	219.96	6,465.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
6,800.00	0.00	219.96	6,565.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
6,900.00	0.00	219.96	6,665.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
7,000.00	0.00	219.96	6,765.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
7,100.00	0.00	219.96	6,865.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
7,200.00	0.00	219.96	6,965.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
7,300.00	0.00	219.96	7,065.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
7,400.00	0.00	219.96	7,165.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
7,500.00	0.00	219.96	7,265.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
7,600.00	0.00	219.96	7,365.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
7,700.00	0.00	219.96	7,465.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
7,793.16	0.00	219.96	7,559.00	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
Rollins									
7,800.00	0.00	219.96	7,565.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
7,900.00	0.00	219.96	7,665.84	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
7,993.16	0.00	219.96	7,759.00	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
TD at 7993 MD/7759 TVD									

Planning Report - Geographic

Database:	EDM5000-New	Local Co-ordinate Reference:	Well Dixon A06 (112012) - Slot A06
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 A06 (112012)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Dixon A06		
Design:	Dixon 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									
BH A06	0.00	360.00	7,759.00	-957.57	-802.43	14,365,966.10	876,608.36	39.526914606°N	107.708596266°W
- plan hits target center									
- Circle (radius 20.00)									

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	5.500	6.000

Formations					
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(ft)	(ft)			(°)	(°)
0.00	0.00	Wasatch			
4,268.05	4,059.00	Mesaverde			
5,093.16	4,859.00	Price Coal			
5,793.16	5,559.00	Top Gas			
6,693.16	6,459.00	Cameo			
7,793.16	7,559.00	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
1,920.19	1,899.49	-117.43	-98.40	Hold 23° at 1920 MD/1900 TVD
4,322.97	4,109.51	-840.14	-704.03	Drop 3°/100 at 4323 MD/4110 TVD
5,093.16	4,859.00	-957.57	-802.43	Vertical at 5093 MD/4859 TVD
7,993.16	7,759.00	-957.57	-802.43	TD at 7993 MD/7759 TVD