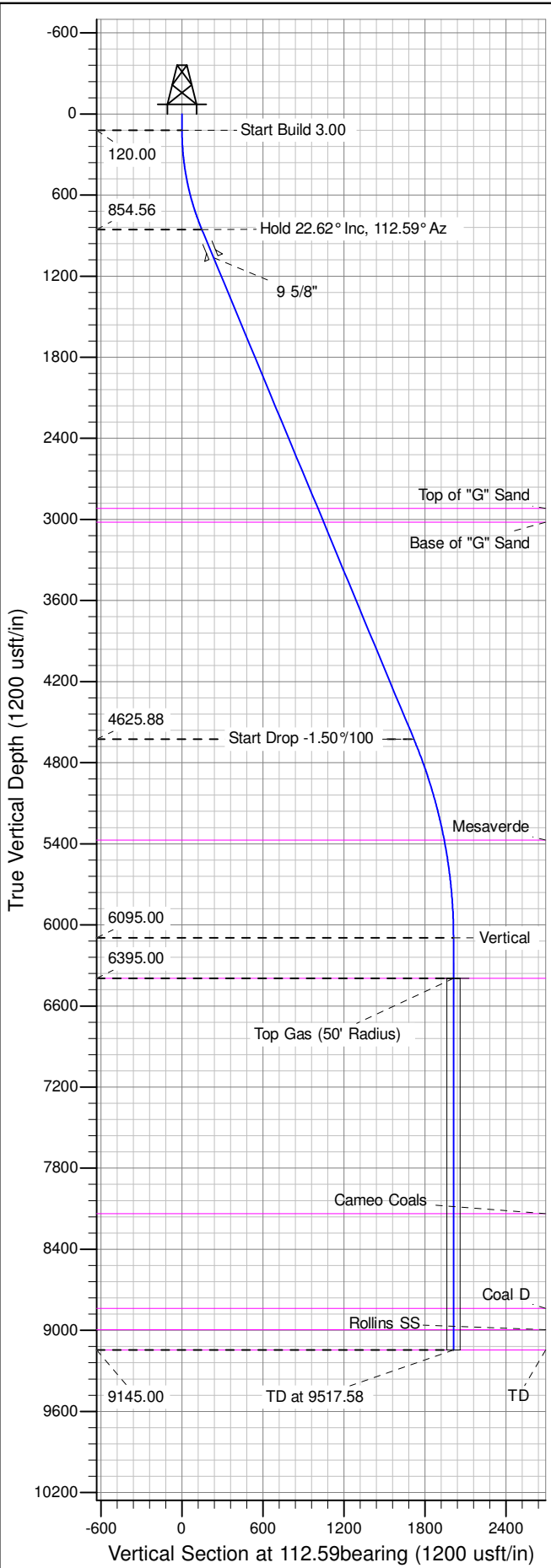
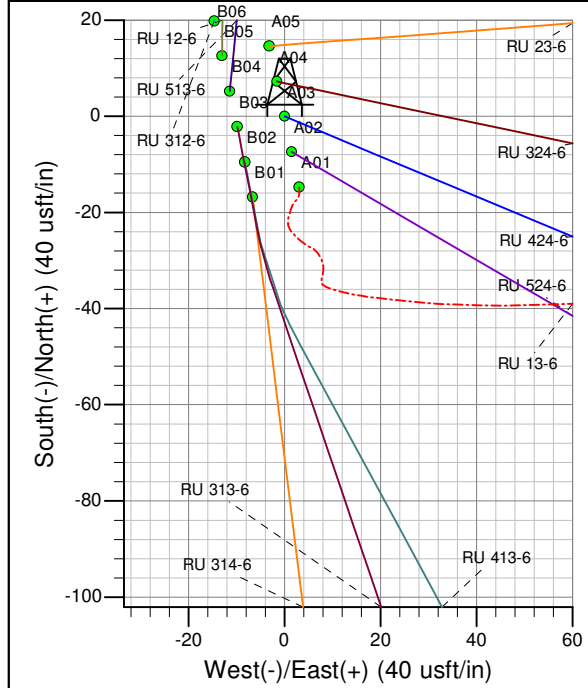
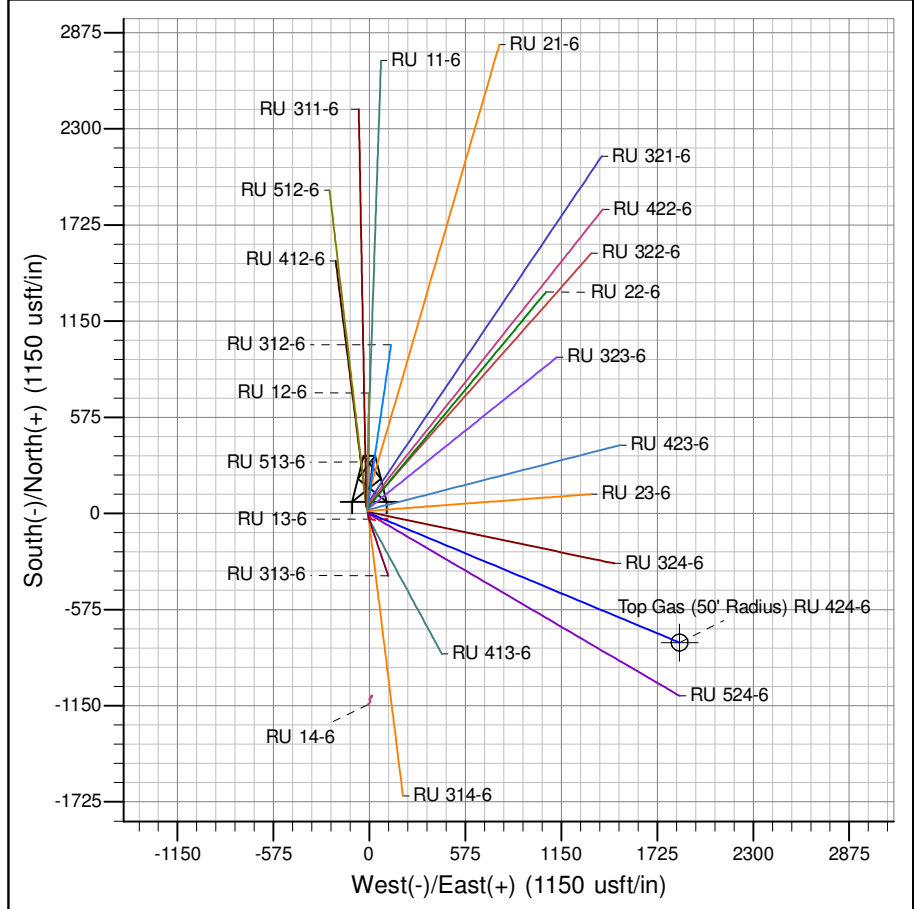




Well Name: RU 424-6
Surface Location: RU 13-6 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 6985.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 1603420.20000 2343758.60000 39.467108 -107.824744 A03
KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)



ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation	
120.00	120.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Build 3.00	
854.56	873.99	22.62	112.59	-56.43	135.64	146.91	146.91	Hold 22.62° Inc, 112.59° Az	
4625.88	4959.59	22.62	112.59	-660.00	1586.48	1718.29	1718.29	Start Drop -1.50°/100	
6095.00	6467.58	0.00	0.00	-772.85	1857.76	2012.11	2012.11	Vertical	
6395.00	6767.58	0.00	0.00	-772.85	1857.76	2012.11	2012.11	Top Gas	
9145.00	9517.58	0.00	0.00	-772.85	1857.76	2012.11	2012.11	TD at 9517.58	



Azimuths to True North
Magnetic North: 9.87°

Magnetic Field
Strength: 51936.6snT
Dip Angle: 65.66°
Date: 7/17/2014
Model: IGRF2010

Project: RU 06-07S-093W
Site: RU 13-6 Pad
Well: RU 424-6
Design #1 17Jul14 mab

PICEANCE VLY NAD 83

RU 06-07S-093W

RU 13-6 Pad

RU 424-6 - Slot A03

Wellbore #1

Plan: Design #1 17Jul14 mab

Standard Planning Report - Geographic

17 September, 2014

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 424-6 - Slot A03
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
Project:	RU 06-07S-093W	MD Reference:	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
Site:	RU 13-6 Pad	North Reference:	True
Well:	RU 424-6	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 17Jul14 mab		

Project	RU 06-07S-093W		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		Using geodetic scale factor

Site	RU 13-6 Pad		
Site Position:		Northing:	1,603,405.40000 usft
From:	Map	Easting:	2,343,761.30000 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in
		Latitude:	39.467067
		Longitude:	-107.824733
		Grid Convergence:	-1.47 °

Well	RU 424-6 - Slot A03		
Well Position	+N/-S	0.00 usft	Northing: 1,603,420.20000 usft
	+E/-W	0.00 usft	Easting: 2,343,758.60000 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	39.467108
		Longitude:	-107.824744
		Ground Level:	6,985.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/17/2014	9.87	65.66	51,937

Design	Design #1 17Jul14 mab				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (bearing)	
	0.00	0.00	0.00	112.59	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
120.00	0.00	0.00	120.00	0.00	0.00	0.00	0.00	0.00	0.00	
873.99	22.62	112.59	854.56	-56.43	135.64	3.00	3.00	0.00	112.59	
4,959.59	22.62	112.59	4,625.88	-660.00	1,586.48	0.00	0.00	0.00	0.00	
6,467.58	0.00	0.00	6,095.00	-772.85	1,857.76	1.50	-1.50	0.00	180.00	
6,767.58	0.00	0.00	6,395.00	-772.85	1,857.76	0.00	0.00	0.00	0.00	Top Gas (50' Radius)
9,517.58	0.00	0.00	9,145.00	-772.85	1,857.76	0.00	0.00	0.00	0.00	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 424-6 - Slot A03
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
Project:	RU 06-07S-093W	MD Reference:	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
Site:	RU 13-6 Pad	North Reference:	True
Well:	RU 424-6	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 17Jul14 mab		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
0.00	0.00	0.00	0.00	0.00	0.00	1,603,420.20000	2,343,758.60000	39.467108	-107.824744	
120.00	0.00	0.00	120.00	0.00	0.00	1,603,420.20000	2,343,758.60000	39.467108	-107.824744	
Start Build 3.00										
200.00	2.40	112.59	199.98	-0.64	1.55	1,603,419.51719	2,343,760.12972	39.467106	-107.824738	
400.00	8.40	112.59	399.00	-7.87	18.92	1,603,411.84932	2,343,777.30832	39.467086	-107.824677	
600.00	14.40	112.59	594.96	-23.05	55.40	1,603,395.74437	2,343,813.38884	39.467045	-107.824548	
800.00	20.40	112.59	785.72	-46.01	110.59	1,603,371.37879	2,343,867.97596	39.466982	-107.824352	
873.99	22.62	112.59	854.56	-56.43	135.64	1,603,360.32175	2,343,892.74744	39.466953	-107.824263	
Hold 22.62° Inc, 112.59° Az										
1,000.00	22.62	112.59	970.87	-75.04	180.39	1,603,340.56855	2,343,937.00126	39.466902	-107.824105	
1,100.00	22.62	112.59	1,063.18	-89.82	215.90	1,603,324.89239	2,343,972.12114	39.466861	-107.823979	
9 5/8"										
1,200.00	22.62	112.59	1,155.49	-104.59	251.41	1,603,309.21622	2,344,007.24102	39.466821	-107.823853	
1,400.00	22.62	112.59	1,340.10	-134.14	322.43	1,603,277.86390	2,344,077.48077	39.466740	-107.823602	
1,600.00	22.62	112.59	1,524.72	-163.68	393.45	1,603,246.51157	2,344,147.72053	39.466658	-107.823350	
1,800.00	22.62	112.59	1,709.34	-193.23	464.48	1,603,215.15925	2,344,217.96029	39.466577	-107.823099	
2,000.00	22.62	112.59	1,893.95	-222.77	535.50	1,603,183.80692	2,344,288.20006	39.466496	-107.822847	
2,200.00	22.62	112.59	2,078.57	-252.32	606.52	1,603,152.45460	2,344,358.43982	39.466415	-107.822596	
2,400.00	22.62	112.59	2,263.18	-281.87	677.54	1,603,121.10227	2,344,428.67957	39.466334	-107.822344	
2,600.00	22.62	112.59	2,447.80	-311.41	748.56	1,603,089.74994	2,344,498.91933	39.466253	-107.822092	
2,800.00	22.62	112.59	2,632.41	-340.96	819.59	1,603,058.39762	2,344,569.15909	39.466172	-107.821841	
3,000.00	22.62	112.59	2,817.03	-370.51	890.61	1,603,027.04529	2,344,639.39885	39.466091	-107.821589	
3,110.47	22.62	112.59	2,919.00	-386.82	929.84	1,603,009.72797	2,344,678.19548	39.466046	-107.821450	
Top of "G" Sand										
3,200.00	22.62	112.59	3,001.64	-400.05	961.63	1,602,995.69297	2,344,709.63861	39.466010	-107.821338	
3,218.80	22.62	112.59	3,019.00	-402.83	968.31	1,602,992.74547	2,344,716.24198	39.466002	-107.821314	
Base of "G" Sand										
3,400.00	22.62	112.59	3,186.26	-429.60	1,032.65	1,602,964.34065	2,344,779.87837	39.465928	-107.821086	
3,600.00	22.62	112.59	3,370.88	-459.14	1,103.68	1,602,932.98833	2,344,850.11812	39.465847	-107.820835	
3,800.00	22.62	112.59	3,555.49	-488.69	1,174.70	1,602,901.63600	2,344,920.35788	39.465766	-107.820583	
4,000.00	22.62	112.59	3,740.11	-518.24	1,245.72	1,602,870.28368	2,344,990.59764	39.465685	-107.820332	
4,200.00	22.62	112.59	3,924.72	-547.78	1,316.74	1,602,838.93135	2,345,060.83740	39.465604	-107.820080	
4,400.00	22.62	112.59	4,109.34	-577.33	1,387.76	1,602,807.57902	2,345,131.07716	39.465523	-107.819829	
4,600.00	22.62	112.59	4,293.95	-606.87	1,458.79	1,602,776.22670	2,345,201.31692	39.465442	-107.819577	
4,800.00	22.62	112.59	4,478.57	-636.42	1,529.81	1,602,744.87437	2,345,271.55668	39.465361	-107.819325	
4,959.59	22.62	112.59	4,625.88	-660.00	1,586.48	1,602,719.85650	2,345,327.60512	39.465296	-107.819125	
Start Drop -1.50°/100										
5,000.00	22.01	112.59	4,663.27	-665.89	1,600.65	1,602,713.60258	2,345,341.61602	39.465280	-107.819075	
5,200.00	19.01	112.59	4,850.56	-692.81	1,665.35	1,602,685.04002	2,345,405.60576	39.465206	-107.818845	
5,400.00	16.01	112.59	5,041.27	-715.92	1,720.91	1,602,660.51187	2,345,460.55708	39.465142	-107.818649	
5,600.00	13.01	112.59	5,234.86	-735.17	1,767.19	1,602,640.08534	2,345,506.31938	39.465089	-107.818485	
5,741.21	10.90	112.59	5,373.00	-746.41	1,794.19	1,602,628.16468	2,345,533.02567	39.465059	-107.818389	
Mesaverde										
5,800.00	10.01	112.59	5,430.82	-750.50	1,804.04	1,602,623.81642	2,345,542.76722	39.465047	-107.818354	
6,000.00	7.01	112.59	5,628.59	-761.88	1,831.37	1,602,611.74972	2,345,569.80070	39.465016	-107.818257	
6,200.00	4.01	112.59	5,827.64	-769.26	1,849.11	1,602,603.91830	2,345,587.34572	39.464996	-107.818195	
6,400.00	1.01	112.59	6,027.43	-772.62	1,857.21	1,602,600.34362	2,345,595.35420	39.464987	-107.818166	
6,467.58	0.00	0.00	6,095.00	-772.85	1,857.76	1,602,600.10000	2,345,595.90000	39.464986	-107.818164	
Vertical										
6,600.00	0.00	0.00	6,227.42	-772.85	1,857.76	1,602,600.10000	2,345,595.90000	39.464986	-107.818164	
6,767.58	0.00	0.00	6,395.00	-772.85	1,857.76	1,602,600.10000	2,345,595.90000	39.464986	-107.818164	
Top Gas - Approx. Top Gas										

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 424-6 - Slot A03
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
Project:	RU 06-07S-093W	MD Reference:	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
Site:	RU 13-6 Pad	North Reference:	True
Well:	RU 424-6	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 17Jul14 mab		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,800.00	0.00	0.00	6,427.42	-772.85	1,857.76	1,602,600.10000	2,345,595.90000	39.464986	-107.818164
7,000.00	0.00	0.00	6,627.42	-772.85	1,857.76	1,602,600.10000	2,345,595.90000	39.464986	-107.818164
7,200.00	0.00	0.00	6,827.42	-772.85	1,857.76	1,602,600.10000	2,345,595.90000	39.464986	-107.818164
7,400.00	0.00	0.00	7,027.42	-772.85	1,857.76	1,602,600.10000	2,345,595.90000	39.464986	-107.818164
7,600.00	0.00	0.00	7,227.42	-772.85	1,857.76	1,602,600.10000	2,345,595.90000	39.464986	-107.818164
7,800.00	0.00	0.00	7,427.42	-772.85	1,857.76	1,602,600.10000	2,345,595.90000	39.464986	-107.818164
8,000.00	0.00	0.00	7,627.42	-772.85	1,857.76	1,602,600.10000	2,345,595.90000	39.464986	-107.818164
8,200.00	0.00	0.00	7,827.42	-772.85	1,857.76	1,602,600.10000	2,345,595.90000	39.464986	-107.818164
8,400.00	0.00	0.00	8,027.42	-772.85	1,857.76	1,602,600.10000	2,345,595.90000	39.464986	-107.818164
8,508.58	0.00	0.00	8,136.00	-772.85	1,857.76	1,602,600.10000	2,345,595.90000	39.464986	-107.818164
Cameo Coals									
8,600.00	0.00	0.00	8,227.42	-772.85	1,857.76	1,602,600.10000	2,345,595.90000	39.464986	-107.818164
8,800.00	0.00	0.00	8,427.42	-772.85	1,857.76	1,602,600.10000	2,345,595.90000	39.464986	-107.818164
9,000.00	0.00	0.00	8,627.42	-772.85	1,857.76	1,602,600.10000	2,345,595.90000	39.464986	-107.818164
9,200.00	0.00	0.00	8,827.42	-772.85	1,857.76	1,602,600.10000	2,345,595.90000	39.464986	-107.818164
9,210.58	0.00	0.00	8,838.00	-772.85	1,857.76	1,602,600.10000	2,345,595.90000	39.464986	-107.818164
Coal D									
9,367.58	0.00	0.00	8,995.00	-772.85	1,857.76	1,602,600.10000	2,345,595.90000	39.464986	-107.818164
Rollins SS									
9,400.00	0.00	0.00	9,027.42	-772.85	1,857.76	1,602,600.10000	2,345,595.90000	39.464986	-107.818164
9,517.58	0.00	0.00	9,145.00	-772.85	1,857.76	1,602,600.10000	2,345,595.90000	39.464986	-107.818164
TD at 9517.58 - TD									

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (bearing)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Top Gas (50' Radius) RL - plan hits target center - Circle (radius 50.00)	0.00	0.00	6,395.00	-772.85	1,857.76	1,602,600.10000	2,345,595.90000	39.464986	-107.818164

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,100.00	1,063.18	9 5/8"	9.625	13.500	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 424-6 - Slot A03
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
Project:	RU 06-07S-093W	MD Reference:	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
Site:	RU 13-6 Pad	North Reference:	True
Well:	RU 424-6	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 17Jul14 mab		

Formations						
	Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)
	3,110.47	2,919.00	Top of "G" Sand			
	3,218.80	3,019.00	Base of "G" Sand			
	5,741.21	5,373.00	Mesaverde			
	6,767.58	6,395.00	Approx. Top Gas			
	8,508.58	8,136.00	Cameo Coals			
	9,210.58	8,838.00	Coal D			
	9,367.58	8,995.00	Rollins SS			
	9,517.58	9,145.00	TD			

Plan Annotations					
	Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		
			+N/-S (usft)	+E/-W (usft)	Comment
	120.00	120.00	0.00	0.00	Start Build 3.00
	873.99	854.56	-56.43	135.64	Hold 22.62° Inc, 112.59° Az
	4,959.59	4,625.88	-660.00	1,586.48	Start Drop -1.50°/100
	6,467.58	6,095.00	-772.85	1,857.76	Vertical
	6,767.58	6,395.00	-772.85	1,857.76	Top Gas
	9,517.58	9,145.00	-772.85	1,857.76	TD at 9517.58