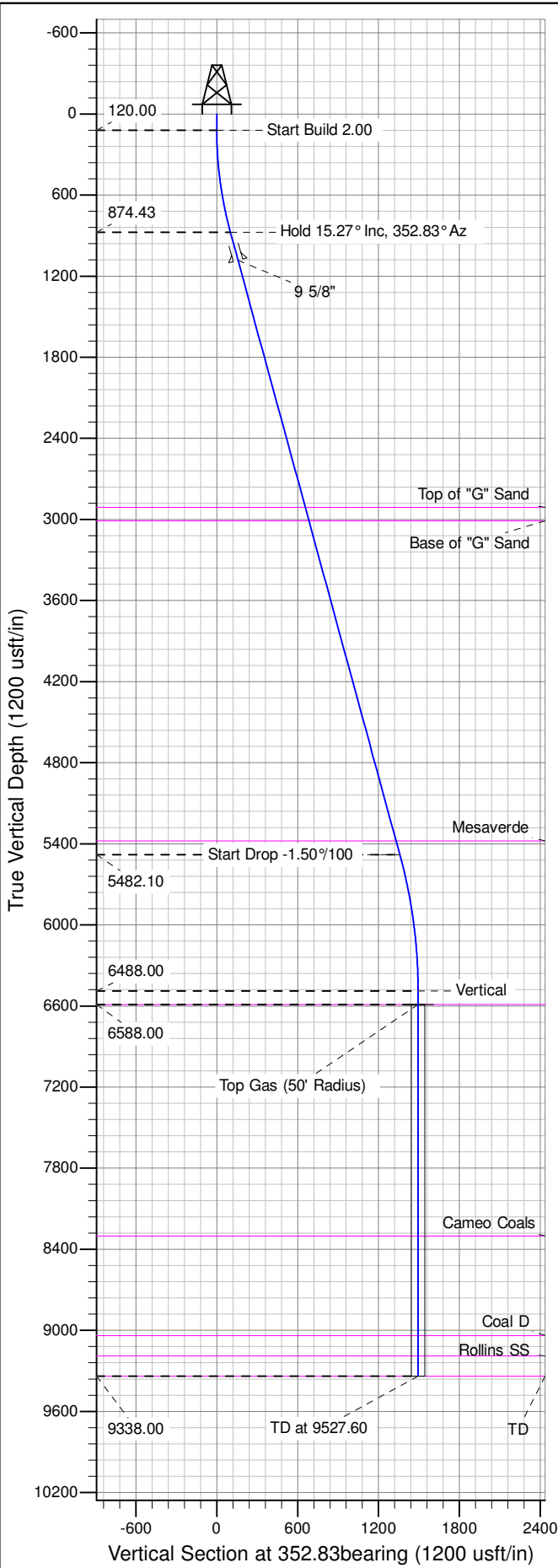
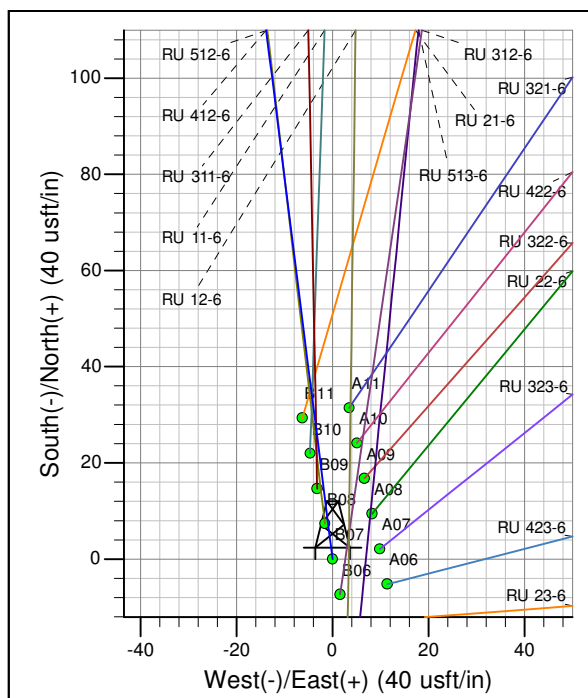
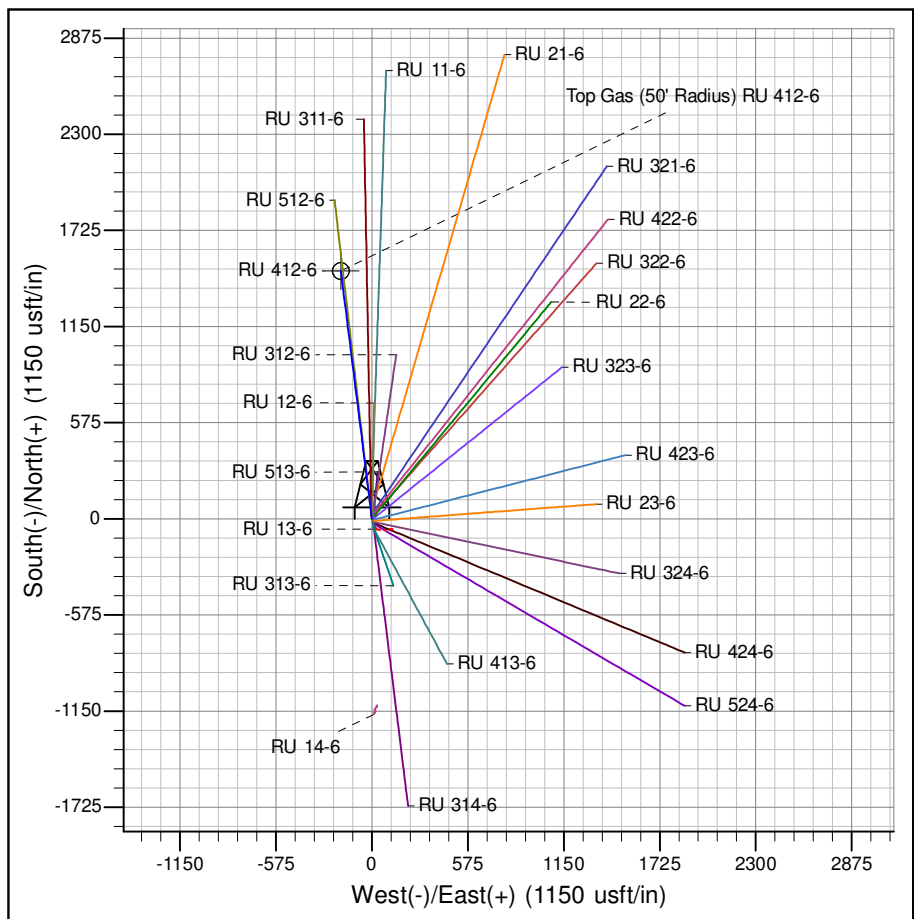




Well Name: RU 412-6
Surface Location: RU 13-6 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 6985.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 1603447.80000 2343743.10000 39.467182 -107.824801 B07
KELLY BUSHING @ 7011.00usft (Nabors 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 2.00	
874.43	883.43	15.27	352.83	100.33	-12.62	101.12	101.12	Hold 15.27° Inc, 352.83° Az	
5482.10	5659.69	15.27	352.83	1348.31	-169.57	1358.93	1358.93	Start Drop -1.50%/100	
6488.00	6677.60	0.00	0.00	1482.08	-186.39	1493.76	1493.76	Vertical	
6588.00	6777.60	0.00	0.00	1482.08	-186.39	1493.76	1493.76	Top Gas	
9338.00	9527.60	0.00	0.00	1482.08	-186.39	1493.76	1493.76	TD at 9527.60	



Azimuths to True North
Magnetic North: 9.87°

Magnetic Field
Strength: 51936.7snT
Dip Angle: 65.66°
Date: 7/17/2014
Model: IGRF2010

Project: RU 06-07S-093W
Site: RU 13-6 Pad
Well: RU 412-6
Design #1 17Jul14 mab

PICEANCE VLY NAD 83

RU 06-07S-093W

RU 13-6 Pad

RU 412-6 - Slot B07

Wellbore #1

Plan: Design #1 17Jul14 mab

Standard Planning Report - Geographic

16 September, 2014

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 412-6 - Slot B07
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 412-6	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 412-6 - Slot B07		
Well Position	+N/-S	0.00 usft	Northing: 1,603,447.80000 usft
	+E/-W	0.00 usft	Easting: 2,343,743.10000 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	39.467182
		Longitude:	-107.824801
		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	352.83

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	
883.43	15.27	352.83	874.43	100.33	-12.62	2.00	2.00	0.00	352.83	
5,659.69	15.27	352.83	5,482.10	1,348.31	-169.57	0.00	0.00	0.00	0.00	
6,677.60	0.00	0.00	6,488.00	1,482.08	-186.39	1.50	-1.50	0.00	180.00	
6,777.60	0.00	0.00	6,588.00	1,482.08	-186.39	0.00	0.00	0.00	0.00	Top Gas (50' Radius)
9,527.60	0.00	0.00	9,338.00	1,482.08	-186.39	0.00	0.00	0.00	0.00	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 412-6 - Slot B07
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 412-6	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	1,603,447.80000	2,343,743.10000	39.467182	-107.824801	
120.00	0.00	0.00	120.00	0.00	0.00	1,603,447.80000	2,343,743.10000	39.467182	-107.824801	
Start Build 2.00										
200.00	1.60	352.83	199.99	1.11	-0.14	1,603,448.91136	2,343,742.98903	39.467186	-107.824802	
400.00	5.60	352.83	399.55	13.57	-1.71	1,603,461.40425	2,343,741.74168	39.467220	-107.824807	
600.00	9.60	352.83	597.76	39.80	-5.01	1,603,487.71816	2,343,739.11436	39.467292	-107.824819	
800.00	13.60	352.83	793.63	79.70	-10.02	1,603,527.72490	2,343,735.11988	39.467401	-107.824837	
883.43	15.27	352.83	874.43	100.33	-12.62	1,603,548.41727	2,343,733.05384	39.467458	-107.824846	
Hold 15.27° Inc, 352.83° Az										
1,000.00	15.27	352.83	986.88	130.79	-16.45	1,603,578.96183	2,343,730.00411	39.467542	-107.824859	
1,100.00	15.27	352.83	1,083.35	156.92	-19.73	1,603,605.16488	2,343,727.38786	39.467613	-107.824871	
9 5/8"										
1,200.00	15.27	352.83	1,179.82	183.05	-23.02	1,603,631.36792	2,343,724.77161	39.467685	-107.824883	
1,400.00	15.27	352.83	1,372.76	235.30	-29.59	1,603,683.77401	2,343,719.53911	39.467828	-107.824906	
1,600.00	15.27	352.83	1,565.70	287.56	-36.16	1,603,736.18010	2,343,714.30661	39.467972	-107.824929	
1,800.00	15.27	352.83	1,758.64	339.82	-42.74	1,603,788.58618	2,343,709.07411	39.468115	-107.824953	
2,000.00	15.27	352.83	1,951.58	392.08	-49.31	1,603,840.99227	2,343,703.84161	39.468259	-107.824976	
2,200.00	15.27	352.83	2,144.52	444.33	-55.88	1,603,893.39836	2,343,698.60912	39.468402	-107.824999	
2,400.00	15.27	352.83	2,337.46	496.59	-62.45	1,603,945.80445	2,343,693.37662	39.468546	-107.825022	
2,600.00	15.27	352.83	2,530.40	548.85	-69.02	1,603,998.21054	2,343,688.14412	39.468689	-107.825046	
2,800.00	15.27	352.83	2,723.34	601.11	-75.60	1,604,050.61663	2,343,682.91162	39.468833	-107.825069	
2,994.52	15.27	352.83	2,911.00	651.93	-81.99	1,604,101.58723	2,343,677.82244	39.468972	-107.825092	
Top of "G" Sand										
3,000.00	15.27	352.83	2,916.29	653.36	-82.17	1,604,103.02273	2,343,677.67912	39.468976	-107.825092	
3,098.18	15.27	352.83	3,011.00	679.02	-85.39	1,604,128.74904	2,343,675.11047	39.469047	-107.825104	
Base of "G" Sand										
3,200.00	15.27	352.83	3,109.23	705.62	-88.74	1,604,155.42882	2,343,672.44662	39.469120	-107.825116	
3,400.00	15.27	352.83	3,302.17	757.88	-95.31	1,604,207.83490	2,343,667.21412	39.469263	-107.825139	
3,600.00	15.27	352.83	3,495.11	810.13	-101.88	1,604,260.24099	2,343,661.98162	39.469407	-107.825162	
3,800.00	15.27	352.83	3,688.05	862.39	-108.46	1,604,312.64708	2,343,656.74912	39.469550	-107.825185	
4,000.00	15.27	352.83	3,880.99	914.65	-115.03	1,604,365.05317	2,343,651.51662	39.469694	-107.825209	
4,200.00	15.27	352.83	4,073.93	966.91	-121.60	1,604,417.45926	2,343,646.28412	39.469837	-107.825232	
4,400.00	15.27	352.83	4,266.87	1,019.16	-128.17	1,604,469.86535	2,343,641.05162	39.469980	-107.825255	
4,600.00	15.27	352.83	4,459.81	1,071.42	-134.74	1,604,522.27144	2,343,635.81912	39.470124	-107.825279	
4,800.00	15.27	352.83	4,652.75	1,123.68	-141.32	1,604,574.67753	2,343,630.58662	39.470267	-107.825302	
5,000.00	15.27	352.83	4,845.69	1,175.94	-147.89	1,604,627.08361	2,343,625.35413	39.470411	-107.825325	
5,200.00	15.27	352.83	5,038.63	1,228.19	-154.46	1,604,679.48970	2,343,620.12163	39.470554	-107.825348	
5,400.00	15.27	352.83	5,231.57	1,280.45	-161.03	1,604,731.89579	2,343,614.88914	39.470698	-107.825372	
5,552.83	15.27	352.83	5,379.00	1,320.38	-166.05	1,604,771.94066	2,343,610.89085	39.470807	-107.825389	
Mesaverde										
5,600.00	15.27	352.83	5,424.51	1,332.71	-167.61	1,604,784.30188	2,343,609.65664	39.470841	-107.825395	
5,659.69	15.27	352.83	5,482.10	1,348.31	-169.57	1,604,799.94364	2,343,608.09488	39.470884	-107.825402	
Start Drop -1.50°/100										
5,800.00	13.16	352.83	5,618.10	1,382.49	-173.87	1,604,834.22650	2,343,604.67190	39.470978	-107.825417	
6,000.00	10.16	352.83	5,813.95	1,422.60	-178.91	1,604,874.45463	2,343,600.65531	39.471088	-107.825435	
6,200.00	7.16	352.83	6,011.64	1,452.49	-182.67	1,604,904.42892	2,343,597.66252	39.471170	-107.825448	
6,400.00	4.16	352.83	6,210.64	1,472.08	-185.13	1,604,924.06721	2,343,595.70173	39.471224	-107.825457	
6,600.00	1.16	352.83	6,410.40	1,481.30	-186.29	1,604,933.31566	2,343,594.77832	39.471249	-107.825461	
6,677.60	0.00	0.00	6,488.00	1,482.08	-186.39	1,604,934.10000	2,343,594.70000	39.471251	-107.825461	
Vertical										
6,777.60	0.00	0.00	6,588.00	1,482.08	-186.39	1,604,934.10000	2,343,594.70000	39.471251	-107.825461	
Top Gas - Approx. Top Gas										

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 412-6 - Slot B07
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 412-6	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	6,610.40	1,482.08	-186.39	1,604,934.10000	2,343,594.70000	39.471251	-107.825461
7,000.00	0.00	0.00	6,810.40	1,482.08	-186.39	1,604,934.10000	2,343,594.70000	39.471251	-107.825461
7,200.00	0.00	0.00	7,010.40	1,482.08	-186.39	1,604,934.10000	2,343,594.70000	39.471251	-107.825461
7,400.00	0.00	0.00	7,210.40	1,482.08	-186.39	1,604,934.10000	2,343,594.70000	39.471251	-107.825461
7,600.00	0.00	0.00	7,410.40	1,482.08	-186.39	1,604,934.10000	2,343,594.70000	39.471251	-107.825461
7,800.00	0.00	0.00	7,610.40	1,482.08	-186.39	1,604,934.10000	2,343,594.70000	39.471251	-107.825461
8,000.00	0.00	0.00	7,810.40	1,482.08	-186.39	1,604,934.10000	2,343,594.70000	39.471251	-107.825461
8,200.00	0.00	0.00	8,010.40	1,482.08	-186.39	1,604,934.10000	2,343,594.70000	39.471251	-107.825461
8,400.00	0.00	0.00	8,210.40	1,482.08	-186.39	1,604,934.10000	2,343,594.70000	39.471251	-107.825461
8,491.60	0.00	0.00	8,302.00	1,482.08	-186.39	1,604,934.10000	2,343,594.70000	39.471251	-107.825461
Cameo Coals									
8,600.00	0.00	0.00	8,410.40	1,482.08	-186.39	1,604,934.10000	2,343,594.70000	39.471251	-107.825461
8,800.00	0.00	0.00	8,610.40	1,482.08	-186.39	1,604,934.10000	2,343,594.70000	39.471251	-107.825461
9,000.00	0.00	0.00	8,810.40	1,482.08	-186.39	1,604,934.10000	2,343,594.70000	39.471251	-107.825461
9,200.00	0.00	0.00	9,010.40	1,482.08	-186.39	1,604,934.10000	2,343,594.70000	39.471251	-107.825461
9,229.60	0.00	0.00	9,040.00	1,482.08	-186.39	1,604,934.10000	2,343,594.70000	39.471251	-107.825461
Coal D									
9,377.60	0.00	0.00	9,188.00	1,482.08	-186.39	1,604,934.10000	2,343,594.70000	39.471251	-107.825461
Rollins SS									
9,400.00	0.00	0.00	9,210.40	1,482.08	-186.39	1,604,934.10000	2,343,594.70000	39.471251	-107.825461
9,527.60	0.00	0.00	9,338.00	1,482.08	-186.39	1,604,934.10000	2,343,594.70000	39.471251	-107.825461
TD at 9527.60 - TD									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (bearing)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Top Gas (50' Radius) RL	0.00	0.00	6,588.00	1,482.08	-186.39	1,604,934.10000	2,343,594.70000	39.471251	-107.825461
- plan hits target center									
- Point									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,100.00	1,083.35	9 5/8"	9.625	13.500	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 412-6 - Slot B07
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 412-6	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)	
2,994.52	2,911.00	Top of "G" Sand				
3,098.18	3,011.00	Base of "G" Sand				
5,552.83	5,379.00	Mesaverde				
6,777.60	6,588.00	Approx. Top Gas				
8,491.60	8,302.00	Cameo Coals				
9,229.60	9,040.00	Coal D				
9,377.60	9,188.00	Rollins SS				
9,527.60	9,338.00	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 2.00	
883.43	874.43	100.33	-12.62	Hold 15.27° Inc, 352.83° Az	
5,659.69	5,482.10	1,348.31	-169.57	Start Drop -1.50°/100	
6,677.60	6,488.00	1,482.08	-186.39	Vertical	
6,777.60	6,588.00	1,482.08	-186.39	Top Gas	
9,527.60	9,338.00	1,482.08	-186.39	TD at 9527.60	