

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_WETHINGTON PAD

Wethington 8-7

Wethington 8-7

Plan: Wethington 8-7 (wp01)

Standard Planning Report

04 May, 2011



Project: COLORADO NORTHERN ZONE - 83
 Site: WELD_WETHINGTON PAD
 Well: Wethington 8-7
 Wellbore: Wethington 8-7
 Section:
 SHL:
 Design: Wethington 8-7 (wp01)
 Latitude: 40.068788
 Longitude: -104.820455
 GL: 4902.00
 KB: 15' RKB + 4902' GL @ 4917.00ft

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3317.00	3499.18	PRKM TOP
4647.00	4935.48	SX TOP
5162.00	5491.64	SHN TOP
7117.00	7513.94	NI A TOP
7457.00	7853.94	CDL TOP
7547.00	7943.94	GH TOP
7897.00	8293.94	J TOP



Azimuths to True North
 Magnetic North: 8.88°

Magnetic Field
 Strength: 52962.7snT
 Dip Angle: 66.78°
 Date: 5/3/2011
 Model: IGRF2010

WELL DETAILS: Wethington 8-7

+N/-S	+E/-W	Northing	Ground Level: Easting	4902.00 Latitude	Longitude	Slot
0.00	0.00	1268633.30	3190183.08	40.068788	-104.820455	

CASING DETAILS

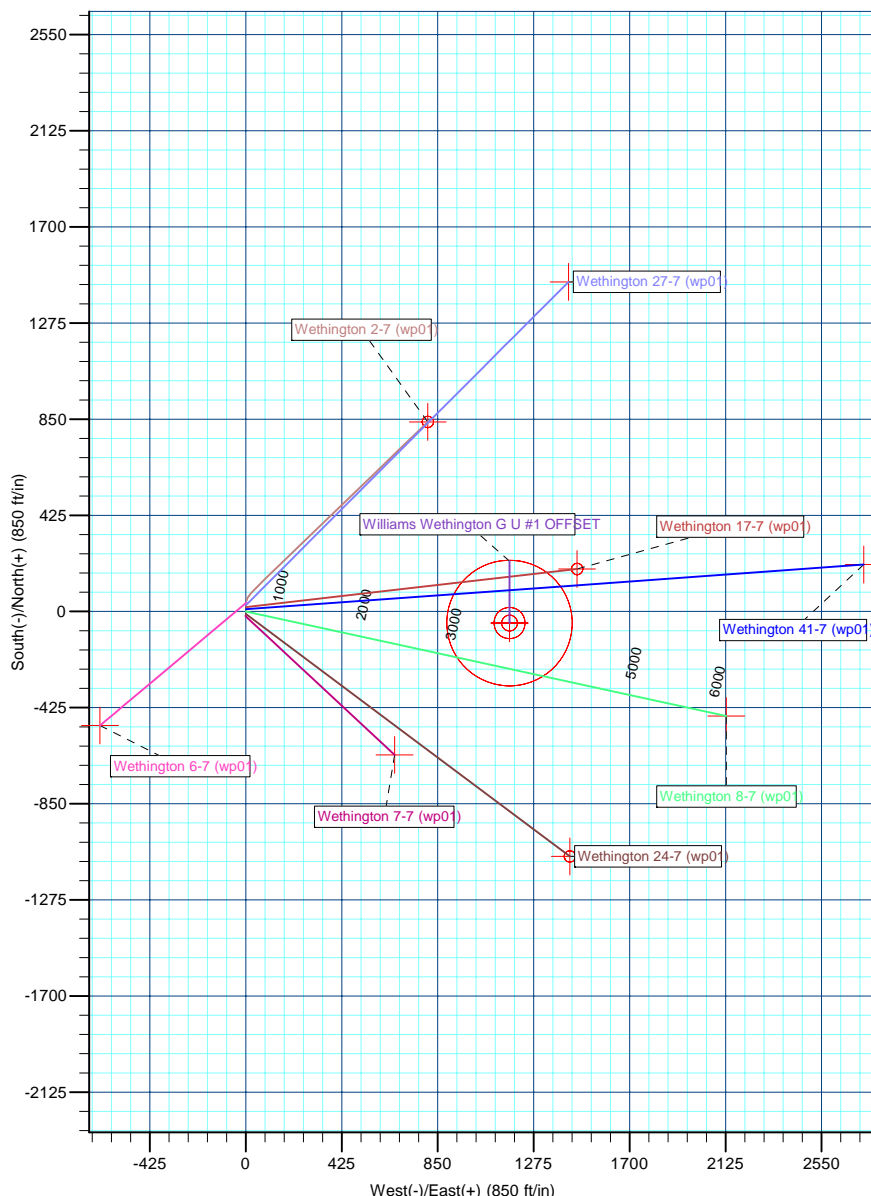
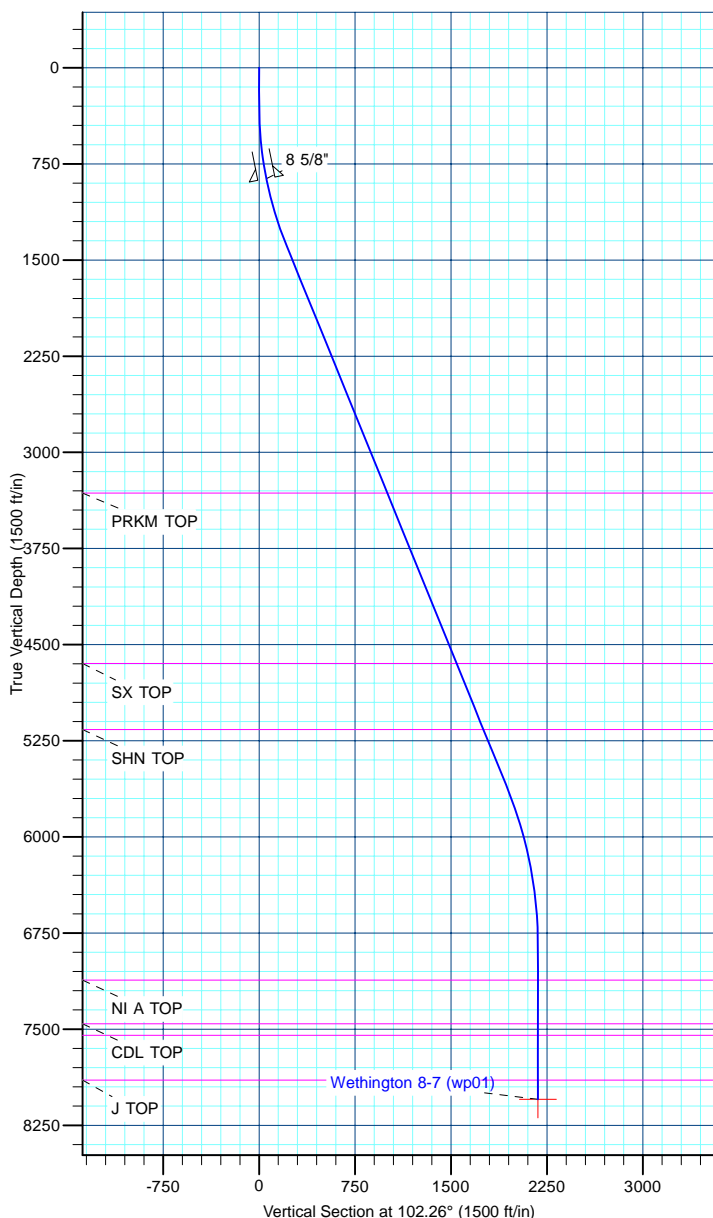
TVD	MD	Name	Size
865.00	868.73	8 5/8"	8-5/8

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape Point
Wethington 8-7 BHL	8047.00	-462.53	2129.02	1268187.10	3192315.59	40.067518	-104.812848	

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00
1409.07	22.18	102.26	1381.58	-45.01	207.18	2.00	102.26	212.01
5976.43	22.18	102.26	5610.91	-411.09	1892.24	0.00	0.00	1936.38
7243.94	0.00	0.00	6847.00	-462.53	2129.02	1.75	180.00	2178.68
8443.94	0.00	0.00	8047.00	-462.53	2129.02	0.00	0.00	2178.68



Database:	edm5000p	Local Co-ordinate Reference:	Well Wethington 8-7
Company:	US ROCKIES REGION PLANNING	TVD Reference:	15' RKB + 4902' GL @ 4917.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	15' RKB + 4902' GL @ 4917.00ft
Site:	WELD_WETHINGTON PAD	North Reference:	True
Well:	Wethington 8-7	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wethington 8-7		
Design:	Wethington 8-7 (wp01)		

Project	COLORADO NORTHERN ZONE - 83		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		WELD_WETHINGTON PAD			
Site Position:		Northing:	1,268,683.25 ft	Latitude:	40.068925
From:	Lat/Long	Easting:	3,190,186.90 ft	Longitude:	-104.820440
Position Uncertainty:	0.00 ft	Slot Radius:	0 "	Grid Convergence:	0.44 °

Well	Wethington 8-7					
Well Position	+N-S	-49.92 ft	Northing:	1,268,633.30 ft	Latitude:	40.068788
	+E-W	-4.20 ft	Easting:	3,190,183.09 ft	Longitude:	-104.820455
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,902.00 ft

Wellbore	Wethington 8-7				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/3/2011	8.88	66.78	52,963

Design	Wethington 8-7 (wp01)			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	102.26

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	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,409.07	22.18	102.26	1,381.58	-45.01	207.18	2.00	2.00	0.00	102.26	
5,976.43	22.18	102.26	5,610.91	-411.09	1,892.24	0.00	0.00	0.00	0.00	
7,243.94	0.00	0.00	6,847.00	-462.53	2,129.02	1.75	-1.75	0.00	180.00	
8,443.94	0.00	0.00	8,047.00	-462.53	2,129.02	0.00	0.00	0.00	0.00	Wethington 8-7 BHI

Database:	edm5000p	Local Co-ordinate Reference:	Well Wethington 8-7
Company:	US ROCKIES REGION PLANNING	TVD Reference:	15' RKB + 4902' GL @ 4917.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	15' RKB + 4902' GL @ 4917.00ft
Site:	WELD_WETHINGTON PAD	North Reference:	True
Well:	Wethington 8-7	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wethington 8-7		
Design:	Wethington 8-7 (wp01)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	2.00	102.26	399.98	-0.37	1.71	1.75	2.00	2.00	0.00
500.00	4.00	102.26	499.84	-1.48	6.82	6.98	2.00	2.00	0.00
600.00	6.00	102.26	599.45	-3.33	15.34	15.69	2.00	2.00	0.00
700.00	8.00	102.26	698.70	-5.92	27.24	27.88	2.00	2.00	0.00
800.00	10.00	102.26	797.47	-9.24	42.53	43.52	2.00	2.00	0.00
868.73	11.37	102.26	865.00	-11.95	54.99	56.27	2.00	2.00	0.00
8 5/8"									
900.00	12.00	102.26	895.62	-13.29	61.18	62.60	2.00	2.00	0.00
1,000.00	14.00	102.26	993.06	-18.07	83.16	85.10	2.00	2.00	0.00
1,100.00	16.00	102.26	1,089.64	-23.56	108.45	110.98	2.00	2.00	0.00
1,200.00	18.00	102.26	1,185.27	-29.77	137.02	140.21	2.00	2.00	0.00
1,300.00	20.00	102.26	1,279.82	-36.68	168.83	172.77	2.00	2.00	0.00
1,400.00	22.00	102.26	1,373.17	-44.29	203.85	208.60	2.00	2.00	0.00
1,409.07	22.18	102.26	1,381.58	-45.01	207.18	212.01	2.00	2.00	0.00
1,500.00	22.18	102.26	1,465.77	-52.30	240.73	246.34	0.00	0.00	0.00
1,600.00	22.18	102.26	1,558.37	-60.31	277.62	284.10	0.00	0.00	0.00
1,700.00	22.18	102.26	1,650.97	-68.33	314.52	321.85	0.00	0.00	0.00
1,800.00	22.18	102.26	1,743.57	-76.34	351.41	359.61	0.00	0.00	0.00
1,900.00	22.18	102.26	1,836.17	-84.36	388.30	397.36	0.00	0.00	0.00
2,000.00	22.18	102.26	1,928.77	-92.37	425.20	435.11	0.00	0.00	0.00
2,100.00	22.18	102.26	2,021.37	-100.39	462.09	472.87	0.00	0.00	0.00
2,200.00	22.18	102.26	2,113.97	-108.40	498.98	510.62	0.00	0.00	0.00
2,300.00	22.18	102.26	2,206.57	-116.42	535.88	548.38	0.00	0.00	0.00
2,400.00	22.18	102.26	2,299.17	-124.43	572.77	586.13	0.00	0.00	0.00
2,500.00	22.18	102.26	2,391.77	-132.45	609.66	623.88	0.00	0.00	0.00
2,600.00	22.18	102.26	2,484.37	-140.46	646.56	661.64	0.00	0.00	0.00
2,700.00	22.18	102.26	2,576.97	-148.48	683.45	699.39	0.00	0.00	0.00
2,800.00	22.18	102.26	2,669.56	-156.49	720.34	737.15	0.00	0.00	0.00
2,900.00	22.18	102.26	2,762.16	-164.51	757.24	774.90	0.00	0.00	0.00
3,000.00	22.18	102.26	2,854.76	-172.52	794.13	812.66	0.00	0.00	0.00
3,100.00	22.18	102.26	2,947.36	-180.54	831.02	850.41	0.00	0.00	0.00
3,200.00	22.18	102.26	3,039.96	-188.55	867.92	888.16	0.00	0.00	0.00
3,300.00	22.18	102.26	3,132.56	-196.57	904.81	925.92	0.00	0.00	0.00
3,400.00	22.18	102.26	3,225.16	-204.58	941.70	963.67	0.00	0.00	0.00
3,499.18	22.18	102.26	3,317.00	-212.53	978.30	1,001.12	0.00	0.00	0.00
PRKM TOP									
3,500.00	22.18	102.26	3,317.76	-212.60	978.60	1,001.43	0.00	0.00	0.00
3,600.00	22.18	102.26	3,410.36	-220.61	1,015.49	1,039.18	0.00	0.00	0.00
3,700.00	22.18	102.26	3,502.96	-228.63	1,052.39	1,076.93	0.00	0.00	0.00
3,800.00	22.18	102.26	3,595.56	-236.64	1,089.28	1,114.69	0.00	0.00	0.00
3,900.00	22.18	102.26	3,688.16	-244.66	1,126.17	1,152.44	0.00	0.00	0.00
4,000.00	22.18	102.26	3,780.76	-252.67	1,163.07	1,190.20	0.00	0.00	0.00
4,100.00	22.18	102.26	3,873.36	-260.69	1,199.96	1,227.95	0.00	0.00	0.00
4,200.00	22.18	102.26	3,965.95	-268.71	1,236.85	1,265.70	0.00	0.00	0.00
4,300.00	22.18	102.26	4,058.55	-276.72	1,273.75	1,303.46	0.00	0.00	0.00
4,400.00	22.18	102.26	4,151.15	-284.74	1,310.64	1,341.21	0.00	0.00	0.00
4,500.00	22.18	102.26	4,243.75	-292.75	1,347.53	1,378.97	0.00	0.00	0.00
4,600.00	22.18	102.26	4,336.35	-300.77	1,384.43	1,416.72	0.00	0.00	0.00
4,700.00	22.18	102.26	4,428.95	-308.78	1,421.32	1,454.47	0.00	0.00	0.00
4,800.00	22.18	102.26	4,521.55	-316.80	1,458.21	1,492.23	0.00	0.00	0.00

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Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	15' RKB + 4902' GL @ 4917.00ft
Site:	WELD_WETHINGTON PAD	North Reference:	True
Well:	Wethington 8-7	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wethington 8-7		
Design:	Wethington 8-7 (wp01)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,900.00	22.18	102.26	4,614.15	-324.81	1,495.11	1,529.98	0.00	0.00	0.00
4,935.48	22.18	102.26	4,647.00	-327.65	1,508.20	1,543.38	0.00	0.00	0.00
SX TOP									
5,000.00	22.18	102.26	4,706.75	-332.83	1,532.00	1,567.74	0.00	0.00	0.00
5,100.00	22.18	102.26	4,799.35	-340.84	1,568.89	1,605.49	0.00	0.00	0.00
5,200.00	22.18	102.26	4,891.95	-348.86	1,605.79	1,643.25	0.00	0.00	0.00
5,300.00	22.18	102.26	4,984.55	-356.87	1,642.68	1,681.00	0.00	0.00	0.00
5,400.00	22.18	102.26	5,077.15	-364.89	1,679.57	1,718.75	0.00	0.00	0.00
5,491.64	22.18	102.26	5,162.00	-372.23	1,713.38	1,753.35	0.00	0.00	0.00
SHN TOP									
5,500.00	22.18	102.26	5,169.75	-372.90	1,716.47	1,756.51	0.00	0.00	0.00
5,600.00	22.18	102.26	5,262.34	-380.92	1,753.36	1,794.26	0.00	0.00	0.00
5,700.00	22.18	102.26	5,354.94	-388.93	1,790.26	1,832.02	0.00	0.00	0.00
5,800.00	22.18	102.26	5,447.54	-396.95	1,827.15	1,869.77	0.00	0.00	0.00
5,900.00	22.18	102.26	5,540.14	-404.96	1,864.04	1,907.52	0.00	0.00	0.00
5,976.43	22.18	102.26	5,610.91	-411.09	1,892.24	1,936.38	0.00	0.00	0.00
6,000.00	21.77	102.26	5,632.77	-412.96	1,900.86	1,945.20	1.75	-1.75	0.00
6,100.00	20.02	102.26	5,726.19	-420.53	1,935.71	1,980.86	1.75	-1.75	0.00
6,200.00	18.27	102.26	5,820.66	-427.49	1,967.75	2,013.65	1.75	-1.75	0.00
6,300.00	16.52	102.26	5,916.08	-433.84	1,996.97	2,043.55	1.75	-1.75	0.00
6,400.00	14.77	102.26	6,012.38	-439.56	2,023.32	2,070.51	1.75	-1.75	0.00
6,500.00	13.02	102.26	6,109.45	-444.66	2,046.78	2,094.52	1.75	-1.75	0.00
6,600.00	11.27	102.26	6,207.20	-449.13	2,067.34	2,115.56	1.75	-1.75	0.00
6,700.00	9.52	102.26	6,305.56	-452.96	2,084.97	2,133.60	1.75	-1.75	0.00
6,800.00	7.77	102.26	6,404.42	-456.15	2,099.65	2,148.63	1.75	-1.75	0.00
6,900.00	6.02	102.26	6,503.69	-458.70	2,111.38	2,160.63	1.75	-1.75	0.00
7,000.00	4.27	102.26	6,603.29	-460.60	2,120.14	2,169.60	1.75	-1.75	0.00
7,100.00	2.52	102.26	6,703.11	-461.86	2,125.93	2,175.52	1.75	-1.75	0.00
7,200.00	0.77	102.26	6,803.06	-462.46	2,128.73	2,178.39	1.75	-1.75	0.00
7,243.94	0.00	0.00	6,847.00	-462.53	2,129.02	2,178.68	1.75	-1.75	0.00
7,300.00	0.00	0.00	6,903.06	-462.53	2,129.02	2,178.68	0.00	0.00	0.00
7,400.00	0.00	0.00	7,003.06	-462.53	2,129.02	2,178.68	0.00	0.00	0.00
7,500.00	0.00	0.00	7,103.06	-462.53	2,129.02	2,178.68	0.00	0.00	0.00
7,513.94	0.00	0.00	7,117.00	-462.53	2,129.02	2,178.68	0.00	0.00	0.00
NI A TOP									
7,600.00	0.00	0.00	7,203.06	-462.53	2,129.02	2,178.68	0.00	0.00	0.00
7,700.00	0.00	0.00	7,303.06	-462.53	2,129.02	2,178.68	0.00	0.00	0.00
7,800.00	0.00	0.00	7,403.06	-462.53	2,129.02	2,178.68	0.00	0.00	0.00
7,853.94	0.00	0.00	7,457.00	-462.53	2,129.02	2,178.68	0.00	0.00	0.00
CDL TOP									
7,900.00	0.00	0.00	7,503.06	-462.53	2,129.02	2,178.68	0.00	0.00	0.00
7,943.94	0.00	0.00	7,547.00	-462.53	2,129.02	2,178.68	0.00	0.00	0.00
GH TOP									
8,000.00	0.00	0.00	7,603.06	-462.53	2,129.02	2,178.68	0.00	0.00	0.00
8,100.00	0.00	0.00	7,703.06	-462.53	2,129.02	2,178.68	0.00	0.00	0.00
8,200.00	0.00	0.00	7,803.06	-462.53	2,129.02	2,178.68	0.00	0.00	0.00
8,293.94	0.00	0.00	7,897.00	-462.53	2,129.02	2,178.68	0.00	0.00	0.00
J TOP									
8,300.00	0.00	0.00	7,903.06	-462.53	2,129.02	2,178.68	0.00	0.00	0.00
8,400.00	0.00	0.00	8,003.06	-462.53	2,129.02	2,178.68	0.00	0.00	0.00
8,443.94	0.00	0.00	8,047.00	-462.53	2,129.02	2,178.68	0.00	0.00	0.00
Wethington 8-7 BHL									

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Company:	US ROCKIES REGION PLANNING	TVD Reference:	15' RKB + 4902' GL @ 4917.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	15' RKB + 4902' GL @ 4917.00ft
Site:	WELD_WETHINGTON PAD	North Reference:	True
Well:	Wethington 8-7	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wethington 8-7		
Design:	Wethington 8-7 (wp01)		

Design Targets

Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- Shape									
Wethington 8-7 BHL	0.00	0.00	8,047.00	-462.53	2,129.02	1,268,187.10	3,192,315.59	40.067518	-104.812848
- plan hits target center									
- Point									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
868.73	865.00	8 5/8"	8-5/8	11

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,499.18	3,317.00	PRKM TOP			
4,935.48	4,647.00	SX TOP			
5,491.64	5,162.00	SHN TOP			
7,513.94	7,117.00	NI A TOP			
7,853.94	7,457.00	CDL TOP			
7,943.94	7,547.00	GH TOP			
8,293.94	7,897.00	J TOP			

US ROCKIES REGION PLANNING

**COLORADO NORTHERN ZONE - 83
WELD_WETHINGTON PAD
Wethington 8-7**

**Wethington 8-7
Wethington 8-7 (wp01)**

Anticollision Summary Report

04 May, 2011



APC
Anticollision Summary Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well Wethington 8-7
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	15' RKB + 4902' GL @ 4917.00ft
Reference Site:	WELD_WETHINGTON PAD	MD Reference:	15' RKB + 4902' GL @ 4917.00ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Wethington 8-7	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wethington 8-7	Database:	edm5000p
Reference Design:	Wethington 8-7 (wp01)	Offset TVD Reference:	Offset Datum

Reference	Wethington 8-7 (wp01)		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD + Stations Interval 25.00ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,000.00 ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date 5/4/2011				
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.00	8,443.94	Wethington 8-7 (wp01) (Wethington 8-7)	MWD	MWD - Standard	

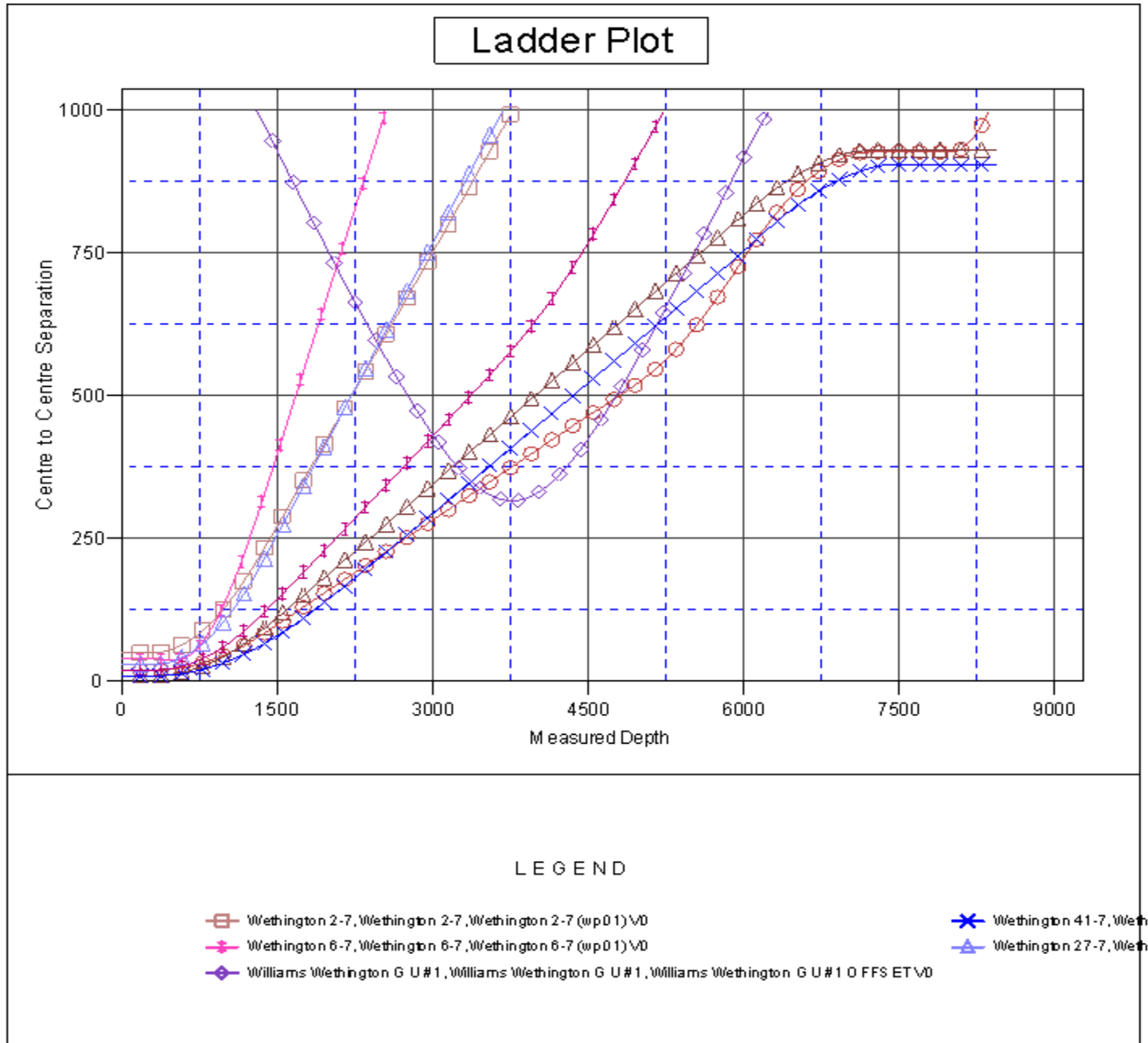
Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
WELD_WETHINGTON PAD						
Wethington 17-7 - Wethington 17-7 - Wethington 17-7 (w	300.00	300.00	19.74	18.65	18.107	CC
Wethington 17-7 - Wethington 17-7 - Wethington 17-7 (w	325.00	324.97	19.77	18.58	16.526	ES
Wethington 17-7 - Wethington 17-7 - Wethington 17-7 (w	4,300.00	4,272.75	441.50	387.48	8.173	SF
Wethington 24-7 - Wethington 24-7 - Wethington 24-7 (w	300.00	300.00	10.23	9.14	9.388	CC
Wethington 24-7 - Wethington 24-7 - Wethington 24-7 (w	325.00	324.95	10.28	9.08	8.607	ES
Wethington 24-7 - Wethington 24-7 - Wethington 24-7 (w	525.00	524.51	13.81	11.77	6.758	SF
Wethington 2-7 - Wethington 2-7 - Wethington 2-7 (wp01	300.00	300.00	50.09	49.00	45.946	CC, ES
Wethington 2-7 - Wethington 2-7 - Wethington 2-7 (wp01	750.00	741.74	85.39	82.20	26.701	SF
Wethington 27-7 - Wethington 27-7 - Wethington 27-7 (w	300.00	300.00	29.97	28.88	27.495	CC
Wethington 27-7 - Wethington 27-7 - Wethington 27-7 (w	325.00	324.80	30.07	28.87	25.103	ES
Wethington 27-7 - Wethington 27-7 - Wethington 27-7 (w	575.00	572.25	41.91	39.60	18.132	SF
Wethington 41-7 - Wethington 41-7 - Wethington 41-7 (w	300.00	300.00	9.87	8.78	9.051	CC
Wethington 41-7 - Wethington 41-7 - Wethington 41-7 (w	350.00	349.97	9.99	8.69	7.669	ES
Wethington 41-7 - Wethington 41-7 - Wethington 41-7 (w	625.00	624.74	15.11	12.54	5.880	SF
Wethington 6-7 - Wethington 6-7 - Wethington 6-7 (wp01	501.72	502.90	37.73	35.80	19.524	CC, ES
Wethington 6-7 - Wethington 6-7 - Wethington 6-7 (wp01	600.00	600.29	40.77	38.39	17.148	SF
Wethington 7-7 - Wethington 7-7 - Wethington 7-7 (wp01	300.00	300.00	20.11	19.02	18.447	CC
Wethington 7-7 - Wethington 7-7 - Wethington 7-7 (wp01	325.00	324.89	20.16	18.97	16.891	ES
Wethington 7-7 - Wethington 7-7 - Wethington 7-7 (wp01	650.00	648.13	30.77	28.11	11.565	SF
Williams Wethington G U #1 - Williams Wethington G U #	3,763.94	3,538.68	316.35	292.78	13.424	CC
Williams Wethington G U #1 - Williams Wethington G U #	3,775.00	3,548.88	316.38	292.71	13.367	ES
Williams Wethington G U #1 - Williams Wethington G U #	3,925.00	3,687.28	322.39	297.61	13.009	SF

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well Wethington 8-7
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	15' RKB + 4902' GL @ 4917.00ft
Reference Site:	WELD_WETHINGTON PAD	MD Reference:	15' RKB + 4902' GL @ 4917.00ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Wethington 8-7	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wethington 8-7	Database:	edm5000p
Reference Design:	Wethington 8-7 (wp01)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to 15' RKB + 4902' GL @ 4917.00ft
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: Wethington 8-7
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.44°



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well Wethington 8-7
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	15' RKB + 4902' GL @ 4917.00ft
Reference Site:	WELD_WETHINGTON PAD	MD Reference:	15' RKB + 4902' GL @ 4917.00ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Wethington 8-7	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wethington 8-7	Database:	edm5000p
Reference Design:	Wethington 8-7 (wp01)	Offset TVD Reference:	Offset Datum

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Coordinate System is US State Plane 1983, Colorado Northern Zone
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