



SHELL E&P

MOFFAT COUNTY, CO

HAMILTON 2-29

HAMILTON 2-29

HAMILTON 2-29

Plan: PLAN 4R1

Standard Planning Report

07 July, 2013





Project: MOFFAT COUNTY, CO
 Site: HAMILTON PAD
 Well: HAMILTON 2-29
 Wellbore: HAMILTON 2-29
 Design: Design #4R1
 Latitude: 40° 21' 16.130 N
 Longitude: 107° 37' 17.090 W
 GL: 6343.00
 KB: WELL @ 6354.00ft (Original Well Elev)



Weatherford®

WELLBORE TARGET DETAILS (LAT/LONG)

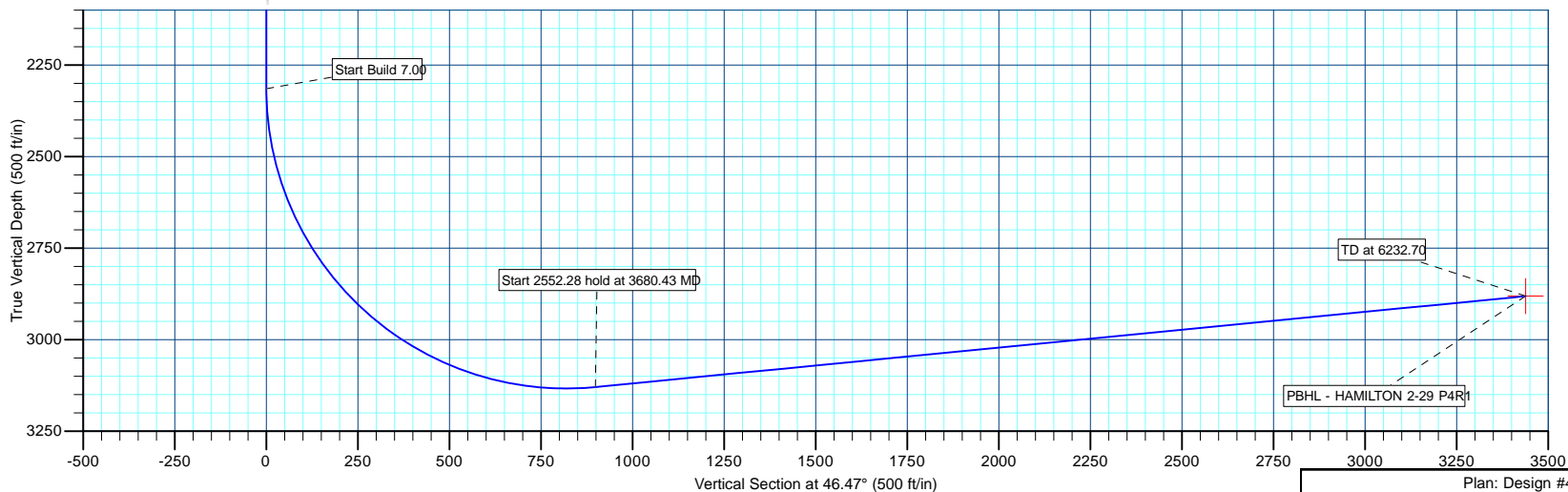
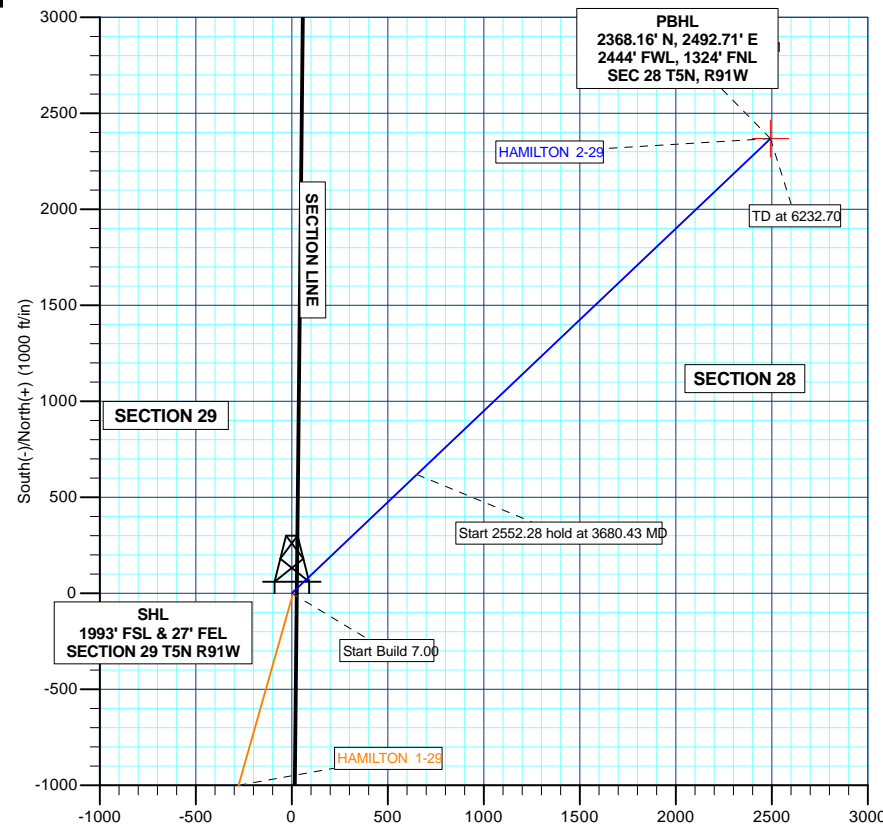
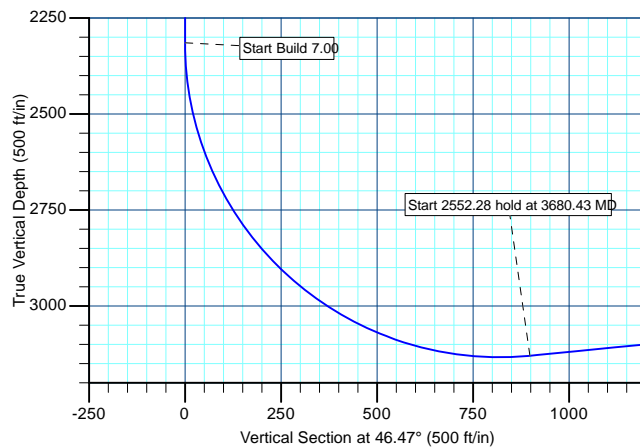
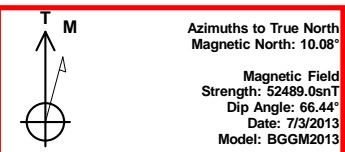
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape Point
PBHL - HAMILTON 2-29 P4R1	2881.46	2368.16	2492.71	40° 21' 39.531 N	107° 36' 44.888 W	

WELL DETAILS: HAMILTON 2-29

+N/-S	+E/-W	Northing	Ground Level: Easting	6343.00 Latitude	Longitude	Slot
0.00	0.00	1379049.71	2408823.95	40° 21' 16.130 N	107° 37' 17.090 W	

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2315.00	0.00	0.00	2315.00	0.00	0.00	0.00	0.00	0.00	Start Build 7.00
3680.43	95.58	46.47	3129.63	618.58	651.11	7.00	46.47	898.10	Start 2552.28 hold at 3680.43 MD
6232.70	95.58	46.47	2881.46	2368.16	2492.71	0.00	0.00	3438.28	TD at 6232.70



Plan: Design #4R1 (HAMILTON 2-29/HAMILTON 2-29)

Created By: MATT MAYDEW Date: 17:48, July 07 2013



SHELL E&P

**MOFFAT COUNTY, CO
HAMILTON PAD
HAMILTON 2-29**

HAMILTON 2-29

Plan: Design #4R1

Standard Planning Report

07 July, 2013





Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well HAMILTON 2-29
Company:	SHELL E&P	TVD Reference:	WELL @ 6354.00ft (Original Well Elev)
Project:	MOFFAT COUNTY, CO	MD Reference:	WELL @ 6354.00ft (Original Well Elev)
Site:	HAMILTON PAD	North Reference:	True
Well:	HAMILTON 2-29	Survey Calculation Method:	Minimum Curvature
Wellbore:	HAMILTON 2-29		
Design:	Design #4R1		

Project	MOFFAT COUNTY, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	HAMILTON PAD			
Site Position:		Northing:	1,379,063.61 usft	Latitude: 40° 21' 16.270 N
From:	Lat/Long	Easting:	2,408,835.12 usft	Longitude: 107° 37' 16.950 W
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16"	Grid Convergence: -1.37 °

Well	HAMILTON 2-29			
Well Position	+N/-S	-14.17 ft	Northing:	1,379,049.71 usft
	+E/-W	-10.84 ft	Easting:	2,408,823.95 usft
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft
			Ground Level:	6,343.00 ft

Wellbore	HAMILTON 2-29				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2013	7/3/2013	10.08	66.44	52,489

Design	Design #4R1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	46.47

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(°/100usft)	(°/100usft)	(°/100usft)	(°)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,315.00	0.00	0.00	2,315.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,680.43	95.58	46.47	3,129.63	618.58	651.11	7.00	7.00	0.00	46.47	
6,232.70	95.58	46.47	2,881.46	2,368.16	2,492.71	0.00	0.00	0.00	0.00	PBHL - HAMILTON 2-



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well HAMILTON 2-29
Company:	SHELL E&P	TVD Reference:	WELL @ 6354.00ft (Original Well Elev)
Project:	MOFFAT COUNTY, CO	MD Reference:	WELL @ 6354.00ft (Original Well Elev)
Site:	HAMILTON PAD	North Reference:	True
Well:	HAMILTON 2-29	Survey Calculation Method:	Minimum Curvature
Wellbore:	HAMILTON 2-29		
Design:	Design #4R1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
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	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 7.00									
2,315.00	0.00	0.00	2,315.00	0.00	0.00	0.00	0.00	0.00	0.00
2,350.00	2.45	46.47	2,349.99	0.52	0.54	0.75	7.00	7.00	0.00
2,400.00	5.95	46.47	2,399.85	3.04	3.20	4.41	7.00	7.00	0.00
PBHL - HAMILTON 2-29									
2,450.00	9.45	46.47	2,449.39	7.65	8.05	11.11	7.00	7.00	0.00
2,500.00	12.95	46.47	2,498.43	14.34	15.09	20.82	7.00	7.00	0.00
2,550.00	16.45	46.47	2,546.78	23.08	24.29	33.50	7.00	7.00	0.00
2,600.00	19.95	46.47	2,594.28	33.83	35.61	49.12	7.00	7.00	0.00
2,650.00	23.45	46.47	2,640.73	46.56	49.01	67.60	7.00	7.00	0.00
2,700.00	26.95	46.47	2,685.96	61.22	64.44	88.89	7.00	7.00	0.00
2,750.00	30.45	46.47	2,729.81	77.76	81.85	112.90	7.00	7.00	0.00
2,800.00	33.95	46.47	2,772.11	96.11	101.16	139.54	7.00	7.00	0.00
2,850.00	37.45	46.47	2,812.71	116.20	122.31	168.71	7.00	7.00	0.00
2,900.00	40.95	46.47	2,851.45	137.96	145.22	200.31	7.00	7.00	0.00
2,950.00	44.45	46.47	2,888.19	161.31	169.80	234.21	7.00	7.00	0.00
3,000.00	47.95	46.47	2,922.79	186.17	195.96	270.29	7.00	7.00	0.00
3,050.00	51.45	46.47	2,955.13	212.43	223.60	308.42	7.00	7.00	0.00
3,100.00	54.95	46.47	2,985.07	240.00	252.62	348.45	7.00	7.00	0.00
3,150.00	58.45	46.47	3,012.52	268.78	282.91	390.23	7.00	7.00	0.00
3,200.00	61.95	46.47	3,037.37	298.66	314.37	433.61	7.00	7.00	0.00
3,250.00	65.45	46.47	3,059.52	329.53	346.86	478.43	7.00	7.00	0.00
3,300.00	68.95	46.47	3,078.89	361.27	380.27	524.52	7.00	7.00	0.00
3,350.00	72.45	46.47	3,095.41	393.77	414.48	571.70	7.00	7.00	0.00
3,400.00	75.95	46.47	3,109.02	426.90	449.35	619.80	7.00	7.00	0.00
3,450.00	79.45	46.47	3,119.67	460.54	484.76	668.65	7.00	7.00	0.00
3,500.00	82.95	46.47	3,127.32	494.57	520.58	718.05	7.00	7.00	0.00
3,550.00	86.45	46.47	3,131.94	528.85	556.67	767.83	7.00	7.00	0.00
3,600.00	89.95	46.47	3,133.51	563.27	592.89	817.80	7.00	7.00	0.00
3,650.00	93.45	46.47	3,132.03	597.69	629.12	867.77	7.00	7.00	0.00



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well HAMILTON 2-29
Company:	SHELL E&P	TVD Reference:	WELL @ 6354.00ft (Original Well Elev)
Project:	MOFFAT COUNTY, CO	MD Reference:	WELL @ 6354.00ft (Original Well Elev)
Site:	HAMILTON PAD	North Reference:	True
Well:	HAMILTON 2-29	Survey Calculation Method:	Minimum Curvature
Wellbore:	HAMILTON 2-29		
Design:	Design #4R1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
Start 2552.28 hold at 3680.43 MD									
3,680.43	95.58	46.47	3,129.63	618.58	651.11	898.10	7.00	7.00	0.00
3,700.00	95.58	46.47	3,127.73	631.99	665.23	917.58	0.00	0.00	0.00
3,800.00	95.58	46.47	3,118.01	700.54	737.39	1,017.11	0.00	0.00	0.00
3,900.00	95.58	46.47	3,108.28	769.09	809.54	1,116.63	0.00	0.00	0.00
4,000.00	95.58	46.47	3,098.56	837.64	881.70	1,216.16	0.00	0.00	0.00
4,100.00	95.58	46.47	3,088.83	906.19	953.86	1,315.68	0.00	0.00	0.00
4,200.00	95.58	46.47	3,079.11	974.74	1,026.01	1,415.21	0.00	0.00	0.00
4,300.00	95.58	46.47	3,069.39	1,043.29	1,098.17	1,514.74	0.00	0.00	0.00
4,400.00	95.58	46.47	3,059.66	1,111.84	1,170.32	1,614.26	0.00	0.00	0.00
4,500.00	95.58	46.47	3,049.94	1,180.39	1,242.48	1,713.79	0.00	0.00	0.00
4,600.00	95.58	46.47	3,040.22	1,248.94	1,314.63	1,813.31	0.00	0.00	0.00
4,700.00	95.58	46.47	3,030.49	1,317.49	1,386.79	1,912.84	0.00	0.00	0.00
4,800.00	95.58	46.47	3,020.77	1,386.04	1,458.94	2,012.37	0.00	0.00	0.00
4,900.00	95.58	46.47	3,011.05	1,454.59	1,531.10	2,111.89	0.00	0.00	0.00
5,000.00	95.58	46.47	3,001.32	1,523.14	1,603.25	2,211.42	0.00	0.00	0.00
5,100.00	95.58	46.47	2,991.60	1,591.69	1,675.41	2,310.95	0.00	0.00	0.00
5,200.00	95.58	46.47	2,981.88	1,660.24	1,747.56	2,410.47	0.00	0.00	0.00
5,300.00	95.58	46.47	2,972.15	1,728.79	1,819.72	2,510.00	0.00	0.00	0.00
5,400.00	95.58	46.47	2,962.43	1,797.34	1,891.87	2,609.52	0.00	0.00	0.00
5,500.00	95.58	46.47	2,952.70	1,865.89	1,964.03	2,709.05	0.00	0.00	0.00
5,600.00	95.58	46.47	2,942.98	1,934.44	2,036.18	2,808.58	0.00	0.00	0.00
5,700.00	95.58	46.47	2,933.26	2,002.99	2,108.34	2,908.10	0.00	0.00	0.00
5,800.00	95.58	46.47	2,923.53	2,071.54	2,180.49	3,007.63	0.00	0.00	0.00
5,900.00	95.58	46.47	2,913.81	2,140.09	2,252.65	3,107.15	0.00	0.00	0.00
6,000.00	95.58	46.47	2,904.09	2,208.64	2,324.81	3,206.68	0.00	0.00	0.00
6,100.00	95.58	46.47	2,894.36	2,277.19	2,396.96	3,306.21	0.00	0.00	0.00
6,200.00	95.58	46.47	2,884.64	2,345.74	2,469.12	3,405.73	0.00	0.00	0.00
TD at 6232.70 - PBHL - HAMILTON 2-29 p4 - PBHL - HAMILTON 2-29 P4R1									
6,232.70	95.58	46.47	2,881.46	2,368.16	2,492.71	3,438.28	0.00	0.00	0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL - HAMILTON 2-29 - plan hits target center - Point	0.00	0.00	2,881.46	2,368.16	2,492.71	1,381,357.55	2,411,372.59	40° 21' 39.531 N	107° 36' 44.888 W

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
2,315.00	2,315.00	0.00	0.00	Start Build 7.00
3,680.43	3,129.63	618.58	651.11	Start 2552.28 hold at 3680.43 MD
6,232.70	2,881.46	2,368.16	2,492.71	TD at 6232.70



SHELL E&P

**MOFFAT COUNTY, CO
HAMILTON PAD
HAMILTON 2-29**

**HAMILTON 2-29
Design #4R1**

Anticollision Report

07 July, 2013



Weatherford®



Company:	SHELL E&P	Local Co-ordinate Reference:	Well HAMILTON 2-29
Project:	MOFFAT COUNTY, CO	TVD Reference:	WELL @ 6354.00ft (Original Well Elev)
Reference Site:	HAMILTON PAD	MD Reference:	WELL @ 6354.00ft (Original Well Elev)
Site Error:	0.00 ft	North Reference:	True
Reference Well:	HAMILTON 2-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	HAMILTON 2-29	Database:	EDM 5000.1 Single User Db
Reference Design:	Design #4R1	Offset TVD Reference:	Offset Datum

Reference	Design #4R1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.00ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 769.86 ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	7/7/2013		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	6,232.70	Design #4R1 (HAMILTON 2-29)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
HAMILTON PAD						
HAMILTON 1-29 - HAMILTON 1-29 - Design #5R1	2,280.49	2,281.45	6.56	-3.35	0.662	Level 1, CC, ES, SF

HAMILTON PAD - HAMILTON 1-29 - HAMILTON 1-29 - Design #5R1												Offset Site Error:		0.00 ft
Survey Program: 0-MWD												Offset Well Error:		0.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.00	0.00	0.00	0.00	0.00	0.00	37.42	14.17	10.84	17.84					
100.00	100.00	100.00	100.00	0.10	0.10	37.42	14.17	10.84	17.84	17.64	0.20	89.168		
200.00	200.00	200.00	200.00	0.32	0.32	37.42	14.17	10.84	17.84	17.19	0.65	27.460		
300.00	300.00	300.00	300.00	0.55	0.55	37.42	14.17	10.84	17.84	16.74	1.10	16.229		
400.00	400.00	400.00	400.00	0.77	0.77	37.42	14.17	10.84	17.84	16.29	1.55	11.518		
500.00	500.00	500.00	500.00	1.00	1.00	37.42	14.17	10.84	17.84	15.84	2.00	8.927		
600.00	600.00	600.00	600.00	1.22	1.22	37.42	14.17	10.84	17.84	15.39	2.45	7.287		
700.00	700.00	700.00	700.00	1.45	1.45	37.42	14.17	10.84	17.84	14.94	2.90	6.157		
800.00	800.00	800.00	800.00	1.67	1.67	37.42	14.17	10.84	17.84	14.49	3.35	5.330		
900.00	900.00	900.00	900.00	1.90	1.90	37.42	14.17	10.84	17.84	14.04	3.80	4.699		
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	37.42	14.17	10.84	17.84	13.59	4.25	4.201		
1,100.00	1,100.00	1,100.00	1,100.00	2.35	2.35	37.42	14.17	10.84	17.84	13.14	4.70	3.799		
1,200.00	1,200.00	1,200.00	1,200.00	2.57	2.57	37.42	14.17	10.84	17.84	12.69	5.14	3.467		
1,300.00	1,300.00	1,300.00	1,300.00	2.80	2.80	37.42	14.17	10.84	17.84	12.24	5.59	3.188		
1,400.00	1,400.00	1,400.00	1,400.00	3.02	3.02	37.42	14.17	10.84	17.84	11.79	6.04	2.951		
1,500.00	1,500.00	1,500.00	1,500.00	3.25	3.25	37.42	14.17	10.84	17.84	11.34	6.49	2.747		
1,600.00	1,600.00	1,600.00	1,600.00	3.47	3.47	37.42	14.17	10.84	17.84	10.89	6.94	2.569		
1,700.00	1,700.00	1,700.00	1,700.00	3.70	3.70	37.42	14.17	10.84	17.84	10.44	7.39	2.413		
1,800.00	1,800.00	1,800.00	1,800.00	3.92	3.92	37.42	14.17	10.84	17.84	10.00	7.84	2.275		
1,900.00	1,900.00	1,900.00	1,900.00	4.15	4.15	37.42	14.17	10.84	17.84	9.55	8.29	2.151		
2,000.00	2,000.00	2,000.00	2,000.00	4.37	4.37	37.42	14.17	10.84	17.84	9.10	8.74	2.041		
2,100.00	2,100.00	2,100.15	2,100.15	4.60	4.59	37.47	14.12	10.83	17.79	8.61	9.19	1.937		
2,200.00	2,200.00	2,201.30	2,201.11	4.82	4.77	46.71	8.77	9.31	12.83	3.25	9.59	1.338	Level 3	
2,280.49	2,280.49	2,281.45	2,280.49	5.00	4.92	105.85	-1.79	6.31	6.56	-3.35	9.91	0.662	Level 1, CC, ES, SF	
2,300.00	2,300.00	2,300.61	2,299.33	5.04	4.95	133.77	-5.13	5.36	7.45	-2.53	9.98	0.747	Level 1	
2,400.00	2,399.85	2,395.42	2,391.52	5.27	5.14	139.76	-26.29	-0.64	30.73	20.34	10.39	2.957		

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



Company:	SHELL E&P	Local Co-ordinate Reference:	Well HAMILTON 2-29
Project:	MOFFAT COUNTY, CO	TVD Reference:	WELL @ 6354.00ft (Original Well Elev)
Reference Site:	HAMILTON PAD	MD Reference:	WELL @ 6354.00ft (Original Well Elev)
Site Error:	0.00 ft	North Reference:	True
Reference Well:	HAMILTON 2-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	HAMILTON 2-29	Database:	EDM 5000.1 Single User Db
Reference Design:	Design #4R1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
2,500.00	2,498.43	2,480.70	2,472.56	5.50	5.38	149.63	-51.77	-7.87	74.61	63.94	10.67	6.994	
2,600.00	2,594.28	2,553.39	2,539.85	5.76	5.64	152.54	-78.19	-15.37	134.58	123.76	10.82	12.443	
2,700.00	2,685.96	2,612.26	2,592.92	6.12	5.89	152.72	-102.68	-22.32	207.48	196.63	10.86	19.110	
2,800.00	2,772.11	2,657.43	2,632.68	6.64	6.13	150.81	-123.31	-28.17	290.36	279.48	10.88	26.676	
2,900.00	2,851.45	2,700.00	2,669.32	7.37	6.36	147.17	-144.16	-34.09	380.68	369.60	11.08	34.342	
3,000.00	2,922.79	2,700.00	2,669.32	8.35	6.36	133.12	-144.16	-34.09	475.70	463.30	12.39	38.379	
3,100.00	2,985.07	2,722.15	2,688.04	9.60	6.51	111.33	-155.54	-37.32	573.37	558.21	15.16	37.825	
3,200.00	3,037.37	2,724.77	2,690.24	11.09	6.53	66.17	-156.91	-37.71	672.31	655.91	16.40	40.989	



Company:	SHELL E&P	Local Co-ordinate Reference:	Well HAMILTON 2-29
Project:	MOFFAT COUNTY, CO	TVD Reference:	WELL @ 6354.00ft (Original Well Elev)
Reference Site:	HAMILTON PAD	MD Reference:	WELL @ 6354.00ft (Original Well Elev)
Site Error:	0.00 ft	North Reference:	True
Reference Well:	HAMILTON 2-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	HAMILTON 2-29	Database:	EDM 5000.1 Single User Db
Reference Design:	Design #4R1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 6354.00ft (Original Well Elev)

Offset Depths are relative to Offset Datum

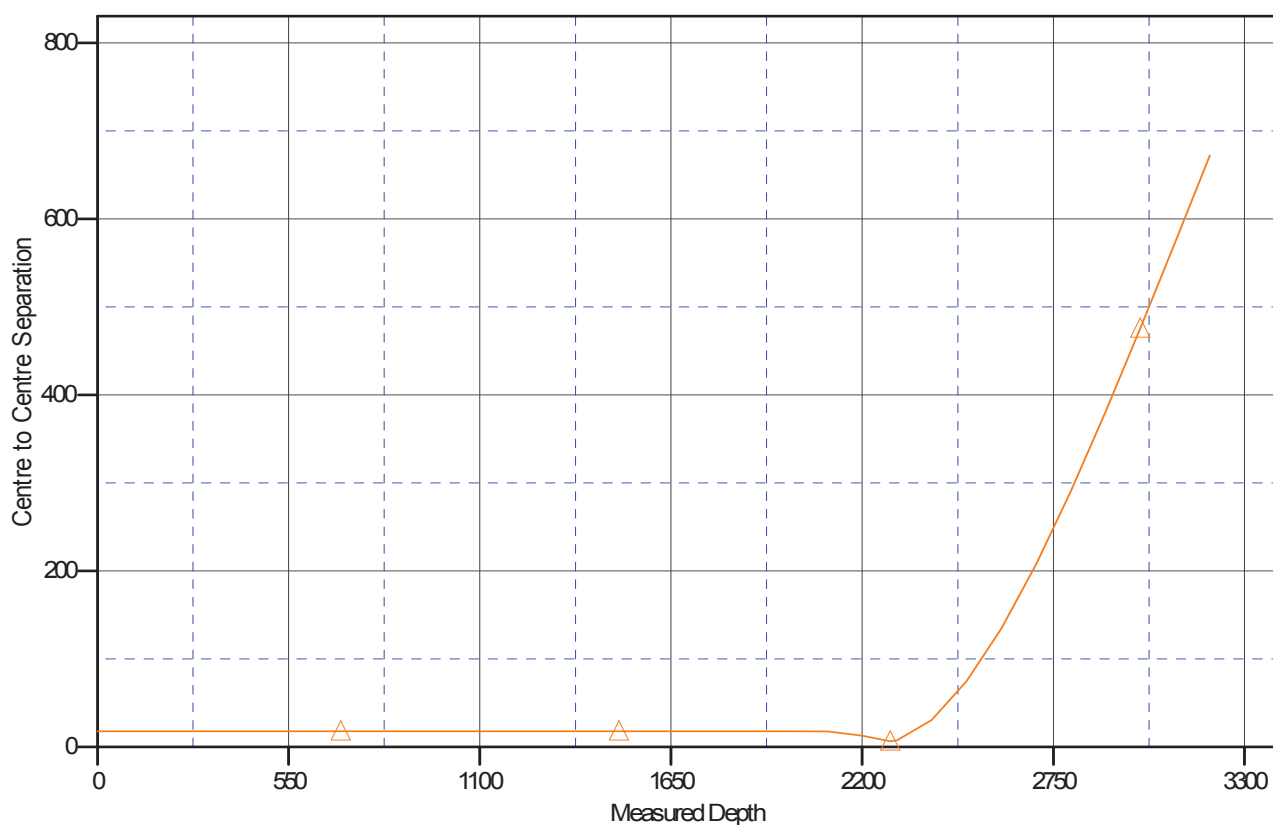
Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: HAMILTON 2-29

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: -1.37°

Ladder Plot



LEGEND

HAMILTON 1-29, HAMILTON 1-29, Design #5R1 V0



Company:	SHELL E&P	Local Co-ordinate Reference:	Well HAMILTON 2-29
Project:	MOFFAT COUNTY, CO	TVD Reference:	WELL @ 6354.00ft (Original Well Elev)
Reference Site:	HAMILTON PAD	MD Reference:	WELL @ 6354.00ft (Original Well Elev)
Site Error:	0.00 ft	North Reference:	True
Reference Well:	HAMILTON 2-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	HAMILTON 2-29	Database:	EDM 5000.1 Single User Db
Reference Design:	Design #4R1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 6354.00ft (Original Well Elev)

Offset Depths are relative to Offset Datum

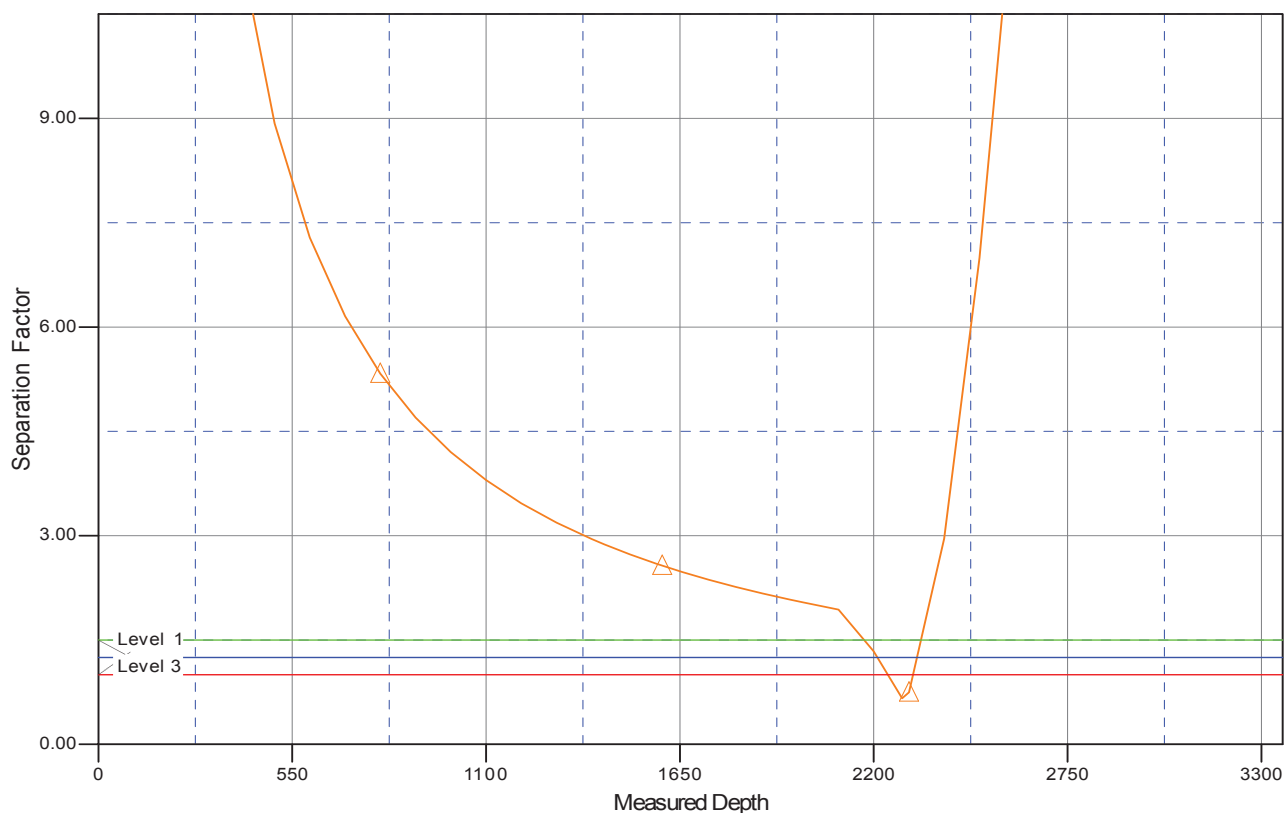
Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: HAMILTON 2-29

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: -1.37°

Separation Factor Plot



LEGEND

HAMILTON 1-29, HAMILTON 1-29, Design #5R1 V0