

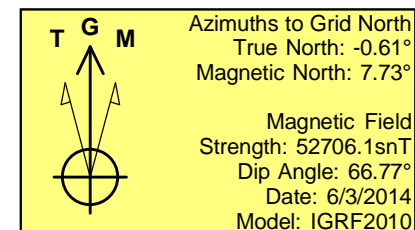
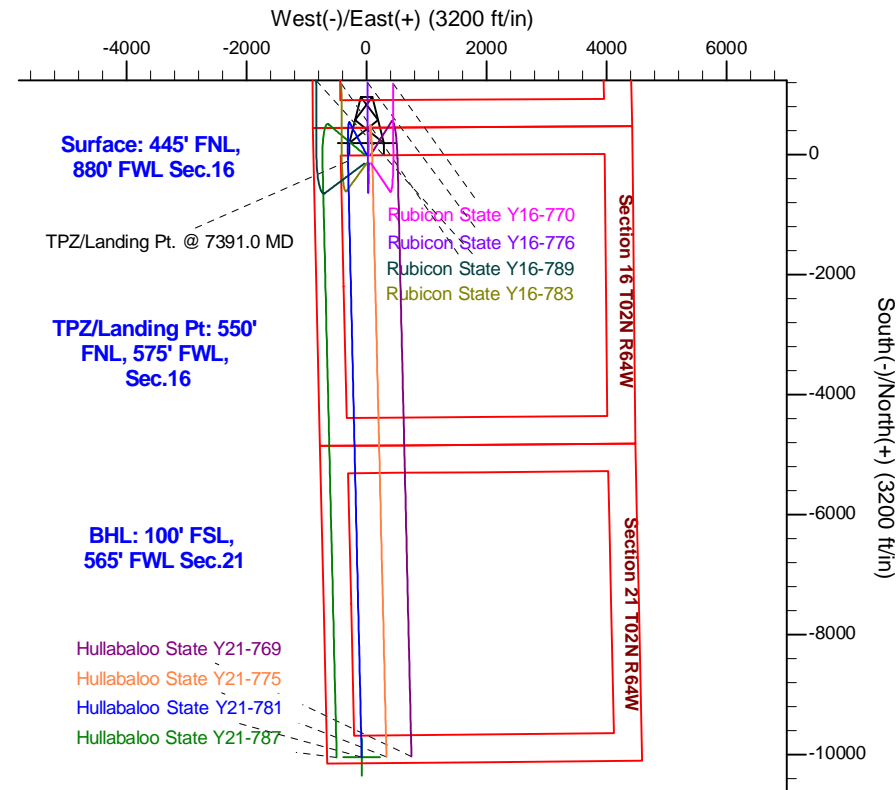
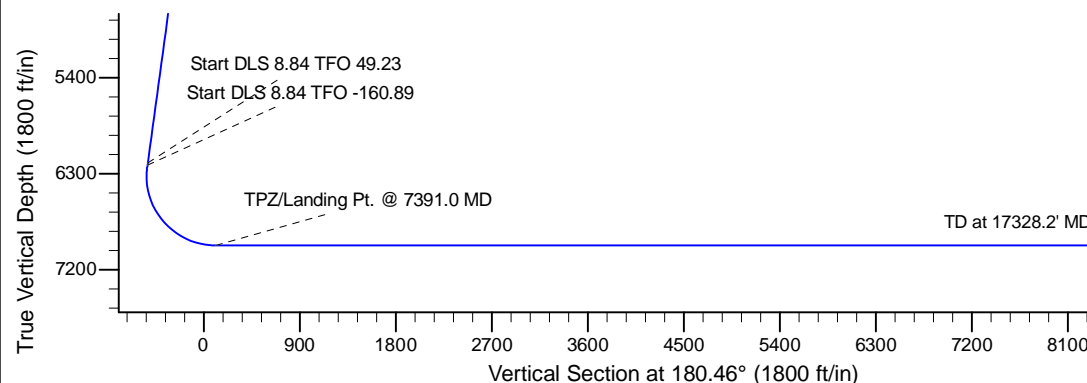
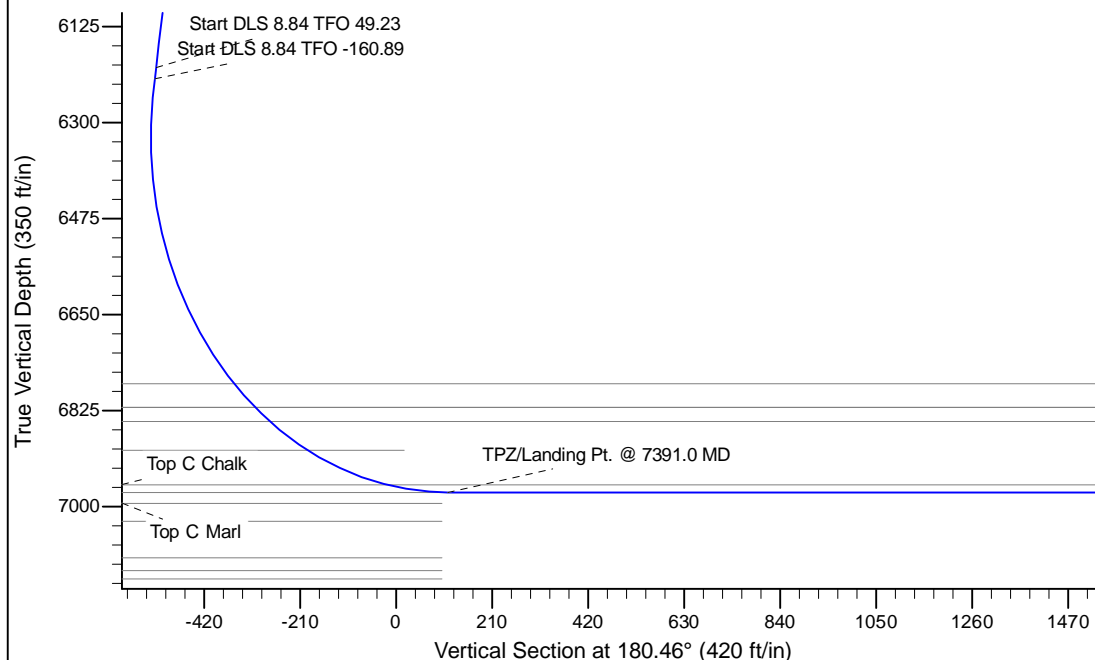
Project: Mustang
 Site: Y Section 16-T2N-R64W Weld County, CO
 Well: Hullabaloo State Y21-781
 Wellbore: Original Drilling
 Design: APD - Rev 0

Northern Region - DJ Basin

Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: Colorado Northern Zone
 System Datum: Mean Sea Level

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	2100.0	0.00	0.00	2100.0	0.0	0.0	0.00	0.00	0.0	
3	2537.5	8.75	332.00	2535.8	29.4	-15.7	2.00	332.00	-29.3	
4	6244.8	8.75	332.00	6200.0	527.4	-280.4	0.00	0.00	-525.1	
5	6265.2	10.01	339.84	6220.1	530.4	-281.8	8.84	49.23	-528.1	
6	7391.0	90.00	178.68	6974.0	-110.0	-310.0	8.84	-160.89	112.5	
7	17328.2	90.00	178.68	6974.0	-10044.6	-81.2	0.00	0.00	10044.9	Hullabaloo State Y21-781 BHL 100'FSL, 565'FWL



WELL DETAILS: Hullabaloo State Y21-781

Ground Level: 4894.0			
Northing	Easting	Latitude	Longitude
0.0	1296891.0351674	3261981.7359613	40.1445600 -104.5628600

Plan: APD - Rev 0 (Hullabaloo State Y21-781/Original Drilling)

Created By: Shailey Jewell Date: 11:19, April 13 2017

OK to submit with 2A as per Noble Drilling
4/13/2017 11:29

Northern Region - DJ Basin

Mustang

Y Section 16

Hullabaloo State Y21-781

Original Drilling

APD - Rev 0

Anticollision Summary Report

13 April, 2017

Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Hullabaloo State Y21-781
Project:	Mustang	TVD Reference:	WELL @ 4924.0ft (Original Well Elev)
Reference Site:	Y Section 16	MD Reference:	WELL @ 4924.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	Grid
Reference Well:	Hullabaloo State Y21-781	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	EDM Produccction
Reference Design:	APD - Rev 0	Offset TVD Reference:	Offset Datum

Reference	APD - Rev 0		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,740.1 ft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	4/13/2017		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	17,328.6	APD - Rev 0 (Original Drilling)		

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Y Section 16						
Hullabaloo State Y21-716 - Original Drilling - APD - Rev						Out of range
Hullabaloo State Y21-726 - Wellbore #1 - Design #1						Out of range
Hullabaloo State Y21-736 - Wellbore #1 - Design #1						Out of range
Hullabaloo State Y21-746 - Wellbore #1 - Design #1						Out of range
Hullabaloo State Y21-756 - Original Drilling - APD - Rev	17,305.8	17,109.9	1,658.5	1,571.7	19.120	CC, ES
Hullabaloo State Y21-756 - Original Drilling - APD - Rev	17,328.6	17,127.6	1,658.6	1,571.8	19.092	SF
Hullabaloo State Y21-763 - Orignal Drilling - APD - Rev 0	17,328.6	17,531.9	1,249.8	1,161.2	14.105	CC, ES, SF
Hullabaloo State Y21-769 - Wellbore #1 - Design #1	1,900.0	1,899.0	72.7	66.1	11.056	CC, ES
Hullabaloo State Y21-769 - Wellbore #1 - Design #1	17,328.6	17,334.1	830.6	742.7	9.450	SF
Hullabaloo State Y21-775 - Wellbore #1 - Design #1	2,100.0	2,100.0	36.3	29.0	4.982	CC, ES
Hullabaloo State Y21-775 - Wellbore #1 - Design #1	17,328.6	17,210.7	419.8	332.3	4.797	SF
Hullabaloo State Y21-787 - Original Drilling - APD - Rev	1,907.7	1,961.7	39.3	32.5	5.781	CC, ES
Hullabaloo State Y21-787 - Original Drilling - APD - Rev	17,328.6	17,336.1	422.6	240.7	2.324	SF
Rubicon State Y16-718 - Original Drilling - APD - Rev 0						Out of range
Rubicon State Y16-725 - Original Drilling - APD - Rev 0						Out of range
Rubicon State Y16-731 - Original Drilling - APD - Rev 0						Out of range
Rubicon State Y16-738 - Original Drilling - APD - Rev 0						Out of range
Rubicon State Y16-744 - Original Drilling - APD - Rev 0						Out of range
Rubicon State Y16-751 - Original Drilling - APD - Rev 0						Out of range
Rubicon State Y16-757 - Original Drilling - APD - Rev 0	6,900.0	7,903.7	1,628.5	1,602.5	62.487	SF
Rubicon State Y16-757 - Original Drilling - APD - Rev 0	7,500.0	7,374.3	1,609.0	1,583.8	63.841	ES
Rubicon State Y16-757 - Original Drilling - APD - Rev 0	7,509.9	7,366.0	1,609.0	1,583.8	63.877	CC
Rubicon State Y16-763 - Original Drilling - APD - Rev 0	6,900.0	7,806.8	1,196.1	1,169.8	45.408	SF
Rubicon State Y16-763 - Original Drilling - APD - Rev 0	7,358.5	7,412.4	1,183.1	1,157.7	46.484	CC, ES
Rubicon State Y16-770 - Wellbore #1 - Design #1	2,100.0	2,106.0	167.3	160.0	22.871	CC, ES
Rubicon State Y16-770 - Wellbore #1 - Design #1	2,200.0	2,200.1	170.9	163.3	22.392	SF
Rubicon State Y16-776 - Wellbore #1 - Design #1	2,100.0	2,106.0	154.4	147.1	21.103	CC, ES
Rubicon State Y16-776 - Wellbore #1 - Design #1	7,400.0	7,282.1	333.0	308.4	13.568	SF
Rubicon State Y16-783 - Wellbore #1 - Design #1	7,102.0	7,484.8	101.4	76.5	4.070	CC, ES, SF
Rubicon State Y16-789 - Wellbore #1 - Design #1	2,000.0	2,005.0	153.7	146.8	22.103	CC, ES
Rubicon State Y16-789 - Wellbore #1 - Design #1	7,700.0	7,064.8	503.2	478.1	20.066	SF
State 01 - Original Drilling - Original Drilling - As Drilled						Out of range
State 21 (PA) - Original Drilling - Original Drilling - As Dril	10,825.5	6,977.0	598.3	458.8	4.288	CC, ES, SF
State Y16-05D - Wellbore #1 - Wellbore #1 - As Drilled	8,778.2	7,038.3	133.2	108.6	5.427	CC, ES, SF

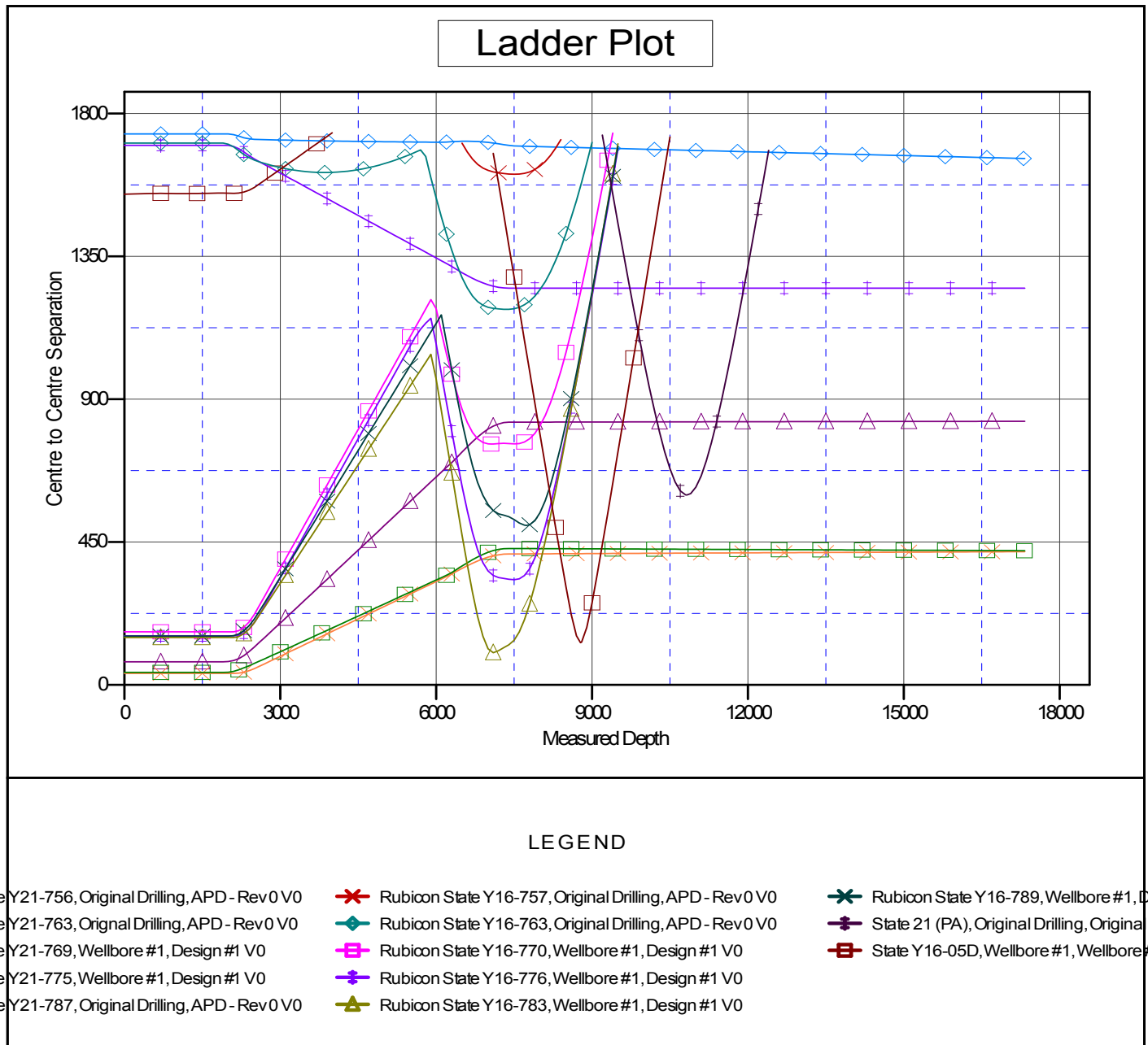
CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

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Reference Wellbore	Original Drilling	Database:	EDM Production
Reference Design:	APD - Rev 0	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4924.0ft (Original Well Elev)
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.5000000

Coordinates are relative to: Hullabaloo State Y21-781
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.61°



Anticollision Summary Report

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