

VERDAD RESOURCES

WATTENBERG FIELD

9N-60W-25 PEGGY 2525 PAD

PEGGY 2525-04H

Plan B

Design #1

Anticollision Summary Report

13 November, 2021

Anticollision Summary Report

Company:	VERDAD RESOURCES	Local Co-ordinate Reference:	Well PEGGY 2525-04H
Project:	WATTENBERG FIELD	TVD Reference:	RKB = 20' @ 4914.00usft (RIG)
Reference Site:	9N-60W-25 PEGGY 2525 PAD	MD Reference:	RKB = 20' @ 4914.00usft (RIG)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PEGGY 2525-04H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 usft	Output errors are at	2.45 sigma
Reference Wellbore	Plan B	Database:	EDM 5000.16 Single User Db
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Reference	Design #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum centre distance of 1,500.00usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.45 Sigma	Casing Method:	Added to Error Values

Survey Tool Program	Date	11/11/2021		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	1,575.00	Design #1 (Plan B)	ISCWSA MWD	Fixed:v2:standard declination
1,575.00	11,471.79	Design #1 (Plan B)	ISCWSA MWD	Fixed:v2:standard declination

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
9N-60W-25 Offsets						
Shull 1-25-9-60 - Verdad Original Well - Actual Precision						Out of range
Shull 1-25-9-60 - Verdad PR Sidetrack Well - Actual Prec						Out of range
Shull 2-25-9-60 - Verdad PR Well - Actual Precision Surv						Out of range
Shull 3-25-9-60 - Verdad PR Well - Actual Precision Surv						Out of range
Shull 4-25-9-60 - Verdad Original Wellbore - Actual Preci						Out of range
Shull 4-25-9-60 - Verdad PR Sidetrack Well - Actual Prec	11,048.96	10,842.00	889.05	655.34	3.804	CC, ES, SF
Shull 5-25-9-60 - Verdad PR Well - Actual Titan Surveys	163.58	153.58	1,390.36	1,382.81	184.336	CC, ES
Shull 5-25-9-60 - Verdad PR Well - Actual Titan Surveys	900.00	693.38	1,485.34	1,476.62	170.375	SF
Shull 6-25-9-60 - Verdad PR Well - Actual Titan Surveys	153.03	143.00	1,375.60	1,368.07	182.487	CC, ES
Shull 6-25-9-60 - Verdad PR Well - Actual Titan Surveys	1,000.00	872.00	1,481.83	1,472.58	160.114	SF
Shull 7-25-9-60 - Verdad PR Well - Actual Titan Surveys	344.82	340.50	1,360.44	1,352.76	176.979	CC, ES
Shull 7-25-9-60 - Verdad PR Well - Actual Titan Surveys	1,700.00	1,677.62	1,491.77	1,479.56	122.136	SF
Shull 8-25-9-60 - Verdad PR Well - Actual Titan Surveys	11,323.54	10,807.00	1,194.38	957.74	5.047	CC, ES, SF
9N-60W-25 PEGGY 2501 PAD						
PEGGY 2501-01H - Verdad PR Well - Actual Baker Surve	575.23	581.38	27.09	18.98	3.341	CC, ES
PEGGY 2501-01H - Verdad PR Well - Actual Baker Surve	600.00	606.20	27.20	19.04	3.333	SF
PEGGY 2501-02H - Verdad PR Well - Actual Baker Surve	603.42	611.27	51.25	43.11	6.298	CC, ES
PEGGY 2501-02H - Verdad PR Well - Actual Baker Surve	700.00	708.43	52.55	44.18	6.282	SF
PEGGY 2501-04H - Plan B - Design #1	326.50	322.50	68.78	61.10	8.951	CC, ES
PEGGY 2501-04H - Plan B - Design #1	400.00	395.99	69.41	61.63	8.924	SF
PEGGY 2501-06H - Plan B - Design #1	326.50	322.50	84.80	77.12	11.036	CC, ES
PEGGY 2501-06H - Plan B - Design #1	6,318.46	6,292.27	149.32	114.87	4.335	SF
PEGGY 2501-08H - Plan B - Design #1	326.50	321.50	100.80	93.11	13.118	CC, ES
PEGGY 2501-08H - Plan B - Design #1	400.00	394.99	101.43	93.65	13.042	SF
PEGGY 2501-10H - Plan B - Design #1	326.50	322.50	116.79	109.11	15.199	CC, ES
PEGGY 2501-10H - Plan B - Design #1	400.00	395.99	117.42	109.64	15.097	SF
PEGGY 2501-12H - Plan B - Design #1	326.50	322.50	132.79	125.10	17.281	CC, ES
PEGGY 2501-12H - Plan B - Design #1	400.00	395.99	133.42	125.64	17.153	SF
PEGGY 2501-14H - Plan B - Design #1	326.50	321.50	148.78	141.10	19.364	CC, ES
PEGGY 2501-14H - Plan B - Design #1	400.00	394.81	149.42	141.64	19.213	SF
PEGGY 2501-16H - Plan B - Design #1	200.00	194.00	164.78	157.21	21.775	CC, ES
PEGGY 2501-16H - Plan B - Design #1	300.00	288.95	166.18	158.54	21.733	SF

Anticollision Summary Report

Company:	VERDAD RESOURCES	Local Co-ordinate Reference:	Well PEGGY 2525-04H
Project:	WATTENBERG FIELD	TVD Reference:	RKB = 20' @ 4914.00usft (RIG)
Reference Site:	9N-60W-25 PEGGY 2525 PAD	MD Reference:	RKB = 20' @ 4914.00usft (RIG)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PEGGY 2525-04H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 usft	Output errors are at	2.45 sigma
Reference Wellbore	Plan B	Database:	EDM 5000.16 Single User Db
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
9N-60W-25 PEGGY 2525 PAD						
PEGGY 2525-01H - Plan B - Design #1	206.84	207.84	48.01	40.44	6.340	CC, ES
PEGGY 2525-01H - Plan B - Design #1	11,472.38	11,749.58	1,404.26	1,166.21	5.899	SF
PEGGY 2525-02H - Plan B - Design #1	202.39	202.39	31.99	24.42	4.226	CC, ES
PEGGY 2525-02H - Plan B - Design #1	11,472.38	11,641.06	936.18	696.98	3.914	SF
PEGGY 2525-03H - Plan B - Design #1	216.58	216.58	16.00	8.42	2.110	CC
PEGGY 2525-03H - Plan B - Design #1	300.00	300.00	16.00	8.34	2.090	ES
PEGGY 2525-03H - Plan B - Design #1	11,472.38	11,522.95	468.09	232.73	1.989	SF
PEGGY 2525-05H - Plan B - Design #1	343.93	344.03	15.45	7.75	2.007	CC, ES
PEGGY 2525-05H - Plan B - Design #1	11,472.38	11,430.56	468.00	228.50	1.954	SF

Anticollision Summary Report

Company:	VERDAD RESOURCES	Local Co-ordinate Reference:	Well PEGGY 2525-04H
Project:	WATTENBERG FIELD	TVD Reference:	RKB = 20' @ 4914.00usft (RIG)
Reference Site:	9N-60W-25 PEGGY 2525 PAD	MD Reference:	RKB = 20' @ 4914.00usft (RIG)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PEGGY 2525-04H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 usft	Output errors are at	2.45 sigma
Reference Wellbore	Plan B	Database:	EDM 5000.16 Single User Db
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to RKB = 20' @ 4914.00usft (RIG)

Offset Depths are relative to Offset Datum

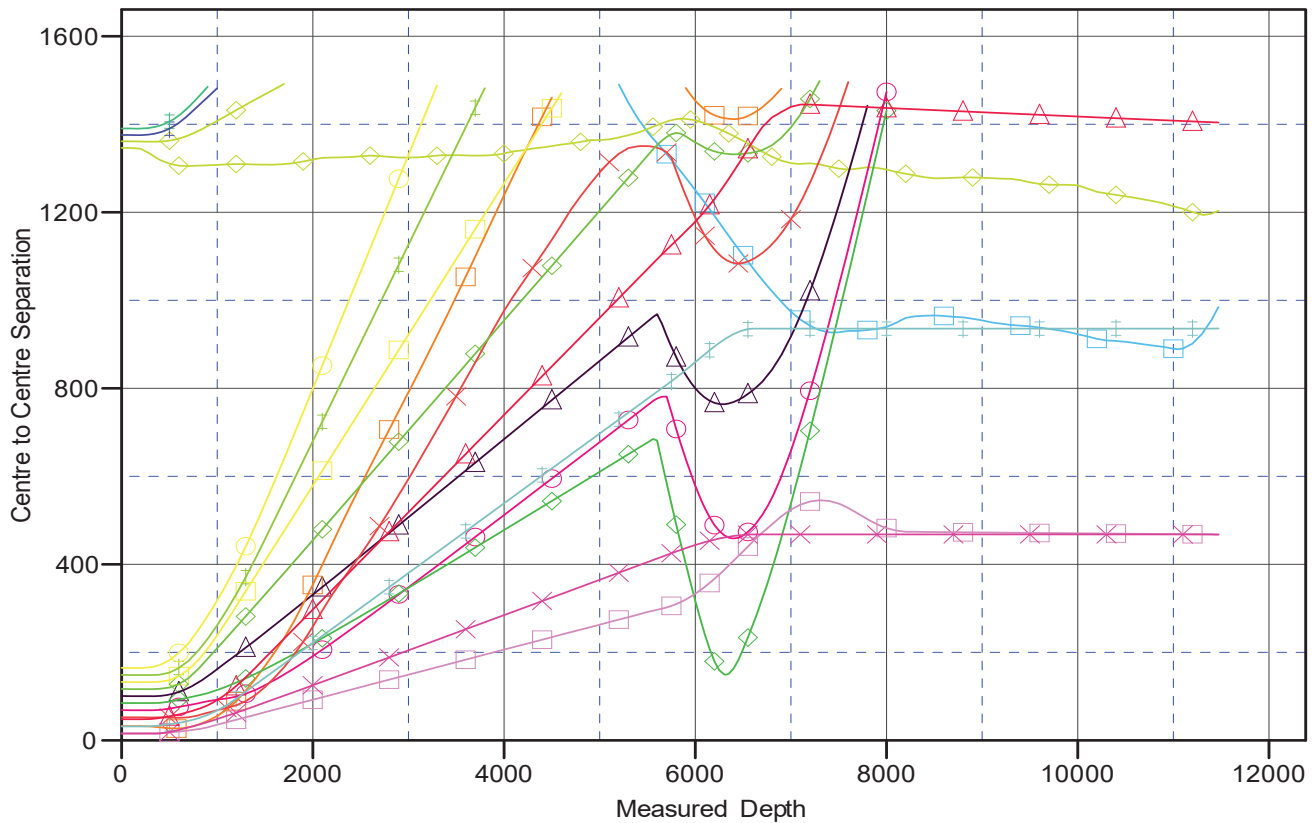
Central Meridian is -105.500000

Coordinates are relative to: PEGGY 2525-04H

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.94°

Ladder Plot



LEGEND

Shul 7-25-960, Verdad PR Well, Actual Titan Surveys V0	PEGGY 2501-16H, Plan B, Design#1 V0	PEGGY 2501-02H, Verdad PR Well, Actual Baker Surveys V0
Shul 6-25-960, Verdad PR Well, Actual Titan Surveys V0	PEGGY 2501-01H, Verdad PR Well, Actual Baker Surveys V0	PEGGY 2501-04H, Plan B, Design#1 V0
Shul 4-25-960, Verdad PR Sidetrack Well, Actual Precision Surveys Grid to True V0	PEGGY 2501-04H, Plan B, Design#1 V0	PEGGY 2501-02H, Plan B, Design#1 V0
Shul 8-25-960, Verdad PR Well, Actual Titan Surveys V0	PEGGY 2501-12H, Plan B, Design#1 V0	PEGGY 2501-03H, Plan B, Design#1 V0
Shul 5-25-960, Verdad PR Well, Actual Titan Surveys Grid to True V0	PEGGY 2501-06H, Plan B, Design#1 V0	PEGGY 2501-09H, Plan B, Design#1 V0
PEGGY 2501-08H, Plan B, Design#1 V0	PEGGY 2501-16H, Plan B, Design#1 V0	PEGGY 2501-11H, Plan B, Design#1 V0

Anticollision Summary Report

Company:	VERDAD RESOURCES	Local Co-ordinate Reference:	Well PEGGY 2525-04H
Project:	WATTENBERG FIELD	TVD Reference:	RKB = 20' @ 4914.00usft (RIG)
Reference Site:	9N-60W-25 PEGGY 2525 PAD	MD Reference:	RKB = 20' @ 4914.00usft (RIG)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PEGGY 2525-04H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 usft	Output errors are at	2.45 sigma
Reference Wellbore	Plan B	Database:	EDM 5000.16 Single User Db
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to RKB = 20' @ 4914.00usft (RIG)

Offset Depths are relative to Offset Datum

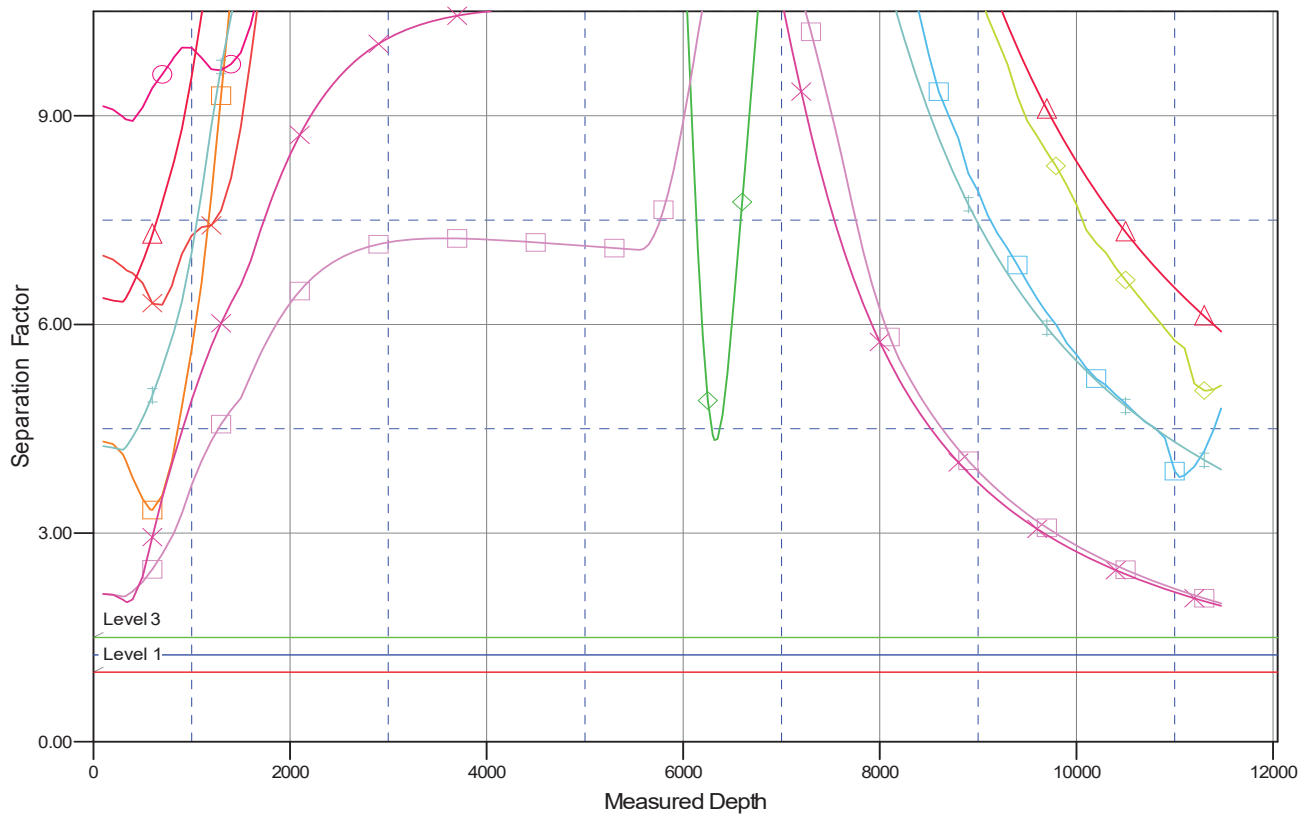
Central Meridian is -105.500000

Coordinates are relative to: PEGGY 2525-04H

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.94°

Separation Factor Plot



LEGEND

Shull 7-25-960, Verdad PR Well, Actual Titan Surveys V0	PEGGY 2501-14H, Plan B, Design#1 V0	PEGGY 2501-02H, Verdad PR Well, Actual Baker Surveys V0
Shull 6-25-960, Verdad PR Well, Actual Titan Surveys V0	PEGGY 2501-01H, Verdad PR Well, Actual Baker Surveys V0	PEGGY 2501-10H, Plan B, Design#1 V0
Shull 4-25-960, Verdad PR Sidetrack Well, Actual Precision Surveys Grid to True V0	PEGGY 2501-04H, Plan B, Design#1 V0	PEGGY 2501-02H, Plan B, Design#1 V0
Shull 8-25-960, Verdad PR Well, Actual Titan Surveys V0	PEGGY 2501-12H, Plan B, Design#1 V0	PEGGY 2501-03H, Plan B, Design#1 V0
Shull 5-25-960, Verdad PR Well, Actual Titan Surveys Grid to True V0	PEGGY 2501-06H, Plan B, Design#1 V0	PEGGY 2501-09H, Plan B, Design#1 V0
PEGGY 2501-08H, Plan B, Design#1 V0	PEGGY 2501-16H, Plan B, Design#1 V0	PEGGY 2501-11H, Plan B, Design#1 V0