

VERDAD RESOURCES

WATTENBERG FIELD

9N-60W-25 PEGGY 2501 PAD

PEGGY 2501-04H

Plan B

Design #1

Anticollision Summary Report

08 October, 2021

Anticollision Summary Report

Company:	VERDAD RESOURCES	Local Co-ordinate Reference:	Well PEGGY 2501-04H
Project:	WATTENBERG FIELD	TVD Reference:	RKB = 16' @ 4910.00usft (RIG)
Reference Site:	9N-60W-25 PEGGY 2501 PAD	MD Reference:	RKB = 16' @ 4910.00usft (RIG)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PEGGY 2501-04H	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	10/8/2021			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	1,590.00	Design #1 (Plan B)	ISCWSA MWD	Fixed:v2:standard declination	
1,590.00	14,415.53	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						
8N-60W-11 SONIC STAR 1101 PAD						
SONIC STAR 1101-01H - Plan B - Design #2	14,416.22	14,382.50	305.06	-78.99	0.794	Level 1, CC, ES, SF
SONIC STAR 1101-03H - Plan B - Design #2	14,416.22	14,420.18	361.06	-23.59	0.939	Level 1, CC, ES, SF
SONIC STAR 1101-05H - Plan B - Design #2	14,393.01	14,602.03	1,019.74	635.40	2.653	CC, ES, SF
SONIC STAR 1101-07H - Plan B - Design #2						Out of range
SONIC STAR 1101-09H - Plan B - Design #2						Out of range
SONIC STAR 1101-11H - Plan B - Design #2						Out of range
SONIC STAR 1101-13H - Plan B - Design #2						Out of range
SONIC STAR 1101-16H - Plan B - Design #2						Out of range
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	820.22	1,038.92	1,469.07	1,460.02	162.343	CC, ES
Shull 4-25-9-60 - Verdad Original Wellbore - Actual Preci	1,200.00	1,404.20	1,493.90	1,483.43	142.722	SF
Shull 4-25-9-60 - Verdad PR Sidetrack Well - Actual Prec	820.22	1,038.92	1,469.07	1,460.02	162.343	CC
Shull 4-25-9-60 - Verdad PR Sidetrack Well - Actual Prec	5,859.00	6,769.00	1,476.39	1,435.74	36.318	ES, SF
Shull 5-25-9-60 - Verdad PR Well - Actual Titan Surveys	159.45	153.48	1,321.59	1,314.04	175.230	CC, ES
Shull 5-25-9-60 - Verdad PR Well - Actual Titan Surveys	1,124.00	914.48	1,476.83	1,467.48	157.854	SF
Shull 6-25-9-60 - Verdad PR Well - Actual Titan Surveys	159.40	152.49	1,306.83	1,299.29	173.287	CC, ES
Shull 6-25-9-60 - Verdad PR Well - Actual Titan Surveys	1,200.00	1,026.06	1,470.26	1,460.50	150.749	SF
Shull 7-25-9-60 - Verdad PR Well - Actual Titan Surveys	512.32	512.56	1,290.76	1,282.82	162.550	CC, ES
Shull 7-25-9-60 - Verdad PR Well - Actual Titan Surveys	1,700.00	1,677.10	1,483.57	1,472.06	128.886	SF
Shull 8-25-9-60 - Verdad PR Well - Actual Titan Surveys	741.03	842.23	1,227.12	1,218.54	143.105	CC, ES
Shull 8-25-9-60 - Verdad PR Well - Actual Titan Surveys	3,400.00	3,525.38	1,494.94	1,475.23	75.848	SF

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Reference Well:	PEGGY 2501-04H	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						
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Offset Well - Wellbore - Design				Between Ellipses (usft)		
9N-60W-25 PEGGY 2501 PAD						
PEGGY 2501-01H - Verdad PR Well - Actual Baker Surve	0.00	8.00	36.26			
PEGGY 2501-01H - Verdad PR Well - Actual Baker Surve	100.00	107.99	36.27	28.74	4.814	ES
PEGGY 2501-01H - Verdad PR Well - Actual Baker Surve	11,600.00	11,867.00	918.38	657.41	3.519	SF
PEGGY 2501-02H - Verdad PR Well - Actual Baker Surve	131.58	139.58	16.08	8.54	2.132	CC, ES, SF
PEGGY 2501-06H - Plan B - Design #1	498.50	498.50	16.02	8.07	2.014	CC
PEGGY 2501-06H - Plan B - Design #1	500.00	500.00	16.02	8.06	2.013	ES
PEGGY 2501-06H - Plan B - Design #1	14,400.00	14,313.99	624.49	232.65	1.594	SF
PEGGY 2501-08H - Plan B - Design #1	498.50	497.50	32.02	24.06	4.024	CC
PEGGY 2501-08H - Plan B - Design #1	500.00	499.00	32.02	24.06	4.023	ES
PEGGY 2501-08H - Plan B - Design #1	14,400.00	14,277.39	1,250.03	858.74	3.195	SF
PEGGY 2501-10H - Plan B - Design #1	410.29	410.29	48.01	40.21	6.153	CC
PEGGY 2501-10H - Plan B - Design #1	498.50	498.24	48.06	40.10	6.040	ES
PEGGY 2501-10H - Plan B - Design #1	500.00	499.72	48.06	40.11	6.039	SF
PEGGY 2501-12H - Plan B - Design #1	409.03	409.03	64.01	56.21	8.204	CC, ES
PEGGY 2501-12H - Plan B - Design #1	498.50	497.13	64.67	56.72	8.133	SF
PEGGY 2501-14H - Plan B - Design #1	313.89	312.89	80.01	72.33	10.428	CC
PEGGY 2501-14H - Plan B - Design #1	400.00	398.79	80.02	72.23	10.276	ES, SF
PEGGY 2501-16H - Plan B - Design #1	200.00	198.00	96.00	88.43	12.683	CC, ES, SF
9N-60W-36 Offsets						
STATE-HUSKY #1 - Bennett D/A Well - No Surveys	498.50	474.50	1,209.18	1,189.50	61.433	CC
STATE-HUSKY #1 - Bennett D/A Well - No Surveys	600.00	575.98	1,210.41	1,187.10	51.934	ES
STATE-HUSKY #1 - Bennett D/A Well - No Surveys	2,500.00	2,438.37	1,482.86	1,389.64	15.906	SF

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Reference Depths are relative to RKB = 16' @ 4910.00usft (RIG)

Offset Depths are relative to Offset Datum

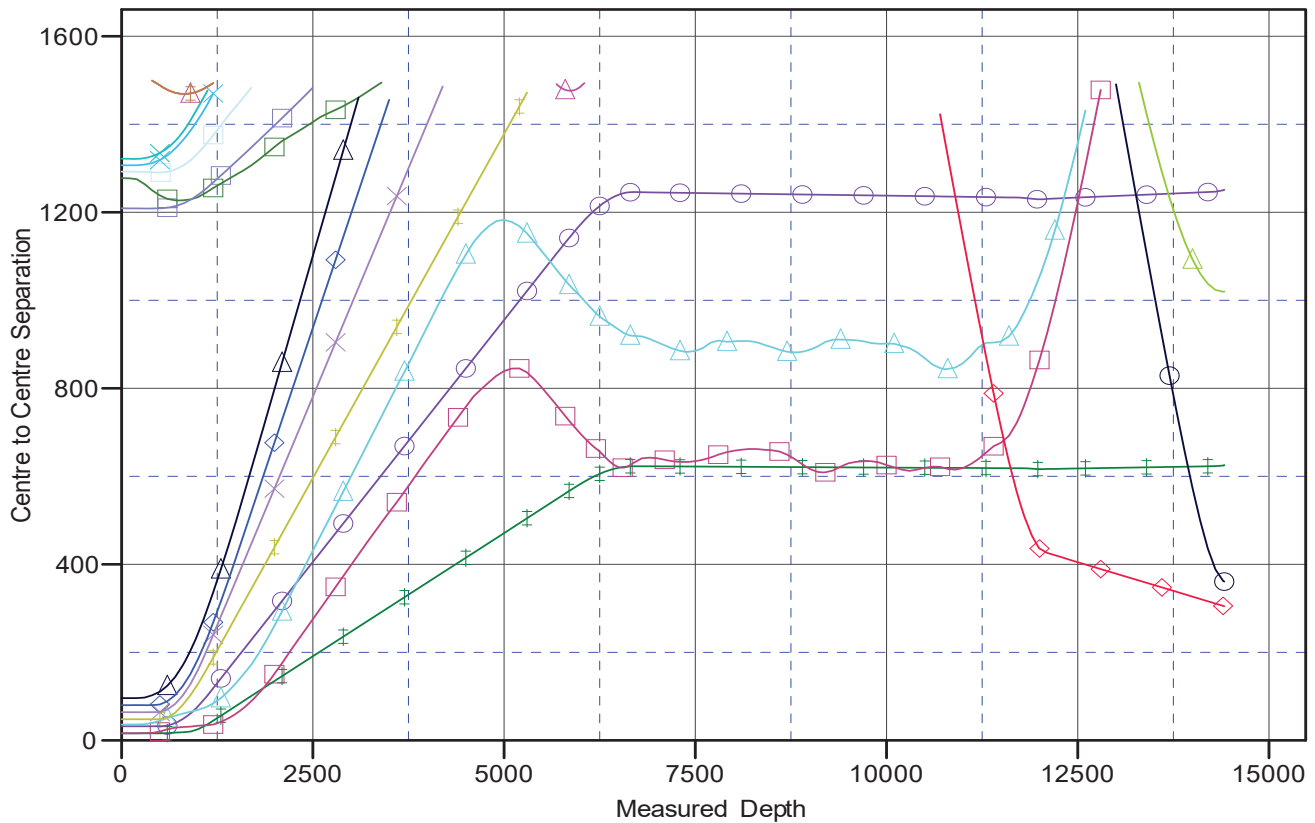
Central Meridian is -105.500000

Coordinates are relative to: PEGGY 2501-04H

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 2501-08H, 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 2501-14H, Plan B, Design#1 V0	PEGGY 2501-10H, Plan B, Design#1 V0
Shul 4-25-960, Verdad PR Sidetrack Well, Actual Precision Surveys Grid to True V0	PEGGY 2501-01H, Verdad PR Well, Actual Baker Surveys V0	SONIC STAR 1101-01H, Plan B, Design #2 V0
Shul 4-25-960, Verdad Original Wellbore, Actual Precision Surveys Grid to True V0	PEGGY 2501-12H, Plan B, Design#1 V0	SONIC STAR 1101-05H, Plan B, Design #2 V0
Shul 8-25-960, Verdad PR Well, Actual Titan Surveys V0	PEGGY 2501-06H, Plan B, Design#1 V0	SONIC STAR 1101-03H, Plan B, Design #2 V0
Shul 5-25-960, Verdad PR Well, Actual Titan Surveys Grid to True V0	PEGGY 2501-16H, Plan B, Design#1 V0	STATE-HUSKY #1, Bennett D/A Well, No Surveys V0

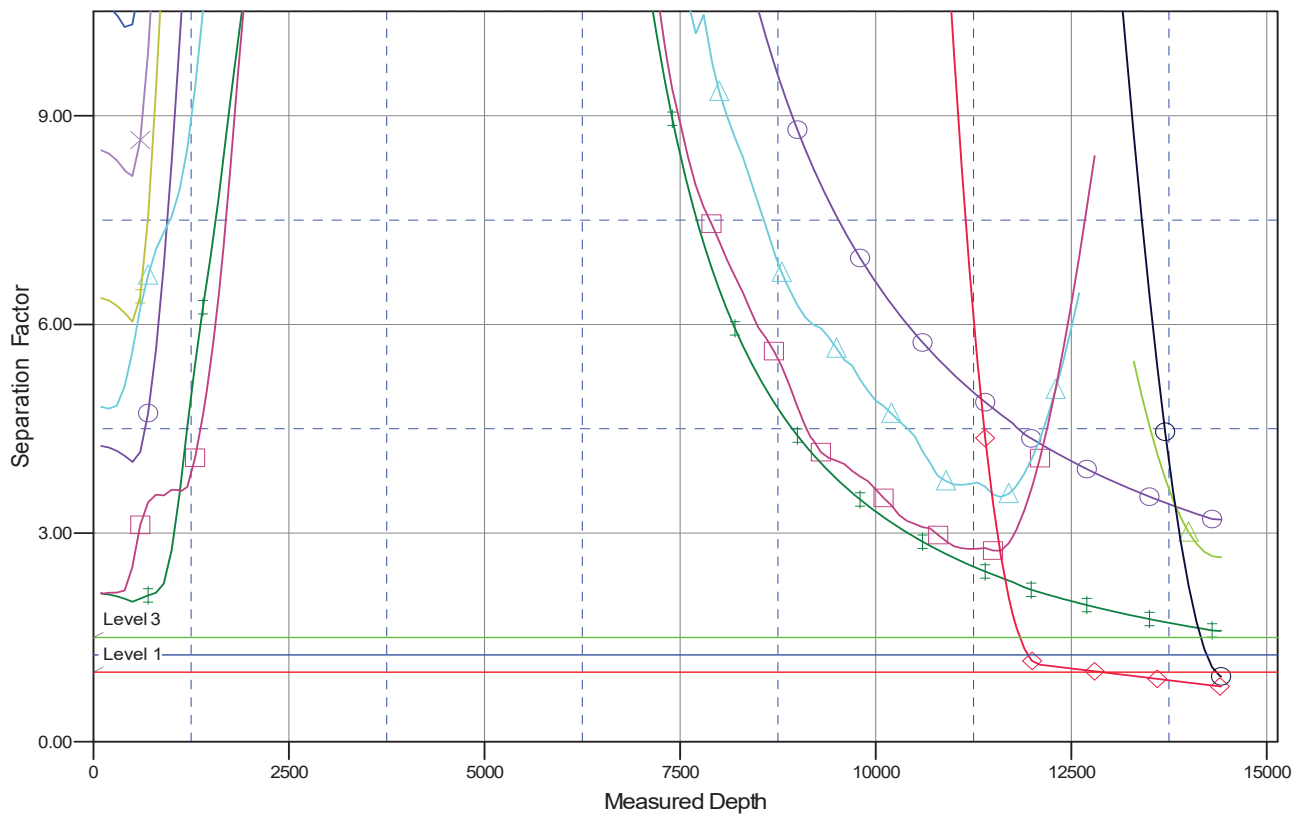
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Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: PEGGY 2501-04H
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.94°

Separation Factor Plot



LEGEND

- | | | |
|---|---|---|
| Shul 7-25-960, Verdad PR Well, Actual Titan Surveys V0 | PEGGY 2501-08H, 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 2501-14H, Plan B, Design#1 V0 | PEGGY 2501-10H, Plan B, Design#1 V0 |
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