

# **VERDAD RESOURCES**

**WATTENBERG FIELD**

**9N-60W-25 PEGGY 2501 PAD**

**PEGGY 2501-06H**

**Plan B**

**Design #1**

## **Anticollision Summary Report**

**08 October, 2021**

## Anticollision Summary Report

<b>Company:</b>	VERDAD RESOURCES	<b>Local Co-ordinate Reference:</b>	Well PEGGY 2501-06H
<b>Project:</b>	WATTENBERG FIELD	<b>TVD Reference:</b>	RKB = 16' @ 4910.00usft (RIG)
<b>Reference Site:</b>	9N-60W-25 PEGGY 2501 PAD	<b>MD Reference:</b>	RKB = 16' @ 4910.00usft (RIG)
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	PEGGY 2501-06H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 usft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	Plan B	<b>Database:</b>	EDM 5000.16 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

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

<b>Survey Tool Program</b>	<b>Date</b>	10/8/2021		
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.00	1,590.00	Design #1 (Plan B)	ISCWSA MWD	Fixed:v2:standard declination
1,590.00	14,313.49	Design #1 (Plan B)	ISCWSA MWD	Fixed:v2:standard declination

<b>Summary</b>						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
<b>Offset Well - Wellbore - Design</b>						
8N-60W-11 SONIC STAR 1101 PAD						
SONIC STAR 1101-01H - Plan B - Design #2	14,313.99	14,400.72	930.15	545.59	2.419	CC, ES, SF
SONIC STAR 1101-03H - Plan B - Design #2	14,313.99	14,420.18	276.66	-86.49	0.762	Level 1, CC, ES, SF
SONIC STAR 1101-05H - Plan B - Design #2	14,313.99	14,602.03	397.33	13.05	1.034	Level 2, CC, ES, SF
SONIC STAR 1101-07H - Plan B - Design #2	14,291.07	15,037.39	1,077.60	700.87	2.860	CC, ES, SF
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	5,847.19	6,110.84	1,487.28	1,456.28	47.981	CC
Shull 3-25-9-60 - Verdad PR Well - Actual Precision Surv	5,850.00	6,112.27	1,487.28	1,456.27	47.964	ES
Shull 3-25-9-60 - Verdad PR Well - Actual Precision Surv	6,000.00	6,149.68	1,494.56	1,463.02	47.379	SF
Shull 4-25-9-60 - Verdad Original Wellbore - Actual Preci	3,917.22	4,129.00	1,376.38	1,306.53	19.705	CC, ES, SF
Shull 4-25-9-60 - Verdad PR Sidetrack Well - Actual Prec	5,929.69	6,634.12	935.35	898.64	25.482	CC, ES
Shull 4-25-9-60 - Verdad PR Sidetrack Well - Actual Prec	6,000.00	6,624.00	938.94	901.76	25.253	SF
Shull 5-25-9-60 - Verdad PR Well - Actual Titan Surveys	159.54	153.55	1,305.57	1,298.03	173.106	CC, ES
Shull 5-25-9-60 - Verdad PR Well - Actual Titan Surveys	1,300.00	1,062.18	1,485.88	1,476.01	150.649	SF
Shull 6-25-9-60 - Verdad PR Well - Actual Titan Surveys	159.27	152.40	1,290.81	1,283.27	171.164	CC, ES
Shull 6-25-9-60 - Verdad PR Well - Actual Titan Surveys	1,500.00	1,381.88	1,485.62	1,474.58	134.477	SF
Shull 7-25-9-60 - Verdad PR Well - Actual Titan Surveys	533.48	532.21	1,274.64	1,266.66	159.746	CC, ES
Shull 7-25-9-60 - Verdad PR Well - Actual Titan Surveys	2,800.00	2,777.48	1,493.87	1,478.92	99.934	SF
Shull 8-25-9-60 - Verdad PR Well - Actual Titan Surveys	5,904.73	6,160.08	1,175.84	1,144.37	37.365	CC, ES
Shull 8-25-9-60 - Verdad PR Well - Actual Titan Surveys	6,000.00	6,151.26	1,180.10	1,148.40	37.224	SF

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<b>Reference Well:</b>	PEGGY 2501-06H	<b>Survey Calculation Method:</b>	Minimum Curvature
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<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

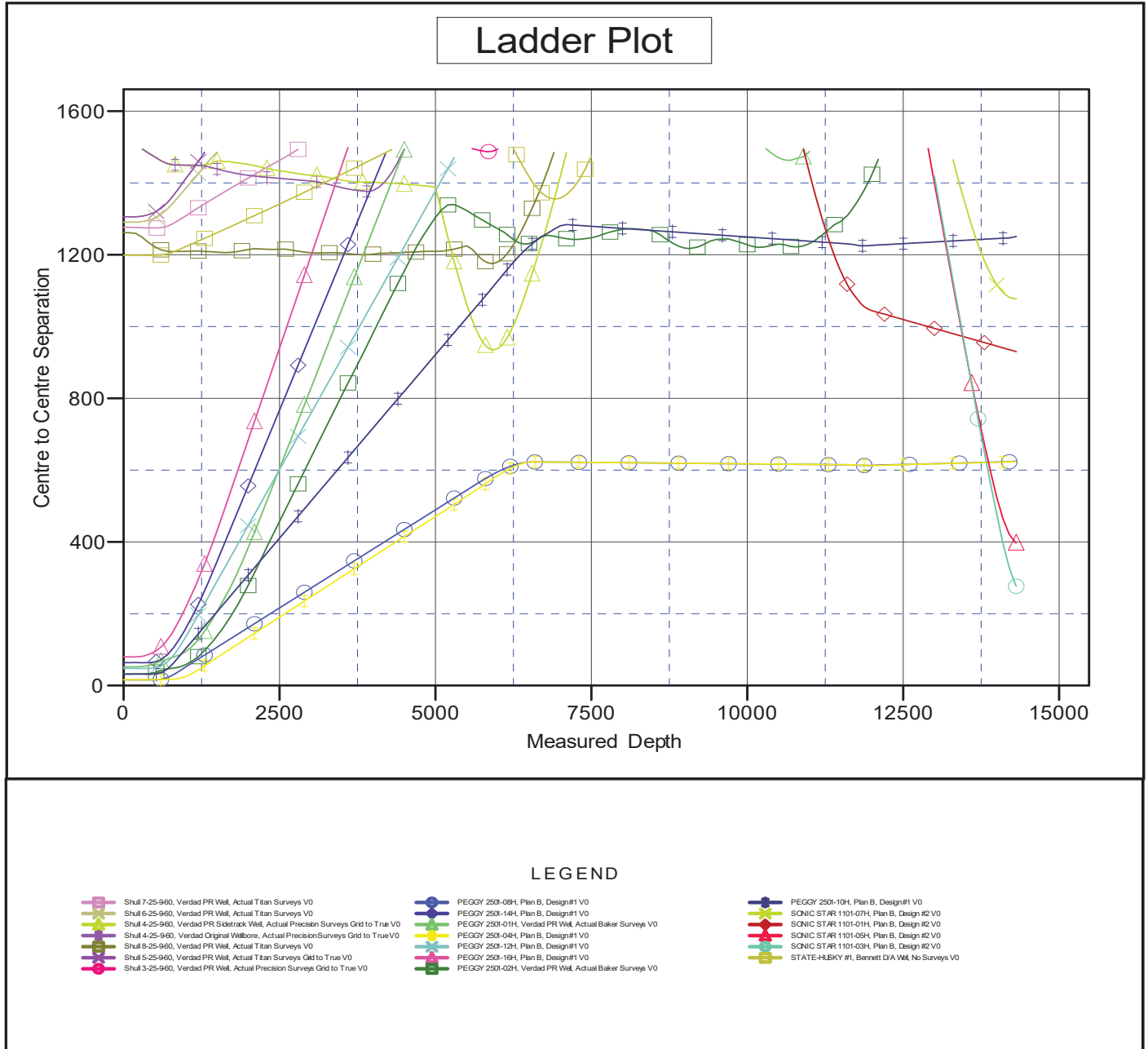
Summary						
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Offset Well - Wellbore - Design						
9N-60W-25 PEGGY 2501 PAD						
PEGGY 2501-01H - Verdad PR Well - Actual Baker Surve	0.00	8.00	52.28			
PEGGY 2501-01H - Verdad PR Well - Actual Baker Surve	100.00	107.99	52.29	44.76	6.941	ES
PEGGY 2501-01H - Verdad PR Well - Actual Baker Surve	11,000.00	11,376.00	1,487.67	1,254.49	6.380	SF
PEGGY 2501-02H - Verdad PR Well - Actual Baker Surve	131.57	139.57	32.10	24.56	4.256	CC, ES
PEGGY 2501-02H - Verdad PR Well - Actual Baker Surve	400.00	407.53	32.98	25.18	4.228	SF
PEGGY 2501-04H - Plan B - Design #1	500.00	500.00	16.02	8.06	2.013	CC, ES
PEGGY 2501-04H - Plan B - Design #1	14,313.99	14,364.94	623.45	231.14	1.589	SF
PEGGY 2501-08H - Plan B - Design #1	522.87	521.87	16.00	7.99	1.999	CC, ES
PEGGY 2501-08H - Plan B - Design #1	14,300.00	14,277.39	624.70	233.41	1.597	SF
PEGGY 2501-10H - Plan B - Design #1	409.84	409.84	31.99	24.19	4.100	CC
PEGGY 2501-10H - Plan B - Design #1	500.00	499.81	32.04	24.08	4.026	ES
PEGGY 2501-10H - Plan B - Design #1	14,300.00	14,302.08	1,250.24	860.03	3.204	SF
PEGGY 2501-12H - Plan B - Design #1	407.79	407.79	47.99	40.19	6.152	CC, ES
PEGGY 2501-12H - Plan B - Design #1	500.00	498.94	48.69	40.73	6.121	SF
PEGGY 2501-14H - Plan B - Design #1	313.89	312.89	63.98	56.31	8.339	CC
PEGGY 2501-14H - Plan B - Design #1	400.00	398.83	63.99	56.21	8.218	ES, SF
PEGGY 2501-16H - Plan B - Design #1	200.00	198.00	79.98	72.41	10.566	CC, ES, SF
9N-60W-36 Offsets						
STATE-HUSKY #1 - Bennett D/A Well - No Surveys	522.87	498.87	1,198.76	1,178.21	58.330	CC
STATE-HUSKY #1 - Bennett D/A Well - No Surveys	6,918.82	6,176.00	1,355.18	1,111.29	5.557	ES
STATE-HUSKY #1 - Bennett D/A Well - No Surveys	7,000.00	6,176.00	1,357.60	1,112.71	5.544	SF

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<b>Reference Wellbore</b>	Plan B	<b>Database:</b>	EDM 5000.16 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

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 2501-06H  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: 0.94°



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Offset Depths are relative to Offset Datum

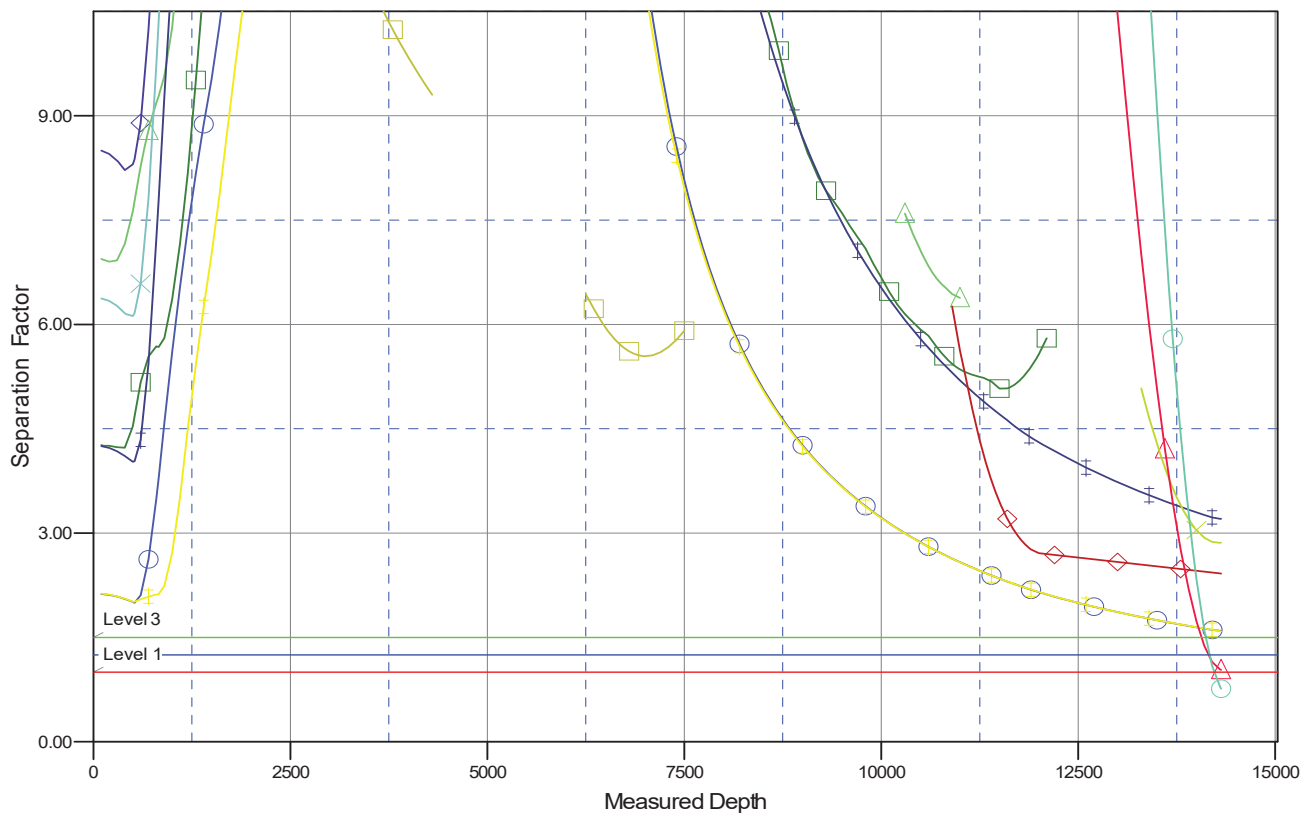
Central Meridian is -105.500000

Coordinates are relative to: PEGGY 2501-06H

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 T1an Surveys V0  
Shull 6-25-960, Verdad PR Well, Actual T1an Surveys V0  
Shull 4-25-960, Verdad PR Sidetrack Well, Actual Precision Surveys Grid to True V0  
Shull 4-25-960, Verdad Original Wellbore, Actual Precision Surveys Grid to True V0  
Shull 8-25-960, Verdad PR Well, Actual T1an Surveys V0  
Shull 5-25-960, Verdad PR Well, Actual T1an Surveys Grid to True V0  
Shull 3-25-960, Verdad PR Well, Actual Precision Surveys Grid to True V0

PEGGY 2501-08H, Plan B, Design#1 V0  
PEGGY 2501-14H, Plan B, Design#1 V0  
PEGGY 2501-01H, Verdad PR Well, Actual Baker Surveys V0  
PEGGY 2501-04H, Plan B, Design#1 V0  
PEGGY 2501-12H, Plan B, Design#1 V0  
PEGGY 2501-16H, Plan B, Design#1 V0  
PEGGY 2501-02H, Verdad PR Well, Actual Baker Surveys V0

PEGGY 2501-10H, Plan B, Design#1 V0  
SONIC STAR 1101-07H, Plan B, Design #2 V0  
SONIC STAR 1101-01H, Plan B, Design #2 V0  
SONIC STAR 1101-05H, Plan B, Design #2 V0  
SONIC STAR 1101-03H, Plan B, Design #2 V0  
STATE-HLSKY #1, Bennett D/A Well, No Surveys V0