

VERDAD RESOURCES

WATTENBERG FIELD

9N-60W-25 PEGGY 2501 PAD

PEGGY 2501-12H

Plan B

Design #1

Anticollision Summary Report

08 October, 2021

Anticollision Summary Report

Company:	VERDAD RESOURCES	Local Co-ordinate Reference:	Well PEGGY 2501-12H
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 2501-12H	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	14,389.99	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						Out of range
SONIC STAR 1101-03H - Plan B - Design #2						Out of range
SONIC STAR 1101-05H - Plan B - Design #2	14,389.99	14,602.03	1,485.46	1,105.80	3.913	CC, ES, SF
SONIC STAR 1101-07H - Plan B - Design #2	14,389.99	15,037.39	851.13	480.56	2.297	CC, ES, SF
SONIC STAR 1101-09H - Plan B - Design #2	14,389.99	15,183.77	171.00	-174.37	0.495	Level 1, CC, ES, SF
SONIC STAR 1101-11H - Plan B - Design #2	14,389.99	15,571.19	506.54	123.41	1.322	Level 3, CC, ES, SF
SONIC STAR 1101-13H - Plan B - Design #2	14,375.02	16,147.31	1,185.68	810.38	3.159	CC, ES, SF
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	6,263.84	5,978.18	987.47	951.69	27.595	CC
Shull 1-25-9-60 - Verdad Original Well - Actual Precision	6,300.00	5,981.70	988.14	951.57	27.023	ES
Shull 1-25-9-60 - Verdad Original Well - Actual Precision	6,900.00	5,894.33	1,160.74	1,107.15	21.658	SF
Shull 1-25-9-60 - Verdad PR Sidetrack Well - Actual Prec	6,263.84	5,978.18	987.47	951.69	27.595	CC
Shull 1-25-9-60 - Verdad PR Sidetrack Well - Actual Prec	6,300.00	5,981.70	988.14	951.57	27.023	ES
Shull 1-25-9-60 - Verdad PR Sidetrack Well - Actual Prec	6,900.00	5,894.33	1,160.74	1,107.15	21.658	SF
Shull 2-25-9-60 - Verdad PR Well - Actual Precision Surv	6,178.50	6,018.70	386.41	352.41	11.364	CC, ES
Shull 2-25-9-60 - Verdad PR Well - Actual Precision Surv	6,300.00	6,025.16	405.25	367.64	10.774	SF
Shull 3-25-9-60 - Verdad PR Well - Actual Precision Surv	5,400.00	5,371.09	232.33	188.78	5.335	SF
Shull 3-25-9-60 - Verdad PR Well - Actual Precision Surv	5,968.66	5,987.61	212.74	178.52	6.218	CC, ES
Shull 4-25-9-60 - Verdad Original Wellbore - Actual Preci	4,170.59	4,129.00	307.87	234.05	4.171	CC, ES, SF
Shull 4-25-9-60 - Verdad PR Sidetrack Well - Actual Prec	4,848.08	4,842.13	245.39	207.20	6.424	CC, ES
Shull 4-25-9-60 - Verdad PR Sidetrack Well - Actual Prec	4,900.00	4,890.94	246.04	207.37	6.363	SF
Shull 5-25-9-60 - Verdad PR Well - Actual Titan Surveys	5,740.78	5,466.72	932.79	900.66	29.032	CC
Shull 5-25-9-60 - Verdad PR Well - Actual Titan Surveys	5,777.00	5,482.00	932.85	900.64	28.958	ES
Shull 5-25-9-60 - Verdad PR Well - Actual Titan Surveys	7,000.00	5,737.00	1,133.13	1,077.81	20.482	SF
Shull 6-25-9-60 - Verdad PR Well - Actual Titan Surveys	6,231.84	5,935.05	672.67	638.15	19.487	CC
Shull 6-25-9-60 - Verdad PR Well - Actual Titan Surveys	6,250.00	5,935.89	672.90	638.03	19.296	ES
Shull 6-25-9-60 - Verdad PR Well - Actual Titan Surveys	6,700.00	5,865.00	797.73	750.06	16.735	SF
Shull 7-25-9-60 - Verdad PR Well - Actual Titan Surveys	6,061.71	5,961.72	75.01	41.94	2.269	CC, ES, SF
Shull 8-25-9-60 - Verdad PR Well - Actual Titan Surveys	4,320.58	4,265.44	209.87	175.04	6.026	CC, ES
Shull 8-25-9-60 - Verdad PR Well - Actual Titan Surveys	4,400.00	4,341.25	211.27	175.97	5.984	SF

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Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

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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	100.27			
PEGGY 2501-01H - Verdad PR Well - Actual Baker Surve	100.00	107.98	100.28	92.74	13.311	ES
PEGGY 2501-01H - Verdad PR Well - Actual Baker Surve	300.00	306.40	101.11	93.43	13.168	SF
PEGGY 2501-02H - Verdad PR Well - Actual Baker Surve	131.53	139.53	80.09	72.55	10.616	CC, ES
PEGGY 2501-02H - Verdad PR Well - Actual Baker Surve	400.00	406.85	80.96	73.16	10.380	SF
PEGGY 2501-04H - Plan B - Design #1	436.15	436.15	64.01	56.16	8.159	CC, ES
PEGGY 2501-04H - Plan B - Design #1	500.00	499.99	64.72	56.76	8.134	SF
PEGGY 2501-06H - Plan B - Design #1	436.15	436.15	47.99	40.14	6.116	CC, ES, SF
PEGGY 2501-08H - Plan B - Design #1	436.15	435.15	31.99	24.15	4.078	CC, ES
PEGGY 2501-08H - Plan B - Design #1	14,389.99	14,185.22	1,247.68	861.18	3.228	SF
PEGGY 2501-10H - Plan B - Design #1	436.15	436.15	16.00	8.15	2.039	CC, ES
PEGGY 2501-10H - Plan B - Design #1	14,389.99	14,259.15	624.00	237.75	1.616	SF
PEGGY 2501-14H - Plan B - Design #1	313.89	312.89	16.00	8.32	2.085	CC
PEGGY 2501-14H - Plan B - Design #1	400.00	398.96	16.01	8.22	2.055	ES
PEGGY 2501-14H - Plan B - Design #1	14,389.99	14,554.66	625.58	234.42	1.599	SF
PEGGY 2501-16H - Plan B - Design #1	200.00	198.00	31.99	24.42	4.226	CC, ES
PEGGY 2501-16H - Plan B - Design #1	14,389.99	14,772.67	1,251.14	858.98	3.190	SF
9N-60W-36 Offsets						
STATE-HUSKY #1 - Bennett D/A Well - No Surveys	6,900.00	6,176.00	547.07	299.89	2.213	SF
STATE-HUSKY #1 - Bennett D/A Well - No Surveys	6,946.70	6,176.00	545.46	299.05	2.214	CC, ES

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

Offset Depths are relative to Offset Datum

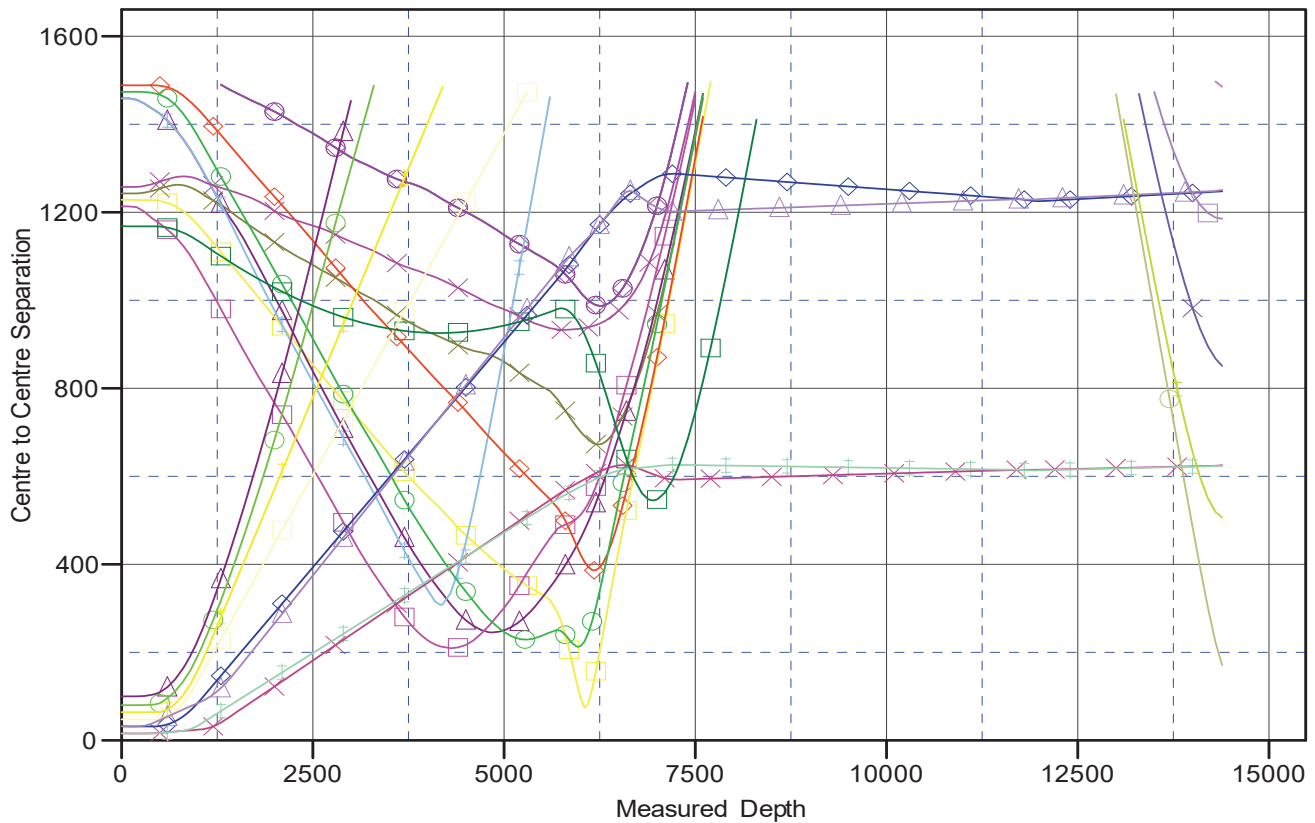
Central Meridian is -105.500000

Coordinates are relative to: PEGGY 2501-12H

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	Shul 5-25-960, Verdad PR Well, Actual Titan Surveys Grid to True V0	PEGGY 2501-02H, Verdad PR Well, Actual Baker Surveys V0
Shul 1-25-960, Verdad PR Sidetrack Well, Actual Precision Surveys Grid to True V0	Shul 3-25-960, Verdad PR Well, Actual Precision Surveys Grid to True V0	PEGGY 2501-10H, Plan B, Design#1 V0
Shul 1-25-960, Verdad Original Well, Actual Precision Surveys Grid to True V0	PEGGY 2501-08H, Plan B, Design#1 V0	SONIC STAR 1101-09H, Plan B, Design #2 V0
Shul 6-25-960, Verdad PR Well, Actual Titan Surveys V0	PEGGY 2501-14H, Plan B, Design#1 V0	SONIC STAR 1101-07H, Plan B, Design #2 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 1101-05H, Plan B, Design #2 V0
Shul 4-25-960, Verdad Original Wellbore, Actual Precision Surveys Grid to True V0	PEGGY 2501-04H, Plan B, Design#1 V0	SONIC STAR 1101-11H, Plan B, Design #2 V0
Shul 2-25-960, Verdad PR Well, Actual Precision Surveys Grid to True V0	PEGGY 2501-06H, Plan B, Design#1 V0	SONIC STAR 1101-13H, Plan B, Design #2 V0
Shul 8-25-960, Verdad PR Well, Actual Titan Surveys 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 2501-12H

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.94°

