

VERDAD RESOURCES

WATTENBERG FIELD

9N-59W-17 TIMBRO 1717 PAD

TIMBRO 1717-08H

Plan B

Design #1

Anticollision Summary Report

02 September, 2021

Anticollision Summary Report

Company:	VERDAD RESOURCES	Local Co-ordinate Reference:	Well TIMBRO 1717-08H
Project:	WATTENBERG FIELD	TVD Reference:	RKB = 20' @ 5030.00usft (RIG)
Reference Site:	9N-59W-17 TIMBRO 1717 PAD	MD Reference:	RKB = 20' @ 5030.00usft (RIG)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	TIMBRO 1717-08H	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	9/2/2021			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	1,700.00	Design #1 (Plan B)	ISCWSA MWD	Fixed:v2:standard declination	
1,700.00	12,249.14	Design #1 (Plan B)	ISCWSA MWD	Fixed:v2:standard declination	

Summary							
Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)		Between Ellipses (usft)	Separation Factor	Warning
9N-59W-08 TIMBRO 9-59-8B PAD							
TIMBRO 9-59 8B-9-1 - Wellbore #1 - Design #1							Out of range
TIMBRO 9-59 8B-9-2 - Wellbore #1 - Design #2							Out of range
TIMBRO 9-59 8B-9-4 - Wellbore #1 - Design #1							Out of range
TIMBRO 9-59 8B-9-8 - Wellbore #1 - Design #1	6,680.50	7,562.96	796.08	686.46	7.262	CC	
TIMBRO 9-59 8B-9-8 - Wellbore #1 - Design #1	6,700.00	7,553.94	796.55	686.03	7.207	ES	
TIMBRO 9-59 8B-9-8 - Wellbore #1 - Design #1	6,800.00	7,509.81	813.95	699.60	7.118	SF	
TIMBRO 9-59 8B-9-9 - Verdad PR Well - Actual Baker Su	6,841.61	7,738.00	626.78	532.27	6.632	CC	
TIMBRO 9-59 8B-9-9 - Verdad PR Well - Actual Baker Su	6,850.00	7,734.57	626.88	531.56	6.577	ES	
TIMBRO 9-59 8B-9-9 - Verdad PR Well - Actual Baker Su	7,000.00	7,679.28	661.57	554.43	6.175	SF	
9N-59W-17 Offsets							
Timbro Ranch 17-11-9-59 - Verdad PR Well - Actual Prec	8,889.87	7,716.14	602.67	495.18	5.607	CC	
Timbro Ranch 17-11-9-59 - Verdad PR Well - Actual Prec	11,803.31	10,631.00	604.81	367.84	2.552	ES	
Timbro Ranch 17-11-9-59 - Verdad PR Well - Actual Prec	11,900.00	10,631.00	612.49	368.73	2.513	SF	
9N-59W-17 TIMBRO 1717 PAD							
TIMBRO 1717-09H - Plan B - Design #1	201.00	201.00	16.01	8.44	2.116	CC, ES, SF	
TIMBRO 1717-10H - Plan B - Design #1	201.00	201.00	32.00	24.43	4.227	CC, ES, SF	
TIMBRO 1717-11H - Plan B - Design #1	201.00	201.00	48.01	40.44	6.343	CC, ES, SF	
TIMBRO 1717-12H - Plan B - Design #1	201.00	201.00	64.00	56.43	8.455	CC, ES, SF	
TIMBRO 1717-13H - Plan B - Design #1	201.00	202.00	80.01	72.44	10.570	CC, ES, SF	
TIMBRO 1717-14H - Wellbore #1 - Design #1	116.15	117.15	96.00	88.47	12.747	CC	
TIMBRO 1717-14H - Wellbore #1 - Design #1	201.00	201.96	96.00	88.43	12.682	ES, SF	
9N-59W-18 Offsets							
FEDERAL #1-18 - McCulloch D/A Well - No Surveys							Out of range
WILDHORSE #18-1834H - Whiting PR Well - Actual Cath							Out of range
Wildhorse #18-1844H - Whiting PR Well - Actual Ensign							Out of range
9N-59W-19 Offsets							
Ptasnik Federal LC19-74HN - Noble Energy PR Well - Ac							Out of range
9N-59W-20 Offsets							
Ptasnik LC20-75HN - Noble PR Well - Actual DDC Surve							Out of range
SW IGO #1 - Rock Oil D/A Well - No Surveys							Out of range

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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-59W-29 Offsets Incomplete						
Rico LC29-74-1HNA - Noble PR Well - Actual Sperry Sur						Out of range
Rico LC29-76-1HNA - Noble PR Well - Actual DDC Surve	12,249.14	15,506.00	1,342.82	1,041.29	4.453	CC, ES, SF
Rico LC29-78-1HNC - Noble PR Well - Actual Sperry Sur	12,249.14	15,541.00	946.49	725.37	4.280	CC, ES, SF
Tina LC29-73-1HNA - Noble PR Well - Actual DDC Surve						Out of range
Tina LC29-75-1HNA - Noble PR Well - Actual Pathfinder						Out of range
Tina LC29-77-1HNA - Noble PR Well - Actual DDC Surve	12,249.14	15,595.00	889.38	687.23	4.400	CC, ES, SF
Trisha LC29-73HNB - Noble PR Well - Actual DDC Surve						Out of range
Trisha LC29-74HNB - Noble PR Well - Actual Sperry Sur						Out of range
Trisha LC29-76HNB - Noble PR Well - Actual DDC Surve	12,249.14	15,585.00	1,160.23	890.47	4.301	CC, ES, SF
Trisha LC29-77HNB - Noble PR Well - Actual Sperry Sur	12,249.14	15,595.00	888.35	769.28	7.460	CC, ES, SF
Trisha LC29-78HNB - Noble PR Well - Actual Sperry Sur	12,249.14	15,574.00	1,076.84	886.82	5.667	CC, ES, SF

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Reference Depths are relative to RKB = 20' @ 5030.00usft (RIG)

Offset Depths are relative to Offset Datum

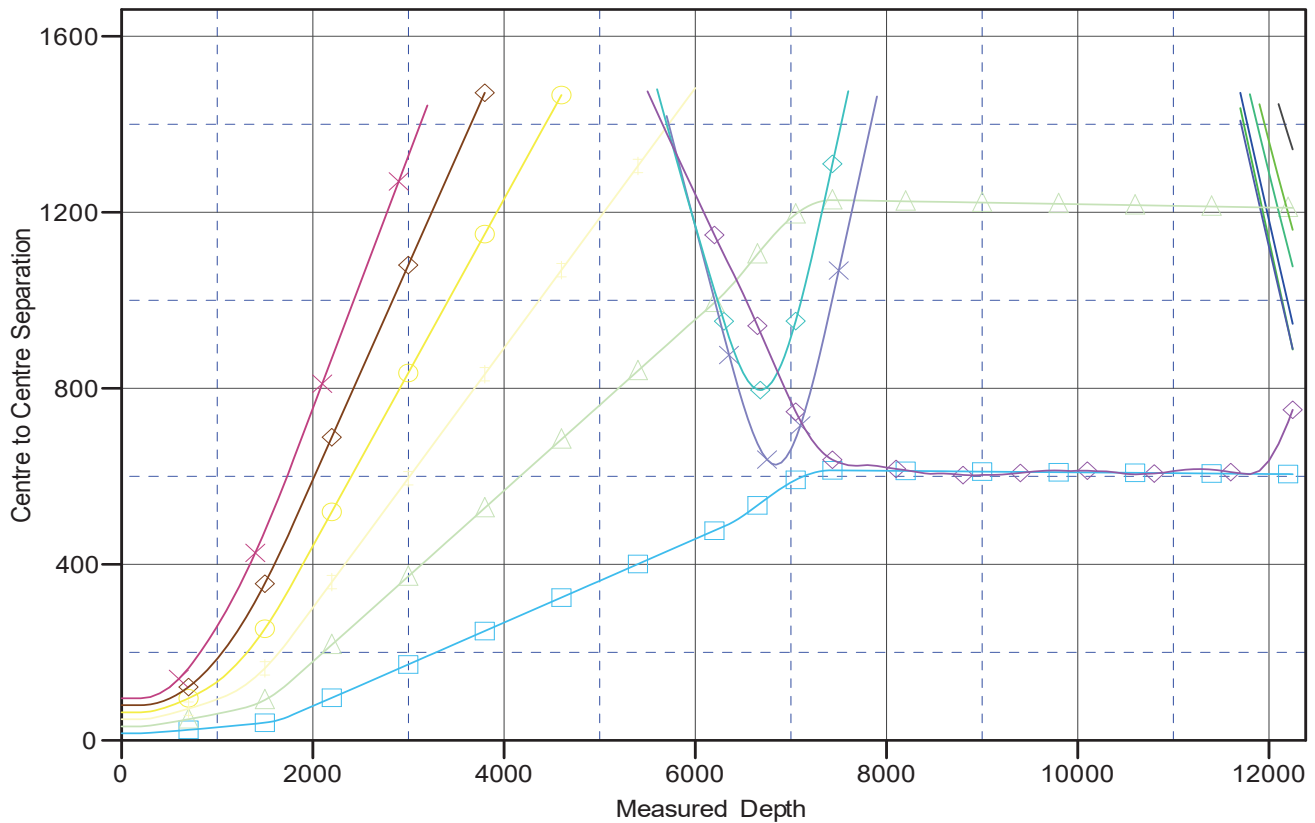
Central Meridian is -105.500000

Coordinates are relative to: TIMBRO 1717-08H

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.97°

Ladder Plot



LEGEND

Trisha LC29-77HNB, Noble PR Well, Actual Sperry Surveys V0
Tina LC29-77-1HNA, Noble PR Well, Actual DDC Surveys V0
Trisha LC29-78HNB, Noble PR Well, Actual Sperry Surveys V0
Trisha LC29-78HNB, Noble PR Well, Actual DDC Surveys V0
Rico LC29-78-1HNC, Noble PR Well, Actual Sperry Surveys V0

Rico LC29-78-1HNA, Noble PR Well, Actual DDC Surveys V0
TIMBRO 1717-13H, Plan B, Design#1 V0
TIMBRO 1717-14H, Wellbore #1, Design #1 V0
TIMBRO 1717-08H, Plan B, Design#1 V0
TIMBRO 1717-12H, Plan B, Design#1 V0

TIMBRO 1717-10H, Plan B, Design#1 V0
TIMBRO 1717-11H, Plan B, Design#1 V0
TIMBRO 969 88-9-9, Verdad PR Well, Actual Baker Surveys V0
TIMBRO 969 88-9-8, Wellbore #1, Design#1 V0
Timbro Ranch 17-11-9-59, Verdad PR Well, Actual Precision Surveys (Grid to True) V0

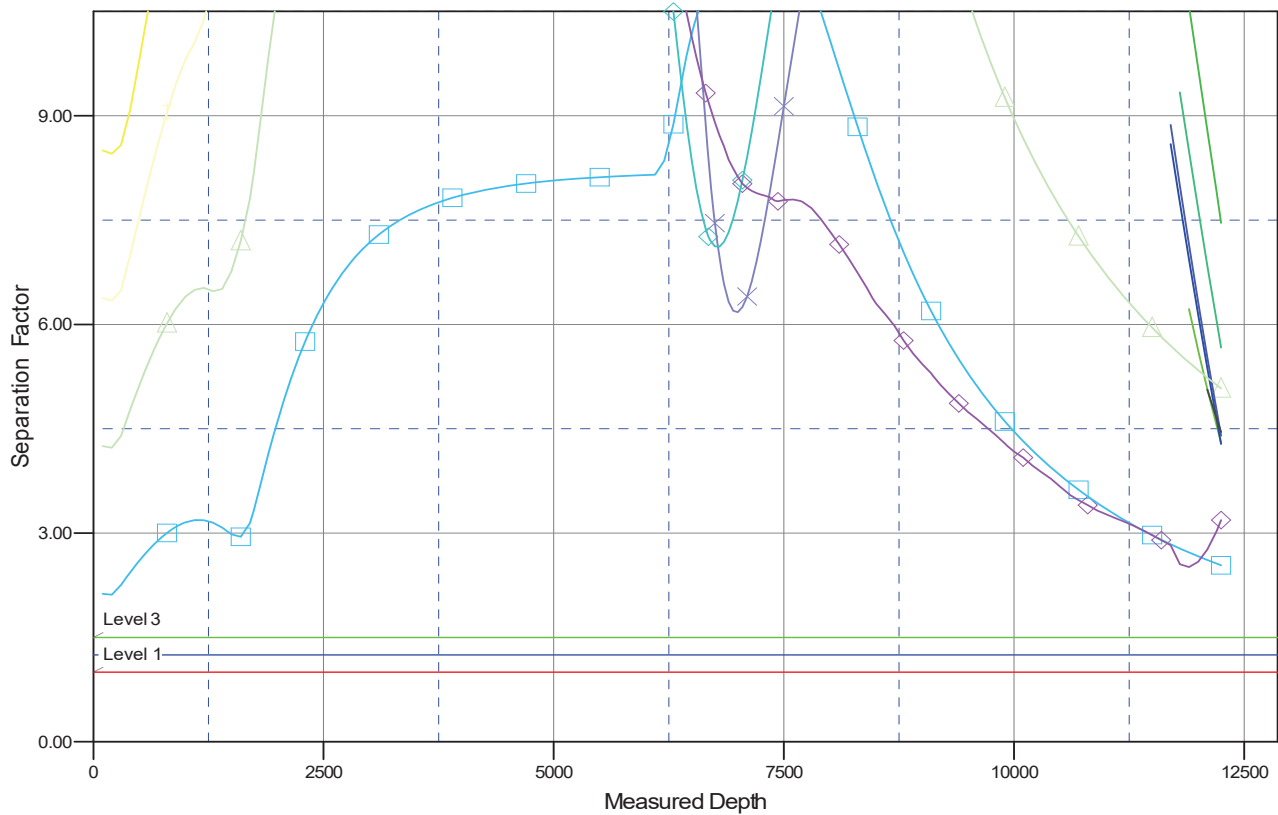
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Central Meridian is -105.500000

Coordinates are relative to: TIMBRO 1717-08H
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.97°

Separation Factor Plot



LEGEND

Timbro 1717-08H, Plan B, Design#1 V0
Timbro 1717-10H, Plan B, Design#1 V0
Timbro 1717-11H, Plan B, Design#1 V0
Timbro 1717-14H, Wellbore #1, Design #1 V0
Timbro 1717-08H, Plan B, Design#1 V0
Timbro 1717-12H, Plan B, Design#1 V0

Timbro 1717-13H, Plan B, Design#1 V0
Timbro 1717-14H, Wellbore #1, Design #1 V0
Timbro 1717-08H, Plan B, Design#1 V0
Timbro 1717-12H, Plan B, Design#1 V0

Timbro 1717-10H, Plan B, Design#1 V0
Timbro 1717-11H, Plan B, Design#1 V0
Timbro 1717-14H, Wellbore #1, Design #1 V0
Timbro 1717-08H, Plan B, Design#1 V0
Timbro 1717-12H, Plan B, Design#1 V0