

VERDAD RESOURCES

WATTENBERG FIELD

9N-59W-17 TIMBRO 1717 PAD

TIMBRO 1717-13H

Plan B

Design #1

Anticollision Summary Report

02 September, 2021

Anticollision Summary Report

Company:	VERDAD RESOURCES	Local Co-ordinate Reference:	Well TIMBRO 1717-13H
Project:	WATTENBERG FIELD	TVD Reference:	RKB = 20' @ 5031.00usft (RIG)
Reference Site:	9N-59W-17 TIMBRO 1717 PAD	MD Reference:	RKB = 20' @ 5031.00usft (RIG)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	TIMBRO 1717-13H	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	11,479.03	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-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	5,938.61	10,442.70	822.12	678.46	5.723	CC
TIMBRO 9-59 8B-9-8 - Wellbore #1 - Design #1	5,950.00	10,442.53	822.30	677.86	5.693	ES
TIMBRO 9-59 8B-9-8 - Wellbore #1 - Design #1	6,050.00	10,441.12	839.19	689.01	5.588	SF
TIMBRO 9-59 8B-9-9 - Verdad PR Well - Actual Baker Su	6,098.56	10,680.00	615.20	488.36	4.850	CC
TIMBRO 9-59 8B-9-9 - Verdad PR Well - Actual Baker Su	6,150.00	10,680.00	619.41	485.93	4.640	ES
TIMBRO 9-59 8B-9-9 - Verdad PR Well - Actual Baker Su	6,250.00	10,680.00	650.66	507.00	4.529	SF
9N-59W-17 Offsets						
Timbro Ranch 17-11-9-59 - Verdad PR Well - Actual Prec						Out of range
9N-59W-17 TIMBRO 1717 PAD						
TIMBRO 1717-08H - Plan B - Design #1	200.00	199.00	80.01	72.44	10.572	CC, ES, SF
TIMBRO 1717-09H - Plan B - Design #1	204.01	203.01	64.00	56.43	8.453	CC, ES
TIMBRO 1717-09H - Plan B - Design #1	300.00	297.96	64.40	56.75	8.415	SF
TIMBRO 1717-10H - Plan B - Design #1	300.00	299.00	48.01	40.36	6.272	CC, ES, SF
TIMBRO 1717-11H - Plan B - Design #1	309.48	308.48	32.00	24.33	4.175	CC, ES
TIMBRO 1717-11H - Plan B - Design #1	400.00	398.57	32.30	24.52	4.150	SF
TIMBRO 1717-12H - Plan B - Design #1	316.57	315.57	16.01	8.34	2.087	CC
TIMBRO 1717-12H - Plan B - Design #1	400.00	399.00	16.01	8.23	2.057	ES, SF
TIMBRO 1717-14H - Wellbore #1 - Design #1	200.00	200.00	15.99	8.42	2.112	CC, 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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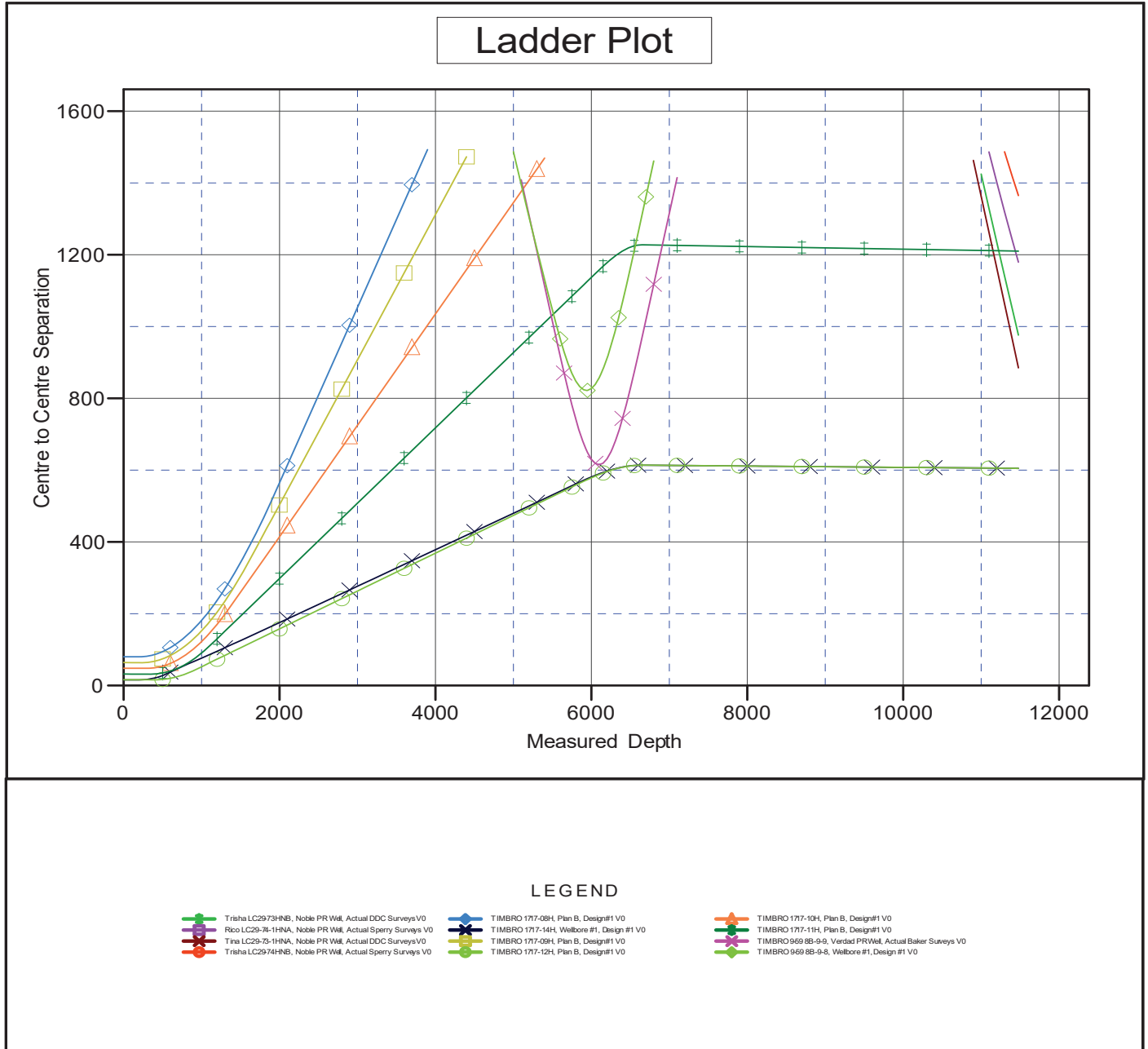
Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
9N-59W-29 Offsets Incomplete						
Rico LC29-74-1HNA - Noble PR Well - Actual Sperry Sur	11,479.03	15,480.00	1,179.33	1,000.54	6.596	CC, ES, SF
Rico LC29-76-1HNA - Noble PR Well - Actual DDC Surve						Out of range
Rico LC29-78-1HNC - Noble PR Well - Actual Sperry Sur						Out of range
Tina LC29-73-1HNA - Noble PR Well - Actual DDC Surve	11,479.03	15,463.00	884.93	831.01	16.411	CC, ES, SF
Tina LC29-75-1HNA - Noble PR Well - Actual Pathfinder						Out of range
Tina LC29-77-1HNA - Noble PR Well - Actual DDC Surve						Out of range
Trisha LC29-73HNB - Noble PR Well - Actual DDC Surve	11,479.03	15,628.00	976.34	816.61	6.113	CC, ES, SF
Trisha LC29-74HNB - Noble PR Well - Actual Sperry Sur	11,479.03	15,548.00	1,364.99	1,162.66	6.746	CC, ES, SF
Trisha LC29-76HNB - Noble PR Well - Actual DDC Surve						Out of range
Trisha LC29-77HNB - Noble PR Well - Actual Sperry Sur						Out of range
Trisha LC29-78HNB - Noble PR Well - Actual Sperry Sur						Out of range

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Reference Depths are relative to RKB = 20' @ 5031.00usft (RIG)
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: TIMBRO 1717-13H
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.97°



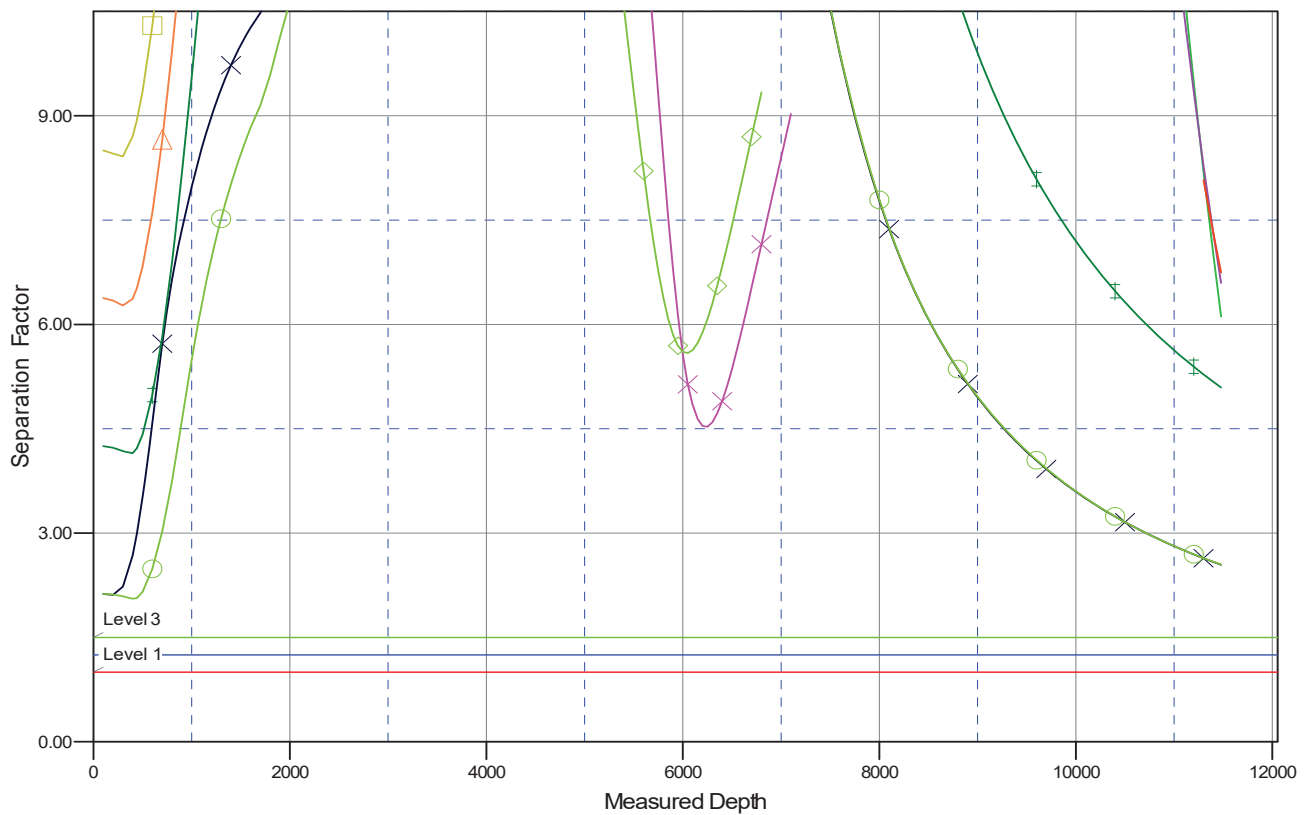
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Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.97°

Separation Factor Plot



LEGEND

- | | | |
|--|--|--|
| Trisha LC2973HNB, Noble PR Well, Actual DDC Surveys V0 | TIMBRO 1717-09H, Plan B, Design#1 V0 | TIMBRO 1717-10H, Plan B, Design#1 V0 |
| Rico LC29-74-1HNA, Noble PR Well, Actual Sperry Surveys V0 | TIMBRO 1717-14H, Wellbore #1, Design #1 V0 | TIMBRO 1717-11H, Plan B, Design#1 V0 |
| Tina LC29-75-1HNA, Noble PR Well, Actual DDC Surveys V0 | TIMBRO 1717-09H, Plan B, Design#1 V0 | TIMBRO 969 88-9-8, Verdad PR Well, Actual Baker Surveys V0 |
| Trisha LC2974HNB, Noble PR Well, Actual Sperry Surveys V0 | TIMBRO 1717-12H, Plan B, Design#1 V0 | TIMBRO 969 88-9-8, Wellbore #1, Design #1 V0 |