

VERDAD RESOURCES

WATTENBERG FIELD

9N-59W-17 TIMBRO 1717 PAD

TIMBRO 1717-08H

Wellbore #1

Design #3

Anticollision Summary Report

11 May, 2021

VERDAD RESOURCES

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	Wellbore #1	Database:	EDM 5000.16 Single User Db
Reference Design:	Design #3	Offset TVD Reference:	Offset Datum

Reference	Design #3		
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	5/11/2021		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	1,700.00	Design #3 (Wellbore #1)	ISCWSA MWD	Fixed:v2:standard declination	
1,700.00	12,238.58	Design #3 (Wellbore #1)	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	6,670.31	7,562.07	796.26	687.06	7.292	CC
TIMBRO 9-59 8B-9-8 - Wellbore #1 - Design #1	6,700.00	7,548.45	797.37	686.81	7.212	ES
TIMBRO 9-59 8B-9-8 - Wellbore #1 - Design #1	6,750.00	7,526.19	804.25	691.68	7.144	SF
TIMBRO 9-59 8B-9-9 - Verdad PR Well - Actual Baker Su	6,831.38	7,737.43	626.96	532.78	6.657	CC
TIMBRO 9-59 8B-9-9 - Verdad PR Well - Actual Baker Su	6,850.00	7,729.90	627.45	531.50	6.540	ES
TIMBRO 9-59 8B-9-9 - Verdad PR Well - Actual Baker Su	6,950.00	7,692.41	646.68	542.49	6.207	SF
9N-59W-17 Offsets						
Timbro Ranch 17-11-9-59 - Verdad PR Well - Actual Prec	8,879.30	7,716.14	602.77	495.05	5.596	CC
Timbro Ranch 17-11-9-59 - Verdad PR Well - Actual Prec	11,800.00	10,631.00	604.86	366.84	2.541	ES
Timbro Ranch 17-11-9-59 - Verdad PR Well - Actual Prec	11,900.00	10,631.00	614.25	369.65	2.511	SF
9N-59W-17 TIMBRO 1717 PAD						
TIMBRO 1717-09H - Wellbore #1 - Design #3	201.00	201.00	18.01	10.44	2.379	CC, ES, SF
TIMBRO 1717-10H - Wellbore #1 - Design #3	201.00	201.00	36.99	29.42	4.886	CC, ES, SF
TIMBRO 1717-11H - Wellbore #1 - Design #3	201.00	201.00	54.99	47.42	7.265	CC, ES, SF
TIMBRO 1717-12H - Wellbore #1 - Design #3	201.00	201.00	74.00	66.43	9.776	CC, ES, SF
TIMBRO 1717-13H - Wellbore #1 - Design #3	201.00	202.00	92.01	84.44	12.155	CC, ES, SF
TIMBRO 1717-14H - Wellbore #1 - Design #3	201.00	202.00	110.99	103.42	14.662	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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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	12,238.58	15,506.00	1,342.82	1,041.05	4.450	CC, ES, SF
Rico LC29-78-1HNC - Noble PR Well - Actual Sperry Sur	12,238.58	15,541.00	946.49	726.02	4.293	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	12,238.58	15,595.00	889.38	687.29	4.401	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	12,238.58	15,585.00	1,160.23	890.33	4.299	CC, ES, SF
Trisha LC29-77HNB - Noble PR Well - Actual Sperry Sur	12,238.58	15,595.00	888.35	769.67	7.485	CC, ES, SF
Trisha LC29-78HNB - Noble PR Well - Actual Sperry Sur	12,238.58	15,574.00	1,076.84	887.26	5.680	CC, ES, SF

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

Offset Depths are relative to Offset Datum

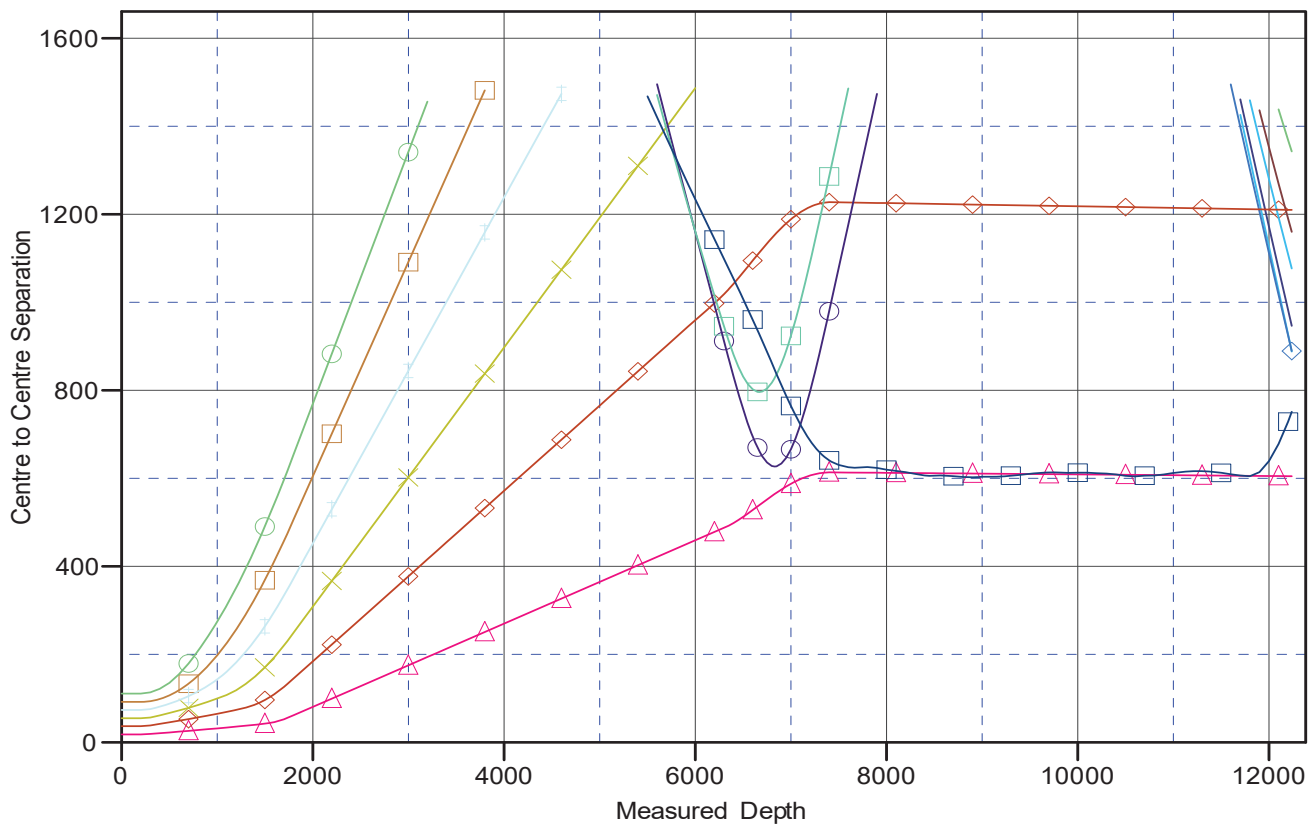
Central Meridian is -105.500000

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, Wellbore #1, Design #3 V0
TIMBRO 1717-14H, Wellbore #1, Design #3 V0
TIMBRO 1717-09H, Wellbore #1, Design #3 V0
TIMBRO 1717-12H, Wellbore #1, Design #3 V0

TIMBRO 1717-10H, Wellbore #1, Design #3 V0
TIMBRO 1717-11H, Wellbore #1, Design #3 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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Reference Depths are relative to RKB = 20' @ 5030.00usft (RIG)

Offset Depths are relative to Offset Datum

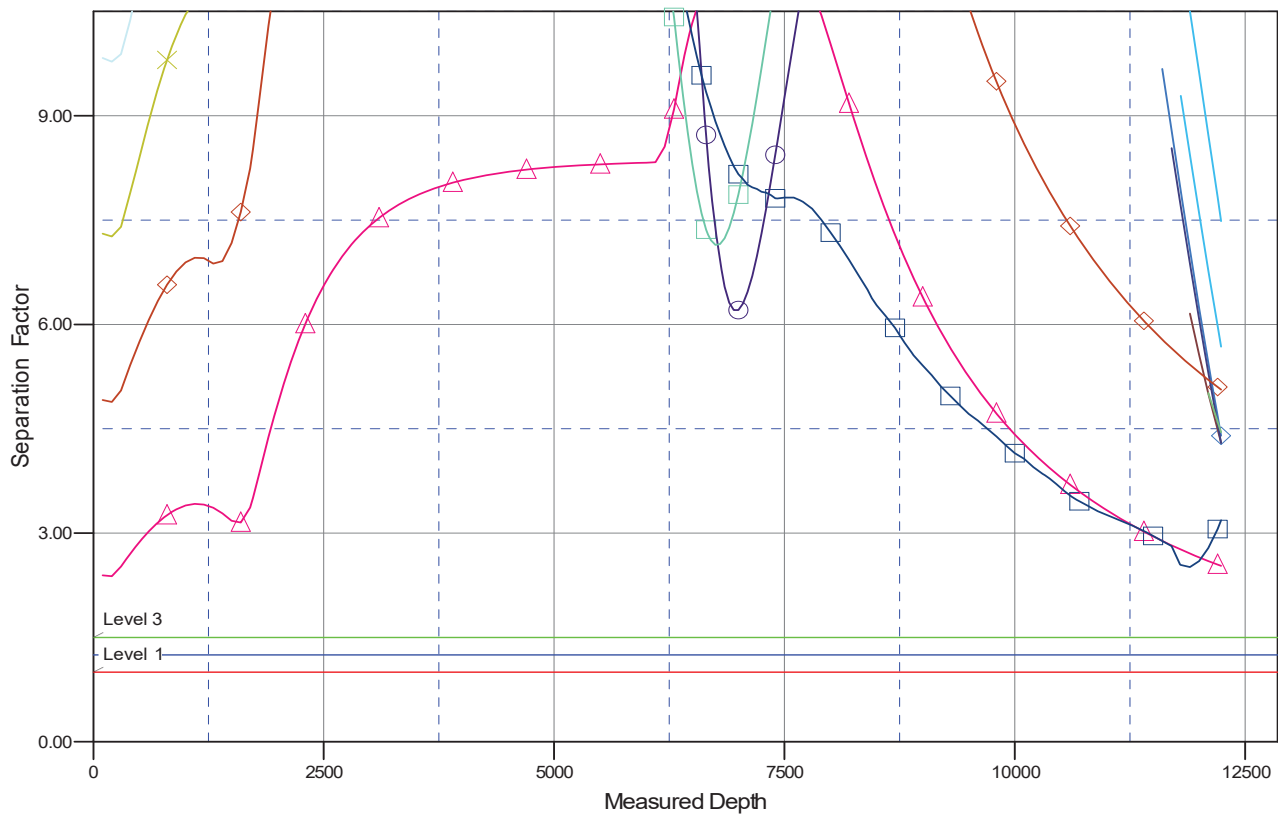
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Coordinates are relative to: TIMBRO 1717-08H

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Grid Convergence at Surface is: 0.97°

Separation Factor Plot



LEGEND

Trisha LC29-77-1HNB, Noble PR Well, Actual Sperry Surveys V0
Trisha LC29-77-1HNA, Noble PR Well, Actual DDC Surveys V0
Trisha LC29-79-HNB, Noble PR Well, Actual Sperry Surveys V0
Trisha LC29-79-HNB, Noble PR Well, Actual DDC Surveys V0
Rico LC29-75-1HNC, Noble PR Well, Actual Sperry Surveys V0

Rico LC29-75-1HNA, Noble PR Well, Actual DDC Surveys V0
TIMBRO 1717-13H, Wellbore #1, Design #3 V0
TIMBRO 1717-14H, Wellbore #1, Design #3 V0
TIMBRO 1717-08H, Wellbore #1, Design #3 V0
TIMBRO 1717-12H, Wellbore #1, Design #3 V0

TIMBRO 1717-10H, Wellbore #1, Design #3 V0
TIMBRO 1717-11H, Wellbore #1, Design #3 V0
TIMBRO 969 8B-9-9, Verdard PR Well, Actual Baker Surveys V0
TIMBRO 969 8B-9-9, Wellbore #1, Design #1 V0
Timbro Ranch 17-11-9-59, Verdard PR Well, Actual Precision Surveys (Grid to True) V0