

# **VERDAD RESOURCES**

**WATTENBERG FIELD**

**9N-59W-01 TIMBRO 0101 PAD**

**TIMBRO 0101-13H**

**Plan B**

**Design #1**

## **Anticollision Summary Report**

**13 October, 2021**

## Anticollision Summary Report

<b>Company:</b>	VERDAD RESOURCES	<b>Local Co-ordinate Reference:</b>	Well TIMBRO 0101-13H
<b>Project:</b>	WATTENBERG FIELD	<b>TVD Reference:</b>	RKB = 24' @ 4961.00usft (RIG)
<b>Reference Site:</b>	9N-59W-01 TIMBRO 0101 PAD	<b>MD Reference:</b>	RKB = 24' @ 4961.00usft (RIG)
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	TIMBRO 0101-13H	<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>	10/12/2021			
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
0.00	1,600.00	Design #1 (Plan B)	ISCWSA MWD	Fixed:v2:standard declination	
1,600.00	11,301.69	Design #1 (Plan B)	ISCWSA MWD	Fixed:v2:standard declination	

<b>Summary</b>						
<b>Site Name</b>	<b>Reference Measured Depth (usft)</b>	<b>Offset Measured Depth (usft)</b>	<b>Distance Between Centres (usft)</b>	<b>Distance Between Ellipses (usft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Offset Well - Wellbore - Design</b>						
10N-59W-36 Offsets						
STATE #1 - US GOLD D/A Well - No Surveys						Out of range
Terrace #36-32M - Whiting WO Well (Waiting on Complet						Out of range
WOLF #36-3624H - Whiting PR Well - Actual Ensign Sur						Out of range
9N-59W-01 Offsets						
BUCHER #1 - Todd Gross D/A Well - No Surveys						Out of range
Timbro Ranch 1-41-9-59 - Verdad Pilot Hole - Actual SDI	6,460.99	6,007.39	592.83	524.63	8.693	CC, ES
Timbro Ranch 1-41-9-59 - Verdad Pilot Hole - Actual SDI	6,496.52	6,008.46	594.02	525.67	8.690	SF
Timbro Ranch 1-41-9-59 - Verdad SI Well - Actual SDI Su	10,193.10	9,461.57	448.15	258.87	2.368	CC
Timbro Ranch 1-41-9-59 - Verdad SI Well - Actual SDI Su	10,600.00	9,780.00	480.58	255.08	2.131	ES, SF
9N-59W-01 TIMBRO 0101 PAD						
TIMBRO 0101-01H - Plan B - Design #1	116.44	117.44	96.00	88.47	12.749	CC
TIMBRO 0101-01H - Plan B - Design #1	200.00	200.32	96.01	88.44	12.687	ES
TIMBRO 0101-01H - Plan B - Design #1	220.00	220.35	96.07	88.49	12.673	SF
TIMBRO 0101-03H - Plan B - Design #1	220.00	221.00	80.01	72.42	10.553	CC, ES, SF
TIMBRO 0101-05H - Plan B - Design #1	220.00	221.00	64.01	56.43	8.443	CC, ES, SF
TIMBRO 0101-07H - Plan B - Design #1	220.00	220.00	48.00	40.42	6.332	CC, ES, SF
TIMBRO 0101-09H - Plan B - Design #1	220.00	220.00	32.00	24.42	4.222	CC, ES, SF
TIMBRO 0101-11H - Plan B - Design #1	220.00	220.00	16.01	8.43	2.112	CC, ES, SF
TIMBRO 0101-16H - Plan B - Design #1	200.00	199.00	16.00	8.43	2.114	CC, ES, SF
9N-59W-12 Offsets						
BEST #1 - Dunwick D/A Well - No Surveys						Out of range
TIMBRO LC12-78HN - Noble PR Well - Actual DDC Surv						Out of range

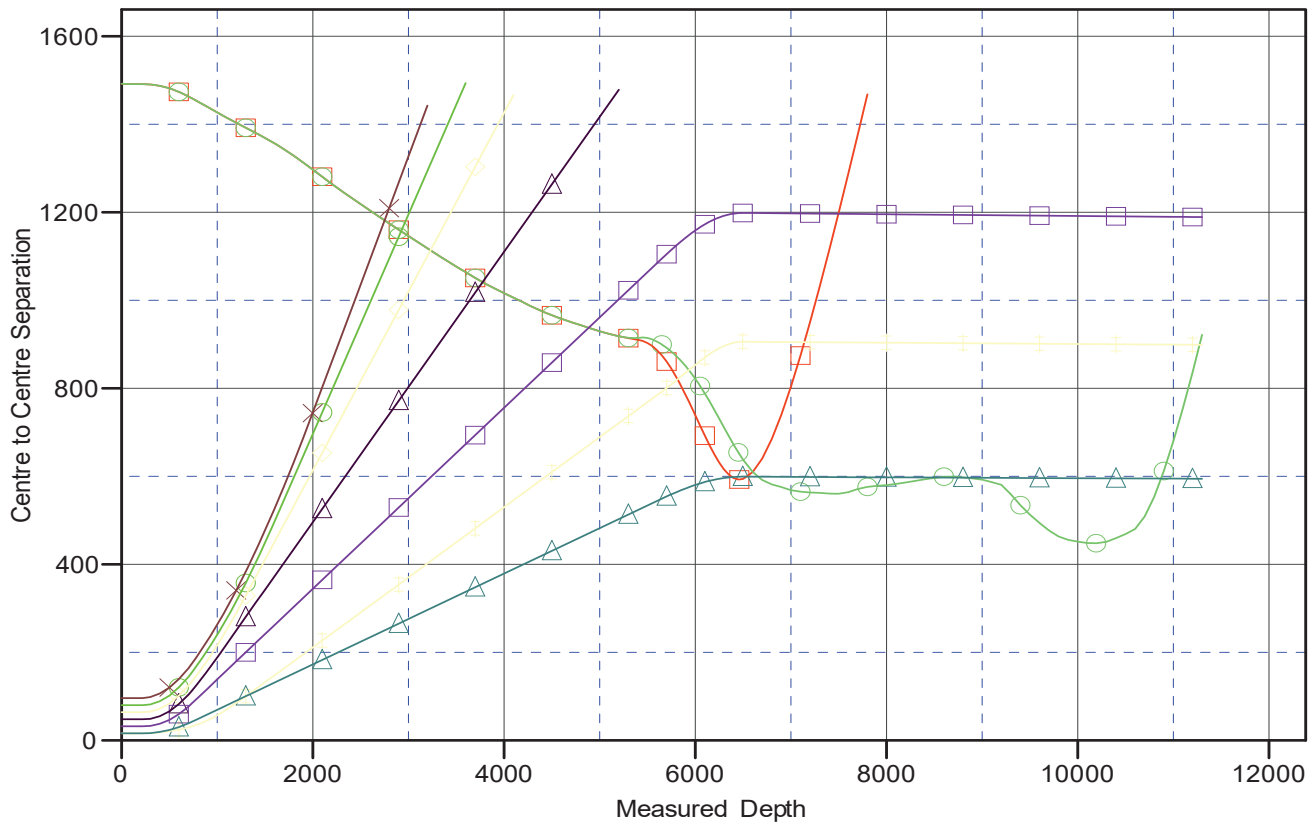
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<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to RKB = 24' @ 4961.00usft (RIG)  
Offset Depths are relative to Offset Datum  
Central Meridian is -105.500000

Coordinates are relative to: TIMBRO 0101-13H  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: 1.02°

### Ladder Plot



#### LEGEND

- Timbro Ranch 1-41-9-59, Verdad Plot Hole, Actual SDI Surveys V0
- Timbro Ranch 1-41-9-59, Verdad SI Well, Actual SDI Surveys V0
- TIMBRO 0101-07H, Plan B, Design#1 V0
- TIMBRO 0101-16H, Plan B, Design#1 V0
- TIMBRO 0101-09H, Plan B, Design#1 V0
- TIMBRO 0101-03H, Plan B, Design#1 V0
- TIMBRO 0101-11H, Plan B, Design#1 V0
- TIMBRO 0101-05H, Plan B, Design#1 V0
- TIMBRO 0101-01H, Plan B, Design#1 V0

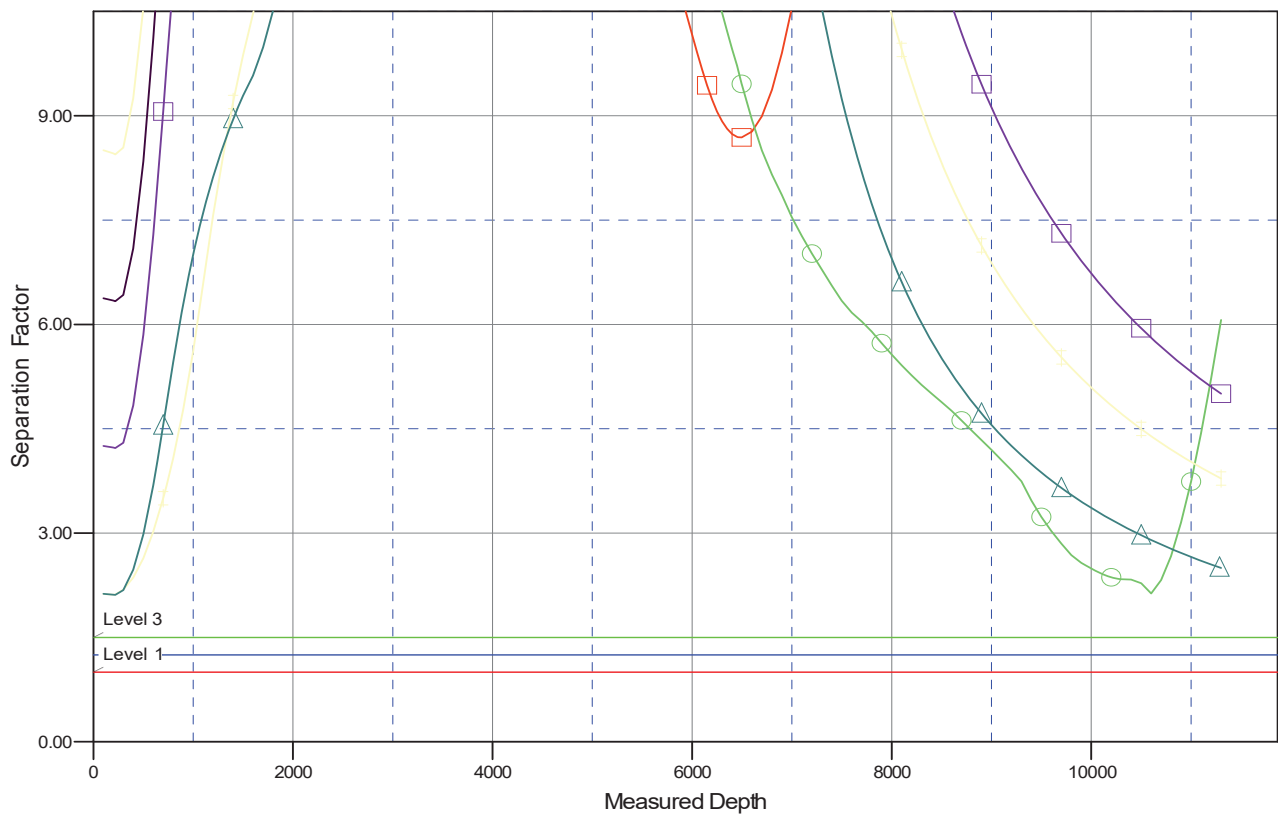
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### Separation Factor Plot



#### LEGEND

Timbro Ranch 1-41-9-59, Verdad Plot Hole, Actual SDI Surveys V0	TIMBRO 0101-16H, Plan B, Design#1 V0	TIMBRO 0101-11H, Plan B, Design#1 V0
Timbro Ranch 1-41-9-59, Verdad SI Well, Actual SDI Surveys V0	TIMBRO 0101-09H, Plan B, Design#1 V0	TIMBRO 0101-05H, Plan B, Design#1 V0
TIMBRO 0101-07H, Plan B, Design#1 V0	TIMBRO 0101-03H, Plan B, Design#1 V0	TIMBRO 0101-01H, Plan B, Design#1 V0