

# **VERDAD RESOURCES**

**WATTENBERG FIELD  
2N-64W-28 GEORGENE PAD  
GEORGENE 2833-04H**

**Plan B  
Design #3**

## **Anticollision Summary Report**

**28 October, 2022**

## Anticollision Summary Report

<b>Company:</b>	VERDAD RESOURCES	<b>Local Co-ordinate Reference:</b>	Well GEORGENE 2833-04H
<b>Project:</b>	WATTENBERG FIELD	<b>TVD Reference:</b>	RKB = 24' @ 5042.00usft (RIG)
<b>Reference Site:</b>	2N-64W-28 GEORGENE PAD	<b>MD Reference:</b>	RKB = 24' @ 5042.00usft (RIG)
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	GEORGENE 2833-04H	<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 #3	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	Design #3		
<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 1,000.00usft	<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>	10/28/2022			
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
0.00	2,376.00	Design #3 (Plan B)	ISCWSA MWD	Fixed:v2:standard declination	
2,376.00	15,326.27	Design #3 (Plan B)	ISCWSA MWD	Fixed:v2:standard declination	

<b>Summary</b>						
Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
1N-64W-05 Offsets						
GRINDE 01-64-05 0108C - HPR PR Well - Actual Atlas S	15,326.75	15,032.53	879.52	689.55	4.630	CC, ES, SF
2N-64W-28 GEORGENE PAD						
GEORGENE 2833-01H - Plan B - Design #3	200.00	200.00	48.00	40.43	6.343	CC, ES, SF
GEORGENE 2833-02H - Plan B - Design #3	200.00	200.00	32.00	24.43	4.229	CC, ES, SF
GEORGENE 2833-03H - Plan B - Design #3	203.40	203.40	16.00	8.43	2.114	CC, ES, SF
GEORGENE 2833-05H - Plan B - Design #3	280.30	280.30	16.00	8.37	2.096	CC, ES
GEORGENE 2833-05H - Plan B - Design #3	15,326.75	15,181.29	541.69	250.93	1.863	SF
GEORGENE 2833-06H - Plan B - Design #3	280.30	280.30	32.00	24.37	4.193	CC, ES
GEORGENE 2833-06H - Plan B - Design #3	300.00	300.00	32.04	24.39	4.187	SF
GEORGENE 2833-07H - Plan B - Design #3	280.30	280.30	48.00	40.37	6.289	CC, ES
GEORGENE 2833-07H - Plan B - Design #3	300.00	300.00	48.04	40.39	6.277	SF
GEORGENE 2833-08H - Plan B - Design #3	200.00	200.00	64.00	56.43	8.457	CC
GEORGENE 2833-08H - Plan B - Design #3	280.30	280.24	64.03	56.40	8.389	ES
GEORGENE 2833-08H - Plan B - Design #3	300.00	299.92	64.10	56.44	8.375	SF

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<b>Reference Well:</b>	GEORGENE 2833-04H	<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 #3	<b>Offset TVD Reference:</b>	Offset Datum

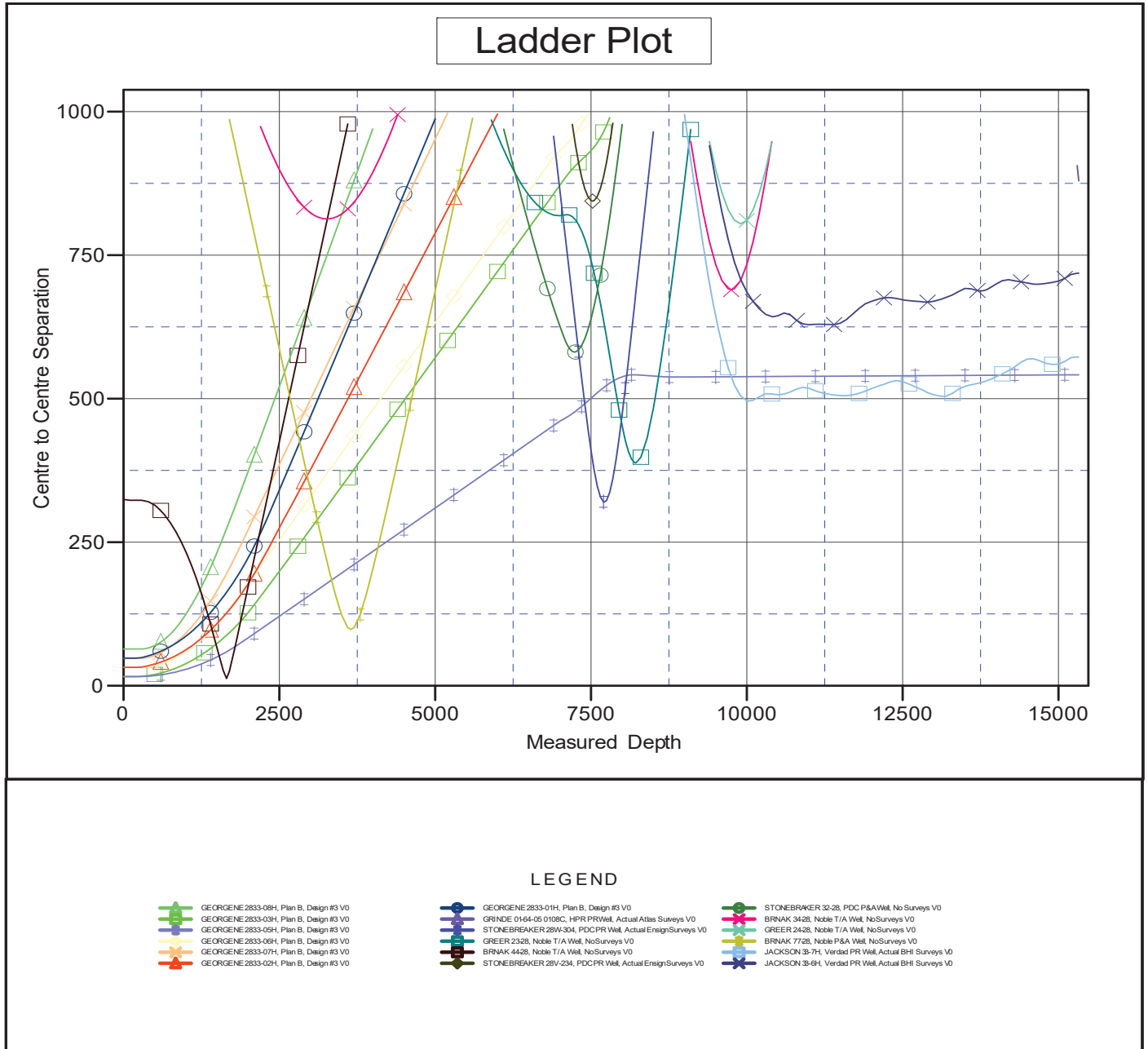
Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
2N-64W-28 Offsets Incomplete						
BRNAK 34-28 - Noble T/A Well - No Surveys	9,750.31	7,008.00	689.84	397.05	2.356	CC, ES
BRNAK 34-28 - Noble T/A Well - No Surveys	9,800.00	7,008.00	691.63	397.43	2.351	SF
BRNAK 44-28 - Noble T/A Well - No Surveys	1,653.42	1,569.44	12.53	-51.54	0.196	Level 1, CC, ES, SF
BRNAK 77-28 - Noble P&A Well - No Surveys	3,649.00	3,266.47	98.16	-46.48	0.679	Level 1, CC, ES, SF
GREER 13-28 - Noble T/A Well - No Surveys						Out of range
GREER 14-28 - Noble T/A Well - No Surveys						Out of range
GREER 23-28 - Noble T/A Well - No Surveys	8,150.00	6,980.09	394.85	89.14	1.292	Level 3, SF
GREER 23-28 - Noble T/A Well - No Surveys	8,200.00	6,984.39	388.69	87.80	1.292	Level 3, ES
GREER 23-28 - Noble T/A Well - No Surveys	8,214.93	6,984.88	388.35	89.05	1.298	Level 3, CC
GREER 24-28 - Noble T/A Well - No Surveys	9,900.00	7,018.00	804.65	510.78	2.738	ES, SF
GREER 24-28 - Noble T/A Well - No Surveys	9,901.32	7,018.00	804.65	510.79	2.738	CC
STONEBRAKER 32-28 - PDC P&A Well - No Surveys	7,234.74	6,327.35	581.27	292.55	2.013	CC
STONEBRAKER 32-28 - PDC P&A Well - No Surveys	7,250.00	6,341.67	581.48	291.87	2.008	ES
STONEBRAKER 32-28 - PDC P&A Well - No Surveys	7,300.00	6,388.89	585.01	292.62	2.001	SF
STONEBRAKER 42-28 - PDC P&A Well - No Surveys						Out of range
STONEBREAKER 28V-234 - PDC PR Well - Actual Ensi	7,525.33	9,128.14	844.34	723.13	6.966	CC
STONEBREAKER 28V-234 - PDC PR Well - Actual Ensi	7,550.00	9,137.16	845.19	722.48	6.888	ES
STONEBREAKER 28V-234 - PDC PR Well - Actual Ensi	7,650.00	9,159.73	865.94	737.77	6.756	SF
STONEBREAKER 28W-304 - PDC PR Well - Actual Ens	7,713.58	9,253.88	319.89	216.35	3.090	CC
STONEBREAKER 28W-304 - PDC PR Well - Actual Ens	7,750.00	9,263.58	322.95	211.43	2.896	ES
STONEBREAKER 28W-304 - PDC PR Well - Actual Ens	7,800.00	9,276.18	336.79	216.44	2.798	SF
2N-64W-29 Offsets						
BAUMGARTNER 14-29 - Noble P&A Well - Actual VES S						Out of range
BELL #41-29 - Noble T/A Well - No Surveys						Out of range
Bell USX #Y29-03 - Noble T/A Well - No Surveys						Out of range
JIM CREEK #1-29 - Noble P&A Well - No Surveys						Out of range
KAMINSKY #1-29 - Noble P&A Well - Actual VES Survey						Out of range
NGL C5 - NGL T/A IJ Well - No Surveys						Out of range
NGL C5A - NGL IJ Well - Actual Ensign Surveys						Out of range
NGL C5B - NGL IJ Well - Actual Total Surveys						Out of range
PARKER #29-34 - Noble SI Well - Actual Coretech Surve						Out of range
2N-64W-32 Offsets						
Ruhl 1K-32H-B264 - CPR PR Well - Actual Cathedral Su						Out of range
Ruhl 1L-32H-B264 - CPR PR Well - Actual Cathedral Su						Out of range
2N-64W-33 Offsets						
JACKSON 33-6H - Verdad PR Well - Actual BHI Surveys	11,008.20	8,023.09	628.80	550.54	8.034	CC
JACKSON 33-6H - Verdad PR Well - Actual BHI Surveys	15,326.75	12,345.73	718.60	467.94	2.867	ES, SF
JACKSON 33-7H - Verdad PR Well - Actual BHI Surveys	10,039.26	7,341.35	496.10	427.50	7.232	CC
JACKSON 33-7H - Verdad PR Well - Actual BHI Surveys	15,326.27	12,674.62	572.36	329.52	2.357	ES, SF
UPV 33-13K4 - Noble T/A Well - No Surveys						Out of range
UPV 33-15K4 - Noble P&A Well - No Surveys						Out of range
UPV 33-7K4 - Noble T/A Well - No Surveys						Out of range
2N-64W-34 Offsets Incomplete						
FRITZLER 12-34 - Noble PR Well - Actual VES Surveys						Out of range

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<b>Reference Wellbore</b>	Plan B	<b>Database:</b>	EDM 5000.16 Single User Db
<b>Reference Design:</b>	Design #3	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to RKB = 24' @ 5042.00usft (RIG)  
Offset Depths are relative to Offset Datum  
Central Meridian is -105.500000

Coordinates are relative to: GEORGENE 2833-04H  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: 0.61°



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Reference Depths are relative to RKB = 24' @ 5042.00usft (RIG)

Offset Depths are relative to Offset Datum

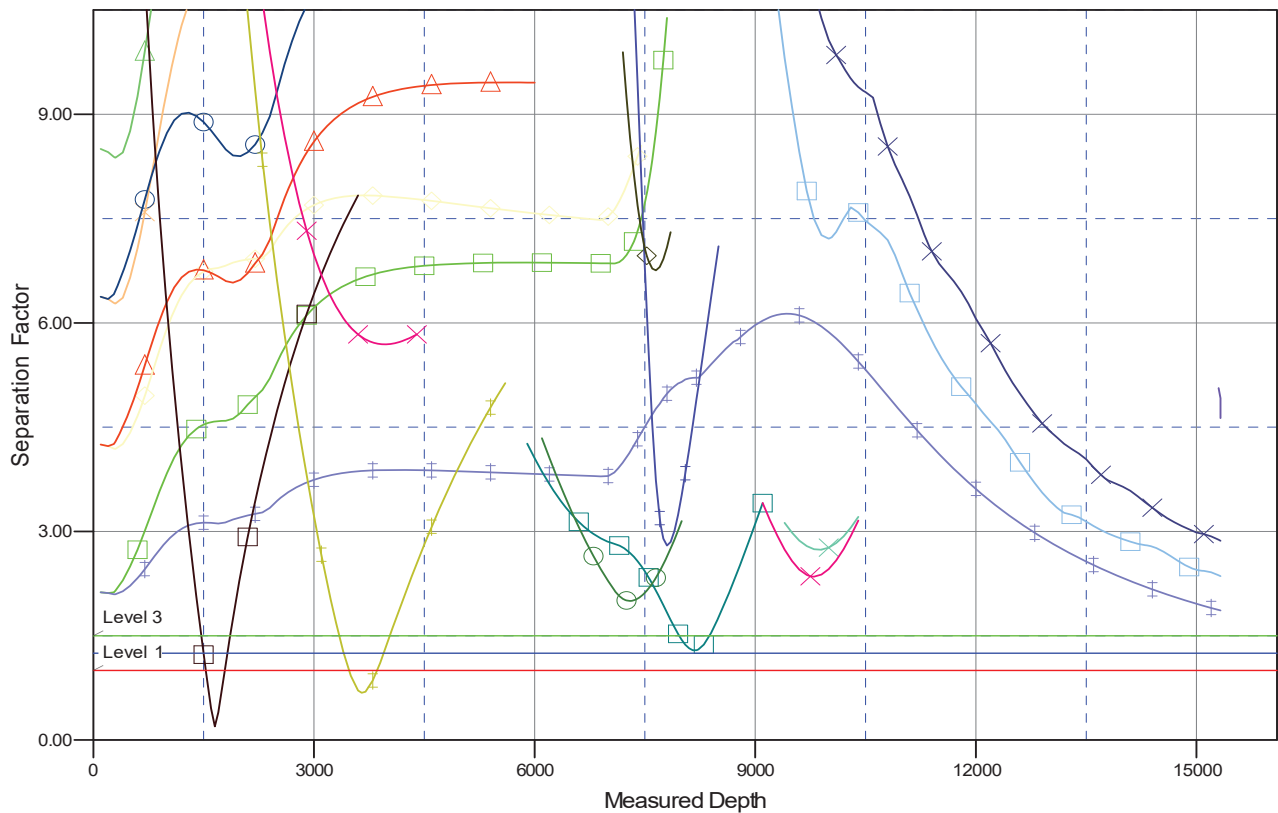
Central Meridian is -105.500000

Coordinates are relative to: GEORGENE 2833-04H

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.61°

### Separation Factor Plot



#### LEGEND

GEORGENE 2833-08H, Plan B, Design #3 V0	GEORGENE 2833-01H, Plan B, Design #3 V0	STONEBREAKER 32-28, PDCPR Well, No Surveys V0
GEORGENE 2833-02H, Plan B, Design #3 V0	GRINDE 0164-05 0109C, HPRPR Well, Actual Atlas Surveys V0	BRNAK 34-28, Noble T/A Well, No Surveys V0
GEORGENE 2833-05H, Plan B, Design #3 V0	STONEBREAKER 28W-304, PDCPR Well, Actual Ensign Surveys V0	GREER 24-28, Noble T/A Well, No Surveys V0
GEORGENE 2833-06H, Plan B, Design #3 V0	GREER 23-28, Noble T/A Well, No Surveys V0	BRNAK 77-28, Noble P&A Well, No Surveys V0
GEORGENE 2833-07H, Plan B, Design #3 V0	BRNAK 44-28, Noble T/A Well, No Surveys V0	JACKSON 33-7H, Verdard PR Well, Actual BHI Surveys V0
GEORGENE 2833-02H, Plan B, Design #3 V0	STONEBREAKER 28V-234, PDCPR Well, Actual Ensign Surveys V0	JACKSON 33-6H, Verdard PR Well, Actual BHI Surveys V0