

VERDAD RESOURCES

WATTENBERG FIELD

1N-64W-10 TIGER 0916 PAD

TIGER 0916-07H

Wellbore #1

Design #1

Anticollision Summary Report

27 December, 2022

Anticollision Summary Report

Company:	VERDAD RESOURCES	Local Co-ordinate Reference:	Well TIGER 0916-07H
Project:	WATTENBERG FIELD	TVD Reference:	RKB = 24' @ 5129.00usft (RIG)
Reference Site:	1N-64W-10 TIGER 0916 PAD	MD Reference:	RKB = 24' @ 5129.00usft (RIG)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	TIGER 0916-07H	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 #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	12/27/2022		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	2,400.91	Design #1 (Wellbore #1)	ISCWSA MWD	Fixed:v2:standard declination
2,400.91	17,864.13	Design #1 (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						
1N-64W-05 Offsets						
BROOKMAN #1 - Bill Barrett PR Well - No Surveys						Out of range
Grinde #01-64-05-3340B - Highpoint Planned Well - Plan						Out of range
Grinde #01-64-05-4841B - Highpoint Planned Well - Plan	7,133.97	16,506.64	1,306.24	931.49	3.486	CC
Grinde #01-64-05-4841B - Highpoint Planned Well - Plan	7,150.00	16,500.76	1,306.53	930.91	3.478	ES
Grinde #01-64-05-4841B - Highpoint Planned Well - Plan	7,200.00	16,482.66	1,311.09	933.09	3.469	SF
Grinde #01-64-05-4841C - Highpoint Planned Well - Plan						Out of range
GRINDE 01-64-05 0108C - HPR PR Well - Actual Atlas S						Out of range
GRINDE 01-64-05-4956C - HPR PR Well - Actual Atlas S	7,216.12	16,604.27	868.51	508.45	2.412	CC
GRINDE 01-64-05-4956C - HPR PR Well - Actual Atlas S	7,250.00	16,594.11	869.99	505.54	2.387	ES
GRINDE 01-64-05-4956C - HPR PR Well - Actual Atlas S	7,300.00	16,579.65	877.56	507.50	2.371	SF
GRINDE 01-64-05-6457B - HPR PR Well - Actual Atlas S	7,323.05	16,624.90	429.38	96.47	1.290	Level 3, CC
GRINDE 01-64-05-6457B - HPR PR Well - Actual Atlas S	7,400.00	16,598.96	439.95	82.04	1.229	Level 2, ES, SF
GRINDE 01-64-05-6457CB - HPR PR Well - Actual Atlas	7,542.95	16,758.05	104.22	-152.18	0.406	Level 1, CC
GRINDE 01-64-05-6457CB - HPR PR Well - Actual Atlas	7,600.00	16,745.74	120.31	-234.58	0.339	Level 1, ES, SF
1N-64W-09 Offsets						
MCMILLAN #1 - Rock Oil D/A Well - No Surveys						Out of range
1N-64W-10 BRNAK EAST PAD						
BRNAK EAST 1015-01H - Plan A - Design #1						Out of range
BRNAK EAST 1015-02H - Plan A - Design #1						Out of range
BRNAK EAST 1015-03H - Wellbore #1 - Design #1						Out of range
BRNAK EAST 1015-04H - Plan A - Design #1						Out of range
BRNAK EAST 1015-05H - Plan A - Design #1						Out of range
BRNAK EAST 1015-06H - Plan A - Design #1						Out of range
BRNAK EAST 1015-07H - Plan A - Design #1						Out of range

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Reference Well:	TIGER 0916-07H	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 #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						
1N-64W-10 Offsets						
BRNAK #21-10 - Goodwin PR Well - No Surveys	351.25	342.25	737.08	722.05	49.044	CC
BRNAK #21-10 - Goodwin PR Well - No Surveys	500.00	490.93	740.47	720.22	36.580	ES
BRNAK #21-10 - Goodwin PR Well - No Surveys	3,000.00	2,849.88	1,490.30	1,380.49	13.572	SF
BRNAK #32-10 - Toltek D/A Well - No Surveys						Out of range
BRNAK 01-64-10-1H - VERDAD PR Well - Actual BKR S	1,616.22	1,573.42	22.53	7.39	1.488	Level 3, CC, ES, SF
BRNAK 01-64-10-2H - VERDAD PR Well - Actual BKR S	1,568.30	1,528.91	68.13	53.51	4.661	CC
BRNAK 01-64-10-2H - VERDAD PR Well - Actual BKR S	1,600.00	1,559.38	68.63	53.48	4.529	ES, SF
BRNAK 01-64-10-3H - VERDAD PR Well - Actual BKR S	1,332.43	1,302.38	69.85	57.96	5.874	CC, ES
BRNAK 01-64-10-3H - VERDAD PR Well - Actual BKR S	1,400.00	1,366.36	72.30	59.53	5.661	SF
1N-64W-10 TIGER 0916 PAD						
TIGER 0916-01H - Wellbore #1 - Design #1	200.00	200.00	95.99	88.42	12.685	CC, ES
TIGER 0916-01H - Wellbore #1 - Design #1	1,700.00	1,639.51	165.49	151.60	11.909	SF
TIGER 0916-02H - Wellbore #1 - Design #1	200.00	200.00	80.04	72.47	10.577	CC, ES, SF
TIGER 0916-03H - Wellbore #1 - Design #1	203.47	203.47	64.09	56.52	8.466	CC, ES
TIGER 0916-03H - Wellbore #1 - Design #1	300.00	298.91	64.51	56.86	8.432	SF
TIGER 0916-04H - Wellbore #1 - Design #1	206.14	206.14	47.86	40.28	6.321	CC, ES
TIGER 0916-04H - Wellbore #1 - Design #1	300.00	299.61	47.95	40.30	6.267	SF
TIGER 0916-05H - Wellbore #1 - Design #1	300.00	300.00	31.90	24.25	4.169	CC, ES
TIGER 0916-05H - Wellbore #1 - Design #1	17,864.13	18,383.02	1,233.93	753.11	2.566	SF
TIGER 0916-06H - Wellbore #1 - Design #1	301.81	301.81	15.95	8.30	2.084	CC, ES
TIGER 0916-06H - Wellbore #1 - Design #1	17,864.13	18,102.47	617.10	136.52	1.284	Level 3, SF
TIGER 0916-08H - Wellbore #1 - Design #1	351.25	351.25	15.95	8.24	2.068	CC, ES
TIGER 0916-08H - Wellbore #1 - Design #1	17,864.13	17,667.57	616.78	137.40	1.287	Level 3, SF
1N-64W-16 Offsets						
EAST HUDSON B STATE #1-16 - Gusher Oil & Gas P/A						Out of range
STATE #1 - Karen Oil D/A Well - No Surveys	16,453.88	7,160.00	960.25	501.10	2.091	CC
STATE #1 - Karen Oil D/A Well - No Surveys	16,500.00	7,160.00	961.36	499.29	2.081	ES, SF
STATE #14-16 - Kaiser-Francis Oil P/A Well - No Survey						Out of range
TURECEK STATE 16-1H - VERDAD PR Well - Actual M						Out of range

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Reference Depths are relative to RKB = 24' @ 5129.00usft (RIG)

Offset Depths are relative to Offset Datum

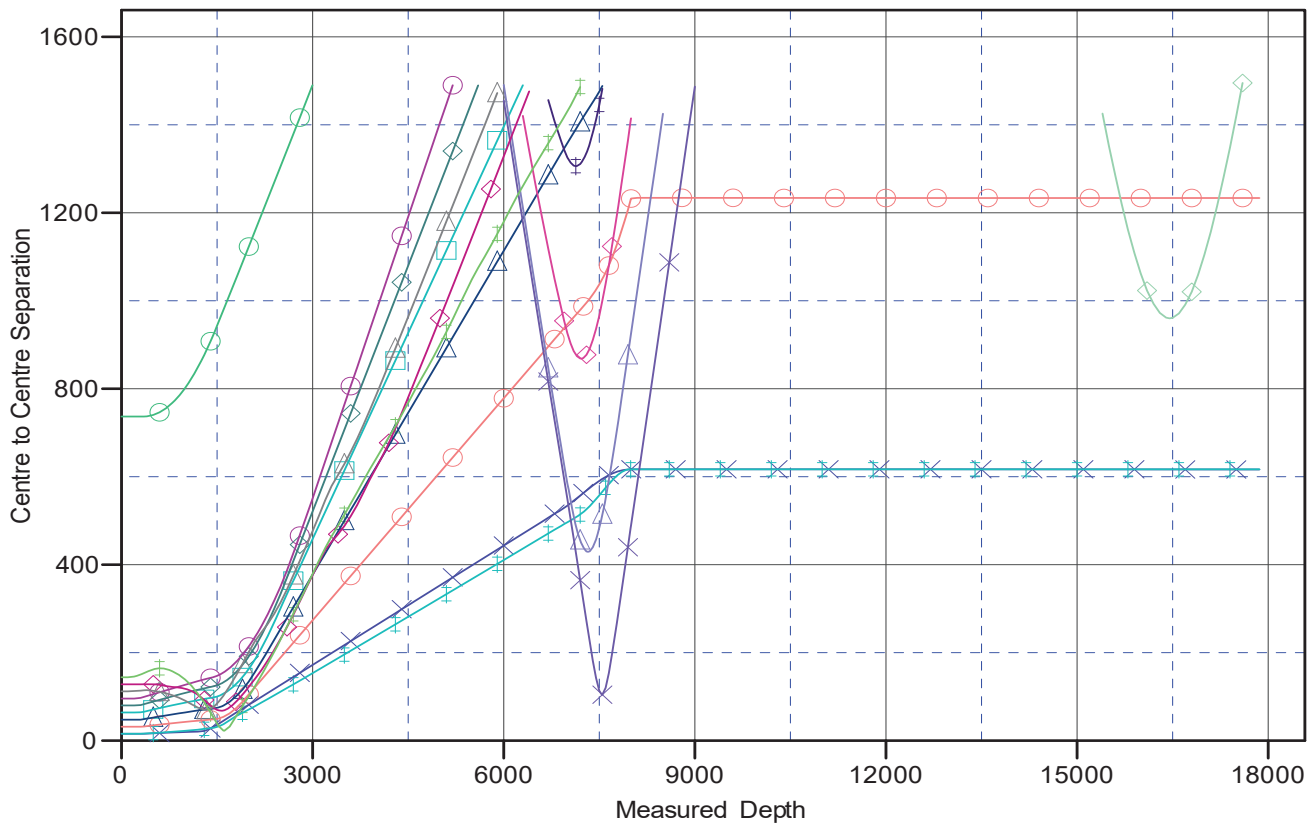
Central Meridian is -105.500000

Coordinates are relative to: TIGER 0916-07H

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.62°

Ladder Plot



LEGEND

TIGER 091601H, Wellbore #1, Design #1 V0	TIGER 091605H, Wellbore #1, Design #1 V0	BRNAK 0164-10-2H, VERDAD PR Well, Actual BKR Surveys V0
TIGER 091603H, Wellbore #1, Design #1 V0	GRINDE 0164-05-6457C, HPR PR Well, Actual Atlas Surveys V0	BRNAK 0164-10-3H, VERDAD PR Well, Actual BKR Surveys V0
TIGER 091602H, Wellbore #1, Design #1 V0	GRINDE 0164-05-6456C, HPR PR Well, Actual Atlas Surveys V0	BRNAK 0164-10-1H, VERDAD PR Well, Actual BKR Surveys V0
TIGER 091608H, Wellbore #1, Design #1 V0	GRINDE 0164-05-6457B, HPR PR Well, Actual Atlas Surveys V0	STATE #1, Karen QID/A Well, No Surveys V0
TIGER 091604H, Wellbore #1, Design #1 V0	Grinde #01-84-05-4841B, Highpoint Planned Well, Planned Meritweather Surveys V0	
TIGER 091606H, Wellbore #1, Design #1 V0	BRNAK #21-10, Goodwin PR Well, No Surveys V0	

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Reference Depths are relative to RKB = 24' @ 5129.00usft (RIG)

Offset Depths are relative to Offset Datum

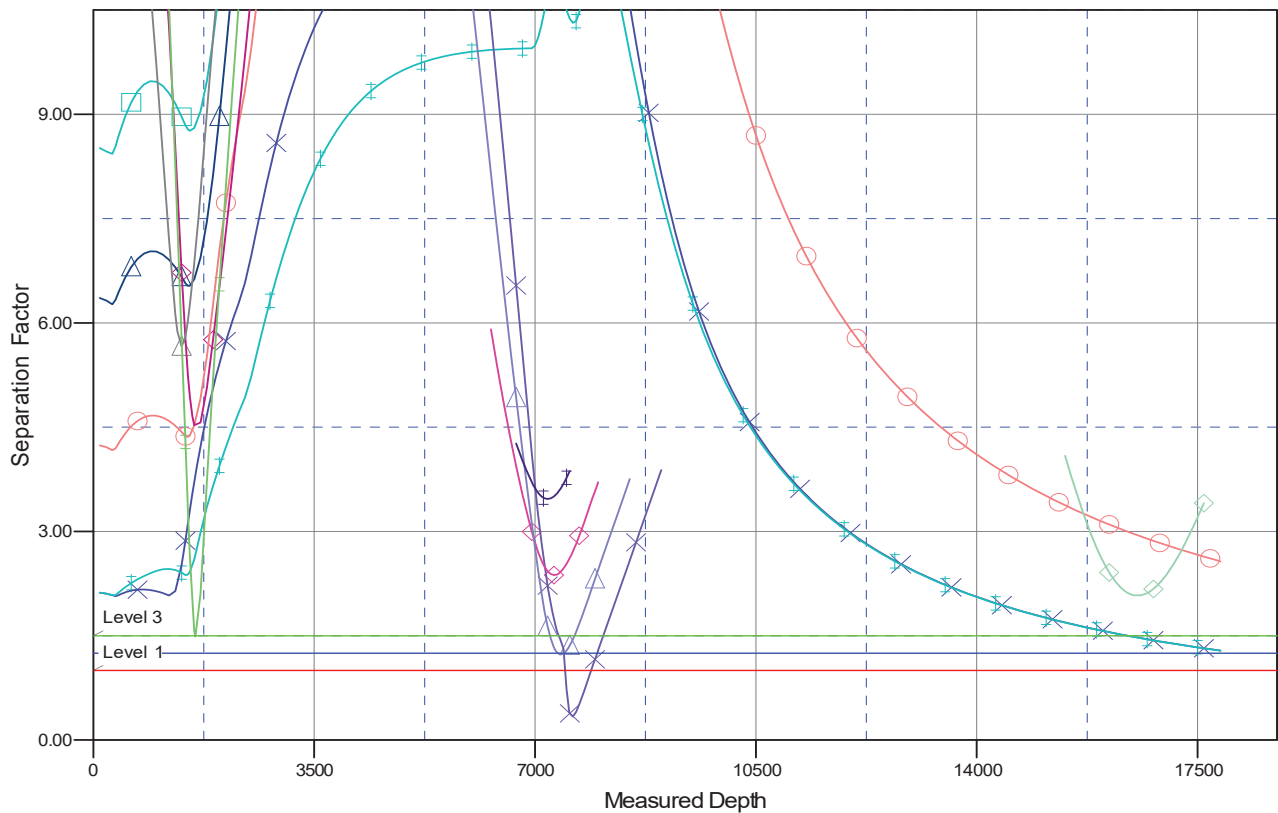
Central Meridian is -105.500000

Coordinates are relative to: TIGER 0916-07H

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.62°

Separation Factor Plot



LEGEND

TIGER 091601H, Wellbore #1, Design #1 V0	TIGER 091609H, Wellbore #1, Design #1 V0	BRNAK 0164-10-2H, VERDAD PRW, Actual BKR Surveys V0
TIGER 091603H, Wellbore #1, Design #1 V0	GRINDE 0164-05-6457CB, HPR PR Well, Actual Atlas Surveys V0	BRNAK 0164-10-3H, VERDAD PRW, Actual BKR Surveys V0
TIGER 091602H, Wellbore #1, Design #1 V0	GRINDE 0164-05-4556C, HPR PR Well, Actual Atlas Surveys V0	BRNAK 0164-10-1H, VERDAD PRW, Actual BKR Surveys V0
TIGER 091608H, Wellbore #1, Design #1 V0	GRINDE 0164-05-6457B, HPR PR Well, Actual Atlas Surveys V0	STATE #1, Karen QID/A Well, No Surveys V0
TIGER 091604H, Wellbore #1, Design #1 V0	Grinde #01-64-05-4841B, Highpoint Planned Well, Planned Meriwether Surveys V0	
TIGER 091606H, Wellbore #1, Design #1 V0	BRNAK #21-10, Goodwin PR Well, No Surveys V0	