

VERDAD RESOURCES

WATTENBERG FIELD

1N-64W-10 TIGER 0916 PAD

TIGER 0916-08H

Wellbore #1

Design #1

Anticollision Summary Report

27 December, 2022

Anticollision Summary Report

Company:	VERDAD RESOURCES	Local Co-ordinate Reference:	Well TIGER 0916-08H
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 0916-08H	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 #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	2,367.10	Design #1 (Wellbore #1)	ISCWSA MWD	Fixed:v2:standard declination
2,367.10	17,674.96	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	6,953.63	16,981.40	1,312.97	936.54	3.488	CC
Grinde #01-64-05-4841B - Highpoint Planned Well - Plan	7,000.00	16,981.40	1,315.48	935.82	3.465	ES
Grinde #01-64-05-4841B - Highpoint Planned Well - Plan	7,050.00	16,981.40	1,323.74	941.15	3.460	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	7,034.56	17,118.00	878.12	513.23	2.407	CC
GRINDE 01-64-05-4956C - HPR PR Well - Actual Atlas S	7,100.00	17,118.00	883.89	509.69	2.362	ES
GRINDE 01-64-05-4956C - HPR PR Well - Actual Atlas S	7,150.00	17,118.00	895.94	516.07	2.359	SF
GRINDE 01-64-05-6457B - HPR PR Well - Actual Atlas S	7,142.17	17,191.00	457.77	115.68	1.338	Level 3, CC
GRINDE 01-64-05-6457B - HPR PR Well - Actual Atlas S	7,200.00	17,182.73	463.92	102.00	1.282	Level 3, ES
GRINDE 01-64-05-6457B - HPR PR Well - Actual Atlas S	7,250.00	17,173.09	478.68	104.72	1.280	Level 3, SF
GRINDE 01-64-05-6457CB - HPR PR Well - Actual Atlas	7,362.71	17,365.99	97.35	-162.30	0.375	Level 1, CC
GRINDE 01-64-05-6457CB - HPR PR Well - Actual Atlas	7,400.00	17,362.02	105.14	-236.99	0.307	Level 1, SF
GRINDE 01-64-05-6457CB - HPR PR Well - Actual Atlas	7,450.00	17,357.68	134.65	-251.51	0.349	Level 1, ES
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 0916-08H	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 #1	Offset TVD Reference:	Offset Datum

Summary						
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Offset Well - Wellbore - Design						
1N-64W-10 Offsets						
BRNAK #21-10 - Goodwin PR Well - No Surveys	370.05	361.05	724.21	708.53	46.191	CC
BRNAK #21-10 - Goodwin PR Well - No Surveys	500.00	490.96	726.73	706.49	35.901	ES
BRNAK #21-10 - Goodwin PR Well - No Surveys	3,500.00	3,377.82	1,486.17	1,357.78	11.576	SF
BRNAK #32-10 - Toltek D/A Well - No Surveys						Out of range
BRNAK 01-64-10-1H - VERDAD PR Well - Actual BKR S	1,889.16	1,846.43	24.18	6.87	1.397	Level 3, CC
BRNAK 01-64-10-1H - VERDAD PR Well - Actual BKR S	1,900.00	1,857.28	24.20	6.70	1.383	Level 3, ES, SF
BRNAK 01-64-10-2H - VERDAD PR Well - Actual BKR S	1,816.41	1,776.04	75.12	58.78	4.597	CC
BRNAK 01-64-10-2H - VERDAD PR Well - Actual BKR S	1,900.00	1,859.35	75.78	58.16	4.300	ES
BRNAK 01-64-10-2H - VERDAD PR Well - Actual BKR S	17,543.00	17,175.00	1,345.72	889.16	2.948	SF
BRNAK 01-64-10-3H - VERDAD PR Well - Actual BKR S	1,427.19	1,392.17	79.10	66.75	6.406	CC, ES
BRNAK 01-64-10-3H - VERDAD PR Well - Actual BKR S	17,583.10	17,396.00	1,480.97	1,020.76	3.218	SF
1N-64W-10 TIGER 0916 PAD						
TIGER 0916-01H - Wellbore #1 - Design #1	200.00	200.00	111.94	104.37	14.793	CC, ES, SF
TIGER 0916-02H - Wellbore #1 - Design #1	200.00	200.00	95.99	88.42	12.685	CC, ES
TIGER 0916-02H - Wellbore #1 - Design #1	300.00	297.54	96.95	89.31	12.676	SF
TIGER 0916-03H - Wellbore #1 - Design #1	203.47	203.47	80.04	72.47	10.574	CC, ES
TIGER 0916-03H - Wellbore #1 - Design #1	300.00	298.64	80.46	72.81	10.517	SF
TIGER 0916-04H - Wellbore #1 - Design #1	206.14	206.14	63.81	56.24	8.427	CC, ES
TIGER 0916-04H - Wellbore #1 - Design #1	300.00	299.48	63.90	56.25	8.352	SF
TIGER 0916-05H - Wellbore #1 - Design #1	300.00	300.00	47.86	40.20	6.253	CC, ES, SF
TIGER 0916-06H - Wellbore #1 - Design #1	306.40	306.40	31.90	24.24	4.165	CC, ES
TIGER 0916-06H - Wellbore #1 - Design #1	17,674.96	18,102.47	1,233.93	753.44	2.568	SF
TIGER 0916-07H - Wellbore #1 - Design #1	303.11	303.11	15.95	8.30	2.083	CC
TIGER 0916-07H - Wellbore #1 - Design #1	370.05	369.95	16.01	8.27	2.069	ES
TIGER 0916-07H - Wellbore #1 - Design #1	17,674.96	17,864.13	616.82	136.39	1.284	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						Out of range
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 Wellbore	Wellbore #1	Database:	EDM 5000.16 Single User Db
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

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

Offset Depths are relative to Offset Datum

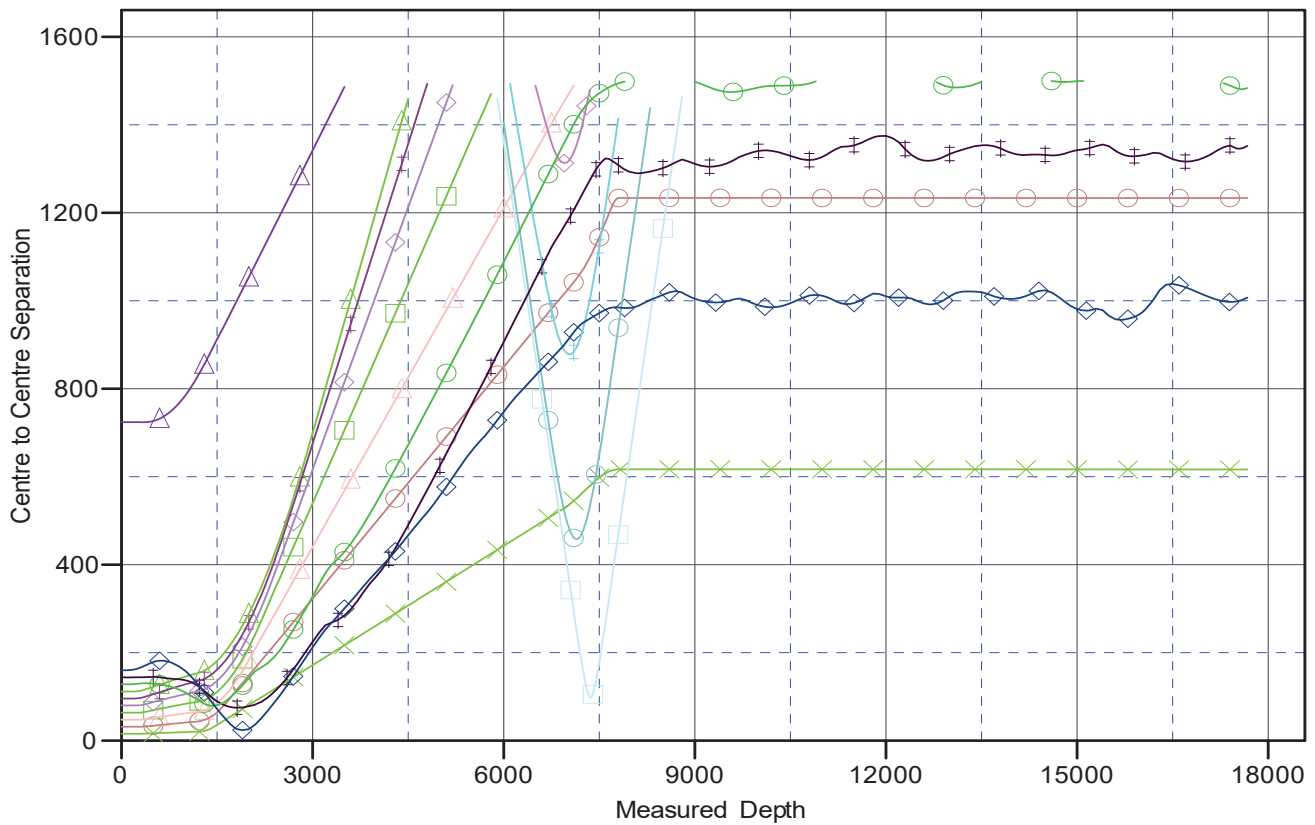
Central Meridian is -105.500000

Coordinates are relative to: TIGER 0916-08H

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 091606H, Wellbore #1, Design #1 V0	Grinde #01-06-05-4841B, Highpoint Planned Well, Planned/Meritwether Surveys V0
TIGER 091603H, Wellbore #1, Design #1 V0	TIGER 091605H, Wellbore #1, Design #1 V0	BRNAK #21-10, Goodwin PR Well, No Surveys V0
TIGER 091602H, Wellbore #1, Design #1 V0	GRINDE 0164-05-6457CB, HPR PR Well, Actual Atlas Surveys V0	BRNAK 0164-10-2H, VERDAD PR Well, Actual BKR Surveys V0
TIGER 091604H, Wellbore #1, Design #1 V0	GRINDE 0164-05-4956C, HPR PR Well, Actual Atlas Surveys V0	BRNAK 0164-10-3H, VERDAD PR Well, Actual BKR Surveys V0
TIGER 091607H, Wellbore #1, Design #1 V0	GRINDE 0164-05-6457B, HPR PR Well, Actual Atlas Surveys V0	BRNAK 0164-10-1H, VERDAD PR Well, Actual BKR Surveys V0

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

Offset Depths are relative to Offset Datum

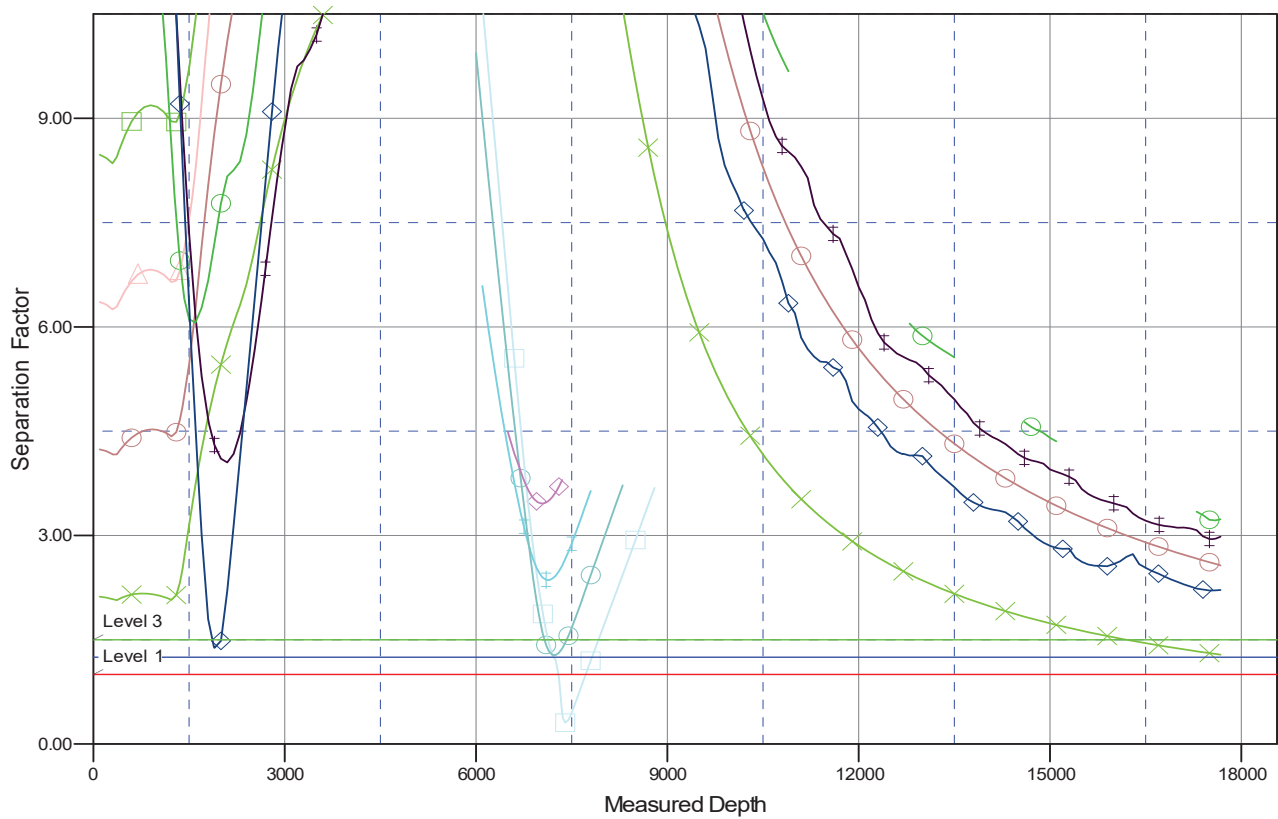
Central Meridian is -105.500000

Coordinates are relative to: TIGER 0916-08H

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Separation Factor Plot



LEGEND

TIGER 091601H, Wellbore #1, Design #1 V0
TIGER 091603H, Wellbore #1, Design #1 V0
TIGER 091602H, Wellbore #1, Design #1 V0
TIGER 091604H, Wellbore #1, Design #1 V0
TIGER 091607H, Wellbore #1, Design #1 V0

TIGER 091606H, Wellbore #1, Design #1 V0
TIGER 091605H, Wellbore #1, Design #1 V0
GRINDE 0164-05-6457CB, HPR PR Well, Actual Atlas Surveys V0
GRINDE 0164-05-4555C, HPR PR Well, Actual Atlas Surveys V0
GRINDE 0164-05-6457B, HPR PR Well, Actual Atlas Surveys V0

Grinde #01-66-05-4841B, Highpoint Planned Well, Planned Meriwether Surveys V0
BRNAK #21-10, Goodwin PR Well, No Surveys V0
BRNAK 0164-10-2H, VERDAD PR Well, Actual BKR Surveys V0
BRNAK 0164-10-3H, VERDAD PR Well, Actual BKR Surveys V0
BRNAK 0164-10-1H, VERDAD PR Well, Actual BKR Surveys V0