

VERDAD RESOURCES

WATTENBERG FIELD

1N-64W-10 TIGER 0916 PAD

TIGER 0916-06H

Wellbore #1

Design #1

Anticollision Summary Report

27 December, 2022

Anticollision Summary Report

Company:	VERDAD RESOURCES	Local Co-ordinate Reference:	Well TIGER 0916-06H
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 0916-06H	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	2,436.69	Design #1 (Wellbore #1)	ISCWSA MWD	Fixed:v2:standard declination
2,436.69	18,101.98	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	7,371.15	15,932.31	1,302.64	932.35	3.518	CC
Grinde #01-64-05-4841B - Highpoint Planned Well - Plan	7,400.00	15,919.51	1,303.55	931.86	3.507	ES
Grinde #01-64-05-4841B - Highpoint Planned Well - Plan	7,450.00	15,897.67	1,309.40	935.63	3.503	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	7,455.41	15,999.21	859.66	504.53	2.421	CC
GRINDE 01-64-05-4956C - HPR PR Well - Actual Atlas S	7,500.00	15,981.02	862.15	501.76	2.392	ES
GRINDE 01-64-05-4956C - HPR PR Well - Actual Atlas S	7,550.00	15,962.09	870.85	505.46	2.383	SF
GRINDE 01-64-05-6457B - HPR PR Well - Actual Atlas S	7,563.59	16,046.43	428.02	102.29	1.314	Level 3, CC
GRINDE 01-64-05-6457B - HPR PR Well - Actual Atlas S	7,650.00	16,017.99	441.15	87.08	1.246	Level 2, ES, SF
GRINDE 01-64-05-6457CB - HPR PR Well - Actual Atlas	7,788.52	16,154.95	96.67	-149.87	0.392	Level 1, CC
GRINDE 01-64-05-6457CB - HPR PR Well - Actual Atlas	7,850.00	16,136.95	115.49	-238.20	0.327	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 0916-06H	Survey Calculation Method:	Minimum Curvature
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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	325.70	316.70	750.06	735.91	52.994	CC
BRNAK #21-10 - Goodwin PR Well - No Surveys	400.00	390.99	750.88	734.16	44.915	ES
BRNAK #21-10 - Goodwin PR Well - No Surveys	2,700.00	2,529.49	1,479.73	1,380.98	14.985	SF
BRNAK #32-10 - Toltek D/A Well - No Surveys						Out of range
BRNAK 01-64-10-1H - VERDAD PR Well - Actual BKR S	1,496.08	1,457.63	38.80	24.80	2.770	CC
BRNAK 01-64-10-1H - VERDAD PR Well - Actual BKR S	1,500.00	1,461.34	38.82	24.74	2.756	ES, SF
BRNAK 01-64-10-2H - VERDAD PR Well - Actual BKR S	1,418.18	1,385.39	79.35	66.25	6.058	CC, ES
BRNAK 01-64-10-2H - VERDAD PR Well - Actual BKR S	1,500.00	1,463.18	82.53	68.19	5.754	SF
BRNAK 01-64-10-3H - VERDAD PR Well - Actual BKR S	1,152.17	1,126.61	71.20	60.73	6.797	CC
BRNAK 01-64-10-3H - VERDAD PR Well - Actual BKR S	1,200.00	1,173.69	71.64	60.72	6.560	ES
BRNAK 01-64-10-3H - VERDAD PR Well - Actual BKR S	1,300.00	1,270.81	76.61	64.62	6.389	SF
1N-64W-10 TIGER 0916 PAD						
TIGER 0916-01H - Wellbore #1 - Design #1	200.00	200.00	80.04	72.47	10.577	CC, ES
TIGER 0916-01H - Wellbore #1 - Design #1	1,900.00	1,842.97	133.95	118.44	8.633	SF
TIGER 0916-02H - Wellbore #1 - Design #1	200.00	200.00	64.09	56.52	8.469	CC, ES
TIGER 0916-02H - Wellbore #1 - Design #1	1,800.00	1,753.20	108.89	95.58	8.183	SF
TIGER 0916-03H - Wellbore #1 - Design #1	203.47	203.47	48.14	40.57	6.359	CC, ES
TIGER 0916-03H - Wellbore #1 - Design #1	1,700.00	1,668.03	78.59	65.74	6.117	SF
TIGER 0916-04H - Wellbore #1 - Design #1	206.14	206.14	31.90	24.33	4.214	CC, ES
TIGER 0916-04H - Wellbore #1 - Design #1	18,102.47	18,715.32	1,295.54	814.61	2.694	SF
TIGER 0916-05H - Wellbore #1 - Design #1	300.00	300.00	15.95	8.30	2.084	CC, ES
TIGER 0916-05H - Wellbore #1 - Design #1	18,102.47	18,383.02	616.82	135.94	1.283	Level 3, SF
TIGER 0916-07H - Wellbore #1 - Design #1	325.70	325.70	15.95	8.27	2.076	CC, ES
TIGER 0916-07H - Wellbore #1 - Design #1	18,102.47	17,856.85	617.06	137.76	1.287	Level 3, SF
TIGER 0916-08H - Wellbore #1 - Design #1	325.70	325.70	31.90	24.22	4.153	CC, ES
TIGER 0916-08H - Wellbore #1 - Design #1	18,102.47	17,660.30	1,233.84	754.70	2.575	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	16,699.48	7,160.00	343.17	-116.14	0.747	Level 1, CC
STATE #1 - Karen Oil D/A Well - No Surveys	16,700.00	7,160.00	343.17	-116.23	0.747	Level 1, 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	17,744.48	11,530.00	1,294.49	945.80	3.712	CC, ES
TURECEK STATE 16-1H - VERDAD PR Well - Actual M	17,800.00	11,530.00	1,295.68	946.28	3.708	SF

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

Offset Depths are relative to Offset Datum

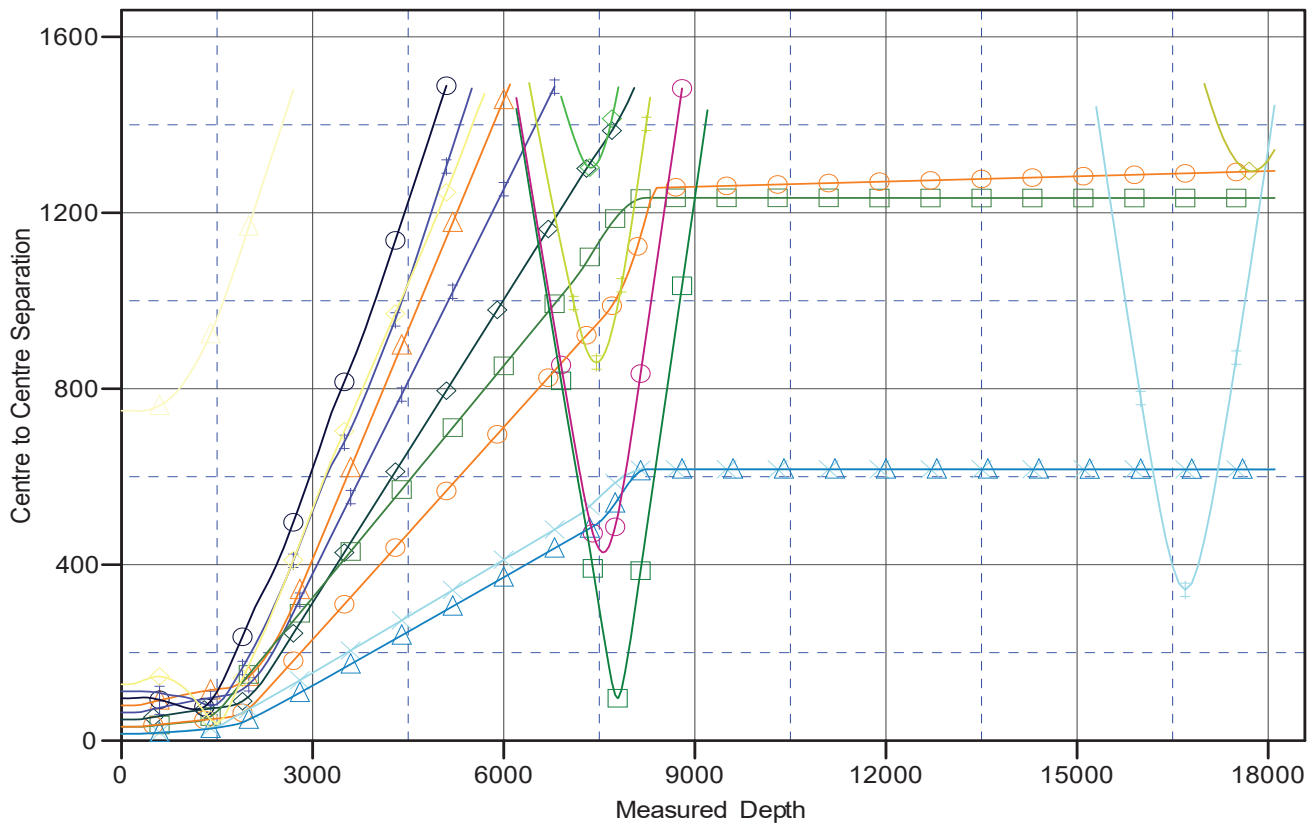
Central Meridian is -105.500000

Coordinates are relative to: TIGER 0916-06H

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 0164-05-4956C, 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 Old'A Well, No Surveys V0
TIGER 091604H, Wellbore #1, Design #1 V0	Grinde #01-84-05-4841B, Highpoint Planned Well, Planned Meritwether Surveys V0	TURECEK STATE 16-1H, VERDAD PR Well, Actual MS Directional Surveys V0
TIGER 091607H, Wellbore #1, Design #1 V0	BRNAK #21-10, Goodwin PR Well, No Surveys V0	

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Offset Depths are relative to Offset Datum

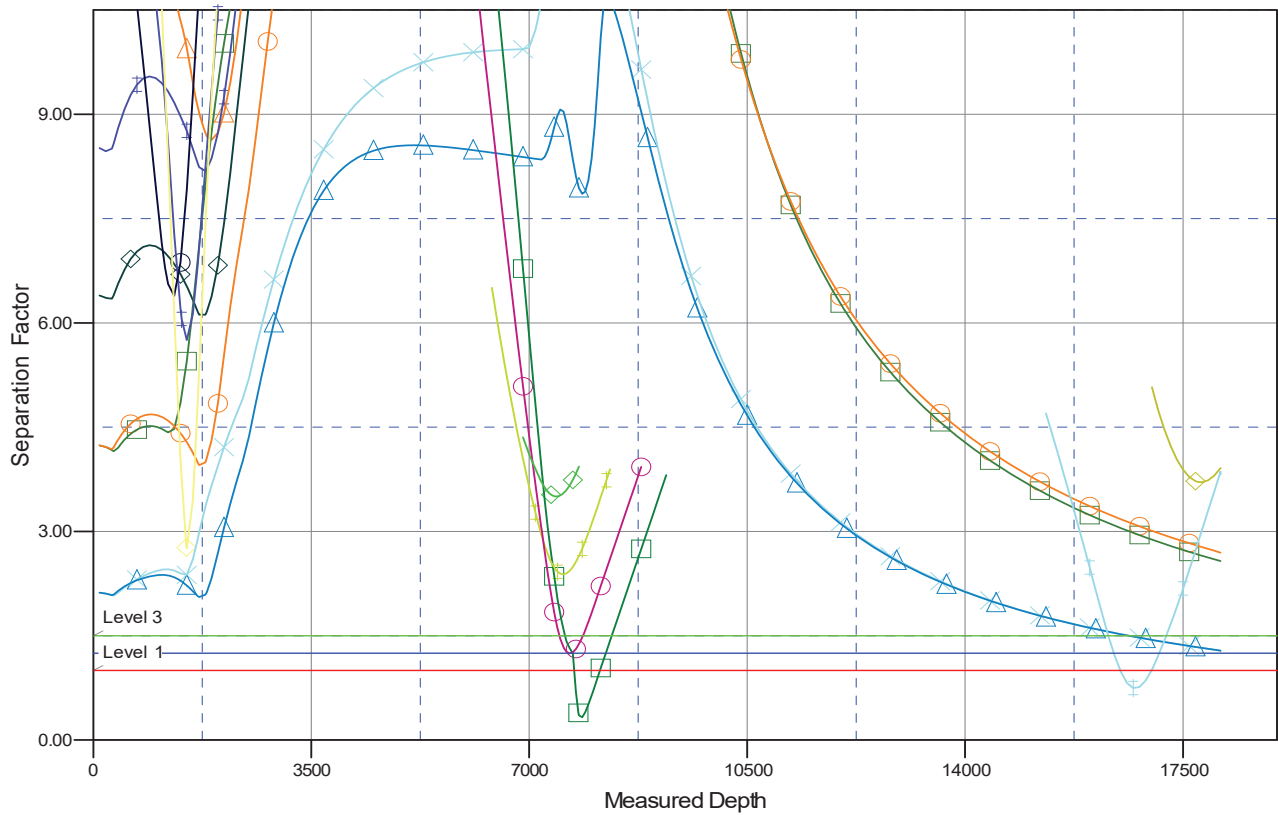
Central Meridian is -105.500000

Coordinates are relative to: TIGER 0916-06H

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 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 0164-05-6457CB, 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 0164-05-4556C, 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 Old'A Well, No Surveys V0
TIGER 091604H, Wellbore #1, Design #1 V0	Grinde #01-64-05-4841B, Highpoint Planned Well, Planned Meriwether Surveys V0	TURECEK STATE 16-1H, VERDAD PR Well, Actual MS Directional Surveys V0
TIGER 091607H, Wellbore #1, Design #1 V0	BRNAK #21-10, Goodwin PR Well, No Surveys V0	