

VERDAD RESOURCES

WATTENBERG FIELD

1N-65W-12 RAMEN 1423 PAD

RAMEN 1423-04H

Plan B

Permit Rev-1

Anticollision Summary Report

17 August, 2023

Anticollision Summary Report

Company:	VERDAD RESOURCES	Local Co-ordinate Reference:	Well RAMEN 1423-04H
Project:	WATTENBERG FIELD	TVD Reference:	RKB = 24' @ 4995.00usft (RIG)
Reference Site:	1N-65W-12 RAMEN 1423 PAD	MD Reference:	RKB = 24' @ 4995.00usft (RIG)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	RAMEN 1423-04H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 usft	Output errors are at	2.45 sigma
Reference Wellbore	Plan B	Database:	EDM 5000.16 Single User Db
Reference Design:	Permit Rev-1	Offset TVD Reference:	Offset Datum

Reference	Permit Rev-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	8/17/2023			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	2,020.00	Permit Rev-1 (Plan B)	ISCWSA MWD	Fixed:v2:standard declination	
2,020.00	19,915.27	Permit Rev-1 (Plan B)	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-65W-10 HDI KF PAD						
HDI KF 10-11H - Verdad PR Well - Actual Baker Surveys						Out of range
1N-65W-11 Offsets						
HUDSON 1-11 - KMG SI Well - No Surveys						Out of range
1N-65W-12 Offsets						
RINGSBY 1 - KPK P&A Well - No Surveys						Out of range
RINGSBY 2 - KPK SI Well - No Surveys						Out of range
WUERTZ 12-3 - KPK PR Well - No Surveys	4,418.84	3,530.78	477.51	294.79	2.613	CC, ES
WUERTZ 12-3 - KPK PR Well - No Surveys	4,500.00	3,584.13	481.41	295.48	2.589	SF
1N-65W-12 RAMEN 1423 PAD						
RAMEN 1423-01H - Plan B - Permit Rev-1	200.00	200.00	48.00	40.43	6.343	CC, ES
RAMEN 1423-01H - Plan B - Permit Rev-1	2,900.00	2,831.15	138.28	95.55	3.236	SF
RAMEN 1423-02H - Plan B - Permit Rev-1	200.00	200.00	32.00	24.43	4.229	CC, ES
RAMEN 1423-02H - Plan B - Permit Rev-1	19,915.61	20,785.74	1,248.05	672.58	2.169	SF
RAMEN 1423-03H - Plan B - Permit Rev-1	202.85	202.85	16.00	8.43	2.114	CC, ES
RAMEN 1423-03H - Plan B - Permit Rev-1	19,915.61	20,340.00	624.03	48.82	1.085	Level 2, SF
RAMEN 1423-05H - Plan B - Permit Rev-1	275.60	275.60	16.00	8.37	2.098	CC, ES
RAMEN 1423-05H - Plan B - Permit Rev-1	19,915.61	19,511.54	624.03	49.25	1.086	Level 2, SF
RAMEN 1423-06H - Plan B - Permit Rev-1	275.60	275.60	32.00	24.37	4.195	CC, ES
RAMEN 1423-06H - Plan B - Permit Rev-1	19,915.61	19,132.11	1,248.06	673.40	2.172	SF
RAMEN 1423-07H - Plan B - Permit Rev-1	275.60	275.60	48.00	40.37	6.293	CC, ES
RAMEN 1423-07H - Plan B - Permit Rev-1	2,400.00	2,440.87	124.83	97.49	4.567	SF
RAMEN 1423-08H - Plan A - Permit Rev-1	280.85	281.01	63.83	56.20	8.369	CC, ES
RAMEN 1423-08H - Plan A - Permit Rev-1	2,000.00	2,008.91	198.64	168.91	6.682	SF

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Reference Design:	Permit Rev-1	Offset TVD Reference:	Offset Datum

Summary						
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Offset Well - Wellbore - Design						
1N-65W-12 SAFI 1224 PAD						
SAFI 1224-02H - Verdad PR Well - Actual SLB Surveys	343.21	340.96	78.88	71.16	10.223	CC, ES
SAFI 1224-02H - Verdad PR Well - Actual SLB Surveys	1,200.00	1,213.73	108.16	97.12	9.796	SF
SAFI 1224-04H - Verdad PR Well - Actual SLB Surveys	526.71	530.82	81.71	73.61	10.091	CC, ES
SAFI 1224-04H - Verdad PR Well - Actual SLB Surveys	600.00	603.03	83.12	74.80	9.989	SF
SAFI 1224-06H - Verdad PR Well - Actual SLB Surveys	375.84	375.51	110.09	102.33	14.185	CC, ES
SAFI 1224-06H - Verdad PR Well - Actual SLB Surveys	500.00	499.95	112.20	104.21	14.052	SF
SAFI 1224-08H - Verdad PR Well - Actual SLB Surveys	286.69	283.16	127.37	119.72	16.647	CC, ES
SAFI 1224-08H - Verdad PR Well - Actual SLB Surveys	300.00	296.47	127.40	119.73	16.622	SF
SAFI 1224-10H - Verdad PR Well - Actual SLB Surveys	258.71	254.72	143.57	135.95	18.831	CC, ES
SAFI 1224-10H - Verdad PR Well - Actual SLB Surveys	300.00	294.86	143.84	136.17	18.770	SF
SAFI 1224-12H - Verdad PR Well - Actual SLB Surveys	252.07	248.07	159.35	151.73	20.918	CC, ES
SAFI 1224-12H - Verdad PR Well - Actual SLB Surveys	300.00	294.30	159.71	152.04	20.842	SF
SAFI 1224-14H - Verdad PR Well - Actual SLB Surveys	215.86	211.86	175.16	167.57	23.080	CC, ES
SAFI 1224-14H - Verdad PR Well - Actual SLB Surveys	300.00	292.29	176.03	168.37	22.975	SF
1N-65W-12 WUERTZ 1201 PAD						
WUERTZ 1201-11H - VERDAD PR Well - Actual SLB Su						Out of range
WUERTZ 1201-14H - VERDAD PR Well - Actual SLB Su						Out of range
WUERTZ 1201-16H - VERDAD PR Well - Actual SLB Su						Out of range
WUERTZ 1201-18H - VERDAD PR Well - Actual SLB Su						Out of range
WUERTZ 1201-2H - VERDAD PR Well - Actual SLB Sur	4,844.63	4,082.67	1,481.99	1,385.78	15.404	CC
WUERTZ 1201-2H - VERDAD PR Well - Actual SLB Sur	5,000.00	4,208.27	1,484.40	1,384.26	14.823	ES
WUERTZ 1201-2H - VERDAD PR Well - Actual SLB Sur	5,200.00	4,379.95	1,494.08	1,389.22	14.249	SF
WUERTZ 1201-3H - VERDAD PR Well - Actual SLB Sur						Out of range
WUERTZ 1201-5H - VERDAD PR Well - Actual SLB Sur						Out of range
WUERTZ 1201-7H - VERDAD PR Well - Actual SLB Sur						Out of range
WUERTZ 1201-9H - VERDAD PR Well - Actual SLB Sur						Out of range
1N-65W-14 Offsets						
AMEN 5 - VERDAD PR Well - Actual Ensign Surveys	6,898.68	5,178.21	891.60	763.65	6.968	CC
AMEN 5 - VERDAD PR Well - Actual Ensign Surveys	6,900.00	5,178.87	891.60	763.62	6.966	ES
AMEN 5 - VERDAD PR Well - Actual Ensign Surveys	7,100.00	5,309.58	905.74	774.07	6.879	SF
STEINWALD #37 - NOBLE P&A Well - No Surveys	13,623.42	7,128.00	1,067.05	669.14	2.682	CC
STEINWALD #37 - NOBLE P&A Well - No Surveys	13,800.00	7,128.00	1,081.56	659.23	2.561	ES
STEINWALD #37 - NOBLE P&A Well - No Surveys	13,900.00	7,128.00	1,102.31	668.12	2.539	SF
1N-65W-22 Offsets						
CANAL 22-1-3L - Confluence PR Well - Actual BKR Surv						Out of range
1N-65W-26 Offsets						
PARKER 10-26 - MTN P&A Well - No Surveys						Out of range
ROWE 01N-65W-26-8N - VERDAD PR Well - Actual Ens	19,915.61	6,940.00	791.30	615.56	4.503	CC, ES, SF

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Reference Depths are relative to RKB = 24' @ 4995.00usft (RIG)

Offset Depths are relative to Offset Datum

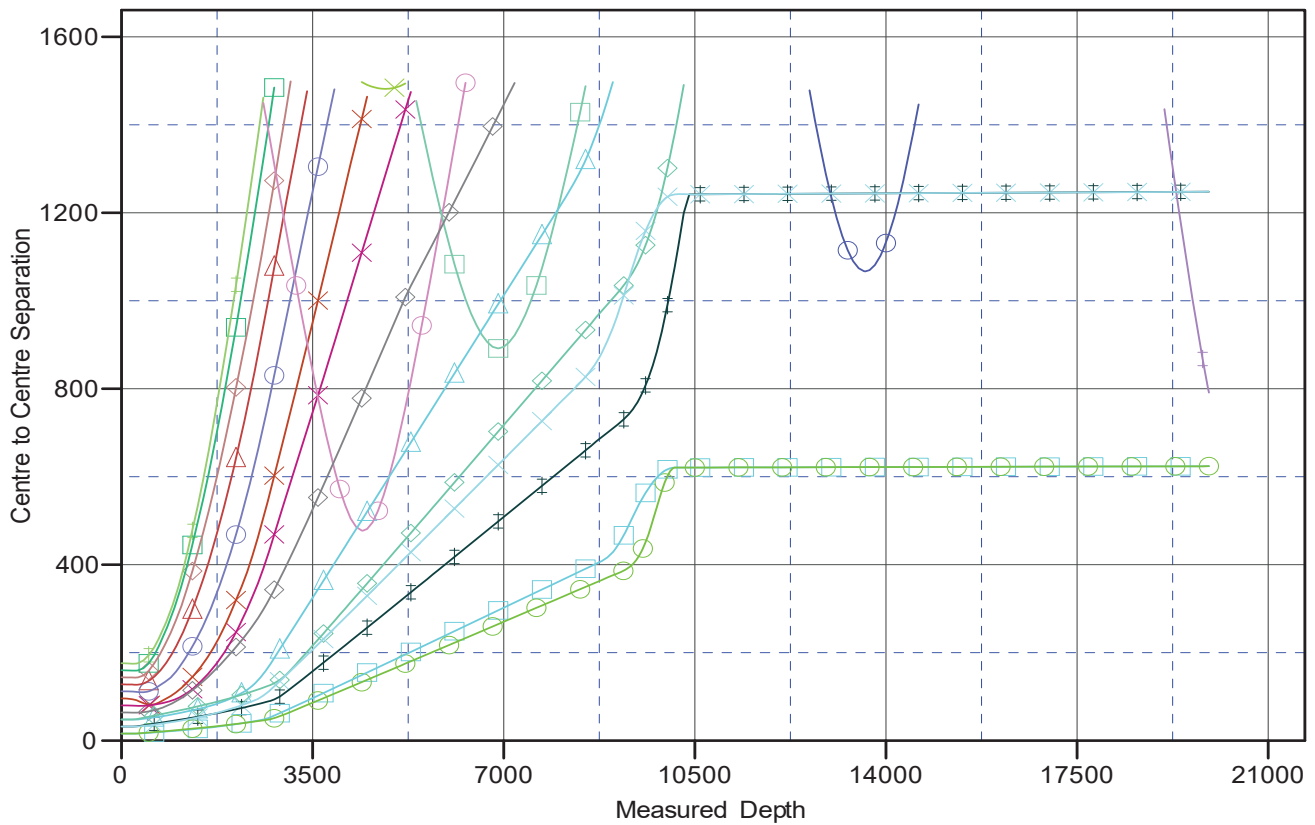
Central Meridian is -105.500000

Coordinates are relative to: RAMEN 1423-04H

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.57°

Ladder Plot



LEGEND

WUERTZ 1201-2H, VERDAD PR Well, Actual SLB Surveys V0	SAFI 1224-12H, Verdad PR Well, Actual SLB Surveys V0	RAMEN 1423-05H, Plan B, Permit Rev-1 V0
SAFI 1224-04H, Verdad PR Well, Actual SLB Surveys V0	WUERTZ 12-3, KPK PR Well, No Surveys V0	RAMEN 1423-03H, Plan B, Permit Rev-1 V0
SAFI 1224-08H, Verdad PR Well, Actual SLB Surveys V0	ROWE 01N65W-26-8N, VERDAD PR Well, Actual Ensign Surveys V0	RAMEN 1423-08H, Plan A, Permit Rev-1 V0
SAFI 1224-14H, Verdad PR Well, Actual SLB Surveys V0	AMEN 5, VERDAD PR Well, Actual Ensign Surveys V0	RAMEN 1423-01H, Plan B, Permit Rev-1 V0
SAFI 1224-08H, Verdad PR Well, Actual SLB Surveys V0	STERNWAD R57, NOBLE P&A Well, No Surveys V0	RAMEN 1423-01H, Plan B, Permit Rev-1 V0
SAFI 1224-01H, Verdad PR Well, Actual SLB Surveys V0	RAMEN 1423-01H, Plan B, Permit Rev-1 V0	RAMEN 1423-06H, Plan B, Permit Rev-1 V0
SAFI 1224-02H, Verdad PR Well, Actual SLB Surveys V0	RAMEN 1423-02H, Plan B, Permit Rev-1 V0	

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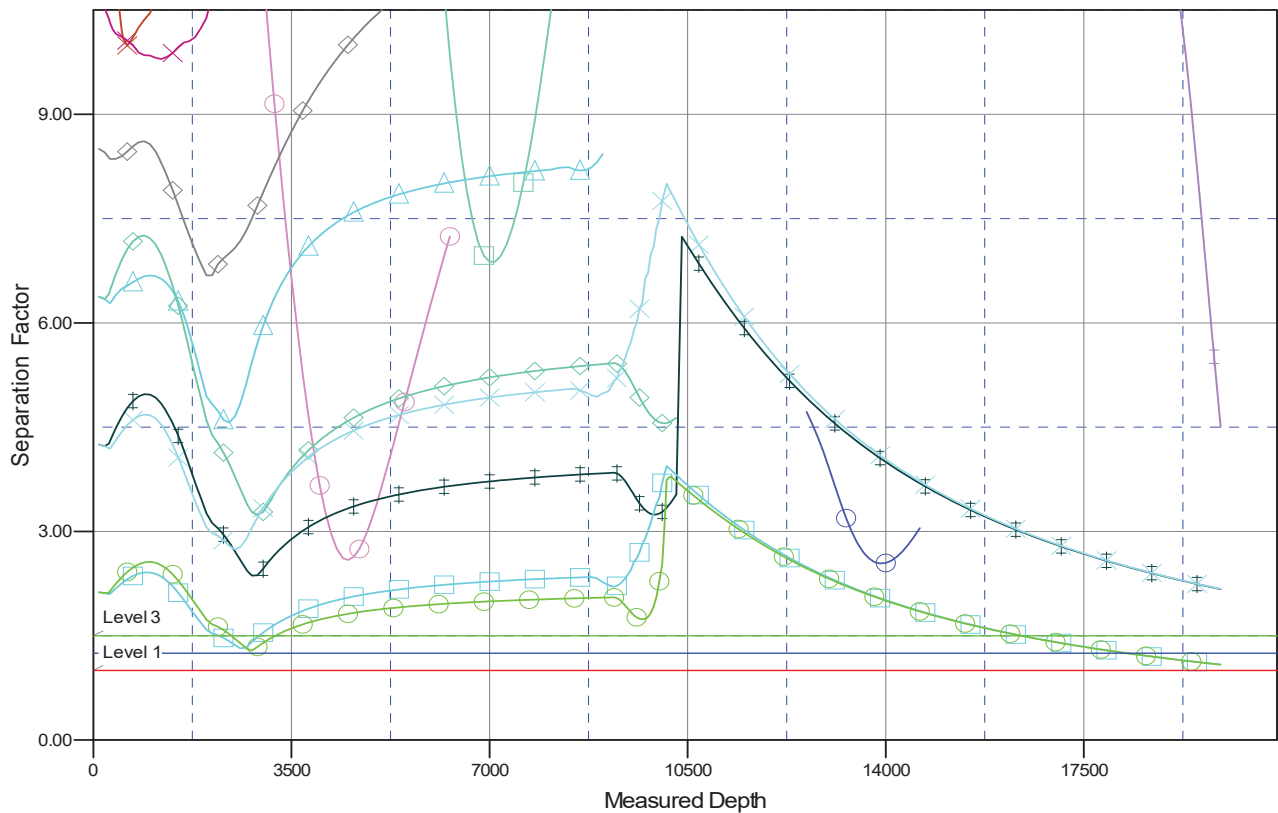
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Grid Convergence at Surface is: 0.57°

Separation Factor Plot



LEGEND

WUERTZ 1201-2H, VERDAD PR Well, Actual SLB Surveys V0	SAFI 1224-12H, Verdad PR Well, Actual SLB Surveys V0	RAMEN 1423-05H, Plan B, Permit Rev-1 V0
SAFI 1224-04H, Verdad PR Well, Actual SLB Surveys V0	WUERTZ 1203, KPK PR Well, No Surveys V0	RAMEN 1423-03H, Plan B, Permit Rev-1 V0
SAFI 1224-08H, Verdad PR Well, Actual SLB Surveys V0	ROME 01N65W-26-8N, VERDAD PR Well, Actual Ensign Surveys V0	RAMEN 1423-08H, Plan A, Permit Rev-1 V0
SAFI 1224-14H, Verdad PR Well, Actual SLB Surveys V0	AMEN 5, VERDAD PR Well, Actual Ensign Surveys V0	RAMEN 1423-01H, Plan B, Permit Rev-1 V0
SAFI 1224-06H, Verdad PR Well, Actual SLB Surveys V0	STERNAUD 187, NOBLE PRA Well, No Surveys V0	RAMEN 1423-06H, Plan B, Permit Rev-1 V0
SAFI 1224-10H, Verdad PR Well, Actual SLB Surveys V0	RAMEN 1423-07H, Plan B, Permit Rev-1 V0	
SAFI 1224-02H, Verdad PR Well, Actual SLB Surveys V0	RAMEN 1423-02H, Plan B, Permit Rev-1 V0	