

VERDAD RESOURCES

WATTENBERG FIELD

1N-65W-12 RAMEN 1423 PAD

RAMEN 1423-06H

Plan B

Permit Rev-1

Anticollision Summary Report

17 August, 2023

Anticollision Summary Report

Company:	VERDAD RESOURCES	Local Co-ordinate Reference:	Well RAMEN 1423-06H
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 1423-06H	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	19,133.94	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	4,764.74	3,944.01	278.10	80.44	1.407	Level 3, CC
WUERTZ 12-3 - KPK PR Well - No Surveys	4,800.00	3,969.98	279.12	80.07	1.402	Level 3, ES, SF
1N-65W-12 RAMEN 1423 PAD						
RAMEN 1423-01H - Plan B - Permit Rev-1	200.00	200.00	80.00	72.43	10.572	CC, ES
RAMEN 1423-01H - Plan B - Permit Rev-1	2,700.00	2,594.38	231.82	195.34	6.355	SF
RAMEN 1423-02H - Plan B - Permit Rev-1	200.00	200.00	64.00	56.43	8.458	CC, ES
RAMEN 1423-02H - Plan B - Permit Rev-1	2,700.00	2,614.46	196.80	160.04	5.353	SF
RAMEN 1423-03H - Plan B - Permit Rev-1	205.64	205.64	48.00	40.43	6.340	CC, ES
RAMEN 1423-03H - Plan B - Permit Rev-1	2,600.00	2,540.39	145.15	110.14	4.145	SF
RAMEN 1423-04H - Plan B - Permit Rev-1	205.91	205.91	32.00	24.43	4.227	CC, ES
RAMEN 1423-04H - Plan B - Permit Rev-1	19,133.94	19,915.61	1,248.06	673.03	2.170	SF
RAMEN 1423-05H - Plan B - Permit Rev-1	300.00	300.00	16.00	8.35	2.091	CC, ES
RAMEN 1423-05H - Plan B - Permit Rev-1	19,133.94	19,512.13	624.03	49.02	1.085	Level 2, SF
RAMEN 1423-07H - Plan B - Permit Rev-1	319.75	319.75	16.00	8.33	2.085	CC, ES
RAMEN 1423-07H - Plan B - Permit Rev-1	19,133.94	18,792.17	624.03	49.35	1.086	Level 2, SF
RAMEN 1423-08H - Plan A - Permit Rev-1	274.39	274.43	31.89	24.27	4.184	CC
RAMEN 1423-08H - Plan A - Permit Rev-1	330.70	330.91	31.91	24.23	4.155	ES
RAMEN 1423-08H - Plan A - Permit Rev-1	19,133.94	18,457.25	1,241.02	667.52	2.164	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	480.61	478.91	45.54	37.62	5.747	CC
SAFI 1224-02H - Verdad PR Well - Actual SLB Surveys	600.00	599.89	45.66	37.50	5.593	ES
SAFI 1224-02H - Verdad PR Well - Actual SLB Surveys	900.00	902.96	48.22	39.07	5.272	SF
SAFI 1224-04H - Verdad PR Well - Actual SLB Surveys	514.94	515.31	49.11	41.03	6.077	CC, ES, SF
SAFI 1224-06H - Verdad PR Well - Actual SLB Surveys	431.35	430.18	76.59	68.74	9.755	CC, ES
SAFI 1224-06H - Verdad PR Well - Actual SLB Surveys	500.00	498.40	77.53	69.54	9.710	SF
SAFI 1224-08H - Verdad PR Well - Actual SLB Surveys	329.74	326.07	95.22	87.52	12.367	CC, ES
SAFI 1224-08H - Verdad PR Well - Actual SLB Surveys	400.00	395.88	96.16	88.37	12.340	SF
SAFI 1224-10H - Verdad PR Well - Actual SLB Surveys	258.69	254.70	111.57	103.95	14.634	CC, ES
SAFI 1224-10H - Verdad PR Well - Actual SLB Surveys	319.75	314.41	111.94	104.25	14.565	SF
SAFI 1224-12H - Verdad PR Well - Actual SLB Surveys	251.96	247.96	127.35	119.73	16.718	CC, ES
SAFI 1224-12H - Verdad PR Well - Actual SLB Surveys	319.75	313.80	127.87	120.19	16.639	SF
SAFI 1224-14H - Verdad PR Well - Actual SLB Surveys	215.81	211.82	143.16	135.57	18.863	CC, ES
SAFI 1224-14H - Verdad PR Well - Actual SLB Surveys	300.00	292.94	143.94	136.28	18.784	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	5,929.37	5,160.48	1,208.24	1,091.88	10.384	CC
WUERTZ 1201-2H - VERDAD PR Well - Actual SLB Sur	6,100.00	5,318.76	1,210.23	1,090.54	10.111	ES
WUERTZ 1201-2H - VERDAD PR Well - Actual SLB Sur	6,700.00	5,864.66	1,248.46	1,120.35	9.745	SF
WUERTZ 1201-3H - VERDAD PR Well - Actual SLB Sur	4,823.80	4,117.55	1,382.89	1,300.99	16.885	CC
WUERTZ 1201-3H - VERDAD PR Well - Actual SLB Sur	4,900.00	4,175.86	1,383.61	1,300.02	16.553	ES
WUERTZ 1201-3H - VERDAD PR Well - Actual SLB Sur	5,900.00	5,044.10	1,486.02	1,385.31	14.755	SF
WUERTZ 1201-5H - VERDAD PR Well - Actual SLB Sur	4,546.31	3,859.99	1,452.59	1,379.02	19.742	CC
WUERTZ 1201-5H - VERDAD PR Well - Actual SLB Sur	4,700.00	3,987.73	1,454.99	1,377.93	18.883	ES
WUERTZ 1201-5H - VERDAD PR Well - Actual SLB Sur	5,200.00	4,411.86	1,492.29	1,405.28	17.152	SF
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	7,599.86	6,075.86	542.91	413.19	4.185	CC
AMEN 5 - VERDAD PR Well - Actual Ensign Surveys	7,600.00	6,075.96	542.91	413.18	4.185	ES
AMEN 5 - VERDAD PR Well - Actual Ensign Surveys	13,800.00	11,663.00	1,088.13	806.83	3.868	SF
STEINWALD #37 - NOBLE P&A Well - No Surveys						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						Out of range

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

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

Offset Depths are relative to Offset Datum

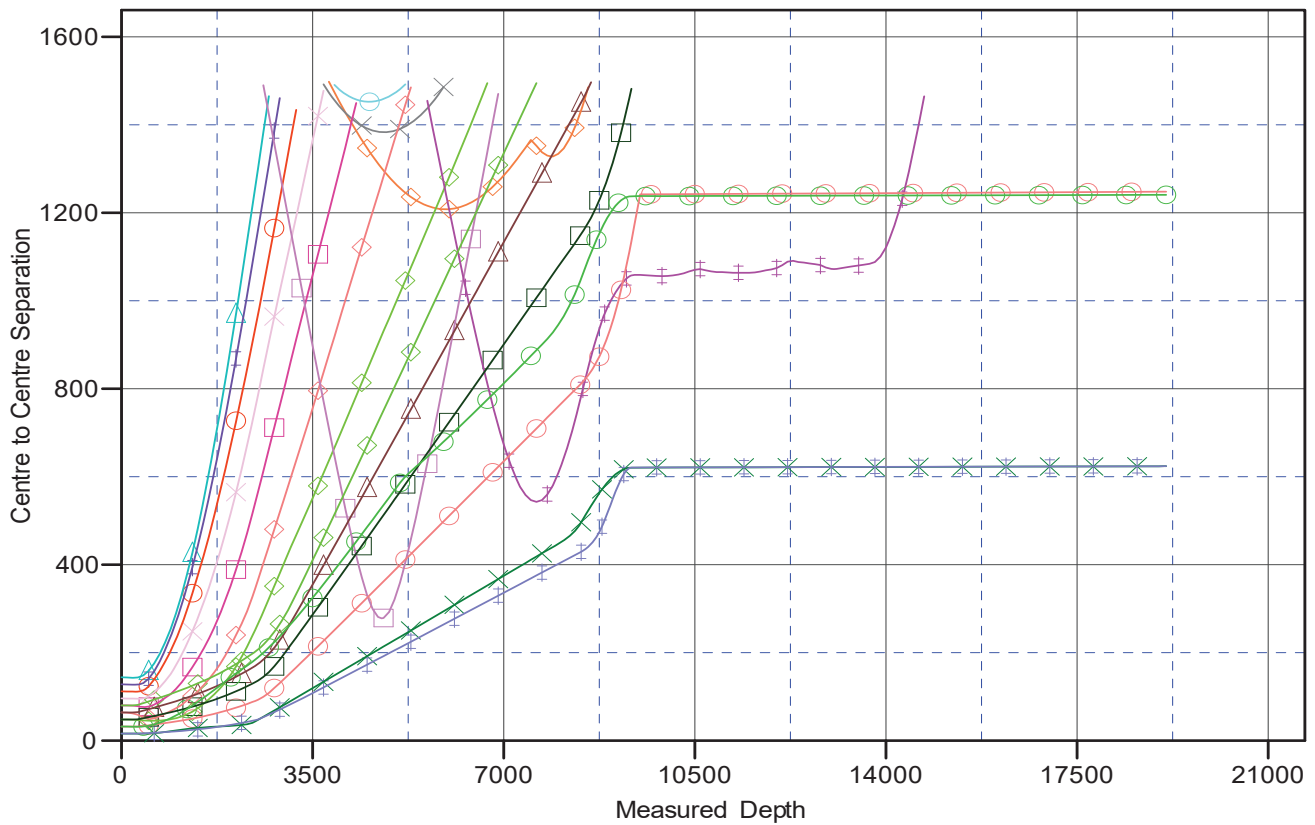
Central Meridian is -105.500000

Coordinates are relative to: RAMEN 1423-06H

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 1224-02H, Verdad PR Well, Actual SLB Surveys V0	RAMEN 1423-02H, Plan B, Permit Rev-1 V0
WUERTZ 1201-9H, VERDAD PR Well, Actual SLB Surveys V0	SAFI 1224-02H, Verdad PR Well, Actual SLB Surveys V0	RAMEN 1423-05H, Plan B, Permit Rev-1 V0
WUERTZ 1201-3H, VERDAD PR Well, Actual SLB Surveys V0	SAFI 1224-02H, Verdad PR Well, Actual SLB Surveys V0	RAMEN 1423-03H, 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 1423-08H, Plan A, Permit Rev-1 V0
SAFI 1224-08H, Verdad PR Well, Actual SLB Surveys V0	AMEN S, VERDAD PR Well, Actual Ensign Surveys V0	RAMEN 1423-08H, Plan B, Permit Rev-1 V0
SAFI 1224-14H, Verdad PR Well, Actual SLB Surveys V0	RAMEN 1423-06H, Plan B, Permit Rev-1 V0	
SAFI 1224-06H, Verdad PR Well, Actual SLB Surveys V0	RAMEN 1423-07H, Plan B, Permit Rev-1 V0	

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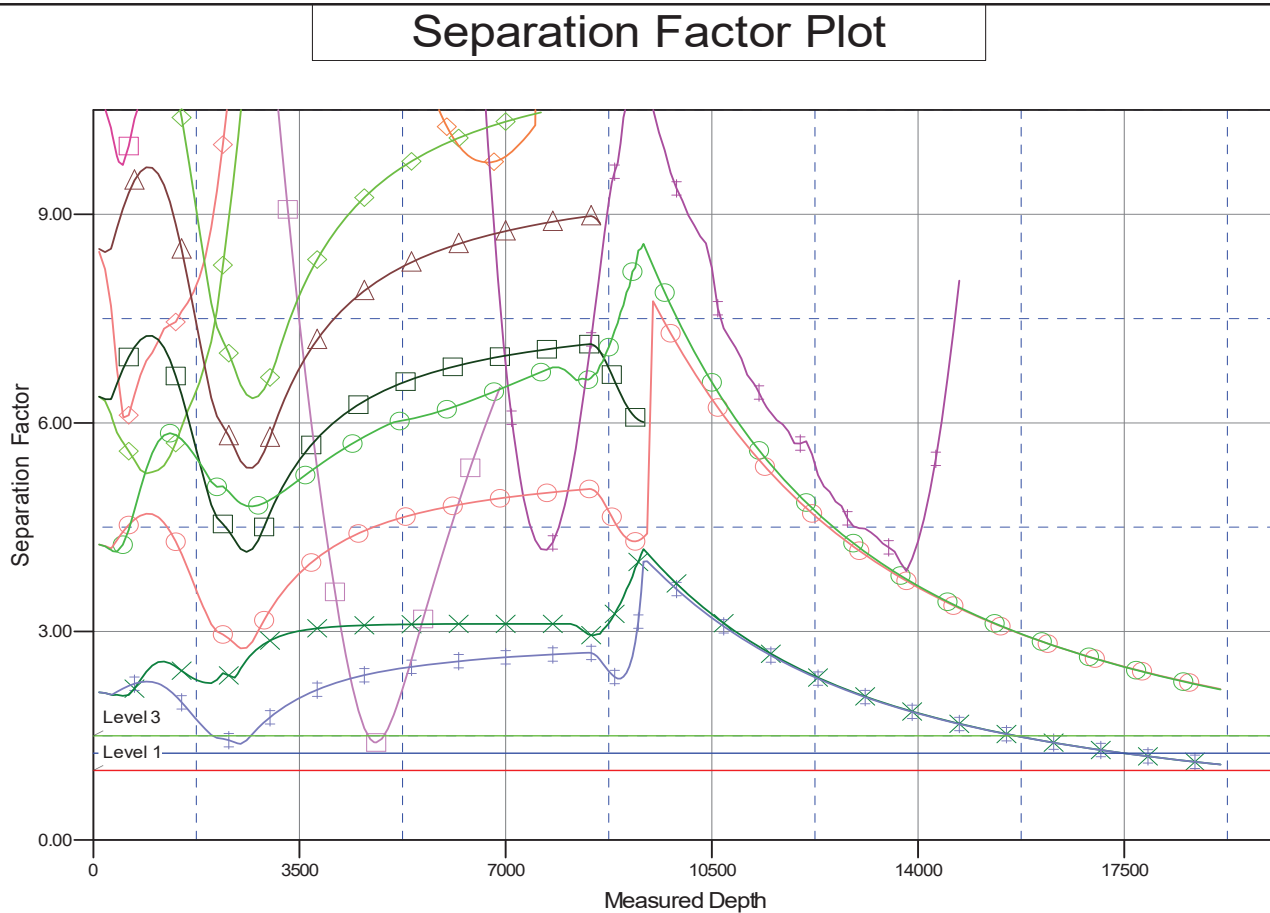
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Offset Depths are relative to Offset Datum

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Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.57°



LEGEND

	WUERTZ 1201-2H, Verdard PR Wt, Actual SLB Surveys V0		SAFI 1224-0H, Verdard PR Wt, Actual SLB Surveys V0		RAMEN 142-0H, Plan B, Permit-Rev-1 V0
	WUERTZ 1201-5H, Verdard PR Wt, Actual SLB Surveys V0		SAFI 1224-0H, Verdard PR Wt, Actual SLB Surveys V0		RAMEN 142-0H, Plan B, Permit-Rev-1 V0
	WUERTZ 1201-3H, Verdard PR Wt, Actual SLB Surveys V0		SAFI 1224-1H, Verdard PR Wt, Actual SLB Surveys V0		RAMEN 142-0H, Plan B, Permit-Rev-1 V0
	SAFI 1224-0H, Verdard PR Wt, Actual SLB Surveys V0		WUERTZ 12-3, KPK PR Wt, No Surveys V0		RAMEN 142-0H, Plan A, Permit-Rev-1 V0
	SAFI 1224-0H, Verdard PR Wt, Actual SLB Surveys V0		AMEN 5-2, Verdard PR Wt, Actual Ensign Surveys V0		RAMEN 142-0H, Plan B, Permit-Rev-1 V0
	SAFI 1224-1H, Verdard PR Wt, Actual SLB Surveys V0		RAMEN 142-0H, Plan B, Permit-Rev-1 V0		
	SAFI 1224-0H, Verdard PR Wt, Actual SLB Surveys V0		RAMEN 142-0H, Plan B, Permit-Rev-1 V0		