

VERDAD RESOURCES

WATTENBERG FIELD

1N-65W-12 RAMEN 1423 PAD

RAMEN 1423-07H

Plan B

Permit Rev-1

Anticollision Summary Report

17 August, 2023

Anticollision Summary Report

Company:	VERDAD RESOURCES	Local Co-ordinate Reference:	Well RAMEN 1423-07H
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 1423-07H	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	18,793.44	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	5,021.18	4,245.68	160.88	-47.04	0.774	Level 1, CC, ES, SF
1N-65W-12 RAMEN 1423 PAD						
RAMEN 1423-01H - Plan B - Permit Rev-1	200.00	200.00	96.00	88.43	12.686	CC, ES
RAMEN 1423-01H - Plan B - Permit Rev-1	2,600.00	2,476.78	261.72	231.33	8.613	SF
RAMEN 1423-02H - Plan B - Permit Rev-1	200.00	200.00	80.00	72.43	10.572	CC, ES
RAMEN 1423-02H - Plan B - Permit Rev-1	2,500.00	2,400.00	212.04	183.84	7.519	SF
RAMEN 1423-03H - Plan B - Permit Rev-1	205.63	205.63	64.00	56.43	8.453	CC, ES
RAMEN 1423-03H - Plan B - Permit Rev-1	2,500.00	2,422.45	174.27	146.02	6.169	SF
RAMEN 1423-04H - Plan B - Permit Rev-1	205.91	205.91	48.00	40.43	6.340	CC, ES
RAMEN 1423-04H - Plan B - Permit Rev-1	2,400.00	2,347.60	120.08	94.01	4.607	SF
RAMEN 1423-05H - Plan B - Permit Rev-1	300.00	300.00	32.00	24.35	4.181	CC, ES
RAMEN 1423-05H - Plan B - Permit Rev-1	18,793.45	19,512.13	1,248.06	673.01	2.170	SF
RAMEN 1423-06H - Plan B - Permit Rev-1	301.57	301.57	16.00	8.35	2.090	CC
RAMEN 1423-06H - Plan B - Permit Rev-1	332.70	332.63	16.03	8.34	2.084	ES
RAMEN 1423-06H - Plan B - Permit Rev-1	18,793.45	19,133.94	624.03	49.02	1.085	Level 2, SF
RAMEN 1423-08H - Plan A - Permit Rev-1	238.42	238.44	15.94	8.35	2.100	CC, ES
RAMEN 1423-08H - Plan A - Permit Rev-1	18,793.45	18,458.52	616.99	43.39	1.076	Level 2, SF

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Reference Design:	Permit Rev-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-65W-12 SAFI 1224 PAD						
SAFI 1224-02H - Verdad PR Well - Actual SLB Surveys	429.87	426.93	29.52	21.67	3.763	CC, ES
SAFI 1224-02H - Verdad PR Well - Actual SLB Surveys	500.00	497.54	29.81	21.84	3.743	SF
SAFI 1224-04H - Verdad PR Well - Actual SLB Surveys	457.52	456.43	35.87	27.93	4.517	CC, ES, SF
SAFI 1224-06H - Verdad PR Well - Actual SLB Surveys	423.63	421.77	60.52	52.68	7.719	CC, ES, SF
SAFI 1224-08H - Verdad PR Well - Actual SLB Surveys	339.29	335.51	79.19	71.48	10.269	CC, ES
SAFI 1224-08H - Verdad PR Well - Actual SLB Surveys	400.00	395.84	80.00	72.20	10.262	SF
SAFI 1224-10H - Verdad PR Well - Actual SLB Surveys	258.66	254.66	95.57	87.95	12.536	CC, ES
SAFI 1224-10H - Verdad PR Well - Actual SLB Surveys	332.70	327.00	96.12	88.42	12.482	SF
SAFI 1224-12H - Verdad PR Well - Actual SLB Surveys	251.97	247.98	111.35	103.73	14.617	CC, ES
SAFI 1224-12H - Verdad PR Well - Actual SLB Surveys	332.70	327.00	112.10	104.40	14.558	SF
SAFI 1224-14H - Verdad PR Well - Actual SLB Surveys	215.81	211.81	127.16	119.57	16.755	CC, ES
SAFI 1224-14H - Verdad PR Well - Actual SLB Surveys	300.00	293.27	127.94	120.28	16.696	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	7,400.00	6,608.50	997.52	861.27	7.321	SF
WUERTZ 1201-2H - VERDAD PR Well - Actual SLB Sur	7,977.20	7,579.42	888.59	796.89	9.690	CC, ES
WUERTZ 1201-3H - VERDAD PR Well - Actual SLB Sur	5,498.98	4,796.30	1,250.92	1,159.22	13.641	CC
WUERTZ 1201-3H - VERDAD PR Well - Actual SLB Sur	5,600.00	4,871.74	1,252.19	1,158.61	13.381	ES
WUERTZ 1201-3H - VERDAD PR Well - Actual SLB Sur	6,300.00	5,501.58	1,309.49	1,205.46	12.588	SF
WUERTZ 1201-5H - VERDAD PR Well - Actual SLB Sur	5,108.63	4,416.47	1,339.20	1,257.94	16.480	CC
WUERTZ 1201-5H - VERDAD PR Well - Actual SLB Sur	5,200.00	4,498.27	1,339.93	1,256.76	16.111	ES
WUERTZ 1201-5H - VERDAD PR Well - Actual SLB Sur	6,200.00	5,383.45	1,431.35	1,332.43	14.470	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	8,021.40	6,585.00	309.06	181.98	2.432	CC
AMEN 5 - VERDAD PR Well - Actual Ensign Surveys	13,400.00	11,663.00	463.32	180.73	1.640	ES, 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

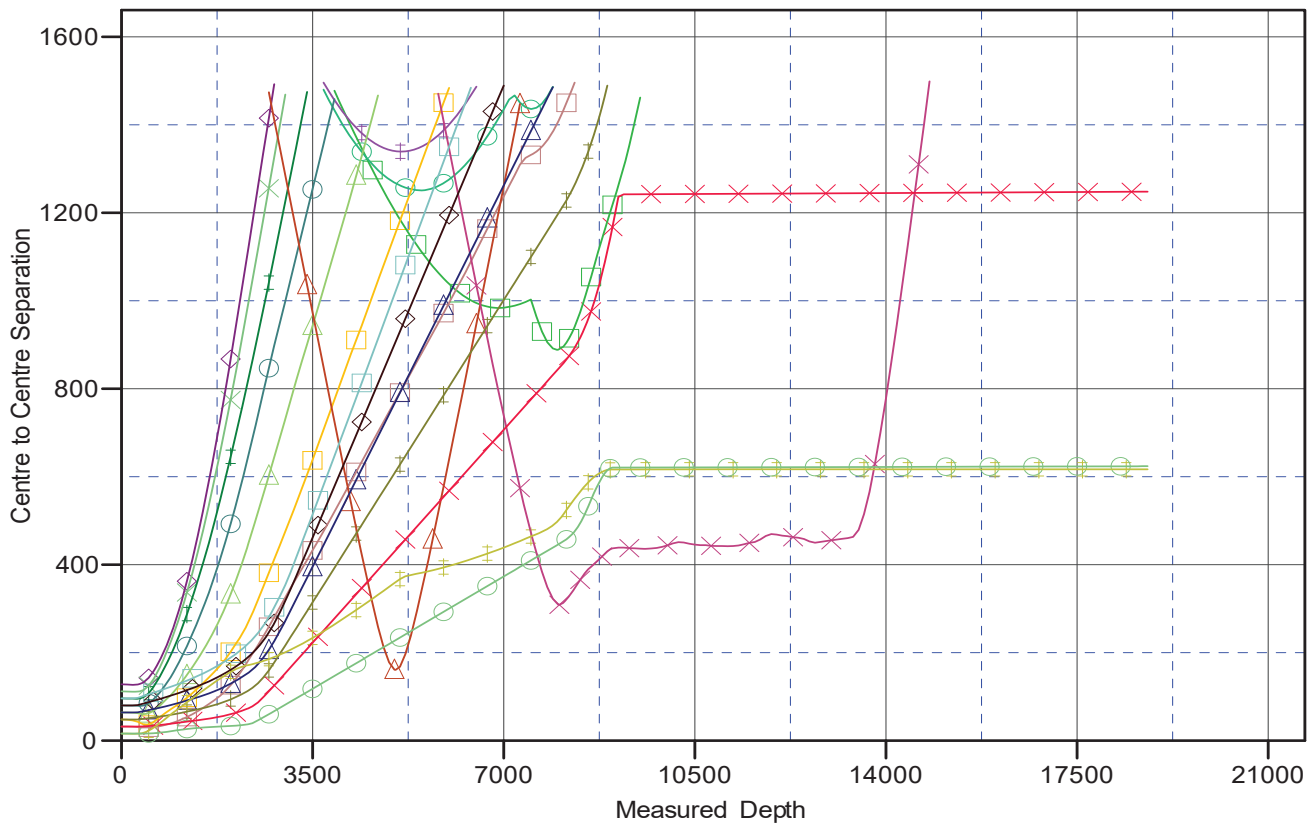
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Reference Depths are relative to RKB = 24' @ 4995.00usft (RIG)
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: RAMEN 1423-07H
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 1423-09H, 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 1423-03H, 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 1423-08H, Plan A, Permit Rev-1 V0
SAFI 1224-04H, Verdad PR Well, Actual SLB Surveys V0	WUERTZ 12-3, KPK PR Well, No Surveys V0	RAMEN 1423-01H, Plan B, Permit Rev-1 V0
SAFI 1224-08H, Verdad PR Well, Actual SLB Surveys V0	AMEN S, VERDAD PR Well, Actual Ensign Surveys V0	RAMEN 1423-01H, Plan B, Permit Rev-1 V0
SAFI 1224-14H, Verdad PR Well, Actual SLB Surveys V0	RAMEN 1423-04H, Plan B, Permit Rev-1 V0	
SAFI 1224-06H, Verdad PR Well, Actual SLB Surveys V0	RAMEN 1423-02H, Plan B, Permit Rev-1 V0	

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Offset Depths are relative to Offset Datum

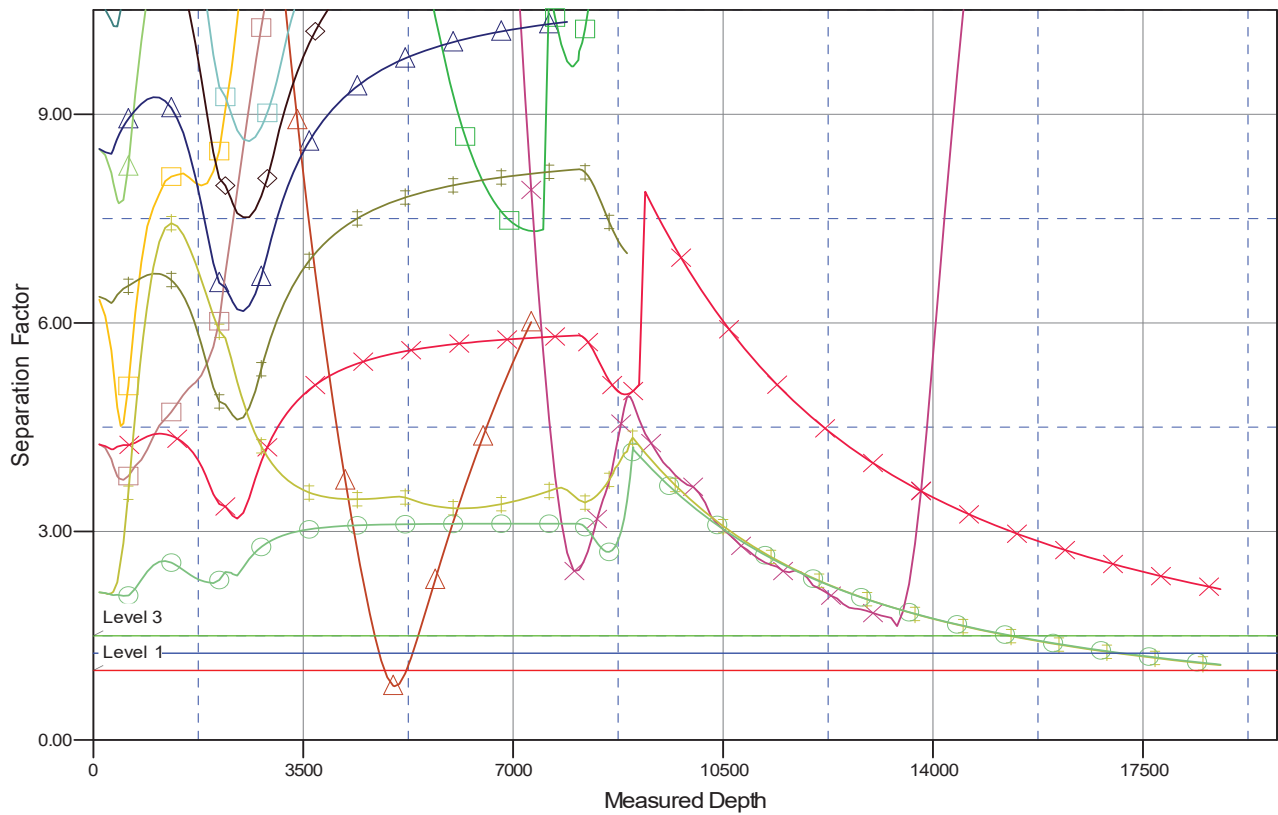
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Coordinates are relative to: RAMEN 1423-07H

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.57°

Separation Factor Plot



LEGEND

WJERTZ 1201-2H, VERDAD PR Well, Actual SLB Surveys V0	SAFI 1224-10H, Verdad PR Well, Actual SLB Surveys V0	RAMEN 1423-09H, Plan B, Permit Rev-1 V0
WJERTZ 1201-5H, 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
WJERTZ 1201-3H, VERDAD PR Well, Actual SLB Surveys V0	SAFI 1224-12H, Verdad PR Well, Actual SLB Surveys V0	RAMEN 1423-08H, Plan A, Permit Rev-1 V0
SAFI 1224-04H, Verdad PR Well, Actual SLB Surveys V0	WJERTZ 12-3, KPK PR Well, No Surveys V0	RAMEN 1423-01H, Plan B, Permit Rev-1 V0
SAFI 1224-08H, Verdad PR Well, Actual SLB Surveys V0	AMEN S, VERDAD PR Well, Actual Elngh Surveys V0	RAMEN 1423-06H, Plan B, Permit Rev-1 V0
SAFI 1224-10H, Verdad PR Well, Actual SLB Surveys V0	RAMEN 1423-04H, Plan B, Permit Rev-1 V0	
SAFI 1224-06H, Verdad PR Well, Actual SLB Surveys V0	RAMEN 1423-02H, Plan B, Permit Rev-1 V0	