

VERDAD RESOURCES

WATTENBERG FIELD

1N-65W-12 RAMEN 1423 PAD

RAMEN 1423-02H

Plan B

Permit Rev-1

Anticollision Summary Report

17 August, 2023

Anticollision Summary Report

Company:	VERDAD RESOURCES	Local Co-ordinate Reference:	Well RAMEN 1423-02H
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 1423-02H	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	20,785.74	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	10,747.33	7,237.58	1,266.15	1,120.07	8.667	CC
HDI KF 10-11H - Verdad PR Well - Actual Baker Surveys	10,800.00	7,215.91	1,268.43	1,117.33	8.395	ES
HDI KF 10-11H - Verdad PR Well - Actual Baker Surveys	11,400.00	6,891.00	1,489.26	1,298.26	7.797	SF
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	4,177.86	3,254.97	614.13	442.24	3.573	CC
WUERTZ 12-3 - KPK PR Well - No Surveys	4,200.00	3,267.95	614.40	441.53	3.554	ES
WUERTZ 12-3 - KPK PR Well - No Surveys	4,300.00	3,326.55	622.06	445.40	3.521	SF
1N-65W-12 RAMEN 1423 PAD						
RAMEN 1423-01H - Plan B - Permit Rev-1	200.00	200.00	16.00	8.43	2.114	CC
RAMEN 1423-01H - Plan B - Permit Rev-1	3,000.00	2,978.89	40.67	-9.30	0.814	Level 1, ES, SF
RAMEN 1423-03H - Plan B - Permit Rev-1	220.20	220.20	16.00	8.42	2.111	CC
RAMEN 1423-03H - Plan B - Permit Rev-1	2,900.00	2,920.92	46.42	1.46	1.033	Level 2, ES, SF
RAMEN 1423-04H - Plan B - Permit Rev-1	220.20	220.20	32.00	24.42	4.221	CC, ES
RAMEN 1423-04H - Plan B - Permit Rev-1	20,785.74	19,913.73	1,248.05	673.04	2.170	SF
RAMEN 1423-05H - Plan B - Permit Rev-1	220.20	220.20	48.00	40.42	6.332	CC, ES
RAMEN 1423-05H - Plan B - Permit Rev-1	2,700.00	2,753.15	144.96	106.45	3.764	SF
RAMEN 1423-06H - Plan B - Permit Rev-1	220.20	220.20	64.00	56.42	8.442	CC, ES
RAMEN 1423-06H - Plan B - Permit Rev-1	2,600.00	2,659.22	193.10	156.76	5.313	SF
RAMEN 1423-07H - Plan B - Permit Rev-1	220.20	220.20	80.00	72.42	10.553	CC, ES
RAMEN 1423-07H - Plan B - Permit Rev-1	2,400.00	2,465.78	209.26	181.08	7.426	SF
RAMEN 1423-08H - Plan A - Permit Rev-1	225.96	226.15	95.93	88.35	12.652	CC, ES
RAMEN 1423-08H - Plan A - Permit Rev-1	2,000.00	2,028.29	256.30	226.28	8.537	SF

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Reference Well:	RAMEN 1423-02H	Survey Calculation Method:	Minimum Curvature
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Reference Wellbore	Plan B	Database:	EDM 5000.16 Single User Db
Reference Design:	Permit Rev-1	Offset TVD Reference:	Offset Datum

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Offset Well - Wellbore - Design						
1N-65W-12 SAFI 1224 PAD						
SAFI 1224-02H - Verdad PR Well - Actual SLB Surveys	242.17	238.99	111.67	104.06	14.677	CC, ES
SAFI 1224-02H - Verdad PR Well - Actual SLB Surveys	2,000.00	2,029.24	297.42	275.72	13.711	SF
SAFI 1224-04H - Verdad PR Well - Actual SLB Surveys	508.28	516.79	117.53	109.48	14.612	CC, ES
SAFI 1224-04H - Verdad PR Well - Actual SLB Surveys	1,400.00	1,414.32	209.53	194.63	14.066	SF
SAFI 1224-06H - Verdad PR Well - Actual SLB Surveys	258.57	256.42	143.49	135.86	18.819	CC, ES
SAFI 1224-06H - Verdad PR Well - Actual SLB Surveys	400.00	401.32	144.93	137.14	18.588	SF
SAFI 1224-08H - Verdad PR Well - Actual SLB Surveys	230.76	227.33	159.57	151.97	20.995	CC, ES
SAFI 1224-08H - Verdad PR Well - Actual SLB Surveys	300.00	296.60	160.36	152.70	20.927	SF
SAFI 1224-10H - Verdad PR Well - Actual SLB Surveys	228.53	225.03	175.65	168.05	23.116	CC, ES
SAFI 1224-10H - Verdad PR Well - Actual SLB Surveys	300.00	294.60	176.80	169.14	23.076	SF
SAFI 1224-12H - Verdad PR Well - Actual SLB Surveys	227.19	223.66	191.40	183.81	25.193	CC, ES
SAFI 1224-12H - Verdad PR Well - Actual SLB Surveys	300.00	293.97	192.67	185.01	25.149	SF
SAFI 1224-14H - Verdad PR Well - Actual SLB Surveys	215.85	211.86	207.16	199.57	27.296	CC
SAFI 1224-14H - Verdad PR Well - Actual SLB Surveys	220.20	216.07	207.16	199.57	27.285	ES
SAFI 1224-14H - Verdad PR Well - Actual SLB Surveys	300.00	291.63	208.99	201.33	27.282	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						Out of range
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	6,484.97	4,648.86	1,126.06	998.69	8.841	CC
AMEN 5 - VERDAD PR Well - Actual Ensign Surveys	6,500.00	4,658.11	1,126.12	998.35	8.814	ES
AMEN 5 - VERDAD PR Well - Actual Ensign Surveys	6,700.00	4,768.78	1,139.28	1,007.53	8.648	SF
STEINWALD #37 - NOBLE P&A Well - No Surveys	14,400.00	7,128.00	201.19	-265.33	0.431	Level 1, ES, SF
STEINWALD #37 - NOBLE P&A Well - No Surveys	14,495.33	7,128.00	177.18	-222.21	0.444	Level 1, CC
1N-65W-22 Offsets						
CANAL 22-1-3L - Confluence PR Well - Actual BKR Surv						Out of range
CANAL 22-2-2L - 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	20,785.74	6,963.25	902.42	565.27	2.677	CC, ES, SF

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Reference Wellbore	Plan B	Database:	EDM 5000.16 Single User Db
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

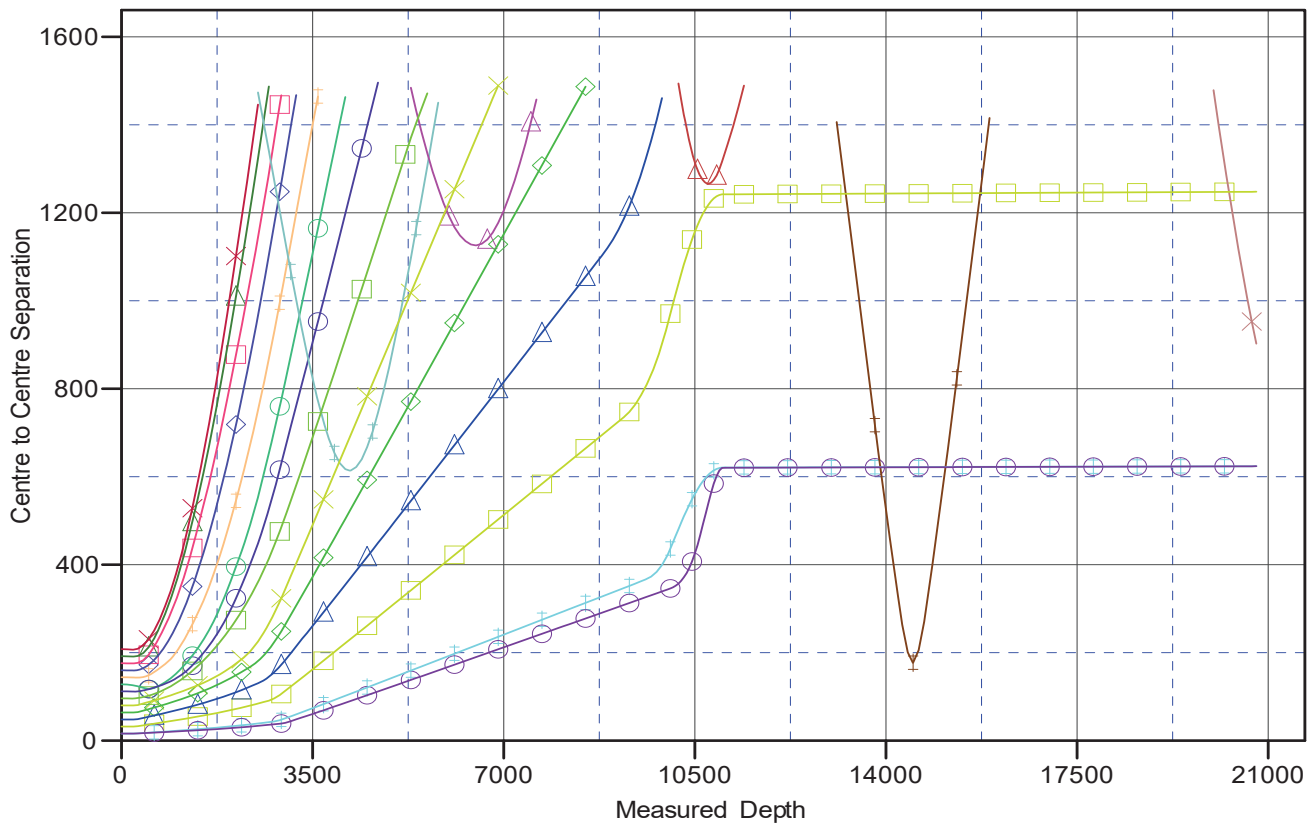
Central Meridian is -105.500000

Coordinates are relative to: RAMEN 1423-02H

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.57°

Ladder Plot



LEGEND

SAF1 1224-08H, Verdad PR Well, Actual SLB Surveys V0	HDI KF 10-11H, Verdad PR Well, Actual Baker Surveys V0	RAMEN 1423-05H, Plan B, Permit Rev-1 V0
SAF1 1224-08H, 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
SAF1 1224-14H, 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
SAF1 1224-08H, 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
SAF1 1224-18H, Verdad PR Well, Actual SLB Surveys V0	STERNAWD 857, NOBLE P&A Well, No Surveys V0	RAMEN 1423-06H, Plan B, Permit Rev-1 V0
SAF1 1224-02H, Verdad PR Well, Actual SLB Surveys V0	RAMEN 1423-04H, Plan B, Permit Rev-1 V0	
SAF1 1224-12H, Verdad PR Well, Actual SLB Surveys V0	RAMEN 1423-07H, Plan B, Permit Rev-1 V0	

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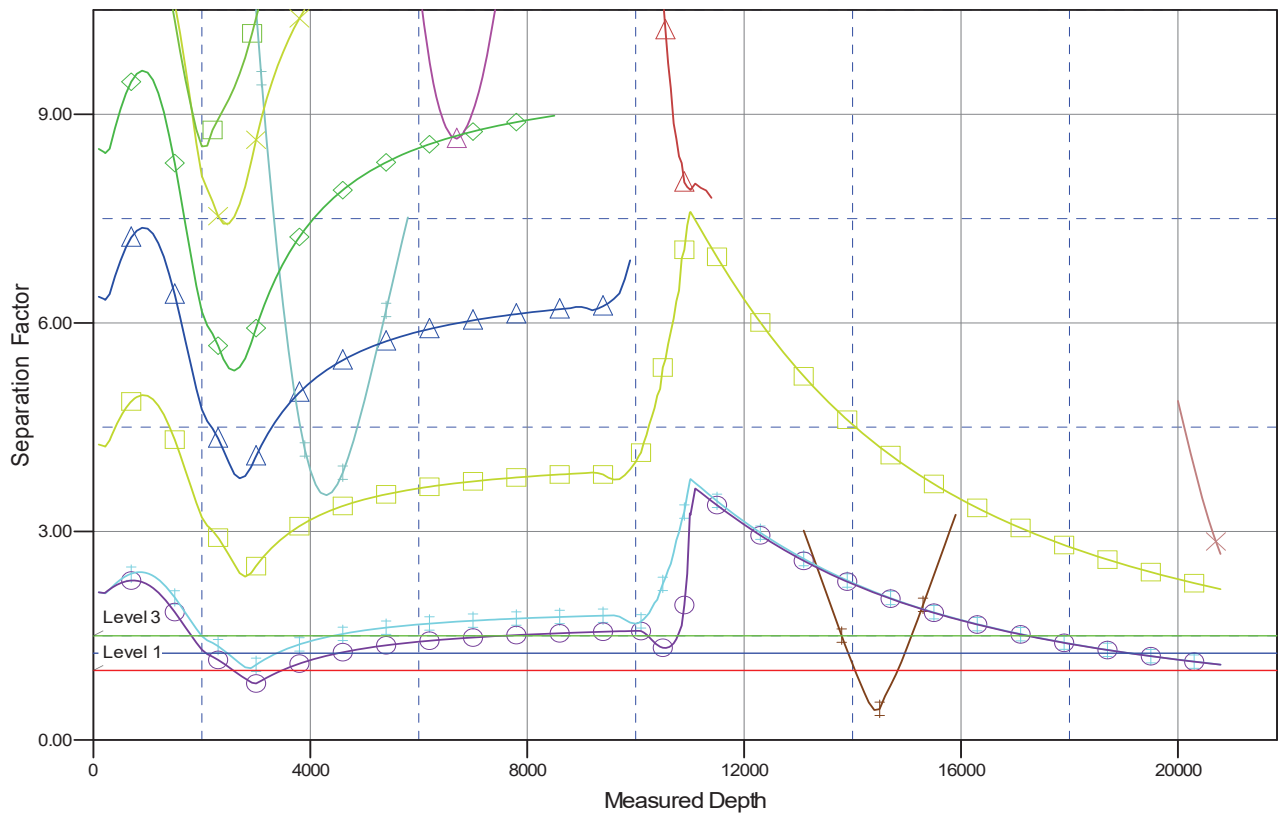
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Separation Factor Plot



LEGEND

SAFI 1224-04H, Verdad PR Well, Actual SLB Surveys V0	HDI KF 10-11H, Verdad PR Well, Actual Baker Surveys V0	RAMEN 1423-05H, Plan B, Permit Rev-1 V0
SAFI 1224-08H, Verdad PR Well, Actual SLB Surveys V0	WJERTZ 2-3, KPK PR Well, No Surveys V0	RAMEN 1423-03H, Plan B, Permit Rev-1 V0
SAFI 1224-14H, 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 1224-08H, 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 1224-10H, Verdad PR Well, Actual SLB Surveys V0	STERNAUD 857, NOBLE P&A Well, No Surveys V0	RAMEN 1423-06H, Plan B, Permit Rev-1 V0
SAFI 1224-02H, Verdad PR Well, Actual SLB Surveys V0	RAMEN 1423-04H, Plan B, Permit Rev-1 V0	
SAFI 1224-12H, Verdad PR Well, Actual SLB Surveys V0	RAMEN 1423-07H, Plan B, Permit Rev-1 V0	