

VERDAD RESOURCES

WATTENBERG FIELD

1N-65W-22 FAWN 2734 & 2833 PAD

FAWN 2833-01H

Plan A

Design #2

Anticollision Summary Report

13 October, 2022

Anticollision Summary Report

Company:	VERDAD RESOURCES	Local Co-ordinate Reference:	Well FAWN 2833-01H
Project:	WATTENBERG FIELD	TVD Reference:	RKB = 20' @ 5127.00usft (RIG)
Reference Site:	1N-65W-22 FAWN 2734 & 2833 PAD	MD Reference:	RKB = 20' @ 5127.00usft (RIG)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FAWN 2833-01H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 usft	Output errors are at	2.45 sigma
Reference Wellbore	Plan A	Database:	EDM 5000.16 Single User Db
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Reference	Design #2		
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	10/13/2022		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	2,250.00	Design #2 (Plan A)	ISCWSA MWD	Fixed:v2:standard declination	
2,250.00	18,890.68	Design #2 (Plan A)	ISCWSA MWD	Fixed:v2:standard declination	

Summary							
Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)		Between Ellipses (usft)	Separation Factor	Warning
1N-65W-09 Offsets Incomplete							
ROBIN 9-10HZ - KMG PR Well - Actual BKR Surveys	8,499.20	17,999.00	509.76	334.14	2.903	CC, ES, SF	
ROBIN 9-11HZ - KMG PR Well - Actual BKR Surveys	8,540.92	18,218.00	731.11	562.61	4.339	CC	
ROBIN 9-11HZ - KMG PR Well - Actual BKR Surveys	8,550.00	18,218.00	731.22	562.08	4.323	ES	
ROBIN 9-11HZ - KMG PR Well - Actual BKR Surveys	8,650.00	18,218.00	746.24	570.94	4.257	SF	
ROBIN 9-12HZ - KMG PR Well - Actual BKR Surveys	8,393.63	18,113.00	697.79	520.02	3.925	CC	
ROBIN 9-12HZ - KMG PR Well - Actual BKR Surveys	8,450.00	18,113.00	701.47	518.66	3.837	ES	
ROBIN 9-12HZ - KMG PR Well - Actual BKR Surveys	8,500.00	18,113.00	710.80	524.00	3.805	SF	
ROBIN 9-13HZ - KMG PR Well - Actual BKR Surveys	8,221.76	18,399.00	744.14	564.67	4.146	CC	
ROBIN 9-13HZ - KMG PR Well - Actual BKR Surveys	8,250.00	18,399.00	744.93	563.69	4.110	ES	
ROBIN 9-13HZ - KMG PR Well - Actual BKR Surveys	8,300.00	18,399.00	750.20	566.09	4.075	SF	
ROBIN 9-14HZ - KMG PR Well - Actual BKR Surveys	8,238.21	18,490.00	1,053.59	876.76	5.958	CC	
ROBIN 9-14HZ - KMG PR Well - Actual BKR Surveys	8,250.00	18,490.00	1,053.69	876.27	5.939	ES	
ROBIN 9-14HZ - KMG PR Well - Actual BKR Surveys	8,400.00	18,490.00	1,071.87	887.83	5.824	SF	
ROBIN 9-15HZ - KMG PR Well - Actual BKR Surveys	7,986.87	18,345.00	1,164.93	990.06	6.662	CC	
ROBIN 9-15HZ - KMG PR Well - Actual BKR Surveys	8,000.00	18,345.00	1,165.00	989.60	6.642	ES	
ROBIN 9-15HZ - KMG PR Well - Actual BKR Surveys	8,200.00	18,345.00	1,185.27	1,002.94	6.500	SF	
ROBIN 9-16HZ - KMG PR Well - Actual BKR Surveys	7,767.25	18,356.00	1,382.31	1,210.83	8.061	CC	
ROBIN 9-16HZ - KMG PR Well - Actual BKR Surveys	7,800.00	18,356.00	1,382.70	1,210.05	8.009	ES	
ROBIN 9-16HZ - KMG PR Well - Actual BKR Surveys	8,000.00	18,356.00	1,401.77	1,222.87	7.836	SF	
ROBIN 9-17HZ - KMG PR Well - Actual BKR Surveys						Out of range	
ROBIN 9-18HZ - Kerr McGee PR Well - Actual BKR Surv						Out of range	

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Reference Wellbore	Plan A	Database:	EDM 5000.16 Single User Db
Reference Design:	Design #2	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-22 FAWN 2734 & 2833 PAD						
FAWN 2734-05H - Plan A - Design #1	201.00	201.00	64.00	56.43	8.455	CC, ES, SF
FAWN 2734-06H - Plan A - Design #1	201.00	201.00	80.00	72.43	10.569	CC, ES, SF
FAWN 2734-07H - Plan A - Design #1	201.00	201.00	96.00	88.43	12.683	CC, ES, SF
FAWN 2734-08H - Plan A - Design #1	201.00	201.00	112.00	104.43	14.797	CC, ES, SF
FAWN 2734-09H - Plan A - Design #1	201.00	201.00	128.00	120.43	16.911	CC, ES, SF
FAWN 2734-10H - Plan A - Design #1	201.00	201.00	143.99	136.42	19.023	CC, ES, SF
FAWN 2734-11H - Plan A - Design #1	201.00	201.00	159.99	152.42	21.137	CC, ES
FAWN 2734-11H - Plan A - Design #1	300.00	299.98	161.70	154.05	21.130	SF
FAWN 2734-12H - Plan A - Design #1	201.00	201.00	175.99	168.42	23.251	CC, ES
FAWN 2734-12H - Plan A - Design #1	300.00	299.98	177.70	170.05	23.220	SF
FAWN 2734-13H - Plan A - Design #1	201.00	201.00	191.99	184.43	25.365	CC, ES
FAWN 2734-13H - Plan A - Design #1	300.00	299.98	193.70	186.05	25.311	SF
FAWN 2734-14H - Plan A - Design #1	201.00	201.00	207.99	200.43	27.479	CC, ES, SF
FAWN 2833-02H - Plan A - Design #1	201.00	201.00	16.00	8.43	2.114	CC
FAWN 2833-02H - Plan A - Design #1	18,890.68	18,638.57	457.70	-35.34	0.928	Level 1, ES, SF
FAWN 2833-03H - Plan A - Design #1	201.00	201.00	32.00	24.43	4.228	CC, ES
FAWN 2833-03H - Plan A - Design #1	18,890.68	18,388.38	954.20	462.01	1.939	SF
FAWN 2833-04H - Plan A - Design #1	201.00	201.00	48.00	40.43	6.342	CC, ES, SF
1N-65W-22 Offsets						
CANAL 22-1-3L - Confluence PR Well - Actual BKR Surv	1,938.18	1,884.14	88.38	62.12	3.365	CC, ES, SF
CANAL 22-1-4L - Confluence PR Well - Actual BKR Surv	2,276.12	2,134.58	151.37	121.29	5.032	CC, ES, SF
CANAL 22-2-2L - Confluence PR Well - Actual BKR Surv	2,024.04	1,949.45	78.50	51.37	2.893	CC, ES, SF
CANAL 22-3-3L - Confluence PR Well - Actual BKR Surv	2,520.69	2,323.05	196.24	164.28	6.140	CC, ES, SF
CANAL 22-4-2L - Confluence PR Well - Actual BKR Surv	2,643.69	2,423.34	202.02	168.53	6.032	CC, ES, SF
DRAKE 01N-65W-22-8N - Verdad PR Well - Actual Ens						Out of range
LONG 22-15-6NCH - Confluence Original Well - Actual B						Out of range
LONG 22-15-6NCH - Confluence PR Sidetrack - Actual B						Out of range
WILLOW 22-14-2L - Confluence PR Well - Actual BKR S	2,391.25	2,193.24	113.57	84.44	3.898	CC, ES
WILLOW 22-14-2L - Confluence PR Well - Actual BKR S	2,400.00	2,199.46	113.74	84.51	3.891	SF
WILLOW 22-15-3L - Confluence PR Well - Actual Baker S	2,520.07	2,290.54	115.79	85.70	3.849	CC, ES, SF
WILLOW 22-17-2L - Confluence PR Well - Actual BKR S	2,706.16	2,433.54	113.62	81.60	3.549	CC, ES, SF
WILLOW 22-18-3L - Confluence PR Well - Actual BKR S	2,888.95	2,577.60	127.66	93.16	3.701	CC
WILLOW 22-18-3L - Confluence PR Well - Actual BKR S	2,900.00	2,586.42	127.83	93.12	3.683	ES, SF
WILLOW 22-20-2L - Confluence PR Well - Actual BKR S	3,114.24	2,757.60	137.93	99.77	3.615	CC, ES, SF
WILLOW 22-21-3L - Confluence PR Well - Actual BKR S	3,315.46	2,922.37	131.36	89.32	3.124	CC, ES, SF
WILLOW 22-4-4L - Confluence PR Well - Actual BKR Su	2,319.82	2,141.66	104.41	75.72	3.640	CC, ES, SF
WILLOW 22-5-4L - Confluence PR Well - Actual BKR Su	2,964.41	2,639.17	148.59	112.77	4.149	CC, ES
WILLOW 22-5-4L - Confluence PR Well - Actual BKR Su	3,000.00	2,667.86	150.06	113.68	4.125	SF
1N-65W-27 Offsets						
ROWE 13N-27HZ - VERDAD PR Well - Actual BHI Surve						Out of range
1N-65W-28 Offsets Incomplete						
*GLEN YOUNG 1 - KPK P&A Well - No Surveys	9,800.00	7,183.00	1,106.60	789.44	3.489	SF
*GLEN YOUNG 1 - KPK P&A Well - No Surveys	10,000.00	7,183.00	1,085.04	778.71	3.542	ES
*GLEN YOUNG 1 - KPK P&A Well - No Surveys	10,018.12	7,183.00	1,084.89	779.40	3.551	CC
*NECKIEN 1 - RENEGADE T/A Well - No Surveys	12,800.00	7,177.00	903.72	529.61	2.416	SF
*NECKIEN 1 - RENEGADE T/A Well - No Surveys	12,900.00	7,177.00	894.23	526.46	2.431	ES
*NECKIEN 1 - RENEGADE T/A Well - No Surveys	12,935.25	7,177.00	893.54	528.16	2.446	CC
YOUNG 01N-65W-28-8N - VERDAD PR Well - Actual En	6,270.34	5,266.31	230.95	133.38	2.367	CC, ES
YOUNG 01N-65W-28-8N - VERDAD PR Well - Actual En	6,300.00	5,287.88	231.77	133.69	2.363	SF

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Well Error:	3.28 usft	Output errors are at	2.45 sigma
Reference Wellbore	Plan A	Database:	EDM 5000.16 Single User Db
Reference Design:	Design #2	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-33 Offsets Incomplete						
*HSR-CHERRY KNOLLS 9-33 - KMG D/A Well - No Surv						Out of range
BUFORD 33-10-2L - Confluence Drilled Well - Plan Only						Out of range
BUFORD 33-6-2L - Confluence Planned Well - BKR Plan	9,133.00	17,711.17	519.83	261.19	2.010	CC
BUFORD 33-6-2L - Confluence Planned Well - BKR Plan	18,890.68	7,973.95	524.34	243.05	1.864	ES, SF
BUFORD 33-6-4L - Confluence Planned Well - Planned B	18,890.68	8,215.63	342.72	131.36	1.621	CC, ES, SF
DESHA 4-15-1 - Confluence PR Well - Actual BKR Surve						Out of range
1N-65W-34 Offsets						
DESHA 4-1-3L - Confluence Planned Well - BKR Planned						Out of range
DESHA 4-1-4L - Confluence Planned Well - BKR Planned						Out of range
DESHA 4-2-2L - Confluence Planned Well - BKR Planned						Out of range
DESHA 4-2-4L - Confluence Planned Well - BKR Planned	18,890.68	7,851.15	804.20	490.43	2.563	CC, ES, SF
DESHA 4-3-1L - Confluence Planned Well - BKR Planned						Out of range
DESHA 4-4-3L - Confluence Planned Well - BKR Planned	18,890.68	7,620.50	1,310.72	1,005.93	4.300	CC, ES, SF
DESHA 4-5-2L - Confluence Planned Well - BKR Planned	18,890.68	7,678.65	1,023.00	714.09	3.312	CC, ES, SF
DESHA 4-6-1L - Confluence Planned Well - BKR Planned	18,890.68	7,683.99	717.68	429.77	2.493	CC, ES, SF
JORDAN #34-2 - KPK PR Well - No Surveys						Out of range
JORDAN #34-3 - KPK PR Well - No Surveys						Out of range
JORDAN #34-4 - KPK PR Well - No Surveys						Out of range
JORDAN #34-5 - KPK PR Well - No Surveys						Out of range
JORDAN #34-6 - BERGE D/A Well - No Surveys						Out of range
JORDAN #34-7 - KPK P&A Well - No Surveys						Out of range
JORDAN #34-8 - KPK D/A Well - No Surveys						Out of range
JORDAN #34-9 - BERGE P&A Well - No Surveys						Out of range
JORDAN, IVAR #1 - KPK PR Well - No Surveys						Out of range
JORDAN-LOUSTAUNAU #34-10 - KPK D/A Well - No Su						Out of range
JUDY 3-4 - Confluence PR Well - Actual Ensign Surveys						Out of range
JUDY 34-03-07 - Confluence Planned Well - Pro Directio						Out of range
JUDY 34-03-08 - Confluence Planned Well - Pro Directio						Out of range
JUDY 34-03-09 - Confluence Planned Well - Pro Directio						Out of range

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Reference Depths are relative to RKB = 20' @ 5127.00usft (RIG)

Offset Depths are relative to Offset Datum

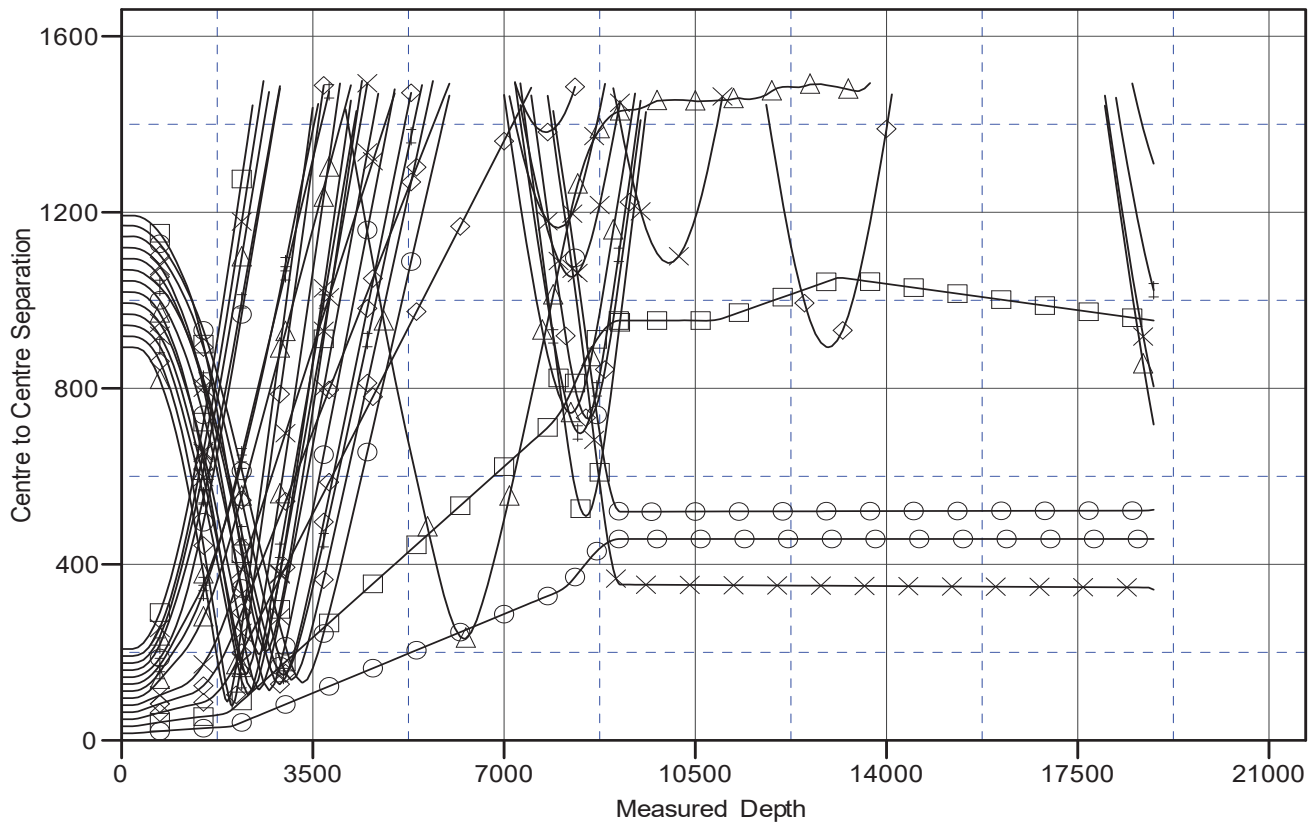
Central Meridian is -105.500000

Coordinates are relative to: FAWN 2833-01H

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.55°

Ladder Plot



LEGEND

<ul style="list-style-type: none"> WILLOW 22-17-2L, Confluence PR Well, Actual BKR Surveys V0 WILLOW 22-18-3L, Confluence PR Well, Actual BKR Surveys V0 CANAL 22-33L, Confluence PR Well, Actual BKR Surveys V0 WILLOW 22-14-2L, Confluence PR Well, Actual BKR Surveys V0 CANAL 22-13L, Confluence PR Well, Actual BKR Surveys V0 WILLOW 22-20-2L, Confluence PR Well, Actual BKR Surveys V0 CANAL 22-22L, Confluence PR Well, Actual BKR Surveys V0 WILLOW 22-15-3L, Confluence PR Well, Actual Baker Surveys V0 CANAL 22-14L, Confluence PR Well, Actual BKR Surveys V0 WILLOW 22-4-4L, Confluence PR Well, Actual BKR Surveys V0 WILLOW 22-5-4L, Confluence PR Well, Actual BKR Surveys V0 CANAL 22-42L, Confluence PR Well, Actual BKR Surveys V0 WILLOW 22-21-3L, Confluence PR Well, Actual BKR Surveys V0 FAWN 2734-11H, Plan A, Design #1 V0 	<ul style="list-style-type: none"> FAWN 2734-14H, Plan A, Design #1 V0 FAWN 2734-10H, Plan A, Design #1 V0 FAWN 2833-03H, Plan A, Design #1 V0 FAWN 2833-04H, Plan A, Design #1 V0 FAWN 2734-06H, Plan A, Design #1 V0 FAWN 2734-08H, Plan A, Design #1 V0 FAWN 2734-12H, Plan A, Design #1 V0 FAWN 2833-02H, Plan A, Design #1 V0 FAWN 2734-05H, Plan A, Design #1 V0 FAWN 2734-13H, Plan A, Design #1 V0 FAWN 2734-07H, Plan A, Design #1 V0 FAWN 2734-09H, Plan A, Design #1 V0 ROBIN 9-19Z, KMG PR Well, Actual BKR Surveys V0 ROBIN 9-19Z, KMG PR Well, Actual BKR Surveys V0 	<ul style="list-style-type: none"> ROBIN 9-13Z, KMG PR Well, Actual BKR Surveys V0 ROBIN 9-11Z, KMG PR Well, Actual BKR Surveys V0 ROBIN 9-14Z, KMG PR Well, Actual BKR Surveys V0 ROBIN 9-12Z, KMG PR Well, Actual BKR Surveys V0 ROBIN 9-10Z, KMG PR Well, Actual BKR Surveys V0 DESHA 4-6-1L, Confluence Planned Well, BKR Planned Surveys V0 DESHA 4-4-3L, Confluence Planned Well, BKR Planned Surveys V0 DESHA 4-5-2L, Confluence Planned Well, BKR Planned Surveys V0 DESHA 4-2-4L, Confluence Planned Well, BKR Planned Surveys V0 *NECKIEN1, RENEGADE T/A Well, No Surveys V0 YOUNG 01N65W-25-SN, VERDADPR Well, Actual Ensign Surveys V0 *LEN YOUNG 1, KPG P&A Well, No Surveys V0 BUF ORD 336-2L, Confluence Planned Well, BKR Planned Surveys V0 BUF ORD 336-4L, Confluence Planned Well, Planned BKR Surveys V0
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Offset Depths are relative to Offset Datum

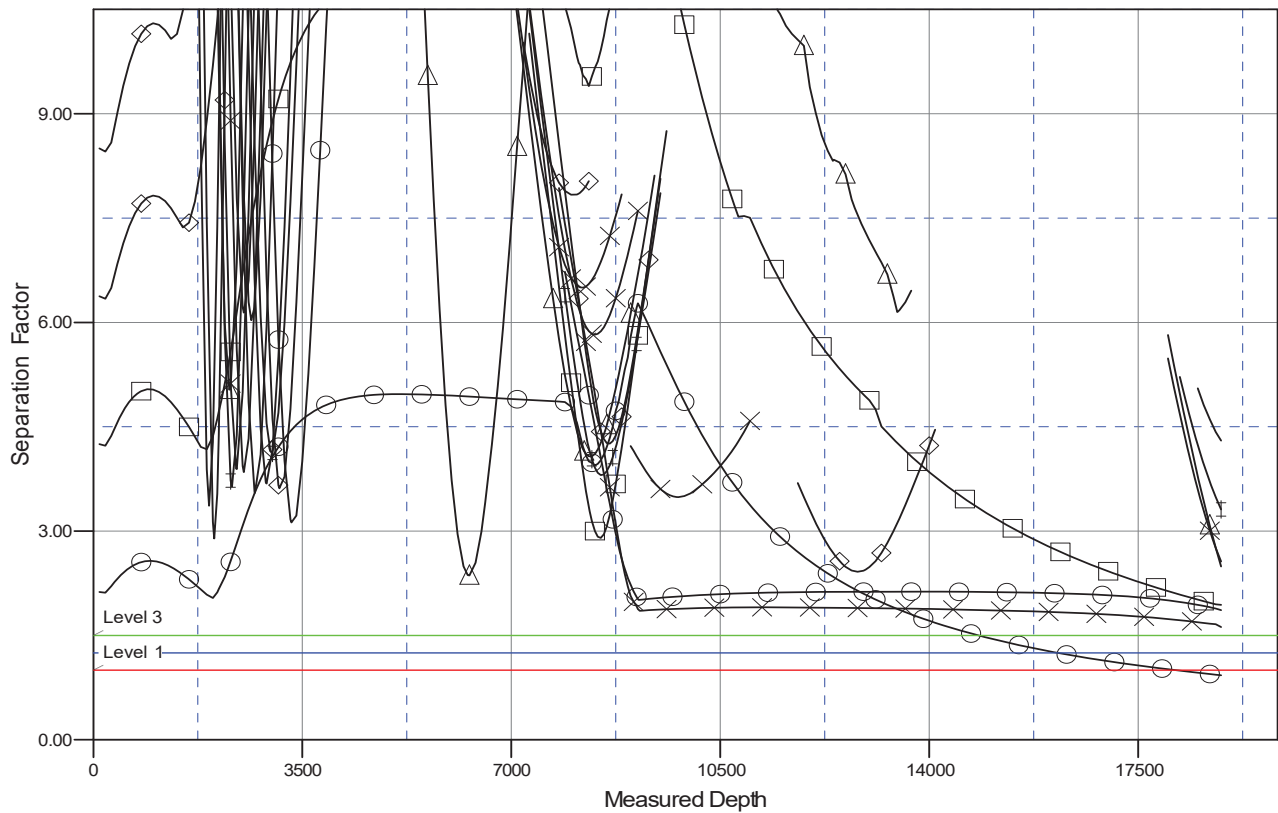
Central Meridian is -105.500000

Coordinates are relative to: FAWN 2833-01H

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.55°

Separation Factor Plot



LEGEND

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