

VERDAD RESOURCES

WATTENBERG FIELD

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

FAWN 2734-10H

Plan A

Design #1

Anticollision Summary Report

30 July, 2022

Anticollision Summary Report

Company:	VERDAD RESOURCES	Local Co-ordinate Reference:	Well FAWN 2734-10H
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 2734-10H	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 #1	Offset TVD Reference:	Offset Datum

Reference	Design #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	7/30/2022			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	2,250.00	Design #1 (Plan A)	ISCWSA MWD	Fixed:v2:standard declination	
2,250.00	17,406.91	Design #1 (Plan A)	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-09 Offsets Incomplete						
ROBIN 9-10HZ - KMG PR Well - Actual BKR Surveys						Out of range
ROBIN 9-11HZ - KMG PR Well - Actual BKR Surveys						Out of range
ROBIN 9-12HZ - KMG PR Well - Actual BKR Surveys						Out of range
ROBIN 9-13HZ - KMG PR Well - Actual BKR Surveys						Out of range
ROBIN 9-14HZ - KMG PR Well - Actual BKR Surveys						Out of range
ROBIN 9-15HZ - KMG PR Well - Actual BKR Surveys						Out of range
ROBIN 9-16HZ - KMG PR Well - Actual BKR Surveys						Out of range
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
1N-65W-22 FAWN 2734 & 2833 PAD						
FAWN 2734-05H - Plan A - Design #1	300.00	300.00	79.99	72.34	10.449	CC, ES
FAWN 2734-05H - Plan A - Design #1	400.00	398.14	80.78	73.00	10.383	SF
FAWN 2734-06H - Plan A - Design #1	303.98	303.98	63.99	56.33	8.355	CC, ES
FAWN 2734-06H - Plan A - Design #1	400.00	399.11	64.27	56.49	8.259	SF
FAWN 2734-07H - Plan A - Design #1	600.00	600.00	47.99	39.83	5.878	CC, ES
FAWN 2734-07H - Plan A - Design #1	700.00	698.58	49.22	40.83	5.861	SF
FAWN 2734-08H - Plan A - Design #1	709.43	709.43	31.99	23.56	3.793	CC, ES
FAWN 2734-08H - Plan A - Design #1	17,407.04	17,339.49	1,038.38	553.15	2.140	SF
FAWN 2734-09H - Plan A - Design #1	800.00	800.00	15.99	7.31	1.841	CC, ES
FAWN 2734-09H - Plan A - Design #1	17,407.04	17,399.58	521.37	31.59	1.064	Level 2, SF
FAWN 2734-11H - Plan A - Design #1	316.58	316.58	16.00	8.33	2.085	CC
FAWN 2734-11H - Plan A - Design #1	400.00	399.75	16.00	8.22	2.056	ES
FAWN 2734-11H - Plan A - Design #1	17,407.04	17,428.13	521.37	30.71	1.063	Level 2, SF
FAWN 2734-12H - Plan A - Design #1	303.39	303.39	32.00	24.34	4.178	CC, ES
FAWN 2734-12H - Plan A - Design #1	17,407.04	17,505.32	1,042.75	551.91	2.124	SF
FAWN 2734-13H - Plan A - Design #1	301.38	301.38	48.00	40.34	6.269	CC, ES
FAWN 2734-13H - Plan A - Design #1	16,900.00	16,955.47	1,475.59	1,012.31	3.185	SF
FAWN 2734-14H - Plan A - Design #1	200.00	200.00	64.00	56.43	8.456	CC, ES, SF
FAWN 2833-01H - Plan A - Design #1	200.00	200.00	143.99	136.42	19.025	CC, ES, SF
FAWN 2833-02H - Plan A - Design #1	200.00	200.00	127.99	120.42	16.911	CC, ES
FAWN 2833-02H - Plan A - Design #1	300.00	297.08	128.77	121.12	16.831	SF
FAWN 2833-03H - Plan A - Design #1	204.44	204.44	111.99	104.42	14.791	CC, ES
FAWN 2833-03H - Plan A - Design #1	300.00	298.49	112.26	104.61	14.669	SF

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Reference Well:	FAWN 2734-10H	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 #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-22 FAWN 2734 & 2833 PAD						
FAWN 2833-04H - Plan A - Design #1	300.00	300.00	95.99	88.34	12.540	CC, ES, SF
1N-65W-22 Offsets						
CANAL 22-1-3L - Confluence PR Well - Actual BKR Surv	3,592.68	3,870.31	125.30	79.51	2.736	CC, ES
CANAL 22-1-3L - Confluence PR Well - Actual BKR Surv	3,600.00	3,876.77	125.35	79.53	2.736	SF
CANAL 22-1-4L - Confluence PR Well - Actual BKR Surv	4,847.45	5,091.02	192.62	142.74	3.862	CC, ES, SF
CANAL 22-2-2L - Confluence PR Well - Actual BKR Surv	4,096.52	4,342.03	134.93	88.56	2.910	CC
CANAL 22-2-2L - Confluence PR Well - Actual BKR Surv	4,100.00	4,345.17	134.94	88.53	2.908	ES, SF
CANAL 22-3-3L - Confluence PR Well - Actual BKR Surv	5,471.10	5,734.79	239.64	185.91	4.460	CC, ES
CANAL 22-3-3L - Confluence PR Well - Actual BKR Surv	5,500.00	5,761.33	239.90	186.03	4.453	SF
CANAL 22-4-2L - Confluence PR Well - Actual BKR Surv	6,019.40	6,280.57	262.79	206.27	4.649	CC, ES
CANAL 22-4-2L - Confluence PR Well - Actual BKR Surv	6,100.00	6,357.11	263.99	207.12	4.642	SF
DRAKE 01N-65W-22-8N - Verdad PR Well - Actual Ensig	2,456.97	2,177.29	1,433.74	1,419.36	99.690	CC, ES
DRAKE 01N-65W-22-8N - Verdad PR Well - Actual Ensig	3,200.00	2,973.55	1,497.46	1,480.59	88.770	SF
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	7,111.92	7,163.00	601.01	564.85	16.623	CC, ES, SF
WILLOW 22-15-3L - Confluence PR Well - Actual Baker	7,164.44	7,179.70	912.99	877.04	25.394	CC, ES
WILLOW 22-15-3L - Confluence PR Well - Actual Baker	7,300.00	7,178.45	924.03	887.42	25.237	SF
WILLOW 22-17-2L - Confluence PR Well - Actual BKR S	816.18	813.68	1,186.39	1,177.68	136.244	CC
WILLOW 22-17-2L - Confluence PR Well - Actual BKR S	7,132.02	7,163.00	1,212.14	1,176.97	34.458	ES
WILLOW 22-17-2L - Confluence PR Well - Actual BKR S	7,500.00	7,124.65	1,270.99	1,233.16	33.594	SF
WILLOW 22-18-3L - Confluence PR Well - Actual BKR S	100.00	89.82	1,238.33	1,230.80	164.442	CC, ES
WILLOW 22-18-3L - Confluence PR Well - Actual BKR S	2,591.50	2,553.81	1,499.70	1,484.06	95.862	SF
WILLOW 22-20-2L - Confluence PR Well - Actual BKR S	0.00	0.00	1,288.69			
WILLOW 22-20-2L - Confluence PR Well - Actual BKR S	595.98	587.00	1,288.86	1,280.72	158.233	ES
WILLOW 22-20-2L - Confluence PR Well - Actual BKR S	1,900.00	1,824.23	1,484.99	1,472.16	115.769	SF
WILLOW 22-21-3L - Confluence PR Well - Actual BKR S	446.96	438.00	1,312.58	1,304.71	166.748	CC, ES
WILLOW 22-21-3L - Confluence PR Well - Actual BKR S	1,700.00	1,543.49	1,492.30	1,480.60	127.553	SF
WILLOW 22-4-4L - Confluence PR Well - Actual BKR Su	7,221.28	7,259.68	399.97	362.24	10.599	CC, ES, SF
WILLOW 22-5-4L - Confluence PR Well - Actual BKR Su	446.38	437.40	1,211.77	1,203.90	154.026	CC, ES
WILLOW 22-5-4L - Confluence PR Well - Actual BKR Su	2,300.00	2,226.58	1,485.96	1,471.12	100.121	SF
1N-65W-27 Offsets						
ROWE 13N-27HZ - VERDAD PR Well - Actual BHI Surv	9,700.00	10,489.34	9.36	-131.36	0.067	Level 1, ES
ROWE 13N-27HZ - VERDAD PR Well - Actual BHI Surv	9,713.14	10,498.68	0.93	-57.46	0.016	Level 1, CC, SF
1N-65W-28 Offsets Incomplete						
*GLEN YOUNG 1 - KPK P&A Well - No Surveys						Out of range
*NECKIEN 1 - RENEGADE T/A Well - No Surveys						Out of range
YOUNG 01N-65W-28-8N - VERDAD PR Well - Actual En						Out of range
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						Out of range
BUFORD 33-6-4L - Confluence Planned Well - Planned B						Out of range
DESHA 4-15-1 - Confluence PR Well - Actual BKR Surve						Out of range

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Reference Well:	FAWN 2734-10H	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 #1	Offset TVD Reference:	Offset Datum

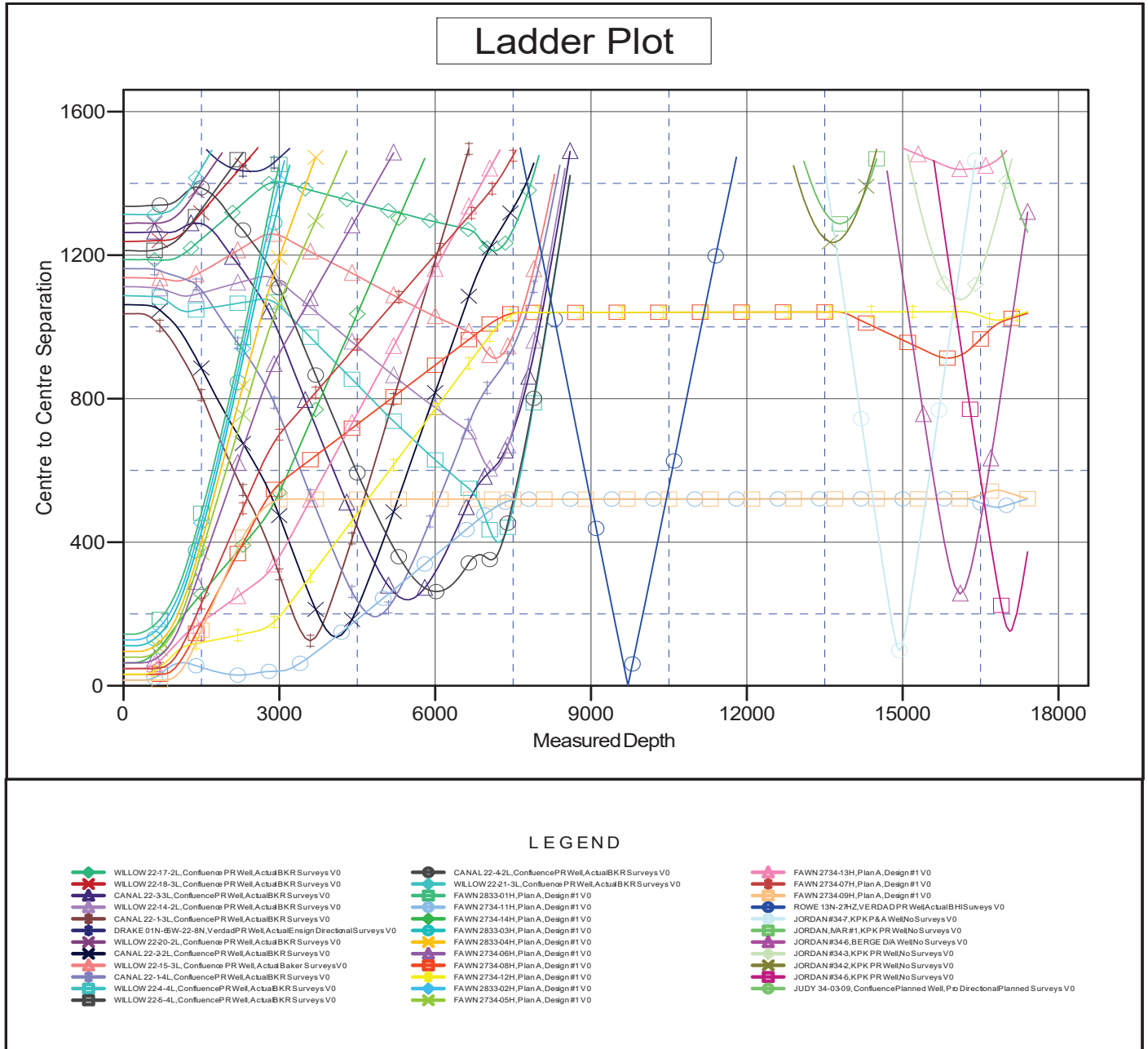
Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
1N-65W-34 Offsets						
DESHA 4-1-3L - Confluence Planned Well - BKR Planne						Out of range
DESHA 4-1-4L - Confluence Planned Well - BKR Planne						Out of range
DESHA 4-2-2L - Confluence Planned Well - BKR Planne						Out of range
DESHA 4-2-4L - Confluence Planned Well - BKR Planne						Out of range
DESHA 4-3-1L - Confluence Planned Well - BKR Planne						Out of range
DESHA 4-4-3L - Confluence Planned Well - BKR Planne						Out of range
DESHA 4-5-2L - Confluence Planned Well - BKR Planne						Out of range
DESHA 4-6-1L - Confluence Planned Well - BKR Planne						Out of range
JORDAN #34-2 - KPK PR Well - No Surveys	13,658.07	7,226.00	1,235.34	822.76	2.994	CC
JORDAN #34-2 - KPK PR Well - No Surveys	13,700.00	7,226.00	1,236.05	822.75	2.991	ES, SF
JORDAN #34-3 - KPK PR Well - No Surveys	16,116.55	7,229.00	1,076.31	606.19	2.289	CC, ES, SF
JORDAN #34-4 - KPK PR Well - No Surveys						Out of range
JORDAN #34-5 - KPK PR Well - No Surveys	17,065.63	7,247.00	151.61	-339.69	0.309	Level 1, CC, ES, SF
JORDAN #34-6 - BERGE D/A Well - No Surveys	16,111.42	7,249.00	256.01	-214.70	0.544	Level 1, CC, ES, SF
JORDAN #34-7 - KPK P&A Well - No Surveys	14,938.12	7,256.00	98.57	-344.96	0.222	Level 1, CC, ES, SF
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	13,793.17	7,253.00	1,287.29	870.59	3.089	CC
JORDAN, IVAR #1 - KPK PR Well - No Surveys	13,800.00	7,253.00	1,287.30	870.43	3.088	ES
JORDAN, IVAR #1 - KPK PR Well - No Surveys	13,900.00	7,253.00	1,291.71	872.67	3.083	SF
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	17,407.04	7,250.00	1,264.24	1,002.26	4.826	CC, ES, SF
1N-65W-35 Offsets Incomplete						
DOUBLE J 35-11-1CDH - Providence Planned Well - BK						Out of range

Anticollision Summary Report

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Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

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 2734-10H
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.55°



Anticollision Summary Report

Company:	VERDAD RESOURCES	Local Co-ordinate Reference:	Well FAWN 2734-10H
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Reference Wellbore	Plan A	Database:	EDM 5000.16 Single User Db
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

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

Offset Depths are relative to Offset Datum

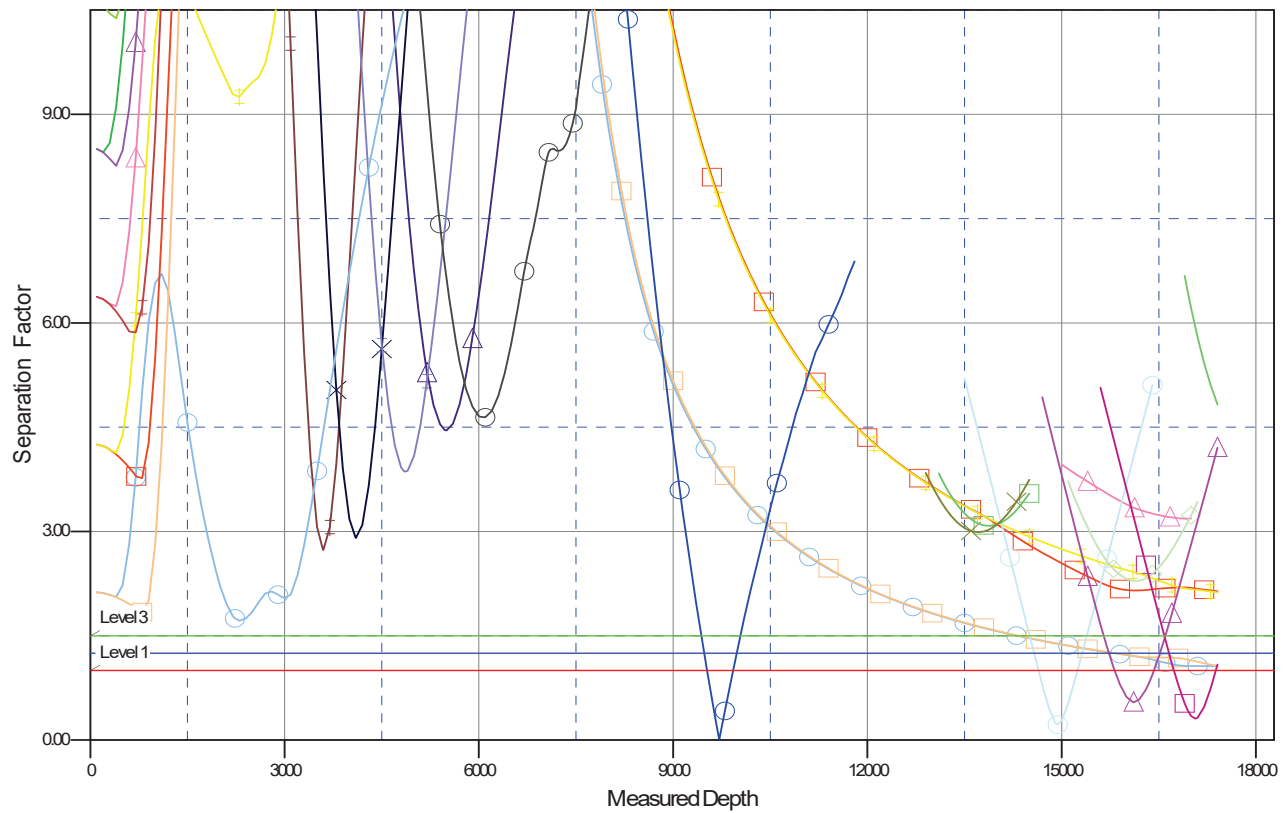
Central Meridian is -105.500000

Coordinates are relative to: FAWN 2734-10H

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.55°

Separation Factor Plot



LEGEND

WILLOW 22-17-2L, Confluence PR Well, Actual BKR Surveys V0	CANAL 22-42L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-13H, Plan A, Design #1 V0
WILLOW 22-18-3L, Confluence PR Well, Actual BKR Surveys V0	WILLOW 22-21-3L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-07H, Plan A, Design #1 V0
CANAL 22-33L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2833-01H, Plan A, Design #1 V0	FAWN 2734-09H, Plan A, Design #1 V0
WILLOW 22-14-2L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-11H, Plan A, Design #1 V0	ROWE 13N-2H2, VERDAD PR Well, Actual BHS Surveys V0
CANAL 22-13L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-14H, Plan A, Design #1 V0	JORDAN #34-7, KPK PR Well No Surveys V0
DRAKE 01N-65W-22-8N, Verdad PR Well, Actual Ensign Directional Surveys V0	FAWN 2833-03H, Plan A, Design #1 V0	JORDAN, MAR #1, KPK PR Well No Surveys V0
WILLOW 22-20-2L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2833-04H, Plan A, Design #1 V0	JORDAN #34-6, BERGE DA Well No Surveys V0
CANAL 22-22L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-06H, Plan A, Design #1 V0	JORDAN #34-3, KPK PR Well No Surveys V0
WILLOW 22-15-3L, Confluence PR Well, Actual Baker Surveys V0	FAWN 2734-08H, Plan A, Design #1 V0	JORDAN #34-2, KPK PR Well No Surveys V0
CANAL 22-14L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-12H, Plan A, Design #1 V0	JORDAN #34-5, KPK PR Well No Surveys V0
WILLOW 22-4-4L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2833-02H, Plan A, Design #1 V0	JUDY 34-0309, Confluence Planned Well, Pro Directional Planned Surveys V0
WILLOW 22-6-4L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-05H, Plan A, Design #1 V0	