

VERDAD RESOURCES

WATTENBERG FIELD

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

FAWN 2734-08H

Plan A

Design #1

Anticollision Summary Report

30 July, 2022

Anticollision Summary Report

Company:	VERDAD RESOURCES	Local Co-ordinate Reference:	Well FAWN 2734-08H
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 2734-08H	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	17,434.84	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	48.00	40.35	6.270	CC, ES, SF
FAWN 2734-06H - Plan A - Design #1	303.98	303.98	32.00	24.34	4.178	CC, ES
FAWN 2734-06H - Plan A - Design #1	17,434.84	17,608.06	1,042.75	552.42	2.127	SF
FAWN 2734-07H - Plan A - Design #1	600.00	600.00	16.00	7.84	1.960	CC, ES
FAWN 2734-07H - Plan A - Design #1	17,434.84	17,482.46	521.37	33.43	1.069	Level 2, SF
FAWN 2734-09H - Plan A - Design #1	736.80	736.80	16.00	7.49	1.881	CC
FAWN 2734-09H - Plan A - Design #1	16,000.00	15,970.38	394.24	-29.68	0.930	Level 1, ES, SF
FAWN 2734-10H - Plan A - Design #1	736.80	736.80	31.99	23.48	3.761	CC, ES
FAWN 2734-10H - Plan A - Design #1	17,400.00	17,407.04	1,040.14	552.27	2.132	SF
FAWN 2734-11H - Plan A - Design #1	316.58	316.58	47.99	40.32	6.254	CC
FAWN 2734-11H - Plan A - Design #1	400.00	399.75	47.99	40.21	6.165	ES
FAWN 2734-11H - Plan A - Design #1	16,700.00	16,695.99	1,496.65	1,040.00	3.277	SF
FAWN 2734-12H - Plan A - Design #1	303.39	303.39	63.99	56.33	8.355	CC, ES
FAWN 2734-12H - Plan A - Design #1	400.00	399.38	64.13	56.35	8.240	SF
FAWN 2734-13H - Plan A - Design #1	301.38	301.38	79.99	72.34	10.447	CC, ES
FAWN 2734-13H - Plan A - Design #1	400.00	398.43	80.55	72.77	10.353	SF
FAWN 2734-14H - Plan A - Design #1	200.00	200.00	95.99	88.42	12.683	CC, ES, SF
FAWN 2833-01H - Plan A - Design #1	200.00	200.00	112.00	104.43	14.798	CC, ES, SF
FAWN 2833-02H - Plan A - Design #1	200.00	200.00	96.00	88.43	12.684	CC, ES
FAWN 2833-02H - Plan A - Design #1	300.00	297.78	96.79	89.13	12.650	SF
FAWN 2833-03H - Plan A - Design #1	204.44	204.44	80.00	72.43	10.566	CC, ES
FAWN 2833-03H - Plan A - Design #1	300.00	298.91	80.27	72.62	10.489	SF
FAWN 2833-04H - Plan A - Design #1	300.00	300.00	64.00	56.35	8.361	CC, ES, SF

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Reference Well:	FAWN 2734-08H	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 Offsets						
CANAL 22-1-3L - Confluence PR Well - Actual BKR Surv	2,605.12	2,756.74	115.80	85.68	3.846	CC, ES, SF
CANAL 22-1-4L - Confluence PR Well - Actual BKR Surv	3,432.42	3,557.58	179.16	146.42	5.472	CC, ES, SF
CANAL 22-2-2L - Confluence PR Well - Actual BKR Surv	2,882.43	3,019.08	125.46	94.96	4.113	CC, ES
CANAL 22-2-2L - Confluence PR Well - Actual BKR Surv	2,900.00	3,034.21	125.78	95.19	4.112	SF
CANAL 22-3-3L - Confluence PR Well - Actual BKR Surv	3,893.52	4,028.15	224.31	188.86	6.328	CC
CANAL 22-3-3L - Confluence PR Well - Actual BKR Surv	3,900.00	4,033.77	224.34	188.85	6.322	ES, SF
CANAL 22-4-2L - Confluence PR Well - Actual BKR Surv	4,201.14	4,335.87	232.06	194.72	6.215	CC, ES, SF
DRAKE 01N-65W-22-8N - Verdad PR Well - Actual Ensig						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	5,206.43	5,206.74	230.94	196.63	6.731	CC, ES
WILLOW 22-14-2L - Confluence PR Well - Actual BKR S	5,300.00	5,296.67	232.26	197.36	6.656	SF
WILLOW 22-15-3L - Confluence PR Well - Actual Baker	7,150.00	7,102.33	106.26	68.55	2.818	SF
WILLOW 22-15-3L - Confluence PR Well - Actual Baker	7,161.83	7,105.13	105.66	68.19	2.820	CC, ES
WILLOW 22-17-2L - Confluence PR Well - Actual BKR S	7,158.17	7,103.63	196.03	158.99	5.292	CC, ES
WILLOW 22-17-2L - Confluence PR Well - Actual BKR S	7,200.00	7,106.70	200.67	162.44	5.249	SF
WILLOW 22-18-3L - Confluence PR Well - Actual BKR S	7,228.33	7,109.07	501.00	463.50	13.358	CC, ES
WILLOW 22-18-3L - Confluence PR Well - Actual BKR S	7,350.00	7,114.54	516.58	476.53	12.901	SF
WILLOW 22-20-2L - Confluence PR Well - Actual BKR S	7,180.03	7,020.71	822.18	785.49	22.413	CC
WILLOW 22-20-2L - Confluence PR Well - Actual BKR S	7,200.00	7,025.20	822.41	785.46	22.252	ES
WILLOW 22-20-2L - Confluence PR Well - Actual BKR S	7,550.00	7,006.20	901.20	857.68	20.708	SF
WILLOW 22-21-3L - Confluence PR Well - Actual BKR S	7,243.64	7,079.41	1,087.02	1,048.99	28.579	CC
WILLOW 22-21-3L - Confluence PR Well - Actual BKR S	7,250.00	7,080.60	1,087.04	1,048.91	28.505	ES
WILLOW 22-21-3L - Confluence PR Well - Actual BKR S	7,900.00	7,015.66	1,270.98	1,219.05	24.478	SF
WILLOW 22-4-4L - Confluence PR Well - Actual BKR Su	4,781.70	4,794.54	209.14	176.38	6.384	CC
WILLOW 22-4-4L - Confluence PR Well - Actual BKR Su	4,800.00	4,812.05	209.20	176.33	6.364	ES
WILLOW 22-4-4L - Confluence PR Well - Actual BKR Su	4,900.00	4,910.32	211.28	177.89	6.328	SF
WILLOW 22-5-4L - Confluence PR Well - Actual BKR Su	7,278.92	7,138.52	688.02	649.62	17.918	CC
WILLOW 22-5-4L - Confluence PR Well - Actual BKR Su	7,300.00	7,142.86	688.37	649.54	17.727	ES
WILLOW 22-5-4L - Confluence PR Well - Actual BKR Su	7,550.00	7,138.22	744.64	700.04	16.694	SF
1N-65W-27 Offsets						
ROWE 13N-27HZ - VERDAD PR Well - Actual BHI Surv	10,777.00	11,974.37	11.06	-67.65	0.141	Level 1, CC
ROWE 13N-27HZ - VERDAD PR Well - Actual BHI Surv	10,800.00	11,990.95	19.40	-160.52	0.108	Level 1, ES, 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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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	13,677.30	7,226.00	193.51	-219.59	0.468	Level 1, CC, ES, SF
JORDAN #34-3 - KPK PR Well - No Surveys	16,154.03	7,229.00	151.65	-318.21	0.323	Level 1, CC, ES, SF
JORDAN #34-4 - KPK PR Well - No Surveys						Out of range
JORDAN #34-5 - KPK PR Well - No Surveys	17,005.50	7,247.00	871.07	381.07	1.778	CC, ES, SF
JORDAN #34-6 - BERGE D/A Well - No Surveys	16,064.73	7,249.00	1,176.68	707.77	2.509	CC, ES
JORDAN #34-6 - BERGE D/A Well - No Surveys	16,100.00	7,249.00	1,177.42	707.84	2.507	SF
JORDAN #34-7 - KPK P&A Well - No Surveys	15,031.90	7,256.00	1,066.20	621.89	2.400	CC, ES, SF
JORDAN #34-8 - KPK D/A Well - No Surveys						Out of range
JORDAN #34-9 - BERGE P&A Well - No Surveys	17,284.77	7,260.00	1,100.59	603.70	2.215	CC
JORDAN #34-9 - BERGE P&A Well - No Surveys	17,300.00	7,260.00	1,100.69	603.59	2.214	ES, SF
JORDAN, IVAR #1 - KPK PR Well - No Surveys						Out of range
JORDAN-LOUSTAUNAU #34-10 - KPK D/A Well - No Su	15,348.70	7,220.00	1,191.18	740.66	2.644	CC
JORDAN-LOUSTAUNAU #34-10 - KPK D/A Well - No Su	15,400.00	7,220.00	1,192.28	739.68	2.634	ES, SF
JUDY 3-4 - Confluence PR Well - Actual Ensign Surveys	17,434.84	7,400.42	1,357.56	1,148.41	6.491	CC, ES, SF
JUDY 34-03-07 - Confluence Planned Well - Pro Directio	17,434.84	7,085.72	1,036.64	792.93	4.254	CC, ES, SF
JUDY 34-03-08 - Confluence Planned Well - Pro Directio	17,434.84	7,067.50	783.58	564.04	3.569	CC, ES, SF
JUDY 34-03-09 - Confluence Planned Well - Pro Directio	17,434.84	7,200.00	379.77	244.43	2.806	CC, ES, SF
1N-65W-35 Offsets Incomplete						
DOUBLE J 35-11-1CDH - Providence Planned Well - BK						Out of range

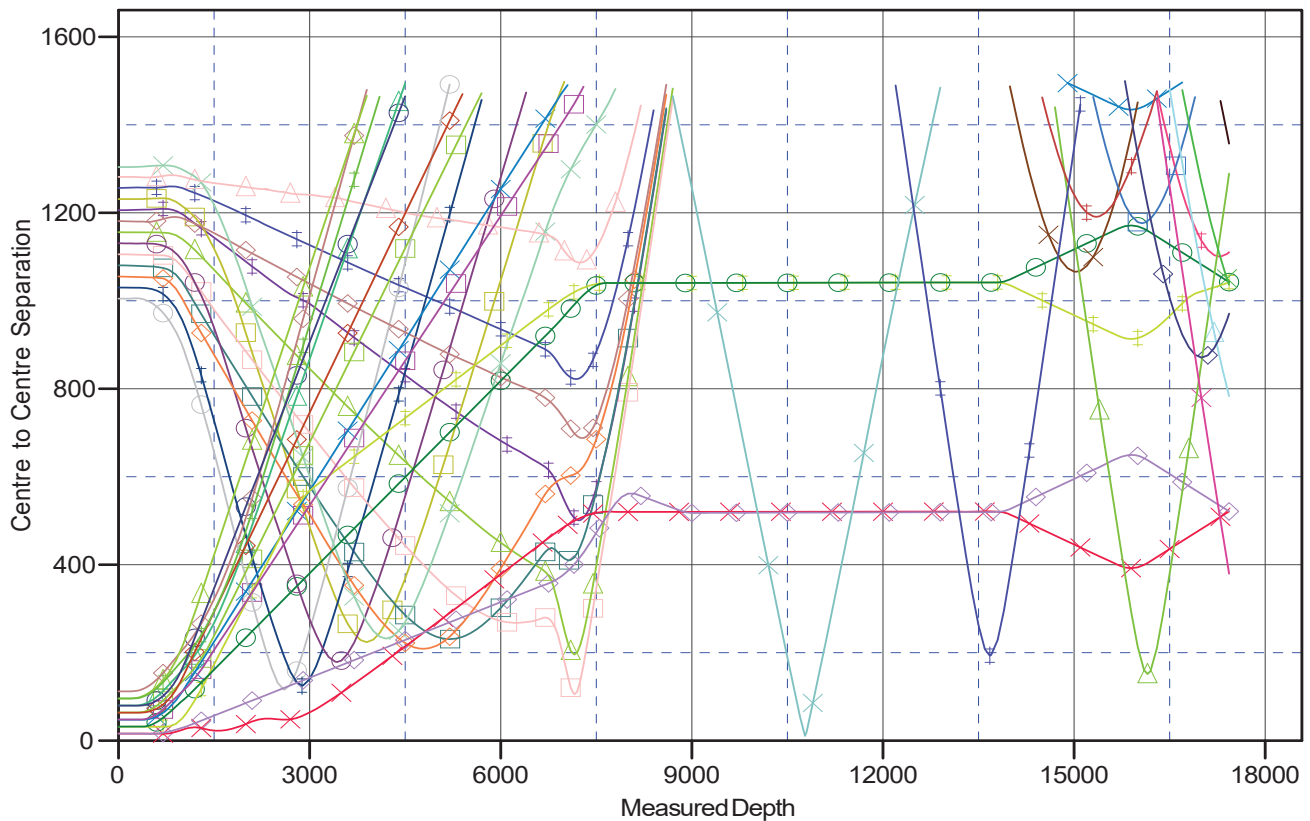
Anticollision Summary Report

Company:	VERDAD RESOURCES	Local Co-ordinate Reference:	Well FAWN 2734-08H
Project:	WATTENBERG FIELD	TVD Reference:	RKB = 20' @ 5127.00usft (RIG)
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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 2734-08H
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.55°

Ladder Plot



LEGEND

WILLOW 22-17-2L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2833-01H, Plan A, Design #1 V0	ROWE 13N-27H, VERDAD PR Well, Actual BHS Surveys V0
WILLOW 22-18-3L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-11H, Plan A, Design #1 V0	JORDAN #34-7, KPK P&A Well, No Surveys V0
CANAL 22-3-3L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-14H, Plan A, Design #1 V0	JORDAN #34-9, BERGE P&A Well, No Surveys V0
WILLOW 22-14-2L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-10H, Plan A, Design #1 V0	JORDAN #34-6, BERGE DA Well, No Surveys V0
CANAL 22-1-3L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2833-03H, Plan A, Design #1 V0	JORDAN #34-3, 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-LOUISIANA #34-10, KP KDA Well, No Surveys V0
CANAL 22-2-2L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-09H, Plan A, Design #1 V0	JUDY 34-03-08, Confluence Planned Well, P&A Directional Planned Surveys V0
WILLOW 22-15-3L, Confluence PR Well, Actual Baker Surveys V0	FAWN 2734-06H, Plan A, Design #1 V0	JORDAN #34-2, KPK PR Well, No Surveys V0
CANAL 22-1-4L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-12H, Plan A, Design #1 V0	JORDAN #34-6, 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 34-03-07, Confluence Planned Well, P&A Directional Planned Surveys V0
WILLOW 22-6-4L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-05H, Plan A, Design #1 V0	JUDY 3-4, Confluence PR Well, Actual Design Surveys V0
CANAL 22-4-2L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-13H, Plan A, Design #1 V0	JUDY 34-03-09, Confluence Planned Well, P&A Directional Planned Surveys V0
WILLOW 22-21-3L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-07H, Plan A, Design #1 V0	

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

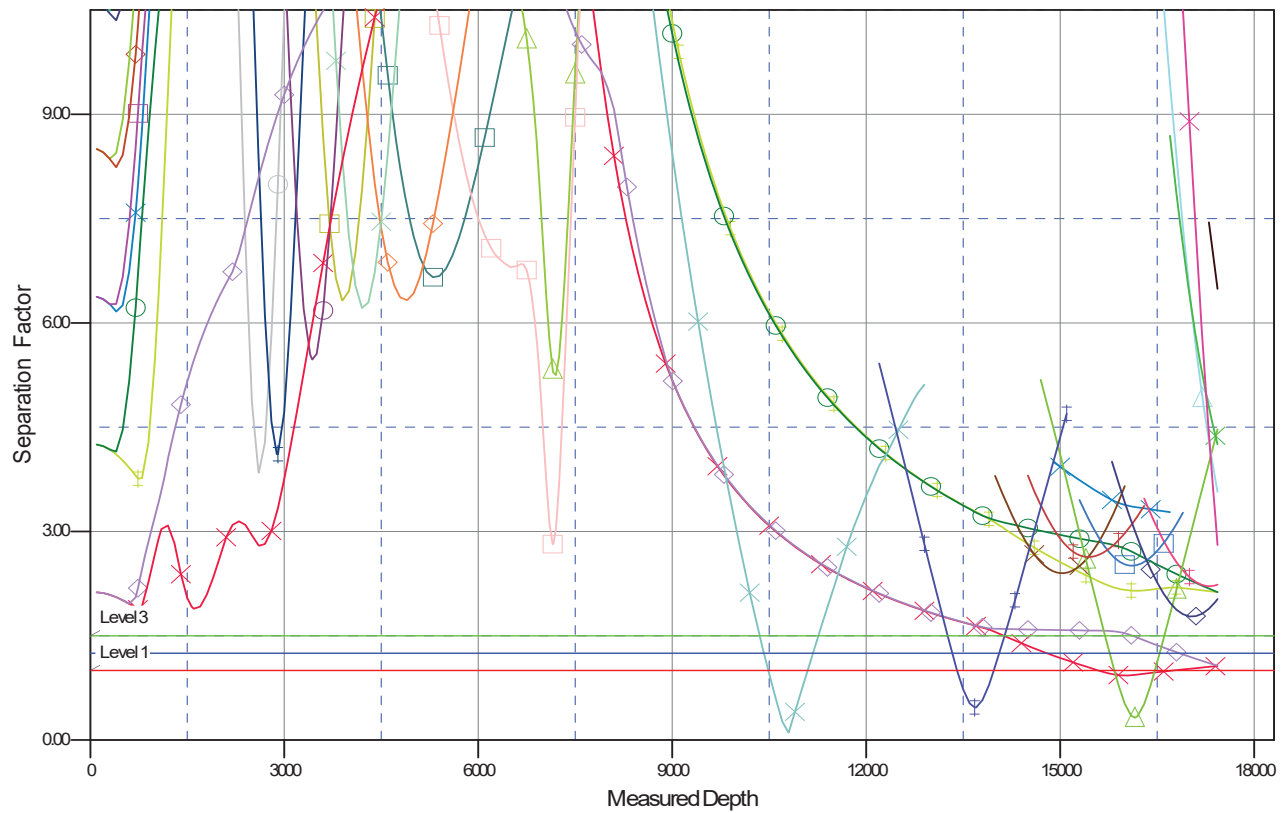
Central Meridian is -105.500000

Coordinates are relative to: FAWN 2734-08H

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	FAWN 2833-01H, Plan A, Design #1 V0	ROWE 13N-24W, VERDAD PR Well, Actual BKR Surveys V0
WILLOW 22-18-3L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-11H, Plan A, Design #1 V0	JORDAN #34-7, KPR P&A Well, No Surveys V0
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WILLOW 22-14-2L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-10H, Plan A, Design #1 V0	JORDAN #34-6, BERGE D&A Well, No Surveys V0
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WILLOW 22-20-2L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2833-04H, Plan A, Design #1 V0	JORDAN-LOUISIANA #34-10, KPR D&A Well, No Surveys V0
CANAL 22-2-2L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-09H, Plan A, Design #1 V0	JUDY 34-03-08, Confluence Planned Well, P&D Directional Planned Surveys V0
WILLOW 22-15-3L, Confluence PR Well, Actual Baker Surveys V0	FAWN 2734-06H, Plan A, Design #1 V0	JORDAN #34-2, KPR PR Well, No Surveys V0
CANAL 22-1-4L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-12H, Plan A, Design #1 V0	JORDAN #34-5, KPR 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 34-03-07, Confluence Planned Well, P&D Directional Planned Surveys V0
WILLOW 22-6-4L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-05H, Plan A, Design #1 V0	JUDY 3-4, Confluence PR Well, Actual Ensign Surveys V0
CANAL 22-4-2L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-13H, Plan A, Design #1 V0	JUDY 34-03-09, Confluence Planned Well, P&D Directional Planned Surveys V0
WILLOW 22-21-3L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-07H, Plan A, Design #1 V0	