

VERDAD RESOURCES

WATTENBERG FIELD

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

FAWN 2734-09H

Plan A

Design #1

Anticollision Summary Report

30 July, 2022

Anticollision Summary Report

Company:	VERDAD RESOURCES	Local Co-ordinate Reference:	Well FAWN 2734-09H
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 2734-09H	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	17,399.58	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	64.00	56.35	8.361	CC, ES
FAWN 2734-05H - Plan A - Design #1	400.00	398.50	64.79	57.01	8.328	SF
FAWN 2734-06H - Plan A - Design #1	303.98	303.98	48.00	40.34	6.267	CC, ES
FAWN 2734-06H - Plan A - Design #1	400.00	399.33	48.28	40.50	6.204	SF
FAWN 2734-07H - Plan A - Design #1	600.00	600.00	32.00	23.84	3.919	CC, ES
FAWN 2734-07H - Plan A - Design #1	17,399.58	17,482.27	1,042.75	553.68	2.132	SF
FAWN 2734-08H - Plan A - Design #1	709.45	709.45	16.00	7.57	1.897	CC
FAWN 2734-08H - Plan A - Design #1	16,000.00	16,013.22	395.10	-29.99	0.929	Level 1, ES, SF
FAWN 2734-10H - Plan A - Design #1	800.00	800.00	15.99	7.31	1.841	CC, ES
FAWN 2734-10H - Plan A - Design #1	17,399.58	17,407.04	521.37	31.59	1.064	Level 2, SF
FAWN 2734-11H - Plan A - Design #1	316.58	316.58	31.99	24.32	4.169	CC
FAWN 2734-11H - Plan A - Design #1	400.00	399.75	31.99	24.21	4.109	ES
FAWN 2734-11H - Plan A - Design #1	17,399.58	17,427.93	1,042.75	551.02	2.121	SF
FAWN 2734-12H - Plan A - Design #1	303.39	303.39	47.99	40.33	6.266	CC, ES
FAWN 2734-12H - Plan A - Design #1	400.00	399.53	48.13	40.35	6.184	SF
FAWN 2734-13H - Plan A - Design #1	301.38	301.38	63.99	56.33	8.358	CC, ES
FAWN 2734-13H - Plan A - Design #1	400.00	398.74	64.56	56.78	8.297	SF
FAWN 2734-14H - Plan A - Design #1	200.00	200.00	79.99	72.42	10.569	CC, ES, SF
FAWN 2833-01H - Plan A - Design #1	200.00	200.00	128.00	120.43	16.912	CC, ES, SF
FAWN 2833-02H - Plan A - Design #1	200.00	200.00	112.00	104.43	14.798	CC, ES
FAWN 2833-02H - Plan A - Design #1	300.00	297.43	112.78	105.13	14.741	SF
FAWN 2833-03H - Plan A - Design #1	204.44	204.44	96.00	88.43	12.679	CC, ES
FAWN 2833-03H - Plan A - Design #1	300.00	298.70	96.27	88.62	12.580	SF

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Site Error:	0.00 usft	North Reference:	True
Reference Well:	FAWN 2734-09H	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	80.00	72.35	10.451	CC, ES, SF
1N-65W-22 Offsets						
CANAL 22-1-3L - Confluence PR Well - Actual BKR Surv	2,619.09	2,769.41	69.85	39.73	2.319	CC, ES, SF
CANAL 22-1-4L - Confluence PR Well - Actual BKR Surv	3,639.02	3,785.22	148.54	114.26	4.334	CC, ES, SF
CANAL 22-2-2L - Confluence PR Well - Actual BKR Surv	2,957.71	3,099.95	84.38	53.24	2.709	CC, ES, SF
CANAL 22-3-3L - Confluence PR Well - Actual BKR Surv	4,213.45	4,380.69	200.29	162.53	5.305	CC, ES, SF
CANAL 22-4-2L - Confluence PR Well - Actual BKR Surv	4,624.16	4,799.30	217.55	177.29	5.404	CC, ES
CANAL 22-4-2L - Confluence PR Well - Actual BKR Surv	4,700.00	4,871.13	219.16	178.46	5.384	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	7,100.00	7,126.91	82.52	46.22	2.273	SF
WILLOW 22-14-2L - Confluence PR Well - Actual BKR S	7,101.03	7,127.05	82.51	46.22	2.274	CC, ES
WILLOW 22-15-3L - Confluence PR Well - Actual Baker	7,152.38	7,138.68	394.08	358.00	10.921	CC, ES
WILLOW 22-15-3L - Confluence PR Well - Actual Baker	7,200.00	7,144.74	397.02	360.64	10.913	SF
WILLOW 22-17-2L - Confluence PR Well - Actual BKR S	7,123.77	7,140.59	693.59	658.25	19.626	CC, ES
WILLOW 22-17-2L - Confluence PR Well - Actual BKR S	7,250.00	7,138.65	706.01	669.64	19.410	SF
WILLOW 22-18-3L - Confluence PR Well - Actual BKR S	7,167.84	7,098.12	1,004.95	969.21	28.116	CC, ES
WILLOW 22-18-3L - Confluence PR Well - Actual BKR S	7,600.00	7,071.00	1,089.79	1,048.94	26.678	SF
WILLOW 22-20-2L - Confluence PR Well - Actual BKR S	2,458.50	2,391.73	1,149.13	1,134.12	76.569	CC, ES
WILLOW 22-20-2L - Confluence PR Well - Actual BKR S	7,800.00	6,942.35	1,470.88	1,426.84	33.400	SF
WILLOW 22-21-3L - Confluence PR Well - Actual BKR S	2,262.94	2,115.33	1,232.96	1,218.68	86.384	CC, ES
WILLOW 22-21-3L - Confluence PR Well - Actual BKR S	5,500.00	5,367.05	1,494.24	1,467.19	55.254	SF
WILLOW 22-4-4L - Confluence PR Well - Actual BKR Su	7,193.15	7,168.90	112.51	74.71	2.977	CC, ES
WILLOW 22-4-4L - Confluence PR Well - Actual BKR Su	7,200.00	7,171.14	112.69	74.74	2.969	SF
WILLOW 22-5-4L - Confluence PR Well - Actual BKR Su	2,482.65	2,428.00	1,065.17	1,049.99	70.209	CC, ES
WILLOW 22-5-4L - Confluence PR Well - Actual BKR Su	7,800.00	7,071.00	1,326.49	1,281.77	29.659	SF
1N-65W-27 Offsets						
ROWE 13N-27HZ - VERDAD PR Well - Actual BHI Surv	10,200.00	11,215.84	19.43	-146.36	0.117	Level 1, ES
ROWE 13N-27HZ - VERDAD PR Well - Actual BHI Surv	10,226.17	11,234.19	5.48	-62.27	0.081	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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Site Error:	0.00 usft	North Reference:	True
Reference Well:	FAWN 2734-09H	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	13,651.90	7,226.00	714.43	301.99	1.732	CC, ES
JORDAN #34-2 - KPK PR Well - No Surveys	13,700.00	7,226.00	716.05	302.64	1.732	SF
JORDAN #34-3 - KPK PR Well - No Surveys	16,110.35	7,229.00	555.10	85.12	1.181	Level 2, CC, ES, SF
JORDAN #34-4 - KPK PR Well - No Surveys						Out of range
JORDAN #34-5 - KPK PR Well - No Surveys	17,051.75	7,247.00	385.36	-107.27	0.782	Level 1, CC, ES, SF
JORDAN #34-6 - BERGE D/A Well - No Surveys	16,105.06	7,249.00	777.23	306.66	1.652	CC, ES, SF
JORDAN #34-7 - KPK P&A Well - No Surveys	14,931.78	7,256.00	619.64	176.26	1.398	Level 3, 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						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	17,399.58	7,065.88	1,247.45	995.23	4.946	CC, ES, SF
JUDY 34-03-09 - Confluence Planned Well - Pro Directio	17,399.58	7,233.28	774.79	529.10	3.153	CC, ES, SF
1N-65W-35 Offsets Incomplete						
DOUBLE J 35-11-1CDH - Providence Planned Well - BK						Out of range

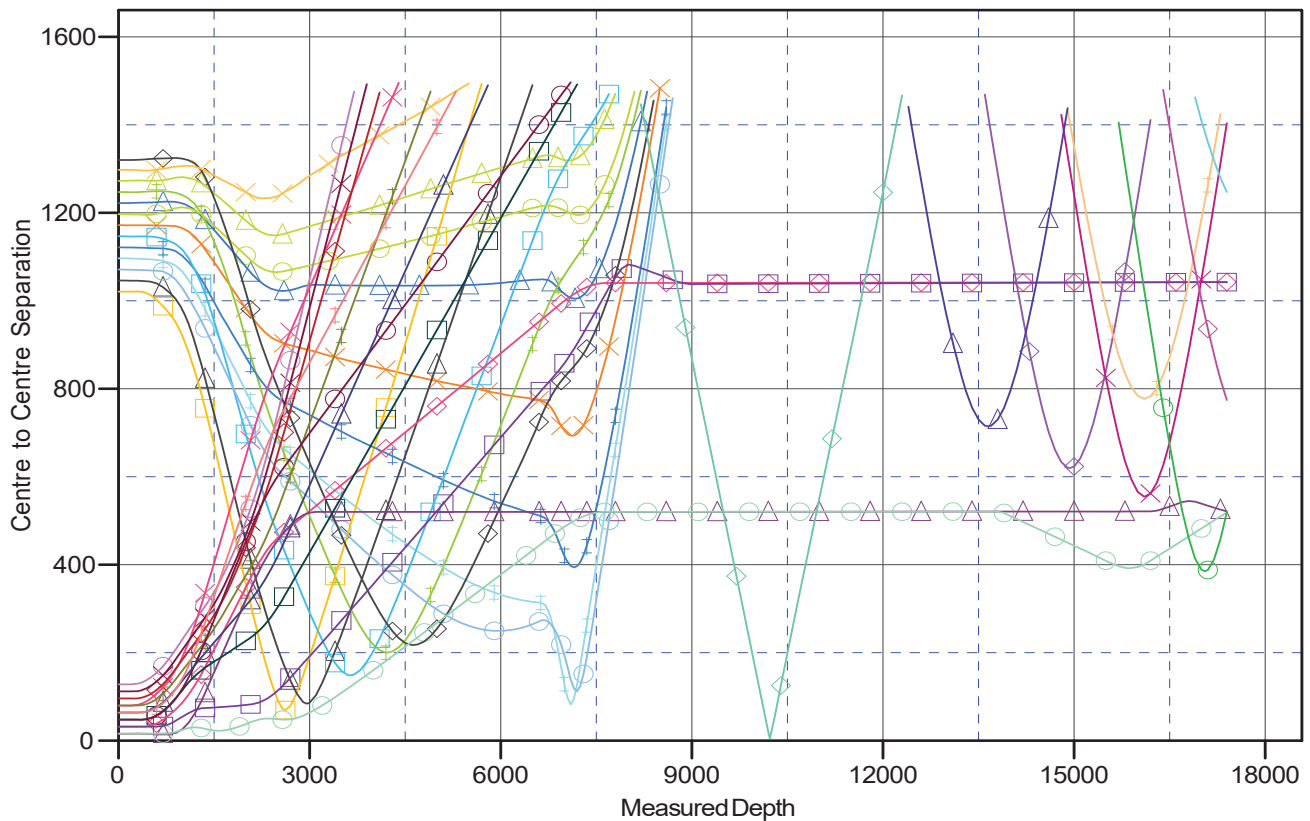
Anticollision Summary Report

Company:	VERDAD RESOURCES	Local Co-ordinate Reference:	Well FAWN 2734-09H
Project:	WATTENBERG FIELD	TVD Reference:	RKB = 20' @ 5127.00usft (RIG)
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Reference Well:	FAWN 2734-09H	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 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 2734-09H
 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	WILLOW 22-21-3L, 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	FAWN 2833-01H, Plan A, Design #1 V0	FAWN 2734-07H, Plan A, Design #1 V0
CANAL 22-33L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-11H, Plan A, Design #1 V0	ROWE 13N-24Z, VERDAD PR Well, Actual BKR Surveys V0
WILLOW 22-14-2L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-14H, Plan A, Design #1 V0	JORDAN #347, KPK P&A Well, No Surveys V0
CANAL 22-13L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-10H, Plan A, Design #1 V0	JORDAN #346, BERGE DA Well, No Surveys V0
WILLOW 22-20-2L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2833-03H, Plan A, Design #1 V0	JORDAN #343, KPK PR Well, No Surveys V0
CANAL 22-22L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2833-04H, Plan A, Design #1 V0	JUDY 34-03-08, Confluence Planned Well, Pro Directional Planned Surveys V0
WILLOW 22-15-3L, Confluence PR Well, Actual Baker Surveys V0	FAWN 2734-08H, Plan A, Design #1 V0	JORDAN #342, KPK PR Well, No Surveys V0
CANAL 22-14L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-06H, Plan A, Design #1 V0	JORDAN #346, KPK PR Well, No Surveys V0
WILLOW 22-4-4L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-12H, Plan A, Design #1 V0	JUDY 34-03-09, Confluence Planned Well, Pro Directional Planned Surveys V0
WILLOW 22-6-4L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2833-02H, Plan A, Design #1 V0	
CANAL 22-42L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-05H, Plan A, Design #1 V0	

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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

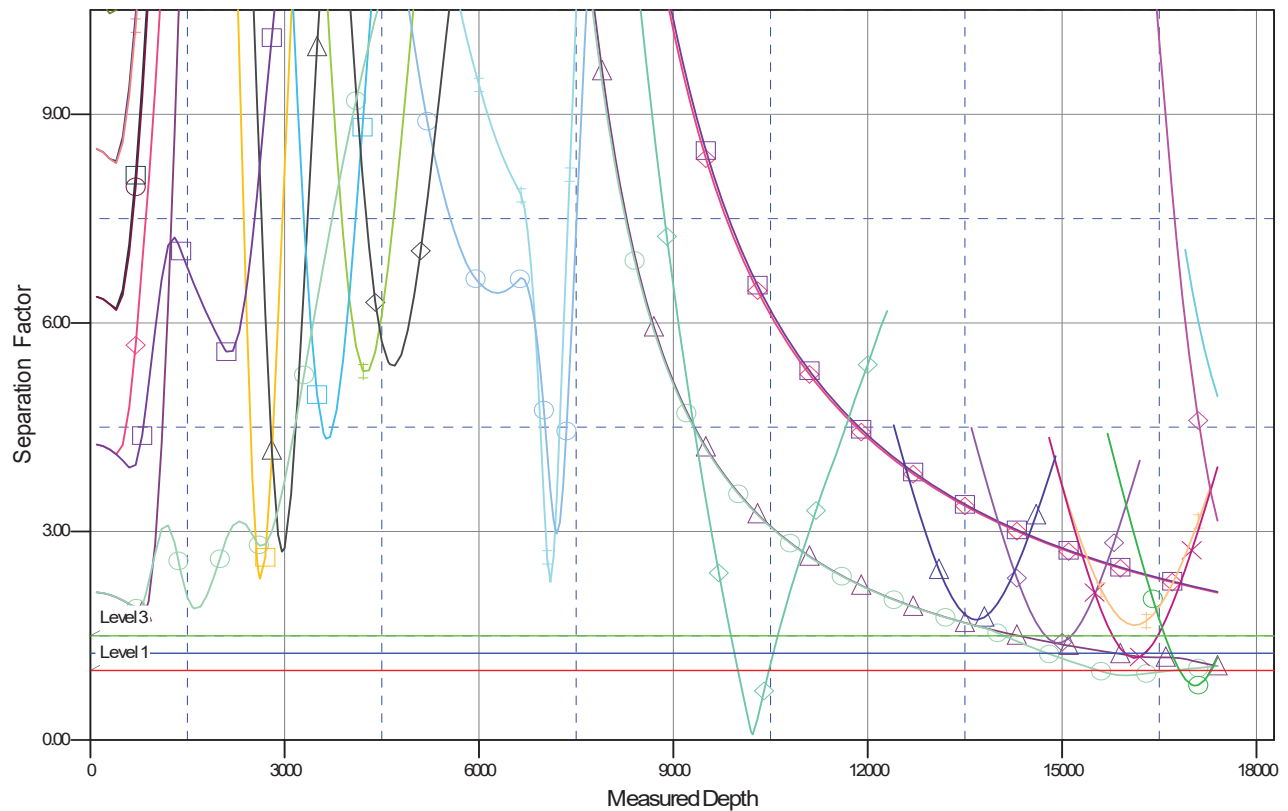
Central Meridian is -105.500000

Coordinates are relative to: FAWN 2734-09H

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	WILLOW 22-21-3L, 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	FAWN 2833-01H, Plan A, Design #1 V0	FAWN 2734-07H, Plan A, Design #1 V0
CANAL 22-3-3L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-11H, Plan A, Design #1 V0	ROWE 13N-2H2, VERDAD PR Well, Actual BKR Surveys V0
WILLOW 22-14-2L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-14H, Plan A, Design #1 V0	JORDAN #34-7, KPK P&A Well, No Surveys V0
CANAL 22-1-3L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-10H, Plan A, Design #1 V0	JORDAN #34-6, BERGE DA Well, No Surveys V0
WILLOW 22-20-2L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2833-03H, Plan A, Design #1 V0	JORDAN #34-3, KPK PR Well, No Surveys V0
CANAL 22-2-2L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2833-04H, Plan A, Design #1 V0	JUDY 34-03-08, Confluence Planned Well, Pro Directional Planned 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 22-1-4L, Confluence PR Well, Actual BKR Surveys V0	FAWN 2734-06H, 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 2734-12H, Plan A, Design #1 V0	JUDY 34-03-09, Confluence Planned Well, Pro Directional Planned Surveys V0
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