

VERDAD RESOURCES

WATTENBERG FIELD

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

FAWN 2833-02H

Plan A

Design #1

Anticollision Summary Report

30 July, 2022

Anticollision Summary Report

Company:	VERDAD RESOURCES	Local Co-ordinate Reference:	Well FAWN 2833-02H
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 2833-02H	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	7/29/2022		
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	18,639.11	Design #1 (Plan A)	ISCWSA MWD	Fixed:v2:standard declination

Summary	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Site Name Offset Well - Wellbore - Design						
1N-65W-09 Offsets Incomplete						
ROBIN 9-10HZ - KMG PR Well - Actual BKR Surveys	8,351.93	17,999.00	751.11	558.69	3.903	CC, ES, SF
ROBIN 9-11HZ - KMG PR Well - Actual BKR Surveys	8,390.72	18,218.00	757.34	590.99	4.553	CC
ROBIN 9-11HZ - KMG PR Well - Actual BKR Surveys	8,400.00	18,218.00	757.46	590.96	4.549	ES, SF
ROBIN 9-12HZ - KMG PR Well - Actual BKR Surveys	8,283.12	18,113.00	583.21	424.49	3.674	CC, ES
ROBIN 9-12HZ - KMG PR Well - Actual BKR Surveys	8,300.00	18,113.00	583.67	424.59	3.669	SF
ROBIN 9-13HZ - KMG PR Well - Actual BKR Surveys	8,150.74	18,399.00	509.85	346.64	3.124	CC, ES
ROBIN 9-13HZ - KMG PR Well - Actual BKR Surveys	8,200.00	18,399.00	513.68	347.92	3.099	SF
ROBIN 9-14HZ - KMG PR Well - Actual BKR Surveys	8,173.01	18,490.00	771.58	603.17	4.582	CC
ROBIN 9-14HZ - KMG PR Well - Actual BKR Surveys	8,200.00	18,490.00	772.35	602.28	4.541	ES
ROBIN 9-14HZ - KMG PR Well - Actual BKR Surveys	8,250.00	18,490.00	777.88	605.02	4.500	SF
ROBIN 9-15HZ - KMG PR Well - Actual BKR Surveys	7,993.19	18,345.00	847.80	674.60	4.895	CC
ROBIN 9-15HZ - KMG PR Well - Actual BKR Surveys	8,000.00	18,345.00	847.84	674.26	4.885	ES
ROBIN 9-15HZ - KMG PR Well - Actual BKR Surveys	8,100.00	18,345.00	857.78	679.19	4.803	SF
ROBIN 9-16HZ - KMG PR Well - Actual BKR Surveys	7,843.46	18,356.00	1,064.06	891.18	6.155	CC
ROBIN 9-16HZ - KMG PR Well - Actual BKR Surveys	7,873.97	18,356.00	1,064.49	890.31	6.111	ES
ROBIN 9-16HZ - KMG PR Well - Actual BKR Surveys	8,000.00	18,356.00	1,078.87	899.98	6.031	SF
ROBIN 9-17HZ - KMG PR Well - Actual BKR Surveys	7,882.16	18,363.00	1,385.88	1,213.37	8.034	CC
ROBIN 9-17HZ - KMG PR Well - Actual BKR Surveys	7,900.00	18,363.00	1,386.05	1,212.90	8.005	ES
ROBIN 9-17HZ - KMG PR Well - Actual BKR Surveys	8,100.00	18,363.00	1,410.54	1,231.07	7.859	SF
ROBIN 9-18HZ - Kerr McGee PR Well - Actual BKR Surv						Out of range

Anticollision Summary Report

Company:	VERDAD RESOURCES	Local Co-ordinate Reference:	Well FAWN 2833-02H
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 2833-02H	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
1N-65W-22 FAWN 2734 & 2833 PAD						
FAWN 2734-05H - Plan A - Design #1	231.90	231.90	48.00	40.41	6.323	CC, ES, SF
FAWN 2734-06H - Plan A - Design #1	231.90	231.90	64.00	56.41	8.431	CC, ES, SF
FAWN 2734-07H - Plan A - Design #1	231.90	231.90	80.00	72.41	10.539	CC, ES, SF
FAWN 2734-08H - Plan A - Design #1	231.90	231.90	96.00	88.41	12.646	CC, ES, SF
FAWN 2734-09H - Plan A - Design #1	231.90	231.90	112.00	104.41	14.754	CC, ES
FAWN 2734-09H - Plan A - Design #1	300.00	299.99	112.81	105.16	14.740	SF
FAWN 2734-10H - Plan A - Design #1	231.90	231.90	127.99	120.40	16.860	CC, ES
FAWN 2734-10H - Plan A - Design #1	300.00	299.99	128.80	121.15	16.830	SF
FAWN 2734-11H - Plan A - Design #1	231.90	231.90	143.99	136.40	18.968	CC, ES
FAWN 2734-11H - Plan A - Design #1	300.00	299.99	144.80	137.15	18.920	SF
FAWN 2734-12H - Plan A - Design #1	231.90	231.90	159.99	152.40	21.076	CC, ES
FAWN 2734-12H - Plan A - Design #1	300.00	299.99	160.80	153.15	21.011	SF
FAWN 2734-13H - Plan A - Design #1	231.90	231.90	175.99	168.40	23.183	CC, ES
FAWN 2734-13H - Plan A - Design #1	300.00	299.99	176.80	169.15	23.101	SF
FAWN 2734-14H - Plan A - Design #1	200.00	200.00	191.99	184.43	25.367	CC, ES
FAWN 2734-14H - Plan A - Design #1	231.90	229.96	192.15	184.56	25.316	SF
FAWN 2833-01H - Plan A - Design #1	200.00	200.00	16.00	8.43	2.114	CC
FAWN 2833-01H - Plan A - Design #1	18,639.11	18,913.56	496.48	3.23	1.007	Level 2, ES, SF
FAWN 2833-03H - Plan A - Design #1	231.90	231.90	16.00	8.41	2.108	CC
FAWN 2833-03H - Plan A - Design #1	18,639.11	18,388.38	496.49	4.40	1.009	Level 2, ES, SF
FAWN 2833-04H - Plan A - Design #1	231.90	231.90	32.00	24.41	4.215	CC, ES
FAWN 2833-04H - Plan A - Design #1	18,639.11	17,944.48	1,490.46	997.85	3.026	SF
1N-65W-22 Offsets						
CANAL 22-1-3L - Confluence PR Well - Actual BKR Surv	1,968.32	1,918.86	89.97	63.30	3.373	CC, ES, SF
CANAL 22-1-4L - Confluence PR Well - Actual BKR Surv	2,318.73	2,187.59	152.42	122.28	5.057	CC, ES, SF
CANAL 22-2-2L - Confluence PR Well - Actual BKR Surv	2,055.87	1,985.87	80.00	52.50	2.910	CC, ES, SF
CANAL 22-3-3L - Confluence PR Well - Actual BKR Surv	2,573.49	2,394.14	197.12	165.08	6.153	CC, ES, SF
CANAL 22-4-2L - Confluence PR Well - Actual BKR Surv	2,698.79	2,498.37	203.86	170.33	6.080	CC
CANAL 22-4-2L - Confluence PR Well - Actual BKR Surv	2,700.00	2,499.05	203.86	170.32	6.078	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	2,461.49	2,269.50	116.39	87.25	3.993	CC, ES, SF
WILLOW 22-15-3L - Confluence PR Well - Actual Baker	2,602.79	2,380.11	118.53	88.37	3.930	CC, ES, SF
WILLOW 22-17-2L - Confluence PR Well - Actual BKR S	2,806.58	2,542.99	117.94	85.71	3.659	CC, ES, SF
WILLOW 22-18-3L - Confluence PR Well - Actual BKR S	3,034.10	2,735.31	130.34	94.99	3.688	CC, ES, SF
WILLOW 22-20-2L - Confluence PR Well - Actual BKR S	3,263.22	2,919.00	143.82	105.01	3.706	CC, ES
WILLOW 22-20-2L - Confluence PR Well - Actual BKR S	3,300.00	2,949.97	145.17	105.69	3.677	SF
WILLOW 22-21-3L - Confluence PR Well - Actual BKR S	3,502.73	3,123.35	138.34	95.06	3.197	CC, ES, SF
WILLOW 22-4-4L - Confluence PR Well - Actual BKR Su	2,381.74	2,207.49	106.12	77.53	3.712	CC, ES, SF
WILLOW 22-5-4L - Confluence PR Well - Actual BKR Su	3,100.07	2,785.41	152.85	116.47	4.202	CC, ES, SF
1N-65W-27 Offsets						
ROWE 13N-27HZ - VERDAD PR Well - Actual BHI Surv						Out of range
1N-65W-28 Offsets Incomplete						
*GLEN YOUNG 1 - KPK P&A Well - No Surveys	9,600.00	7,183.00	648.58	328.99	2.029	SF
*GLEN YOUNG 1 - KPK P&A Well - No Surveys	9,700.00	7,183.00	630.45	320.31	2.033	ES
*GLEN YOUNG 1 - KPK P&A Well - No Surveys	9,765.98	7,183.00	626.99	322.69	2.060	CC
*NECKIEN 1 - RENEGADE T/A Well - No Surveys	12,600.00	7,177.00	443.56	67.61	1.180	Level 2, ES, SF
*NECKIEN 1 - RENEGADE T/A Well - No Surveys	12,683.13	7,177.00	435.70	70.76	1.194	Level 2, CC
YOUNG 01N-65W-28-8N - VERDAD PR Well - Actual En	6,638.13	5,703.12	233.41	135.39	2.381	CC, ES, SF

Anticollision Summary Report

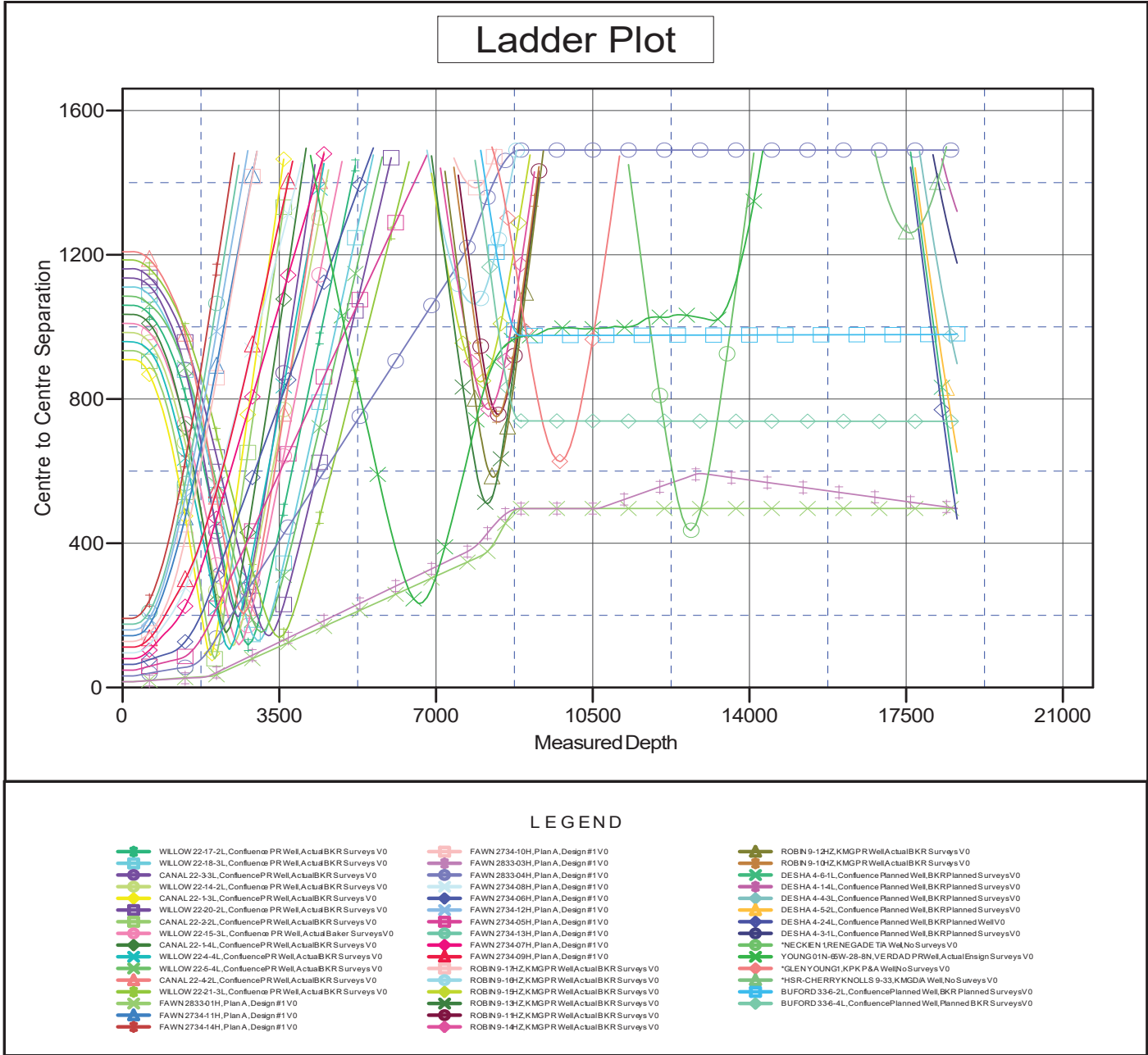
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Project:	WATTENBERG FIELD	TVD Reference:	RKB = 20' @ 5127.00usft (RIG)
Reference Site:	1N-65W-22 FAWN 2734 & 2833 PAD	MD Reference:	RKB = 20' @ 5127.00usft (RIG)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FAWN 2833-02H	Survey Calculation 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-33 Offsets Incomplete						
*HSR-CHERRY KNOLLS 9-33 - KMG D/A Well - No Surv	17,500.00	7,252.00	1,263.65	780.86	2.617	SF
*HSR-CHERRY KNOLLS 9-33 - KMG D/A Well - No Surv	17,587.68	7,252.00	1,260.60	780.51	2.626	CC, ES
BUFORD 33-10-2L - Confluence Drilled Well - Plan Only						Out of range
BUFORD 33-6-2L - Confluence Planned Well - BKR Plan	8,880.94	17,711.17	976.26	717.62	3.775	CC
BUFORD 33-6-2L - Confluence Planned Well - BKR Plan	18,639.11	7,988.41	980.91	699.43	3.485	ES, SF
BUFORD 33-6-4L - Confluence Planned Well - Planned B	18,540.36	8,345.89	738.14	473.28	2.787	CC
BUFORD 33-6-4L - Confluence Planned Well - Planned B	18,639.11	8,253.07	738.52	470.13	2.752	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 Planne						Out of range
DESHA 4-1-4L - Confluence Planned Well - BKR Planne	18,639.11	7,579.99	1,320.71	1,023.66	4.446	CC, ES, SF
DESHA 4-2-2L - Confluence Planned Well - BKR Planne						Out of range
DESHA 4-2-4L - Confluence Planned Well - BKR Planne	18,639.11	7,766.37	467.55	193.28	1.705	CC, ES, SF
DESHA 4-3-1L - Confluence Planned Well - BKR Planne	18,639.11	7,378.23	1,177.13	884.63	4.024	CC, ES, SF
DESHA 4-4-3L - Confluence Planned Well - BKR Planne	18,639.11	7,582.07	898.37	598.74	2.998	CC, ES, SF
DESHA 4-5-2L - Confluence Planned Well - BKR Planne	18,639.11	7,620.50	652.93	365.90	2.275	CC, ES, SF
DESHA 4-6-1L - Confluence Planned Well - BKR Planne	18,639.11	7,620.50	538.15	358.14	2.990	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
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 2833-02H
Project:	WATTENBERG FIELD	TVD Reference:	RKB = 20' @ 5127.00usft (RIG)
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Reference Well:	FAWN 2833-02H	Survey Calculation Method:	Minimum Curvature
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Reference Depths are relative to RKB = 20' @ 5127.00usft (RIG) Coordinates are relative to: FAWN 2833-02H
 Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
 Central Meridian is -105.500000 Grid Convergence at Surface is: 0.55°



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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 2833-02H
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.55°

