

VERDAD RESOURCES

**WATTENBERG FIELD
8N-60W-14 SCHNEIDER 1414 PAD
SCHNEIDER 1414-02H**

**Plan A
Permit Rev-1**

Anticollision Summary Report

22 July, 2021

Anticollision Summary Report

Company:	VERDAD RESOURCES	Local Co-ordinate Reference:	Well SCHNEIDER 1414-02H
Project:	WATTENBERG FIELD	TVD Reference:	RKB = 20' @ 4963.00usft (RIG)
Reference Site:	8N-60W-14 SCHNEIDER 1414 PAD	MD Reference:	RKB = 20' @ 4963.00usft (RIG)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	SCHNEIDER 1414-02H	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:	Permit Rev-1	Offset TVD Reference:	Offset Datum

Reference	Permit Rev-1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 25.00usft	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	7/22/2021		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	1,800.00	Permit Rev-1 (Plan A)	ISCWSA MWD	Fixed:v2:standard declination
1,800.00	11,426.81	Permit Rev-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						
8N-60W-11 SONIC STAR 1101 PAD						
SONIC STAR 1101-01H - Plan B - Design #2						Out of range
SONIC STAR 1101-03H - Plan B - Design #2						Out of range
SONIC STAR 1101-05H - Plan B - Design #2						Out of range
SONIC STAR 1101-07H - Plan B - Design #2						Out of range
SONIC STAR 1101-09H - Plan B - Design #2						Out of range
SONIC STAR 1101-11H - Plan B - Design #2						Out of range
SONIC STAR 1101-13H - Plan B - Design #2						Out of range
SONIC STAR 1101-16H - Plan B - Design #2						Out of range
8N-60W-12 Offsets						
COLORADO NATIONAL BANK #1 - Shell P&A Well - No						Out of range
8N-60W-14 Offsets						
BOOMSLANG FED 8-60 14A-13-18-1 - Bison Planned W						Out of range
BOOMSLANG FED 8-60 14A-13-18-2 - Bison PR Well - A						Out of range
BOOMSLANG FED 8-60 14A-13-18-3 - Bison PR Well - A						Out of range
BOOMSLANG FED 8-60 14A-13-18-4 - Bison PR Well - A						Out of range
BOOMSLANG FED 8-60 14A-13-18-5 - Bison PR Well - A						Out of range
BOOMSLANG FED 8-60 14A-13-18-6 - Bison Planned W						Out of range
BOOMSLANG FED 8-60 14B-13-18-1 - Bison Planned W						Out of range
BOOMSLANG FED 8-60 14B-13-18-2 - Bison PR Well - A						Out of range
BOOMSLANG FED 8-60 14B-13-18-3 - Bison PR Well - A						Out of range
BOOMSLANG FED 8-60 14B-13-18-4 - Bison PR Well - A						Out of range
BOOMSLANG FED 8-60 14B-13-18-5 - Bison PR Well - A						Out of range
BOOMSLANG FED 8-60 14B-13-18-6 - Bison Planned W						Out of range
HNIZDIL 1-14 - Gemini D/A Well - No Surveys	10,905.38	6,067.00	778.63	458.60	2.433	CC
HNIZDIL 1-14 - Gemini D/A Well - No Surveys	10,950.00	6,067.00	779.91	457.79	2.421	ES
HNIZDIL 1-14 - Gemini D/A Well - No Surveys	10,975.00	6,067.00	781.74	458.60	2.419	SF
SCHNEIDER 1-14-8-60 - Verdad PR Well - Actual Precis	0.00	0.00	51.55			
SCHNEIDER 1-14-8-60 - Verdad PR Well - Actual Precis	25.00	23.95	51.55	44.02	6.852	ES, SF
SCHNEIDER 2-14-8-60 - Verdad PR Well - Actual Precis	275.00	274.00	36.54	23.93	2.898	CC
SCHNEIDER 2-14-8-60 - Verdad PR Well - Actual Precis	400.00	398.96	38.77	21.90	2.298	ES

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Reference Wellbore	Plan A	Database:	EDM 5000.16 Single User Db
Reference Design:	Permit Rev-1	Offset TVD Reference:	Offset Datum

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)		Separation Factor	Warning
Offset Well - Wellbore - Design						
8N-60W-14 Offsets						
SCHNEIDER 2-14-8-60 - Verdad PR Well - Actual Precis	525.00	523.70	46.02	24.73	2.162	SF
8N-60W-14 SCHNEIDER 1414 PAD						
SCHNEIDER 1414-01H - Plan A - Permit Rev-1	275.00	275.00	16.01	8.38	2.098	CC, ES, SF
SCHNEIDER 1414-03H - Plan A - Permit Rev-1	250.58	250.58	16.01	8.40	2.104	CC, ES
SCHNEIDER 1414-03H - Plan A - Permit Rev-1	275.00	274.92	16.05	8.42	2.103	SF
SCHNEIDER 1414-04H - Plan A - Permit Rev-1	226.11	226.11	32.01	24.43	4.220	CC
SCHNEIDER 1414-04H - Plan A - Permit Rev-1	250.00	249.89	32.03	24.42	4.211	ES, SF
SCHNEIDER 1414-05H - Plan A - Permit Rev-1	202.21	202.21	47.99	40.42	6.340	CC
SCHNEIDER 1414-05H - Plan A - Permit Rev-1	225.00	224.92	48.00	40.41	6.327	ES, SF
SCHNEIDER 1414-06H - Plan A - Permit Rev-1	200.00	200.00	64.00	56.43	8.456	CC, ES
SCHNEIDER 1414-06H - Plan A - Permit Rev-1	225.00	224.46	64.10	56.52	8.451	SF
8N-60W-22 Offsets Incomplete						
HALE 8-60 22-23-1 - Bison Plan - Now PR - No COGCC	11,427.32	14,474.86	631.37	352.28	2.262	CC, ES, SF
8N-60W-26 Offsets Incomplete						
EWS 1B - Expedition Water Solutions Planned Well - Pla						Out of range
8N-60W-36 Offsets Incomplete						
*STATE C #1 (No GL on COGCC) - Williamson P&A Well						Out of range
STATE #1 - Chicago D/A Well - No Surveys						Out of range
9N-60W-35 Offsets Incomplete						
PINTAIL FED 2-11-1HN - Mallard Drilled Well No COGCC						Out of range
PINTAIL FED 2-11-2HN - Mallard Drilled Well No COGCC						Out of range
PINTAIL FED 2-11-3HC - Mallard Planned Well - Planned	6,210.74	16,896.88	1,175.92	925.76	4.701	CC
PINTAIL FED 2-11-3HC - Mallard Planned Well - Planned	6,225.00	16,896.88	1,176.04	925.66	4.697	ES
PINTAIL FED 2-11-3HC - Mallard Planned Well - Planned	6,250.00	16,896.88	1,176.87	926.25	4.696	SF
PINTAIL FED 2-11-4HN - Mallard Drilled Well No COGCC	6,136.92	16,704.43	960.72	705.33	3.762	CC
PINTAIL FED 2-11-4HN - Mallard Drilled Well No COGCC	6,150.00	16,704.43	960.83	705.15	3.758	ES
PINTAIL FED 2-11-4HN - Mallard Drilled Well No COGCC	6,175.00	16,704.43	961.70	705.63	3.756	SF
PINTAIL FED 2-11-5HN - Mallard Drilled Well No COGCC	6,196.21	16,810.49	424.53	254.97	2.504	CC, ES, SF
PINTAIL FED 2-11-6HN - Mallard Drilled Well No COGCC	6,243.02	17,006.97	573.77	343.28	2.489	CC
PINTAIL FED 2-11-6HN - Mallard Drilled Well No COGCC	6,250.00	17,006.97	573.84	343.25	2.489	ES, SF
PINTAIL FED 2-11-7HN - Mallard Drilled Well No COGCC	6,279.29	17,255.29	1,168.28	900.95	4.370	CC
PINTAIL FED 2-11-7HN - Mallard Drilled Well No COGCC	6,300.00	17,255.29	1,168.63	900.88	4.365	ES
PINTAIL FED 2-11-7HN - Mallard Drilled Well No COGCC	6,325.00	17,255.29	1,169.97	901.78	4.362	SF
PINTAIL FED 2-11-8HN - Mallard Drilled Well No COGCC						Out of range
PINTAIL FED 2-11-9HN - Mallard Planned Well - Planned						Out of range

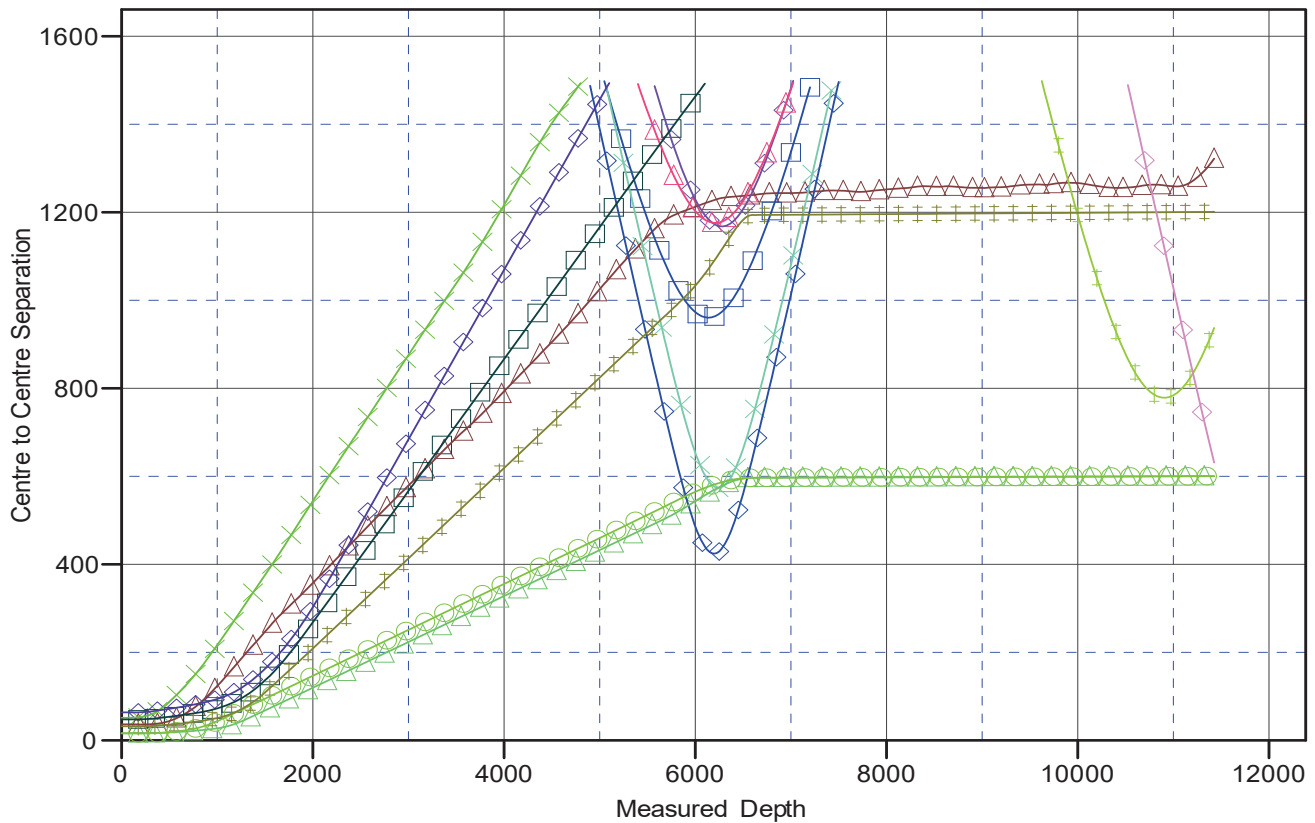
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Reference Design:	Permit Rev-1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to RKB = 20' @ 4963.00usft (RIG)
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: SCHNEIDER 1414-02H
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.93°

Ladder Plot



LEGEND

SCHNEIDER 1-14-8-60, Verdad PRWell, Actual Precision Surveys (Grid to True) V0	PINTAIL FED 2-11-6HN, Mallard Drilled Well No COGCC Data, Planned MWD Surveys V0	SCHNEIDER 1414-01H, Plan A, Permit Rev-1 V0
SCHNEIDER 2-14-8-60, Verdad PRWell, Actual Precision Surveys (Grid to True) V0	PINTAIL FED 2-11-9HN, Mallard Drilled Well No COGCC Data, Planned MWD Surveys V0	SCHNEIDER 1414-06H, Plan A, Permit Rev-1 V0
HNZDIL 1-4, Gemini D/A Well, No Surveys V0	PINTAIL FED 2-11-3HC, Mallard Planned Well, Planned MWD Surveys V0	SCHNEIDER 1414-04H, Plan A, Permit Rev-1 V0
PINTAIL FED 2-11-7HN, Mallard Drilled Well No COGCC Data, Planned MWD Surveys V0	SCHNEIDER 1414-03H, Plan A, Permit Rev-1 V0	HALE 8-6022-23-1, Bison Plan - New PR - No COGCC Actual Surveys, Planned MWD Surveys V0
PINTAIL FED 2-11-4HN, Mallard Drilled Well No COGCC Data, Planned MWD Surveys V0	SCHNEIDER 1414-05H, Plan A, Permit Rev-1 V0	

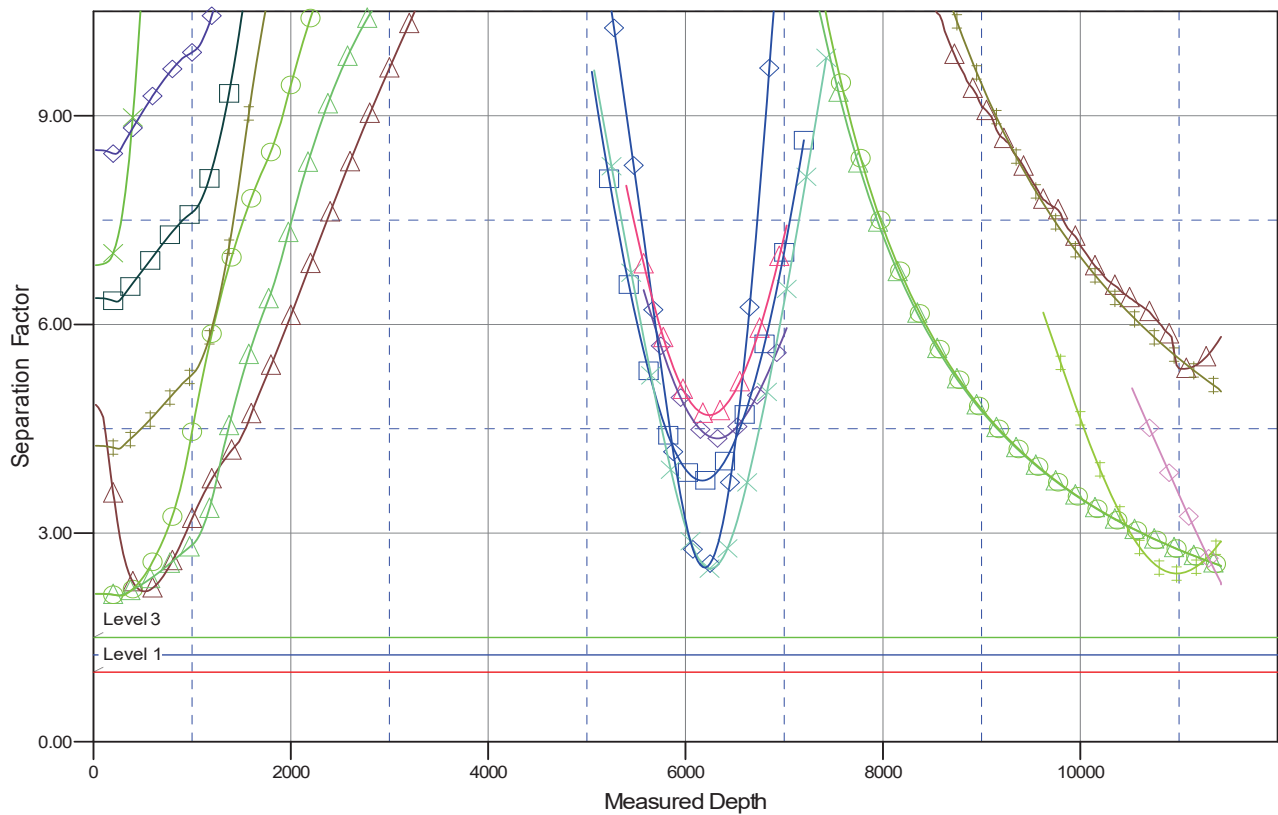
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Separation Factor Plot



LEGEND

x SCHNEIDER 1-14-8-60, Verdad PRWell, Actual Precision Surveys (Grid to True) V0	x PINTAIL FED 2-11-4HN, Mallard Drilled Well No COGCC Data, Planned MWD Surveys V0	x SCHNEIDER 1414-01H, Plan A, Permit Rev-1 V0
x SCHNEIDER 2-14-8-60, Verdad PRWell, Actual Precision Surveys (Grid to True) V0	x PINTAIL FED 2-11-5HN, Mallard Drilled Well No COGCC Data, Planned MWD Surveys V0	x SCHNEIDER 1414-06H, Plan A, Permit Rev-1 V0
x HNZDIL 144, Gemini D/A Well, No Surveys V0	x PINTAIL FED 2-11-3HC, Mallard Planned Well, Planned MWD Surveys V0	x SCHNEIDER 1414-04H, Plan A, Permit Rev-1 V0
x PINTAIL FED 2-11-7HN, Mallard Drilled Well No COGCC Data, Planned MWD Surveys V0	x SCHNEIDER 1414-03H, Plan A, Permit Rev-1 V0	x HALE 8-60-22-23-1, Bison Plan - New PR - No COGCC Actual Surveys, Planned MWD Surveys V0
x PINTAIL FED 2-11-4HN, Mallard Drilled Well No COGCC Data, Planned MWD Surveys V0	x SCHNEIDER 1414-05H, Plan A, Permit Rev-1 V0	