

VERDAD RESOURCES

WATTENBERG FIELD

2N-63W-19 KBL PAD

KBL 1918-15H

Plan A

Design #1

Anticollision Summary Report

17 September, 2024

Anticollision Summary Report

Company:	VERDAD RESOURCES	Local Co-ordinate Reference:	Well KBL 1918-15H
Project:	WATTENBERG FIELD	TVD Reference:	RKB = 21' @ 4882.00usft (RIG)
Reference Site:	2N-63W-19 KBL PAD	MD Reference:	RKB = 21' @ 4882.00usft (RIG)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	KBL 1918-15H	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:	Reference 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	9/17/2024		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	1,816.00	Design #1 (Plan A)	ISCWSA MWD	Fixed:v2:standard declination	
1,816.00	12,480.75	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						
2N-63W-08 OFFSETS						
FEDERAL 14 - NOBLE P&A Well - No Surveys						Out of range
L F RANCHES 2-A - VOG P&A Well - No Surveys						Out of range
2N-63W-17 Offsets						
CHAMPLIN #1-17 - Rex Family D/A Well - No Surveys						Out of range
EWS #4A - EWS IJ Well - No Surveys						Out of range
PHILLIP #1 - EMC P&A Well - No Surveys						Out of range
UPRR 34 PAN AM #1 - Amoco D/A Well - No Surveys						Out of range
UPV #17-1K3 - Patina D/A Well - No Surveys						Out of range
UPV #17-3K3 - Snyder D/A Well - No Surveys						Out of range
2N-63W-18 Offsets						
CUYKENDALL-LAUCK #1 - Habersham Energy P&A We						Out of range
CUYKENDALL-LAUCK #2 - ARCH SI Well - No Surveys	12,480.75	6,682.00	1,028.44	740.15	3.567	CC, ES, SF
CUYKENDALL-LAUCK #3 - Sands-American P&A Well -	12,480.75	6,691.00	816.49	526.35	2.814	CC, ES, SF
ELMER KAUFMAN #1 - Sands-American P&A Well - No						Out of range
ELMER KAUFMAN #2 - ARCH SI Well - No Surveys	10,869.48	6,695.00	1,485.75	1,149.87	4.423	CC, ES
ELMER KAUFMAN #2 - ARCH SI Well - No Surveys	10,900.00	6,695.00	1,486.07	1,150.06	4.423	SF
ELMER KAUFMAN #3 - US Minerals P&A Well - No Surv						Out of range
EWS #4 - EWS 4 IJ Well - No Surveys						Out of range
EWS 4B - EWS IJ Well - Actual Ensign Surveys						Out of range
GUTTERSEN #YY18-715 - NOBLE Drilled Well - No EC						Out of range
GUTTERSEN #YY18-726 - NOBLE Drilled Well - No EC						Out of range
GUTTERSEN #YY18-736 - NOBLE Drilled Well - No EC						Out of range
GUTTERSEN #YY18-746 - NOBLE Drilled Well - No EC	12,480.75	6,920.72	1,090.00	914.66	6.216	CC, ES, SF
GUTTERSEN #YY18-754 - NOBLE Drilled Well - No EC	12,480.75	6,998.11	452.36	283.47	2.678	CC, ES, SF
GUTTERSEN #YY18-764 - NOBLE Drilled Well - No EC	12,480.75	7,045.65	269.42	120.72	1.812	CC, ES, SF
GUTTERSEN #YY18-775 - NOBLE Drilled Well - No EC	12,436.87	6,969.81	829.93	661.20	4.919	CC
GUTTERSEN #YY18-775 - NOBLE Drilled Well - No EC	12,480.75	6,979.42	831.04	661.02	4.888	ES, SF
GUTTERSEN #YY18-785 - NOBLE Drilled Well - No EC	12,480.75	6,776.66	1,314.50	1,152.67	8.123	CC, ES, SF
JOHN CUYKENDALL UNIT #2 - NOBLE P&A Well - No S						Out of range
KAUFMAN #4 - ARCH SI Well - No Surveys						Out of range

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

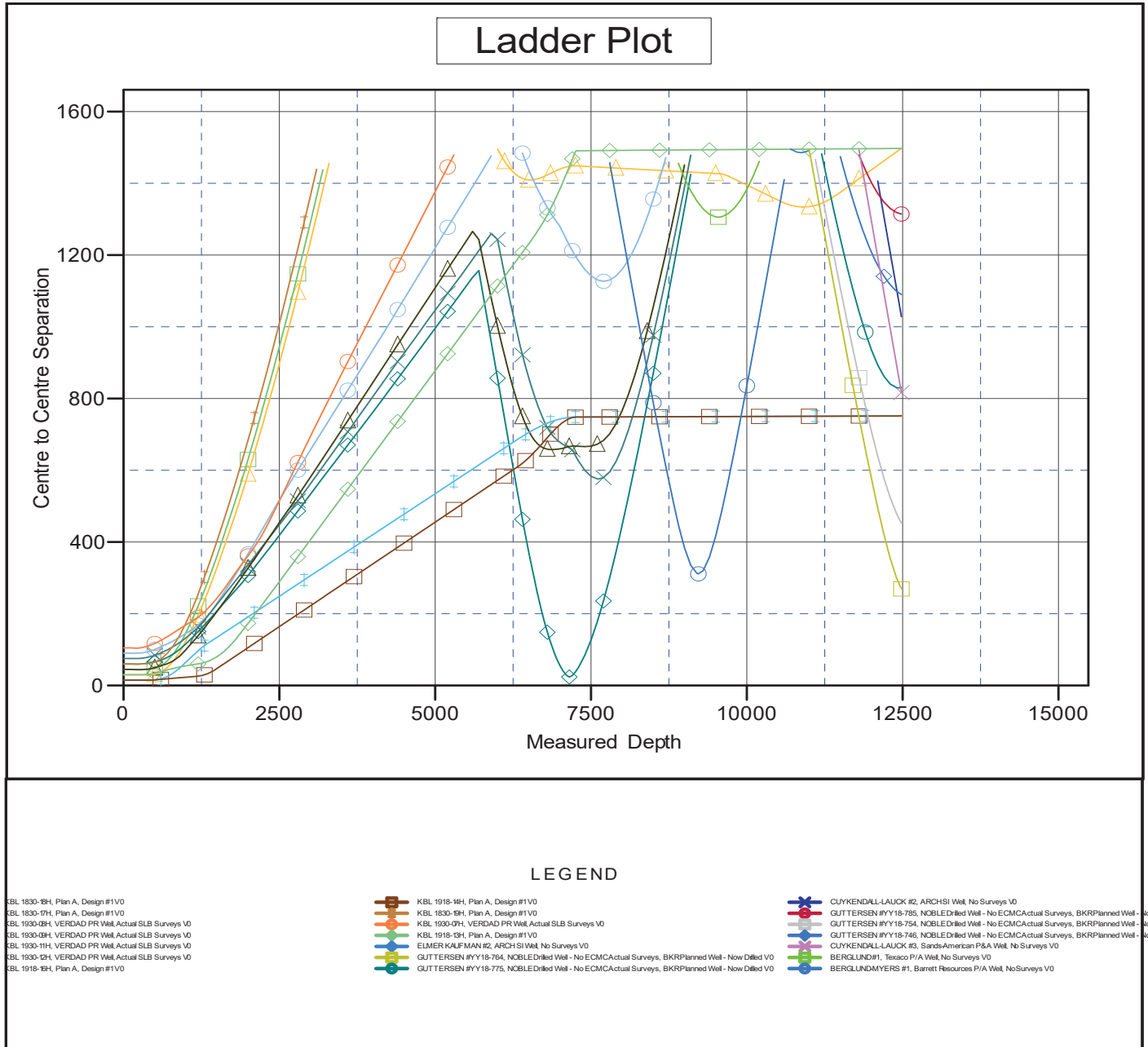
Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
2N-63W-19 KBL PAD						
KBL 1830-17H - Plan A - Design #1	300.00	300.00	29.93	22.27	3.909	CC
KBL 1830-17H - Plan A - Design #1	400.00	399.94	30.01	22.23	3.856	ES
KBL 1830-17H - Plan A - Design #1	460.10	459.90	30.35	22.47	3.851	SF
KBL 1830-18H - Plan A - Design #1	206.40	206.40	45.03	37.45	5.946	CC
KBL 1830-18H - Plan A - Design #1	300.00	299.94	45.06	37.41	5.887	ES
KBL 1830-18H - Plan A - Design #1	400.00	399.68	45.49	37.71	5.844	SF
KBL 1830-19H - Plan A - Design #1	200.00	200.00	59.85	52.28	7.908	CC, ES
KBL 1830-19H - Plan A - Design #1	300.00	299.57	60.20	52.55	7.865	SF
KBL 1918-13H - Plan A - Design #1	245.84	245.84	30.20	22.60	3.974	CC
KBL 1918-13H - Plan A - Design #1	300.00	299.97	30.23	22.58	3.953	ES, SF
KBL 1918-14H - Plan A - Design #1	400.00	400.00	15.11	7.32	1.941	CC, ES, SF
KBL 1918-16H - Plan A - Design #1	460.10	460.10	14.82	6.94	1.880	CC, ES, SF
KBL 1930-07H - VERDAD PR Well - Actual SLB Surveys	224.31	223.31	104.33	96.73	13.735	CC, ES, SF
KBL 1930-08H - VERDAD PR Well - Actual SLB Surveys	152.12	151.12	89.96	82.41	11.914	CC, ES
KBL 1930-08H - VERDAD PR Well - Actual SLB Surveys	200.00	198.69	90.04	82.46	11.882	SF
KBL 1930-09H - VERDAD PR Well - Actual SLB Surveys	0.00	0.00	75.24			
KBL 1930-09H - VERDAD PR Well - Actual SLB Surveys	7,900.00	6,801.00	624.02	544.64	7.861	SF
KBL 1930-11H - VERDAD PR Well - Actual SLB Surveys	7,150.00	7,278.46	23.83	-24.10	0.497	Level 1, ES, SF
KBL 1930-11H - VERDAD PR Well - Actual SLB Surveys	7,153.33	7,275.33	23.80	-24.04	0.498	Level 1, CC
KBL 1930-12H - VERDAD PR Well - Actual SLB Surveys	251.99	251.00	44.27	36.65	5.807	CC, ES
KBL 1930-12H - VERDAD PR Well - Actual SLB Surveys	300.00	298.81	44.38	36.71	5.783	SF
2N-63W-19 Offsets						
BERGLUND #1 - Texaco P/A Well - No Surveys	9,544.22	6,691.00	1,306.00	1,000.56	4.276	CC
BERGLUND #1 - Texaco P/A Well - No Surveys	9,600.00	6,691.00	1,307.19	999.42	4.247	ES
BERGLUND #1 - Texaco P/A Well - No Surveys	9,700.00	6,691.00	1,315.26	1,003.60	4.220	SF
BERGLUND MYERS #42-19 - Simmons Energy D/A We						Out of range
BERGLUND-MYERS #1 - Barrett Resources P/A Well - N	9,224.28	6,684.00	311.50	13.51	1.045	Level 2, CC, ES, SF
OSCAR & JENNIE BERGLUND #1 - Amoco D/A Well - N						Out of range
2N-63W-20 Offsets						
WRIGHT #1 - Summit D/A Well - No Surveys						Out of range
2N-63W-30 Offsets						
LAUCK #1 - Siler Earl F DA Well - No Surveys						Out of range

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

Reference Depths are relative to RKB = 21' @ 4882.00usft (RIG)
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000

Coordinates are relative to: KBL 1918-15H
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.66°



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

Grid Convergence at Surface is: 0.66°

