

VERDAD RESOURCES

WATTENBERG FIELD

1N-64W-19 CHIVE & SHALLOT PAD

SHALLOT 1930-18H

Plan A

Design #1

Anticollision Summary Report

19 May, 2023

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Company:	VERDAD RESOURCES	Local Co-ordinate Reference:	Well SHALLOT 1930-18H
Project:	WATTENBERG FIELD	TVD Reference:	RKB = 20' @ 5031.00usft (RIG)
Reference Site:	1N-64W-19 CHIVE & SHALLOT PAD	MD Reference:	RKB = 20' @ 5031.00usft (RIG)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	SHALLOT 1930-18H	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	5/15/2023		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	2,070.00	Design #1 (Plan A)	ISCWSA MWD	Fixed:v2:standard declination
2,070.00	15,208.89	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-64W-19 CHIVE & SHALLOT PAD						
CHIVE 2536-10H - Plan A - Design #1	200.00	200.00	128.00	120.43	16.911	CC, ES, SF
CHIVE 2536-11H - Plan A - Design #1	200.00	200.00	112.00	104.43	14.797	CC, ES
CHIVE 2536-11H - Plan A - Design #1	300.00	297.08	113.04	105.39	14.777	SF
CHIVE 2536-12H - Plan A - Design #1	207.93	207.93	95.99	88.42	12.675	CC, ES
CHIVE 2536-12H - Plan A - Design #1	300.00	298.17	96.56	88.91	12.620	SF
CHIVE 2536-13H - Plan A - Design #1	203.51	203.51	79.99	72.42	10.566	CC, ES
CHIVE 2536-13H - Plan A - Design #1	300.00	298.96	80.26	72.61	10.488	SF
CHIVE 2536-14H - Plan A - Design #1	208.33	208.33	63.99	56.42	8.449	CC
CHIVE 2536-14H - Plan A - Design #1	300.00	299.60	64.06	56.40	8.369	ES, SF
CHIVE 2536-15H - Plan A - Design #1	216.60	216.60	48.00	40.42	6.333	CC
CHIVE 2536-15H - Plan A - Design #1	300.00	299.80	48.00	40.35	6.271	ES, SF
CHIVE 2536-16H - Plan A - Design #1	300.67	300.67	32.00	24.35	4.180	CC, ES
CHIVE 2536-16H - Plan A - Design #1	361.00	360.62	32.24	24.51	4.173	SF
CHIVE 2536-17H - Plan A - Design #1	305.61	305.61	16.00	8.34	2.089	CC
CHIVE 2536-17H - Plan A - Design #1	361.00	360.91	16.06	8.33	2.078	ES, SF
SHALLOT 1930-19H - Plan A - Design #1	361.00	361.00	16.00	8.27	2.070	CC, ES
SHALLOT 1930-19H - Plan A - Design #1	400.00	400.06	16.11	8.32	2.069	SF
SHALLOT 1930-20H - Plan A - Design #1	361.00	361.00	32.00	24.27	4.140	CC, ES
SHALLOT 1930-20H - Plan A - Design #1	400.00	399.94	32.17	24.38	4.132	SF
SHALLOT 1930-21H - Plan A - Design #1	301.84	301.84	48.00	40.35	6.269	CC
SHALLOT 1930-21H - Plan A - Design #1	361.00	360.79	48.07	40.34	6.219	ES, SF
SHALLOT 1930-22H - Plan A - Design #1	300.00	300.00	64.00	56.35	8.361	CC, ES
SHALLOT 1930-22H - Plan A - Design #1	361.00	360.11	64.41	56.69	8.335	SF
SHALLOT 1930-23H - Plan A - Design #1	203.39	203.39	80.00	72.43	10.567	CC, ES
SHALLOT 1930-23H - Plan A - Design #1	300.00	299.38	80.11	72.46	10.466	SF
SHALLOT 1930-24H - Plan A - Design #1	200.00	200.00	96.00	88.44	12.685	CC, ES
SHALLOT 1930-24H - Plan A - Design #1	300.00	297.71	96.96	89.30	12.671	SF
1N-64W-19 Offsets						
STEVEN'S #1 - KPK P/A Well - No Surveys						Out of range
WEIMER #1 - Petro-American Energy D/A Well - No Sur						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:	Offset Datum

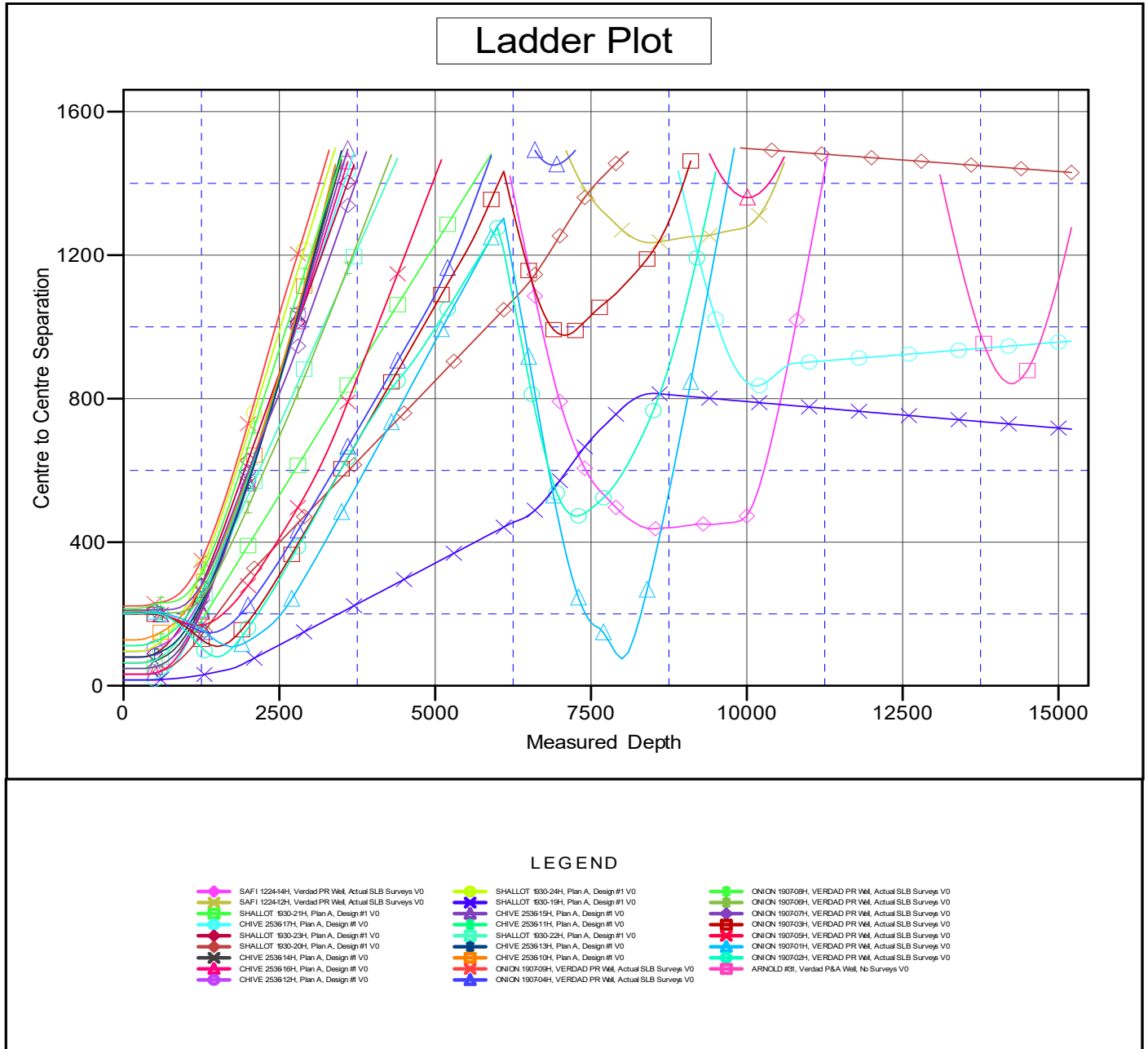
Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
1N-64W-19 ONION 1907 PAD						
ONION 1907-01H - VERDAD PR Well - Actual SLB Surv	7,999.66	7,233.79	75.10	32.58	1.766	CC, ES, SF
ONION 1907-02H - VERDAD PR Well - Actual SLB Surv	1,500.99	1,478.17	80.15	67.19	6.184	CC, ES, SF
ONION 1907-03H - VERDAD PR Well - Actual SLB Surv	1,512.65	1,489.01	109.85	96.72	8.371	CC, ES
ONION 1907-03H - VERDAD PR Well - Actual SLB Surv	1,600.00	1,572.50	112.67	98.94	8.203	SF
ONION 1907-04H - VERDAD PR Well - Actual SLB Surv	1,386.63	1,364.70	147.25	135.24	12.255	CC
ONION 1907-04H - VERDAD PR Well - Actual SLB Surv	1,400.00	1,377.47	147.30	135.18	12.149	ES
ONION 1907-04H - VERDAD PR Well - Actual SLB Surv	1,600.00	1,570.59	157.90	144.26	11.582	SF
ONION 1907-05H - VERDAD PR Well - Actual SLB Surv	1,214.60	1,194.06	169.00	158.34	15.846	CC
ONION 1907-05H - VERDAD PR Well - Actual SLB Surv	1,251.50	1,229.92	169.23	158.29	15.478	ES
ONION 1907-05H - VERDAD PR Well - Actual SLB Surv	1,500.00	1,467.22	186.71	173.93	14.602	SF
ONION 1907-06H - VERDAD PR Well - Actual SLB Surv	711.57	697.80	203.18	194.82	24.323	CC, ES
ONION 1907-06H - VERDAD PR Well - Actual SLB Surv	1,100.00	1,060.33	218.33	208.41	21.997	SF
ONION 1907-07H - VERDAD PR Well - Actual SLB Surv	0.00	1.00	210.38			
ONION 1907-07H - VERDAD PR Well - Actual SLB Surv	1,000.00	960.70	227.22	217.80	24.127	SF
ONION 1907-08H - VERDAD PR Well - Actual SLB Surv	0.00	1.00	215.89			
ONION 1907-08H - VERDAD PR Well - Actual SLB Surv	900.00	870.65	240.74	231.73	26.707	SF
ONION 1907-09H - VERDAD PR Well - Actual SLB Surv	0.00	1.00	222.38			
ONION 1907-09H - VERDAD PR Well - Actual SLB Surv	800.00	769.50	245.19	236.47	28.122	SF
1N-64W-30 Offsets						
ANDREWS #13 - Verdad P&A Well - No Surveys						Out of range
ARNOLD #31 - Verdad P&A Well - No Surveys	14,248.96	6,940.00	841.80	450.89	2.153	CC, ES, SF
1N-64W-31 Offsets						
UPRR TIPPETT #1 - Rocky Mtn P&A Well - No Surveys						Out of range
1N-65W-12 SAFI 1224 PAD						
SAFI 1224-02H - Verdad PR Well - Actual SLB Surveys						Out of range
SAFI 1224-04H - Verdad PR Well - Actual SLB Surveys						Out of range
SAFI 1224-06H - Verdad PR Well - Actual SLB Surveys						Out of range
SAFI 1224-08H - Verdad PR Well - Actual SLB Surveys						Out of range
SAFI 1224-10H - Verdad PR Well - Actual SLB Surveys						Out of range
SAFI 1224-12H - Verdad PR Well - Actual SLB Surveys	8,443.05	16,619.29	1,234.46	969.44	4.658	CC
SAFI 1224-12H - Verdad PR Well - Actual SLB Surveys	9,900.00	18,082.06	1,273.62	952.46	3.966	ES
SAFI 1224-12H - Verdad PR Well - Actual SLB Surveys	10,000.00	18,108.00	1,278.47	953.99	3.940	SF
SAFI 1224-14H - Verdad PR Well - Actual SLB Surveys	8,484.91	16,761.95	437.46	174.02	1.661	CC
SAFI 1224-14H - Verdad PR Well - Actual SLB Surveys	9,900.00	18,158.91	460.04	143.67	1.454	Level 3, ES, SF
1N-65W-24 Offsets						
Meehl 01N-65W-24-2N - Verdad SI Well - Actual Ensign						Out of range
1N-65W-25 Offsets						
HSR OLIPHANT #3-25 - Mountain Petroleum P&A Well -						Out of range
HSR-AMEN #11-25 - KMG P&A Well - No Surveys						Out of range
HSR-HAFFNER #2-25 - HSR P&A Well - No Surveys						Out of range
1N-65W-36 Offsets						
ACCO TERRA STATE #18-36 - Kerr McGee PR Well - N						Out of range
ACCO-TERRA-STATE ET AL #41 - Kerr McGee PR Well						Out of range
RUEBEL ET AL #36-1 - KPK PR Well - No Surveys						Out of range
STATE #36-2 - KPK P&A Well - No Surveys						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

Reference Depths are relative to RKB = 20' @ 5031.00usft (RIG)
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: SHALLOT 1930-18H
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.58°



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Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

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Offset Depths are relative to Offset Datum

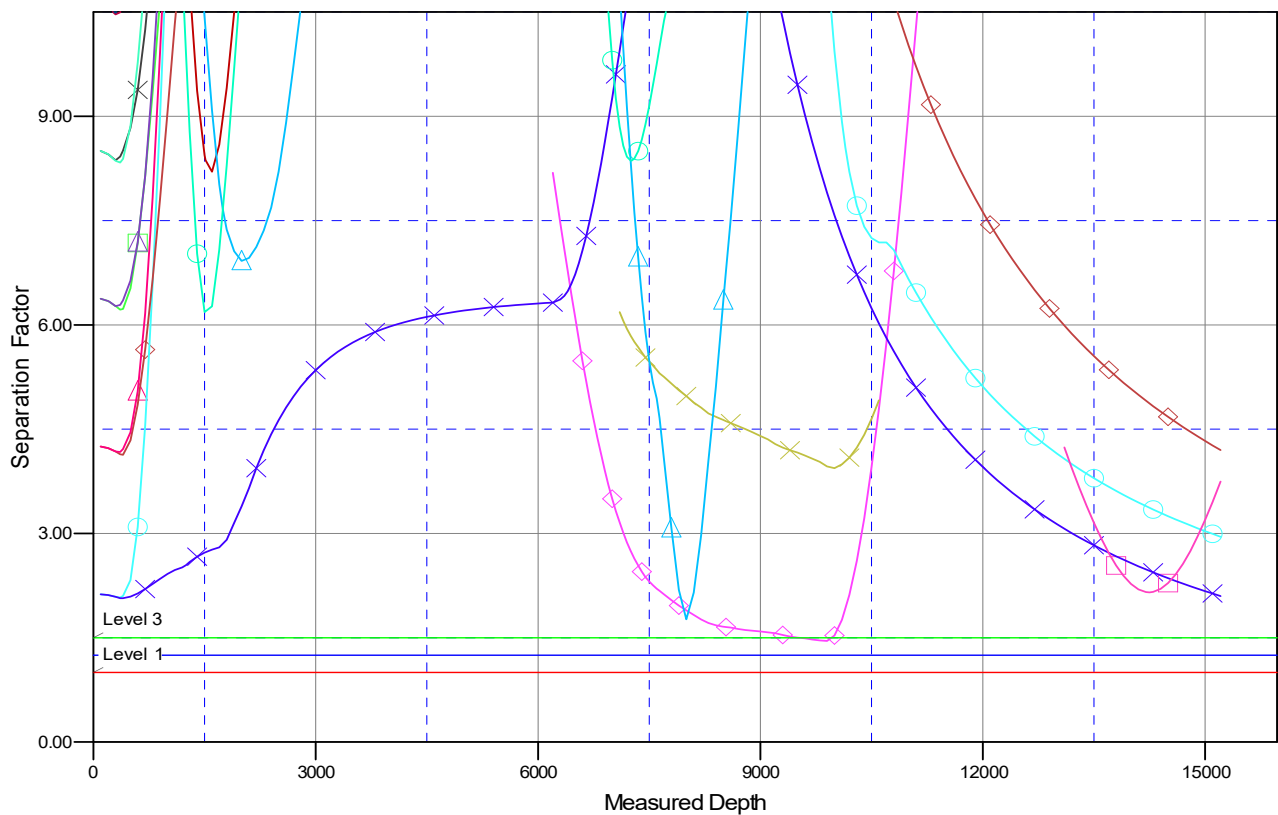
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Coordinates are relative to: SHALLOT 1930-18H

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.58°

Separation Factor Plot



LEGEND

SAFI 122414H, Verdad PR Well, Actual SLB Surveys V0	SHALLOT 1930-24H, Plan A, Design #1 V0	ONION 190708H, VERDAD PR Well, Actual SLB Surveys V0
SAFI 122412H, Verdad PR Well, Actual SLB Surveys V0	SHALLOT 1930-19H, Plan A, Design #1 V0	ONION 190706H, VERDAD PR Well, Actual SLB Surveys V0
SHALLOT 1930-21H, Plan A, Design #1 V0	CHIVE 253615H, Plan A, Design #1 V0	ONION 190707H, VERDAD PR Well, Actual SLB Surveys V0
CHIVE 253617H, Plan A, Design #1 V0	CHIVE 253611H, Plan A, Design #1 V0	ONION 190703H, VERDAD PR Well, Actual SLB Surveys V0
SHALLOT 1930-23H, Plan A, Design #1 V0	SHALLOT 1930-22H, Plan A, Design #1 V0	ONION 190705H, VERDAD PR Well, Actual SLB Surveys V0
SHALLOT 1930-20H, Plan A, Design #1 V0	CHIVE 253613H, Plan A, Design #1 V0	ONION 190701H, VERDAD PR Well, Actual SLB Surveys V0
CHIVE 253614H, Plan A, Design #1 V0	CHIVE 253610H, Plan A, Design #1 V0	ONION 190702H, VERDAD PR Well, Actual SLB Surveys V0
CHIVE 253616H, Plan A, Design #1 V0	ONION 190709H, VERDAD PR Well, Actual SLB Surveys V0	ARNOLD #31, Verdad P&A Well, No Surveys V0
CHIVE 253612H, Plan A, Design #1 V0	ONION 190704H, VERDAD PR Well, Actual SLB Surveys V0	