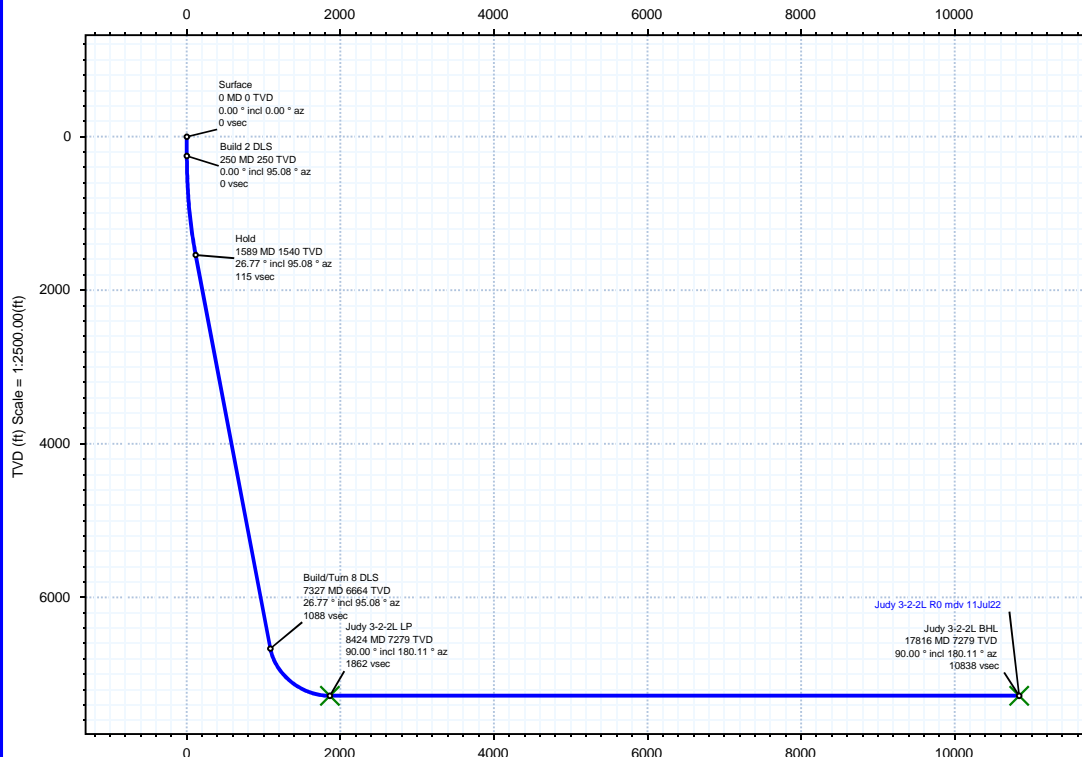


Borehole:	Well:	Field:	Structure:
Original Hole	Judy 3-2-2L	CO, Weld County (NAD 83 NZ) - 2019	Confluence 34-01N-65W (Judy 34 Pad)

Gravity & Magnetic Parameters	Surface Location	NAD83 Colorado State Plane, Northern Zone, US Feet	Miscellaneous
Model: HDGM 2022 Dip: 66.209° Date: 11-Jul-2022	Lat: N 40 0 8.10 Northing: 1244792.03ftUS Grid Conv: 0.5454°	Lon: W 104 39 21.10 Easting: 3236477.48ftUS Scale Fact: 0.9999662	Slot: Judy 3-2-2L TVD Ref: KB = 23ft(5157ft above MSL)
MagDec: 7.886° FS: 51570.992nT Gravity FS: 998.981mgn (9.80665 Based)			Plan: Judy 3-2-2L R0 mdv 11Jul22

Surface Location		NAD83 Colorado State Plane, Northern Zone, US Feet		VSec Azimuth: 162.99	
Northing: 1244792.02792353	Easting: 3236477.47785176	Latitude: N 40 0 8.10	Longitude: W 104 39 21.10		
Target Description	Grid Coord	Local Coord			
Target Name	Latitude	Longitude	Northing	Easting	TVD
Judy 34 Pad Sec 03-10 - Setback	N 40 0 8.10	W 104 39 20.92	1244792.16	3236491.48	5157.00
Judy 34 Pad Sec 03-10 - CL	N 40 0 8.10	W 104 39 20.92	1244792.16	3236491.48	5157.00
Judy 34 Pad Sec 03-10	N 40 0 8.10	W 104 39 20.92	1244792.16	3236491.48	5157.00
Judy 3-2-2L BHL	N 39 58 25.68	W 104 38 40.38	1234459.29	3239745.74	7279.00
Judy 3-2-2L LP	N 39 59 58.49	W 104 38 40.13	1243850.01	3239674.76	7279.00

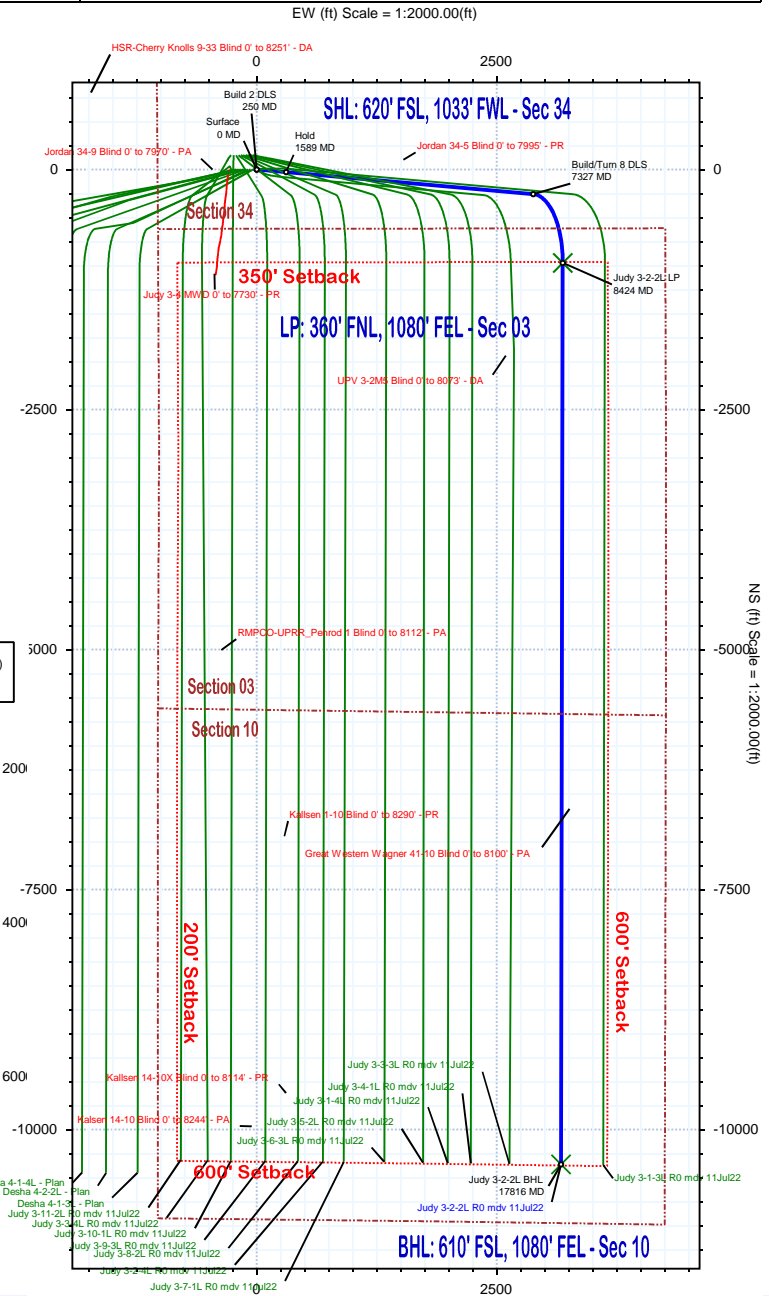
Critical Points							
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)
Surface	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Build 2 DLS	250.00	0.00	95.08	250.00	0.00	0.00	0.00
Hold	1588.55	26.77	95.08	1540.38	115.47	-27.20	305.86
Build/Turn 8 DLS	7327.35	26.77	95.08	6664.05	1087.52	-256.19	2880.61
Judy 3-2-2L LP	8424.40	90.00	180.11	7279.00	1862.44	-972.44	3188.28
Judy 3-2-2L BHL	17815.72	90.00	180.11	7279.00	10837.68	-10363.75	3169.87



Vertical Section (ft) Azim = 162.99° Scale = 1:2500.00(ft) Origin = 0N/-S, 0E/-W



True North
Tot Corr (M->T 7.886°)
Mag Dec (7.886°)
Grid Conv (0.545°)



Judy 3-2-2L R0 mdv 11Jul22 Proposal Geodetic Report

(Def Plan)

Report Date: July 13, 2022 - 12:08 PM
Client: Confluence DJ
Field: CO, Weld County (NAD 83 NZ) - 2019
Structure / Slot: Confluence 34-01N-65W (Judy 34 Pad) / Judy 3-2-2L
Well: Judy 3-2-2L
Borehole: Original Hole
UWI / API#: 05-123-44207
Survey Name: Judy 3-2-2L R0 mdv 11Jul22
Survey Date: July 11, 2022
Tort / AHD / DDI / ERD Ratio: 114.535 ° / 13115.574 ft / 6.565 / 1.802
Coordinate Reference System: NAD83 Colorado State Plane, Northern Zone, US Feet
Location Lat / Long: N 40° 0' 8.10000", W 104° 39' 21.09600"
Location Grid N/E Y/X: N 1244792.028 ftUS, E 3236477.478 ftUS
CRS Grid Convergence Angle: 0.5454 °
Grid Scale Factor: 0.9999662
Version / Patch: 2.10.829.1

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 162.993 ° (True North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: KB = 23ft
TVD Reference Elevation: 5157.00 ft above MSL
Seabed / Ground Elevation: 5134.00 ft above MSL
Magnetic Declination: 7.886 °
Total Gravity Field Strength: 998.9811mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 51570.992 nT
Magnetic Dip Angle: 66.209 °
Declination Date: July 11, 2022
Magnetic Declination Model: HDGM 2022
North Reference: True North
Grid Convergence Used: 0.0000 °
Total Corr Mag North->True North: 7.8861 °
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)	
Build 2 DLS	Surface	0.00	0.00	0.00	0.00	-5157.00	0.00	0.00	0.00	N/A	1244792.03	3236477.48	40.002250	-104.655860
	100.00	0.00	95.08	100.00	-5057.00	0.00	0.00	0.00	0.00	1244792.03	3236477.48	40.002250	-104.655860	
	200.00	0.00	95.08	200.00	-4957.00	0.00	0.00	0.00	0.00	1244792.03	3236477.48	40.002250	-104.655860	
	250.00	0.00	95.08	250.00	-4907.00	0.00	0.00	0.00	0.00	1244792.03	3236477.48	40.002250	-104.655860	
	300.00	1.00	95.08	300.00	-4857.00	0.16	-0.04	0.43	2.00	1244791.99	3236477.91	40.002250	-104.655858	
	400.00	3.00	95.08	399.93	-4757.07	1.48	-0.35	3.91	2.00	1244791.72	3236481.39	40.002249	-104.655846	
	500.00	5.00	95.08	499.68	-4657.32	4.10	-0.97	10.86	2.00	1244791.17	3236488.34	40.002247	-104.655821	
	600.00	7.00	95.08	599.13	-4557.87	8.03	-1.89	21.27	2.00	1244790.34	3236498.76	40.002245	-104.655784	
	700.00	9.00	95.08	698.15	-4458.85	13.26	-3.12	35.13	2.00	1244789.24	3236512.64	40.002241	-104.655735	
	800.00	11.00	95.08	796.63	-4360.37	19.79	-4.66	52.43	2.00	1244787.86	3236529.95	40.002237	-104.655673	
	900.00	13.00	95.08	894.44	-4262.56	27.61	-6.50	73.14	2.00	1244786.22	3236550.67	40.002232	-104.655599	
	1000.00	15.00	95.08	991.46	-4165.54	36.71	-8.65	97.23	2.00	1244784.31	3236574.78	40.002226	-104.655513	
	1100.00	17.00	95.08	1087.58	-4069.42	47.07	-11.09	124.69	2.00	1244782.13	3236602.26	40.002220	-104.655415	
	1200.00	19.00	95.08	1182.68	-3974.32	58.69	-13.83	155.46	2.00	1244779.68	3236633.06	40.002212	-104.655305	
Hold	1300.00	21.00	95.08	1276.65	-3880.35	71.55	-16.86	189.53	2.00	1244776.98	3236667.15	40.002204	-104.655183	
	1400.00	23.00	95.08	1460.71	-3789.34	85.64	-20.17	226.84	2.00	1244774.01	3236704.49	40.002195	-104.655050	
	1500.00	25.00	95.08	1460.71	-3696.29	100.93	-23.78	267.35	2.00	1244770.80	3236745.04	40.002185	-104.654906	
	1588.55	26.77	95.08	1540.38	-3616.62	115.47	-27.20	305.86	2.00	1244767.74	3236783.57	40.002175	-104.654768	
	1600.00	26.77	95.08	1550.60	-3606.40	117.41	-27.66	311.00	0.00	1244767.33	3236788.71	40.002174	-104.654750	
	1700.00	26.77	95.08	1639.88	-3517.12	134.35	-31.65	355.86	0.00	1244763.77	3236833.61	40.002163	-104.654590	
	1800.00	26.77	95.08	1729.16	-3427.84	151.29	-35.64	400.73	0.00	1244760.21	3236878.51	40.002152	-104.654430	
	1900.00	26.77	95.08	1818.44	-3338.56	168.22	-39.63	445.59	0.00	1244756.64	3236923.41	40.002141	-104.654269	
	2000.00	26.77	95.08	1907.72	-3249.28	185.16	-43.62	490.46	0.00	1244753.08	3236968.31	40.002130	-104.654109	
	2100.00	26.77	95.08	1997.00	-3160.00	202.10	-47.61	535.32	0.00	1244749.52	3237013.21	40.002119	-104.653949	
	2200.00	26.77	95.08	2086.29	-3070.71	219.04	-51.60	580.19	0.00	1244745.96	3237058.11	40.002108	-104.653789	
	2300.00	26.77	95.08	2175.57	-2981.43	235.98	-55.59	625.05	0.00	1244742.39	3237103.01	40.002097	-104.653629	
	2400.00	26.77	95.08	2264.85	-2892.15	252.92	-59.58	669.92	0.00	1244738.83	3237147.91	40.002086	-104.653469	
	2500.00	26.77	95.08	2354.13	-2802.87	269.85	-63.57	714.79	0.00	1244735.27	3237192.81	40.002075	-104.653309	
	2600.00	26.77	95.08	2443.41	-2713.59	286.79	-67.56	759.65	0.00	1244731.71	3237237.71	40.002065	-104.653148	
	2700.00	26.77	95.08	2532.69	-2624.31	303.73	-71.55	804.52	0.00	1244728.14	3237282.61	40.002054	-104.652988	
	2800.00	26.77	95.08	2621.97	-2535.03	320.67	-75.54	849.38	0.00	1244724.58	3237327.51	40.002043	-104.652828	
	2900.00	26.77	95.08	2711.25	-2445.75	337.61	-79.53	894.25	0.00	1244721.02	3237372.41	40.002032	-104.652668	
	3000.00	26.77	95.08	2800.54	-2356.46	354.54	-83.52	939.11	0.00	1244717.45	3237417.31	40.002021	-104.652508	
	3100.00	26.77	95.08	2889.82	-2267.18	371.48	-87.51	983.98	0.00	1244713.89	3237462.21	40.002010	-104.652348	
	3200.00	26.77	95.08	2979.10	-2177.90	388.42	-91.50	1028.85	0.00	1244710.33	3237507.11	40.001999	-104.652188	
	3300.00	26.77	95.08	3068.38	-2088.62	405.36	-95.49	1073.71	0.00	1244706.77	3237552.01	40.001988	-104.652027	
	3400.00	26.77	95.08	3157.66	-1999.34	422.30	-99.48	1118.58	0.00	1244703.20	3237596.91	40.001977	-104.651867	
	3500.00	26.77	95.08	3246.94	-1910.06	439.24	-103.47	1163.44	0.00	1244699.64	3237641.81	40.001966	-104.651707	
	3600.00	26.77	95.08	3336.22	-1820.78	456.17	-107.46	1208.31	0.00	1244696.08	3237686.71	40.001955	-104.651547	
	3700.00	26.77	95.08	3425.50	-1731.50	473.11	-111.45	1253.17	0.00	1244692.52	3237731.61	40.001944	-104.651387	
	3800.00	26.77	95.08	3514.79	-1642.21	490.05	-115.44	1298.04	0.00	1244688.95	3237776.51	40.001933	-104.651227	
	3900.00	26.77	95.08	3604.07	-1552.93	506.99	-119.43	1342.91	0.00	1244685.39	3237821.41	40.001922	-104.651067	
	4000.00	26.77	95.08	3693.35	-1463.65	523.93	-123.42	1387.77	0.00	1244681.83	3237866.31	40.001911	-104.650906	
	4100.00	26.77	95.08	3782.63	-1374.37	540.86	-127.41	1432.64	0.00	1244678.26	3237911.21	40.001900	-104.650746	
	4200.00	26.77	95.08	3871.91	-1285.09	557.80	-131.40	1477.50	0.00	1244674.70	3237956.11	40.001889	-104.650586	
	4300.00	26.77	95.08	3961.19	-1195.81	574.74	-135.39	1522.37	0.00	1244671.14	3238001.01	40.001878	-104.650426	
	4400.00	26.77	95.08	4050.47	-1106.53	591.68	-139.38	1567.23	0.00	1244667.58	3238045.91	40.001867	-104.650266	
	4500.00	26.77	95.08	4139.76	-1017.24	608.62	-143.37	1612.10	0.00	1244664.01	3238090.81	40.001856	-104.650106	
	4600.00	26.77	95.08	4229.04	-927.96	625.56	-147.36	1656.96	0.00	1244660.45	3238135.71	40.001845	-104.649946	
	4700.00	26.77	95.08	4318.32	-838.68	642.49	-151.35	1701.83	0.00	1244656.89	3238180.61	40.001834	-104.649785	
	4800.00	26.77	95.08	4407.60	-749.40	659.43	-155.34	1746.70	0.00	1244653.33	3238225.51	40.001823	-104.649625	
	4900.00	26.77	95.08	4496.88	-660.12	676.37	-159.33	1791.56	0.00	1244649.76	3238270.41	40.001812	-104.649465	
	5000.00	26.77	95.08	4586.16	-570.84	693.31	-163.32	1836.43	0.00	1244646.20	3238315.31	40.001801	-104.649305	
	5100.00	26.77	95.08	4675.44	-481.56	710.25	-167.31	1881.29	0.00	1244642.64	3238360.21	40.001791	-104.649145	
	5200.00	26.77	95.08	4764.72	-392.28	727.18	-171.30	1926.16	0.00	1244639.08	3238405.11	40.001780	-104.648985	
	5300.00	26.77	95.08	4854.01	-302.99	744.12	-175.29	1971.02	0.00	1244635.51	3238450.01	40.001769	-104.648825	
	5400.00	26.77	95.08	4943.29	-213.71	761.06	-179.28	2015.89	0.00	1244631.95	3238494.91	40.001758	-104.648664	
	5500.00	26.77	95.08	5032.57	-124.43	778.00	-183.27	2060.76	0.00	1244628.39	3238539.81	40.001747	-104.648504	
	5600.00	26.77	95.08	5121.85	-35.15	794.94	-187.26	2105.62	0.00	1244624.82	3238584.71	40.001736	-104.648344	
	5700.00	26.77	95.08	5211.13	54.13	811.88	-191.25	2150.49	0.00	1244621.26	3238629.61	40.001725	-104.648184	
	5800.00	26.77	95.08	5300.41	143.41	828.81	-195.24	2195.35	0.00	1244617.70	3238674.51	40.001714	-104.648024	
	5900.00	26.77	95.08	5389.69	232.69	845.75	-199.23	2240.22	0.00	1244614.14	3238719.41	40.001703	-104.647864	
	6000.00	26.77	95.08	5478.98	321.98	862.69	-203.22	2285.08	0.00	1244610.57	3238764.31	40.001692	-104.647704	
	6100.00	26.77	95.08	5568.26	411.26	879.63	-207.21	2329.95	0.00	1244607.01	3238809.21	40.001681	-104.647543	
	6200.00	26.77	95.08	5657.54	500.54	896.57	-211.20	2374.82	0.00	1244603.45	3238854.11	40.001670	-104.647383	
	6300.00	26.77	95.08	5746.82	589.82	913.50	-215.19	2419.69	0.00	1244599.89	3238899.01	40.001659	-104.647223	
6400.00	26.77	95.08	5836.10	679.10	930.44	-219.18	2464.55	0.00	1244596.32	3238943.91	40.001648	-104.647063		
6500.00	26.77	95.08	5925.38	768.38	947.38	-223.17	2509.41	0.00	1244592.76	3238988.81	40.001637	-104.646903		
6600.00	26.77	95.08	6014.66	857.66	964.32	-227.16	2554.28	0.00	1244589.20	3239033.71	40.001626	-104.646743		
6700.00	26.77	95.08	6103.94	946.94	981.26	-231.15	2599.14	0.00	1244585.63	3239078.61	40.001615	-104.646583		
6800.00	26.77	95.08	6193.23	1036.23	998.20	-235.14	2644.01	0.00	1244582.07	3239123.51	40.001604	-104.646422		
6900.00	26.77	95.08	6282.51	1125.51	1015.13	-239.13	2688.87	0.00	1244578.51	3239168.41	40.001593	-104.646262		
7000.00	26.77	95.08	6371.79	1214.79	1032.07									

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
Judy 3-2-2L LP	8200.00	74.01	171.83	7247.85	2090.85	1646.87	-751.67	3173.06	8.00	1244070.63	3239657.43	40.000186	-104.644534
	8300.00	81.12	175.61	7269.37	2112.37	1742.73	-848.66	3183.68	8.00	1243973.74	3239668.98	39.999920	-104.644496
	8400.00	88.26	179.24	7278.63	2121.63	1839.08	-948.05	3188.14	8.00	1243874.41	3239674.39	39.999647	-104.644480
	8424.40	90.00	180.11	7279.00	2122.00	1862.44	-972.44	3188.28	8.00	1243850.01	3239674.76	39.999580	-104.644480
	8500.00	90.00	180.11	7279.00	2122.00	1934.70	-1048.04	3188.13	0.00	1243774.42	3239675.33	39.999372	-104.644481
	8600.00	90.00	180.11	7279.00	2122.00	2030.27	-1148.04	3187.94	0.00	1243674.42	3239676.08	39.999098	-104.644481
	8700.00	90.00	180.11	7279.00	2122.00	2125.83	-1248.04	3187.74	0.00	1243574.43	3239676.84	39.998823	-104.644482
	8800.00	90.00	180.11	7279.00	2122.00	2221.40	-1348.04	3187.55	0.00	1243474.44	3239677.60	39.998549	-104.644483
	8900.00	90.00	180.11	7279.00	2122.00	2316.97	-1448.04	3187.35	0.00	1243374.44	3239678.35	39.998274	-104.644484
	9000.00	90.00	180.11	7279.00	2122.00	2412.54	-1548.04	3187.15	0.00	1243274.45	3239679.11	39.998000	-104.644484
	9100.00	90.00	180.11	7279.00	2122.00	2508.11	-1648.04	3186.96	0.00	1243174.46	3239679.86	39.997725	-104.644485
	9200.00	90.00	180.11	7279.00	2122.00	2603.68	-1748.04	3186.76	0.00	1243074.46	3239680.62	39.997451	-104.644486
	9300.00	90.00	180.11	7279.00	2122.00	2699.25	-1848.04	3186.56	0.00	1242974.47	3239681.38	39.997176	-104.644487
	9400.00	90.00	180.11	7279.00	2122.00	2794.82	-1948.04	3186.37	0.00	1242874.48	3239682.13	39.996902	-104.644487
	9500.00	90.00	180.11	7279.00	2122.00	2890.39	-2048.04	3186.17	0.00	1242774.48	3239682.89	39.996627	-104.644488
	9600.00	90.00	180.11	7279.00	2122.00	2985.96	-2148.04	3185.98	0.00	1242674.49	3239683.64	39.996353	-104.644489
	9700.00	90.00	180.11	7279.00	2122.00	3081.53	-2248.04	3185.78	0.00	1242574.49	3239684.40	39.996078	-104.644490
	9800.00	90.00	180.11	7279.00	2122.00	3177.10	-2348.04	3185.58	0.00	1242474.50	3239685.15	39.995804	-104.644490
	9900.00	90.00	180.11	7279.00	2122.00	3272.67	-2448.04	3185.39	0.00	1242374.51	3239685.91	39.995529	-104.644491
	10000.00	90.00	180.11	7279.00	2122.00	3368.24	-2548.04	3185.19	0.00	1242274.51	3239686.67	39.995255	-104.644492
	10100.00	90.00	180.11	7279.00	2122.00	3463.81	-2648.04	3185.00	0.00	1242174.52	3239687.42	39.994980	-104.644492
	10200.00	90.00	180.11	7279.00	2122.00	3559.38	-2748.04	3184.80	0.00	1242074.53	3239688.18	39.994706	-104.644493
	10300.00	90.00	180.11	7279.00	2122.00	3654.95	-2848.04	3184.60	0.00	1241974.53	3239688.93	39.994431	-104.644494
	10400.00	90.00	180.11	7279.00	2122.00	3750.52	-2948.04	3184.41	0.00	1241874.54	3239689.69	39.994157	-104.644495
	10500.00	90.00	180.11	7279.00	2122.00	3846.08	-3048.04	3184.21	0.00	1241774.55	3239690.45	39.993882	-104.644495
	10600.00	90.00	180.11	7279.00	2122.00	3941.65	-3148.04	3184.02	0.00	1241674.55	3239691.20	39.993608	-104.644496
	10700.00	90.00	180.11	7279.00	2122.00	4037.22	-3248.04	3183.82	0.00	1241574.56	3239691.96	39.993333	-104.644497
	10800.00	90.00	180.11	7279.00	2122.00	4132.79	-3348.04	3183.62	0.00	1241474.57	3239692.71	39.993059	-104.644498
	10900.00	90.00	180.11	7279.00	2122.00	4228.36	-3448.04	3183.43	0.00	1241374.57	3239693.47	39.992784	-104.644498
	11000.00	90.00	180.11	7279.00	2122.00	4323.93	-3548.04	3183.23	0.00	1241274.58	3239694.23	39.992510	-104.644499
	11100.00	90.00	180.11	7279.00	2122.00	4419.50	-3648.04	3183.04	0.00	1241174.58	3239694.98	39.992235	-104.644500
	11200.00	90.00	180.11	7279.00	2122.00	4515.07	-3748.04	3182.84	0.00	1241074.59	3239695.74	39.991961	-104.644501
	11300.00	90.00	180.11	7279.00	2122.00	4610.64	-3848.04	3182.64	0.00	1240974.60	3239696.49	39.991686	-104.644501
	11400.00	90.00	180.11	7279.00	2122.00	4706.21	-3948.04	3182.45	0.00	1240874.60	3239697.25	39.991412	-104.644502
	11500.00	90.00	180.11	7279.00	2122.00	4801.78	-4048.04	3182.25	0.00	1240774.61	3239698.00	39.991137	-104.644503
	11600.00	90.00	180.11	7279.00	2122.00	4897.35	-4148.04	3182.06	0.00	1240674.62	3239698.76	39.990863	-104.644504
	11700.00	90.00	180.11	7279.00	2122.00	4992.92	-4248.04	3181.86	0.00	1240574.62	3239699.52	39.990588	-104.644504
	11800.00	90.00	180.11	7279.00	2122.00	5088.49	-4348.04	3181.66	0.00	1240474.63	3239700.27	39.990314	-104.644505
	11900.00	90.00	180.11	7279.00	2122.00	5184.06	-4448.04	3181.47	0.00	1240374.64	3239701.03	39.990039	-104.644506
	12000.00	90.00	180.11	7279.00	2122.00	5279.63	-4548.04	3181.27	0.00	1240274.64	3239701.78	39.989765	-104.644507
12100.00	90.00	180.11	7279.00	2122.00	5375.20	-4648.04	3181.07	0.00	1240174.65	3239702.54	39.989490	-104.644507	
12200.00	90.00	180.11	7279.00	2122.00	5470.77	-4748.04	3180.88	0.00	1240074.66	3239703.30	39.989216	-104.644508	
12300.00	90.00	180.11	7279.00	2122.00	5566.34	-4848.04	3180.68	0.00	1239974.66	3239704.05	39.988941	-104.644509	
12400.00	90.00	180.11	7279.00	2122.00	5661.90	-4948.04	3180.49	0.00	1239874.67	3239704.81	39.988667	-104.644510	
12500.00	90.00	180.11	7279.00	2122.00	5757.47	-5048.04	3180.29	0.00	1239774.68	3239705.56	39.988392	-104.644510	
12600.00	90.00	180.11	7279.00	2122.00	5853.04	-5148.04	3180.09	0.00	1239674.68	3239706.32	39.988118	-104.644511	
12700.00	90.00	180.11	7279.00	2122.00	5948.61	-5248.04	3179.90	0.00	1239574.69	3239707.07	39.987843	-104.644512	
12800.00	90.00	180.11	7279.00	2122.00	6044.18	-5348.03	3179.70	0.00	1239474.69	3239707.83	39.987569	-104.644513	
12900.00	90.00	180.11	7279.00	2122.00	6139.75	-5448.03	3179.51	0.00	1239374.70	3239708.59	39.987294	-104.644513	
13000.00	90.00	180.11	7279.00	2122.00	6235.32	-5548.03	3179.31	0.00	1239274.71	3239709.34	39.987020	-104.644514	
13100.00	90.00	180.11	7279.00	2122.00	6330.89	-5648.03	3179.11	0.00	1239174.71	3239710.10	39.986745	-104.644515	
13200.00	90.00	180.11	7279.00	2122.00	6426.46	-5748.03	3178.92	0.00	1239074.72	3239710.85	39.986471	-104.644516	
13300.00	90.00	180.11	7279.00	2122.00	6522.03	-5848.03	3178.72	0.00	1238974.73	3239711.61	39.986196	-104.644516	
13400.00	90.00	180.11	7279.00	2122.00	6617.60	-5948.03	3178.53	0.00	1238874.73	3239712.37	39.985922	-104.644517	
13500.00	90.00	180.11	7279.00	2122.00	6713.17	-6048.03	3178.33	0.00	1238774.74	3239713.12	39.985647	-104.644518	
13600.00	90.00	180.11	7279.00	2122.00	6808.74	-6148.03	3178.13	0.00	1238674.75	3239713.88	39.985373	-104.644519	
13700.00	90.00	180.11	7279.00	2122.00	6904.31	-6248.03	3177.94	0.00	1238574.75	3239714.63	39.985098	-104.644519	
13800.00	90.00	180.11	7279.00	2122.00	6999.88	-6348.03	3177.74	0.00	1238474.76	3239715.39	39.984824	-104.644520	
13900.00	90.00	180.11	7279.00	2122.00	7095.45	-6448.03	3177.55	0.00	1238374.77	3239716.14	39.984549	-104.644521	
14000.00	90.00	180.11	7279.00	2122.00	7191.02	-6548.03	3177.35	0.00	1238274.77	3239716.90	39.984274	-104.644522	
14100.00	90.00	180.11	7279.00	2122.00	7286.59	-6648.03	3177.15	0.00	1238174.78	3239717.66	39.984000	-104.644522	
14200.00	90.00	180.11	7279.00	2122.00	7382.15	-6748.03	3176.96	0.00	1238074.78	3239718.41	39.983725	-104.644523	
14300.00	90.00	180.											

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
		1	23.000	1700.000	1/100.000	13.500	9.625		B001Mb_MWD+HRGM			Original Hole / Judy 3-2-2L R0 mdv 11Jul22	
		1	1700.000	17815.724	1/100.000	8.500	5.500		B001Mb_MWD+HRGM			Original Hole / Judy 3-2-2L R0 mdv 11Jul22	

Judy 3-2-2L R0 mdv 11Jul22 Anti-Collision Summary Report

Analysis Date-24hr Time: July 13, 2022 - 12:09
Client: Confluence DJ
Field: CO, Weld County (NAD 83 NZ) - 2019
Structure: Confluence 34-01N-65W (Judy 34 Pad)
Slot: Judy 3-2-2L
Well: Judy 3-2-2L
Borehole: Original Hole
Scan MD Range: 0.00ft ~ 17815.72ft

Analysis Method: 3D Least Distance
Reference Trajectory: Judy 3-2-2L R0 mdv 11Jul22 (Def Plan)
Depth Interval: Every 10.00 Measured Depth (ft)
Rule Set: NAL Procedure: D&M AntiCollision Standard S002
Min Pts: All local minima indicated.
Version / Patch: 2.10.829.1
Database \ Project: us1455vsm3175\drilling-CO, Weld County 2.10_RESTORE

Trajectory Error Model: ISCWSA3 3-D 95.000% Confidence 2.7955 sigma, for subject well. For offset wells, error model version is specified with each well respectively.

Offset Selection Criteria

Wellhead distance scan: Not performed!
 Selection filters: Definitive Surveys - Definitive Plans - Definitive surveys exclude definitive plans
 - All Non-Def Surveys when no Def-Survey is set in a borehole - All Non-Def Plans when no Def-Plan is set in a borehole

Offset Trajectories Summary

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		

Results highlighted: Sep-Factor separation <= 1.50 ft

Judy 3-1-3L R0 mdv 11Jul22 (Def Plan) Fail Major

14.01	11.40	13.02	2.61	N/A	MAS = 3.47 (m)	0.00	0.00	CtCt<=15m<15.00				Enter Alert	
14.01	11.40	13.02	2.61	N/A	MAS = 3.47 (m)	23.00	23.00					WRP	
14.00	11.40	10.05	2.50	4.39	MAS = 3.47 (m)	360.00	359.97					MinPts	
15.15	11.40	7.81	3.76	2.23	MAS = 3.47 (m)	700.00	698.15					MINPT-O-EOU	
16.21	11.81	8.01	4.40	2.11	OSF1.50	780.00	776.98					MinPt-O-ADP	
18.24	13.53	8.89	4.71	2.08	OSF1.50	880.00	874.93					MinPt-O-SF	
37.12	35.15	13.35	1.97	1.59	OSF1.50	1720.00	1657.73					MINPT-O-EOU	
37.70	35.89	13.45	1.82	1.58	OSF1.50	1760.00	1693.45					MinPt-O-ADP	
37.87	36.05	13.51	1.82	1.58	OSF1.50	1770.00	1702.38					MinPt-O-SF	
379.65	167.37	267.74	212.28	3.41	OSF1.50	7870.00	7096.66					MinPt-O-SF	
442.65	133.66	353.21	308.99	4.99	OSF1.50	8410.00	7278.87	OSF>5.00				Exit Alert	
442.69	133.75	353.20	308.94	4.99	OSF1.50	8480.00	7279.00	OSF<5.00				Enter Alert	
442.80	443.20	147.01	-0.39	1.50	OSF1.50	14150.00	7279.00		OSF<1.50			Enter Minor	
442.87	663.90	-0.06	-221.03	1.00	OSF1.50	17650.00	7279.00			OSF<1.00		Enter Major	
442.87	674.44	-7.09	-231.57	0.98	OSF1.50	17815.72	7279.00					MinPts	

Great Western Wagner 41-10 Blind 0' to 8100' - PA (Def Survey)

7414.48	32.81	7412.50	7381.68	42017.92	MAS = 10.00 (m)	0.00	0.00					Surface	
7414.48	32.81	7411.92	7381.68	9804.18	MAS = 10.00 (m)	23.00	23.00					WRP	
1544.65	465.48	1233.80	1079.17	4.99	OSF1.50	12570.00	7279.00	OSF<5.00				Enter Alert	
449.75	457.73	144.06	-7.99	1.47	OSF1.50	13870.00	7279.00		OSF<1.50			Enter Minor	
293.68	453.64	-9.29	-159.97	0.97	OSF1.50	13830.00	7279.00			OSF<1.00		Enter Major	
80.02	533.89	-276.44	-453.87	0.22	OSF1.50	14110.00	7279.00					MinPt-CtCt	
80.32	542.20	-281.68	-461.87	0.22	OSF1.50	14120.00	7279.00					MinPt-O-SF	
81.85	548.03	-284.03	-466.17	0.22	OSF1.50	14130.00	7279.00					MINPT-O-EOU	
84.55	551.22	-283.47	-466.67	0.23	OSF1.50	14140.00	7279.00					MinPt-O-ADP	
327.34	492.86	-1.76	-165.52	0.99	OSF1.50	14430.00	7279.00			OSF>1.00		Exit Major	
484.07	484.95	160.24	-0.88	1.50	OSF1.50	14590.00	7279.00					Exit Minor	
1569.46	474.76	1252.42	1094.70	4.97	OSF1.50	15680.00	7279.00	OSF>5.00				Exit Alert	
3704.01	473.20	3388.01	3230.81	11.78	OSF1.50	17815.72	7279.00					TD	

Judy 3-3-3L R0 mdv 11Jul22 (Def Plan)

14.01	11.40	13.02	2.61	N/A	MAS = 3.47 (m)	0.00	0.00	CtCt<=15m<15.00				Enter Alert	
14.01	11.40	13.02	2.61	N/A	MAS = 3.47 (m)	23.00	23.00					WRP	
14.01	11.40	11.13	2.51	6.89	MAS = 3.47 (m)	250.00	250.00					MinPts	
14.82	11.40	9.89	3.42	3.51	MAS = 3.47 (m)	460.00	459.81					MINPT-O-EOU	
18.82	11.40	11.83	7.42	2.97	MAS = 3.47 (m)	660.00	658.60					MinPt-O-SF	
60.96	27.76	42.13	33.20	3.35	OSF1.50	1500.00	1460.71					MinPt-O-ADP	
65.51	30.54	44.82	34.97	3.28	OSF1.50	1620.00	1568.45					MinPt-O-SF	
120.28	36.85	95.38	83.42	4.99	OSF1.50	2490.00	2345.20	OSF>5.00				Exit Alert	
526.52	158.78	420.34	367.74	5.00	OSF1.50	8910.00	7279.00	OSF<5.00				Enter Alert	
509.76	177.79	390.91	331.97	4.32	OSF1.50	9430.00	7279.00					MinPt-CtCt	
532.98	533.10	177.25	-0.12	1.50	OSF1.50	15460.00	7279.00		OSF<1.50			Enter Minor	
542.04	681.83	87.16	-139.79	1.19	OSF1.50	17810.00	7279.00					MinPts	
542.08	680.91	87.81	-138.83	1.19	OSF1.50	17815.72	7279.00					TD	

Jordan 34-5 Blind 0' to 7995' - PR (Def Survey)

1531.69	32.81	1529.88	1498.88	N/A	MAS = 10.00 (m)	0.00	0.00					Surface	
1531.39	32.81	1529.54	1498.58	45641.49	MAS = 10.00 (m)	20.00	20.00					MinPt-O-SF	
1531.37	32.81	1529.53	1498.56	51593.20	MAS = 10.00 (m)	23.00	23.00					WRP	
571.83	172.77	456.12	399.06	5.00	OSF1.50	3110.00	2898.75	OSF<5.00				Enter Alert	
239.77	240.78	78.71	-1.02	1.49	OSF1.50	4180.00	3854.06		OSF<1.50			Enter Minor	
236.64	246.35	71.88	-9.70	1.44	OSF1.50	4270.00	3934.41					MinPt-CtCt	
237.48	248.61	71.20	-11.14	1.43	OSF1.50	4310.00	3970.12					MINPT-O-EOU	
238.40	249.69	71.41	-11.25	1.43	OSF1.50	4330.00	3987.98					MinPts	
257.30	257.30	85.23	0.00	1.50	OSF1.50	4490.00	4130.83			OSF>1.50		Exit Minor	
1289.52	388.39	1030.06	901.13	4.99	OSF1.50	7080.00	6443.21	OSF>5.00				Exit Alert	
10593.45	454.60	10289.85	10138.85	35.07	OSF1.50	17815.72	7279.00					TD	

Desha 4-1-3L - Plan (Def Plan)

39.22	31.57	38.24	7.65	N/A	MAS = 9.62 (m)	0.00	0.00	CtCt<=15m<15.00				Enter Alert	
39.22	31.57	38.22	7.65	2158.44	MAS = 9.62 (m)	23.00	23.00					WRP	
39.22	31.57	36.33	7.65	20.04	MAS = 9.62 (m)	250.00	250.00					MinPts	
39.38	31.57	36.19	7.81	17.41	MAS = 9.62 (m)	280.00	280.00					MINPT-O-EOU	
48.42	31.57	43.24	16.85	11.30	MAS = 9.62 (m)	480.00	479.75	CtCt<=15m<15.00				Exit Alert	
57.03	31.57	50.94	25.48	10.98	MAS = 9.62 (m)	570.00	569.33					MinPt-O-SF	
4413.14	725.21	3929.34	3687.93	9.14	OSF1.50	17815.72	7279.00					MinPts	

Judy 3-4-1L R0 mdv 11Jul22 (Def Plan)

154.42	32.81	153.44	121.61	N/A	MAS = 10.00 (m)	0.00	0.00					Surface	
154.42	32.81	153.44	121.61	N/A	MAS = 10.00 (m)	23.00	23.00					WRP	

...Confluence 34-01N-65W (Judy 34 Pad)\Judy 3-2-2L\Original Hole\Judy 3-2-2L R0 mdv 11Jul22

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Cl-Cl (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
	240.55	32.81	231.99	207.74	31.64	MAS = 10.00 (m)	830.00	826.05				MinPt-O-SF	
	5796.13	723.97	5313.16	5072.16	12.02	OSF1.50	17815.72	7279.00				MinPts	
Desha 4-2-4L - Plan (Def Plan)													Pass
	190.50	32.81	189.52	157.70	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	190.50	32.81	189.50	157.70	8915.13	MAS = 10.00 (m)	23.00	23.00				WRP	
	190.50	32.81	187.61	157.70	99.07	MAS = 10.00 (m)	250.00	250.00				MinPts	
	190.66	32.81	187.47	157.85	85.82	MAS = 10.00 (m)	280.00	280.00				MINPT-O-EOU	
	278.34	32.81	269.42	245.53	34.95	MAS = 10.00 (m)	870.00	865.17				MinPt-O-SF	
	4197.56	68.09	4151.84	4129.47	93.81	OSF1.50	6360.00	5800.39				MinPt-O-SF	
	6050.78	723.99	5567.80	5326.79	12.55	OSF1.50	17815.72	7279.00				MinPts	
Judy 3-7-1L R0 mdv 11Jul22 (Def Plan)													Pass
	204.77	32.81	203.78	171.96	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	204.77	32.81	203.78	171.96	N/A	MAS = 10.00 (m)	23.00	23.00				WRP	
	204.77	32.81	201.89	171.96	107.88	MAS = 10.00 (m)	250.00	250.00				MinPts	
	204.97	32.81	201.71	172.17	89.27	MAS = 10.00 (m)	290.00	290.00				MINPT-O-EOU	
	292.26	32.81	276.71	259.46	20.00	MAS = 10.00 (m)	1460.00	1424.34				MinPt-O-SF	
	2064.76	109.25	1991.60	1955.52	28.59	OSF1.50	7480.00	6798.74				MinPt-O-SF	
	2102.61	111.30	2028.08	1991.30	28.58	OSF1.50	7990.00	6891.67				MinPt-O-SF	
	2262.33	123.54	2179.65	2138.79	27.68	OSF1.50	8430.00	7279.00				MinPt-CiCt	
	2266.05	678.91	1813.11	1587.14	5.01	OSF1.50	17790.00	7279.00				MinPts	
	2266.18	678.60	1813.45	1587.58	5.01	OSF1.50	17815.72	7279.00				TD	
Desha 4-6-1L - Plan (Def Plan)													Pass
	215.72	32.81	214.73	182.91	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	215.72	32.81	214.71	182.91	10101.20	MAS = 10.00 (m)	23.00	23.00				WRP	
	215.72	32.81	212.82	182.91	112.25	MAS = 10.00 (m)	250.00	250.00				MinPts	
	215.88	32.81	212.68	183.07	97.23	MAS = 10.00 (m)	280.00	280.00				MINPT-O-EOU	
	316.72	32.81	307.45	283.92	38.07	MAS = 10.00 (m)	910.00	904.18				MinPt-O-SF	
	6236.84	723.72	5754.04	5513.12	12.94	OSF1.50	17815.72	7279.00				MinPts	
Judy 3-2-4L R0 mdv 11Jul22 (Def Plan)													Pass
	222.77	32.81	221.79	189.97	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	222.77	32.81	221.79	189.97	N/A	MAS = 10.00 (m)	23.00	23.00				WRP	
	222.77	32.81	219.90	189.97	117.41	MAS = 10.00 (m)	250.00	250.00				MinPts	
	223.00	32.81	219.73	190.19	97.15	MAS = 10.00 (m)	290.00	290.00				MINPT-O-EOU	
	364.97	32.81	351.55	332.17	29.27	MAS = 10.00 (m)	1290.00	1267.31				MinPt-O-SF	
	942.06	32.81	920.17	909.25	45.02	MAS = 10.00 (m)	2740.00	2568.40				MinPt-O-SF	
	2489.19	129.80	2402.33	2359.39	28.97	OSF1.50	8430.00	7279.00				MinPt-CiCt	
	2490.20	683.31	2034.33	1806.89	5.47	OSF1.50	17800.00	7279.00				MinPts	
	2490.31	683.12	2034.56	1807.18	5.47	OSF1.50	17815.72	7279.00				TD	
Desha 4-7-3L - Plan (Def Plan)													Pass
	240.93	32.81	239.95	208.12	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	240.93	32.81	239.93	208.12	11287.27	MAS = 10.00 (m)	23.00	23.00				WRP	
	240.93	32.81	238.04	208.12	125.43	MAS = 10.00 (m)	250.00	250.00				MinPts	
	241.09	32.81	237.89	208.28	108.64	MAS = 10.00 (m)	280.00	280.00				MINPT-O-EOU	
	359.58	32.81	349.86	326.77	41.04	MAS = 10.00 (m)	960.00	952.75				MinPt-O-SF	
	6525.39	724.08	6042.37	5801.36	13.54	OSF1.50	17815.72	7279.00				MinPts	
Judy 3-8-2L R0 mdv 11Jul22 (Def Plan)													Pass
	242.07	32.81	241.09	209.27	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	242.07	32.81	241.09	209.27	N/A	MAS = 10.00 (m)	23.00	23.00				WRP	
	242.07	32.81	239.20	209.27	127.63	MAS = 10.00 (m)	250.00	250.00				MinPts	
	242.21	32.81	239.03	209.40	110.34	MAS = 10.00 (m)	280.00	280.00				MINPT-O-EOU	
	397.74	32.81	383.92	364.93	30.91	MAS = 10.00 (m)	1330.00	1304.60				MinPt-O-SF	
	2740.11	125.99	2655.79	2614.12	32.87	OSF1.50	8440.00	7279.00				MinPt-CiCt	
	2741.23	682.48	2285.91	2058.75	6.03	OSF1.50	17790.00	7279.00				MinPts	
	2741.36	682.33	2286.15	2059.04	6.03	OSF1.50	17815.72	7279.00				TD	
Judy 3-9-3L R0 mdv 11Jul22 (Def Plan)													Pass
	262.38	32.81	261.39	229.57	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	262.38	32.81	261.39	229.57	N/A	MAS = 10.00 (m)	23.00	23.00				WRP	
	262.38	32.81	259.50	229.57	138.38	MAS = 10.00 (m)	250.00	250.00				MinPts	
	262.51	32.81	259.34	229.71	119.63	MAS = 10.00 (m)	280.00	280.00				MINPT-O-EOU	
	434.57	32.81	420.47	401.76	33.05	MAS = 10.00 (m)	1360.00	1332.43				MinPt-O-SF	
	3080.72	126.22	2996.24	2954.50	36.89	OSF1.50	8440.00	7279.00				MinPt-CiCt	
	3081.97	683.08	2626.25	2398.94	6.78	OSF1.50	17790.00	7279.00				MinPts	
	3082.00	683.04	2626.31	2398.96	6.78	OSF1.50	17800.00	7279.00				MinPt-O-SF	
	3082.12	683.05	2626.42	2399.06	6.78	OSF1.50	17815.72	7279.00				TD	
Judy 3-11-2L R0 mdv 11Jul22 (Def Plan)													Pass
	266.15	32.81	265.16	233.34	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	266.15	32.81	265.16	233.34	N/A	MAS = 10.00 (m)	23.00	23.00				WRP	
	266.15	32.81	263.27	233.34	140.37	MAS = 10.00 (m)	250.00	250.00				MinPts	
	266.23	32.81	263.16	233.42	127.19	MAS = 10.00 (m)	270.00	270.00				MINPT-O-EOU	
	476.59	32.81	462.96	443.78	37.61	MAS = 10.00 (m)	1320.00	1295.29				MinPt-O-SF	
	1778.26	48.32	1745.72	1729.94	56.32	OSF1.50	4230.00	3898.70				MinPt-O-SF	
	3960.47	676.91	3508.87	3283.56	8.79	OSF1.50	17810.00	7279.00				MINPT-O-EOU	
	3960.52	676.98	3508.87	3283.54	8.79	OSF1.50	17815.72	7279.00				MinPts	
Judy 3-10-1L R0 mdv 11Jul22 (Def Plan)													Pass
	283.47	32.81	282.49	250.66	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	283.47	32.81	282.49	250.66	N/A	MAS = 10.00 (m)	23.00	23.00				WRP	
	283.47	32.81	280.60	250.66	149.54	MAS = 10.00 (m)	250.00	250.00				MinPts	
	283.61	32.81	280.44	250.80	129.28	MAS = 10.00 (m)	280.00	280.00				MINPT-O-EOU	
	480.03	32.81	465.77	447.23	36.08	MAS = 10.00 (m)	1380.00	1350.93				MinPt-O-SF	
	3439.60	122.88	3357.35	3316.72	42.31	OSF1.50	8440.00	7279.00				MinPt-CiCt	
	3441.03	681.17	2986.50	2759.87	7.59	OSF1.50	17800.00	7279.00				MINPT-O-EOU	
	3441.10	681.23	2986.62	2759.87	7.59	OSF1.50	17810.00	7279.00				MinPt-O-ADP	
	3441.15	681.27	2986.64	2759.88	7.59	OSF1.50	17815.72	7279.00				MinPt-O-SF	
Judy 3-4 MWD 0° to 7730° - PR (Def Survey)													Pass
	291.41	32.81	289.60	258.60	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	

...Confluence 34-01N-65W (Judy 34 Pad)\Judy 3-2-2L\Original Hole\Judy 3-2-2L R0 mdv 11Jul22

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Cl-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
	291.36	32.81	289.53	258.55	16295.78	MAS = 10.00 (m)		23.00	23.00			WRP	
	290.81	32.81	287.04	258.01	147.62	MAS = 10.00 (m)		260.00	260.00			MinPts	
	290.97	32.81	286.90	258.16	128.39	MAS = 10.00 (m)		290.00	290.00			MINPT-O-EQU	
	504.58	32.81	489.75	471.77	38.63	MAS = 10.00 (m)		1370.00	1341.69			MinPt-O-SF	
	568.67	32.81	552.16	535.86	38.59	MAS = 10.00 (m)		1530.00	1487.83			MinPt-O-SF	
	1187.02	39.23	1160.33	1147.79	47.26	OSF1.50		2840.00	2657.69			MinPt-O-SF	
	1287.91	42.51	1259.04	1245.40	47.17	OSF1.50		3050.00	2845.18			MinPt-O-SF	
	1445.96	47.58	1413.70	1398.38	47.13	OSF1.50		3370.00	3130.88			MinPt-O-SF	
	1674.23	56.01	1636.35	1618.22	46.11	OSF1.50		3840.00	3550.50			MinPt-O-SF	
	1796.11	60.19	1755.45	1735.92	45.95	OSF1.50		4090.00	3773.70			MinPt-O-SF	
	1865.32	62.36	1823.21	1802.96	46.02	OSF1.50		4230.00	3898.70			MinPt-O-SF	
	2103.16	71.61	2054.89	2031.55	45.03	OSF1.50		4710.00	4327.25			MinPt-O-SF	
	2339.38	81.40	2284.58	2257.98	43.95	OSF1.50		5180.00	4746.87			MinPt-O-SF	
	2652.37	91.62	2590.76	2560.75	44.17	OSF1.50		5800.00	5300.41			MinPt-O-SF	
	2975.56	105.34	2904.79	2870.21	43.00	OSF1.50		6440.00	5871.81			MinPt-O-SF	
	3152.22	113.37	3076.11	3038.85	42.28	OSF1.50		6800.00	6193.23			MinPt-O-SF	
	3621.79	137.65	3529.49	3484.14	39.92	OSF1.50		8560.00	7279.00			MinPt-CtCt	
	3621.80	137.67	3529.49	3484.14	39.91	OSF1.50		8570.00	7279.00			MinPts	
	3634.15	138.45	3541.32	3495.70	39.82	OSF1.50		8860.00	7279.00			MinPt-O-SF	
	3639.59	138.64	3546.63	3500.95	39.82	OSF1.50		8920.00	7279.00			MinPt-O-SF	
	9938.18	164.77	9827.80	9773.41	91.35	OSF1.50		17815.72	7279.00			TD	

Judy 3-3-4L R0 mdv 11Jul22 (Def Plan) Pass

305.19	32.81	304.21	272.38	N/A	MAS = 10.00 (m)	0.00	0.00					Surface	
305.19	32.81	304.21	272.38	N/A	MAS = 10.00 (m)	23.00	23.00					WRP	
305.19	32.81	302.32	272.38	161.04	MAS = 10.00 (m)	250.00	250.00					MinPts	
305.35	32.81	302.19	272.54	139.71	MAS = 10.00 (m)	280.00	280.00					MINPT-O-EQU	
543.09	32.81	528.46	510.28	39.74	MAS = 10.00 (m)	1420.00	1387.74					MinPt-O-SF	
2003.90	54.47	1967.26	1949.43	56.17	OSF1.50	4680.00	4300.46					MinPt-O-SF	
3686.55	682.57	3231.18	3003.98	8.11	OSF1.50	17780.00	7279.00					MinPt-CtCt	
3686.61	682.79	3231.05	3003.82	8.11	OSF1.50	17800.00	7279.00					MINPT-O-EQU	
3686.73	682.94	3231.11	3003.79	8.11	OSF1.50	17815.72	7279.00					MinPts	

Jordan 34-9 Blind 0' to 7970' - PA (Def Survey) Pass

461.29	32.81	459.48	428.48	N/A	MAS = 10.00 (m)	0.00	0.00					Surface	
460.96	32.81	459.11	428.15	10722.49	MAS = 10.00 (m)	10.00	10.00					MinPt-O-SF	
460.85	32.81	458.98	428.05	7698.75	MAS = 10.00 (m)	23.00	23.00					WRP	
460.85	32.81	451.73	428.05	62.80	MAS = 10.00 (m)	250.00	250.00					MinPts	
463.36	32.81	449.39	430.55	37.99	MAS = 10.00 (m)	370.00	369.96					MINPT-O-EQU	
812.83	96.69	747.77	716.14	12.82	OSF1.50	1690.00	1630.95					MinPt-O-SF	
862.32	102.40	793.51	759.92	12.81	OSF1.50	1800.00	1729.16					MinPt-O-SF	
3379.61	405.30	3108.87	2974.30	12.55	OSF1.50	7390.00	6719.82					MinPt-O-SF	
10981.33	454.39	10677.86	10526.93	36.37	OSF1.50	17815.72	7279.00					TD	

Jordan 34-3 Blind 0' to 8008' - PR (Def Survey) Pass

1195.57	32.81	1193.75	1162.76	N/A	MAS = 10.00 (m)	0.00	0.00					Surface	
1194.81	32.81	1192.89	1162.00	11213.10	MAS = 10.00 (m)	23.00	23.00					MinPt-O-SF	
1088.91	115.17	1011.60	973.75	14.36	OSF1.50	2000.00	1907.72					MinPt-CtCt	
1092.75	126.26	1008.04	966.49	13.13	OSF1.50	2200.00	2086.29					MINPT-O-EQU	
1097.44	131.83	1009.02	965.61	12.62	OSF1.50	2300.00	2175.57					MinPt-O-ADP	
1630.12	262.43	1454.63	1367.69	9.37	OSF1.50	4690.00	4309.39					MinPt-O-SF	
11694.03	451.29	11392.64	11242.74	39.00	OSF1.50	17815.72	7279.00					TD	

HSR-Cherry Knolls 9-33 Blind 0' to 8251' - DA (Def Survey) Pass

1904.21	32.81	1902.40	1871.41	N/A	MAS = 10.00 (m)	0.00	0.00					Surface	
1904.09	32.81	1902.26	1871.29	101945.04	MAS = 10.00 (m)	10.00	10.00					MinPt-O-SF	
1904.02	32.81	1902.19	1871.21	159552.98	MAS = 10.00 (m)	23.00	23.00					WRP	
1904.01	32.81	1894.99	1871.20	263.79	MAS = 10.00 (m)	250.00	250.00					MinPts	
1906.37	32.81	1892.49	1873.56	157.81	MAS = 10.00 (m)	370.00	369.96					MINPT-O-EQU	
4950.76	425.04	4666.87	4525.72	17.53	OSF1.50	7790.00	7043.95					MinPt-O-SF	
12191.92	458.43	11885.76	11733.48	40.03	OSF1.50	17815.72	7279.00					TD	

Kallsen 14-10X Blind 0' to 8114' - PR (Def Survey) Pass

9625.26	32.81	9622.50	9592.46	10159.81	MAS = 10.00 (m)	0.00	0.00					Surface	
9625.26	32.81	9621.90	9592.46	6199.21	MAS = 10.00 (m)	23.00	23.00					WRP	
9555.63	203.76	9419.26	9351.87	70.89	OSF1.50	3470.00	3220.16					MinPt-CtCt	
9591.80	311.56	9383.56	9280.24	46.41	OSF1.50	5320.00	4871.86					MINPT-O-EQU	
9637.18	365.98	9392.66	9271.20	39.67	OSF1.50	6250.00	5702.18					MinPt-O-ADP	
2866.67	625.07	2449.43	2241.60	6.89	OSF1.50	17080.00	7279.00					MinPts	
2866.70	625.10	2449.43	2241.60	6.89	OSF1.50	17090.00	7279.00					MinPt-O-ADP	
2866.85	625.14	2449.55	2241.71	6.89	OSF1.50	17110.00	7279.00					MinPt-O-SF	
2960.07	618.15	2547.43	2341.92	7.20	OSF1.50	17815.72	7279.00					TD	

Kallsen 1-10 Blind 0' to 8290' - PR (Def Survey) Pass

6951.48	32.81	6948.57	6918.67	6289.84	MAS = 10.00 (m)	0.00	0.00					Surface	
6951.48	32.81	6947.96	6918.67	4064.20	MAS = 10.00 (m)	23.00	23.00					WRP	
6892.61	171.86	6777.51	6720.76	60.71	OSF1.50	2910.00	2720.18					MinPt-CtCt	
6918.17	248.16	6752.13	6670.01	42.08	OSF1.50	4230.00	3898.70					MINPT-O-EQU	
6951.17	287.75	6738.81	6663.43	36.43	OSF1.50	4910.00	4505.81					MinPt-O-ADP	
2887.93	545.60	2523.66	2342.33	7.96	OSF1.50	14400.00	7279.00					MinPt-CtCt	
2887.93	545.62	2523.65	2342.31	7.96	OSF1.50	14410.00	7279.00					MinPts	
2888.05	545.67	2523.74	2342.38	7.96	OSF1.50	14430.00	7279.00					MinPt-O-SF	
4470.57	500.40	4136.43	3970.17	13.44	OSF1.50	17815.72	7279.00					TD	

Kallsen 14-10 Blind 0' to 8244' - PA (Def Survey) Pass

9967.01	32.81	9963.99	9934.20	8231.79	MAS = 10.00 (m)	0.00	0.00					Surface	
9967.01	32.81	9963.38	9934.20	5487.86	MAS = 10.00 (m)	23.00	23.00					WRP	
9932.26	162.94	9823.10	9769.32	92.33	OSF1.50	2750.00	2577.33					MinPt-CtCt	
9969.34	273.48	9786.48	9695.85	54.99	OSF1.50	4860.00	4282.61					MINPT-O-EQU	
10017.03	330.73	9796.01	9686.30	45.65	OSF1.50	5640.00	5157.56					MinPt-O-ADP	
3222.21	636.86	2797.10	2585.35	7.60	OSF1.50	17430.00	7279.00					MinPt-CtCt	
3222.24	636.92	2797.09	2585.32	7.60	OSF1.50	17440.00	7279.00					MinPts	
3223.08	637.23	2797.72	2585.85	7.60	OSF1.50	17500.00	7279.00					MinPt-O-SF	
3245.79	637.10	2820.53	2608.70	7.66	OSF1.50	17815.72	7279.00					TD	

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status	
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major			
RMPCO-UPRR_Penrod 1 Blind 0' to 8112' - PA (Def Survey)														Pass
	5018.84	32.81	5016.90	4986.03	38171.91	MAS = 10.00 (m)	0.00	0.00					Surface	
	5018.84	32.81	5016.29	4986.03	6816.41	MAS = 10.00 (m)	23.00	23.00					WRP	
	5018.26	56.02	4980.31	4962.24	138.81	OSF1.50	910.00	904.18					MinPt-CtCt	
	5025.87	101.49	4957.60	4924.38	75.61	OSF1.50	1690.00	1630.95					MINPT-O-EOU	
	5034.74	117.25	4956.04	4917.49	65.28	OSF1.50	1980.00	1889.87					MINPT-O-EOU	
	5057.93	145.13	4960.64	4912.80	52.84	OSF1.50	2480.00	2336.27					MinPt-O-ADP	
	3548.85	497.00	3216.98	3051.85	10.74	OSF1.50	12460.00	7279.00					MinPt-CtCt	
	3548.88	497.10	3216.95	3051.78	10.74	OSF1.50	12480.00	7279.00					MinPts	
	3550.73	497.58	3218.48	3053.15	10.73	OSF1.50	12580.00	7279.00					MinPt-O-SF	
	6421.28	479.49	6101.09	5941.80	20.15	OSF1.50	17815.72	7279.00					TD	