

Westlake Chemicals (W1039)

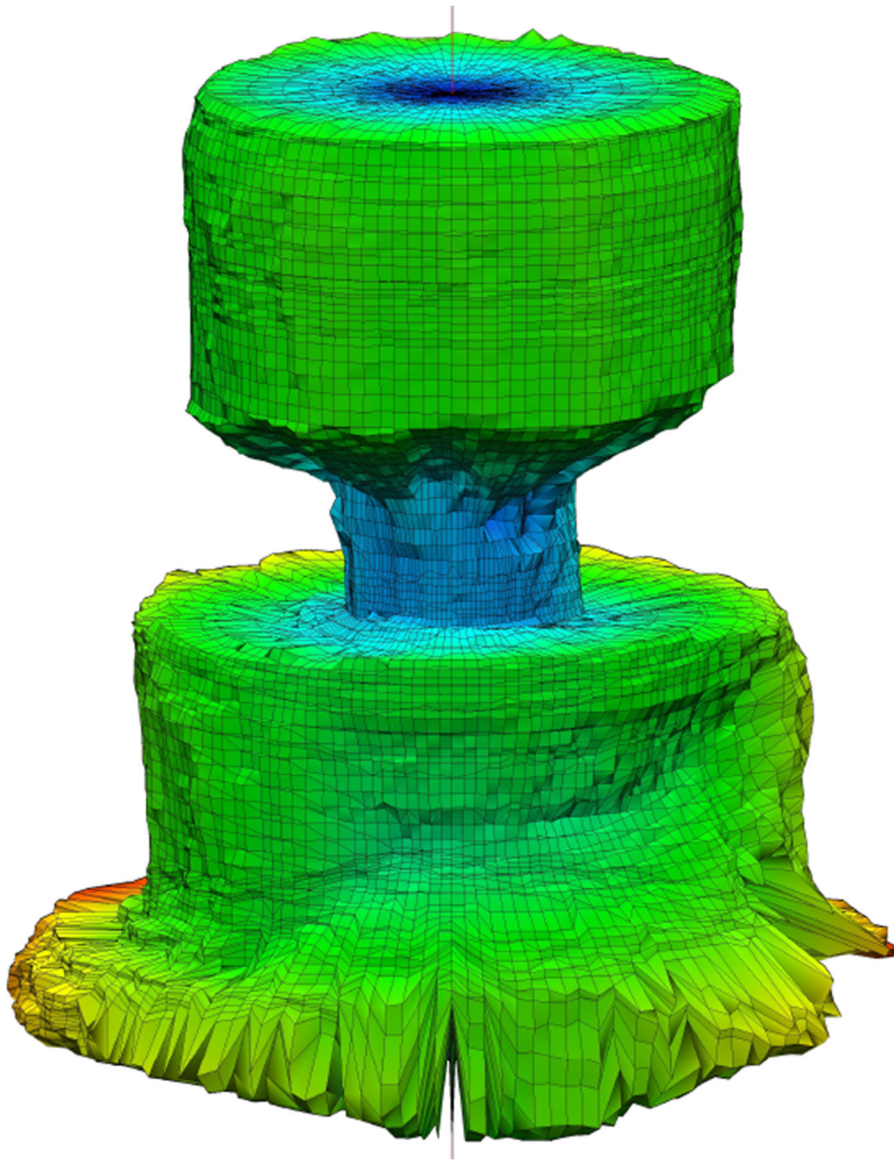
PPG No. 007B

Sulphur Mines (8759)

Calcasieu, Louisiana

January 07, 2025

Through Pipe Sonar Survey



Survey Conducted by: Richard Lawrence
Company Representative: Mr. Joseph Lovewell – Lonquist
Joseph@lonquist.com 713-559-9950

Serving the Storage Well Industry Since 1978

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Well Information

Company: Westlake Chemicals (W1039)
Well Name: PPG No. 007B
Field: Sulphur Mines (8759)
State: Louisiana
Parish: Calcasieu
API No.: 17-019-04012
Serial No.: 67270

Cemented Casing: 7-5/8 in. @ 2501 ft.
Hanging String: 5-1/2 in. @ 2607 ft.
Total Depth: 3100.1 ft.

Permanent Datum: B.H.F 0'
Depth Correction: -2.85 ft.

Total Volume BBL: 9,825,739.83
Total Volume Ft³: 55,167,435.09

Sonar Tool Orientation:

Sonar tool serial number SON-073-031 magnetic compass calibration performed on July 16, 2024.

The sonar survey was run using the fiber optic gyro which was set to the internal magnetic compass at the depth of 2640 feet. The orientation was checked on the surface after the survey to verify the orientation.

Operation No. 1 – Sonic Surveys / Flodim – 2022.03.11 – Through Pipe Sonar Survey
Operation No. 2 – Sonic Surveys / Flodim – 2022.11.02 – Through Pipe Sonar Survey
Operation No. 3 – Sonic Surveys / Flodim – 2023.01.11 – Through Pipe Sonar Survey
Orientation correction of -3° was made in November 2024 to align with the cavern
Operation No. 4 – Sonic Surveys / Flodim – 2023.02.01 – Through Pipe Sonar Survey
Orientation correction of -3° was made in November 2024 to align with the cavern
Operation No. 5 – Sonic Surveys / Flodim – 2023.03.16 – Through Pipe Sonar Survey
Operation No. 6 – Sonic Surveys / Flodim – 2023.07.26 – Through Pipe Sonar Survey
Operation No. 7 – Sonic Surveys / Flodim – 2023.11.02 – Through Pipe Sonar Survey
Operation No. 8 – Sonic Surveys / Flodim – 2024.04.15 – Through Pipe Sonar Survey
Operation No. 9 – Sonic Surveys / Flodim – 2024.07.08 – Through Pipe Sonar Survey
Operation No. 10 – Sonic Surveys / Flodim – 2025.01.07 – Through Pipe Sonar Survey

List of Acquired Measurements

Sonar survey from 2501 ft. to 3090 ft.

- Oriented circular horizontal sections from 2501 ft to 2502 ft, with a step of 1 feet.
- Oriented circular horizontal sections from 2502 ft to 2505 ft, with a step of 3 feet.
- Oriented circular horizontal sections from 2505 ft to 2510 ft, with a step of 5 feet.
- Oriented circular horizontal sections from 2510 ft to 2520 ft, with a step of 2 feet.
- Oriented circular horizontal sections from 2520 ft to 2600 ft, with a step of 10 feet.
- Oriented circular horizontal sections from 2600 ft to 2640 ft, with a step of 5 feet.
- Oriented circular horizontal sections from 2640 ft to 2800 ft, with a step of 10 feet.
- Oriented circular horizontal sections from 2800 ft to 2870 ft, with a step of 5 feet.
- Oriented circular horizontal sections from 2870 ft to 3000 ft, with a step of 10 feet.
- Oriented circular horizontal sections from 3000 ft to 3090 ft, with a step of 5 feet.
- Up-tilted oriented circular sections from 2615 ft with a tilt of 5°, 10°, 15°, 20°, 25°, 30°, 35°, 40°, 45°, 50°, 55°, 60°, 65°, 70°, 75°, 80°, 85° with respect to the horizontal.
- Down-tilted oriented circular sections from 2615 ft with a tilt of -60°, -55°, -50°, -45°, -40°, -35°, -30°, -25° with respect to the horizontal.
- Down-tilted oriented circular sections from 2900 ft with a tilt of -92°, -63°, -60°, -57°, -54°, -51°, -48°, -45°, -42°, -39°, -36°, -35°, -34°, -33°, -30°, -29°, -28°, -27°, -26° with respect to the horizontal.
- Up-tilted oriented circular sections from 2920 ft with a tilt of 10°, 15°, 20°, 25°, 30°, 35°, 40°, 45°, 50°, 55°, 60°, 65°, 70°, 75°, 80°, 85° with respect to the horizontal.
- Down-tilted oriented circular sections from 3035 ft with a tilt of -87°, -84°, -81°, -78°, -75°, -72°, -69°, -66°, -63°, -60°, -57°, -54°, -51°, -48°, -45°, -42°, -39°, -36°, -33°, -30°, -27°, -24°, -21°, -18°, -15°, -12°, -9°, -6°, -5°, -4°, -3°, -2°, -1° with respect to the horizontal.
- Up-tilted oriented circular sections from 3080 ft with a tilt of 3°, 4°, 7°, 10°, 13°, 16°, 19°, 22°, 25°, 28°, 31°, 34°, 37°, 40°, 43°, 46°, 49°, 52°, 55°, 58° with respect to the horizontal.
- 1 complimentary measurement to determine the cavity floor depth.

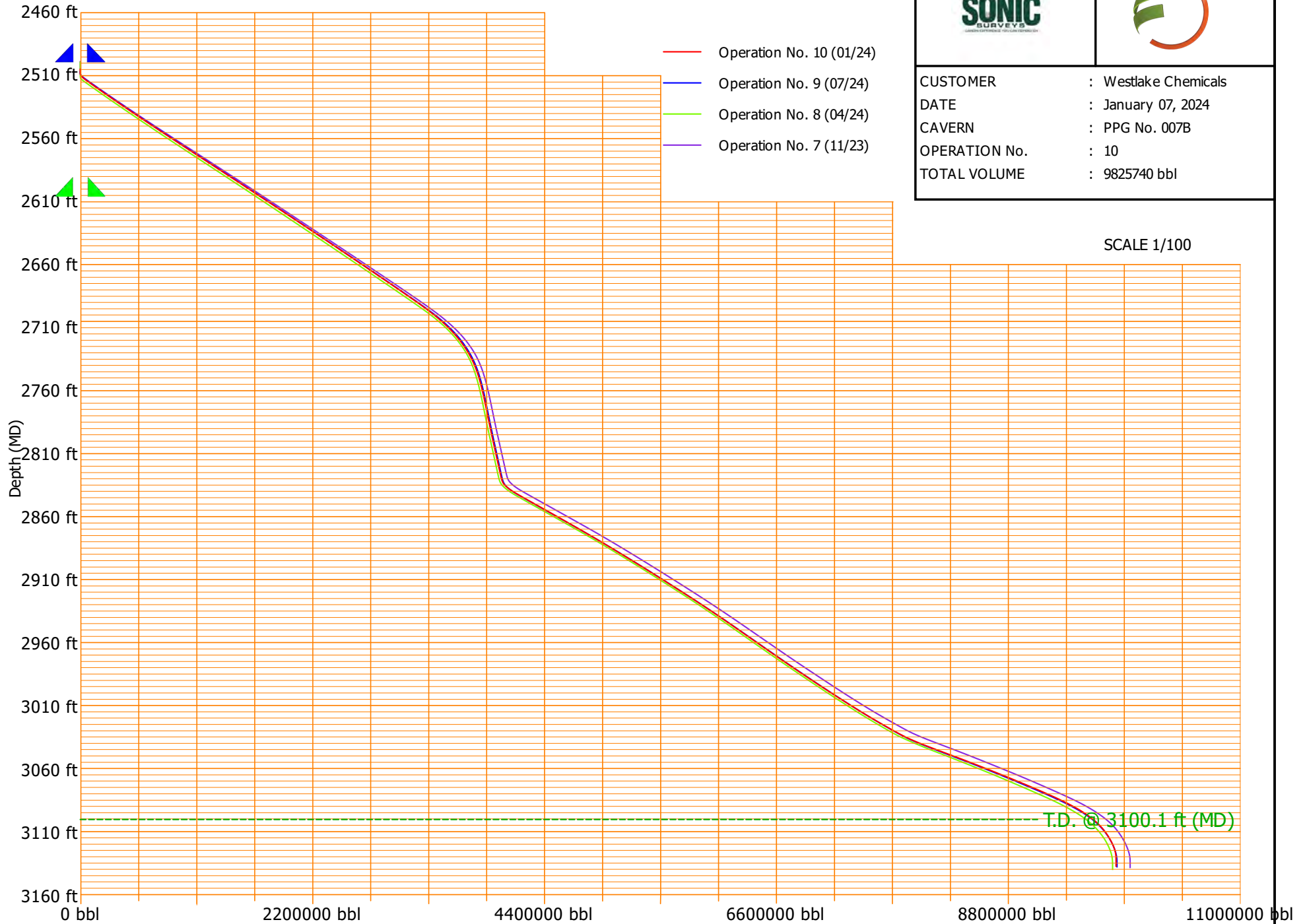
TOTAL VOLUME (bbl) VERSUS DEPTH (ft)

SONIC
SURVEYS



CUSTOMER	: Westlake Chemicals
DATE	: January 07, 2024
CAVERN	: PPG No. 007B
OPERATION No.	: 10
TOTAL VOLUME	: 9825740 bbl

SCALE 1/100



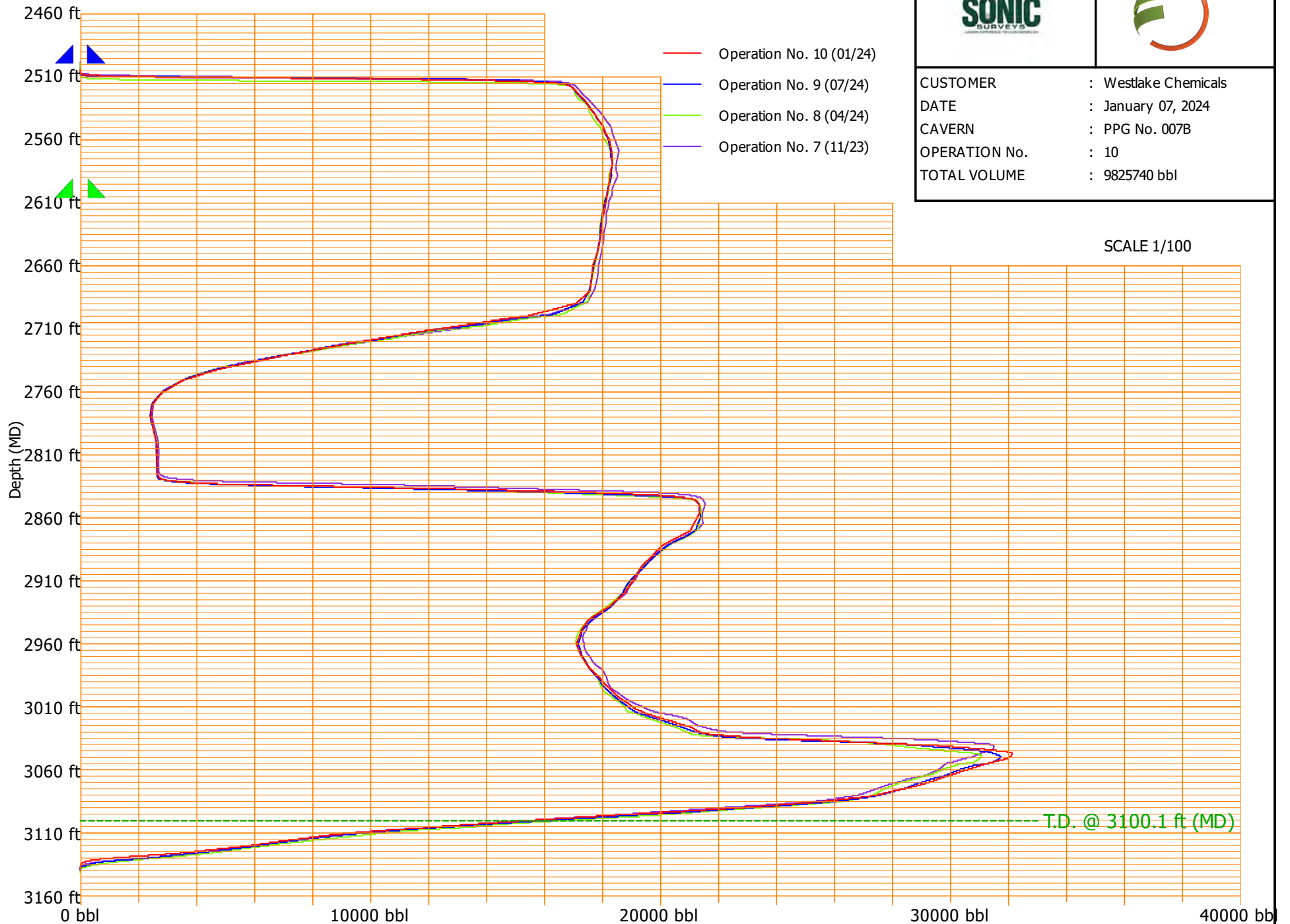
PARTIAL VOLUME (bbl) VERSUS DEPTH EACH 1 ft

SONIC
SURVEYS



CUSTOMER	: Westlake Chemicals
DATE	: January 07, 2024
CAVERN	: PPG No. 007B
OPERATION No.	: 10
TOTAL VOLUME	: 9825740 bbl

SCALE 1/100



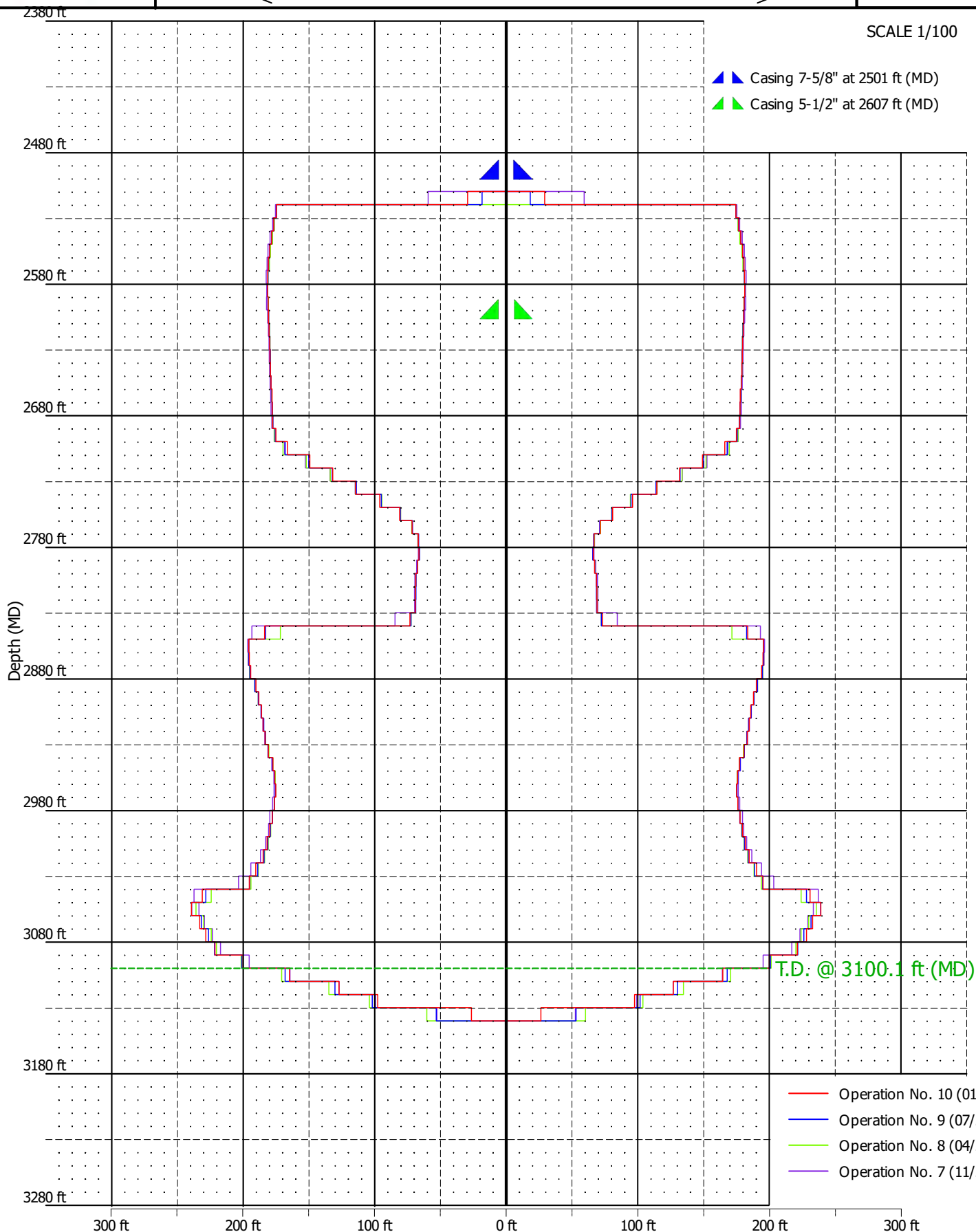


CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



MEAN RADIUS



		CUSTOMER : Westlake Chemicals				CAVERN : PPG No. 007B					
		DATE : January 07, 2024				OPERATION No. : 10					
		MAIN CHARACTERISTICS DATASHEET									
Depth	Cumulated Volume	Volume Section	Section Area	Mean Radius	Mean Diameter	Min Radius	Max Radius	Max Radius Orientation	Min Diameter	Max Diameter	Max Diam. Orientation
(ft)	(bbl)	(bbl)	(ft²)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(°)
2615.00	1848788.80	18103.52	-	-	-	-	-	-	-	-	-
2616.00	1866882.83	18094.03	-	-	-	-	-	-	-	-	-
2617.00	1884965.28	18082.45	-	-	-	-	-	-	-	-	-
2618.00	1903035.81	18070.53	-	-	-	-	-	-	-	-	-
2619.00	1921094.09	18058.27	-	-	-	-	-	-	-	-	-
2620.00	1939139.77	18045.68	101303.99	179.57	359.14	153.71	220.86	162.00	324.04	393.16	162.00
2621.00	1957174.90	18035.13	-	-	-	-	-	-	-	-	-
2622.00	1975201.14	18026.24	-	-	-	-	-	-	-	-	-
2623.00	1993218.52	18017.37	-	-	-	-	-	-	-	-	-
2624.00	2011227.04	18008.52	-	-	-	-	-	-	-	-	-
2625.00	2029227.15	18000.11	-	-	-	-	-	-	-	-	-
2626.00	2047222.07	17994.92	-	-	-	-	-	-	-	-	-
2627.00	2065213.02	17990.95	-	-	-	-	-	-	-	-	-
2628.00	2083200.67	17987.65	-	-	-	-	-	-	-	-	-
2629.00	2101185.67	17985.00	-	-	-	-	-	-	-	-	-
2630.00	2119168.69	17983.02	100965.07	179.27	358.54	153.43	220.82	165.00	324.58	392.54	165.00
2631.00	2137147.97	17979.28	-	-	-	-	-	-	-	-	-
2632.00	2155122.43	17974.45	-	-	-	-	-	-	-	-	-
2633.00	2173092.29	17969.87	-	-	-	-	-	-	-	-	-
2634.00	2191057.81	17965.52	-	-	-	-	-	-	-	-	-
2635.00	2209019.10	17961.29	-	-	-	-	-	-	-	-	-
2636.00	2226974.22	17955.12	-	-	-	-	-	-	-	-	-
2637.00	2244922.65	17948.43	-	-	-	-	-	-	-	-	-
2638.00	2262864.46	17941.82	-	-	-	-	-	-	-	-	-
2639.00	2280799.75	17935.29	-	-	-	-	-	-	-	-	-
2640.00	2298728.59	17928.84	100650.97	178.99	357.98	153.15	219.82	162.00	324.52	392.13	162.00
2641.00	2316649.91	17921.32	-	-	-	-	-	-	-	-	-
2642.00	2334562.83	17912.92	-	-	-	-	-	-	-	-	-
2643.00	2352467.05	17904.23	-	-	-	-	-	-	-	-	-
2644.00	2370362.29	17895.24	-	-	-	-	-	-	-	-	-
2645.00	2388248.26	17885.97	-	-	-	-	-	-	-	-	-
2646.00	2406124.66	17876.40	-	-	-	-	-	-	-	-	-
2647.00	2423991.20	17866.54	-	-	-	-	-	-	-	-	-
2648.00	2441847.58	17856.39	-	-	-	-	-	-	-	-	-
2649.00	2459693.53	17845.95	-	-	-	-	-	-	-	-	-
2650.00	2477528.74	17835.21	100130.63	178.53	357.06	152.99	219.63	162.00	323.25	391.37	162.00

		CUSTOMER : Westlake Chemicals				CAVERN : PPG No. 007B					
		DATE : January 07, 2024				OPERATION No. : 10					
		MAIN CHARACTERISTICS DATASHEET									
Depth	Cumulated Volume	Volume Section	Section Area	Mean Radius	Mean Diameter	Min Radius	Max Radius	Max Radius Orientation	Min Diameter	Max Diameter	Max Diam. Orientation
(ft)	(bbl)	(bbl)	(ft²)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(°)
2759.00	3809415.78	2958.95	-	-	-	-	-	-	-	-	-
2760.00	3812293.40	2877.61	16027.58	71.43	142.85	41.25	101.08	189.00	109.90	165.89	15.00
2761.00	3815115.15	2821.75	-	-	-	-	-	-	-	-	-
2762.00	3817895.34	2780.19	-	-	-	-	-	-	-	-	-
2763.00	3820637.19	2741.85	-	-	-	-	-	-	-	-	-
2764.00	3823343.29	2706.10	-	-	-	-	-	-	-	-	-
2765.00	3826013.47	2670.18	-	-	-	-	-	-	-	-	-
2766.00	3828647.67	2634.19	-	-	-	-	-	-	-	-	-
2767.00	3831247.52	2599.85	-	-	-	-	-	-	-	-	-
2768.00	3833812.95	2565.43	-	-	-	-	-	-	-	-	-
2769.00	3836344.40	2531.45	-	-	-	-	-	-	-	-	-
2770.00	3838842.14	2497.74	13980.74	66.71	133.42	35.30	86.62	180.00	100.93	148.43	27.00
2771.00	3841323.42	2481.28	-	-	-	-	-	-	-	-	-
2772.00	3843801.05	2477.63	-	-	-	-	-	-	-	-	-
2773.00	3846274.93	2473.88	-	-	-	-	-	-	-	-	-
2774.00	3848744.80	2469.88	-	-	-	-	-	-	-	-	-
2775.00	3851210.67	2465.87	-	-	-	-	-	-	-	-	-
2776.00	3853672.79	2462.12	-	-	-	-	-	-	-	-	-
2777.00	3856131.49	2458.69	-	-	-	-	-	-	-	-	-
2778.00	3858587.13	2455.64	-	-	-	-	-	-	-	-	-
2779.00	3861040.05	2452.92	-	-	-	-	-	-	-	-	-
2780.00	3863490.76	2450.71	13754.41	66.17	132.34	46.80	86.39	228.00	112.04	146.29	21.00
2781.00	3865945.21	2454.46	-	-	-	-	-	-	-	-	-
2782.00	3868406.19	2460.97	-	-	-	-	-	-	-	-	-
2783.00	3870874.05	2467.86	-	-	-	-	-	-	-	-	-
2784.00	3873349.06	2475.01	-	-	-	-	-	-	-	-	-
2785.00	3875831.24	2482.18	-	-	-	-	-	-	-	-	-
2786.00	3878320.74	2489.50	-	-	-	-	-	-	-	-	-
2787.00	3880817.81	2497.07	-	-	-	-	-	-	-	-	-
2788.00	3883322.75	2504.95	-	-	-	-	-	-	-	-	-
2789.00	3885835.84	2513.09	-	-	-	-	-	-	-	-	-
2790.00	3888357.33	2521.49	14169.70	67.16	134.32	52.48	87.30	228.00	119.69	144.22	69.00
2791.00	3890887.30	2529.97	-	-	-	-	-	-	-	-	-
2792.00	3893425.92	2538.63	-	-	-	-	-	-	-	-	-
2793.00	3895973.43	2547.51	-	-	-	-	-	-	-	-	-
2794.00	3898530.43	2557.00	-	-	-	-	-	-	-	-	-

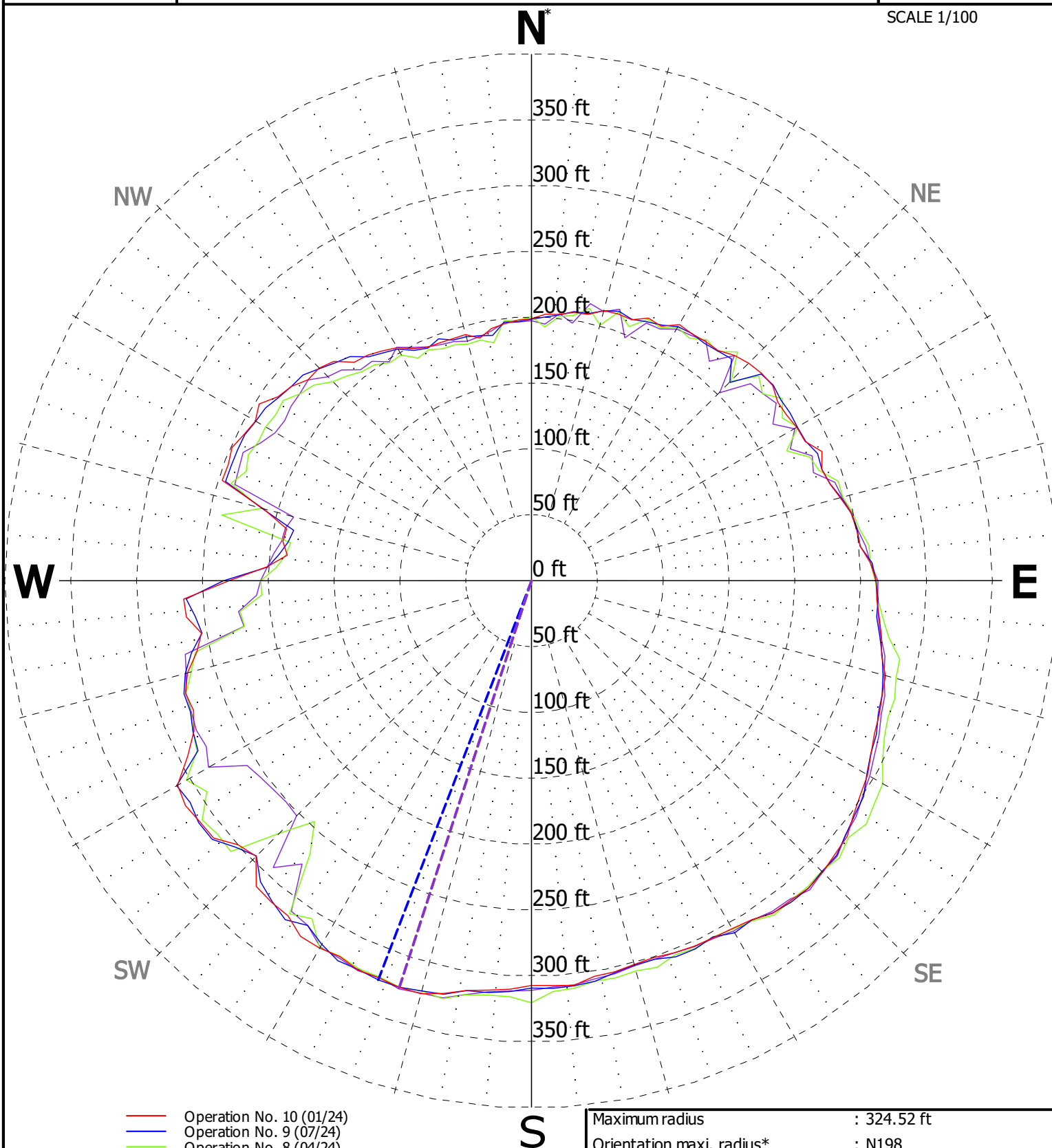
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		DATE : January 07, 2024				OPERATION No. : 10						
		MAIN CHARACTERISTICS DATASHEET										
Depth	Cumulated Volume	Volume Section	Section Area	Mean Radius	Mean Diameter	Min Radius	Max Radius	Max Radius Orientation	Min Diameter	Max Diameter	Max Diam. Orientation	
(ft)	(bbl)	(bbl)	(ft²)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(°)	
2795.00	3901098.63	2568.20	-	-	-	-	-	-	-	-	-	
2796.00	3903679.24	2580.61	-	-	-	-	-	-	-	-	-	
2797.00	3906273.46	2594.22	-	-	-	-	-	-	-	-	-	
2798.00	3908880.86	2607.39	-	-	-	-	-	-	-	-	-	
2799.00	3911500.18	2619.32	-	-	-	-	-	-	-	-	-	
2800.00	3914130.12	2629.94	14777.71	68.58	137.17	52.76	91.86	234.00	119.83	147.95	0.00	
2801.00	3916768.20	2638.08	-	-	-	-	-	-	-	-	-	
2802.00	3919409.06	2640.86	-	-	-	-	-	-	-	-	-	
2803.00	3922053.02	2643.96	-	-	-	-	-	-	-	-	-	
2804.00	3924700.18	2647.16	-	-	-	-	-	-	-	-	-	
2805.00	3927350.60	2650.41	-	-	-	-	-	-	-	-	-	
2806.00	3930002.78	2652.19	-	-	-	-	-	-	-	-	-	
2807.00	3932655.42	2652.64	-	-	-	-	-	-	-	-	-	
2808.00	3935308.14	2652.72	-	-	-	-	-	-	-	-	-	
2809.00	3937960.75	2652.61	-	-	-	-	-	-	-	-	-	
2810.00	3940613.37	2652.62	14893.21	68.85	137.70	52.79	90.72	231.00	119.86	146.89	60.00	
2811.00	3943267.06	2653.69	-	-	-	-	-	-	-	-	-	
2812.00	3945922.93	2655.87	-	-	-	-	-	-	-	-	-	
2813.00	3948580.81	2657.88	-	-	-	-	-	-	-	-	-	
2814.00	3951240.64	2659.83	-	-	-	-	-	-	-	-	-	
2815.00	3953902.45	2661.81	-	-	-	-	-	-	-	-	-	
2816.00	3956564.96	2662.51	-	-	-	-	-	-	-	-	-	
2817.00	3959226.73	2661.78	-	-	-	-	-	-	-	-	-	
2818.00	3961888.17	2661.44	-	-	-	-	-	-	-	-	-	
2819.00	3964549.50	2661.34	-	-	-	-	-	-	-	-	-	
2820.00	3967211.01	2661.50	14944.73	68.97	137.94	53.05	91.17	231.00	119.85	146.92	15.00	
2821.00	3969873.46	2662.45	-	-	-	-	-	-	-	-	-	
2822.00	3972536.83	2663.37	-	-	-	-	-	-	-	-	-	
2823.00	3975200.88	2664.05	-	-	-	-	-	-	-	-	-	
2824.00	3977865.35	2664.47	-	-	-	-	-	-	-	-	-	
2825.00	3980530.27	2664.92	-	-	-	-	-	-	-	-	-	
2826.00	3983206.31	2676.04	-	-	-	-	-	-	-	-	-	
2827.00	3985903.45	2697.14	-	-	-	-	-	-	-	-	-	
2828.00	3988628.33	2724.89	-	-	-	-	-	-	-	-	-	
2829.00	3991418.01	2789.68	-	-	-	-	-	-	-	-	-	
2830.00	3994381.96	2963.94	16770.38	73.06	146.13	52.48	94.22	324.00	119.55	175.11	6.00	

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		DATE : January 07, 2024				OPERATION No. : 10					
		MAIN CHARACTERISTICS DATASHEET									
Depth	Cumulated Volume	Volume Section	Section Area	Mean Radius	Mean Diameter	Min Radius	Max Radius	Max Radius Orientation	Min Diameter	Max Diameter	Max Diam. Orientation
(ft)	(bbl)	(bbl)	(ft²)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(°)
2975.00	6675505.40	17441.84	-	-	-	-	-	-	-	-	-
2976.00	6692977.01	17471.61	-	-	-	-	-	-	-	-	-
2977.00	6710482.17	17505.17	-	-	-	-	-	-	-	-	-
2978.00	6728024.54	17542.37	-	-	-	-	-	-	-	-	-
2979.00	6745608.37	17583.83	-	-	-	-	-	-	-	-	-
2980.00	6763233.28	17624.91	99034.54	177.55	355.10	126.64	242.87	231.00	304.51	403.71	54.00
2981.00	6780902.86	17669.58	-	-	-	-	-	-	-	-	-
2982.00	6798614.75	17711.89	-	-	-	-	-	-	-	-	-
2983.00	6816371.49	17756.74	-	-	-	-	-	-	-	-	-
2984.00	6834177.83	17806.34	-	-	-	-	-	-	-	-	-
2985.00	6852031.11	17853.28	-	-	-	-	-	-	-	-	-
2986.00	6869928.59	17897.48	-	-	-	-	-	-	-	-	-
2987.00	6887868.27	17939.67	-	-	-	-	-	-	-	-	-
2988.00	6905847.68	17979.41	-	-	-	-	-	-	-	-	-
2989.00	6923858.92	18011.24	-	-	-	-	-	-	-	-	-
2990.00	6941898.10	18039.17	101160.26	179.44	358.89	137.78	244.00	231.00	312.90	404.32	54.00
2991.00	6959973.21	18075.12	-	-	-	-	-	-	-	-	-
2992.00	6978095.08	18121.87	-	-	-	-	-	-	-	-	-
2993.00	6996267.71	18172.63	-	-	-	-	-	-	-	-	-
2994.00	7014489.69	18221.98	-	-	-	-	-	-	-	-	-
2995.00	7032755.48	18265.79	-	-	-	-	-	-	-	-	-
2996.00	7051066.02	18310.55	-	-	-	-	-	-	-	-	-
2997.00	7069421.25	18355.22	-	-	-	-	-	-	-	-	-
2998.00	7087820.53	18399.29	-	-	-	-	-	-	-	-	-
2999.00	7106262.21	18441.68	-	-	-	-	-	-	-	-	-
3000.00	7124742.89	18480.67	103536.47	181.54	363.08	144.32	243.86	231.00	327.13	409.98	57.00
3001.00	7143268.68	18525.79	-	-	-	-	-	-	-	-	-
3002.00	7161853.06	18584.38	-	-	-	-	-	-	-	-	-
3003.00	7180501.22	18648.16	-	-	-	-	-	-	-	-	-
3004.00	7199213.34	18712.12	-	-	-	-	-	-	-	-	-
3005.00	7217996.08	18782.75	-	-	-	-	-	-	-	-	-
3006.00	7236847.51	18851.42	-	-	-	-	-	-	-	-	-
3007.00	7255759.81	18912.30	-	-	-	-	-	-	-	-	-
3008.00	7274731.71	18971.90	-	-	-	-	-	-	-	-	-
3009.00	7293757.98	19026.27	-	-	-	-	-	-	-	-	-
3010.00	7312834.37	19076.39	106939.56	184.50	369.00	126.49	244.04	237.00	319.24	412.40	57.00



MAXIMUM EXTENSION

SCALE 1/100



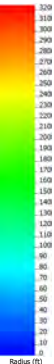
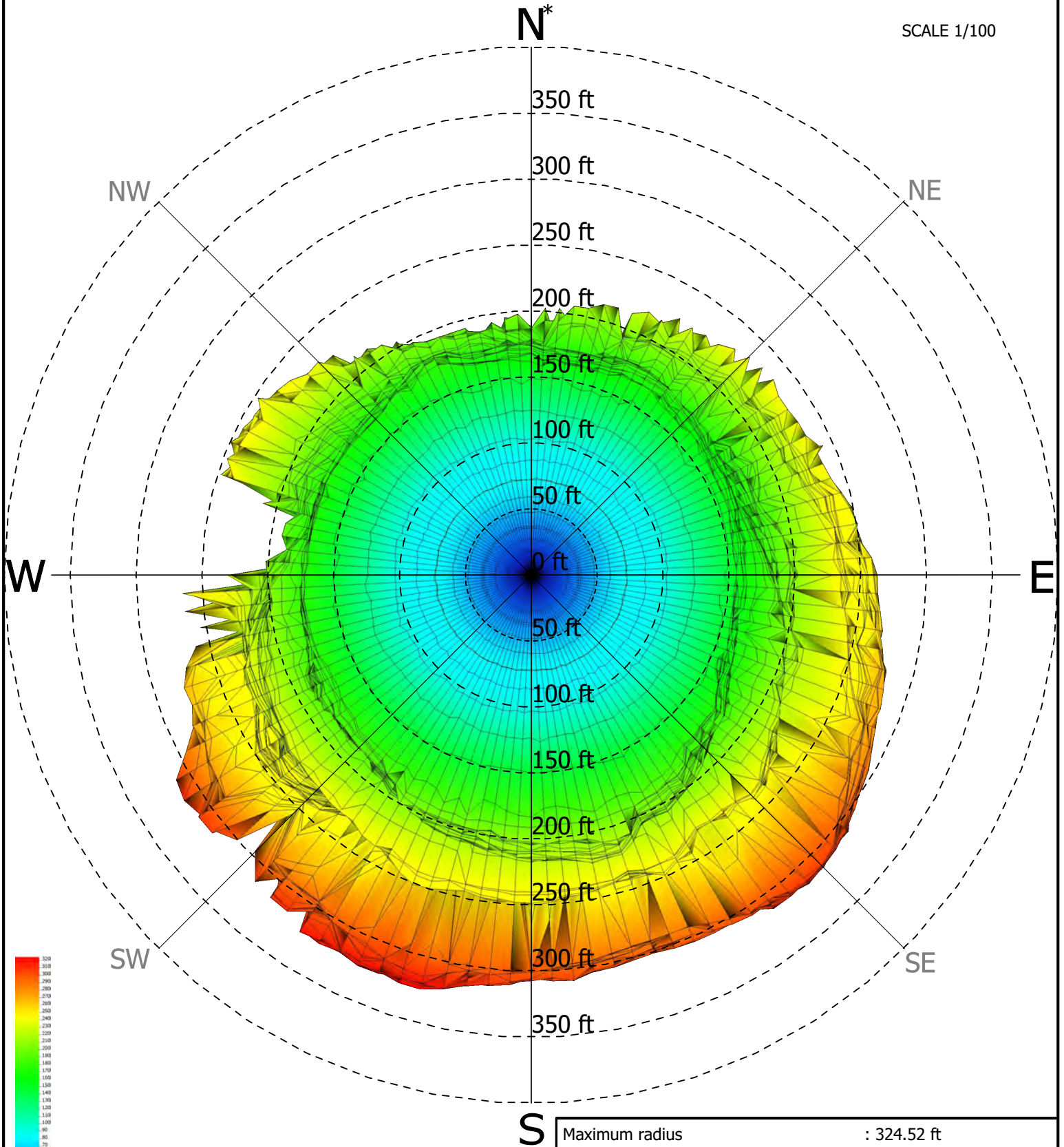
— Operation No. 10 (01/24)
— Operation No. 9 (07/24)
— Operation No. 8 (04/24)
— Operation No. 7 (11/23)

Maximum radius : 324.52 ft
Orientation maxi. radius* : N198
Depth maxi. radius (MD) : 3080.1 ft
Surface : 217268.11 ft²
Max distance between points : 556.19 ft



VIEW FROM ABOVE

SCALE 1/100



*All sections are oriented to Magnetic North.

Magnetic Declination= 0.7°

Maximum radius	: 324.52 ft
Orientation maxi. radius*	: N198
Depth maxi. radius	: 3080.1 ft
Surface	: 217268.11 ft ²
Max distance between points	: 556.19 ft



CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



WALL RANGE VS BEARING

Bearing	0.0	3.0	6.0	9.0
0	199.0: 3098.44	202.7: 3081.97	203.3: 3102.81	206.3: 3085.23
12	206.8: 3085.65	212.3: 3090.62	213.0: 3091.26	212.3: 3090.65
24	218.3: 3096.01	216.9: 3075.12	224.6: 3081.34	223.6: 3080.53
36	224.6: 3081.34	225.0: 3081.67	230.3: 3085.94	233.4: 3088.51
48	235.2: 3089.93	235.6: 3090.22	231.0: 3086.51	231.0: 3086.49
60	232.6: 3087.87	233.1: 3088.21	237.4: 3071.99	235.9: 3071.78
72	238.0: 3055.25	242.8: 3063.08	248.0: 3073.70	249.7: 3060.67
84	250.1: 3081.21	257.6: 3075.22	261.6: 3082.67	262.4: 3083.19
96	265.4: 3078.47	268.9: 3080.86	271.6: 3077.44	278.1: 3075.17
108	280.0: 3063.85	282.8: 3064.14	285.0: 3084.52	289.2: 3095.90
120	294.6: 3090.77	297.8: 3092.85	302.2: 3080.10	308.3: 3061.39
132	310.1: 3083.53	312.7: 3075.17	314.1: 3084.16	312.4: 3041.71
144	311.9: 3050.77	306.8: 3070.11	304.9: 3070.11	304.1: 3085.27
156	303.6: 3082.51	302.5: 3080.10	300.7: 3098.34	301.5: 3098.51
168	303.5: 3098.93	304.1: 3085.27	308.8: 3070.11	307.7: 3083.15
180	307.2: 3075.17	310.5: 3083.59	312.5: 3083.91	314.9: 3084.29
192	320.2: 3085.14	324.5: 3080.10	324.5: 3080.10	323.0: 3060.17
204	323.5: 3068.42	320.2: 3070.11	321.9: 3068.25	321.9: 3068.25
216	314.4: 3073.72	313.8: 3073.41	312.2: 3072.53	295.7: 3070.17
228	299.6: 3065.52	310.4: 3064.51	311.2: 3064.93	313.2: 3066.00
240	310.1: 3064.37	292.8: 3061.78	280.4: 3048.57	274.7: 3051.75
252	276.1: 3039.98	270.3: 3043.86	259.7: 3048.18	253.6: 3040.05
264	263.4: 3039.50	264.3: 3040.01	227.4: 3010.36	201.2: 2970.01
276	186.4: 2968.15	191.0: 2992.65	190.1: 2992.17	210.3: 3011.30
288	246.8: 3065.96	246.5: 3041.78	248.8: 3073.68	244.8: 3077.36
300	242.1: 3068.99	246.5: 3059.54	237.8: 3072.22	234.5: 3063.66
312	228.2: 3084.23	228.2: 3059.28	224.2: 3080.99	213.6: 3038.17
324	211.7: 3053.29	208.1: 3045.18	204.3: 3103.82	197.8: 3077.61
336	194.1: 3115.01	193.6: 3073.80	193.3: 3114.14	193.5: 3114.43
348	188.4: 3052.04	194.0: 3093.44	196.2: 3117.35	198.1: 3097.61



CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



**Wall Range versus Depth
(N, NE, E, SE, S, SW, W, NW)**

DEPTH	TILT	N	NE	E	SE	S	SW	W	NW
2516.1	0	161.91	159.31	155.21	174.20	202.29	176.27	171.96	166.70
2518.1	0	168.27	158.94	154.84	174.94	203.43	177.54	173.45	166.70
2519.9	0	168.68	161.54	154.10	175.69	204.18	178.72	173.45	167.63
2530.2	0	170.96	166.38	154.67	180.90	208.36	184.36	172.34	170.71
2540.0	0	173.87	168.28	160.09	180.57	209.24	182.49	171.64	171.38
2550.3	0	173.90	171.29	162.33	181.74	210.47	183.60	171.46	173.53
2560.2	0	175.77	173.32	161.96	182.11	214.95	183.60	171.46	173.53
2570.0	0	178.85	171.35	161.60	184.79	217.09	183.00	173.20	172.31
2579.9	0	177.98	170.23	161.47	183.32	216.12	183.91	172.59	172.31
2590.1	0	177.26	167.85	160.71	186.59	216.34	184.43	169.93	171.12
2599.9	0	176.22	167.55	158.92	186.59	215.29	183.32	171.08	172.01
2604.9	0	172.23	167.21	158.96	186.59	214.58	183.32	169.72	171.71
2608.1	0	172.09	169.52	159.14	187.25	213.97	184.27	169.42	171.70
2610.2	0	171.99	169.13	159.14	187.70	212.83	184.55	169.70	171.42
2615.1	-60	142.45	153.93	155.89	161.84	176.66	174.93	151.42	146.07
2615.1	-55	141.91	155.00	158.27	157.97	174.04	160.95	154.70	146.67
2615.1	-50	143.39	154.70	165.71	163.29	177.36	160.84	153.86	147.56
2615.1	-45	147.26	160.05	172.85	166.06	179.05	166.90	156.45	150.83
2615.1	-40	150.35	162.43	177.90	170.10	181.18	169.72	159.32	155.59
2615.1	-35	158.33	169.36	179.77	173.14	188.32	179.39	163.62	165.37
2615.1	-30	166.60	175.52	183.72	184.43	196.28	186.23	166.99	173.31
2615.1	-25	177.60	184.45	173.74	196.65	208.12	196.73	172.69	180.28
2615.1	0	171.57	171.42	158.62	187.98	214.26	184.83	169.04	171.71
2615.1	5	177.07	168.11	159.22	187.26	215.15	184.08	171.71	172.62
2615.1	10	180.34	172.01	163.36	186.95	219.31	186.81	173.85	173.20
2615.1	15	183.61	177.37	167.15	190.03	220.80	189.58	178.85	178.40
2615.1	20	185.18	182.62	172.35	193.08	222.40	194.62	181.83	184.50
2615.1	25	189.56	185.10	176.53	199.36	225.08	203.45	189.57	188.53
2615.1	30	194.03	187.48	178.06	199.51	210.99	200.94	198.03	192.61
2615.1	35	181.92	184.79	177.26	183.00	182.64	180.85	183.00	184.79
2615.1	40	162.91	162.19	160.11	161.47	160.11	160.11	161.11	160.03
2615.1	45	145.83	146.72	143.53	146.92	144.64	148.21	145.32	148.51
2615.1	50	135.42	136.31	133.84	135.72	134.23	136.61	134.53	133.63
2615.1	55	125.90	125.30	124.11	125.90	123.89	125.60	127.09	125.30
2615.1	60	118.05	116.97	118.76	119.95	117.27	117.87	117.87	118.16
2615.1	65	111.92	112.51	111.62	111.92	112.21	112.21	112.51	112.21
2615.1	70	107.45	108.05	108.05	107.16	108.94	107.45	107.45	107.75
2615.1	75	103.59	104.18	104.18	103.88	105.67	104.78	104.18	104.78



CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



**Wall Range versus Depth
(N, NE, E, SE, S, SW, W, NW)**

DEPTH	TILT	N	NE	E	SE	S	SW	W	NW
2615.1	80	101.50	101.80	101.50	101.50	102.10	101.50	102.10	101.50
2615.1	85	100.31	100.61	100.61	100.31	100.31	100.31	100.31	100.31
2620.2	0	171.13	170.84	158.85	188.27	213.94	185.12	169.42	171.13
2624.8	0	171.42	168.65	158.33	186.59	213.66	183.32	168.74	170.82
2630.1	0	171.13	170.27	158.28	186.27	212.83	183.13	169.13	170.84
2634.9	0	171.12	169.63	158.33	187.36	213.07	184.09	168.74	170.82
2640.1	0	169.70	167.99	158.28	188.55	212.77	185.13	169.70	170.56
2650.2	0	170.24	167.27	157.74	186.01	212.19	184.82	168.75	170.54
2660.2	0	169.65	166.67	157.74	183.33	213.68	182.74	168.46	169.94
2670.2	0	169.35	166.37	157.45	185.41	211.60	181.62	169.65	169.35
2680.4	0	169.05	165.18	157.45	186.90	211.60	182.14	168.75	169.35
2690.1	0	161.53	165.48	157.45	183.63	211.30	182.15	156.50	165.78
2700.2	0	142.53	156.53	157.48	176.99	194.38	178.06	142.89	152.50
2710.0	0	121.17	144.32	156.58	147.66	174.14	155.99	133.07	135.75
2720.2	0	102.59	124.02	142.89	137.50	159.30	145.76	115.97	112.54
2730.1	0	83.68	105.56	134.27	121.77	141.41	120.99	103.02	89.41
2740.1	0	70.29	89.93	109.87	106.00	129.51	99.11	90.49	74.75
2750.3	0	66.76	65.76	75.39	81.94	116.05	92.07	71.22	61.10
2760.1	0	56.34	58.12	70.43	70.03	98.09	92.07	65.27	45.32
2770.2	0	58.12	56.93	68.25	62.89	86.41	84.62	61.99	44.42
2780.1	0	59.61	56.04	66.76	63.48	79.56	83.43	62.89	48.59
2790.0	0	59.61	52.47	64.08	65.27	80.75	85.52	66.76	58.94
2800.5	0	60.22	52.77	64.69	65.58	87.92	88.21	65.58	54.26
2805.2	0	59.32	53.07	65.28	65.88	87.92	88.51	65.88	53.96
2810.3	0	58.13	52.77	64.69	65.88	87.32	90.60	66.47	54.26
2815.3	0	57.54	52.47	64.39	66.47	87.32	92.09	66.17	53.96
2820.2	0	57.84	53.07	64.39	66.47	87.32	89.11	68.56	54.26
2825.2	0	58.43	53.07	64.39	66.77	87.02	90.60	68.26	53.96
2830.1	0	85.36	61.47	64.09	67.37	87.02	90.89	68.85	53.96
2835.4	0	101.91	78.39	72.73	67.66	86.72	91.19	70.05	158.80
2840.1	0	152.25	84.94	84.34	124.29	87.62	92.38	190.78	158.80
2845.2	0	152.25	148.97	179.07	142.97	248.26	227.37	196.03	158.80
2850.0	0	152.25	149.57	182.03	237.72	249.02	227.03	184.41	159.13
2855.3	0	152.25	151.35	184.12	237.09	248.15	224.87	185.31	163.86
2860.5	0	152.25	150.76	183.48	230.87	246.66	220.22	185.31	162.67
2870.0	0	151.06	151.65	182.33	226.40	244.28	221.34	181.14	162.08
2880.0	0	145.10	154.03	185.31	217.47	239.24	222.72	171.01	154.93
2890.2	0	137.36	156.42	187.39	214.81	235.65	221.94	169.71	151.95



CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



**Wall Range versus Depth
(N, NE, E, SE, S, SW, W, NW)**

DEPTH	TILT	N	NE	E	SE	S	SW	W	NW
2899.9	-63	160.79	153.16	231.56	257.54	239.79	205.61	196.42	161.31
2899.9	-60	153.63	170.75	236.28	267.01	248.94	225.71	198.54	157.42
2899.9	-57	270.87	193.46	241.00	275.79	255.15	232.50	190.11	154.90
2899.9	-54	277.95	219.12	241.36	282.67	266.96	237.85	175.17	161.69
2899.9	-51	281.10	253.58	248.49	295.89	284.63	242.57	183.98	262.43
2899.9	-48	287.39	259.85	256.76	306.65	305.37	241.78	188.72	271.27
2899.9	-45	280.70	280.71	290.20	322.44	321.59	236.24	191.46	280.70
2899.9	-42	246.10	288.77	295.64	332.20	328.27	243.64	184.10	286.88
2899.9	-39	240.08	299.69	313.73	338.17	336.81	249.36	191.50	288.37
2899.9	-36	229.07	262.64	317.55	345.22	344.96	255.33	197.83	279.56
2899.9	-35	211.86	187.18	318.71	349.22	347.82	255.33	199.19	277.93
2899.9	-34	187.83	184.12	301.16	353.42	221.17	280.23	199.19	262.64
2899.9	-33	174.76	181.28	236.43	355.46	217.75	333.07	199.19	251.71
2899.9	-30	149.61	176.43	209.13	197.65	212.32	340.72	198.74	207.49
2899.9	-29	143.84	175.65	206.40	197.38	212.32	277.38	201.91	188.96
2899.9	-28	139.78	173.39	204.93	194.66	211.41	273.07	200.10	172.02
2899.9	-27	136.67	171.69	203.04	194.66	208.25	268.10	200.10	167.32
2899.9	-26	134.07	169.89	202.36	191.04	207.34	263.96	252.26	163.23
2900.1	0	136.17	155.82	186.20	211.58	233.54	224.16	170.42	146.92
2910.1	0	132.91	156.15	185.34	208.75	230.30	224.66	174.62	139.17
2919.9	10	138.70	158.61	188.44	220.37	244.12	226.02	172.23	152.94
2919.9	15	147.57	158.86	188.90	243.83	257.10	227.33	185.68	161.72
2919.9	20	161.28	160.20	194.92	249.03	257.37	238.60	196.06	172.93
2919.9	25	167.77	164.90	193.56	194.40	202.21	207.24	201.49	174.80
2919.9	30	170.63	167.29	165.62	154.92	164.79	170.52	173.54	179.38
2919.9	35	147.38	144.35	144.86	145.19	139.76	139.76	150.61	149.77
2919.9	40	131.72	124.74	122.25	130.59	120.58	124.12	132.26	137.32
2919.9	45	125.58	114.74	113.91	118.08	122.35	128.01	116.19	127.67
2919.9	50	119.75	111.82	110.99	110.15	135.30	141.05	109.91	114.18
2919.9	55	110.99	108.90	111.23	115.72	150.40	151.10	118.60	105.57
2919.9	60	114.87	105.15	129.10	130.93	158.81	167.31	131.16	107.12
2919.9	65	140.30	124.27	158.26	150.55	449.79	432.74	150.64	126.71
2919.9	80	414.08	413.61	412.64	414.11	412.42	413.84	414.98	413.60
2919.9	85	407.16	407.71	407.71	406.95	408.63	407.30	407.23	407.55
2920.1	0	131.86	155.25	184.15	205.15	225.56	228.51	179.28	136.49
2930.2	0	131.42	154.66	184.45	197.25	220.60	229.58	179.68	130.42
2940.3	0	122.49	154.06	184.15	181.44	208.75	230.02	184.67	124.27
2950.3	0	118.61	153.76	184.45	180.57	195.47	230.62	197.97	132.02



CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



**Wall Range versus Depth
(N, NE, E, SE, S, SW, W, NW)**

DEPTH	TILT	N	NE	E	SE	S	SW	W	NW
2960.1	0	121.59	153.47	184.15	176.40	194.87	231.81	199.64	138.57
2970.0	0	126.66	152.87	181.77	168.96	191.89	234.25	199.90	146.62
2980.1	0	136.49	153.66	181.47	169.25	188.98	234.97	202.32	151.98
2989.9	0	140.84	152.87	181.47	173.14	186.83	238.36	205.87	164.55
3000.2	0	151.40	152.56	181.17	171.02	186.97	240.13	167.77	173.41
3005.0	0	156.40	153.76	181.75	171.33	185.08	238.35	167.06	180.56
3010.3	0	161.69	154.08	182.08	172.11	183.27	238.38	166.33	185.36
3015.1	0	167.44	157.66	183.97	172.55	183.27	237.79	162.27	186.84
3020.1	0	173.74	161.69	186.49	201.22	183.87	238.68	142.75	192.52
3025.1	0	179.30	166.36	196.08	219.91	183.97	240.65	133.82	89.47
3030.3	0	186.49	169.27	201.58	219.33	185.36	242.56	133.23	83.00
3034.9	-87	65.64	66.05	66.05	65.24	64.43	64.43	65.24	65.24
3034.9	-84	65.64	65.64	66.05	64.43	64.02	62.81	63.62	65.24
3034.9	-81	69.89	64.43	66.45	63.62	64.02	62.40	62.00	64.83
3034.9	-78	69.29	63.62	66.05	63.62	64.02	62.00	58.76	67.27
3034.9	-75	69.29	66.86	64.43	65.24	64.43	64.02	60.38	68.42
3034.9	-72	71.32	67.67	64.83	65.64	63.62	65.24	61.09	67.93
3034.9	-69	64.02	68.48	64.83	66.86	68.08	67.67	62.00	64.83
3034.9	-66	63.21	69.29	65.24	76.59	70.91	68.89	65.24	64.83
3034.9	-63	62.81	74.96	66.05	79.83	70.91	68.89	65.64	65.24
3034.9	-60	64.02	77.40	69.29	81.04	72.94	68.89	66.45	64.43
3034.9	-57	65.24	77.80	75.37	83.47	79.42	69.70	70.10	64.02
3034.9	-54	65.64	79.42	82.26	83.88	80.64	70.10	73.34	63.62
3034.9	-51	66.05	80.23	86.31	86.72	82.66	71.02	74.96	62.81
3034.9	-48	66.05	79.42	86.72	96.85	85.50	72.53	77.80	63.62
3034.9	-45	66.86	77.22	91.58	120.35	87.93	74.96	78.61	62.21
3034.9	-42	66.86	77.71	92.79	139.29	101.30	77.80	81.45	63.62
3034.9	-39	66.86	75.92	107.38	150.53	113.88	82.11	82.11	64.43
3034.9	-36	67.27	67.61	123.65	164.11	126.43	84.69	85.77	65.64
3034.9	-33	68.08	68.89	134.13	177.89	148.38	89.15	87.73	64.67
3034.9	-30	69.29	71.84	138.93	184.78	156.82	98.87	89.55	65.58
3034.9	-27	71.32	68.42	147.77	209.64	193.05	133.65	91.17	62.84
3034.9	-24	70.51	67.93	153.46	228.24	227.75	147.60	98.61	62.30
3034.9	-21	70.55	66.96	164.35	257.71	250.28	156.07	105.22	64.46
3034.9	-18	70.74	66.62	181.32	267.83	266.85	163.96	109.21	65.13
3034.9	-15	70.51	66.47	243.11	278.58	281.51	167.21	106.97	65.24
3034.9	-12	68.89	66.36	261.36	300.57	302.53	167.76	105.63	64.02
3034.9	-9	73.41	66.86	261.77	315.25	308.37	182.79	104.14	68.48



CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



**Wall Range versus Depth
(N, NE, E, SE, S, SW, W, NW)**

DEPTH	TILT	N	NE	E	SE	S	SW	W	NW
3034.9	-6	72.94	65.00	254.63	312.32	299.51	197.94	102.99	77.71
3034.9	-5	71.72	65.00	254.88	312.82	299.11	203.01	102.76	77.71
3034.9	-4	72.53	210.16	253.26	310.96	299.05	207.66	102.92	76.59
3034.9	-3	188.16	205.27	243.88	310.80	299.45	262.51	123.87	76.57
3034.9	-2	187.19	203.31	236.71	310.80	299.86	255.13	127.56	76.59
3034.9	-1	74.96	191.13	233.57	301.04	299.86	248.22	129.67	79.83
3035.1	0	76.03	178.96	227.39	219.35	189.74	243.48	135.73	81.69
3040.0	0	187.37	202.08	236.23	310.76	300.45	250.78	103.89	77.20
3045.1	0	72.82	66.70	238.13	311.27	300.35	258.32	103.10	69.02
3050.3	0	67.70	64.95	250.19	311.08	299.71	206.54	103.49	63.77
3060.2	0	66.41	62.96	254.07	310.37	298.57	187.85	103.89	57.08
3065.4	0	64.56	61.70	251.37	311.15	297.90	169.35	104.28	58.26
3070.1	0	59.44	62.62	250.19	311.54	305.49	163.65	104.83	54.72
3075.2	0	54.50	55.12	258.71	312.72	307.22	162.09	89.18	50.96
3080.1	3	52.20	55.90	250.58	311.94	298.17	163.42	86.49	45.28
3080.1	4	53.94	55.90	251.89	311.54	299.35	166.25	97.20	48.43
3080.1	7	56.65	55.90	250.56	313.23	302.11	197.36	105.07	53.89
3080.1	10	64.16	63.25	238.13	243.35	259.06	249.63	105.46	55.38
3080.1	13	66.21	63.11	206.82	224.23	199.95	246.67	106.64	59.84
3080.1	16	68.88	65.12	203.03	213.46	192.77	247.44	107.54	58.66
3080.1	19	71.64	66.73	193.56	191.17	194.34	253.32	108.61	63.09
3080.1	22	73.78	69.15	195.94	185.47	199.23	254.89	144.02	67.31
3080.1	25	80.68	71.64	200.18	188.50	205.47	258.32	184.61	70.14
3080.1	28	170.77	75.20	205.74	196.68	216.37	260.42	226.27	87.10
3080.1	31	169.17	76.02	211.75	197.88	226.59	268.18	232.63	183.58
3080.1	34	167.99	184.90	221.97	210.51	236.23	276.03	235.25	181.84
3080.1	37	166.81	191.47	230.07	223.84	290.78	281.25	230.92	183.72
3080.1	40	166.42	200.24	239.57	276.55	312.57	290.27	234.13	184.12
3080.1	43	168.79	209.68	253.34	315.87	340.59	302.17	239.97	184.12
3080.1	46	172.65	223.10	267.20	337.44	344.68	326.88	246.40	183.72
3080.1	49	201.13	237.61	277.50	323.34	327.31	322.56	272.76	187.37
3080.1	52	214.89	250.94	293.16	308.18	312.03	314.03	306.43	249.46
3080.1	55	264.12	262.08	295.36	293.16	298.51	299.80	299.87	278.92
3080.1	58	284.42	277.50	285.95	277.86	286.61	289.25	290.70	293.61
3080.1	0	48.43	60.24	260.77	312.34	305.25	162.23	77.93	43.71
3085.3	0	43.32	58.82	258.06	310.37	305.25	68.31	70.06	38.21
3090.2	0	30.58	54.87	254.53	308.47	303.38	45.07	57.52	33.37



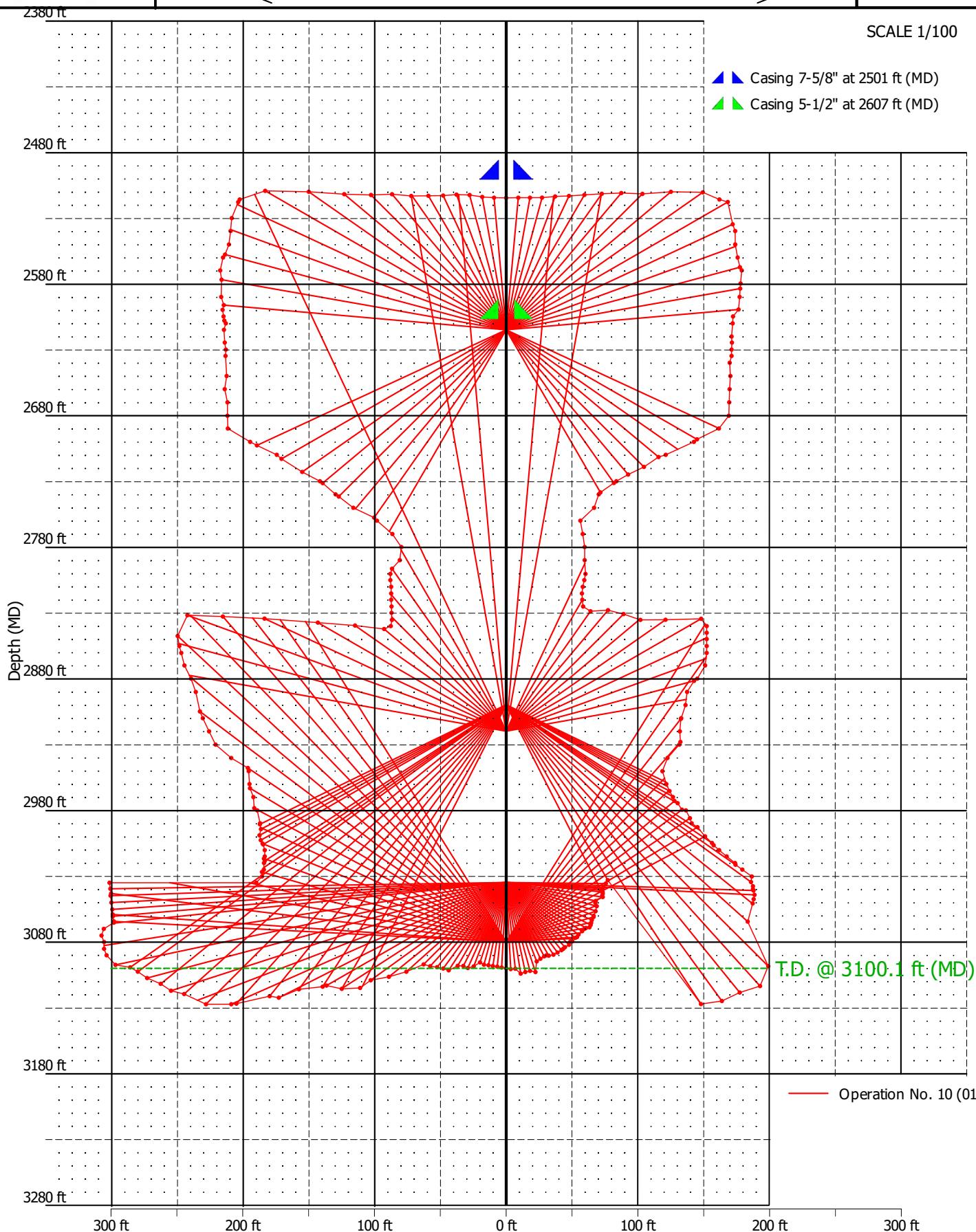
CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



TILOED SECTIONS POSITION

← N180 1 N0 →





CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10

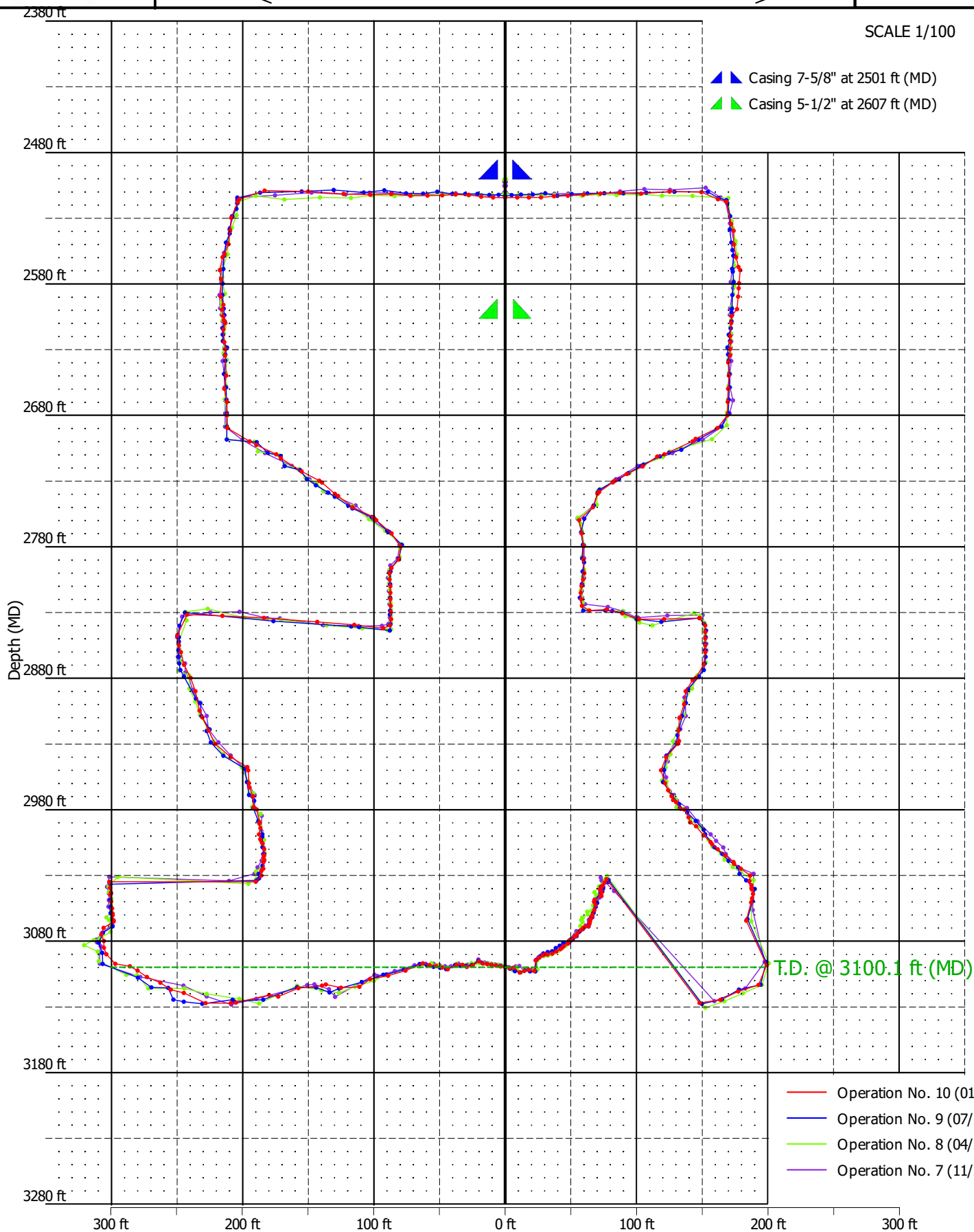


VERTICAL SECTION

N180

1

N0





CUSTOMER : Westlake Chemicals

DATE : January 07, 2024

CAVERN : PPG No. 007B

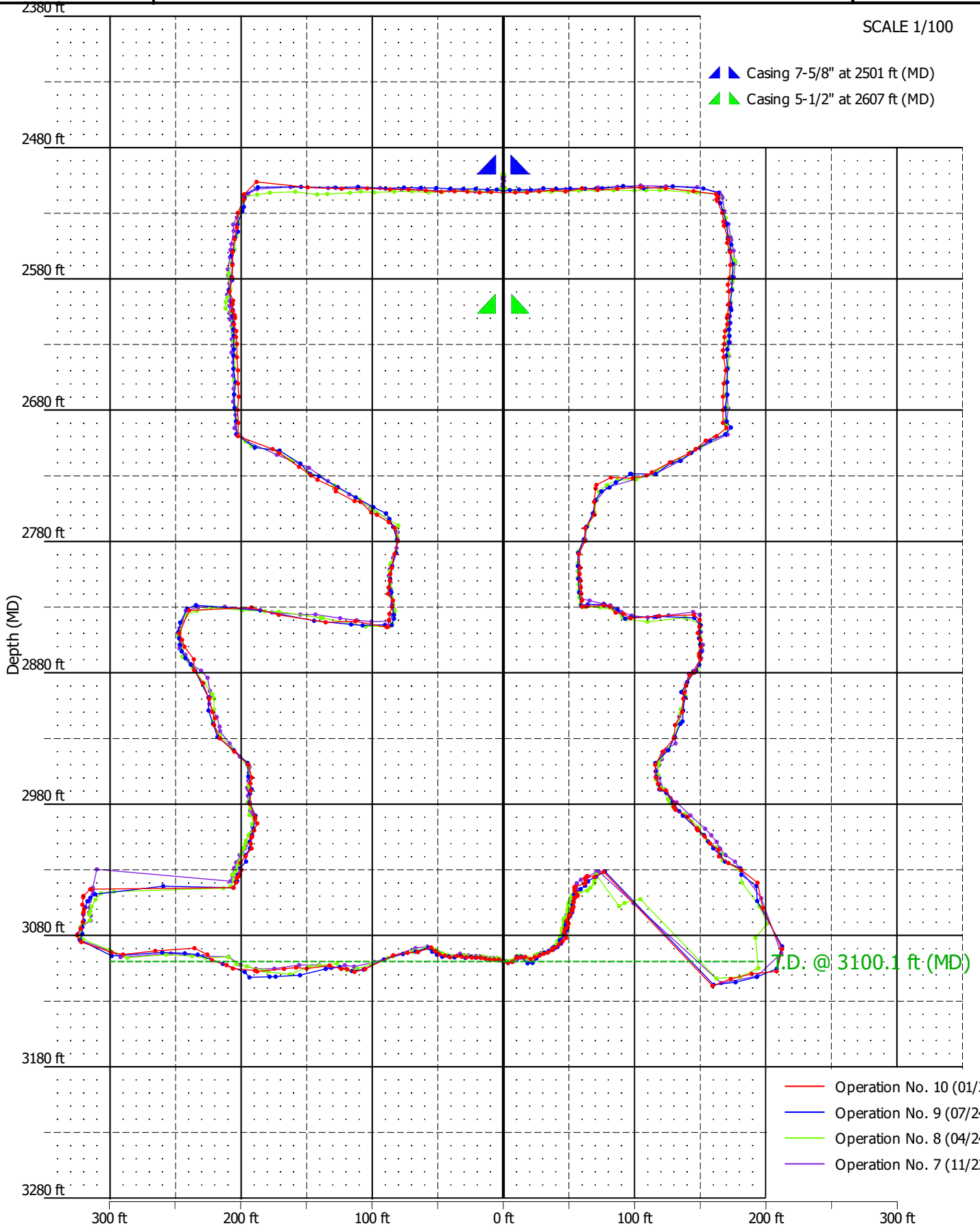
OPERATION No. : 10

**VERTICAL SECTION**

← N195

2

N15 →





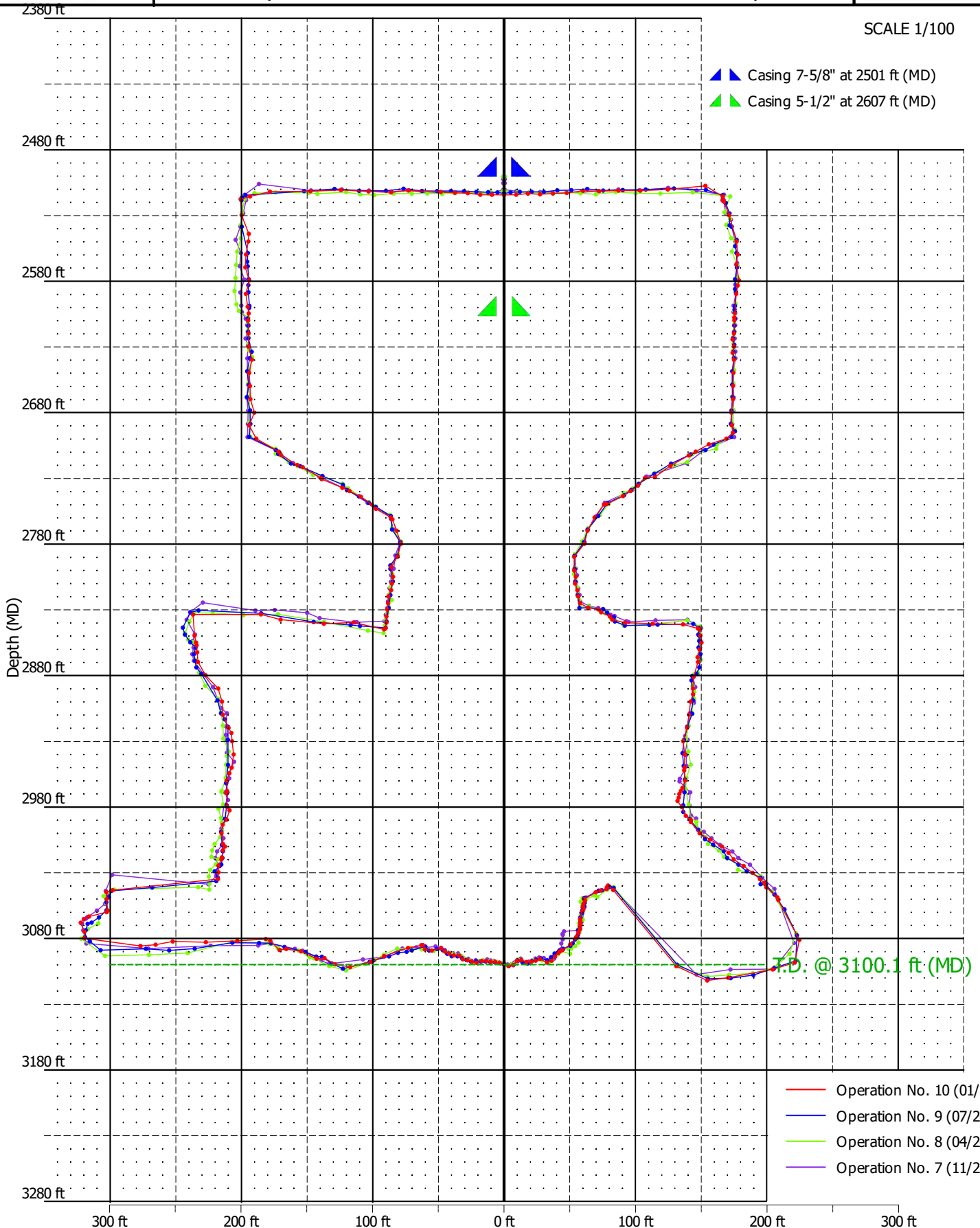
CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



VERTICAL SECTION

← N210 3 N30 →





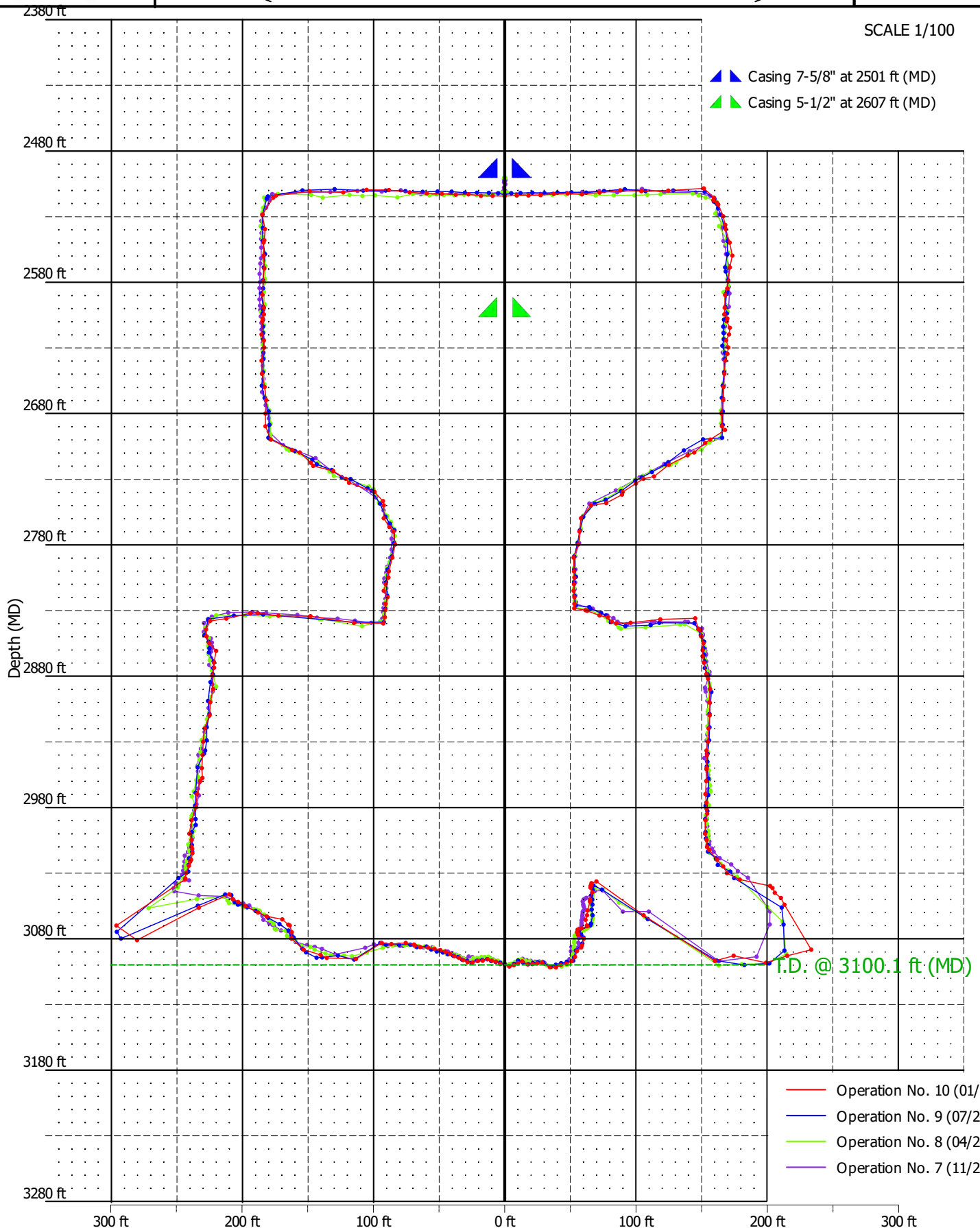
CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



VERTICAL SECTION

← N225 4 N45 →





CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10

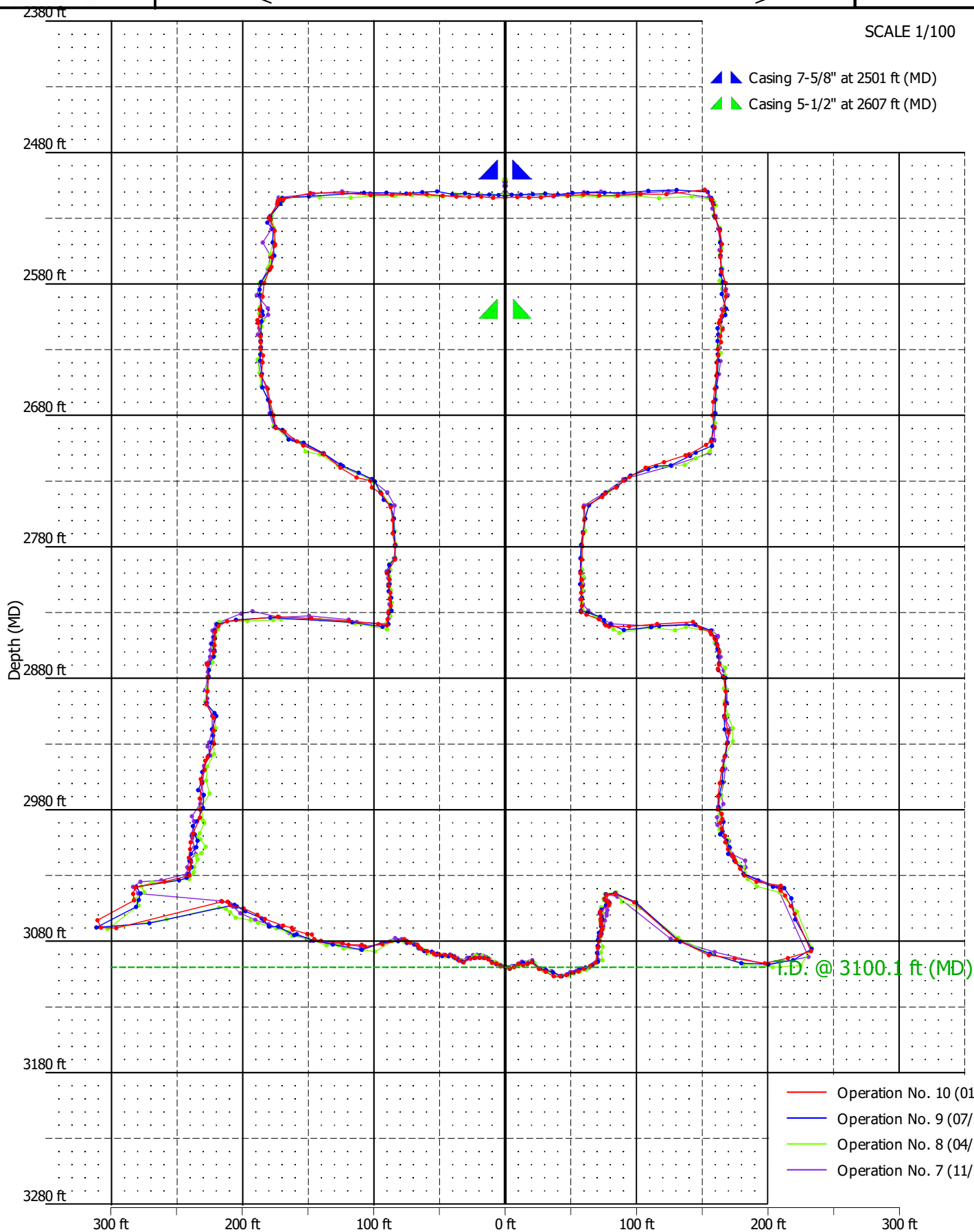


VERTICAL SECTION

N240

5

N60





CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10

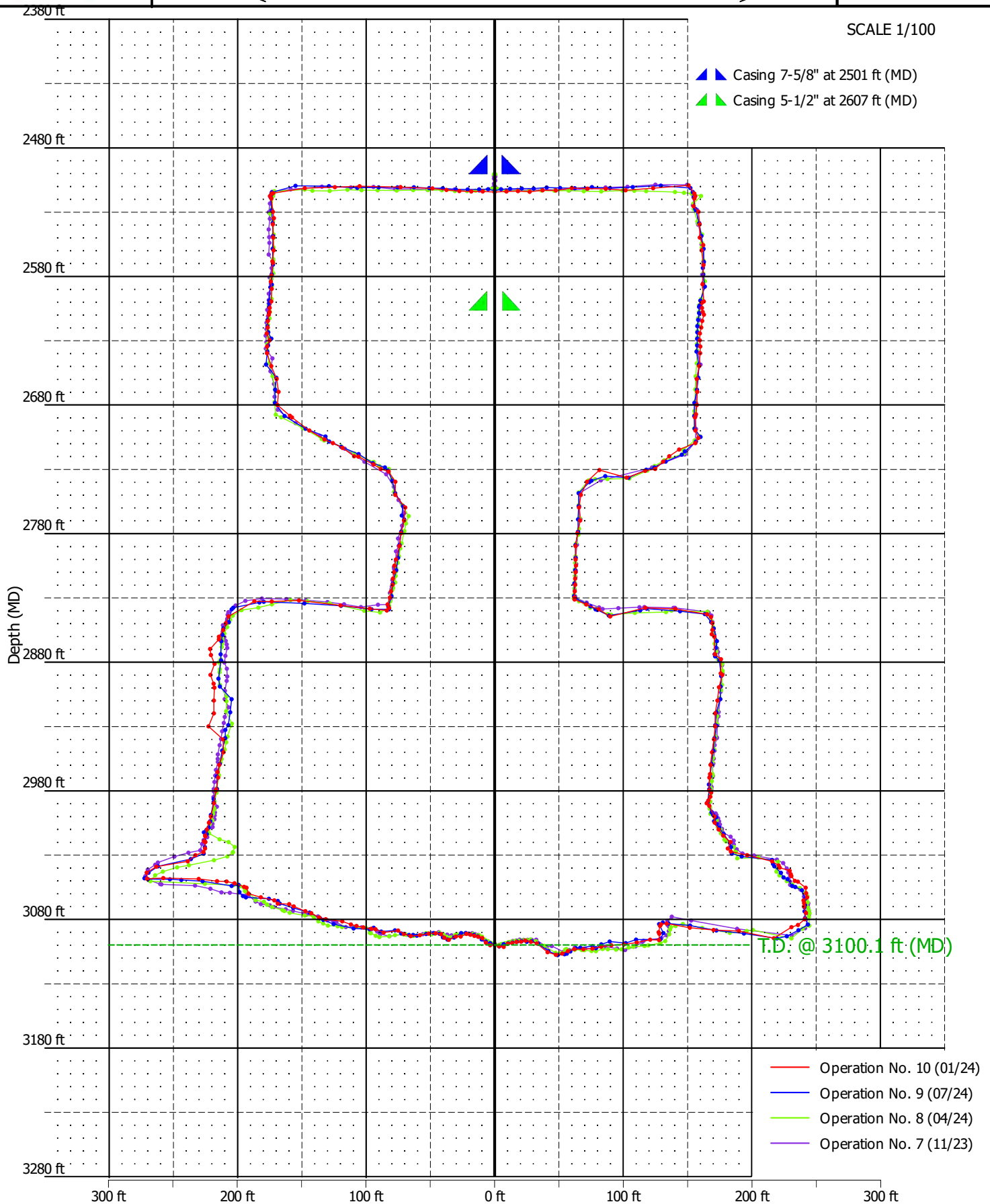


VERTICAL SECTION

N255

6

N75





CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10

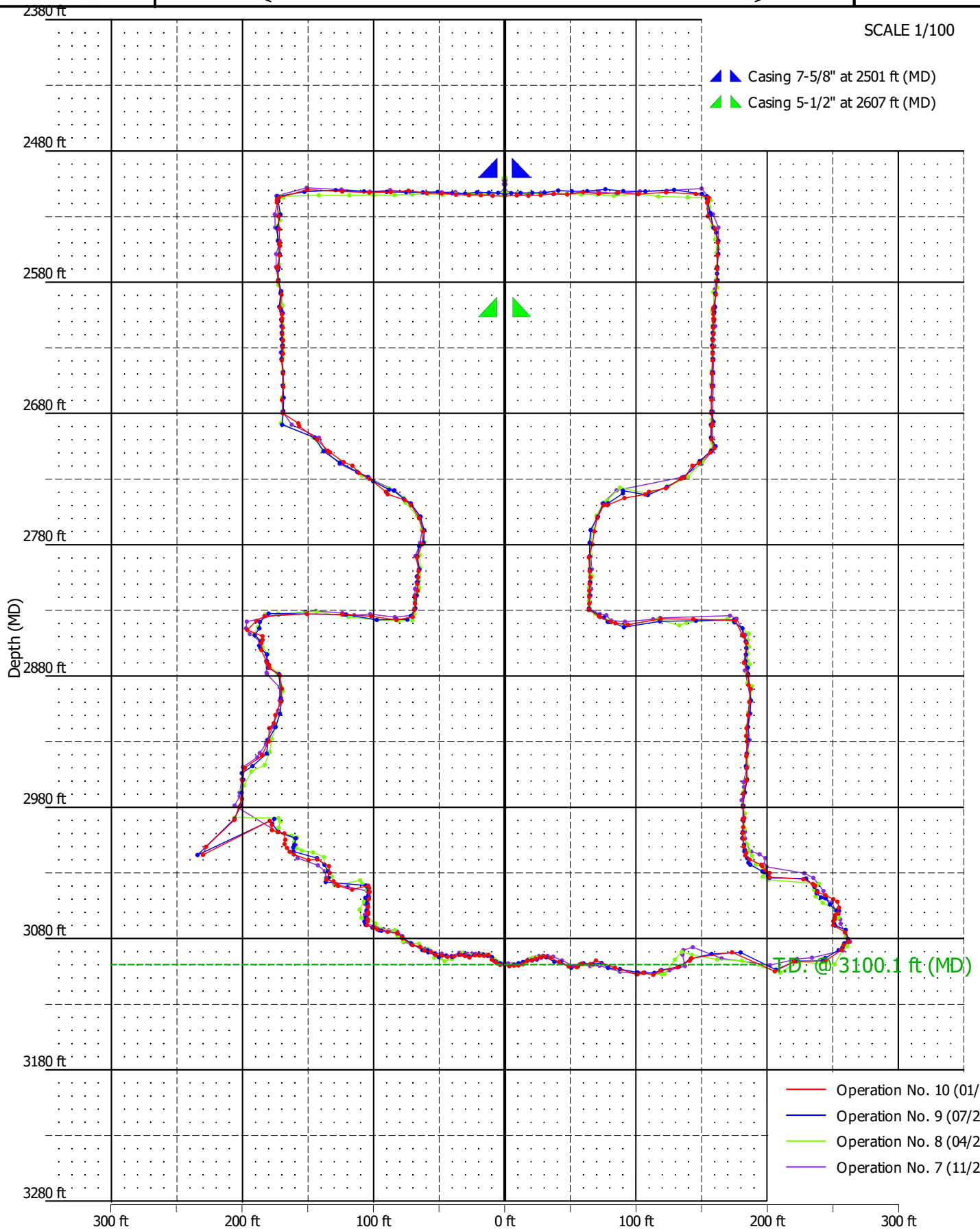


VERTICAL SECTION

N270

7

N90





CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10

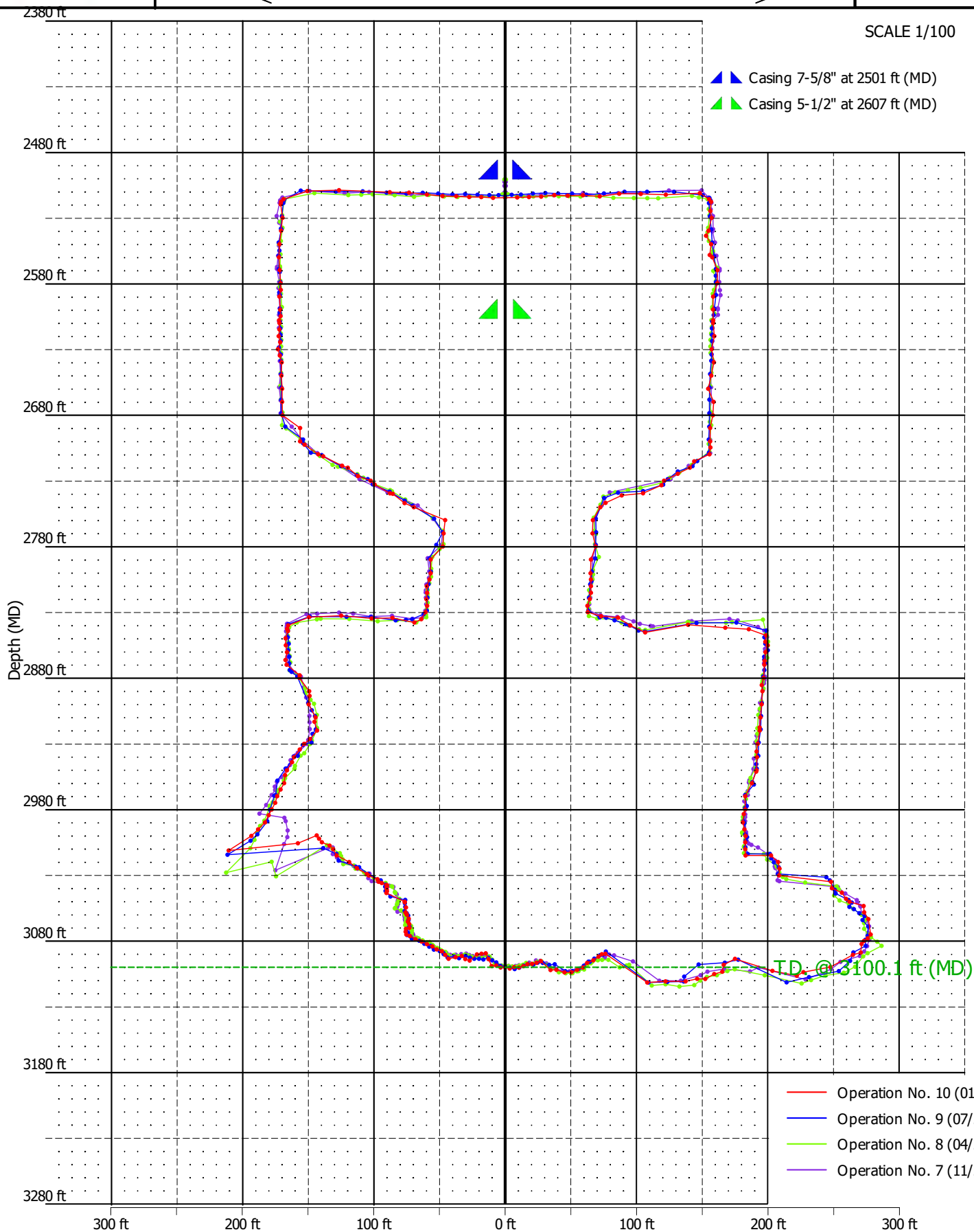


VERTICAL SECTION

N285

8

N105





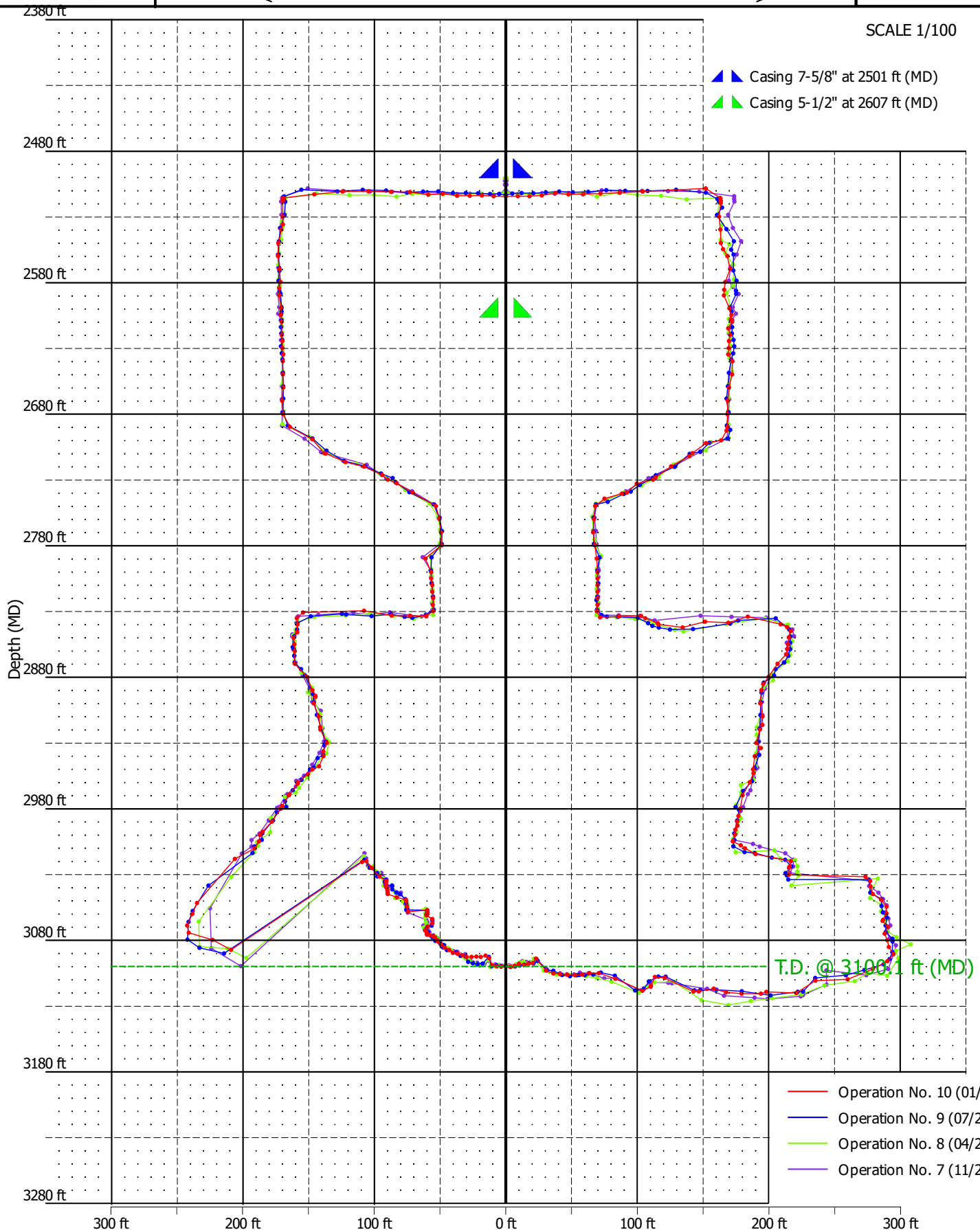
CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



VERTICAL SECTION

← N300 9 N120 →





CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10

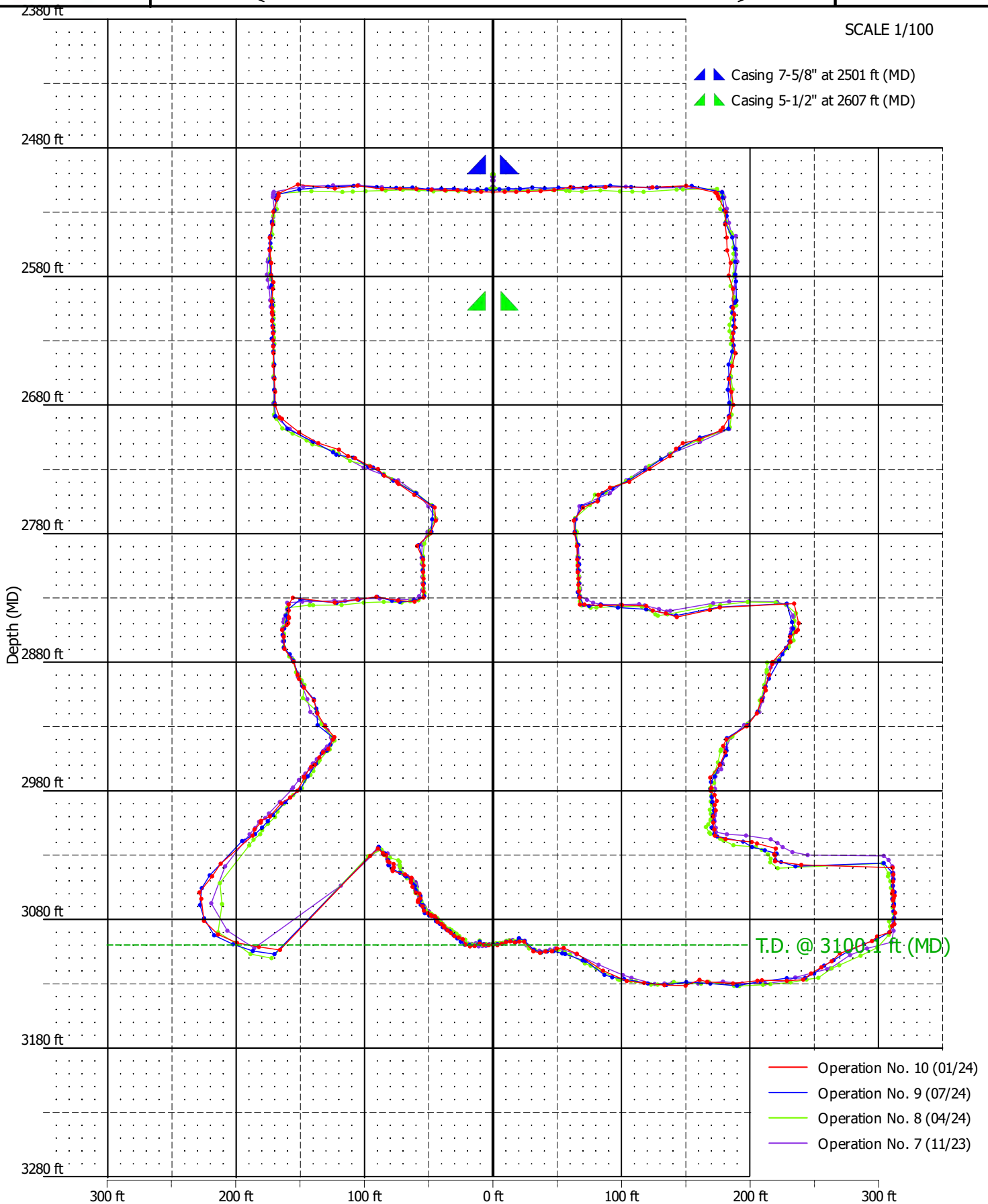


VERTICAL SECTION

N315

10

N135





CUSTOMER : Westlake Chemicals

DATE : January 07, 2024

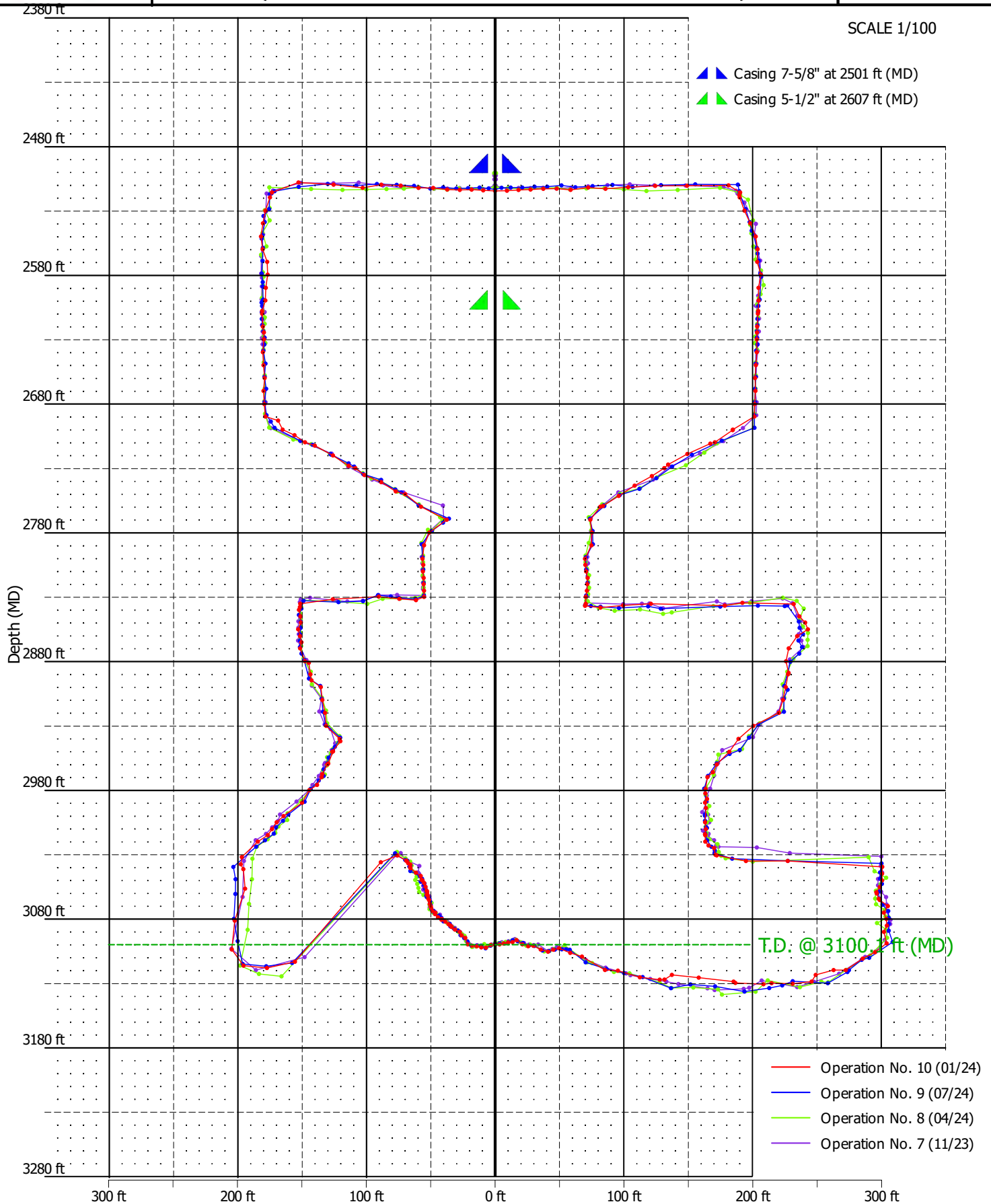
CAVERN : PPG No. 007B

OPERATION No. : 10

**VERTICAL SECTION****11**

← N330

N150 →





CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



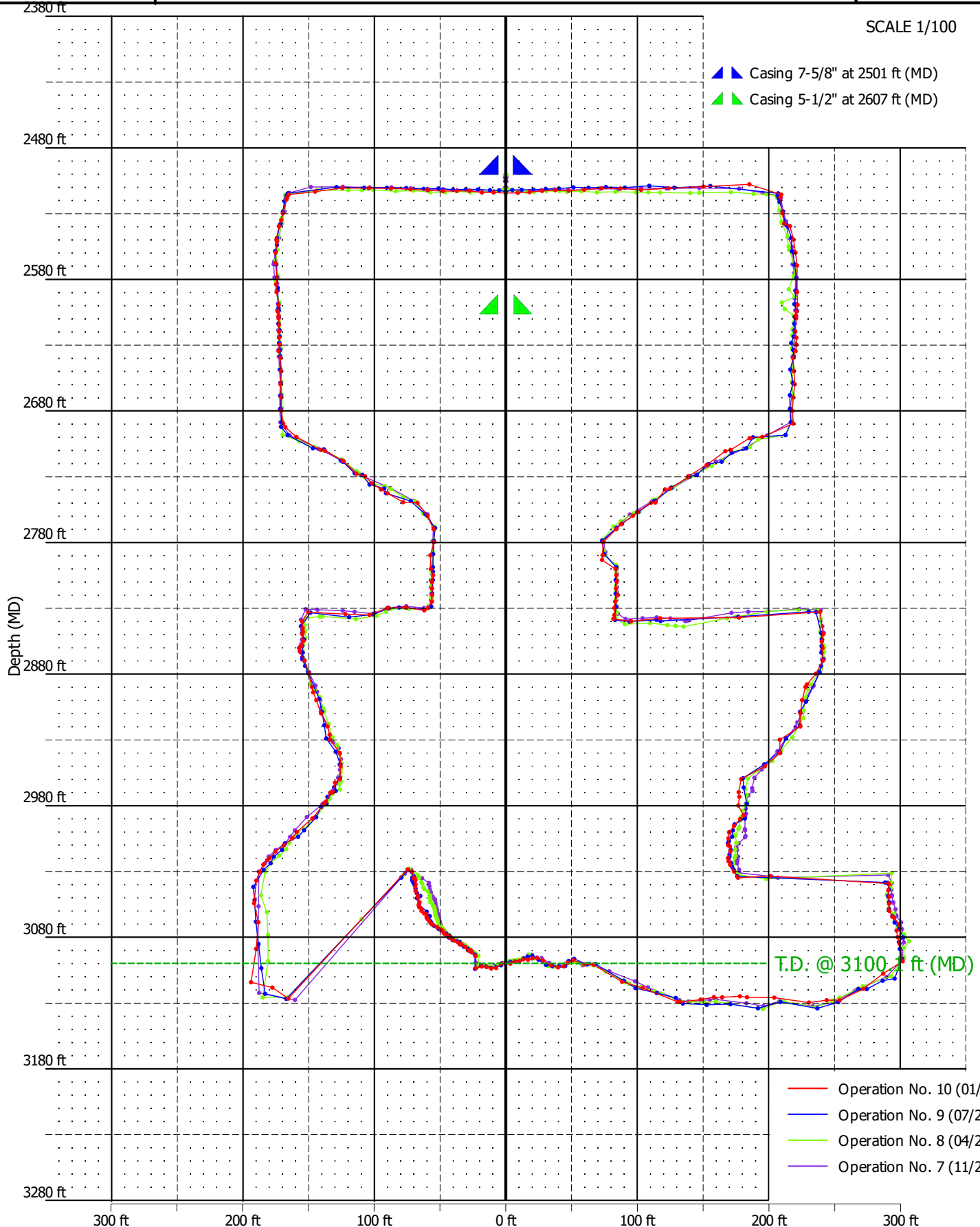
VERTICAL SECTION

N345

12

N165

SCALE 1/100





CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



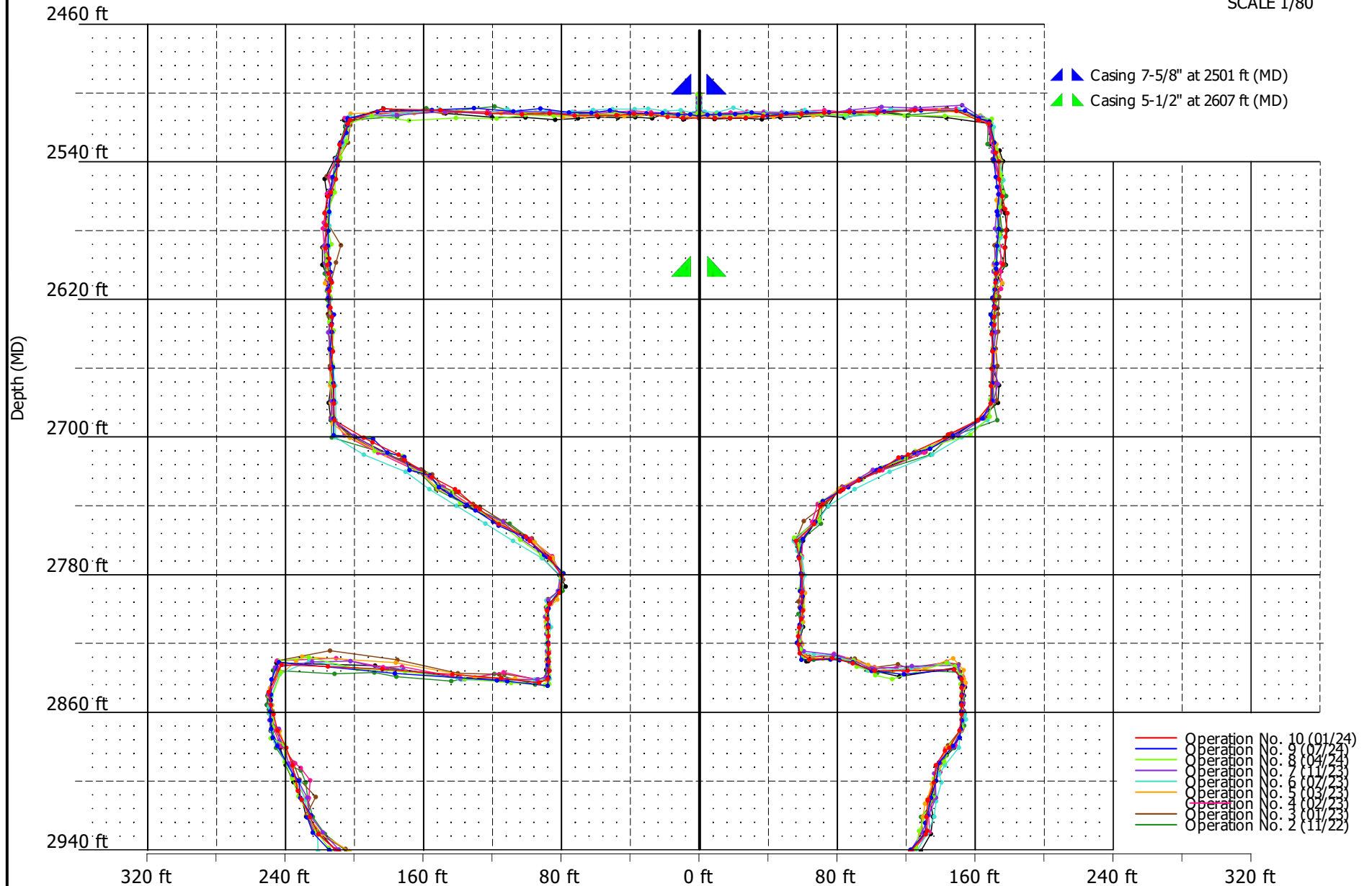
VERTICAL SECTION

← N180

1

N0 →

SCALE 1/80





CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



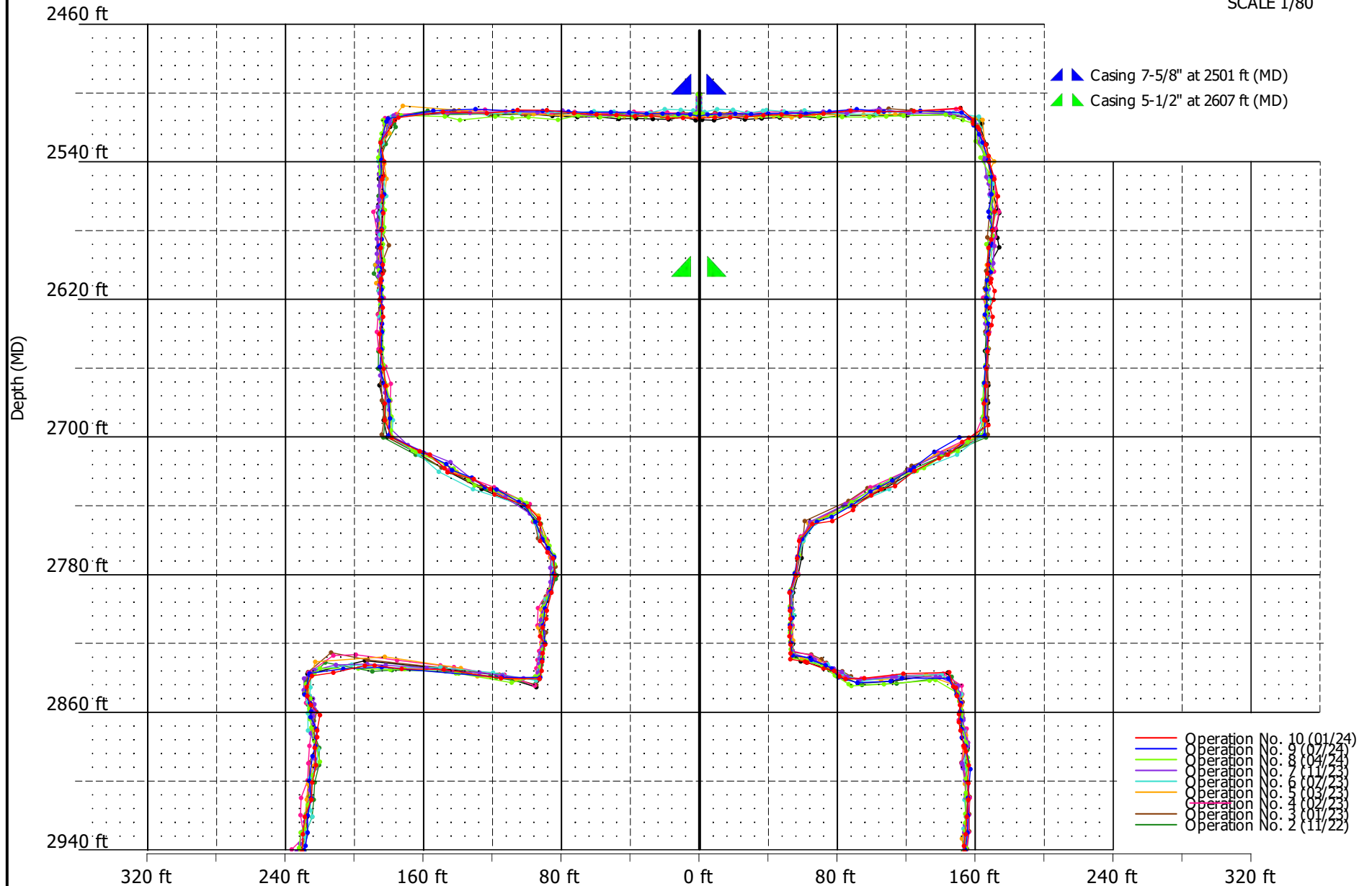
VERTICAL SECTION

← N225

2

N45 →

SCALE 1/80





CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



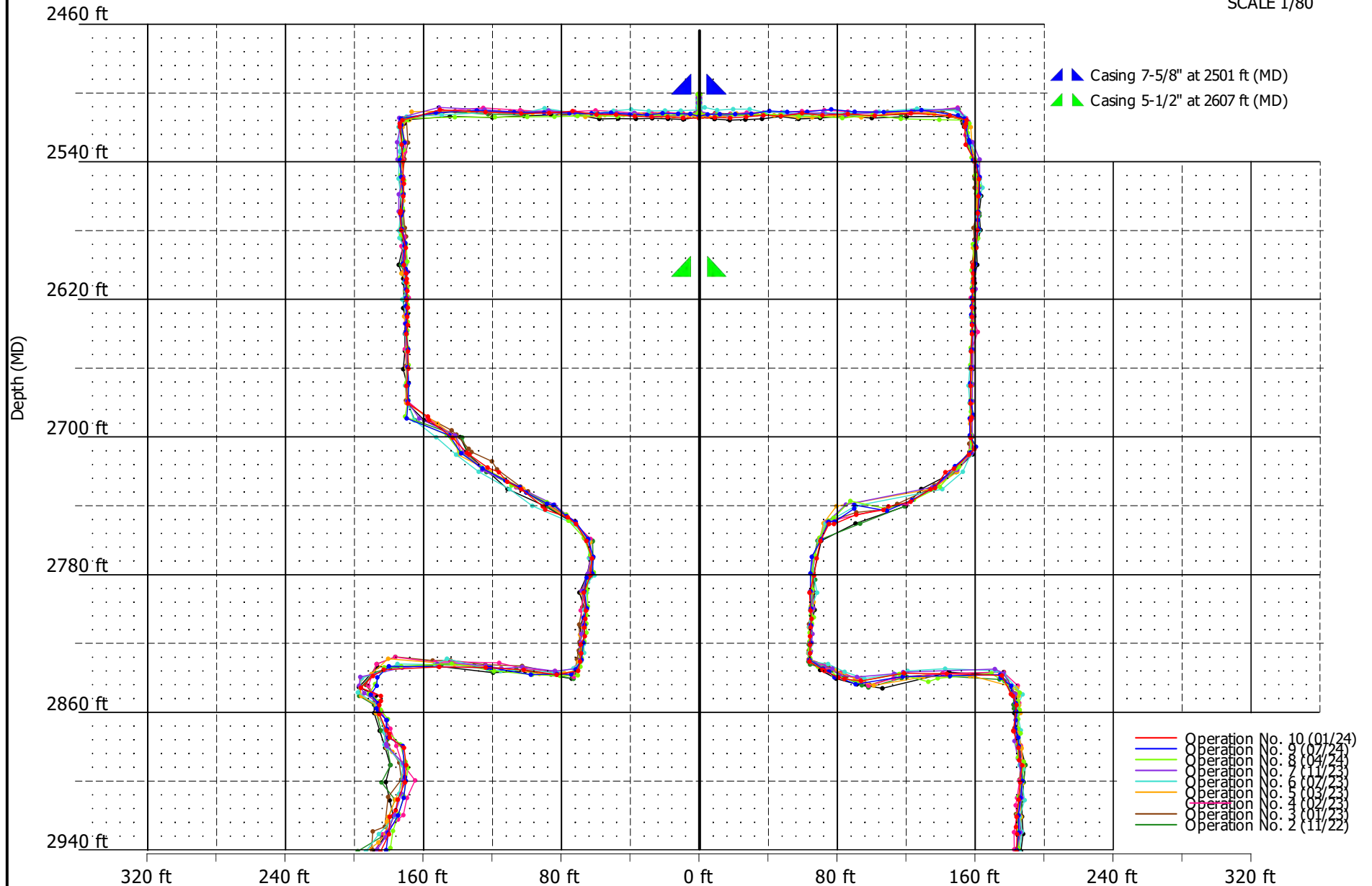
VERTICAL SECTION

← N270

3

N90 →

SCALE 1/80





CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



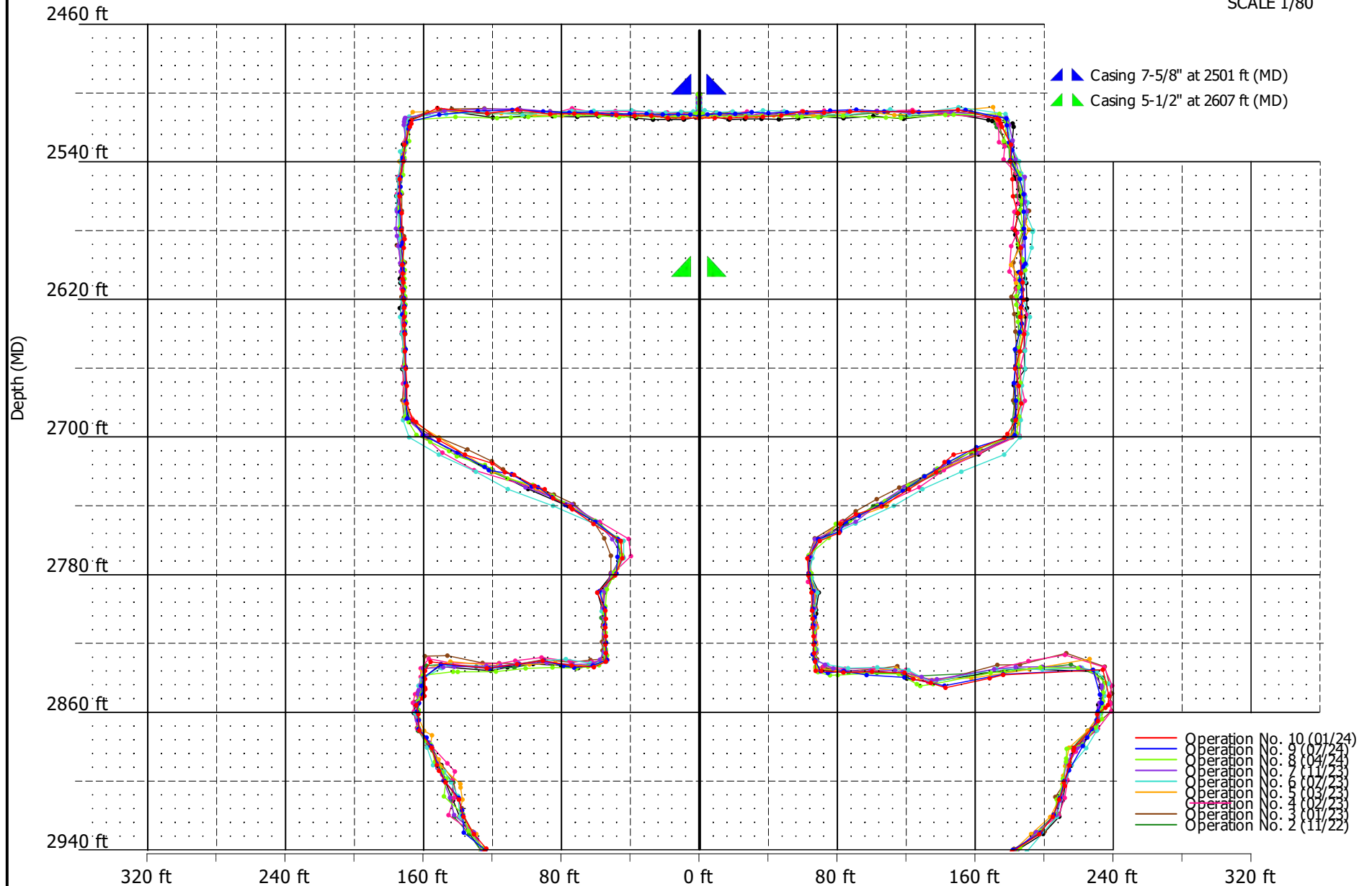
VERTICAL SECTION

← N315

4

N135 →

SCALE 1/80





CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



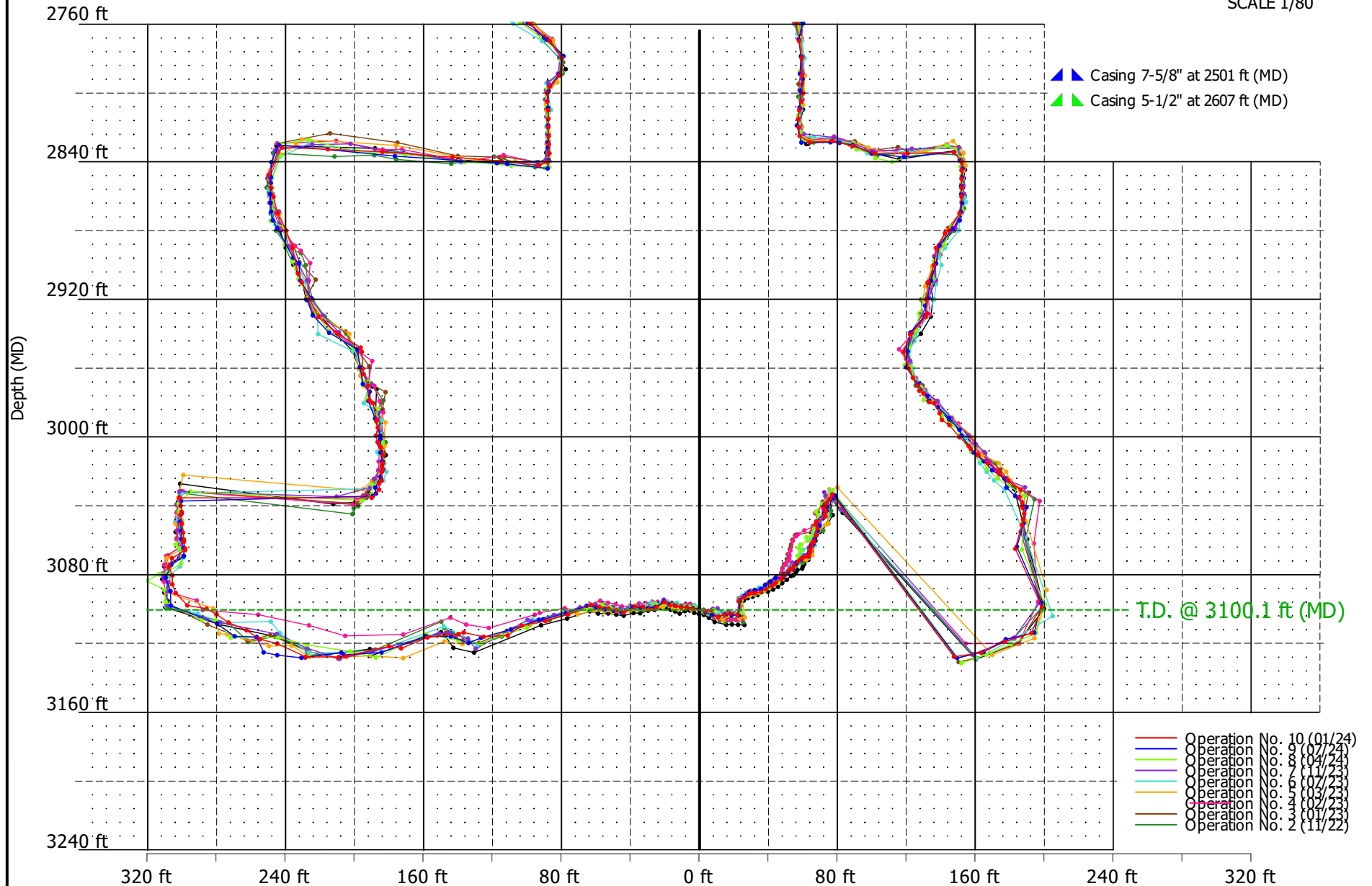
VERTICAL SECTION

← N180

1

N0 →

SCALE 1/80





CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



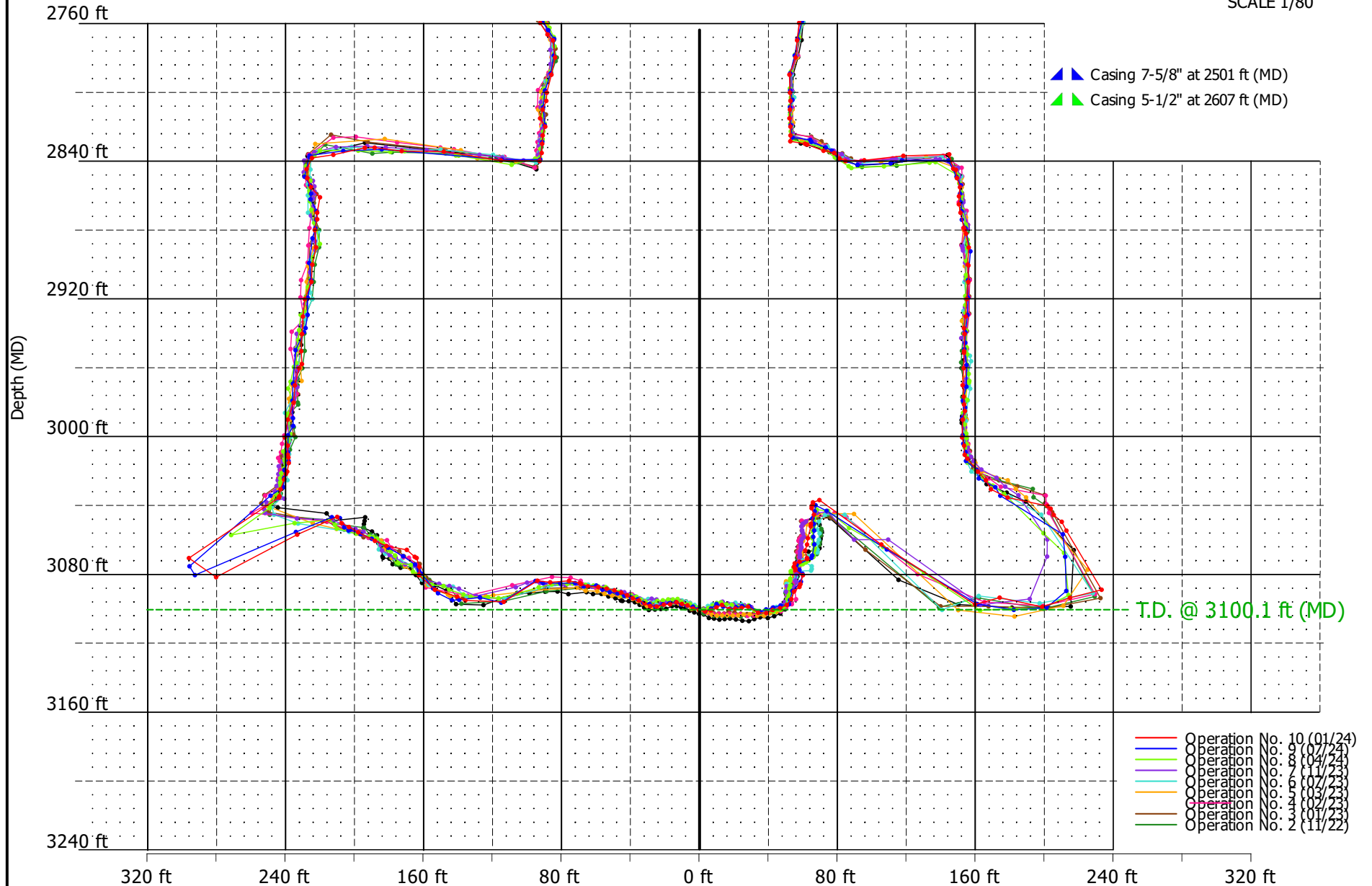
VERTICAL SECTION

← N225

2

N45 →

SCALE 1/80





CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



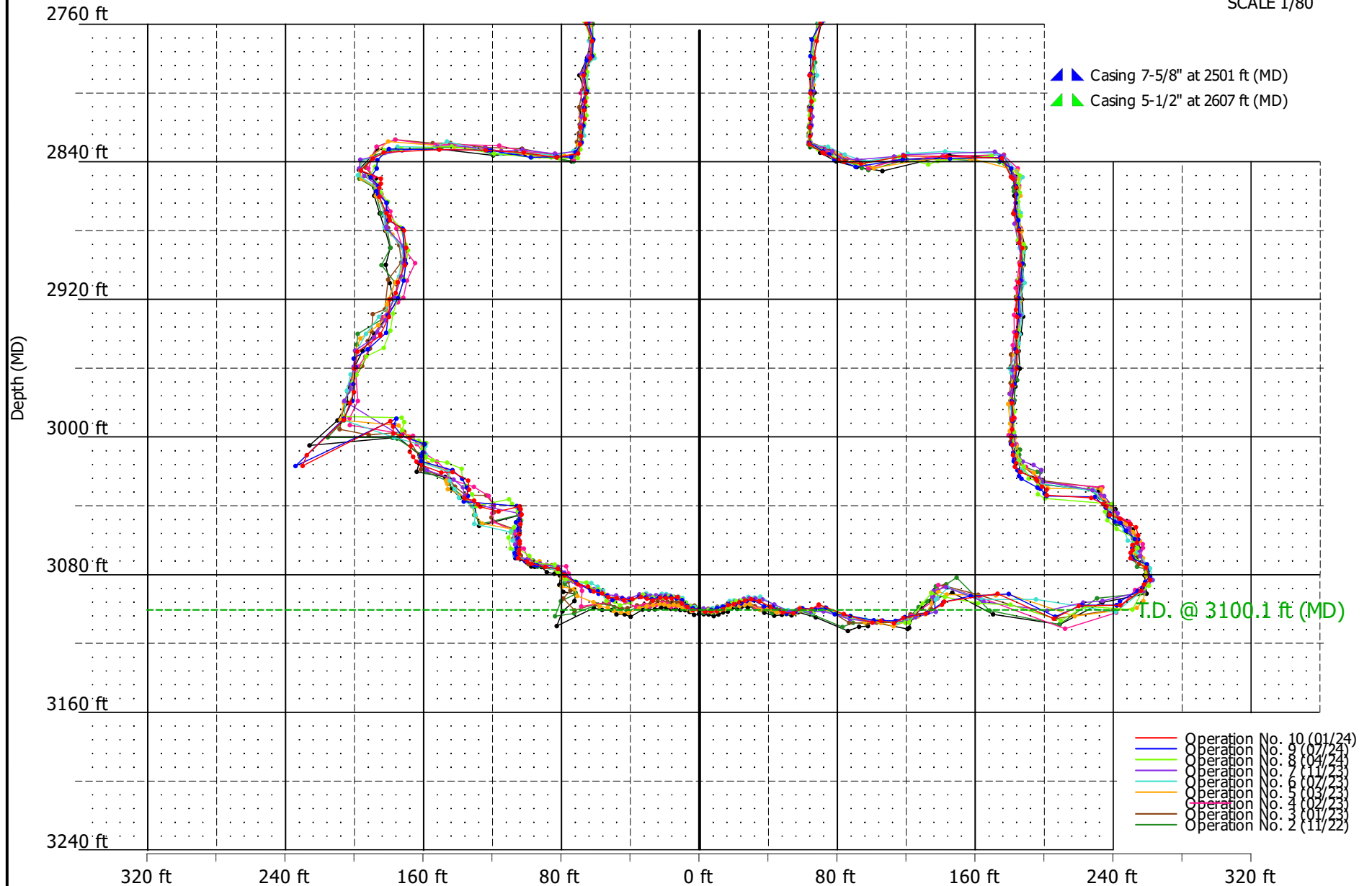
VERTICAL SECTION

← N270

3

N90 →

SCALE 1/80





CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



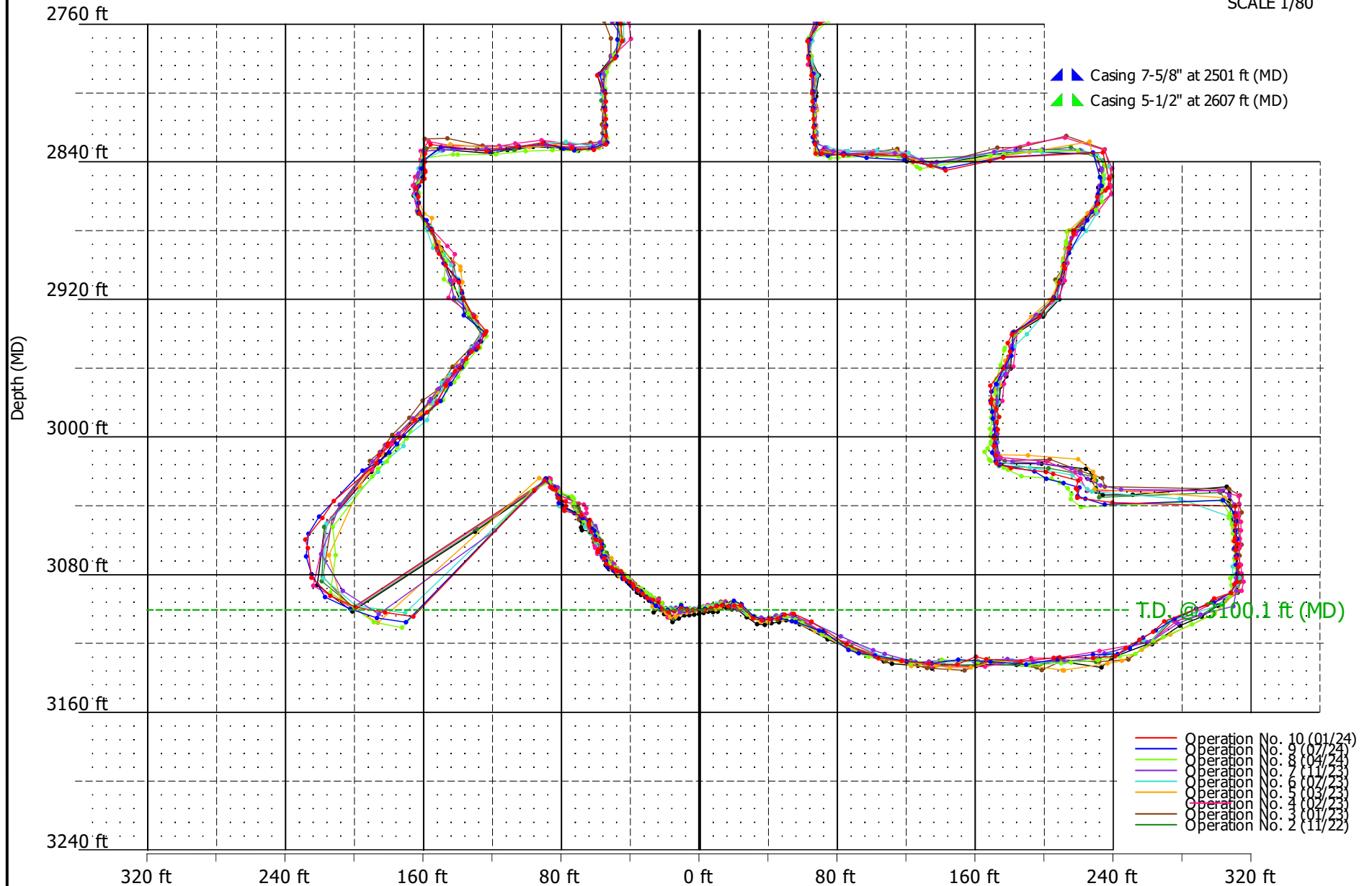
VERTICAL SECTION

← N315

4

N135 →

SCALE 1/80





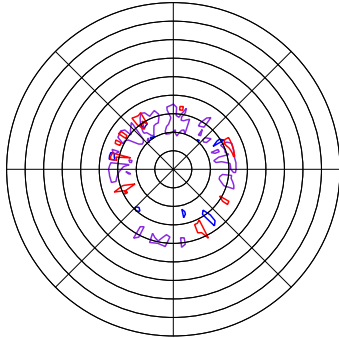
CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10

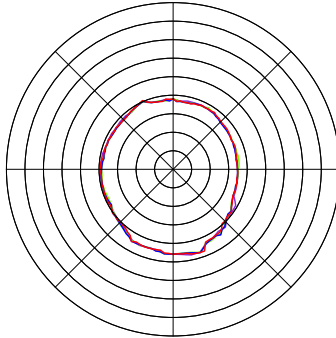


HORIZONTAL SECTIONS between 2510 ft and 2620 ft

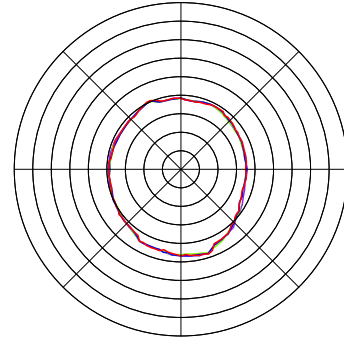
— Operation No. 10 (01/24) — Operation No. 9 (07/24) — Operation No. 8 (04/24) — Operation No. 7 (11/23) SCALE 50.0 ft per division



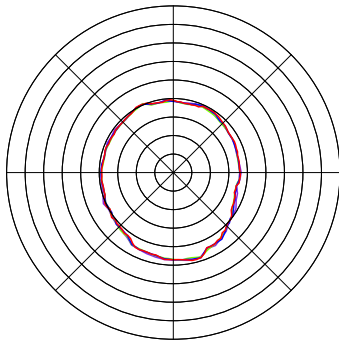
2510 ft / 2689.27 ft²



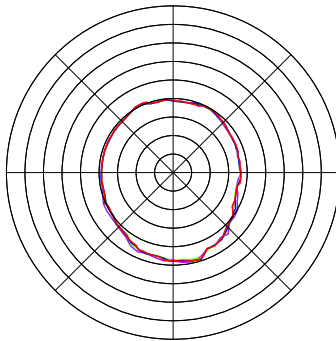
2520 ft / 95560.33 ft²



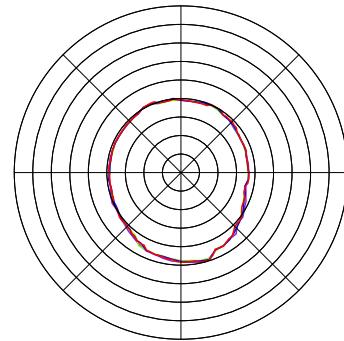
2530 ft / 97856.35 ft²



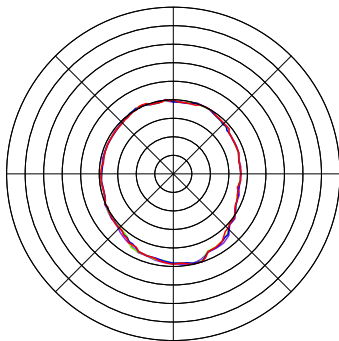
2540 ft / 99614.06 ft²



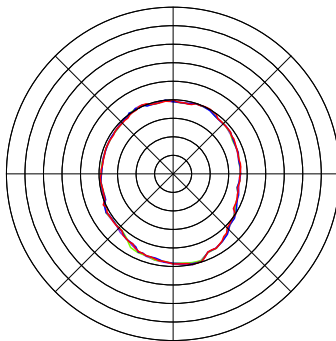
2550 ft / 101274.81 ft²



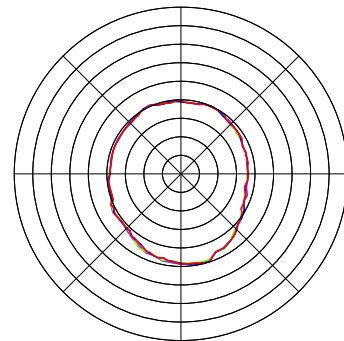
2560 ft / 102423.19 ft²



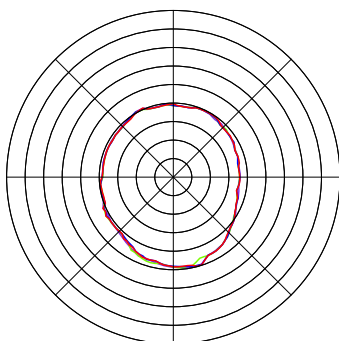
2570 ft / 102945.07 ft²



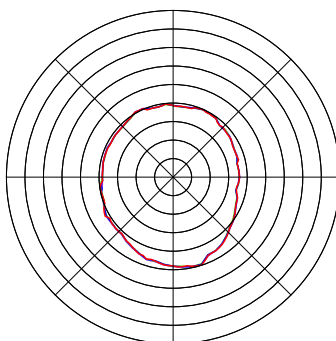
2580 ft / 103068.47 ft²



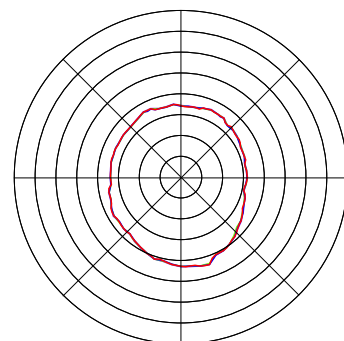
2590 ft / 102575.55 ft²



2600 ft / 102258.32 ft²



2610 ft / 101797.01 ft²



2620 ft / 101303.99 ft²

*All sections are oriented to Magnetic North.

Magnetic Declination= 0.7°



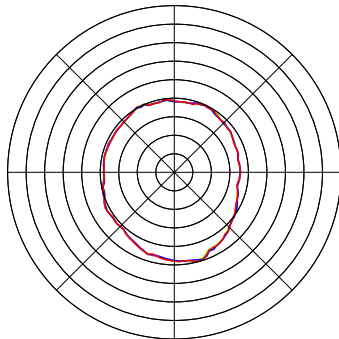
CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10

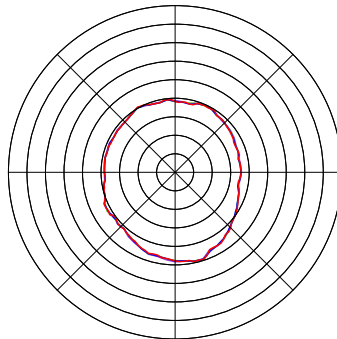


HORIZONTAL SECTIONS between 2630 ft and 2740 ft

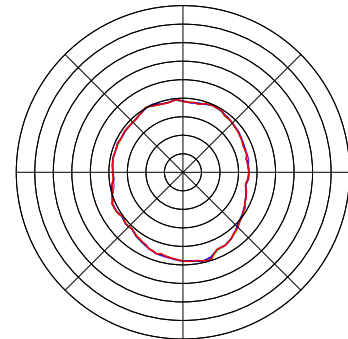
— Operation No. 10 (01/24) — Operation No. 9 (07/24) — Operation No. 8 (04/24) — Operation No. 7 (11/23) SCALE 50.0 ft per division



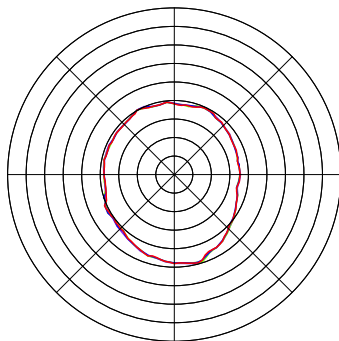
2630 ft / 100965.07 ft²



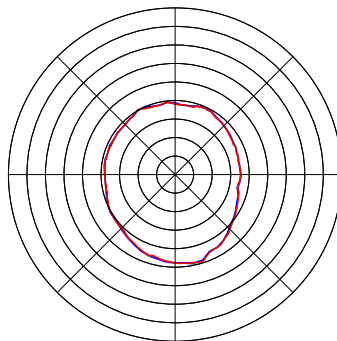
2640 ft / 100650.97 ft²



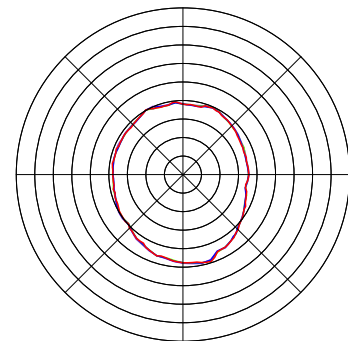
2650 ft / 100130.63 ft²



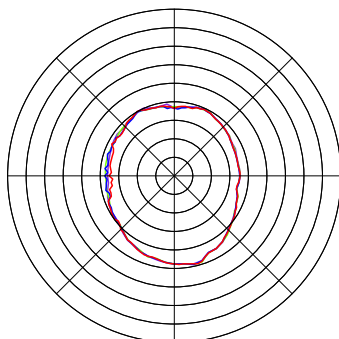
2660 ft / 99238.65 ft²



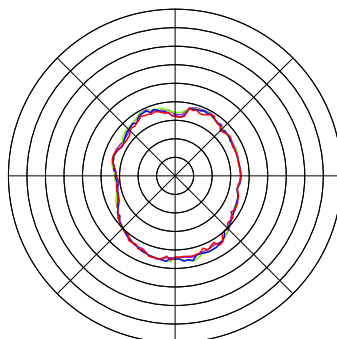
2670 ft / 99049.90 ft²



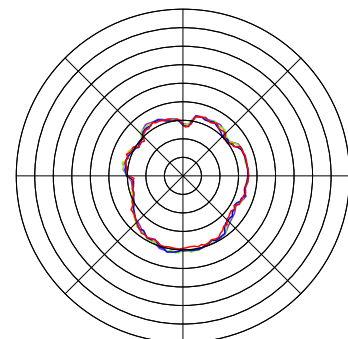
2680 ft / 98697.76 ft²



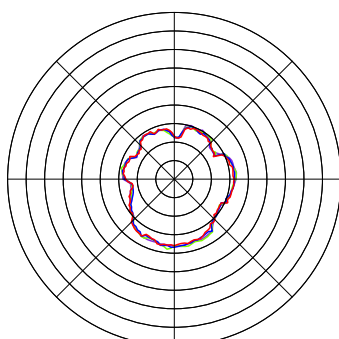
2690 ft / 96005.72 ft²



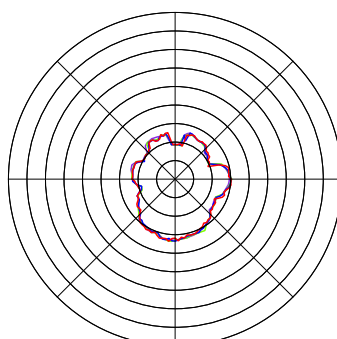
2700 ft / 86557.91 ft²



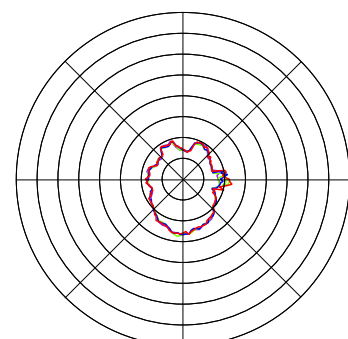
2710 ft / 69793.92 ft²



2720 ft / 54450.98 ft²



2730 ft / 41099.32 ft²



2740 ft / 28949.13 ft²

*All sections are oriented to Magnetic North.

Magnetic Declination= 0.7°



CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

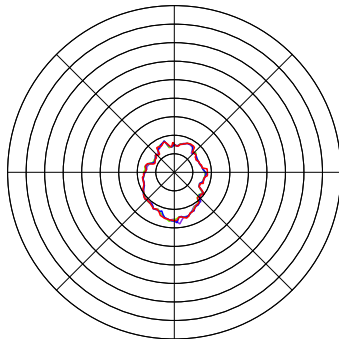
CAVERN : PPG No. 007B
OPERATION No. : 10



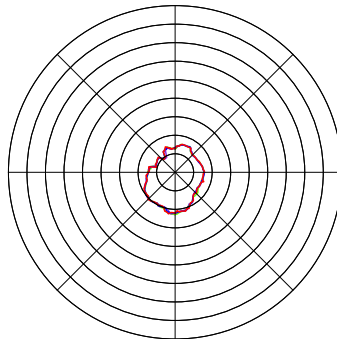
HORIZONTAL SECTIONS between 2750 ft and 2860 ft

— Operation No. 10 (01/24) — Operation No. 9 (07/24) — Operation No. 8 (04/24) — Operation No. 7 (11/23)

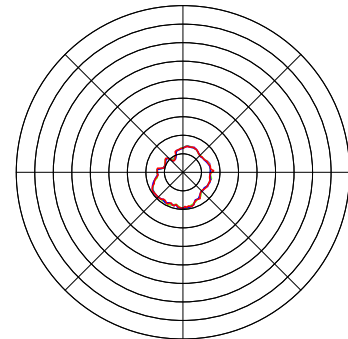
SCALE 50.0 ft per division



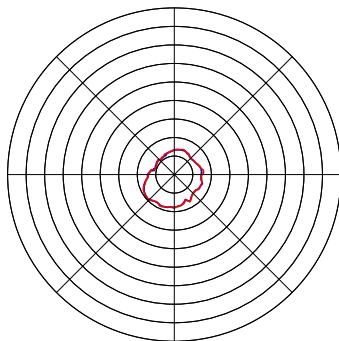
2750 ft / 20543.25 ft²



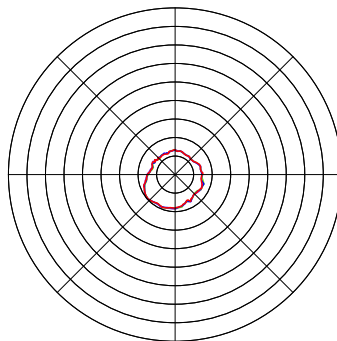
2760 ft / 16027.58 ft²



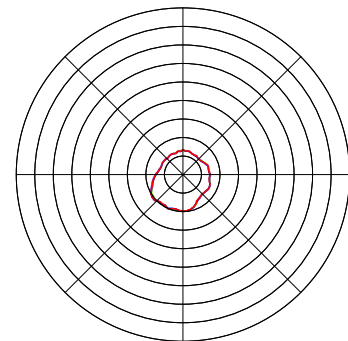
2770 ft / 13980.74 ft²



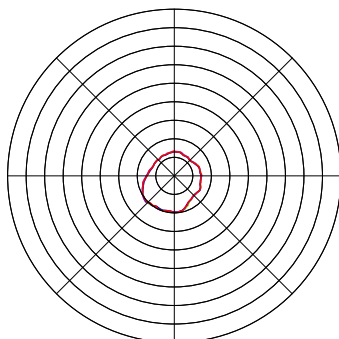
2780 ft / 13754.41 ft²



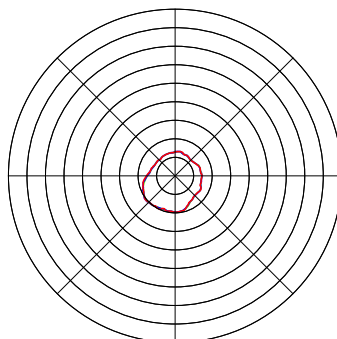
2790 ft / 14169.70 ft²



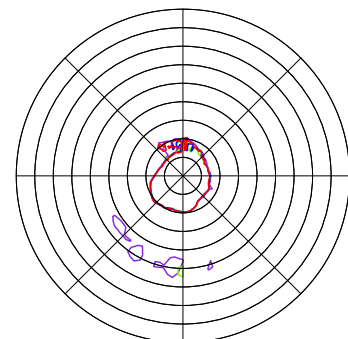
2800 ft / 14777.71 ft²



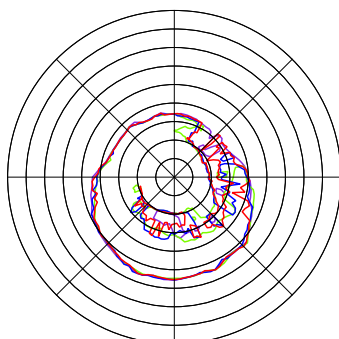
2810 ft / 14893.21 ft²



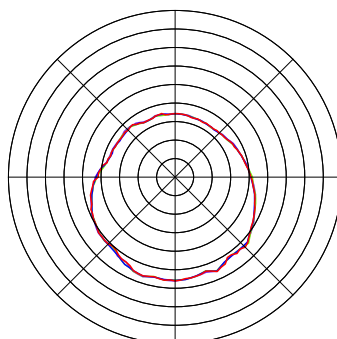
2820 ft / 14944.73 ft²



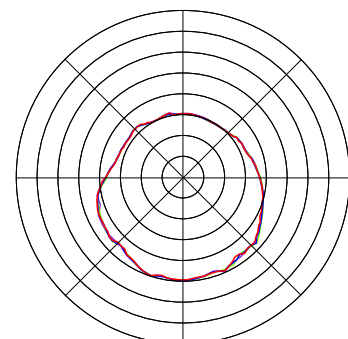
2830 ft / 16770.38 ft²



2840 ft / 101700.83 ft²



2850 ft / 119932.41 ft²



2860 ft / 119454.39 ft²

*All sections are oriented to Magnetic North.

Magnetic Declination= 0.7°



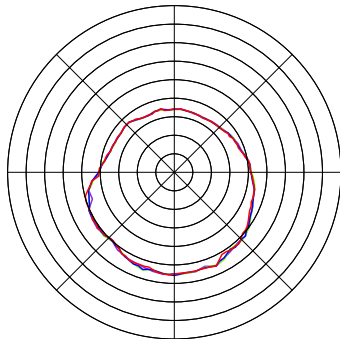
CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10

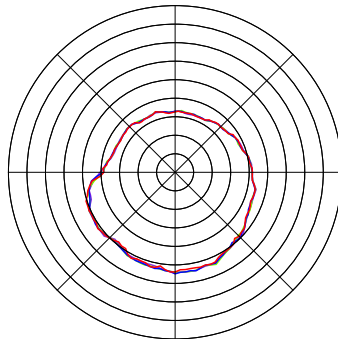


HORIZONTAL SECTIONS between 2870 ft and 2980 ft

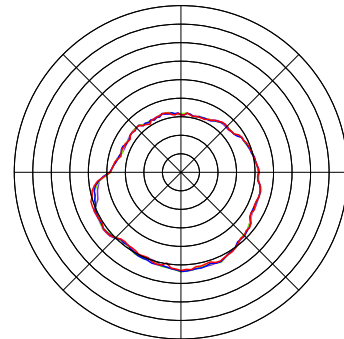
— Operation No. 10 (01/24) — Operation No. 9 (07/24) — Operation No. 8 (04/24) — Operation No. 7 (11/23) SCALE 50.0 ft per division



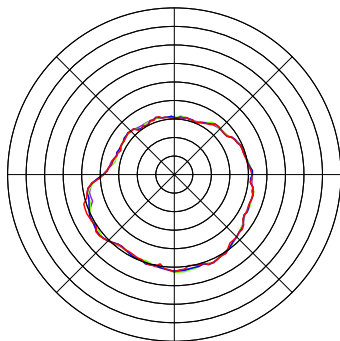
2870 ft / 118168.29 ft²



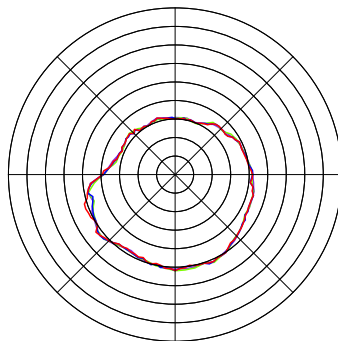
2880 ft / 113357.97 ft²



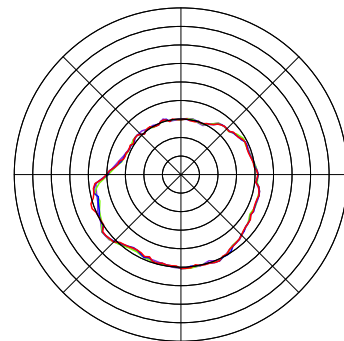
2890 ft / 110763.34 ft²



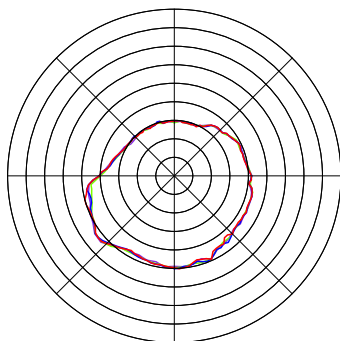
2900 ft / 108335.51 ft²



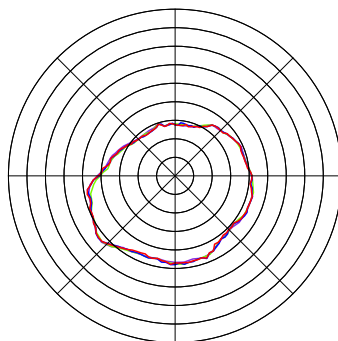
2910 ft / 106939.11 ft²



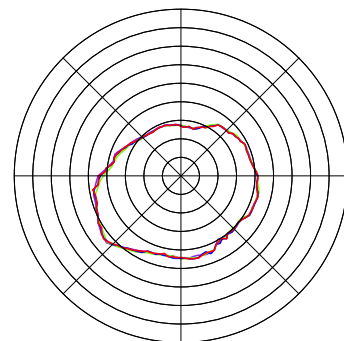
2920 ft / 105218.65 ft²



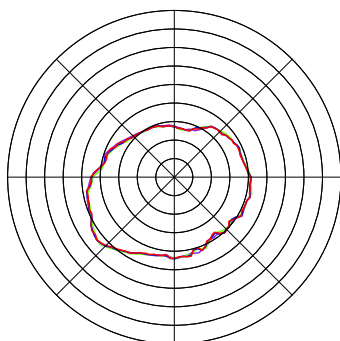
2930 ft / 102429.13 ft²



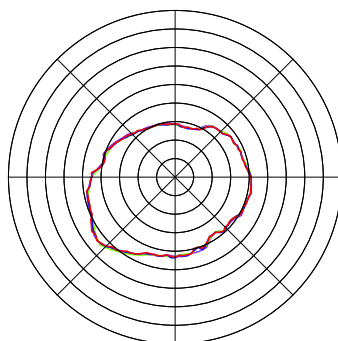
2940 ft / 98501.63 ft²



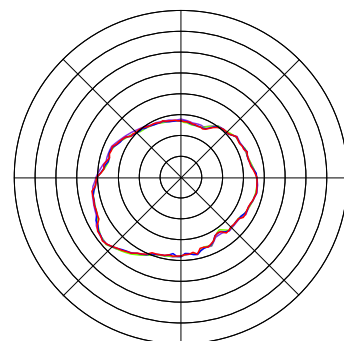
2950 ft / 96939.83 ft²



2960 ft / 96092.41 ft²



2970 ft / 97186.18 ft²



2980 ft / 99034.54 ft²

*All sections are oriented to Magnetic North.

Magnetic Declination= 0.7°



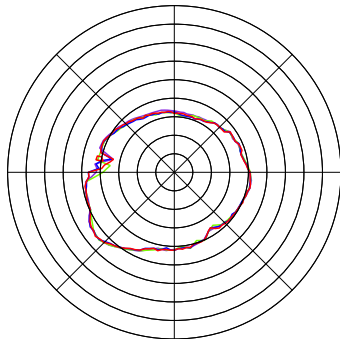
CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10

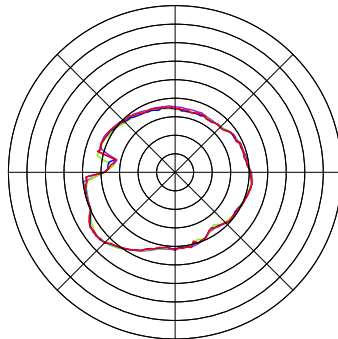


HORIZONTAL SECTIONS between 2990 ft and 3100 ft

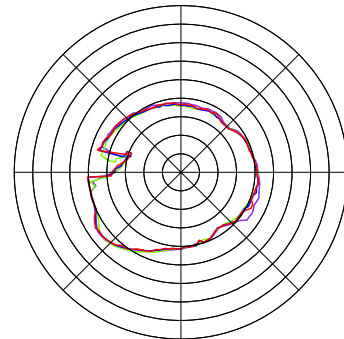
— Operation No. 10 (01/24) — Operation No. 9 (07/24) — Operation No. 8 (04/24) — Operation No. 7 (11/23) SCALE 50.0 ft per division



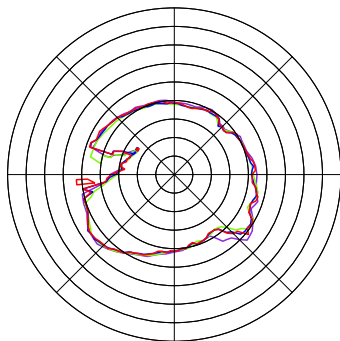
2990 ft / 101160.26 ft²



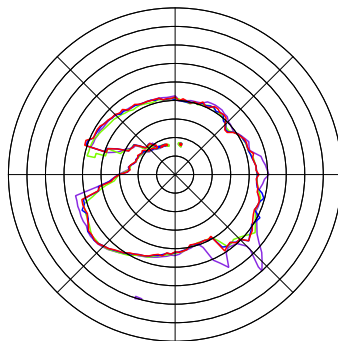
3000 ft / 103536.47 ft²



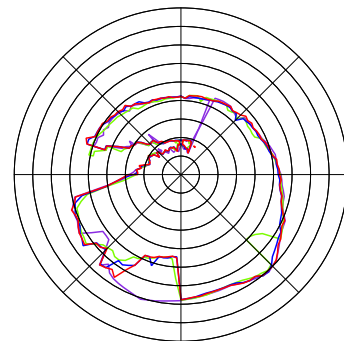
3010 ft / 106939.56 ft²



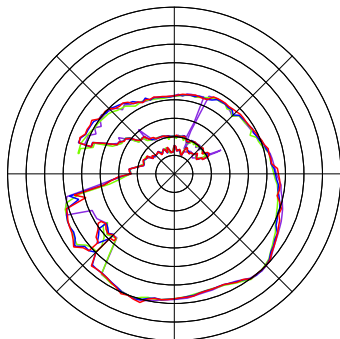
3020 ft / 113497.33 ft²



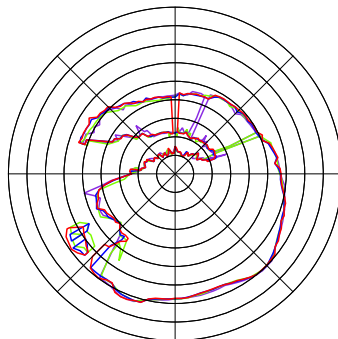
3030 ft / 119423.35 ft²



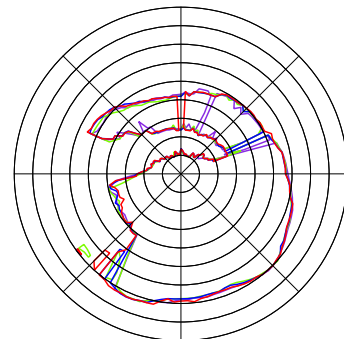
3040 ft / 166872.80 ft²



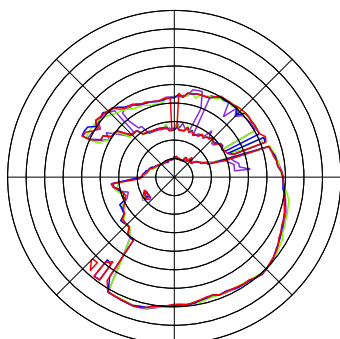
3050 ft / 179297.98 ft²



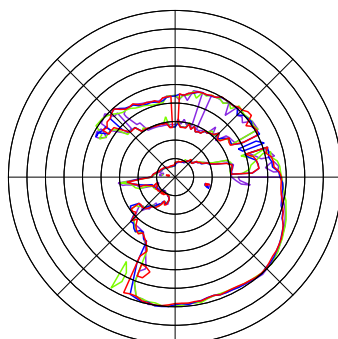
3060 ft / 170046.53 ft²



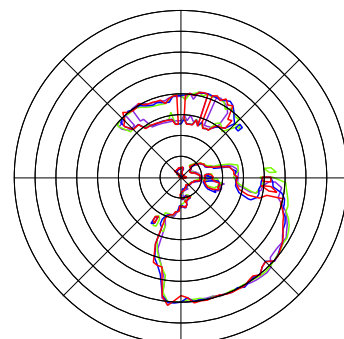
3070 ft / 163363.95 ft²



3080 ft / 153367.98 ft²



3090 ft / 124793.87 ft²



3100 ft / 84152.94 ft²

*All sections are oriented to Magnetic North.

Magnetic Declination= 0.7°



CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

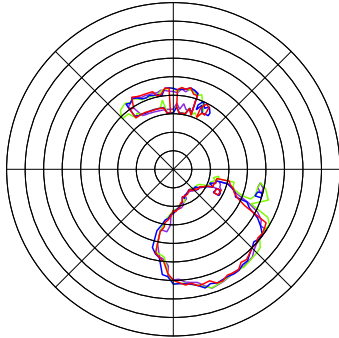
CAVERN : PPG No. 007B
OPERATION No. : 10



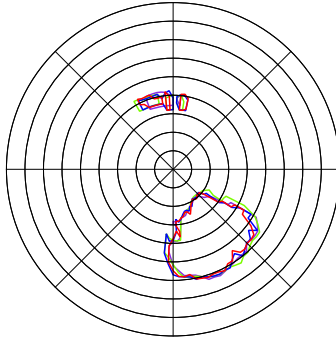
HORIZONTAL SECTIONS between 3110 ft and 3130 ft

— Operation No. 10 (01/24) — Operation No. 9 (07/24) — Operation No. 8 (04/24) — Operation No. 7 (11/23)

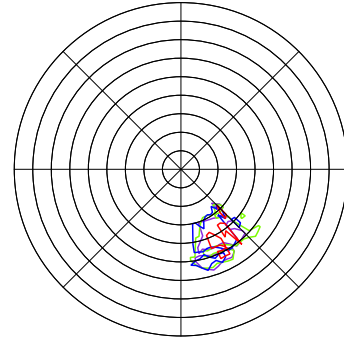
SCALE 50.0 ft per division



3110 ft / 50465.79 ft²



3120 ft / 29857.27 ft²



3130 ft / 2185.03 ft²



CUSTOMER : Westlake Chemicals

DATE : January 07, 2024

CAVERN : PPG No. 007B

OPERATION No. : 10

**WALL RANGES VS DEPTH**

DEPTH	2516.1		TILT	0		VOS	5934.70	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	161.9	158.6	164.9	161.8	162.1	162.1	162.3	162.4
24	165.8	165.8	166.4	166.8	162.7	161.5	160.8	159.3
48	161.9	161.2	156.7	158.2	157.1	156.8	156.7	157.1
72	157.1	155.2	154.0	154.0	153.4	154.7	155.2	153.7
96	153.7	154.1	154.1	155.2	156.3	158.2	154.5	155.9
120	163.0	166.4	171.6	170.7	171.1	174.2	172.7	182.0
144	183.1	186.5	190.2	189.8	191.4	208.8	210.2	209.3
168	204.0	203.4	202.2	204.0	202.3	201.6	200.5	195.5
192	197.3	197.3	196.5	195.7	196.2	195.0	193.2	176.6
216	186.1	178.7	178.3	176.3	177.2	173.1	173.1	171.3
240	168.6	168.9	168.6	172.3	172.7	173.2	173.2	172.9
264	173.4	171.6	172.0	168.9	169.8	169.5	169.4	168.6
288	169.2	164.0	170.4	170.1	169.0	168.6	168.2	167.1
312	166.7	166.7	167.3	170.1	172.3	166.8	173.2	177.9
336	179.0	171.6	167.1	164.9	165.3	164.2	164.5	162.3

DEPTH	2518.1		TILT	0		VOS	5934.70	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	168.3	162.7	164.5	161.8	162.7	163.4	162.1	162.4
24	166.9	166.8	166.4	166.6	166.4	161.9	163.0	158.9
48	161.5	161.4	159.3	158.9	157.7	156.8	156.8	157.1
72	157.1	155.9	155.6	153.1	153.1	154.0	154.8	155.6
96	154.5	154.5	155.6	156.7	156.7	157.1	154.8	157.1
120	163.4	166.6	172.4	172.3	172.1	174.9	174.7	184.2
144	187.4	187.4	189.5	189.8	191.4	210.3	209.3	208.7
168	207.1	203.2	202.1	203.1	203.4	202.5	201.9	195.7
192	196.9	197.5	197.3	196.9	196.9	196.0	200.3	189.1
216	186.1	180.6	179.3	177.5	178.7	177.5	178.7	172.7
240	173.1	173.1	173.5	174.2	175.3	174.6	173.8	173.8
264	174.4	173.8	173.5	172.3	172.3	169.9	170.1	170.5
288	170.1	169.0	170.6	169.1	169.4	167.3	169.6	167.6
312	167.0	166.7	166.4	170.1	172.0	172.3	174.0	178.7
336	179.0	171.6	168.2	166.0	165.4	164.6	165.5	165.6

DEPTH	2519.9		TILT	0		VOS	5934.70	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	168.7	163.1	164.9	162.6	163.4	162.4	165.3	165.3
24	167.9	166.4	167.1	166.8	168.6	164.8	164.2	161.5
48	161.2	161.5	161.1	159.6	158.2	156.0	157.4	158.6
72	157.4	155.3	155.6	152.2	154.0	153.7	154.1	155.2
96	154.8	154.7	156.0	156.6	157.1	157.1	156.7	159.7
120	163.4	166.8	173.1	172.7	172.7	175.7	175.5	184.5
144	188.0	188.1	189.8	189.8	191.3	210.1	210.0	208.9
168	207.8	204.1	204.4	202.8	204.2	202.1	202.1	196.2
192	197.3	197.6	198.0	198.4	196.9	195.7	200.1	189.2
216	186.2	181.6	180.2	178.7	180.2	178.3	179.0	175.3
240	173.5	175.3	174.6	174.6	174.7	173.5	174.7	173.5
264	172.9	173.5	173.5	174.2	174.1	170.1	170.5	170.7
288	170.8	169.4	170.7	168.6	169.4	167.7	169.6	167.6
312	167.6	167.6	167.6	170.1	172.2	173.5	174.7	177.5
336	180.6	172.4	169.0	166.7	165.8	164.9	169.4	167.9



CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



WALL RANGES VS DEPTH

DEPTH	2530.2		TILT	0		VOS	5934.70	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	171.0	166.7	167.1	165.6	165.2	166.7	167.1	167.5
24	169.8	171.6	171.2	171.2	171.6	165.5	168.2	166.4
48	165.6	163.9	161.2	162.3	159.9	160.4	160.8	159.6
72	158.6	158.4	158.1	158.1	157.8	155.9	154.7	156.2
96	157.4	157.8	156.0	157.1	155.0	156.0	158.6	160.4
120	162.1	165.3	170.8	170.8	173.5	180.9	180.0	186.1
144	191.3	192.1	193.6	194.5	195.4	209.0	213.9	210.2
168	211.8	208.7	208.1	204.7	208.4	205.1	203.2	201.0
192	197.3	202.1	201.0	201.4	200.6	197.6	199.5	189.5
216	188.0	186.1	184.6	184.4	183.9	182.4	184.2	178.9
240	179.8	176.9	176.8	177.9	174.9	172.3	172.6	172.3
264	173.2	173.2	172.3	173.1	174.1	169.8	170.5	169.4
288	170.1	171.6	171.2	169.7	169.5	169.8	169.8	170.1
312	170.4	170.7	168.6	169.8	173.8	174.7	178.3	180.9
336	180.5	177.1	173.1	169.4	169.8	170.5	171.2	170.7

DEPTH	2540.0		TILT	0		VOS	5936.22	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	173.9	170.4	170.4	168.0	169.2	168.0	169.5	168.9
24	174.2	173.5	173.5	174.8	173.5	172.4	170.1	168.3
48	167.7	165.3	163.2	163.3	163.3	164.3	163.3	161.8
72	161.8	159.3	159.6	160.0	159.0	159.0	160.1	160.8
96	159.5	159.7	154.1	154.7	153.8	159.0	159.7	162.7
120	163.1	165.5	172.8	177.6	178.0	180.6	185.8	186.2
144	194.5	194.2	198.1	198.4	197.3	207.7	214.6	215.9
168	215.6	212.2	210.4	209.1	209.2	209.0	209.6	205.6
192	201.9	202.8	201.3	201.0	202.2	201.4	195.7	188.7
216	186.2	187.1	183.7	182.5	182.5	179.1	183.2	178.7
240	175.4	179.8	180.2	176.8	172.3	172.3	171.4	172.0
264	173.2	171.6	171.6	172.4	171.1	170.5	170.4	170.4
288	172.3	172.3	169.5	170.8	170.4	169.2	172.0	171.7
312	171.6	171.4	172.6	173.5	173.5	175.7	180.2	180.3
336	179.4	178.7	173.5	172.4	171.6	170.5	173.5	175.1

DEPTH	2550.3		TILT	0		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	173.9	171.0	172.8	171.5	171.3	171.3	171.3	170.6
24	176.1	176.5	176.9	175.8	175.3	173.9	171.5	171.3
48	168.3	167.0	164.3	164.3	165.0	164.7	164.7	164.2
72	163.7	159.4	160.9	162.7	160.5	161.6	162.3	162.8
96	162.5	162.7	156.7	156.7	159.7	159.7	162.7	162.3
120	163.5	170.9	176.5	176.7	181.7	181.7	186.3	192.2
144	197.0	198.5	202.3	201.2	199.6	209.4	218.3	218.7
168	216.4	214.2	214.6	212.6	210.5	211.2	210.8	205.2
192	204.3	204.6	203.6	201.8	203.0	195.9	194.4	192.6
216	188.8	187.3	185.5	183.6	182.3	180.1	178.6	177.5
240	175.0	175.2	181.1	175.4	172.4	172.0	171.5	171.5
264	172.7	171.2	171.5	172.1	171.7	171.8	172.0	171.7
288	172.7	171.8	173.3	173.2	172.8	172.8	173.2	173.2
312	173.2	173.5	173.6	174.6	176.1	178.0	181.7	181.7
336	182.1	181.0	175.2	174.3	173.2	174.6	175.0	175.0



CUSTOMER : Westlake Chemicals

DATE : January 07, 2024

CAVERN : PPG No. 007B

OPERATION No. : 10

**WALL RANGES VS DEPTH**

DEPTH	2560.2		TILT	0		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	175.8	173.9	173.0	172.4	172.0	172.7	172.4	172.4
24	177.6	177.6	177.7	177.7	170.8	173.2	171.8	173.3
48	170.8	170.8	165.6	165.9	163.7	163.5	163.5	164.9
72	164.7	160.8	160.6	161.9	161.9	160.3	162.0	162.8
96	162.8	162.2	157.5	157.5	158.6	163.8	165.7	165.9
120	168.4	173.2	179.9	181.7	182.0	182.1	188.8	195.5
144	195.9	199.3	203.8	202.3	201.5	212.5	220.2	220.2
168	219.8	215.7	214.9	215.7	214.9	213.8	209.5	210.5
192	207.1	206.1	206.4	204.5	204.0	195.5	196.2	194.5
216	189.6	188.2	184.5	183.6	181.4	182.5	182.5	178.8
240	177.6	178.0	178.8	173.5	173.6	171.7	172.1	172.1
264	171.8	171.8	171.5	173.5	173.5	171.5	172.1	172.1
288	173.2	172.7	173.9	172.7	173.0	172.7	173.0	173.0
312	173.6	173.5	174.2	174.6	174.6	177.6	180.4	181.0
336	181.7	181.7	176.4	174.9	174.6	174.6	177.1	174.6

DEPTH	2570.0		TILT	0		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	178.9	173.5	172.4	173.0	172.9	172.9	172.9	177.7
24	177.6	178.2	177.0	176.6	173.0	172.9	171.9	171.4
48	171.6	172.1	164.9	165.4	164.5	165.1	164.0	164.6
72	164.6	162.0	160.3	160.8	160.8	161.3	161.6	161.0
96	161.9	160.0	156.8	161.5	161.1	164.7	165.8	166.7
120	170.4	175.5	180.5	179.4	181.6	184.8	186.2	192.3
144	199.5	201.3	203.5	203.8	204.9	215.7	222.1	221.4
168	222.5	218.5	215.7	215.3	217.1	215.7	213.5	211.3
192	208.1	206.2	207.0	205.2	203.8	197.0	196.7	197.0
216	190.5	189.2	183.6	183.0	184.1	182.7	181.6	179.8
240	179.4	176.2	179.4	174.4	174.0	172.2	172.2	173.3
264	173.8	173.7	173.2	173.8	172.7	169.7	170.8	171.5
288	172.0	171.9	172.6	172.6	172.0	172.3	172.9	172.6
312	172.0	172.3	174.0	173.7	175.8	177.3	176.9	181.5
336	181.5	180.8	174.7	174.7	174.4	174.4	179.2	174.8

DEPTH	2579.9		TILT	0		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	178.0	173.5	171.9	172.5	171.1	172.2	177.3	176.2
24	178.0	178.6	178.7	176.5	176.2	170.2	170.4	170.2
48	170.1	170.2	170.2	167.0	167.9	166.4	164.7	164.0
72	163.1	161.9	161.6	163.1	162.9	161.6	161.5	159.7
96	161.1	159.7	158.6	161.5	161.8	164.3	166.1	166.1
120	166.9	178.7	177.6	179.1	181.6	183.3	191.6	193.1
144	199.5	202.7	206.3	204.5	205.2	213.9	221.6	221.4
168	222.6	218.2	216.9	216.3	216.1	213.4	211.3	211.3
192	208.8	206.3	206.7	204.4	203.8	200.0	193.7	194.1
216	192.0	190.2	183.6	183.9	184.1	183.9	183.0	183.4
240	183.4	177.3	183.7	175.5	174.0	173.3	172.6	174.0
264	174.7	174.7	172.6	173.3	171.2	170.5	170.8	170.8
288	171.7	172.6	171.9	172.2	171.1	170.5	172.6	172.9
312	172.2	172.3	172.9	172.2	175.8	176.5	176.5	180.6
336	180.9	180.1	175.0	173.8	173.5	173.8	175.5	174.0



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WALL RANGES VS DEPTH

DEPTH	2590.1		TILT	0		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	177.3	172.2	171.7	172.0	171.7	171.9	175.8	175.8
24	176.2	175.8	176.5	176.2	176.2	170.8	169.0	167.8
48	169.3	169.0	168.7	168.7	167.9	164.0	162.5	162.5
72	163.1	161.8	162.5	163.3	160.0	160.0	160.7	161.0
96	160.4	157.2	155.7	158.2	163.3	162.9	165.4	165.8
120	165.8	174.7	176.9	181.6	182.3	186.6	193.4	197.4
144	199.1	201.7	204.4	205.3	204.4	212.1	221.0	221.4
168	218.9	216.3	216.3	216.3	216.3	213.4	211.0	210.4
192	206.2	208.5	207.4	203.5	203.1	198.8	196.3	193.0
216	189.8	191.6	183.3	184.4	183.7	181.8	183.4	184.8
240	184.5	179.1	184.8	174.4	173.5	173.2	173.7	174.1
264	175.3	175.5	169.9	169.9	169.9	169.4	169.9	171.7
288	171.4	172.6	171.7	171.9	172.2	171.2	172.0	172.0
312	171.7	171.1	171.7	173.5	173.2	178.3	178.0	180.3
336	180.1	178.7	174.1	174.1	173.2	171.4	173.0	176.5

DEPTH	2599.9		TILT	0		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	176.2	172.3	170.8	170.4	171.1	171.5	175.1	175.8
24	175.5	176.2	175.9	176.1	175.5	173.5	169.3	167.5
48	167.5	167.8	168.6	167.0	166.2	165.1	161.1	161.3
72	162.5	162.5	161.8	158.0	158.0	158.9	158.9	159.8
96	158.9	157.2	154.8	158.2	161.8	162.9	164.3	167.8
120	169.9	175.6	178.7	180.3	183.1	186.6	190.5	196.6
144	199.9	202.7	204.5	205.0	205.6	212.2	221.0	221.8
168	216.4	214.9	215.1	215.7	215.3	213.1	212.3	209.2
192	205.3	206.3	206.3	206.0	202.4	199.9	194.9	194.1
216	189.9	189.9	183.3	183.3	184.5	183.8	183.9	183.7
240	186.9	182.3	184.8	174.7	174.0	173.5	174.4	174.4
264	175.3	175.1	171.1	169.9	170.2	169.9	170.1	171.1
288	170.8	172.0	171.4	171.7	170.5	170.5	172.0	170.8
312	171.7	172.0	172.0	172.0	172.9	175.8	178.3	179.8
336	181.2	175.3	173.3	172.6	172.3	173.3	173.7	174.9

DEPTH	2604.9		TILT	0		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	172.2	170.8	170.5	169.7	170.8	171.1	175.1	176.0
24	176.5	175.5	175.6	175.1	174.7	171.0	169.4	167.2
48	167.9	169.0	167.9	166.1	164.7	163.6	161.5	161.8
72	160.8	161.1	157.9	157.4	157.5	158.6	159.0	159.0
96	157.7	155.0	154.5	158.3	161.8	163.2	164.3	168.5
120	171.5	175.3	179.4	179.8	183.4	186.6	193.0	197.1
144	199.8	202.0	204.4	204.2	205.5	212.2	221.0	221.0
168	217.4	215.7	216.0	215.3	214.6	213.1	212.4	208.8
192	206.0	206.0	207.0	204.9	202.0	198.9	194.1	192.7
216	191.6	187.5	182.6	183.3	184.1	183.4	184.1	181.2
240	186.2	185.2	183.7	175.1	175.1	174.7	176.2	175.9
264	175.5	169.7	169.7	170.2	170.2	170.2	171.4	170.8
288	171.2	171.4	172.3	170.8	170.8	170.5	170.5	170.5
312	171.1	171.7	171.5	171.7	173.3	177.0	179.9	180.5
336	178.9	172.6	173.7	173.3	173.5	172.3	175.6	174.5



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**WALL RANGES VS DEPTH**

DEPTH	2608.1		TILT	0		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	172.1	169.7	171.4	170.2	170.5	170.8	175.1	176.1
24	177.1	175.1	175.1	174.0	175.4	169.4	167.1	169.5
48	167.1	166.8	166.0	166.3	163.4	160.6	160.6	161.1
72	161.4	161.7	156.9	156.6	158.3	159.1	159.1	158.8
96	156.9	154.3	155.1	158.3	161.7	163.4	164.8	168.8
120	171.1	175.1	177.7	179.7	183.7	187.3	192.9	197.4
144	199.7	202.5	204.3	203.7	205.3	212.3	221.5	220.5
168	218.3	215.7	216.5	216.3	214.0	212.8	211.1	208.8
192	206.5	204.5	207.1	202.0	201.7	198.4	194.4	191.4
216	190.0	186.0	183.4	184.3	184.6	184.0	183.9	181.4
240	188.5	185.4	180.0	175.1	175.1	174.8	176.0	176.3
264	175.2	169.4	169.4	170.0	169.7	171.1	171.7	172.0
288	171.4	171.1	172.8	170.3	170.5	171.7	171.7	172.0
312	171.1	171.7	172.3	173.7	175.4	177.7	180.8	179.7
336	179.5	174.0	173.4	172.6	172.3	172.8	176.8	174.3

DEPTH	2610.2		TILT	0		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	172.0	169.7	171.4	170.6	170.3	170.3	175.4	175.7
24	177.1	174.3	175.1	174.0	174.3	168.6	166.8	169.1
48	167.4	166.0	166.0	166.0	162.6	160.8	160.6	160.6
72	160.6	162.6	157.1	157.4	158.3	158.3	159.1	158.6
96	156.9	154.0	155.1	158.3	162.6	163.4	164.8	167.4
120	172.0	174.6	178.0	180.0	182.6	187.7	191.9	196.0
144	199.7	202.3	204.0	204.3	206.0	214.0	221.7	220.5
168	218.5	215.4	216.0	216.1	212.8	212.5	211.1	208.8
192	206.0	204.3	206.8	201.1	201.5	198.0	194.5	190.8
216	189.7	186.8	183.1	184.6	184.6	184.6	183.8	181.1
240	188.0	185.7	181.9	175.7	174.8	175.4	176.0	176.8
264	175.0	169.4	169.7	170.0	169.7	170.3	171.4	171.7
288	171.4	171.4	171.4	170.0	170.3	171.4	171.4	170.8
312	171.4	171.4	172.3	174.6	174.6	178.3	180.8	179.7
336	179.5	172.8	172.6	172.6	172.0	173.1	176.6	174.3

DEPTH	2615.1		TILT	85		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	100.3	100.3	100.3	100.3	100.6	100.3	100.3	100.6
24	100.3	100.3	100.3	100.3	100.3	100.3	100.3	100.6
48	100.3	100.3	100.3	100.3	100.6	100.3	100.3	100.3
72	100.3	100.6	100.6	100.0	100.6	100.6	100.6	100.6
96	100.6	100.3	100.3	100.3	100.6	100.9	100.6	100.6
120	100.3	100.6	100.6	100.3	100.3	100.3	100.3	100.3
144	100.3	100.6	100.3	100.6	100.6	100.3	100.0	100.3
168	100.3	100.6	100.6	100.6	100.3	100.0	100.3	100.6
192	100.0	100.6	100.6	100.6	100.6	100.3	100.3	100.3
216	100.0	100.3	100.3	100.3	100.3	100.3	100.3	100.3
240	100.0	100.0	100.0	100.0	100.0	100.6	100.6	100.0
264	100.0	100.0	100.3	100.0	100.3	100.3	100.3	100.0
288	100.3	100.3	100.6	100.0	100.3	100.3	100.6	100.0
312	100.3	100.3	100.3	100.3	100.3	100.3	100.6	100.0
336	100.6	100.6	100.3	100.6	100.0	100.3	100.3	100.0



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DEPTH	2615.1		TILT	80		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	101.5	102.1	101.5	101.5	102.4	101.5	102.7	102.1
24	102.1	101.5	102.4	102.4	102.1	102.1	101.8	101.8
48	101.8	101.8	101.5	101.8	101.5	101.5	101.8	102.1
72	102.1	102.1	101.8	102.4	101.8	101.8	101.5	102.4
96	102.4	102.4	102.4	101.8	101.8	102.1	101.5	102.4
120	101.5	102.4	101.5	101.5	101.5	101.5	102.4	102.4
144	102.4	101.8	102.1	102.1	101.5	101.5	101.8	102.1
168	101.8	102.1	102.1	102.4	102.1	102.1	102.1	101.2
192	101.5	101.5	102.1	101.8	101.8	101.8	101.5	101.8
216	102.1	102.1	101.8	101.5	101.8	102.1	101.8	102.1
240	102.1	101.8	102.1	102.1	102.1	101.8	101.8	101.8
264	102.1	102.1	102.1	101.8	102.7	101.5	101.5	101.8
288	101.8	101.8	101.8	101.8	102.1	101.8	101.8	101.8
312	101.8	101.5	101.8	101.8	102.1	102.4	102.4	102.1
336	102.4	102.1	101.8	101.8	102.1	101.8	101.5	101.8

DEPTH	2615.1		TILT	75		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	103.6	104.2	104.2	104.2	104.8	104.5	104.2	104.5
24	104.5	104.5	103.9	103.9	104.5	103.9	104.2	104.2
48	104.8	103.6	103.6	103.6	103.6	105.1	103.9	104.5
72	103.6	103.6	103.9	103.6	104.2	104.2	104.2	104.8
96	105.1	105.1	104.5	104.2	104.2	104.2	104.2	105.1
120	104.2	104.5	104.2	104.2	104.2	103.9	103.9	104.8
144	104.5	104.5	104.5	104.5	104.8	104.2	104.8	105.1
168	105.1	104.2	104.2	105.7	105.7	105.7	105.7	104.8
192	104.2	104.2	104.2	104.2	104.2	103.9	104.8	103.6
216	104.8	105.1	103.9	104.8	104.5	105.4	103.9	103.9
240	103.9	104.5	104.2	104.2	104.2	104.2	103.6	104.5
264	104.5	104.5	104.2	104.5	104.2	103.9	103.9	103.9
288	103.9	104.5	104.5	104.5	103.9	103.9	103.9	103.9
312	103.9	104.8	104.8	104.5	103.9	104.2	104.2	104.2
336	104.2	104.2	104.2	105.1	104.8	104.8	103.6	104.8

DEPTH	2615.1		TILT	70		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	107.5	107.5	108.3	108.3	108.0	108.3	107.5	107.5
24	107.5	107.5	107.5	107.5	107.5	107.5	108.0	108.0
48	107.2	106.9	108.0	108.0	108.0	107.8	107.8	108.3
72	107.8	107.8	106.9	108.6	108.0	108.0	108.0	107.8
96	107.5	108.6	107.8	108.3	108.3	108.3	107.2	107.2
120	108.9	106.9	108.9	108.3	107.8	107.2	107.5	107.8
144	108.6	107.8	108.0	108.0	108.0	108.0	107.8	108.6
168	108.0	108.0	108.6	108.6	108.9	107.8	108.0	108.6
192	108.0	107.5	107.5	107.5	107.8	107.8	108.0	107.2
216	107.2	108.0	107.8	107.5	107.8	107.8	107.8	107.5
240	107.2	107.5	107.5	107.8	107.8	108.0	108.3	107.8
264	107.8	108.0	107.5	107.5	107.5	107.5	108.0	107.5
288	107.5	107.5	107.5	108.0	106.9	106.9	107.8	107.8
312	107.5	107.8	107.2	107.8	107.2	108.0	107.5	107.5
336	107.8	108.0	108.0	108.0	107.2	108.0	108.0	107.5



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DEPTH	2615.1		TILT	65		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	111.9	111.9	113.7	113.4	112.8	111.3	112.5	112.2
24	111.6	111.6	111.9	111.6	111.3	113.4	112.8	112.5
48	111.6	112.2	111.3	111.3	111.9	112.8	111.6	111.3
72	112.8	111.6	111.9	112.2	112.2	111.6	111.6	112.8
96	113.1	112.2	113.4	111.9	111.3	111.6	111.9	113.1
120	111.9	113.1	112.5	111.9	111.6	111.9	111.9	112.2
144	112.2	112.2	112.2	112.8	111.3	112.8	113.1	112.2
168	113.1	113.1	111.3	113.1	112.2	112.2	113.4	112.8
192	112.2	111.0	111.0	111.9	112.8	112.8	112.8	111.9
216	113.1	111.6	112.5	112.2	112.5	112.8	111.0	112.2
240	111.9	112.8	112.2	112.8	113.7	113.4	111.9	111.9
264	112.2	113.1	112.5	111.3	111.3	112.2	111.6	111.6
288	113.1	112.8	112.8	111.6	112.5	112.5	113.7	112.2
312	112.2	112.2	112.2	112.2	111.6	111.9	112.8	113.1
336	112.2	111.0	111.9	111.9	112.2	112.2	112.2	111.9

DEPTH	2615.1		TILT	60		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	118.1	118.1	118.2	118.2	118.2	119.1	119.1	117.9
24	117.0	119.1	119.1	119.4	117.0	118.8	118.8	117.0
48	117.0	117.3	117.3	119.7	118.2	117.0	117.9	117.9
72	119.1	119.1	118.2	118.5	117.9	118.8	118.8	118.8
96	116.7	116.7	116.1	117.6	117.0	117.9	115.5	117.9
120	117.6	119.9	118.5	117.0	117.9	119.9	119.9	118.8
144	116.7	118.5	116.4	116.4	118.2	119.1	117.6	118.5
168	118.5	119.1	117.9	117.6	117.3	117.3	116.7	117.3
192	117.6	117.3	117.3	117.3	117.6	117.9	118.7	116.7
216	119.1	117.0	117.0	117.9	117.9	118.2	118.5	118.5
240	118.5	118.5	117.3	117.6	117.0	119.3	117.9	117.9
264	116.7	117.3	117.9	117.9	118.8	118.8	116.4	118.2
288	116.4	117.6	117.3	116.7	117.0	117.3	117.3	118.2
312	117.3	118.2	118.2	118.5	117.3	118.2	118.2	117.3
336	117.6	118.8	118.8	117.9	117.6	118.5	117.0	118.4

DEPTH	2615.1		TILT	55		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	125.9	128.0	126.5	126.5	126.5	124.7	126.5	126.5
24	127.1	125.6	125.6	126.3	123.8	125.9	125.3	125.3
48	125.9	125.9	126.2	124.4	124.1	126.2	124.4	125.9
72	125.6	125.3	124.1	123.5	125.3	123.8	124.1	126.2
96	125.0	123.5	123.2	123.4	125.0	125.0	125.9	125.9
120	124.7	125.1	125.7	125.7	124.5	125.9	125.9	126.2
144	126.5	126.5	125.3	125.0	125.6	127.4	123.5	126.5
168	126.8	125.0	124.1	124.4	123.9	124.4	124.4	126.8
192	125.0	125.0	126.2	123.5	125.0	125.9	126.2	126.2
216	124.7	123.8	126.5	125.6	124.7	126.5	124.1	125.9
240	125.6	125.6	125.3	124.1	124.4	126.8	127.1	124.7
264	124.1	127.4	127.1	126.2	123.8	125.0	124.7	126.8
288	126.8	125.9	123.3	124.7	126.2	125.3	126.5	126.2
312	125.3	125.3	125.3	124.7	126.5	125.6	127.1	125.6
336	124.1	125.6	126.2	125.6	128.0	126.2	125.9	125.6



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**WALL RANGES VS DEPTH**

DEPTH	2615.1		TILT	50		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	135.4	134.5	136.6	133.9	136.0	134.5	136.3	135.1
24	135.4	135.4	134.9	133.6	134.5	134.5	136.3	136.3
48	133.6	131.8	134.2	132.7	132.7	134.8	133.9	132.8
72	133.1	133.8	133.8	134.2	134.5	133.1	133.8	132.8
96	134.8	134.8	134.8	134.5	132.4	134.5	134.2	133.9
120	134.2	135.4	133.3	134.2	134.2	135.7	136.3	136.3
144	133.3	136.6	132.7	135.4	132.7	132.4	134.5	135.1
168	134.5	135.1	133.0	132.7	134.2	131.7	134.6	133.5
192	134.6	133.8	133.9	132.1	133.1	134.5	133.1	135.2
216	134.2	133.3	133.9	136.6	132.7	136.0	135.7	133.0
240	133.3	133.6	134.5	134.5	134.5	136.0	135.3	132.4
264	134.5	135.1	134.5	133.6	135.1	134.8	136.9	136.0
288	133.9	135.4	132.7	135.4	135.1	135.1	133.6	135.1
312	133.6	133.6	136.0	135.7	136.6	136.6	136.9	135.1
336	136.3	133.6	133.6	135.1	135.1	133.3	134.5	134.8

DEPTH	2615.1		TILT	45		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	145.8	145.8	147.3	144.3	145.8	147.3	148.2	146.4
24	145.8	146.4	146.1	145.8	147.9	146.1	147.0	146.7
48	147.9	145.8	145.8	143.7	145.2	146.1	145.2	144.6
72	145.7	143.5	145.5	145.5	144.0	145.5	143.5	144.0
96	145.2	145.2	145.5	145.5	146.4	146.4	146.1	146.4
120	146.7	146.4	146.4	147.9	143.7	146.9	147.0	146.4
144	144.6	145.5	145.5	145.2	146.7	146.1	143.7	144.9
168	146.7	146.7	146.7	145.8	144.6	147.0	144.9	146.4
192	147.3	146.1	146.4	147.6	145.5	145.8	145.2	146.7
216	145.2	143.5	145.2	148.2	147.6	147.3	147.0	143.7
240	144.3	145.5	145.2	150.3	146.7	147.9	145.8	146.0
264	144.9	144.9	145.3	145.2	145.2	147.0	147.5	148.4
288	144.3	146.7	144.9	146.7	147.0	145.8	143.7	146.4
312	146.4	148.5	147.0	146.1	147.0	144.9	144.9	145.5
336	145.5	145.3	146.8	146.8	146.8	147.9	146.7	144.6

DEPTH	2615.1		TILT	40		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	162.9	162.5	161.9	160.1	160.4	161.0	161.3	162.8
24	160.4	162.2	162.2	161.6	162.2	162.8	161.3	162.2
48	164.0	161.6	161.5	160.8	159.8	161.8	161.5	159.7
72	158.6	160.4	161.5	160.8	160.0	160.1	160.1	161.0
96	160.0	160.0	160.7	159.2	160.4	160.4	159.0	161.7
120	163.1	160.0	159.0	159.2	160.4	161.5	160.7	161.0
144	160.1	160.1	161.8	160.4	159.3	159.7	160.0	161.3
168	159.8	160.7	160.7	164.6	160.1	161.6	161.0	161.3
192	160.7	160.4	161.5	159.3	159.3	157.2	161.6	161.6
216	162.2	160.1	163.4	160.1	159.5	159.8	159.2	161.1
240	161.3	163.7	163.4	164.6	163.4	161.6	161.1	159.5
264	163.1	164.0	161.1	161.1	161.3	162.2	161.3	164.6
288	161.6	161.6	161.9	160.8	161.5	161.1	161.8	161.1
312	161.5	160.0	159.8	160.4	164.0	161.8	163.3	163.1
336	159.5	163.1	163.4	161.6	161.3	161.9	163.4	162.2



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WALL RANGES VS DEPTH

DEPTH	2615.1		TILT	35		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	181.9	180.9	183.7	184.4	178.7	176.5	179.1	177.0
24	180.8	176.9	186.6	181.2	180.9	179.4	183.0	184.8
48	180.1	178.0	174.7	181.9	185.1	185.1	184.8	184.8
72	184.5	183.6	183.3	183.0	181.5	182.4	177.3	182.7
96	174.4	175.5	180.6	180.5	180.6	183.9	180.1	182.1
120	185.2	185.5	181.6	182.3	181.6	183.0	178.7	181.2
144	181.6	179.1	181.6	187.3	185.5	185.2	180.8	183.0
168	181.5	177.7	181.2	182.1	182.6	180.5	179.7	179.7
192	179.7	181.5	179.8	180.1	180.8	182.7	179.4	183.0
216	179.4	180.3	180.1	180.8	180.5	182.3	181.8	180.1
240	180.6	181.6	180.5	183.7	182.6	179.8	182.6	185.1
264	181.2	181.9	183.0	179.8	177.6	184.5	184.4	183.4
288	181.9	180.8	184.1	185.2	177.3	186.6	184.8	182.6
312	180.5	184.8	180.0	186.9	185.2	184.8	186.0	182.7
336	183.3	181.2	177.1	176.5	178.0	184.8	182.7	176.5

DEPTH	2615.1		TILT	30		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	194.0	188.4	190.2	188.1	188.6	187.8	190.4	190.4
24	192.8	192.1	191.9	191.9	192.7	190.2	189.6	187.5
48	186.6	183.3	184.5	184.8	183.1	181.9	181.6	180.8
72	180.5	178.3	180.7	177.4	179.8	178.7	178.1	179.6
96	179.4	179.2	179.8	180.0	179.8	180.5	181.6	184.4
120	188.3	192.2	197.9	197.2	197.7	199.5	198.1	201.3
144	206.5	208.6	208.9	212.8	207.4	206.7	208.8	213.5
168	209.9	205.6	202.4	203.8	211.0	209.9	206.8	202.1
192	200.0	216.7	204.1	212.5	203.5	201.7	205.2	199.1
216	200.9	201.3	200.6	200.9	202.4	198.2	197.9	197.6
240	197.6	195.9	196.5	198.2	198.3	198.5	198.2	198.8
264	199.5	197.9	198.0	195.9	197.0	195.8	195.8	195.6
288	195.7	194.8	196.6	195.2	195.2	193.0	195.6	193.3
312	192.8	192.6	192.4	196.1	198.2	195.8	198.6	199.8
336	201.2	197.9	194.0	191.9	190.9	190.1	192.5	192.2

DEPTH	2615.1		TILT	25		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	189.6	186.3	185.7	185.7	185.4	184.8	184.8	185.6
24	187.5	188.7	188.7	189.9	190.1	187.2	186.6	185.1
48	183.0	181.8	179.7	179.9	179.7	180.5	179.7	178.2
72	178.2	175.6	176.0	176.4	175.4	175.5	176.5	177.3
96	175.9	175.9	170.5	168.4	168.7	175.3	176.2	179.1
120	179.6	182.3	189.3	191.3	192.8	199.4	198.9	204.8
144	209.5	210.0	211.5	213.7	211.0	231.2	231.1	230.1
168	228.5	225.0	225.3	223.5	225.1	222.6	222.9	220.2
192	218.1	216.3	219.1	219.2	219.2	214.9	220.5	208.9
216	205.9	205.0	203.5	203.5	202.4	201.2	202.6	197.7
240	196.7	196.7	197.0	194.8	189.8	189.0	188.7	189.7
264	190.9	190.1	189.6	190.4	190.4	187.6	187.9	187.3
288	188.7	189.5	187.8	188.1	186.6	185.7	188.4	188.4
312	188.5	188.5	186.9	188.1	191.5	192.9	196.9	199.3
336	198.9	196.1	190.2	188.1	187.8	187.9	189.9	189.6



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**WALL RANGES VS DEPTH**

DEPTH	2615.1		TILT	20		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	185.2	181.9	183.0	182.5	181.5	181.2	182.4	181.8
24	187.4	187.7	188.1	187.2	186.6	184.2	182.4	182.6
48	179.8	178.3	175.3	174.7	174.4	172.2	174.4	175.0
72	174.6	172.3	170.8	171.1	169.3	170.9	172.3	173.1
96	172.9	172.7	167.3	165.5	167.3	168.7	174.6	174.5
120	175.6	182.3	187.9	188.1	192.8	193.1	197.9	201.7
144	207.9	208.2	211.7	211.0	210.4	221.0	228.0	225.0
168	227.3	224.9	223.8	222.0	222.4	222.6	221.4	218.7
192	215.1	215.7	213.7	213.9	214.3	211.6	206.3	205.3
216	199.8	199.7	194.9	194.6	194.3	191.3	189.9	188.7
240	186.3	186.3	192.8	186.3	183.6	182.8	182.5	182.5
264	183.4	181.8	181.8	183.3	181.8	182.6	182.9	182.6
288	183.7	182.9	184.4	184.0	183.7	183.7	184.1	184.1
312	184.2	184.5	184.7	185.7	187.1	189.2	193.0	193.0
336	193.3	192.2	186.4	184.8	184.5	185.7	186.3	186.0

DEPTH	2615.1		TILT	15		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	183.6	179.6	178.5	178.9	178.8	178.9	178.8	182.6
24	183.8	184.2	182.7	182.7	178.7	178.9	178.0	177.4
48	177.6	178.3	170.5	171.1	170.2	170.9	169.7	169.3
72	170.1	167.8	165.8	166.1	166.7	166.9	167.2	165.8
96	167.5	165.5	164.9	167.0	166.8	170.3	171.5	172.4
120	176.2	181.1	186.5	186.4	188.0	190.0	194.1	201.4
144	203.5	206.5	210.8	209.4	209.8	219.3	227.1	227.2
168	227.0	224.1	222.9	221.4	220.8	221.4	217.0	217.1
192	214.1	213.2	213.4	211.6	211.0	202.7	203.1	201.8
216	196.5	195.1	190.3	189.6	189.3	188.9	188.2	186.9
240	183.9	182.1	185.4	180.3	180.1	178.6	178.2	179.1
264	179.5	179.2	178.9	179.8	178.9	175.6	176.8	177.5
288	178.1	177.9	178.7	178.6	178.1	178.3	178.9	178.6
312	178.1	178.4	180.1	179.8	181.6	183.5	184.0	187.6
336	187.8	186.0	181.8	180.9	180.4	180.4	184.8	180.9

DEPTH	2615.1		TILT	10		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	180.3	176.2	173.8	174.8	174.7	173.5	179.3	178.7
24	179.9	180.6	180.3	178.3	178.6	173.1	173.5	172.0
48	170.5	174.4	170.5	170.5	169.9	167.4	166.1	164.9
72	165.5	164.0	165.2	166.5	164.0	162.9	163.4	162.5
96	163.4	161.6	160.1	161.6	165.2	165.9	168.2	168.4
120	168.4	179.8	180.0	182.6	184.5	187.0	194.7	196.5
144	202.5	205.7	209.1	207.5	208.3	217.6	225.1	224.7
168	225.6	222.1	219.2	219.3	219.3	217.5	214.9	214.5
192	211.9	209.4	209.5	207.6	206.9	203.0	196.9	197.0
216	194.5	193.3	186.3	186.8	186.7	186.6	185.7	185.4
240	186.4	180.6	186.8	177.6	176.9	176.5	174.1	174.7
264	177.6	176.8	173.9	173.8	172.0	172.6	171.7	173.2
288	173.8	175.2	175.3	173.5	174.7	172.6	174.7	173.8
312	174.1	173.2	174.4	175.4	177.3	179.9	179.8	183.0
336	183.0	182.4	177.1	177.1	175.6	174.7	174.4	177.4



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DEPTH	2615.1		TILT	5		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	177.1	172.9	171.4	171.0	171.7	172.1	175.7	176.5
24	176.1	176.8	176.6	176.8	176.2	174.1	169.9	168.1
48	168.1	168.6	169.2	167.5	166.7	165.4	161.9	161.9
72	161.6	161.6	162.2	158.3	158.3	159.4	159.2	159.2
96	159.2	157.1	155.2	158.8	162.4	163.5	164.9	168.5
120	170.6	176.2	179.3	181.1	183.6	187.3	191.7	197.5
144	200.4	203.2	205.2	205.9	206.0	212.9	221.8	222.4
168	218.1	216.2	216.4	216.3	215.1	214.0	213.1	210.3
192	206.3	206.5	207.4	206.8	203.3	200.3	195.9	194.6
216	190.5	191.3	184.0	184.1	185.1	184.5	184.5	184.8
240	187.3	182.7	185.7	175.3	174.7	174.1	175.0	175.0
264	175.9	175.7	171.7	170.6	170.8	170.6	170.8	171.7
288	171.4	172.6	172.1	172.3	171.1	171.1	172.6	171.4
312	172.3	172.6	172.6	172.6	173.5	176.5	179.0	180.4
336	181.8	176.0	173.9	173.2	172.9	173.9	174.3	175.6

DEPTH	2615.1		TILT	0		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	171.6	169.6	168.7	171.1	170.2	170.5	175.0	175.0
24	177.0	174.6	175.0	174.0	175.3	169.7	166.7	171.4
48	168.1	166.4	166.1	167.5	165.5	161.0	159.8	160.1
72	160.1	161.3	156.8	156.2	157.7	158.0	158.6	158.3
96	158.0	155.9	153.9	158.7	162.0	163.3	163.1	165.2
120	169.0	173.5	178.0	179.7	182.8	188.0	192.2	195.0
144	197.3	202.0	203.7	203.8	203.2	208.9	221.3	220.3
168	218.4	214.8	214.9	215.7	214.3	212.5	211.0	208.3
192	205.6	205.0	207.0	201.5	201.2	197.4	194.4	192.2
216	189.4	186.7	183.1	184.8	185.1	185.4	183.6	182.4
240	187.0	186.2	183.9	180.0	176.8	176.2	175.9	176.2
264	175.1	169.3	169.0	170.5	169.6	169.6	171.7	171.7
288	171.0	171.6	171.3	169.8	170.3	170.2	171.7	171.4
312	170.5	171.7	171.7	172.3	174.7	178.0	180.6	180.6
336	179.4	174.1	173.2	172.3	172.3	172.3	175.0	174.1

DEPTH	2615.1		TILT	-25		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	177.6	180.1	180.7	181.5	186.2	186.8	189.5	188.4
24	185.2	184.7	191.3	191.6	186.8	188.3	183.3	184.4
48	181.8	179.1	178.3	175.0	174.8	172.1	171.7	171.5
72	170.9	172.0	170.4	170.5	173.1	173.0	173.7	172.1
96	170.2	167.1	167.7	172.0	175.3	176.7	178.7	183.7
120	184.4	185.6	190.7	190.7	193.4	196.6	196.6	197.5
144	206.5	207.8	202.7	203.5	204.9	202.6	203.5	203.8
168	204.4	205.9	208.1	204.7	208.1	206.0	207.7	210.3
192	210.9	210.9	211.0	207.9	207.1	207.9	204.8	205.8
216	205.7	198.4	199.1	196.7	195.9	191.6	190.4	188.3
240	184.4	184.4	182.1	180.3	176.9	174.7	175.8	173.1
264	173.1	169.4	172.7	171.1	170.8	174.3	174.0	173.9
288	173.7	174.0	176.1	181.6	179.1	179.8	178.1	177.6
312	178.2	180.3	183.6	184.0	182.6	183.4	185.2	184.2
336	186.9	185.0	185.3	184.1	184.1	182.7	179.1	180.3



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WALL RANGES VS DEPTH

DEPTH	2615.1		TILT	-30		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	166.6	167.0	167.2	168.9	179.7	177.3	179.1	178.5
24	180.5	179.8	179.1	178.8	178.5	177.6	175.8	175.5
48	174.6	175.4	175.8	177.2	175.8	180.3	180.9	180.9
72	184.2	182.1	181.8	183.3	183.3	185.0	183.7	183.9
96	184.2	175.2	175.2	179.7	180.0	180.6	180.6	178.5
120	174.9	175.8	177.6	181.5	181.2	184.4	183.9	183.0
144	188.0	189.8	192.2	194.3	191.6	191.6	193.7	192.0
168	197.0	194.6	194.6	194.9	196.3	194.9	194.3	193.1
192	196.3	196.3	196.3	193.4	192.5	192.5	195.2	192.5
216	192.5	189.8	189.1	186.2	183.3	183.4	178.5	180.5
240	176.7	173.7	170.9	169.1	167.8	167.7	165.4	164.5
264	163.6	162.7	167.0	161.8	166.3	171.3	173.7	175.5
288	174.0	174.0	173.7	169.9	169.0	167.2	166.0	168.1
312	168.4	173.3	174.6	174.6	178.2	178.2	179.1	177.3
336	175.2	175.5	174.6	176.4	174.4	172.1	173.3	168.3

DEPTH	2615.1		TILT	-35		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	158.3	156.8	158.0	159.2	168.3	171.7	172.0	171.9
24	171.5	170.8	170.8	171.5	171.9	171.4	168.1	169.4
48	165.2	163.0	162.7	166.9	166.9	172.0	173.4	173.1
72	177.6	174.3	178.5	177.0	179.1	180.0	179.8	179.1
96	178.3	176.9	176.6	174.9	174.9	176.4	175.5	173.7
120	169.6	168.4	171.1	170.2	170.8	173.1	174.6	175.1
144	180.0	181.5	181.5	183.9	185.6	185.9	185.3	185.6
168	186.8	185.6	185.6	188.7	188.3	187.3	188.9	188.3
192	189.5	189.2	184.5	184.4	182.4	181.8	186.2	185.3
216	185.0	184.2	182.4	179.4	180.3	172.0	172.5	171.7
240	166.7	166.3	163.3	163.0	160.6	160.6	157.7	157.4
264	157.4	155.9	163.6	163.9	166.0	166.0	167.2	168.3
288	166.9	168.1	166.0	166.0	166.1	160.7	162.7	159.5
312	159.2	165.4	167.9	167.5	167.8	169.0	170.2	169.0
336	168.7	169.0	167.2	166.9	165.8	163.9	166.0	163.8

DEPTH	2615.1		TILT	-40		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	150.3	149.9	150.7	157.5	161.5	164.1	163.4	166.0
24	165.4	165.1	164.5	163.3	163.6	163.6	161.5	162.4
48	159.8	157.1	156.5	157.1	157.1	164.5	167.6	168.1
72	168.7	170.2	173.3	174.0	173.7	176.7	177.9	176.7
96	176.7	175.2	174.0	170.8	170.8	169.3	169.3	163.4
120	163.3	163.9	163.9	165.7	164.2	170.1	169.6	169.6
144	174.0	174.3	174.6	177.3	177.3	179.4	179.8	180.0
168	178.5	181.9	180.6	182.1	181.2	181.2	184.4	184.2
192	181.8	184.1	182.4	177.9	179.4	178.6	180.3	178.0
216	178.2	176.4	174.9	169.7	166.1	165.1	166.0	163.4
240	163.3	159.7	158.3	156.5	156.5	153.5	151.7	151.4
264	150.5	149.6	159.3	158.9	161.8	161.8	162.1	161.2
288	160.1	160.1	160.1	158.6	158.3	152.0	152.3	155.9
312	153.8	155.6	162.2	162.1	163.9	164.2	163.6	164.2
336	160.4	161.2	163.3	160.6	160.4	160.6	160.1	156.2



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WALL RANGES VS DEPTH

DEPTH	2615.1		TILT	-45		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	147.3	145.8	147.0	147.3	152.5	159.3	159.8	161.5
24	161.5	159.5	161.5	158.3	159.8	160.1	160.1	160.1
48	153.2	153.8	153.8	154.1	149.3	152.6	155.0	159.5
72	160.6	164.7	164.2	165.7	169.6	170.2	172.8	172.5
96	174.0	171.5	167.9	167.5	165.4	165.7	161.6	156.5
120	160.4	159.8	158.6	161.8	161.8	166.1	168.3	168.4
144	169.0	170.5	171.4	171.4	174.0	174.0	174.3	175.8
168	175.8	177.6	179.6	176.8	179.1	179.4	179.4	179.7
192	179.7	179.7	174.0	175.5	175.5	172.3	173.1	171.7
216	171.7	171.1	168.7	166.9	160.3	160.3	160.6	160.6
240	159.2	155.6	154.4	154.1	152.0	149.0	147.1	145.2
264	147.0	151.1	156.4	156.2	156.5	157.7	157.7	157.7
288	156.8	156.8	156.5	156.5	149.6	149.5	148.2	149.0
312	150.8	150.8	152.0	152.3	159.5	159.5	160.1	159.2
336	155.7	154.1	160.9	159.8	159.8	160.9	153.6	151.8

DEPTH	2615.1		TILT	-50		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	143.4	143.7	144.3	144.6	143.7	152.9	157.4	157.4
24	157.4	158.0	157.7	157.7	156.5	158.0	157.7	154.7
48	151.4	151.4	150.8	150.8	146.4	146.4	146.4	146.1
72	153.9	158.9	162.5	162.9	157.4	161.4	165.7	166.6
96	167.5	162.2	162.2	162.5	156.8	155.9	152.9	152.9
120	154.1	157.4	157.9	158.2	158.9	163.3	164.7	165.1
144	166.3	167.2	167.8	172.6	173.1	173.1	175.1	176.1
168	175.2	174.6	172.8	176.9	177.4	176.7	176.7	175.5
192	175.5	175.5	172.3	172.0	167.2	167.2	168.7	169.0
216	168.1	166.0	161.9	160.8	159.3	158.6	158.6	156.8
240	156.8	150.7	151.7	148.3	146.8	145.5	146.4	144.0
264	148.5	150.0	153.9	153.5	152.6	153.2	153.5	153.8
288	153.8	153.8	151.7	148.9	145.5	145.5	145.2	147.8
312	147.6	147.6	149.0	149.0	155.7	155.9	157.1	152.1
336	153.6	154.4	157.7	157.1	159.2	151.8	148.2	144.6

DEPTH	2615.1		TILT	-55		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	141.9	141.9	141.9	142.2	140.1	142.2	152.4	156.2
24	155.9	155.9	157.1	156.2	153.8	155.9	155.0	155.0
48	148.2	150.8	150.8	150.8	146.7	146.4	146.4	144.9
72	148.3	141.3	154.3	156.5	156.2	155.4	158.3	156.5
96	155.0	160.0	152.4	153.9	146.1	149.3	149.3	151.4
120	153.2	154.4	155.3	155.6	158.0	158.0	158.0	164.3
144	164.8	164.8	166.6	166.6	169.0	169.6	173.4	173.4
168	175.8	175.8	173.1	174.3	174.0	174.0	174.3	176.4
192	174.9	174.6	172.8	167.2	167.5	167.5	169.0	169.0
216	165.2	164.0	163.6	160.9	165.2	163.0	160.7	158.2
240	157.9	151.2	151.9	146.7	145.4	142.8	141.9	148.8
264	154.1	151.1	154.7	151.1	152.0	152.0	152.0	152.0
288	151.7	151.4	151.1	143.9	143.7	144.6	144.9	146.7
312	146.7	146.7	146.7	146.7	155.0	155.3	153.5	153.5
336	153.5	152.6	155.9	155.9	150.3	150.5	142.1	141.9



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**WALL RANGES VS DEPTH**

DEPTH	2615.1		TILT	-60		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	142.5	141.6	142.1	141.0	141.0	141.0	152.1	153.8
24	154.7	155.3	155.6	155.6	155.6	154.7	154.3	153.9
48	146.4	150.8	150.8	146.8	147.0	146.7	146.7	146.4
72	144.1	143.7	145.5	145.5	156.1	156.2	155.9	156.5
96	156.5	154.4	149.6	152.1	145.3	152.1	145.5	149.6
120	149.3	155.6	160.0	160.1	161.2	161.8	158.2	161.8
144	158.6	165.4	166.6	166.9	169.3	169.9	169.6	174.6
168	174.9	174.0	174.4	174.0	176.7	174.4	173.7	174.4
192	173.7	173.7	174.0	170.8	169.6	169.9	169.0	169.7
216	169.7	174.6	174.6	174.9	174.9	171.4	172.5	171.7
240	170.4	166.8	159.2	155.4	153.9	153.7	155.1	155.1
264	153.2	152.9	151.4	150.8	150.8	150.8	152.6	152.3
288	152.6	152.3	144.6	145.7	143.2	144.6	144.6	146.1
312	146.1	146.1	146.4	146.1	153.2	153.9	153.5	152.9
336	152.9	154.1	155.3	155.3	149.3	149.6	147.3	151.1

DEPTH	2620.2		TILT	0		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	171.1	169.4	169.4	170.8	170.6	168.8	174.6	174.6
24	176.8	174.8	174.8	174.0	174.8	168.3	167.1	170.8
48	168.0	165.7	164.8	166.0	163.7	159.4	159.4	159.7
72	159.4	160.6	156.3	155.7	157.7	158.0	158.8	158.0
96	156.6	153.7	153.7	159.1	161.4	163.1	164.0	165.0
120	170.6	174.0	178.0	179.4	183.1	188.3	192.6	194.0
144	198.0	201.7	203.4	203.4	203.7	208.4	220.8	220.0
168	218.3	214.3	214.3	215.4	213.9	212.3	210.8	208.0
192	205.1	203.4	207.1	202.0	200.8	196.8	194.3	191.4
216	189.1	186.6	183.1	185.1	184.8	184.3	183.1	183.1
240	186.0	185.7	184.1	178.6	176.6	176.3	176.8	175.4
264	167.7	168.6	169.4	169.4	169.4	170.3	171.7	172.3
288	170.6	171.7	171.1	169.7	170.3	171.1	171.4	171.4
312	170.8	171.1	172.0	173.4	175.1	177.7	180.3	179.1
336	179.4	173.4	172.3	172.3	171.7	173.4	175.1	174.0

DEPTH	2624.8		TILT	0		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	171.4	169.4	169.0	170.8	170.2	168.4	174.0	174.7
24	176.7	175.3	173.8	175.0	174.7	169.0	166.7	168.6
48	167.5	165.5	164.9	164.9	164.3	161.3	158.6	159.2
72	159.5	159.5	155.7	155.9	156.8	157.7	158.3	158.6
96	157.4	155.1	153.9	158.2	159.2	161.6	162.8	164.9
120	169.6	173.5	175.9	178.0	182.3	186.6	192.3	192.3
144	197.9	200.6	203.2	203.8	203.2	209.2	218.2	220.8
168	219.6	216.3	214.3	215.4	213.7	211.9	211.9	208.6
192	205.2	203.5	207.0	202.1	200.6	197.1	194.3	191.1
216	189.4	186.8	183.1	183.3	185.7	184.2	182.4	183.0
240	186.0	187.5	184.2	177.4	177.4	177.1	176.8	175.3
264	167.5	168.4	168.7	169.6	169.3	170.5	171.4	171.1
288	170.5	170.5	171.4	169.9	169.6	170.2	170.8	171.1
312	170.2	170.8	171.1	172.0	174.1	177.3	179.4	177.6
336	178.9	174.4	172.9	172.3	171.7	174.1	174.7	173.9



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WALL RANGES VS DEPTH

DEPTH	2630.1		TILT	0		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	171.1	169.4	170.6	170.3	170.2	168.3	173.4	174.6
24	176.6	174.6	174.8	174.8	170.6	168.8	166.6	170.3
48	166.6	164.6	166.8	164.3	161.7	159.4	158.6	159.4
72	159.4	159.4	155.7	155.7	157.1	157.4	158.3	157.7
96	157.1	153.7	153.4	157.1	159.1	162.3	164.8	165.4
120	169.5	173.7	176.8	179.1	182.0	186.3	191.9	192.0
144	198.3	201.1	203.1	203.1	204.8	214.3	220.5	220.8
168	218.3	214.0	213.7	215.1	212.8	211.7	210.3	208.3
192	205.4	202.8	206.8	202.3	200.3	197.4	194.3	191.1
216	189.7	187.1	183.1	183.1	184.8	184.8	182.0	184.3
240	186.0	186.6	183.1	179.4	178.3	174.8	175.7	172.6
264	169.4	168.6	169.1	169.1	169.1	170.8	171.4	172.8
288	170.3	170.8	171.4	169.4	169.7	170.6	170.8	171.1
312	170.0	170.8	171.7	172.8	173.4	176.8	179.4	177.7
336	179.0	172.8	171.4	171.7	171.4	174.8	175.1	173.7

DEPTH	2634.9		TILT	0		VOS	5950.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	171.1	169.3	170.3	169.9	168.7	167.3	173.7	173.8
24	174.1	174.1	173.8	175.3	169.4	168.7	167.8	169.6
48	166.9	166.1	164.9	164.9	162.2	161.3	158.3	158.3
72	158.3	159.8	155.7	155.4	157.4	157.4	158.3	158.3
96	156.8	153.4	153.3	158.0	159.2	162.4	164.8	165.2
120	169.0	172.9	175.6	177.4	181.8	187.4	191.9	192.2
144	198.1	201.8	203.1	203.5	203.0	213.9	220.2	220.2
168	219.6	214.1	214.0	214.0	213.1	212.2	209.0	208.0
192	204.3	202.8	205.9	202.0	199.7	196.9	193.0	191.1
216	188.6	186.8	183.0	184.1	185.4	185.1	181.2	184.2
240	184.2	186.9	187.2	180.1	177.7	176.8	175.3	172.8
264	168.4	168.1	168.7	169.3	169.3	169.3	171.7	171.4
288	170.5	170.8	170.8	169.0	169.0	169.9	171.4	170.8
312	170.8	170.8	170.5	171.1	173.8	177.4	179.8	180.0
336	179.2	174.4	172.6	172.6	171.7	174.8	174.9	175.3

DEPTH	2640.1		TILT	0		VOS	5950.06	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	169.7	168.0	170.0	169.4	167.1	167.8	174.0	174.0
24	174.8	173.7	174.8	174.8	168.8	168.8	169.1	168.0
48	165.4	164.6	163.4	162.0	160.9	157.7	157.4	158.0
72	159.4	159.7	154.9	157.1	157.1	157.7	158.3	157.7
96	155.4	153.1	154.9	158.9	160.9	162.6	164.8	168.6
120	172.3	175.4	178.3	178.6	181.7	188.6	192.0	191.9
144	198.0	202.5	203.1	202.3	203.3	213.6	219.8	218.3
168	218.9	214.3	214.8	214.5	212.8	209.7	207.7	207.7
192	203.1	202.8	204.8	200.8	199.1	196.3	191.7	191.1
216	187.4	186.4	182.9	185.1	184.3	181.4	178.8	187.1
240	184.6	186.6	186.8	180.2	177.1	176.8	173.1	173.0
264	168.3	168.6	169.7	170.0	170.3	171.4	171.7	170.0
288	170.3	172.0	169.1	169.1	169.4	170.6	170.6	169.7
312	170.6	170.6	171.4	173.4	174.3	178.0	180.3	178.8
336	177.8	173.7	172.3	171.1	171.1	174.8	174.6	174.7



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**WALL RANGES VS DEPTH**

DEPTH	2650.2		TILT	0		VOS	5950.50	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	170.2	168.5	168.5	169.9	167.3	169.3	173.8	173.8
24	175.0	173.8	174.4	173.8	169.1	167.9	168.2	167.3
48	165.2	164.3	163.4	161.6	160.7	159.5	157.1	157.4
72	157.7	158.9	155.1	155.1	156.9	157.4	157.7	157.4
96	156.9	153.0	153.0	156.9	159.2	161.9	164.6	166.1
120	172.0	172.0	176.5	178.3	181.2	186.0	188.8	191.4
144	197.0	199.4	202.4	201.7	201.8	207.7	219.6	219.0
168	217.5	214.0	214.6	214.3	212.2	211.0	208.3	207.1
192	205.3	202.1	205.9	201.8	201.2	195.2	193.7	190.8
216	189.3	185.7	182.7	184.8	184.8	182.1	178.9	184.2
240	185.4	185.7	185.9	180.4	179.2	173.5	173.0	172.6
264	168.8	168.2	168.8	169.1	170.5	170.2	171.1	170.2
288	170.2	170.2	171.4	169.3	169.3	171.1	171.1	170.5
312	169.9	170.5	169.9	171.4	173.5	176.2	179.8	178.0
336	175.2	172.3	171.7	170.5	170.8	172.0	174.7	173.5

DEPTH	2660.2		TILT	0		VOS	5950.50	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	169.6	167.3	167.0	169.1	168.2	167.9	169.9	173.8
24	175.0	174.7	174.1	174.1	168.2	168.2	169.3	166.7
48	164.3	163.7	163.4	160.7	159.5	158.9	159.2	159.5
72	156.9	157.1	154.8	154.8	156.9	156.9	157.7	156.9
96	156.9	154.5	152.7	154.5	158.0	161.3	162.8	166.1
120	169.6	171.7	175.0	178.3	178.3	183.3	187.8	190.8
144	196.7	199.7	201.8	201.8	202.4	206.5	216.1	219.6
168	217.2	215.5	213.4	212.2	213.7	210.7	209.5	206.8
192	203.6	202.1	205.3	202.1	198.5	196.4	193.1	190.5
216	189.6	185.7	182.7	182.7	181.2	181.5	178.6	181.0
240	180.7	182.7	183.4	174.1	171.7	169.3	168.2	167.3
264	166.7	168.2	168.5	169.3	168.8	169.9	172.3	169.6
288	169.9	169.9	171.4	168.8	169.1	170.8	170.8	170.2
312	169.6	169.9	171.1	170.8	173.2	173.5	178.9	177.4
336	174.4	171.7	171.7	171.1	170.8	172.6	174.4	172.6

DEPTH	2670.2		TILT	0		VOS	5950.50	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	169.3	167.3	168.8	168.8	167.3	167.3	172.3	172.9
24	174.7	172.9	174.1	169.3	167.9	167.9	166.4	166.4
48	163.7	163.1	160.4	159.5	158.3	157.1	159.5	156.3
72	156.0	157.4	154.8	155.4	156.6	156.9	157.4	157.1
96	155.4	152.4	152.4	158.6	159.8	161.9	164.4	167.6
120	168.7	172.9	176.2	178.0	181.5	185.4	191.4	193.1
144	196.4	200.9	202.1	201.8	204.2	210.1	218.7	218.4
168	215.5	215.5	213.4	213.7	211.6	210.4	208.9	206.8
192	203.9	201.5	203.3	201.5	198.5	196.1	192.9	190.2
216	189.3	186.3	182.7	181.6	181.5	181.0	179.8	178.9
240	178.9	177.7	175.3	172.6	172.0	167.9	169.4	167.3
264	168.5	168.2	169.6	169.1	169.6	171.1	169.9	169.6
288	169.3	171.4	168.5	169.3	169.9	169.6	169.9	169.1
312	170.2	169.3	170.8	173.2	172.0	175.0	179.8	177.4
336	173.5	171.7	171.4	170.5	170.2	173.5	173.8	172.6



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WALL RANGES VS DEPTH

DEPTH	2680.4		TILT	0		VOS	5950.50	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	169.1	167.9	169.1	167.9	167.3	167.3	173.5	173.2
24	175.6	172.6	172.9	169.3	168.5	168.8	166.4	165.2
48	164.0	162.8	160.1	158.9	157.7	156.9	157.1	155.4
72	156.0	157.1	155.1	156.0	156.9	157.1	157.4	156.9
96	155.1	152.1	153.3	158.0	159.2	161.6	163.7	168.5
120	168.5	172.3	176.2	178.0	181.0	186.9	188.7	194.3
144	196.1	199.4	201.5	201.5	202.7	212.5	219.0	217.8
168	215.8	212.5	212.2	211.9	211.6	210.1	208.9	206.5
192	203.9	202.4	205.1	201.8	198.8	196.4	189.9	190.2
216	189.6	186.3	182.7	182.1	175.9	178.7	177.3	176.8
240	176.2	173.5	171.7	171.7	171.7	168.8	171.1	167.6
264	168.0	168.2	168.8	168.5	170.2	171.7	169.6	169.3
288	169.6	171.7	168.5	169.3	169.1	169.9	169.9	169.3
312	167.9	169.3	170.5	172.0	173.5	175.0	179.1	177.1
336	173.5	171.7	169.9	170.5	169.9	174.1	175.3	171.9

DEPTH	2690.1		TILT	0		VOS	5950.62	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	161.5	166.2	167.6	168.8	167.9	167.3	172.3	172.3
24	174.7	173.5	173.2	170.2	168.5	167.9	166.7	165.5
48	165.2	163.1	162.2	159.2	159.2	156.6	156.0	156.3
72	155.4	155.7	155.1	154.5	156.0	157.5	157.5	156.6
96	154.8	152.1	152.1	156.0	159.5	160.7	162.5	167.4
120	168.5	172.6	175.3	177.1	180.7	183.6	187.7	190.2
144	195.8	198.2	201.2	201.5	202.4	207.1	215.2	218.4
168	215.8	214.0	212.2	213.1	211.3	210.7	208.9	206.2
192	203.9	201.8	203.0	202.8	199.9	197.6	193.7	190.8
216	190.5	186.3	182.4	182.1	175.6	172.6	177.0	176.2
240	174.4	172.0	171.7	169.8	158.7	157.5	158.9	150.3
264	152.4	147.9	156.5	151.1	153.6	156.1	156.1	156.0
288	156.3	156.5	159.7	168.7	164.0	165.5	162.2	161.5
312	163.3	165.8	170.9	172.3	172.6	175.0	178.3	177.1
336	172.9	171.4	171.1	169.1	170.2	169.4	167.3	165.8

DEPTH	2700.2		TILT	0		VOS	5951.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	142.5	140.8	141.1	145.0	166.1	162.3	165.5	160.7
24	160.7	164.3	169.1	171.5	163.7	161.0	160.8	156.5
48	155.5	160.2	161.9	160.5	156.5	154.8	155.7	156.3
72	156.0	156.0	155.1	155.1	156.6	156.9	157.5	157.2
96	154.8	152.4	152.1	156.0	159.3	160.7	163.7	163.7
120	163.7	159.0	172.0	169.4	169.1	177.0	177.0	178.8
144	194.9	197.4	184.6	188.7	194.2	185.4	193.9	195.0
168	196.5	195.3	194.1	194.9	194.4	202.4	193.5	201.0
192	203.5	202.1	203.0	196.0	194.2	196.4	188.4	191.1
216	190.5	178.8	180.9	178.1	176.6	172.7	168.7	163.3
240	158.3	156.2	149.0	145.8	144.1	144.0	141.8	142.2
264	137.8	137.2	142.9	142.0	143.8	149.4	153.0	156.0
288	156.3	155.1	152.3	147.1	146.3	144.7	144.3	145.0
312	146.8	152.5	155.1	153.0	156.9	159.0	164.9	161.9
336	161.2	158.3	161.2	159.0	155.5	151.2	152.9	144.1



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WALL RANGES VS DEPTH

DEPTH	2710.0		TILT	0		VOS	5951.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	121.2	117.3	120.3	126.4	145.0	146.5	147.1	150.4
24	146.8	143.6	145.8	150.0	143.6	142.5	144.0	144.3
48	135.4	132.5	132.1	142.0	140.0	154.5	155.4	154.4
72	156.9	156.0	156.0	155.7	156.6	156.9	156.6	156.6
96	155.1	152.1	153.0	155.5	152.9	152.2	151.1	151.1
120	141.8	147.2	142.6	144.1	147.4	147.7	158.1	155.1
144	161.7	164.3	170.6	170.2	167.7	171.6	174.5	170.9
168	173.8	170.9	170.9	172.4	174.1	175.6	175.2	174.4
192	173.5	175.6	175.0	169.7	168.0	168.5	171.2	168.4
216	169.8	164.8	162.3	156.0	153.6	149.0	148.3	149.0
240	137.9	137.5	132.1	126.5	124.6	125.7	122.4	122.4
264	123.0	117.4	133.1	134.3	136.7	136.8	141.4	142.2
288	138.4	145.4	138.2	136.8	137.9	127.1	127.1	128.5
312	124.6	135.8	138.7	141.7	139.9	143.2	147.6	142.9
336	143.2	141.9	140.0	140.5	136.5	132.8	135.2	133.6

DEPTH	2720.2		TILT	0		VOS	5951.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	102.6	98.6	98.3	101.5	121.8	126.8	125.3	130.3
24	129.3	128.6	127.6	125.2	125.9	125.9	121.0	124.0
48	117.0	115.3	113.5	114.5	106.9	127.8	133.1	135.4
72	137.8	135.7	141.7	142.0	140.7	139.9	142.9	141.7
96	143.2	141.7	140.5	140.5	140.4	135.8	140.0	125.3
120	125.4	126.4	126.5	129.4	127.1	137.5	139.7	136.9
144	144.7	145.9	147.2	151.7	155.5	154.7	152.7	154.4
168	157.6	154.9	154.9	156.6	159.3	157.4	159.1	158.0
192	160.7	160.4	152.4	152.1	149.4	148.5	157.2	154.7
216	154.0	152.0	148.0	145.8	132.8	128.9	132.5	125.3
240	125.3	118.1	115.6	116.3	109.6	109.2	102.4	100.0
264	101.2	111.9	116.0	118.5	123.0	121.2	124.6	119.7
288	120.6	116.0	116.3	119.9	107.7	107.5	103.0	108.4
312	106.9	112.5	120.2	120.4	126.4	126.9	125.9	127.5
336	118.5	119.9	125.4	121.6	121.3	121.9	117.6	111.8

DEPTH	2730.1		TILT	0		VOS	5951.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	83.7	82.2	84.4	85.1	80.4	109.0	109.5	113.2
24	113.8	109.9	107.2	107.4	110.5	109.3	109.9	105.6
48	100.0	100.9	98.4	98.5	90.5	91.7	90.2	83.7
72	109.4	124.7	131.3	129.5	129.5	127.8	134.3	133.6
96	134.6	131.8	124.9	120.9	124.6	121.0	112.8	104.8
120	111.9	111.9	111.4	114.9	113.5	121.8	125.9	125.3
144	128.6	125.6	131.3	132.5	134.6	138.6	139.3	138.7
168	136.6	142.9	139.9	148.3	141.4	142.6	149.7	144.3
192	145.0	146.5	141.5	136.0	140.4	137.1	139.3	135.7
216	134.6	133.6	126.4	121.0	110.5	110.8	111.9	109.2
240	102.7	98.0	99.8	92.0	88.3	88.4	90.5	92.0
264	95.2	96.8	103.0	101.6	102.1	103.4	104.1	102.3
288	102.3	102.7	101.5	92.6	89.6	87.5	89.1	91.2
312	89.8	89.4	94.4	94.8	106.9	108.7	108.4	101.2
336	101.5	103.2	112.2	106.9	112.4	112.8	91.4	82.2



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WALL RANGES VS DEPTH

DEPTH	2740.1		TILT	0		VOS	5951.93	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	70.3	70.7	66.7	64.6	69.4	70.3	87.6	95.5
24	95.0	97.7	96.2	91.9	94.4	94.8	89.9	89.9
48	79.0	85.5	78.9	79.7	75.8	76.5	75.8	74.7
72	72.1	71.8	101.7	104.7	95.3	98.0	109.9	112.0
96	117.8	103.5	87.6	101.1	74.8	82.2	77.1	86.4
120	91.9	92.0	93.7	95.2	96.2	106.0	108.6	109.3
144	113.5	113.4	114.9	121.5	121.5	122.1	120.3	121.0
168	124.2	127.1	133.4	125.6	129.5	131.4	130.4	131.0
192	130.4	127.4	121.4	118.8	118.8	117.0	117.4	118.5
216	109.9	108.8	101.5	99.1	96.2	95.9	94.7	94.4
240	94.1	85.8	86.9	77.7	77.7	77.1	83.1	83.1
264	89.6	85.8	90.5	84.7	78.9	78.9	81.3	85.5
288	86.6	82.8	76.1	70.4	70.6	75.1	73.3	76.3
312	76.3	74.8	75.1	76.5	92.6	94.1	90.5	89.4
336	89.6	88.2	94.7	94.8	80.1	80.4	75.9	75.1

DEPTH	2750.3		TILT	0		VOS	5955.50	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	66.8	63.5	63.5	63.8	68.8	69.1	71.5	72.9
24	75.7	76.3	76.0	76.0	76.0	76.1	61.1	65.8
48	65.3	66.5	60.8	60.8	59.6	60.8	63.5	63.5
72	64.1	67.1	67.1	67.4	69.1	70.9	75.4	72.7
96	75.4	73.0	72.4	72.4	73.0	74.2	66.8	67.9
120	67.9	77.8	88.8	82.6	84.6	81.9	81.9	92.3
144	93.9	94.8	98.1	101.0	103.7	103.8	110.2	110.2
168	110.3	107.1	108.2	115.0	116.0	114.4	114.4	112.5
192	112.3	108.7	108.7	101.5	98.3	98.0	100.4	97.1
216	95.3	93.1	93.9	92.1	95.3	93.6	91.5	87.3
240	87.0	84.3	80.5	78.1	77.2	77.2	77.5	77.5
264	73.3	74.2	71.2	67.4	67.2	69.4	70.6	69.4
288	66.5	52.8	51.0	51.0	53.1	54.5	54.6	54.5
312	60.5	61.1	55.7	55.4	71.8	71.5	69.7	69.4
336	71.2	75.4	74.8	67.1	66.8	61.4	61.7	71.8

DEPTH	2760.1		TILT	0		VOS	5955.50	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	56.3	63.2	63.5	63.5	67.7	69.4	68.5	68.8
24	68.8	67.9	68.8	69.1	63.5	61.4	60.2	58.1
48	59.3	60.2	59.9	60.2	60.2	61.4	63.2	63.8
72	64.1	65.6	66.5	67.1	67.4	69.4	70.4	67.4
96	67.7	67.7	66.8	66.8	72.7	66.8	66.8	66.8
120	67.1	65.6	65.6	66.2	69.7	70.0	68.5	69.0
144	73.3	80.5	81.6	81.6	86.1	93.1	91.5	96.5
168	94.5	93.8	95.6	91.8	98.1	96.8	96.8	101.0
192	97.0	96.3	87.6	86.4	87.0	89.1	86.1	86.7
216	87.0	89.7	90.3	92.1	86.1	86.1	86.1	86.4
240	85.5	83.7	78.7	76.6	72.1	69.4	69.4	70.0
264	70.0	65.8	65.3	61.7	62.6	64.1	64.4	45.6
288	46.5	51.0	50.4	49.8	50.4	51.6	52.8	53.1
312	54.8	45.3	41.1	41.1	42.0	42.3	57.5	57.5
336	60.2	65.6	62.9	59.6	60.5	55.4	57.2	58.1



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WALL RANGES VS DEPTH

DEPTH	2770.2		TILT	0		VOS	5955.50	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	58.1	59.9	61.1	63.8	62.3	62.3	63.5	64.4
24	64.4	63.2	63.5	62.3	60.8	58.4	57.8	56.9
48	56.6	58.7	58.1	59.0	59.3	61.7	63.2	63.5
72	64.1	66.5	67.1	66.5	67.4	74.2	68.2	65.0
96	64.7	64.4	65.0	66.5	68.8	66.8	67.1	67.1
120	66.5	66.5	65.6	64.7	62.9	62.9	63.5	65.6
144	68.2	75.4	73.9	73.6	73.9	76.0	81.9	84.0
168	83.7	81.3	84.6	81.6	86.4	85.2	85.5	83.1
192	78.7	82.6	82.8	78.7	81.3	85.2	81.6	79.6
216	79.6	83.4	83.1	84.6	84.3	84.3	84.9	85.8
240	85.5	83.1	79.3	73.9	72.7	70.3	66.5	62.3
264	59.9	61.7	62.0	62.0	62.0	62.5	48.3	46.8
288	46.5	46.5	46.8	48.3	49.2	51.0	52.5	53.7
312	50.0	44.4	37.6	35.2	35.2	35.8	37.6	42.0
336	42.1	53.1	53.7	54.8	54.8	55.7	57.2	57.8

DEPTH	2780.1		TILT	0		VOS	5955.50	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	59.6	59.6	60.5	60.5	61.1	62.0	63.2	64.1
24	61.4	61.1	61.1	60.5	59.6	57.2	56.0	56.0
48	56.0	56.9	56.9	57.8	58.7	58.7	61.1	61.4
72	64.1	64.4	66.8	70.6	70.6	70.3	66.8	63.5
96	63.8	64.1	65.9	68.8	68.8	68.2	68.2	67.7
120	67.7	66.8	62.5	63.5	62.0	63.5	64.1	65.9
144	68.2	72.1	75.1	70.6	65.6	69.4	72.7	73.9
168	75.7	76.0	76.9	77.5	79.6	79.0	78.7	79.0
192	79.6	80.2	80.2	82.2	81.6	81.6	78.4	77.8
216	79.3	80.2	82.5	83.4	86.4	85.2	85.2	84.6
240	83.7	83.7	81.6	79.3	73.9	72.7	70.3	67.7
264	63.8	62.3	62.9	60.5	59.0	57.8	56.9	47.4
288	46.8	46.8	48.0	48.3	48.9	49.8	51.3	51.3
312	52.5	48.6	48.3	50.1	49.8	50.7	51.0	53.7
336	53.4	53.7	54.5	54.5	54.8	56.3	56.6	58.1

DEPTH	2790.0		TILT	0		VOS	5955.59	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	59.6	56.3	56.6	56.6	57.5	57.5	56.6	55.1
24	54.3	53.4	53.4	53.7	54.5	55.1	53.4	52.5
48	52.5	53.7	53.7	55.7	58.4	59.9	62.3	63.5
72	63.5	62.9	62.0	62.3	63.5	67.1	64.1	63.5
96	63.2	62.9	64.4	65.3	67.7	69.7	69.7	71.8
120	69.1	68.8	67.4	67.7	66.5	65.3	65.8	67.6
144	69.4	69.4	74.8	68.2	67.9	71.8	73.3	73.6
168	76.9	77.5	78.7	78.7	80.8	80.2	80.2	80.2
192	81.9	82.8	83.1	84.9	82.8	82.5	81.1	81.1
216	82.8	84.3	85.2	85.5	87.3	86.7	86.4	85.2
240	83.7	82.8	80.8	80.8	78.7	73.9	73.0	68.8
264	69.1	67.9	66.8	64.1	60.8	59.9	59.0	56.6
288	58.1	58.7	60.8	61.7	61.1	56.1	61.1	55.0
312	54.6	58.9	54.0	54.3	55.1	55.7	55.1	55.1
336	54.0	52.8	52.8	57.2	57.2	57.2	57.8	59.6



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WALL RANGES VS DEPTH

DEPTH	2800.5		TILT	0		VOS	5956.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	60.2	57.2	56.6	57.2	57.8	58.4	56.6	54.9
24	54.6	54.0	53.4	54.9	55.8	54.0	53.1	52.8
48	52.8	53.7	54.9	56.3	57.2	59.6	60.8	63.5
72	63.2	62.9	62.0	62.3	62.0	64.1	64.7	63.8
96	63.5	63.2	65.0	65.0	67.7	69.2	69.7	69.7
120	69.7	68.6	67.7	67.1	66.2	65.6	65.9	66.2
144	67.7	68.3	69.7	70.9	77.2	78.7	82.6	83.4
168	85.8	85.5	87.3	87.3	87.9	87.6	87.3	85.5
192	84.6	84.9	85.8	89.1	90.6	87.7	85.3	86.4
216	85.8	85.2	86.1	88.2	91.8	92.1	92.4	90.9
240	90.0	85.2	83.7	78.1	76.9	76.6	74.2	71.2
264	69.5	68.0	65.6	64.7	61.1	59.0	58.1	56.6
288	55.5	55.2	55.8	56.6	56.6	56.0	56.0	56.3
312	55.8	54.3	54.0	55.2	55.8	56.3	56.3	55.5
336	55.5	53.7	53.7	56.9	57.2	57.2	55.8	57.2

DEPTH	2805.2		TILT	0		VOS	5956.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	59.3	57.5	57.2	57.5	57.8	58.1	58.4	55.5
24	54.3	54.3	54.6	54.9	55.5	54.3	53.1	53.1
48	53.4	54.6	55.2	56.6	58.1	59.6	59.9	63.2
72	63.2	63.2	62.0	62.3	62.6	64.7	65.3	64.1
96	64.1	63.8	64.4	65.3	66.8	69.7	69.5	69.7
120	69.7	68.6	68.0	67.1	65.9	65.9	66.2	66.5
144	68.3	68.6	70.0	71.8	77.2	79.0	82.9	84.0
168	85.5	85.8	87.3	86.7	87.9	87.6	85.5	84.9
192	85.2	86.1	86.4	88.8	89.1	88.5	84.3	85.8
216	87.6	87.0	87.9	88.5	92.4	92.7	90.3	90.0
240	87.9	84.6	83.2	79.3	78.4	77.8	77.8	73.0
264	70.3	66.2	65.9	64.7	62.3	61.4	60.5	57.5
288	55.8	55.2	55.8	56.3	56.6	56.3	56.3	56.3
312	56.3	54.0	54.0	54.6	55.8	56.0	55.8	55.5
336	55.2	54.0	53.4	55.2	56.9	56.6	56.0	58.7

DEPTH	2810.3		TILT	0		VOS	5956.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	58.1	57.2	57.5	57.8	57.8	58.7	56.9	54.6
24	54.0	54.3	54.0	55.5	55.5	54.6	52.8	52.8
48	52.8	53.4	55.2	56.3	58.4	59.0	60.5	62.9
72	62.9	62.9	62.6	62.9	62.6	65.3	64.7	64.4
96	63.5	63.5	64.1	65.3	63.8	66.8	68.0	69.7
120	69.7	68.9	67.4	67.4	66.5	65.9	66.2	67.1
144	68.9	69.7	70.6	71.8	77.2	78.1	80.2	84.3
168	85.8	85.8	87.6	87.6	87.3	87.3	85.2	85.5
192	85.2	86.4	87.9	88.5	88.8	87.9	85.2	85.5
216	88.2	87.0	87.0	90.6	90.6	90.6	90.0	88.2
240	88.5	85.5	83.4	82.3	79.0	78.1	76.6	73.3
264	70.9	67.7	66.5	63.7	62.9	62.3	61.4	59.6
288	57.5	56.9	55.8	55.8	55.8	56.3	55.8	56.0
312	56.3	54.3	53.7	54.3	55.2	55.8	56.0	55.8
336	54.6	55.2	56.0	56.0	56.6	56.9	57.2	59.0



CUSTOMER : Westlake Chemicals

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**WALL RANGES VS DEPTH**

DEPTH	2815.3		TILT	0		VOS	5956.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	57.5	57.5	58.4	58.7	59.0	59.0	57.8	55.5
24	54.3	54.6	55.8	56.0	55.5	53.7	52.8	52.5
48	52.8	54.3	54.6	56.3	57.8	59.0	60.5	62.6
72	62.6	62.6	62.3	62.3	62.6	65.0	64.4	63.5
96	63.5	63.5	63.8	65.3	64.4	66.2	68.6	69.5
120	69.7	68.9	68.0	66.8	66.8	66.5	66.8	67.4
144	70.0	70.6	71.8	72.7	76.0	78.1	82.3	83.7
168	85.8	85.8	86.7	87.6	87.3	87.0	85.5	85.8
192	87.0	87.3	88.5	89.4	88.5	87.3	85.8	87.0
216	88.5	87.9	87.6	92.1	92.1	90.6	89.7	88.5
240	87.3	85.5	83.2	82.9	79.9	79.0	77.8	75.1
264	71.8	68.6	66.2	63.2	62.0	59.6	60.8	59.3
288	58.1	57.5	56.6	55.8	55.8	56.0	55.5	55.8
312	56.0	54.0	53.4	54.0	55.2	55.5	55.5	55.8
336	56.0	56.3	56.3	56.0	56.0	54.9	54.9	54.3

DEPTH	2820.2		TILT	0		VOS	5956.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	57.8	57.8	58.4	58.7	59.6	59.3	59.0	55.5
24	55.5	56.0	56.3	56.3	55.2	54.3	53.1	53.1
48	53.4	54.3	55.2	56.0	58.1	58.7	60.5	61.7
72	62.6	62.6	61.7	61.7	61.7	63.8	64.4	63.5
96	63.2	63.2	63.5	64.4	63.8	63.8	68.0	69.5
120	69.7	68.9	67.4	66.8	66.8	66.5	66.8	67.7
144	70.0	70.6	71.5	72.1	76.3	78.1	82.3	85.2
168	85.5	85.8	86.7	87.0	87.3	86.7	85.5	85.5
192	86.4	87.6	82.7	83.4	88.5	88.5	87.9	85.8
216	88.5	88.5	88.5	89.1	90.3	91.2	90.6	87.9
240	87.6	84.6	82.9	82.9	81.1	79.3	78.7	76.9
264	74.2	71.2	68.6	66.5	63.8	61.1	60.5	59.9
288	59.6	57.8	57.5	55.2	55.2	54.9	54.6	55.5
312	55.5	54.3	53.1	53.1	54.6	55.5	55.5	55.5
336	55.8	55.8	55.8	56.0	56.0	56.3	56.0	55.8

DEPTH	2825.2		TILT	0		VOS	5956.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	58.4	60.2	59.3	60.2	59.9	59.9	57.8	57.2
24	56.3	56.6	57.8	56.3	55.5	54.3	53.7	53.1
48	53.4	54.6	55.5	57.2	58.4	59.3	60.5	61.7
72	61.7	62.3	61.7	61.4	62.0	63.8	64.4	63.5
96	63.2	63.2	62.9	62.6	63.2	65.6	68.0	67.7
120	69.7	69.2	67.7	67.1	66.8	66.8	67.1	67.7
144	68.6	70.0	71.2	71.8	78.4	78.7	82.0	83.2
168	85.5	85.8	86.4	87.3	87.0	86.4	85.8	86.4
192	86.4	84.0	83.4	83.4	84.6	89.1	88.2	85.5
216	86.4	88.5	90.0	90.6	90.6	92.4	91.5	89.7
240	87.0	85.5	84.9	83.7	81.1	80.5	79.3	76.0
264	73.6	71.8	68.3	67.1	63.8	62.3	60.2	59.3
288	56.9	55.5	54.9	55.5	55.5	54.6	54.6	55.5
312	55.2	54.0	52.8	52.8	54.9	54.9	55.2	55.5
336	55.5	55.5	55.8	56.0	56.3	56.6	56.6	56.9



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WALL RANGES VS DEPTH

DEPTH	2830.1		TILT	0		VOS	5956.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	85.4	60.8	60.5	59.9	60.5	59.9	59.0	73.0
24	56.9	72.2	71.9	73.3	73.7	70.1	69.0	61.5
48	67.2	62.2	63.7	62.2	57.8	59.0	60.8	61.7
72	61.7	62.0	61.4	61.1	63.2	63.2	64.1	64.1
96	62.9	62.9	62.9	62.9	64.1	65.3	68.6	68.9
120	69.2	68.9	67.7	67.4	67.4	67.4	67.1	68.0
144	68.9	69.5	70.3	73.9	77.8	79.6	82.3	82.6
168	85.8	85.8	87.0	87.6	87.0	85.8	85.5	86.1
192	86.1	84.6	84.6	85.8	86.4	87.9	88.8	87.3
216	87.3	89.1	90.0	90.9	93.0	93.0	90.3	90.0
240	88.8	86.1	84.0	83.7	82.6	81.4	80.5	77.5
264	74.5	70.9	68.9	67.7	64.4	62.3	61.7	60.5
288	58.4	56.9	55.2	54.9	55.2	54.9	54.3	54.9
312	55.2	54.0	52.5	56.4	54.9	54.9	55.2	55.5
336	55.5	57.8	58.1	59.0	55.8	56.6	56.6	57.8

DEPTH	2835.4		TILT	0		VOS	5956.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	101.9	96.9	102.4	94.1	100.6	91.5	87.6	87.3
24	84.9	78.3	80.5	77.8	76.6	80.2	78.7	78.4
48	77.6	72.7	73.0	72.7	71.2	70.0	69.7	70.3
72	70.3	71.2	71.5	72.1	72.4	76.2	72.7	77.5
96	73.3	72.9	84.6	87.7	88.4	93.4	94.8	98.8
120	106.0	107.8	71.6	70.7	67.7	67.7	75.4	68.3
144	68.9	69.5	70.3	73.0	78.7	78.7	80.8	82.6
168	85.8	85.5	87.0	87.9	86.7	86.7	85.8	86.7
192	86.4	86.7	86.7	86.1	88.8	89.1	89.4	88.5
216	88.8	90.3	90.9	91.2	93.0	93.6	91.5	90.6
240	89.4	87.3	84.3	83.4	83.4	83.2	80.5	79.3
264	75.1	72.4	70.0	67.7	65.6	64.7	63.2	63.8
288	60.5	57.8	158.1	158.8	158.8	159.1	158.1	157.7
312	157.9	158.8	160.2	160.6	151.7	151.1	151.2	150.5
336	149.8	96.3	97.7	103.5	99.5	94.8	99.9	101.9

DEPTH	2840.1		TILT	0		VOS	5956.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	152.2	152.8	151.9	148.7	149.7	149.6	98.3	97.7
24	95.4	94.5	92.0	86.4	87.0	87.0	86.7	84.9
48	82.0	81.2	81.2	77.2	76.6	75.4	84.4	82.6
72	83.3	82.3	82.7	82.8	85.1	84.1	84.3	83.0
96	92.1	88.4	92.7	95.1	103.1	99.9	102.0	111.4
120	116.0	127.1	130.2	134.0	131.1	124.3	126.1	131.5
144	130.8	130.2	233.9	240.0	129.0	80.0	121.3	94.7
168	85.5	86.7	88.8	87.9	87.6	86.7	87.0	87.0
192	87.3	87.0	87.3	88.5	89.4	88.8	89.4	89.7
216	89.7	91.2	91.2	92.4	94.2	95.1	94.8	91.5
240	90.0	87.0	85.8	84.9	85.2	83.7	189.1	200.4
264	196.9	198.3	190.8	183.3	182.8	176.7	168.1	165.1
288	162.7	160.9	160.0	158.2	158.2	158.5	158.5	157.3
312	158.2	158.8	161.5	160.6	155.8	156.3	152.2	150.5
336	149.6	149.6	153.7	154.6	157.0	151.1	151.4	151.7



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WALL RANGES VS DEPTH

DEPTH	2845.2		TILT	0		VOS	5956.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	152.2	152.8	151.7	151.4	150.5	149.3	148.4	149.6
24	149.0	148.7	148.7	147.2	145.4	144.3	145.8	149.0
48	151.9	151.7	153.4	155.8	156.1	156.4	160.6	162.7
72	166.3	168.1	169.9	171.9	174.7	177.3	179.1	185.7
96	187.9	181.0	197.6	106.1	195.6	204.9	198.9	211.1
120	216.6	217.2	221.8	227.7	233.6	143.0	231.2	233.3
144	230.4	230.3	236.2	241.4	246.3	240.8	236.8	240.6
168	241.6	243.6	243.6	247.1	248.3	247.9	245.7	245.0
192	242.9	87.9	88.5	89.1	90.9	90.3	91.2	91.5
216	91.8	228.3	227.3	227.4	226.7	225.3	225.7	222.0
240	220.7	219.0	216.9	216.0	206.6	206.9	200.4	202.7
264	197.5	197.2	196.0	186.5	182.5	176.1	168.3	165.5
288	163.9	161.0	161.5	158.9	158.4	158.3	158.3	160.1
312	159.7	158.8	160.3	162.1	156.1	155.2	151.1	151.1
336	151.4	150.2	152.8	154.3	155.9	151.4	151.1	152.2

DEPTH	2850.0		TILT	0		VOS	5956.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	152.2	152.5	151.7	151.7	150.2	148.1	148.1	149.9
24	148.4	147.2	149.3	148.4	148.1	148.1	150.2	149.6
48	151.7	151.9	154.0	157.0	159.4	159.4	162.7	164.8
72	167.4	169.2	170.4	173.1	176.4	178.8	182.0	185.4
96	187.7	191.3	195.1	198.3	200.5	205.3	207.9	211.5
120	215.1	217.8	222.5	227.6	234.4	237.7	232.4	235.9
144	230.0	230.0	240.7	242.8	248.0	241.4	237.4	241.3
168	242.8	244.9	244.7	247.6	249.0	247.0	248.7	246.7
192	244.3	246.5	249.0	247.9	245.7	238.5	235.3	234.7
216	230.9	225.5	223.1	227.0	227.3	226.3	227.0	223.1
240	220.7	220.2	216.6	216.6	210.0	208.8	207.6	203.2
264	198.7	196.1	184.4	184.3	179.6	176.7	166.8	167.0
288	162.7	163.9	163.0	160.9	161.0	160.6	159.9	160.3
312	161.5	159.1	161.2	162.1	156.4	154.6	150.8	150.8
336	151.1	150.8	154.0	154.6	156.1	151.4	151.1	151.9

DEPTH	2855.3		TILT	0		VOS	5956.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	152.2	151.9	151.4	151.7	150.2	150.2	148.4	149.3
24	147.5	148.1	150.2	150.2	148.7	148.1	149.9	151.4
48	153.1	154.0	159.5	159.4	161.5	160.6	163.3	164.8
72	167.0	169.2	171.9	172.5	177.1	179.3	184.1	187.7
96	187.4	192.5	195.4	199.7	202.0	202.6	207.9	208.5
120	214.5	216.0	223.1	227.6	236.0	237.1	230.3	235.6
144	230.3	230.0	242.8	242.5	246.4	241.3	236.7	240.1
168	243.2	243.7	244.9	247.9	248.1	246.4	248.2	245.8
192	243.7	244.6	248.4	247.5	245.5	237.4	234.2	234.9
216	230.6	222.5	222.7	224.9	228.8	227.6	224.8	224.0
240	221.0	220.6	220.2	216.9	215.7	210.9	209.8	205.0
264	198.7	194.7	185.3	179.3	175.8	175.7	166.5	166.8
288	163.0	163.0	162.4	160.3	160.6	160.1	159.3	160.6
312	162.7	163.9	162.7	163.3	157.0	153.4	152.8	150.8
336	149.6	149.6	152.8	153.7	156.7	151.1	150.8	151.7



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WALL RANGES VS DEPTH

DEPTH	2860.5		TILT	0		VOS	5956.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	152.2	152.5	153.1	151.9	151.1	150.5	149.9	150.2
24	149.6	148.1	148.7	149.3	148.7	149.6	150.8	150.8
48	152.8	154.9	160.9	158.5	163.0	161.5	161.5	162.4
72	166.1	170.7	171.3	177.0	177.3	180.4	183.5	186.8
96	190.1	192.2	194.8	198.1	199.0	202.0	205.1	206.5
120	213.6	215.8	222.0	225.2	231.3	230.9	230.3	235.6
144	228.5	228.5	234.4	240.4	246.4	241.3	241.0	240.7
168	242.8	242.8	243.7	246.1	246.7	246.4	245.5	244.9
192	241.0	242.8	248.4	247.6	242.5	240.1	233.5	230.9
216	230.3	221.9	222.2	220.2	226.9	228.2	222.5	222.2
240	221.6	221.2	221.2	219.8	216.9	214.2	209.8	204.7
264	197.2	194.3	185.3	179.9	174.9	168.9	165.6	165.9
288	162.7	162.4	161.8	159.1	160.3	159.1	158.8	159.4
312	162.7	162.7	163.0	162.7	157.0	156.7	151.4	151.4
336	151.7	153.0	153.7	157.0	157.0	151.7	151.4	152.5

DEPTH	2870.0		TILT	0		VOS	5956.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	151.1	151.1	151.9	151.4	150.2	150.2	148.1	149.0
24	149.0	146.9	147.5	149.0	150.5	151.1	151.7	151.7
48	154.3	154.9	158.8	157.6	162.7	162.4	165.4	164.2
72	167.4	171.0	173.7	180.3	181.7	182.3	182.3	187.2
96	189.3	193.0	195.9	197.2	198.4	197.5	201.4	202.6
120	206.6	211.6	216.6	219.9	219.9	226.4	230.9	229.4
144	230.3	227.6	227.9	236.5	246.4	243.1	241.9	241.0
168	242.5	242.5	242.2	243.1	244.3	246.7	245.5	244.3
192	240.1	235.6	236.8	236.4	237.4	237.4	232.7	232.7
216	226.2	223.0	220.5	221.3	225.5	224.0	227.9	224.2
240	226.7	222.2	223.1	222.8	223.1	221.0	212.7	204.7
264	199.0	182.3	181.1	179.9	174.3	169.5	168.6	166.2
288	160.9	161.5	161.2	158.8	160.3	160.0	158.2	160.0
312	161.8	162.1	161.6	158.5	157.6	153.0	151.4	150.5
336	150.8	149.3	152.8	152.8	156.1	150.2	149.9	150.5

DEPTH	2880.0		TILT	0		VOS	5956.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	145.1	146.9	145.1	145.1	144.5	145.7	144.2	143.5
24	143.5	144.0	144.6	150.2	150.5	154.1	155.2	154.0
48	155.2	156.7	157.6	166.0	166.3	169.5	168.6	169.8
72	170.1	175.8	179.6	179.3	181.1	185.0	185.3	185.3
96	186.2	192.2	196.3	196.6	196.0	193.9	197.2	199.7
120	199.7	201.4	207.3	213.7	214.1	217.5	213.3	222.4
144	223.3	224.8	225.8	229.1	235.8	236.5	234.0	235.6
168	234.2	233.9	234.7	234.2	239.2	239.2	234.6	227.3
192	233.2	234.3	228.5	227.9	227.0	231.8	227.0	218.1
216	218.7	215.1	219.8	222.7	225.9	226.4	229.6	225.1
240	226.0	224.3	225.9	224.7	224.7	218.2	214.0	207.5
264	200.4	179.6	171.0	173.7	165.2	163.6	159.4	156.4
288	154.8	155.5	153.0	152.2	151.1	152.5	153.4	152.5
312	154.6	154.9	154.3	153.4	146.2	145.4	147.6	146.6
336	147.6	148.4	152.9	149.6	148.0	144.4	142.1	143.3



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**WALL RANGES VS DEPTH**

DEPTH	2890.2		TILT	0		VOS	5956.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	137.4	137.6	143.0	139.1	136.9	139.1	138.8	138.8
24	138.8	142.7	143.6	149.0	150.8	155.5	156.4	156.4
48	153.4	155.8	156.7	165.2	167.7	168.3	172.4	174.3
72	174.9	177.0	178.2	179.6	182.3	185.3	187.4	183.8
96	185.0	191.6	193.9	195.7	195.4	193.0	193.0	197.5
120	194.2	196.5	207.6	211.2	209.8	214.8	213.7	218.0
144	222.7	226.7	227.4	229.4	232.8	231.7	226.1	227.7
168	229.9	229.2	234.9	233.3	235.6	232.4	231.0	220.2
192	227.7	228.1	225.2	219.5	219.8	221.6	217.3	216.0
216	216.3	213.9	215.5	221.9	227.7	229.9	230.6	224.9
240	226.4	227.0	227.7	228.1	227.4	220.7	218.4	211.2
264	201.4	183.6	169.7	166.0	162.7	160.6	154.3	149.1
288	151.0	152.3	150.2	150.5	146.9	145.5	150.5	151.1
312	149.3	152.0	150.5	144.4	141.9	137.1	143.3	143.3
336	144.5	144.8	147.6	147.2	145.4	140.1	138.3	142.1

DEPTH	2899.9		TILT	-26		VOS	5956.68	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	134.1	129.9	130.4	131.3	129.6	128.4	130.4	137.2
24	140.3	143.5	150.3	159.6	163.9	168.4	170.6	169.9
48	171.2	176.9	182.6	180.5	179.4	182.4	182.4	191.0
72	185.1	186.5	187.0	188.1	193.2	195.6	202.4	202.0
96	202.7	204.8	205.2	200.8	200.7	197.6	198.3	196.0
120	196.0	196.8	189.5	189.5	190.6	191.0	190.1	191.9
144	179.1	176.9	181.1	190.1	196.5	197.4	198.8	200.4
168	204.7	202.7	203.7	203.8	207.3	207.3	206.4	208.7
192	209.9	209.6	216.8	216.8	228.4	232.7	237.7	245.2
216	250.3	250.5	260.4	264.0	267.1	270.4	271.4	272.1
240	267.0	260.8	246.8	245.4	246.7	247.3	245.5	248.4
264	244.6	247.9	252.3	196.5	192.7	211.9	210.8	201.5
288	203.1	204.2	205.9	200.9	192.8	186.7	181.3	171.5
312	167.6	163.2	158.3	158.9	150.9	150.3	146.4	145.6
336	144.6	144.5	144.0	143.6	139.0	137.2	137.6	134.9

DEPTH	2899.9		TILT	-27		VOS	5956.68	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	136.7	135.4	135.4	131.7	130.8	129.7	130.4	138.7
24	142.4	143.5	150.3	160.3	162.7	169.6	172.5	171.7
48	172.5	178.2	183.4	183.2	184.3	182.8	184.7	191.9
72	191.0	187.4	187.4	190.6	194.7	197.0	203.0	204.2
96	206.4	208.7	206.8	202.8	202.2	198.6	201.5	197.4
120	196.8	196.9	191.5	192.2	194.1	194.7	191.0	191.9
144	186.5	178.8	182.4	191.8	198.2	200.1	200.1	199.3
168	204.9	204.1	207.8	208.2	208.2	206.4	206.4	208.2
192	207.3	209.6	216.8	221.8	231.0	233.7	239.2	248.7
216	251.7	254.7	267.1	268.1	269.2	275.9	340.0	278.8
240	267.9	261.9	250.8	249.4	251.7	251.4	249.4	248.5
264	259.4	259.9	200.1	196.0	192.9	201.0	198.3	210.2
288	207.5	213.2	208.9	204.8	198.8	196.2	192.8	173.2
312	173.6	167.3	161.2	164.9	156.7	152.3	149.9	147.9
336	146.3	146.5	146.7	145.6	145.8	138.5	138.2	139.0



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WALL RANGES VS DEPTH

DEPTH	2899.9		TILT	-28		VOS	5956.68	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	139.8	137.4	137.4	133.6	131.7	131.5	132.7	138.5
24	145.2	143.5	150.3	160.3	165.2	170.7	173.1	173.4
48	174.7	179.7	186.5	187.0	186.5	185.6	186.5	191.5
72	192.4	187.4	187.4	191.4	194.2	198.7	204.9	205.1
96	209.2	210.1	208.6	205.7	203.9	200.8	203.1	200.4
120	198.7	199.2	199.2	198.7	197.8	194.7	192.4	194.2
144	186.5	178.8	185.6	192.6	198.4	199.6	201.6	198.4
168	206.2	205.1	207.8	208.7	211.4	206.3	205.8	208.2
192	207.5	214.2	217.7	228.2	233.4	235.6	241.3	252.6
216	256.6	260.5	268.1	273.1	280.7	350.8	351.8	354.0
240	350.5	264.5	316.9	252.8	254.4	255.0	247.7	249.7
264	297.6	298.7	200.1	196.0	190.6	191.1	187.0	237.5
288	209.9	219.5	212.0	210.8	208.6	204.9	202.6	189.9
312	181.9	172.0	173.0	169.6	157.8	154.5	152.9	152.6
336	151.2	148.5	150.8	150.3	148.0	141.5	138.9	141.4

DEPTH	2899.9		TILT	-29		VOS	5956.68	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	143.8	145.8	140.3	135.5	133.8	134.0	138.1	140.6
24	145.5	145.3	151.2	160.3	167.9	173.1	174.6	175.7
48	174.7	177.9	187.8	187.3	186.5	186.4	192.3	193.3
72	192.9	190.0	190.6	192.7	194.4	202.0	206.4	207.8
96	210.8	212.2	210.5	208.4	207.1	204.4	203.9	203.7
120	198.7	200.5	199.2	200.2	199.1	197.4	195.1	194.2
144	191.9	178.8	185.6	193.3	198.8	201.1	203.7	197.7
168	209.7	206.2	207.8	207.3	212.3	209.1	205.6	209.6
192	214.1	218.7	222.3	232.2	235.9	239.9	244.6	256.6
216	358.7	358.1	356.3	277.4	341.8	351.3	352.7	354.0
240	350.8	334.1	316.7	313.4	256.2	256.5	243.1	289.3
264	294.3	298.7	201.9	194.7	191.0	186.2	177.0	228.0
288	230.9	229.1	225.9	217.0	213.4	213.1	210.2	198.8
312	196.9	189.0	179.6	176.9	173.0	164.4	158.1	156.7
336	154.8	153.3	159.4	154.0	151.6	149.2	145.8	146.8

DEPTH	2899.9		TILT	-30		VOS	5956.68	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	149.6	150.0	149.8	137.7	137.6	137.0	144.0	145.3
24	145.3	145.3	151.7	163.9	170.7	175.7	176.2	176.4
48	176.1	177.9	189.0	191.0	189.7	189.7	195.4	195.8
72	196.1	194.8	194.8	192.7	200.0	204.1	209.1	209.9
96	215.2	214.6	212.4	210.2	210.2	207.7	208.0	206.4
120	200.4	200.5	200.1	200.6	200.9	197.6	195.1	194.2
144	191.9	183.5	188.3	193.3	199.6	202.4	205.7	197.4
168	210.7	208.2	208.5	207.1	212.3	212.5	208.2	211.1
192	215.0	221.4	228.6	236.9	238.1	243.5	250.1	357.6
216	260.8	357.6	355.8	340.7	318.0	325.2	331.3	333.5
240	340.9	315.1	314.5	310.1	306.0	296.5	238.8	288.8
264	289.4	241.4	198.7	195.5	190.6	180.2	176.6	219.0
288	272.5	283.9	231.0	232.2	237.0	219.5	219.6	215.1
312	208.0	207.5	199.3	196.0	183.7	178.0	168.5	172.1
336	166.2	162.8	163.3	158.9	156.7	155.3	151.6	151.2



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**WALL RANGES VS DEPTH**

DEPTH	2899.9		TILT	-33		VOS	5956.68	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	174.8	176.6	174.1	174.7	170.9	155.6	161.6	158.3
24	172.0	172.5	168.7	177.0	177.5	180.2	183.5	181.3
48	182.9	188.8	194.7	196.6	201.1	207.4	211.9	210.9
72	209.8	210.7	223.2	228.2	231.2	232.6	236.4	233.1
96	232.2	239.2	239.2	327.8	331.0	334.2	339.1	344.1
120	350.5	354.4	355.8	206.9	206.9	355.5	356.6	195.8
144	192.1	189.7	193.7	199.7	205.2	207.7	210.3	200.9
168	206.9	214.3	213.3	215.0	217.8	219.0	225.5	225.0
192	225.0	354.9	244.7	248.8	353.6	341.3	339.4	333.6
216	340.7	340.4	339.6	333.1	262.6	265.4	279.9	284.9
240	288.7	279.3	279.1	279.6	279.2	273.4	227.1	273.0
264	208.2	199.6	199.2	188.7	185.2	178.8	176.6	196.0
288	287.5	285.7	282.9	285.6	279.0	293.2	263.2	265.4
312	248.1	251.7	228.2	254.0	220.1	215.7	208.2	200.4
336	200.3	199.5	203.1	192.2	195.3	193.6	190.9	190.0

DEPTH	2899.9		TILT	-34		VOS	5956.68	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	187.8	200.9	192.8	194.5	185.8	176.9	181.3	186.7
24	195.8	186.7	178.2	178.5	178.0	182.8	185.3	184.1
48	186.3	193.3	196.7	211.0	209.2	213.0	216.1	216.4
72	217.0	219.2	227.8	230.8	298.5	238.6	301.2	234.9
96	319.4	323.7	322.7	326.4	331.8	336.8	340.9	348.2
120	349.8	351.8	356.3	360.4	360.9	353.4	202.8	199.6
144	194.6	191.6	196.6	201.9	206.9	209.6	211.7	205.2
168	206.9	215.5	215.0	220.4	221.2	220.0	227.1	352.7
192	354.9	348.6	345.9	345.9	347.7	332.3	332.7	324.9
216	334.7	333.1	293.4	280.2	261.7	263.9	266.3	271.8
240	274.7	269.2	269.2	270.8	271.4	267.8	223.6	221.4
264	204.2	199.6	199.2	193.3	187.0	179.3	174.7	189.5
288	297.0	287.5	291.1	287.8	286.6	292.7	269.7	266.6
312	270.8	262.6	256.1	256.7	225.0	228.8	236.4	219.5
336	214.0	204.8	209.7	217.9	216.3	208.6	204.9	195.9

DEPTH	2899.9		TILT	-35		VOS	5956.68	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	211.9	208.1	206.9	199.7	198.5	190.4	199.5	205.0
24	209.7	207.3	241.3	240.2	192.4	186.0	188.0	187.2
48	189.2	194.7	207.3	217.7	216.9	228.3	228.6	228.6
72	219.1	292.8	301.8	302.9	304.2	313.8	318.7	319.6
96	322.8	323.2	323.2	329.6	331.8	335.0	337.7	344.6
120	347.0	351.6	353.3	352.7	354.4	349.2	350.4	201.0
144	198.7	358.2	359.3	205.5	209.6	211.0	213.4	206.3
168	209.2	216.5	221.1	230.4	347.8	354.9	350.8	350.8
192	347.7	249.7	337.5	341.3	336.0	324.1	322.7	314.2
216	325.5	301.3	258.0	255.3	261.7	260.5	254.0	259.9
240	262.1	260.8	264.4	263.5	262.6	262.6	269.7	221.7
264	202.4	200.5	199.2	192.6	188.3	177.0	175.3	174.3
288	288.3	287.9	303.0	292.1	294.9	292.4	284.3	285.6
312	277.4	277.9	256.7	256.7	253.1	253.4	240.2	237.0
336	229.5	234.8	228.6	227.7	228.6	219.8	214.6	206.9



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WALL RANGES VS DEPTH

DEPTH	2899.9		TILT	-36		VOS	5956.68	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	229.1	218.0	234.5	235.0	237.5	238.6	208.3	235.9
24	241.9	245.4	257.1	260.8	258.8	258.5	262.6	262.6
48	191.5	197.7	212.1	274.6	271.6	271.6	275.2	278.0
72	291.2	298.3	303.3	306.0	308.5	316.9	317.5	318.3
96	322.3	320.9	323.9	325.3	332.3	335.5	336.4	339.5
120	344.0	344.1	342.9	340.0	348.3	345.2	350.8	356.0
144	202.0	200.5	200.9	354.4	211.9	212.6	351.1	353.8
168	213.6	218.7	352.8	346.3	345.0	347.2	346.8	345.4
192	336.9	326.9	326.9	336.9	328.2	314.2	310.7	305.2
216	303.5	274.8	257.2	255.3	257.1	256.6	251.0	256.2
240	258.8	256.8	262.6	260.0	257.6	256.7	261.7	225.0
264	204.1	200.5	197.8	188.8	188.3	177.0	174.3	174.3
288	247.6	245.8	302.5	302.0	297.0	295.4	293.2	286.7
312	279.3	279.6	261.0	256.7	261.0	252.8	240.8	236.8
336	233.2	235.9	234.8	233.6	230.9	233.7	228.6	228.6

DEPTH	2899.9		TILT	-39		VOS	5956.68	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	240.1	247.9	247.6	248.1	249.4	253.5	252.2	253.1
24	249.5	278.4	288.3	287.0	288.3	288.8	295.6	299.7
48	302.0	302.4	296.5	296.5	298.7	299.2	302.0	301.4
72	301.4	296.1	302.4	303.8	303.3	309.0	313.7	311.5
96	308.3	313.4	319.7	317.8	321.3	323.8	327.3	329.8
120	333.6	334.1	335.9	334.6	339.1	338.2	341.8	341.8
144	343.2	349.0	349.5	350.4	349.0	349.0	349.9	348.9
168	348.4	341.3	342.2	341.8	336.8	331.3	327.9	322.3
192	308.7	302.0	295.2	295.9	302.4	298.7	291.0	273.0
216	252.3	252.6	251.3	249.4	250.1	239.5	243.4	248.4
240	250.0	251.3	259.4	256.7	250.2	247.3	246.7	231.0
264	205.1	198.3	191.5	182.9	181.1	178.4	174.3	171.1
288	171.6	172.0	295.9	292.7	285.9	282.0	294.3	292.9
312	292.9	288.4	287.8	267.6	264.3	259.9	249.0	250.0
336	239.9	244.6	240.8	245.4	241.7	240.8	239.5	239.5

DEPTH	2899.9		TILT	-42		VOS	5956.68	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	246.1	272.1	251.3	276.9	277.6	285.0	285.9	285.0
24	293.0	287.8	296.8	294.9	295.2	292.1	294.9	288.8
48	287.4	288.2	283.5	289.2	288.8	286.2	290.1	292.1
72	292.6	291.3	295.4	296.8	295.9	295.6	295.6	298.4
96	294.5	301.9	303.1	304.7	311.1	315.2	310.9	311.3
120	315.6	319.5	325.3	331.8	333.4	332.2	338.5	339.3
144	327.5	333.8	334.2	332.9	334.6	333.8	334.2	340.9
168	338.6	334.2	337.3	335.3	328.3	318.4	309.4	307.0
192	296.8	297.8	298.0	290.2	286.4	272.8	272.2	259.5
216	246.3	248.9	249.5	243.6	239.2	244.2	242.3	241.8
240	244.5	244.1	248.9	250.4	244.7	243.7	245.1	229.1
264	210.1	195.8	184.1	181.5	174.2	174.2	174.5	171.9
288	167.9	166.7	165.9	281.2	280.2	281.2	276.8	283.5
312	283.1	286.9	292.5	282.3	272.8	271.7	271.2	265.5
336	259.5	259.8	255.6	252.3	252.0	246.1	249.9	247.0



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WALL RANGES VS DEPTH

DEPTH	2899.9		TILT	-45		VOS	5956.68	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	280.7	279.3	286.9	280.2	291.6	293.7	290.9	291.6
24	291.1	287.0	288.2	284.2	286.4	281.2	277.6	280.7
48	279.8	274.1	275.2	281.1	278.7	271.7	280.2	278.3
72	273.6	267.7	262.2	258.7	255.9	272.7	290.2	284.0
96	294.9	279.3	280.0	286.9	295.2	294.9	294.0	293.5
120	311.5	309.7	313.3	316.9	316.3	322.4	323.9	325.5
144	320.4	321.6	325.9	326.7	327.1	320.5	320.7	325.1
168	329.8	320.1	320.4	321.6	321.6	312.5	301.5	298.7
192	293.3	290.5	284.7	268.5	258.7	260.3	255.5	252.7
216	251.6	252.3	247.0	236.2	243.6	244.9	241.6	240.6
240	238.2	238.2	240.6	237.5	237.5	237.6	238.0	244.2
264	213.8	197.4	191.5	179.0	168.8	180.2	179.2	168.9
288	168.7	167.1	165.9	202.0	205.8	280.8	276.9	275.5
312	280.7	280.7	286.9	282.3	281.1	281.2	288.3	274.1
336	269.7	270.5	267.0	267.4	261.0	273.6	274.4	279.5

DEPTH	2899.9		TILT	-48		VOS	5956.68	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	287.4	284.6	288.6	287.4	288.2	281.9	281.9	276.8
24	279.3	281.2	278.6	273.6	273.6	268.4	269.7	259.8
48	265.2	260.0	258.0	261.5	260.3	248.5	255.5	255.5
72	253.7	253.6	252.8	254.2	242.0	248.1	256.8	264.6
96	253.6	260.3	260.7	260.7	270.8	272.1	281.2	283.0
120	295.2	295.9	301.6	303.2	304.3	306.6	306.6	314.5
144	301.2	305.5	310.6	308.2	308.6	307.4	308.2	304.3
168	311.4	306.2	306.3	293.3	305.4	301.1	294.5	286.8
192	286.9	279.5	273.2	266.0	255.1	252.8	254.4	254.6
216	251.8	252.8	241.8	241.8	240.9	241.8	232.7	234.7
240	233.0	231.9	226.4	230.0	230.5	229.9	230.4	238.2
264	233.0	200.5	188.7	173.1	169.8	168.3	168.3	167.9
288	166.4	167.1	164.7	162.4	162.4	158.4	159.6	203.6
312	269.8	271.3	275.6	282.3	276.8	279.1	291.1	292.1
336	289.4	288.2	288.2	288.6	268.9	277.4	292.5	289.0

DEPTH	2899.9		TILT	-51		VOS	5956.68	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	281.1	281.1	284.0	285.0	280.7	274.5	273.1	268.5
24	268.9	270.8	270.3	263.2	264.2	262.2	261.7	253.6
48	252.7	248.0	243.4	245.1	245.6	233.5	238.0	225.2
72	233.1	240.2	233.5	233.5	230.8	234.3	248.5	253.7
96	244.1	246.1	244.9	261.8	258.3	263.0	270.0	274.0
120	284.0	286.6	291.3	294.0	295.9	295.9	289.7	297.1
144	294.9	297.2	295.6	299.6	300.8	304.3	295.6	290.5
168	291.3	289.4	290.7	285.8	284.6	281.1	281.2	273.6
192	274.8	264.6	261.8	261.8	254.0	248.6	244.5	246.1
216	246.1	243.0	243.0	242.6	240.9	234.7	233.1	230.7
240	230.0	227.6	225.3	224.1	224.9	225.7	225.8	232.2
264	233.5	198.1	184.0	172.9	170.8	177.8	175.0	166.3
288	165.1	163.5	160.8	160.8	161.2	160.6	161.2	161.2
312	197.9	262.4	263.6	263.8	277.2	271.2	280.7	286.9
336	286.6	287.8	288.8	281.1	281.2	282.1	285.7	281.1



CUSTOMER : Westlake Chemicals
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WALL RANGES VS DEPTH

DEPTH	2899.9		TILT	-54		VOS	5956.68	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	278.0	278.3	279.1	278.3	278.3	270.3	264.6	258.7
24	260.8	260.8	262.2	255.1	244.2	243.7	237.5	219.1
48	243.4	235.2	216.7	218.1	221.3	221.3	214.8	214.7
72	222.4	226.7	237.9	241.4	231.2	232.0	241.4	235.5
96	237.9	240.6	243.7	258.3	258.3	261.4	261.4	261.8
120	268.1	269.3	281.9	284.6	279.9	282.7	281.6	284.6
144	287.3	287.5	279.9	281.2	286.6	283.1	278.7	279.1
168	276.0	279.5	269.8	279.8	267.0	257.9	272.7	262.2
192	259.4	254.0	252.0	238.0	237.1	240.2	241.8	240.6
216	241.2	241.0	233.7	237.9	232.7	231.6	231.6	231.6
240	223.6	222.9	223.7	221.7	221.7	222.5	225.7	228.4
264	231.6	202.1	175.2	177.6	184.6	172.1	173.5	164.5
288	164.1	163.9	163.9	163.5	162.8	160.8	162.8	160.3
312	156.1	161.7	154.9	152.1	264.6	264.6	263.6	262.2
336	267.9	281.5	280.2	280.3	278.0	279.1	279.9	279.9

DEPTH	2899.9		TILT	-57		VOS	5956.68	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	270.9	198.1	270.8	262.2	260.3	194.2	253.7	212.6
24	250.8	237.5	239.9	196.3	219.1	198.2	198.7	193.5
48	192.6	195.8	195.8	181.6	179.7	185.9	188.7	194.9
72	219.4	233.9	238.2	236.7	236.7	238.0	241.0	240.6
96	241.0	241.4	250.8	251.3	259.5	259.4	257.9	257.2
120	261.3	263.2	269.3	271.3	272.2	275.8	276.7	273.7
144	270.6	270.1	267.6	263.8	263.0	264.6	268.6	271.3
168	273.6	268.9	269.3	260.8	255.1	256.1	255.6	249.6
192	242.2	242.2	240.2	237.1	235.1	234.7	237.4	237.6
216	236.7	236.6	230.5	232.5	226.8	229.2	229.2	225.3
240	218.1	221.7	218.2	218.2	217.0	216.6	218.2	224.9
264	226.1	201.1	190.1	193.9	194.6	176.4	167.4	164.3
288	162.1	162.7	161.9	163.4	166.3	164.4	160.8	160.8
312	154.9	154.9	154.9	154.1	150.6	151.0	162.2	190.5
336	191.7	195.1	194.8	194.5	202.4	202.7	272.2	272.7

DEPTH	2899.9		TILT	-60		VOS	5956.68	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	153.6	154.5	148.6	148.6	148.6	152.2	162.2	181.1
24	185.2	164.3	165.5	164.3	164.3	165.9	168.7	170.7
48	163.6	168.3	176.1	166.7	166.7	169.1	175.1	177.1
72	215.9	227.8	231.7	234.7	237.9	236.3	236.3	237.6
96	241.0	241.0	241.0	243.4	243.4	246.1	240.4	240.9
120	241.0	249.4	249.9	263.2	263.0	267.0	263.8	263.8
144	263.4	262.2	262.2	262.2	263.8	258.9	262.2	265.0
168	264.6	260.8	254.8	255.1	248.9	248.3	242.1	240.6
192	236.6	237.6	237.1	237.6	229.6	229.6	233.1	231.9
216	227.2	227.2	226.1	225.7	223.8	224.3	222.4	215.0
240	212.7	217.0	217.0	217.0	213.9	213.9	212.8	218.6
264	227.2	198.7	198.5	194.6	194.6	179.3	171.1	168.8
288	158.9	159.8	164.4	166.8	169.3	162.3	162.1	157.2
312	157.1	157.4	152.1	151.3	151.4	151.0	151.0	149.4
336	149.0	149.0	149.0	148.6	158.8	158.8	158.8	154.9



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WALL RANGES VS DEPTH

DEPTH	2899.9		TILT	-63		VOS	5956.68	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	160.8	157.0	155.6	151.3	147.5	152.2	152.9	159.5
24	159.7	159.6	161.2	161.2	158.9	157.9	158.8	153.2
48	159.1	161.5	165.5	163.0	165.9	165.8	193.3	180.8
72	215.4	223.8	225.7	231.8	233.1	231.6	231.6	232.3
96	233.5	233.1	236.3	237.5	236.3	240.2	239.8	242.2
120	241.8	240.8	241.4	248.5	252.0	257.5	255.7	253.6
144	253.6	253.1	253.3	253.2	246.9	244.1	252.4	249.7
168	243.4	239.0	240.7	237.1	239.8	232.0	232.0	230.5
192	227.5	230.9	227.1	222.5	222.1	222.1	222.1	219.5
216	218.1	215.8	209.6	205.6	205.6	205.6	202.9	204.4
240	204.8	206.2	206.5	208.0	210.3	210.3	210.3	215.4
264	219.4	197.3	196.4	194.6	180.8	181.7	176.5	168.3
288	171.2	176.7	175.5	170.6	167.5	170.6	160.1	153.1
312	164.0	161.3	151.0	151.1	151.4	151.4	151.3	149.8
336	154.1	154.7	151.9	152.5	148.9	149.4	157.1	157.0

DEPTH	2900.1		TILT	0		VOS	5956.70	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	136.2	134.1	137.4	138.3	140.1	137.1	138.0	134.7
24	136.5	139.7	141.8	145.4	148.1	155.8	156.4	155.8
48	154.6	155.2	156.4	164.8	167.1	169.2	173.1	174.1
72	173.4	174.3	176.4	177.0	180.2	183.6	186.2	185.7
96	182.9	190.7	190.1	195.1	193.9	193.1	193.1	195.4
120	193.4	196.0	205.5	209.4	208.7	211.6	211.5	211.5
144	218.8	225.2	225.6	228.1	229.9	231.0	223.7	225.2
168	222.5	221.0	228.2	229.5	233.5	229.0	227.3	216.9
192	224.2	224.0	224.2	218.8	218.4	215.9	214.5	215.2
216	214.5	214.5	221.3	224.2	229.1	232.4	232.8	222.4
240	227.4	228.5	230.0	229.4	228.5	217.7	214.2	209.7
264	199.3	180.0	170.4	161.3	158.8	152.8	152.8	149.4
288	144.8	146.6	140.3	144.8	146.0	144.8	146.0	147.5
312	148.7	146.9	147.5	136.9	134.4	138.5	135.3	135.8
336	140.8	139.1	143.3	143.9	138.7	139.7	136.9	135.8

DEPTH	2910.1		TILT	0		VOS	5957.70	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	132.9	134.7	134.4	136.2	133.2	136.2	135.0	133.0
24	135.0	138.3	140.7	142.4	150.5	155.0	156.4	156.1
48	155.8	154.4	156.4	164.5	166.9	173.1	171.6	171.0
72	171.9	173.1	175.2	176.4	177.8	182.9	185.3	185.0
96	181.2	188.9	188.9	194.3	192.5	192.5	192.8	194.6
120	195.1	198.3	201.1	203.8	205.5	208.7	211.3	211.0
144	216.6	223.1	223.5	223.8	227.8	227.1	223.8	223.8
168	223.5	220.2	224.9	225.6	230.3	225.6	226.1	220.5
192	218.1	221.7	220.2	213.3	216.3	213.6	213.8	211.3
216	214.5	214.2	220.6	224.7	227.0	231.8	235.1	221.7
240	221.7	226.7	227.3	229.7	228.8	218.1	215.4	210.1
264	203.7	187.1	174.6	171.7	158.8	154.4	151.6	144.2
288	143.3	142.4	138.6	143.7	142.1	142.3	144.8	145.5
312	146.9	139.2	146.2	135.3	136.9	137.7	134.1	134.0
336	139.4	138.0	142.3	140.4	137.6	137.2	135.3	134.1



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WALL RANGES VS DEPTH

DEPTH	2919.9		TILT	85		VOS	5957.70	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	407.2	407.2	407.9	407.9	407.8	408.0	407.2	407.3
24	407.3	407.3	407.2	407.2	407.3	407.2	407.7	407.7
48	407.1	406.7	407.6	407.6	407.6	407.6	407.4	408.0
72	407.4	407.4	406.7	408.1	407.7	407.7	407.7	407.5
96	407.3	408.3	407.5	407.9	407.9	407.9	407.0	407.1
120	408.4	406.8	408.4	407.9	407.5	406.9	407.2	407.5
144	408.2	407.5	407.7	407.7	407.8	407.7	407.5	408.3
168	407.8	407.7	408.2	408.4	408.6	407.4	407.9	408.3
192	407.7	407.2	407.2	407.2	407.5	407.4	407.8	406.9
216	407.1	407.8	407.4	407.3	407.5	407.6	407.4	407.2
240	406.9	407.3	407.2	407.5	407.5	407.7	407.9	407.5
264	407.5	407.7	407.2	407.3	407.2	407.2	407.7	407.2
288	407.2	407.3	407.3	407.7	406.7	406.7	407.4	407.4
312	407.2	407.5	407.1	407.5	406.9	407.7	407.2	407.2
336	407.5	407.7	407.7	407.8	407.1	407.8	407.6	407.3

DEPTH	2919.9		TILT	80		VOS	5957.70	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	414.1	415.6	414.5	414.5	414.5	413.1	414.6	414.5
24	414.9	413.9	413.9	414.4	412.4	414.1	413.6	413.6
48	414.1	414.1	414.3	412.9	412.6	414.3	412.9	414.1
72	413.9	413.6	412.6	412.2	413.6	412.4	412.6	414.3
96	413.4	412.2	411.9	411.9	413.3	413.4	414.0	414.1
120	413.1	413.4	413.9	413.9	412.9	414.1	414.1	414.3
144	414.5	414.6	413.6	413.4	413.8	415.3	412.2	414.6
168	414.8	413.4	412.6	412.9	412.4	412.8	412.9	414.7
192	413.4	413.4	414.3	412.1	413.4	414.1	414.3	414.3
216	413.1	412.4	414.5	413.8	413.1	414.5	412.7	414.1
240	413.8	413.8	413.6	412.7	412.9	414.8	415.0	413.1
264	412.7	415.2	415.0	414.3	412.5	413.4	413.2	414.8
288	414.7	414.1	411.9	413.1	414.3	413.6	414.5	414.3
312	413.6	413.6	413.6	413.1	414.5	413.8	415.0	413.8
336	412.7	413.9	414.3	413.8	415.6	414.3	414.1	413.8

DEPTH	2919.9		TILT	65		VOS	5957.70	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	140.3	134.0	133.0	134.1	135.6	136.3	133.0	129.4
24	127.5	127.2	127.5	128.8	130.8	127.2	124.3	124.3
48	124.9	127.5	129.1	132.2	135.3	140.5	145.7	147.3
72	150.1	150.0	157.1	160.4	161.1	169.7	158.3	149.2
96	147.9	147.4	154.7	159.2	161.8	160.0	159.2	158.5
120	158.0	156.8	150.6	151.5	149.8	150.6	151.5	154.8
144	160.5	442.3	446.1	446.2	156.4	448.6	449.6	451.8
168	449.5	447.8	446.7	447.3	449.8	449.2	448.0	446.2
192	445.9	451.7	446.8	449.1	446.6	446.1	446.5	443.5
216	439.1	434.9	433.1	432.7	431.8	429.8	431.9	421.5
240	412.8	422.5	423.1	182.1	170.4	165.3	160.2	156.4
264	152.1	150.6	150.6	147.3	142.9	140.2	137.6	133.0
288	130.4	129.5	130.9	143.5	143.2	131.6	143.2	132.1
312	131.0	126.7	126.7	128.7	130.9	132.2	132.1	130.2
336	130.0	126.6	125.8	133.8	134.4	134.4	130.9	137.0



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WALL RANGES VS DEPTH

DEPTH	2919.9		TILT	60		VOS	5957.70	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	114.9	114.9	116.1	116.6	117.8	117.6	116.6	111.9
24	111.2	111.9	112.9	111.9	110.0	108.9	105.6	105.1
48	105.1	105.1	105.6	112.3	115.4	116.8	120.2	124.8
72	124.8	124.8	124.1	124.6	124.4	129.2	129.1	127.8
96	126.2	126.2	127.5	129.7	132.9	136.3	138.6	139.2
120	138.6	136.3	134.8	133.3	131.1	130.9	131.5	132.1
144	135.1	135.9	143.7	140.0	144.0	145.2	145.6	145.6
168	152.4	153.2	154.9	155.4	158.8	157.8	157.5	157.8
192	159.2	160.1	160.1	162.7	162.4	164.4	157.6	157.1
216	159.1	160.2	164.6	167.3	169.1	168.5	169.2	170.3
240	169.1	166.1	162.1	158.4	153.5	147.9	146.0	140.5
264	138.1	131.8	131.2	126.8	124.4	119.2	120.9	118.3
288	117.7	115.2	108.9	110.0	110.0	108.4	108.2	110.1
312	109.5	107.1	104.3	107.2	108.9	108.9	109.5	110.1
336	110.2	110.2	110.7	111.3	111.6	112.2	111.9	111.9

DEPTH	2919.9		TILT	55		VOS	5957.70	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	111.0	108.9	108.5	109.7	109.7	109.7	111.0	113.9
24	111.0	113.2	111.0	111.4	112.7	111.8	111.4	108.9
48	109.9	109.3	109.7	109.3	107.2	107.2	107.2	107.2
72	107.2	107.7	107.7	107.7	109.5	109.5	111.2	110.8
96	109.3	109.4	109.4	109.4	110.7	113.5	117.8	119.2
120	120.9	119.6	117.1	116.2	115.7	115.7	116.2	117.3
144	121.3	122.5	124.3	125.8	133.9	136.1	143.4	144.9
168	147.1	148.4	149.9	148.4	150.4	148.8	148.6	147.2
192	146.6	147.0	148.1	151.4	151.0	151.0	148.9	148.1
216	148.0	147.7	149.1	151.1	153.1	152.3	151.4	151.4
240	151.3	147.9	145.3	138.6	136.5	135.3	133.1	129.3
264	125.8	122.7	118.6	116.1	111.3	108.6	107.7	107.0
288	104.2	103.1	103.9	104.3	104.7	104.7	104.7	105.1
312	105.1	105.6	106.0	106.4	106.0	106.8	106.4	107.7
336	107.7	108.1	107.2	107.2	108.5	108.5	108.1	108.1

DEPTH	2919.9		TILT	50		VOS	5957.70	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	119.7	120.2	121.0	120.6	119.3	118.5	118.1	116.0
24	117.0	114.7	114.3	114.3	114.3	113.9	112.2	111.8
48	111.8	111.4	111.0	110.6	110.2	109.4	109.7	109.7
72	109.7	110.2	110.3	110.5	110.6	111.0	111.0	111.0
96	110.6	111.4	113.1	113.1	112.7	112.2	111.0	111.0
120	111.0	110.2	110.2	109.7	109.7	110.2	111.4	108.9
144	106.8	110.0	108.1	113.8	121.0	122.1	127.2	131.5
168	132.7	133.0	134.4	135.7	135.3	134.7	132.5	132.7
192	134.6	135.4	128.4	129.3	137.2	135.5	134.1	134.2
216	137.1	136.2	135.9	141.0	141.0	140.4	139.2	137.1
240	135.4	131.4	128.9	128.6	125.6	124.4	122.9	119.2
264	115.6	111.6	109.9	106.4	110.2	110.1	109.7	106.8
288	110.2	111.0	111.0	111.4	112.7	113.1	113.1	113.7
312	114.2	114.2	116.2	117.2	118.1	117.7	115.2	117.7
336	117.2	117.7	118.9	117.7	118.9	120.2	120.6	118.9



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WALL RANGES VS DEPTH

DEPTH	2919.9		TILT	45		VOS	5957.70	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	125.6	125.2	126.8	122.7	122.2	120.6	121.0	119.3
24	119.5	116.8	116.0	116.0	116.0	116.4	115.2	114.7
48	113.5	113.3	113.3	111.8	111.4	111.8	113.5	113.5
72	113.5	113.9	113.9	113.9	115.2	113.9	113.9	113.9
96	115.2	117.2	119.3	121.0	121.0	122.2	121.0	121.0
120	121.2	120.7	118.7	117.7	117.2	118.1	116.4	117.2
144	118.1	118.1	115.2	114.3	114.7	112.7	114.3	115.2
168	120.9	120.6	122.6	123.6	122.4	121.8	120.8	121.9
192	121.6	121.4	121.0	121.2	123.4	124.4	125.3	123.7
216	123.9	125.8	126.8	128.0	129.7	130.6	127.3	126.8
240	125.3	122.4	118.9	118.0	118.0	115.6	118.6	115.7
264	117.2	117.7	116.2	120.2	119.7	119.2	119.2	120.7
288	120.2	120.2	120.2	122.2	122.2	122.7	123.1	125.6
312	126.0	127.7	126.8	128.5	128.5	126.0	127.3	126.0
336	125.6	123.9	126.8	126.8	126.4	126.4	124.3	124.3

DEPTH	2919.9		TILT	40		VOS	5957.70	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	131.7	130.2	132.0	128.9	131.3	126.0	124.3	125.1
24	124.1	124.0	123.8	119.3	120.2	124.7	118.7	124.7
48	121.8	123.1	123.2	119.3	122.7	126.0	122.7	116.4
72	116.4	116.8	118.1	118.5	118.9	119.7	122.2	118.9
96	122.2	123.5	123.9	123.9	125.6	128.1	130.2	130.6
120	133.9	134.3	133.9	132.8	130.2	130.6	130.6	128.1
144	128.3	127.8	129.3	128.3	126.0	125.2	126.0	123.9
168	121.8	121.2	121.7	120.6	120.6	119.2	118.9	118.1
192	116.8	115.6	116.4	116.2	117.8	117.2	117.2	117.2
216	117.7	117.7	118.5	124.1	121.4	124.0	124.0	124.5
240	125.6	125.6	126.0	127.3	126.4	126.3	127.7	128.5
264	129.8	129.8	132.3	131.0	130.2	131.4	135.8	132.3
288	132.3	135.2	136.8	137.3	140.2	139.8	135.8	136.3
312	137.3	137.3	135.2	134.3	134.8	137.8	138.6	134.3
336	133.8	130.2	130.2	132.4	131.3	130.2	131.0	131.6

DEPTH	2919.9		TILT	35		VOS	5957.70	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	147.4	142.3	141.8	146.4	144.8	144.4	141.8	141.3
24	137.8	137.8	137.7	138.8	137.3	135.3	134.8	144.4
48	137.8	138.5	138.3	137.8	140.8	141.8	142.3	139.8
72	138.9	142.7	140.8	143.5	145.2	141.8	144.9	144.4
96	131.4	131.8	135.3	129.8	134.3	135.2	134.3	137.7
120	140.6	141.3	141.8	143.1	143.5	145.2	148.1	146.0
144	146.4	144.8	147.3	144.4	144.4	143.4	141.3	142.9
168	138.9	138.9	138.5	140.2	139.8	139.3	138.1	141.3
192	140.8	137.3	139.8	138.3	139.8	139.3	139.3	134.3
216	139.3	139.3	139.3	139.8	141.8	139.8	138.3	142.3
240	144.9	146.4	142.9	145.6	145.6	145.9	147.4	148.4
264	147.3	151.4	150.6	150.6	151.4	150.2	153.1	151.9
288	155.2	152.7	151.9	151.9	156.1	155.8	151.4	148.5
312	151.9	149.8	151.9	150.9	150.6	153.4	153.4	147.9
336	148.4	151.4	148.5	148.4	147.4	144.4	148.9	146.9



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WALL RANGES VS DEPTH

DEPTH	2919.9		TILT	30		VOS	5957.70	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	170.6	170.6	170.2	168.1	169.4	167.3	168.5	168.1
24	166.5	166.5	156.9	155.9	155.4	153.9	158.4	167.3
48	167.7	156.9	161.5	161.0	164.8	154.9	165.2	163.5
72	164.0	161.9	163.1	163.5	162.5	161.5	165.6	164.0
96	159.5	166.0	165.0	160.5	163.0	168.5	164.0	160.8
120	154.9	157.3	157.9	158.5	157.4	154.9	153.4	155.9
144	156.0	158.9	167.7	166.4	155.2	153.5	153.5	164.4
168	161.9	164.6	162.1	162.5	164.8	162.5	161.0	164.4
192	165.0	155.9	163.5	156.4	157.4	165.0	157.9	167.0
216	167.0	168.5	167.5	170.5	167.0	161.4	166.5	166.5
240	170.0	173.1	174.0	169.5	172.0	175.2	174.5	173.5
264	172.5	173.5	173.5	172.0	170.2	168.9	174.0	172.0
288	171.0	172.0	179.8	179.0	177.6	177.6	179.4	177.3
312	179.4	179.4	172.1	173.5	174.4	172.3	170.0	170.6
336	170.6	172.3	173.1	173.0	171.5	171.5	170.2	170.6

DEPTH	2919.9		TILT	25		VOS	5957.70	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	167.8	168.2	167.1	167.1	165.5	163.5	162.7	165.1
24	163.3	162.4	164.6	163.8	163.3	163.2	165.5	164.9
48	167.2	167.7	169.5	172.2	172.7	174.4	176.9	179.0
72	181.5	181.9	184.4	188.1	190.2	193.1	193.6	196.5
96	189.1	185.6	189.6	184.6	197.2	201.9	196.2	191.5
120	202.7	199.7	203.2	198.7	200.7	194.4	192.3	208.7
144	196.2	194.0	196.5	198.2	197.7	197.2	195.7	195.2
168	195.7	203.7	197.2	203.2	202.2	197.9	192.1	201.2
192	200.7	211.3	199.7	203.2	202.7	208.2	203.7	206.7
216	203.2	200.7	194.8	207.2	206.9	200.2	203.7	200.7
240	202.1	208.7	207.7	207.7	199.7	205.7	195.7	205.2
264	198.9	196.2	201.5	199.0	194.2	191.1	185.3	182.7
288	180.2	177.3	177.7	175.2	174.5	174.4	174.4	176.5
312	176.1	174.8	176.9	178.1	172.2	170.7	166.1	166.1
336	166.5	166.1	169.3	169.8	171.9	166.8	166.5	167.5

DEPTH	2919.9		TILT	20		VOS	5957.70	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	161.3	160.2	162.3	161.2	160.1	158.5	157.3	159.1
24	157.7	155.2	156.4	158.9	158.1	159.8	160.7	160.2
48	162.3	164.0	170.2	168.3	173.3	171.7	171.9	172.7
72	176.5	179.4	183.1	184.0	188.3	190.6	194.9	196.1
96	199.4	203.5	208.2	211.1	212.3	218.2	214.8	224.3
120	227.3	228.2	234.9	238.4	246.5	249.0	245.5	242.9
144	244.0	242.4	246.5	253.2	254.0	254.4	250.3	254.0
168	253.6	255.5	255.7	257.4	257.4	257.8	255.7	255.7
192	254.4	254.4	259.0	258.5	252.5	247.2	251.5	249.9
216	244.4	242.4	238.2	238.6	235.7	238.6	234.8	231.5
240	231.9	231.1	226.1	225.7	219.4	219.8	215.5	215.9
264	210.7	208.9	196.1	194.7	186.7	186.1	177.6	176.6
288	172.9	172.6	172.0	169.1	170.4	169.3	168.1	169.8
312	171.9	172.9	173.2	172.7	167.1	164.0	159.8	159.8
336	159.3	161.9	161.9	166.5	164.5	160.5	159.8	159.4



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WALL RANGES VS DEPTH

DEPTH	2919.9		TILT	15		VOS	5957.70	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	147.6	149.5	148.7	147.6	149.1	146.7	146.7	147.5
24	147.5	147.1	149.1	155.3	155.6	159.3	158.5	158.9
48	159.7	160.5	163.3	170.5	169.4	172.2	174.7	172.2
72	176.3	177.1	180.9	186.8	187.6	187.9	188.9	193.7
96	196.1	199.8	202.6	204.2	204.6	207.1	211.5	212.3
120	220.4	223.3	229.8	233.5	242.4	243.8	237.5	242.8
144	236.5	237.0	251.1	250.9	255.4	249.7	245.4	248.4
168	251.6	252.3	253.6	256.4	257.1	255.1	257.0	254.5
192	252.2	253.5	257.3	256.2	253.9	245.9	241.9	239.4
216	238.4	229.6	230.0	227.3	235.0	235.4	230.3	230.0
240	229.4	229.0	229.0	227.7	224.5	221.7	218.0	209.1
264	203.8	186.4	185.7	184.8	178.8	172.5	172.0	161.7
288	160.8	160.9	159.5	158.2	157.0	158.7	159.4	158.7
312	161.3	161.7	161.0	159.4	149.5	148.5	149.5	148.3
336	150.0	153.2	158.8	154.8	152.8	148.5	145.1	146.3

DEPTH	2919.9		TILT	10		VOS	5957.70	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	138.7	136.6	141.0	140.7	136.6	139.8	138.2	137.3
24	139.0	145.1	145.9	150.8	152.1	157.2	158.5	158.6
48	156.8	158.1	157.6	167.6	170.2	170.9	174.9	176.7
72	177.5	178.3	181.1	182.3	185.6	188.8	188.4	186.8
96	187.9	194.7	198.6	198.2	198.6	195.7	195.5	200.2
120	198.6	203.3	209.6	215.0	215.2	220.4	213.6	224.8
144	226.2	228.1	229.2	232.6	239.9	239.9	238.8	240.2
168	238.0	238.7	238.9	239.4	244.1	243.8	240.1	234.1
192	237.5	238.9	232.3	231.6	231.4	235.9	230.5	221.0
216	221.6	218.1	222.6	226.0	229.4	229.8	233.1	228.5
240	229.4	227.7	229.4	228.1	228.1	220.8	218.4	211.5
264	203.9	187.1	172.2	168.2	164.7	159.8	155.4	151.0
288	152.0	151.5	151.5	150.0	146.7	147.3	150.4	150.8
312	152.4	152.9	151.0	141.8	139.0	140.2	144.6	138.2
336	144.9	141.2	148.0	148.5	141.7	141.2	139.4	139.3

DEPTH	2920.1		TILT	0		VOS	5957.70	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	131.9	132.6	134.1	131.4	130.8	130.8	134.7	132.3
24	133.8	137.2	139.2	143.0	149.6	153.2	155.8	155.3
48	155.0	161.7	162.7	163.9	169.6	172.2	171.3	169.9
72	169.9	171.4	173.7	175.5	176.1	181.8	184.1	182.4
96	180.0	188.6	190.8	193.7	191.4	191.1	191.9	194.3
120	193.1	198.3	198.7	199.3	201.2	205.2	208.6	210.1
144	212.0	213.8	220.2	219.9	226.4	226.0	223.5	223.8
168	222.8	219.2	224.9	225.3	225.6	219.6	219.9	219.9
192	217.2	220.2	219.6	211.3	215.3	210.7	209.5	210.4
216	213.8	216.3	219.0	228.5	230.0	232.4	232.7	221.4
240	221.7	222.0	223.1	228.5	227.3	218.1	213.8	212.9
264	207.7	188.3	179.3	172.2	160.6	153.8	152.0	143.0
288	141.0	141.8	138.9	139.1	140.8	135.6	140.4	141.2
312	141.2	136.5	130.8	135.0	136.8	136.8	132.0	131.1
336	130.8	136.5	137.6	135.5	129.9	135.0	132.9	131.9



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**WALL RANGES VS DEPTH**

DEPTH	2930.2		TILT	0		VOS	5957.70	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	131.4	132.2	132.9	129.0	130.2	129.9	128.7	131.1
24	128.7	136.2	136.2	143.7	150.2	153.5	155.8	154.7
48	154.7	161.8	162.1	166.0	168.7	172.8	173.1	169.9
72	171.9	171.3	171.9	174.6	176.1	180.9	184.4	185.0
96	178.8	188.3	190.8	192.2	191.3	190.1	190.1	193.4
120	190.4	191.5	189.3	190.7	191.6	197.2	190.4	190.7
144	201.7	199.8	200.5	203.5	218.8	212.4	210.5	208.3
168	213.1	219.9	221.3	223.5	220.6	219.2	217.7	215.6
192	217.4	215.9	213.4	213.0	210.2	209.8	206.8	210.4
216	214.8	219.2	222.9	229.6	235.3	235.7	233.6	226.4
240	221.4	220.8	219.3	219.9	222.6	222.3	216.0	212.4
264	206.9	195.8	179.7	175.3	162.0	157.7	155.9	152.9
288	149.1	143.6	140.7	137.4	135.9	135.3	134.4	132.6
312	134.4	130.4	130.5	130.8	128.7	133.2	131.1	127.5
336	130.5	130.4	132.3	133.5	129.3	129.6	130.9	131.1

DEPTH	2940.3		TILT	0		VOS	5957.70	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	122.5	121.3	121.3	121.9	126.1	121.6	124.6	126.4
24	129.0	129.9	137.4	141.0	150.8	153.2	154.1	154.1
48	154.1	160.9	161.5	164.8	166.9	170.4	171.9	169.0
72	169.0	170.4	171.0	173.1	174.6	181.1	184.1	183.9
96	180.6	184.7	187.2	191.6	190.7	190.4	189.8	191.3
120	189.2	189.0	185.0	180.0	182.9	181.4	184.0	182.9
144	186.8	189.7	188.9	202.3	201.6	211.3	206.6	208.4
168	208.3	210.2	208.9	209.1	208.7	212.3	206.9	205.5
192	201.9	204.8	204.4	200.1	201.9	203.2	205.6	210.7
216	214.5	219.2	224.6	230.0	235.7	236.0	234.2	227.5
240	226.4	220.2	219.0	219.9	212.7	211.0	215.4	213.1
264	203.7	197.0	184.7	175.7	175.0	162.7	159.1	160.6
288	155.3	149.5	148.7	144.5	138.6	136.5	129.6	129.6
312	125.8	124.3	123.4	123.1	119.5	119.2	120.7	121.9
336	122.2	124.9	130.2	126.1	121.0	121.9	126.4	124.9

DEPTH	2950.3		TILT	0		VOS	5957.70	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	118.6	116.5	117.5	120.7	117.1	115.6	121.3	124.9
24	128.4	128.7	137.2	141.0	150.8	152.9	153.8	153.8
48	153.5	161.2	160.6	164.8	164.8	170.7	169.9	167.8
72	169.0	169.0	170.7	172.5	175.2	181.5	184.4	183.9
96	182.5	183.6	186.5	191.3	189.3	187.7	189.0	187.5
120	187.9	184.1	179.6	177.1	177.6	180.6	179.3	176.8
144	186.8	178.2	181.8	185.0	195.8	194.4	194.0	196.9
168	201.6	200.8	200.5	197.9	195.5	196.5	194.0	196.9
192	189.8	194.0	195.2	197.9	197.9	203.8	207.1	212.4
216	216.3	222.0	225.3	230.6	236.6	239.6	235.7	227.3
240	228.9	223.1	218.8	218.4	212.2	210.7	210.7	214.9
264	199.3	198.4	198.0	183.0	181.8	169.2	164.2	166.0
288	163.6	159.7	154.5	152.0	146.9	145.7	139.5	136.2
312	132.9	132.0	130.2	127.8	126.4	124.6	126.4	126.4
336	127.8	126.7	126.7	125.5	123.7	123.7	123.7	121.6



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WALL RANGES VS DEPTH

DEPTH	2960.1		TILT	0		VOS	5957.70	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	121.6	118.6	117.7	117.7	117.1	116.2	116.2	124.0
24	126.8	129.4	137.6	140.1	150.2	151.4	153.8	153.5
48	152.6	159.6	160.6	164.5	163.3	167.8	168.1	167.5
72	166.3	167.8	169.9	171.9	175.3	176.7	184.1	183.9
96	182.4	184.1	184.1	187.7	183.0	182.7	181.8	181.5
120	185.4	178.7	174.0	168.1	176.4	176.4	180.0	173.5
144	163.5	165.4	172.1	171.9	181.4	188.3	177.8	178.9
168	194.0	193.7	191.1	191.9	194.9	195.1	186.5	190.7
192	191.0	191.6	195.2	195.5	199.0	203.8	210.9	212.2
216	216.6	221.0	226.0	231.8	236.3	239.3	234.2	236.2
240	230.6	222.9	216.7	218.1	215.1	213.9	211.9	213.0
264	204.8	199.6	199.6	193.3	184.3	175.8	170.1	168.1
288	170.3	170.3	168.1	158.4	158.1	153.2	146.6	146.2
312	139.0	138.6	136.2	135.9	133.8	133.5	130.2	130.5
336	130.2	129.9	128.4	126.1	124.0	124.0	124.3	121.9

DEPTH	2970.0		TILT	0		VOS	5957.70	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	126.7	127.8	124.6	121.0	121.0	124.0	122.2	124.0
24	128.1	127.7	133.5	144.2	149.9	152.3	153.2	152.9
48	154.9	162.1	164.6	163.6	162.1	166.9	165.1	169.6
72	167.2	166.9	169.6	170.1	173.5	176.7	181.8	183.0
96	183.3	183.3	185.0	182.7	182.1	181.8	178.5	181.2
120	180.0	174.3	169.9	168.1	170.4	169.0	174.0	169.9
144	164.2	165.4	164.8	172.5	177.5	182.7	176.8	177.0
168	188.0	188.6	189.3	187.9	191.9	191.1	187.1	191.6
192	192.8	192.5	192.8	194.0	201.1	206.6	211.0	211.9
216	219.5	225.0	225.3	234.3	237.5	241.9	236.0	238.6
240	232.0	227.1	217.8	217.8	215.1	214.8	213.9	214.9
264	205.9	204.2	199.9	201.2	186.1	176.7	173.4	173.4
288	178.2	176.4	171.6	166.7	164.9	159.4	155.6	154.1
312	150.5	146.6	143.0	143.9	139.4	136.5	134.7	132.9
336	132.3	132.0	132.6	131.1	131.4	127.8	127.7	128.4

DEPTH	2980.1		TILT	0		VOS	5957.70	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	136.5	133.5	133.5	133.8	130.2	130.8	128.1	129.0
24	126.7	129.0	135.0	141.8	147.2	151.4	153.5	153.7
48	154.6	159.4	164.8	162.7	161.8	164.5	164.5	169.6
72	167.3	167.0	168.4	169.3	173.7	177.6	181.5	182.7
96	182.7	183.9	184.7	182.7	180.9	177.9	176.7	176.7
120	178.2	177.9	169.9	170.1	169.9	169.3	171.7	172.4
144	161.8	159.9	163.3	171.7	175.8	180.0	176.8	176.8
168	188.9	182.7	186.1	186.0	189.0	189.7	190.8	188.6
192	191.9	192.8	194.0	194.3	202.3	206.9	210.5	217.7
216	221.3	226.0	229.4	235.0	240.0	242.9	239.0	238.7
240	232.1	221.1	220.2	218.4	219.0	216.6	216.3	216.6
264	206.6	204.4	202.3	192.2	186.1	187.9	183.3	177.6
288	180.6	178.9	180.7	173.9	171.0	167.8	163.9	155.2
312	155.2	152.0	152.6	150.8	148.4	144.7	144.2	144.2
336	142.4	140.4	142.3	138.9	138.1	137.3	137.7	135.3



CUSTOMER : Westlake Chemicals

DATE : January 07, 2024

CAVERN : PPG No. 007B

OPERATION No. : 10

**WALL RANGES VS DEPTH**

DEPTH	2989.9		TILT	0		VOS	5957.65	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	140.8	142.4	141.8	141.8	139.8	140.1	139.8	137.7
24	139.2	142.1	141.9	143.0	147.2	152.0	153.2	152.9
48	153.5	153.8	165.1	164.7	163.9	163.6	168.1	169.7
72	170.5	164.8	166.9	169.6	173.1	176.0	181.5	182.1
96	182.7	184.7	185.0	180.9	180.9	177.6	179.8	176.6
120	175.8	175.7	174.3	174.3	174.3	173.1	170.5	172.0
144	166.8	158.7	163.0	170.7	177.1	179.1	178.9	178.5
168	184.4	183.0	185.6	183.6	186.8	187.2	186.3	187.7
192	192.6	189.0	192.8	196.7	204.4	208.3	211.0	217.3
216	222.9	227.1	230.9	238.4	239.6	244.0	239.3	238.7
240	233.7	226.3	220.8	219.5	219.9	218.1	216.3	217.0
264	212.1	205.0	205.9	174.7	168.4	156.6	149.3	182.7
288	185.0	185.3	185.6	182.0	177.6	176.4	175.2	169.2
312	168.5	164.6	163.0	159.2	157.9	156.1	149.8	153.4
336	149.6	150.9	149.1	146.9	147.3	145.5	146.6	145.4

DEPTH	3000.2		TILT	0		VOS	5957.10	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	151.4	154.3	152.0	151.7	151.7	148.0	150.5	152.6
24	152.9	153.7	148.7	148.4	148.8	151.9	154.4	152.6
48	154.0	157.7	163.9	167.1	167.4	163.6	170.4	170.4
72	171.0	170.7	170.4	173.9	174.0	177.1	181.2	182.3
96	184.4	185.9	184.7	182.9	181.7	180.3	178.5	179.0
120	174.1	174.2	174.0	174.3	174.6	171.0	167.5	167.2
144	164.2	159.6	163.3	168.9	173.6	176.0	179.1	169.9
168	184.3	180.9	183.6	182.0	187.0	183.2	180.0	184.1
192	184.1	189.7	193.3	198.1	205.9	209.1	214.8	219.1
216	222.0	227.1	230.0	240.1	238.9	244.0	240.4	243.0
240	238.0	231.5	221.8	220.5	221.1	220.5	221.3	217.5
264	212.7	213.4	167.8	158.2	155.9	148.9	144.2	193.1
288	186.1	191.3	188.0	187.9	186.8	185.0	182.9	178.2
312	176.8	173.4	174.6	174.6	168.1	167.7	164.2	161.3
336	161.7	162.7	161.3	158.8	158.8	156.6	156.1	157.4

DEPTH	3005.0		TILT	0		VOS	5957.36	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	156.4	159.9	158.5	158.4	155.6	153.4	153.8	157.7
24	159.9	155.6	156.7	156.7	156.7	152.3	154.1	153.8
48	155.2	159.7	163.9	166.0	167.5	169.5	170.4	170.4
72	171.0	171.0	174.0	175.8	178.8	177.8	181.7	182.4
96	187.1	186.5	184.7	182.6	182.6	180.6	180.3	180.0
120	172.5	172.5	173.4	174.0	175.2	171.3	167.8	165.6
144	161.4	159.7	163.0	168.5	174.2	174.0	178.5	169.2
168	183.2	180.9	180.9	178.8	185.1	184.6	181.2	183.2
192	186.8	191.3	193.4	201.5	206.4	209.1	214.2	220.9
216	224.6	224.9	233.9	238.4	240.4	243.1	240.7	244.0
240	239.2	231.4	222.3	220.3	222.0	222.0	222.0	221.7
264	218.2	176.4	167.1	159.4	155.6	142.7	138.3	139.4
288	192.9	196.2	192.2	190.4	187.5	188.3	188.0	182.1
312	183.6	180.6	176.4	177.5	174.6	171.7	169.5	167.5
336	167.5	164.5	163.9	162.0	162.7	162.7	162.1	161.2



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WALL RANGES VS DEPTH

DEPTH	3010.3		TILT	0		VOS	5958.20	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	161.7	164.8	162.1	163.3	160.3	157.4	161.0	162.4
24	163.5	160.3	165.6	163.1	158.1	154.1	155.0	154.1
48	155.0	159.9	163.6	167.8	169.6	173.4	173.1	171.9
72	172.3	174.0	175.2	179.1	179.4	182.9	182.1	184.5
96	186.8	186.2	183.6	182.7	181.5	180.0	188.9	190.1
120	181.8	174.9	175.8	175.5	175.5	172.1	167.5	162.4
144	162.1	159.9	163.6	167.8	172.8	175.0	176.4	169.0
168	176.8	180.0	180.7	178.5	183.3	183.9	184.0	186.2
192	186.8	192.3	194.9	203.5	206.7	208.6	212.2	221.0
216	225.5	225.9	234.6	238.4	240.9	243.2	242.0	244.0
240	239.7	233.3	222.6	222.4	222.9	223.5	220.5	223.1
264	224.0	166.9	166.3	158.8	150.2	141.9	135.3	130.8
288	130.5	125.2	198.6	191.9	190.7	192.6	191.2	188.6
312	188.6	185.4	184.3	180.0	178.2	173.9	173.1	170.8
336	168.9	169.6	170.8	168.5	169.6	166.6	168.1	163.3

DEPTH	3015.1		TILT	0		VOS	5958.20	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	167.4	168.9	169.2	164.2	164.2	163.8	164.5	166.4
24	167.8	168.4	170.7	170.3	160.6	162.1	157.4	157.7
48	156.7	160.6	168.5	173.1	172.8	175.5	178.1	177.9
72	177.6	177.6	179.4	179.7	181.8	183.0	184.0	186.0
96	187.1	187.1	185.8	202.3	193.7	194.9	198.5	191.2
120	191.7	174.9	214.9	175.5	176.1	172.5	168.9	165.2
144	163.6	161.8	163.1	168.1	172.2	174.5	177.0	170.7
168	172.4	180.4	179.7	179.4	183.3	184.2	186.2	186.0
192	186.2	192.4	199.7	203.8	207.0	209.5	214.0	223.5
216	224.6	227.4	235.4	237.8	240.8	243.4	243.4	244.7
240	240.3	234.8	224.7	223.2	224.6	224.9	223.1	220.8
264	168.0	164.7	162.3	138.0	136.0	130.8	134.4	128.2
288	122.2	122.9	121.6	200.2	199.7	197.8	194.0	191.2
312	190.1	186.8	185.1	179.7	182.9	179.1	176.4	176.4
336	172.1	171.7	173.4	175.0	172.1	172.1	170.8	164.6

DEPTH	3020.1		TILT	0		VOS	5958.20	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	173.7	171.4	170.3	166.7	164.6	164.2	167.1	170.7
24	172.2	171.0	174.6	177.1	174.0	169.6	161.2	161.7
48	159.1	160.0	172.8	178.9	175.3	177.6	178.8	180.0
72	180.6	183.3	186.0	192.2	193.7	195.2	186.5	186.8
96	187.9	198.3	200.3	207.7	205.7	195.1	198.2	200.5
120	216.6	221.3	216.6	230.9	203.8	201.2	179.8	169.8
144	164.0	163.6	163.1	169.6	172.3	173.5	175.7	168.9
168	172.0	179.3	178.8	182.4	183.9	183.0	188.5	186.5
192	188.0	196.4	201.4	206.8	207.8	211.2	214.9	223.8
216	227.1	230.0	238.6	238.7	240.2	243.7	244.9	244.9
240	239.0	233.6	226.7	223.8	223.5	224.7	204.3	221.4
264	165.6	161.8	142.8	135.6	119.4	130.8	129.0	118.6
288	119.8	114.8	113.9	110.3	105.8	103.4	105.5	196.6
312	194.8	192.5	190.4	185.7	185.4	183.6	184.2	180.5
336	178.6	180.7	180.0	179.4	179.1	176.8	172.5	173.4



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**WALL RANGES VS DEPTH**

DEPTH	3025.1		TILT	0		VOS	5958.20	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	179.3	176.1	178.2	171.4	166.7	171.4	171.4	177.1
24	174.3	176.7	182.2	181.5	181.5	180.0	168.9	166.4
48	159.7	160.6	172.1	178.9	178.8	183.6	186.0	179.7
72	180.0	181.2	189.8	191.9	194.4	195.2	196.1	194.6
96	193.4	197.6	201.2	208.8	209.2	205.9	204.1	210.2
120	215.2	220.3	223.2	230.6	235.4	219.9	215.9	207.7
144	208.0	201.1	170.0	174.3	172.0	172.5	174.9	170.5
168	173.4	177.5	181.8	183.9	184.0	186.0	189.1	193.0
192	195.2	200.1	204.7	208.0	209.8	213.1	217.2	224.7
216	227.6	232.1	237.5	240.6	241.7	246.4	245.2	249.4
240	240.5	234.2	227.1	224.2	225.0	225.0	185.4	182.5
264	165.3	146.6	133.8	134.7	116.1	113.1	113.0	112.1
288	111.0	107.8	101.0	101.3	102.0	101.3	104.9	98.7
312	87.3	89.5	193.0	84.4	186.9	187.9	189.4	184.7
336	184.3	183.3	181.2	184.2	184.3	180.4	179.7	179.3

DEPTH	3030.3		TILT	0		VOS	5958.40	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	186.5	177.5	74.1	71.9	70.1	181.1	179.3	187.1
24	179.1	180.3	189.0	188.5	183.6	185.7	183.6	169.3
48	160.3	160.6	172.0	178.9	182.1	187.1	187.6	185.4
72	188.0	196.2	189.8	191.9	195.2	194.3	201.6	194.8
96	197.7	201.2	201.2	208.4	212.0	211.3	208.3	210.6
120	215.0	221.0	229.3	232.1	237.5	219.3	220.5	209.5
144	212.7	219.9	171.1	176.8	172.9	174.9	173.1	173.4
168	172.6	177.0	184.8	187.2	185.4	191.2	189.0	197.6
192	195.8	199.4	205.3	208.6	210.7	214.6	217.1	224.2
216	226.4	232.1	239.0	242.6	248.7	249.4	246.7	247.6
240	240.2	236.3	230.6	232.7	233.6	232.4	189.7	183.3
264	152.4	146.2	133.2	115.7	107.9	112.5	109.1	103.7
288	98.7	99.6	97.2	101.1	97.3	94.8	97.4	92.0
312	82.9	83.0	80.2	79.6	77.1	76.7	194.8	71.3
336	73.9	73.9	73.9	71.1	69.5	181.8	183.6	183.3

DEPTH	3034.9		TILT	-1		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	75.0	73.4	71.3	67.6	65.4	62.5	56.7	189.9
24	188.2	196.5	197.3	196.9	197.3	192.8	197.4	191.1
48	201.8	203.4	205.8	205.4	209.1	209.1	209.5	215.2
72	217.0	220.0	223.8	231.4	230.5	231.2	233.6	239.0
96	236.1	239.5	245.7	247.8	252.6	259.8	271.1	268.3
120	276.6	284.0	286.4	297.0	300.7	301.0	307.2	307.8
144	301.6	302.3	299.9	295.0	290.5	290.1	290.1	290.1
168	291.8	294.2	294.7	297.4	299.9	196.0	194.9	198.8
192	200.3	202.5	206.7	209.2	212.1	234.0	253.4	293.4
216	272.3	279.7	285.4	248.2	258.4	259.3	284.9	282.5
240	280.8	276.1	269.3	270.0	269.2	260.3	231.1	181.9
264	156.0	140.2	129.7	103.7	107.8	112.2	109.3	93.2
288	87.9	90.7	87.7	89.4	90.4	91.6	82.3	85.5
312	78.2	79.8	65.6	66.5	66.9	67.4	67.6	66.8
336	70.1	72.5	68.4	69.3	65.2	58.2	185.2	72.9



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WALL RANGES VS DEPTH

DEPTH	3034.9		TILT	-2		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	187.2	71.3	71.3	66.5	64.4	61.6	74.2	191.6
24	193.3	196.5	199.0	200.9	204.3	197.9	199.7	203.3
48	210.6	206.7	212.1	205.8	209.2	209.7	209.7	215.5
72	221.2	228.7	228.5	231.8	232.2	235.2	236.7	241.6
96	237.3	246.8	246.8	255.6	260.0	262.9	274.7	277.1
120	278.1	285.8	293.1	297.8	308.4	310.8	310.8	311.2
144	307.2	302.3	299.9	295.0	290.9	289.7	290.1	290.1
168	291.8	294.2	295.0	296.4	299.9	301.5	303.5	302.5
192	300.3	203.7	312.8	310.7	307.2	303.9	301.9	294.5
216	293.7	294.6	290.8	255.1	265.8	268.6	291.1	281.9
240	282.5	275.6	270.8	274.2	275.2	269.8	258.7	181.9
264	156.0	139.5	127.6	103.7	107.8	107.8	105.1	89.6
288	79.2	84.5	84.9	88.5	90.4	90.9	81.4	64.4
312	78.2	76.6	65.2	66.5	66.9	70.5	66.9	65.8
336	70.1	71.4	67.0	67.9	63.1	57.0	72.8	72.4

DEPTH	3034.9		TILT	-3		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	188.2	71.3	70.9	66.4	63.6	62.1	53.5	192.6
24	195.6	199.4	202.3	203.5	205.8	201.0	203.8	205.3
48	212.7	210.2	212.2	210.6	212.6	213.6	218.0	222.1
72	226.5	230.2	229.5	231.8	233.8	234.6	243.9	245.8
96	252.2	254.1	251.4	259.0	267.6	266.9	275.5	279.1
120	284.9	289.8	295.0	300.3	308.4	310.8	311.2	310.8
144	311.6	301.9	300.1	294.8	290.5	290.5	290.5	290.9
168	292.3	296.6	297.4	297.5	299.5	301.8	303.4	302.3
192	308.0	319.6	320.1	312.4	316.2	305.9	301.9	297.0
216	295.1	294.4	297.2	262.5	217.5	220.8	203.4	288.3
240	282.0	280.5	279.9	274.4	275.2	269.8	259.3	181.5
264	156.4	137.8	123.9	103.7	107.8	98.4	102.8	89.6
288	79.1	79.0	82.3	89.1	90.4	85.7	81.4	64.4
312	78.2	76.6	65.2	66.4	66.8	70.5	65.2	64.9
336	69.1	69.7	66.5	68.0	61.2	55.9	71.4	71.8

DEPTH	3034.9		TILT	-4		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	72.5	71.2	69.9	66.5	62.4	62.1	53.5	192.6
24	195.4	72.5	78.6	78.6	207.8	205.3	208.2	210.2
48	212.7	211.9	212.3	213.1	214.5	218.4	220.4	224.3
72	226.5	235.6	234.1	234.6	235.5	251.2	253.3	254.1
96	255.6	263.9	257.6	272.7	271.5	270.8	277.6	286.5
120	289.3	293.7	297.0	306.3	309.6	311.0	311.2	312.4
144	307.6	301.9	298.6	293.8	290.9	290.5	293.4	291.3
168	292.5	295.8	297.5	299.9	299.0	302.3	302.7	302.3
192	308.0	320.6	320.1	320.9	319.6	317.7	301.7	299.8
216	305.9	304.5	210.4	207.7	215.1	213.7	203.3	212.1
240	292.4	211.5	277.2	271.9	264.3	220.9	237.5	172.0
264	151.5	136.3	102.9	104.1	108.2	95.8	85.9	89.6
288	79.0	79.0	82.3	84.7	89.6	81.5	81.4	66.0
312	78.2	76.6	65.2	66.5	66.9	70.5	65.4	64.0
336	68.1	69.1	66.5	68.0	61.2	55.9	70.9	71.4



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WALL RANGES VS DEPTH

DEPTH	3034.9		TILT	-5		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	71.7	70.5	69.9	66.0	62.5	62.1	53.5	193.8
24	72.5	72.1	77.8	77.8	75.4	71.3	67.7	65.0
48	83.5	214.3	212.6	215.8	217.5	218.0	221.6	224.9
72	238.3	241.9	246.4	249.6	238.1	252.9	254.9	255.6
96	255.1	263.9	268.3	273.5	274.1	274.7	277.6	286.5
120	289.7	295.8	297.0	308.8	308.8	312.8	311.2	312.4
144	308.4	301.7	296.7	295.2	291.5	290.4	290.8	291.8
168	293.3	295.5	298.9	299.9	299.1	301.6	302.0	302.0
192	307.4	320.1	320.2	323.5	322.8	320.4	306.9	305.1
216	312.8	310.3	207.1	203.0	208.2	186.6	198.4	203.0
240	209.5	205.0	213.6	210.6	205.4	202.2	224.4	171.1
264	150.7	134.9	102.8	104.5	108.5	95.8	85.9	89.6
288	79.0	79.0	82.3	84.6	89.6	80.0	79.1	66.0
312	78.2	77.7	65.2	66.5	66.9	70.4	65.4	64.0
336	68.5	68.5	66.0	68.1	61.3	55.9	71.2	70.9

DEPTH	3034.9		TILT	-6		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	72.9	70.5	69.4	65.0	62.8	61.6	53.5	73.3
24	72.5	72.5	77.8	77.4	71.6	71.3	65.6	65.0
48	70.9	216.9	216.5	219.4	219.4	219.7	222.9	224.1
72	238.3	242.7	245.9	250.4	240.5	252.4	254.6	255.1
96	258.9	263.0	270.3	277.2	280.8	283.6	282.8	287.7
120	287.7	296.7	300.3	308.4	308.8	312.3	312.2	312.0
144	306.8	306.6	300.2	295.5	291.6	290.5	292.8	296.0
168	297.3	299.0	299.1	299.6	299.5	301.6	302.0	304.5
192	305.5	321.1	320.7	323.8	324.6	320.9	323.0	323.0
216	313.2	311.8	204.8	197.9	200.6	186.1	185.2	194.9
240	199.4	205.0	206.3	204.2	197.0	195.0	194.1	171.0
264	151.9	134.7	103.0	105.1	109.0	95.3	85.9	89.6
288	77.8	79.8	82.3	84.3	89.6	78.6	77.0	66.0
312	78.2	77.7	64.9	66.0	66.5	70.9	64.7	64.0
336	68.1	68.1	62.6	68.5	61.2	55.5	71.4	70.9

DEPTH	3034.9		TILT	-9		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	73.4	68.2	64.0	62.4	62.4	54.7	50.7	53.8
24	72.1	71.8	69.3	67.7	67.3	71.7	68.1	66.9
48	71.8	66.9	67.3	73.3	76.7	76.2	239.7	238.2
72	238.3	243.5	250.4	251.0	252.1	260.1	261.8	263.4
96	266.2	269.1	274.3	278.6	282.4	284.2	284.8	290.0
120	292.9	299.8	305.1	309.6	313.2	315.3	317.3	313.8
144	308.0	308.4	307.0	305.5	306.7	305.6	300.4	301.3
168	306.3	307.0	311.6	310.8	308.4	313.6	315.7	318.1
192	323.5	324.6	323.8	323.0	321.1	312.3	306.3	294.6
216	185.6	186.0	191.6	182.8	178.3	183.6	181.9	179.5
240	184.4	183.6	194.0	194.1	184.7	182.8	185.2	173.6
264	152.5	126.0	104.1	109.4	109.5	96.5	86.3	82.5
288	78.2	79.8	82.7	83.9	83.1	79.2	61.2	68.7
312	75.0	68.5	64.8	66.0	67.3	68.9	61.6	64.0
336	67.8	64.8	55.1	68.6	60.4	53.9	69.9	61.6



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WALL RANGES VS DEPTH

DEPTH	3034.9		TILT	-12		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	68.9	67.3	58.6	62.4	62.0	54.7	50.2	50.2
24	68.9	70.9	65.3	62.0	63.6	67.9	67.3	66.4
48	76.3	70.8	67.7	67.4	80.6	75.7	86.7	90.4
72	241.1	240.3	243.5	250.3	251.5	258.5	261.4	261.8
96	263.0	263.8	267.8	269.8	276.6	280.4	283.0	295.0
120	295.8	298.1	302.8	306.3	306.7	300.6	303.1	309.2
144	299.0	303.9	310.0	309.6	309.4	308.4	306.7	307.6
168	309.6	309.4	311.3	302.3	302.5	305.1	315.7	299.4
192	302.3	283.7	284.0	250.7	276.1	248.8	233.6	190.6
216	186.0	183.2	185.7	167.8	176.9	177.4	174.4	172.7
240	167.8	166.5	168.6	164.1	166.2	162.5	167.4	176.9
264	160.8	124.1	105.6	110.9	110.5	96.8	86.2	77.4
288	78.6	80.6	82.7	78.6	76.6	79.0	62.4	70.1
312	67.7	64.0	64.8	66.9	67.1	66.5	58.4	61.6
336	64.8	63.6	55.1	67.4	60.4	52.8	53.9	53.8

DEPTH	3034.9		TILT	-15		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	70.5	66.0	57.2	58.8	61.4	57.9	50.7	49.0
24	68.5	70.5	62.8	62.4	60.5	64.0	66.9	66.5
48	81.4	70.4	68.4	64.1	78.4	74.8	85.5	85.5
72	229.8	226.7	233.1	237.0	175.5	232.1	243.1	242.4
96	235.8	247.0	257.1	253.7	259.5	263.3	267.7	271.4
120	277.2	277.6	277.1	274.2	278.6	278.6	284.1	289.3
144	286.9	295.2	294.7	293.7	300.1	300.1	290.7	292.8
168	294.1	288.1	289.6	283.9	281.5	276.8	275.5	275.5
192	238.5	232.6	230.2	225.4	218.5	190.7	183.3	183.3
216	184.4	182.8	169.3	167.2	168.2	168.1	156.4	154.0
240	155.2	154.4	149.3	149.8	150.7	151.5	149.1	164.4
264	158.4	119.2	107.0	108.9	84.9	85.2	86.5	77.4
288	79.4	83.1	83.1	80.6	77.0	79.2	65.2	69.5
312	64.3	65.2	65.2	65.6	66.9	56.2	58.4	62.0
336	66.9	62.6	55.1	67.6	60.8	52.3	53.9	54.2

DEPTH	3034.9		TILT	-18		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	70.7	66.5	55.7	59.2	59.2	56.3	51.1	49.4
24	65.6	65.6	62.8	62.3	56.7	64.8	69.3	66.6
48	78.6	71.2	69.3	65.1	75.3	75.4	88.3	86.0
72	149.7	172.8	150.3	147.5	152.0	148.3	181.3	214.0
96	172.6	198.8	201.0	232.6	239.0	246.8	238.5	238.7
120	246.8	252.9	263.0	265.0	267.3	267.8	271.2	269.9
144	273.9	275.5	275.5	279.6	278.6	278.2	278.8	280.8
168	279.5	271.3	273.5	272.2	266.9	251.6	238.5	231.7
192	228.5	220.8	214.8	192.6	178.9	173.4	173.4	175.9
216	170.1	171.1	163.5	164.0	160.8	154.9	152.8	151.5
240	146.6	143.1	140.2	140.3	138.3	142.6	145.5	149.9
264	153.2	113.1	109.2	102.5	85.9	86.4	76.2	78.6
288	80.6	83.2	77.4	80.2	77.4	68.5	65.8	68.0
312	59.6	65.1	66.0	65.2	65.6	57.1	57.1	61.5
336	66.9	58.4	54.3	68.9	61.2	57.1	54.3	54.2



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WALL RANGES VS DEPTH

DEPTH	3034.9		TILT	-21		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	70.5	66.5	55.7	59.6	59.6	56.7	52.3	50.5
24	65.2	64.8	64.0	63.5	58.4	65.6	69.7	67.0
48	79.5	76.2	69.7	66.1	77.2	76.7	93.6	87.5
72	132.2	137.8	149.9	147.2	145.5	146.2	164.3	174.3
96	154.0	161.8	161.8	177.4	184.0	191.3	206.7	208.7
120	236.9	235.0	240.9	253.2	257.7	257.7	259.2	261.0
144	247.6	255.3	262.5	256.5	257.9	255.1	253.7	260.6
168	261.5	249.2	257.1	250.0	250.3	237.5	221.2	219.9
192	216.5	201.8	188.0	182.8	172.2	165.7	160.1	158.4
216	156.8	156.8	149.5	156.1	148.7	146.3	146.1	146.1
240	131.7	132.1	132.7	129.6	130.1	130.0	134.4	141.6
264	146.6	105.3	105.2	99.6	87.5	87.5	77.3	78.1
288	81.9	80.4	77.9	78.3	63.0	62.7	66.1	66.8
312	58.8	64.5	65.6	66.0	66.5	57.1	57.1	61.6
336	58.8	57.1	55.1	67.7	61.6	55.9	55.1	55.2

DEPTH	3034.9		TILT	-24		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	70.5	67.3	60.4	58.2	59.5	57.8	52.7	51.1
24	59.3	60.9	64.2	62.7	58.2	66.5	69.5	67.9
48	80.2	77.7	70.4	66.3	79.1	78.6	95.6	94.9
72	123.2	139.4	151.1	154.0	152.0	144.2	153.5	147.9
96	149.5	153.2	155.6	173.4	173.0	175.9	184.8	191.4
120	211.5	212.6	220.0	222.5	224.3	228.2	231.2	236.2
144	219.2	225.8	234.2	233.3	234.1	227.7	230.7	225.7
168	239.7	229.7	226.1	207.7	227.8	219.9	206.6	191.7
192	191.6	172.0	175.0	145.5	142.2	147.9	148.7	151.1
216	152.8	152.5	141.0	147.6	136.4	139.3	139.0	127.1
240	118.8	126.6	124.5	124.5	121.4	121.6	121.2	129.3
264	130.5	100.1	98.6	95.6	89.7	89.2	79.6	79.3
288	83.5	77.4	79.2	78.2	65.2	65.2	68.1	67.1
312	59.2	62.3	65.6	64.8	60.2	57.5	57.5	61.9
336	55.0	54.3	55.9	67.3	62.0	53.8	55.9	54.2

DEPTH	3034.9		TILT	-27		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	71.3	64.8	61.1	58.8	59.6	58.4	53.0	51.4
24	52.7	55.3	64.7	64.3	58.0	66.9	71.7	68.4
48	78.2	79.2	72.4	68.9	81.9	80.9	97.8	97.4
72	117.9	134.9	139.3	140.3	142.7	142.7	147.8	147.0
96	147.5	149.1	157.2	163.3	168.6	169.4	170.8	170.9
120	187.2	191.7	203.8	206.7	209.5	209.6	196.9	211.9
144	208.0	212.3	207.1	217.5	215.0	219.2	209.4	199.0
168	199.4	197.0	200.2	194.5	193.1	166.4	186.7	169.8
192	156.1	151.8	147.3	143.7	139.3	139.0	143.4	142.2
216	138.2	139.7	131.0	133.6	116.3	134.4	101.0	105.7
240	106.1	112.9	113.5	115.3	115.5	113.9	110.6	119.3
264	127.6	93.6	91.2	90.4	91.2	87.9	81.0	84.3
288	84.3	77.5	80.2	79.8	63.1	66.5	68.4	67.5
312	60.0	62.8	65.2	64.8	55.2	57.3	58.8	60.8
336	51.9	53.9	56.3	66.9	62.4	53.9	56.3	54.9



CUSTOMER : Westlake Chemicals
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WALL RANGES VS DEPTH

DEPTH	3034.9		TILT	-30		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	69.3	66.5	61.6	58.8	57.9	58.4	56.7	53.1
24	53.1	52.9	66.5	66.5	59.4	64.0	72.0	71.8
48	71.3	77.5	74.3	76.6	83.1	83.3	97.7	100.6
72	113.4	126.8	132.5	136.6	139.4	138.0	138.9	141.0
96	146.3	149.1	149.6	152.5	164.3	164.1	165.7	162.7
120	168.6	172.5	185.6	190.5	182.3	184.8	188.0	187.7
144	196.0	196.5	181.8	182.3	176.4	177.9	177.9	181.9
168	183.6	177.1	171.0	170.1	156.8	160.1	155.2	151.1
192	142.6	141.8	142.2	142.2	129.7	130.0	134.4	132.4
216	121.5	119.7	101.3	98.9	99.3	90.0	87.1	87.9
240	87.9	87.9	89.6	96.4	102.9	106.2	107.5	113.4
264	126.0	95.3	89.6	89.6	89.4	84.7	82.9	83.1
288	82.3	79.8	77.4	73.7	63.7	67.8	70.9	68.6
312	60.8	65.6	66.0	64.8	55.2	56.2	59.2	60.7
336	52.0	54.7	57.6	66.5	62.6	54.9	57.9	55.9

DEPTH	3034.9		TILT	-33		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	68.1	66.9	63.1	58.4	57.3	58.8	58.8	54.3
24	53.7	54.3	68.3	66.8	61.2	61.1	74.0	68.9
48	65.6	75.9	75.2	79.1	84.2	85.1	99.3	108.2
72	108.6	119.1	121.9	130.1	133.3	130.9	134.1	128.0
96	139.3	135.2	94.4	140.3	98.1	144.2	137.0	134.9
120	134.5	149.9	152.6	172.5	171.5	177.9	178.9	174.5
144	165.3	163.7	162.9	159.2	161.3	162.1	168.2	171.3
168	173.9	167.8	157.9	157.6	148.4	147.5	135.0	132.1
192	126.1	134.4	129.0	117.5	117.1	115.3	108.0	96.4
216	96.0	90.9	93.6	89.1	86.3	83.9	85.5	85.5
240	85.5	85.5	87.5	89.1	95.6	102.1	103.6	111.0
264	110.6	98.7	87.7	87.6	84.1	82.3	79.4	80.6
288	79.0	77.0	76.2	74.0	71.3	70.9	70.4	68.9
312	62.0	64.7	64.4	64.4	56.2	56.6	60.0	59.6
336	53.5	54.7	58.1	65.6	62.1	56.8	59.0	55.8

DEPTH	3034.9		TILT	-36		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	67.3	66.9	64.1	58.7	59.4	59.6	57.1	57.1
24	55.9	56.2	69.3	68.4	63.6	60.7	77.0	67.6
48	65.6	72.7	77.6	81.0	86.3	90.0	101.3	102.5
72	106.6	111.4	111.4	124.1	124.6	122.7	123.7	124.6
96	125.6	99.3	93.2	93.6	97.7	131.7	108.0	135.7
120	135.7	135.3	136.8	150.5	156.8	164.1	158.4	157.4
144	157.2	157.2	157.2	159.2	160.5	152.0	159.2	160.8
168	146.7	141.2	136.6	136.2	126.4	122.8	114.3	116.7
192	109.5	102.9	102.6	101.7	102.6	94.3	89.6	88.0
216	88.3	86.3	87.1	84.7	82.3	82.3	80.6	82.3
240	81.9	82.3	83.5	86.1	89.1	92.0	98.9	102.9
264	109.0	95.3	85.8	85.6	83.1	78.2	77.8	77.8
288	77.0	75.4	74.2	70.1	70.5	70.4	68.3	66.5
312	65.4	65.6	64.4	64.0	57.5	58.2	61.0	60.4
336	56.7	55.1	59.7	64.0	64.0	57.9	59.8	56.8



CUSTOMER : Westlake Chemicals

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CAVERN : PPG No. 007B

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**WALL RANGES VS DEPTH**

DEPTH	3034.9		TILT	-39		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	66.9	67.3	65.4	58.8	62.4	62.4	57.7	56.3
24	57.5	57.2	70.1	70.1	63.7	62.5	78.6	75.9
48	68.5	69.4	80.5	83.5	89.0	90.9	100.1	101.3
72	100.9	105.8	107.0	109.0	116.3	107.4	107.4	107.4
96	104.1	96.4	90.0	90.8	92.4	100.5	104.5	109.8
120	132.9	132.1	131.7	136.8	141.2	150.5	147.9	141.7
144	143.9	143.4	143.9	144.2	136.2	130.1	126.4	133.4
168	126.8	118.3	115.8	114.9	113.9	102.5	102.1	101.2
192	99.7	93.2	86.5	83.1	89.4	87.0	80.2	82.7
216	83.1	83.1	83.1	82.1	79.4	80.6	81.0	81.4
240	81.4	82.3	82.3	85.1	86.3	90.0	90.8	91.2
264	93.8	91.4	82.1	81.9	79.0	76.6	76.6	75.8
288	74.2	72.9	70.9	70.1	68.5	68.1	66.0	65.2
312	65.2	64.4	64.4	64.0	58.4	60.0	62.0	60.4
336	57.4	55.7	62.0	62.8	62.8	57.1	61.2	58.8

DEPTH	3034.9		TILT	-42		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	66.9	66.9	67.3	60.3	62.4	62.1	59.3	58.3
24	59.8	59.8	70.4	69.7	65.5	64.4	78.2	77.7
48	70.1	68.7	86.7	84.7	92.0	94.0	95.6	95.6
72	99.3	101.7	103.3	101.7	101.3	96.8	92.8	96.8
96	95.8	95.2	92.4	89.6	91.6	96.0	97.7	105.8
120	111.4	128.5	122.8	127.2	132.9	139.3	135.9	130.5
144	130.5	131.3	127.6	127.6	121.6	119.5	119.5	118.3
168	114.7	95.6	98.7	97.7	101.3	98.2	90.4	89.1
192	89.1	86.7	76.6	76.2	82.1	78.2	80.2	79.0
216	79.8	80.2	77.8	77.8	78.6	78.6	78.6	77.0
240	79.0	80.2	79.8	79.4	84.3	87.1	87.1	86.7
264	86.7	88.0	81.4	78.2	78.2	76.6	76.6	73.7
288	72.9	72.5	69.3	68.9	68.9	67.1	65.2	64.8
312	64.4	63.6	62.8	62.8	60.7	62.0	62.0	59.8
336	57.9	57.7	62.3	62.8	62.2	58.2	61.6	60.7

DEPTH	3034.9		TILT	-45		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	66.9	66.9	66.9	62.4	62.5	66.9	61.0	60.4
24	62.8	61.7	70.5	69.7	68.1	67.7	80.2	77.2
48	73.8	73.3	87.1	88.7	90.8	90.4	91.6	93.6
72	95.2	96.8	97.7	98.7	88.3	91.6	91.6	90.4
96	90.4	89.4	87.5	87.5	91.2	92.8	92.8	96.0
120	99.3	105.4	105.4	104.9	126.6	120.3	124.0	117.8
144	118.3	120.8	119.9	115.5	115.5	111.0	110.5	93.6
168	90.8	90.0	88.7	90.4	87.9	89.6	83.9	83.1
192	82.6	77.0	74.6	74.2	71.7	72.9	77.0	75.4
216	74.6	76.2	75.0	75.0	75.4	76.2	76.2	76.6
240	76.6	77.8	78.2	79.4	79.4	81.4	83.5	83.5
264	84.7	79.8	78.6	77.8	77.0	76.2	74.6	72.9
288	70.9	70.5	70.5	68.9	68.9	68.1	66.0	65.2
312	64.0	62.2	62.8	62.4	62.0	62.4	62.0	61.2
336	59.1	59.7	62.4	62.4	62.4	60.9	62.3	62.3



CUSTOMER : Westlake Chemicals

DATE : January 07, 2024

CAVERN : PPG No. 007B

OPERATION No. : 10

**WALL RANGES VS DEPTH**

DEPTH	3034.9		TILT	-48		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	66.0	66.5	66.5	64.3	65.1	66.9	65.2	65.5
24	65.6	67.3	70.0	69.9	71.2	72.9	79.4	79.4
48	80.6	77.8	86.7	86.7	89.1	89.1	90.4	90.8
72	92.0	92.0	91.2	94.8	87.9	86.7	86.7	87.1
96	87.5	84.3	87.5	87.9	90.0	90.8	92.0	94.8
120	94.4	96.4	96.4	96.4	96.4	96.8	99.7	107.4
144	105.4	107.8	100.1	100.1	98.2	100.1	99.2	88.7
168	88.3	87.9	85.9	85.5	85.5	84.3	83.9	80.2
192	78.6	77.0	73.7	70.9	70.5	71.3	70.9	74.2
216	74.2	74.6	75.0	72.5	74.2	74.6	74.6	74.6
240	74.6	73.3	72.9	72.5	75.0	75.8	75.4	75.0
264	75.8	77.8	77.8	76.6	76.6	74.6	73.3	71.3
288	70.5	70.1	69.3	68.9	68.5	67.7	64.8	64.8
312	63.6	63.6	62.0	62.0	62.0	61.6	61.6	61.6
336	60.4	61.6	61.6	62.0	62.0	61.6	63.6	64.0

DEPTH	3034.9		TILT	-51		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	66.0	65.6	66.0	66.0	67.3	66.9	67.7	67.7
24	69.3	69.3	69.7	69.7	75.0	75.0	76.6	80.2
48	80.6	80.6	86.3	86.3	87.9	88.3	89.1	89.6
72	90.0	90.0	90.0	90.9	84.7	84.3	86.3	86.3
96	84.7	84.7	85.5	86.3	88.3	90.8	90.4	90.4
120	91.6	91.6	90.0	91.2	91.6	86.7	90.4	95.8
144	91.4	91.6	92.0	84.7	81.9	81.9	81.9	80.6
168	80.6	82.3	83.1	83.5	82.7	80.6	80.6	77.8
192	77.8	76.6	75.0	75.0	72.1	71.7	70.9	71.3
216	69.7	70.5	71.7	71.0	72.5	72.9	72.5	72.9
240	71.7	71.3	72.1	70.9	70.5	72.1	74.2	74.2
264	74.2	73.3	75.0	75.8	75.8	75.8	72.1	71.7
288	70.1	68.9	68.5	68.5	67.7	67.3	64.4	64.4
312	64.4	62.8	62.8	62.8	61.6	61.6	60.8	60.8
336	61.6	61.6	61.6	61.6	61.6	61.6	63.2	63.2

DEPTH	3034.9		TILT	-54		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	65.6	65.6	65.6	66.5	66.9	67.3	67.3	67.3
24	69.3	69.7	69.7	70.0	74.2	75.4	75.0	79.4
48	79.8	79.8	85.1	85.1	85.5	86.3	87.9	89.1
72	89.6	88.7	88.7	87.5	83.5	83.9	82.3	81.6
96	82.3	83.1	83.5	85.1	85.5	87.5	89.1	89.6
120	88.7	88.7	87.5	87.1	88.0	83.9	85.1	85.1
144	85.1	83.1	83.9	82.7	81.9	81.9	81.9	79.8
168	82.3	82.3	82.3	81.9	80.6	79.4	79.0	76.2
192	77.0	75.0	74.2	73.3	71.3	70.9	70.1	69.3
216	68.9	69.3	70.1	70.1	70.1	70.1	68.9	69.7
240	69.3	69.3	70.1	70.5	70.1	70.1	70.5	70.1
264	72.5	71.3	73.3	75.8	75.8	75.4	72.5	72.5
288	68.1	68.5	67.7	67.7	67.7	66.5	65.2	65.2
312	64.4	63.6	63.2	63.2	61.6	61.2	60.8	61.2
336	60.8	60.8	61.6	60.8	61.2	61.2	62.8	62.8



CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



WALL RANGES VS DEPTH

DEPTH	3034.9		TILT	-57		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	65.2	65.6	65.6	66.0	67.2	67.3	67.3	67.7
24	69.3	69.3	70.5	70.5	74.2	74.6	75.8	77.8
48	79.0	79.0	82.3	83.5	84.7	85.9	85.9	86.3
72	86.3	86.7	83.5	83.1	73.3	73.3	75.4	75.4
96	75.4	75.4	75.8	82.3	84.3	86.3	86.3	86.3
120	85.1	85.5	83.9	81.9	83.5	83.5	82.7	82.7
144	83.1	83.1	82.3	81.9	81.9	81.4	80.2	80.2
168	80.2	81.0	80.2	79.4	79.4	79.0	72.9	74.6
192	74.6	73.7	73.3	72.9	71.7	70.5	69.3	68.5
216	68.5	68.5	69.7	69.7	68.9	68.5	68.5	68.9
240	69.3	69.3	69.7	69.7	70.5	70.9	71.3	69.7
264	69.3	70.1	70.1	70.1	69.7	68.1	68.5	68.5
288	67.3	67.3	67.7	66.0	66.0	65.9	65.6	64.8
312	64.8	64.0	64.0	63.2	61.6	61.2	61.2	61.2
336	61.2	61.2	61.2	60.8	60.8	60.8	62.4	62.4

DEPTH	3034.9		TILT	-60		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	64.0	65.6	66.0	66.9	67.3	67.3	67.3	67.7
24	69.3	69.3	71.7	71.7	72.1	74.6	75.0	77.4
48	77.4	77.4	81.0	80.6	83.1	82.7	81.4	84.7
72	81.4	81.6	71.3	71.3	71.7	73.3	69.3	69.7
96	70.9	70.9	74.2	77.4	80.2	81.9	83.1	83.1
120	81.9	81.9	81.9	81.9	81.0	81.0	81.9	81.4
144	81.4	81.4	81.4	81.4	79.8	79.8	79.8	78.6
168	79.0	78.6	77.4	76.2	72.9	72.9	72.9	72.9
192	72.9	70.1	70.1	70.1	69.7	68.5	67.3	67.3
216	66.9	65.2	68.9	68.9	68.9	68.9	68.5	68.9
240	69.3	68.9	68.9	68.9	69.3	70.5	68.1	68.1
264	66.5	66.5	66.5	64.8	65.2	65.2	65.2	65.2
288	66.0	66.0	66.0	65.2	65.2	65.2	65.6	64.8
312	65.2	64.4	63.2	62.0	62.4	62.0	61.6	61.6
336	61.6	61.6	61.2	60.8	60.8	60.8	61.6	62.0

DEPTH	3034.9		TILT	-63		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	62.8	64.0	64.0	65.6	66.0	66.5	66.9	66.5
24	68.1	70.1	71.3	72.1	71.7	72.9	75.0	75.0
48	75.4	77.4	77.0	77.0	80.6	77.0	76.6	76.7
72	71.7	71.7	69.3	69.3	66.9	66.9	66.0	66.5
96	66.5	70.1	70.1	75.4	75.4	75.0	74.6	76.6
120	79.0	79.0	77.8	77.4	77.0	79.8	79.8	79.4
144	79.4	77.7	77.2	77.7	77.7	77.8	74.6	74.6
168	74.6	72.5	72.5	72.5	70.9	70.9	70.1	68.9
192	68.5	68.9	68.1	68.1	69.7	68.9	68.5	67.3
216	66.5	66.5	68.9	68.9	68.9	68.5	68.5	68.9
240	68.9	66.0	65.2	65.6	65.6	65.6	64.8	64.8
264	66.5	66.5	65.6	65.2	65.2	65.2	65.6	66.0
288	66.0	66.5	65.6	64.8	64.8	65.6	65.6	65.2
312	65.2	65.2	63.6	63.6	62.8	61.5	61.5	62.0
336	62.0	62.0	61.6	62.0	62.0	62.0	62.0	62.8



CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



WALL RANGES VS DEPTH

DEPTH	3034.9		TILT	-66		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	63.2	63.2	63.2	66.0	66.5	66.5	66.0	66.0
24	66.0	66.5	66.5	66.5	68.1	69.3	69.3	69.3
48	69.3	69.4	73.3	73.3	75.0	75.0	74.8	74.8
72	68.5	68.5	67.3	66.0	66.0	65.6	65.2	64.8
96	67.3	66.9	67.7	66.0	66.0	66.0	68.4	74.6
120	74.6	75.0	76.6	76.6	76.6	76.6	73.3	73.3
144	73.3	72.1	72.1	72.1	72.1	73.3	71.7	68.9
168	68.5	67.7	70.9	70.9	70.9	67.7	67.7	67.7
192	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.3
216	67.3	67.3	67.7	68.9	68.9	65.2	65.2	64.0
240	64.0	64.0	64.0	64.4	64.0	64.0	64.0	63.6
264	63.6	63.6	65.2	65.2	65.2	65.2	65.2	65.6
288	60.6	60.6	65.2	63.2	63.2	64.8	64.8	64.8
312	66.0	64.8	63.6	63.6	63.6	63.6	63.2	62.8
336	62.4	62.0	62.0	62.0	62.0	62.8	62.8	63.2

DEPTH	3034.9		TILT	-69		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	64.0	63.6	66.0	69.7	66.0	66.0	66.0	66.0
24	66.0	66.5	66.5	66.5	66.5	67.3	68.1	68.5
48	68.5	68.5	69.7	70.9	70.9	70.4	66.9	66.9
72	66.9	66.0	66.0	66.0	66.0	66.0	64.8	64.4
96	64.4	64.4	66.5	66.0	66.0	65.6	65.2	64.8
120	63.2	65.2	65.2	65.2	66.5	66.9	69.7	69.7
144	69.7	70.9	70.9	68.1	66.5	65.6	65.6	65.2
168	65.2	66.0	64.4	68.1	68.1	66.5	66.5	66.0
192	66.5	66.5	66.5	67.7	67.7	67.7	67.3	67.3
216	67.3	67.3	67.7	67.7	64.4	63.6	62.8	62.0
240	62.0	61.6	61.6	60.4	60.4	60.4	60.4	61.6
264	61.2	61.6	62.0	62.1	61.6	62.6	57.1	59.2
288	59.2	59.6	59.6	60.4	61.6	62.0	62.0	62.8
312	64.4	64.8	65.2	65.2	64.8	64.8	64.0	64.0
336	63.6	63.6	63.6	63.6	63.6	63.2	63.6	63.6

DEPTH	3034.9		TILT	-72		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	71.3	71.3	70.5	70.1	66.5	66.5	66.5	66.5
24	65.2	65.2	66.0	66.0	66.0	67.3	67.7	67.7
48	67.7	67.7	64.4	64.4	64.4	65.6	65.6	65.6
72	65.6	65.6	65.6	64.8	64.8	64.8	64.8	64.0
96	64.0	65.2	65.6	65.6	67.3	65.6	66.0	66.0
120	65.6	65.6	65.6	65.6	65.6	65.6	68.1	68.1
144	68.1	68.1	68.1	67.3	66.9	62.4	62.4	64.4
168	64.4	62.0	62.0	63.6	63.6	63.2	65.2	65.2
192	65.2	65.2	66.0	66.0	65.6	66.0	66.9	66.0
216	66.0	66.9	65.6	65.2	61.2	61.2	61.2	61.2
240	60.8	59.6	60.0	60.0	60.0	60.0	60.0	60.0
264	60.8	60.8	61.1	61.1	61.1	56.7	57.5	57.5
288	58.4	58.4	58.8	58.8	60.8	60.8	60.8	60.8
312	68.9	67.9	67.9	67.9	67.9	67.7	68.1	68.1
336	67.7	67.7	71.7	72.1	72.1	71.7	66.3	71.3



CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



WALL RANGES VS DEPTH

DEPTH	3034.9		TILT	-75		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	69.3	69.3	68.9	68.9	69.3	63.6	63.6	63.6
24	63.6	65.2	65.2	66.0	66.0	66.0	66.9	66.9
48	64.4	64.8	64.8	64.8	64.8	64.4	65.2	64.8
72	64.8	64.8	64.8	64.4	64.4	64.4	64.4	64.4
96	66.9	66.9	64.8	64.8	64.8	65.2	65.2	65.2
120	65.2	65.2	65.2	65.2	65.2	65.2	64.8	64.8
144	64.8	64.4	63.6	63.6	63.2	63.2	63.2	64.4
168	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4
192	64.4	64.4	64.4	64.4	64.4	64.4	64.4	65.2
216	65.2	64.8	64.8	64.0	60.8	60.4	60.4	60.4
240	60.0	60.0	59.6	60.0	60.0	60.0	60.0	60.0
264	60.4	60.4	60.4	60.1	60.1	56.3	56.3	56.3
288	56.3	57.1	57.5	58.8	58.8	58.8	58.8	60.8
312	67.4	68.4	67.9	67.7	67.7	67.7	68.1	68.1
336	68.5	69.7	69.7	69.7	69.7	69.3	69.3	70.5

DEPTH	3034.9		TILT	-78		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	69.3	69.3	69.3	69.3	63.2	63.2	63.2	62.8
24	63.2	63.2	62.8	63.6	63.6	63.6	63.6	63.6
48	63.6	63.2	63.6	64.8	64.8	64.8	64.8	64.8
72	64.8	64.8	64.8	64.8	65.6	66.0	66.0	66.0
96	65.6	65.6	65.6	65.6	65.2	65.6	65.2	65.2
120	65.2	64.0	63.6	63.6	63.6	63.6	63.6	63.6
144	63.6	63.6	64.4	63.6	63.2	63.2	63.2	63.2
168	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.4
192	64.4	64.4	64.4	64.4	64.4	64.4	63.6	63.6
216	63.6	63.2	62.0	62.0	62.0	62.0	62.0	62.0
240	60.4	60.0	60.0	60.0	60.0	60.0	60.0	58.8
264	58.8	58.8	58.8	59.2	59.2	59.2	59.2	60.1
288	60.6	61.1	60.1	60.0	60.0	60.0	60.0	60.0
312	67.4	67.3	67.7	67.7	67.7	67.7	67.7	67.7
336	67.7	69.7	69.3	69.3	69.3	69.3	69.3	69.3

DEPTH	3034.9		TILT	-81		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	69.9	69.9	69.9	70.4	66.5	62.8	62.8	62.8
24	62.8	62.8	62.8	64.8	64.4	64.4	64.4	64.4
48	64.4	63.2	64.4	64.8	63.2	64.8	64.8	64.8
72	64.8	64.8	64.8	64.8	66.0	66.5	66.5	66.5
96	66.0	66.0	66.0	66.0	65.2	65.2	65.2	64.4
120	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6
144	63.6	63.6	64.0	64.0	64.4	64.4	64.0	64.0
168	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.4
192	64.4	64.4	64.4	63.6	63.6	63.6	63.6	63.6
216	63.6	63.6	63.6	62.4	62.4	62.4	62.4	62.4
240	62.4	62.4	62.4	62.4	62.4	60.4	60.4	60.4
264	62.0	62.0	62.0	62.0	61.2	61.2	61.2	64.8
288	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8
312	64.8	64.8	64.0	63.6	67.0	67.4	67.9	69.4
336	69.7	69.7	70.1	69.7	69.7	70.1	66.5	66.5



CUSTOMER : Westlake Chemicals

DATE : January 07, 2024

CAVERN : PPG No. 007B

OPERATION No. : 10

**WALL RANGES VS DEPTH**

DEPTH	3034.9		TILT	-84		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.2
24	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6
48	65.6	65.6	65.2	65.2	65.2	64.8	64.8	64.8
72	66.9	66.9	66.9	66.9	66.9	66.0	66.0	66.0
96	66.0	66.0	66.0	65.2	65.2	65.2	64.8	64.8
120	64.8	64.8	64.8	64.8	64.8	64.4	64.4	64.4
144	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.0
168	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0
192	64.0	64.0	64.0	64.0	64.0	64.0	63.2	63.2
216	63.2	63.2	62.8	62.8	62.4	62.4	62.4	62.4
240	62.4	62.4	62.4	63.6	63.6	63.6	63.6	64.0
264	64.0	64.0	63.6	64.0	63.6	64.0	64.0	64.0
288	64.0	64.4	64.4	65.2	65.2	65.2	65.2	65.2
312	65.2	65.2	65.2	65.2	65.2	65.2	67.7	67.7
336	67.7	67.7	67.7	68.9	67.7	68.9	67.7	65.6

DEPTH	3034.9		TILT	-87		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	65.6	65.6	65.6	65.6	66.0	66.0	66.0	66.0
24	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
48	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
72	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
96	66.0	66.0	66.0	66.0	66.0	66.0	66.0	64.8
120	65.2	65.2	65.2	65.2	64.8	65.2	64.8	65.2
144	65.2	64.8	64.8	65.2	65.2	65.2	65.2	65.2
168	65.2	64.4	64.4	64.4	64.4	64.4	64.0	64.0
192	64.0	63.6	64.0	63.6	63.6	63.6	63.6	64.4
216	64.4	64.4	64.0	64.4	64.4	64.0	64.4	64.4
240	64.4	64.4	64.4	64.4	64.4	65.2	64.4	65.2
264	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
288	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
312	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
336	65.2	65.2	65.2	65.2	65.2	65.2	65.6	65.6

DEPTH	3035.1		TILT	0		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	76.0	75.1	72.2	68.9	66.8	63.6	60.2	189.6
24	186.1	196.1	194.6	194.9	188.3	191.2	194.8	179.0
48	179.3	197.3	173.2	194.4	191.2	191.2	208.4	211.3
72	215.6	215.6	221.1	225.3	228.9	228.6	227.4	233.9
96	237.9	241.9	244.4	248.0	245.7	255.1	264.0	239.2
120	276.9	217.1	230.4	231.9	235.4	219.3	223.9	218.5
144	303.7	304.0	227.1	202.3	177.5	212.5	219.9	176.4
168	175.0	193.7	188.3	298.3	189.7	191.6	194.3	199.7
192	199.1	201.2	206.6	209.2	211.6	211.9	217.6	224.4
216	227.4	232.8	254.0	243.5	253.3	252.1	250.6	280.7
240	259.1	271.5	268.8	267.3	243.3	238.4	214.6	182.6
264	153.1	144.1	135.7	108.2	107.9	113.2	110.3	96.3
288	95.4	95.4	90.0	90.9	90.6	92.7	84.1	87.7
312	79.6	81.7	67.7	68.2	68.7	68.9	68.6	67.9
336	71.1	73.3	69.7	69.7	66.3	61.5	185.6	185.4



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WALL RANGES VS DEPTH

DEPTH	3040.0		TILT	0		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	187.4	71.6	70.4	66.5	63.0	62.6	53.9	192.1
24	74.9	197.8	79.1	79.1	201.9	196.9	199.9	202.1
48	209.2	205.8	209.7	206.1	209.2	210.6	210.2	215.9
72	219.1	221.5	223.9	232.1	232.1	235.8	236.2	240.5
96	238.1	241.1	247.4	248.6	254.1	261.8	272.3	271.3
120	277.5	284.8	287.7	297.7	306.8	310.8	311.2	311.7
144	302.2	302.9	300.5	295.6	291.2	290.7	290.8	291.3
168	292.2	295.5	295.5	298.0	300.4	199.7	196.3	199.2
192	202.1	203.4	208.7	210.6	211.6	243.3	264.0	294.1
216	281.3	287.5	291.7	250.8	260.8	261.8	286.2	283.0
240	281.7	276.7	270.2	271.4	276.1	264.1	259.0	182.5
264	156.6	139.5	103.9	104.3	108.3	96.8	103.1	90.1
288	79.5	79.5	82.8	86.3	90.9	82.3	81.9	66.5
312	78.7	77.2	66.1	67.1	67.3	70.9	65.9	64.5
336	68.8	69.2	66.5	68.5	61.8	56.3	71.6	71.6

DEPTH	3045.1		TILT	0		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	72.8	68.1	63.6	62.2	63.0	54.3	49.8	49.8
24	72.8	71.6	69.7	67.8	67.1	72.0	67.7	66.7
48	71.5	66.8	73.5	74.8	77.3	76.2	217.3	219.6
72	225.3	230.1	229.1	232.0	231.3	235.8	238.1	243.3
96	237.6	248.1	251.4	257.3	263.3	264.6	275.3	278.9
120	278.9	286.5	294.1	298.4	308.8	311.3	311.3	311.8
144	307.4	302.8	300.4	295.5	291.4	290.3	290.7	290.7
168	292.3	294.8	295.4	297.0	300.3	302.0	304.1	303.1
192	300.9	314.5	313.1	311.2	305.5	304.4	302.4	295.1
216	294.3	295.1	291.3	258.3	218.7	222.3	203.8	282.2
240	282.9	277.1	273.5	274.7	275.6	270.3	259.4	181.7
264	151.9	135.9	103.1	104.9	108.9	95.8	86.0	87.3
288	78.7	81.1	83.4	83.4	89.7	78.7	61.0	68.5
312	77.9	69.0	64.9	66.1	67.1	68.9	60.2	63.4
336	67.7	64.2	54.3	68.5	60.2	52.6	69.9	56.9

DEPTH	3050.3		TILT	0		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	67.7	65.7	55.3	57.1	60.2	56.3	49.2	47.6
24	67.7	69.7	61.0	61.0	59.1	64.3	64.9	64.9
48	75.2	70.8	65.4	62.6	77.5	74.8	91.7	224.5
72	226.6	233.3	232.0	234.4	234.3	248.6	250.2	253.3
96	255.2	254.9	252.2	262.0	270.4	268.5	276.6	280.3
120	285.9	290.5	295.4	300.6	308.6	311.1	311.4	311.1
144	311.7	302.2	300.3	295.1	290.8	290.8	291.1	291.2
168	292.5	296.8	297.8	297.8	299.7	302.1	303.7	302.6
192	307.8	319.8	316.7	311.9	315.3	306.1	302.2	297.4
216	295.4	294.6	209.4	206.5	213.1	193.2	203.4	208.7
240	211.1	209.5	279.4	274.7	272.0	217.4	243.6	170.8
264	151.8	133.8	103.5	108.6	108.9	95.8	85.4	76.4
288	77.1	80.3	81.9	77.9	75.6	78.7	62.6	68.8
312	65.7	63.8	63.0	64.8	65.3	54.7	56.3	60.6
336	64.5	61.7	53.5	66.5	59.4	52.4	52.4	52.7



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**WALL RANGES VS DEPTH**

DEPTH	3060.2		TILT	0		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	66.4	61.8	55.6	52.8	54.3	52.8	47.6	46.5
24	46.5	46.5	59.5	57.9	52.4	60.6	64.2	63.0
48	74.9	71.2	65.6	61.4	72.8	72.4	82.3	82.3
72	237.6	242.1	245.2	249.7	240.5	251.9	254.1	254.3
96	257.3	262.4	268.7	274.3	274.6	280.9	278.1	286.2
120	289.1	295.3	296.6	307.8	308.4	310.4	310.4	310.8
144	306.4	301.3	296.2	294.7	291.1	290.0	290.3	291.5
168	293.1	295.0	298.6	299.4	298.6	301.3	301.3	302.1
192	306.8	319.2	319.4	323.0	322.6	319.0	302.1	303.3
216	191.2	188.3	190.7	187.8	176.9	184.1	181.0	184.0
240	188.4	189.6	203.7	200.9	193.1	191.2	186.9	171.3
264	151.3	123.3	103.9	109.3	82.3	82.6	72.4	74.8
288	76.7	79.9	73.2	76.4	59.4	59.4	62.6	62.6
312	54.3	57.1	61.0	61.0	48.4	52.4	52.8	57.1
336	45.7	48.7	50.8	64.0	57.2	47.9	50.8	49.2

DEPTH	3065.4		TILT	0		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	64.6	58.3	54.3	50.4	48.8	50.0	49.8	46.1
24	45.7	46.0	57.9	57.5	51.6	60.2	64.2	61.7
48	74.3	72.0	64.9	61.4	72.8	72.8	87.0	82.3
72	236.7	240.0	247.6	248.7	246.7	250.9	251.4	254.5
96	261.4	263.3	266.7	276.6	279.8	282.4	282.0	286.4
120	286.4	295.7	299.1	307.2	307.2	311.2	311.2	310.8
144	305.6	305.3	298.6	294.6	290.7	289.5	292.2	295.0
168	296.2	297.6	298.1	298.5	297.9	299.0	301.3	302.2
192	303.3	319.9	319.4	323.0	322.6	319.4	319.4	311.2
216	183.3	185.1	189.3	169.3	176.7	180.3	180.2	175.5
240	177.2	176.5	190.0	191.1	176.5	171.1	179.8	174.1
264	157.8	115.8	104.3	98.4	82.3	82.3	74.0	74.0
288	76.7	72.6	73.2	72.5	55.7	59.4	61.7	60.7
312	53.2	58.3	58.3	59.1	47.6	48.1	51.2	52.8
336	46.1	45.5	50.0	59.8	55.5	48.2	50.2	47.3

DEPTH	3070.1		TILT	0		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	59.4	56.7	53.1	47.5	48.7	48.8	45.7	44.6
24	45.3	44.9	57.9	56.7	52.0	49.6	63.0	62.6
48	72.6	71.1	64.9	66.9	74.0	72.8	88.2	82.7
72	236.2	240.4	247.4	248.6	249.4	250.6	250.2	256.8
96	262.4	263.6	267.5	277.3	279.3	280.9	282.0	284.0
120	290.3	295.6	299.5	306.4	308.0	311.5	311.2	310.8
144	306.4	306.8	304.9	301.7	297.8	297.8	297.0	298.8
168	301.7	303.3	308.8	305.0	305.5	308.3	301.7	309.2
192	320.2	320.2	319.8	322.6	322.6	320.2	321.1	319.8
216	182.9	183.3	182.2	163.7	175.0	175.2	172.7	170.6
240	162.2	161.8	149.3	156.8	156.5	156.1	161.3	173.5
264	158.0	107.4	104.8	94.1	82.6	82.6	72.4	72.8
288	76.2	69.7	72.8	71.2	59.4	59.4	62.0	59.3
312	52.4	54.7	53.2	54.5	46.1	47.3	50.0	49.5
336	45.3	43.7	48.8	56.3	52.8	44.9	48.8	46.1



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**WALL RANGES VS DEPTH**

DEPTH	3075.2		TILT	0		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	54.5	53.2	51.7	45.3	48.0	46.9	44.5	43.3
24	44.9	44.9	56.7	55.9	50.0	48.4	62.6	55.1
48	53.7	65.0	63.8	66.9	72.7	72.7	87.8	87.7
72	235.6	241.9	247.3	248.2	249.8	257.5	258.7	260.5
96	263.4	265.1	270.6	278.1	279.3	281.7	281.7	285.6
120	287.9	295.4	299.8	305.0	307.6	312.7	312.7	310.8
144	304.1	304.1	301.7	302.5	297.8	298.2	297.0	297.0
168	300.9	303.7	307.6	304.9	307.2	307.2	301.7	314.5
192	319.2	321.8	321.4	322.2	320.2	318.6	319.0	184.5
216	179.0	179.8	169.3	162.1	169.3	170.0	151.7	147.1
240	147.1	148.2	141.9	140.4	134.2	143.1	142.8	165.2
264	154.1	93.3	89.2	81.9	82.6	76.4	72.9	75.2
288	74.3	69.3	65.7	62.6	59.8	58.3	55.5	51.2
312	51.2	51.0	50.8	50.3	45.7	46.6	46.5	44.9
336	42.5	43.3	47.3	48.0	48.4	43.5	46.5	45.7

DEPTH	3080.1		TILT	58		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	284.4	284.8	284.1	281.3	282.2	281.4	278.9	278.5
24	279.3	278.5	277.5	277.7	276.1	276.1	276.1	277.5
48	281.1	278.9	279.3	280.9	280.1	281.3	279.9	279.9
72	283.0	282.2	282.7	284.2	284.1	284.1	286.0	285.6
96	283.2	284.9	285.1	282.2	285.3	287.5	285.6	284.1
120	285.1	285.1	283.7	282.2	282.2	277.9	281.2	284.0
144	283.1	283.2	287.3	286.9	281.9	282.6	282.2	285.6
168	284.7	286.7	285.0	285.8	286.6	285.3	284.3	285.3
192	286.6	283.4	285.9	282.8	283.2	286.5	283.3	287.3
216	286.9	288.2	287.0	289.3	288.0	284.0	287.3	287.5
240	289.3	290.6	291.3	289.1	289.8	291.8	291.0	290.7
264	290.3	289.4	290.7	290.2	288.3	287.6	289.7	288.2
288	287.4	287.7	294.0	293.2	292.1	292.1	293.5	291.7
312	293.5	293.6	289.8	290.0	286.0	286.8	285.2	285.1
336	281.3	281.3	286.3	286.7	286.0	285.1	283.7	284.0

DEPTH	3080.1		TILT	55		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	264.1	262.1	266.0	263.9	261.9	259.2	257.4	260.0
24	258.5	254.9	256.4	259.7	259.6	261.5	262.8	262.1
48	265.2	269.1	275.5	276.0	278.9	279.3	283.7	284.4
72	287.8	288.4	290.4	292.6	293.5	294.7	295.4	296.4
96	294.1	291.3	293.4	290.6	296.5	298.8	296.2	294.1
120	294.2	297.2	297.6	295.9	295.1	293.2	293.7	298.9
144	296.5	294.6	296.9	297.4	294.1	297.0	296.0	295.9
168	295.8	299.0	296.4	298.4	298.5	297.0	295.5	295.1
192	298.4	297.4	297.9	297.4	298.2	297.9	295.5	298.2
216	296.5	298.8	296.1	299.8	300.3	297.0	298.8	299.4
240	300.7	300.3	302.1	301.1	298.9	301.2	298.4	299.8
264	299.3	297.4	299.9	300.9	296.2	296.2	292.5	287.5
288	283.6	282.7	283.2	279.8	280.3	279.9	277.6	278.9
312	280.9	278.9	278.9	281.9	273.0	270.3	261.5	261.2
336	259.5	265.5	266.9	269.9	272.7	262.6	261.4	260.4



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**WALL RANGES VS DEPTH**

DEPTH	3080.1		TILT	52		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	214.9	218.3	218.7	222.4	218.2	221.2	221.5	215.4
24	222.9	226.0	231.1	241.5	244.1	250.3	252.4	250.9
48	250.9	253.8	255.7	262.1	262.3	263.2	267.4	266.1
72	270.6	276.8	277.8	281.9	286.8	289.8	293.2	299.3
96	299.2	297.0	300.3	300.5	303.3	306.4	303.6	303.7
120	309.6	309.1	311.0	309.4	310.5	308.2	309.2	314.1
144	308.3	308.8	311.2	310.7	309.9	309.7	308.8	308.9
168	309.1	312.5	309.8	311.7	312.0	309.8	310.2	311.4
192	311.1	316.1	311.5	312.5	311.9	314.3	312.3	313.6
216	312.0	310.2	307.2	314.0	313.7	311.1	311.9	310.1
240	310.5	314.2	312.5	311.9	306.6	310.0	304.9	309.2
264	308.0	306.4	306.4	300.3	284.9	274.1	270.4	270.9
288	248.3	250.9	223.9	244.7	234.3	235.2	245.7	245.7
312	244.1	249.5	246.7	219.6	222.0	224.0	217.6	217.6
336	228.1	224.9	237.3	237.6	224.1	225.5	220.1	217.7

DEPTH	3080.1		TILT	49		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	201.1	200.7	183.9	186.5	197.5	184.6	204.4	196.4
24	195.9	208.2	211.5	217.1	228.1	236.8	237.2	237.6
48	236.8	236.8	237.9	251.2	254.6	256.8	260.0	262.3
72	261.4	267.5	268.5	271.4	276.1	276.1	277.5	284.5
96	289.1	292.5	297.3	301.2	305.0	311.2	308.7	314.3
120	317.8	320.7	322.1	322.6	323.9	323.3	323.0	324.1
144	322.3	322.1	324.3	325.5	325.3	325.2	323.9	324.7
168	324.7	327.0	325.5	326.8	327.3	325.9	325.8	326.4
192	326.0	328.8	327.1	327.6	326.0	326.4	326.0	326.3
216	325.9	322.7	320.3	322.6	326.4	326.4	324.5	322.6
240	321.8	324.5	318.6	315.5	312.7	312.6	309.3	309.3
264	302.4	274.0	272.8	257.6	244.3	233.3	231.7	220.6
288	214.9	216.3	211.3	211.1	214.4	205.4	204.4	217.5
312	220.3	187.4	198.4	200.2	182.5	182.5	182.5	185.8
336	198.4	200.7	202.6	203.4	184.2	187.5	199.7	201.6

DEPTH	3080.1		TILT	46		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	172.6	168.8	169.1	170.2	168.1	166.8	167.2	179.2
24	184.7	186.5	196.9	200.2	215.3	220.6	224.0	223.1
48	222.5	227.9	229.2	236.3	239.8	243.8	249.5	250.2
72	249.0	250.5	254.2	255.9	261.5	267.1	267.2	264.2
96	265.6	276.0	281.8	282.9	284.1	279.2	285.1	290.9
120	307.6	310.4	319.8	327.0	334.2	337.4	331.2	332.0
144	331.6	329.6	335.3	342.4	343.2	343.4	338.7	343.2
168	342.9	343.9	343.9	344.6	344.7	344.7	343.9	343.9
192	343.4	343.4	345.3	345.2	342.5	339.5	339.8	337.5
216	332.0	330.8	330.2	326.9	326.1	324.1	325.3	320.5
240	317.4	316.7	314.7	311.9	310.5	306.7	302.4	293.2
264	288.4	263.7	246.4	244.7	230.5	221.3	220.6	213.2
288	209.7	207.3	203.0	201.8	199.2	195.1	191.6	189.2
312	186.1	183.7	181.8	181.8	180.9	179.8	180.6	181.0
336	182.3	181.6	182.8	180.1	177.6	177.6	177.7	175.1



CUSTOMER : Westlake Chemicals

DATE : January 07, 2024

CAVERN : PPG No. 007B

OPERATION No. : 10

**WALL RANGES VS DEPTH**

DEPTH	3080.1		TILT	43		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	168.8	166.8	166.8	163.3	163.3	162.9	165.7	167.8
24	172.7	176.5	186.9	192.3	205.7	209.1	211.3	209.7
48	211.6	220.8	221.3	225.4	232.0	235.1	233.9	231.8
72	230.9	233.9	237.5	240.0	241.5	249.7	253.3	252.8
96	247.1	259.7	259.0	266.5	264.9	263.5	263.5	267.6
120	264.0	267.8	282.8	289.2	289.6	315.9	287.8	317.1
144	313.4	311.1	317.2	331.2	339.2	330.4	324.9	327.9
168	332.0	333.6	334.7	339.2	340.6	337.3	337.9	336.8
192	333.2	336.8	340.6	342.0	334.7	324.9	318.6	316.7
216	311.2	304.9	301.2	302.2	307.9	305.3	310.7	306.4
240	308.8	304.1	305.0	304.8	305.1	300.9	292.3	285.6
264	273.4	250.9	240.0	235.0	221.0	216.8	212.8	213.2
288	208.9	204.6	204.6	199.8	193.6	192.4	189.6	186.5
312	184.9	184.1	182.2	180.6	178.6	178.6	176.6	177.8
336	177.3	176.6	175.4	174.1	172.9	169.6	168.0	170.2

DEPTH	3080.1		TILT	40		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	166.4	167.9	166.8	163.3	162.5	164.9	163.7	165.2
24	164.1	164.1	176.0	182.5	196.2	199.2	199.1	200.2
48	199.7	209.9	209.9	214.7	217.5	223.3	226.7	221.1
72	221.1	222.5	223.3	226.8	229.0	235.9	239.6	240.0
96	233.0	245.8	248.7	252.4	249.5	249.0	250.5	252.8
120	254.3	258.5	260.8	266.9	271.3	276.6	275.6	275.5
144	287.9	295.5	297.0	299.0	306.3	306.6	294.7	298.4
168	299.4	299.8	304.5	304.8	312.6	312.4	303.6	284.8
192	298.3	298.4	291.7	285.5	285.4	283.0	279.6	280.6
216	279.6	279.6	285.6	290.3	296.7	298.7	298.6	292.7
240	295.2	295.8	296.7	296.9	296.6	284.6	279.3	273.6
264	265.2	246.7	234.1	228.6	222.4	213.5	210.5	211.3
288	210.1	205.7	201.4	199.3	195.9	190.0	187.3	188.1
312	184.1	184.1	179.8	179.8	177.4	176.9	174.7	173.1
336	171.1	171.6	172.3	171.0	171.2	169.6	168.0	168.5

DEPTH	3080.1		TILT	37		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	166.8	166.4	166.4	166.5	163.3	162.1	162.2	162.1
24	162.1	163.7	167.7	179.4	187.4	189.8	191.9	191.5
48	191.2	199.5	200.8	206.3	204.8	212.9	212.0	211.1
72	209.2	210.8	213.3	215.7	218.9	226.5	230.1	229.6
96	226.7	230.9	235.3	239.2	239.2	241.0	238.0	240.0
120	242.4	236.7	234.3	223.1	226.7	223.8	228.6	225.7
144	262.9	271.1	278.5	278.9	285.4	284.7	279.9	279.9
168	279.3	274.8	281.3	282.2	290.8	276.1	283.2	275.4
192	271.8	274.6	275.1	264.4	271.3	263.7	259.2	263.1
216	267.4	269.0	275.0	281.3	284.3	290.2	292.3	277.1
240	277.2	285.6	285.2	288.7	286.1	272.8	267.1	266.3
264	259.3	245.2	230.9	223.1	219.2	213.2	208.9	209.3
288	208.5	206.7	201.0	198.5	197.5	193.2	190.4	187.7
312	184.1	183.7	179.0	180.9	175.1	175.1	172.7	172.3
336	171.1	170.7	173.3	170.7	169.6	169.3	168.0	167.6



CUSTOMER : Westlake Chemicals
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WALL RANGES VS DEPTH

DEPTH	3080.1		TILT	34		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	168.0	167.2	166.8	86.6	79.1	64.9	59.8	56.7
24	163.7	163.7	166.4	171.8	177.4	182.6	185.7	184.9
48	186.0	192.6	197.9	197.0	195.2	200.2	200.2	203.8
72	203.5	201.6	204.9	206.1	210.7	212.8	222.0	221.5
96	221.1	221.5	224.4	230.1	225.1	224.8	225.3	222.9
120	226.7	215.6	203.0	204.4	210.6	210.5	216.8	209.7
144	197.7	199.2	203.5	204.4	238.3	254.9	214.2	251.0
168	251.4	259.5	265.1	269.5	236.2	260.9	246.4	244.6
192	227.7	238.5	240.5	239.5	240.8	245.0	247.9	253.7
216	258.6	261.8	268.4	276.0	279.5	281.1	280.7	271.5
240	267.0	265.9	261.2	261.2	266.3	267.6	261.6	258.1
264	243.6	238.4	235.2	225.2	222.5	212.5	204.6	205.7
288	208.5	207.8	204.8	199.1	197.9	195.1	190.8	186.1
312	183.3	181.8	181.8	180.7	178.6	175.5	175.0	81.9
336	88.2	89.0	89.0	84.7	74.2	63.8	170.7	167.6

DEPTH	3080.1		TILT	31		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	169.2	169.3	83.7	77.3	73.0	63.8	57.1	55.9
24	168.3	168.6	167.4	169.2	172.0	177.5	178.4	76.0
48	178.4	185.5	190.7	190.4	190.4	190.2	191.6	197.1
72	195.1	194.3	196.3	197.4	202.3	206.3	211.7	213.2
96	213.5	213.5	215.5	212.8	212.0	211.2	207.3	210.2
120	209.2	201.6	198.8	200.2	200.7	197.9	198.8	200.2
144	192.1	183.5	190.1	200.4	208.7	212.7	208.5	206.8
168	218.7	221.5	219.9	221.5	226.6	225.8	220.1	223.1
192	223.1	224.4	226.5	227.3	232.0	238.0	243.3	246.7
216	252.0	256.6	262.1	268.2	274.6	275.0	272.9	265.5
240	265.9	259.6	256.1	254.8	247.9	246.5	245.1	250.2
264	237.2	232.7	232.6	227.0	217.2	209.3	204.6	203.8
288	209.7	207.3	204.6	201.0	197.9	195.1	71.2	188.8
312	185.9	183.6	76.0	78.3	78.3	82.7	76.4	74.7
336	80.5	85.0	63.0	79.7	70.1	59.1	61.3	61.8

DEPTH	3080.1		TILT	28		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	170.8	171.7	61.7	69.7	69.2	61.0	55.6	53.2
24	82.3	82.1	169.0	168.4	168.8	80.9	76.0	75.2
48	80.2	78.3	185.9	186.9	185.9	184.9	190.4	191.9
72	192.9	188.3	189.0	191.8	197.5	199.5	205.7	206.4
96	207.3	208.2	208.7	205.4	204.9	201.8	201.8	200.0
120	199.9	201.0	193.9	194.7	196.3	196.7	192.9	194.4
144	189.4	180.5	185.0	194.0	200.5	201.7	202.0	202.8
168	213.9	205.9	205.9	210.1	216.4	216.4	215.2	213.5
192	217.3	218.0	217.9	220.3	225.8	233.7	238.1	240.8
216	246.7	250.9	255.7	260.4	266.7	269.9	265.8	265.9
240	262.0	252.2	243.9	246.6	243.1	243.5	242.3	243.1
264	232.4	231.7	226.3	220.1	190.2	162.9	155.2	203.5
288	204.4	205.9	113.7	113.3	113.8	113.4	69.6	76.4
312	88.9	87.1	73.6	74.4	75.6	61.4	63.9	68.7
336	77.1	77.1	58.7	77.5	67.7	60.8	58.9	58.3



CUSTOMER : Westlake Chemicals
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WALL RANGES VS DEPTH

DEPTH	3080.1		TILT	25		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	80.7	73.2	58.4	62.4	62.4	58.9	52.8	50.8
24	76.8	78.7	67.7	65.7	61.0	73.2	72.8	71.6
48	171.7	75.6	71.6	83.4	184.5	181.8	187.7	187.8
72	188.5	188.2	188.1	190.4	191.2	195.3	200.2	200.2
96	203.5	205.1	203.8	200.7	199.1	196.3	198.0	196.6
120	192.0	193.1	191.9	193.5	192.1	188.5	184.7	182.2
144	177.9	175.5	179.7	186.1	191.6	194.5	196.7	187.3
168	200.7	200.4	204.7	204.7	205.5	201.1	202.2	206.3
192	207.8	208.1	212.6	216.8	222.3	228.6	230.1	239.2
216	241.9	247.4	250.0	258.3	261.7	266.3	260.4	262.8
240	256.1	248.2	242.1	240.7	240.7	238.4	238.8	238.4
264	230.1	226.2	184.6	150.4	121.7	125.5	121.5	99.0
288	85.8	88.1	91.0	94.4	100.2	100.1	69.3	75.9
312	61.7	70.1	69.3	71.6	72.8	59.4	59.4	65.5
336	70.8	53.5	57.1	73.3	64.9	53.9	57.1	55.1

DEPTH	3080.1		TILT	22		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	73.8	68.9	59.0	57.9	59.8	57.5	51.6	50.0
24	49.2	49.8	64.6	64.6	57.9	67.0	70.7	69.1
48	80.2	76.7	71.2	67.3	82.5	80.7	186.5	185.3
72	185.7	187.3	188.1	191.6	193.2	192.4	195.9	196.3
96	201.3	200.9	198.9	196.8	195.5	194.3	193.9	193.9
120	192.4	187.3	188.1	188.8	190.0	185.5	181.7	178.6
144	176.1	174.2	175.5	180.9	186.2	188.4	190.8	183.6
168	194.8	194.3	194.3	192.8	199.2	199.1	196.3	197.9
192	201.8	205.4	207.7	213.4	221.5	224.9	230.5	234.1
216	240.2	244.5	248.4	254.9	257.6	260.4	259.2	256.5
240	250.2	243.3	238.0	236.7	237.1	235.5	234.3	233.7
264	229.6	227.4	144.0	112.4	116.8	103.6	92.5	97.2
288	83.0	86.2	88.5	89.9	81.6	63.8	68.1	72.8
312	59.0	67.3	68.5	67.5	52.0	56.9	56.7	62.6
336	69.3	52.4	54.8	70.5	62.6	51.6	54.7	53.2

DEPTH	3080.1		TILT	19		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	71.6	66.1	58.4	55.5	56.7	54.9	52.3	48.6
24	48.0	64.0	63.0	61.1	55.1	64.8	69.9	66.7
48	81.9	72.0	69.9	65.7	83.5	76.4	188.8	189.2
72	188.1	191.0	192.7	194.4	195.5	193.9	193.6	197.5
96	197.5	199.5	196.7	199.5	202.6	204.4	205.9	201.1
120	200.7	199.8	206.8	195.9	194.9	191.2	185.8	180.6
144	173.5	173.5	175.0	180.4	182.0	183.3	185.7	178.8
168	182.5	190.4	188.8	191.5	194.3	194.7	197.2	196.3
192	197.1	202.6	207.8	215.0	218.4	220.3	226.1	232.9
216	234.9	240.0	243.1	253.3	252.9	255.7	252.9	256.1
240	251.0	244.8	234.9	232.5	234.3	234.2	234.4	231.3
264	174.8	154.6	108.6	110.2	114.8	101.6	90.1	79.8
288	82.2	83.4	85.4	82.4	63.0	62.2	65.7	66.5
312	57.1	63.1	64.6	65.4	49.8	51.2	55.1	59.7
336	47.6	49.4	53.5	69.3	60.2	50.8	53.9	51.2



CUSTOMER : Westlake Chemicals

DATE : January 07, 2024

CAVERN : PPG No. 007B

OPERATION No. : 10

**WALL RANGES VS DEPTH**

DEPTH	3080.1		TILT	16		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	68.9	64.2	56.7	52.0	50.4	51.8	51.7	47.6
24	47.3	47.7	60.8	60.2	53.9	62.6	66.5	65.1
48	79.7	73.6	67.9	63.4	75.4	75.2	86.8	191.6
72	187.7	190.8	196.7	199.5	202.0	203.4	203.0	201.8
96	201.0	205.7	207.7	216.0	215.4	207.3	208.9	211.7
120	220.7	225.2	224.4	219.9	215.4	213.5	208.1	206.5
144	202.1	200.6	178.8	181.8	179.8	181.0	180.3	180.3
168	179.5	184.5	188.8	191.2	192.8	195.9	196.3	200.2
192	201.5	206.5	210.7	215.2	216.4	219.5	223.1	232.4
216	233.3	236.4	243.3	247.4	250.6	252.8	251.7	253.7
240	249.3	243.1	233.8	232.1	233.3	233.7	194.0	189.2
264	160.5	144.9	107.5	111.8	85.9	86.2	75.4	78.7
288	80.3	83.8	76.0	81.1	57.9	61.8	65.3	64.2
312	55.3	58.7	62.2	61.1	49.6	49.6	53.2	55.9
336	48.0	46.8	51.2	62.6	58.3	50.0	52.0	48.8

DEPTH	3080.1		TILT	13		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	66.2	59.8	55.5	49.6	49.6	49.6	47.2	46.2
24	46.5	46.5	59.4	59.1	53.2	52.4	65.7	63.1
48	76.8	74.0	66.1	63.3	74.5	74.0	85.4	84.4
72	209.0	210.9	210.6	211.9	206.8	207.0	206.8	202.1
96	204.9	206.3	206.1	218.6	219.8	218.2	220.6	216.8
120	220.6	226.7	231.5	236.0	243.1	224.2	225.0	216.8
144	218.7	223.4	199.7	203.5	193.7	203.5	205.4	205.9
168	203.0	199.2	198.9	200.8	199.9	197.9	199.5	204.4
192	203.4	205.9	210.9	214.4	216.4	219.9	222.7	229.3
216	233.7	238.5	243.6	246.7	247.0	252.9	252.6	254.7
240	246.3	240.6	233.3	232.5	233.7	232.1	209.1	187.3
264	161.3	138.0	106.6	111.8	111.8	85.0	74.8	75.2
288	78.7	79.9	75.2	75.2	57.1	60.6	63.0	62.1
312	53.9	59.8	59.8	60.6	48.0	48.8	52.0	51.3
336	46.5	44.9	50.4	61.0	53.9	47.6	51.2	47.3

DEPTH	3080.1		TILT	10		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	64.2	57.5	53.7	46.8	49.6	50.4	45.7	44.5
24	45.7	45.7	58.7	57.5	52.8	50.4	64.6	63.2
48	54.7	72.1	66.1	66.0	74.0	73.2	87.8	83.5
72	223.9	227.0	227.7	235.6	235.1	236.6	238.1	241.9
96	240.4	244.2	248.6	251.9	254.7	259.0	263.7	252.0
120	277.5	248.7	249.4	236.0	241.9	243.3	250.9	250.5
144	269.4	271.1	251.6	247.5	239.1	248.5	249.7	250.0
168	248.4	246.2	246.0	259.1	259.1	226.5	225.9	226.0
192	226.5	208.5	226.7	229.1	227.0	238.4	244.7	250.7
216	249.4	251.4	258.5	249.6	257.5	256.7	257.1	270.7
240	261.4	266.2	264.8	264.5	253.5	250.7	237.6	173.5
264	153.4	126.2	105.5	111.0	83.5	83.5	74.4	74.0
288	77.5	71.2	74.0	72.8	60.2	60.2	63.0	60.7
312	52.8	55.4	53.5	55.1	46.5	47.6	50.4	49.1
336	45.7	44.1	48.8	57.1	53.5	45.0	48.4	46.9



CUSTOMER : Westlake Chemicals

DATE : January 07, 2024

CAVERN : PPG No. 007B

OPERATION No. : 10

**WALL RANGES VS DEPTH**

DEPTH	3080.1		TILT	7		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	56.7	56.7	52.5	45.7	49.3	49.4	44.9	44.1
24	45.3	45.3	58.3	56.7	50.4	49.6	63.2	55.9
48	53.9	71.6	65.3	67.4	74.4	73.2	88.7	83.0
72	231.8	237.6	236.8	237.3	237.7	248.5	250.6	252.7
96	255.7	256.5	253.7	261.5	268.4	268.3	277.5	281.0
120	281.9	288.6	295.1	300.3	310.0	313.2	313.1	314.7
144	304.9	304.9	302.6	297.7	293.6	292.4	292.8	292.8
168	294.4	297.0	297.8	299.0	302.1	302.9	301.3	300.3
192	300.9	289.7	295.2	313.1	293.5	302.6	299.7	297.0
216	296.2	296.0	205.9	197.4	201.3	186.1	183.7	194.9
240	199.6	206.2	214.7	207.8	197.3	193.9	261.6	171.9
264	154.6	115.6	105.1	98.4	83.2	83.2	73.2	76.0
288	76.4	69.7	72.5	64.5	61.8	61.8	61.0	56.6
312	53.9	53.9	52.8	52.8	45.7	46.9	48.6	45.3
336	43.2	43.7	48.8	50.4	51.2	43.7	47.6	45.7

DEPTH	3080.1		TILT	4		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	53.9	53.0	51.2	45.3	46.7	46.7	44.0	43.3
24	44.9	44.9	56.7	55.9	50.0	48.4	62.5	55.9
48	53.9	64.6	63.8	67.0	72.8	72.8	88.1	88.2
72	238.1	243.3	247.0	249.9	244.8	252.0	251.9	255.2
96	259.0	262.8	269.6	275.4	276.1	281.6	279.2	286.8
120	289.9	295.8	297.4	308.0	309.6	311.5	311.5	311.5
144	306.8	302.1	296.6	294.2	291.8	290.7	291.1	291.9
168	293.1	295.4	297.9	300.1	299.4	302.3	302.4	304.1
192	309.2	320.9	320.6	322.1	321.1	318.8	302.1	302.1
216	183.6	185.5	185.9	166.3	177.0	178.4	176.0	173.2
240	169.9	169.9	150.5	161.1	166.3	158.7	169.3	173.5
264	158.4	97.5	97.2	83.5	82.6	79.9	73.2	75.4
288	75.9	69.3	65.5	62.2	59.8	58.3	51.9	50.2
312	50.2	48.4	50.0	48.4	45.7	46.1	46.2	44.6
336	42.2	42.8	46.9	47.3	46.5	43.7	46.3	45.3

DEPTH	3080.1		TILT	3		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	52.2	51.6	50.8	45.0	44.9	46.5	43.7	43.3
24	44.9	44.1	56.1	55.6	49.6	48.4	62.1	55.9
48	53.8	64.0	63.8	67.0	72.6	72.8	87.9	87.8
72	236.2	240.8	247.4	248.6	248.6	251.4	250.6	254.7
96	261.9	263.7	267.2	277.0	280.2	282.8	282.4	286.9
120	286.9	296.0	299.0	308.0	308.0	311.9	310.8	311.2
144	306.8	301.3	298.2	294.6	291.1	289.9	291.9	294.2
168	296.2	296.6	298.2	298.6	298.2	299.0	301.3	302.4
192	303.7	320.2	320.2	323.3	322.6	320.6	315.9	309.3
216	183.1	183.0	182.4	163.4	174.3	174.6	170.8	167.1
240	161.8	157.1	146.2	151.3	151.7	151.3	148.7	174.1
264	158.0	93.4	86.5	81.2	82.1	75.4	72.4	72.7
288	70.7	65.5	63.7	56.5	55.1	54.9	50.0	48.4
312	48.4	45.3	46.5	46.0	45.1	45.5	45.4	44.0
336	41.8	42.5	44.5	46.5	46.1	43.7	46.1	45.0



CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



WALL RANGES VS DEPTH

DEPTH	3080.1		TILT	0		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	48.4	48.8	50.3	44.5	44.5	47.6	43.3	43.6
24	44.5	44.1	54.6	53.8	48.8	48.0	62.8	60.2
48	52.8	51.6	63.4	66.9	71.2	72.1	87.8	87.3
72	128.3	241.0	242.9	248.1	250.0	257.6	260.8	261.7
96	265.3	268.5	268.4	273.0	278.1	281.3	282.0	287.2
120	289.9	297.0	302.2	306.0	308.0	312.3	313.5	310.4
144	304.9	305.6	303.7	301.7	302.5	302.5	297.4	297.8
168	300.9	303.7	307.6	305.3	305.3	308.8	311.5	314.5
192	319.4	324.5	324.5	321.4	320.2	318.8	319.0	177.0
216	177.8	178.4	161.8	162.2	160.1	74.8	74.5	75.4
240	74.8	76.0	132.6	122.9	127.6	130.8	135.7	149.1
264	148.9	83.8	77.9	77.8	71.6	66.4	64.9	64.7
288	61.2	58.3	54.4	52.4	52.0	50.0	48.1	47.3
312	46.1	43.7	43.7	41.7	42.1	42.1	41.4	42.2
336	40.8	42.7	43.2	42.5	43.2	42.1	43.3	44.1

DEPTH	3085.3		TILT	0		VOS	5959.00	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	43.3	43.7	42.9	42.5	43.7	44.4	43.6	43.7
24	44.1	45.3	49.6	49.2	48.4	47.6	59.8	58.8
48	52.4	51.2	63.0	66.4	70.5	71.2	84.7	87.8
72	112.1	128.6	140.5	137.7	139.5	138.0	258.1	260.0
96	264.7	265.3	265.4	270.9	275.7	280.3	284.7	288.6
120	291.1	296.2	301.7	305.3	306.4	310.4	311.9	310.8
144	304.9	304.9	304.1	304.1	302.1	302.5	297.4	299.4
168	303.3	304.1	307.1	306.2	305.3	310.0	310.8	312.7
192	317.8	321.4	320.1	318.8	179.1	179.6	61.7	174.6
216	172.7	71.9	156.1	68.3	61.7	63.7	63.9	65.3
240	65.3	65.7	67.7	70.5	107.3	107.3	98.8	133.3
264	139.0	82.6	70.1	69.7	61.8	57.5	57.5	53.8
288	50.3	49.7	48.0	47.6	47.0	44.5	40.8	39.8
312	39.8	38.2	37.8	38.2	35.5	34.7	34.7	34.7
336	33.9	35.1	35.1	35.1	35.8	34.8	38.2	38.2

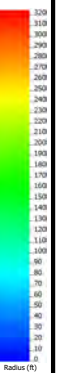
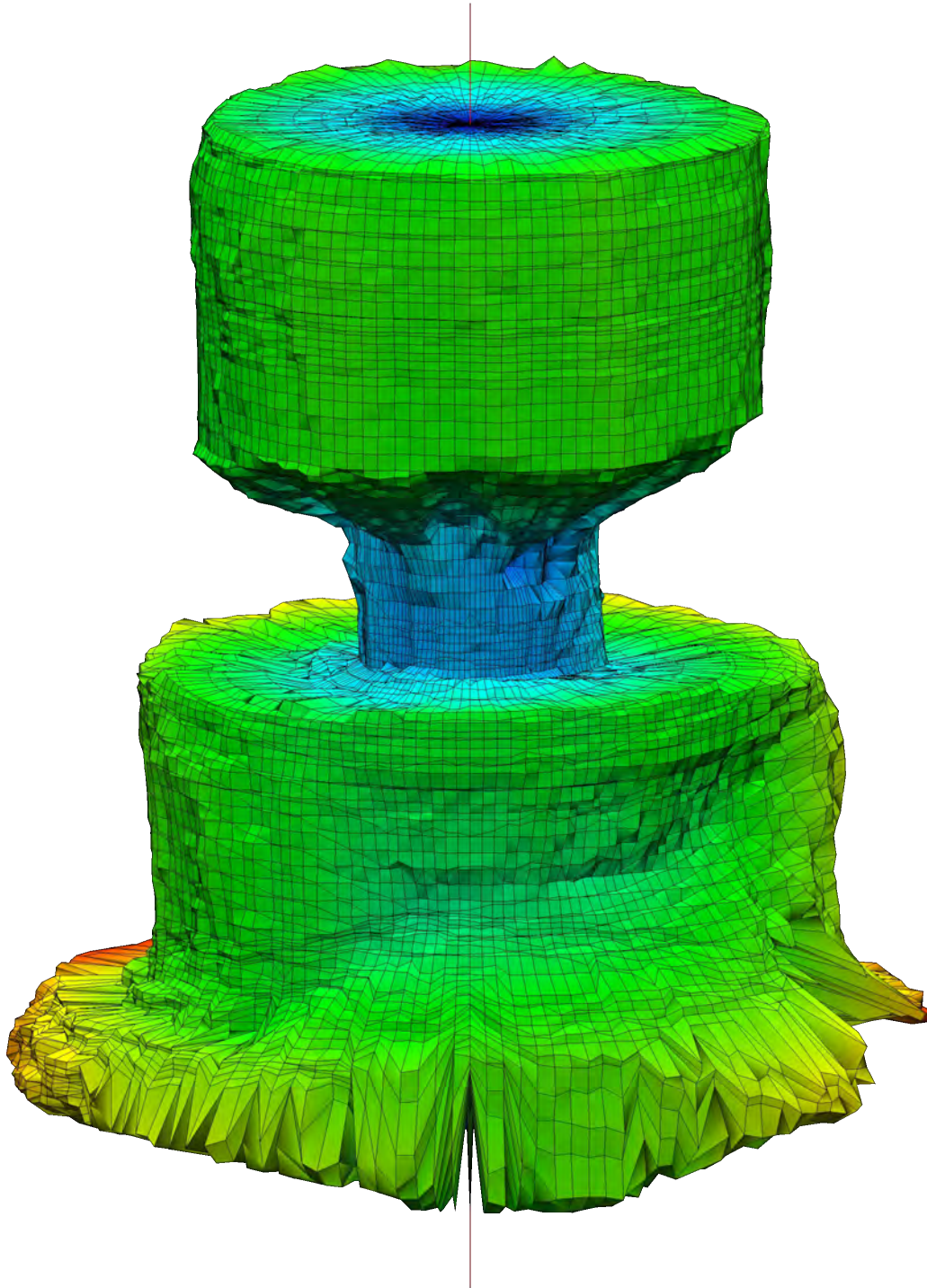
DEPTH	3090.2		TILT	0		VOS	5930.10	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	30.6	35.9	36.0	36.5	38.8	37.6	38.8	38.0
24	41.2	42.3	42.3	43.1	47.8	48.8	57.1	54.9
48	51.7	52.4	64.2	64.1	69.8	72.5	83.5	89.8
72	101.6	127.5	139.8	138.6	134.7	133.5	254.5	254.3
96	142.6	257.3	73.6	73.6	80.7	275.7	283.3	289.2
120	294.2	297.2	300.1	301.0	304.6	308.5	309.6	308.9
144	306.1	304.6	301.8	300.6	301.0	302.4	298.6	300.2
168	303.4	302.2	303.8	303.0	303.4	306.9	310.0	311.2
192	308.8	54.1	48.2	47.8	46.2	46.1	44.8	48.3
216	42.0	43.4	51.1	45.1	49.7	52.5	50.9	53.3
240	53.7	46.3	47.4	44.9	44.1	72.7	89.2	102.8
264	115.7	79.3	57.5	55.0	53.9	14.3	14.3	46.1
288	40.1	42.3	39.5	38.4	36.8	36.5	34.9	34.1
312	34.7	33.4	30.2	28.6	28.6	27.5	27.5	28.6
336	28.6	131.2	26.7	26.7	27.5	27.8	27.1	28.6



VIEW FROM NORTH

with an overhang of 10°

SCALE 1/100

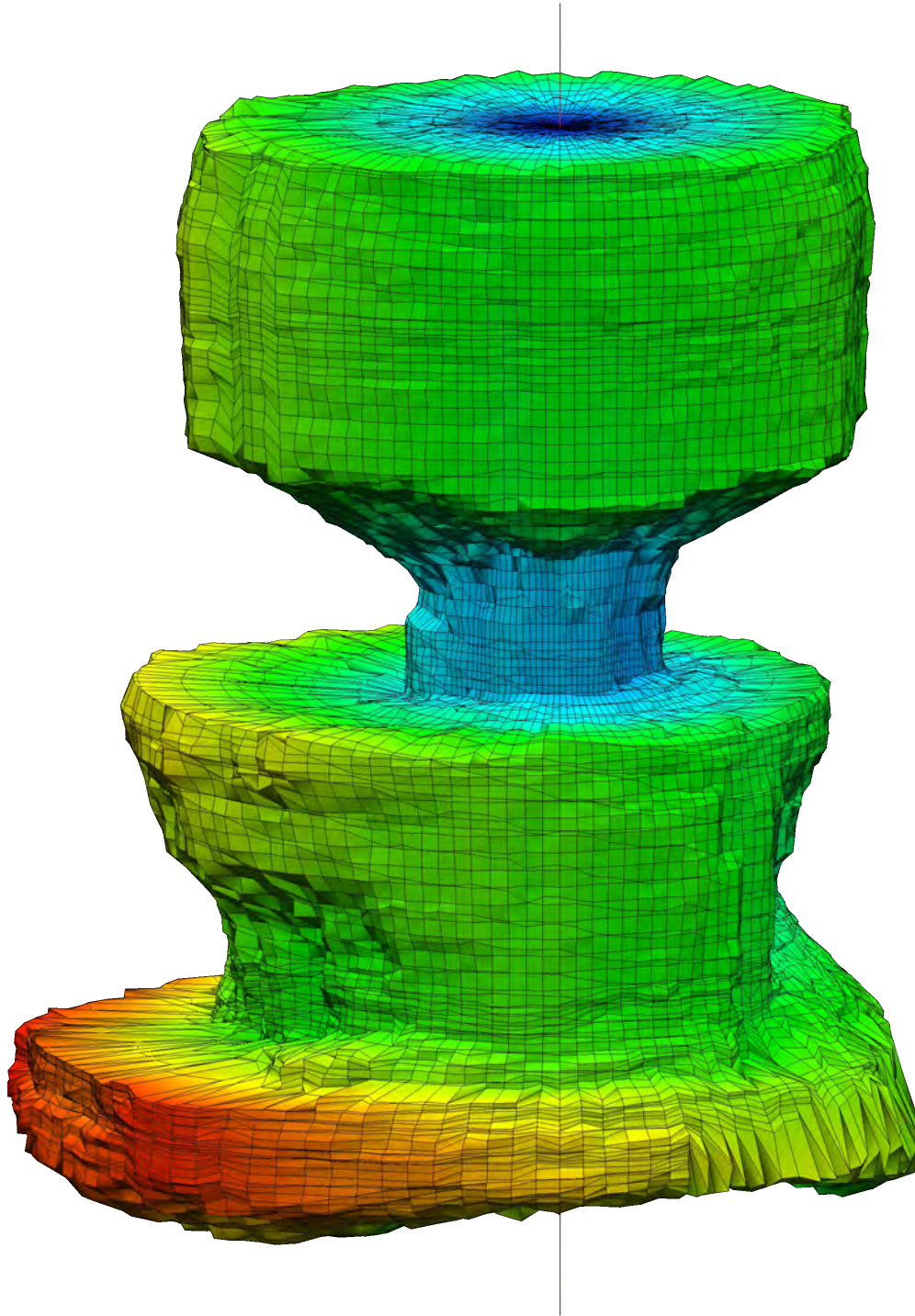




VIEW FROM EAST

with an overhang of 10°

SCALE 1/100

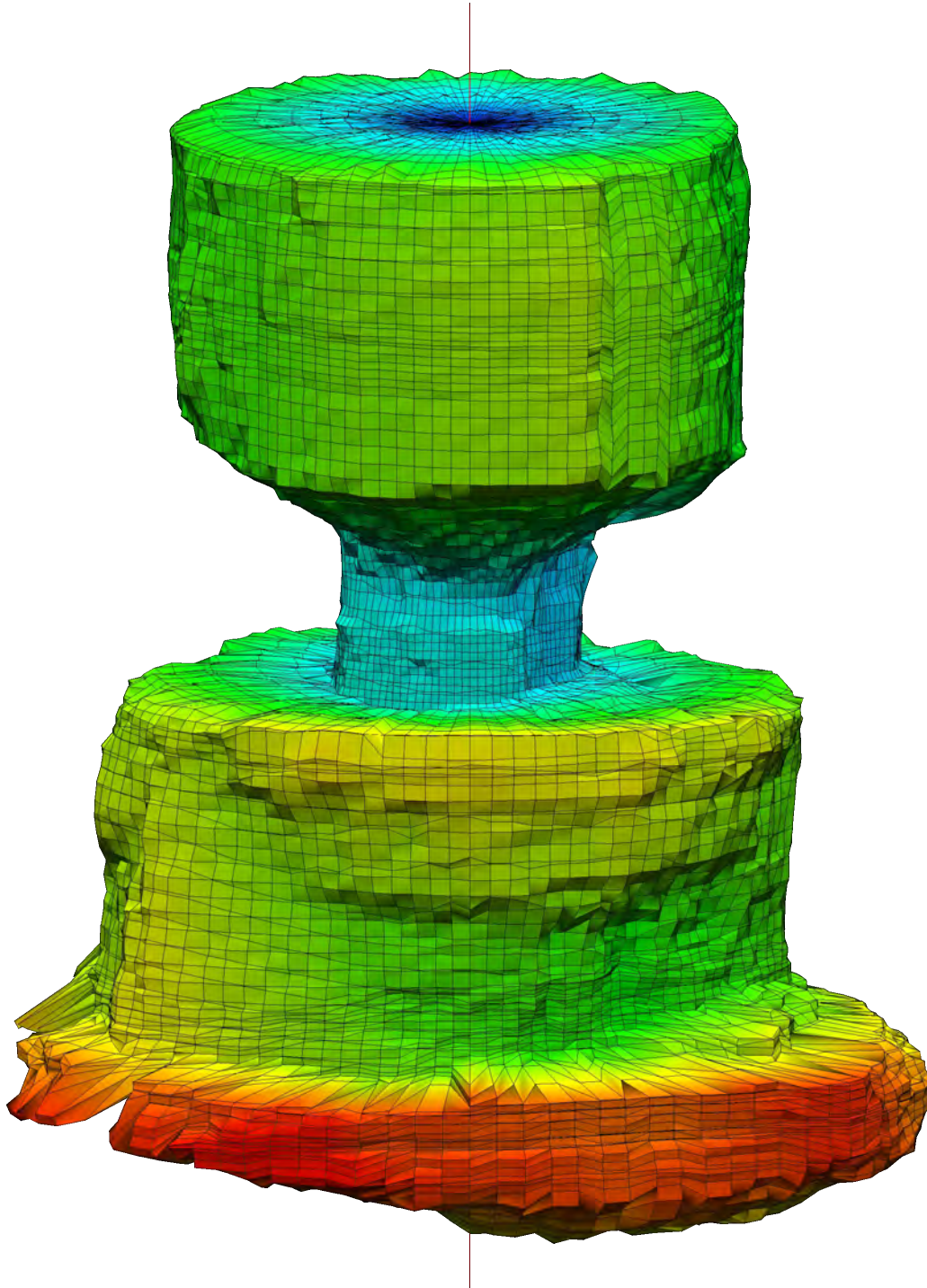




VIEW FROM SOUTH

with an overhang of 10°

SCALE 1/100

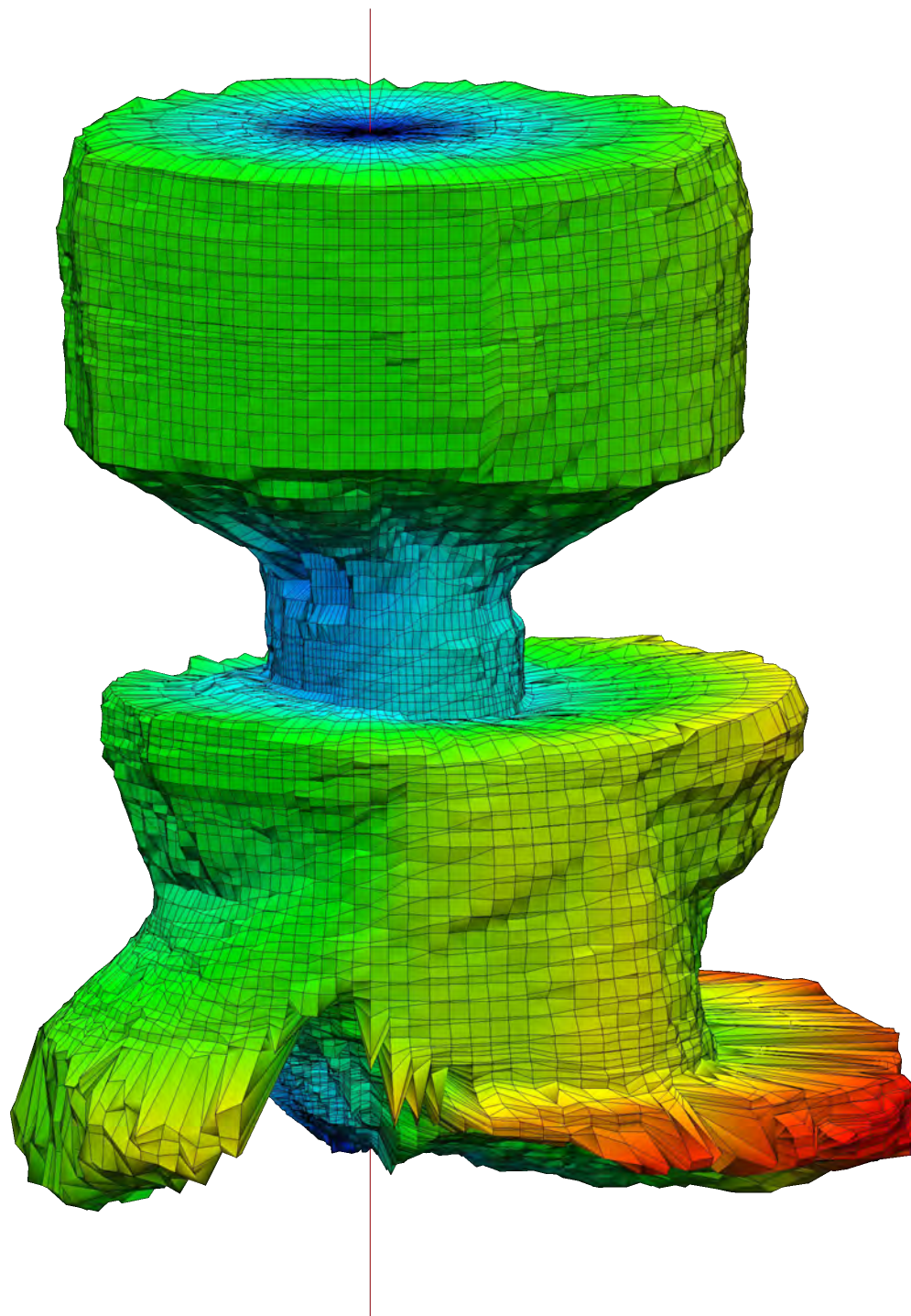




VIEW FROM WEST

with an overhang of 10°

SCALE 1/100





CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



VIEW FROM NORTH

2380 ft

SCALE 1/100

- ▲ Casing 7-5/8" at 2501 ft (MD)
- ▲ Casing 5-1/2" at 2607 ft (MD)

2480 ft

2580 ft

2680 ft

2780 ft

Depth (MD)

2880 ft

2980 ft

3080 ft

T.D. @ 3100.1 ft (MD)

3180 ft

3280 ft

300 ft

200 ft

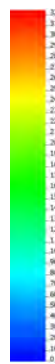
100 ft

0 ft

100 ft

200 ft

300 ft





CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

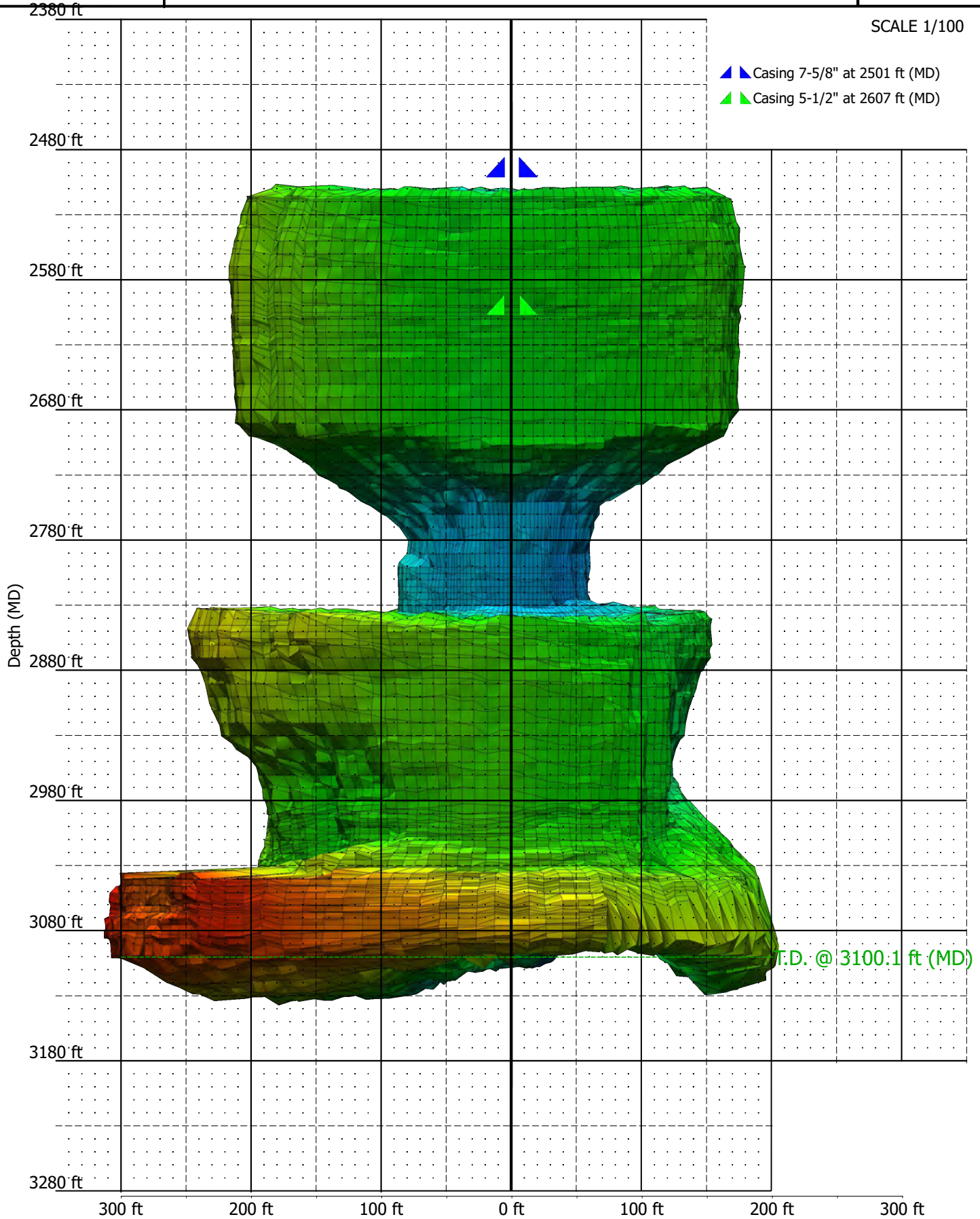
CAVERN : PPG No. 007B
OPERATION No. : 10



VIEW FROM EAST

SCALE 1/100

- ▲ Casing 7-5/8" at 2501 ft (MD)
- ▲ Casing 5-1/2" at 2607 ft (MD)





CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



VIEW FROM SOUTH

2380 ft

SCALE 1/100

- ▲ Casing 7-5/8" at 2501 ft (MD)
- ▲ Casing 5-1/2" at 2607 ft (MD)

2480 ft

2580 ft

2680 ft

2780 ft

Depth (MD)

2880 ft

2980 ft

3080 ft

T.D. @ 3100.1 ft (MD)

3180 ft

3280 ft

300 ft

200 ft

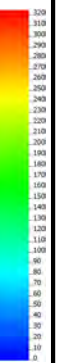
100 ft

0 ft

100 ft

200 ft

300 ft





CUSTOMER : Westlake Chemicals
DATE : January 07, 2024

CAVERN : PPG No. 007B
OPERATION No. : 10



VIEW FROM WEST

2380 ft

SCALE 1/100

- ▲ Casing 7-5/8" at 2501 ft (MD)
- ▲ Casing 5-1/2" at 2607 ft (MD)

2480 ft

2580 ft

2680 ft

2780 ft

Depth (MD)

2880 ft

2980 ft

3080 ft

T.D. @ 3100.1 ft (MD)

3180 ft

3280 ft

300 ft

200 ft

100 ft

0 ft

100 ft

200 ft

300 ft

