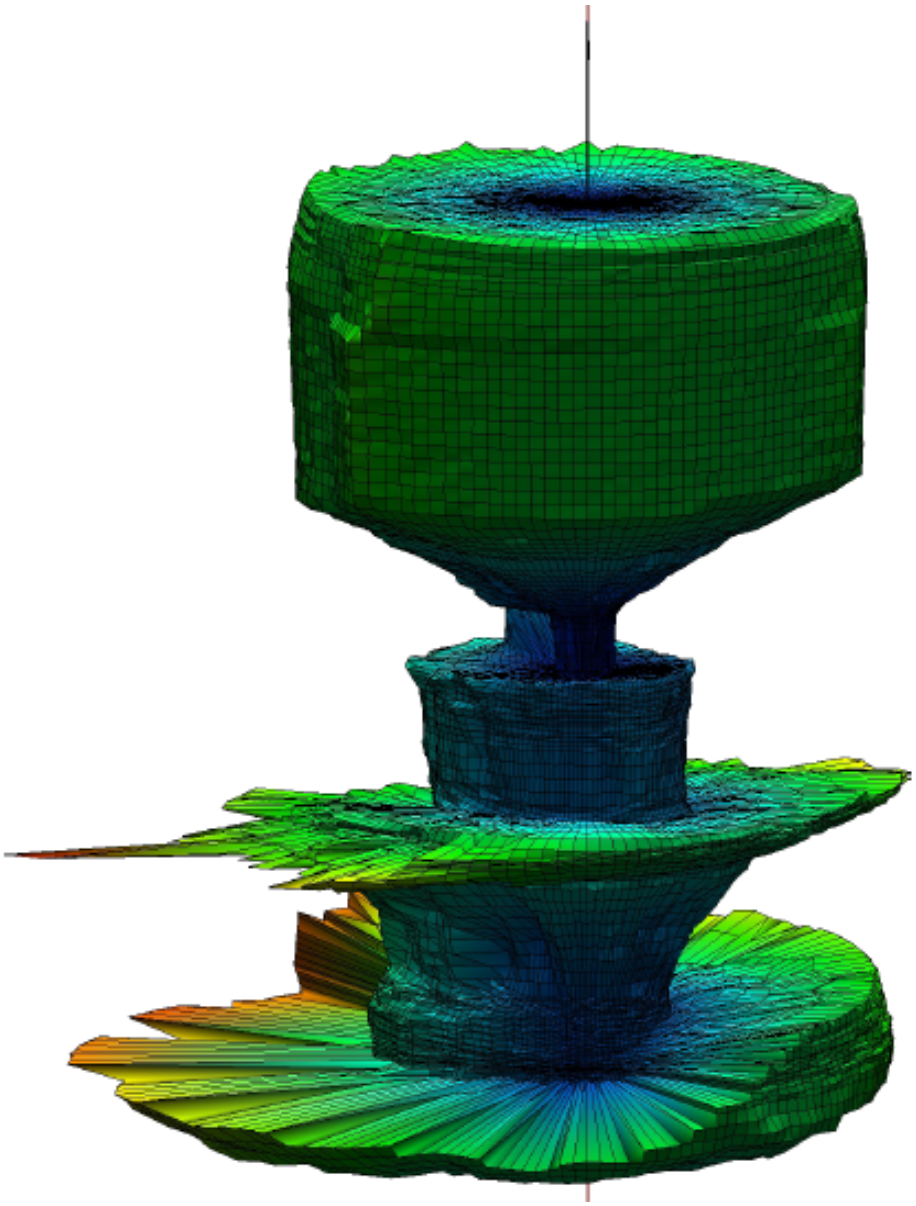
SONIC SURVEYS
CAVERN EXPERIENCE YOU CAN DEPEND ON

FLODIM
Challenging the limits

Sonar Survey Report
Westlake Chemicals
PPG No. 006X
Sulphur
Calcasieu Parish, Louisiana
December 13, 2021



Survey Conducted by: Ricky Lawrence
Company Representative: Mr. Colton Long

Serving the Storage Well Industry Since 1978

SONIC SURVEYS
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Well Information

Company:	Westlake Chemicals
State:	Louisiana
Parish:	Calcasieu
Field:	Sulphur
Well:	PPG No. 006X
API No.:	17-019-04009
Serial No.:	57788

Cemented Casing:	7-5/8” @ 2505’
Hanging String:	5-1/2” @ 2628’
Total Depth:	3269.88’

Permanent Datum:	CHF
Depth Correction:	+1.4’

Total Volume BBL:	9,844,973.37
Total Volume Ft^3:	55,275,423.4

All sections are oriented to Magnetic North.

Gyro Compass was set up using the Magnetic Compass 40 feet below the 5-1/2” tubing. After the survey was completed, the orientation was double checked on surface using a compass to verify direction. The handheld compass showed that the tool direction was within 3 degrees of the tool direction.

SONIC SURVEYS
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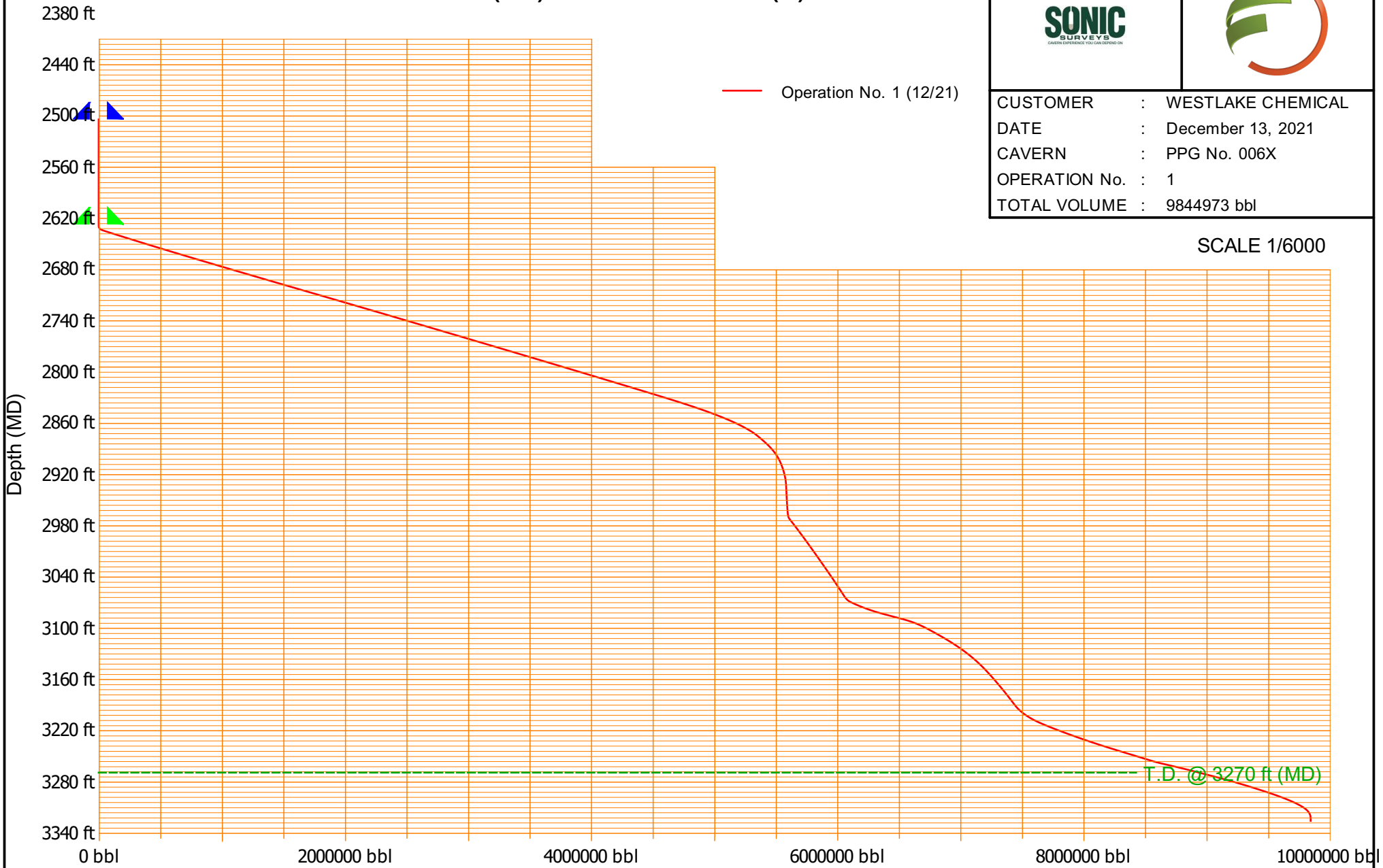
List of Acquired Measurements

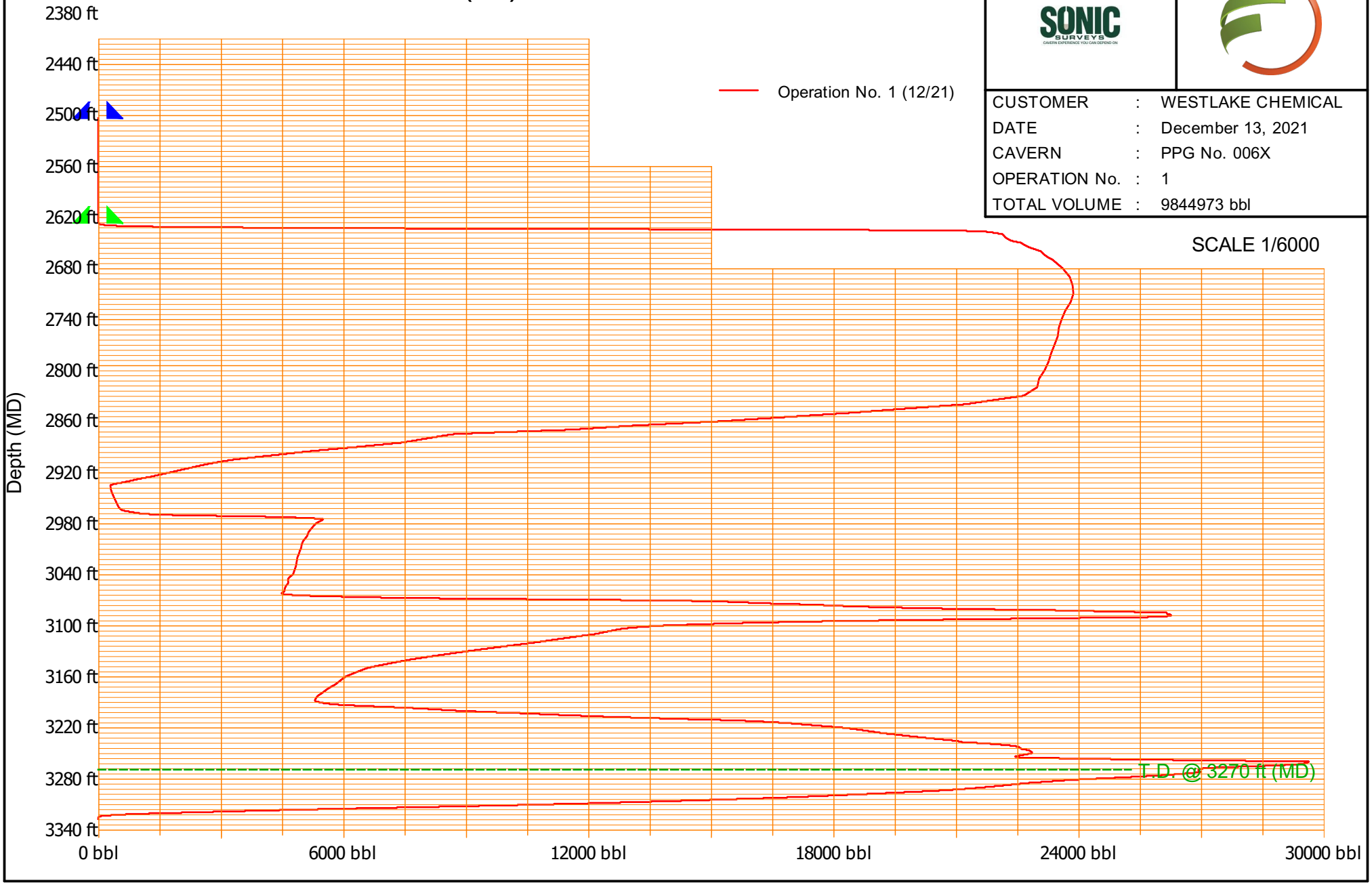
- Oriented circular horizontal sections from 2505 ft to 2630 ft, with a step of 10 feet.
- Oriented circular horizontal sections from 2630 ft to 2640 ft, with a step of 5 feet.
- Oriented circular horizontal sections from 2640 ft to 2850 ft, with a step of 10 feet.
- Oriented circular horizontal sections from 2850 ft to 2950 ft, with a step of 5 feet.
- Oriented circular horizontal sections from 2950 ft to 2980 ft, with a step of 10 feet.
- Oriented circular horizontal sections from 2980 ft to 3000 ft, with a step of 5 feet.
- Oriented circular horizontal sections from 3000 ft to 3070 ft, with a step of 10 feet.
- Oriented circular horizontal sections from 3070 ft to 3100 ft, with a step of 5 feet.
- Oriented circular horizontal sections from 3100 ft to 3200 ft, with a step of 10 feet.
- Oriented circular horizontal sections from 3200 ft to 3210 ft, with a step of 2 feet.
- Oriented circular horizontal sections from 3210 ft to 3260 ft, with a step of 5 feet.
- Up-tilted oriented circular sections from 2720 ft, with a tilt of 3°, 6°, 9°, 12°, 15°, 18°, 21°, 24°, 27°, 30°, 33°, 36°, 39°, 42°, 45°, 48°, 51°, 54°, 57°, 60°, 66°, 69° with respect to the horizontal.
- Up-tilted oriented circular sections from 3020 ft, with a tilt of 15°, 18°, 21°, 24°, 27°, 30°, 33°, 36°, 39°, 42°, 45°, 48°, 51°, 54°, 57°, 60°, 66°, 69°, 72°, 75°, 78°, 81°, 84°, 87°, 89° with respect to the horizontal.
- Up-tilted oriented circular sections from 3110 ft, with a tilt of 1°, 2°, 3°, 4°, 6°, 8°, 10°, 12°, 15°, 18°, 21°, 24°, 27°, 30°, 33°, 36°, 39°, 42° with respect to the horizontal.
- Up-tilted oriented circular sections from 3255 ft, with a tilt of 3°, 6°, 9°, 12°, 15°, 18°, 21°, 24°, 27°, 30°, 33°, 36°, 39°, 42° with respect to the horizontal.
- Down-tilted oriented circular sections from 3255 ft, with a tilt of -3°,-6°, -9°, -12°, -15°, -18°, -21°, -24°, -27°, -30°, -33°, -36°, -39°, -42°, -45°, -48°, -51°, -54°, -57°, -60°, -66°, -69°, -72°, -75°, -78°, -81°, -84°, -87° with respect to the horizontal.
- Up-tilted oriented circular sections from 3265 ft, with a tilt of 9°, 12°, 15°, 18° with respect to the horizontal.
- 1 complimentary measurement to determine the cavity floor depth.

TOTAL VOLUME (bbl) VERSUS DEPTH (ft)



CUSTOMER	:	WESTLAKE CHEMICAL
DATE	:	December 13, 2021
CAVERN	:	PPG No. 006X
OPERATION No.	:	1
TOTAL VOLUME	:	9844973 bbl

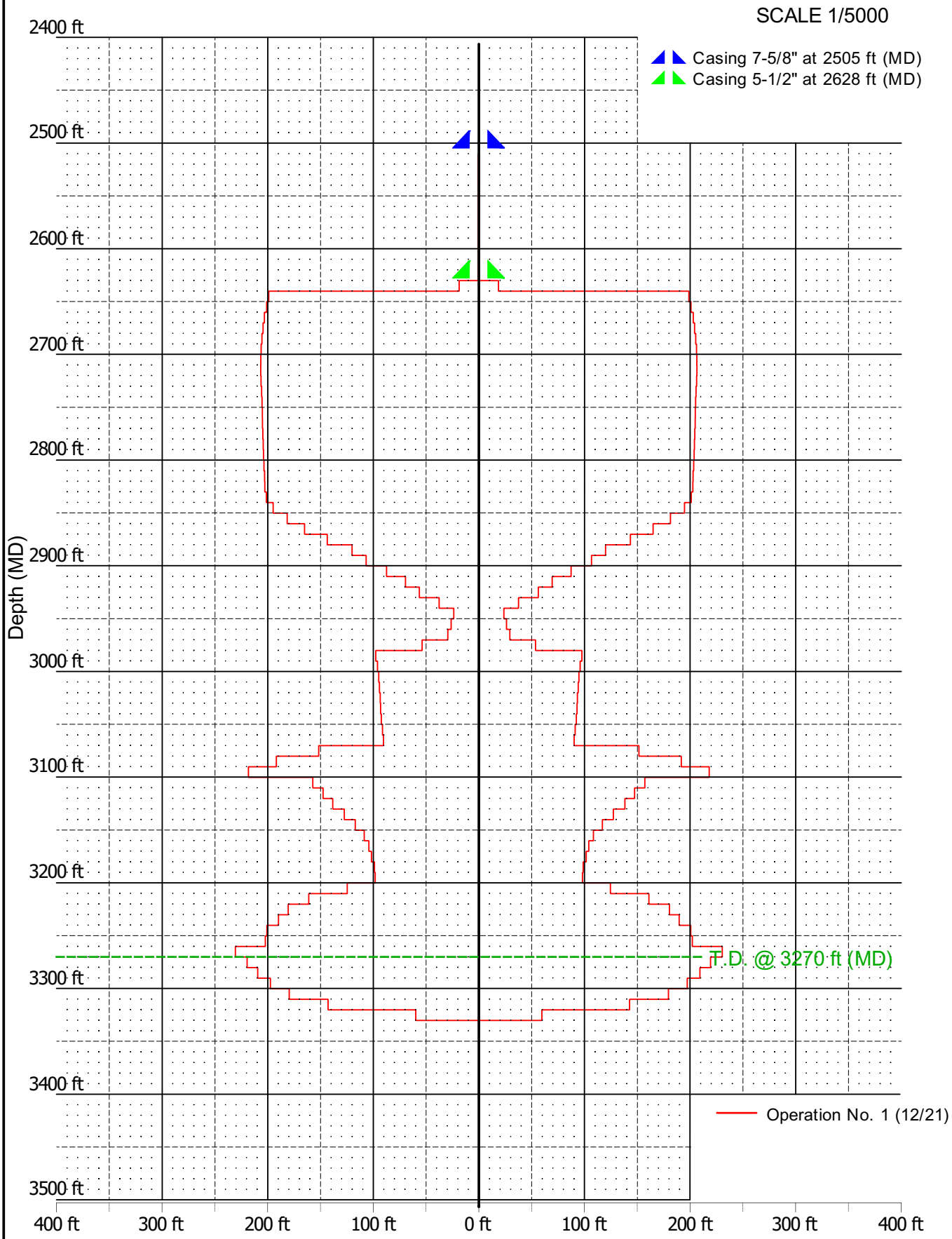
PARTIAL VOLUME (bbl) VERSUS DEPTH EACH 1 ft



CUSTOMER	:	WESTLAKE CHEMICAL
DATE	:	December 13, 2021
CAVERN	:	PPG No. 006X
OPERATION No.	:	1
TOTAL VOLUME	:	9844973 bbl

SONIC SURVEYS	CUSTOMER : WESTLAKE CHEMICAL DATE : December 13, 2021	CAVERN : PPG No. 006X OPERATION No. : 1

MEAN RADIUS



SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

1

MAIN CHARACTERISTICS DATASHEET

Depth (ft)	Cumulated Volume (bbl)	Volume Section (bbl)	Section Area (ft²)	Mean Radius (ft)	Mean Diameter (ft)	Min Radius (ft)	Max Radius (ft)	Max Radius Orientation (°)	Min Diameter (ft)	Max Diameter (ft)	Max Diam. Orientation (°)
2505.00	0.15	0.15	-	-	-	-	-	-	-	-	-
2506.00	0.45	0.30	-	-	-	-	-	-	-	-	-
2507.00	0.74	0.29	-	-	-	-	-	-	-	-	-
2508.00	1.01	0.28	-	-	-	-	-	-	-	-	-
2509.00	1.28	0.27	-	-	-	-	-	-	-	-	-
2510.00	**1.54**	**0.26**	**1.45**	**0.68**	**1.36**	**0.50**	**0.82**	**72.00**	**1.27**	**1.41**	**60.00**
2511.00	1.80	0.26	-	-	-	-	-	-	-	-	-
2512.00	2.06	0.26	-	-	-	-	-	-	-	-	-
2513.00	2.32	0.26	-	-	-	-	-	-	-	-	-
2514.00	2.58	0.26	-	-	-	-	-	-	-	-	-
2515.00	2.85	0.26	-	-	-	-	-	-	-	-	-
2516.00	3.11	0.26	-	-	-	-	-	-	-	-	-
2517.00	3.38	0.27	-	-	-	-	-	-	-	-	-
2518.00	3.64	0.27	-	-	-	-	-	-	-	-	-
2519.00	3.91	0.27	-	-	-	-	-	-	-	-	-
2520.00	**4.19**	**0.27**	**1.53**	**0.70**	**1.40**	**0.56**	**0.90**	**246.00**	**1.27**	**1.57**	**66.00**
2521.00	4.46	0.27	-	-	-	-	-	-	-	-	-
2522.00	4.73	0.27	-	-	-	-	-	-	-	-	-
2523.00	5.00	0.27	-	-	-	-	-	-	-	-	-
2524.00	5.27	0.27	-	-	-	-	-	-	-	-	-
2525.00	5.54	0.27	-	-	-	-	-	-	-	-	-
2526.00	5.81	0.27	-	-	-	-	-	-	-	-	-
2527.00	6.08	0.27	-	-	-	-	-	-	-	-	-
2528.00	6.34	0.27	-	-	-	-	-	-	-	-	-
2529.00	6.61	0.27	-	-	-	-	-	-	-	-	-
2530.00	**6.88**	**0.27**	**1.50**	**0.69**	**1.38**	**0.51**	**0.92**	**300.00**	**1.20**	**1.59**	**120.00**
2531.00	7.14	0.26	-	-	-	-	-	-	-	-	-
2532.00	7.39	0.25	-	-	-	-	-	-	-	-	-
2533.00	7.64	0.25	-	-	-	-	-	-	-	-	-
2534.00	7.88	0.24	-	-	-	-	-	-	-	-	-
2535.00	8.12	0.24	-	-	-	-	-	-	-	-	-
2536.00	8.35	0.23	-	-	-	-	-	-	-	-	-
2537.00	8.58	0.23	-	-	-	-	-	-	-	-	-
2538.00	8.80	0.22	-	-	-	-	-	-	-	-	-
2539.00	9.02	0.22	-	-	-	-	-	-	-	-	-

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

2

MAIN CHARACTERISTICS DATASHEET

Depth (ft)	Cumulated Volume (bbl)	Volume Section (bbl)	Section Area (ft²)	Mean Radius (ft)	Mean Diameter (ft)	Min Radius (ft)	Max Radius (ft)	Max Radius Orientation (°)	Min Diameter (ft)	Max Diameter (ft)	Max Diam. Orientation (°)
2540.00	**9.23**	**0.21**	**1.19**	**0.62**	**1.23**	**0.51**	**0.84**	**324.00**	**1.04**	**1.37**	**144.00**
2541.00	9.44	0.21	-	-	-	-	-	-	-	-	-
2542.00	9.66	0.22	-	-	-	-	-	-	-	-	-
2543.00	9.88	0.22	-	-	-	-	-	-	-	-	-
2544.00	10.10	0.22	-	-	-	-	-	-	-	-	-
2545.00	10.32	0.22	-	-	-	-	-	-	-	-	-
2546.00	10.55	0.23	-	-	-	-	-	-	-	-	-
2547.00	10.78	0.23	-	-	-	-	-	-	-	-	-
2548.00	11.01	0.23	-	-	-	-	-	-	-	-	-
2549.00	11.24	0.23	-	-	-	-	-	-	-	-	-
2550.00	**11.48**	**0.24**	**1.33**	**0.65**	**1.30**	**0.59**	**0.71**	**306.00**	**1.24**	**1.35**	**126.00**
2551.00	11.72	0.24	-	-	-	-	-	-	-	-	-
2552.00	11.96	0.24	-	-	-	-	-	-	-	-	-
2553.00	12.20	0.24	-	-	-	-	-	-	-	-	-
2554.00	12.44	0.24	-	-	-	-	-	-	-	-	-
2555.00	12.69	0.24	-	-	-	-	-	-	-	-	-
2556.00	12.93	0.25	-	-	-	-	-	-	-	-	-
2557.00	13.18	0.25	-	-	-	-	-	-	-	-	-
2558.00	13.43	0.25	-	-	-	-	-	-	-	-	-
2559.00	13.68	0.25	-	-	-	-	-	-	-	-	-
2560.00	**13.94**	**0.25**	**1.42**	**0.67**	**1.35**	**0.57**	**0.86**	**252.00**	**1.23**	**1.49**	**72.00**
2561.00	14.19	0.25	-	-	-	-	-	-	-	-	-
2562.00	14.44	0.25	-	-	-	-	-	-	-	-	-
2563.00	14.69	0.25	-	-	-	-	-	-	-	-	-
2564.00	14.94	0.25	-	-	-	-	-	-	-	-	-
2565.00	15.19	0.25	-	-	-	-	-	-	-	-	-
2566.00	15.43	0.25	-	-	-	-	-	-	-	-	-
2567.00	15.68	0.25	-	-	-	-	-	-	-	-	-
2568.00	15.92	0.25	-	-	-	-	-	-	-	-	-
2569.00	16.17	0.24	-	-	-	-	-	-	-	-	-
2570.00	**16.41**	**0.24**	**1.37**	**0.66**	**1.32**	**0.59**	**0.86**	**198.00**	**1.23**	**1.45**	**18.00**
2571.00	16.66	0.24	-	-	-	-	-	-	-	-	-
2572.00	16.90	0.24	-	-	-	-	-	-	-	-	-
2573.00	17.14	0.24	-	-	-	-	-	-	-	-	-
2574.00	17.38	0.24	-	-	-	-	-	-	-	-	-

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

3

MAIN CHARACTERISTICS DATASHEET

Depth (ft)	Cumulated Volume (bbl)	Volume Section (bbl)	Section Area (ft²)	Mean Radius (ft)	Mean Diameter (ft)	Min Radius (ft)	Max Radius (ft)	Max Radius Orientation (°)	Min Diameter (ft)	Max Diameter (ft)	Max Diam. Orientation (°)
2575.00	17.62	0.24	-	-	-	-	-	-	-	-	-
2576.00	17.87	0.24	-	-	-	-	-	-	-	-	-
2577.00	18.11	0.24	-	-	-	-	-	-	-	-	-
2578.00	18.35	0.24	-	-	-	-	-	-	-	-	-
2579.00	18.59	0.24	-	-	-	-	-	-	-	-	-
2580.00	**18.83**	**0.24**	**1.35**	**0.65**	**1.31**	**0.57**	**0.74**	**144.00**	**1.23**	**1.37**	**156.00**
2581.00	19.06	0.24	-	-	-	-	-	-	-	-	-
2582.00	19.30	0.24	-	-	-	-	-	-	-	-	-
2583.00	19.54	0.24	-	-	-	-	-	-	-	-	-
2584.00	19.78	0.24	-	-	-	-	-	-	-	-	-
2585.00	20.02	0.24	-	-	-	-	-	-	-	-	-
2586.00	20.26	0.24	-	-	-	-	-	-	-	-	-
2587.00	20.50	0.24	-	-	-	-	-	-	-	-	-
2588.00	20.74	0.24	-	-	-	-	-	-	-	-	-
2589.00	20.97	0.24	-	-	-	-	-	-	-	-	-
2590.00	**21.21**	**0.24**	**1.34**	**0.65**	**1.31**	**0.53**	**0.84**	**120.00**	**1.21**	**1.47**	**120.00**
2591.00	21.44	0.23	-	-	-	-	-	-	-	-	-
2592.00	21.67	0.23	-	-	-	-	-	-	-	-	-
2593.00	21.89	0.22	-	-	-	-	-	-	-	-	-
2594.00	22.10	0.22	-	-	-	-	-	-	-	-	-
2595.00	22.31	0.21	-	-	-	-	-	-	-	-	-
2596.00	22.52	0.20	-	-	-	-	-	-	-	-	-
2597.00	22.72	0.20	-	-	-	-	-	-	-	-	-
2598.00	22.91	0.19	-	-	-	-	-	-	-	-	-
2599.00	23.10	0.19	-	-	-	-	-	-	-	-	-
2600.00	**23.29**	**0.19**	**1.04**	**0.58**	**1.15**	**0.56**	**0.65**	**258.00**	**1.12**	**1.22**	**78.00**
2601.00	23.48	0.19	-	-	-	-	-	-	-	-	-
2602.00	23.67	0.19	-	-	-	-	-	-	-	-	-
2603.00	23.87	0.20	-	-	-	-	-	-	-	-	-
2604.00	24.07	0.20	-	-	-	-	-	-	-	-	-
2605.00	24.27	0.20	-	-	-	-	-	-	-	-	-
2606.00	24.48	0.21	-	-	-	-	-	-	-	-	-
2607.00	24.69	0.21	-	-	-	-	-	-	-	-	-
2608.00	24.90	0.21	-	-	-	-	-	-	-	-	-
2609.00	25.12	0.22	-	-	-	-	-	-	-	-	-

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

4

MAIN CHARACTERISTICS DATASHEET

Depth (ft)	Cumulated Volume (bbl)	Volume Section (bbl)	Section Area (ft²)	Mean Radius (ft)	Mean Diameter (ft)	Min Radius (ft)	Max Radius (ft)	Max Radius Orientation (°)	Min Diameter (ft)	Max Diameter (ft)	Max Diam. Orientation (°)
2610.00	**25.34**	**0.22**	**1.25**	**0.63**	**1.26**	**0.53**	**0.71**	**126.00**	**1.14**	**1.31**	**150.00**
2611.00	25.57	0.22	-	-	-	-	-	-	-	-	-
2612.00	25.79	0.23	-	-	-	-	-	-	-	-	-
2613.00	26.02	0.23	-	-	-	-	-	-	-	-	-
2614.00	26.25	0.23	-	-	-	-	-	-	-	-	-
2615.00	26.48	0.23	-	-	-	-	-	-	-	-	-
2616.00	26.72	0.23	-	-	-	-	-	-	-	-	-
2617.00	26.95	0.24	-	-	-	-	-	-	-	-	-
2618.00	27.19	0.24	-	-	-	-	-	-	-	-	-
2619.00	27.43	0.24	-	-	-	-	-	-	-	-	-
2620.00	**27.67**	**0.24**	**1.36**	**0.66**	**1.31**	**0.55**	**0.76**	**84.00**	**1.17**	**1.43**	**84.00**
2621.00	27.90	0.23	-	-	-	-	-	-	-	-	-
2622.00	28.11	0.21	-	-	-	-	-	-	-	-	-
2623.00	28.31	0.20	-	-	-	-	-	-	-	-	-
2624.00	28.50	0.19	-	-	-	-	-	-	-	-	-
2625.00	28.68	0.18	-	-	-	-	-	-	-	-	-
2626.00	29.66	0.98	-	-	-	-	-	-	-	-	-
2627.00	38.20	8.53	-	-	-	-	-	-	-	-	-
2628.00	74.52	36.32	-	-	-	-	-	-	-	-	-
2629.00	221.58	147.06	-	-	-	-	-	-	-	-	-
2630.00	**667.15**	**445.58**	**1089.07**	**18.62**	**37.24**	**0.40**	**217.21**	**156.00**	**0.93**	**217.70**	**156.00**
2631.00	2001.21	1334.06	-	-	-	-	-	-	-	-	-
2632.00	5541.70	3540.48	-	-	-	-	-	-	-	-	-
2633.00	13049.96	7508.27	-	-	-	-	-	-	-	-	-
2634.00	26530.31	13480.35	-	-	-	-	-	-	-	-	-
2635.00	45400.43	18870.12	-	-	-	-	-	-	-	-	-
2636.00	66660.48	21260.05	-	-	-	-	-	-	-	-	-
2637.00	88406.94	21746.45	-	-	-	-	-	-	-	-	-
2638.00	110310.01	21903.07	-	-	-	-	-	-	-	-	-
2639.00	132342.29	22032.28	-	-	-	-	-	-	-	-	-
2640.00	**154481.30**	**22139.01**	**124318.82**	**198.93**	**397.85**	**184.57**	**224.77**	**165.00**	**376.17**	**414.19**	**165.00**
2641.00	176641.67	22160.36	-	-	-	-	-	-	-	-	-
2642.00	198818.91	22177.24	-	-	-	-	-	-	-	-	-
2643.00	221015.90	22196.99	-	-	-	-	-	-	-	-	-
2644.00	243236.51	22220.62	-	-	-	-	-	-	-	-	-

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

5

MAIN CHARACTERISTICS DATASHEET

Depth (ft)	Cumulated Volume (bbl)	Volume Section (bbl)	Section Area (ft²)	Mean Radius (ft)	Mean Diameter (ft)	Min Radius (ft)	Max Radius (ft)	Max Radius Orientation (°)	Min Diameter (ft)	Max Diameter (ft)	Max Diam. Orientation (°)
2645.00	265487.25	22250.74	-	-	-	-	-	-	-	-	-
2646.00	287773.22	22285.97	-	-	-	-	-	-	-	-	-
2647.00	310101.66	22328.44	-	-	-	-	-	-	-	-	-
2648.00	332492.72	22391.06	-	-	-	-	-	-	-	-	-
2649.00	354981.84	22489.12	-	-	-	-	-	-	-	-	-
2650.00	**377568.89**	**22587.05**	**126808.00**	**200.91**	**401.82**	**185.54**	**229.37**	**156.00**	**378.59**	**419.27**	**156.00**
2651.00	400193.46	22624.58	-	-	-	-	-	-	-	-	-
2652.00	422850.51	22657.04	-	-	-	-	-	-	-	-	-
2653.00	445543.30	22692.79	-	-	-	-	-	-	-	-	-
2654.00	468276.93	22733.64	-	-	-	-	-	-	-	-	-
2655.00	491056.17	22779.24	-	-	-	-	-	-	-	-	-
2656.00	513888.49	22832.32	-	-	-	-	-	-	-	-	-
2657.00	536781.14	22892.65	-	-	-	-	-	-	-	-	-
2658.00	559735.41	22954.27	-	-	-	-	-	-	-	-	-
2659.00	582752.19	23016.78	-	-	-	-	-	-	-	-	-
2660.00	**605827.33**	**23075.14**	**129550.56**	**203.07**	**406.14**	**186.29**	**233.21**	**153.00**	**380.97**	**424.42**	**156.00**
2661.00	628924.87	23097.53	-	-	-	-	-	-	-	-	-
2662.00	652042.39	23117.53	-	-	-	-	-	-	-	-	-
2663.00	675180.88	23138.48	-	-	-	-	-	-	-	-	-
2664.00	698343.13	23162.25	-	-	-	-	-	-	-	-	-
2665.00	721532.12	23188.99	-	-	-	-	-	-	-	-	-
2666.00	744750.21	23218.09	-	-	-	-	-	-	-	-	-
2667.00	768001.26	23251.04	-	-	-	-	-	-	-	-	-
2668.00	791288.76	23287.50	-	-	-	-	-	-	-	-	-
2669.00	814614.91	23326.15	-	-	-	-	-	-	-	-	-
2670.00	**837979.72**	**23364.81**	**131168.18**	**204.33**	**408.67**	**187.45**	**235.82**	**153.00**	**380.98**	**427.32**	**153.00**
2671.00	861369.76	23390.04	-	-	-	-	-	-	-	-	-
2672.00	884784.18	23414.42	-	-	-	-	-	-	-	-	-
2673.00	908223.01	23438.83	-	-	-	-	-	-	-	-	-
2674.00	931686.28	23463.28	-	-	-	-	-	-	-	-	-
2675.00	955174.04	23487.76	-	-	-	-	-	-	-	-	-
2676.00	978686.31	23512.27	-	-	-	-	-	-	-	-	-
2677.00	1002223.14	23536.82	-	-	-	-	-	-	-	-	-
2678.00	1025784.55	23561.41	-	-	-	-	-	-	-	-	-
2679.00	1049370.58	23586.03	-	-	-	-	-	-	-	-	-

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

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MAIN CHARACTERISTICS DATASHEET

Depth (ft)	Cumulated Volume (bbl)	Volume Section (bbl)	Section Area (ft²)	Mean Radius (ft)	Mean Diameter (ft)	Min Radius (ft)	Max Radius (ft)	Max Radius Orientation (°)	Min Diameter (ft)	Max Diameter (ft)	Max Diam. Orientation (°)
2680.00	**1072979.76**	**23609.18**	**132542.84**	**205.40**	**410.80**	**187.74**	**237.55**	**153.00**	**382.71**	**429.63**	**153.00**
2681.00	1096606.66	23626.89	-	-	-	-	-	-	-	-	-
2682.00	1120250.94	23644.28	-	-	-	-	-	-	-	-	-
2683.00	1143912.60	23661.67	-	-	-	-	-	-	-	-	-
2684.00	1167591.65	23679.05	-	-	-	-	-	-	-	-	-
2685.00	1191288.08	23696.43	-	-	-	-	-	-	-	-	-
2686.00	1215001.88	23713.81	-	-	-	-	-	-	-	-	-
2687.00	1238733.07	23731.18	-	-	-	-	-	-	-	-	-
2688.00	1262481.62	23748.55	-	-	-	-	-	-	-	-	-
2689.00	1286247.54	23765.92	-	-	-	-	-	-	-	-	-
2690.00	**1310028.78**	**23781.24**	**133518.25**	**206.16**	**412.31**	**187.45**	**239.00**	**150.00**	**383.58**	**430.50**	**153.00**
2691.00	1333817.76	23788.98	-	-	-	-	-	-	-	-	-
2692.00	1357613.97	23796.21	-	-	-	-	-	-	-	-	-
2693.00	1381417.39	23803.42	-	-	-	-	-	-	-	-	-
2694.00	1405227.98	23810.59	-	-	-	-	-	-	-	-	-
2695.00	1429045.72	23817.74	-	-	-	-	-	-	-	-	-
2696.00	1452870.57	23824.85	-	-	-	-	-	-	-	-	-
2697.00	1476702.51	23831.94	-	-	-	-	-	-	-	-	-
2698.00	1500541.51	23839.00	-	-	-	-	-	-	-	-	-
2699.00	1524387.53	23846.02	-	-	-	-	-	-	-	-	-
2700.00	**1548239.58**	**23852.05**	**133918.87**	**206.46**	**412.93**	**187.55**	**238.55**	**153.00**	**383.21**	**430.16**	**156.00**
2701.00	1572094.02	23854.44	-	-	-	-	-	-	-	-	-
2702.00	1595950.58	23856.56	-	-	-	-	-	-	-	-	-
2703.00	1619809.23	23858.65	-	-	-	-	-	-	-	-	-
2704.00	1643669.95	23860.72	-	-	-	-	-	-	-	-	-
2705.00	1667532.71	23862.76	-	-	-	-	-	-	-	-	-
2706.00	1691397.48	23864.77	-	-	-	-	-	-	-	-	-
2707.00	1715264.25	23866.76	-	-	-	-	-	-	-	-	-
2708.00	1739132.97	23868.73	-	-	-	-	-	-	-	-	-
2709.00	1763003.64	23870.66	-	-	-	-	-	-	-	-	-
2710.00	**1786874.34**	**23870.71**	**134031.67**	**206.55**	**413.10**	**186.68**	**239.71**	**159.00**	**383.79**	**431.90**	**162.00**
2711.00	1810738.51	23864.17	-	-	-	-	-	-	-	-	-
2712.00	1834595.82	23857.30	-	-	-	-	-	-	-	-	-
2713.00	1858446.26	23850.44	-	-	-	-	-	-	-	-	-
2714.00	1882289.83	23843.58	-	-	-	-	-	-	-	-	-

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

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MAIN CHARACTERISTICS DATASHEET

Depth (ft)	Cumulated Volume (bbl)	Volume Section (bbl)	Section Area (ft²)	Mean Radius (ft)	Mean Diameter (ft)	Min Radius (ft)	Max Radius (ft)	Max Radius Orientation (°)	Min Diameter (ft)	Max Diameter (ft)	Max Diam. Orientation (°)
2715.00	1906126.55	23836.71	-	-	-	-	-	-	-	-	-
2716.00	1929956.40	23829.85	-	-	-	-	-	-	-	-	-
2717.00	1953779.38	23822.99	-	-	-	-	-	-	-	-	-
2718.00	1977595.51	23816.12	-	-	-	-	-	-	-	-	-
2719.00	2001404.76	23809.26	-	-	-	-	-	-	-	-	-
2720.00	**2025205.86**	**23801.10**	**133645.61**	**206.25**	**412.51**	**186.68**	**239.71**	**159.00**	**382.05**	**430.74**	**162.00**
2721.00	2048994.18	23788.32	-	-	-	-	-	-	-	-	-
2722.00	2072769.47	23775.29	-	-	-	-	-	-	-	-	-
2723.00	2096531.75	23762.28	-	-	-	-	-	-	-	-	-
2724.00	2120281.01	23749.27	-	-	-	-	-	-	-	-	-
2725.00	2144017.27	23736.26	-	-	-	-	-	-	-	-	-
2726.00	2167740.54	23723.26	-	-	-	-	-	-	-	-	-
2727.00	2191450.81	23710.27	-	-	-	-	-	-	-	-	-
2728.00	2215148.09	23697.28	-	-	-	-	-	-	-	-	-
2729.00	2238832.40	23684.30	-	-	-	-	-	-	-	-	-
2730.00	**2262504.57**	**23672.18**	**132915.88**	**205.69**	**411.38**	**185.81**	**239.13**	**159.00**	**380.90**	**429.87**	**159.00**
2731.00	2286167.69	23663.12	-	-	-	-	-	-	-	-	-
2732.00	2309821.94	23654.25	-	-	-	-	-	-	-	-	-
2733.00	2333467.34	23645.40	-	-	-	-	-	-	-	-	-
2734.00	2357103.90	23636.56	-	-	-	-	-	-	-	-	-
2735.00	2380731.63	23627.73	-	-	-	-	-	-	-	-	-
2736.00	2404350.56	23618.92	-	-	-	-	-	-	-	-	-
2737.00	2427960.68	23610.12	-	-	-	-	-	-	-	-	-
2738.00	2451562.02	23601.34	-	-	-	-	-	-	-	-	-
2739.00	2475154.59	23592.57	-	-	-	-	-	-	-	-	-
2740.00	**2498738.77**	**23584.18**	**132420.69**	**205.31**	**410.61**	**185.52**	**238.55**	**159.00**	**380.61**	**429.29**	**162.00**
2741.00	2522315.93	23577.16	-	-	-	-	-	-	-	-	-
2742.00	2545886.16	23570.23	-	-	-	-	-	-	-	-	-
2743.00	2569449.47	23563.31	-	-	-	-	-	-	-	-	-
2744.00	2593005.86	23556.39	-	-	-	-	-	-	-	-	-
2745.00	2616555.33	23549.48	-	-	-	-	-	-	-	-	-
2746.00	2640097.90	23542.57	-	-	-	-	-	-	-	-	-
2747.00	2663633.56	23535.66	-	-	-	-	-	-	-	-	-
2748.00	2687162.33	23528.76	-	-	-	-	-	-	-	-	-
2749.00	2710684.20	23521.87	-	-	-	-	-	-	-	-	-

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

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MAIN CHARACTERISTICS DATASHEET

Depth (ft)	Cumulated Volume (bbl)	Volume Section (bbl)	Section Area (ft²)	Mean Radius (ft)	Mean Diameter (ft)	Min Radius (ft)	Max Radius (ft)	Max Radius Orientation (°)	Min Diameter (ft)	Max Diameter (ft)	Max Diam. Orientation (°)
2750.00	**2734200.06**	**23515.86**	**132032.60**	**205.01**	**410.01**	**185.52**	**238.55**	**162.00**	**380.03**	**429.87**	**162.00**
2751.00	2757713.19	23513.14	-	-	-	-	-	-	-	-	-
2752.00	2781223.82	23510.63	-	-	-	-	-	-	-	-	-
2753.00	2804731.92	23508.10	-	-	-	-	-	-	-	-	-
2754.00	2828237.49	23505.57	-	-	-	-	-	-	-	-	-
2755.00	2851740.52	23503.03	-	-	-	-	-	-	-	-	-
2756.00	2875240.99	23500.47	-	-	-	-	-	-	-	-	-
2757.00	2898738.90	23497.91	-	-	-	-	-	-	-	-	-
2758.00	2922234.24	23495.33	-	-	-	-	-	-	-	-	-
2759.00	2945726.98	23492.75	-	-	-	-	-	-	-	-	-
2760.00	**2969215.98**	**23489.00**	**131888.79**	**204.89**	**409.79**	**185.91**	**237.52**	**159.00**	**380.23**	**427.79**	**162.00**
2761.00	2992697.19	23481.21	-	-	-	-	-	-	-	-	-
2762.00	3016170.41	23473.21	-	-	-	-	-	-	-	-	-
2763.00	3039635.62	23465.21	-	-	-	-	-	-	-	-	-
2764.00	3063092.83	23457.21	-	-	-	-	-	-	-	-	-
2765.00	3086542.02	23449.19	-	-	-	-	-	-	-	-	-
2766.00	3109983.19	23441.18	-	-	-	-	-	-	-	-	-
2767.00	3133416.35	23433.15	-	-	-	-	-	-	-	-	-
2768.00	3156841.47	23425.12	-	-	-	-	-	-	-	-	-
2769.00	3180258.56	23417.09	-	-	-	-	-	-	-	-	-
2770.00	**3203667.57**	**23409.02**	**131438.81**	**204.54**	**409.09**	**184.47**	**237.52**	**159.00**	**379.37**	**427.79**	**159.00**
2771.00	3227068.39	23400.82	-	-	-	-	-	-	-	-	-
2772.00	3250461.00	23392.61	-	-	-	-	-	-	-	-	-
2773.00	3273845.41	23384.40	-	-	-	-	-	-	-	-	-
2774.00	3297221.60	23376.19	-	-	-	-	-	-	-	-	-
2775.00	3320589.59	23367.98	-	-	-	-	-	-	-	-	-
2776.00	3343949.36	23359.77	-	-	-	-	-	-	-	-	-
2777.00	3367300.92	23351.56	-	-	-	-	-	-	-	-	-
2778.00	3390644.26	23343.34	-	-	-	-	-	-	-	-	-
2779.00	3413979.39	23335.13	-	-	-	-	-	-	-	-	-
2780.00	**3437306.67**	**23327.28**	**130977.92**	**204.19**	**408.37**	**185.04**	**236.94**	**159.00**	**379.08**	**426.63**	**159.00**
2781.00	3460627.48	23320.80	-	-	-	-	-	-	-	-	-
2782.00	3483941.87	23314.39	-	-	-	-	-	-	-	-	-
2783.00	3507249.85	23307.98	-	-	-	-	-	-	-	-	-
2784.00	3530551.43	23301.57	-	-	-	-	-	-	-	-	-

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

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MAIN CHARACTERISTICS DATASHEET

Depth (ft)	Cumulated Volume (bbl)	Volume Section (bbl)	Section Area (ft²)	Mean Radius (ft)	Mean Diameter (ft)	Min Radius (ft)	Max Radius (ft)	Max Radius Orientation (°)	Min Diameter (ft)	Max Diameter (ft)	Max Diam. Orientation (°)
2785.00	3553846.58	23295.16	-	-	-	-	-	-	-	-	-
2786.00	3577135.32	23288.74	-	-	-	-	-	-	-	-	-
2787.00	3600417.64	23282.32	-	-	-	-	-	-	-	-	-
2788.00	3623693.53	23275.90	-	-	-	-	-	-	-	-	-
2789.00	3646963.00	23269.47	-	-	-	-	-	-	-	-	-
2790.00	**3670225.40**	**23262.40**	**130617.57**	**203.90**	**407.81**	**183.59**	**236.65**	**159.00**	**379.66**	**426.34**	**159.00**
2791.00	3693478.34	23252.94	-	-	-	-	-	-	-	-	-
2792.00	3716721.67	23243.33	-	-	-	-	-	-	-	-	-
2793.00	3739955.40	23233.73	-	-	-	-	-	-	-	-	-
2794.00	3763179.53	23224.13	-	-	-	-	-	-	-	-	-
2795.00	3786394.06	23214.53	-	-	-	-	-	-	-	-	-
2796.00	3809598.99	23204.93	-	-	-	-	-	-	-	-	-
2797.00	3832794.32	23195.33	-	-	-	-	-	-	-	-	-
2798.00	3855980.06	23185.74	-	-	-	-	-	-	-	-	-
2799.00	3879156.20	23176.14	-	-	-	-	-	-	-	-	-
2800.00	**3902321.89**	**23165.69**	**130078.58**	**203.48**	**406.97**	**183.30**	**236.65**	**159.00**	**378.21**	**425.76**	**162.00**
2801.00	3925473.94	23152.05	-	-	-	-	-	-	-	-	-
2802.00	3948612.17	23138.23	-	-	-	-	-	-	-	-	-
2803.00	3971736.61	23124.44	-	-	-	-	-	-	-	-	-
2804.00	3994847.30	23110.69	-	-	-	-	-	-	-	-	-
2805.00	4017944.26	23096.96	-	-	-	-	-	-	-	-	-
2806.00	4041027.53	23083.27	-	-	-	-	-	-	-	-	-
2807.00	4064097.14	23069.61	-	-	-	-	-	-	-	-	-
2808.00	4087153.12	23055.98	-	-	-	-	-	-	-	-	-
2809.00	4110195.51	23042.39	-	-	-	-	-	-	-	-	-
2810.00	**4133226.31**	**23030.80**	**129310.03**	**202.88**	**405.76**	**183.21**	**235.94**	**159.00**	**377.42**	**424.65**	**159.00**
2811.00	4156252.47	23026.15	-	-	-	-	-	-	-	-	-
2812.00	4179274.31	23021.85	-	-	-	-	-	-	-	-	-
2813.00	4202291.86	23017.54	-	-	-	-	-	-	-	-	-
2814.00	4225305.09	23013.23	-	-	-	-	-	-	-	-	-
2815.00	4248314.01	23008.92	-	-	-	-	-	-	-	-	-
2816.00	4271318.61	23004.61	-	-	-	-	-	-	-	-	-
2817.00	4294318.90	23000.29	-	-	-	-	-	-	-	-	-
2818.00	4317314.88	22995.97	-	-	-	-	-	-	-	-	-
2819.00	4340306.53	22991.65	-	-	-	-	-	-	-	-	-

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

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MAIN CHARACTERISTICS DATASHEET

Depth (ft)	Cumulated Volume (bbl)	Volume Section (bbl)	Section Area (ft²)	Mean Radius (ft)	Mean Diameter (ft)	Min Radius (ft)	Max Radius (ft)	Max Radius Orientation (°)	Min Diameter (ft)	Max Diameter (ft)	Max Diam. Orientation (°)
2820.00	**4363287.64**	**22981.11**	**129064.67**	**202.69**	**405.38**	**183.20**	**235.08**	**159.00**	**377.13**	**423.50**	**162.00**
2821.00	4386236.02	22948.38	-	-	-	-	-	-	-	-	-
2822.00	4409150.61	22914.59	-	-	-	-	-	-	-	-	-
2823.00	4432031.55	22880.93	-	-	-	-	-	-	-	-	-
2824.00	4454878.95	22847.41	-	-	-	-	-	-	-	-	-
2825.00	4477692.96	22814.01	-	-	-	-	-	-	-	-	-
2826.00	4500473.71	22780.75	-	-	-	-	-	-	-	-	-
2827.00	4523221.33	22747.62	-	-	-	-	-	-	-	-	-
2828.00	4545935.95	22714.62	-	-	-	-	-	-	-	-	-
2829.00	4568617.71	22681.75	-	-	-	-	-	-	-	-	-
2830.00	**4591242.82**	**22625.12**	**127183.80**	**201.21**	**402.41**	**177.19**	**236.36**	**159.00**	**377.05**	**426.02**	**162.00**
2831.00	4613725.15	22482.33	-	-	-	-	-	-	-	-	-
2832.00	4636060.89	22335.74	-	-	-	-	-	-	-	-	-
2833.00	4658251.27	22190.39	-	-	-	-	-	-	-	-	-
2834.00	4680297.55	22046.28	-	-	-	-	-	-	-	-	-
2835.00	4702200.97	21903.42	-	-	-	-	-	-	-	-	-
2836.00	4723962.76	21761.80	-	-	-	-	-	-	-	-	-
2837.00	4745584.18	21621.42	-	-	-	-	-	-	-	-	-
2838.00	4767066.47	21482.28	-	-	-	-	-	-	-	-	-
2839.00	4788410.86	21344.39	-	-	-	-	-	-	-	-	-
2840.00	**4809586.47**	**21175.61**	**119181.32**	**194.77**	**389.55**	**157.78**	**235.20**	**159.00**	**372.98**	**407.47**	**162.00**
2841.00	4830476.78	20890.31	-	-	-	-	-	-	-	-	-
2842.00	4851077.37	20600.58	-	-	-	-	-	-	-	-	-
2843.00	4871391.21	20313.84	-	-	-	-	-	-	-	-	-
2844.00	4891421.29	20030.08	-	-	-	-	-	-	-	-	-
2845.00	4911170.60	19749.32	-	-	-	-	-	-	-	-	-
2846.00	4930642.14	19471.53	-	-	-	-	-	-	-	-	-
2847.00	4949838.88	19196.74	-	-	-	-	-	-	-	-	-
2848.00	4968763.81	18924.93	-	-	-	-	-	-	-	-	-
2849.00	4987419.92	18656.11	-	-	-	-	-	-	-	-	-
2850.00	**5005797.95**	**18378.03**	**103476.02**	**181.49**	**362.97**	**141.55**	**225.93**	**153.00**	**329.68**	**377.63**	**165.00**
2851.00	5023855.31	18057.36	-	-	-	-	-	-	-	-	-
2852.00	5041592.67	17737.36	-	-	-	-	-	-	-	-	-
2853.00	5059013.77	17421.11	-	-	-	-	-	-	-	-	-
2854.00	5076122.38	17108.60	-	-	-	-	-	-	-	-	-

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

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MAIN CHARACTERISTICS DATASHEET

Depth (ft)	Cumulated Volume (bbl)	Volume Section (bbl)	Section Area (ft²)	Mean Radius (ft)	Mean Diameter (ft)	Min Radius (ft)	Max Radius (ft)	Max Radius Orientation (°)	Min Diameter (ft)	Max Diameter (ft)	Max Diam. Orientation (°)
2855.00	5092917.90	16795.52	-	-	-	-	-	-	-	-	-
2856.00	5109388.11	16470.21	-	-	-	-	-	-	-	-	-
2857.00	5125535.24	16147.13	-	-	-	-	-	-	-	-	-
2858.00	5141362.43	15827.19	-	-	-	-	-	-	-	-	-
2859.00	5156872.82	15510.39	-	-	-	-	-	-	-	-	-
2860.00	**5172042.79**	**15169.97**	**85567.23**	**165.04**	**330.07**	**124.70**	**210.76**	**120.00**	**297.75**	**346.45**	**165.00**
2861.00	5186782.81	14740.02	-	-	-	-	-	-	-	-	-
2862.00	5201094.57	14311.76	-	-	-	-	-	-	-	-	-
2863.00	5214984.42	13889.85	-	-	-	-	-	-	-	-	-
2864.00	5228458.72	13474.30	-	-	-	-	-	-	-	-	-
2865.00	5241539.57	13080.84	-	-	-	-	-	-	-	-	-
2866.00	5254290.45	12750.89	-	-	-	-	-	-	-	-	-
2867.00	5266719.35	12428.90	-	-	-	-	-	-	-	-	-
2868.00	5278830.58	12111.23	-	-	-	-	-	-	-	-	-
2869.00	5290628.46	11797.88	-	-	-	-	-	-	-	-	-
2870.00	**5302054.85**	**11426.39**	**64730.05**	**143.54**	**287.08**	**104.38**	**189.92**	**132.00**	**251.66**	**308.42**	**174.00**
2871.00	5312896.48	10841.62	-	-	-	-	-	-	-	-	-
2872.00	5323157.74	10261.26	-	-	-	-	-	-	-	-	-
2873.00	5332855.13	9697.39	-	-	-	-	-	-	-	-	-
2874.00	5342005.15	9150.02	-	-	-	-	-	-	-	-	-
2875.00	5350702.77	8697.62	-	-	-	-	-	-	-	-	-
2876.00	5359251.69	8548.93	-	-	-	-	-	-	-	-	-
2877.00	5367672.77	8421.08	-	-	-	-	-	-	-	-	-
2878.00	5375967.02	8294.24	-	-	-	-	-	-	-	-	-
2879.00	5384135.44	8168.42	-	-	-	-	-	-	-	-	-
2880.00	**5392179.04**	**8043.60**	**45263.02**	**120.03**	**240.06**	**82.97**	**170.53**	**132.00**	**206.83**	**259.60**	**132.00**
2881.00	5400098.84	7919.80	-	-	-	-	-	-	-	-	-
2882.00	5407895.84	7797.00	-	-	-	-	-	-	-	-	-
2883.00	5415571.06	7675.22	-	-	-	-	-	-	-	-	-
2884.00	5423125.49	7554.44	-	-	-	-	-	-	-	-	-
2885.00	5430537.79	7412.29	-	-	-	-	-	-	-	-	-
2886.00	5437731.43	7193.65	-	-	-	-	-	-	-	-	-
2887.00	5444706.23	6974.80	-	-	-	-	-	-	-	-	-
2888.00	5451465.88	6759.65	-	-	-	-	-	-	-	-	-
2889.00	5458014.07	6548.19	-	-	-	-	-	-	-	-	-

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

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MAIN CHARACTERISTICS DATASHEET

Depth (ft)	Cumulated Volume (bbl)	Volume Section (bbl)	Section Area (ft²)	Mean Radius (ft)	Mean Diameter (ft)	Min Radius (ft)	Max Radius (ft)	Max Radius Orientation (°)	Min Diameter (ft)	Max Diameter (ft)	Max Diam. Orientation (°)
2890.00	**5464347.59**	**6333.52**	**35770.65**	**106.71**	**213.41**	**69.35**	**162.41**	**144.00**	**179.86**	**239.88**	**144.00**
2891.00	5470445.07	6097.48	-	-	-	-	-	-	-	-	-
2892.00	5476309.53	5864.46	-	-	-	-	-	-	-	-	-
2893.00	5481945.60	5636.07	-	-	-	-	-	-	-	-	-
2894.00	5487357.89	5412.30	-	-	-	-	-	-	-	-	-
2895.00	5492554.27	5196.38	-	-	-	-	-	-	-	-	-
2896.00	5497550.82	4996.55	-	-	-	-	-	-	-	-	-
2897.00	5502352.67	4801.85	-	-	-	-	-	-	-	-	-
2898.00	5506964.30	4611.64	-	-	-	-	-	-	-	-	-
2899.00	5511390.23	4425.92	-	-	-	-	-	-	-	-	-
2900.00	**5515629.94**	**4239.72**	**23982.48**	**87.37**	**174.74**	**52.25**	**146.48**	**144.00**	**136.39**	**210.33**	**144.00**
2901.00	5519669.86	4039.92	-	-	-	-	-	-	-	-	-
2902.00	5523514.60	3844.74	-	-	-	-	-	-	-	-	-
2903.00	5527170.05	3655.45	-	-	-	-	-	-	-	-	-
2904.00	5530642.11	3472.05	-	-	-	-	-	-	-	-	-
2905.00	5533945.28	3303.17	-	-	-	-	-	-	-	-	-
2906.00	5537115.68	3170.40	-	-	-	-	-	-	-	-	-
2907.00	5540158.72	3043.04	-	-	-	-	-	-	-	-	-
2908.00	5543077.96	2919.24	-	-	-	-	-	-	-	-	-
2909.00	5545876.95	2798.99	-	-	-	-	-	-	-	-	-
2910.00	**5548562.49**	**2685.54**	**15158.61**	**69.46**	**138.93**	**31.65**	**133.09**	**141.00**	**90.85**	**178.62**	**144.00**
2911.00	5551148.86	2586.37	-	-	-	-	-	-	-	-	-
2912.00	5553638.77	2489.92	-	-	-	-	-	-	-	-	-
2913.00	5556034.38	2395.61	-	-	-	-	-	-	-	-	-
2914.00	5558337.83	2303.45	-	-	-	-	-	-	-	-	-
2915.00	5560549.69	2211.86	-	-	-	-	-	-	-	-	-
2916.00	5562666.54	2116.85	-	-	-	-	-	-	-	-	-
2917.00	5564690.78	2024.24	-	-	-	-	-	-	-	-	-
2918.00	5566625.18	1934.39	-	-	-	-	-	-	-	-	-
2919.00	5568472.48	1847.30	-	-	-	-	-	-	-	-	-
2920.00	**5570231.05**	**1758.57**	**9965.71**	**56.32**	**112.64**	**28.17**	**113.95**	**138.00**	**68.21**	**147.02**	**138.00**
2921.00	5571888.91	1657.87	-	-	-	-	-	-	-	-	-
2922.00	5573450.11	1561.20	-	-	-	-	-	-	-	-	-
2923.00	5574919.54	1469.43	-	-	-	-	-	-	-	-	-
2924.00	5576302.11	1382.56	-	-	-	-	-	-	-	-	-

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

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MAIN CHARACTERISTICS DATASHEET

Depth (ft)	Cumulated Volume (bbl)	Volume Section (bbl)	Section Area (ft²)	Mean Radius (ft)	Mean Diameter (ft)	Min Radius (ft)	Max Radius (ft)	Max Radius Orientation (°)	Min Diameter (ft)	Max Diameter (ft)	Max Diam. Orientation (°)
2925.00	5577593.00	1290.89	-	-	-	-	-	-	-	-	-
2926.00	5578762.62	1169.62	-	-	-	-	-	-	-	-	-
2927.00	5579819.23	1056.61	-	-	-	-	-	-	-	-	-
2928.00	5580773.74	954.52	-	-	-	-	-	-	-	-	-
2929.00	5581637.08	863.33	-	-	-	-	-	-	-	-	-
2930.00	**5582413.81**	**776.73**	**4441.09**	**37.60**	**75.20**	**18.03**	**93.69**	**138.00**	**47.35**	**115.02**	**144.00**
2931.00	5583091.22	677.41	-	-	-	-	-	-	-	-	-
2932.00	5583666.42	575.20	-	-	-	-	-	-	-	-	-
2933.00	5584118.67	452.25	-	-	-	-	-	-	-	-	-
2934.00	5584475.16	356.49	-	-	-	-	-	-	-	-	-
2935.00	5584775.80	300.64	-	-	-	-	-	-	-	-	-
2936.00	5585074.50	298.70	-	-	-	-	-	-	-	-	-
2937.00	5585377.40	302.90	-	-	-	-	-	-	-	-	-
2938.00	5585683.44	306.04	-	-	-	-	-	-	-	-	-
2939.00	5585991.54	308.10	-	-	-	-	-	-	-	-	-
2940.00	**5586302.46**	**310.92**	**1768.40**	**23.73**	**47.45**	**12.34**	**82.81**	**144.00**	**31.48**	**99.81**	**150.00**
2941.00	5586619.68	317.23	-	-	-	-	-	-	-	-	-
2942.00	5586943.60	323.91	-	-	-	-	-	-	-	-	-
2943.00	5587274.47	330.87	-	-	-	-	-	-	-	-	-
2944.00	5587612.66	338.19	-	-	-	-	-	-	-	-	-
2945.00	5587958.93	346.27	-	-	-	-	-	-	-	-	-
2946.00	5588314.33	355.40	-	-	-	-	-	-	-	-	-
2947.00	5588679.52	365.19	-	-	-	-	-	-	-	-	-
2948.00	5589053.69	374.17	-	-	-	-	-	-	-	-	-
2949.00	5589436.82	383.13	-	-	-	-	-	-	-	-	-
2950.00	**5589829.29**	**392.47**	**2160.85**	**26.23**	**52.45**	**10.73**	**83.02**	**144.00**	**26.31**	**99.13**	**150.00**
2951.00	5590231.82	402.53	-	-	-	-	-	-	-	-	-
2952.00	5590644.32	412.50	-	-	-	-	-	-	-	-	-
2953.00	5591066.95	422.63	-	-	-	-	-	-	-	-	-
2954.00	5591499.82	432.87	-	-	-	-	-	-	-	-	-
2955.00	5591942.53	442.71	-	-	-	-	-	-	-	-	-
2956.00	5592394.81	452.27	-	-	-	-	-	-	-	-	-
2957.00	5592856.36	461.56	-	-	-	-	-	-	-	-	-
2958.00	5593327.33	470.97	-	-	-	-	-	-	-	-	-
2959.00	5593808.21	480.88	-	-	-	-	-	-	-	-	-

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

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MAIN CHARACTERISTICS DATASHEET

Depth (ft)	Cumulated Volume (bbl)	Volume Section (bbl)	Section Area (ft²)	Mean Radius (ft)	Mean Diameter (ft)	Min Radius (ft)	Max Radius (ft)	Max Radius Orientation (°)	Min Diameter (ft)	Max Diameter (ft)	Max Diam. Orientation (°)
2960.00	**5594300.05**	**491.85**	**2710.71**	**29.37**	**58.75**	**10.73**	**82.52**	**144.00**	**28.09**	**100.16**	**150.00**
2961.00	5594806.27	506.22	-	-	-	-	-	-	-	-	-
2962.00	5595329.64	523.37	-	-	-	-	-	-	-	-	-
2963.00	5595874.48	544.84	-	-	-	-	-	-	-	-	-
2964.00	5596448.90	574.42	-	-	-	-	-	-	-	-	-
2965.00	5597092.82	643.92	-	-	-	-	-	-	-	-	-
2966.00	5597844.96	752.14	-	-	-	-	-	-	-	-	-
2967.00	5598713.53	868.56	-	-	-	-	-	-	-	-	-
2968.00	5599718.20	1004.67	-	-	-	-	-	-	-	-	-
2969.00	5600973.24	1255.04	-	-	-	-	-	-	-	-	-
2970.00	**5602789.03**	**1815.79**	**9061.96**	**53.71**	**107.42**	**11.40**	**138.15**	**144.00**	**31.17**	**202.27**	**144.00**
2971.00	5605680.67	2891.65	-	-	-	-	-	-	-	-	-
2972.00	5609773.81	4093.14	-	-	-	-	-	-	-	-	-
2973.00	5614611.70	4837.89	-	-	-	-	-	-	-	-	-
2974.00	5619902.76	5291.07	-	-	-	-	-	-	-	-	-
2975.00	5625407.29	5504.53	-	-	-	-	-	-	-	-	-
2976.00	5630889.58	5482.29	-	-	-	-	-	-	-	-	-
2977.00	5636330.45	5440.88	-	-	-	-	-	-	-	-	-
2978.00	5641731.51	5401.05	-	-	-	-	-	-	-	-	-
2979.00	5647095.12	5363.61	-	-	-	-	-	-	-	-	-
2980.00	**5652425.39**	**5330.28**	**29936.95**	**97.62**	**195.24**	**65.22**	**144.93**	**144.00**	**150.98**	**216.62**	**159.00**
2981.00	5657735.22	5309.83	-	-	-	-	-	-	-	-	-
2982.00	5663025.73	5290.51	-	-	-	-	-	-	-	-	-
2983.00	5668296.57	5270.84	-	-	-	-	-	-	-	-	-
2984.00	5673548.91	5252.34	-	-	-	-	-	-	-	-	-
2985.00	5678783.80	5234.89	-	-	-	-	-	-	-	-	-
2986.00	5684001.78	5217.97	-	-	-	-	-	-	-	-	-
2987.00	5689202.24	5200.46	-	-	-	-	-	-	-	-	-
2988.00	5694385.33	5183.09	-	-	-	-	-	-	-	-	-
2989.00	5699551.05	5165.72	-	-	-	-	-	-	-	-	-
2990.00	**5704702.13**	**5151.08**	**28922.29**	**95.95**	**191.90**	**65.33**	**139.60**	**153.00**	**150.68**	**213.34**	**156.00**
2991.00	5709844.71	5142.58	-	-	-	-	-	-	-	-	-
2992.00	5714980.10	5135.39	-	-	-	-	-	-	-	-	-
2993.00	5720108.92	5128.82	-	-	-	-	-	-	-	-	-
2994.00	5725229.42	5120.50	-	-	-	-	-	-	-	-	-

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

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MAIN CHARACTERISTICS DATASHEET

Depth (ft)	Cumulated Volume (bbl)	Volume Section (bbl)	Section Area (ft²)	Mean Radius (ft)	Mean Diameter (ft)	Min Radius (ft)	Max Radius (ft)	Max Radius Orientation (°)	Min Diameter (ft)	Max Diameter (ft)	Max Diam. Orientation (°)
2995.00	5730339.82	5110.40	-	-	-	-	-	-	-	-	-
2996.00	5735433.85	5094.03	-	-	-	-	-	-	-	-	-
2997.00	5740510.99	5077.15	-	-	-	-	-	-	-	-	-
2998.00	5745571.22	5060.22	-	-	-	-	-	-	-	-	-
2999.00	5750613.81	5042.59	-	-	-	-	-	-	-	-	-
3000.00	**5755639.80**	**5025.99**	**28228.37**	**94.79**	**189.58**	**64.69**	**137.80**	**135.00**	**148.54**	**211.20**	**153.00**
3001.00	5760652.78	5012.98	-	-	-	-	-	-	-	-	-
3002.00	5765656.55	5003.76	-	-	-	-	-	-	-	-	-
3003.00	5770652.16	4995.61	-	-	-	-	-	-	-	-	-
3004.00	5775639.82	4987.67	-	-	-	-	-	-	-	-	-
3005.00	5780620.25	4980.42	-	-	-	-	-	-	-	-	-
3006.00	5785596.33	4976.08	-	-	-	-	-	-	-	-	-
3007.00	5790570.27	4973.94	-	-	-	-	-	-	-	-	-
3008.00	5795541.50	4971.23	-	-	-	-	-	-	-	-	-
3009.00	5800506.10	4964.61	-	-	-	-	-	-	-	-	-
3010.00	**5805462.26**	**4956.16**	**27835.15**	**94.13**	**188.26**	**64.46**	**137.27**	**135.00**	**147.49**	**210.72**	**159.00**
3011.00	5810408.43	4946.18	-	-	-	-	-	-	-	-	-
3012.00	5815344.48	4936.04	-	-	-	-	-	-	-	-	-
3013.00	5820274.02	4929.54	-	-	-	-	-	-	-	-	-
3014.00	5825198.56	4924.54	-	-	-	-	-	-	-	-	-
3015.00	5830116.64	4918.08	-	-	-	-	-	-	-	-	-
3016.00	5835026.25	4909.60	-	-	-	-	-	-	-	-	-
3017.00	5839926.80	4900.56	-	-	-	-	-	-	-	-	-
3018.00	5844818.51	4891.71	-	-	-	-	-	-	-	-	-
3019.00	5849701.45	4882.94	-	-	-	-	-	-	-	-	-
3020.00	**5854576.87**	**4875.41**	**27375.26**	**93.35**	**186.70**	**63.59**	**136.12**	**162.00**	**146.03**	**211.30**	**159.00**
3021.00	5859448.91	4872.04	-	-	-	-	-	-	-	-	-
3022.00	5864317.91	4869.00	-	-	-	-	-	-	-	-	-
3023.00	5869183.27	4865.35	-	-	-	-	-	-	-	-	-
3024.00	5874044.68	4861.41	-	-	-	-	-	-	-	-	-
3025.00	5878902.72	4858.04	-	-	-	-	-	-	-	-	-
3026.00	5883757.49	4854.77	-	-	-	-	-	-	-	-	-
3027.00	5888608.83	4851.33	-	-	-	-	-	-	-	-	-
3028.00	5893456.57	4847.74	-	-	-	-	-	-	-	-	-
3029.00	5898300.76	4844.19	-	-	-	-	-	-	-	-	-

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

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MAIN CHARACTERISTICS DATASHEET

Depth (ft)	Cumulated Volume (bbl)	Volume Section (bbl)	Section Area (ft²)	Mean Radius (ft)	Mean Diameter (ft)	Min Radius (ft)	Max Radius (ft)	Max Radius Orientation (°)	Min Diameter (ft)	Max Diameter (ft)	Max Diam. Orientation (°)
3030.00	**5903140.90**	**4840.14**	**27179.87**	**93.01**	**186.03**	**62.72**	**136.40**	**162.00**	**142.26**	**208.99**	**147.00**
3031.00	5907974.08	4833.18	-	-	-	-	-	-	-	-	-
3032.00	5912800.48	4826.40	-	-	-	-	-	-	-	-	-
3033.00	5917619.96	4819.48	-	-	-	-	-	-	-	-	-
3034.00	5922431.83	4811.86	-	-	-	-	-	-	-	-	-
3035.00	5927236.10	4804.27	-	-	-	-	-	-	-	-	-
3036.00	5932032.74	4796.64	-	-	-	-	-	-	-	-	-
3037.00	5936822.22	4789.48	-	-	-	-	-	-	-	-	-
3038.00	5941604.90	4782.68	-	-	-	-	-	-	-	-	-
3039.00	5946381.27	4776.37	-	-	-	-	-	-	-	-	-
3040.00	**5951146.80**	**4765.52**	**26788.60**	**92.34**	**184.68**	**60.69**	**134.37**	**162.00**	**139.65**	**209.57**	**150.00**
3041.00	5955885.06	4738.27	-	-	-	-	-	-	-	-	-
3042.00	5960596.00	4710.94	-	-	-	-	-	-	-	-	-
3043.00	5965280.59	4684.58	-	-	-	-	-	-	-	-	-
3044.00	5969944.78	4664.19	-	-	-	-	-	-	-	-	-
3045.00	5974596.97	4652.19	-	-	-	-	-	-	-	-	-
3046.00	5979243.46	4646.49	-	-	-	-	-	-	-	-	-
3047.00	5983890.06	4646.60	-	-	-	-	-	-	-	-	-
3048.00	5988539.50	4649.45	-	-	-	-	-	-	-	-	-
3049.00	5993193.21	4653.70	-	-	-	-	-	-	-	-	-
3050.00	**5997846.23**	**4653.03**	**26152.06**	**91.24**	**182.48**	**61.56**	**133.51**	**162.00**	**138.49**	**210.15**	**150.00**
3051.00	6002480.87	4634.64	-	-	-	-	-	-	-	-	-
3052.00	6007099.25	4618.38	-	-	-	-	-	-	-	-	-
3053.00	6011702.34	4603.09	-	-	-	-	-	-	-	-	-
3054.00	6016292.35	4590.00	-	-	-	-	-	-	-	-	-
3055.00	6020872.31	4579.97	-	-	-	-	-	-	-	-	-
3056.00	6025444.06	4571.74	-	-	-	-	-	-	-	-	-
3057.00	6030009.83	4565.77	-	-	-	-	-	-	-	-	-
3058.00	6034572.45	4562.62	-	-	-	-	-	-	-	-	-
3059.00	6039133.74	4561.30	-	-	-	-	-	-	-	-	-
3060.00	**6043685.17**	**4551.43**	**25593.75**	**90.26**	**180.52**	**62.14**	**132.02**	**162.00**	**139.66**	**205.46**	**153.00**
3061.00	6048199.87	4514.70	-	-	-	-	-	-	-	-	-
3062.00	6052688.29	4488.42	-	-	-	-	-	-	-	-	-
3063.00	6057223.77	4535.48	-	-	-	-	-	-	-	-	-
3064.00	6061967.97	4744.20	-	-	-	-	-	-	-	-	-

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

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MAIN CHARACTERISTICS DATASHEET

Depth (ft)	Cumulated Volume (bbl)	Volume Section (bbl)	Section Area (ft²)	Mean Radius (ft)	Mean Diameter (ft)	Min Radius (ft)	Max Radius (ft)	Max Radius Orientation (°)	Min Diameter (ft)	Max Diameter (ft)	Max Diam. Orientation (°)
3065.00	6067156.53	5188.56	-	-	-	-	-	-	-	-	-
3066.00	6073116.31	5959.78	-	-	-	-	-	-	-	-	-
3067.00	6080036.60	6920.29	-	-	-	-	-	-	-	-	-
3068.00	6088393.24	8356.64	-	-	-	-	-	-	-	-	-
3069.00	6098875.85	10482.61	-	-	-	-	-	-	-	-	-
3070.00	**6111665.17**	**12789.32**	**69461.36**	**151.64**	**303.29**	**65.69**	**256.95**	**240.00**	**210.96**	**424.54**	**60.00**
3071.00	6126195.92	14530.75	-	-	-	-	-	-	-	-	-
3072.00	6141608.82	15412.91	-	-	-	-	-	-	-	-	-
3073.00	6157523.63	15914.80	-	-	-	-	-	-	-	-	-
3074.00	6173984.04	16460.41	-	-	-	-	-	-	-	-	-
3075.00	6191162.84	17178.80	-	-	-	-	-	-	-	-	-
3076.00	6208918.87	17756.03	-	-	-	-	-	-	-	-	-
3077.00	6227155.41	18236.54	-	-	-	-	-	-	-	-	-
3078.00	6246019.55	18864.13	-	-	-	-	-	-	-	-	-
3079.00	6265696.68	19677.14	-	-	-	-	-	-	-	-	-
3080.00	**6286352.98**	**20656.30**	**115500.59**	**191.74**	**383.48**	**105.57**	**311.11**	**36.00**	**269.51**	**531.80**	**33.00**
3081.00	6308298.55	21945.57	-	-	-	-	-	-	-	-	-
3082.00	6331728.65	23430.11	-	-	-	-	-	-	-	-	-
3083.00	6356108.22	24379.57	-	-	-	-	-	-	-	-	-
3084.00	6381473.06	25364.84	-	-	-	-	-	-	-	-	-
3085.00	6407626.47	26153.41	-	-	-	-	-	-	-	-	-
3086.00	6433790.21	26163.73	-	-	-	-	-	-	-	-	-
3087.00	6460031.18	26240.97	-	-	-	-	-	-	-	-	-
3088.00	6486297.90	26266.73	-	-	-	-	-	-	-	-	-
3089.00	6512466.98	26169.08	-	-	-	-	-	-	-	-	-
3090.00	**6538161.68**	**25694.70**	**147617.29**	**218.19**	**436.37**	**107.24**	**422.24**	**78.00**	**352.51**	**604.39**	**78.00**
3091.00	6562194.55	24032.87	-	-	-	-	-	-	-	-	-
3092.00	6584537.03	22342.48	-	-	-	-	-	-	-	-	-
3093.00	6605220.74	20683.71	-	-	-	-	-	-	-	-	-
3094.00	6624330.16	19109.42	-	-	-	-	-	-	-	-	-
3095.00	6642047.34	17717.18	-	-	-	-	-	-	-	-	-
3096.00	6658705.81	16658.46	-	-	-	-	-	-	-	-	-
3097.00	6674482.01	15776.20	-	-	-	-	-	-	-	-	-
3098.00	6689548.30	15066.29	-	-	-	-	-	-	-	-	-
3099.00	6703961.97	14413.67	-	-	-	-	-	-	-	-	-

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

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MAIN CHARACTERISTICS DATASHEET

Depth (ft)	Cumulated Volume (bbl)	Volume Section (bbl)	Section Area (ft²)	Mean Radius (ft)	Mean Diameter (ft)	Min Radius (ft)	Max Radius (ft)	Max Radius Orientation (°)	Min Diameter (ft)	Max Diameter (ft)	Max Diam. Orientation (°)
3100.00	**6717798.39**	**13836.41**	**77663.91**	**157.23**	**314.46**	**111.45**	**215.90**	**129.00**	**271.08**	**338.53**	**129.00**
3101.00	6731279.68	13481.30	-	-	-	-	-	-	-	-	-
3102.00	6744469.86	13190.17	-	-	-	-	-	-	-	-	-
3103.00	6757432.58	12962.73	-	-	-	-	-	-	-	-	-
3104.00	6770228.39	12795.80	-	-	-	-	-	-	-	-	-
3105.00	6782908.21	12679.82	-	-	-	-	-	-	-	-	-
3106.00	6795479.24	12571.03	-	-	-	-	-	-	-	-	-
3107.00	6807945.87	12466.63	-	-	-	-	-	-	-	-	-
3108.00	6820310.92	12365.05	-	-	-	-	-	-	-	-	-
3109.00	6832575.97	12265.05	-	-	-	-	-	-	-	-	-
3110.00	**6844730.22**	**12154.26**	**68350.56**	**147.50**	**295.00**	**97.93**	**210.08**	**126.00**	**233.63**	**326.88**	**126.00**
3111.00	6856731.28	12001.05	-	-	-	-	-	-	-	-	-
3112.00	6868578.55	11847.28	-	-	-	-	-	-	-	-	-
3113.00	6880273.91	11695.35	-	-	-	-	-	-	-	-	-
3114.00	6891819.09	11545.18	-	-	-	-	-	-	-	-	-
3115.00	6903215.68	11396.59	-	-	-	-	-	-	-	-	-
3116.00	6914465.53	11249.86	-	-	-	-	-	-	-	-	-
3117.00	6925570.90	11105.37	-	-	-	-	-	-	-	-	-
3118.00	6936534.25	10963.35	-	-	-	-	-	-	-	-	-
3119.00	6947356.93	10822.68	-	-	-	-	-	-	-	-	-
3120.00	**6958033.78**	**10676.85**	**60128.54**	**138.35**	**276.69**	**85.99**	**200.08**	**129.00**	**211.28**	**301.48**	**129.00**
3121.00	6968543.96	10510.18	-	-	-	-	-	-	-	-	-
3122.00	6978887.06	10343.10	-	-	-	-	-	-	-	-	-
3123.00	6989064.02	10176.96	-	-	-	-	-	-	-	-	-
3124.00	6999076.29	10012.27	-	-	-	-	-	-	-	-	-
3125.00	7008925.52	9849.23	-	-	-	-	-	-	-	-	-
3126.00	7018613.37	9687.85	-	-	-	-	-	-	-	-	-
3127.00	7028141.53	9528.16	-	-	-	-	-	-	-	-	-
3128.00	7037511.68	9370.15	-	-	-	-	-	-	-	-	-
3129.00	7046725.50	9213.82	-	-	-	-	-	-	-	-	-
3130.00	**7055785.23**	**9059.72**	**50988.74**	**127.40**	**254.80**	**72.15**	**189.67**	**129.00**	**183.56**	**278.00**	**159.00**
3131.00	7064694.56	8909.34	-	-	-	-	-	-	-	-	-
3132.00	7073455.50	8760.94	-	-	-	-	-	-	-	-	-
3133.00	7082069.86	8614.36	-	-	-	-	-	-	-	-	-
3134.00	7090539.34	8469.47	-	-	-	-	-	-	-	-	-

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

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MAIN CHARACTERISTICS DATASHEET

Depth (ft)	Cumulated Volume (bbl)	Volume Section (bbl)	Section Area (ft²)	Mean Radius (ft)	Mean Diameter (ft)	Min Radius (ft)	Max Radius (ft)	Max Radius Orientation (°)	Min Diameter (ft)	Max Diameter (ft)	Max Diam. Orientation (°)
3135.00	7098865.60	8326.26	-	-	-	-	-	-	-	-	-
3136.00	7107050.33	8184.73	-	-	-	-	-	-	-	-	-
3137.00	7115095.20	8044.87	-	-	-	-	-	-	-	-	-
3138.00	7123001.88	7906.68	-	-	-	-	-	-	-	-	-
3139.00	7130772.04	7770.16	-	-	-	-	-	-	-	-	-
3140.00	**7138411.09**	**7639.06**	**43017.79**	**117.02**	**234.03**	**68.70**	**177.07**	**141.00**	**155.52**	**264.28**	**156.00**
3141.00	7145934.01	7522.92	-	-	-	-	-	-	-	-	-
3142.00	7153342.72	7408.70	-	-	-	-	-	-	-	-	-
3143.00	7160639.01	7296.29	-	-	-	-	-	-	-	-	-
3144.00	7167825.19	7186.18	-	-	-	-	-	-	-	-	-
3145.00	7174903.63	7078.44	-	-	-	-	-	-	-	-	-
3146.00	7181876.40	6972.77	-	-	-	-	-	-	-	-	-
3147.00	7188745.72	6869.32	-	-	-	-	-	-	-	-	-
3148.00	7195514.08	6768.37	-	-	-	-	-	-	-	-	-
3149.00	7202184.64	6670.56	-	-	-	-	-	-	-	-	-
3150.00	**7208768.47**	**6583.83**	**37001.20**	**108.53**	**217.05**	**58.68**	**175.14**	**138.00**	**138.18**	**251.94**	**159.00**
3151.00	7215294.84	6526.37	-	-	-	-	-	-	-	-	-
3152.00	7221765.88	6471.04	-	-	-	-	-	-	-	-	-
3153.00	7228182.17	6416.29	-	-	-	-	-	-	-	-	-
3154.00	7234544.73	6362.55	-	-	-	-	-	-	-	-	-
3155.00	7240854.26	6309.53	-	-	-	-	-	-	-	-	-
3156.00	7247111.54	6257.29	-	-	-	-	-	-	-	-	-
3157.00	7253316.89	6205.35	-	-	-	-	-	-	-	-	-
3158.00	7259471.10	6154.20	-	-	-	-	-	-	-	-	-
3159.00	7265575.07	6103.98	-	-	-	-	-	-	-	-	-
3160.00	**7271633.32**	**6058.24**	**34066.05**	**104.13**	**208.26**	**51.35**	**171.66**	**138.00**	**130.08**	**243.44**	**156.00**
3161.00	7277660.93	6027.61	-	-	-	-	-	-	-	-	-
3162.00	7283659.78	5998.85	-	-	-	-	-	-	-	-	-
3163.00	7289630.55	5970.77	-	-	-	-	-	-	-	-	-
3164.00	7295574.63	5944.08	-	-	-	-	-	-	-	-	-
3165.00	7301492.46	5917.83	-	-	-	-	-	-	-	-	-
3166.00	7307383.91	5891.45	-	-	-	-	-	-	-	-	-
3167.00	7313248.47	5864.56	-	-	-	-	-	-	-	-	-
3168.00	7319085.41	5836.94	-	-	-	-	-	-	-	-	-
3169.00	7324893.67	5808.26	-	-	-	-	-	-	-	-	-

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

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MAIN CHARACTERISTICS DATASHEET

Depth (ft)	Cumulated Volume (bbl)	Volume Section (bbl)	Section Area (ft²)	Mean Radius (ft)	Mean Diameter (ft)	Min Radius (ft)	Max Radius (ft)	Max Radius Orientation (°)	Min Diameter (ft)	Max Diameter (ft)	Max Diam. Orientation (°)
3170.00	**7330670.51**	**5776.84**	**32481.99**	**101.68**	**203.37**	**50.58**	**168.97**	**153.00**	**128.14**	**236.89**	**153.00**
3171.00	7336407.40	5736.89	-	-	-	-	-	-	-	-	-
3172.00	7342105.64	5698.24	-	-	-	-	-	-	-	-	-
3173.00	7347769.19	5663.55	-	-	-	-	-	-	-	-	-
3174.00	7353400.31	5631.12	-	-	-	-	-	-	-	-	-
3175.00	7359000.79	5600.49	-	-	-	-	-	-	-	-	-
3176.00	7364572.28	5571.48	-	-	-	-	-	-	-	-	-
3177.00	7370115.44	5543.17	-	-	-	-	-	-	-	-	-
3178.00	7375630.57	5515.13	-	-	-	-	-	-	-	-	-
3179.00	7381118.24	5487.67	-	-	-	-	-	-	-	-	-
3180.00	**7386576.94**	**5458.70**	**30682.40**	**98.83**	**197.65**	**49.55**	**167.79**	**153.00**	**124.81**	**229.24**	**159.00**
3181.00	7392000.42	5423.49	-	-	-	-	-	-	-	-	-
3182.00	7397393.87	5393.45	-	-	-	-	-	-	-	-	-
3183.00	7402763.54	5369.66	-	-	-	-	-	-	-	-	-
3184.00	7408114.22	5350.68	-	-	-	-	-	-	-	-	-
3185.00	7413450.69	5336.47	-	-	-	-	-	-	-	-	-
3186.00	7418774.21	5323.52	-	-	-	-	-	-	-	-	-
3187.00	7424085.66	5311.45	-	-	-	-	-	-	-	-	-
3188.00	7429388.35	5302.69	-	-	-	-	-	-	-	-	-
3189.00	7434711.16	5322.81	-	-	-	-	-	-	-	-	-
3190.00	**7440115.47**	**5404.30**	**30258.48**	**98.14**	**196.28**	**47.95**	**376.68**	**159.00**	**124.49**	**434.59**	**159.00**
3191.00	7445624.16	5508.70	-	-	-	-	-	-	-	-	-
3192.00	7451284.00	5659.83	-	-	-	-	-	-	-	-	-
3193.00	7457167.50	5883.51	-	-	-	-	-	-	-	-	-
3194.00	7463438.48	6270.97	-	-	-	-	-	-	-	-	-
3195.00	7470185.43	6746.95	-	-	-	-	-	-	-	-	-
3196.00	7477429.07	7243.64	-	-	-	-	-	-	-	-	-
3197.00	7485136.23	7707.16	-	-	-	-	-	-	-	-	-
3198.00	7493210.61	8074.39	-	-	-	-	-	-	-	-	-
3199.00	7501614.75	8404.13	-	-	-	-	-	-	-	-	-
3200.00	**7510369.78**	**8755.04**	**48791.87**	**124.62**	**249.25**	**45.37**	**378.64**	**159.00**	**128.02**	**434.61**	**159.00**
3201.00	7519612.21	9242.43	-	-	-	-	-	-	-	-	-
3202.00	7529358.24	9746.03	-	-	-	-	-	-	-	-	-
3203.00	7539687.62	10329.38	-	-	-	-	-	-	-	-	-
3204.00	7550494.99	10807.37	-	-	-	-	-	-	-	-	-

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

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MAIN CHARACTERISTICS DATASHEET

Depth (ft)	Cumulated Volume (bbl)	Volume Section (bbl)	Section Area (ft²)	Mean Radius (ft)	Mean Diameter (ft)	Min Radius (ft)	Max Radius (ft)	Max Radius Orientation (°)	Min Diameter (ft)	Max Diameter (ft)	Max Diam. Orientation (°)
3205.00	7561770.38	11275.39	-	-	-	-	-	-	-	-	-
3206.00	7573585.14	11814.76	-	-	-	-	-	-	-	-	-
3207.00	7585946.00	12360.87	-	-	-	-	-	-	-	-	-
3208.00	7598978.89	13032.89	-	-	-	-	-	-	-	-	-
3209.00	7612724.15	13745.26	-	-	-	-	-	-	-	-	-
3210.00	**7627162.38**	**14438.23**	**80876.44**	**161.07**	**322.14**	**44.68**	**378.30**	**159.00**	**160.44**	**432.06**	**159.00**
3211.00	7642396.54	15234.15	-	-	-	-	-	-	-	-	-
3212.00	7658241.95	15845.42	-	-	-	-	-	-	-	-	-
3213.00	7674528.84	16286.88	-	-	-	-	-	-	-	-	-
3214.00	7691183.80	16654.97	-	-	-	-	-	-	-	-	-
3215.00	7708156.72	16972.92	-	-	-	-	-	-	-	-	-
3216.00	7725376.12	17219.40	-	-	-	-	-	-	-	-	-
3217.00	7742838.50	17462.38	-	-	-	-	-	-	-	-	-
3218.00	7760545.95	17707.44	-	-	-	-	-	-	-	-	-
3219.00	7778510.40	17964.45	-	-	-	-	-	-	-	-	-
3220.00	**7796729.67**	**18219.27**	**102372.04**	**180.52**	**361.03**	**42.27**	**379.59**	**156.00**	**168.66**	**432.94**	**147.00**
3221.00	7815134.70	18405.04	-	-	-	-	-	-	-	-	-
3222.00	7833698.85	18564.14	-	-	-	-	-	-	-	-	-
3223.00	7852412.95	18714.10	-	-	-	-	-	-	-	-	-
3224.00	7871268.17	18855.22	-	-	-	-	-	-	-	-	-
3225.00	7890262.04	18993.87	-	-	-	-	-	-	-	-	-
3226.00	7909394.22	19132.18	-	-	-	-	-	-	-	-	-
3227.00	7928699.47	19305.25	-	-	-	-	-	-	-	-	-
3228.00	7948201.78	19502.31	-	-	-	-	-	-	-	-	-
3229.00	7967884.90	19683.12	-	-	-	-	-	-	-	-	-
3230.00	**7987744.74**	**19859.84**	**113084.50**	**189.73**	**379.45**	**41.40**	**379.16**	**156.00**	**178.21**	**430.46**	**147.00**
3231.00	8007800.57	20055.83	-	-	-	-	-	-	-	-	-
3232.00	8028060.58	20260.01	-	-	-	-	-	-	-	-	-
3233.00	8048529.54	20468.97	-	-	-	-	-	-	-	-	-
3234.00	8069211.79	20682.25	-	-	-	-	-	-	-	-	-
3235.00	8090114.76	20902.97	-	-	-	-	-	-	-	-	-
3236.00	8111174.24	21059.47	-	-	-	-	-	-	-	-	-
3237.00	8132319.41	21145.18	-	-	-	-	-	-	-	-	-
3238.00	8153828.85	21509.44	-	-	-	-	-	-	-	-	-
3239.00	8175671.69	21842.84	-	-	-	-	-	-	-	-	-

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

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MAIN CHARACTERISTICS DATASHEET

Depth (ft)	Cumulated Volume (bbl)	Volume Section (bbl)	Section Area (ft²)	Mean Radius (ft)	Mean Diameter (ft)	Min Radius (ft)	Max Radius (ft)	Max Radius Orientation (°)	Min Diameter (ft)	Max Diameter (ft)	Max Diam. Orientation (°)
3240.00	**8197769.83**	**22098.13**	**126547.97**	**200.70**	**401.40**	**43.30**	**380.95**	**147.00**	**232.77**	**432.13**	**147.00**
3241.00	8220090.96	22321.13	-	-	-	-	-	-	-	-	-
3242.00	8242560.75	22469.78	-	-	-	-	-	-	-	-	-
3243.00	8265106.78	22546.03	-	-	-	-	-	-	-	-	-
3244.00	8287677.55	22570.77	-	-	-	-	-	-	-	-	-
3245.00	8310281.27	22603.72	-	-	-	-	-	-	-	-	-
3246.00	8333000.32	22719.05	-	-	-	-	-	-	-	-	-
3247.00	8355799.85	22799.54	-	-	-	-	-	-	-	-	-
3248.00	8378630.42	22830.57	-	-	-	-	-	-	-	-	-
3249.00	8401491.46	22861.03	-	-	-	-	-	-	-	-	-
3250.00	**8424347.71**	**22856.25**	**128419.62**	**202.18**	**404.36**	**41.40**	**380.03**	**153.00**	**247.83**	**434.22**	**147.00**
3251.00	8447107.74	22760.03	-	-	-	-	-	-	-	-	-
3252.00	8469757.70	22649.96	-	-	-	-	-	-	-	-	-
3253.00	8492302.72	22545.02	-	-	-	-	-	-	-	-	-
3254.00	8514750.47	22447.75	-	-	-	-	-	-	-	-	-
3255.00	8537305.92	22555.45	-	-	-	-	-	-	-	-	-
3256.00	8560829.60	23523.68	-	-	-	-	-	-	-	-	-
3257.00	8585617.86	24788.26	-	-	-	-	-	-	-	-	-
3258.00	8611926.81	26308.95	-	-	-	-	-	-	-	-	-
3259.00	8640015.71	28088.90	-	-	-	-	-	-	-	-	-
3260.00	**8669652.93**	**29637.22**	**166981.89**	**230.55**	**461.09**	**42.08**	**388.58**	**129.00**	**306.89**	**566.30**	**93.00**
3261.00	8699258.46	29605.53	-	-	-	-	-	-	-	-	-
3262.00	8728783.38	29524.92	-	-	-	-	-	-	-	-	-
3263.00	8758161.54	29378.16	-	-	-	-	-	-	-	-	-
3264.00	8787205.52	29043.98	-	-	-	-	-	-	-	-	-
3265.00	8815762.95	28557.43	-	-	-	-	-	-	-	-	-
3266.00	8843667.76	27904.82	-	-	-	-	-	-	-	-	-
3267.00	8871014.69	27346.92	-	-	-	-	-	-	-	-	-
3268.00	8898057.36	27042.67	-	-	-	-	-	-	-	-	-
3269.00	8925012.32	26954.96	-	-	-	-	-	-	-	-	-
3270.00	**8951943.27**	**26930.95**	**151046.67**	**219.45**	**438.89**	**0.48**	**352.09**	**126.00**	**-**	**-**	**-**
3271.00	8978887.30	26944.03	-	-	-	-	-	-	-	-	-
3272.00	9005869.22	26981.91	-	-	-	-	-	-	-	-	-
3273.00	9032716.04	26846.83	-	-	-	-	-	-	-	-	-
3274.00	9059324.77	26608.73	-	-	-	-	-	-	-	-	-

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

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MAIN CHARACTERISTICS DATASHEET

Depth (ft)	Cumulated Volume (bbl)	Volume Section (bbl)	Section Area (ft²)	Mean Radius (ft)	Mean Diameter (ft)	Min Radius (ft)	Max Radius (ft)	Max Radius Orientation (°)	Min Diameter (ft)	Max Diameter (ft)	Max Diam. Orientation (°)
3275.00	9085664.48	26339.71	-	-	-	-	-	-	-	-	-
3276.00	9111692.03	26027.55	-	-	-	-	-	-	-	-	-
3277.00	9137352.75	25660.72	-	-	-	-	-	-	-	-	-
3278.00	9162637.96	25285.22	-	-	-	-	-	-	-	-	-
3279.00	9187519.57	24881.61	-	-	-	-	-	-	-	-	-
3280.00	**9211954.06**	**24434.49**	**137726.83**	**209.40**	**418.80**	**3.97**	**333.93**	**114.00**	**-**	**-**	**-**
3281.00	9235963.58	24009.53	-	-	-	-	-	-	-	-	-
3282.00	9259611.50	23647.92	-	-	-	-	-	-	-	-	-
3283.00	9282970.37	23358.86	-	-	-	-	-	-	-	-	-
3284.00	9306051.63	23081.26	-	-	-	-	-	-	-	-	-
3285.00	9328838.95	22787.33	-	-	-	-	-	-	-	-	-
3286.00	9351403.59	22564.64	-	-	-	-	-	-	-	-	-
3287.00	9373756.95	22353.36	-	-	-	-	-	-	-	-	-
3288.00	9395913.37	22156.42	-	-	-	-	-	-	-	-	-
3289.00	9417853.62	21940.24	-	-	-	-	-	-	-	-	-
3290.00	**9439565.13**	**21711.51**	**122395.46**	**197.38**	**394.76**	**26.37**	**327.62**	**114.00**	**-**	**-**	**-**
3291.00	9461041.92	21476.79	-	-	-	-	-	-	-	-	-
3292.00	9482261.03	21219.11	-	-	-	-	-	-	-	-	-
3293.00	9503179.36	20918.34	-	-	-	-	-	-	-	-	-
3294.00	9523764.72	20585.36	-	-	-	-	-	-	-	-	-
3295.00	9543938.41	20173.69	-	-	-	-	-	-	-	-	-
3296.00	9563670.63	19732.22	-	-	-	-	-	-	-	-	-
3297.00	9582952.49	19281.86	-	-	-	-	-	-	-	-	-
3298.00	9601774.30	18821.82	-	-	-	-	-	-	-	-	-
3299.00	9620109.19	18334.89	-	-	-	-	-	-	-	-	-
3300.00	**9637975.50**	**17866.30**	**101025.00**	**179.56**	**359.13**	**48.34**	**308.49**	**114.00**	**-**	**-**	**-**
3301.00	9655353.95	17378.45	-	-	-	-	-	-	-	-	-
3302.00	9672216.87	16862.92	-	-	-	-	-	-	-	-	-
3303.00	9688497.14	16280.27	-	-	-	-	-	-	-	-	-
3304.00	9704129.70	15632.56	-	-	-	-	-	-	-	-	-
3305.00	9719096.34	14966.64	-	-	-	-	-	-	-	-	-
3306.00	9733364.48	14268.13	-	-	-	-	-	-	-	-	-
3307.00	9746902.38	13537.90	-	-	-	-	-	-	-	-	-
3308.00	9759686.62	12784.24	-	-	-	-	-	-	-	-	-
3309.00	9771685.55	11998.93	-	-	-	-	-	-	-	-	-

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

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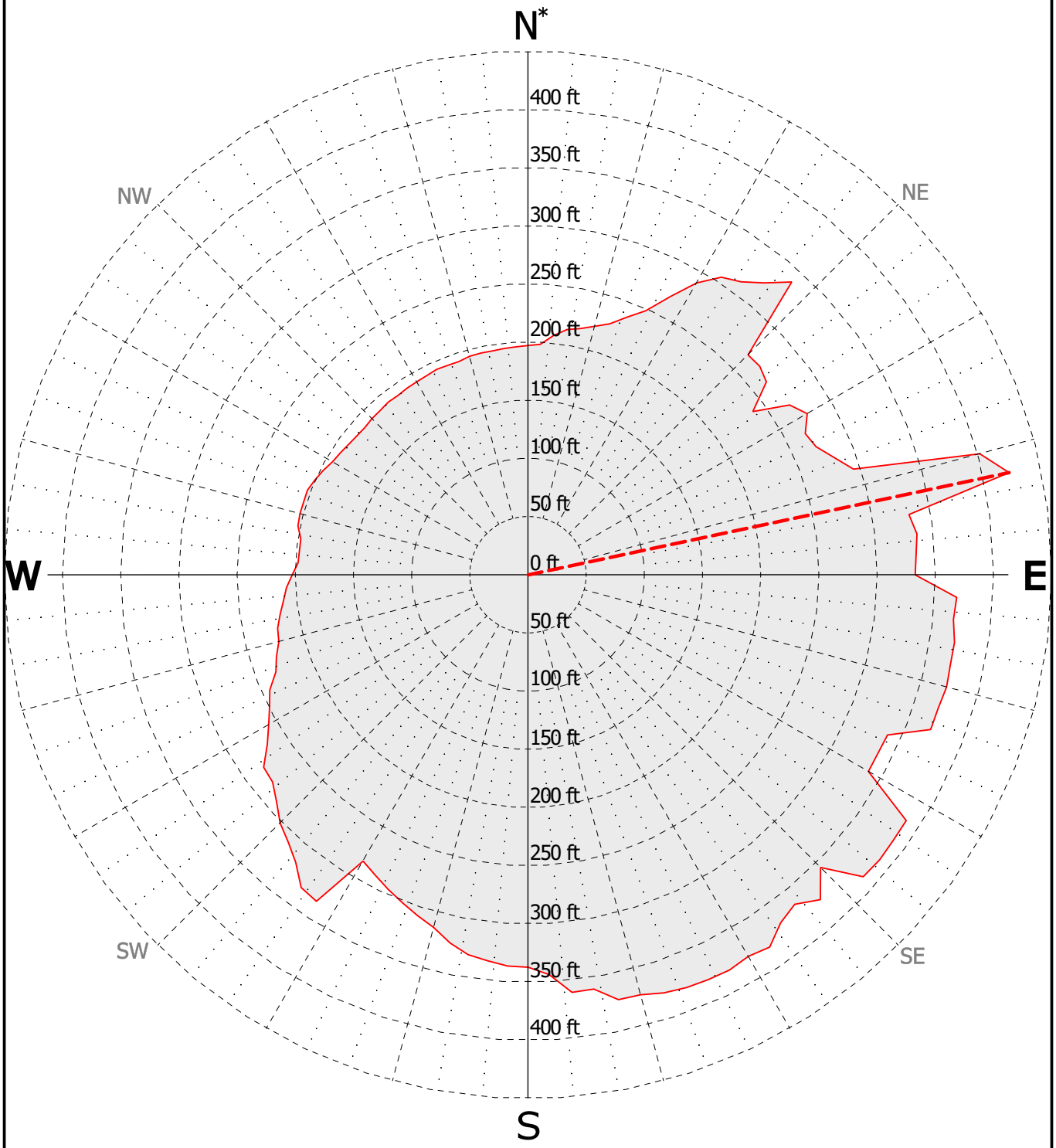
MAIN CHARACTERISTICS DATASHEET

Depth (ft)	Cumulated Volume (bbl)	Volume Section (bbl)	Section Area (ft²)	Mean Radius (ft)	Mean Diameter (ft)	Min Radius (ft)	Max Radius (ft)	Max Radius Orientation (°)	Min Diameter (ft)	Max Diameter (ft)	Max Diam. Orientation (°)
3310.00	**9782840.97**	**11155.43**	**64008.96**	**142.77**	**285.55**	**74.57**	**291.45**	**120.00**	**-**	**-**	**-**
3311.00	9793105.48	10264.51	-	-	-	-	-	-	-	-	-
3312.00	9802429.59	9324.11	-	-	-	-	-	-	-	-	-
3313.00	9810772.26	8342.67	-	-	-	-	-	-	-	-	-
3314.00	9818085.74	7313.48	-	-	-	-	-	-	-	-	-
3315.00	9824406.30	6320.56	-	-	-	-	-	-	-	-	-
3316.00	9829782.08	5375.78	-	-	-	-	-	-	-	-	-
3317.00	9834217.73	4435.66	-	-	-	-	-	-	-	-	-
3318.00	9837807.40	3589.67	-	-	-	-	-	-	-	-	-
3319.00	9840622.69	2815.28	-	-	-	-	-	-	-	-	-
3320.00	**9842662.20**	**2039.52**	**11204.84**	**59.72**	**119.44**	**126.77**	**266.34**	**114.00**	**-**	**-**	**-**
3321.00	9843905.56	1243.36	-	-	-	-	-	-	-	-	-
3322.00	9844578.74	673.18	-	-	-	-	-	-	-	-	-
3323.00	9844888.63	309.89	-	-	-	-	-	-	-	-	-
3324.00	9844959.81	71.18	-	-	-	-	-	-	-	-	-
3325.00	9844972.21	12.40	-	-	-	-	-	-	-	-	-
3326.00	9844973.37	1.16	-	-	-	-	-	-	-	-	-
3327.00	9844973.37	0.00	-	-	-	-	-	-	-	-	-

SONIC SURVEYS	CUSTOMER : WESTLAKE CHEMICAL DATE : December 13, 2021	CAVERN : PPG No. 006X OPERATION No. : 1

MAXIMUM EXTENSION

SCALE 1/5000



Operation No. 1 (12/21)

Maximum radius	:	422.51 ft
Orientation maxi. radius*	:	N78
Depth maxi. radius (MD)	:	3089.99 ft
Surface	:	262371.77 ft²
Max distance between points	:	705.07 ft

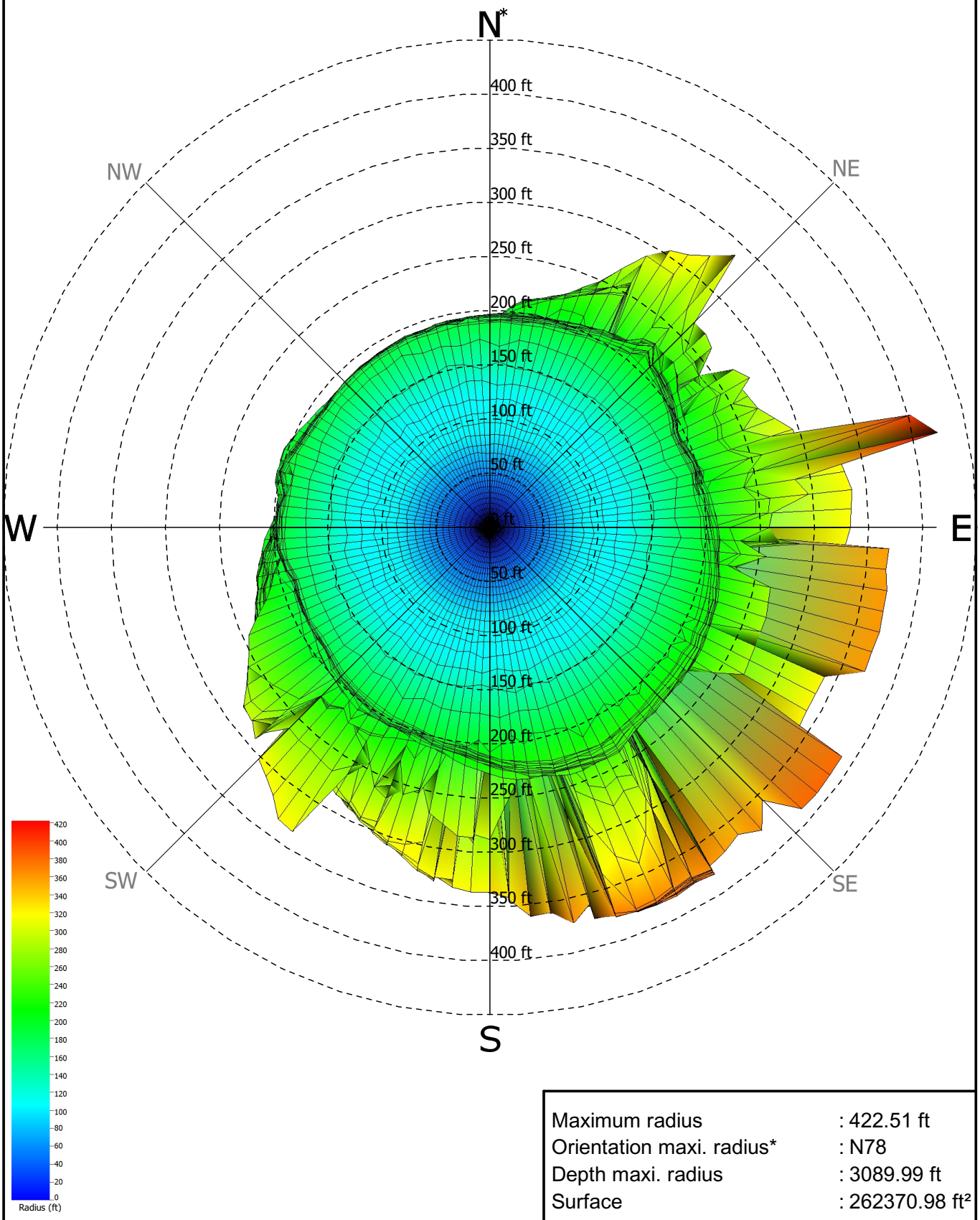
*All sections are oriented to Magnetic North.

Magnetic Declination= 0.8°

SONIC SURVEYS	CUSTOMER :WESTLAKE CHEMICAL DATE :December 13, 2021	CAVERN :PPG No. 006X OPERATION No. :1

VIEW FROM ABOVE

SCALE 1/5000



*All sections are oriented to Magnetic North.

Magnetic Declination= 0.8°

Maximum radius	: 422.51 ft
Orientation maxi. radius*	: N78
Depth maxi. radius	: 3089.99 ft
Surface	: 262370.98 ft²
Max distance between points	: 705.07 ft

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGE VS BEARING

Bearing	0.0	3.0	6.0	9.0
0	197.0: 2689.99	198.3: 2700	206.6: 3075	212.0: 3075
12	216.3: 3079.99	221.0: 3077.99	226.7: 3079.99	237.1: 3084.97
24	249.9: 3077.99	267.9: 3079.99	289.5: 3079.99	303.4: 3084.97
36	310.7: 3084.97	322.7: 3084.97	338.5: 3084.97	267.2: 3084.97
48	267.8: 3089.99	263.4: 3089.99	238.6: 3084.97	267.9: 3089.99
60	276.9: 3089.99	251.9: 3089.99	270.2: 3089.99	250.3: 3089.99
72	272.0: 3089.99	401.8: 3089.99	422.5: 3089.99	285.1: 3089.99
84	295.6: 3089.99	261.0: 3089.99	257.7: 3089.99	368.8: 3259.97
96	367.5: 3259.97	370.9: 3259.97	370.9: 3259.97	372.2: 3259.97
108	370.5: 3259.97	370.5: 3259.97	222.6: 2700	223.7: 2689.99
120	225.4: 2689.99	387.4: 3259.97	387.8: 3259.97	388.7: 3259.97
132	387.4: 3259.97	355.3: 3259.97	375.3: 3259.97	364.0: 3259.97
144	369.2: 3259.97	380.5: 3234.97	378.3: 3244.98	380.9: 3244.98
156	380.5: 3244.98	379.6: 3250	377.4: 3203.97	361.4: 3250
168	360.5: 3239.99	371.4: 3254.99	351.7: 3239.99	341.5: 3239.99
180	327.8: 3250	324.6: 3250	329.3: 3250	330.2: 3225
192	322.0: 3229.99	317.2: 3259.97	307.7: 3259.97	301.6: 3259.97
204	293.4: 3225	289.5: 3219.98	282.1: 3219.98	334.2: 3084.97
216	331.9: 3084.97	317.6: 3084.97	308.4: 3084.97	301.5: 3084.97
228	284.1: 3079.99	281.4: 3079.99	281.0: 3079.99	264.9: 3079.99
240	256.0: 3079.99	247.7: 3077.99	237.9: 3079.99	232.3: 3259.97
252	227.5: 3250	221.9: 3254.99	220.2: 3250	215.8: 3259.97
264	211.5: 3254.99	208.0: 3250	202.8: 3250	198.1: 3250
276	197.7: 2709.97	197.9: 2689.99	202.3: 2700	203.1: 2689.99
288	202.9: 2719.98	203.2: 2719.98	200.6: 2729.99	197.7: 2709.97
300	194.2: 2709.97	192.5: 2709.97	190.7: 2709.97	189.6: 2700
312	189.0: 2700	189.9: 2700	190.1: 2689.99	191.0: 2700
324	190.4: 2700	191.2: 2689.99	191.5: 2689.99	192.1: 2679.99
336	193.2: 2679.99	192.8: 2700	192.7: 2689.99	194.4: 2679.99
348	194.8: 2700	194.8: 2700	195.6: 2689.99	209.5: 2650

SONIC

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

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

DEPTH	TILT	N	NE	E	SE	S	SW	W	NW
2505.0	0	0.67	0.67	0.76	0.89	0.69	0.69	0.67	0.67
2510.0	0	0.63	0.70	0.78	0.74	0.65	0.67	0.50	0.65
2520.0	0	0.75	0.62	0.65	0.61	0.61	0.73	0.88	0.76
2530.0	0	0.71	0.63	0.53	0.52	0.61	0.69	0.78	0.69
2540.0	0	0.71	0.56	0.53	0.53	0.55	0.61	0.75	0.76
2550.0	0	0.65	0.67	0.65	0.62	0.67	0.67	0.59	0.69
2560.0	0	0.61	0.64	0.73	0.63	0.65	0.71	0.73	0.67
2570.0	0	0.63	0.68	0.67	0.65	0.76	0.67	0.67	0.64
2580.0	0	0.61	0.57	0.65	0.74	0.73	0.67	0.65	0.57
2590.0	0	0.63	0.57	0.59	0.73	0.69	0.69	0.63	0.63
2600.0	0	0.56	0.58	0.56	0.56	0.56	0.57	0.63	0.56
2610.0	0	0.61	0.59	0.61	0.70	0.71	0.63	0.61	0.61
2620.0	0	0.57	0.57	0.73	0.72	0.69	0.67	0.67	0.67
2630.0	0	0.49	0.40	0.43	0.47	0.47	0.57	0.49	0.49
2635.0	0	3.12	6.18	6.35	4.64	6.35	7.23	6.35	3.18
2640.0	0	190.14	209.03	197.89	215.33	211.94	191.84	191.60	186.51
2650.0	0	194.99	209.27	200.56	218.23	213.39	193.53	192.32	187.72
2660.0	0	194.69	211.78	203.38	221.04	215.25	194.40	194.69	189.76
2670.0	0	195.56	212.06	205.69	222.78	216.41	194.40	196.71	189.47
2680.0	0	196.42	212.64	209.46	224.81	216.99	195.85	197.87	189.47
2690.0	0	197.00	220.46	210.91	226.26	219.02	195.85	197.58	189.76
2700.0	0	196.82	226.67	209.86	224.93	220.01	197.69	197.69	189.87
2710.0	0	195.37	225.80	207.84	226.09	226.96	200.30	196.53	188.71
2720.0	0	194.21	223.48	207.84	226.38	227.25	200.59	195.95	188.71
2720.0	15	200.22	219.39	210.93	229.01	222.10	200.79	202.30	195.34
2720.0	18	201.99	221.64	210.93	229.01	223.71	203.36	203.58	196.31
2720.0	21	204.24	220.36	211.59	229.33	225.31	204.00	204.40	199.83
2720.0	24	206.97	223.56	213.06	217.15	226.81	207.53	206.49	201.44
2720.0	27	191.38	190.53	194.68	190.21	194.31	187.97	190.11	196.38
2720.0	30	172.80	177.39	173.67	173.54	169.80	170.97	169.66	170.01
2720.0	33	159.23	155.58	158.91	158.15	157.48	158.79	157.82	162.96
2720.0	36	145.89	149.06	145.05	146.64	147.22	146.64	146.26	144.70
2720.0	39	136.95	135.49	136.45	135.73	135.38	136.95	136.33	135.98
2720.0	42	130.30	128.22	127.99	126.29	129.46	129.68	127.75	125.32
2720.0	45	121.02	120.31	121.54	121.38	121.74	119.42	121.02	120.31
2720.0	48	114.79	115.50	114.62	115.50	115.34	114.07	113.91	115.85
2720.0	51	109.02	111.58	109.56	109.44	109.56	109.26	109.55	108.91
2720.0	54	104.76	104.81	104.40	105.16	105.20	105.16	104.85	105.16
2720.0	57	101.02	100.18	101.02	100.00	100.49	101.96	101.65	101.07
2720.0	60	96.58	97.50	97.47	97.68	98.09	97.86	97.56	98.04
2720.0	63	95.43	95.19	95.42	94.47	93.82	94.65	94.98	95.72
2720.0	66	92.49	93.05	92.67	91.45	92.49	91.98	92.40	91.62
2720.0	69	90.72	90.73	90.62	90.02	90.27	90.02	90.54	90.38

SONIC

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

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

DEPTH	TILT	N	NE	E	SE	S	SW	W	NW
2720.0	72	88.16	88.95	87.84	87.92	88.10	88.05	88.42	88.05
2720.0	75	86.95	87.15	87.27	86.89	86.69	86.64	86.82	86.51
2720.0	78	85.48	85.60	85.74	85.28	85.48	85.35	85.23	85.73
2720.0	81	84.58	84.84	84.84	84.71	84.84	84.45	84.58	84.58
2720.0	84	84.71	84.33	84.07	84.26	84.07	84.20	84.20	84.20
2720.0	87	84.07	83.81	84.97	83.75	83.81	83.94	83.81	83.75
2720.0	89	85.23	84.84	85.10	83.56	84.97	84.84	85.35	83.62
2730.0	0	193.64	224.35	206.97	225.22	225.51	198.56	195.08	188.13
2740.0	0	193.64	220.88	206.97	225.51	226.67	200.88	195.95	187.84
2750.0	0	193.06	223.48	206.68	225.22	225.51	200.30	195.95	187.26
2760.0	0	192.58	220.13	206.79	224.19	227.09	197.51	195.77	187.07
2770.0	0	192.58	220.13	205.92	224.77	225.64	198.38	195.48	186.78
2780.0	0	192.58	217.52	205.92	223.32	223.61	196.35	195.19	186.49
2790.0	0	192.00	220.42	205.63	223.32	225.06	196.64	194.90	186.20
2800.0	0	192.29	219.26	205.34	223.32	224.48	196.64	194.61	186.20
2810.0	0	191.90	219.72	204.94	221.75	222.03	196.24	195.08	185.81
2820.0	0	191.03	219.43	204.65	222.61	223.77	195.37	194.21	186.39
2830.0	0	192.58	214.07	203.02	223.03	221.00	196.06	194.03	180.69
2840.0	0	174.32	198.48	202.73	221.87	222.45	196.35	172.29	163.30
2850.0	0	159.82	177.80	204.76	221.29	211.72	178.95	154.02	144.25
2855.0	0	148.80	160.69	191.74	221.29	197.80	163.01	149.67	134.30
2860.0	0	140.10	158.37	181.56	207.08	194.32	158.37	139.52	125.89
2865.0	0	129.95	148.51	167.29	197.80	181.46	145.61	131.98	115.46
2870.0	0	115.46	135.46	158.08	189.68	176.93	135.46	122.12	107.92
2875.0	0	104.15	116.33	135.46	174.61	152.86	115.46	99.51	95.45
2885.0	0	96.90	103.28	126.18	162.72	144.45	105.89	91.68	84.72
2890.0	0	87.91	95.74	117.78	157.50	131.69	92.55	82.11	75.73
2895.0	0	79.50	87.04	101.25	121.54	120.96	88.49	71.67	68.19
2900.0	0	69.35	78.63	94.87	118.36	116.91	77.76	57.47	59.21
2905.0	0	60.08	69.06	82.40	116.62	109.66	53.41	51.96	53.12
2910.0	0	52.54	57.18	69.64	124.73	81.82	53.12	43.84	37.46
2915.0	0	45.29	50.80	59.50	124.44	81.24	47.90	36.01	33.11
2920.0	0	36.59	38.33	53.99	112.56	82.11	41.81	31.66	32.24
2925.0	0	28.18	34.27	35.43	101.54	64.71	33.40	26.15	24.12
2930.0	0	22.96	28.18	29.92	93.42	27.31	26.73	20.64	18.03
2932.0	0	21.87	26.72	27.21	91.07	25.91	25.91	18.80	16.86
2935.0	0	20.26	20.74	23.97	26.08	24.94	22.84	17.67	15.57
2940.0	0	18.17	17.84	22.05	25.60	18.81	21.72	17.52	14.61
2950.0	0	18.65	16.39	21.72	25.93	16.71	21.08	16.71	13.48
2960.0	0	19.30	16.39	22.05	23.66	15.09	21.56	18.17	14.61
2970.0	0	21.24	16.55	20.59	22.21	14.77	22.37	17.52	14.77
2975.0	0	21.24	20.75	72.82	147.04	136.85	23.02	72.66	73.13
2980.0	0	67.81	78.48	112.11	143.16	129.74	74.28	68.29	71.53

SONIC

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

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

DEPTH	TILT	N	NE	E	SE	S	SW	W	NW
2985.0	0	67.65	77.81	108.56	138.73	130.32	74.90	67.94	71.71
2990.0	0	67.65	76.93	108.56	136.41	129.74	75.19	67.07	72.29
2995.0	0	66.78	76.93	107.69	137.86	129.44	75.48	67.94	72.58
3000.0	0	65.86	77.46	107.05	137.80	129.10	76.59	69.34	72.53
3010.0	0	65.62	77.23	107.11	137.28	127.99	76.93	70.84	72.00
3020.0	0	66.20	74.61	105.66	136.12	127.41	73.74	69.10	72.87
3020.0	3	65.14	73.88	105.73	134.84	127.83	75.79	69.23	71.63
3020.0	6	65.14	74.71	106.69	136.03	127.83	77.10	68.99	72.23
3020.0	9	66.34	75.89	107.89	137.12	128.55	79.49	69.95	72.00
3020.0	12	67.30	77.09	109.09	137.73	129.99	79.88	71.15	72.49
3020.0	15	67.78	77.91	111.02	140.12	134.31	80.69	71.63	72.49
3020.0	18	68.75	78.72	112.94	147.20	139.12	81.54	72.59	75.00
3020.0	21	70.91	80.89	116.30	137.27	142.72	81.80	74.03	75.60
3020.0	24	72.11	82.69	116.30	120.95	121.34	83.46	76.19	76.69
3020.0	27	73.79	85.82	105.25	113.15	106.69	83.80	77.87	79.71
3020.0	30	76.67	88.10	92.52	105.74	99.73	85.50	79.55	81.03
3020.0	33	78.35	89.19	85.32	100.35	92.76	90.15	82.92	83.19
3020.0	36	84.36	81.75	81.95	99.84	87.96	83.20	84.84	85.48
3020.0	39	77.39	76.37	78.11	102.59	83.40	76.73	78.35	78.28
3020.0	42	73.07	69.53	72.35	107.27	77.39	71.67	73.79	74.09
3020.0	45	68.99	66.42	68.26	112.47	73.31	68.70	68.99	67.50
3020.0	48	64.89	63.38	65.57	134.56	70.54	64.74	65.34	64.40
3020.0	51	60.09	59.73	61.37	113.14	65.87	59.57	62.01	62.14
3020.0	54	56.88	56.36	58.48	55.38	62.98	58.45	57.52	57.97
3020.0	57	54.31	53.64	56.56	56.37	60.09	55.08	55.91	55.89
3020.0	60	53.02	51.72	54.63	55.89	58.48	52.85	53.67	53.33
3020.0	63	51.74	50.76	53.35	55.42	54.31	51.40	52.38	51.89
3020.0	66	49.17	49.48	50.46	52.85	52.70	50.28	49.81	50.44
3020.0	69	53.99	49.32	54.63	56.31	50.78	51.36	49.17	49.16
3030.0	0	65.62	73.16	106.53	134.96	128.28	72.87	67.07	73.45
3040.0	0	64.75	72.87	105.37	131.48	126.54	73.16	69.10	72.00
3050.0	0	65.62	71.71	103.92	130.32	124.51	75.48	67.65	72.58
3060.0	0	64.46	71.71	104.50	129.15	124.80	76.35	68.81	71.71
3070.0	0	67.40	72.33	103.68	124.29	117.03	76.98	70.88	74.36
3072.0	0	68.56	73.49	103.97	123.13	114.42	77.56	72.33	75.53
3074.0	0	68.27	168.99	104.84	120.52	112.10	78.14	74.66	76.40
3075.0	0	188.28	168.04	104.77	119.54	108.62	80.03	181.86	160.33
3076.0	0	189.24	168.36	104.77	116.97	108.30	80.88	180.57	161.30
3078.0	0	189.56	178.96	172.54	114.40	107.98	219.44	180.25	160.66
3080.0	0	190.08	200.71	173.50	118.00	105.67	220.53	180.06	160.78
3085.0	0	180.44	267.17	202.03	113.76	106.05	301.47	171.19	149.99
3090.0	0	171.15	237.93	257.66	109.15	107.23	216.33	165.87	148.08
3095.0	0	163.49	148.88	200.71	112.60	217.67	156.16	137.10	134.75

SONIC

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

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

DEPTH	TILT	N	NE	E	SE	S	SW	W	NW
3100.0	0	125.71	145.37	198.17	211.28	183.14	126.09	116.84	116.07
3110.0	0	114.92	124.55	183.91	206.65	174.66	109.14	114.53	104.90
3110.0	3	116.07	129.82	184.43	206.38	182.18	114.47	113.83	113.44
3110.0	6	124.13	143.46	202.00	216.27	289.02	126.30	116.64	117.26
3110.0	9	178.26	226.95	207.41	113.70	161.85	230.34	177.43	146.61
3110.0	12	189.92	186.13	182.43	112.65	134.87	190.46	184.51	162.39
3110.0	15	174.52	170.32	149.12	115.66	109.98	162.72	151.61	159.16
3110.0	18	140.79	141.20	125.38	122.11	110.81	126.89	126.22	126.84
3110.0	21	122.47	115.25	111.23	137.86	134.13	106.93	112.06	111.50
3110.0	24	104.15	103.17	111.23	141.04	137.87	89.84	99.15	100.08
3110.0	27	95.82	93.21	113.73	144.99	138.29	86.36	87.49	84.49
3110.0	30	77.92	83.04	118.72	151.22	142.45	87.80	81.66	84.08
3110.0	33	77.92	84.91	120.80	155.62	154.11	91.30	82.08	84.50
3110.0	36	78.33	86.79	124.97	162.91	155.36	93.95	82.91	86.79
3120.0	0	111.06	112.60	160.40	189.31	165.80	98.73	105.28	93.72
3130.0	0	95.65	97.57	154.23	185.07	150.38	86.01	93.72	87.17
3140.0	0	87.60	86.44	148.53	172.44	143.52	78.73	88.37	75.64
3150.0	0	80.66	77.57	131.56	170.90	135.81	71.40	77.19	66.77
3160.0	0	75.26	67.16	128.86	168.20	136.96	73.33	73.72	64.85
3170.0	0	67.55	57.13	124.24	164.73	137.35	74.49	63.69	62.92
3180.0	0	65.62	57.26	123.46	161.39	133.43	73.97	64.33	57.90
3190.0	0	61.44	58.55	122.82	162.67	131.50	71.08	60.80	53.73
3200.0	0	52.76	59.19	127.96	169.74	129.25	72.69	57.26	57.26
3202.0	0	52.48	60.28	122.67	171.20	128.74	72.41	57.25	54.21
3204.0	0	54.21	62.01	133.50	170.76	131.34	71.98	57.68	55.95
3206.0	0	53.78	63.31	133.50	172.50	130.90	71.54	57.68	55.51
3208.0	0	52.05	65.48	132.63	173.80	130.90	71.11	56.81	55.51
3210.0	0	52.05	65.48	133.50	175.09	129.17	71.98	57.68	55.95
3215.0	0	52.91	68.08	137.83	174.66	131.77	70.24	58.11	55.08
3220.0	0	50.31	68.51	140.00	173.36	132.20	259.15	59.41	54.21
3225.0	0	49.88	66.35	144.33	172.93	133.07	259.58	74.58	55.08
3230.0	0	45.55	68.94	143.90	175.09	138.70	260.88	198.92	56.38
3235.0	0	47.71	65.05	143.90	173.36	164.26	258.71	196.76	57.25
3240.0	0	49.88	69.38	143.47	173.80	169.90	259.58	197.62	63.75
3245.0	0	46.85	69.38	143.90	172.06	162.96	259.58	201.09	67.21
3250.0	0	45.55	66.35	143.03	170.76	327.82	259.15	202.82	91.91
3255.0	-90	14.62	14.62	14.62	14.62	14.62	14.62	14.70	14.70
3255.0	-87	14.85	14.70	14.65	14.99	14.56	14.56	14.56	14.56
3255.0	-84	14.46	14.65	15.04	15.33	15.23	14.90	14.46	14.08
3255.0	-81	13.98	24.49	15.14	15.76	15.91	15.28	14.37	13.83
3255.0	-78	25.84	25.07	24.68	15.95	16.20	15.81	14.46	13.06
3255.0	-75	23.04	26.17	25.74	17.16	17.26	16.10	14.56	12.63
3255.0	-72	21.40	27.13	25.94	17.59	17.55	16.34	13.88	12.48

SONIC

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

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

DEPTH	TILT	N	NE	E	SE	S	SW	W	NW
3255.0	-69	21.79	28.39	27.86	18.56	18.61	16.87	13.88	12.58
3255.0	-66	25.07	29.72	27.67	19.42	19.67	17.58	13.98	12.82
3255.0	-63	25.74	31.28	27.28	20.72	20.83	18.31	14.08	12.67
3255.0	-60	26.03	32.40	28.06	26.99	22.37	19.99	14.46	12.87
3255.0	-57	25.45	36.37	36.44	27.65	24.20	20.96	14.94	12.82
3255.0	-54	25.36	39.93	37.89	28.57	25.26	22.47	15.62	13.05
3255.0	-51	25.74	42.35	38.76	29.73	25.65	23.46	16.20	13.30
3255.0	-48	25.65	44.61	53.90	29.58	26.71	25.72	16.78	13.87
3255.0	-45	33.55	48.77	56.79	30.49	28.44	27.02	17.93	14.45
3255.0	-42	35.48	65.46	63.83	34.73	28.54	29.33	19.28	19.33
3255.0	-39	47.05	71.86	76.46	41.95	27.38	33.50	20.44	32.95
3255.0	-36	56.26	74.92	79.10	45.22	26.69	39.40	22.60	37.28
3255.0	-33	60.59	82.61	81.51	48.18	26.21	45.75	25.97	43.45
3255.0	-30	77.18	97.74	121.90	62.92	31.74	47.26	27.89	60.47
3255.0	-27	138.01	113.29	127.67	84.77	33.18	48.05	28.13	124.15
3255.0	-24	151.72	149.55	147.87	80.61	35.34	47.85	28.13	139.73
3255.0	-21	167.35	168.68	157.49	173.93	37.27	47.23	28.85	150.93
3255.0	-18	175.47	181.10	177.08	199.44	43.71	47.83	30.21	161.42
3255.0	-15	183.19	194.79	257.31	217.44	183.83	50.86	34.71	166.57
3255.0	-12	190.13	208.38	272.85	285.46	187.04	72.35	35.35	180.69
3255.0	-9	43.33	219.36	299.95	300.38	255.79	73.21	198.30	183.68
3255.0	-6	44.99	60.95	323.70	308.44	282.04	73.01	202.88	177.77
3255.0	-3	44.58	62.97	332.86	326.35	294.54	226.69	202.47	173.88
3255.0	0	48.58	66.78	136.97	169.03	319.81	259.58	202.39	175.53
3255.0	1	41.65	61.58	138.27	170.33	321.97	259.58	201.96	173.36
3255.0	2	45.12	63.75	138.70	170.33	337.14	257.85	201.96	175.96
3255.0	3	44.68	63.75	139.13	170.76	336.70	259.58	201.96	174.23
3255.0	4	44.68	65.05	139.13	170.76	164.26	260.45	200.22	91.47
3255.0	6	43.82	65.05	139.57	174.66	166.86	260.45	200.22	90.61
3255.0	8	45.55	65.05	140.43	175.09	171.20	263.05	200.66	88.01
3255.0	10	44.68	70.24	141.73	175.53	148.29	261.31	198.92	84.54
3255.0	12	46.85	66.35	142.60	175.53	140.00	261.31	197.62	65.05
3255.0	15	46.42	67.21	144.33	179.43	136.10	187.48	160.36	62.01
3255.0	18	47.71	67.65	140.87	178.13	136.53	145.20	118.34	60.71
3255.0	21	49.87	68.83	139.86	175.21	141.46	133.11	86.83	59.51
3255.0	24	51.48	70.44	134.07	174.89	139.86	111.90	82.01	59.83
3255.0	27	55.01	75.26	131.50	179.38	149.18	91.97	76.22	60.15
3255.0	30	55.01	76.22	129.89	188.06	153.35	83.29	71.72	62.72
3255.0	33	58.55	80.40	132.78	202.85	163.32	84.58	69.47	63.37
3255.0	36	61.44	79.11	139.21	252.02	168.46	88.43	70.76	64.01
3255.0	39	61.44	78.79	158.50	269.05	170.71	90.36	72.04	64.97
3255.0	42	66.71	77.54	260.85	252.52	255.85	95.04	76.71	72.96
3260.0	0	42.52	60.71	145.63	355.33	305.94	247.85	202.82	176.39

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

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

DEPTH	TILT	N	NE	E	SE	S	SW	W	NW
3265.0	9	45.05	65.66	139.53	174.38	170.13	262.44	198.92	118.79
3265.0	12	46.40	66.86	142.23	176.41	164.99	263.10	200.27	89.66
3265.0	15	43.25	68.12	144.03	177.77	144.93	262.85	198.47	80.31
3265.0	18	46.40	69.97	148.08	180.70	138.18	198.90	178.23	75.32

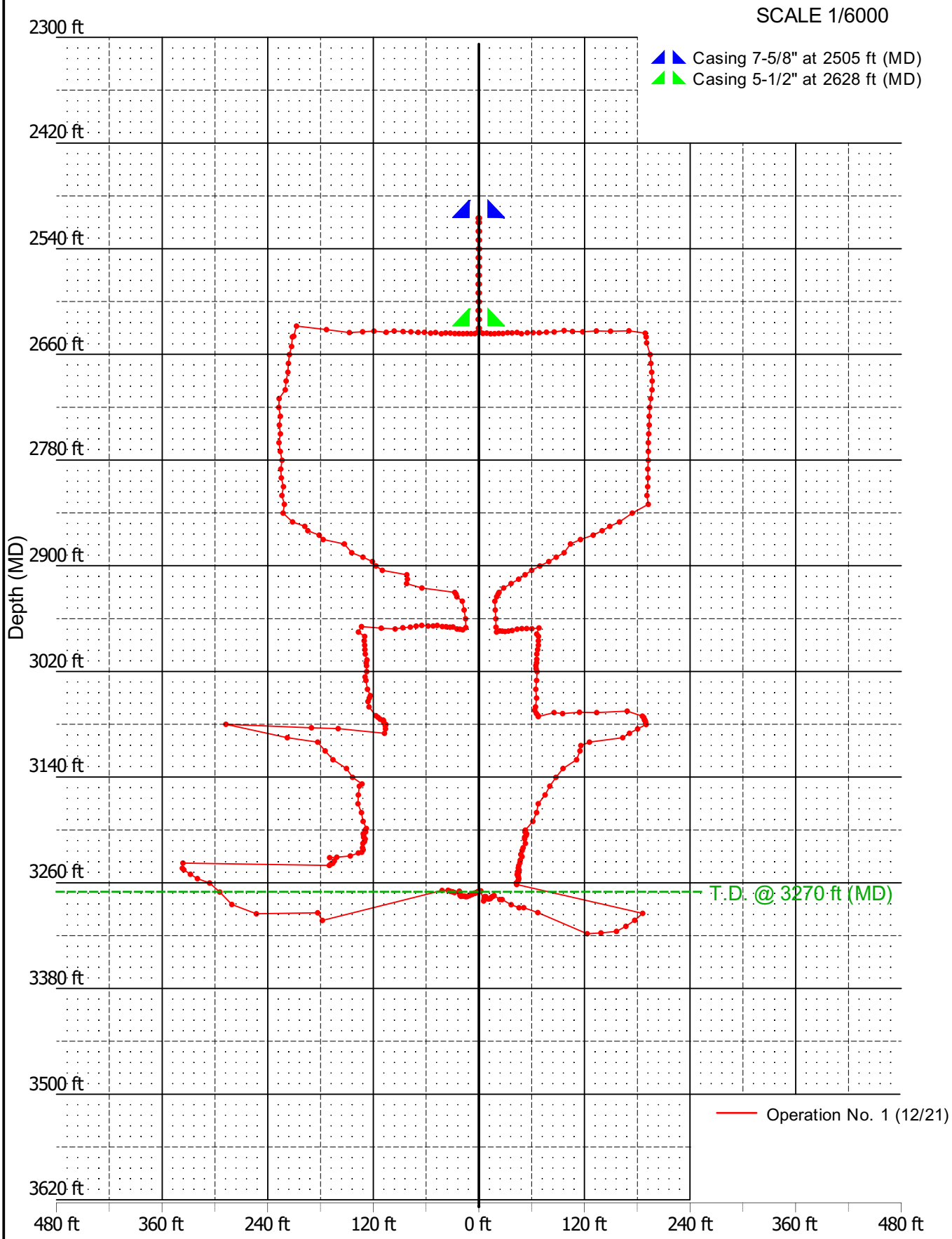
SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

VERTICAL SECTION

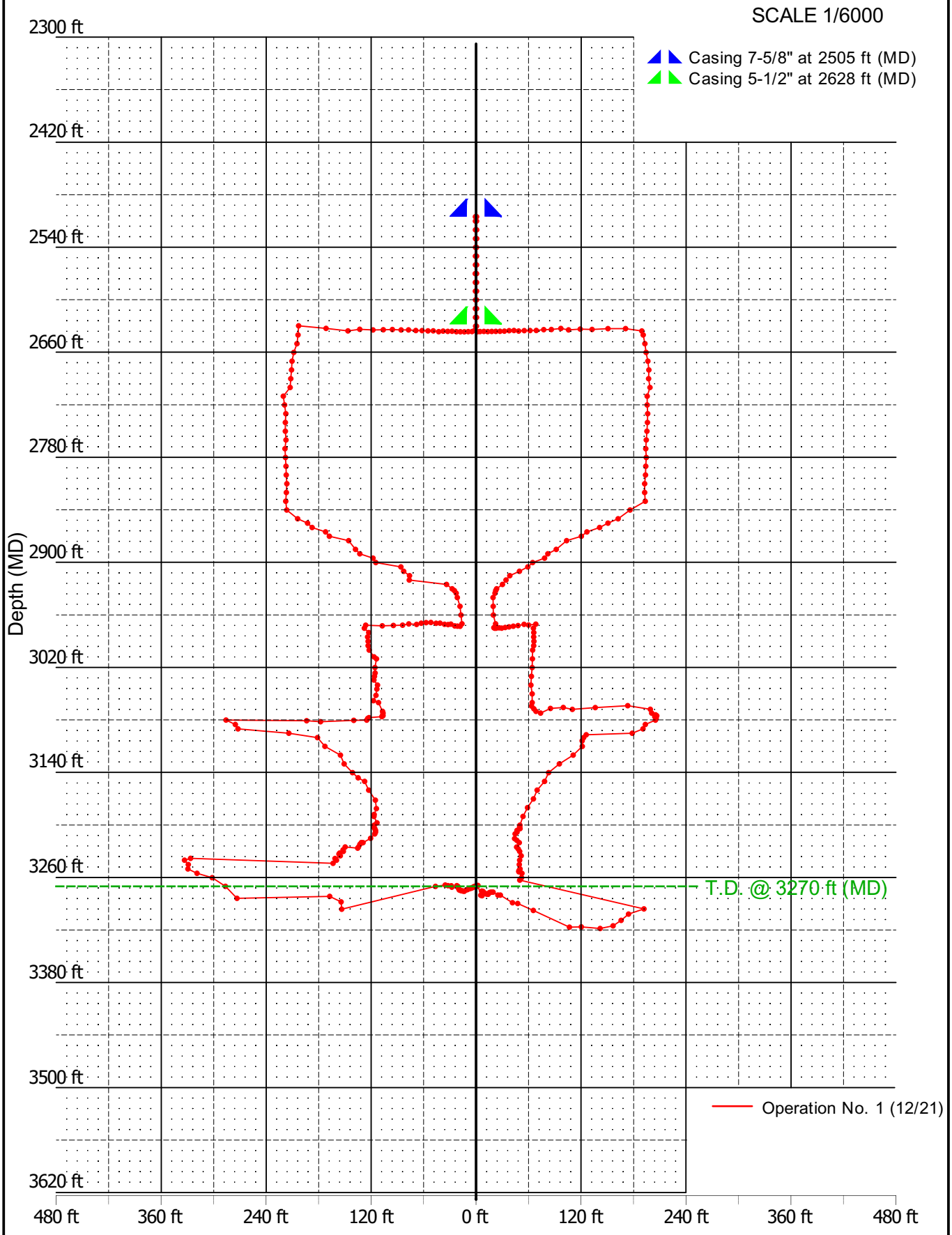
N180 ← 1 → N0



SONIC SURVEYS	CUSTOMER : WESTLAKE CHEMICAL DATE : December 13, 2021	CAVERN : PPG No. 006X OPERATION No. : 1

VERTICAL SECTION

N186 ← **2** → N6



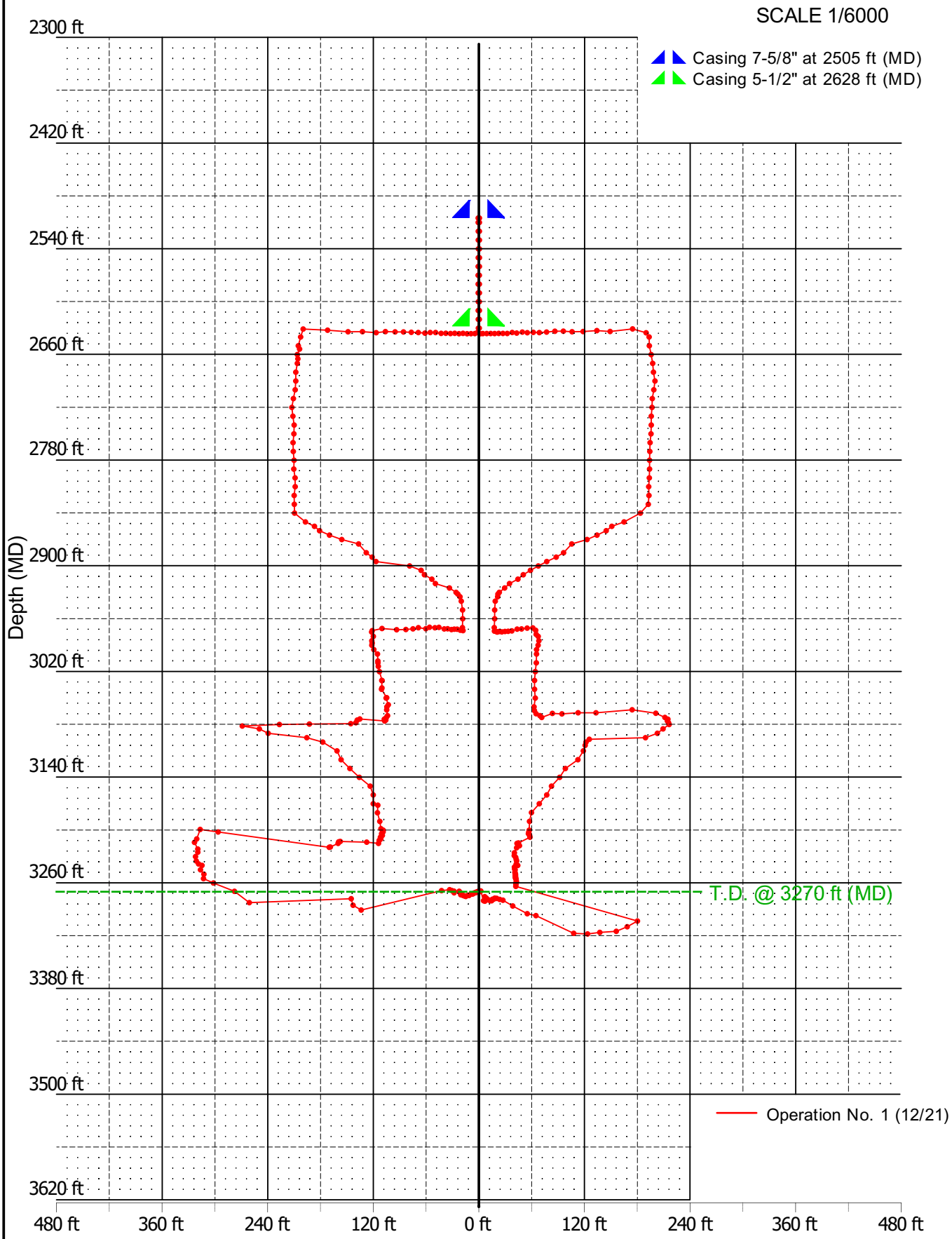
SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

VERTICAL SECTION

N192 ← 3 → N12



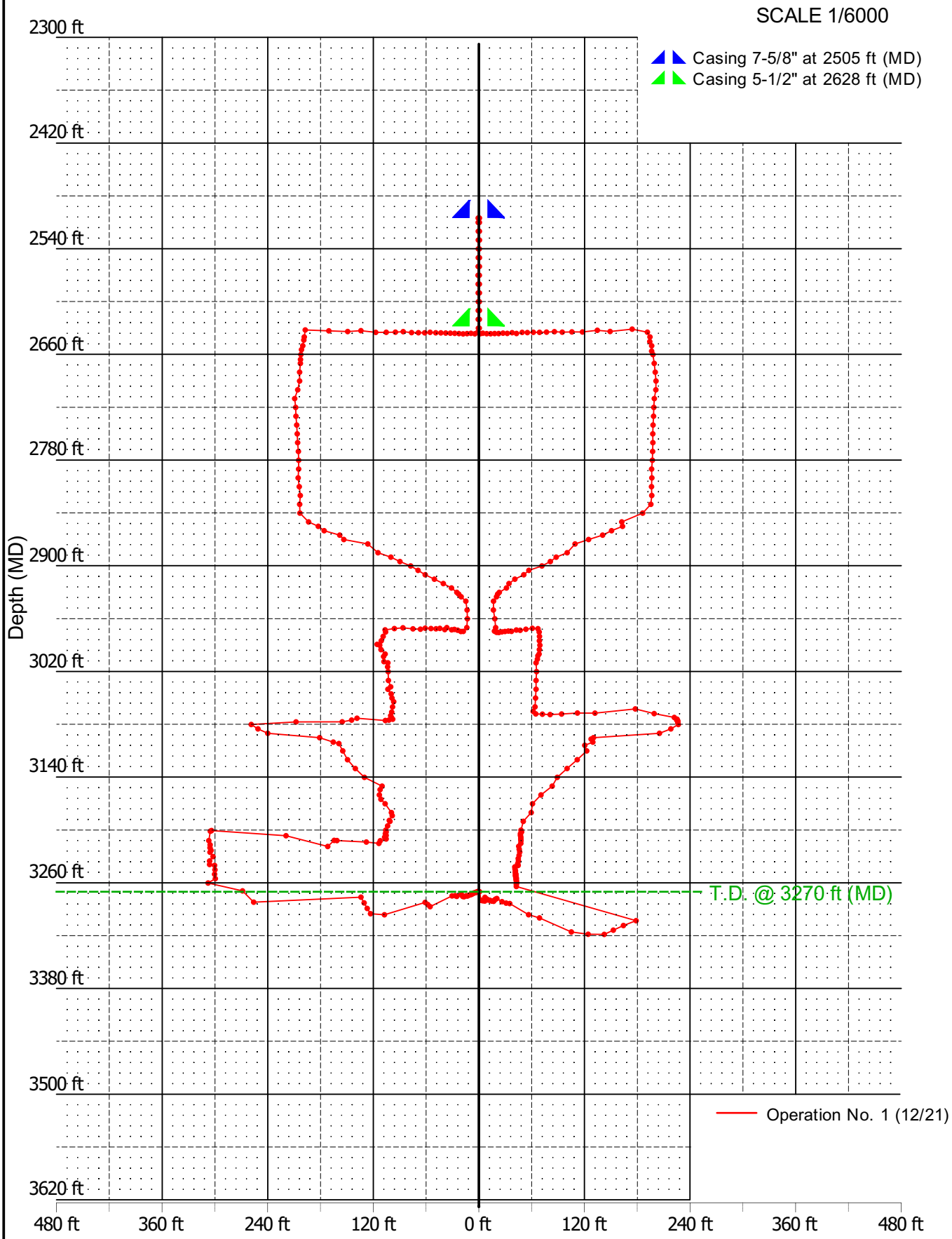
SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

VERTICAL SECTION

N198 ← **4** → N18



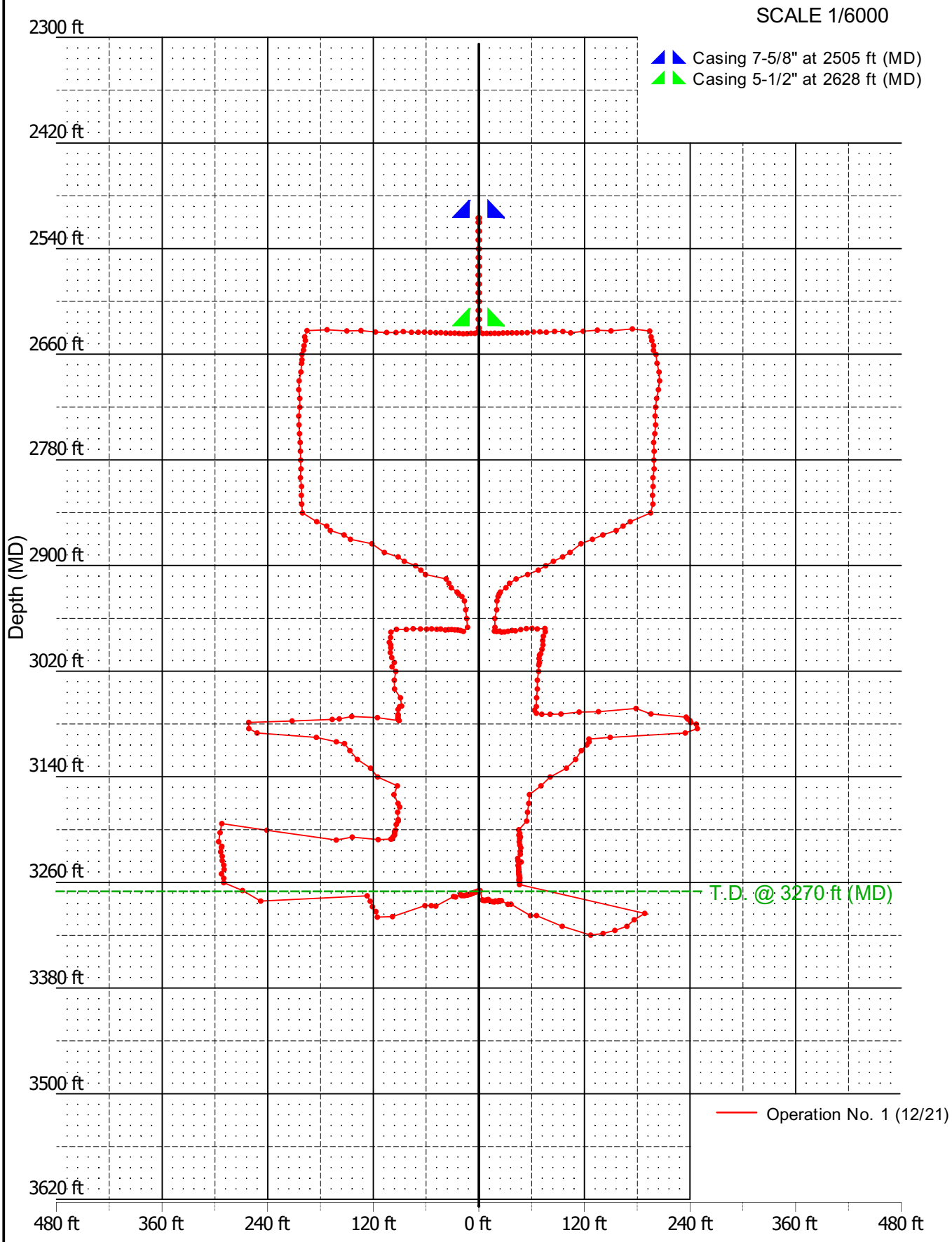
SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

VERTICAL SECTION

N204 ← **5** → N24



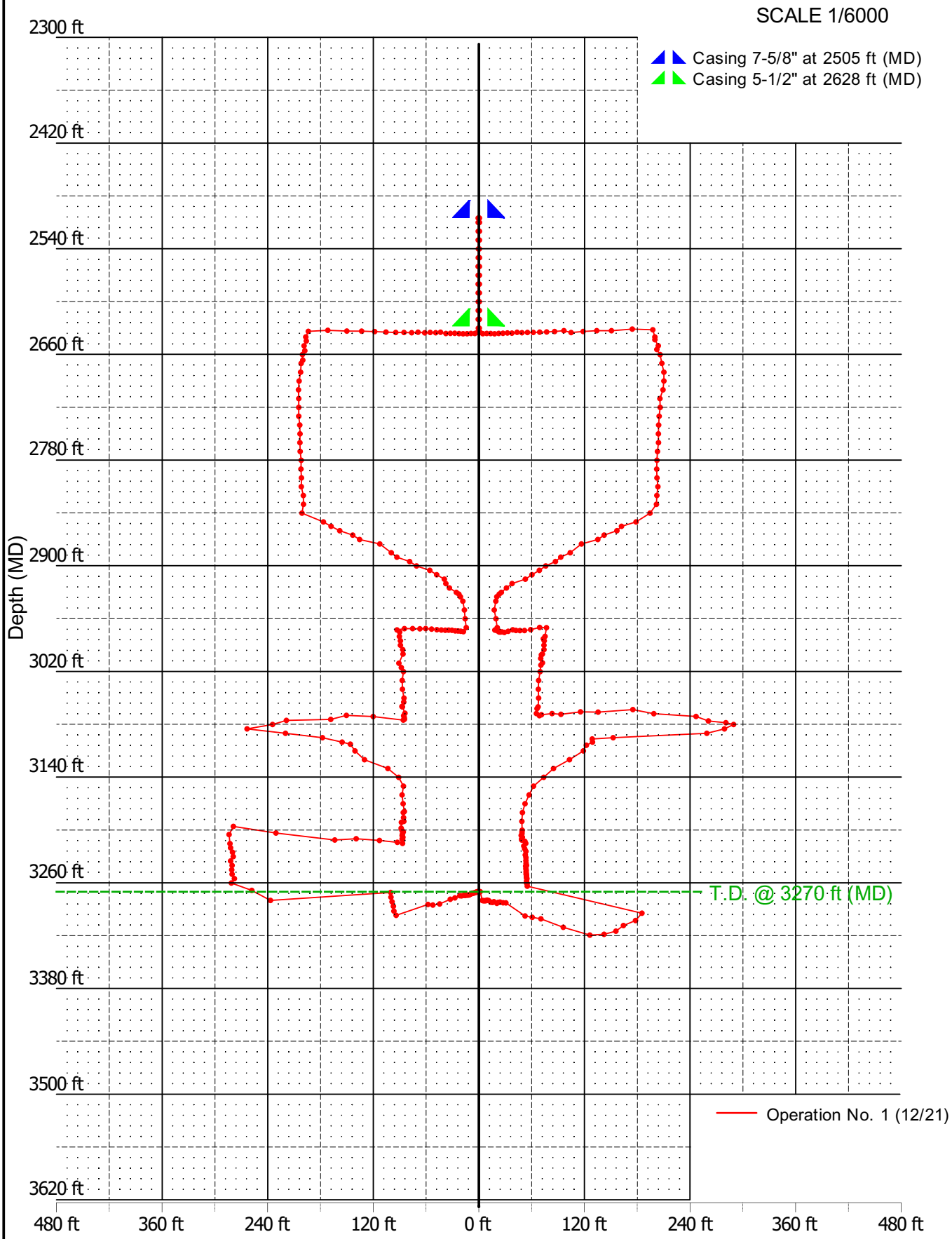
SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

VERTICAL SECTION

N210 ← **6** → N30



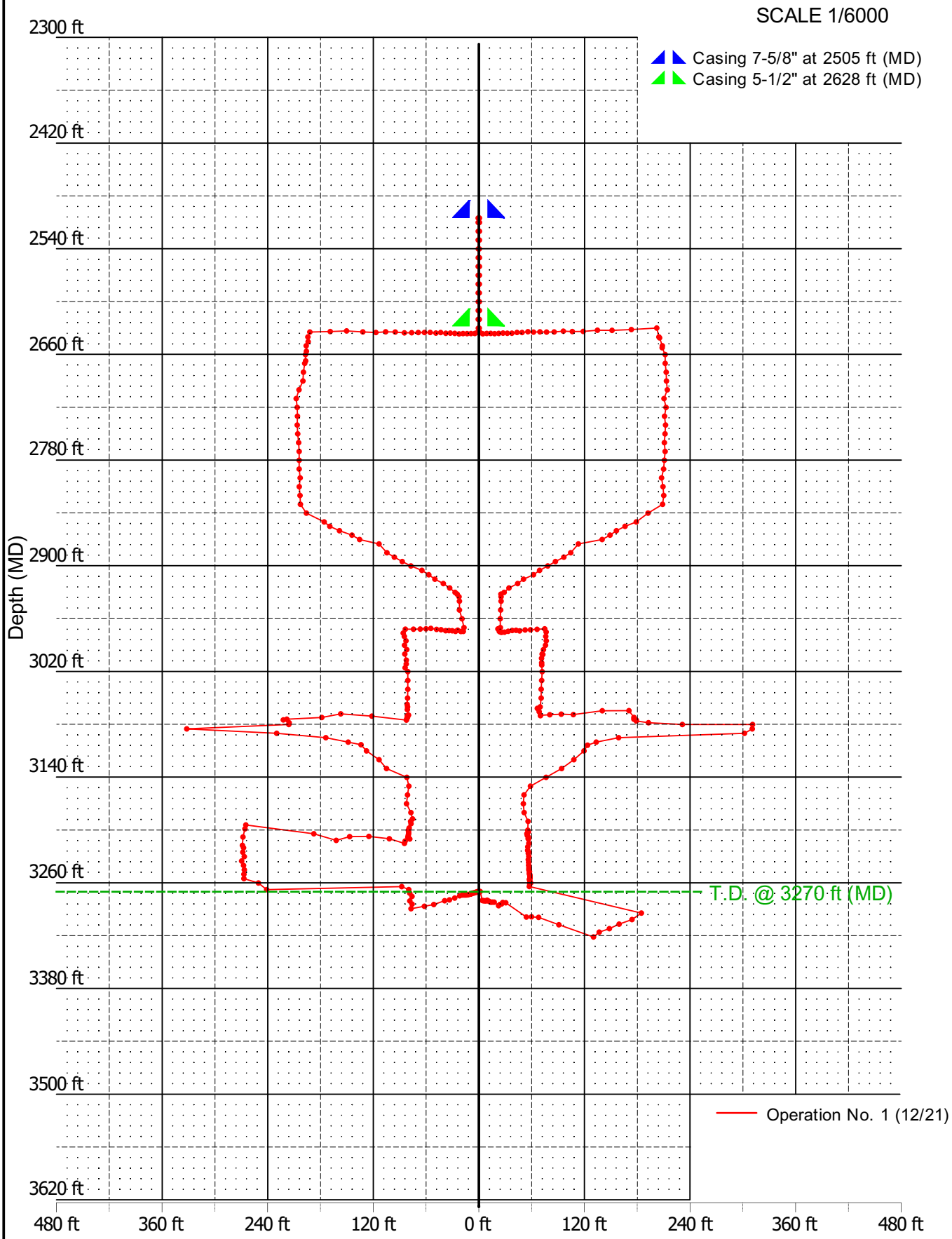
SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

VERTICAL SECTION

N216 ← 7 → N36



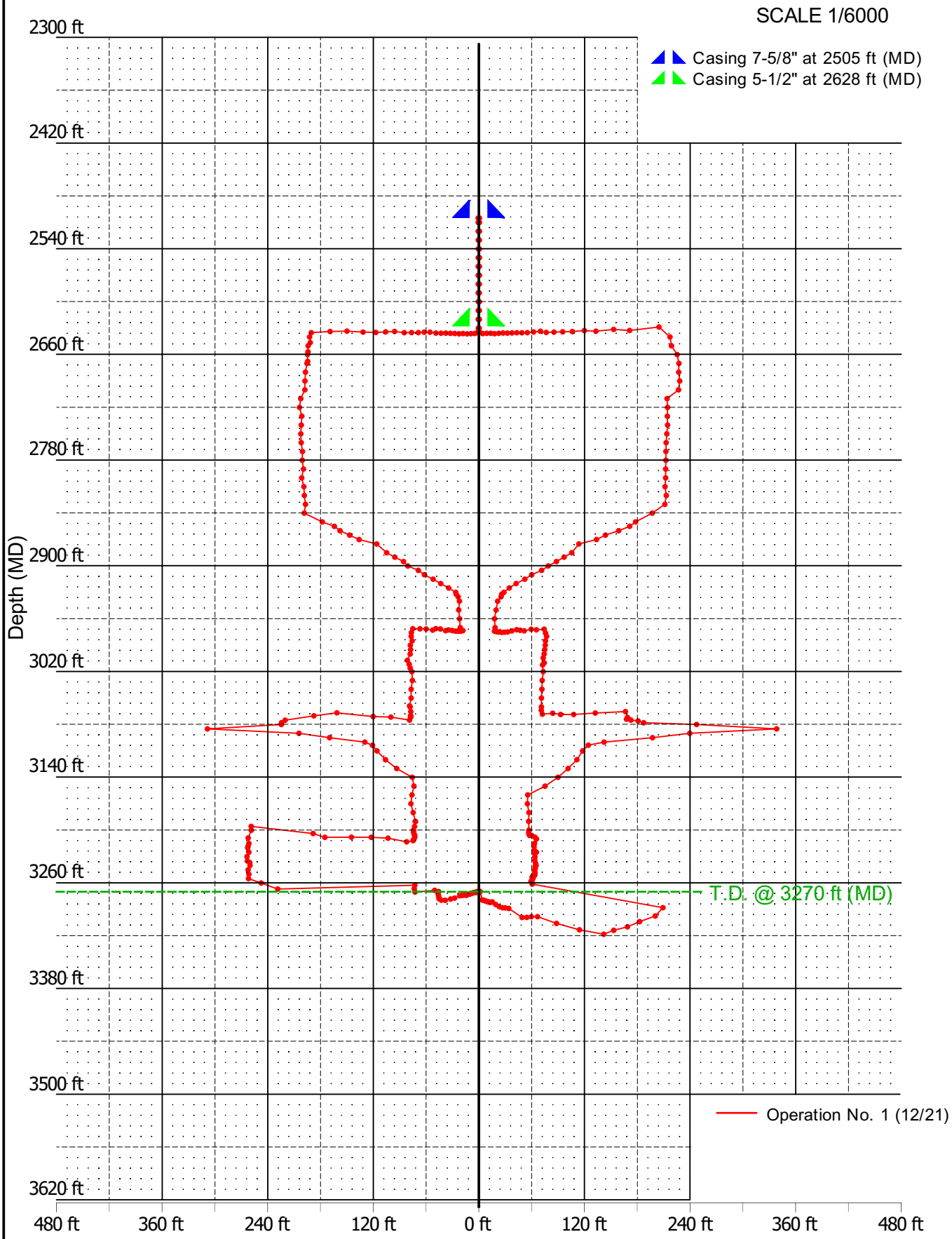
SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

VERTICAL SECTION

N222 ← **8** → N42



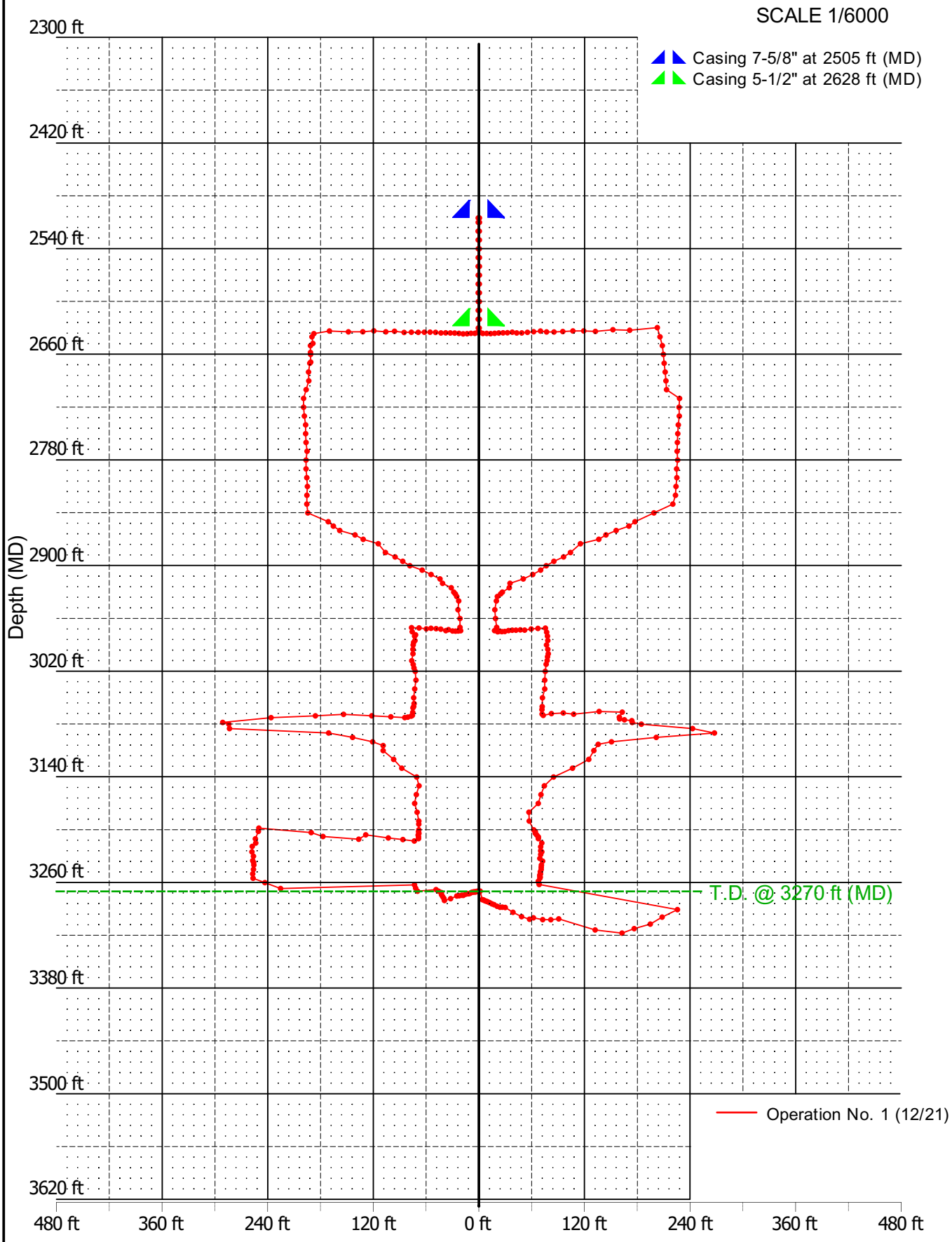
SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

VERTICAL SECTION

N228 ← **9** → N48



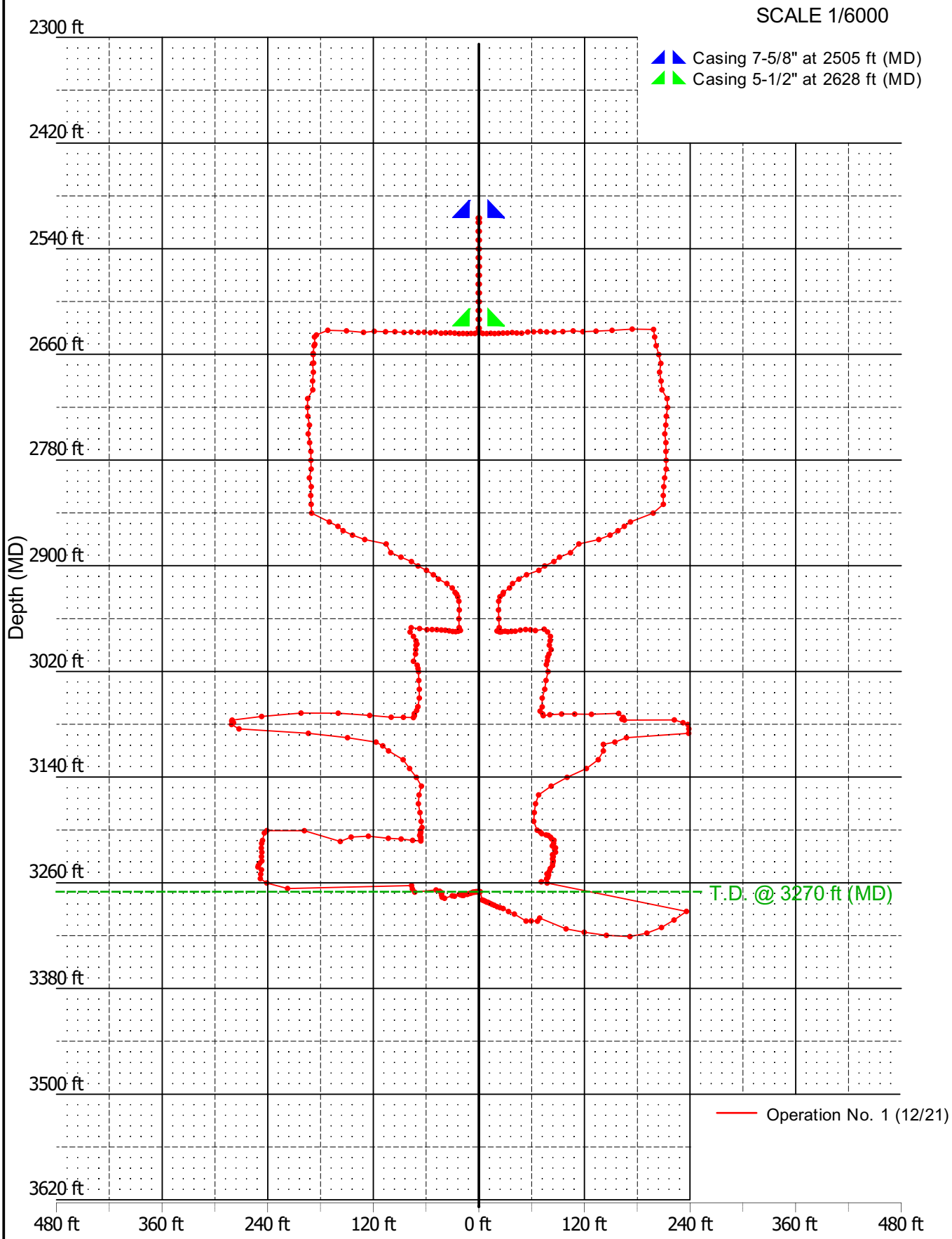
SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

VERTICAL SECTION

N234 ← **10** → N54



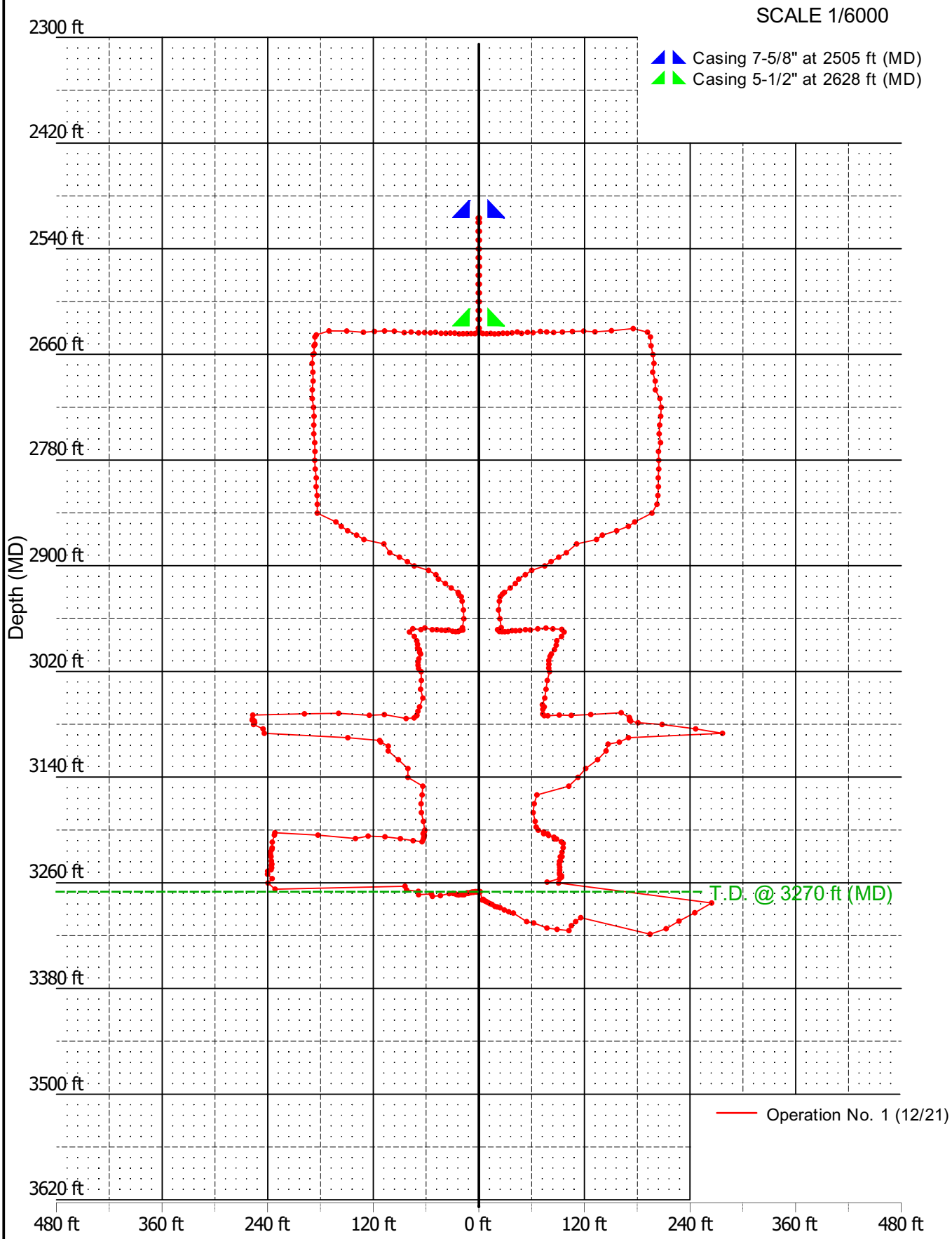
SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

VERTICAL SECTION

N240 ← **11** → N60



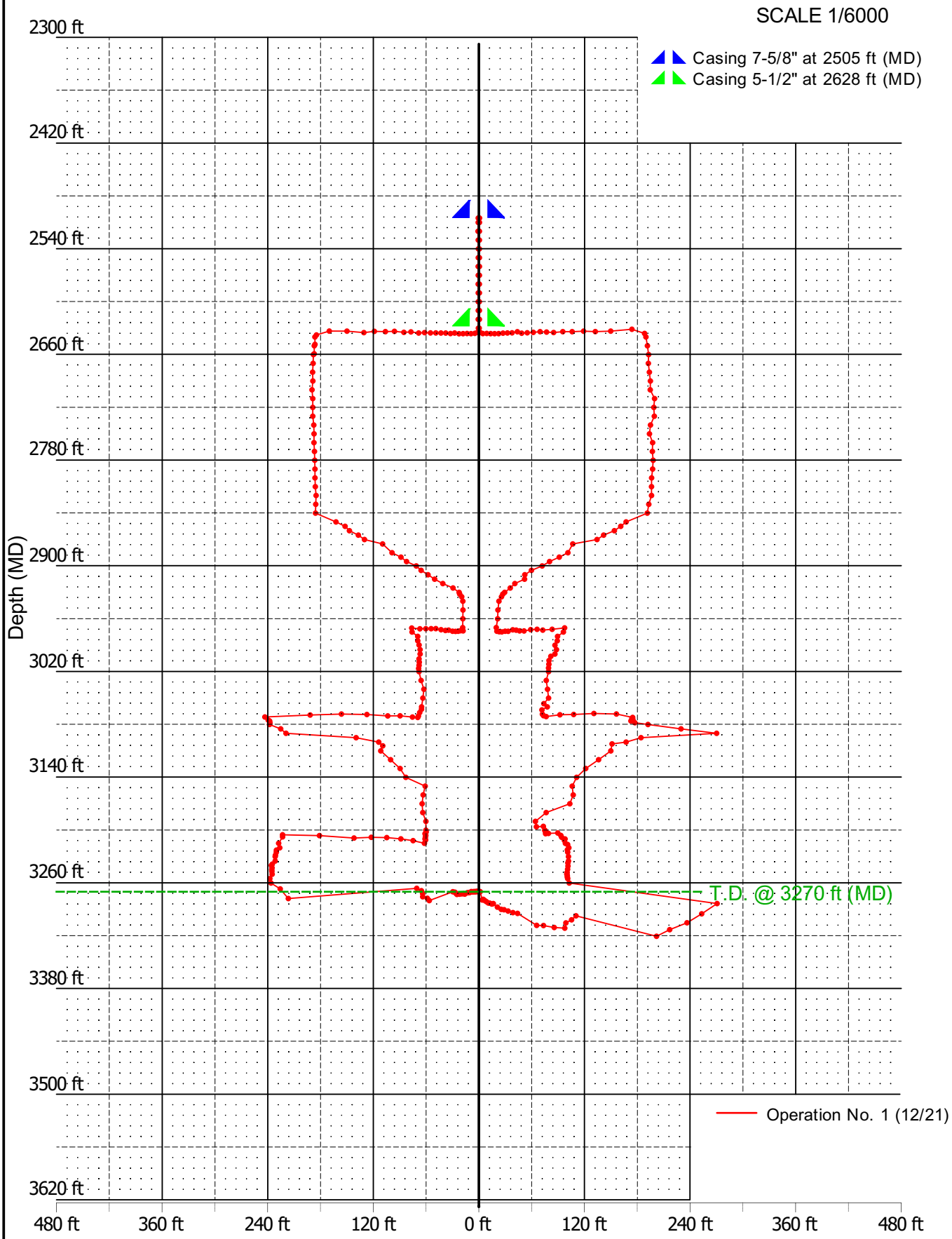
SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

VERTICAL SECTION

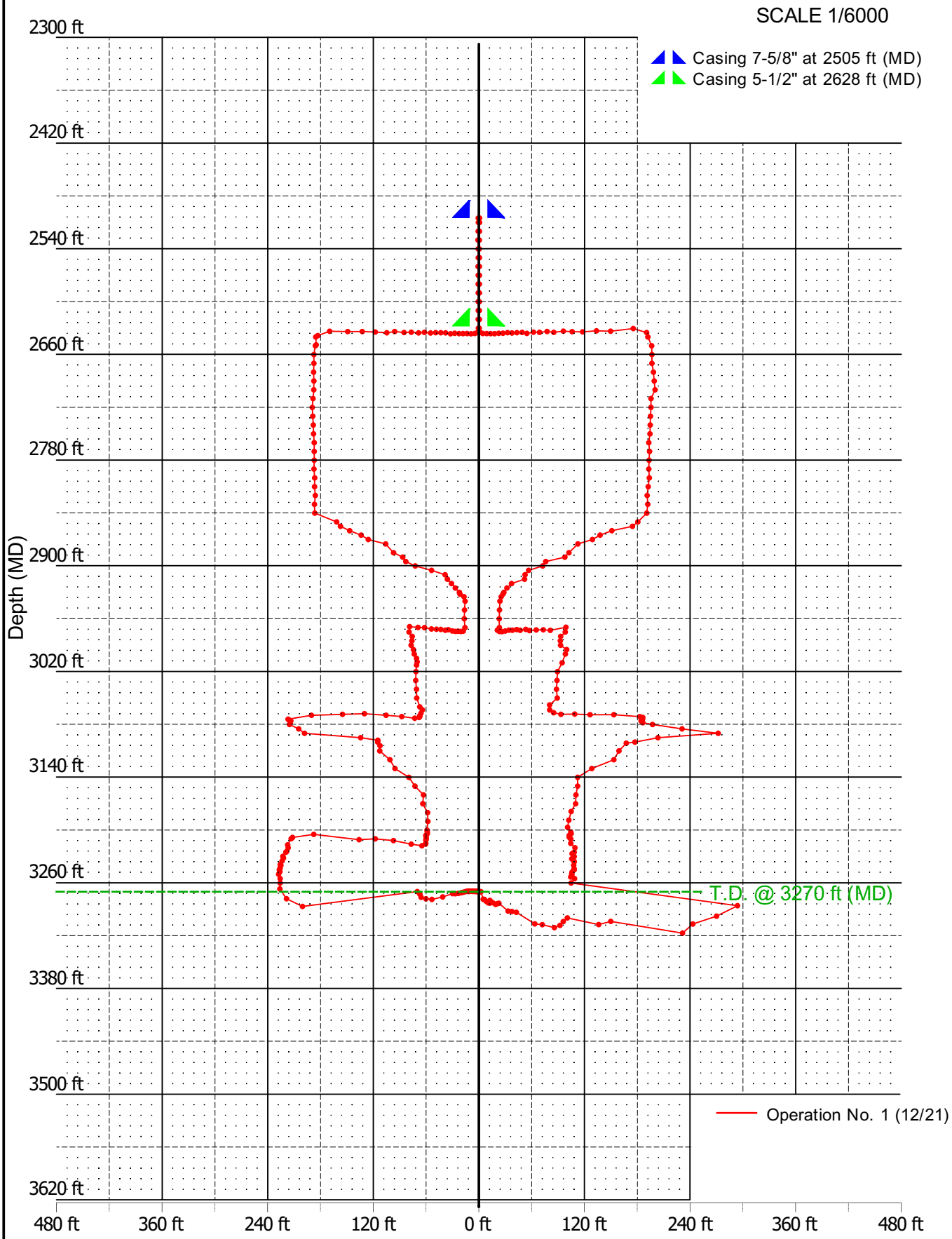
N246 ← 12 → N66



SONIC SURVEYS	CUSTOMER : WESTLAKE CHEMICAL DATE : December 13, 2021	CAVERN : PPG No. 006X OPERATION No. : 1

VERTICAL SECTION

N252 ← **13** → N72



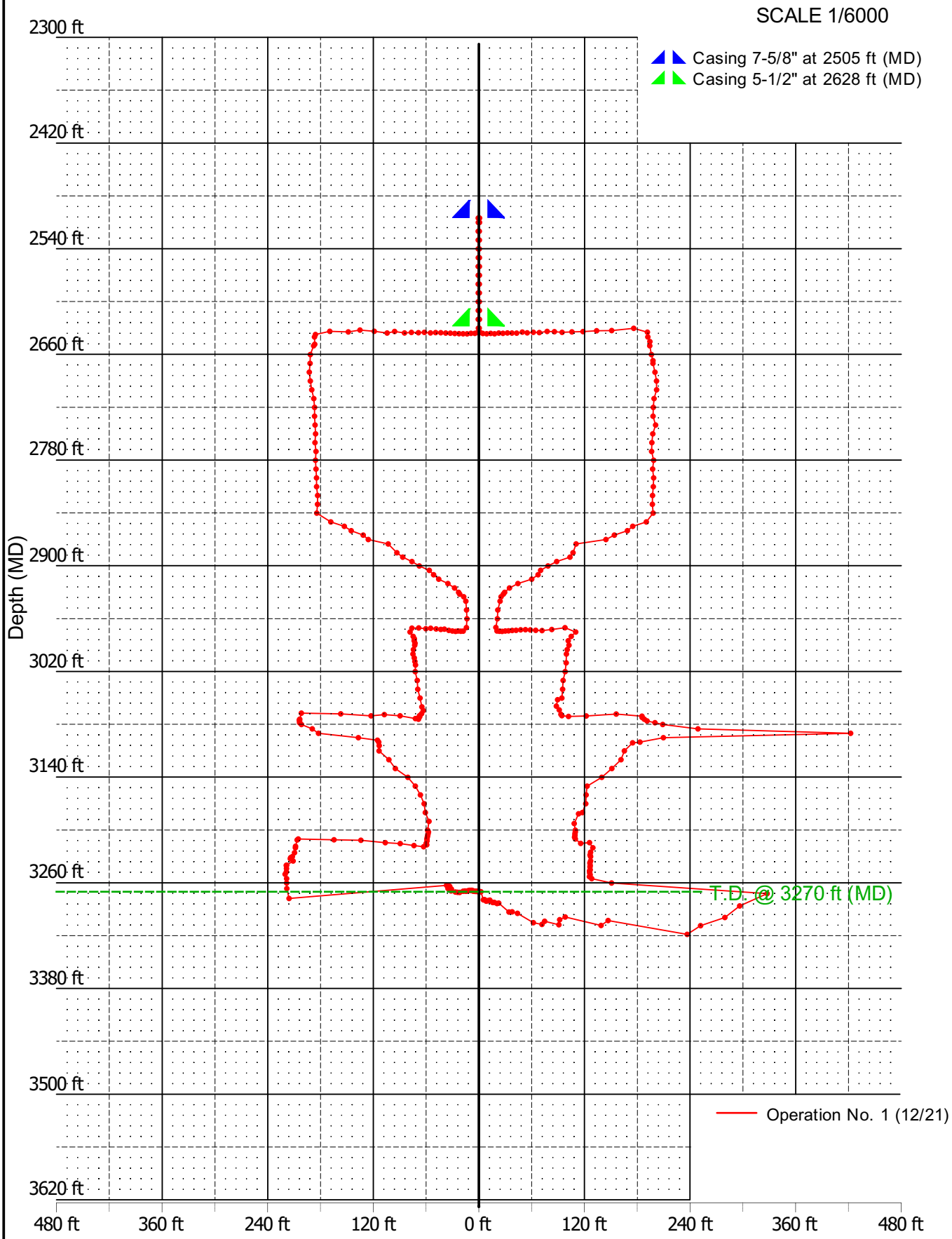
SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

VERTICAL SECTION

N258 ← **14** → N78



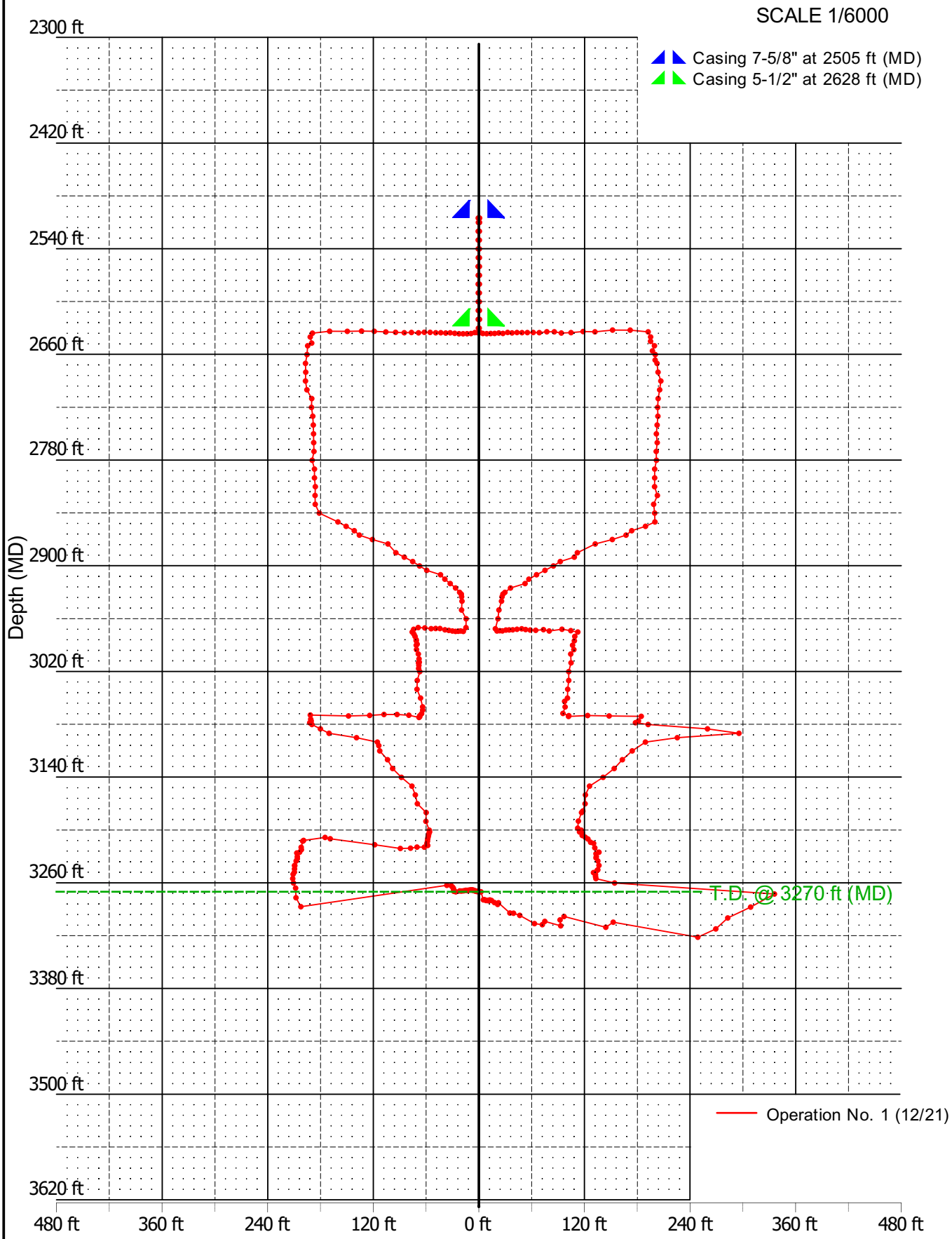
SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

VERTICAL SECTION

N264 ← **15** → N84



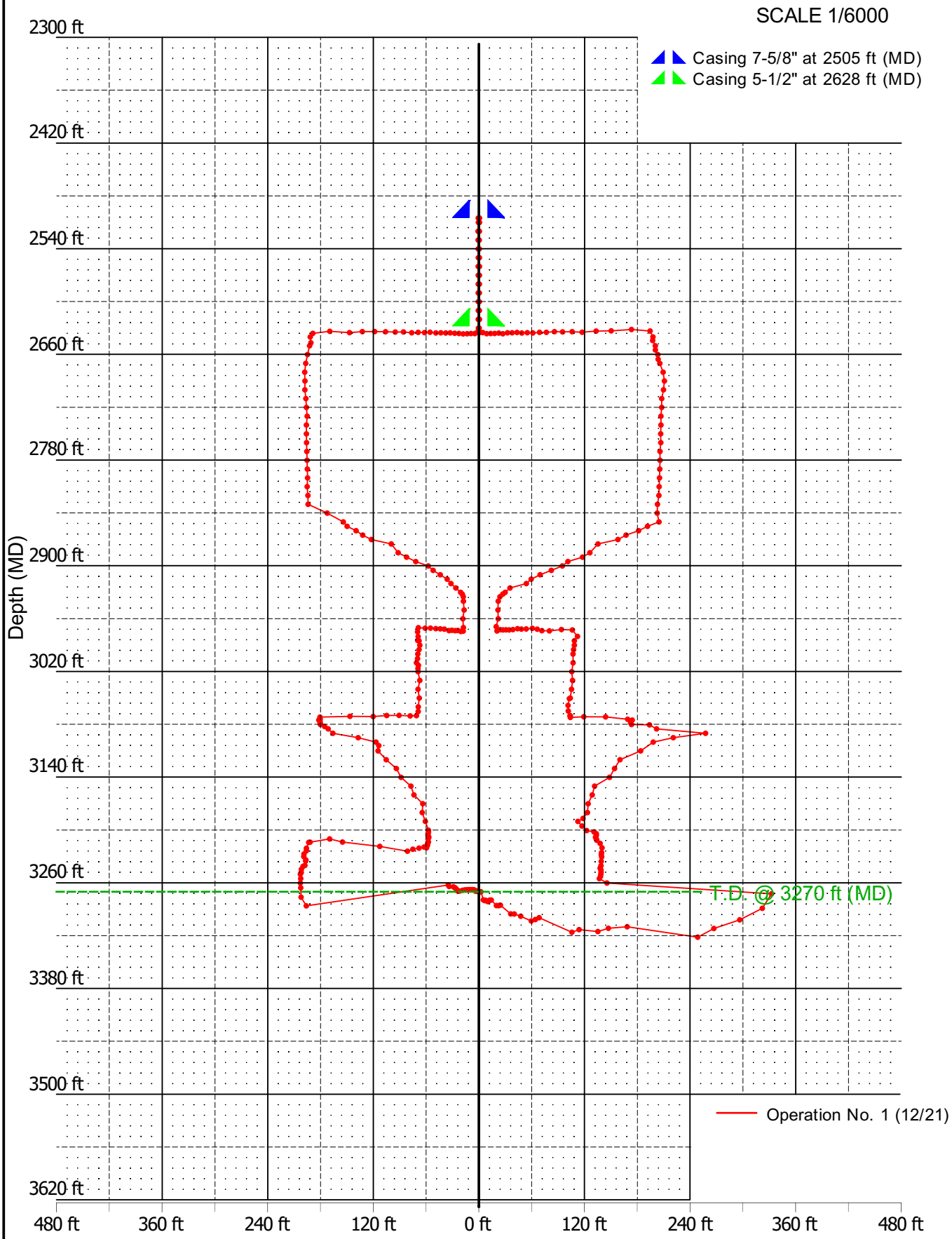
SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

VERTICAL SECTION

N270 ← **16** → N90



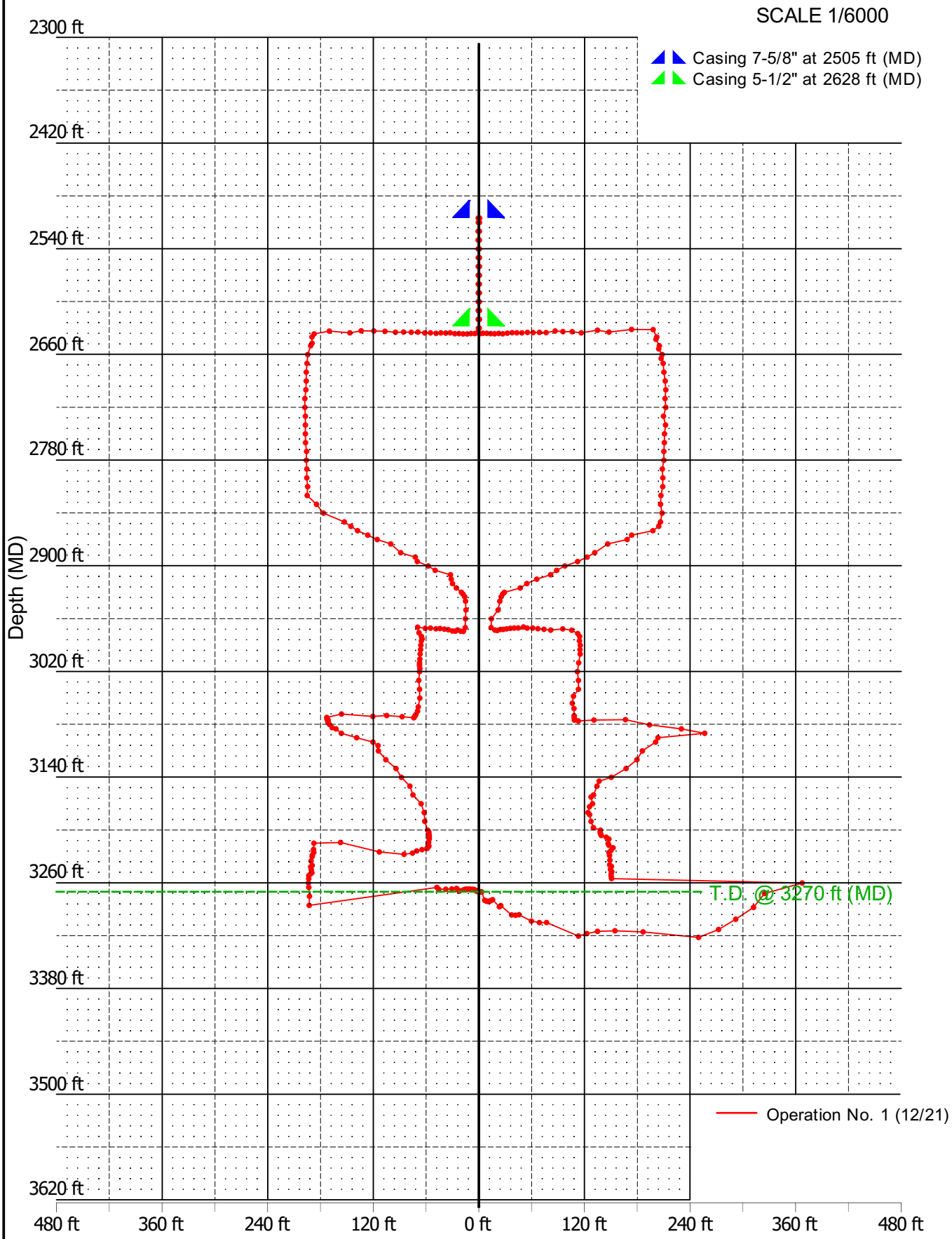
SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

VERTICAL SECTION

N276 ← **17** → N96



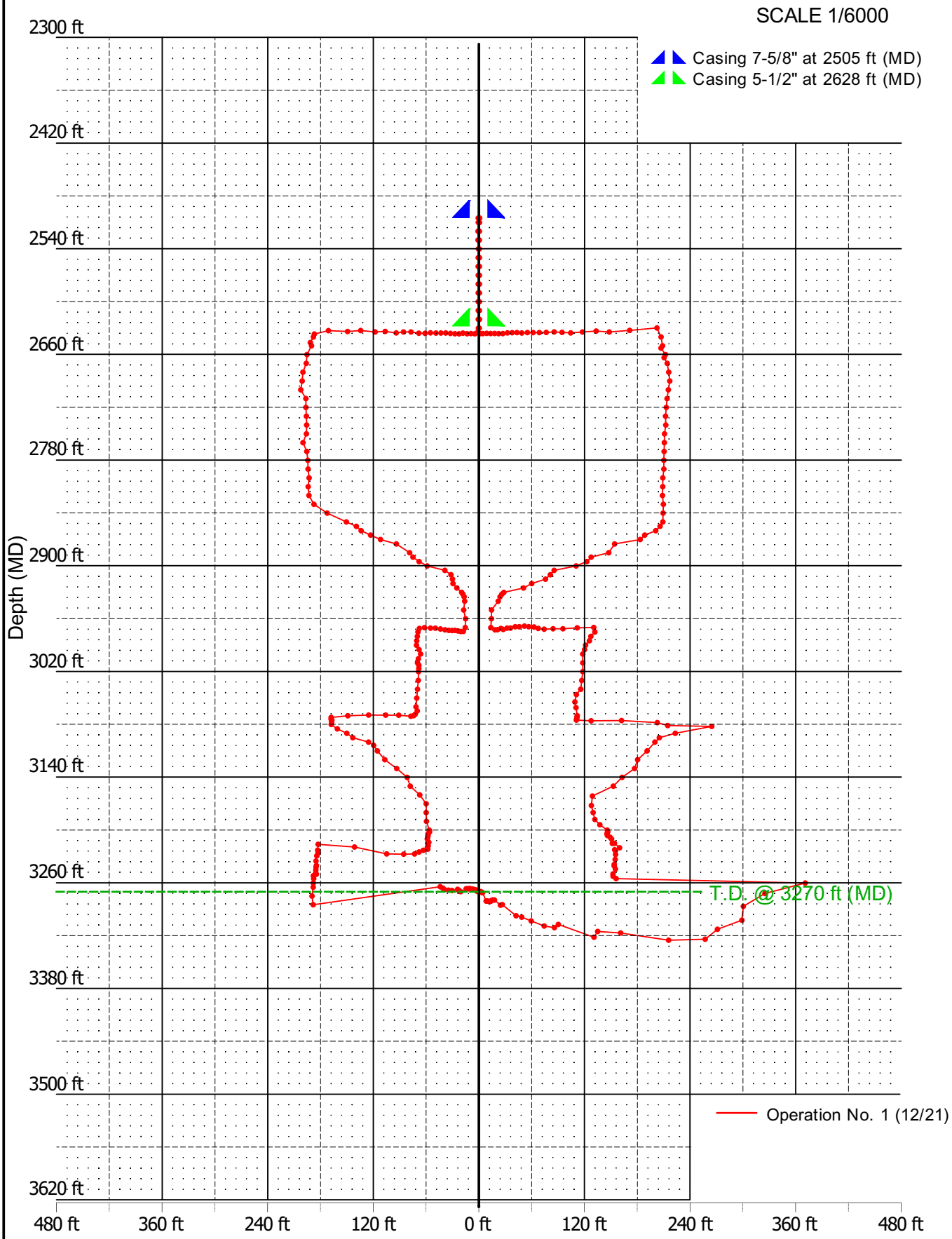
SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

VERTICAL SECTION

N282 ← **18** → N102



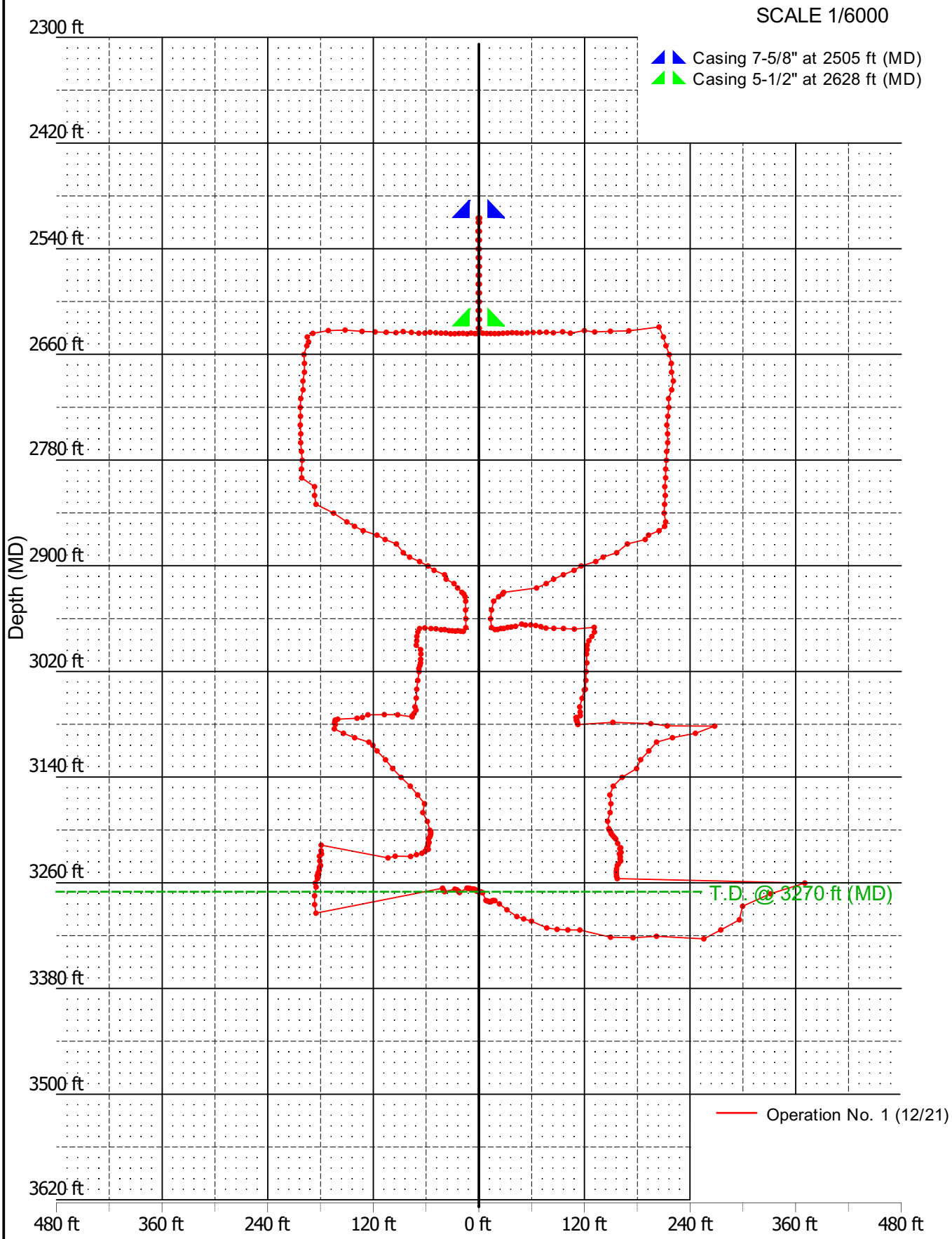
SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

VERTICAL SECTION

N288 ← **19** → N108



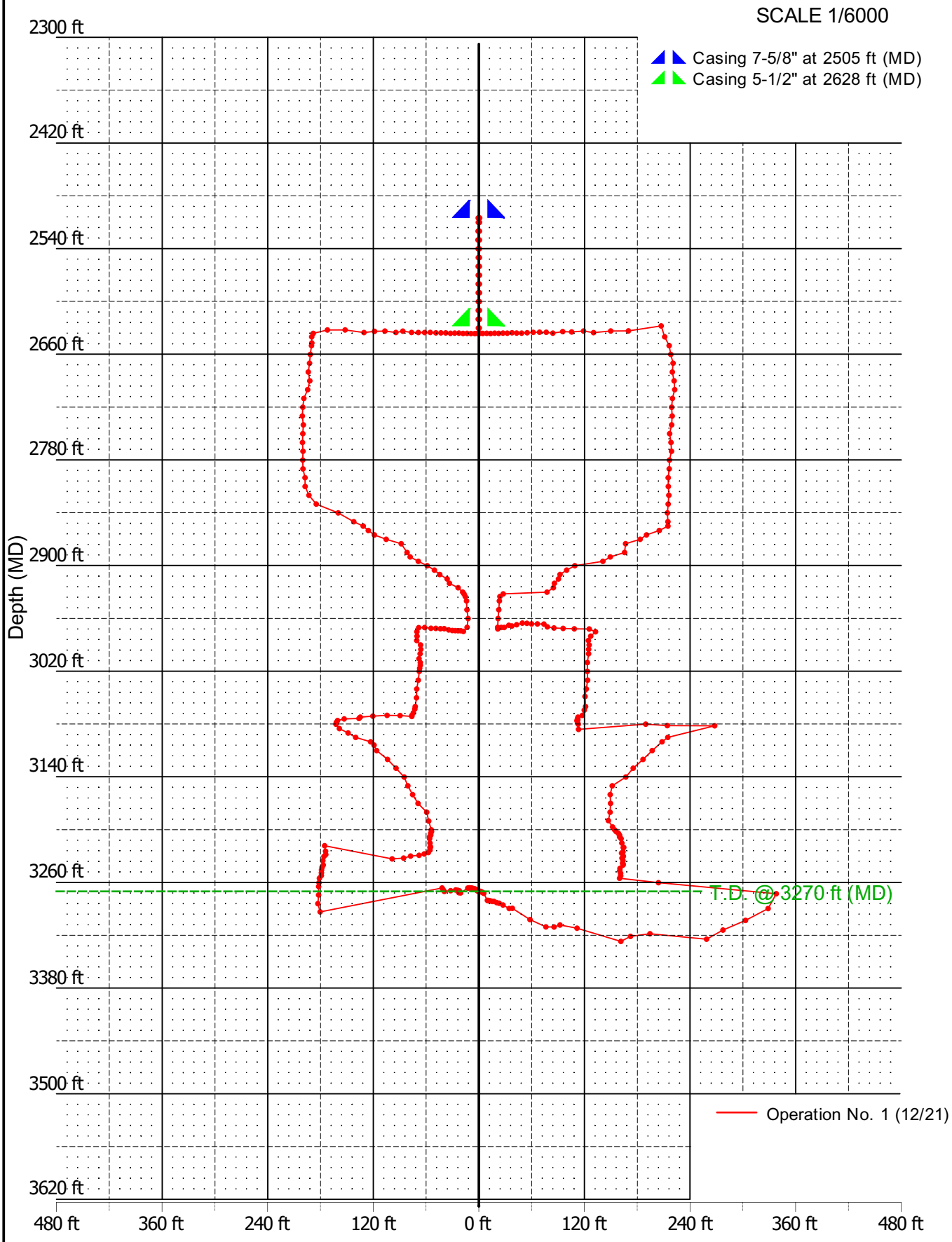
SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

VERTICAL SECTION

N294 ← **20** → N114



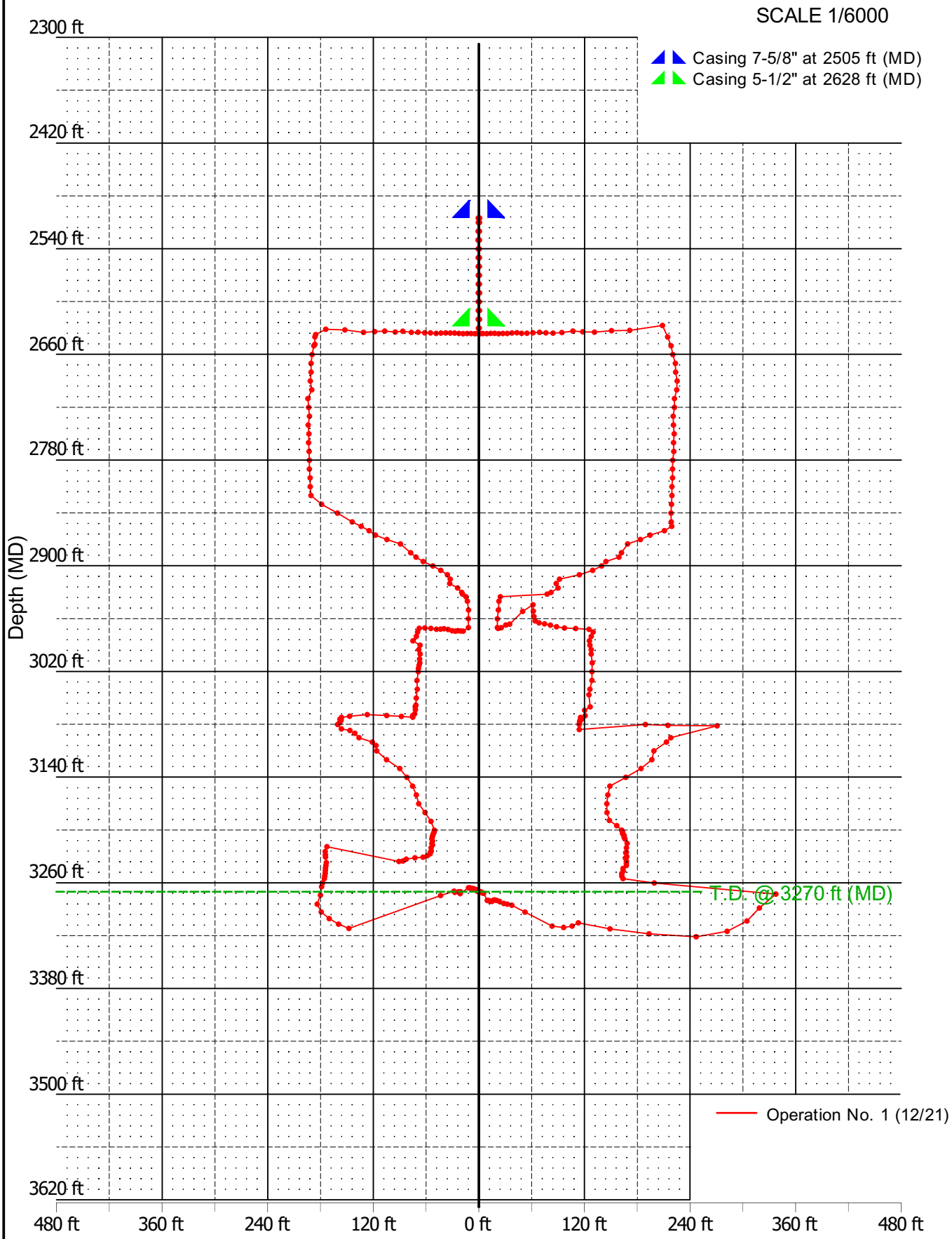
SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

VERTICAL SECTION

N300 ← 21 → N120



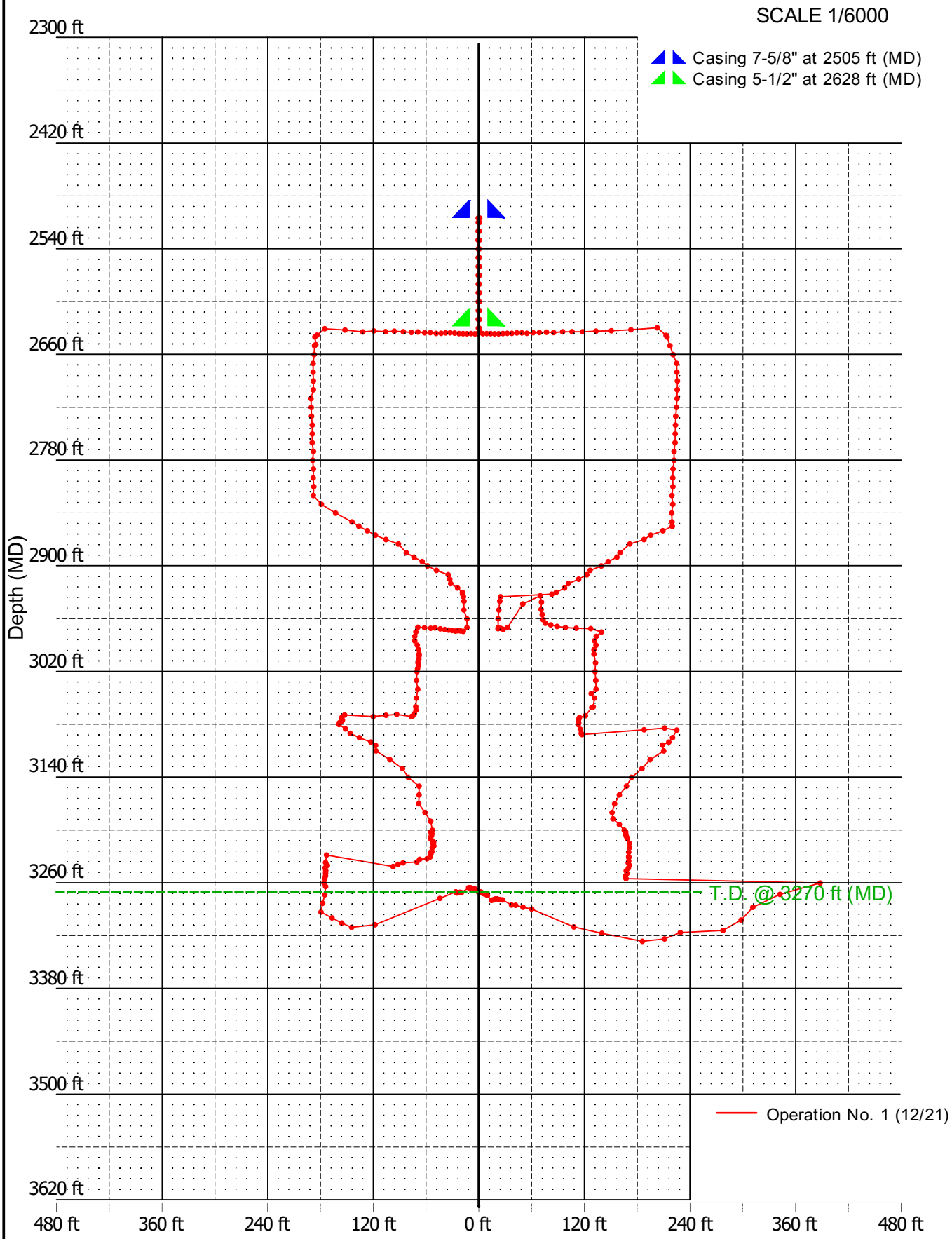
SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

VERTICAL SECTION

N306 ← 22 → N126



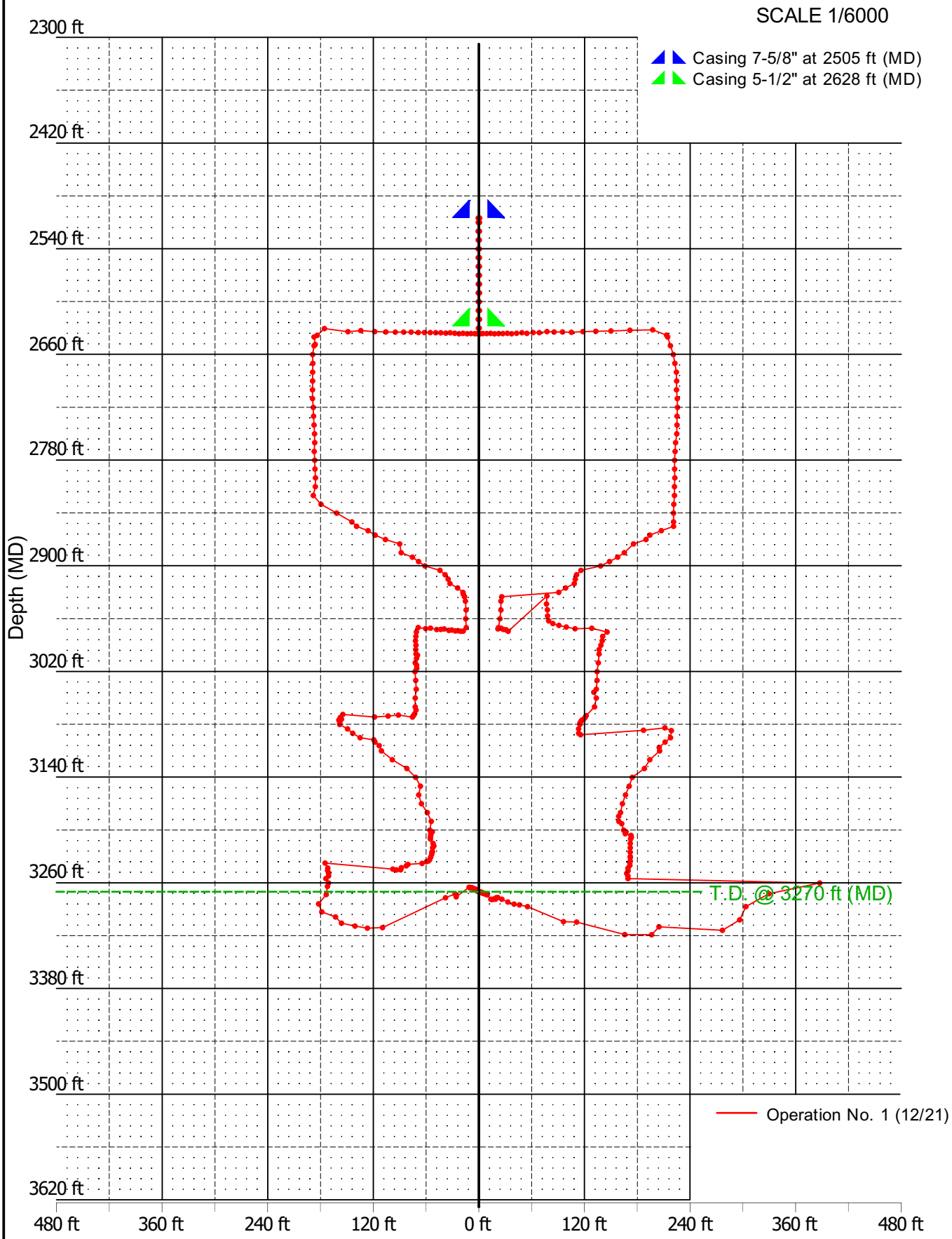
SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

VERTICAL SECTION

N312 ← **23** → N132



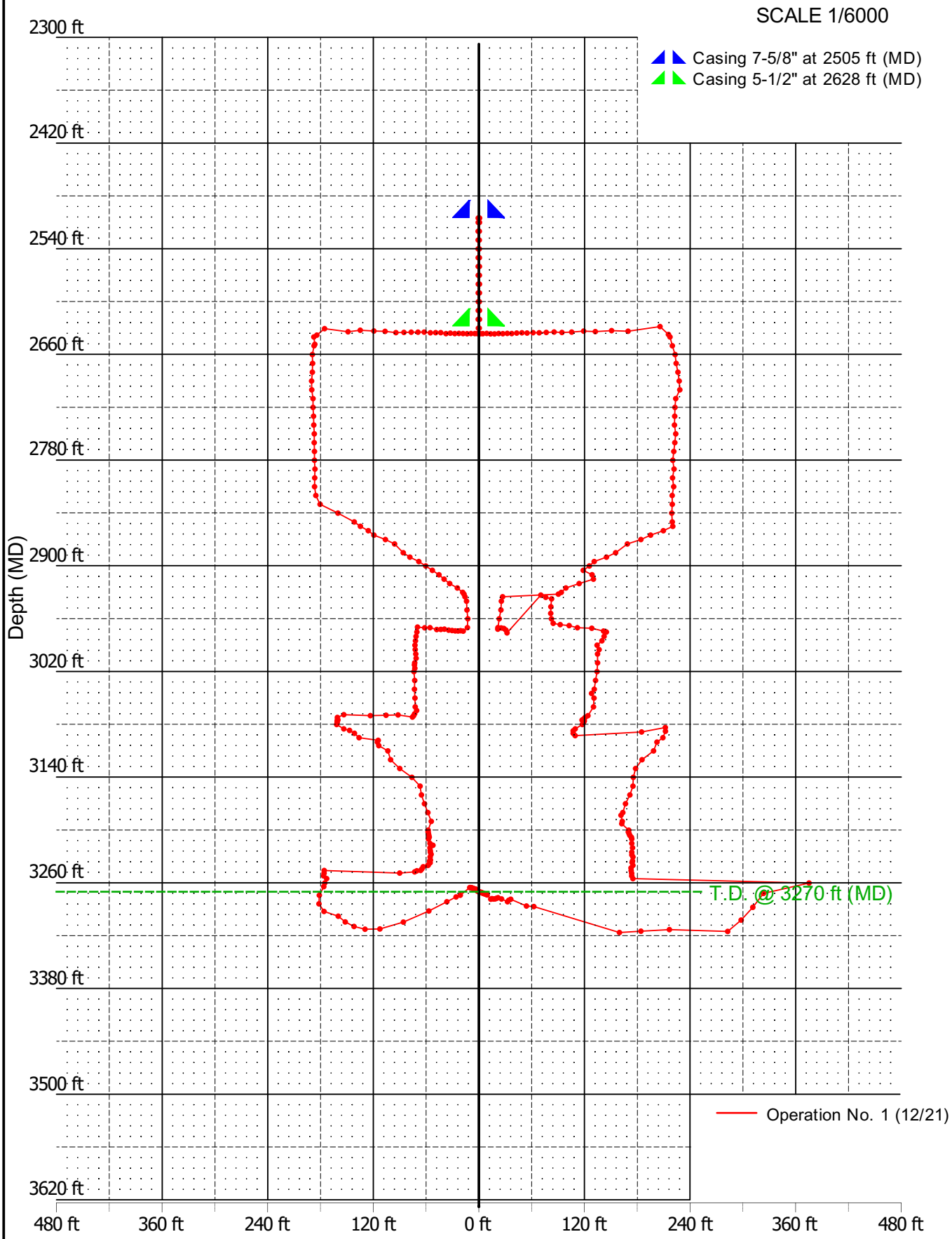
SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

VERTICAL SECTION

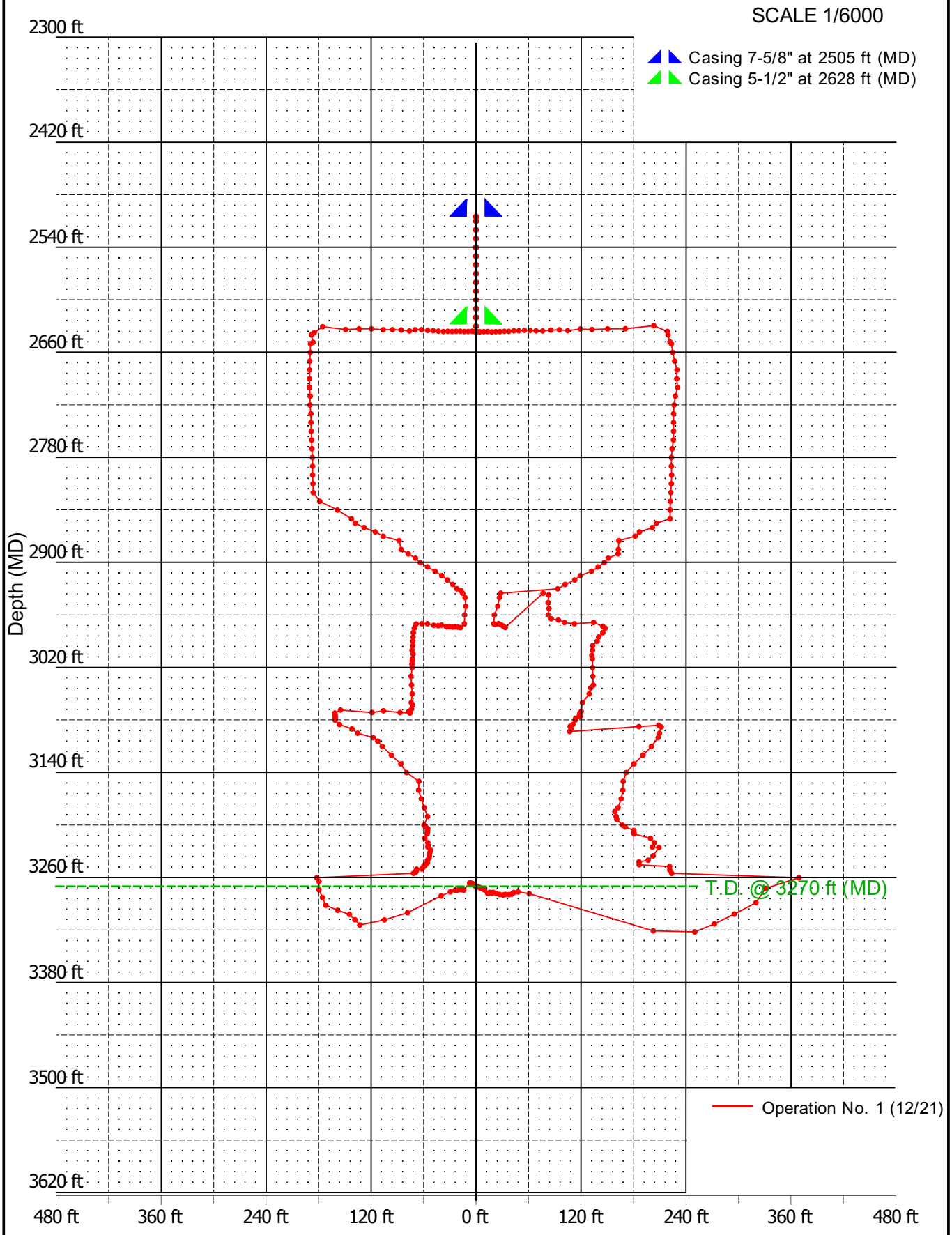
N318 ← **24** → N138



SONIC SURVEYS	CUSTOMER : WESTLAKE CHEMICAL DATE : December 13, 2021	CAVERN : PPG No. 006X OPERATION No. : 1

VERTICAL SECTION

N324 ← **25** → N144



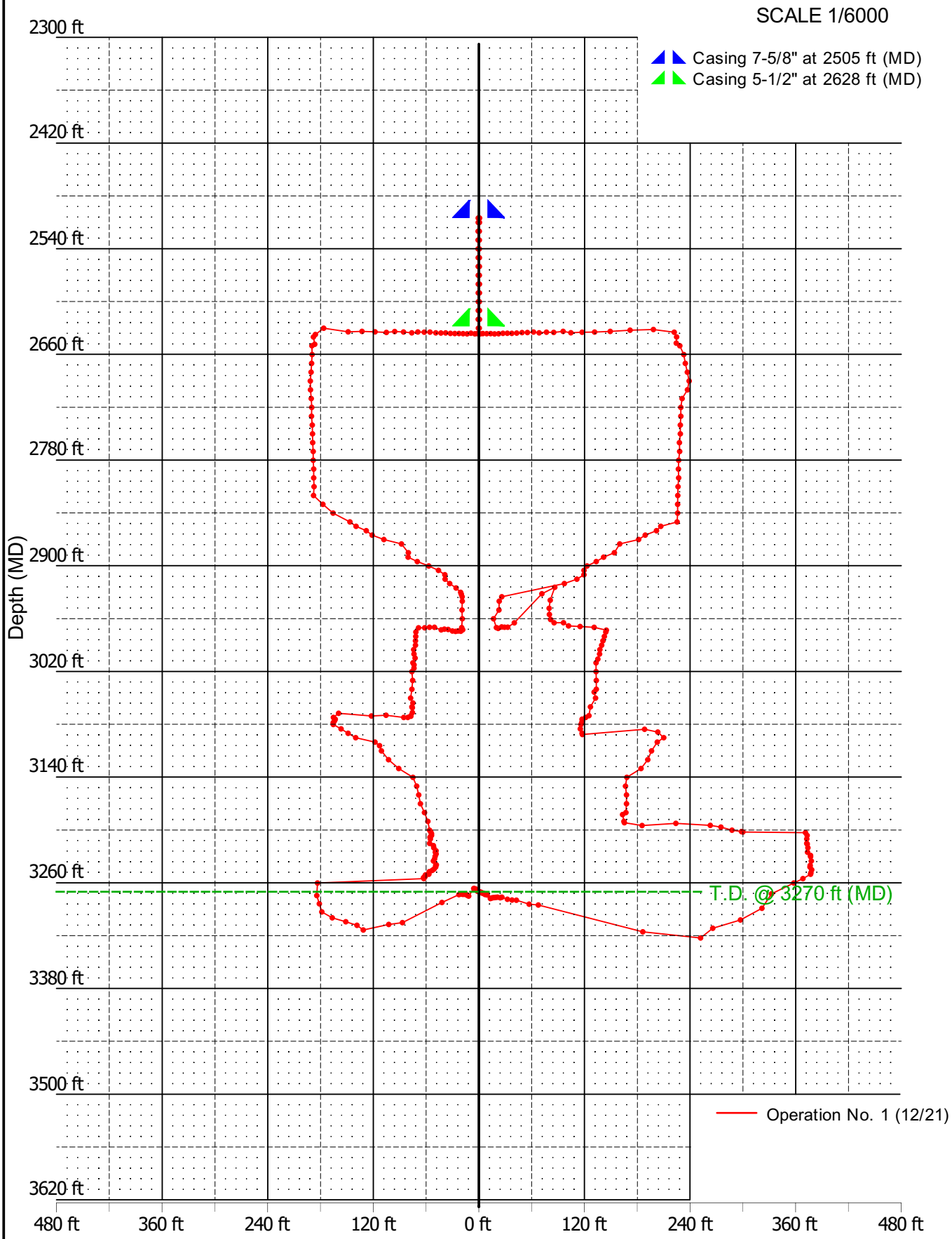
SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

VERTICAL SECTION

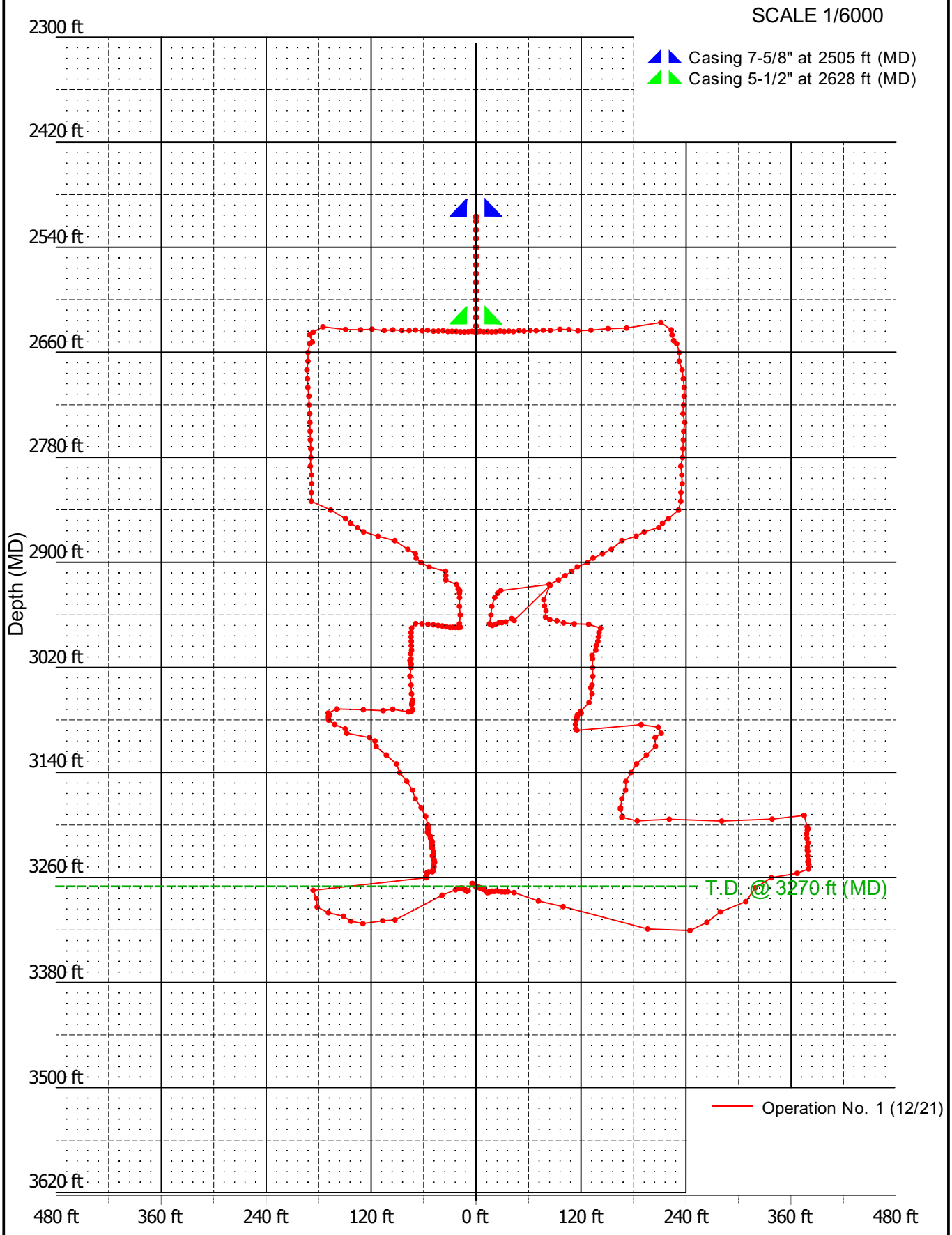
N330 ← **26** → N150



SONIC SURVEYS	CUSTOMER : WESTLAKE CHEMICAL DATE : December 13, 2021	CAVERN : PPG No. 006X OPERATION No. : 1

VERTICAL SECTION

N336 ← **27** → N156



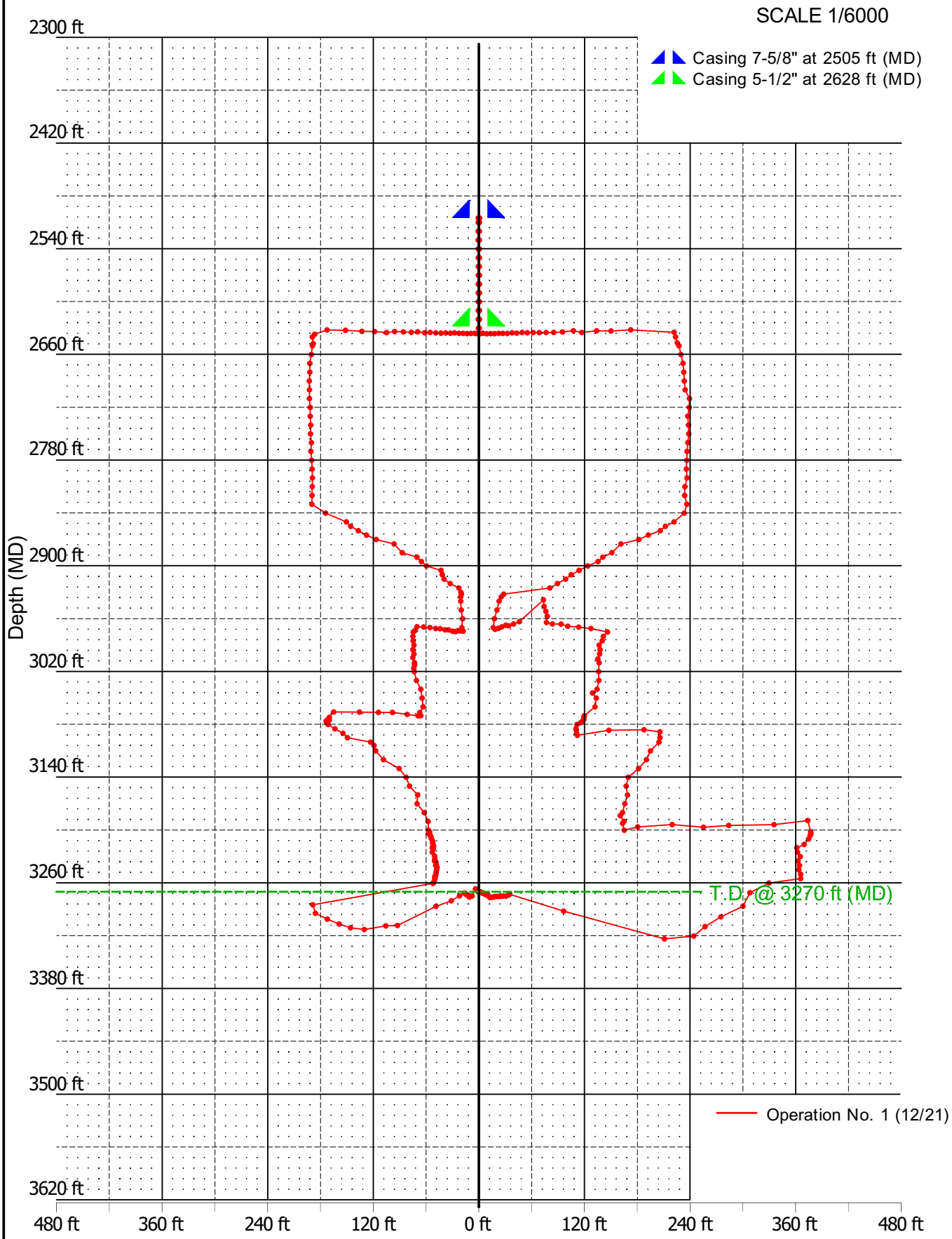
SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

VERTICAL SECTION

N342 ← **28** → N162



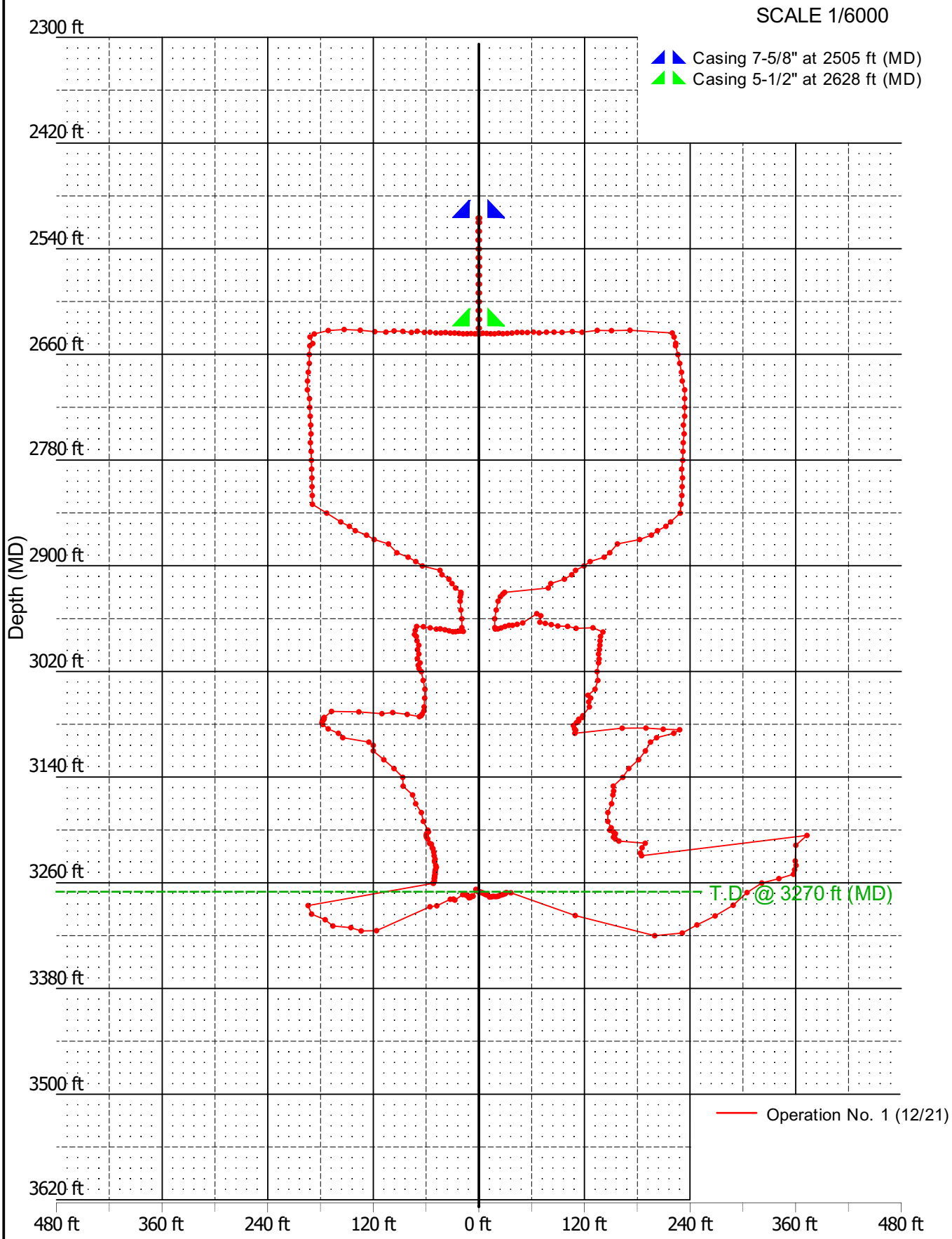
SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

VERTICAL SECTION

N348 ← **29** → N168



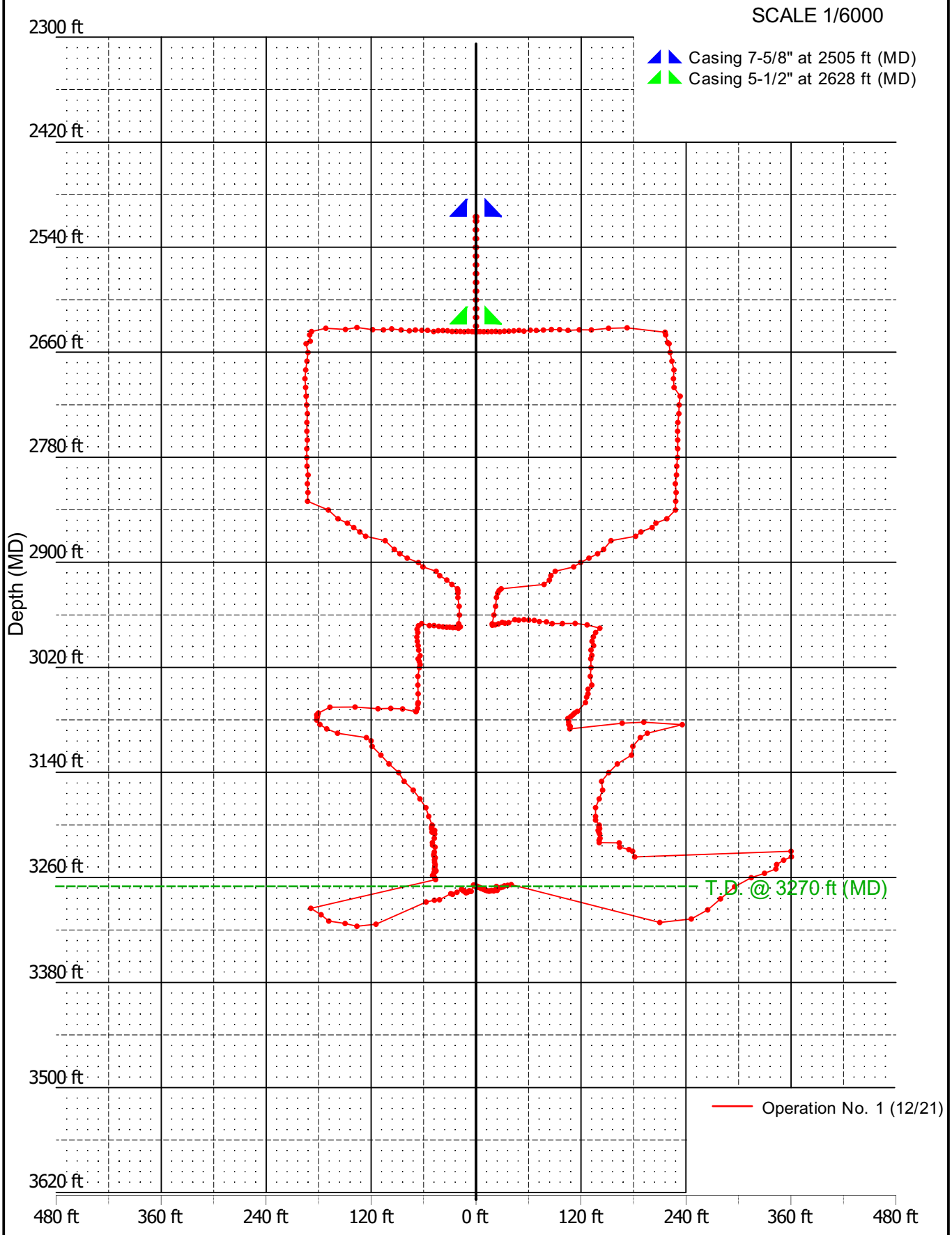
SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

VERTICAL SECTION

N354 ← **30** → N174



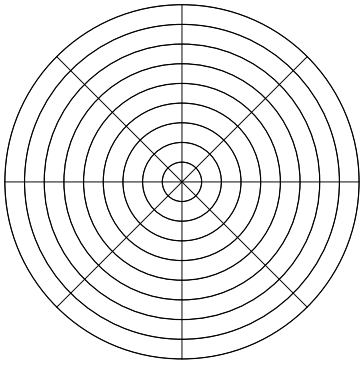
SONIC SURVEYS	CUSTOMER : WESTLAKE CHEMICAL DATE : December 13, 2021	CAVERN : PPG No. 006X OPERATION No. : 1

HORIZONTAL SECTIONS

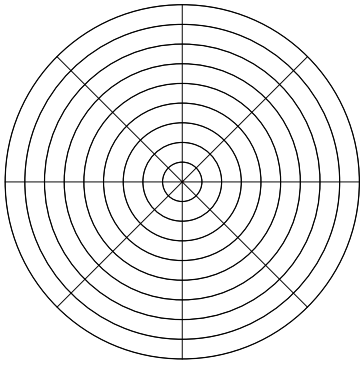
between 2510 ft and 2620 ft

SCALE 50.0 ft per division

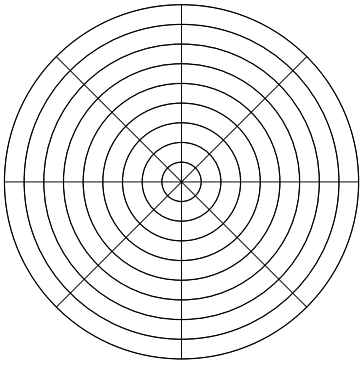
Operation No. 1 (12/21)



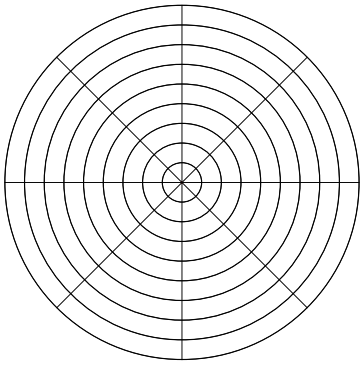
2510 ft / 1.45 ft²



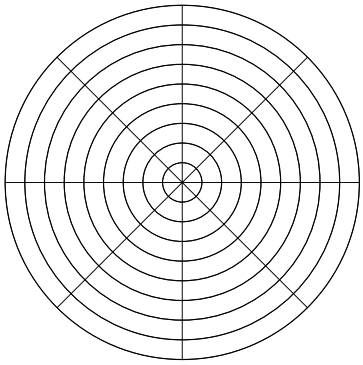
2520 ft / 1.53 ft²



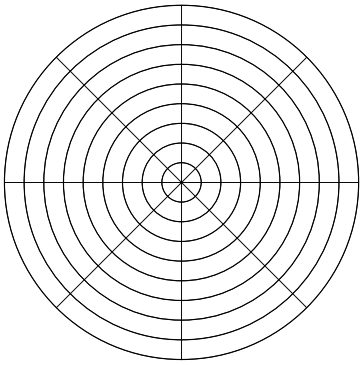
2530 ft / 1.50 ft²



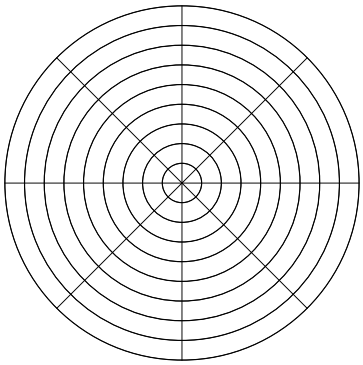
2540 ft / 1.19 ft²



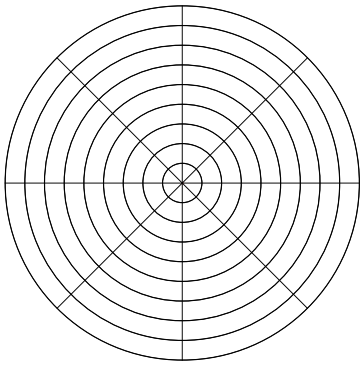
2550 ft / 1.33 ft²



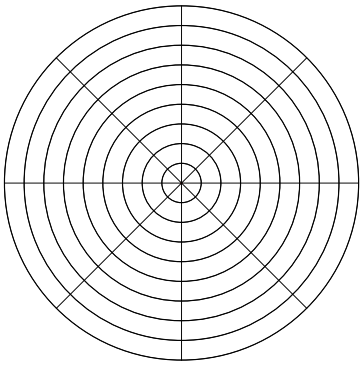
2560 ft / 1.42 ft²



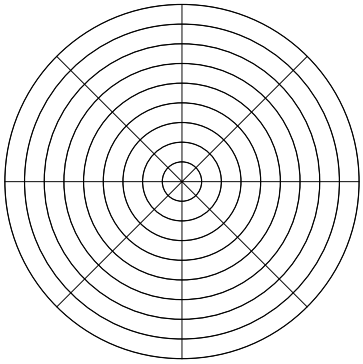
2570 ft / 1.37 ft²



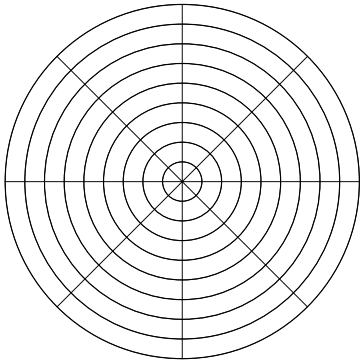
2580 ft / 1.35 ft²



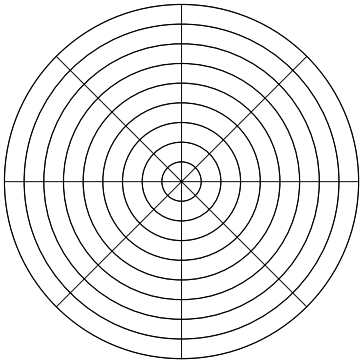
2590 ft / 1.34 ft²



2600 ft / 1.04 ft²



2610 ft / 1.25 ft²



2620 ft / 1.36 ft²

*All sections are oriented to Magnetic North.

Magnetic Declination= 0.8°

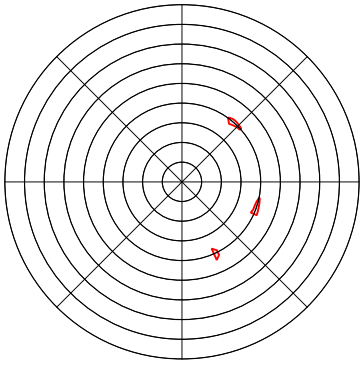
SONIC SURVEYS	CUSTOMER : WESTLAKE CHEMICAL DATE : December 13, 2021	CAVERN : PPG No. 006X OPERATION No. : 1

HORIZONTAL SECTIONS

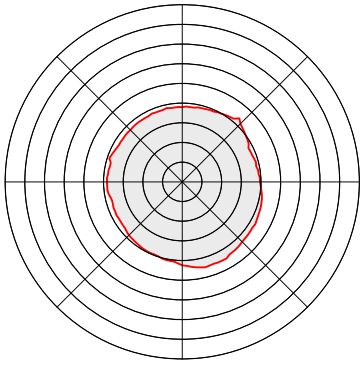
between 2630 ft and 2740 ft

SCALE 50.0 ft per division

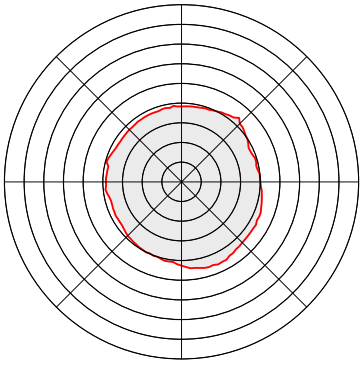
Operation No. 1 (12/21)



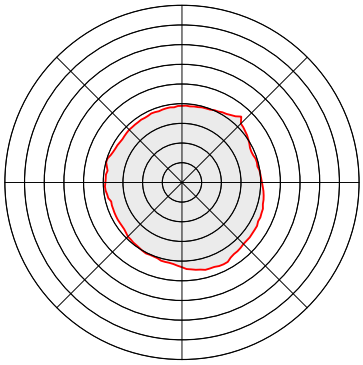
2630 ft / 1089.07 ft²



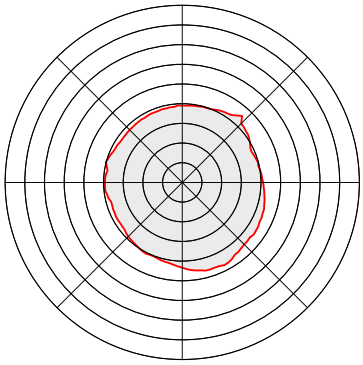
2640 ft / 124318.82 ft²



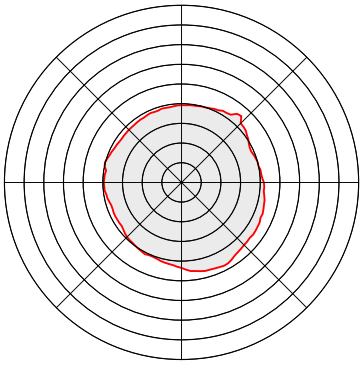
2650 ft / 126808.00 ft²



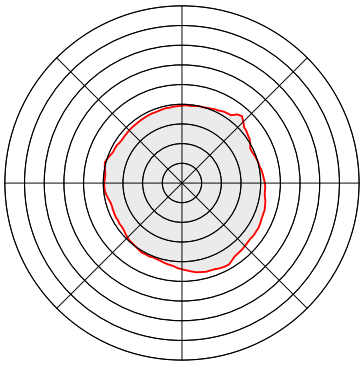
2660 ft / 129550.56 ft²



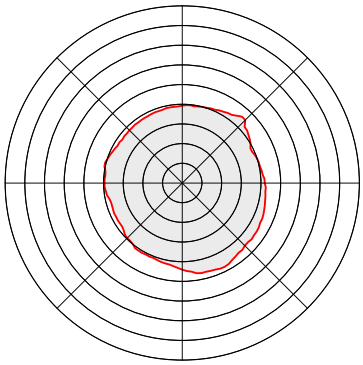
2670 ft / 131168.18 ft²



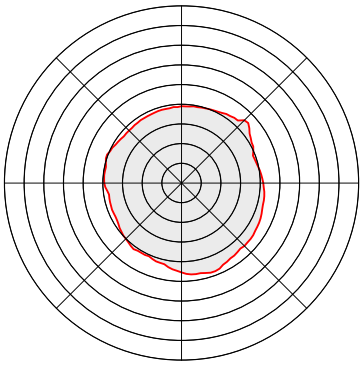
2680 ft / 132542.84 ft²



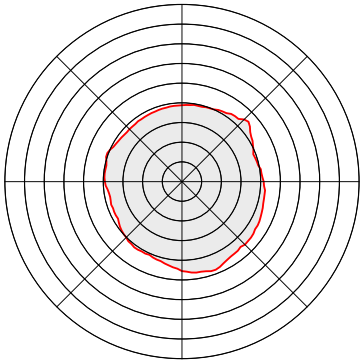
2690 ft / 133518.25 ft²



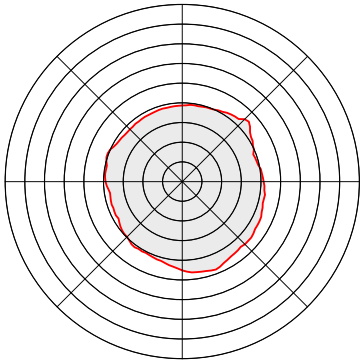
2700 ft / 133918.87 ft²



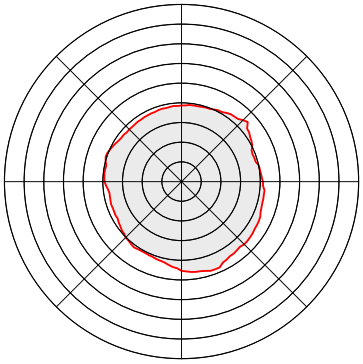
2710 ft / 134031.67 ft²



2720 ft / 133645.61 ft²



2730 ft / 132915.88 ft²



2740 ft / 132420.69 ft²

*All sections are oriented to Magnetic North.

Magnetic Declination= 0.8°

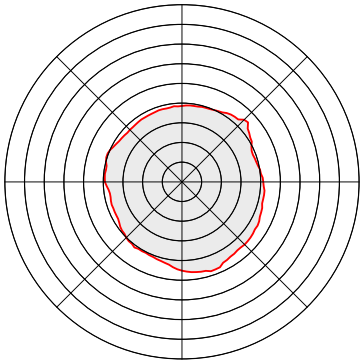
SONIC SURVEYS	CUSTOMER : WESTLAKE CHEMICAL DATE : December 13, 2021	CAVERN : PPG No. 006X OPERATION No. : 1

HORIZONTAL SECTIONS

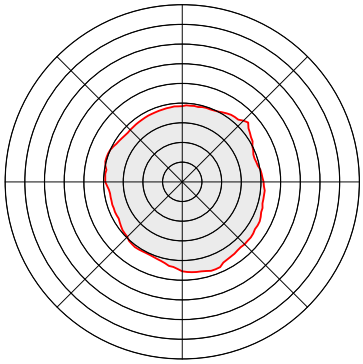
between 2750 ft and 2860 ft

SCALE 50.0 ft per division

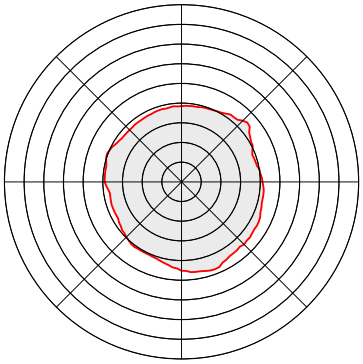
Operation No. 1 (12/21)



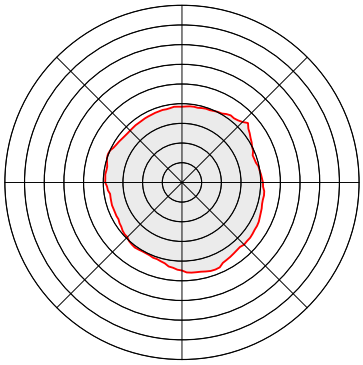
2750 ft / 132032.60 ft²



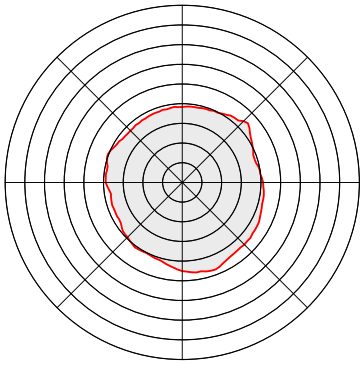
2760 ft / 131888.79 ft²



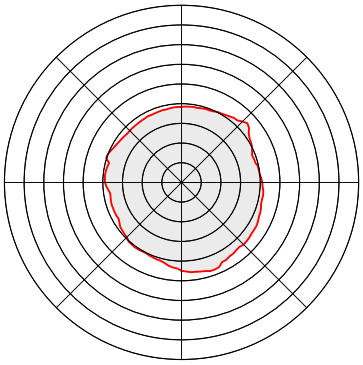
2770 ft / 131438.81 ft²



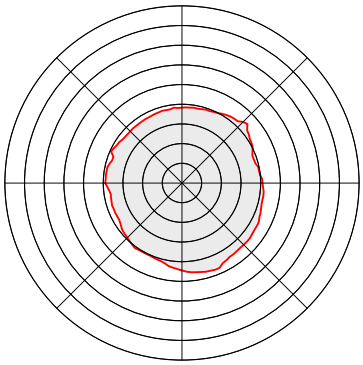
2780 ft / 130977.92 ft²



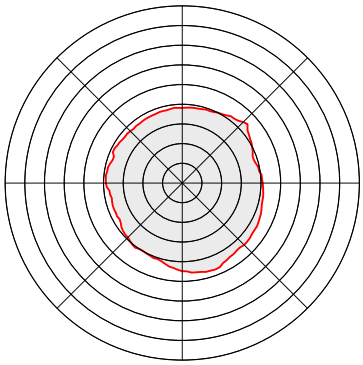
2790 ft / 130617.57 ft²



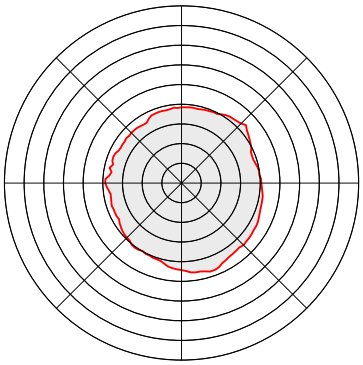
2800 ft / 130078.58 ft²



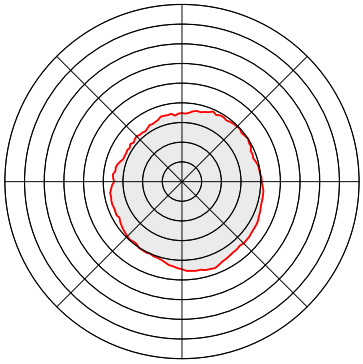
2810 ft / 129310.03 ft²



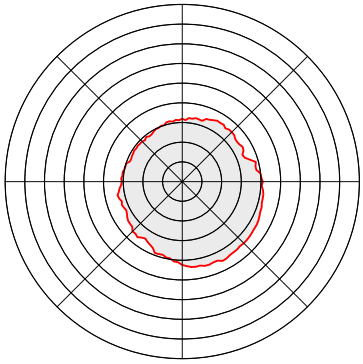
2820 ft / 129064.67 ft²



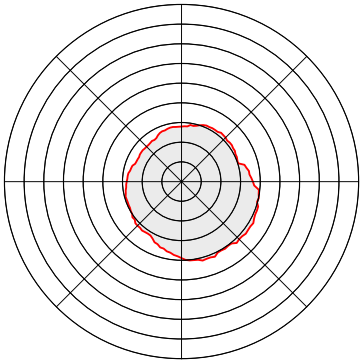
2830 ft / 127183.80 ft²



2840 ft / 119181.32 ft²



2850 ft / 103476.02 ft²



2860 ft / 85567.23 ft²

*All sections are oriented to Magnetic North.

Magnetic Declination= 0.8°

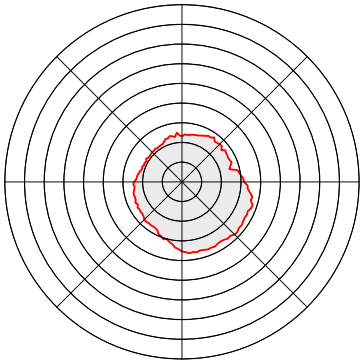
SONIC SURVEYS	CUSTOMER : WESTLAKE CHEMICAL DATE : December 13, 2021	CAVERN : PPG No. 006X OPERATION No. : 1

HORIZONTAL SECTIONS

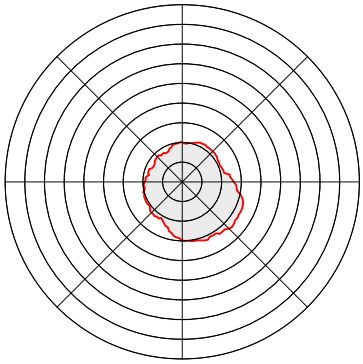
between 2870 ft and 2980 ft

SCALE 50.0 ft per division

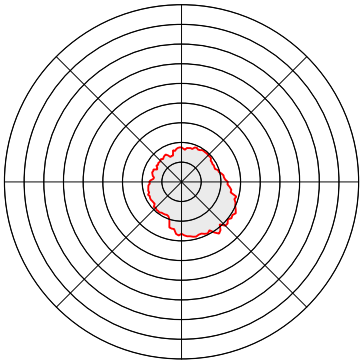
Operation No. 1 (12/21)



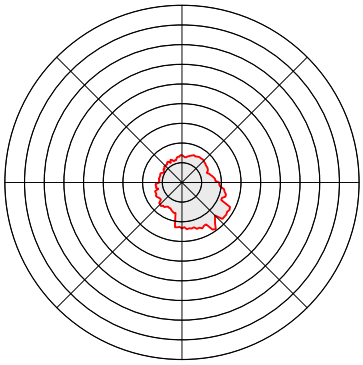
2870 ft / 64730.05 ft²



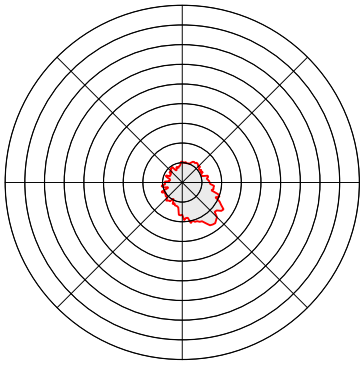
2880 ft / 45263.02 ft²



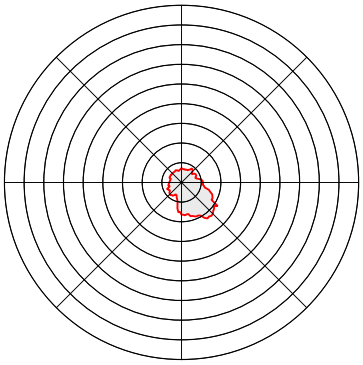
2890 ft / 35770.65 ft²



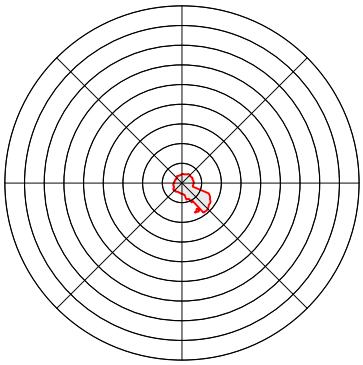
2900 ft / 23982.48 ft²



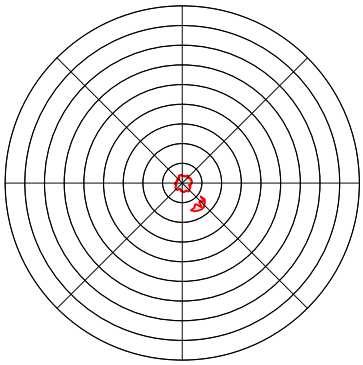
2910 ft / 15158.61 ft²



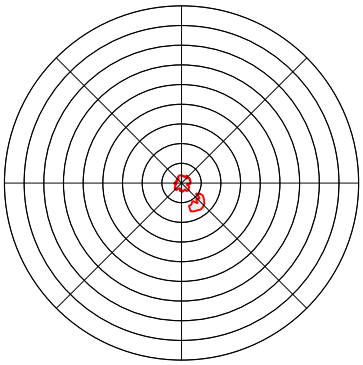
2920 ft / 9965.71 ft²



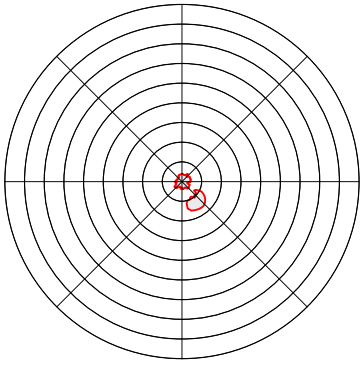
2930 ft / 4441.09 ft²



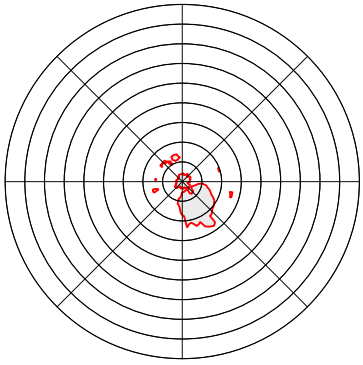
2940 ft / 1768.40 ft²



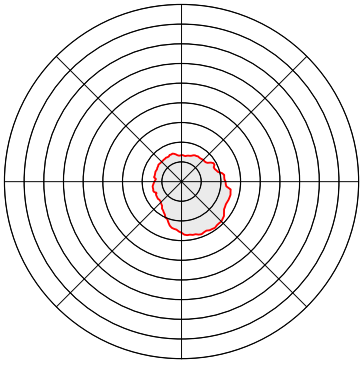
2950 ft / 2160.85 ft²



2960 ft / 2710.71 ft²



2970 ft / 9061.96 ft²



2980 ft / 29936.95 ft²

*All sections are oriented to Magnetic North.

Magnetic Declination= 0.8°

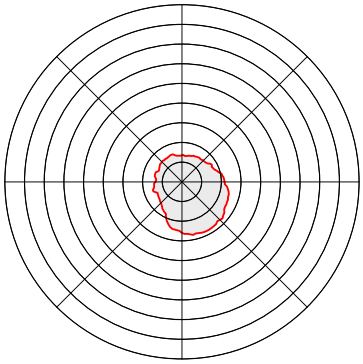
SONIC SURVEYS	CUSTOMER : WESTLAKE CHEMICAL DATE : December 13, 2021	CAVERN : PPG No. 006X OPERATION No. : 1

HORIZONTAL SECTIONS

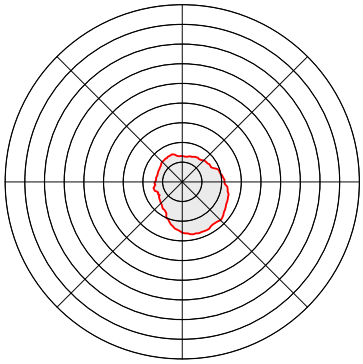
between 2990 ft and 3100 ft

SCALE 50.0 ft per division

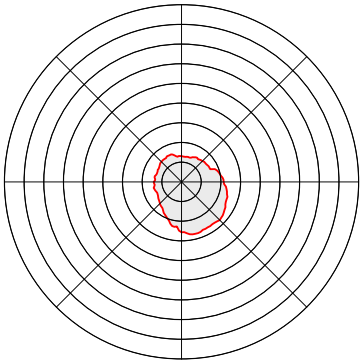
Operation No. 1 (12/21)



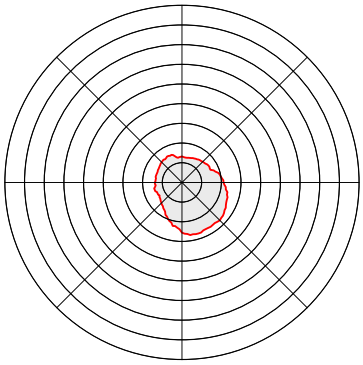
2990 ft / 28922.29 ft²



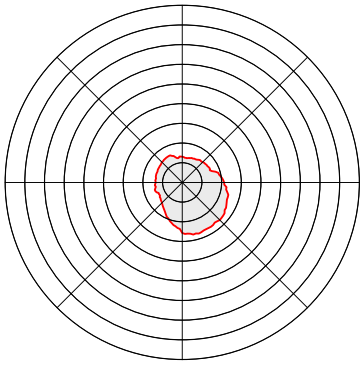
3000 ft / 28228.37 ft²



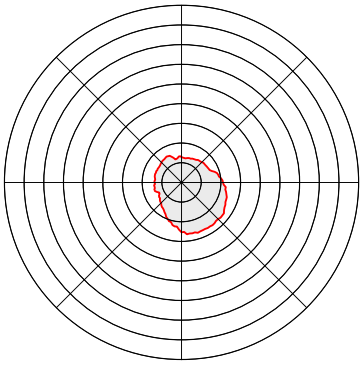
3010 ft / 27835.15 ft²



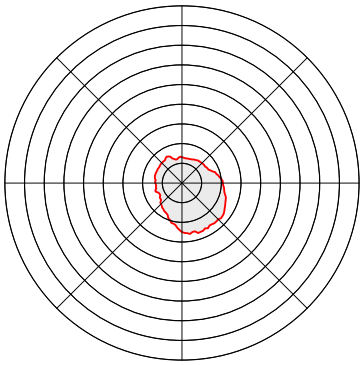
3020 ft / 27375.26 ft²



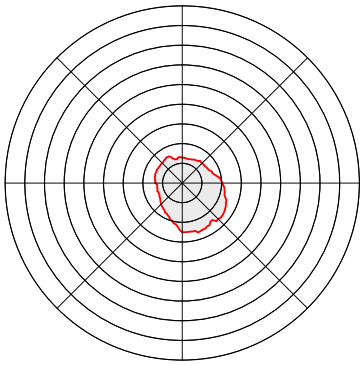
3030 ft / 27179.87 ft²



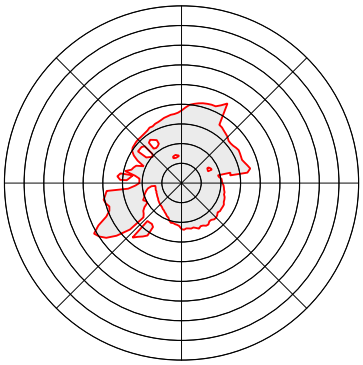
3040 ft / 26788.60 ft²



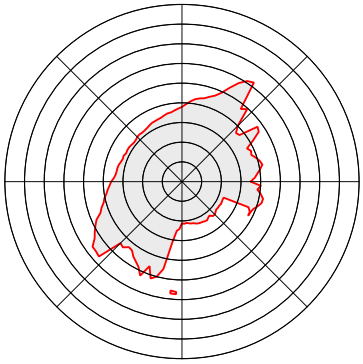
3050 ft / 26152.06 ft²



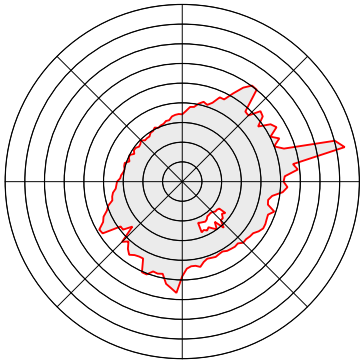
3060 ft / 25593.75 ft²



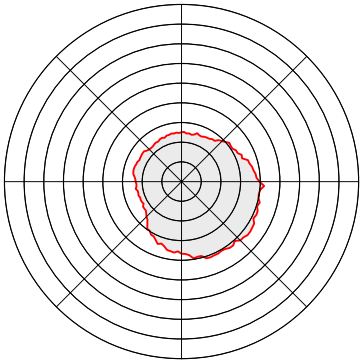
3070 ft / 69461.36 ft²



3080 ft / 115500.59 ft²



3090 ft / 147617.29 ft²



3100 ft / 77663.91 ft²

*All sections are oriented to Magnetic North.

Magnetic Declination= 0.8°

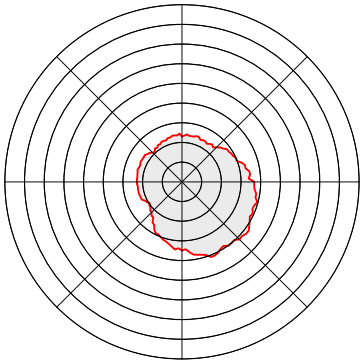
SONIC SURVEYS	CUSTOMER : WESTLAKE CHEMICAL DATE : December 13, 2021	CAVERN : PPG No. 006X OPERATION No. : 1

HORIZONTAL SECTIONS

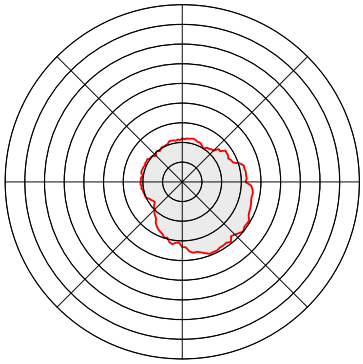
between 3110 ft and 3220 ft

SCALE 50.0 ft per division

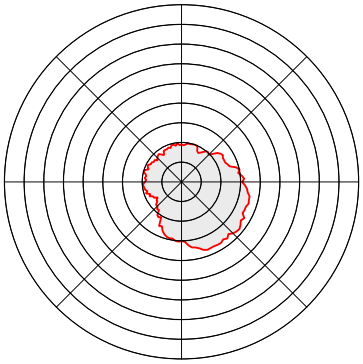
Operation No. 1 (12/21)



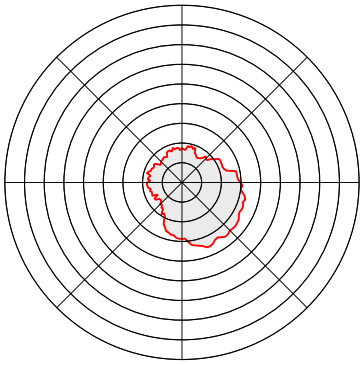
3110 ft / 68350.56 ft²



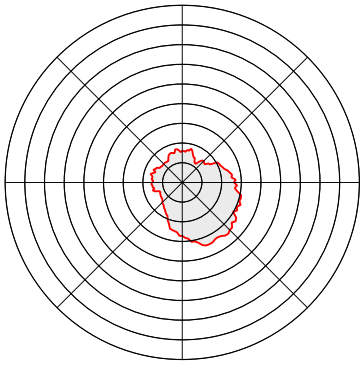
3120 ft / 60128.54 ft²



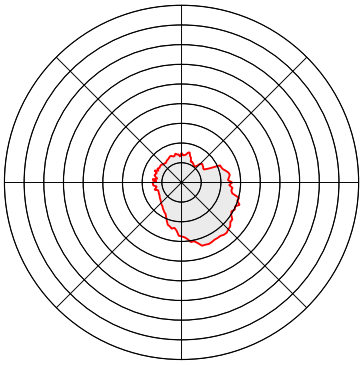
3130 ft / 50988.74 ft²



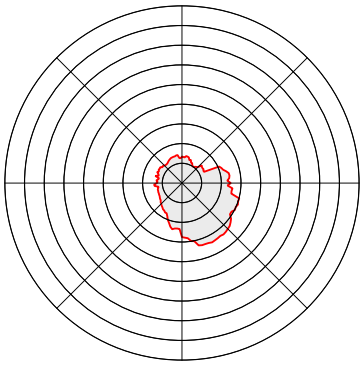
3140 ft / 43017.79 ft²



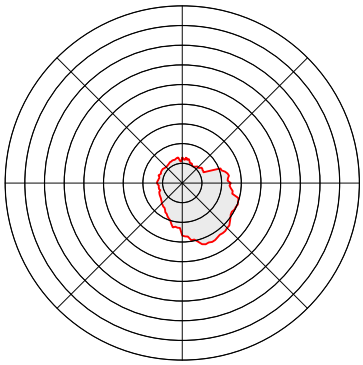
3150 ft / 37001.20 ft²



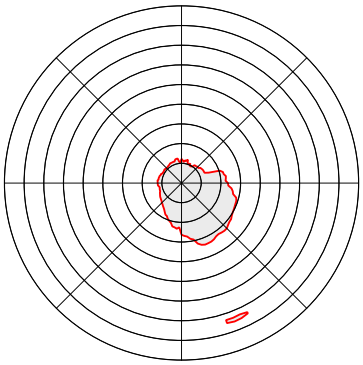
3160 ft / 34066.05 ft²



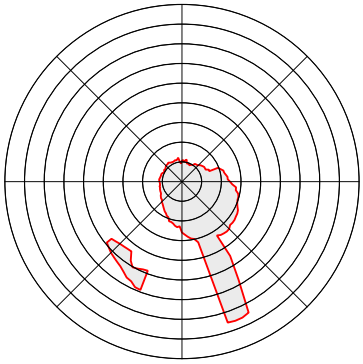
3170 ft / 32481.99 ft²



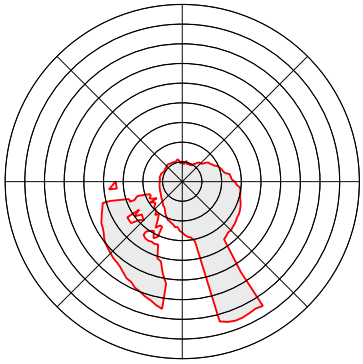
3180 ft / 30682.40 ft²



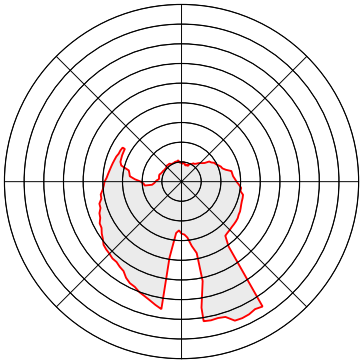
3190 ft / 30258.48 ft²



3200 ft / 48791.87 ft²



3210 ft / 80876.44 ft²



3220 ft / 102372.04 ft²

*All sections are oriented to Magnetic North.

Magnetic Declination= 0.8°

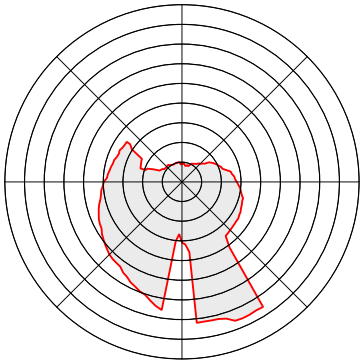
SONIC SURVEYS	CUSTOMER : WESTLAKE CHEMICAL DATE : December 13, 2021	CAVERN : PPG No. 006X OPERATION No. : 1

HORIZONTAL SECTIONS

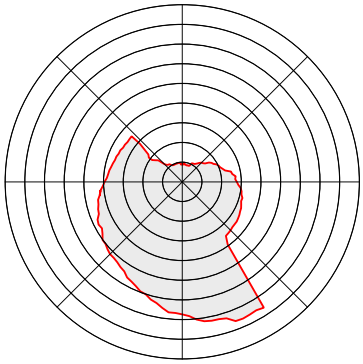
between 3230 ft and 3320 ft

SCALE 50.0 ft per division

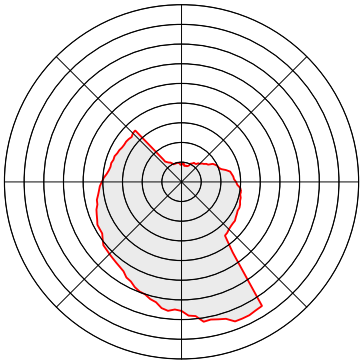
Operation No. 1 (12/21)



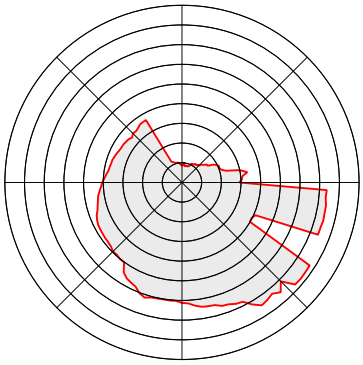
3230 ft / 113084.50 ft²



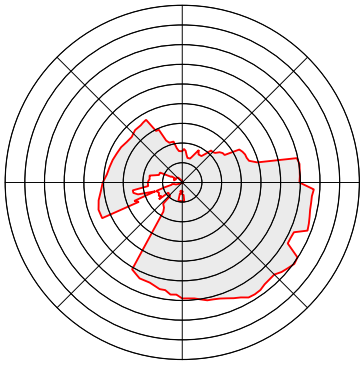
3240 ft / 126547.97 ft²



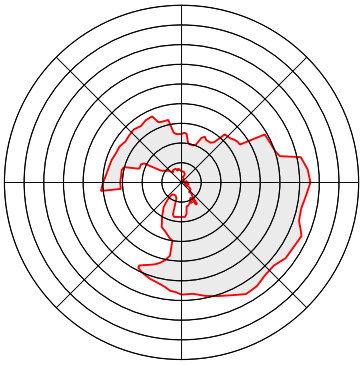
3250 ft / 128419.62 ft²



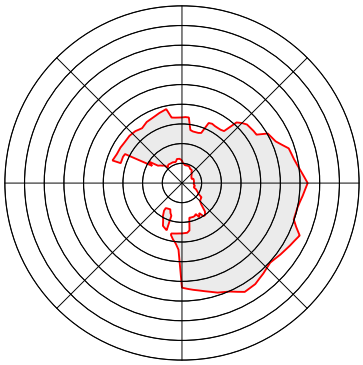
3260 ft / 166981.89 ft²



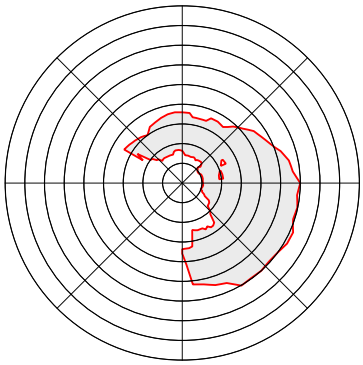
3270 ft / 151046.67 ft²



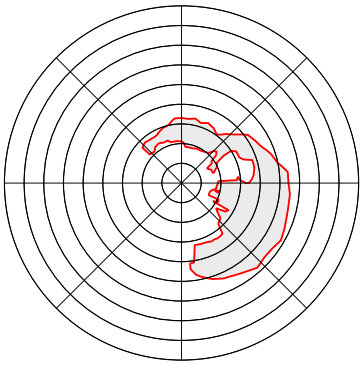
3280 ft / 137726.83 ft²



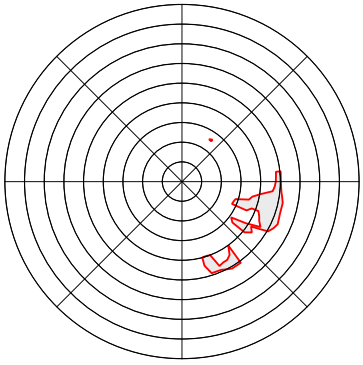
3290 ft / 122395.46 ft²



3300 ft / 101025.00 ft²



3310 ft / 64008.96 ft²



3320 ft / 11204.84 ft²

*All sections are oriented to Magnetic North.

Magnetic Declination= 0.8°

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	2505.0		TILT	0		VOS	5935.04	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
24	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
48	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8
72	0.8	0.8	0.8	0.9	0.9	0.8	0.8	0.8
96	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
120	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
144	0.9	0.9	0.9	0.9	1.0	1.0	1.0	0.9
168	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7
192	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
216	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
240	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
264	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
288	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
312	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
336	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7

DEPTH	2510.0		TILT	0		VOS	5935.04	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7
24	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
48	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8
72	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
96	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
120	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
144	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
168	0.7	0.7	0.7	0.7	0.6	0.7	0.7	0.7
192	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
216	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.7
240	0.7	0.7	0.7	0.6	0.5	0.5	0.6	0.5
264	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
288	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
312	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7
336	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6

DEPTH	2520.0		TILT	0		VOS	5935.04	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	0.7	0.7	0.7	0.7	0.6	0.7	0.7	0.7
24	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6
48	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7
72	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6
96	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7
120	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6
144	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
168	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6
192	0.6	0.6	0.6	0.7	0.7	0.7	0.6	0.6
216	0.6	0.7	0.7	0.7	0.8	0.7	0.7	0.7
240	0.7	0.8	0.9	0.8	0.7	0.7	0.7	0.7
264	0.7	0.8	0.9	0.8	0.8	0.8	0.9	0.9
288	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8
312	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
336	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	2530.0		TILT	0		VOS	5935.04	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7
24	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6
48	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.6
72	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6
96	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7
120	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.5
144	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
168	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
192	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7
216	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
240	0.7	0.7	0.6	0.8	0.9	0.8	0.7	0.7
264	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.9
288	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.7
312	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8
336	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7

DEPTH	2540.0		TILT	0		VOS	5935.04	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	0.7	0.6	0.5	0.6	0.6	0.6	0.5	0.5
24	0.5	0.6	0.6	0.6	0.5	0.6	0.6	0.6
48	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6
72	0.5	0.5	0.5	0.6	0.6	0.6	0.5	0.5
96	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
120	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
144	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
168	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
192	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.6
216	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
240	0.6	0.6	0.5	0.6	0.7	0.7	0.7	0.7
264	0.7	0.7	0.7	0.7	0.7	0.6	0.5	0.6
288	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
312	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
336	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7

DEPTH	2550.0		TILT	0		VOS	5935.04	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7
24	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
48	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7
72	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6
96	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
120	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
144	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
168	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.7
192	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
216	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7
240	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6
264	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
288	0.7	0.6	0.6	0.6	0.7	0.7	0.7	0.7
312	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
336	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	2560.0		TILT	0		VOS	5935.04	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
24	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
48	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7
72	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7
96	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6
120	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
144	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.7
168	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.7
192	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.7
216	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
240	0.7	0.7	0.7	0.8	0.9	0.8	0.7	0.8
264	0.8	0.8	0.7	0.7	0.6	0.7	0.7	0.7
288	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.6
312	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
336	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6

DEPTH	2570.0		TILT	0		VOS	5935.04	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
24	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7
48	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
72	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
96	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7
120	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.6
144	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7
168	0.7	0.7	0.7	0.7	0.8	0.8	0.9	0.8
192	0.8	0.8	0.9	0.8	0.8	0.7	0.7	0.7
216	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6
240	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7
264	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6
288	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
312	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
336	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6

DEPTH	2580.0		TILT	0		VOS	5935.04	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
24	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
48	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
72	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
96	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
120	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7
144	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
168	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
192	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
216	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
240	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
264	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6
288	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
312	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
336	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	2590.0		TILT	0		VOS	5935.04	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
24	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.6
48	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
72	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
96	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8
120	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7
144	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
168	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
192	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
216	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6
240	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
264	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
288	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
312	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
336	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6

DEPTH	2600.0		TILT	0		VOS	5935.04	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
24	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
48	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
72	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
96	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
120	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
144	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
168	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
192	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
216	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
240	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
264	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
288	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
312	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
336	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6

DEPTH	2610.0		TILT	0		VOS	5935.04	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
24	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
48	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
72	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
96	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7
120	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
144	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
168	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
192	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6
216	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
240	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
264	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
288	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
312	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
336	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	2620.0		TILT	0		VOS	5935.04	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
24	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.6
48	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
72	0.6	0.7	0.7	0.7	0.8	0.7	0.7	0.7
96	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
120	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
144	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
168	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6
192	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7
216	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
240	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
264	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6
288	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7
312	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
336	0.7	0.6	0.6	0.6	0.5	0.6	0.6	0.6

DEPTH	2630.0		TILT	0		VOS	5935.04	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
24	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4
48	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
72	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
96	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
120	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
144	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
168	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
192	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
216	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
240	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5
264	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
288	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
312	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
336	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

DEPTH	2640.0		TILT	0		VOS	5935.04	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	190.1	191.8	191.1	191.1	193.5	193.8	194.5	196.0
24	195.7	198.6	200.1	202.7	204.7	206.9	217.3	209.0
48	205.9	202.7	199.8	197.6	195.0	188.9	189.9	190.4
72	192.1	194.0	192.1	195.0	195.2	197.6	197.9	199.8
96	202.3	204.9	207.1	208.3	209.8	210.2	211.2	212.4
120	214.6	212.9	213.9	214.4	214.6	215.3	217.3	218.7
144	219.4	220.2	224.8	224.3	224.0	222.8	223.6	224.8
168	221.9	219.7	216.8	213.6	211.9	207.3	203.5	203.0
192	202.5	201.3	198.4	197.6	197.9	197.6	196.7	195.7
216	194.3	193.3	192.3	191.8	189.7	187.2	186.8	186.3
240	186.3	187.5	186.3	186.8	185.3	184.6	186.8	189.9
264	191.6	191.1	191.6	191.8	189.7	189.9	188.0	188.2
288	195.0	192.3	189.9	188.0	186.3	186.8	186.3	187.0
312	187.2	186.5	187.5	188.0	188.2	187.7	188.0	188.0
336	190.1	188.9	189.2	189.4	191.8	189.9	190.1	190.6

SONIC

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	2650.0		TILT	0		VOS	5935.04	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	191.7	192.3	193.0	193.5	193.8	195.0	196.4	196.2
24	198.6	200.6	203.9	205.4	208.5	210.5	219.0	209.3
48	208.5	204.9	201.5	199.8	195.7	191.4	191.6	193.0
72	196.4	196.4	194.3	196.0	199.6	199.6	200.6	201.8
96	205.2	206.6	208.8	211.0	212.7	215.8	216.3	215.1
120	218.5	217.3	217.3	217.5	217.7	218.2	219.9	220.2
144	223.3	223.8	228.4	227.9	229.4	226.0	227.4	226.2
168	223.6	221.1	220.7	216.4	212.7	209.5	204.7	204.7
192	205.2	202.5	200.1	200.8	198.6	200.3	198.6	197.9
216	196.2	195.5	194.0	193.5	191.4	188.9	187.2	187.0
240	187.2	188.2	187.0	186.8	185.8	185.5	187.7	191.1
264	194.5	192.1	192.3	192.3	191.1	190.9	190.1	197.4
288	195.5	192.6	190.1	188.0	187.5	186.5	186.8	187.0
312	187.2	187.7	187.2	187.7	189.2	188.9	189.7	189.7
336	189.9	189.4	189.2	191.4	192.1	190.4	194.3	191.8

DEPTH	2660.0		TILT	0		VOS	5935.04	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	194.7	195.6	194.4	195.6	195.8	197.6	197.9	198.5
24	201.3	202.5	206.0	207.7	211.8	216.4	225.4	211.8
48	209.7	206.9	204.5	201.1	197.9	194.1	192.9	193.8
72	196.7	197.3	196.1	199.3	200.5	201.6	203.4	205.7
96	208.3	210.3	212.1	212.9	216.4	216.7	218.1	217.3
120	220.5	220.5	220.8	221.6	221.0	221.0	223.1	224.5
144	224.8	227.4	232.9	233.2	232.3	229.7	229.7	229.7
168	226.3	224.5	221.9	220.2	215.3	211.8	208.3	206.6
192	206.3	205.7	202.2	201.3	201.1	202.2	200.5	198.5
216	197.0	196.4	194.7	194.4	191.2	188.9	188.3	188.3
240	188.6	188.3	188.0	187.4	187.4	186.3	191.5	192.7
264	195.3	196.1	194.7	194.1	194.4	191.5	195.3	199.6
288	198.7	194.1	191.5	190.1	189.5	188.0	187.2	188.0
312	188.9	189.8	189.2	189.5	189.5	190.3	189.5	190.1
336	192.1	191.5	190.3	191.8	192.7	193.2	192.1	194.7

DEPTH	2670.0		TILT	0		VOS	5935.04	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	195.6	195.6	196.4	197.3	197.6	199.3	199.3	199.9
24	202.5	205.7	208.0	209.7	211.8	219.3	227.4	212.1
48	210.6	208.0	206.9	203.1	199.0	194.4	192.7	195.0
72	196.7	199.0	197.9	200.5	202.5	203.4	205.7	207.4
96	209.5	211.5	214.1	215.8	218.7	219.0	220.8	220.5
120	223.4	223.7	224.8	221.3	222.8	222.8	224.2	226.8
144	227.1	232.0	234.7	235.8	232.3	231.5	232.0	231.8
168	228.3	226.3	223.9	220.5	216.4	213.5	210.3	207.4
192	206.3	205.1	202.8	201.3	201.3	203.1	201.9	199.9
216	197.9	196.7	195.3	194.4	192.1	189.2	188.9	188.6
240	189.5	189.5	188.3	188.6	187.4	187.4	191.8	193.5
264	197.0	196.7	196.7	196.4	195.3	192.4	196.1	201.1
288	198.2	195.6	192.4	190.9	190.6	188.6	188.3	188.3
312	188.6	189.5	188.9	189.8	190.1	190.9	190.1	191.5
336	192.1	191.5	192.1	192.9	192.7	193.5	193.2	196.1

SONIC

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	2680.0		TILT	0		VOS	5935.04	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	196.4	196.4	197.6	197.9	198.5	199.9	200.5	201.9
24	204.8	206.0	210.3	210.6	212.9	224.5	227.1	212.6
48	211.8	210.0	205.4	202.2	197.6	194.7	193.8	196.4
72	198.5	200.2	200.2	203.4	203.7	205.7	209.5	210.6
96	210.3	212.9	215.8	217.0	219.0	221.0	219.9	223.1
120	223.7	224.5	225.1	223.4	224.5	224.8	226.3	227.7
144	229.7	233.8	237.0	237.6	235.5	234.1	232.9	232.6
168	230.3	227.7	226.3	221.9	217.0	214.4	210.9	209.5
192	208.0	206.3	203.7	202.5	202.2	204.5	202.5	201.1
216	199.3	197.6	197.0	195.8	193.5	190.3	188.0	188.6
240	188.6	189.2	188.9	187.7	187.7	190.1	192.7	193.5
264	196.7	196.7	197.9	196.7	196.1	194.1	199.9	201.3
288	198.2	195.6	193.8	191.5	190.6	189.2	188.3	188.9
312	188.9	189.5	189.2	189.5	190.3	190.9	190.6	192.1
336	193.2	192.1	192.1	194.4	193.8	193.5	194.7	196.1

DEPTH	2690.0		TILT	0		VOS	5935.04	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	197.0	197.9	197.3	197.9	200.2	199.9	201.3	202.8
24	205.4	206.6	210.3	211.5	213.2	224.5	228.3	220.5
48	212.6	210.6	207.1	205.1	200.5	194.7	195.0	197.3
72	199.3	201.1	201.9	205.1	206.9	208.6	210.9	212.1
96	211.8	213.2	217.0	218.7	221.0	221.0	221.9	223.7
120	225.4	225.1	225.7	224.2	224.8	226.3	227.7	228.3
144	229.4	233.8	239.0	238.4	237.0	234.4	233.5	233.5
168	231.2	229.4	225.7	222.2	219.0	216.4	211.8	210.0
192	208.0	205.4	203.7	202.5	204.2	203.4	204.2	201.9
216	199.9	198.5	197.6	195.8	193.2	190.1	188.9	189.5
240	188.3	189.2	188.6	188.3	187.4	188.3	191.5	194.4
264	197.0	197.6	197.6	196.7	196.1	197.9	200.8	203.1
288	199.9	195.8	192.1	192.1	191.5	188.9	188.0	188.6
312	188.9	189.8	190.1	190.1	190.3	191.2	191.5	192.1
336	192.7	192.4	192.7	193.8	194.7	194.1	195.6	195.8

DEPTH	2700.0		TILT	0		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	196.8	198.3	198.9	197.4	198.9	200.3	201.2	203.2
24	204.1	207.3	209.3	212.5	214.2	220.3	227.0	226.7
48	213.3	212.2	208.1	204.6	200.6	194.5	194.8	198.0
72	200.3	201.7	202.0	204.4	205.5	209.3	209.9	212.8
96	212.5	214.2	215.4	217.4	219.1	221.2	222.6	222.3
120	224.9	225.8	225.5	227.0	224.6	224.9	228.4	227.8
144	230.4	233.0	237.1	238.6	238.0	235.4	234.5	233.3
168	233.9	231.9	226.4	223.8	220.0	215.9	212.5	209.6
192	208.7	207.5	205.8	203.8	204.6	203.8	204.9	204.6
216	204.4	199.7	197.7	197.7	196.2	191.3	188.7	188.7
240	189.3	188.7	189.6	188.4	187.5	187.5	189.9	193.9
264	195.4	197.7	197.7	197.7	196.5	197.7	202.3	202.9
288	199.7	197.4	194.5	192.5	189.9	190.4	188.1	189.6
312	189.0	189.9	189.9	191.0	190.4	191.0	191.3	191.3
336	192.2	192.8	192.5	192.8	194.8	194.8	194.8	195.1

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	2710.0		TILT	0		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	195.4	195.1	195.7	197.4	197.1	198.6	199.4	200.9
24	202.0	203.5	205.8	209.3	210.4	213.3	213.9	225.8
48	228.1	221.7	213.9	209.9	205.8	204.6	199.7	194.5
72	195.7	197.1	199.1	201.7	203.8	205.8	207.8	209.3
96	211.6	213.1	213.9	214.2	215.7	218.0	220.0	221.5
120	222.3	223.2	225.2	225.8	225.5	226.1	223.8	225.8
144	227.8	228.1	231.0	232.8	238.0	239.7	239.4	236.5
168	233.9	234.2	233.3	231.0	227.0	223.2	220.3	216.2
192	210.7	209.9	209.3	206.7	203.5	204.9	204.6	204.9
216	207.5	205.2	202.3	200.3	199.1	196.5	194.5	191.3
240	189.3	188.4	188.7	189.3	188.4	188.1	187.5	186.7
264	189.9	194.2	196.5	197.1	197.7	197.1	196.5	199.1
288	202.3	202.6	198.9	197.7	194.2	192.5	190.7	188.7
312	189.0	188.7	188.4	189.6	189.6	190.7	190.4	190.7
336	191.0	191.6	192.5	192.8	192.5	192.5	194.2	193.3

DEPTH	2720.0		TILT	89		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	85.2	84.4	83.6	83.6	83.6	83.6	83.6	84.2
24	84.8	84.9	85.0	84.9	84.8	84.8	84.8	84.8
48	84.8	84.8	84.8	84.8	84.7	84.8	85.0	85.0
72	85.0	85.0	85.0	84.9	84.8	85.0	85.1	84.4
96	83.7	83.7	83.7	84.3	84.8	84.4	83.9	83.8
120	83.7	84.3	85.0	84.3	83.6	83.6	83.6	83.6
144	83.6	83.5	83.4	83.5	83.6	83.6	83.6	83.6
168	83.6	83.6	83.7	84.3	85.0	85.0	85.0	84.9
192	84.8	84.8	84.8	84.8	84.8	84.9	85.0	85.0
216	85.0	85.0	85.0	84.8	84.7	84.8	85.0	84.9
240	84.8	84.9	85.0	84.9	84.8	84.8	84.8	84.8
264	84.8	85.1	85.4	85.1	84.8	84.9	85.0	84.4
288	83.8	83.8	83.8	83.8	83.8	83.7	83.6	83.6
312	83.6	83.6	83.7	83.7	83.7	83.7	83.7	83.6
336	83.6	83.6	83.6	83.6	83.6	83.6	83.6	84.4

DEPTH	2720.0		TILT	87		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	84.1	83.9	83.8	83.8	83.8	84.0	84.2	84.0
24	83.8	83.8	83.7	83.6	83.6	83.7	83.8	83.8
48	83.8	83.9	83.9	83.9	83.9	83.9	83.8	83.9
72	83.9	83.9	83.9	83.9	83.9	84.5	85.0	84.6
96	84.2	84.0	83.8	84.0	84.2	84.0	83.8	83.8
120	83.8	83.8	83.7	83.8	83.8	83.8	83.7	83.6
144	83.6	83.7	83.8	84.0	84.2	84.2	84.2	84.2
168	84.2	84.0	83.8	83.8	83.8	83.8	83.8	83.8
192	83.8	83.7	83.6	83.7	83.9	83.9	83.9	83.9
216	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
240	83.8	83.9	84.1	84.0	83.9	84.0	84.1	84.5
264	85.0	84.4	83.8	83.8	83.8	83.7	83.6	83.7
288	83.8	83.8	83.7	83.7	83.7	83.6	83.6	83.6
312	83.7	83.8	83.8	84.0	84.2	83.9	83.6	83.8
336	84.1	84.1	84.1	83.8	83.6	83.7	83.8	83.9

SONIC

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	2720.0		TILT	84		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	84.7	84.5	84.3	84.3	84.2	84.1	84.1	84.2
24	84.3	84.3	84.3	84.3	84.3	84.4	84.5	84.3
48	84.2	84.2	84.2	84.1	84.1	84.2	84.3	84.3
72	84.2	84.1	83.9	84.0	84.1	84.1	84.1	84.3
96	84.5	84.5	84.5	84.4	84.3	84.3	84.3	84.2
120	84.1	84.1	84.2	84.2	84.2	84.3	84.3	84.2
144	84.1	84.1	84.1	84.1	84.1	84.0	83.9	84.1
168	84.3	84.2	84.1	84.1	84.1	84.1	84.1	84.1
192	84.1	84.3	84.5	84.4	84.3	84.3	84.3	84.3
216	84.2	84.1	84.1	84.2	84.3	84.3	84.3	84.3
240	84.2	84.1	84.1	84.0	83.9	84.2	84.5	84.3
264	84.2	84.2	84.2	84.2	84.2	84.2	84.2	84.5
288	84.7	84.4	84.1	84.1	84.2	84.2	84.2	84.2
312	84.2	84.2	84.2	84.3	84.3	84.5	84.6	84.3
336	84.1	84.2	84.3	84.3	84.2	84.3	84.5	84.6

DEPTH	2720.0		TILT	81		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	84.6	84.6	84.7	84.8	84.8	84.7	84.6	84.7
24	84.8	84.8	84.8	84.9	85.0	85.0	85.1	84.8
48	84.6	84.8	85.1	85.0	85.0	84.8	84.7	84.7
72	84.7	84.8	85.0	84.9	84.8	84.8	84.8	84.8
96	84.7	84.8	84.8	84.8	84.8	84.8	84.7	84.8
120	85.0	84.8	84.7	84.8	85.0	84.7	84.5	84.6
144	84.8	84.8	84.7	84.8	84.8	84.8	84.7	84.6
168	84.6	84.6	84.7	84.8	84.8	84.6	84.5	84.5
192	84.6	84.6	84.7	84.6	84.6	84.6	84.6	84.6
216	84.7	84.6	84.5	84.5	84.5	84.6	84.7	84.7
240	84.7	84.8	84.8	84.8	84.8	84.6	84.5	84.5
264	84.6	84.6	84.6	84.5	84.3	84.5	84.6	84.5
288	84.5	84.6	84.8	84.8	84.8	84.7	84.6	84.6
312	84.6	84.6	84.6	84.7	84.8	84.6	84.5	84.5
336	84.5	84.6	84.7	84.6	84.6	84.6	84.6	84.6

DEPTH	2720.0		TILT	78		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	85.5	85.6	85.7	85.7	85.6	85.6	85.6	85.7
24	85.9	85.6	85.4	85.4	85.5	85.5	85.5	85.6
48	85.7	85.7	85.6	85.4	85.2	85.3	85.5	85.5
72	85.5	85.4	85.4	85.5	85.7	85.7	85.7	85.5
96	85.4	85.5	85.7	85.7	85.6	85.7	85.9	85.9
120	85.9	85.6	85.4	85.3	85.4	85.3	85.2	85.2
144	85.2	85.2	85.2	85.3	85.4	85.4	85.5	85.4
168	85.4	85.5	85.6	85.5	85.5	85.4	85.4	85.6
192	85.9	85.5	85.2	85.2	85.2	85.3	85.4	85.5
216	85.6	85.6	85.6	85.3	85.1	85.4	85.7	85.6
240	85.5	85.5	85.5	85.5	85.6	85.5	85.4	85.3
264	85.4	85.3	85.2	85.2	85.2	85.7	86.1	86.0
288	85.9	85.7	85.6	85.5	85.5	85.5	85.5	85.7
312	85.9	85.7	85.6	85.8	86.0	85.7	85.5	85.4
336	85.4	85.6	85.9	85.6	85.4	85.5	85.7	85.6

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	2720.0		TILT	75		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	86.9	86.9	86.9	86.9	86.9	86.9	86.7	86.5
24	86.7	86.9	86.9	86.9	86.9	86.9	87.0	87.1
48	87.2	87.3	86.9	86.6	86.6	86.5	86.6	86.8
72	87.0	87.3	87.3	87.3	87.3	87.4	87.3	87.1
96	86.9	86.6	86.6	86.6	86.7	86.8	86.8	86.8
120	86.6	86.4	86.4	86.5	86.7	86.9	86.8	86.6
144	86.6	86.5	86.5	86.5	86.6	86.8	86.9	87.1
168	87.1	87.1	86.9	86.6	86.7	86.8	86.5	86.3
192	86.6	86.9	86.7	86.5	86.8	87.0	86.7	86.4
216	86.3	86.3	86.4	86.6	86.8	86.9	86.6	86.4
240	86.4	86.4	86.5	86.6	86.7	86.8	86.6	86.4
264	86.5	86.6	86.8	87.0	86.7	86.4	86.4	86.4
288	86.8	87.3	87.1	86.9	86.9	86.9	86.7	86.5
312	86.5	86.5	86.9	87.3	87.0	86.8	86.8	86.8
336	86.9	87.0	87.1	87.1	86.9	86.8	86.9	87.0

DEPTH	2720.0		TILT	72		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	88.2	88.3	88.4	88.4	88.2	88.0	88.5	89.1
24	88.6	88.2	88.4	88.7	88.6	88.6	88.7	88.9
48	88.7	88.6	88.6	88.7	88.5	88.3	88.5	88.8
72	88.5	88.2	88.4	88.6	88.2	87.9	87.8	87.8
96	87.8	87.8	88.0	88.3	88.4	88.6	88.4	88.3
120	88.2	88.0	88.1	88.2	88.0	87.9	87.9	87.9
144	88.0	88.0	88.4	88.7	88.7	88.7	88.2	87.8
168	87.9	88.0	87.8	87.7	88.1	88.6	88.4	88.3
192	88.4	88.4	88.4	88.3	88.4	88.6	88.4	88.3
216	88.3	88.3	88.2	88.0	88.5	88.9	88.5	88.2
240	88.5	88.9	88.7	88.4	88.4	88.4	88.2	87.9
264	88.4	88.8	88.4	88.0	87.9	87.8	87.8	87.9
288	87.9	87.9	88.4	88.9	88.7	88.4	88.6	88.8
312	88.4	88.0	88.0	88.0	88.2	88.3	88.1	87.9
336	88.4	88.8	88.9	89.1	88.7	88.3	88.2	88.0

DEPTH	2720.0		TILT	69		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	90.7	90.4	90.2	90.0	89.8	89.7	89.9	90.2
24	90.4	90.6	90.5	90.4	90.1	89.8	90.3	90.7
48	90.5	90.4	90.4	90.4	90.0	89.7	90.4	91.3
72	90.8	90.4	90.5	90.6	91.1	91.6	90.6	89.7
96	90.2	90.7	90.5	90.4	90.4	90.4	90.0	89.7
120	89.8	90.0	90.0	90.0	90.0	90.0	89.9	89.8
144	90.0	90.2	90.1	90.0	89.8	89.7	89.8	90.0
168	89.9	89.8	90.1	90.4	90.3	90.2	89.9	89.7
192	89.7	89.8	90.2	90.6	90.0	89.5	90.0	90.6
216	90.3	90.0	90.0	90.0	90.3	90.6	90.6	90.7
240	90.3	89.8	89.7	89.7	89.5	89.3	90.2	91.1
264	90.6	90.2	90.5	90.9	90.6	90.4	89.9	89.5
288	89.5	89.5	89.8	90.2	90.4	90.6	90.7	90.9
312	90.6	90.4	90.2	90.0	90.0	90.0	89.9	89.8
336	89.8	89.8	90.1	90.4	90.3	90.2	90.6	91.1

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	2720.0		TILT	66		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	92.5	92.3	92.8	93.2	93.0	92.9	92.8	92.7
24	92.4	92.2	92.2	92.3	92.1	92.0	92.5	93.0
48	93.2	93.4	92.9	92.5	92.5	92.5	92.6	92.7
72	92.4	92.2	92.3	92.5	92.5	92.5	92.7	92.9
96	92.8	92.7	92.8	92.9	92.8	92.7	92.5	92.3
120	92.4	92.5	92.0	91.4	91.4	91.4	91.7	92.0
144	92.0	92.0	92.0	92.0	92.2	92.5	92.6	92.7
168	92.3	92.0	92.1	92.3	92.5	92.7	92.2	91.8
192	92.0	92.3	92.3	92.3	92.1	92.0	91.8	91.6
216	92.0	92.5	92.2	92.0	92.4	92.9	92.5	92.2
240	92.0	92.0	92.3	92.7	92.6	92.5	92.3	92.2
264	92.3	92.5	92.4	92.3	92.3	92.3	92.4	92.5
288	92.2	92.0	92.3	92.7	92.5	92.3	92.6	92.9
312	92.2	91.6	91.6	91.6	91.7	91.8	92.5	93.2
336	92.7	92.2	92.5	92.9	92.9	93.0	92.8	92.7

DEPTH	2720.0		TILT	63		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	95.4	95.5	95.3	95.2	94.6	94.1	94.1	94.1
24	94.7	95.4	95.6	95.9	95.4	95.0	95.1	95.2
48	94.6	94.1	94.7	95.4	96.0	96.8	96.3	95.9
72	95.2	94.5	94.5	94.7	95.3	96.1	95.4	94.8
96	95.0	95.2	95.2	95.4	94.8	94.3	94.4	94.7
120	95.1	95.5	94.9	94.3	94.4	94.5	94.6	94.8
144	95.1	95.4	94.6	93.9	94.0	94.1	94.5	95.0
168	95.5	96.1	94.9	93.8	93.8	93.9	93.8	93.8
192	94.3	94.8	94.9	95.0	95.0	95.0	95.7	96.4
216	95.3	94.3	94.4	94.7	94.6	94.7	94.4	94.3
240	94.4	94.5	94.7	95.0	95.1	95.2	95.1	95.0
264	95.1	95.2	95.0	94.8	94.9	95.0	94.7	94.5
288	94.5	94.7	94.7	94.8	94.6	94.5	94.4	94.3
312	95.0	95.7	95.2	94.7	94.5	94.5	94.7	95.0
336	94.6	94.3	94.5	94.8	94.8	94.8	95.1	95.4

DEPTH	2720.0		TILT	60		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	96.6	96.4	97.4	98.4	98.6	98.9	98.3	97.7
24	97.6	97.5	97.8	98.2	98.1	98.0	97.7	97.5
48	97.4	97.3	97.2	97.1	97.0	97.0	97.2	97.5
72	98.3	99.1	98.6	98.2	97.9	97.7	97.5	97.3
96	97.6	98.0	97.5	97.0	97.2	97.5	97.1	96.8
120	97.0	97.3	97.6	98.0	97.8	97.7	97.7	97.9
144	97.7	97.7	98.0	98.4	97.9	97.5	98.2	98.9
168	98.2	97.5	98.2	98.9	98.1	97.3	97.6	98.0
192	98.1	98.2	97.7	97.3	97.6	97.9	97.8	97.9
216	97.4	97.0	97.4	97.9	98.1	98.4	98.6	98.9
240	98.3	97.7	97.6	97.5	97.9	98.4	98.0	97.7
264	97.7	97.9	97.6	97.3	97.0	96.8	97.4	98.0
288	97.6	97.3	97.5	97.7	96.9	96.3	96.9	97.7
312	97.8	98.0	97.9	97.9	97.8	97.9	97.6	97.5
336	97.2	97.0	97.6	98.4	97.6	96.8	96.8	96.8

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	2720.0		TILT	57		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	101.0	101.1	101.1	101.2	101.0	100.9	101.2	101.6
24	100.8	100.2	101.4	102.7	102.4	102.1	101.1	100.2
48	101.4	102.7	101.9	101.2	101.6	102.0	100.9	100.0
72	100.1	100.4	100.8	101.4	101.2	101.1	101.0	101.1
96	101.4	101.8	101.2	100.7	100.8	101.1	100.8	100.5
120	100.3	100.2	100.2	100.4	100.1	100.0	100.6	101.2
144	101.6	102.0	101.3	100.7	100.5	100.4	100.9	101.6
168	101.3	101.1	100.4	99.8	100.5	101.2	100.8	100.4
192	101.3	102.3	101.6	100.9	101.2	101.6	101.4	101.2
216	101.4	101.6	101.7	102.0	101.6	101.2	100.9	100.7
240	100.8	100.9	100.8	100.7	100.7	100.7	100.8	100.9
264	101.5	102.1	101.6	101.2	100.8	100.5	100.8	101.2
288	101.5	101.8	101.2	100.7	100.8	100.9	101.1	101.4
312	101.2	101.1	100.9	100.9	101.4	102.0	101.8	101.8
336	101.6	101.6	101.5	101.4	101.6	102.0	101.5	101.1

DEPTH	2720.0		TILT	54		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	104.8	104.8	104.9	105.2	105.2	105.3	105.3	105.3
24	105.6	105.9	105.1	104.5	105.5	106.8	105.7	104.8
48	105.9	107.1	105.9	104.8	104.7	104.6	105.2	105.9
72	105.5	105.2	105.3	105.5	105.0	104.6	104.4	104.3
96	104.8	105.5	104.8	104.3	104.9	105.7	105.0	104.5
120	104.6	104.8	104.8	104.8	104.9	105.2	104.8	104.5
144	105.1	105.9	105.6	105.5	105.0	104.6	105.0	105.5
168	105.6	105.7	105.5	105.3	105.2	105.2	104.8	104.6
192	104.1	103.7	104.6	105.5	105.2	105.0	104.6	104.3
216	105.0	105.9	105.5	105.2	105.2	105.3	105.4	105.5
240	104.8	104.3	104.8	105.5	105.2	105.0	105.2	105.5
264	105.3	105.2	104.8	104.6	104.4	104.3	103.9	103.6
288	104.2	105.0	104.8	104.6	104.6	104.6	104.7	104.8
312	104.9	105.2	105.6	106.1	106.2	106.4	105.5	104.6
336	104.6	104.6	104.6	104.6	105.1	105.7	105.2	104.8

DEPTH	2720.0		TILT	51		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	109.0	109.3	109.4	109.6	109.2	108.9	109.6	110.3
24	110.1	110.0	109.8	109.8	110.3	110.9	111.2	111.6
48	111.2	111.0	110.9	110.9	111.0	111.2	110.5	110.0
72	109.6	109.3	109.2	109.3	109.1	109.1	109.6	110.2
96	109.5	108.9	109.2	109.6	109.6	109.8	109.6	109.4
120	109.6	109.8	109.3	108.9	109.1	109.4	108.9	108.5
144	108.8	109.3	108.8	108.5	109.0	109.6	109.1	108.7
168	108.8	109.1	109.4	109.8	109.6	109.4	109.3	109.3
192	109.3	109.4	109.0	108.7	109.4	110.2	109.7	109.4
216	109.3	109.3	109.2	109.3	109.4	109.6	109.3	109.1
240	108.8	108.5	108.6	108.7	108.8	108.9	109.0	109.3
264	108.8	108.5	109.5	110.7	109.9	109.3	108.3	107.5
288	108.3	109.3	109.1	109.1	109.7	110.5	110.1	109.8
312	109.3	108.9	109.8	110.9	110.4	110.2	110.1	110.2
336	109.9	109.8	110.4	111.0	111.2	111.4	110.1	108.9

SONIC

CUSTOMER : WESTLAKE CHEMICAL
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CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	2720.0		TILT	48		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	114.8	116.0	115.6	115.3	115.0	114.8	114.9	115.1
24	114.4	113.9	115.1	116.6	115.0	113.5	114.4	115.5
48	115.0	114.6	115.2	115.9	115.2	114.6	115.0	115.5
72	115.9	116.4	116.0	115.7	115.4	115.3	114.6	114.1
96	114.2	114.4	114.4	114.6	114.7	115.0	114.4	114.1
120	113.8	113.7	114.8	116.0	115.7	115.5	114.4	113.5
144	113.6	113.9	114.8	115.9	114.7	113.7	114.4	115.1
168	114.8	114.6	115.0	115.5	115.3	115.3	115.2	115.3
192	114.6	114.1	114.2	114.4	114.4	114.4	114.0	113.7
216	114.0	114.4	114.2	114.1	114.5	115.1	114.9	114.8
240	115.0	115.3	115.2	115.3	114.7	114.2	114.4	114.8
264	114.4	114.1	113.9	113.9	114.7	115.7	115.2	114.8
288	114.4	114.2	114.2	114.2	114.5	115.0	114.4	114.1
312	114.9	115.9	114.8	113.9	113.6	113.5	113.8	114.2
336	114.2	114.2	114.5	115.0	114.4	114.1	113.8	113.7

DEPTH	2720.0		TILT	45		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	121.0	121.4	121.7	122.3	122.2	122.3	121.5	120.8
24	121.7	122.8	121.7	120.8	121.0	121.4	120.8	120.3
48	120.8	121.4	120.9	120.7	120.1	119.8	120.1	120.7
72	120.4	120.3	121.5	122.8	121.3	120.0	121.5	123.3
96	122.5	121.9	121.0	120.3	119.7	119.2	118.9	118.7
120	119.2	119.8	120.1	120.7	120.9	121.4	120.9	120.7
144	120.8	121.2	120.3	119.6	120.1	120.8	120.3	120.0
168	120.8	121.7	121.7	121.9	121.7	121.7	121.0	120.5
192	121.0	121.7	121.5	121.4	121.5	121.7	120.2	118.9
216	119.6	120.5	119.9	119.4	120.0	120.8	120.2	119.8
240	119.9	120.1	120.4	120.8	120.1	119.6	119.4	119.4
264	119.8	120.3	121.0	121.9	120.8	120.0	121.0	122.3
288	121.6	121.2	122.1	123.2	122.2	121.4	121.3	121.4
312	120.8	120.3	120.3	120.5	120.9	121.6	120.9	120.5
336	120.0	119.8	121.2	122.8	122.0	121.4	121.0	120.8

DEPTH	2720.0		TILT	42		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	130.3	130.4	130.4	130.6	129.2	128.0	127.5	127.3
24	128.5	129.9	130.1	130.4	129.2	128.2	128.1	128.2
48	128.4	128.7	128.5	128.5	127.8	127.3	128.4	129.7
72	129.2	129.0	127.3	125.8	126.1	126.5	128.0	129.7
96	128.5	127.5	127.2	127.0	128.1	129.4	128.2	127.3
120	126.9	126.8	128.1	129.7	127.9	126.3	127.0	128.0
144	128.1	128.5	128.9	129.4	129.0	128.7	127.9	127.3
168	127.3	127.5	128.5	129.7	129.5	129.4	128.6	128.0
192	128.0	128.2	127.5	127.0	126.7	126.5	127.0	127.7
216	127.8	128.0	128.7	129.7	128.8	128.2	128.2	128.5
240	129.2	130.2	129.0	128.0	128.6	129.4	128.7	128.2
264	127.3	126.5	127.7	129.2	127.4	125.8	126.3	127.0
288	126.7	126.5	126.8	127.3	127.8	128.5	129.2	130.2
312	127.6	125.3	126.8	128.5	128.5	128.7	128.6	128.7
336	128.0	127.5	128.7	130.2	129.6	129.2	129.7	130.4

SONIC

CUSTOMER : WESTLAKE CHEMICAL
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WALL RANGES VS DEPTH

DEPTH	2720.0		TILT	39		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	136.9	137.9	136.1	134.5	136.3	138.4	136.1	134.0
24	134.2	134.5	134.9	135.5	136.7	138.2	136.7	135.5
48	137.5	139.9	137.9	136.2	136.8	137.7	136.5	135.5
72	136.5	137.7	136.1	134.8	134.8	135.0	136.5	138.2
96	136.5	135.0	134.3	133.8	133.8	134.0	135.7	137.7
120	137.6	137.7	136.3	135.2	135.4	135.7	135.7	136.0
144	134.8	133.8	134.5	135.5	136.6	137.9	138.2	138.6
168	136.7	135.0	135.3	135.7	135.4	135.2	136.3	137.7
192	136.6	135.7	135.4	135.2	134.8	134.5	135.7	137.2
216	136.2	135.5	136.1	136.9	136.0	135.2	136.3	137.7
240	137.8	138.2	136.6	135.2	134.5	134.0	134.0	134.3
264	136.0	137.9	136.3	135.0	137.2	139.6	136.9	134.5
288	135.4	136.5	137.3	138.4	137.6	136.9	136.5	136.2
312	136.0	136.0	137.1	138.4	136.4	134.8	135.1	135.7
336	135.0	134.5	134.9	135.5	135.7	136.2	136.1	136.2

DEPTH	2720.0		TILT	36		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	145.9	146.9	147.2	147.8	146.4	145.2	145.5	146.2
24	146.6	147.4	146.5	145.9	146.6	147.6	148.2	149.1
48	147.3	145.9	146.1	146.6	147.2	148.1	147.1	146.4
72	145.8	145.4	146.3	147.4	146.4	145.7	145.1	144.7
96	143.8	143.2	145.5	148.1	148.2	148.6	147.1	145.9
120	145.9	146.2	145.9	145.9	146.1	146.6	147.2	148.1
144	147.5	147.1	145.0	143.2	144.0	144.9	144.6	144.5
168	145.0	145.9	145.9	146.2	147.2	148.6	145.6	143.0
192	144.2	145.7	144.8	144.2	145.2	146.4	146.3	146.4
216	144.5	143.0	144.7	146.6	147.5	148.6	146.9	145.4
240	146.6	148.1	146.7	145.7	145.4	145.4	146.9	148.6
264	146.9	145.4	146.3	147.4	147.5	147.8	145.6	143.7
288	145.6	147.8	146.5	145.4	146.3	147.4	147.6	148.1
312	146.2	144.7	147.4	150.5	147.8	145.4	145.8	146.4
336	147.0	147.8	146.4	145.2	146.1	147.4	146.1	145.2

DEPTH	2720.0		TILT	33		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	159.2	156.9	158.1	159.7	159.9	160.4	160.6	161.0
24	160.6	160.4	159.8	159.4	160.7	162.3	158.7	155.6
48	158.0	160.7	158.8	157.2	157.4	157.8	157.8	158.1
72	159.4	161.0	159.6	158.5	157.3	156.5	158.9	161.7
96	160.7	160.1	158.9	158.1	157.0	156.2	155.4	154.9
120	156.7	158.8	158.8	159.1	158.5	158.1	157.8	157.8
144	158.0	158.5	156.9	155.6	156.5	157.8	159.6	161.7
168	160.4	159.4	157.2	155.3	157.5	160.1	158.5	157.2
192	157.7	158.5	159.7	161.4	159.7	158.5	158.8	159.4
216	157.2	155.3	156.9	158.8	157.2	155.9	156.2	156.9
240	156.4	156.2	155.7	155.6	158.0	160.7	161.0	161.7
264	158.9	156.5	157.8	159.4	159.4	159.7	160.1	160.7
288	158.3	156.2	155.6	155.3	156.2	157.5	157.2	157.2
312	159.9	163.0	160.7	158.8	159.4	160.4	158.3	156.5
336	157.3	158.5	158.5	158.8	160.7	163.0	162.3	162.0

SONIC

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WALL RANGES VS DEPTH

DEPTH	2720.0		TILT	30		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	172.8	176.7	174.1	171.9	172.2	172.9	172.2	171.9
24	173.3	175.1	174.0	173.2	174.8	176.7	176.9	177.4
48	175.9	174.8	174.8	175.1	174.0	173.2	173.0	173.2
72	172.9	172.9	174.3	176.1	175.4	175.1	173.7	172.6
96	170.8	169.4	171.1	173.2	172.7	172.6	173.0	173.9
120	174.0	174.5	173.8	173.5	173.4	173.5	174.2	175.1
144	173.7	172.6	172.4	172.6	174.1	176.1	173.3	171.0
168	174.1	177.7	174.9	172.6	169.8	167.4	169.0	171.0
192	171.6	172.6	172.1	171.9	173.2	174.8	173.2	171.9
216	173.5	175.5	173.0	171.0	171.1	171.6	173.7	176.1
240	173.3	171.0	173.0	175.5	172.0	169.0	171.2	173.9
264	172.6	171.6	169.7	168.1	169.2	170.7	172.2	174.2
288	175.4	177.1	175.4	174.2	175.7	177.7	175.6	173.9
312	171.7	170.0	171.6	173.5	172.1	171.0	171.4	172.3
336	172.1	172.3	174.9	178.0	176.7	175.8	172.3	169.4

DEPTH	2720.0		TILT	27		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	191.4	188.0	191.8	196.3	196.1	196.3	195.5	195.2
24	195.8	196.8	195.7	195.0	194.5	194.4	192.2	190.5
48	192.4	194.7	195.6	196.9	196.9	197.3	195.2	193.6
72	196.9	200.8	197.5	194.8	193.0	191.7	194.7	198.2
96	194.8	191.8	192.4	193.4	191.3	189.6	190.8	192.5
120	192.4	192.8	194.0	195.7	192.7	190.2	190.3	190.9
144	191.6	192.8	192.9	193.4	193.2	193.4	193.7	194.4
168	192.7	191.5	193.8	196.6	194.3	192.5	192.4	192.8
192	192.9	193.4	191.3	189.6	193.6	198.2	192.6	187.6
216	189.5	191.8	189.7	188.0	190.6	193.6	192.6	192.1
240	191.1	190.5	190.7	191.3	190.3	189.7	190.1	190.9
264	190.3	190.1	190.1	190.5	190.6	191.2	191.8	192.8
288	192.0	191.5	193.1	195.2	195.2	195.6	196.5	197.9
312	196.9	196.4	196.7	197.6	196.7	196.3	197.8	199.8
336	196.4	193.4	193.5	194.0	192.1	190.5	192.7	195.3

DEPTH	2720.0		TILT	24		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	207.0	208.2	207.5	207.2	208.1	209.5	209.7	210.4
24	212.5	215.2	216.4	218.1	221.3	225.2	224.1	223.6
48	222.0	221.0	217.3	214.3	209.8	205.9	206.2	206.9
72	208.7	211.1	209.7	208.8	210.6	213.0	213.1	213.6
96	216.8	220.7	221.5	222.9	224.1	225.8	226.8	215.5
120	228.4	217.1	222.0	215.9	216.3	217.1	225.4	218.4
144	222.4	211.7	217.2	223.4	231.3	216.2	213.1	213.4
168	211.6	221.0	210.7	218.8	226.8	214.3	222.0	219.4
192	218.5	218.1	215.9	214.3	213.7	213.6	212.1	211.1
216	210.2	209.8	208.4	207.5	205.2	203.4	202.0	201.1
240	202.2	203.7	202.0	200.8	200.2	200.2	203.2	206.9
264	207.0	207.5	206.5	205.9	204.9	204.3	204.6	205.3
288	206.5	208.2	206.0	204.3	203.0	202.1	201.4	201.1
312	201.0	201.4	201.5	202.1	202.5	203.4	203.3	203.7
336	203.9	204.6	204.1	204.0	204.7	205.9	205.8	206.2

SONIC

CUSTOMER : WESTLAKE CHEMICAL
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CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	2720.0		TILT	21		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	204.2	205.8	206.0	206.2	207.4	207.2	208.1	209.5
24	210.6	212.3	214.3	216.8	220.0	221.7	229.8	223.7
48	220.7	217.6	214.6	212.6	209.2	204.1	204.6	205.7
72	208.2	209.1	208.2	208.2	209.0	210.4	211.6	213.3
96	215.6	218.4	221.9	223.1	224.4	224.9	225.9	225.5
120	228.8	226.0	227.9	228.4	228.6	229.3	230.8	232.9
144	234.2	236.1	237.8	240.2	239.0	238.3	237.7	237.7
168	235.5	233.8	231.4	229.7	225.3	222.1	218.1	217.7
192	217.4	215.2	213.0	211.4	211.1	211.4	210.0	209.1
216	207.8	206.9	205.2	204.0	202.0	200.5	199.6	199.2
240	199.4	200.2	199.4	199.2	198.0	197.3	199.7	202.7
264	203.4	204.6	204.4	204.6	202.9	201.8	205.1	209.1
288	207.3	205.9	203.2	201.1	199.6	198.6	198.5	198.9
312	199.1	199.8	199.6	199.8	199.4	199.5	199.8	200.5
336	200.4	200.8	201.5	202.7	202.2	202.1	203.0	204.3

DEPTH	2720.0		TILT	18		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	203.7	204.5	203.9	204.9	205.1	205.9	206.5	207.5
24	208.7	210.4	212.7	215.5	219.1	223.2	230.0	220.5
48	219.5	216.1	213.2	210.7	207.1	203.2	202.5	203.5
72	206.7	207.1	205.5	206.2	207.4	209.1	210.9	213.3
96	214.9	217.1	217.7	222.1	223.9	226.8	227.2	226.1
120	229.3	228.1	228.2	228.4	228.7	229.2	230.8	231.2
144	233.1	234.1	235.9	238.3	237.5	237.4	237.1	237.4
168	235.3	233.8	230.3	227.4	223.7	220.7	216.3	214.9
192	214.2	213.9	211.9	210.4	209.5	209.1	207.9	207.2
216	206.0	205.3	204.1	203.4	201.2	199.5	198.0	196.9
240	196.9	197.3	196.7	196.6	196.9	195.8	200.5	202.1
264	205.0	204.8	203.9	203.5	203.4	201.2	203.7	208.8
288	207.5	203.6	201.0	199.4	198.9	197.5	196.7	197.6
312	198.4	199.2	198.6	198.9	199.2	199.8	199.2	199.7
336	201.4	200.9	199.9	201.5	202.4	202.4	202.6	203.7

DEPTH	2720.0		TILT	15		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	202.2	202.4	202.8	203.7	204.0	205.7	205.8	206.4
24	209.1	211.4	214.2	215.9	219.2	224.6	233.1	219.3
48	217.5	214.7	212.9	209.3	205.6	201.2	199.5	201.6
72	203.6	204.3	204.9	205.9	207.4	209.5	210.9	213.0
96	214.5	216.5	218.0	220.0	224.5	224.7	226.2	225.4
120	228.5	228.5	228.8	229.4	228.9	228.9	230.9	232.3
144	232.7	235.1	240.1	240.2	239.9	237.2	237.5	237.3
168	234.0	232.3	229.8	228.0	223.1	219.8	216.5	213.6
192	212.9	212.7	209.8	207.5	208.1	209.1	207.1	205.6
216	203.7	202.4	201.3	200.8	197.8	195.3	194.3	195.2
240	196.1	196.0	194.9	195.2	194.0	194.0	198.5	200.2
264	203.4	203.5	203.1	202.7	201.9	199.0	202.8	207.6
288	205.3	202.1	199.0	197.5	197.2	195.2	194.9	194.9
312	195.3	196.2	195.6	196.4	196.7	197.6	196.7	198.0
336	198.8	198.2	198.6	199.5	199.4	200.3	199.8	202.7

SONIC

CUSTOMER : WESTLAKE CHEMICAL
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CAVERN : PPG No. 006X
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WALL RANGES VS DEPTH

DEPTH	2720.0		TILT	0		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	194.2	195.1	195.7	197.4	196.8	196.8	198.9	199.4
24	200.9	204.4	206.1	207.5	212.8	214.2	214.5	223.5
48	227.5	222.3	214.5	209.9	207.3	202.6	198.9	194.2
72	195.7	197.1	198.3	202.9	203.2	204.9	207.8	209.0
96	212.5	212.5	213.1	213.9	215.9	217.4	219.1	221.2
120	222.3	221.7	224.6	225.8	225.8	226.4	222.9	225.8
144	226.4	227.3	229.6	232.8	237.1	239.7	239.1	235.7
168	233.9	233.9	232.2	229.0	227.3	221.5	218.8	215.4
192	212.5	209.0	208.1	206.4	203.5	205.2	204.6	206.1
216	206.4	204.1	203.8	200.6	199.1	197.4	194.8	191.3
240	187.8	188.7	188.7	187.8	189.3	187.5	186.7	187.8
264	190.2	194.2	196.0	197.4	197.7	197.1	196.5	198.9
288	202.9	203.2	200.0	195.4	193.3	191.6	190.4	189.0
312	188.1	188.7	188.4	188.4	189.9	189.3	189.9	190.2
336	190.7	190.7	191.6	192.2	192.2	193.3	193.6	193.6

DEPTH	2730.0		TILT	0		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	193.6	194.2	196.2	196.5	196.0	197.1	198.6	198.9
24	200.3	203.2	204.9	208.7	211.0	213.1	214.2	224.4
48	227.8	221.7	213.1	208.4	206.7	201.7	199.4	193.3
72	195.1	196.2	198.0	202.3	203.5	205.2	207.0	209.3
96	209.9	213.1	212.2	211.9	214.8	216.2	219.7	220.6
120	220.9	220.9	223.8	225.8	225.2	225.2	222.6	224.6
144	225.8	227.0	229.6	232.2	236.5	239.1	237.4	235.1
168	233.9	232.8	231.9	229.0	225.5	220.9	217.4	214.8
192	211.3	208.4	207.8	206.1	204.6	203.2	204.6	203.8
216	206.1	204.9	201.2	198.6	198.3	196.8	194.2	190.7
240	187.3	189.3	188.7	187.5	188.7	187.8	186.7	185.8
264	188.7	192.5	195.1	196.5	197.1	196.2	196.0	199.7
288	202.6	202.6	200.6	195.7	192.5	191.0	190.2	188.4
312	187.8	188.1	187.8	189.3	188.7	189.6	190.2	189.9
336	190.2	190.7	191.6	192.2	191.6	192.2	192.8	193.1

DEPTH	2740.0		TILT	0		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	193.6	193.9	196.0	196.0	196.0	196.8	198.0	198.3
24	200.9	203.8	204.4	208.4	212.2	213.1	214.5	220.9
48	226.7	214.5	212.5	208.1	205.5	201.7	195.1	193.3
72	194.8	195.1	200.9	201.5	202.6	204.4	207.0	207.5
96	212.2	211.9	212.5	212.5	213.6	215.4	219.1	220.6
120	221.2	221.5	223.5	224.4	225.2	225.5	222.3	224.1
144	225.8	225.8	229.0	231.0	238.6	238.6	238.3	234.8
168	232.5	232.2	230.7	228.4	226.7	220.3	218.0	213.9
192	209.9	208.1	207.0	204.9	204.4	203.5	203.5	204.4
216	206.4	204.1	201.7	200.9	196.8	195.7	192.5	190.4
240	187.5	188.4	187.5	187.3	188.1	187.0	186.1	185.5
264	188.1	192.2	196.0	196.5	197.1	196.8	195.7	199.7
288	202.9	202.3	199.4	196.8	193.9	191.0	189.3	189.3
312	187.3	187.8	187.5	187.8	188.7	188.4	189.3	189.3
336	189.9	189.6	191.0	191.9	191.0	192.2	193.3	192.5

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	2750.0		TILT	0		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	193.1	194.5	195.4	195.4	195.7	197.4	197.7	198.3
24	200.0	202.0	204.1	208.7	211.6	213.1	213.6	223.5
48	226.1	215.1	211.3	207.0	204.9	198.3	193.9	193.1
72	194.5	195.7	197.7	200.9	201.7	205.5	206.7	208.1
96	211.0	211.3	211.0	211.0	214.5	215.7	216.8	220.3
120	222.0	221.2	223.2	224.4	224.9	225.2	223.8	223.8
144	225.8	226.4	229.0	230.4	237.4	238.0	238.6	233.9
168	233.3	231.9	230.4	228.1	225.5	222.3	218.0	212.8
192	210.2	207.8	206.4	204.4	203.8	202.3	203.2	202.9
216	205.8	202.3	202.3	200.3	196.8	196.2	193.9	190.2
240	187.5	187.3	187.3	187.0	187.8	187.0	185.5	185.5
264	187.8	191.9	196.0	196.5	197.1	195.7	196.0	200.0
288	202.3	202.3	200.0	196.0	193.1	190.4	189.3	188.1
312	186.7	187.3	187.0	187.5	188.4	189.3	189.0	189.3
336	189.6	190.2	191.3	191.3	190.7	191.3	193.3	192.2

DEPTH	2760.0		TILT	0		VOS	5941.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	192.6	194.9	194.6	195.5	194.6	196.9	197.8	197.5
24	198.7	200.7	204.2	207.7	210.8	212.3	212.9	220.1
48	225.6	216.6	212.6	208.5	206.5	200.1	197.5	193.7
72	193.2	194.9	196.6	201.0	202.7	204.2	206.8	207.9
96	210.8	210.6	210.8	211.1	214.6	214.9	218.4	221.0
120	221.3	220.4	223.0	224.2	223.6	224.2	222.7	223.6
144	225.6	226.5	228.0	230.0	236.9	237.5	237.5	234.3
168	232.3	231.7	230.6	229.1	227.1	221.6	217.2	216.1
192	211.1	207.9	205.9	204.2	203.0	202.7	203.3	204.2
216	204.8	203.3	201.9	197.5	196.4	195.2	192.3	189.4
240	186.5	187.1	187.4	186.5	187.1	186.2	186.2	185.9
264	187.7	191.4	195.8	196.1	196.9	195.2	199.8	202.4
288	202.4	201.9	200.4	197.2	193.5	191.4	189.4	187.7
312	186.5	187.1	187.1	187.7	187.9	188.2	188.8	189.4
336	189.4	189.7	190.3	190.6	191.4	191.7	192.9	192.3

DEPTH	2770.0		TILT	0		VOS	5941.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	192.6	193.7	194.0	194.6	194.3	196.6	197.5	198.1
24	199.3	201.3	203.0	206.8	211.7	211.4	212.6	220.1
48	225.3	223.0	212.6	208.2	204.2	203.0	197.2	192.6
72	194.0	194.9	196.4	200.7	201.6	204.5	205.9	208.2
96	210.3	210.6	210.6	211.1	213.5	214.9	219.0	220.7
120	221.6	220.7	221.9	223.9	223.0	224.8	221.6	223.6
144	224.2	224.8	228.2	230.0	236.7	237.5	236.7	234.3
168	232.0	231.4	230.6	226.5	225.6	220.1	218.4	213.7
192	210.8	207.9	205.1	203.9	202.7	202.7	203.0	202.7
216	204.2	203.3	200.4	198.4	195.2	194.6	190.8	189.4
240	186.2	186.2	186.8	186.8	187.1	185.9	185.0	184.5
264	187.4	191.7	195.5	195.5	195.8	195.8	195.5	198.4
288	201.6	202.4	199.8	197.2	192.9	190.6	187.9	187.4
312	187.1	186.8	186.8	187.9	187.7	187.7	188.2	188.8
336	188.8	190.3	190.8	191.4	190.6	191.7	193.5	192.0

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	2780.0		TILT	0		VOS	5941.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	192.6	193.5	194.6	194.9	194.0	195.8	197.2	196.9
24	199.0	201.3	202.4	207.4	210.8	210.0	212.6	217.5
48	225.9	217.2	212.9	207.9	204.5	200.1	198.1	192.6
72	193.5	194.6	198.7	199.5	201.9	203.6	205.9	206.5
96	210.3	211.1	210.3	210.8	213.2	214.6	216.6	219.3
120	220.4	220.4	221.9	223.0	222.4	223.3	220.4	221.6
144	223.3	225.3	227.1	229.1	236.1	236.9	236.4	234.0
168	231.7	230.9	230.3	228.8	223.6	221.9	217.8	216.1
192	210.0	207.4	204.8	204.8	202.4	201.9	201.9	203.0
216	204.2	202.7	200.7	196.4	196.4	194.3	190.8	189.4
240	186.5	187.1	186.5	186.5	187.1	186.2	185.6	185.0
264	189.4	190.8	195.2	195.2	196.1	194.6	194.3	197.2
288	200.7	201.6	200.1	195.2	192.6	190.8	188.8	187.4
312	186.5	186.5	186.8	187.4	187.1	187.4	188.2	188.5
336	188.8	189.7	190.0	190.8	190.3	191.4	193.5	192.9

DEPTH	2790.0		TILT	0		VOS	5941.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	192.0	193.2	194.0	194.0	194.0	195.8	196.4	196.4
24	199.3	198.7	202.2	205.3	210.0	211.4	212.3	220.4
48	224.8	219.8	212.9	207.9	204.5	200.7	197.5	193.5
72	193.2	194.0	197.5	199.5	199.8	203.0	205.6	206.5
96	208.5	210.0	210.3	210.3	212.3	214.0	216.4	219.3
120	220.1	220.7	220.7	223.3	222.4	223.3	221.9	222.4
144	223.3	224.5	226.8	229.7	234.0	236.7	235.8	234.0
168	230.6	231.4	229.4	226.8	225.1	221.6	217.2	213.7
192	210.3	206.2	204.8	203.9	202.2	201.0	202.2	203.0
216	204.2	201.6	199.3	196.6	196.4	194.9	190.6	186.8
240	185.9	186.8	186.2	186.2	187.4	186.2	185.0	183.6
264	186.8	190.8	194.9	194.9	195.5	194.0	194.0	198.1
288	201.6	202.2	199.8	195.8	192.6	191.7	187.9	187.1
312	186.2	186.2	186.2	187.9	186.8	188.2	187.7	188.8
336	189.4	189.7	189.4	191.4	190.0	191.7	193.2	191.7

DEPTH	2800.0		TILT	0		VOS	5941.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	192.3	193.2	193.7	194.3	193.7	195.2	196.6	196.4
24	197.8	201.3	202.4	204.8	207.7	211.4	212.3	219.3
48	225.1	220.7	211.1	206.2	203.9	201.0	196.4	192.3
72	193.7	194.3	198.7	199.0	199.8	203.0	205.3	206.5
96	209.1	210.0	209.1	209.4	212.3	214.3	215.2	218.1
120	220.1	220.1	220.4	221.9	222.7	223.3	220.1	221.0
144	223.6	223.9	227.1	227.1	235.2	236.7	236.7	232.9
168	231.4	229.7	229.1	226.5	224.5	218.7	216.9	213.7
192	208.8	205.9	205.3	203.9	202.7	201.0	201.6	202.4
216	203.0	202.2	201.3	196.6	195.5	193.7	192.6	188.2
240	184.8	185.6	186.2	185.9	186.5	185.6	184.5	183.3
264	186.8	191.4	194.6	195.2	195.5	194.6	192.9	190.8
288	201.3	201.0	197.5	194.0	191.7	189.7	188.2	187.1
312	185.6	186.2	186.5	186.5	186.8	187.4	187.7	188.8
336	187.9	188.5	189.1	190.0	189.7	190.8	192.0	192.0

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	2810.0		TILT	0		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	191.9	192.5	192.8	193.9	193.1	194.5	196.2	196.0
24	198.0	199.7	203.5	206.4	209.3	210.7	211.6	219.7
48	224.1	213.1	210.2	205.8	204.1	201.7	196.2	191.9
72	192.5	193.3	198.3	198.3	199.7	204.1	204.9	206.4
96	209.0	209.6	209.0	209.6	211.3	213.9	215.4	219.1
120	219.4	219.4	220.6	222.3	222.3	221.7	221.5	222.0
144	223.2	223.2	226.4	228.4	235.7	235.9	234.2	233.3
168	231.0	229.3	227.8	225.5	222.0	218.8	216.2	213.9
192	208.7	205.5	204.1	202.9	201.5	201.5	201.7	202.3
216	204.1	201.2	198.9	196.2	194.8	193.6	190.4	187.0
240	184.9	185.2	185.8	185.5	186.7	185.2	184.4	183.2
264	185.8	190.2	195.1	194.2	194.5	193.9	193.9	190.4
288	186.7	186.7	197.4	194.8	191.6	190.4	187.5	186.4
312	185.8	185.8	186.7	186.4	186.4	186.7	187.3	187.3
336	187.8	188.7	189.3	190.4	189.6	189.9	192.8	191.0

DEPTH	2820.0		TILT	0		VOS	5938.32	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	191.0	191.9	192.8	193.3	193.3	194.5	196.5	196.0
24	197.4	200.9	202.3	205.2	210.2	210.4	213.1	219.4
48	223.5	213.3	209.6	205.8	203.5	199.7	196.2	191.6
72	191.3	193.6	197.4	197.7	202.9	202.9	204.6	205.8
96	207.0	208.4	208.7	209.6	211.9	214.5	215.9	217.7
120	219.4	219.1	219.4	221.5	222.3	222.6	219.7	220.3
144	222.6	223.2	226.1	228.1	234.2	235.1	233.9	233.6
168	230.7	229.6	228.7	224.6	223.8	220.6	216.8	214.5
192	209.9	205.5	202.9	204.1	201.7	200.9	199.4	199.7
216	203.2	201.5	198.3	195.4	195.4	193.6	191.0	186.4
240	183.8	186.1	184.9	185.8	185.8	184.7	183.2	185.8
264	186.1	192.2	194.2	194.8	195.1	193.1	193.1	190.2
288	186.7	186.1	193.1	193.6	190.7	190.2	188.1	187.3
312	188.1	186.4	185.2	186.7	186.1	187.0	187.8	187.8
336	188.1	188.1	189.6	189.6	189.3	190.7	192.2	191.3

DEPTH	2830.0		TILT	0		VOS	5941.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	192.6	192.9	193.5	193.7	192.6	193.7	195.5	195.8
24	197.8	197.5	201.9	205.9	208.8	209.7	211.4	214.1
48	220.5	213.7	209.7	205.9	202.4	199.3	193.2	192.0
72	192.0	194.3	197.2	199.3	198.7	202.4	203.0	204.5
96	206.5	209.1	209.7	210.3	211.1	212.9	215.2	217.8
120	219.0	219.0	220.4	221.3	221.6	223.0	219.8	221.0
144	222.2	223.0	225.9	228.2	234.0	236.4	236.4	232.3
168	229.7	229.7	228.2	223.9	221.0	219.5	217.5	215.2
192	209.7	205.1	203.6	203.3	201.3	201.6	199.3	201.9
216	202.7	201.6	196.9	196.1	195.5	193.5	190.6	187.7
240	183.6	185.3	185.3	185.0	186.8	184.8	183.3	182.4
264	185.9	190.3	194.0	194.0	184.5	180.1	187.4	180.4
288	185.0	185.9	184.8	180.4	178.7	179.5	179.0	181.0
312	179.3	180.7	180.4	180.1	178.6	177.2	177.2	183.6
336	188.2	188.8	189.7	189.7	189.1	190.0	192.6	191.1

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	2840.0		TILT	0		VOS	5941.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	174.3	173.2	176.1	181.1	183.6	182.7	186.2	189.1
24	195.2	190.3	194.6	194.9	192.3	195.2	197.1	198.5
48	199.0	195.5	198.1	200.4	196.7	197.2	191.4	192.6
72	190.8	194.6	198.1	198.7	199.8	202.4	202.7	205.1
96	208.2	208.8	209.4	209.4	210.6	212.9	214.3	217.2
120	218.4	218.7	219.3	221.0	221.3	221.9	219.3	221.6
144	221.9	223.6	225.9	227.4	231.4	235.2	233.5	232.6
168	228.8	229.4	228.0	227.1	222.4	220.1	216.4	214.3
192	209.4	205.3	203.3	202.7	200.4	201.9	201.0	200.7
216	196.0	196.0	198.4	196.4	194.3	192.6	190.0	187.4
240	183.6	187.1	185.6	185.3	186.4	185.9	184.2	185.0
264	181.3	178.1	172.3	175.5	176.6	171.4	172.3	169.7
288	165.0	160.1	159.8	159.2	160.7	158.1	162.7	157.8
312	161.6	163.3	160.1	160.1	158.4	161.3	165.6	164.5
336	166.2	168.5	174.0	173.4	172.9	174.6	168.8	173.2

DEPTH	2850.0		TILT	0		VOS	5941.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	159.8	156.6	162.4	161.8	165.0	163.9	162.4	170.5
24	172.0	175.2	178.7	177.8	179.0	174.3	178.1	177.8
48	177.5	173.2	172.3	173.4	177.2	174.9	167.4	170.3
72	180.7	193.7	190.3	190.7	200.1	201.3	204.8	202.2
96	206.5	208.8	209.1	209.4	212.3	212.6	214.9	217.2
120	218.7	218.7	219.5	220.7	221.3	221.3	219.8	221.6
144	221.9	222.4	225.3	225.9	219.8	219.8	221.9	221.6
168	218.0	219.0	218.1	214.9	211.7	205.1	203.9	197.5
192	197.1	192.3	193.5	194.3	184.2	180.1	176.6	172.3
216	175.8	181.3	177.9	179.0	171.1	170.5	170.0	166.8
240	162.4	159.8	162.3	164.5	161.6	165.9	168.2	163.4
264	160.1	155.5	154.0	155.5	152.9	153.4	150.5	149.7
288	150.0	142.7	142.1	143.5	143.9	145.6	144.2	145.3
312	144.2	144.2	141.6	146.2	142.4	143.0	146.5	149.4
336	149.1	151.7	150.5	156.0	156.9	154.3	157.8	156.3

DEPTH	2855.0		TILT	0		VOS	5941.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	148.8	150.5	150.8	150.2	151.1	158.7	163.3	162.4
24	163.9	165.0	162.1	165.3	166.2	165.0	171.4	170.0
48	170.5	162.7	165.3	162.4	170.0	161.8	161.3	160.4
72	174.6	172.6	174.9	176.9	189.4	187.5	191.7	201.6
96	204.5	209.1	205.9	208.8	211.1	213.5	214.9	216.6
120	219.3	219.0	219.8	221.6	221.3	221.3	220.4	221.6
144	206.2	211.1	206.8	209.1	213.2	216.1	212.0	215.2
168	212.6	213.7	205.6	203.0	197.8	199.5	192.6	190.0
192	186.8	184.8	182.4	181.6	172.9	171.7	167.9	165.5
216	169.4	168.5	164.2	163.0	165.3	161.0	160.1	163.9
240	156.3	154.3	152.0	153.4	157.2	150.5	152.9	148.2
264	150.8	151.1	149.7	142.1	145.3	141.0	139.2	142.1
288	141.3	133.7	131.4	133.4	133.7	130.5	136.3	134.0
312	138.9	134.3	134.6	134.9	138.1	139.5	139.5	138.9
336	143.3	147.6	145.6	146.8	147.1	149.4	147.1	146.2

SONIC

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
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WALL RANGES VS DEPTH

DEPTH	2860.0		TILT	0		VOS	5941.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	140.1	141.0	141.3	145.9	144.7	147.1	150.8	154.0
24	156.0	155.8	156.9	156.6	156.3	159.8	158.9	158.4
48	156.0	157.8	158.1	156.3	156.6	154.0	154.0	152.0
72	151.1	165.6	168.8	173.4	173.7	177.8	181.6	185.0
96	197.8	198.7	201.0	198.7	204.9	205.3	205.1	207.1
120	210.8	208.8	209.1	210.3	207.4	207.1	209.7	202.2
144	201.6	203.3	201.9	202.4	208.8	206.2	206.2	207.7
168	203.0	201.9	201.3	199.3	194.3	190.0	187.4	182.7
192	181.0	176.1	175.8	170.3	168.8	162.4	158.1	157.5
216	158.4	159.8	157.8	158.4	158.1	153.1	154.3	150.0
240	149.1	147.1	147.1	146.5	146.8	147.4	145.0	143.9
264	141.6	141.0	139.5	138.1	137.8	136.9	133.7	132.6
288	131.4	126.5	125.6	125.3	124.7	126.5	126.8	127.1
312	125.9	125.9	125.6	126.5	127.9	126.5	127.9	132.3
336	135.5	137.2	136.9	138.9	140.4	140.7	139.8	139.8

DEPTH	2865.0		TILT	0		VOS	5941.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	130.0	131.4	126.8	131.1	134.3	138.7	140.7	143.3
24	141.0	141.0	142.4	150.8	149.1	145.9	143.9	148.5
48	144.5	142.4	149.1	142.7	140.4	140.1	141.8	141.0
72	137.8	155.5	154.0	160.4	167.3	161.0	167.3	170.8
96	173.7	181.9	188.5	196.6	192.9	192.6	190.6	191.1
120	194.6	194.3	195.3	197.8	194.3	197.8	195.2	189.4
144	186.8	187.4	189.1	192.0	192.3	195.5	192.6	189.1
168	196.1	187.9	188.5	181.6	181.5	179.0	172.0	172.2
192	169.7	166.8	158.1	153.4	153.1	150.0	143.3	148.2
216	144.2	147.1	146.8	145.6	140.7	140.7	143.6	136.9
240	138.9	135.5	136.9	136.3	133.7	137.5	131.4	135.5
264	135.8	129.7	132.0	130.2	126.2	125.6	123.0	125.3
288	115.7	116.0	118.6	115.7	117.5	115.5	117.5	116.9
312	117.8	115.5	119.2	116.0	115.2	118.4	121.3	124.7
336	128.5	127.3	127.6	128.5	127.6	132.3	132.9	126.8

DEPTH	2870.0		TILT	0		VOS	5941.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	115.5	120.7	120.4	120.7	123.0	123.6	124.7	126.2
24	129.1	131.4	135.2	134.3	140.1	132.0	133.7	135.5
48	136.3	128.8	136.3	134.0	133.7	132.3	134.3	135.5
72	129.1	124.7	144.5	147.4	151.7	156.3	158.1	167.1
96	168.5	175.5	183.3	181.3	189.1	188.2	183.3	185.0
120	183.6	185.3	187.7	186.2	190.0	189.7	184.2	185.3
144	181.9	180.4	181.6	184.5	183.0	183.9	181.9	180.1
168	182.7	180.4	182.4	178.6	176.9	171.1	167.6	159.8
192	155.8	150.2	153.4	147.6	145.9	138.1	135.5	135.2
216	135.5	134.6	136.0	135.5	131.4	129.4	129.7	128.5
240	130.5	125.9	130.0	126.2	125.6	127.1	125.6	123.3
264	121.0	123.9	122.1	116.9	115.5	114.3	111.7	109.7
288	106.5	108.5	105.3	107.0	104.4	108.8	105.6	105.0
312	106.2	107.9	106.2	108.8	106.2	107.3	107.9	108.2
336	112.0	116.9	116.6	120.7	118.9	115.5	126.2	118.6

SONIC SURVEYS

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WALL RANGES VS DEPTH

DEPTH	2875.0		TILT	0		VOS	5941.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	104.1	101.8	103.6	103.6	105.6	106.8	109.4	112.0
24	116.0	114.3	116.6	114.6	113.1	113.7	113.7	116.3
48	115.5	112.6	113.7	112.3	111.1	108.5	106.8	110.2
72	112.6	111.1	110.5	135.0	132.3	132.6	135.5	139.5
96	146.5	152.3	154.3	165.0	168.8	167.6	166.8	168.8
120	169.1	172.9	171.5	171.4	175.8	174.6	168.8	163.6
144	163.3	160.4	160.1	161.8	166.8	164.2	161.6	159.2
168	157.5	158.4	154.3	156.9	152.9	148.2	145.6	142.4
192	136.6	134.3	126.2	123.6	121.5	114.6	112.6	118.1
216	113.4	118.9	116.0	115.5	114.3	111.4	105.3	108.5
240	107.9	107.6	109.4	110.5	105.9	107.6	103.0	101.0
264	103.3	104.4	99.5	96.6	100.1	97.2	93.7	93.4
288	93.7	94.9	88.2	88.2	89.1	89.1	91.4	90.8
312	89.9	95.4	95.7	89.4	87.9	87.9	87.9	90.2
336	92.8	98.3	96.3	101.5	102.7	103.3	103.9	107.0

DEPTH	2885.0		TILT	0		VOS	5941.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	96.9	94.3	91.7	96.3	96.3	98.1	100.4	101.5
24	103.6	104.7	103.9	106.2	104.4	105.9	105.6	103.3
48	104.1	105.6	104.1	100.7	99.5	103.0	101.2	101.8
72	102.4	105.9	107.0	108.5	112.0	121.0	126.2	134.3
96	131.7	129.7	147.6	150.5	156.6	163.0	165.6	165.0
120	162.1	162.4	160.4	167.1	165.3	162.7	155.5	161.3
144	162.7	151.7	154.0	149.4	154.6	154.6	151.1	148.2
168	148.8	146.8	145.9	143.6	144.5	138.7	137.8	136.0
192	127.9	125.3	114.6	116.0	107.3	107.0	99.5	104.1
216	104.4	105.6	104.7	105.9	106.2	100.4	100.1	100.4
240	101.2	101.8	98.6	97.5	96.9	98.1	93.1	92.0
264	94.3	91.7	91.7	89.1	88.8	85.3	78.6	86.8
288	85.9	85.9	81.5	77.8	77.5	78.3	82.4	85.6
312	88.2	84.7	85.9	83.0	85.6	87.6	80.1	78.6
336	77.8	83.0	87.0	92.0	93.1	94.3	93.4	96.0

DEPTH	2890.0		TILT	0		VOS	5941.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	87.9	84.7	82.1	87.3	87.9	89.1	87.9	93.7
24	95.2	92.3	93.1	96.6	96.6	96.3	96.9	95.7
48	96.3	96.3	91.7	92.0	90.8	92.3	91.4	91.4
72	97.8	98.1	103.6	107.9	108.5	111.4	117.8	116.9
96	123.0	128.2	127.6	144.5	141.3	147.1	149.4	154.6
120	159.2	154.3	156.9	151.1	157.8	157.5	145.0	157.5
144	162.4	153.1	141.8	147.1	144.5	140.7	141.0	143.9
168	142.4	139.8	138.9	136.0	131.7	136.3	132.9	121.3
192	121.3	119.8	99.9	93.4	91.7	92.8	93.1	93.1
216	96.0	94.9	95.4	92.5	95.2	87.9	88.5	89.1
240	90.2	89.9	88.5	91.4	86.5	87.6	86.5	85.6
264	84.7	80.7	82.1	78.9	72.3	70.8	74.9	76.6
288	78.6	77.2	78.1	69.6	71.4	76.3	73.7	76.3
312	75.4	75.7	78.3	74.6	77.5	79.5	80.4	75.7
336	69.4	70.8	70.2	83.6	80.4	84.7	87.0	87.9

SONIC SURVEYS

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CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	2895.0		TILT	0		VOS	5941.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	79.5	78.3	78.3	73.1	77.2	77.5	81.2	81.8
24	84.7	84.4	87.0	86.5	87.0	85.6	88.2	87.0
48	85.3	87.0	85.3	82.1	82.1	81.2	80.4	77.2
72	76.0	89.1	88.5	91.4	92.5	100.1	101.2	109.7
96	112.3	114.9	122.7	117.8	132.9	141.6	141.0	145.3
120	144.5	144.2	147.1	143.6	148.5	121.5	131.1	136.3
144	151.1	149.4	133.4	131.1	133.7	133.7	135.5	133.1
168	126.5	131.1	129.1	125.0	121.0	123.0	117.8	117.8
192	116.9	85.6	89.7	88.2	84.7	85.3	78.6	81.5
216	87.0	84.1	85.6	88.5	86.5	79.2	76.6	81.0
240	81.2	80.1	82.1	82.4	83.0	79.5	76.0	75.7
264	75.2	74.6	71.7	67.3	69.9	68.5	67.9	71.1
288	67.3	67.0	68.8	62.4	63.3	65.3	64.4	67.6
312	68.5	68.2	68.2	69.6	69.4	69.6	69.9	67.3
336	68.5	67.9	65.3	66.2	71.7	75.2	78.6	77.5

DEPTH	2900.0		TILT	0		VOS	5941.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	69.4	67.3	64.7	64.7	67.6	69.4	71.7	73.7
24	76.0	74.6	76.0	77.8	78.3	78.1	78.9	78.6
48	76.6	76.6	74.9	74.9	74.9	73.7	72.0	67.3
72	72.5	74.9	78.6	81.8	84.7	84.7	94.9	94.9
96	97.8	108.5	110.5	115.7	116.3	109.1	109.1	137.2
120	139.5	136.9	139.2	138.4	138.4	118.4	125.6	133.7
144	146.5	142.7	123.0	123.3	127.6	123.0	123.9	117.8
168	119.5	117.8	119.5	113.4	116.9	112.8	114.6	115.2
192	78.6	80.1	77.5	75.2	72.0	72.3	70.8	73.4
216	77.2	75.7	80.7	77.8	78.3	68.8	69.1	70.8
240	73.4	74.6	71.1	71.7	72.3	61.5	67.6	66.2
264	67.3	66.7	57.5	58.6	57.5	59.8	58.6	58.3
288	57.8	59.5	58.6	54.3	52.2	55.1	58.3	56.3
312	61.2	59.2	60.4	59.5	63.8	63.1	56.9	65.0
336	63.0	57.8	59.5	58.3	64.1	66.2	65.9	69.6

DEPTH	2905.0		TILT	0		VOS	5941.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	60.1	61.5	59.2	60.7	58.6	58.9	56.9	64.7
24	67.6	65.9	68.8	71.7	69.1	69.4	71.4	69.1
48	70.2	67.9	68.2	58.6	60.1	65.6	59.8	59.8
72	56.6	72.3	70.2	71.1	75.2	76.3	82.4	84.7
96	88.5	89.4	85.6	103.6	108.2	106.8	99.8	106.5
120	129.4	128.2	126.5	132.0	116.0	116.6	118.6	127.3
144	139.6	141.1	119.5	110.8	115.7	114.0	114.0	111.1
168	109.9	109.9	111.6	101.0	109.7	94.9	85.9	66.7
192	65.6	69.6	69.1	66.7	65.9	66.7	55.7	62.7
216	64.7	67.9	68.8	53.4	64.4	60.9	59.5	60.7
240	57.2	66.5	65.6	63.8	53.7	56.0	56.3	58.3
264	59.2	52.5	52.0	51.4	49.6	41.2	38.6	40.9
288	50.8	50.8	50.5	42.4	43.3	43.3	48.2	48.5
312	44.1	53.1	52.8	45.3	55.4	49.6	45.9	54.6
336	53.7	54.6	43.0	44.4	44.1	44.1	60.7	61.2

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	2910.0		TILT	0		VOS	5941.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	52.5	51.7	49.6	53.1	50.5	50.2	51.1	50.8
24	55.4	59.2	60.4	58.9	62.1	61.8	60.1	57.2
48	61.2	54.3	54.3	58.6	52.8	59.2	52.2	52.2
72	52.5	67.0	67.3	63.0	65.6	68.5	69.6	71.4
96	81.5	80.7	81.2	76.6	96.0	101.5	92.3	106.5
120	114.3	125.3	122.7	112.8	111.1	124.7	128.7	133.1
144	132.0	129.7	119.4	110.5	109.4	105.3	105.0	100.4
168	105.6	90.8	90.5	96.3	81.8	83.6	82.7	64.4
192	61.8	61.2	60.9	55.7	60.7	47.9	47.9	57.2
216	56.9	59.2	61.8	53.1	54.3	54.6	51.7	52.2
240	48.8	56.9	57.8	38.9	38.3	48.5	51.4	53.7
264	43.5	44.4	43.8	44.4	32.2	33.1	31.7	32.5
288	38.9	45.0	44.4	34.8	35.7	36.0	34.8	42.7
312	38.3	37.5	45.3	44.4	46.7	47.3	38.6	34.3
336	34.8	41.8	41.5	37.7	41.8	42.4	45.6	53.4

DEPTH	2915.0		TILT	0		VOS	5941.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	45.3	38.9	38.6	38.9	44.4	44.7	40.9	41.5
24	42.4	43.3	52.8	52.8	50.8	53.4	52.2	50.8
48	50.5	45.3	45.6	45.0	45.4	50.0	52.0	52.0
72	52.0	59.2	60.1	60.4	56.9	59.2	59.5	59.2
96	65.9	72.5	75.7	73.1	85.0	90.2	90.5	92.5
120	91.7	111.4	113.4	109.4	109.7	124.4	130.2	123.9
144	119.2	125.3	111.4	107.0	101.8	98.9	98.6	94.6
168	97.2	85.9	85.6	82.7	81.2	80.7	76.0	65.3
192	53.4	51.7	50.5	53.7	37.2	38.0	39.2	49.3
216	49.9	51.7	52.0	47.9	44.1	48.2	45.9	46.2
240	45.9	49.1	50.2	36.0	35.7	41.5	45.6	46.7
264	38.6	39.5	36.0	31.7	31.4	31.1	29.9	32.0
288	37.2	39.2	36.0	32.8	32.5	32.5	33.1	35.7
312	34.8	33.1	39.5	39.8	39.2	38.9	38.3	34.6
336	34.6	41.8	39.5	32.8	34.0	45.3	41.5	44.4

DEPTH	2920.0		TILT	0		VOS	5941.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	36.6	35.4	34.3	34.0	34.8	33.7	34.3	35.1
24	34.8	34.8	37.7	38.9	44.1	43.8	42.4	38.3
48	35.4	33.4	38.3	40.6	41.5	41.8	40.9	38.0
72	37.2	39.5	44.4	50.5	52.5	54.3	54.0	54.9
96	54.6	58.3	60.1	72.3	76.6	83.6	85.9	88.5
120	87.9	109.7	101.8	106.5	108.5	112.6	114.0	111.1
144	112.8	107.3	97.2	94.0	94.3	92.3	89.4	88.8
168	81.8	82.1	83.9	81.8	82.1	74.9	76.3	67.0
192	49.3	43.5	40.4	34.6	34.0	34.0	37.5	40.4
216	40.4	40.6	43.3	41.8	41.2	39.8	36.3	35.7
240	38.0	38.9	40.9	35.1	31.1	33.4	35.1	32.8
264	32.5	31.7	31.7	30.8	29.9	29.9	29.3	29.1
288	28.2	32.8	33.4	32.8	33.1	33.4	32.0	33.4
312	32.8	32.2	33.1	32.8	32.8	32.8	33.1	34.3
336	34.6	32.5	32.5	30.5	30.5	32.2	33.4	35.1

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
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CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	2925.0		TILT	0		VOS	5941.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	28.2	29.9	30.2	29.9	29.3	29.6	31.4	30.2
24	30.8	30.8	31.4	32.8	34.3	34.0	34.6	34.3
48	34.6	34.3	34.8	35.4	35.7	34.8	35.7	32.2
72	32.0	33.7	34.8	36.3	36.0	36.9	35.4	55.1
96	47.0	51.7	50.8	60.9	65.6	82.4	84.7	89.4
120	90.0	91.1	97.5	94.9	98.6	101.5	98.9	101.5
144	101.8	99.5	73.4	87.3	83.6	82.1	80.7	82.1
168	78.9	75.4	77.8	70.5	64.7	32.8	33.7	33.4
192	33.4	32.5	31.1	32.2	31.4	32.2	33.4	33.1
216	33.1	33.4	34.3	33.4	31.4	31.1	30.2	28.8
240	31.4	30.2	29.3	28.5	26.7	27.3	27.6	26.2
264	26.4	25.9	26.2	25.6	25.6	24.1	25.0	23.8
288	24.1	23.8	23.5	23.8	24.1	25.0	24.1	24.1
312	24.1	24.1	24.4	26.4	26.7	25.3	25.9	21.8
336	22.4	22.1	22.7	25.9	26.4	26.7	27.6	27.3

DEPTH	2930.0		TILT	0		VOS	5941.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	23.0	22.7	23.5	23.3	23.3	23.0	23.3	24.4
24	24.4	24.7	25.6	27.3	28.8	28.5	28.5	28.2
48	26.7	27.9	27.9	28.2	29.1	30.2	29.3	28.5
72	28.5	29.3	29.3	29.3	29.6	31.1	29.9	29.3
96	29.1	29.3	28.5	28.5	28.2	72.8	77.5	80.4
120	82.1	86.8	87.9	87.9	90.8	93.4	93.7	93.1
144	93.4	64.0	49.7	56.5	44.2	43.3	43.3	44.0
168	29.3	30.2	28.8	27.6	27.3	26.4	27.3	26.2
192	25.9	25.9	25.0	24.7	24.7	25.0	25.6	25.9
216	27.0	26.2	26.2	26.7	28.5	27.6	27.0	26.7
240	23.5	22.4	22.4	22.4	22.1	23.0	23.0	21.8
264	21.8	21.2	20.6	20.9	19.8	19.8	19.5	19.8
288	19.2	18.3	18.3	18.0	19.5	18.9	18.6	18.6
312	18.0	18.0	18.3	18.9	21.8	21.8	20.6	20.6
336	20.4	20.6	20.4	19.8	20.4	21.2	21.2	22.1

DEPTH	2932.0		TILT	0		VOS	5941.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	21.9	21.7	22.5	22.5	21.7	21.9	21.4	22.5
24	23.2	23.2	23.2	23.7	25.1	26.9	26.1	26.7
48	24.8	25.6	27.4	25.9	26.7	27.7	27.2	27.4
72	27.4	27.9	27.9	27.4	27.4	28.2	27.2	27.9
96	27.0	27.2	26.2	26.6	26.9	27.4	27.7	77.1
120	77.6	83.1	83.0	84.7	64.8	66.4	90.4	92.2
144	67.2	49.8	40.2	44.1	28.3	27.7	28.3	28.7
168	27.2	27.4	26.4	26.6	25.9	25.1	24.8	23.8
192	23.8	23.5	22.8	22.5	23.0	22.2	22.7	24.6
216	24.6	25.3	25.8	25.9	26.7	26.6	25.3	25.9
240	22.8	21.7	21.7	21.4	21.4	20.1	21.7	20.7
264	19.9	18.3	18.8	16.9	18.0	18.3	18.2	18.2
288	17.0	17.7	16.9	17.2	18.5	18.6	18.5	18.8
312	17.7	16.9	16.9	16.9	17.3	19.9	19.9	19.0
336	18.6	19.0	19.8	20.1	20.4	20.7	20.7	22.4

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
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WALL RANGES VS DEPTH

DEPTH	2935.0		TILT	0		VOS	5941.60	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	20.3	20.6	21.7	20.7	21.4	19.8	20.1	20.9
24	21.9	20.9	20.4	21.7	25.3	25.6	25.3	20.7
48	21.1	22.2	24.0	24.8	24.3	27.0	25.8	24.1
72	25.4	26.1	25.3	25.4	26.4	26.1	24.0	24.9
96	25.4	24.1	24.1	22.8	22.5	23.2	24.0	24.6
120	24.5	24.5	24.6	24.9	26.1	26.1	27.0	28.8
144	28.2	28.5	26.1	25.6	24.8	24.8	25.6	24.9
168	24.5	25.4	24.8	24.6	24.9	21.6	22.7	21.1
192	21.4	20.6	20.1	18.6	19.3	19.9	20.9	22.7
216	22.5	22.5	23.5	22.8	25.1	24.0	24.0	22.2
240	19.9	20.1	19.4	19.1	16.9	16.2	17.2	20.1
264	19.6	18.2	17.7	16.9	16.1	16.5	16.7	16.5
288	15.6	15.6	15.4	14.1	14.6	17.8	17.5	16.5
312	16.2	15.6	15.7	16.1	15.4	15.4	19.0	18.3
336	19.0	19.1	20.6	20.7	21.1	21.6	20.7	20.4

DEPTH	2940.0		TILT	0		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	18.2	17.8	19.5	18.7	18.7	17.8	16.7	18.3
24	20.6	19.1	19.3	20.4	25.3	23.7	21.4	17.8
48	19.9	21.2	22.5	24.0	23.3	25.1	22.9	21.6
72	24.0	25.3	24.1	24.3	25.8	23.3	22.0	23.2
96	23.8	22.9	22.0	18.5	16.9	19.8	23.3	23.7
120	22.9	22.9	23.8	24.0	25.1	25.6	25.6	26.7
144	26.7	24.6	23.2	20.9	21.4	23.0	23.0	22.4
168	21.9	23.5	23.3	23.5	18.8	19.6	21.4	19.3
192	19.9	16.2	14.8	15.9	16.4	16.7	18.2	20.9
216	22.0	21.9	22.0	21.7	22.9	22.7	22.7	21.1
240	19.0	18.3	18.2	19.0	15.6	14.4	14.8	19.9
264	19.1	17.8	17.5	15.9	15.1	15.9	16.1	15.1
288	14.9	15.1	14.0	12.3	13.0	16.1	16.9	16.2
312	15.3	14.6	14.0	13.5	12.5	12.7	18.8	19.3
336	18.8	20.9	20.6	18.2	21.2	20.9	20.8	20.8

DEPTH	2950.0		TILT	0		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	18.7	19.6	19.6	18.5	18.0	17.2	16.5	18.0
24	20.3	18.2	17.5	19.5	24.8	23.2	19.6	16.4
48	18.2	20.8	22.4	24.0	22.4	25.0	21.7	22.5
72	23.5	24.3	21.6	23.8	22.9	21.9	21.7	23.3
96	21.9	14.3	14.4	14.6	14.4	15.6	22.7	21.9
120	22.2	22.2	22.7	23.7	25.1	25.9	25.1	24.6
144	24.8	22.5	22.9	17.5	18.0	18.8	20.6	20.8
168	19.8	20.8	22.4	23.2	16.7	17.2	18.3	21.7
192	18.5	14.3	13.3	14.0	14.9	15.6	16.4	19.6
216	22.0	21.1	22.9	21.1	23.7	22.4	22.2	19.0
240	17.5	18.5	18.0	16.5	16.2	13.6	14.0	14.3
264	19.6	18.3	16.7	15.7	14.6	14.6	17.2	14.9
288	15.1	10.7	13.5	11.7	11.7	11.7	17.0	15.1
312	14.4	13.5	13.5	11.9	11.7	13.2	19.1	19.0
336	19.0	19.3	19.9	20.3	20.4	20.1	19.3	19.6

SONIC SURVEYS

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WALL RANGES VS DEPTH

DEPTH	2960.0		TILT	0		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	19.3	20.8	19.8	19.1	18.0	17.0	18.2	18.5
24	18.2	17.7	19.5	23.2	24.3	25.0	17.8	16.4
48	19.0	20.8	22.7	22.2	24.0	22.9	21.4	22.0
72	23.2	23.7	21.1	23.2	21.7	21.1	22.0	20.9
96	14.3	14.0	14.3	13.8	13.3	21.6	21.9	21.6
120	21.1	21.4	21.9	22.7	24.0	23.7	23.2	22.5
144	20.9	17.5	16.7	17.0	17.0	17.5	17.7	18.8
168	18.0	18.7	20.4	15.4	15.1	16.9	17.2	19.5
192	18.3	14.1	13.0	13.3	13.8	14.3	15.6	16.5
216	19.1	20.8	21.9	21.6	21.4	23.5	22.7	24.3
240	17.0	17.5	18.2	17.2	16.5	14.3	13.5	13.8
264	14.4	18.3	18.2	16.2	15.3	14.4	15.1	15.3
288	14.8	14.3	12.2	10.7	11.9	12.3	13.5	14.6
312	14.9	14.6	12.5	12.2	13.0	14.0	18.8	18.5
336	18.0	18.0	18.5	18.5	19.3	18.8	19.0	19.3

DEPTH	2970.0		TILT	0		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	19.5	21.1	22.4	19.3	17.5	17.2	19.1	19.9
24	18.3	19.9	20.9	24.1	24.5	19.1	18.5	16.5
48	20.3	21.6	23.2	22.5	25.4	21.6	19.8	22.2
72	23.3	20.3	19.4	19.3	19.1	19.2	19.9	19.1
96	14.0	13.6	13.6	14.4	14.4	21.4	21.4	20.8
120	21.1	21.6	22.0	23.7	22.4	22.2	21.7	20.9
144	20.3	19.8	19.9	16.2	15.4	15.4	16.4	17.2
168	18.2	17.5	18.5	16.9	14.8	14.9	16.1	17.0
192	18.7	17.7	13.6	12.5	12.8	13.3	14.3	16.4
216	16.9	21.2	21.1	22.4	21.4	22.9	22.4	23.5
240	18.7	16.9	18.3	18.3	15.7	14.8	14.1	13.5
264	14.6	15.7	17.5	16.9	15.4	14.9	15.4	15.4
288	14.8	14.0	13.3	11.4	11.9	12.5	13.5	15.3
312	14.3	14.8	13.0	12.7	13.3	14.0	19.5	18.8
336	19.0	19.5	19.3	19.3	19.3	19.5	19.8	19.6

DEPTH	2975.0		TILT	0		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	66.6	21.7	21.4	20.8	20.9	21.1	20.4	22.4
24	75.5	23.8	24.5	24.1	24.6	25.0	22.2	20.8
48	21.4	22.5	24.3	25.4	96.9	96.6	96.1	96.3
72	98.2	100.0	110.1	113.6	112.5	106.4	108.2	107.8
96	109.2	129.7	131.8	132.8	131.4	135.8	132.6	130.2
120	129.9	134.8	139.3	143.0	145.7	147.0	144.9	147.2
144	147.7	148.3	144.3	141.5	142.4	147.8	146.2	139.8
168	141.1	138.1	141.5	138.1	136.9	131.5	127.6	121.8
192	121.8	115.7	106.0	102.0	99.0	94.0	90.0	85.8
216	85.3	80.2	76.4	75.9	75.7	77.8	78.2	78.5
240	78.8	76.9	75.9	77.0	79.3	79.1	78.2	77.3
264	75.7	75.7	69.6	68.7	68.2	70.4	69.2	68.8
288	69.3	70.4	70.4	69.4	69.6	70.4	71.6	72.3
312	71.0	73.1	70.4	70.1	70.6	70.4	71.5	71.9
336	73.6	72.7	74.4	72.3	72.6	69.6	66.9	66.6

SONIC SURVEYS

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CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	2980.0		TILT	0		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	67.8	67.3	66.0	65.7	67.5	68.5	68.9	70.6
24	73.3	75.1	75.2	76.7	76.1	76.1	77.0	78.5
48	78.0	78.6	81.4	89.2	94.0	94.0	89.5	90.3
72	93.0	95.8	105.0	109.9	109.0	109.2	112.1	112.4
96	114.5	126.5	127.3	128.9	128.4	128.1	127.2	126.5
120	127.8	128.9	133.5	138.8	140.7	143.2	142.4	142.7
144	144.9	143.3	142.7	139.6	140.6	142.8	141.5	138.3
168	138.3	136.4	136.7	134.9	129.7	127.0	122.6	121.5
192	119.9	115.7	108.7	101.4	100.2	93.7	90.3	86.6
216	84.6	78.6	76.9	74.3	73.0	72.8	74.3	73.6
240	73.3	73.0	69.4	74.3	75.7	74.4	74.6	74.4
264	72.5	70.7	69.0	67.1	65.2	71.0	69.9	70.1
288	70.4	71.0	70.2	69.9	71.0	71.2	72.8	72.2
312	71.5	71.5	71.4	71.9	71.7	72.7	71.7	71.7
336	74.3	73.8	74.9	73.3	71.0	68.1	66.5	66.4

DEPTH	2985.0		TILT	0		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	67.7	69.1	65.9	66.2	68.2	68.5	68.8	70.0
24	72.6	73.2	74.3	76.6	76.6	75.5	75.8	77.8
48	78.4	77.8	81.0	85.1	88.5	89.4	89.1	89.7
72	92.6	95.8	101.6	105.9	108.6	108.6	108.6	112.6
96	114.4	123.1	125.7	124.5	125.1	126.0	124.5	126.3
120	125.7	128.6	131.5	135.0	140.2	138.7	139.9	137.9
144	140.2	142.2	141.0	140.5	139.9	139.6	140.2	135.8
168	137.9	136.1	134.1	133.8	130.3	125.7	123.9	122.5
192	121.6	117.6	110.9	103.0	101.2	92.0	89.1	87.1
216	82.7	79.8	75.8	74.9	72.6	72.3	71.4	71.1
240	70.6	71.4	69.4	73.5	76.1	76.4	73.5	71.4
264	71.1	71.4	67.9	65.9	65.3	70.6	70.6	70.6
288	70.6	71.1	70.6	73.2	74.9	71.7	72.9	72.3
312	72.0	71.7	72.0	71.1	72.0	72.3	72.0	72.6
336	74.3	73.5	74.6	74.3	70.3	68.2	67.7	67.7

DEPTH	2990.0		TILT	0		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	67.7	68.8	66.2	66.8	67.4	69.4	69.4	70.6
24	72.9	72.6	74.0	74.9	75.8	74.6	75.5	76.9
48	76.9	78.1	80.1	85.1	88.0	84.8	86.5	88.2
72	92.9	96.1	102.5	103.9	106.5	107.4	108.6	109.1
96	115.2	118.4	121.3	123.4	123.1	125.4	125.4	126.5
120	126.3	128.0	133.2	135.0	138.7	136.4	134.4	137.9
144	138.4	139.0	139.6	139.6	139.3	138.4	136.7	135.5
168	137.6	135.0	132.6	132.3	129.7	124.5	123.4	122.5
192	121.6	118.1	112.6	106.8	100.1	90.3	89.1	86.5
216	84.5	80.4	77.8	75.2	74.6	72.6	71.4	70.8
240	69.6	68.8	67.9	72.6	76.9	76.4	72.9	71.7
264	71.1	71.1	67.1	66.2	65.9	68.2	70.8	71.1
288	71.1	70.6	66.2	65.3	66.8	68.2	70.0	71.7
312	71.4	72.3	72.6	71.1	72.3	71.1	72.0	72.6
336	74.0	74.0	73.7	70.3	68.2	67.4	67.1	66.8

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	2995.0		TILT	0		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	66.8	65.9	65.9	65.9	65.6	67.9	68.8	69.7
24	71.7	72.9	74.0	74.3	73.5	73.7	74.9	76.9
48	78.4	80.4	82.2	83.0	85.9	83.9	88.2	95.2
72	99.9	99.9	100.4	103.6	108.0	108.0	107.7	108.8
96	114.9	116.7	120.2	123.1	123.1	124.2	124.8	126.8
120	127.7	128.3	130.9	134.4	136.7	137.9	136.7	134.1
144	133.2	136.1	137.6	139.0	137.6	137.6	137.9	136.1
168	137.0	136.4	134.4	131.8	129.4	124.8	123.4	121.0
192	119.3	116.1	111.2	107.1	100.3	88.8	86.5	85.9
216	81.9	81.0	77.5	75.5	74.9	72.6	71.7	70.3
240	67.7	70.0	66.8	69.1	74.3	75.5	74.3	72.0
264	70.8	71.1	67.9	66.5	66.2	67.1	67.9	69.7
288	66.2	65.9	65.9	67.1	68.2	67.7	68.5	69.7
312	71.7	72.6	72.3	71.7	72.3	72.0	74.0	73.7
336	74.0	73.7	74.9	72.3	69.7	67.4	66.2	66.5

DEPTH	3000.0		TILT	0		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	65.9	65.3	64.7	64.7	65.6	67.3	68.5	67.9
24	70.2	71.4	72.2	73.4	71.9	72.8	74.3	77.5
48	78.9	79.2	79.8	82.4	82.4	82.1	86.5	93.4
72	98.3	98.1	99.5	103.0	104.4	107.6	107.1	108.8
96	115.2	116.9	118.1	122.1	122.4	123.9	124.7	125.3
120	127.6	129.7	130.8	134.3	136.6	137.8	134.9	133.7
144	133.2	134.0	137.2	137.5	136.9	136.4	137.2	135.2
168	136.1	134.6	131.4	130.8	129.1	124.7	122.1	120.1
192	115.2	111.7	106.5	101.0	100.2	89.1	86.2	84.1
216	84.1	80.9	78.0	76.6	74.8	73.1	71.9	70.8
240	66.1	69.3	66.7	68.8	73.4	74.0	74.8	71.4
264	68.8	70.8	69.3	67.0	66.7	67.6	66.1	65.6
288	65.9	66.1	66.7	66.4	66.7	67.6	67.9	69.3
312	71.4	72.5	71.7	72.2	73.1	71.9	73.7	73.7
336	73.7	74.8	73.7	71.7	68.2	66.4	65.6	65.9

DEPTH	3010.0		TILT	0		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	65.6	64.8	64.5	64.5	65.3	65.6	65.0	65.9
24	68.8	70.3	72.3	73.2	71.4	72.9	74.3	74.7
48	77.0	77.0	77.3	78.3	79.6	79.5	79.7	90.9
72	94.6	97.2	99.3	101.3	104.8	106.8	107.1	108.6
96	113.5	115.8	118.1	119.6	122.8	122.8	123.4	125.1
120	128.9	130.3	132.6	135.0	135.8	137.3	135.0	133.5
144	132.9	133.8	133.2	133.8	133.2	135.8	136.7	136.4
168	136.1	134.7	131.2	127.7	128.0	123.9	113.8	115.5
192	114.6	110.0	103.3	99.6	96.1	93.2	90.6	86.1
216	82.4	81.0	79.9	77.5	75.4	73.8	72.6	70.8
240	69.1	68.3	67.7	68.9	70.3	71.2	72.4	70.0
264	68.5	70.0	70.8	67.7	67.4	69.4	69.7	67.4
288	66.2	66.2	66.5	67.9	67.1	67.9	69.1	70.8
312	72.3	72.0	72.9	72.9	72.6	72.3	74.9	74.6
336	74.3	74.9	73.2	70.0	66.8	64.8	66.2	65.9

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3020.0		TILT	69		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	54.0	415.3	414.5	413.4	49.2	49.2	49.2	49.0
24	48.9	49.6	50.5	414.0	415.0	50.8	49.2	49.3
48	49.5	414.9	414.8	414.7	414.3	56.7	413.9	414.0
72	413.9	55.1	53.7	52.8	52.1	53.3	54.6	52.5
96	50.5	50.6	50.8	50.9	51.1	413.6	413.8	414.1
120	414.3	414.6	414.4	414.2	414.1	414.1	414.4	414.8
144	414.2	413.7	413.6	51.6	51.4	51.4	51.4	51.6
168	51.7	51.7	51.7	51.2	50.8	50.6	50.5	50.1
192	49.8	49.3	48.9	48.7	48.5	48.5	48.5	48.7
216	48.9	49.3	49.8	51.4	59.6	65.2	63.1	65.6
240	50.5	50.0	49.5	49.3	49.2	49.2	49.2	49.0
264	48.9	49.0	49.2	49.0	48.9	48.8	48.9	48.8
288	48.9	48.7	48.5	48.8	49.2	49.0	48.9	49.0
312	49.2	49.2	49.2	49.0	48.9	49.8	50.8	50.0
336	49.2	49.2	49.2	49.0	48.9	49.3	49.8	51.8

DEPTH	3020.0		TILT	66		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	49.2	421.6	49.8	49.6	49.5	49.2	48.9	49.2
24	49.5	50.1	50.8	51.9	53.0	51.2	49.5	423.3
48	424.1	50.0	50.5	51.2	52.1	51.1	50.1	50.8
72	51.4	50.9	50.5	50.4	50.5	50.4	50.5	50.8
96	51.1	51.6	52.1	52.2	52.4	52.5	52.7	53.2
120	53.7	53.5	53.3	53.2	53.0	52.9	52.7	53.3
144	54.0	53.8	53.7	53.8	54.0	53.8	53.7	53.3
168	53.0	53.2	53.3	53.0	52.7	52.2	51.7	51.6
192	51.4	50.6	49.8	50.3	50.8	50.4	50.1	50.0
216	49.8	50.0	50.1	50.3	50.5	50.8	51.1	51.1
240	51.1	50.9	50.8	50.3	49.8	50.0	50.1	50.3
264	50.5	50.1	49.8	50.0	50.1	50.0	49.8	50.0
288	50.1	50.3	50.5	50.4	50.5	50.4	50.5	50.3
312	50.1	50.4	50.8	50.6	50.5	50.3	50.1	50.1
336	50.1	50.3	50.5	50.4	50.5	49.8	49.2	49.2

DEPTH	3020.0		TILT	63		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	51.7	51.1	50.5	50.8	51.1	50.4	49.8	50.4
24	51.1	50.8	50.5	50.8	51.1	50.8	438.3	50.8
48	51.1	50.9	50.8	50.9	51.1	50.9	50.8	50.9
72	51.1	51.2	51.4	51.7	52.1	52.7	53.3	53.5
96	53.7	54.3	55.0	54.9	55.0	55.4	55.9	55.9
120	55.9	55.4	55.0	55.1	55.3	55.4	55.6	55.9
144	56.2	56.5	56.9	57.2	57.5	57.2	56.9	56.2
168	55.6	55.7	55.9	55.1	54.3	53.8	53.3	53.6
192	54.0	53.3	52.7	52.7	52.7	52.2	51.7	52.2
216	52.7	52.0	51.4	51.4	51.4	51.4	51.4	51.2
240	51.1	51.2	51.4	51.4	51.4	51.6	51.7	51.6
264	51.4	51.9	52.4	52.7	53.0	52.4	51.7	51.9
288	52.1	51.9	51.7	51.9	52.1	52.0	52.1	52.0
312	52.1	51.9	51.7	51.9	52.1	51.9	51.7	51.6
336	51.4	51.7	52.1	51.7	51.4	51.4	51.4	51.6

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3020.0		TILT	60		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	53.0	52.7	52.4	52.2	52.1	52.0	52.1	51.7
24	51.4	51.7	52.1	51.7	51.4	51.4	51.4	51.7
48	52.1	52.2	52.4	52.4	52.4	52.2	52.1	52.2
72	52.4	52.5	52.7	53.0	53.3	54.0	54.6	54.9
96	55.3	55.3	55.3	55.9	56.6	57.0	57.5	59.2
120	61.1	58.0	55.3	55.3	55.3	55.9	56.6	56.5
144	56.6	57.3	58.2	58.6	59.1	59.9	60.7	59.9
168	59.1	59.3	59.4	58.9	58.5	57.8	57.2	56.4
192	55.6	55.4	55.3	54.8	54.3	53.8	53.3	53.0
216	52.7	52.8	53.0	52.8	52.7	52.5	52.4	52.4
240	52.4	52.5	52.7	52.7	52.7	52.7	52.7	52.7
264	52.7	53.2	53.7	53.3	53.0	53.5	54.0	53.5
288	53.0	53.2	53.3	53.2	53.0	53.0	53.0	53.2
312	53.3	53.3	53.3	53.3	53.3	53.0	52.7	52.8
336	53.0	52.7	52.4	52.4	52.4	52.5	52.7	52.8

DEPTH	3020.0		TILT	57		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	54.3	54.0	53.7	54.0	54.3	54.3	54.3	53.8
24	53.3	53.2	53.0	53.2	53.3	53.3	53.3	53.6
48	54.0	54.3	54.6	54.3	54.0	54.3	54.6	54.8
72	55.0	54.9	55.0	55.6	56.2	56.4	56.6	57.2
96	57.8	58.3	58.8	59.3	59.8	61.0	62.3	63.3
120	64.3	61.9	59.8	58.1	56.6	56.4	56.2	56.4
144	56.6	58.2	60.1	66.1	62.0	67.3	62.0	62.3
168	62.7	61.5	60.4	60.2	60.1	59.2	58.5	57.6
192	56.9	56.7	56.6	56.5	56.6	56.2	55.9	55.6
216	55.3	55.4	55.6	55.1	54.6	54.4	54.3	54.4
240	54.6	54.6	54.6	54.8	55.0	54.9	55.0	54.9
264	55.0	55.4	55.9	55.4	55.0	55.2	55.6	55.4
288	55.3	55.2	55.3	55.2	55.3	55.4	55.6	55.9
312	56.2	55.9	55.6	55.6	55.6	55.2	55.0	54.8
336	54.6	54.6	54.6	54.3	54.0	54.4	55.0	54.6

DEPTH	3020.0		TILT	54		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	56.9	56.7	56.6	56.5	56.6	56.7	56.9	56.5
24	56.2	56.4	56.6	56.5	56.6	56.0	55.6	56.4
48	57.2	56.5	55.9	56.0	56.2	56.4	56.6	57.3
72	58.2	57.6	57.2	57.8	58.5	58.5	58.5	59.6
96	60.7	60.9	61.1	61.8	62.7	63.1	63.6	72.6
120	84.5	85.2	383.1	68.3	56.6	55.4	54.3	55.4
144	56.6	61.9	68.4	68.7	69.1	67.9	66.8	65.8
168	64.9	64.1	63.3	63.1	63.0	62.0	61.1	60.5
192	60.1	60.8	61.7	60.0	58.5	58.3	58.2	57.8
216	57.5	58.0	58.5	58.5	58.5	57.8	57.2	57.8
240	58.5	58.3	58.2	58.5	58.8	58.3	57.8	57.8
264	57.8	57.7	57.5	58.1	58.8	58.3	57.8	57.7
288	57.5	57.8	58.2	58.6	59.1	58.6	58.2	58.0
312	57.8	58.0	58.2	57.8	57.5	58.3	59.1	58.3
336	57.5	58.0	58.5	57.8	57.2	57.0	56.9	56.8

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3020.0		TILT	51		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	60.1	59.9	59.8	59.6	59.4	59.1	58.8	59.2
24	59.8	60.4	61.1	60.5	60.1	59.7	59.4	59.7
48	60.1	59.4	58.8	59.2	59.8	60.4	61.1	60.7
72	60.4	60.2	60.1	60.5	61.1	61.2	61.4	62.4
96	63.6	64.5	65.5	65.8	66.2	67.1	68.1	71.0
120	97.6	92.9	110.8	356.4	357.7	113.1	111.8	355.8
144	358.7	115.4	113.7	85.9	69.1	70.9	72.9	70.9
168	69.1	69.7	70.4	68.0	65.9	65.5	65.2	63.7
192	62.3	61.8	61.4	60.9	60.4	60.4	60.4	60.1
216	59.8	59.7	59.8	59.6	59.4	59.9	60.4	60.2
240	60.1	60.1	60.1	60.2	60.4	61.2	62.0	61.5
264	61.1	61.5	62.0	62.0	62.0	61.5	61.1	61.2
288	61.4	61.8	62.3	62.5	62.7	62.0	61.4	61.8
312	62.3	62.1	62.0	62.1	62.3	62.1	62.0	61.5
336	61.1	61.0	61.1	61.0	61.1	60.4	59.8	59.9

DEPTH	3020.0		TILT	48		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	64.9	64.2	63.5	64.2	64.9	64.2	63.5	62.7
24	62.0	62.4	62.9	62.9	63.1	63.5	64.0	63.4
48	62.9	62.2	61.7	62.0	62.4	62.8	63.3	63.7
72	64.2	63.6	63.1	63.8	64.7	65.1	65.6	66.1
96	66.7	67.5	68.5	70.4	72.6	73.1	73.7	82.0
120	92.5	98.8	106.2	110.6	115.5	335.7	113.5	333.4
144	114.4	121.1	128.8	121.5	126.3	112.2	109.6	88.6
168	74.4	73.5	72.8	71.6	70.5	69.2	68.1	67.8
192	67.6	66.8	66.0	65.3	64.7	64.1	63.5	63.7
216	64.0	64.5	65.1	64.7	64.4	63.9	63.5	63.4
240	63.3	63.6	64.0	64.2	64.4	64.4	64.4	65.1
264	65.8	65.5	65.3	65.5	65.8	65.4	65.1	64.5
288	64.0	64.5	65.1	65.0	64.9	65.1	65.3	64.8
312	64.4	64.4	64.4	64.4	64.4	64.1	63.8	64.2
336	64.7	65.1	65.6	65.4	65.3	64.3	63.3	64.1

DEPTH	3020.0		TILT	45		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	69.0	68.3	67.8	68.1	68.5	67.4	66.3	66.7
24	67.1	66.4	65.9	65.6	65.4	65.8	66.3	66.4
48	66.6	66.5	66.6	66.2	65.9	65.6	65.4	65.8
72	66.3	66.7	67.1	67.8	68.7	68.5	68.3	69.9
96	71.6	72.3	73.1	73.8	74.7	75.9	77.2	82.4
120	88.4	93.8	100.0	104.0	108.6	112.5	116.8	116.9
144	117.3	115.8	114.6	112.0	109.6	107.0	104.8	98.5
168	93.0	84.4	77.4	75.2	73.3	73.0	72.8	71.6
192	70.4	69.5	68.7	68.1	67.5	67.4	67.3	67.5
216	67.8	68.3	69.0	68.7	68.5	67.9	67.3	67.3
240	67.3	68.1	69.0	68.5	68.0	68.2	68.5	68.8
264	69.2	69.1	69.0	68.8	68.7	69.2	69.7	69.2
288	68.7	68.8	69.0	68.5	68.0	69.0	70.2	68.8
312	67.5	67.5	67.5	67.9	68.3	69.6	71.1	70.0
336	69.0	69.1	69.2	68.7	68.3	68.0	67.8	68.3

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3020.0		TILT	42		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	73.1	73.4	73.8	73.7	73.8	72.8	71.9	72.2
24	72.6	71.1	69.7	70.1	70.7	69.9	69.2	69.5
48	69.9	70.6	71.4	71.2	71.1	70.0	69.0	70.2
72	71.6	71.3	71.1	71.2	71.4	71.8	72.3	73.0
96	73.8	74.9	76.2	77.7	79.3	79.8	80.5	83.1
120	86.0	91.1	96.8	100.6	104.8	107.3	110.1	110.3
144	110.8	109.0	107.4	106.2	105.3	103.7	102.4	98.3
168	94.7	87.2	81.0	79.1	77.4	77.0	76.7	75.9
192	75.2	74.1	73.1	72.5	72.1	72.1	72.1	72.6
216	73.3	71.8	70.4	71.7	73.1	72.2	71.4	71.2
240	71.1	71.9	72.8	72.5	72.3	72.9	73.5	73.1
264	72.8	73.2	73.8	73.7	73.8	73.7	73.8	73.4
288	73.1	73.0	73.1	73.1	73.3	73.4	73.5	73.6
312	73.8	74.1	74.5	74.6	74.7	74.9	75.2	74.4
336	73.8	74.2	74.7	74.5	74.3	72.9	71.6	72.3

DEPTH	3020.0		TILT	39		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	77.4	77.2	77.2	77.9	78.8	78.4	78.1	77.8
24	77.6	76.6	75.7	75.5	75.5	75.9	76.4	76.4
48	76.4	75.9	75.5	75.3	75.2	75.4	75.7	74.8
72	74.0	74.6	75.2	75.0	75.0	76.5	78.1	78.3
96	78.6	79.5	80.5	81.7	83.2	84.3	85.6	86.7
120	88.0	90.7	93.7	96.9	100.4	102.6	105.0	106.0
144	107.2	105.0	103.1	102.9	102.8	101.3	100.0	94.2
168	89.2	87.2	85.6	84.4	83.4	81.9	80.5	78.9
192	77.4	77.8	78.4	77.2	76.2	76.8	77.6	77.3
216	77.2	77.0	76.9	76.7	76.7	76.1	75.7	77.2
240	78.8	78.0	77.4	78.3	79.3	78.3	77.4	78.0
264	78.8	78.5	78.4	78.2	78.1	78.6	79.3	79.0
288	78.8	78.9	79.1	78.9	78.8	79.0	79.3	78.4
312	77.6	78.3	79.1	79.2	79.6	79.2	79.1	79.2
336	79.6	80.0	80.5	80.7	81.0	80.3	79.8	78.5

DEPTH	3020.0		TILT	36		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	84.4	84.3	84.4	81.9	79.8	81.3	82.9	82.4
24	82.0	83.5	85.3	83.4	81.7	81.2	80.8	81.7
48	82.9	81.0	79.3	80.9	82.7	82.1	81.7	81.0
72	80.5	80.1	79.8	79.7	79.8	80.8	82.0	82.4
96	82.9	83.1	83.4	85.1	87.0	89.0	91.3	91.7
120	92.3	92.8	93.5	95.6	98.0	99.8	101.9	101.8
144	101.9	101.2	100.7	99.3	98.0	96.4	94.9	94.0
168	93.2	91.2	89.4	88.6	88.0	85.8	83.9	84.3
192	84.8	83.3	82.0	81.9	82.0	82.2	82.7	82.4
216	82.2	82.4	82.7	83.2	83.9	83.4	83.2	82.1
240	81.2	81.9	82.7	83.9	85.3	84.8	84.4	84.6
264	85.1	84.9	84.8	85.2	85.8	84.5	83.4	83.2
288	83.2	83.7	84.4	83.9	83.6	84.5	85.6	85.2
312	85.1	85.5	86.0	85.2	84.6	84.5	84.6	84.9
336	85.3	86.0	86.8	86.9	87.2	84.1	81.2	82.7

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3020.0		TILT	33		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	78.4	79.4	78.4	77.4	77.6	78.0	81.7	83.6
24	89.4	90.4	91.6	90.3	89.2	88.7	88.4	89.2
48	90.1	89.2	88.4	89.5	90.8	88.5	86.5	86.8
72	87.2	86.3	85.6	86.4	87.5	86.3	85.3	86.7
96	88.2	88.2	88.4	89.5	90.8	91.7	92.8	94.7
120	96.8	97.0	97.3	98.7	100.2	100.4	100.7	101.4
144	102.4	102.0	101.9	101.1	100.4	99.9	99.5	98.7
168	98.0	96.9	95.9	94.2	92.8	92.1	91.6	90.3
192	89.2	89.1	89.2	89.0	88.9	89.2	89.6	88.9
216	88.4	88.8	89.4	90.1	91.1	91.2	91.6	90.4
240	89.4	90.0	90.8	92.2	93.7	92.0	90.6	89.3
264	88.2	85.4	82.9	81.9	81.0	83.6	82.4	82.0
288	82.5	83.5	83.6	82.7	82.8	83.6	84.7	85.1
312	84.1	85.6	83.7	83.4	83.7	83.6	84.4	84.7
336	85.8	85.5	86.0	86.0	86.0	83.0	80.3	79.2

DEPTH	3020.0		TILT	30		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	78.2	78.1	76.1	76.0	78.0	79.0	79.5	81.3
24	86.2	88.4	87.5	88.0	88.2	86.8	87.5	88.1
48	88.9	89.4	90.1	93.4	97.1	96.5	96.1	94.8
72	93.7	94.6	95.6	93.8	92.3	92.3	92.5	93.3
96	94.2	95.6	97.3	97.7	98.3	98.3	98.5	100.1
120	101.9	102.1	102.6	103.7	105.0	105.7	106.7	107.5
144	108.6	109.7	111.0	108.7	106.7	107.2	107.9	105.6
168	103.6	101.9	100.4	100.0	99.7	98.2	96.8	96.1
192	95.6	97.4	99.5	97.2	95.2	96.3	97.6	96.9
216	96.4	92.1	88.4	85.5	82.9	82.6	90.1	90.4
240	90.5	87.7	80.6	88.4	91.4	91.1	90.1	88.9
264	85.1	82.1	79.6	76.7	74.3	81.8	80.6	80.7
288	81.1	81.8	81.1	80.6	81.7	82.0	83.5	83.3
312	82.4	83.1	82.1	82.4	82.4	83.0	82.7	82.8
336	85.3	84.5	86.1	83.8	84.4	78.6	77.1	77.0

DEPTH	3020.0		TILT	27		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	75.9	77.4	74.0	74.4	76.5	76.9	77.2	78.6
24	81.7	83.3	82.2	86.0	85.5	85.1	86.1	88.0
48	87.5	88.2	90.5	96.9	105.7	107.4	109.3	110.0
72	111.0	110.3	109.8	107.7	106.0	105.5	105.3	106.0
96	106.9	106.9	107.2	107.4	107.9	107.5	107.4	108.1
120	109.1	109.6	110.3	110.8	111.5	113.1	115.1	114.1
144	113.4	113.8	114.4	113.2	112.2	112.7	113.4	113.2
168	113.2	111.8	110.8	108.6	106.7	106.2	106.0	105.3
192	104.8	106.1	107.7	106.2	105.0	104.5	104.3	96.4
216	96.4	91.3	86.0	83.6	81.6	81.3	81.4	80.7
240	79.9	80.7	77.8	82.9	85.0	84.2	82.2	80.9
264	79.8	78.7	77.9	74.0	73.5	79.2	79.0	79.0
288	79.1	79.7	79.1	80.8	82.0	80.3	81.7	81.0
312	80.6	80.4	80.5	80.0	80.6	81.2	80.6	81.0
336	83.3	82.6	83.9	82.8	78.9	76.5	75.8	75.7

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3020.0		TILT	24		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	74.0	75.3	72.4	73.0	73.7	75.7	75.8	77.0
24	79.6	79.7	81.2	83.4	83.7	82.3	82.8	85.0
48	85.7	85.1	88.7	97.1	104.4	104.2	97.9	99.3
72	104.8	108.7	115.2	115.2	114.4	115.2	116.3	115.8
96	115.6	118.7	122.3	120.3	118.7	118.6	118.7	119.4
120	120.4	120.6	121.1	120.2	119.7	120.9	122.5	122.6
144	123.0	124.3	125.9	124.2	122.8	123.4	124.2	122.4
168	120.9	122.3	124.0	122.5	121.3	119.1	117.3	118.7
192	120.4	118.3	116.5	112.7	109.3	102.6	98.8	94.9
216	91.4	87.2	83.4	82.0	81.0	78.8	76.9	76.5
240	76.2	75.1	74.3	79.9	83.4	83.5	79.3	77.9
264	76.7	77.9	73.4	72.4	72.1	74.9	77.4	77.6
288	77.6	77.4	72.4	71.8	73.1	75.1	77.5	78.7
312	78.4	78.8	79.1	77.8	78.9	78.3	78.8	79.4
336	81.2	80.6	81.3	78.6	74.8	73.7	73.3	73.0

DEPTH	3020.0		TILT	21		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	71.6	70.8	70.6	70.6	70.3	73.1	73.8	74.9
24	77.5	77.8	79.3	80.0	80.6	79.6	80.7	82.4
48	82.5	83.6	85.9	91.1	94.7	94.7	94.9	95.8
72	99.2	102.6	113.0	120.0	118.6	116.0	118.1	118.1
96	120.4	129.2	139.8	139.9	140.3	137.1	134.3	134.0
120	134.1	135.0	136.2	136.7	137.4	137.3	137.4	140.4
144	143.9	141.9	140.3	138.9	137.9	137.0	136.5	137.5
168	138.9	137.3	136.0	139.1	142.7	138.6	135.0	132.2
192	129.7	123.9	115.6	108.9	107.4	98.6	95.4	93.0
216	89.6	86.0	83.3	80.6	80.0	77.7	76.6	75.6
240	74.5	74.5	71.6	75.5	82.0	81.6	78.6	76.9
264	76.0	76.1	72.5	71.1	70.8	72.0	73.6	75.2
288	71.6	71.0	70.6	71.5	72.7	72.5	73.8	75.5
312	76.6	77.5	77.6	76.5	77.4	76.6	78.0	78.2
336	79.3	79.2	79.3	76.3	74.1	72.1	70.9	71.2

DEPTH	3020.0		TILT	18		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	69.5	68.8	68.3	68.3	68.9	71.0	72.1	72.2
24	74.8	76.1	77.4	77.9	76.8	77.3	78.6	80.9
48	82.2	84.0	85.7	88.2	91.7	88.6	91.5	94.1
72	97.6	100.9	107.1	111.1	114.1	114.1	114.4	118.3
96	120.3	133.9	135.7	137.6	136.3	140.0	136.0	134.1
120	135.1	139.3	146.0	147.7	148.8	149.2	149.0	150.4
144	152.3	152.1	152.3	149.1	147.6	149.4	148.7	146.3
168	147.1	145.2	147.0	145.1	142.4	135.2	128.9	127.8
192	126.3	122.4	116.1	109.3	106.9	94.7	93.0	90.7
216	87.1	85.0	81.5	79.4	78.7	76.4	75.4	73.1
240	70.7	73.2	70.1	72.4	77.9	79.2	78.2	75.4
264	73.4	74.6	72.2	70.2	69.9	70.8	70.1	70.5
288	69.3	69.4	69.8	70.0	70.7	71.1	71.6	73.1
312	75.2	76.3	75.8	75.5	76.2	75.6	77.7	77.5
336	77.7	77.7	78.5	75.8	72.4	70.1	69.1	69.4

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3020.0		TILT	15		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	68.1	67.4	66.9	66.9	67.8	69.3	69.5	70.3
24	71.4	72.4	73.5	74.3	75.2	75.1	76.8	80.1
48	81.5	82.3	83.3	85.5	87.1	85.8	90.8	98.0
72	101.5	102.2	104.8	107.4	110.7	111.3	112.2	112.9
96	119.1	124.8	128.5	128.4	128.8	130.2	129.2	130.7
120	130.2	133.0	136.2	140.8	145.4	146.2	146.2	145.3
144	148.5	148.0	147.0	144.9	145.2	146.4	145.9	141.4
168	142.9	141.0	139.4	138.7	134.9	129.7	128.0	126.8
192	125.4	122.3	119.7	110.6	103.6	92.0	89.4	88.1
216	86.0	83.8	80.7	79.1	77.5	75.7	74.6	73.2
240	69.2	71.4	69.5	71.3	75.8	76.5	77.4	73.7
264	70.9	72.8	71.8	69.8	69.2	70.0	69.4	68.5
288	68.2	68.8	69.5	69.2	69.2	69.5	70.2	71.0
312	72.1	74.8	74.1	74.6	75.5	74.5	76.2	76.2
336	76.3	77.4	76.3	74.2	71.1	68.8	67.2	67.7

DEPTH	3020.0		TILT	12		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	67.3	66.4	66.0	66.0	66.9	67.8	68.0	68.9
24	69.9	70.8	71.9	72.2	72.8	73.7	74.7	77.1
48	79.8	79.8	80.0	81.2	82.7	83.0	83.6	95.4
72	100.8	100.6	101.9	105.5	108.6	110.2	109.8	111.2
96	117.5	119.3	123.0	125.9	125.8	127.3	127.7	129.5
120	129.9	131.0	135.3	137.8	141.6	139.7	138.0	140.3
144	140.7	141.8	142.5	142.7	142.2	141.4	139.9	138.7
168	140.5	138.3	136.2	135.0	132.5	127.5	126.1	123.9
192	122.1	118.3	112.0	107.8	102.8	91.4	88.8	86.4
216	85.4	83.0	81.2	79.2	77.2	75.8	74.8	72.0
240	69.7	69.5	69.5	70.8	72.3	73.5	75.0	72.0
264	69.5	70.2	71.1	69.7	68.5	69.2	70.2	68.7
288	67.5	68.4	69.5	69.0	68.7	69.1	69.7	70.9
312	72.3	72.5	72.8	73.1	73.5	73.7	74.0	75.1
336	76.4	76.5	76.7	73.8	71.4	68.2	65.4	66.2

DEPTH	3020.0		TILT	9		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	66.4	65.5	65.2	65.2	66.1	66.5	65.9	66.9
24	69.6	70.9	72.6	73.3	72.3	73.5	74.9	75.9
48	78.6	78.6	78.8	79.6	80.5	80.5	80.8	93.2
72	97.8	98.9	100.6	103.6	105.8	108.7	108.4	110.1
96	116.3	118.2	119.5	123.5	124.0	125.4	126.2	126.9
120	129.2	131.1	132.5	136.0	138.3	139.5	137.1	135.5
144	134.8	136.2	139.0	139.8	138.8	138.4	139.1	137.1
168	138.0	136.8	133.6	132.6	130.7	126.3	123.1	121.0
192	116.5	113.0	109.6	104.5	100.2	92.5	89.9	86.5
216	83.4	82.7	82.2	79.5	77.2	76.1	75.2	72.4
240	69.9	69.1	68.5	69.6	70.9	72.1	73.5	70.8
264	68.5	70.5	71.4	68.6	68.1	69.9	70.3	68.2
288	67.0	67.1	67.5	68.7	67.9	68.7	69.8	71.3
312	72.8	72.6	73.3	73.4	73.3	73.1	75.0	75.2
336	75.4	75.8	74.6	71.3	68.0	65.7	66.7	66.6

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3020.0		TILT	6		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	65.1	65.2	64.7	64.6	65.3	65.8	65.6	67.1
24	68.5	69.6	70.9	71.3	71.9	72.2	72.8	74.7
48	76.9	76.9	77.2	78.5	80.0	79.9	80.0	91.1
72	95.1	97.8	99.8	102.0	105.3	107.5	107.7	109.2
96	114.4	116.7	118.8	120.9	123.3	123.8	124.4	125.8
120	129.1	130.8	132.7	135.4	136.9	138.3	135.7	135.2
144	133.1	134.4	136.0	134.5	133.4	134.5	136.0	136.5
168	137.4	135.1	133.1	130.2	127.8	124.9	117.3	116.1
192	115.3	111.6	108.4	102.0	96.6	93.8	91.3	86.8
216	82.9	81.1	79.6	77.1	75.0	72.5	70.4	69.8
240	69.5	68.8	68.3	69.6	71.1	71.6	72.3	70.3
264	68.5	68.7	69.0	68.3	67.8	68.1	68.5	67.8
288	67.3	67.0	66.8	67.4	68.3	68.5	69.0	70.0
312	71.1	72.2	73.5	73.3	73.3	73.6	74.0	74.9
336	76.0	74.5	73.3	71.1	69.2	67.0	65.1	65.1

DEPTH	3020.0		TILT	3		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	65.1	65.0	64.3	64.2	64.6	65.3	65.5	66.7
24	68.1	69.0	70.2	70.7	71.8	72.5	72.9	74.6
48	76.1	76.5	77.8	79.0	79.6	79.3	79.3	88.5
72	92.0	96.4	98.8	100.6	103.7	106.3	106.6	108.4
96	113.0	114.8	118.3	119.3	122.6	122.7	123.5	125.4
120	128.9	130.1	132.6	134.9	135.6	137.1	135.0	133.4
144	133.2	134.1	133.4	133.7	133.4	136.1	136.7	136.4
168	135.8	135.0	131.4	130.8	127.8	122.3	114.6	115.8
192	114.4	108.7	103.8	101.1	98.8	93.1	88.2	85.9
216	83.9	80.8	78.1	75.8	73.8	71.3	69.2	68.8
240	68.5	68.4	68.5	68.0	71.2	71.6	72.2	69.6
264	68.5	68.8	69.2	68.0	67.1	67.6	68.3	68.2
288	68.3	67.7	67.3	67.9	68.7	69.1	69.7	70.1
312	70.7	71.6	72.8	73.0	73.3	73.4	73.8	73.9
336	74.3	74.0	74.0	70.8	68.0	65.8	63.9	64.4

DEPTH	3020.0		TILT	0		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	66.2	65.0	64.2	63.9	64.2	65.0	65.6	66.5
24	67.9	68.5	69.7	70.3	72.0	72.9	73.2	74.6
48	75.5	76.4	78.7	79.8	80.4	79.3	79.3	86.2
72	89.4	95.2	98.1	99.6	102.2	105.4	105.7	108.0
96	112.0	112.9	118.1	118.4	121.9	122.2	123.4	125.4
120	128.6	129.2	132.1	134.1	134.4	136.1	134.4	132.6
144	133.2	134.1	133.2	132.9	133.2	136.1	136.1	135.8
168	134.4	135.2	131.5	130.3	127.4	119.0	115.5	112.0
192	112.9	105.1	103.0	99.0	94.3	92.3	85.6	82.7
216	80.7	77.2	76.1	73.7	72.3	70.3	68.5	68.2
240	65.6	67.9	67.9	67.9	71.4	71.7	72.3	69.1
264	67.1	68.8	69.1	67.4	67.4	66.8	68.5	68.2
288	67.9	67.7	67.7	68.8	68.8	69.4	70.3	71.1
312	72.6	72.9	73.7	74.6	72.9	74.0	76.1	75.8
336	74.3	75.2	73.5	69.1	65.3	63.6	64.8	65.3

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3030.0		TILT	0		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	65.6	64.8	63.3	62.7	63.3	64.5	65.0	66.8
24	66.5	67.9	67.9	69.1	71.4	72.9	72.0	73.2
48	74.9	75.2	76.4	76.4	77.8	78.7	76.6	80.7
72	88.8	94.9	95.8	99.0	102.2	104.5	106.5	107.1
96	113.2	112.9	117.0	121.3	121.6	121.6	123.6	126.0
120	128.6	128.6	132.9	133.8	134.4	135.0	132.6	131.2
144	133.5	134.1	133.5	133.2	133.5	135.2	136.4	134.1
168	135.2	131.8	130.6	130.9	128.3	118.1	116.1	112.3
192	110.3	105.9	102.8	97.8	96.1	91.4	87.1	83.6
216	80.7	78.1	75.5	72.9	71.4	70.3	68.2	68.2
240	65.3	66.2	65.6	69.7	71.7	72.3	70.0	67.9
264	70.0	69.1	67.1	68.8	68.2	67.4	68.8	69.1
288	69.4	69.1	68.8	70.0	70.3	70.3	70.8	70.8
312	71.7	73.5	72.9	74.0	74.3	74.9	75.2	75.5
336	75.5	72.3	70.8	66.5	63.3	62.7	66.5	65.9

DEPTH	3040.0		TILT	0		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	64.8	63.3	62.7	62.1	63.3	64.5	65.0	64.8
24	66.5	67.1	67.7	68.5	70.8	71.4	71.7	72.9
48	74.9	74.9	74.9	75.8	76.4	77.2	78.1	81.9
72	88.2	93.2	95.2	96.4	101.0	104.2	105.4	107.4
96	113.2	112.6	115.8	118.1	121.0	121.6	122.2	125.1
120	126.3	128.9	133.2	133.2	133.5	131.5	131.2	133.2
144	134.1	132.9	133.5	132.3	132.6	132.9	134.4	131.2
168	132.1	131.2	132.3	125.7	126.5	120.2	112.6	112.9
192	110.6	103.9	103.3	98.7	95.8	90.0	86.8	83.0
216	80.7	79.5	76.9	73.2	72.9	70.8	67.7	67.9
240	66.2	62.4	62.4	67.1	70.8	72.0	69.4	69.4
264	70.3	67.4	69.1	68.8	67.4	68.2	69.7	70.3
288	70.6	69.7	70.6	69.1	70.0	69.4	69.4	70.0
312	71.1	72.0	73.2	73.5	73.7	74.9	76.1	74.9
336	74.3	70.0	65.9	60.7	61.3	63.0	66.5	66.8

DEPTH	3050.0		TILT	0		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	65.6	64.8	64.2	63.3	64.2	63.9	64.5	64.8
24	65.6	67.4	67.9	69.1	70.8	70.6	71.1	71.7
48	72.3	72.9	72.0	74.0	74.9	75.5	79.3	83.0
72	89.1	90.3	94.3	96.7	100.7	103.6	103.9	105.9
96	107.2	108.5	110.0	113.5	117.4	118.9	120.8	123.1
120	125.5	128.6	131.5	132.6	133.5	130.3	130.9	131.2
144	129.4	128.6	132.6	129.2	132.6	132.6	133.5	126.8
168	127.1	130.9	128.0	126.8	124.5	119.3	114.1	107.7
192	105.4	104.5	98.7	96.4	89.1	86.5	85.1	83.9
216	81.0	80.1	76.9	75.5	74.0	68.2	67.7	67.4
240	63.6	63.0	63.6	65.9	70.6	70.0	66.8	67.1
264	66.2	66.5	67.7	68.5	67.1	69.4	70.6	71.1
288	71.1	71.1	70.8	70.8	71.1	70.8	70.8	71.7
312	72.3	72.6	72.6	72.3	72.9	76.1	77.5	75.8
336	73.7	66.8	64.5	61.8	61.6	63.9	66.2	67.1

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3060.0		TILT	0		VOS	5944.88	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	64.5	64.8	64.2	63.6	62.7	63.0	63.9	64.5
24	65.3	67.1	67.4	68.2	69.7	72.9	71.1	71.7
48	72.0	72.0	72.0	73.2	74.3	74.9	77.8	81.3
72	80.5	84.2	88.7	93.8	98.0	99.4	101.5	104.1
96	107.5	108.8	110.3	111.0	114.6	120.7	121.3	124.8
120	126.5	128.9	130.0	131.2	131.5	129.2	130.3	120.7
144	121.6	127.7	126.8	129.4	129.2	130.3	132.1	126.0
168	125.7	125.1	125.1	125.1	124.8	119.9	111.5	105.9
192	104.5	99.9	98.0	92.6	90.0	87.1	86.8	83.0
216	81.0	79.5	78.1	76.4	74.0	71.4	69.4	67.7
240	67.4	64.8	65.0	65.0	67.1	65.0	64.8	64.8
264	63.9	64.2	68.8	69.1	68.8	70.6	71.4	71.1
288	72.6	72.3	72.3	72.9	72.3	72.0	71.7	72.0
312	72.3	71.7	72.3	74.0	74.0	76.4	76.1	76.1
336	73.2	67.1	63.3	62.7	62.1	66.2	66.2	66.2

DEPTH	3070.0		TILT	0		VOS	5948.16	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	67.4	66.2	68.6	70.6	69.4	76.1	211.6	213.1
24	213.2	67.1	68.8	70.3	70.0	71.8	168.3	72.3
48	73.2	72.3	73.2	75.2	74.4	74.4	73.5	83.4
72	168.2	95.3	94.4	96.7	102.2	102.8	103.7	106.9
96	108.3	109.5	111.8	111.8	115.3	116.7	117.6	120.8
120	120.8	120.5	121.1	118.2	122.0	124.3	124.0	120.2
144	120.2	125.5	125.2	121.1	119.6	124.0	119.9	116.7
168	118.2	116.7	115.9	118.8	117.0	109.5	106.9	105.7
192	103.7	104.6	100.2	93.8	91.8	87.7	85.4	82.5
216	81.3	78.7	77.6	77.0	75.5	74.4	73.2	71.2
240	70.6	69.7	208.9	68.6	67.1	68.0	67.4	66.8
264	67.1	70.3	70.9	72.6	72.3	73.8	74.1	74.9
288	75.8	75.8	76.1	74.7	75.2	74.9	74.9	75.2
312	74.4	74.4	74.1	74.4	76.7	77.3	77.3	74.4
336	73.8	70.6	65.9	65.7	65.7	67.1	68.6	68.8

DEPTH	3072.0		TILT	0		VOS	5948.16	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	187.3	70.0	73.8	71.2	71.5	217.8	222.1	229.2
24	235.6	243.3	249.9	177.7	176.2	172.2	169.0	166.1
48	159.7	160.3	164.1	168.2	171.0	172.4	174.8	177.6
72	186.3	185.2	185.6	184.7	183.8	180.4	104.0	106.9
96	108.3	109.8	111.5	110.1	110.4	112.4	112.7	119.1
120	115.6	117.3	114.4	117.8	120.8	123.1	120.8	117.3
144	118.8	122.8	121.4	120.2	120.2	121.7	119.4	115.9
168	117.6	113.8	112.7	117.0	114.4	106.3	106.3	105.1
192	105.1	104.8	99.3	94.7	91.8	88.3	84.8	81.6
216	81.0	79.0	77.6	77.6	80.8	75.5	255.8	258.7
240	257.1	71.2	69.4	68.6	68.0	68.0	68.0	67.7
264	68.0	71.5	180.5	175.7	73.5	168.4	167.8	143.4
288	132.4	134.5	134.7	150.1	156.1	155.4	155.8	156.2
312	157.4	160.3	160.7	160.7	75.5	77.6	80.8	163.8
336	169.0	168.4	170.0	173.9	175.6	179.2	180.2	183.5

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3074.0		TILT	0		VOS	5948.16	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	188.2	195.1	205.3	210.5	214.9	218.3	225.3	228.2
24	237.2	249.1	255.4	179.9	176.2	177.4	167.8	169.0
48	160.0	160.0	162.6	166.1	171.6	172.8	174.8	178.1
72	186.1	189.5	188.1	184.7	182.6	177.4	168.6	105.4
96	108.9	111.2	111.2	110.4	111.2	110.1	112.1	114.1
120	116.7	115.6	113.6	116.7	119.1	120.5	118.8	117.0
144	118.2	121.4	117.3	117.0	115.9	119.6	119.4	111.8
168	113.6	110.9	110.6	110.6	112.1	106.6	106.6	107.7
192	107.5	105.1	97.9	94.4	92.1	88.0	84.5	83.1
216	218.2	79.9	212.7	78.1	250.4	269.6	272.1	266.5
240	257.2	249.1	240.4	228.9	216.8	68.6	68.6	68.3
264	191.1	185.2	180.3	176.8	172.5	168.4	167.8	167.8
288	160.4	138.5	153.0	151.9	157.9	157.5	155.9	157.5
312	156.1	160.3	160.6	160.9	161.2	161.2	163.2	165.8
336	167.3	169.3	171.3	176.0	176.0	179.4	182.1	183.4

DEPTH	3075.0		TILT	0		VOS	5948.16	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	188.3	196.7	206.6	212.0	214.3	218.5	224.9	229.4
24	238.6	248.9	258.2	182.5	179.0	185.4	172.9	168.0
48	165.5	160.3	165.5	169.0	171.3	172.9	175.1	176.3
72	185.4	193.5	189.7	186.1	182.0	178.3	174.3	106.4
96	108.6	111.5	110.9	111.2	110.9	109.9	112.5	112.8
120	115.4	114.7	113.3	115.7	117.3	119.5	117.3	114.1
144	119.5	120.9	117.5	116.8	115.8	118.0	118.6	111.3
168	113.5	110.6	109.5	110.5	108.6	106.7	106.4	106.4
192	105.7	105.1	102.2	95.1	91.3	88.4	85.8	83.6
216	82.3	79.4	78.7	80.0	260.7	282.7	280.3	267.4
240	257.6	248.2	239.4	226.9	215.3	209.7	204.0	196.3
264	190.8	184.7	181.9	176.4	171.3	168.4	167.1	167.4
288	163.2	149.7	157.1	152.3	156.5	157.7	155.1	156.5
312	159.1	160.3	160.2	161.0	161.3	161.6	163.7	166.1
336	168.4	169.3	170.0	172.9	177.1	178.6	181.2	186.4

DEPTH	3076.0		TILT	0		VOS	5948.16	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	189.2	196.3	204.3	213.3	214.3	220.1	226.2	232.3
24	240.0	248.7	260.9	197.9	179.0	185.4	181.0	168.4
48	173.8	162.6	225.8	227.9	172.5	172.9	172.9	176.7
72	184.4	197.5	191.2	185.4	181.4	178.0	173.7	109.3
96	113.1	174.0	170.5	110.5	111.2	110.9	111.5	113.1
120	114.7	113.8	113.1	114.7	116.3	117.0	119.9	111.5
144	117.9	120.5	117.6	116.7	115.7	116.3	117.9	110.9
168	113.4	110.2	108.3	108.9	108.3	106.4	107.7	108.8
192	107.0	106.4	149.9	170.5	90.6	216.8	220.9	221.4
216	219.7	79.7	221.3	220.3	270.7	282.4	280.8	262.8
240	255.1	247.4	237.7	224.6	213.7	207.9	203.7	197.6
264	190.5	183.8	180.6	175.1	171.6	168.7	167.4	166.1
288	163.3	151.3	160.6	159.7	157.1	157.8	155.5	156.8
312	158.1	161.3	161.0	160.3	161.0	163.2	164.1	164.8
336	168.7	170.0	173.5	174.5	177.7	179.0	181.5	186.4

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3078.0		TILT	0		VOS	5948.16	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	189.6	197.3	205.9	211.4	215.6	221.0	226.2	235.2
24	241.0	249.0	280.7	208.1	192.8	188.1	187.3	179.0
48	174.3	179.3	232.0	236.0	180.9	180.2	177.4	186.4
72	186.4	199.2	200.2	188.0	178.0	177.5	172.5	188.3
96	182.6	194.5	203.3	110.5	112.2	110.9	112.2	112.5
120	114.4	113.4	113.4	114.7	115.0	114.4	118.9	110.9
144	113.8	118.6	117.0	115.7	115.0	116.0	115.7	108.6
168	110.9	107.3	105.1	108.0	108.0	107.7	123.7	133.7
192	139.8	144.9	223.7	214.8	261.5	243.4	227.6	224.0
216	215.6	214.3	224.2	219.4	291.1	281.7	278.8	259.6
240	254.8	247.7	237.4	227.1	214.3	207.2	203.7	196.0
264	192.1	185.7	180.2	177.0	171.3	168.0	167.4	166.4
288	163.9	161.0	161.9	159.7	158.1	161.3	158.4	157.8
312	158.1	160.7	161.0	160.7	161.0	161.9	165.5	166.8
336	168.7	169.0	172.9	175.1	178.3	179.0	181.9	186.7

DEPTH	3080.0		TILT	0		VOS	5948.16	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	190.1	197.0	205.1	212.0	216.3	219.4	226.7	234.0
24	247.1	267.9	289.5	238.3	231.3	237.5	247.5	200.7
48	184.7	188.0	237.5	232.7	208.2	185.5	192.2	188.9
72	197.4	204.5	209.0	200.9	192.4	185.1	173.5	200.4
96	192.0	202.8	210.4	112.6	112.6	113.4	113.0	113.8
120	114.1	112.6	113.0	112.2	114.9	118.0	117.6	111.1
144	113.4	117.2	116.1	114.9	114.5	113.8	111.7	109.1
168	108.7	106.9	105.5	107.2	105.7	109.9	124.9	137.3
192	226.6	250.2	258.7	229.8	261.5	243.4	234.4	226.7
216	215.9	214.0	224.4	220.5	284.1	281.4	281.0	264.9
240	256.0	247.1	237.9	222.1	215.1	206.3	201.6	194.3
264	189.7	184.3	180.1	173.5	169.6	168.1	167.7	166.2
288	163.1	161.2	162.3	159.2	160.4	160.4	158.9	157.3
312	158.1	160.8	161.6	160.4	161.2	162.7	165.4	167.7
336	168.5	169.6	171.2	174.3	177.4	178.1	182.0	185.8

DEPTH	3085.0		TILT	0		VOS	5948.16	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	180.4	188.9	193.5	198.9	209.4	218.6	218.2	237.1
24	248.3	267.6	279.1	303.4	310.7	322.7	338.5	267.2
48	242.9	243.3	238.6	240.2	246.4	230.9	229.8	225.5
72	230.9	259.8	249.1	237.1	259.8	257.1	202.0	225.9
96	230.2	221.7	249.8	250.8	259.5	254.5	113.3	113.6
120	114.1	114.4	115.1	112.6	113.4	113.8	109.5	111.1
144	110.7	116.1	115.3	115.3	113.8	112.2	110.3	109.1
168	108.8	107.6	106.1	105.7	106.1	291.2	275.1	270.2
192	249.4	241.7	251.0	267.2	261.4	243.3	263.4	334.2
216	331.9	317.6	308.4	301.5	283.4	271.4	272.6	254.8
240	245.2	232.1	225.2	217.1	204.7	202.0	189.3	190.5
264	180.1	177.4	171.2	166.2	162.3	166.6	160.8	161.9
288	164.3	155.0	158.5	157.7	156.2	158.9	151.5	149.2
312	149.2	150.0	153.5	153.5	156.2	154.6	156.5	161.9
336	161.6	162.3	163.5	164.6	171.2	175.8	178.5	183.1

SONIC

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3090.0		TILT	0		VOS	5948.16	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	171.2	179.8	190.9	192.3	202.9	210.1	205.3	214.9
24	234.6	234.6	259.1	285.1	301.9	300.9	239.7	237.9
48	267.8	263.4	238.4	267.9	276.9	251.9	270.2	250.3
72	272.0	401.8	422.5	285.1	295.6	261.0	257.7	267.9
96	256.7	231.5	223.2	225.5	246.1	233.6	234.9	237.2
120	237.7	231.7	116.4	113.5	113.5	109.2	107.2	108.2
144	108.7	114.4	117.3	115.4	114.0	112.0	111.1	110.1
168	109.2	109.2	107.2	106.8	107.2	283.1	272.1	263.0
192	239.4	242.0	239.9	252.6	252.0	219.2	219.7	222.6
216	229.7	219.7	204.4	216.3	170.7	193.9	193.7	241.5
240	243.8	225.9	219.1	205.3	198.1	184.1	182.2	178.4
264	170.2	167.8	165.9	158.2	156.3	151.9	150.0	152.9
288	153.9	143.8	148.6	150.0	140.9	146.6	146.2	141.4
312	143.3	148.1	141.4	142.3	141.8	148.1	148.6	154.3
336	149.5	152.9	154.3	159.6	159.6	167.8	170.7	172.1

DEPTH	3095.0		TILT	0		VOS	5948.16	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	163.5	167.3	178.6	184.7	189.4	199.7	130.3	131.1
24	149.2	143.2	152.7	154.5	158.9	139.6	197.4	180.0
48	201.6	195.5	167.7	160.0	170.0	192.4	184.3	224.8
72	203.6	227.5	209.7	242.1	225.5	210.1	221.0	287.4
96	203.6	209.7	205.1	219.8	220.0	227.9	214.7	218.2
120	218.2	220.0	220.1	220.9	217.8	227.5	209.2	215.3
144	209.7	216.3	210.1	209.0	211.7	209.0	205.9	202.1
168	202.0	199.3	195.9	195.9	217.7	225.7	214.0	211.5
192	195.5	189.3	180.9	177.6	184.7	181.9	177.7	172.4
216	173.9	171.2	169.6	156.2	143.4	142.8	149.2	147.7
240	148.9	139.0	139.5	134.6	134.3	132.9	136.9	131.9
264	139.0	137.6	137.1	137.1	138.8	147.5	143.2	144.2
288	141.1	141.9	140.0	134.7	136.2	133.8	135.7	135.3
312	135.0	134.7	136.1	135.7	135.2	136.5	139.9	143.7
336	147.7	148.8	149.4	149.8	154.6	155.4	158.3	162.5

DEPTH	3100.0		TILT	0		VOS	5948.16	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	125.7	126.5	123.0	124.2	121.9	123.8	129.6	126.1
24	125.3	128.0	129.2	129.9	133.4	133.4	142.3	145.4
48	150.8	156.5	154.6	154.2	159.6	160.0	167.3	165.0
72	177.4	178.9	183.1	185.1	189.3	190.8	198.2	210.5
96	200.9	198.9	200.1	205.9	202.0	207.4	208.2	205.1
120	213.2	214.4	215.9	215.9	211.7	211.3	202.4	208.6
144	208.2	204.0	202.8	205.1	204.7	205.9	204.7	195.5
168	195.1	197.8	187.8	183.9	183.1	177.4	181.2	178.9
192	177.4	170.0	165.4	169.6	161.9	156.2	155.4	148.5
216	148.5	138.0	129.6	126.1	120.7	116.8	116.8	116.8
240	111.4	113.4	113.8	112.6	114.9	113.8	113.8	118.0
264	115.3	114.9	116.8	117.6	120.3	124.2	125.3	125.7
288	124.9	123.4	123.0	120.3	121.1	121.9	122.6	122.6
312	118.0	116.1	115.3	115.7	117.6	118.8	118.0	121.1
336	121.9	119.5	123.0	123.0	124.9	123.8	125.3	123.8

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3110.0		TILT	36		VOS	5948.16	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	78.3	78.3	78.3	78.1	77.9	77.0	76.3	77.0
24	77.9	79.7	81.7	81.8	82.1	89.3	87.8	88.6
48	89.0	89.2	88.9	90.7	89.2	90.1	91.2	102.5
72	109.6	114.1	117.5	119.1	125.3	128.9	131.2	132.4
96	139.5	139.5	145.3	147.5	150.5	150.9	152.4	154.9
120	159.0	160.2	163.6	166.5	167.5	169.6	166.6	164.6
144	164.3	165.4	164.6	165.0	164.6	167.9	168.8	168.5
168	167.9	166.5	162.2	161.3	157.5	146.6	142.5	138.9
192	135.8	129.4	123.7	121.3	117.7	110.1	105.5	103.5
216	100.1	98.9	95.9	94.0	90.8	88.0	85.4	83.9
240	83.6	82.0	80.4	79.7	79.2	78.5	77.9	78.3
264	78.7	80.7	85.0	85.3	85.0	87.0	88.0	87.8
288	89.2	88.9	88.9	89.3	88.3	88.6	88.3	88.8
312	89.3	88.8	89.4	90.7	90.9	94.1	92.5	90.9
336	89.6	83.5	80.2	78.4	77.1	79.4	82.1	80.1

DEPTH	3110.0		TILT	33		VOS	5948.16	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	77.9	78.3	78.7	78.0	77.5	77.2	77.1	77.4
24	77.9	77.8	77.9	79.7	81.7	83.0	84.6	84.9
48	85.4	84.1	82.9	84.7	86.7	85.9	85.4	90.2
72	95.8	100.8	106.6	115.1	120.2	124.0	125.3	127.9
96	134.9	134.3	138.8	144.0	144.9	144.9	147.3	150.0
120	153.2	153.5	157.8	159.7	160.1	162.0	159.5	157.3
144	158.9	159.8	158.9	158.5	158.9	162.0	162.3	161.5
168	160.4	160.0	156.2	155.7	154.1	141.5	139.1	134.9
192	131.2	124.0	118.7	115.7	105.8	103.6	101.7	99.2
216	97.1	95.3	93.7	90.9	89.2	86.5	84.2	83.2
240	82.5	81.2	80.0	79.1	78.3	77.8	77.5	77.4
264	77.5	79.6	82.1	82.4	82.9	83.0	83.3	84.1
288	85.0	85.7	86.7	86.2	85.8	85.3	85.0	84.9
312	85.0	84.5	84.2	85.1	86.2	88.0	90.0	88.6
336	87.5	83.5	80.0	78.2	76.7	78.0	79.6	78.7

DEPTH	3110.0		TILT	30		VOS	5948.16	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	77.9	78.2	79.6	80.6	80.0	82.4	83.3	82.8
24	82.5	82.2	82.1	81.4	80.8	82.3	83.3	83.0
48	82.9	83.2	83.7	83.7	83.7	83.5	83.3	87.8
72	92.9	97.0	101.7	106.7	112.5	115.4	118.7	121.2
96	124.1	125.9	127.9	132.7	138.3	140.4	141.1	144.6
120	146.6	148.6	153.5	154.2	154.8	154.7	152.5	152.3
144	154.3	154.4	154.1	153.4	153.8	155.5	157.1	153.7
168	155.2	151.8	151.6	147.3	146.7	138.6	130.8	125.5
192	120.8	120.6	111.6	106.1	101.2	100.9	100.8	95.4
216	93.7	91.3	89.2	87.8	86.7	85.5	84.6	82.8
240	81.2	80.1	79.2	78.2	77.5	77.4	77.5	77.4
264	77.5	80.7	81.4	82.0	82.5	82.8	83.3	84.1
288	85.0	85.3	85.8	84.9	84.2	84.3	84.6	84.3
312	84.2	84.1	84.2	84.5	85.0	85.9	87.1	85.3
336	83.7	81.5	79.6	78.7	77.9	78.5	79.2	80.2

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3110.0		TILT	27		VOS	5948.16	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	95.8	95.5	95.4	94.5	93.7	92.2	90.8	90.7
24	90.8	92.0	93.3	91.7	90.4	92.1	94.2	93.2
48	92.5	91.3	90.4	89.0	87.9	86.8	85.8	90.3
72	95.4	98.7	102.5	106.0	110.0	111.7	113.7	116.2
96	119.1	120.6	122.5	126.7	131.6	133.3	135.4	137.7
120	140.4	141.7	143.3	144.8	146.6	145.0	143.7	145.2
144	147.0	146.9	147.0	146.9	147.0	145.8	145.0	141.8
168	139.1	141.2	143.7	140.8	138.3	133.9	128.3	121.4
192	115.4	112.5	110.0	106.2	102.9	98.2	94.2	91.7
216	89.6	88.0	86.7	86.4	86.2	84.7	83.3	82.8
240	82.5	83.4	84.6	83.0	81.7	81.2	80.8	84.7
264	89.2	88.2	87.5	85.0	82.9	84.7	86.7	85.7
288	85.0	85.1	85.4	84.7	84.2	84.9	85.8	85.1
312	84.6	84.5	84.6	84.5	84.6	85.5	86.7	86.6
336	86.7	88.8	91.2	91.1	91.2	92.6	94.2	94.9

DEPTH	3110.0		TILT	24		VOS	5948.16	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	104.1	106.5	109.1	106.0	103.3	103.0	102.9	102.4
24	102.1	101.9	102.1	102.2	102.5	101.9	101.7	103.2
48	105.0	103.8	102.9	101.3	100.0	100.3	100.8	101.3
72	102.1	101.9	102.1	103.2	104.6	107.7	111.2	114.5
96	118.3	119.4	120.8	121.3	125.8	131.4	132.5	135.6
120	137.8	140.8	143.6	145.0	146.0	142.3	143.1	140.2
144	138.5	140.4	144.3	141.4	144.7	144.9	146.0	138.4
168	136.6	137.3	138.3	137.9	137.9	132.8	128.3	115.8
192	114.6	111.2	108.3	104.1	100.4	96.2	92.7	90.3
216	89.6	87.1	86.1	86.8	92.1	92.8	93.7	91.9
240	90.4	93.9	97.9	96.7	95.8	96.7	97.9	99.6
264	101.7	100.3	99.2	97.1	95.4	97.3	99.6	100.1
288	100.8	99.2	97.9	97.0	96.2	99.0	102.1	100.9
312	100.0	100.1	100.4	97.5	95.0	94.0	93.3	98.3
336	104.1	105.7	107.5	107.1	107.1	106.7	106.6	105.3

DEPTH	3110.0		TILT	21		VOS	5948.16	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	122.5	120.0	117.9	119.2	120.8	120.2	120.0	120.9
24	122.1	122.7	123.7	119.0	115.0	115.0	115.4	115.3
48	115.4	115.9	116.6	114.4	112.5	113.8	115.4	115.9
72	116.6	112.6	109.1	109.0	109.1	110.0	111.2	114.1
96	115.9	117.1	119.3	119.4	123.3	125.6	128.3	128.4
120	128.7	132.8	137.5	140.5	140.9	138.0	139.5	129.1
144	129.7	136.5	135.6	138.2	137.6	139.5	141.5	132.4
168	132.6	131.3	130.9	132.2	131.2	122.0	115.0	113.2
192	111.1	111.9	106.4	101.1	97.8	98.7	100.1	101.0
216	101.6	99.5	107.1	106.9	107.1	106.7	106.6	110.5
240	115.0	112.7	110.8	111.7	112.9	113.8	115.0	115.0
264	115.4	113.6	112.1	111.9	112.1	112.5	113.3	114.0
288	115.0	113.1	111.6	111.7	112.1	112.4	113.0	111.5
312	110.4	111.5	112.9	113.0	113.3	113.0	112.9	113.2
336	113.7	117.6	122.1	119.8	117.9	118.8	120.0	121.1

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3110.0		TILT	18		VOS	5948.16	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	140.8	141.9	143.3	141.4	140.0	139.2	138.7	140.6
24	142.9	142.5	142.5	144.7	147.5	143.0	139.1	141.2
48	143.7	138.8	134.5	134.0	133.7	135.4	137.5	135.0
72	132.9	130.4	128.3	129.0	130.0	127.5	125.4	112.5
96	114.3	116.8	116.9	116.1	116.9	115.6	118.0	126.0
120	121.7	123.8	119.8	123.9	127.9	130.9	130.6	123.7
144	125.4	132.1	131.7	126.9	126.1	130.6	125.7	119.6
168	123.7	116.8	116.2	123.1	118.7	112.0	112.2	112.4
192	111.7	111.3	111.6	116.0	121.1	123.5	126.2	126.8
216	127.7	126.8	126.2	126.9	127.9	129.0	130.4	130.4
240	130.8	132.1	133.7	135.0	136.6	132.4	128.7	129.4
264	130.4	128.1	126.2	126.3	126.6	128.9	131.6	131.9
288	132.5	129.3	126.6	129.7	133.3	129.5	126.2	125.2
312	124.6	126.8	129.5	127.1	125.0	126.5	128.3	131.6
336	135.4	138.7	142.5	142.7	143.3	144.1	145.4	142.9

DEPTH	3110.0		TILT	15		VOS	5948.16	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	174.5	176.8	179.5	179.7	180.3	182.0	184.1	184.3
24	184.9	182.8	181.2	178.6	176.6	174.3	172.4	170.3
48	168.7	166.4	164.5	165.8	167.4	164.4	161.8	160.1
72	158.8	160.0	161.6	157.1	153.3	151.0	149.1	141.7
96	135.4	133.5	132.0	123.0	116.5	117.0	116.8	117.5
120	118.2	116.6	117.0	116.3	119.0	120.1	123.0	114.9
144	117.4	122.5	120.7	119.3	118.7	118.6	115.4	113.1
168	111.2	110.2	109.6	109.6	110.0	117.6	126.6	132.8
192	140.0	141.4	143.3	146.2	149.5	152.4	155.8	158.8
216	162.4	164.4	166.9	162.7	159.1	162.0	165.4	164.9
240	164.9	163.0	161.6	160.8	160.4	161.2	162.4	157.5
264	153.3	152.2	151.6	156.3	161.6	157.6	154.1	148.3
288	143.3	141.9	141.0	148.7	152.0	154.7	157.9	158.7
312	159.9	159.2	158.8	159.3	160.3	162.4	164.9	164.7
336	164.9	167.6	170.8	171.8	173.3	172.8	172.8	173.5

DEPTH	3110.0		TILT	12		VOS	5948.16	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	189.9	196.3	203.7	204.4	205.6	204.4	203.7	201.5
24	199.9	201.3	203.2	181.8	180.2	178.4	172.3	172.7
48	168.6	165.3	168.8	171.0	175.3	176.5	177.8	182.1
72	187.0	188.0	189.5	188.8	188.7	185.3	172.8	176.0
96	170.4	167.8	165.8	160.4	155.8	132.7	115.8	116.1
120	116.6	117.1	117.9	115.3	115.9	115.3	109.6	109.6
144	110.0	118.5	118.0	117.9	116.3	114.7	113.3	112.7
168	112.5	111.1	110.0	108.5	109.0	138.6	142.9	145.5
192	148.7	153.3	158.7	164.1	170.4	171.0	172.0	176.8
216	182.4	186.6	191.6	190.5	189.8	197.6	206.6	204.3
240	202.6	198.9	195.9	194.9	194.4	199.9	206.2	200.6
264	195.8	189.7	184.5	180.0	176.2	172.1	171.3	171.4
288	166.9	159.1	164.1	163.3	160.9	161.9	160.0	160.6
312	161.6	164.6	164.4	164.0	164.6	166.0	167.4	169.7
336	171.4	173.0	174.9	178.7	179.9	183.0	183.8	186.0

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3110.0		TILT	9		VOS	5948.16	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	192.4	199.6	208.0	215.7	217.0	221.7	228.0	231.1
24	239.0	245.1	249.9	207.9	202.2	201.6	201.9	195.9
48	190.0	191.2	224.9	225.4	197.7	190.1	193.0	191.5
72	196.0	202.5	203.4	197.4	193.1	190.4	189.8	197.9
96	193.2	201.5	205.3	201.2	197.8	194.6	192.0	191.5
120	191.6	146.4	118.7	117.7	117.1	113.7	110.8	109.4
144	108.3	113.3	119.1	117.7	116.6	114.8	113.3	134.1
168	164.9	166.8	169.1	165.2	161.8	170.2	179.9	186.9
192	194.9	202.1	210.3	212.3	214.9	217.8	221.4	222.9
216	225.0	216.6	222.8	222.4	239.1	244.0	249.9	254.5
240	260.1	252.6	246.1	232.7	216.3	210.1	206.2	197.5
264	192.1	185.1	177.4	169.2	168.7	169.1	163.6	164.6
288	166.0	155.3	160.5	159.6	148.3	160.9	152.1	148.2
312	149.0	151.3	148.7	145.1	156.7	155.7	158.0	164.9
336	164.6	165.7	167.3	169.7	176.6	179.4	183.3	187.8

DEPTH	3110.0		TILT	6		VOS	5948.16	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	168.4	177.1	126.6	126.3	126.2	127.1	128.3	126.9
24	125.8	127.5	129.5	286.9	286.9	269.7	273.8	251.4
48	241.4	241.7	239.9	241.2	243.9	234.3	234.8	231.0
72	235.4	249.4	245.3	238.8	248.3	246.9	222.5	232.8
96	234.2	229.9	266.1	267.4	269.5	269.1	269.5	270.5
120	272.2	246.7	226.1	222.7	220.0	216.3	213.2	212.7
144	212.8	208.3	204.5	206.7	209.5	208.0	207.0	217.4
168	229.5	232.9	237.0	260.1	289.0	287.8	287.4	278.2
192	270.3	254.5	254.9	255.6	262.8	244.6	255.1	268.8
216	266.6	264.3	264.8	262.8	145.3	281.9	281.6	260.8
240	113.3	135.5	136.5	114.0	115.4	115.4	115.8	128.2
264	136.1	133.7	133.7	134.0	137.1	148.8	144.1	145.3
288	141.1	142.2	139.2	132.0	133.9	131.6	133.8	133.4
312	120.0	117.3	115.0	115.6	131.6	133.6	138.4	144.8
336	148.7	150.2	151.0	152.5	156.9	160.8	164.7	168.5

DEPTH	3110.0		TILT	3		VOS	5948.16	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	116.1	118.5	121.5	121.1	121.0	120.6	120.6	121.5
24	122.8	122.4	122.4	122.9	123.7	124.0	124.6	129.8
48	135.9	138.5	141.7	144.2	147.1	149.1	151.6	159.1
72	167.8	171.1	175.0	185.0	189.5	191.2	200.9	287.6
96	201.4	200.3	200.9	208.8	205.0	212.3	209.8	207.7
120	214.8	216.2	217.4	217.6	213.4	215.8	203.6	210.2
144	208.8	206.2	204.1	206.0	206.1	206.7	205.2	196.1
168	195.7	198.2	187.9	183.7	183.0	177.0	181.0	178.3
192	176.4	168.8	159.2	155.8	152.9	149.3	146.2	139.7
216	134.1	127.0	121.0	114.5	108.9	109.0	109.3	105.9
240	103.0	105.9	109.3	110.7	112.5	112.8	113.4	113.4
264	113.8	113.7	113.8	114.1	114.7	117.0	119.7	120.0
288	120.6	119.7	119.2	117.9	117.0	117.0	117.4	115.2
312	113.4	113.4	113.8	113.0	112.5	112.5	112.9	114.1
336	115.6	117.2	119.2	119.5	120.1	120.0	120.1	117.9

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3110.0		TILT	0		VOS	5948.16	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	114.9	118.0	121.5	118.4	118.8	119.2	122.6	121.5
24	116.5	119.2	118.8	115.7	119.5	122.2	118.0	124.6
48	130.7	135.0	141.5	141.5	144.6	145.8	150.0	149.2
72	159.2	165.8	165.4	173.5	174.3	169.6	183.9	183.9
96	185.8	191.2	191.2	198.6	193.2	192.0	197.0	193.5
120	198.9	204.0	210.1	209.7	205.5	206.7	198.6	200.1
144	200.5	193.9	196.2	202.0	205.1	204.3	195.1	191.6
168	189.3	187.0	179.3	171.2	174.7	168.9	172.7	166.6
192	161.2	156.9	154.6	150.4	146.5	146.5	140.7	129.9
216	127.6	115.7	115.7	109.1	108.8	103.0	102.6	98.0
240	103.0	104.9	111.4	112.2	112.6	113.4	113.4	113.4
264	112.6	114.5	114.5	114.9	114.1	114.9	115.3	117.2
288	115.7	114.1	116.1	116.8	116.1	115.7	116.8	112.6
312	110.7	104.9	103.4	109.5	107.2	111.8	110.7	114.5
336	114.1	113.0	117.2	116.8	119.9	119.9	118.8	123.4

DEPTH	3120.0		TILT	0		VOS	5948.16	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	111.1	108.8	111.1	111.1	112.6	113.4	111.8	109.1
24	109.9	107.2	103.0	100.7	108.0	108.0	111.4	112.6
48	124.9	123.8	135.7	134.6	135.0	131.1	136.1	138.0
72	153.5	161.9	161.6	163.9	163.1	164.3	160.4	175.4
96	179.7	182.0	180.4	181.2	183.9	185.5	186.6	189.3
120	196.6	195.5	194.7	200.1	194.3	189.3	185.5	196.6
144	190.8	192.4	192.0	195.5	194.7	195.9	190.5	185.5
168	181.6	182.4	177.7	166.2	165.8	154.6	155.0	160.4
192	156.5	146.5	149.2	141.1	138.0	135.0	129.9	123.8
216	113.4	110.3	106.1	98.7	96.8	91.8	86.0	88.3
240	91.4	94.1	100.3	101.0	101.0	102.2	102.2	105.7
264	103.7	106.8	105.3	105.7	105.7	100.7	106.8	107.2
288	106.1	105.7	103.7	105.7	104.9	106.1	101.0	101.4
312	98.3	93.7	100.3	101.4	96.8	100.7	102.6	101.4
336	102.6	103.0	108.4	108.8	108.0	106.1	108.8	106.1

DEPTH	3130.0		TILT	0		VOS	5948.16	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	95.6	93.3	95.3	99.5	98.3	99.1	100.3	100.3
24	99.5	87.9	84.9	89.1	94.1	100.3	101.4	97.6
48	106.4	116.8	122.2	125.3	121.5	121.5	121.5	125.3
72	128.4	143.4	151.1	145.8	153.8	159.6	154.2	161.6
96	167.3	170.4	177.0	177.4	179.3	175.4	175.4	174.3
120	184.3	179.7	185.5	189.7	188.2	185.1	178.1	185.1
144	180.4	184.7	184.3	183.1	183.5	184.7	181.6	174.7
168	170.4	168.5	161.6	151.9	150.4	151.9	150.8	145.8
192	146.5	144.6	140.4	134.2	123.0	126.1	103.4	107.2
216	104.9	91.0	93.3	86.0	87.6	79.1	78.7	72.1
240	80.6	81.0	89.5	85.2	95.3	89.9	94.9	95.6
264	98.0	97.2	93.7	89.9	94.1	91.0	93.3	100.3
288	98.0	89.5	94.1	95.6	89.9	90.6	86.8	88.3
312	81.8	87.2	89.9	91.4	86.0	81.4	91.0	91.4
336	91.0	93.3	90.6	97.2	96.4	92.9	99.5	93.3

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3140.0		TILT	0		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	87.6	84.9	83.0	93.8	91.8	96.1	89.1	94.5
24	81.0	78.3	73.7	73.7	76.4	79.1	89.9	86.4
48	84.9	94.5	100.3	110.7	112.7	111.5	111.1	110.4
72	112.3	116.9	139.7	141.2	141.2	143.1	148.5	153.9
96	150.5	154.7	162.8	166.7	162.8	166.7	167.0	164.3
120	167.0	172.4	173.6	175.1	174.4	172.4	175.5	177.1
144	171.7	166.7	168.2	174.0	177.1	176.3	169.7	166.3
168	163.6	160.9	151.6	142.7	143.5	143.1	141.2	135.8
192	135.8	131.6	130.0	121.5	115.0	96.1	91.1	96.1
216	81.8	83.0	75.6	78.7	70.6	69.9	71.0	80.7
240	80.7	68.7	83.0	81.0	79.5	84.5	80.7	86.8
264	88.0	89.5	88.4	80.7	88.0	85.3	81.4	92.6
288	88.4	84.1	84.9	81.4	81.8	85.3	80.3	70.6
312	71.8	75.6	76.0	76.4	79.5	76.8	74.9	85.3
336	87.2	87.6	82.6	91.5	86.4	88.8	88.4	81.8

DEPTH	3150.0		TILT	0		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	80.7	80.3	78.3	83.7	82.6	89.1	83.4	76.0
24	70.6	70.2	62.1	58.7	58.7	68.3	75.3	77.6
48	74.5	73.7	82.2	84.5	102.3	105.3	106.1	109.6
72	112.3	118.8	123.1	128.1	125.8	136.2	131.6	139.7
96	134.3	129.7	152.8	154.3	152.8	158.9	151.6	156.6
120	148.9	163.6	167.8	161.6	170.9	170.9	175.1	173.6
144	168.2	165.9	166.7	170.5	171.3	171.3	167.4	158.6
168	152.8	152.8	143.5	140.8	135.8	135.8	127.3	125.0
192	123.5	121.2	110.0	103.0	92.6	89.9	85.7	81.4
216	79.5	74.9	73.7	71.4	67.9	65.6	65.2	64.8
240	63.7	62.9	61.0	61.8	72.6	78.0	72.2	76.4
264	76.0	78.7	77.2	73.7	78.3	76.8	78.0	83.7
288	78.0	72.6	80.7	75.6	75.3	67.9	67.9	66.0
312	66.4	66.8	66.8	66.4	65.2	65.2	70.6	76.8
336	79.1	80.7	78.7	76.8	86.1	85.7	82.2	77.2

DEPTH	3160.0		TILT	0		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	75.3	69.1	69.9	71.8	77.2	79.5	70.6	67.2
24	57.5	59.4	57.1	56.0	51.3	52.9	55.6	67.2
48	70.6	69.1	67.9	65.6	66.0	78.7	107.3	108.0
72	110.4	116.1	121.9	124.2	121.2	118.1	128.9	121.2
96	130.4	128.1	131.7	151.6	148.9	158.2	149.3	152.0
120	146.6	150.5	159.7	159.7	166.7	168.2	171.7	170.9
144	167.8	168.2	167.8	169.7	170.9	169.4	169.0	159.3
168	152.4	153.2	144.7	139.3	137.0	135.4	122.7	116.5
192	120.0	115.4	113.1	104.6	96.5	89.5	87.2	83.7
216	81.0	77.2	76.0	73.3	71.0	69.1	67.9	66.4
240	64.5	64.5	63.3	62.9	62.9	71.4	66.4	64.1
264	72.2	72.9	73.7	63.7	74.9	62.1	67.2	71.4
288	69.5	67.2	75.3	65.6	71.0	67.2	67.9	68.7
312	68.3	64.8	65.2	63.7	65.6	67.5	68.3	70.2
336	72.6	72.6	69.5	69.5	75.3	71.8	71.8	65.6

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3170.0		TILT	0		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	67.5	66.4	65.6	69.5	68.7	67.5	61.0	63.3
24	56.7	57.1	52.5	50.6	50.6	53.3	55.2	57.1
48	67.5	65.2	64.5	65.2	62.9	62.9	103.4	107.3
72	110.0	116.1	121.5	122.3	120.8	115.4	124.2	115.8
96	129.2	127.7	128.1	150.8	150.1	152.4	149.7	150.8
120	145.4	145.4	154.3	158.9	163.2	164.7	166.7	167.8
144	165.9	167.0	167.8	169.0	166.7	165.9	165.9	164.0
168	150.8	149.3	140.8	138.9	137.3	116.9	116.0	116.9
192	120.0	114.6	106.5	100.3	91.8	86.1	86.1	83.0
216	82.2	79.1	77.2	74.5	72.9	69.5	68.7	67.2
240	65.6	65.2	64.5	64.5	63.7	63.7	62.1	60.2
264	69.9	71.0	63.7	62.1	65.6	61.0	59.8	70.2
288	61.8	64.5	69.1	65.6	68.3	67.5	68.3	64.1
312	65.2	62.9	61.8	61.8	62.5	64.5	66.4	67.9
336	69.5	69.9	70.2	70.2	71.8	72.2	64.1	63.3

DEPTH	3180.0		TILT	0		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	65.6	61.4	58.9	66.3	59.8	63.7	59.5	54.0
24	55.3	54.7	49.5	50.5	51.5	53.7	56.9	57.3
48	56.9	62.4	63.0	61.1	61.8	60.2	76.5	104.2
72	104.6	112.5	117.7	120.3	116.7	115.4	123.5	120.3
96	124.1	129.9	129.9	148.5	149.2	151.4	149.2	148.9
120	145.6	146.9	151.4	155.9	161.1	161.4	163.6	163.6
144	162.4	164.6	167.2	167.8	165.2	166.5	163.3	154.0
168	146.6	147.2	136.6	135.7	133.4	114.1	114.0	112.0
192	115.2	107.4	99.4	96.1	92.3	87.5	85.9	80.4
216	77.2	76.9	74.6	74.0	70.1	68.8	66.9	65.9
240	65.3	64.7	63.7	62.7	58.2	60.8	60.8	60.8
264	59.8	62.4	64.3	64.0	62.1	61.1	59.8	60.2
288	63.7	60.8	59.2	60.8	61.1	61.1	61.1	59.5
312	58.5	57.9	57.9	58.5	59.2	60.5	61.8	61.4
336	62.7	62.7	62.1	63.7	65.3	65.9	57.4	54.4

DEPTH	3190.0		TILT	0		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	61.4	57.9	53.7	58.5	57.6	61.8	50.5	51.2
24	54.4	47.9	48.9	50.5	56.0	56.6	56.6	58.5
48	57.3	61.4	62.4	63.4	64.0	63.7	64.3	99.4
72	102.0	108.7	109.5	114.1	113.1	111.9	112.6	118.8
96	127.5	131.6	133.9	143.9	146.3	146.7	147.5	148.6
120	149.9	152.0	155.7	156.4	159.1	162.7	163.0	161.7
144	160.1	161.4	164.9	166.9	167.2	167.5	164.9	159.1
168	146.6	143.4	136.6	134.4	131.5	112.5	116.7	113.8
192	112.5	104.5	101.0	97.4	91.6	90.0	85.2	80.7
216	77.5	74.9	72.4	71.1	68.2	66.9	65.6	64.7
240	63.0	61.4	60.2	58.2	57.9	57.6	56.6	57.6
264	60.2	60.5	60.8	60.8	61.4	59.2	59.5	58.9
288	58.5	56.9	56.9	54.0	54.4	54.0	54.7	55.7
312	54.0	53.7	54.0	54.7	55.3	56.3	57.9	57.6
336	57.6	57.9	57.6	62.1	63.0	63.0	54.0	52.8

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3200.0		TILT	0		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	52.8	55.3	50.2	55.0	57.3	47.9	47.9	50.5
24	45.4	47.9	49.2	50.5	55.7	56.6	56.9	59.2
48	62.4	64.3	66.3	67.9	67.5	67.5	74.9	74.3
72	103.1	109.0	109.6	112.9	116.4	116.4	122.1	128.0
96	138.2	138.6	146.0	148.5	148.5	150.5	154.3	159.8
120	162.4	163.3	165.2	165.6	164.6	169.7	170.4	169.1
144	167.5	163.0	287.7	373.3	378.0	378.6	165.2	159.5
168	148.9	146.3	140.8	134.7	129.2	113.5	116.4	113.5
192	108.7	106.1	105.8	96.8	293.5	90.0	87.5	83.6
216	80.1	76.9	74.3	72.7	68.2	68.2	66.3	64.3
240	61.4	60.5	60.2	59.5	58.9	57.6	58.2	56.3
264	56.3	56.3	57.3	57.9	58.2	56.9	56.3	55.7
288	55.7	55.7	54.0	51.5	50.5	54.7	52.8	53.7
312	55.7	57.3	57.6	57.6	59.5	57.6	56.0	55.7
336	55.0	56.0	57.3	56.0	57.9	61.8	50.2	46.0

DEPTH	3202.0		TILT	0		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	52.5	57.7	49.9	55.1	56.8	47.7	48.6	50.6
24	45.9	48.1	49.0	50.7	56.4	56.8	56.8	60.3
48	64.2	66.3	69.8	71.1	73.7	73.3	75.9	98.4
72	104.5	107.5	109.7	112.7	114.4	114.9	130.9	135.7
96	137.8	140.4	146.5	149.1	150.0	151.7	156.0	159.9
120	163.4	164.7	166.9	167.7	167.3	171.2	169.9	171.6
144	170.3	168.2	299.7	373.7	378.6	378.9	377.1	158.6
168	153.0	142.6	140.4	136.5	128.7	113.1	117.0	112.3
192	108.8	106.6	105.3	98.0	95.8	90.6	85.8	84.1
216	79.8	75.9	74.1	72.4	68.5	67.6	65.9	63.7
240	62.0	60.7	59.8	59.8	58.5	57.7	57.2	56.8
264	55.9	56.8	57.2	57.2	56.8	56.8	55.9	55.9
288	54.6	54.6	53.8	52.0	50.7	52.5	54.6	54.2
312	52.9	54.2	57.7	57.2	57.7	54.6	54.6	54.6
336	55.1	55.5	55.9	55.1	57.2	61.6	50.7	49.4

DEPTH	3204.0		TILT	0		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	54.2	55.9	50.3	54.6	56.4	47.7	47.3	50.7
24	46.4	46.4	49.0	50.7	54.6	56.8	56.8	62.0
48	64.2	70.2	71.5	73.7	73.7	76.3	75.9	99.7
72	104.9	106.6	109.2	112.3	117.9	121.4	133.5	138.3
96	138.3	141.3	145.6	149.5	150.4	152.6	158.6	161.7
120	163.4	164.7	166.9	167.7	166.4	170.8	170.8	173.8
144	175.3	169.9	371.9	374.6	379.6	378.7	377.4	158.6
168	155.2	146.1	141.3	138.3	131.3	124.4	115.7	115.3
192	110.5	107.9	106.2	99.3	95.8	90.6	86.7	84.1
216	79.8	76.3	73.7	72.0	68.1	66.3	66.3	64.2
240	63.3	60.7	61.1	59.0	58.5	58.1	57.7	57.2
264	56.8	57.2	57.7	56.8	56.8	56.8	57.7	55.9
288	54.6	54.2	54.6	52.9	51.6	52.5	53.3	53.3
312	54.6	55.9	57.2	56.4	55.1	54.2	53.8	55.1
336	55.1	55.5	57.2	56.4	59.4	60.3	50.7	49.4

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3206.0		TILT	0		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	53.8	49.9	46.8	55.1	57.7	46.0	47.3	50.3
24	45.5	48.1	48.1	52.5	55.1	56.8	57.7	63.3
48	65.9	68.9	78.9	78.9	79.3	91.0	93.2	99.3
72	102.7	106.2	109.2	114.0	117.5	120.5	133.5	138.3
96	139.1	144.8	146.1	149.5	152.1	156.0	159.9	163.0
120	165.1	166.4	167.3	169.9	172.9	172.5	171.6	175.5
144	180.3	264.8	373.1	375.7	378.7	378.3	376.6	160.4
168	154.3	143.9	139.6	135.7	130.9	124.8	114.9	115.3
192	109.7	108.8	105.3	99.3	95.8	90.6	87.1	83.7
216	80.2	76.7	72.8	71.5	68.9	68.1	67.2	63.7
240	62.0	61.1	60.3	59.0	60.3	58.5	58.1	57.7
264	57.2	57.2	57.7	56.8	56.4	56.8	57.7	56.8
288	55.1	53.8	54.6	53.8	52.5	52.5	53.8	53.8
312	54.6	55.5	56.8	56.4	55.5	54.6	53.8	55.1
336	54.6	55.5	55.1	57.7	59.8	60.7	47.3	49.4

DEPTH	3208.0		TILT	0		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	52.0	46.8	46.8	54.6	58.1	45.5	47.7	49.9
24	47.3	46.8	49.4	51.2	56.4	57.7	63.7	65.5
48	67.6	69.4	81.5	83.7	85.4	89.7	94.1	99.3
72	102.7	106.2	108.8	120.9	120.9	126.1	132.6	138.7
96	144.8	150.0	149.1	151.3	153.9	155.6	159.9	164.3
120	165.1	167.3	168.2	169.9	173.4	173.8	173.4	175.5
144	180.3	269.1	372.9	375.5	378.3	378.7	375.7	193.7
168	153.0	143.9	140.4	136.5	130.9	122.7	114.9	114.9
192	111.8	108.4	107.1	101.9	97.5	91.9	86.3	83.2
216	80.6	76.7	72.8	71.1	68.5	67.2	65.9	64.2
240	62.4	61.6	60.7	61.6	59.8	59.4	58.5	58.1
264	57.7	56.8	56.8	57.2	56.4	57.7	58.1	57.7
288	55.9	55.1	55.9	53.8	52.9	52.9	54.6	54.6
312	55.1	55.5	56.4	56.4	55.5	54.6	55.5	55.5
336	55.5	54.2	54.2	56.4	59.4	61.1	50.3	47.7

DEPTH	3210.0		TILT	0		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	52.0	46.8	44.7	50.4	54.1	46.0	47.7	49.9
24	46.4	47.3	48.6	53.3	56.4	62.0	65.5	65.5
48	67.6	76.3	82.8	83.7	85.8	90.2	98.0	101.0
72	104.5	106.6	109.7	121.8	124.0	125.3	133.5	138.3
96	147.8	150.0	150.8	152.1	155.6	159.1	161.7	164.3
120	166.0	166.4	169.0	171.2	172.5	175.1	173.8	177.7
144	180.7	272.1	372.7	375.3	377.9	378.3	374.8	196.3
168	155.2	143.9	141.3	136.5	129.2	125.3	115.7	117.0
192	111.4	108.4	105.3	103.6	98.0	93.2	87.1	81.9
216	78.5	77.6	73.7	72.0	68.5	67.6	65.9	64.6
240	62.9	62.0	61.1	60.7	59.8	59.4	59.0	58.5
264	58.1	57.7	57.7	57.7	56.4	58.1	58.5	57.7
288	57.2	57.2	55.9	53.8	53.3	52.9	54.6	54.6
312	55.1	55.9	57.2	56.8	55.9	55.1	55.1	54.2
336	54.2	53.8	53.8	55.5	58.1	54.6	47.3	47.7

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3215.0		TILT	0		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	52.9	45.5	44.1	49.0	43.4	43.4	47.7	44.4
24	46.2	50.0	53.3	55.9	56.8	59.0	63.3	68.1
48	71.5	75.4	85.0	88.4	95.8	96.2	98.4	102.7
72	104.5	109.2	115.7	127.7	130.5	133.1	137.8	140.9
96	146.9	150.8	151.7	153.9	157.8	162.1	162.5	166.0
120	168.6	169.9	171.2	171.6	172.1	174.7	173.8	176.0
144	199.4	274.7	372.7	375.7	378.3	379.2	370.7	360.9
168	189.0	143.7	141.7	137.0	131.8	124.4	120.5	120.5
192	114.0	111.7	113.6	299.2	294.6	286.3	86.7	83.7
216	84.5	263.0	261.3	259.1	253.5	251.0	246.8	241.0
240	234.8	232.0	227.5	222.7	60.3	60.3	59.8	59.8
264	59.0	58.5	58.1	59.0	57.7	57.2	58.1	59.0
288	57.7	56.4	55.5	54.6	53.3	52.5	52.5	52.0
312	52.0	55.1	55.5	55.9	58.5	55.9	55.9	51.6
336	52.0	52.0	52.5	54.6	55.9	53.8	47.7	46.0

DEPTH	3220.0		TILT	0		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	50.3	44.7	49.4	48.6	42.9	42.4	45.6	42.1
24	47.6	50.6	51.8	55.3	55.6	58.5	62.8	66.9
48	70.3	75.2	87.1	89.7	95.8	98.0	102.3	107.1
72	109.2	116.6	129.6	130.5	131.8	135.7	140.0	146.1
96	152.6	151.3	159.9	160.8	161.2	162.5	164.7	166.9
120	167.7	170.3	171.2	171.6	172.1	173.4	174.7	176.8
144	203.7	378.3	374.0	378.3	379.6	378.3	361.4	358.7
168	185.5	145.2	140.9	134.4	132.2	124.0	129.2	161.2
192	320.1	312.0	305.5	300.3	292.5	289.5	282.1	270.8
216	267.4	262.6	262.6	259.1	257.6	255.1	247.2	241.9
240	234.9	233.6	226.2	223.6	216.7	216.3	208.5	208.0
264	201.8	198.1	59.4	59.4	58.1	57.7	58.5	59.0
288	59.0	56.8	55.5	54.6	54.2	52.9	52.9	52.5
312	52.5	54.2	55.5	54.6	55.1	54.6	51.2	51.6
336	51.2	52.0	52.9	52.9	52.9	55.1	49.9	47.3

DEPTH	3225.0		TILT	0		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	48.5	45.1	46.4	50.0	40.7	41.5	46.4	42.4
24	47.0	51.6	53.4	55.1	56.8	59.4	65.5	66.3
48	71.5	74.6	87.1	89.3	94.5	100.1	101.0	106.2
72	108.4	115.7	127.0	132.2	136.5	135.2	139.5	143.6
96	148.2	151.2	155.3	160.8	161.7	163.8	163.8	166.0
120	167.7	169.0	170.3	171.6	172.1	172.9	173.8	177.3
144	201.5	378.7	373.5	377.9	378.7	377.9	362.3	360.5
168	183.9	165.6	164.3	149.5	133.1	128.3	134.4	330.2
192	319.4	310.3	305.5	299.4	293.4	286.0	279.9	272.6
216	268.2	264.3	261.3	259.6	257.8	253.5	246.6	239.7
240	237.1	233.6	230.1	223.6	219.3	216.4	209.4	210.1
264	203.7	200.7	197.2	191.3	187.6	184.9	182.9	180.9
288	179.1	177.8	174.1	55.9	55.1	54.6	54.6	54.6
312	53.3	55.1	55.1	55.5	55.1	52.5	49.4	50.3
336	51.2	52.0	52.9	52.9	51.2	52.0	46.8	44.9

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
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CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3230.0		TILT	0		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	49.1	45.5	49.9	43.8	41.2	42.5	45.4	42.7
24	45.8	51.8	53.3	54.8	56.7	58.4	63.7	64.3
48	69.9	73.6	84.5	89.7	94.5	98.4	101.9	106.6
72	108.4	116.6	127.0	128.7	133.5	135.2	139.5	143.5
96	148.7	151.7	155.2	160.8	160.8	163.0	164.3	167.3
120	168.2	170.8	170.3	171.2	172.1	173.4	174.9	176.4
144	205.9	378.7	377.0	378.7	379.2	377.9	365.3	360.5
168	359.8	359.2	179.0	158.8	154.0	132.6	151.7	329.8
192	322.0	312.0	302.0	298.1	291.6	286.9	279.1	274.7
216	266.5	264.8	263.5	260.9	256.1	251.8	247.0	242.7
240	236.2	234.5	231.4	226.7	222.6	217.8	211.9	208.5
264	206.3	201.5	198.9	191.1	189.4	186.4	184.3	181.6
288	181.1	177.2	175.7	177.7	174.3	173.3	173.3	54.8
312	54.5	54.5	55.2	55.8	52.3	51.6	49.7	49.1
336	48.8	49.9	50.2	50.1	50.5	51.1	47.5	43.3

DEPTH	3235.0		TILT	0		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	46.9	43.4	51.6	47.3	42.9	42.9	45.0	42.0
24	44.4	51.7	53.5	54.6	56.4	58.8	63.7	64.5
48	71.9	73.3	84.5	90.6	92.8	99.7	101.9	105.8
72	107.9	115.3	127.0	128.7	135.2	134.8	139.1	143.8
96	148.9	153.0	154.6	160.4	161.2	163.0	163.8	166.4
120	167.7	170.8	170.3	172.5	172.1	173.4	174.7	176.4
144	202.4	380.5	377.9	379.2	379.2	378.3	362.7	360.5
168	359.6	359.2	180.9	176.4	164.3	155.6	155.2	329.8
192	321.1	311.6	305.9	299.0	291.6	286.4	282.1	275.6
216	269.5	263.0	263.0	258.7	257.0	251.3	246.6	241.8
240	235.8	236.2	231.4	226.2	223.6	218.9	211.1	211.1
264	207.6	202.0	196.8	190.7	190.7	187.2	185.1	182.0
288	180.7	177.3	177.3	177.3	86.3	83.7	173.9	61.3
312	57.2	57.2	55.9	54.6	53.3	52.9	51.6	50.7
336	49.9	50.3	50.3	49.9	50.3	51.6	48.1	43.4

DEPTH	3240.0		TILT	0		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	45.5	43.4	49.9	44.2	44.2	43.4	44.7	43.8
24	45.1	52.9	54.2	54.5	56.6	60.3	65.0	69.4
48	71.1	74.5	83.7	88.9	91.6	98.0	101.3	103.4
72	107.8	112.6	126.6	128.7	136.5	134.8	138.8	142.7
96	149.4	152.7	153.9	158.3	157.4	160.5	163.8	165.1
120	167.7	169.5	171.2	171.2	171.6	173.8	175.1	176.4
144	196.8	380.9	376.6	378.3	380.0	378.7	364.4	361.0
168	360.5	358.4	351.7	341.5	169.9	160.4	159.5	324.1
192	314.6	309.4	300.3	297.7	289.9	284.3	280.4	270.8
216	267.4	262.6	260.0	259.6	255.7	250.9	250.5	241.8
240	235.8	238.8	235.8	227.1	224.9	220.6	218.9	212.4
264	209.3	202.3	197.6	192.0	189.4	187.7	184.6	182.5
288	179.9	179.4	176.8	176.8	173.8	173.8	172.1	172.7
312	173.3	63.7	58.1	56.4	55.5	51.2	49.0	48.1
336	48.6	48.1	49.0	48.6	49.0	49.4	47.5	43.2

SONIC SURVEYS

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OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3245.0		TILT	0		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	45.7	42.9	49.4	44.7	41.2	43.4	41.3	42.0
24	45.4	51.5	53.7	56.8	56.8	59.2	63.6	65.9
48	70.9	73.0	80.7	87.6	91.9	98.8	100.8	104.0
72	108.4	116.6	126.6	130.0	135.2	134.8	138.7	143.9
96	149.9	153.4	154.8	157.6	156.4	161.1	160.3	161.8
120	164.0	166.3	168.5	168.6	169.6	170.5	173.1	175.2
144	186.5	380.0	378.3	380.9	380.5	379.2	363.6	358.8
168	358.8	360.1	343.6	338.9	335.2	328.4	328.9	325.4
192	316.3	306.8	299.9	297.3	289.5	285.6	280.8	271.3
216	266.5	263.5	262.2	259.6	256.1	253.1	247.0	241.0
240	236.2	238.8	235.3	229.3	226.7	221.5	218.6	213.2
264	209.5	202.7	201.7	192.3	190.4	187.4	185.2	182.6
288	181.3	181.6	178.6	175.8	174.4	174.1	174.2	172.6
312	88.9	89.6	65.6	61.0	58.1	53.8	52.1	48.4
336	48.4	48.0	48.0	48.4	49.3	49.2	46.7	42.8

DEPTH	3250.0		TILT	0		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	43.9	44.7	50.3	41.4	41.6	43.4	42.1	43.1
24	45.7	52.5	53.8	58.1	57.7	58.5	63.7	64.9
48	70.1	72.6	78.0	80.7	91.8	96.1	100.1	101.2
72	105.7	116.7	126.4	129.1	132.2	133.6	138.6	142.1
96	150.3	153.4	152.5	155.7	156.4	159.5	161.2	160.2
120	162.5	164.6	167.9	167.7	168.5	170.3	173.7	175.5
144	221.4	375.7	377.0	380.0	380.0	379.6	365.7	361.4
168	357.5	359.7	342.8	340.2	327.8	324.6	329.3	324.6
192	312.4	308.1	300.3	298.1	292.5	283.8	280.4	270.8
216	266.9	263.9	261.3	259.1	257.0	255.7	247.9	240.5
240	240.1	240.1	234.9	231.0	227.5	221.5	220.2	215.0
264	211.1	208.0	202.8	198.1	191.6	187.2	184.6	185.1
288	182.0	182.4	178.9	177.6	174.7	173.7	174.2	172.9
312	170.7	174.9	176.1	66.8	62.0	58.5	56.8	53.0
336	48.8	49.2	48.8	49.6	49.7	48.7	47.5	43.1

DEPTH	3255.0		TILT	42		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	69.9	265.1	59.2	66.7	60.5	57.5	64.2	57.5
24	61.7	66.3	65.5	267.2	264.2	263.9	264.0	262.2
48	260.3	260.7	269.1	269.2	87.5	88.8	88.0	100.0
72	262.1	266.4	265.4	262.7	261.2	260.5	260.8	262.9
96	260.8	264.2	265.1	263.9	262.9	261.4	261.1	260.8
120	261.1	257.5	252.5	257.1	251.7	252.5	248.8	257.5
144	250.4	251.7	253.3	251.3	253.8	252.5	252.5	252.1
168	255.4	255.0	257.9	254.2	255.8	257.7	260.4	260.3
192	262.1	153.8	150.9	139.8	120.9	117.5	113.8	108.0
216	101.3	98.8	96.7	95.0	91.7	88.0	86.7	86.6
240	82.7	81.4	80.6	80.3	78.7	77.8	77.3	76.8
264	76.3	76.8	77.3	76.4	76.4	76.4	76.9	75.5
288	73.9	72.6	73.4	72.3	71.0	71.0	72.5	72.5
312	73.4	75.0	77.1	75.8	74.4	73.4	72.7	74.0
336	73.5	74.6	76.6	75.9	78.0	83.1	63.8	62.7

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
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CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3255.0		TILT	39		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	67.4	57.7	59.8	60.5	59.3	54.4	58.2	53.7
24	59.8	64.3	67.2	69.2	72.0	279.3	77.5	276.3
48	274.1	274.4	286.1	286.4	276.6	273.3	94.2	93.3
72	274.3	276.5	276.8	159.5	275.4	274.8	269.0	274.1
96	175.8	166.9	276.1	276.8	275.5	271.0	275.5	274.2
120	276.4	270.7	271.6	274.8	271.9	269.0	272.6	273.0
144	268.7	265.2	262.9	264.5	265.6	265.1	264.7	267.0
168	269.5	271.3	272.2	178.7	170.7	176.8	173.3	149.7
192	155.7	148.2	143.1	121.9	118.6	115.1	110.0	107.4
216	99.0	96.5	93.9	90.4	87.7	87.5	84.8	82.3
240	81.2	78.5	77.5	76.8	77.4	75.9	75.2	74.7
264	74.2	73.4	73.4	73.7	72.5	74.2	74.7	74.1
288	72.8	72.6	71.9	69.4	67.5	65.3	65.9	66.3
312	70.2	71.8	73.0	72.8	71.8	70.9	70.9	68.4
336	67.2	65.6	67.2	68.5	76.7	70.0	61.9	59.8

DEPTH	3255.0		TILT	36		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	63.7	55.4	60.4	59.8	49.9	51.2	56.6	52.1
24	58.9	61.4	63.0	297.6	297.6	73.0	298.0	293.0
48	290.3	290.4	294.1	292.8	291.5	288.2	92.9	91.0
72	129.6	137.1	291.9	289.8	292.1	291.6	284.8	148.9
96	157.5	155.3	159.5	295.3	294.8	292.1	294.8	294.1
120	295.6	257.7	257.8	256.5	253.3	252.0	228.6	248.3
144	249.1	238.7	240.6	250.5	253.3	253.2	238.2	227.5
168	208.6	202.7	289.0	291.8	168.6	140.5	142.1	140.2
192	141.8	138.2	121.5	119.3	113.2	110.6	108.7	101.0
216	97.8	94.7	91.6	89.3	84.7	83.8	82.7	79.3
240	77.5	76.6	74.6	73.7	74.3	72.4	72.7	72.0
264	72.0	70.8	70.8	70.8	70.4	69.5	70.1	71.4
288	69.8	68.5	68.6	67.4	65.0	64.0	63.0	62.7
312	63.0	64.0	64.3	69.2	71.1	68.9	63.7	63.7
336	61.8	64.3	63.4	64.0	66.6	66.6	61.1	55.3

DEPTH	3255.0		TILT	33		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	58.5	53.8	55.5	57.6	47.9	50.8	55.3	51.2
24	56.0	61.4	62.1	65.9	66.3	70.1	319.2	80.4
48	306.7	306.0	91.0	91.6	93.3	93.6	94.2	112.2
72	121.9	130.5	135.0	143.7	140.8	308.4	303.4	305.4
96	149.8	145.3	152.4	180.0	317.9	317.8	317.9	318.1
120	318.5	198.0	204.4	192.7	206.9	204.9	209.2	211.1
144	202.7	198.0	199.3	206.3	211.1	209.7	200.8	189.2
168	182.6	182.3	171.8	165.8	163.5	134.1	135.7	132.8
192	137.3	123.1	121.2	116.3	111.9	109.3	105.1	99.8
216	95.0	91.2	86.8	85.1	82.1	80.1	78.5	77.2
240	76.9	74.3	73.7	72.4	72.0	70.8	70.4	69.5
264	69.2	69.5	69.5	69.2	67.5	67.9	68.5	68.8
288	68.8	65.9	65.3	64.3	64.5	63.1	63.1	62.6
312	62.6	64.4	65.3	65.3	66.8	65.3	57.9	58.9
336	59.5	61.4	61.4	62.7	62.1	58.9	59.2	53.4

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3255.0		TILT	30		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	55.0	52.4	55.7	58.5	48.3	48.9	52.8	49.2
24	54.4	59.5	61.8	63.7	64.0	67.2	72.4	76.2
48	81.7	87.8	94.0	95.1	95.6	101.9	103.5	112.2
72	116.4	125.1	125.1	127.3	130.5	128.9	129.9	136.0
96	145.3	149.9	149.9	174.3	173.0	178.9	172.7	174.4
120	167.9	168.0	181.8	184.1	193.2	194.9	200.2	198.6
144	193.8	193.7	193.5	196.2	197.4	196.2	194.6	185.2
168	174.5	173.0	160.2	158.1	155.2	129.9	134.4	131.1
192	129.9	122.5	119.6	113.5	109.3	104.6	100.3	96.3
216	91.5	89.8	86.2	83.3	84.6	83.6	86.8	90.7
240	86.2	85.9	86.2	75.3	74.6	72.4	72.4	70.4
264	71.4	72.4	71.7	71.1	68.2	67.5	66.9	67.5
288	66.3	65.0	64.0	63.4	62.4	61.8	61.4	61.1
312	60.8	62.7	63.7	62.7	63.0	60.5	56.0	56.0
336	57.6	57.9	60.8	61.0	59.0	60.0	54.5	49.9

DEPTH	3255.0		TILT	27		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	55.0	49.9	55.7	48.3	47.6	47.3	50.2	47.3
24	49.5	57.9	59.2	61.8	63.0	66.5	70.8	75.3
48	78.8	84.3	95.8	96.5	99.0	100.9	105.2	111.8
72	117.1	369.0	369.3	125.9	126.0	129.2	131.5	134.7
96	143.1	146.6	147.9	166.8	167.5	170.1	167.4	167.2
120	163.6	164.9	170.7	176.7	182.6	184.3	186.9	188.5
144	185.9	187.4	188.3	189.7	187.0	186.1	186.0	180.6
168	164.5	165.2	153.3	151.3	148.0	125.7	127.0	126.4
192	124.8	119.3	118.4	111.4	107.6	103.2	97.1	93.9
216	93.9	93.3	92.0	92.0	96.8	99.7	99.0	96.1
240	100.0	98.4	99.4	99.0	86.2	86.2	82.6	79.4
264	78.8	77.2	76.2	74.3	72.4	71.7	70.8	69.5
288	68.5	67.5	64.3	64.3	62.1	61.4	61.1	60.5
312	60.2	60.2	60.8	61.4	57.9	57.9	55.7	55.0
336	54.7	56.0	56.3	56.3	56.9	58.2	53.4	48.3

DEPTH	3255.0		TILT	24		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	51.5	47.4	55.5	50.4	46.8	46.8	49.2	45.7
24	48.6	56.9	58.5	59.8	62.1	63.4	69.5	70.4
48	76.9	82.3	91.3	96.9	102.6	103.9	106.4	107.7
72	113.3	408.1	409.1	123.5	127.4	128.9	134.1	138.6
96	142.4	147.2	150.5	156.9	160.1	160.4	161.1	161.7
120	162.4	163.3	166.9	166.5	173.9	174.9	176.8	178.1
144	173.6	174.6	178.7	180.3	180.7	181.0	175.8	170.4
168	160.4	157.2	149.5	146.6	139.9	128.4	127.1	125.8
192	120.1	118.9	116.7	112.6	109.3	109.6	101.3	102.3
216	111.3	107.4	112.9	111.9	112.5	112.5	112.5	111.6
240	116.7	111.6	114.5	115.8	106.1	104.8	97.8	90.4
264	84.9	82.6	82.0	78.5	77.2	77.5	74.3	72.0
288	70.8	68.8	67.9	65.6	64.0	63.7	60.5	60.2
312	59.8	59.8	60.5	61.1	57.9	56.3	55.0	54.4
336	53.4	54.4	54.7	54.4	54.4	54.0	52.8	47.6

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3255.0		TILT	21		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	49.9	46.4	55.2	49.9	45.4	45.4	47.3	45.0
24	51.5	55.3	57.3	58.5	60.2	63.7	68.2	68.8
48	75.3	79.4	92.3	94.5	102.6	103.2	108.0	108.0
72	111.9	116.1	120.0	129.7	130.1	133.0	142.7	146.1
96	147.6	149.7	155.3	156.6	158.2	159.8	162.7	165.6
120	167.8	170.7	171.0	172.6	173.9	175.2	173.9	173.0
144	172.3	172.3	177.1	178.1	178.4	178.4	174.9	168.8
168	161.1	156.3	150.6	146.6	140.5	131.5	124.4	125.4
192	121.2	117.0	119.9	117.7	122.5	121.5	120.9	128.6
216	133.7	129.2	130.9	133.1	137.6	131.5	134.4	136.0
240	134.7	130.2	130.9	127.6	126.0	122.2	113.8	109.3
264	95.5	93.6	86.8	82.0	80.7	79.4	78.2	78.5
288	75.9	72.0	72.7	68.5	67.9	65.9	63.0	59.8
312	59.8	59.5	58.9	58.8	57.0	56.5	55.0	53.7
336	52.4	53.7	52.1	52.4	53.7	53.1	49.9	46.7

DEPTH	3255.0		TILT	18		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	47.7	45.5	52.9	46.0	42.5	44.2	42.9	45.5
24	46.8	55.1	56.4	57.2	59.4	61.6	66.8	67.6
48	72.8	77.2	88.0	93.2	99.5	102.7	105.8	110.5
72	114.4	119.5	132.2	133.5	133.5	137.8	140.9	145.2
96	152.1	155.1	155.2	157.5	159.6	162.1	166.2	168.9
120	171.7	172.8	174.6	175.1	174.5	178.3	178.8	177.8
144	176.7	174.4	195.0	206.3	193.7	183.8	189.8	166.8
168	162.8	151.3	148.2	143.6	136.5	130.8	127.6	127.8
192	133.9	142.6	134.4	144.3	151.3	155.2	146.5	148.2
216	154.3	157.3	152.1	145.2	143.5	143.0	152.6	139.6
240	147.4	149.5	149.1	143.9	143.0	137.8	140.9	127.4
264	124.4	124.8	118.3	96.7	89.3	86.3	89.7	83.2
288	81.5	82.4	81.5	80.2	76.3	72.0	70.7	64.6
312	62.4	60.7	58.1	57.2	56.4	52.9	50.7	49.9
336	50.3	49.9	50.7	51.1	51.8	51.2	49.9	45.1

DEPTH	3255.0		TILT	15		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	46.4	44.6	51.5	45.5	42.1	43.8	42.5	43.4
24	46.8	53.3	55.1	56.4	58.5	61.1	66.8	67.2
48	75.0	75.9	86.7	92.3	95.8	102.4	105.0	110.5
72	109.7	120.0	134.0	135.1	136.3	139.8	143.9	147.7
96	152.3	156.0	156.9	158.9	162.4	165.9	167.6	170.3
120	172.1	172.5	174.8	176.7	179.2	180.1	179.6	181.7
144	186.6	217.6	240.5	237.8	237.4	235.1	234.8	200.7
168	164.7	148.7	145.6	140.4	136.8	129.2	135.7	135.7
192	163.0	164.3	166.9	170.3	167.7	170.8	169.5	168.6
216	167.7	174.2	181.1	187.5	183.3	169.0	163.0	156.9
240	191.2	189.9	188.7	188.1	194.2	169.5	170.3	169.9
264	174.8	167.7	160.4	163.8	117.0	111.8	108.4	106.2
288	98.4	97.1	88.4	86.7	85.4	84.5	72.8	71.1
312	66.8	62.0	59.4	58.3	57.4	53.3	50.7	49.0
336	49.0	49.4	49.0	49.4	49.9	50.7	49.0	44.2

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3255.0		TILT	12		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	46.8	44.2	50.6	45.6	42.0	44.1	42.5	42.9
24	46.4	52.5	54.6	58.5	58.1	60.7	65.5	70.9
48	72.7	75.9	85.8	91.0	93.6	101.6	104.1	107.5
72	107.9	116.2	129.2	130.9	136.1	138.7	142.6	146.9
96	153.4	156.5	157.8	165.1	163.8	164.7	167.7	170.5
120	171.6	174.0	175.0	175.4	175.9	177.7	178.2	180.3
144	198.7	253.1	281.2	278.2	287.0	273.9	290.3	220.6
168	193.3	169.0	167.3	153.0	140.0	133.9	138.3	172.5
192	172.5	169.9	175.5	296.6	298.6	288.6	285.1	277.3
216	271.7	267.8	264.3	261.3	256.1	253.9	249.2	244.4
240	237.5	235.3	228.0	222.8	218.0	214.5	211.1	207.6
264	204.6	202.4	197.6	194.2	191.6	188.8	186.7	184.6
288	179.0	173.2	161.5	149.8	117.7	90.1	86.7	82.8
312	78.8	68.6	64.6	59.0	56.8	54.6	52.0	49.4
336	49.4	49.0	49.0	49.4	50.3	50.3	47.7	43.8

DEPTH	3255.0		TILT	10		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	44.7	44.4	50.4	45.1	41.6	43.4	42.1	43.4
24	46.0	52.5	54.6	57.7	57.7	60.3	65.0	70.2
48	72.0	76.3	85.0	90.6	92.8	101.4	102.7	104.5
72	110.1	116.9	128.7	133.5	135.2	137.4	141.7	145.6
96	150.8	153.4	157.8	163.0	162.1	163.8	164.7	166.9
120	169.5	171.6	172.9	174.3	174.7	175.6	176.6	179.9
144	206.1	272.5	304.6	377.0	380.9	382.2	379.6	277.9
168	187.6	169.4	169.1	151.7	148.3	137.2	154.3	332.4
192	321.5	315.0	309.8	302.0	298.6	290.3	288.2	280.8
216	272.1	268.2	266.1	261.3	257.8	254.8	249.6	241.4
240	238.4	235.3	231.0	226.7	220.6	217.6	211.5	208.9
264	205.0	201.1	198.9	193.7	190.7	188.1	185.9	184.2
288	182.0	181.6	176.8	179.4	177.3	94.9	93.2	88.4
312	83.7	84.5	65.5	60.7	59.0	55.9	53.8	49.4
336	49.0	49.0	49.0	49.4	50.3	49.9	47.7	45.1

DEPTH	3255.0		TILT	8		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	45.5	44.7	50.4	41.6	41.6	43.4	42.1	43.4
24	46.0	52.5	54.2	57.7	58.1	59.0	63.7	65.0
48	71.5	73.7	81.9	88.4	92.8	98.0	102.3	104.5
72	108.8	113.6	127.4	129.6	136.8	136.1	140.4	145.2
96	150.4	154.3	156.5	162.5	162.1	163.8	164.3	167.7
120	168.2	170.8	172.1	172.5	173.8	175.1	176.8	178.1
144	211.1	379.6	374.8	377.4	382.2	382.6	380.8	376.1
168	186.8	190.7	180.7	169.0	171.2	158.2	158.2	330.6
192	323.7	315.0	309.8	302.9	298.6	289.0	285.6	276.0
216	271.3	267.8	264.8	263.0	260.0	257.8	249.6	244.4
240	237.5	236.6	232.3	226.7	220.6	218.4	211.5	212.4
264	208.9	202.4	200.7	192.9	191.1	187.8	185.9	183.3
288	182.9	179.0	177.7	179.4	176.0	175.0	98.4	90.6
312	88.9	88.0	66.8	63.7	60.3	58.1	56.8	49.4
336	48.6	49.4	49.0	49.9	50.3	49.4	47.7	43.4

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3255.0		TILT	6		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	43.8	44.8	50.5	41.6	41.6	43.8	42.1	43.4
24	46.0	52.5	54.2	57.7	57.7	58.5	64.2	65.0
48	70.2	73.3	80.6	88.0	92.3	99.7	101.4	105.3
72	108.8	113.6	127.0	130.0	137.1	135.5	139.6	143.5
96	149.5	154.3	154.7	159.1	159.5	162.5	164.3	166.4
120	168.6	169.9	170.8	172.5	172.5	174.7	175.1	177.3
144	204.5	378.7	375.3	377.4	380.4	381.2	371.8	359.7
168	362.2	361.0	182.2	181.7	166.9	160.8	162.1	329.8
192	321.1	312.9	305.9	299.4	294.8	287.6	281.4	274.6
216	269.1	266.0	263.8	261.7	258.2	253.7	248.3	243.7
240	237.5	235.8	232.7	227.8	223.2	218.0	215.4	211.1
264	207.9	202.5	197.7	191.7	191.7	188.3	186.0	183.1
288	181.5	178.8	178.1	178.1	174.2	173.8	175.1	165.1
312	94.1	90.6	73.3	66.8	61.2	58.5	57.2	52.0
336	49.0	49.4	49.0	49.9	49.9	49.0	47.7	43.4

DEPTH	3255.0		TILT	4		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	44.7	44.3	49.4	41.6	41.6	43.8	42.1	43.8
24	46.0	52.5	54.2	57.7	58.1	58.1	63.3	65.0
48	70.2	72.8	77.6	81.1	91.9	96.2	100.6	101.9
72	106.2	117.0	126.1	130.9	134.8	135.2	139.1	144.3
96	150.0	153.9	155.6	159.1	156.9	161.2	160.8	161.7
120	164.3	169.0	170.3	170.8	169.9	170.8	173.4	175.5
144	186.8	379.6	377.9	378.7	379.6	378.8	365.9	361.4
168	360.7	360.0	361.0	341.5	228.0	164.7	163.8	330.6
192	322.3	312.5	305.7	299.6	292.3	287.1	282.7	275.5
216	269.7	263.5	260.9	260.4	256.5	254.4	249.6	243.1
240	235.8	239.2	235.3	229.7	226.2	221.5	218.9	212.4
264	209.8	202.8	200.2	195.9	191.6	188.1	185.5	182.5
288	181.6	179.0	178.6	176.4	174.7	173.8	175.1	172.9
312	172.1	91.5	90.2	72.4	68.1	61.1	60.7	55.9
336	49.4	49.4	49.4	49.9	50.3	48.6	46.0	43.4

DEPTH	3255.0		TILT	3		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	44.7	44.0	49.0	41.6	41.6	43.4	42.1	43.8
24	46.0	52.5	54.2	57.7	58.1	58.5	63.3	63.7
48	69.4	72.0	79.3	80.6	91.9	96.2	100.1	101.4
72	105.8	117.0	126.1	129.2	130.5	135.2	139.1	142.2
96	151.3	153.4	154.0	156.0	156.5	161.7	160.4	162.5
120	164.3	164.7	167.7	167.7	169.9	170.8	173.4	175.5
144	186.8	381.0	378.3	379.7	379.7	378.8	363.5	361.1
168	360.3	359.5	361.0	341.5	336.7	336.8	326.7	326.7
192	318.9	313.3	306.4	299.0	290.4	284.7	280.8	271.3
216	267.6	263.2	260.9	259.9	256.2	252.0	251.3	241.4
240	235.8	239.2	235.3	229.7	226.2	221.9	218.9	212.4
264	209.8	202.8	202.0	192.4	190.7	187.7	185.5	182.9
288	181.6	182.5	179.0	176.0	174.7	174.7	174.2	172.9
312	172.1	174.2	176.0	74.6	68.1	63.3	61.1	55.9
336	49.4	49.9	49.9	49.9	50.3	48.6	46.0	43.4

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3255.0		TILT	2		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	45.1	43.8	49.0	41.6	41.6	43.8	42.1	43.4
24	46.0	53.8	54.2	58.1	58.1	58.5	60.7	63.7
48	69.4	70.7	78.9	80.6	94.1	96.2	100.6	101.0
72	105.8	116.6	126.6	129.2	132.6	133.5	138.7	142.2
96	150.4	153.4	152.6	155.6	156.5	160.8	161.2	160.4
120	162.5	164.7	168.6	167.7	168.2	170.3	173.8	175.5
144	221.5	381.3	376.6	376.6	379.6	379.1	364.3	360.1
168	359.9	359.4	347.2	340.6	337.1	329.8	330.4	325.3
192	316.2	308.1	300.1	297.5	289.7	285.7	281.0	271.4
216	266.7	263.7	262.2	259.7	256.4	253.8	247.4	241.0
240	240.1	239.7	235.3	229.7	226.2	221.5	218.9	215.8
264	209.8	203.3	202.0	197.2	189.8	187.7	185.5	183.8
288	182.9	182.5	179.0	177.7	174.7	173.8	174.2	172.9
312	170.8	176.0	176.0	81.9	68.9	64.2	61.1	58.5
336	49.9	49.9	49.9	50.3	50.3	49.4	47.7	43.8

DEPTH	3255.0		TILT	1		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	45.2	43.6	50.7	42.1	41.6	44.2	42.5	43.4
24	46.4	53.8	54.2	57.2	58.1	58.5	60.7	61.6
48	69.8	70.2	78.5	80.6	94.1	96.7	100.6	100.6
72	104.5	117.0	125.7	129.2	132.6	133.5	138.3	140.9
96	150.4	153.4	152.6	156.9	156.5	155.2	161.2	159.9
120	162.5	164.7	166.4	167.7	169.5	170.3	173.8	175.5
144	221.5	376.5	377.4	380.3	380.2	379.5	365.2	360.8
168	357.9	359.8	343.0	340.0	329.0	325.1	329.3	324.7
192	312.9	308.1	300.3	298.1	292.5	283.9	280.4	271.1
216	267.0	263.8	261.4	259.2	257.0	255.1	248.0	240.5
240	239.3	240.1	235.4	231.1	227.2	221.6	219.8	214.6
264	211.2	207.8	202.7	197.0	193.3	189.0	188.1	185.1
288	183.8	182.5	179.0	177.7	175.1	173.8	174.2	172.9
312	170.8	173.4	176.4	81.9	68.9	67.2	62.9	58.5
336	55.9	49.9	49.9	50.3	50.3	51.1	47.9	43.6

DEPTH	3255.0		TILT	0		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	45.4	43.4	52.5	44.3	42.1	44.2	42.5	43.8
24	46.4	53.8	54.6	55.5	58.1	58.5	61.3	61.4
48	69.4	71.1	77.2	81.1	91.9	98.0	101.0	101.9
72	108.8	115.3	128.3	129.2	133.1	133.5	137.0	142.2
96	150.8	151.7	156.0	157.3	157.3	154.7	159.9	159.1
120	163.8	164.3	167.3	167.7	169.5	169.0	175.1	176.0
144	223.6	373.1	368.3	380.0	367.0	351.9	365.7	361.4
168	341.0	331.0	329.8	323.3	319.8	320.2	318.9	308.5
192	312.9	305.9	299.4	299.0	289.9	285.6	277.8	274.3
216	266.9	261.7	261.7	259.6	256.5	249.6	248.3	240.1
240	234.9	240.1	237.5	231.4	225.8	221.9	218.4	213.2
264	211.5	207.2	202.4	194.6	193.3	188.5	187.7	185.9
288	183.3	181.2	181.2	178.6	175.5	176.0	175.1	173.4
312	173.8	175.5	172.9	82.4	71.5	67.2	62.4	57.7
336	56.2	49.9	49.9	50.7	50.7	52.9	48.1	43.4

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3255.0		TILT	-3		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	44.6	43.6	52.3	44.5	42.6	42.6	42.5	43.8
24	45.4	53.9	54.2	54.8	57.9	58.4	59.2	61.1
48	67.5	69.0	70.8	73.9	77.5	100.6	107.5	106.2
72	111.2	154.2	327.9	331.5	336.2	334.1	332.9	328.4
96	324.9	324.7	325.4	328.0	331.6	334.5	338.3	337.6
120	337.9	339.7	342.4	335.6	329.9	326.3	323.7	327.0
144	331.2	331.6	332.9	325.6	319.5	313.4	308.3	306.2
168	305.0	299.9	295.8	294.8	294.5	285.6	286.6	277.5
192	277.9	272.8	268.7	268.3	268.7	263.0	258.2	249.1
216	241.2	234.4	228.6	226.7	225.4	221.0	217.5	224.0
240	231.6	228.4	225.8	225.7	226.2	221.9	218.3	212.9
264	208.3	205.1	202.5	197.5	193.3	190.5	188.3	186.4
288	185.0	183.2	182.1	180.1	178.7	176.2	174.1	172.9
312	172.1	173.9	176.2	177.6	179.6	182.7	183.9	58.6
336	56.7	53.3	50.4	50.3	50.4	49.9	49.6	46.9

DEPTH	3255.0		TILT	-6		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	43.1	44.0	52.0	42.9	42.5	45.0	43.1	44.2
24	46.7	58.4	55.0	56.3	57.9	59.2	60.8	60.9
48	68.7	98.7	110.4	112.4	265.8	268.5	272.0	282.8
72	295.4	296.2	297.9	303.6	310.4	316.5	323.7	318.2
96	313.7	307.3	302.0	301.2	301.2	314.7	330.4	324.8
120	320.4	316.1	312.9	308.4	305.0	308.4	312.9	316.8
144	321.6	322.0	323.3	316.0	310.0	305.3	301.6	295.5
168	290.4	285.1	280.8	281.0	282.0	277.9	274.5	267.8
192	262.0	259.2	257.0	252.7	249.1	243.0	237.9	118.8
216	87.9	75.8	72.9	73.0	73.3	74.8	76.7	80.1
240	84.2	121.3	217.5	218.2	219.5	217.8	216.6	212.3
264	208.7	205.5	202.9	197.7	193.3	191.6	190.4	188.7
288	187.5	184.9	182.9	181.6	180.8	178.0	175.8	174.7
312	174.1	177.8	182.1	181.0	180.4	182.4	185.0	185.8
336	187.1	81.6	52.1	51.8	51.7	52.4	47.6	45.9

DEPTH	3255.0		TILT	-9		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	43.3	68.1	50.4	46.1	42.5	42.6	42.9	44.6
24	46.7	89.5	55.5	56.6	57.9	91.0	211.6	219.4
48	228.3	233.1	238.7	243.1	248.3	251.9	256.2	264.1
72	273.3	277.6	282.9	284.1	286.2	292.5	300.0	297.2
96	295.4	298.5	302.5	300.6	299.5	302.6	306.6	307.0
120	308.3	304.5	301.6	300.4	300.0	300.4	301.6	299.8
144	298.7	299.3	300.8	290.9	282.5	280.0	278.3	274.5
168	271.6	269.4	267.9	261.3	255.8	194.1	169.1	151.3
192	146.6	140.6	135.4	131.6	128.3	113.0	101.2	89.5
216	80.4	77.1	74.2	73.2	72.5	74.2	76.2	79.3
240	82.9	76.5	71.2	50.6	202.7	78.7	62.0	61.7
264	204.6	201.1	198.3	196.4	195.0	192.4	190.4	189.3
288	188.7	186.6	185.0	185.1	185.8	182.4	179.6	181.6
312	184.1	183.7	183.7	180.3	177.5	180.1	183.3	183.7
336	184.6	187.4	190.8	193.2	196.2	75.5	46.7	44.9

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3255.0		TILT	-12		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	190.1	192.8	196.0	70.4	42.7	43.0	43.4	71.0
24	192.5	190.6	189.3	188.7	188.6	196.1	204.7	208.4
48	212.8	219.2	226.6	229.1	232.4	236.6	241.7	244.7
72	248.4	252.5	257.4	265.6	275.1	273.6	272.8	275.2
96	278.3	277.3	277.0	278.6	280.9	281.8	283.5	285.5
120	288.3	285.5	283.5	282.8	282.8	285.5	288.9	283.1
144	278.3	274.5	271.6	270.2	269.6	265.7	262.6	257.5
168	253.2	251.9	251.3	214.2	187.0	170.8	157.5	151.3
192	145.9	139.0	133.1	129.2	126.0	112.5	101.9	89.5
216	80.0	76.7	73.9	72.3	71.0	72.5	74.2	72.0
240	70.1	68.2	66.5	68.8	71.3	49.0	37.3	37.1
264	37.0	36.1	35.4	40.9	48.5	46.5	44.7	72.4
288	189.0	186.3	184.1	183.3	182.9	182.8	183.2	182.5
312	182.2	180.7	179.7	177.3	175.5	178.5	182.2	183.6
336	185.4	187.3	189.6	191.6	194.1	193.2	192.8	191.2

DEPTH	3255.0		TILT	-15		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	183.2	181.5	180.3	183.1	186.4	185.4	184.8	183.4
24	182.5	183.1	184.1	181.8	180.0	184.1	189.0	194.8
48	201.5	207.6	214.7	217.1	220.1	221.9	224.3	231.3
72	239.4	241.8	244.9	250.7	257.4	257.0	257.3	257.5
96	258.4	261.9	266.1	265.0	264.5	265.8	267.7	261.1
120	255.5	245.5	236.9	223.3	211.8	217.4	224.0	239.8
144	258.7	259.3	260.6	256.4	252.9	252.4	252.6	245.4
168	239.1	227.4	217.3	198.9	183.8	170.2	158.8	147.6
192	138.2	134.4	131.1	127.8	125.0	112.1	101.9	88.5
216	78.4	62.3	51.7	50.9	50.1	50.1	50.1	58.6
240	70.7	68.1	65.9	67.4	69.1	45.7	34.1	33.0
264	32.1	33.3	34.7	39.9	46.9	44.3	42.1	42.2
288	42.4	42.7	43.1	69.3	175.8	173.9	172.6	170.2
312	168.4	166.6	165.2	164.2	163.6	167.6	172.3	173.2
336	174.5	176.0	178.0	179.1	180.6	181.7	183.2	183.0

DEPTH	3255.0		TILT	-18		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	175.5	174.6	174.2	175.4	177.1	174.6	172.6	174.4
24	176.8	174.4	172.6	169.8	167.4	172.1	177.4	181.1
48	185.4	192.5	200.5	202.2	204.4	207.9	212.1	180.5
72	157.5	155.7	154.3	157.1	160.4	168.1	177.1	185.8
96	196.0	209.9	226.6	218.8	212.1	207.9	204.3	203.4
120	203.1	211.8	221.8	213.5	206.3	199.4	193.5	202.4
144	212.8	203.6	195.7	200.5	206.0	213.2	221.6	215.3
168	209.9	70.3	42.1	42.8	43.7	45.9	48.5	46.3
192	44.4	66.1	129.2	125.7	122.8	111.2	101.9	90.9
216	82.3	60.5	47.9	47.8	47.9	47.2	46.6	51.0
240	56.6	61.2	66.8	67.7	68.8	47.8	36.6	33.6
264	31.2	30.6	30.2	34.1	39.2	39.9	40.8	41.4
288	42.1	42.2	42.4	67.9	167.4	165.3	163.6	163.5
312	163.9	161.4	159.4	155.4	152.0	155.1	158.8	158.7
336	159.1	162.6	166.8	170.2	174.2	175.2	176.8	175.9

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3255.0		TILT	-21		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	167.3	167.3	167.6	167.1	167.1	165.1	163.5	164.3
24	165.4	165.8	166.6	162.4	158.7	161.1	164.0	168.7
48	174.1	178.5	183.7	147.8	123.8	120.7	118.1	130.3
72	145.7	147.0	148.6	151.2	154.4	155.7	157.5	161.2
96	165.5	168.7	172.4	179.4	187.5	185.7	184.4	170.8
120	159.4	176.8	198.8	187.3	177.4	173.9	171.0	94.1
144	64.9	63.9	106.2	79.1	106.3	104.6	103.1	109.6
168	117.1	58.0	38.5	37.8	37.3	37.3	37.5	36.4
192	35.3	54.2	114.7	118.7	123.3	109.0	103.1	88.6
216	81.0	61.3	49.3	47.2	45.4	45.1	45.0	49.9
240	56.3	59.2	62.5	63.3	64.2	43.8	33.2	31.9
264	30.8	29.7	28.9	30.6	32.7	34.6	36.8	39.0
288	41.6	41.7	41.8	43.8	158.0	71.2	154.6	152.3
312	150.5	150.9	151.7	149.7	148.1	147.9	148.1	150.3
336	152.9	154.3	156.0	155.6	155.6	157.6	160.1	163.5

DEPTH	3255.0		TILT	-24		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	151.7	153.2	155.1	152.5	150.3	152.8	155.8	154.9
24	154.4	154.8	155.6	152.3	149.6	152.2	155.3	149.5
48	144.5	151.0	158.4	136.6	120.2	117.5	115.2	112.3
72	109.9	108.4	107.2	106.4	105.8	123.2	147.9	147.5
96	147.4	147.3	147.6	155.1	163.7	169.7	176.5	145.2
120	123.6	121.1	152.8	141.4	121.4	113.6	98.4	70.8
144	52.4	66.9	73.8	59.4	77.9	60.7	55.9	40.8
168	39.7	37.3	35.3	35.3	35.3	35.1	34.9	34.1
192	33.4	44.5	66.6	82.1	107.2	104.8	102.7	92.4
216	84.2	62.5	49.8	47.8	46.2	46.1	46.2	46.8
240	47.6	53.6	61.4	59.7	58.2	43.2	34.4	32.6
264	31.0	29.5	28.1	27.7	27.4	30.0	33.2	31.2
288	29.6	32.0	34.9	40.1	47.4	69.3	128.9	133.3
312	138.4	139.7	141.4	143.1	145.2	144.2	143.5	142.3
336	141.4	141.6	142.2	144.0	146.2	147.3	148.8	150.1

DEPTH	3255.0		TILT	-27		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	138.0	136.3	134.9	136.5	138.5	138.7	139.2	140.6
24	142.3	141.7	141.4	143.5	146.1	136.4	128.2	113.3
48	101.7	115.6	134.2	125.3	117.8	114.1	110.8	109.0
72	107.5	105.0	102.9	103.0	103.4	114.1	127.7	132.3
96	137.5	141.8	146.7	136.9	128.6	126.7	125.0	121.7
120	118.8	119.7	120.9	113.8	107.7	84.8	70.0	57.1
144	48.3	55.0	64.0	55.2	48.6	43.3	39.2	36.9
168	34.9	34.6	34.4	33.7	33.2	32.3	31.5	31.5
192	31.5	42.5	64.9	66.6	68.5	66.5	64.7	66.8
216	69.2	58.4	50.5	48.0	45.9	46.2	46.6	41.6
240	37.6	35.1	32.9	33.3	45.9	36.8	32.4	31.5
264	31.7	29.8	28.1	27.6	27.2	27.0	26.9	27.4
288	27.9	28.6	29.3	30.3	31.5	38.5	49.5	70.6
312	122.6	124.1	126.0	121.4	117.3	115.9	114.7	116.9
336	119.5	118.8	118.3	123.9	130.3	129.1	128.2	132.8

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3255.0		TILT	-30		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	77.2	94.8	123.1	123.6	124.3	122.6	121.2	114.7
24	109.2	109.8	110.6	107.5	104.8	103.1	101.7	97.7
48	94.3	103.2	114.2	116.0	118.1	115.1	112.6	109.2
72	106.3	105.4	104.8	105.9	107.2	114.0	121.9	126.0
96	130.6	115.7	104.1	109.9	116.6	111.1	106.3	108.5
120	111.1	85.3	69.2	66.3	63.7	62.9	62.3	53.8
144	47.4	48.2	49.1	45.3	42.1	41.9	38.0	37.7
168	34.4	33.4	32.5	32.1	31.7	31.7	31.7	31.9
192	32.2	42.8	63.7	62.9	62.3	61.1	60.1	59.4
216	58.9	53.5	49.0	47.3	45.7	45.2	44.7	38.4
240	33.7	32.3	31.0	32.5	34.1	32.2	30.5	30.3
264	30.1	28.9	27.9	27.1	26.4	26.3	26.2	26.9
288	27.7	27.5	27.4	29.2	31.3	30.6	30.1	35.5
312	43.5	60.5	98.8	94.2	90.2	94.7	100.0	103.2
336	106.8	106.5	106.5	79.9	64.0	64.7	65.6	70.9

DEPTH	3255.0		TILT	-33		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	60.6	68.1	77.9	77.5	77.2	79.4	82.0	79.8
24	77.9	80.7	83.9	82.2	80.8	80.0	79.3	82.6
48	86.3	84.1	82.2	92.5	105.8	103.7	101.9	102.0
72	102.2	95.0	89.0	89.0	89.2	85.1	81.5	86.2
96	91.6	96.5	102.2	103.9	105.8	103.6	101.7	100.3
120	99.1	74.4	59.6	57.1	54.8	48.2	43.0	43.8
144	44.7	44.7	44.7	41.7	39.2	37.8	36.5	34.6
168	32.9	30.0	27.7	26.9	26.2	26.1	26.0	26.2
192	26.4	30.5	36.1	44.5	58.2	55.4	52.9	49.3
216	46.2	45.6	45.2	45.8	46.4	40.4	35.8	33.6
240	31.7	31.2	30.8	31.1	31.5	30.0	28.6	27.1
264	25.7	25.8	26.0	26.1	26.2	26.1	26.0	26.3
288	26.7	26.4	26.2	26.8	27.4	28.5	29.8	30.8
312	32.0	43.5	67.6	55.7	47.4	48.5	49.8	47.9
336	46.2	51.3	57.9	57.3	56.7	56.6	56.5	58.4

DEPTH	3255.0		TILT	-36		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	56.3	57.4	58.7	62.9	67.8	68.7	69.7	71.0
24	72.4	73.5	74.8	74.2	73.8	73.6	73.6	74.9
48	76.5	79.2	82.2	88.3	95.5	92.9	90.6	89.7
72	89.0	88.6	88.5	88.6	89.0	83.7	79.1	81.8
96	84.9	88.0	91.6	93.3	95.2	94.5	94.0	76.6
120	64.7	57.3	51.5	50.3	49.3	45.2	41.8	41.4
144	41.1	40.5	39.9	37.9	36.1	34.8	33.7	32.5
168	31.5	30.9	30.3	28.4	26.7	26.1	25.5	25.9
192	26.4	29.3	32.9	34.1	35.3	37.5	39.9	40.5
216	41.1	40.2	39.4	39.4	39.4	36.4	33.9	32.2
240	30.8	30.6	30.5	29.5	28.6	27.6	26.7	25.3
264	24.0	23.3	22.6	22.2	21.9	23.4	25.2	26.0
288	26.9	27.4	27.9	26.6	25.5	25.9	26.4	28.9
312	32.0	37.3	44.7	46.2	36.1	36.6	36.2	36.2
336	36.1	40.9	47.1	40.9	39.9	46.2	51.5	55.5

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3255.0		TILT	-39		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	47.0	50.0	53.4	51.3	49.4	47.1	45.0	45.9
24	46.9	55.3	67.4	68.3	69.3	69.6	70.0	71.9
48	73.9	75.0	76.2	78.0	80.0	82.1	84.4	82.9
72	81.7	80.5	79.5	80.3	81.2	78.7	76.5	76.5
96	76.6	76.4	76.4	76.5	76.7	75.6	74.6	58.4
120	48.0	47.8	47.6	44.7	42.2	42.0	41.7	40.5
144	39.4	36.2	33.6	33.0	32.6	32.2	31.8	31.0
168	30.3	30.6	30.9	29.0	27.4	26.6	25.9	26.2
192	26.4	28.9	32.0	32.8	33.7	34.2	34.8	34.9
216	35.1	35.1	35.2	33.5	32.0	30.0	28.3	28.8
240	29.4	28.7	28.1	26.7	25.5	24.0	22.8	22.3
264	22.0	21.2	20.4	19.7	19.0	18.7	18.4	17.8
288	17.2	20.8	26.4	26.7	27.1	26.1	25.3	28.6
312	32.9	32.9	33.1	31.7	30.6	29.7	28.9	29.4
336	30.0	34.3	40.0	38.4	36.9	36.9	36.9	41.4

DEPTH	3255.0		TILT	-42		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	35.5	36.3	37.2	36.9	36.6	38.9	41.6	42.8
24	44.3	42.6	41.2	41.0	41.0	50.5	65.9	65.5
48	65.2	68.4	72.0	72.4	73.0	65.2	59.0	58.0
72	57.2	58.0	58.9	60.5	62.4	63.0	63.8	62.4
96	61.2	63.2	65.4	66.8	68.4	58.4	51.0	46.8
120	43.3	39.3	36.1	35.5	35.0	34.7	34.5	35.2
144	36.1	34.2	32.5	31.3	30.2	30.2	30.3	30.0
168	29.8	29.3	28.8	28.7	28.5	27.4	26.4	26.9
192	27.4	27.2	27.0	27.4	27.8	28.3	28.9	29.0
216	29.1	29.0	29.0	29.3	29.7	28.5	27.5	27.2
240	27.0	26.4	25.8	24.3	22.9	21.9	21.0	20.4
264	19.9	19.6	19.3	18.8	18.3	17.8	17.3	16.7
288	16.2	16.4	16.7	16.1	15.6	15.5	15.3	15.0
312	14.7	19.3	28.2	28.5	28.8	27.5	26.3	26.1
336	25.9	27.5	29.3	32.5	36.4	36.1	35.9	35.6

DEPTH	3255.0		TILT	-45		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	33.6	34.3	35.2	34.2	33.4	35.1	37.0	36.5
24	36.0	37.3	38.8	38.5	38.3	40.9	47.9	48.8
48	54.7	55.7	56.9	56.0	55.2	54.9	54.6	53.7
72	52.8	53.0	53.3	54.4	55.5	56.1	56.8	57.7
96	58.8	59.2	59.6	60.2	60.8	54.0	48.6	43.7
120	39.8	36.4	33.6	31.9	30.4	30.5	30.7	31.5
144	32.4	31.0	29.8	29.4	29.1	28.8	28.5	28.6
168	28.7	28.6	28.4	28.4	28.4	27.6	26.9	26.6
192	26.4	26.5	26.7	27.2	27.8	27.7	27.7	27.0
216	26.3	26.5	26.8	27.0	27.3	27.0	26.8	26.2
240	25.7	24.9	24.1	22.2	20.6	20.4	20.2	19.5
264	18.9	18.4	17.9	17.4	16.9	16.5	16.2	16.0
288	15.9	15.7	15.4	15.1	14.8	14.7	14.7	14.6
312	14.6	14.5	14.4	18.6	26.3	25.8	25.3	24.4
336	23.6	23.4	23.2	24.4	25.6	27.9	30.6	32.0

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3255.0		TILT	-48		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	25.6	27.2	28.9	29.5	30.2	30.3	30.4	32.1
24	34.0	34.9	35.9	37.1	38.6	41.4	44.6	44.6
48	44.6	47.2	50.2	50.3	50.5	50.0	49.6	49.5
72	49.6	50.2	51.0	51.7	52.5	53.2	53.9	54.7
96	55.5	46.3	39.7	43.3	47.5	43.9	40.9	37.6
120	34.8	32.7	30.9	30.0	29.2	29.6	30.0	29.6
144	29.3	29.0	28.6	28.0	27.4	27.3	27.3	27.3
168	27.4	26.8	26.3	26.5	26.7	26.5	26.3	26.1
192	25.8	26.5	27.2	26.8	26.4	26.0	25.5	25.2
216	25.0	25.1	25.4	25.7	26.1	25.9	25.6	25.0
240	24.5	24.0	23.6	21.3	19.5	19.1	18.7	18.2
264	17.8	17.3	16.8	16.5	16.2	15.8	15.4	15.3
288	15.2	15.2	15.1	14.7	14.4	14.3	14.3	14.2
312	14.1	13.9	13.7	17.8	25.1	24.4	23.8	23.4
336	23.0	22.9	22.8	23.1	23.5	24.1	24.7	25.1

DEPTH	3255.0		TILT	-51		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	25.7	26.7	27.7	28.1	28.5	29.2	30.0	32.0
24	34.2	34.4	34.7	36.2	37.8	40.0	42.5	42.3
48	42.2	42.9	43.7	44.7	45.8	45.6	45.4	40.1
72	36.0	35.8	35.8	35.5	35.3	36.9	38.8	39.1
96	39.5	39.1	38.8	37.8	36.9	36.7	36.4	34.0
120	31.8	30.7	29.6	29.8	30.0	29.7	29.5	29.2
144	28.9	28.3	27.7	27.2	26.7	26.6	26.6	26.2
168	25.8	25.8	25.7	25.7	25.6	25.6	25.6	25.5
192	25.4	25.9	26.4	25.8	25.3	24.9	24.6	24.2
216	23.9	23.8	23.8	23.5	23.1	22.7	22.4	21.5
240	20.6	20.6	20.6	19.3	18.1	17.6	17.2	17.0
264	16.8	16.5	16.2	15.9	15.7	15.3	14.8	14.9
288	14.9	14.6	14.4	14.4	14.4	14.0	13.6	13.5
312	13.4	13.3	13.2	17.1	24.0	23.6	23.1	23.0
336	22.8	22.8	22.8	23.2	23.6	23.9	24.3	25.0

DEPTH	3255.0		TILT	-54		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	25.4	26.1	26.9	27.8	28.7	29.4	30.1	31.0
24	31.9	33.2	34.6	36.2	38.0	38.6	39.2	39.9
48	40.7	40.7	40.7	40.7	40.8	41.9	43.1	38.7
72	35.1	35.0	34.9	35.5	36.2	37.0	37.9	38.6
96	39.4	34.1	30.0	30.4	30.9	32.4	34.1	31.8
120	29.8	29.6	29.5	29.0	28.6	28.6	28.5	27.7
144	27.0	26.9	26.8	26.3	25.9	26.0	26.0	25.6
168	25.3	25.2	25.2	25.2	25.3	25.2	25.1	25.0
192	25.0	24.5	24.0	23.8	23.5	23.3	23.1	23.0
216	22.8	23.1	23.3	22.5	21.7	21.9	22.1	21.4
240	20.7	20.1	19.5	18.7	18.0	17.2	16.5	16.1
264	15.8	15.7	15.6	15.4	15.2	15.0	14.8	14.6
288	14.4	14.1	13.8	13.9	14.0	13.7	13.5	13.1
312	12.8	13.1	13.3	17.1	23.6	23.2	22.8	22.8
336	22.8	22.7	22.8	23.1	23.5	24.1	24.7	25.0

SONIC SURVEYS

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DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3255.0		TILT	-57		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	25.5	26.1	26.8	27.4	28.0	29.2	30.7	31.3
24	32.0	31.6	31.2	31.5	31.8	33.3	35.0	36.4
48	37.9	37.9	38.0	38.1	38.3	38.4	38.6	36.6
72	34.9	33.5	32.2	32.3	32.4	34.3	36.4	32.0
96	28.5	28.7	28.8	29.1	29.5	30.4	31.3	30.3
120	29.4	29.1	28.8	28.5	28.2	27.6	27.1	27.1
144	27.1	26.6	26.2	26.1	25.9	25.5	25.1	24.8
168	24.6	24.2	23.8	24.0	24.2	24.3	24.4	23.4
192	22.6	23.0	23.5	23.1	22.7	22.5	22.3	22.0
216	21.8	21.4	21.0	21.0	20.9	20.6	20.2	19.7
240	19.2	19.0	18.8	17.8	17.0	16.4	15.9	15.7
264	15.4	15.2	14.9	14.8	14.8	14.5	14.2	14.1
288	14.1	13.9	13.8	13.6	13.5	13.4	13.3	13.1
312	12.8	12.8	12.8	13.0	13.1	16.7	22.8	22.5
336	22.3	22.5	22.8	22.9	23.1	23.7	24.3	24.9

DEPTH	3255.0		TILT	-60		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	26.0	26.8	27.6	28.2	28.9	29.2	29.4	30.0
24	30.7	30.9	31.1	30.9	30.8	30.6	30.5	32.4
48	34.6	34.7	34.9	35.6	36.3	34.4	32.7	32.1
72	31.5	31.4	31.2	29.9	28.6	28.3	28.1	28.2
96	28.3	28.5	28.6	28.9	29.2	29.8	30.4	30.1
120	29.8	29.1	28.4	27.7	27.1	27.0	26.9	26.5
144	26.2	26.1	26.0	25.7	25.4	25.1	24.8	24.4
168	24.1	23.2	22.4	22.4	22.4	22.1	21.8	21.9
192	22.1	21.8	21.6	21.3	21.0	21.2	21.3	20.8
216	20.2	20.3	20.3	20.0	19.7	19.4	19.2	18.7
240	18.2	17.6	17.0	16.7	16.5	15.9	15.3	15.0
264	14.7	14.6	14.5	14.3	14.2	14.1	14.1	13.8
288	13.6	13.4	13.3	13.2	13.0	13.1	13.1	13.0
312	12.8	12.9	12.9	12.9	12.9	16.6	22.8	22.8
336	22.8	22.8	22.8	22.9	23.1	23.8	24.6	25.3

DEPTH	3255.0		TILT	-63		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	25.7	26.2	26.6	27.3	28.1	27.8	27.6	28.5
24	29.4	29.7	30.0	30.0	30.0	30.0	30.1	31.3
48	32.6	32.6	32.7	32.7	32.8	32.5	32.3	29.8
72	27.7	27.5	27.4	27.2	27.1	27.2	27.3	27.8
96	28.3	28.7	29.0	29.3	29.6	29.2	28.8	28.8
120	28.7	24.5	21.3	21.0	20.7	20.7	20.7	21.0
144	21.3	21.0	20.7	21.0	21.2	21.3	21.4	21.1
168	20.7	20.9	21.0	20.9	20.8	20.8	20.7	20.1
192	19.5	19.9	20.4	20.3	20.2	19.9	19.6	19.6
216	19.7	19.1	18.6	18.3	18.0	18.1	18.1	17.6
240	17.2	17.0	16.9	16.4	16.0	15.8	15.5	15.2
264	14.8	14.4	14.1	14.0	13.9	13.8	13.7	13.5
288	13.3	13.3	13.2	13.1	12.9	12.9	12.9	12.8
312	12.7	12.7	12.6	12.6	12.6	12.6	12.5	16.3
336	23.1	23.3	23.5	23.9	24.4	24.7	25.0	25.3

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3255.0		TILT	-66		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	25.1	24.9	24.8	25.5	26.3	26.4	26.5	26.4
24	26.3	26.7	27.2	27.6	28.1	28.6	29.1	29.7
48	30.4	30.5	30.7	30.8	31.0	30.7	30.5	30.4
72	30.4	28.8	27.4	27.4	27.5	27.6	27.7	28.0
96	28.2	28.3	28.3	28.5	28.6	28.1	27.6	27.4
120	27.2	22.6	19.4	19.4	19.4	19.4	19.5	19.6
144	19.7	19.6	19.5	19.6	19.8	19.6	19.4	19.7
168	20.0	19.8	19.7	19.7	19.7	19.3	19.0	19.1
192	19.2	19.3	19.4	19.0	18.6	18.3	18.0	18.0
216	18.0	18.0	18.0	17.6	17.2	17.0	16.9	16.8
240	16.8	16.5	16.3	16.1	15.9	15.7	15.4	14.9
264	14.4	14.2	14.0	13.7	13.5	13.5	13.5	13.4
288	13.3	13.2	13.0	13.1	13.1	12.9	12.7	12.8
312	12.8	12.8	12.8	12.6	12.4	12.5	12.5	16.0
336	21.9	21.7	21.6	22.5	23.4	23.5	23.6	24.3

DEPTH	3255.0		TILT	-69		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	21.8	21.9	22.1	22.8	23.6	24.1	24.7	25.5
24	26.3	26.2	26.1	26.2	26.2	27.2	28.2	28.4
48	28.6	28.7	28.7	28.9	29.1	29.3	29.5	29.4
72	29.3	28.0	26.8	26.7	26.5	27.2	27.9	27.8
96	27.7	27.4	27.2	27.2	27.2	27.0	26.9	26.7
120	26.5	21.8	18.5	18.5	18.5	18.6	18.6	18.7
144	18.7	18.9	19.2	19.0	18.9	18.9	18.9	18.7
168	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5
192	18.5	18.3	18.0	17.9	17.8	17.8	17.7	17.6
216	17.5	17.3	17.1	16.9	16.7	16.5	16.4	16.4
240	16.5	16.1	15.8	15.6	15.3	15.2	15.0	14.8
264	14.6	14.2	13.9	13.8	13.7	13.5	13.4	13.3
288	13.1	13.1	13.0	13.0	12.9	12.8	12.7	12.7
312	12.6	12.6	12.5	12.5	12.5	12.4	12.3	12.4
336	12.4	15.7	21.1	21.0	20.9	21.1	21.3	21.5

DEPTH	3255.0		TILT	-72		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	21.4	21.4	21.3	21.4	21.5	21.9	22.3	24.0
24	26.1	26.2	26.2	26.4	26.5	26.7	26.9	27.1
48	27.4	27.6	27.9	27.6	27.4	27.4	27.4	27.2
72	27.0	26.9	26.8	26.4	26.0	26.0	25.9	26.3
96	26.6	26.7	26.7	26.4	26.0	21.3	17.9	17.7
120	17.5	17.5	17.6	17.6	17.5	17.6	17.6	17.6
144	17.6	17.6	17.6	17.6	17.6	17.5	17.5	17.6
168	17.7	17.8	17.9	17.7	17.5	17.6	17.7	17.5
192	17.3	17.2	17.1	17.0	17.0	17.0	17.0	17.0
216	17.0	16.8	16.6	16.3	16.1	16.1	16.1	16.0
240	15.9	15.7	15.5	15.3	15.1	15.1	15.0	14.7
264	14.5	14.2	13.9	13.7	13.5	13.4	13.3	13.2
288	13.0	13.0	12.9	12.9	12.8	12.7	12.6	12.6
312	12.5	12.5	12.4	12.4	12.4	12.4	12.4	12.3
336	12.2	12.2	12.2	15.5	20.9	21.1	21.3	21.4

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3255.0		TILT	-75		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	23.0	24.6	26.4	26.4	26.4	26.3	26.2	26.2
24	26.1	26.0	25.9	26.0	26.0	26.0	25.9	26.2
48	26.4	26.4	26.3	26.2	26.0	25.8	25.6	25.0
72	24.4	24.5	24.6	24.6	24.7	25.2	25.7	25.5
96	25.4	20.0	16.5	16.5	16.6	16.7	16.9	16.9
120	16.9	17.0	17.1	17.1	17.2	17.2	17.2	17.0
144	16.9	16.9	17.0	17.0	17.0	17.1	17.3	17.0
168	16.8	16.8	16.8	17.0	17.3	17.2	17.2	16.8
192	16.4	16.4	16.4	16.4	16.5	16.4	16.4	16.3
216	16.3	16.2	16.1	16.1	16.1	15.9	15.7	15.5
240	15.2	15.3	15.3	15.1	14.9	14.9	14.9	14.7
264	14.6	14.6	14.6	14.3	14.0	13.6	13.3	13.4
288	13.4	13.3	13.2	13.2	13.1	13.1	13.1	12.9
312	12.7	12.6	12.5	12.6	12.6	12.5	12.3	12.5
336	12.6	12.6	12.5	12.5	12.5	15.8	21.3	22.1

DEPTH	3255.0		TILT	-78		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	25.8	25.7	25.5	25.5	25.5	25.5	25.5	25.6
24	25.6	25.6	25.6	25.6	25.6	25.4	25.1	25.1
48	25.1	25.2	25.3	24.6	24.0	24.0	24.0	24.0
72	23.9	24.2	24.6	24.6	24.6	24.6	24.7	19.0
96	15.4	15.7	15.9	16.0	16.0	16.0	16.0	16.1
120	16.1	16.2	16.3	16.0	15.8	16.0	16.1	16.1
144	16.0	16.3	16.6	16.6	16.7	16.4	16.1	16.2
168	16.3	16.3	16.4	16.3	16.2	16.2	16.2	16.2
192	16.2	16.1	16.1	15.9	15.7	15.8	15.8	15.8
216	15.8	15.9	15.9	15.8	15.7	15.4	15.0	15.1
240	15.2	15.1	15.0	14.9	14.8	14.7	14.6	14.5
264	14.5	14.5	14.5	14.1	13.8	13.7	13.7	13.6
288	13.6	13.5	13.4	13.4	13.3	13.3	13.2	13.2
312	13.2	13.1	12.9	12.9	12.8	13.1	13.3	13.2
336	13.1	13.2	13.2	13.4	13.6	13.6	13.6	17.9

DEPTH	3255.0		TILT	-81		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	14.0	14.0	14.0	14.1	14.2	18.2	25.3	25.1
24	24.9	25.0	25.1	25.1	25.1	24.8	24.5	24.5
48	24.5	24.5	24.5	24.5	24.5	24.5	24.5	18.7
72	15.0	15.0	15.0	15.1	15.1	15.1	15.1	15.2
96	15.2	15.1	14.9	15.1	15.2	15.2	15.2	15.3
120	15.3	15.4	15.4	15.6	15.8	15.8	15.7	15.6
144	15.5	15.6	15.7	15.7	15.7	15.7	15.7	15.8
168	15.9	15.9	15.9	15.9	15.9	15.7	15.4	15.4
192	15.3	15.3	15.3	15.4	15.4	15.3	15.2	15.3
216	15.3	15.4	15.5	15.3	15.0	15.1	15.1	15.1
240	15.1	14.9	14.7	14.7	14.7	14.7	14.7	14.7
264	14.8	14.6	14.4	14.4	14.4	14.3	14.2	14.3
288	14.4	14.1	13.9	13.9	13.9	13.9	13.9	13.9
312	13.9	13.8	13.8	13.5	13.3	13.6	13.9	13.9
336	13.9	13.8	13.8	13.8	13.8	13.8	13.8	13.9

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3255.0		TILT	-84		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	14.5	14.5	14.5	14.3	14.1	14.1	24.7	14.1
24	14.1	14.5	14.8	14.8	14.7	14.7	14.7	14.7
48	14.7	14.8	14.8	14.8	14.8	14.8	14.8	14.8
72	14.8	14.9	14.9	15.0	15.0	15.0	15.0	15.0
96	15.0	15.0	15.0	15.0	14.9	14.9	14.9	14.9
120	14.8	15.0	15.2	15.2	15.2	15.3	15.4	15.4
144	15.3	15.3	15.3	15.3	15.2	15.1	15.0	15.1
168	15.1	15.2	15.2	15.2	15.2	15.2	15.2	15.0
192	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8
216	14.8	14.8	14.8	14.9	14.9	14.9	14.9	15.0
240	15.0	14.8	14.6	14.6	14.6	14.5	14.5	14.5
264	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5
288	14.5	14.4	14.3	14.3	14.3	14.2	14.1	14.1
312	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1
336	14.1	14.1	14.1	14.2	14.3	14.3	14.4	14.4

DEPTH	3255.0		TILT	-87		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8
24	14.8	14.8	14.8	14.7	14.7	14.7	14.8	14.7
48	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7
72	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7
96	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7
120	14.7	14.7	14.8	14.8	14.9	15.0	15.0	15.0
144	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
168	15.0	14.8	14.6	14.6	14.6	14.6	14.6	14.6
192	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6
216	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6
240	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6
264	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6
288	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6
312	14.6	14.6	14.6	14.5	14.5	14.5	14.5	14.5
336	14.5	14.7	14.8	14.8	14.8	14.8	14.8	14.8

DEPTH	3260.0		TILT	0		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	42.5	43.8	52.0	42.1	42.1	45.1	42.9	43.8
24	46.4	53.8	54.2	53.8	59.0	56.4	60.7	60.7
48	68.1	71.1	77.6	78.0	90.6	98.4	102.7	101.9
72	104.9	115.3	150.8	167.9	154.3	152.1	145.6	368.8
96	367.5	370.9	370.9	372.2	370.5	370.5	204.1	198.5
120	199.4	387.4	387.8	388.7	387.4	355.3	375.3	364.0
144	369.2	372.3	357.9	340.2	337.6	331.5	329.8	322.4
168	321.5	319.8	314.6	307.7	305.9	301.2	301.6	300.7
192	301.6	302.5	307.7	301.6	289.9	285.6	281.2	272.1
216	250.5	250.5	247.3	247.9	243.1	241.4	241.0	240.1
240	239.7	238.8	236.2	232.3	225.8	221.9	218.4	215.8
264	210.6	206.3	202.8	197.6	193.7	189.4	188.1	186.4
288	185.9	183.8	181.6	179.0	177.7	177.7	176.0	174.7
312	170.8	176.4	175.1	177.7	182.0	182.9	183.3	59.0
336	56.8	54.2	52.0	52.0	52.0	50.3	47.3	45.5

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

DEPTH	3265.0		TILT	18		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	46.0	46.8	52.6	43.6	43.7	45.8	43.7	45.6
24	47.7	54.7	56.4	60.0	60.3	61.8	67.1	72.7
48	74.6	78.6	88.2	93.6	97.5	104.2	107.1	111.8
72	113.8	122.1	134.3	138.0	140.2	142.5	147.0	151.5
96	155.3	158.4	162.0	161.7	165.3	169.0	170.4	173.2
120	175.0	175.5	177.7	179.6	181.9	183.0	182.4	184.5
144	189.5	210.2	235.4	233.5	232.2	231.3	231.0	199.2
168	169.7	151.7	148.0	143.9	138.2	133.5	139.5	152.0
192	167.4	169.9	172.8	176.5	174.7	176.6	175.5	175.5
216	197.1	197.3	198.0	198.9	200.3	204.0	208.4	199.7
240	192.2	191.0	190.4	189.8	193.7	174.6	175.2	174.7
264	183.7	180.7	178.2	171.2	165.2	156.2	148.5	125.2
288	108.5	105.8	103.5	99.2	95.4	92.8	90.5	87.4
312	84.6	75.3	68.0	64.4	61.2	59.1	58.6	52.7
336	51.0	51.6	51.1	52.0	52.3	51.3	49.8	45.4

DEPTH	3265.0		TILT	15		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	46.4	45.3	50.9	43.2	43.1	45.2	43.6	44.9
24	47.5	54.2	55.8	59.8	59.6	60.4	65.9	66.9
48	72.9	75.5	84.3	91.3	94.8	102.6	104.8	106.6
72	112.2	119.0	131.1	133.8	138.1	140.1	144.0	148.2
96	153.0	156.6	160.7	167.0	166.3	167.4	169.8	172.7
120	173.6	176.2	177.2	177.6	178.1	179.9	180.5	182.6
144	199.8	246.3	272.3	267.0	271.7	263.6	264.2	214.4
168	194.3	171.2	169.5	154.8	145.7	137.0	154.8	176.9
192	176.0	197.9	226.8	251.2	249.3	243.6	238.7	254.8
216	274.1	270.5	267.8	262.9	258.8	253.6	249.3	244.2
240	239.9	235.0	230.9	224.6	219.2	215.5	212.4	209.0
264	206.1	202.0	198.5	195.9	194.0	191.2	189.0	187.0
288	185.4	183.1	181.4	179.8	178.7	123.9	97.3	91.8
312	89.2	88.9	72.9	67.5	63.0	60.4	58.8	56.1
336	51.1	51.2	51.2	51.5	51.9	50.2	47.7	45.2

DEPTH	3265.0		TILT	12		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	46.4	44.4	52.0	46.3	43.2	43.2	43.2	44.9
24	46.8	54.9	55.4	59.2	59.3	59.8	64.6	65.3
48	71.6	74.3	80.4	84.5	93.9	101.0	103.2	106.7
72	110.4	115.2	129.1	131.3	138.5	137.8	142.2	147.0
96	152.2	155.9	158.5	164.4	164.3	166.4	167.8	170.6
120	171.7	174.1	174.1	175.1	175.9	177.0	177.8	180.8
144	207.4	274.8	305.1	323.9	346.1	331.8	342.9	280.3
168	187.7	176.5	178.7	165.8	165.0	155.7	159.3	213.8
192	302.9	309.0	310.5	302.7	300.5	292.2	290.0	282.7
216	274.0	270.0	267.8	263.3	259.5	256.6	251.6	244.8
240	240.0	237.4	232.1	228.4	221.7	220.5	213.2	213.0
264	206.1	202.9	200.3	195.6	191.7	189.0	186.8	184.5
288	182.7	180.0	177.8	181.2	178.2	177.3	176.9	127.6
312	99.9	92.2	82.1	72.3	69.4	64.4	62.4	59.1
336	55.4	51.0	51.0	51.5	51.5	52.3	49.1	46.3

SONIC SURVEYS

CUSTOMER : WESTLAKE CHEMICAL
DATE : December 13, 2021

CAVERN : PPG No. 006X
OPERATION No. : 1

WALL RANGES VS DEPTH

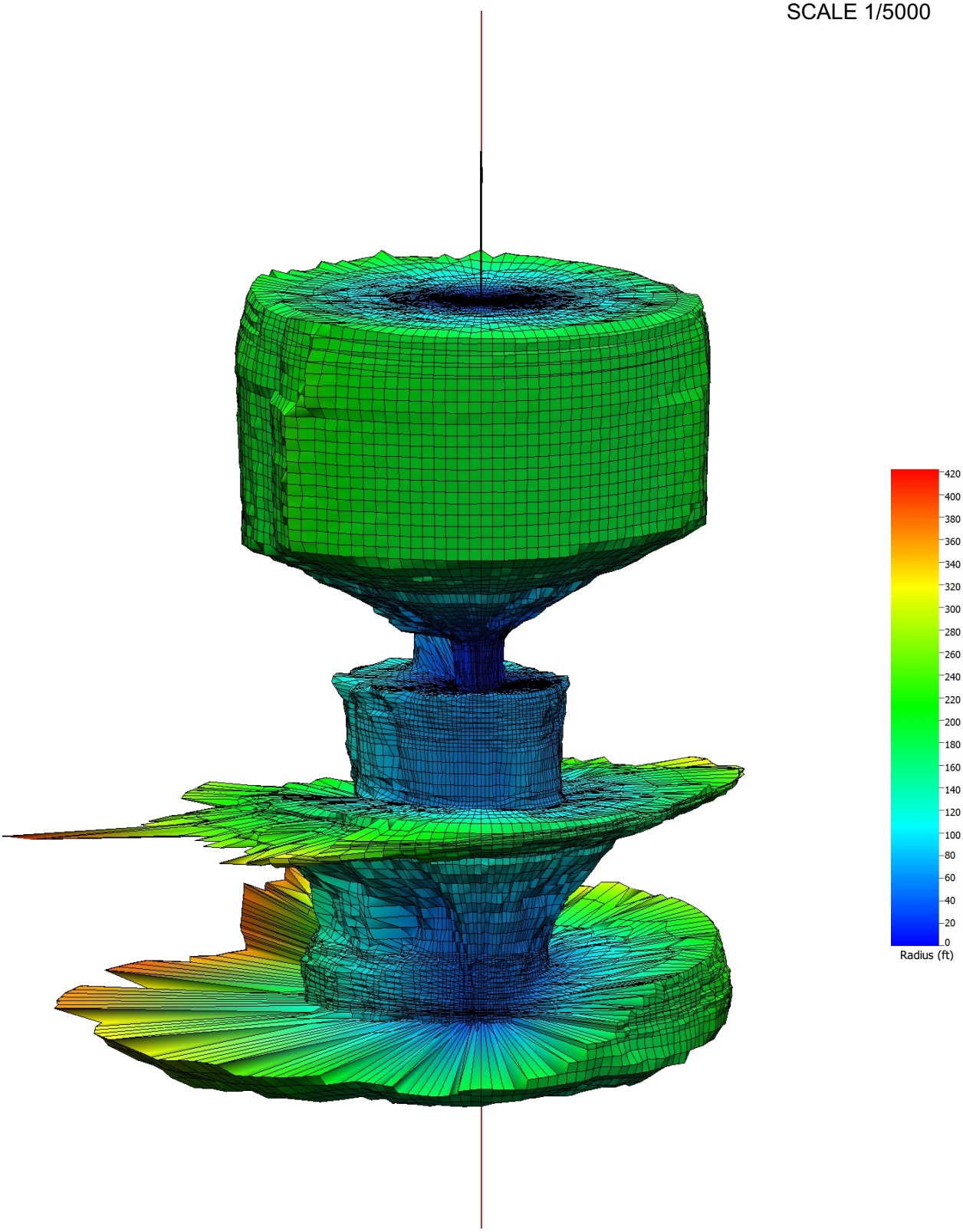
DEPTH	3265.0		TILT	9		VOS	5951.44	
Bearing	+ 0	+ 3	+ 6	+ 9	+ 12	+ 15	+ 18	+ 21
0	44.6	44.2	53.0	44.7	43.2	43.2	43.2	44.9
24	46.8	54.4	55.1	56.2	58.1	60.0	62.1	62.1
48	70.6	71.2	79.7	81.6	93.2	97.3	101.3	102.7
72	107.1	118.2	128.1	131.5	137.3	136.5	139.5	145.6
96	152.6	153.9	155.7	160.3	159.3	162.4	166.1	167.0
120	169.8	171.2	172.4	173.6	173.7	175.9	176.5	178.5
144	206.5	380.8	377.7	380.1	383.9	383.2	381.5	377.9
168	377.5	246.8	183.6	185.9	170.1	162.2	161.7	331.7
192	327.2	317.5	309.2	301.9	295.7	291.6	285.5	274.9
216	271.1	267.0	264.9	262.7	261.0	256.7	249.7	243.8
240	239.9	236.6	234.0	229.4	225.5	220.6	216.5	212.3
264	208.8	203.5	198.9	193.1	193.0	189.6	187.3	184.4
288	182.7	180.2	179.3	179.3	175.5	175.2	175.8	175.1
312	176.9	118.8	107.7	82.5	70.3	68.0	63.8	58.6
336	57.1	52.8	51.0	51.1	51.2	51.2	50.1	47.4

SONIC SURVEYS	CUSTOMER :WESTLAKE CHEMICAL DATE :December 13, 2021	CAVERN :PPG No. 006X OPERATION No. :1

VIEW FROM NORTH

with an overhang of 10°

SCALE 1/5000

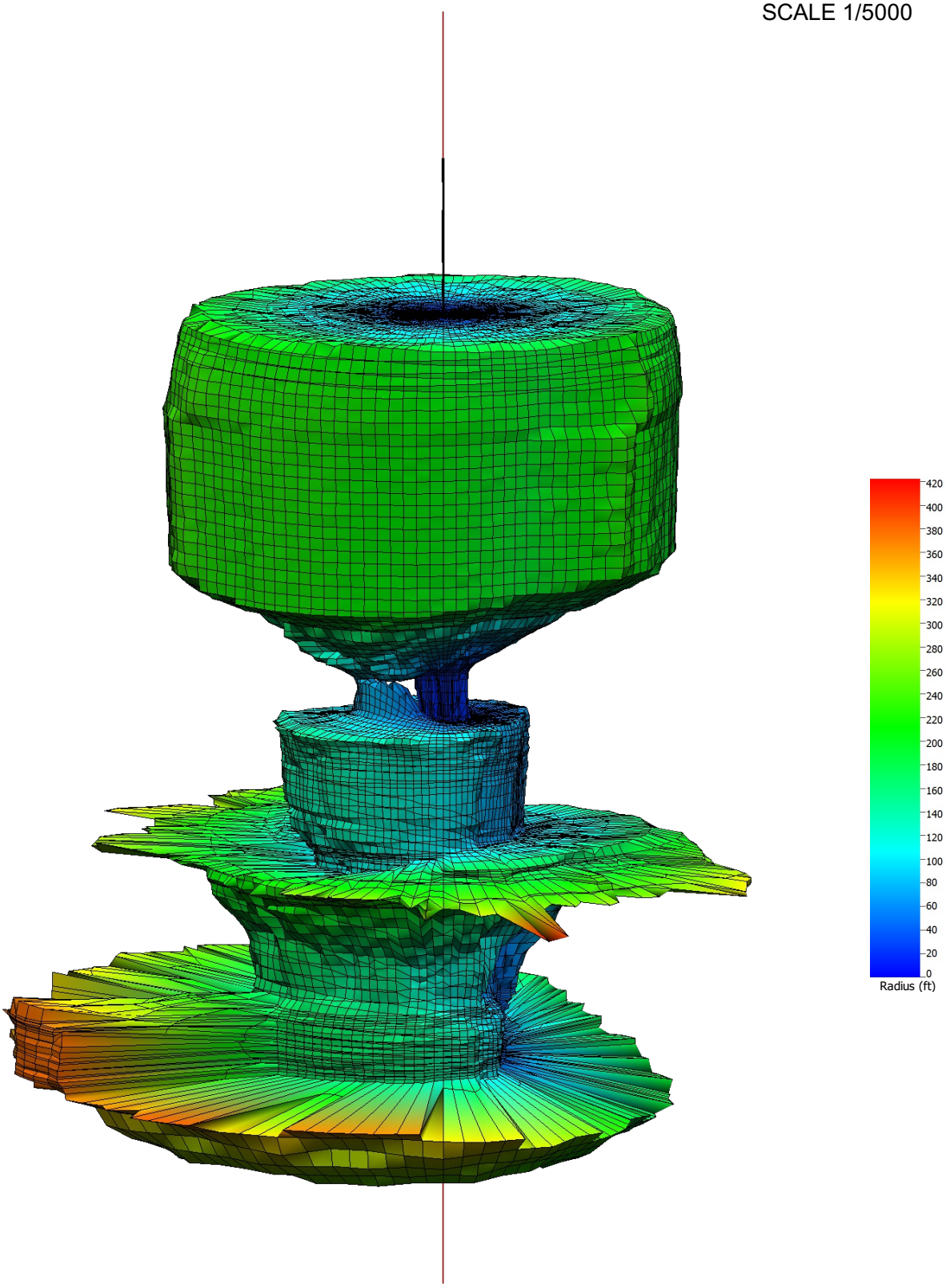


SONIC SURVEYS	CUSTOMER :WESTLAKE CHEMICAL DATE :December 13, 2021	CAVERN :PPG No. 006X OPERATION No. :1

VIEW FROM EAST

with an overhang of 10°

SCALE 1/5000

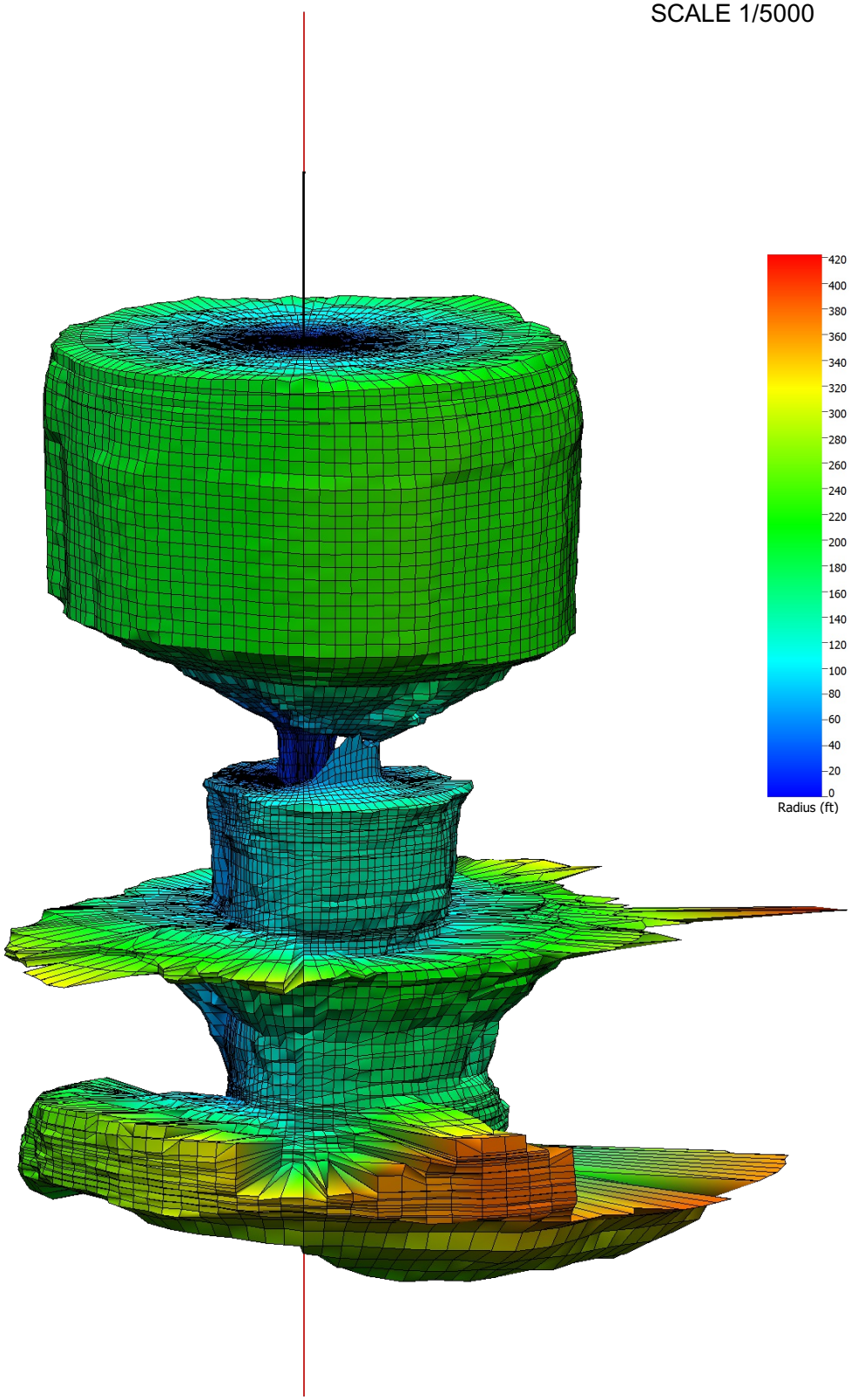


SONIC SURVEYS	CUSTOMER :WESTLAKE CHEMICAL DATE :December 13, 2021	CAVERN :PPG No. 006X OPERATION No. :1

VIEW FROM SOUTH

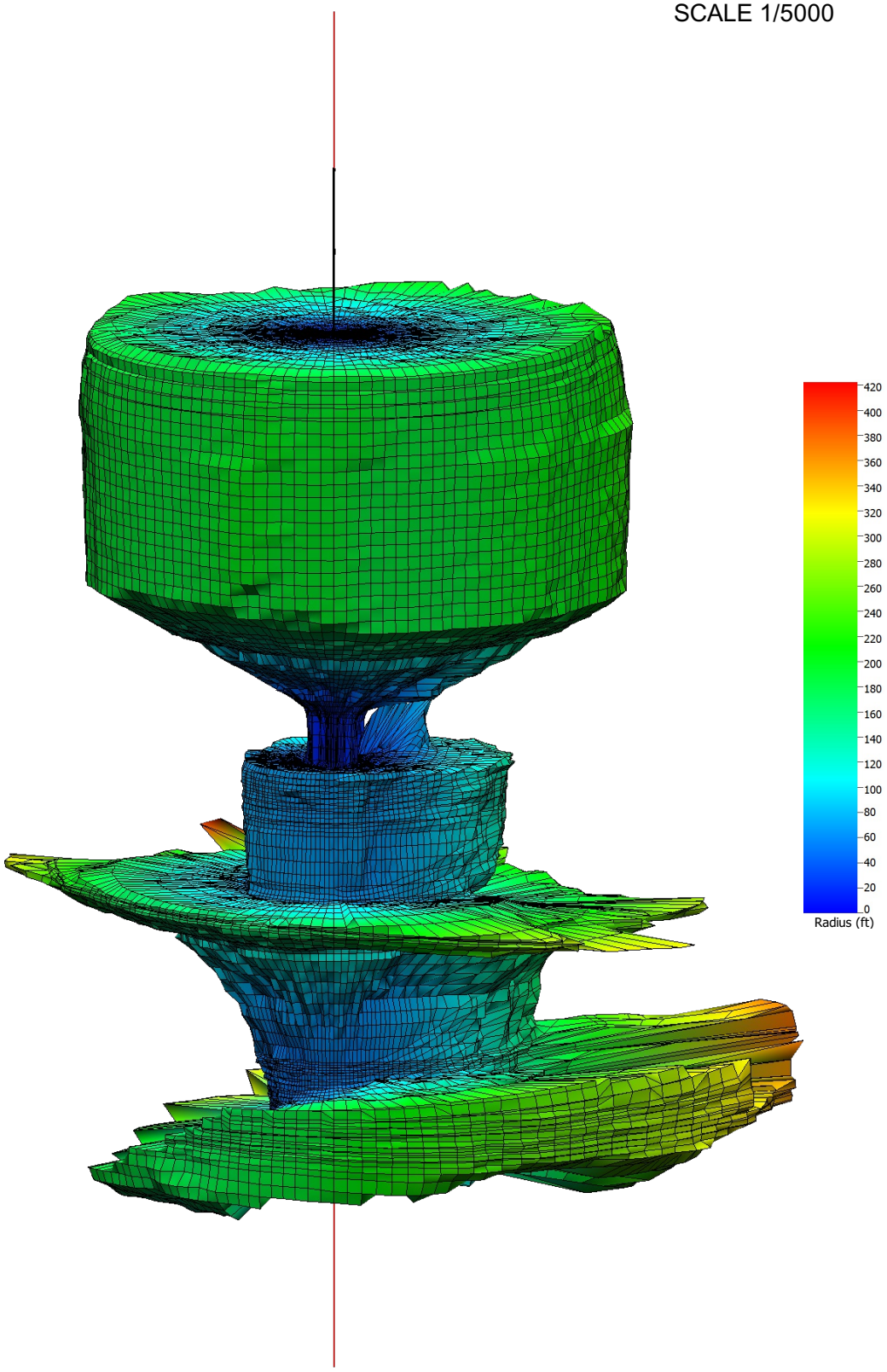
with an overhang of 10°

SCALE 1/5000



SONIC SURVEYS	CUSTOMER :WESTLAKE CHEMICAL DATE :December 13, 2021	CAVERN :PPG No. 006X OPERATION No. :1
	VIEW FROM WEST with an overhang of 10°	

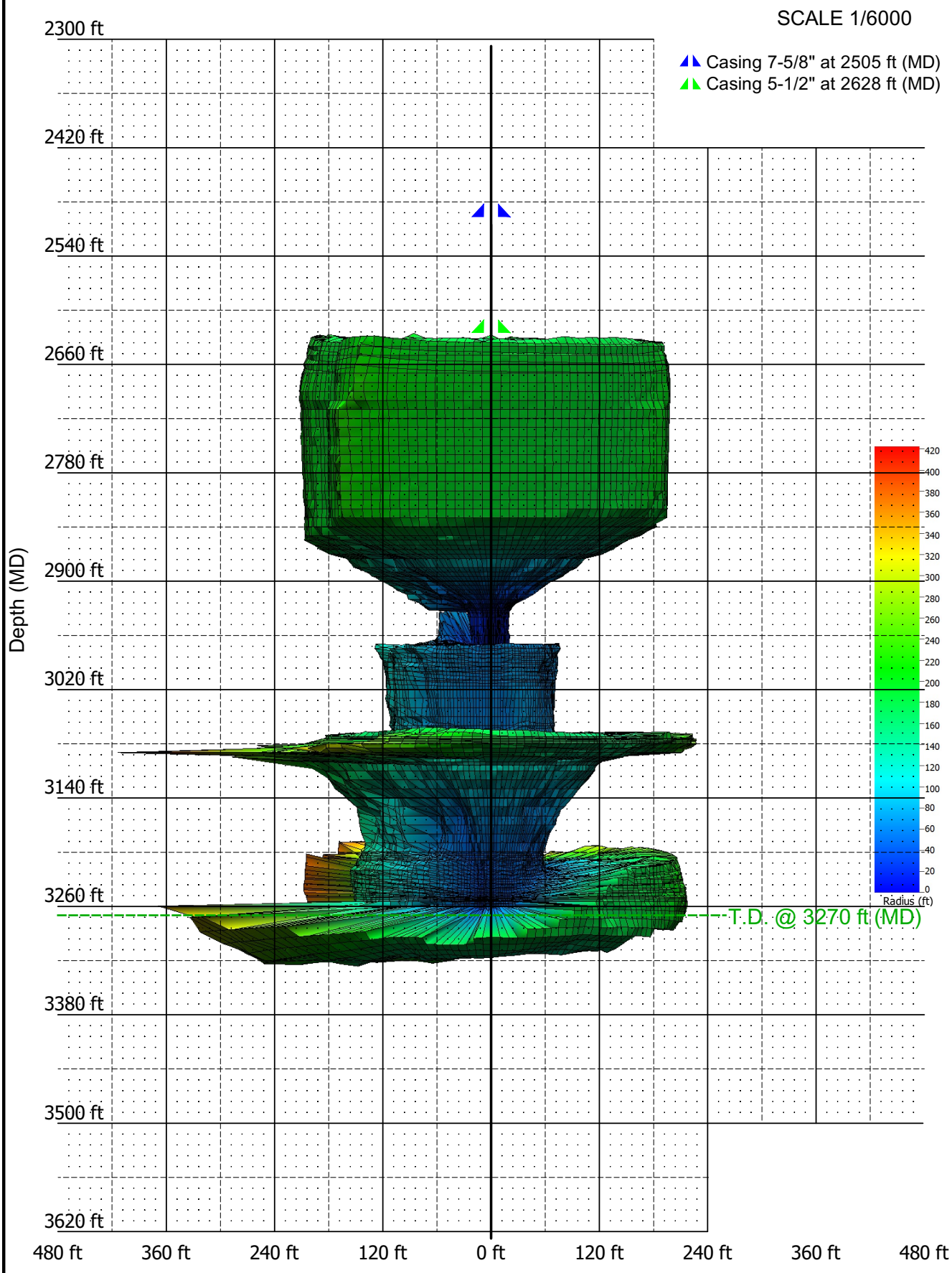
SCALE 1/5000



SONIC SURVEYS	CUSTOMER :WESTLAKE CHEMICAL DATE :December 13, 2021	CAVERN :PPG No. 006X OPERATION No. :1

VIEW FROM NORTH

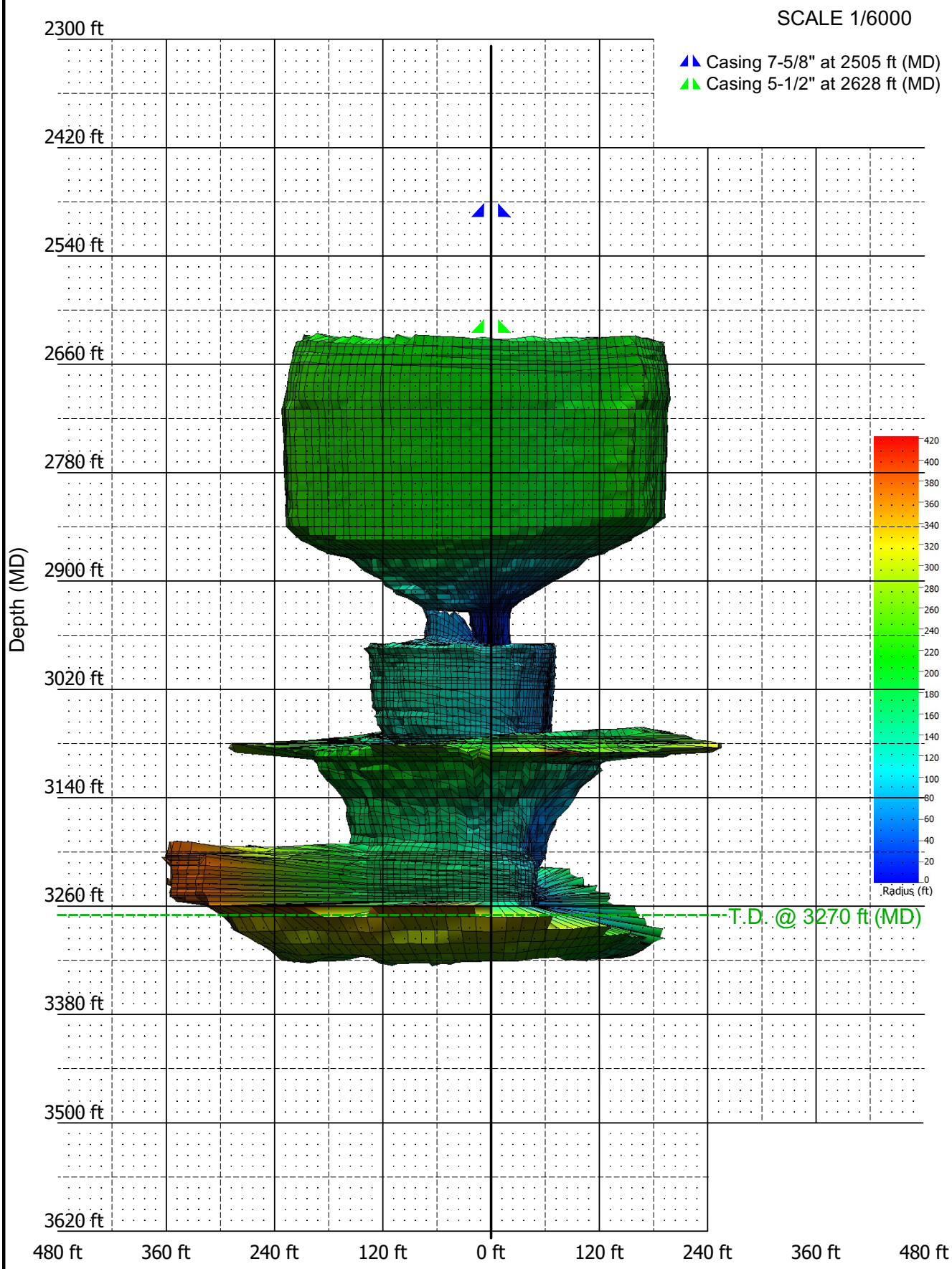
with an overhang of 0°



SONIC SURVEYS	CUSTOMER :WESTLAKE CHEMICAL DATE :December 13, 2021	CAVERN :PPG No. 006X OPERATION No. :1

VIEW FROM EAST

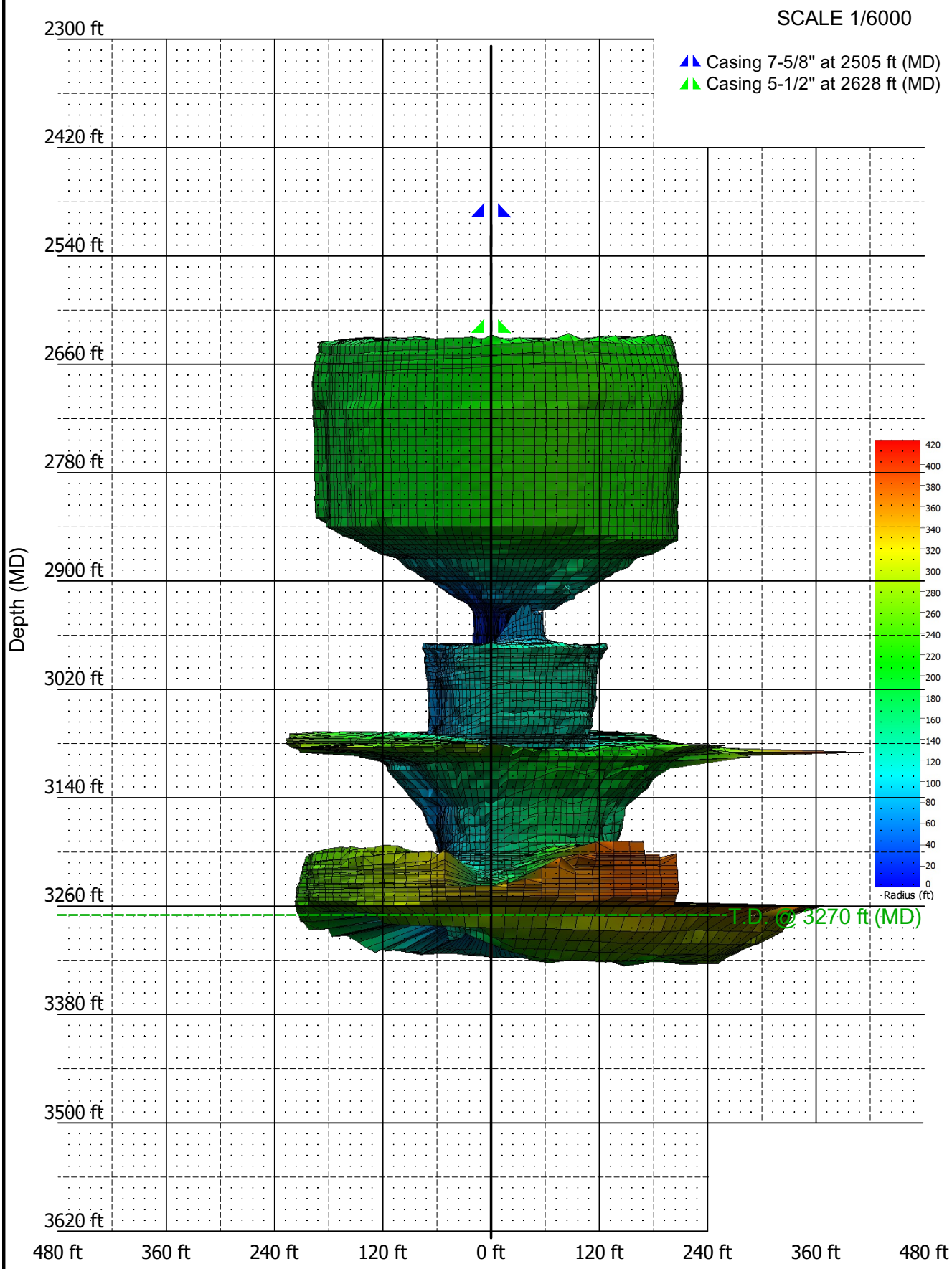
with an overhang of 0°



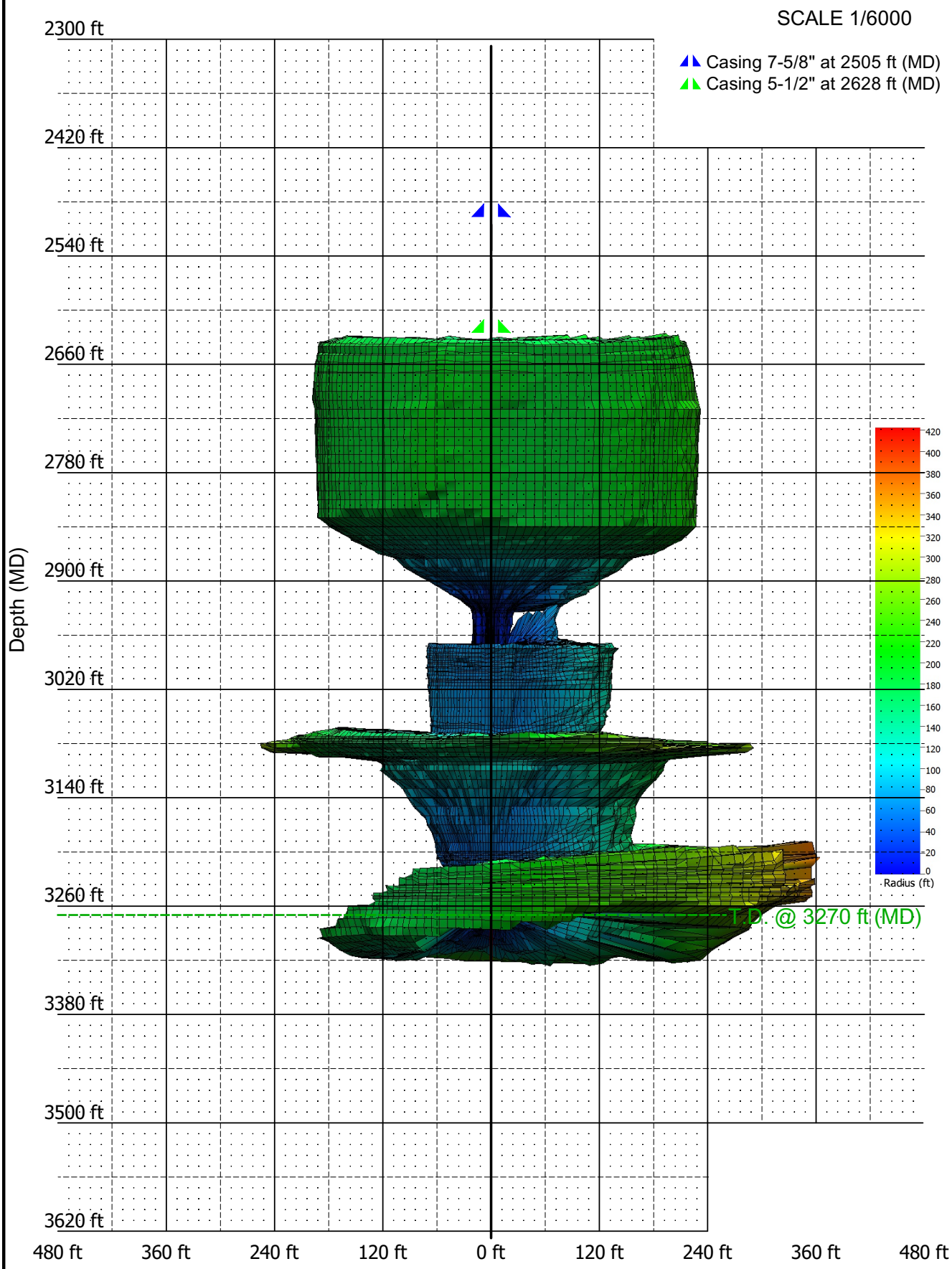
SONIC SURVEYS	CUSTOMER :WESTLAKE CHEMICAL DATE :December 13, 2021	CAVERN :PPG No. 006X OPERATION No. :1

VIEW FROM SOUTH

with an overhang of 0°



SONIC SURVEYS	CUSTOMER :WESTLAKE CHEMICAL DATE :December 13, 2021	CAVERN :PPG No. 006X OPERATION No. :1

VIEW FROM WEST

with an overhang of 0°