Permit Application

Environmental Impact Assessment

White Pine North Project

Volume IIJ

Appendix C-2 (4 of 4)

White Pine Copper LLC
White Pine, Michigan

September 2026

Project I.D.: 23W200

Solving our clients' toughest science and engineering challenges.

C-2

Deep Bedrock Hydrogeology Report

(4 of 4)

Acoustic and Optical Televiewer Draft Plot

DGI GEOSCIENCE

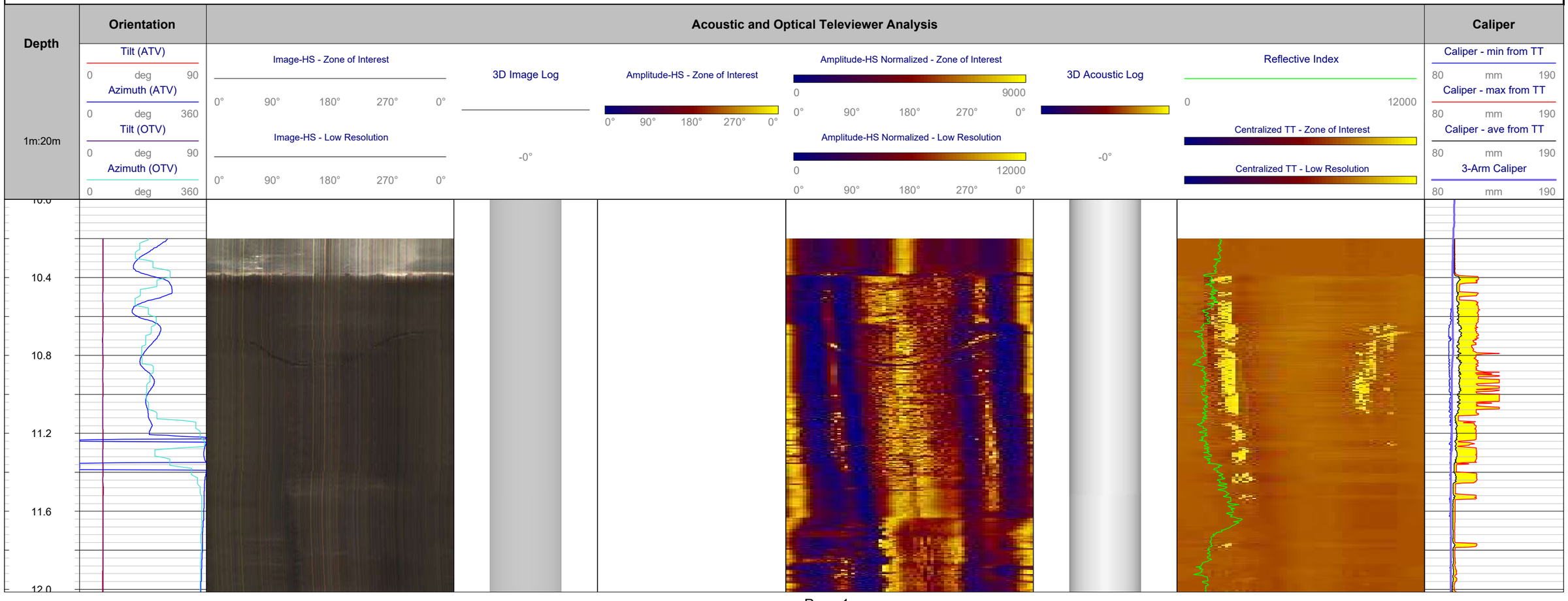
Company:	White Pine	**Total Depth:**	929.00 m	**UTM X (Easting):**	---
Project:	White Pine	**Surveyed Depth:**	926.50 m	**UTM Y (Northing):**	---
Hole ID:	WP598	**Hole Diameter:**	96.00 mm	**UTM Z (Elevation):**	---
Acquisition date(s):	Aug 25, 26; 2024	**Bit Size:**	HQ	**Location:**	White Pine, Michigan
Field Personnel:	R. Verdeflor; J. Henson	**Hole Type:**	Diamond		
Data Analysts:	G. Garcia Lamberg	**Casing Depth:**	10.40 m		
Survey Day(s):	2	**Fluid Level:**	---		

Probes:

Manufacturer	Model	Serial
M. Sopris	2CAA 3-Arm Caliper	4262
ALT	QL40 OBI 2G	212101
ALT	QL ABI2G Acoustic Televiewer	212010

Notes:

Murky water affects visibility in the OTV image from 150 m to 750 and from 830 m to EOH.
Zone of interest (854 m -926 m) surveyed with a higher resolution.
3 arm caliper depth matched to acoustic caliper.

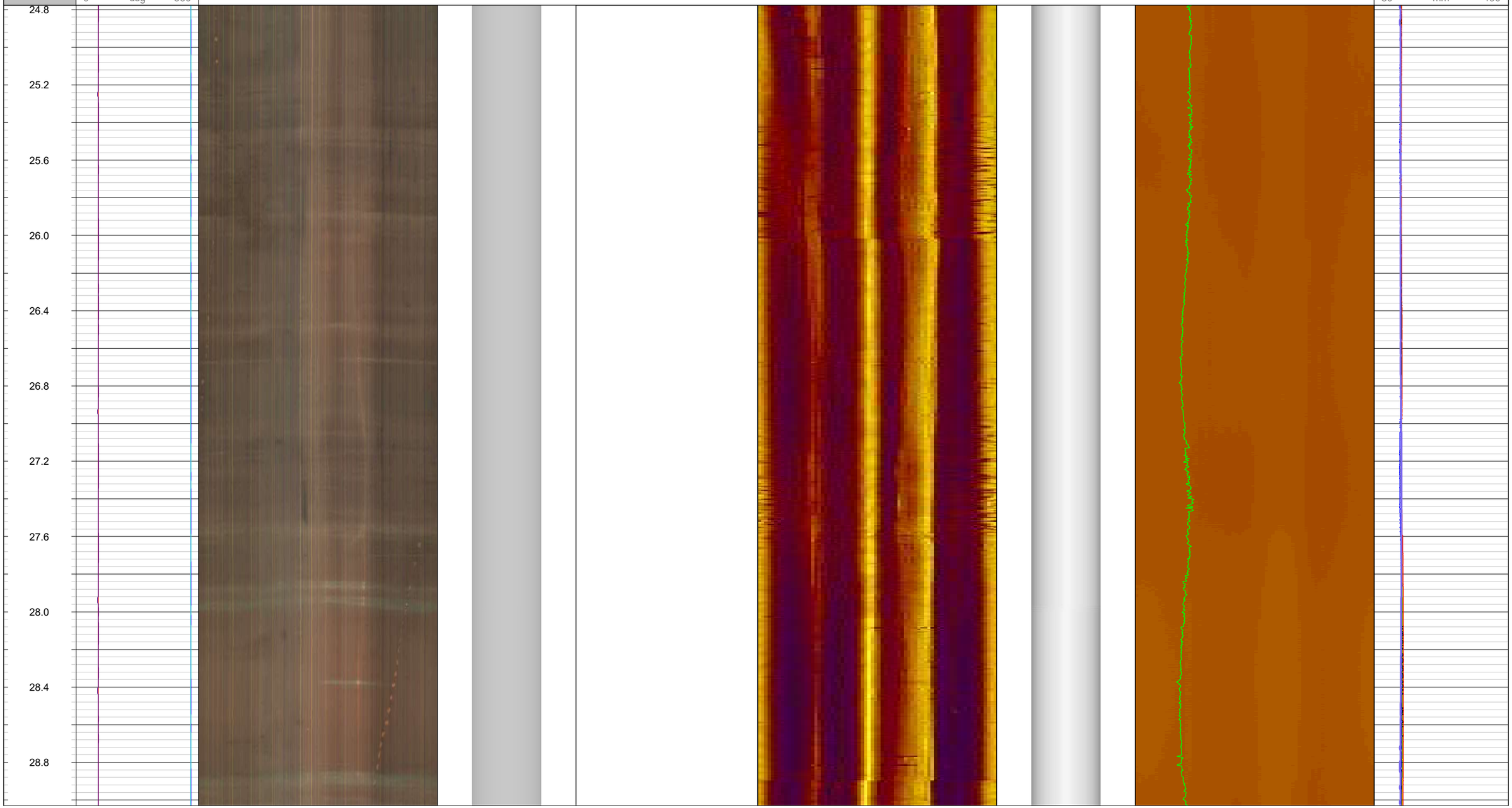


Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
12.4								
12.8								
13.2								
13.6								
14.0								
14.4								
14.8								
15.2								
15.6								
16.0								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
16.4								
16.8								
17.2								
17.6								
18.0								
18.4								
18.8								
19.2								
19.6								
20.0								
20.4								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
20.8								
21.2								
21.6								
22.0								
22.4								
22.8								
23.2								
23.6								
24.0								
24.4								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								

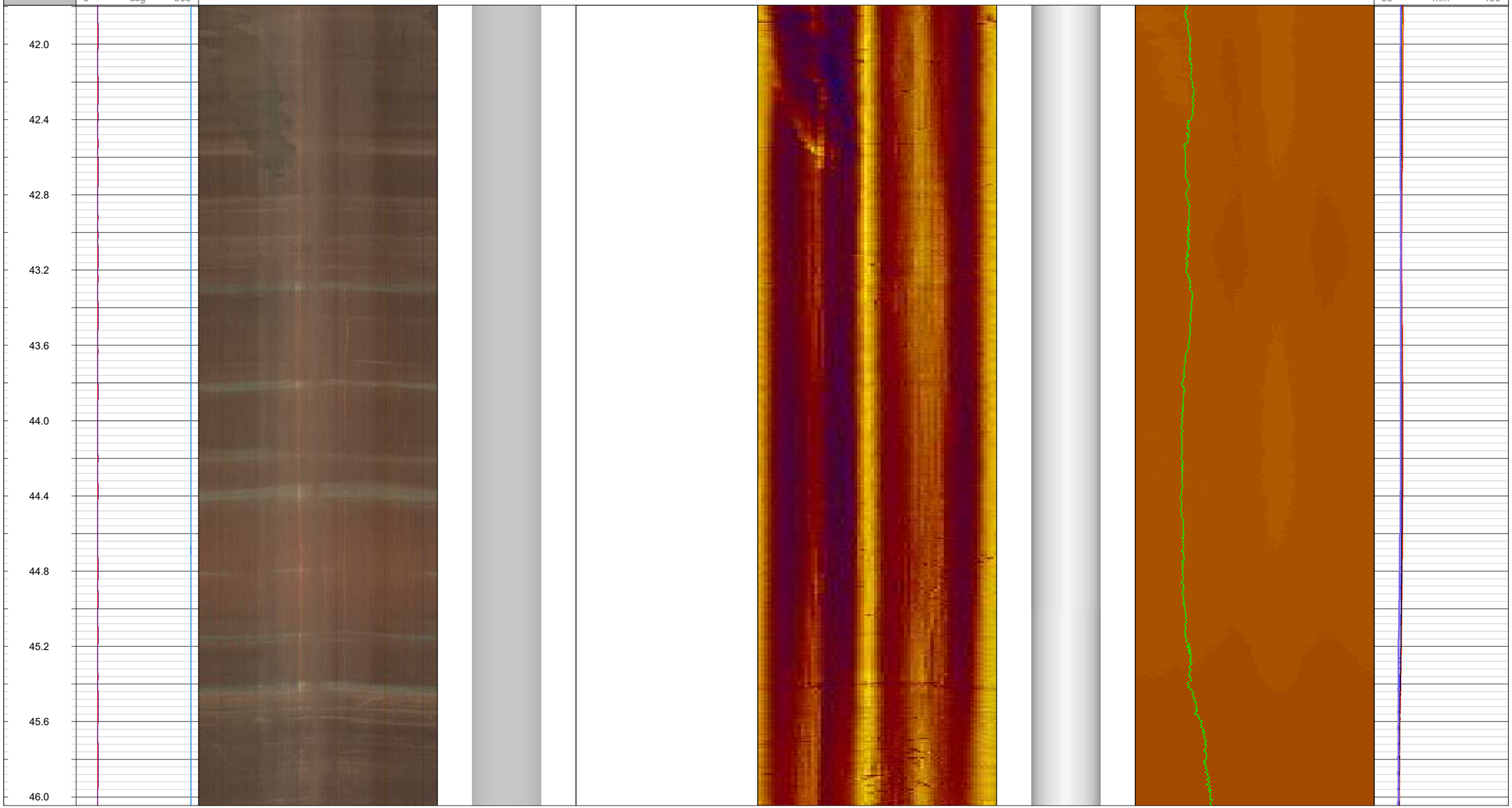


Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
29.2									
29.6									
30.0									
30.4									
30.8									
31.2									
31.6									
32.0									
32.4									
32.8									
33.2									

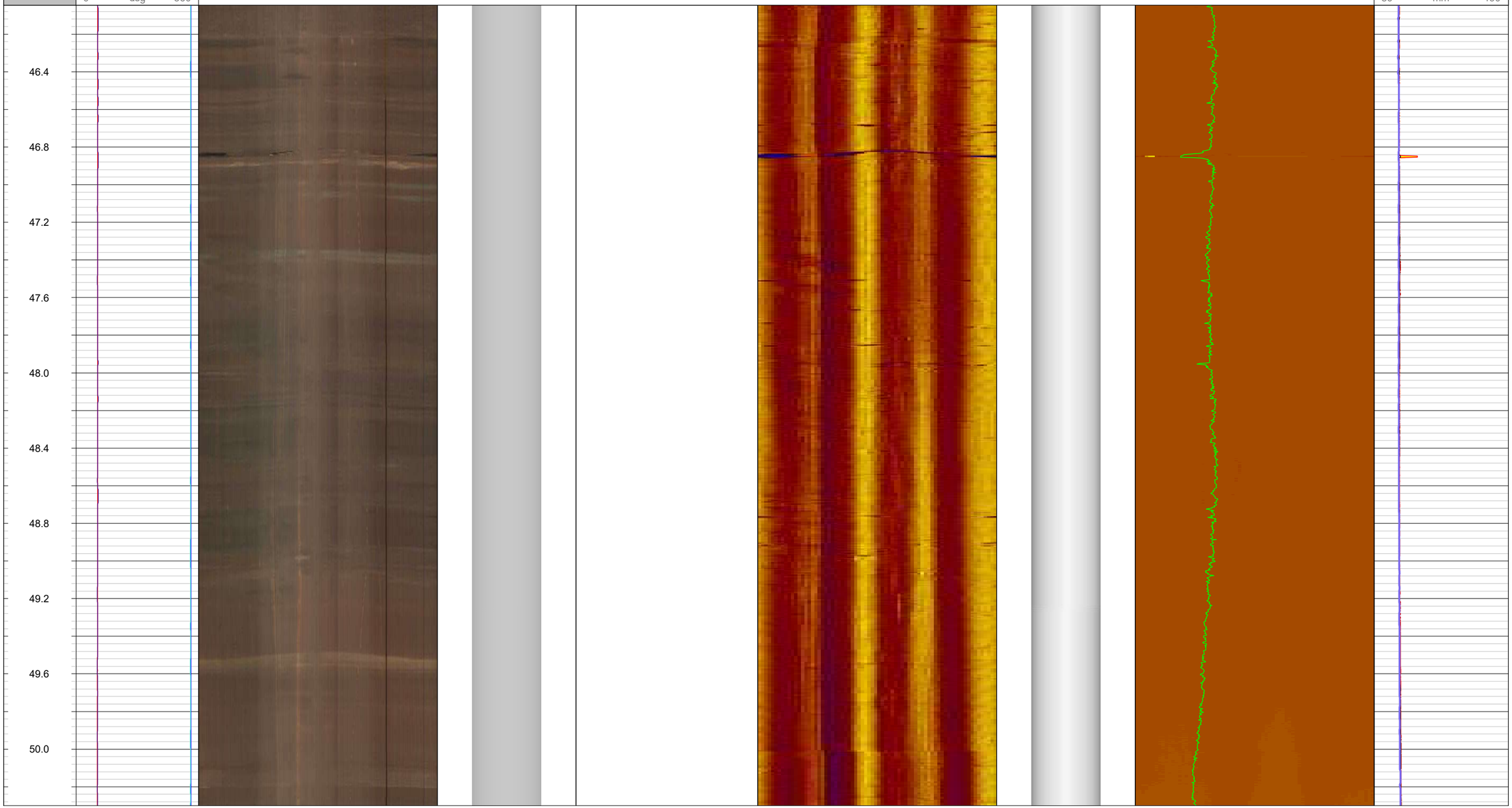
Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
33.6								
34.0								
34.4								
34.8								
35.2								
35.6								
36.0								
36.4								
36.8								
37.2								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
37.6								
38.0								
38.4								
38.8								
39.2								
39.6								
40.0								
40.4								
40.8								
41.2								
41.6								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190



Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190



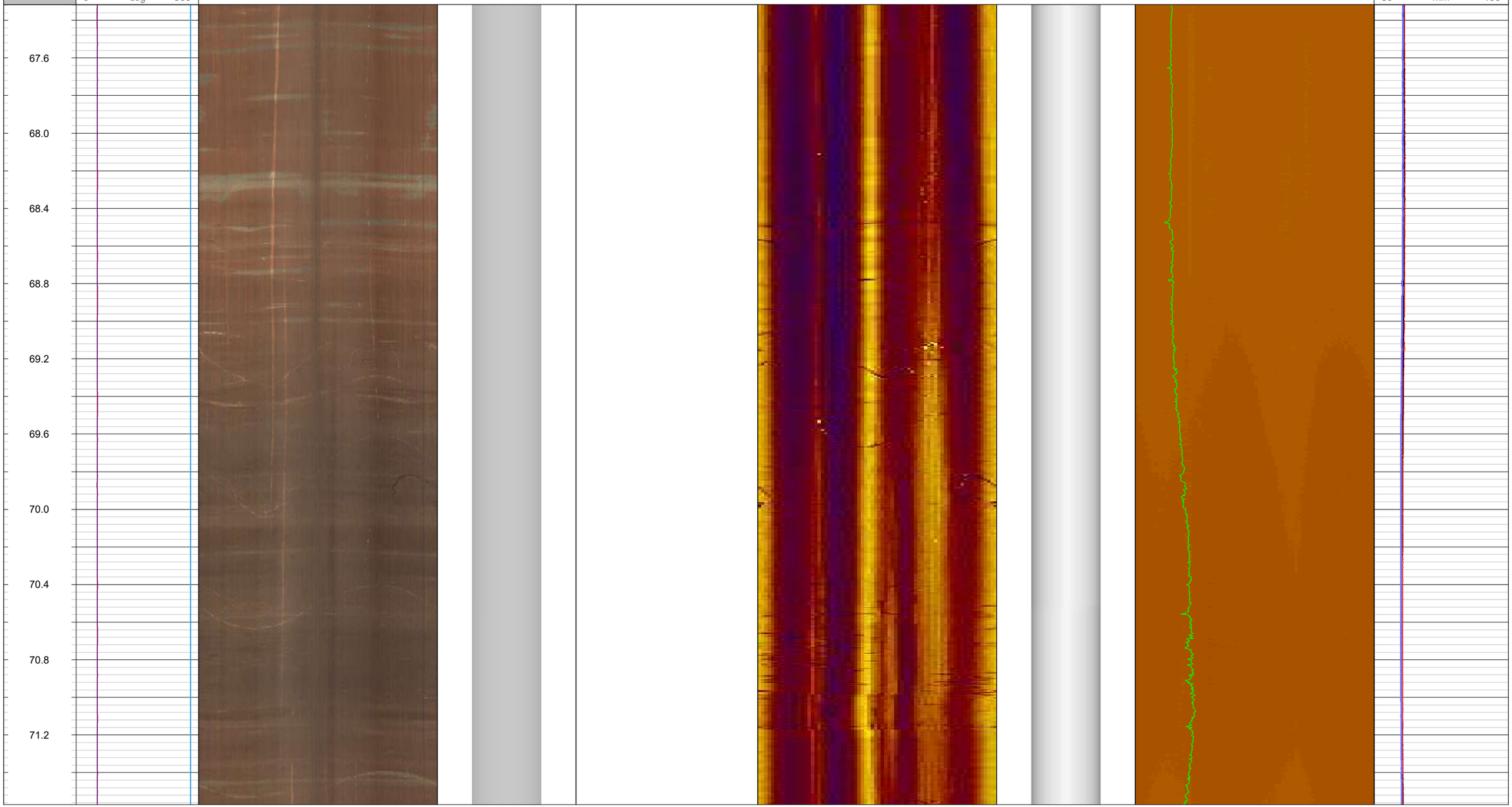
Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
50.4								
50.8								
51.2								
51.6								
52.0								
52.4								
52.8								
53.2								
53.6								
54.0								
54.4								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
54.8								
55.2								
55.6								
56.0								
56.4								
56.8								
57.2								
57.6								
58.0								
58.4								
58.8								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
59.2									
59.6									
60.0									
60.4									
60.8									
61.2									
61.6									
62.0									
62.4									
62.8									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
63.2									
63.6									
64.0									
64.4									
64.8									
65.2									
65.6									
66.0									
66.4									
66.8									
67.2									

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190



Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
71.6								
72.0								
72.4								
72.8								
73.2								
73.6								
74.0								
74.4								
74.8								
75.2								
75.6								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
76.0								
76.4								
76.8								
77.2								
77.6								
78.0								
78.4								
78.8								
79.2								
79.6								
80.0								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
80.4								
80.8								
81.2								
81.6								
82.0								
82.4								
82.8								
83.2								
83.6								
84.0								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
84.4								
84.8								
85.2								
85.6								
86.0								
86.4								
86.8								
87.2								
87.6								
88.0								
88.4								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
88.8								
89.2								
89.6								
90.0								
90.4								
90.8								
91.2								
91.6								
92.0								
92.4								
92.8								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
93.2								
93.6								
94.0								
94.4								
94.8								
95.2								
95.6								
96.0								
96.4								
96.8								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
97.2								
97.6								
98.0								
98.4								
98.8								
99.2								
99.6								
100.0								
100.4								
100.8								
101.2								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190



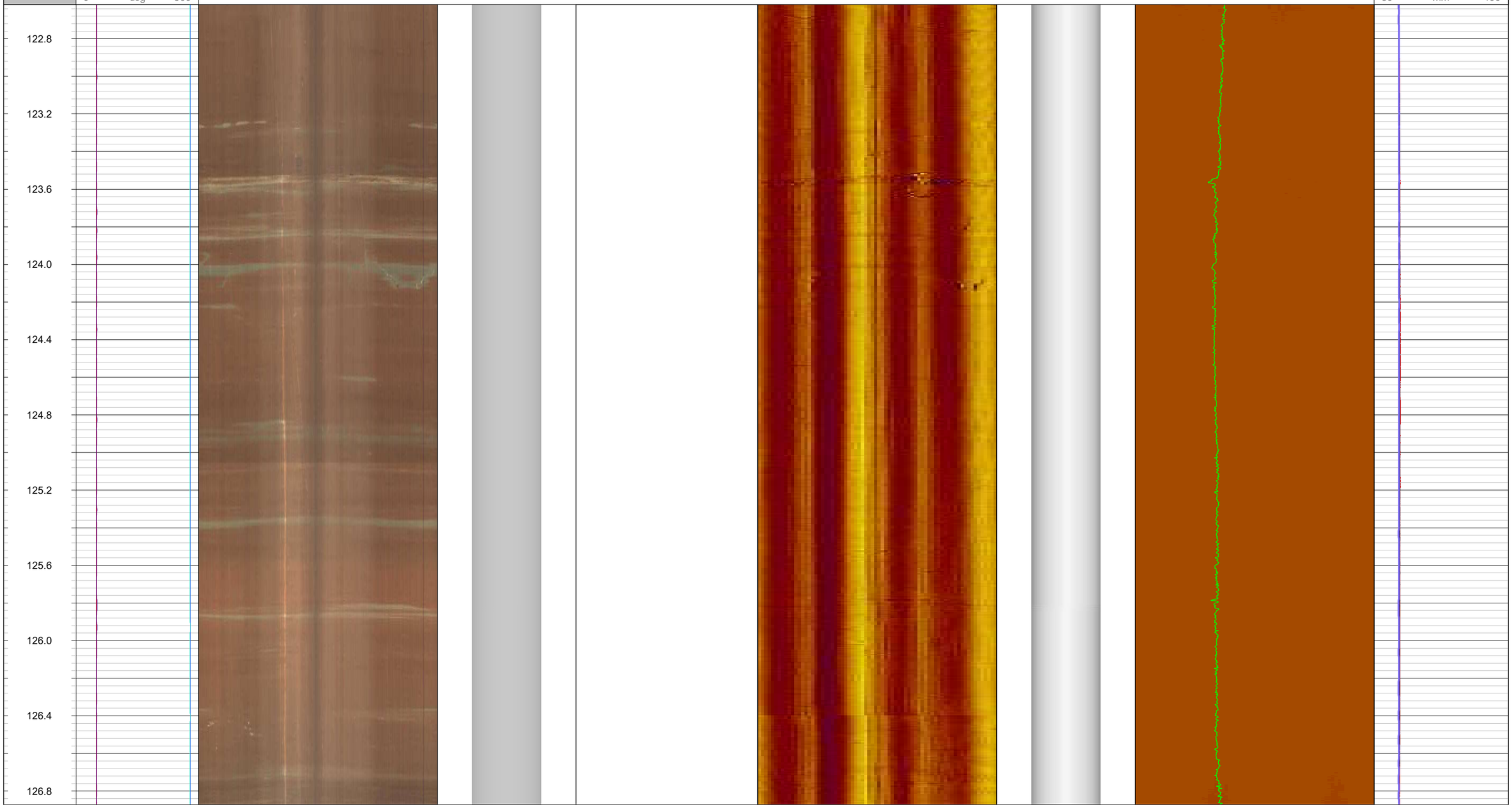
Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
106.0								
106.4								
106.8								
107.2								
107.6								
108.0								
108.4								
108.8								
109.2								
109.6								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
110.0								
110.4								
110.8								
111.2								
111.6								
112.0								
112.4								
112.8								
113.2								
113.6								
114.0								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
114.4								
114.8								
115.2								
115.6								
116.0								
116.4								
116.8								
117.2								
117.6								
118.0								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
118.4								
118.8								
119.2								
119.6								
120.0								
120.4								
120.8								
121.2								
121.6								
122.0								
122.4								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190



Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
127.2									
127.6									
128.0									
128.4									
128.8									
129.2									
129.6									
130.0									
130.4									
130.8									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
131.2									
131.6									
132.0									
132.4									
132.8									
133.2									
133.6									
134.0									
134.4									
134.8									
135.2									

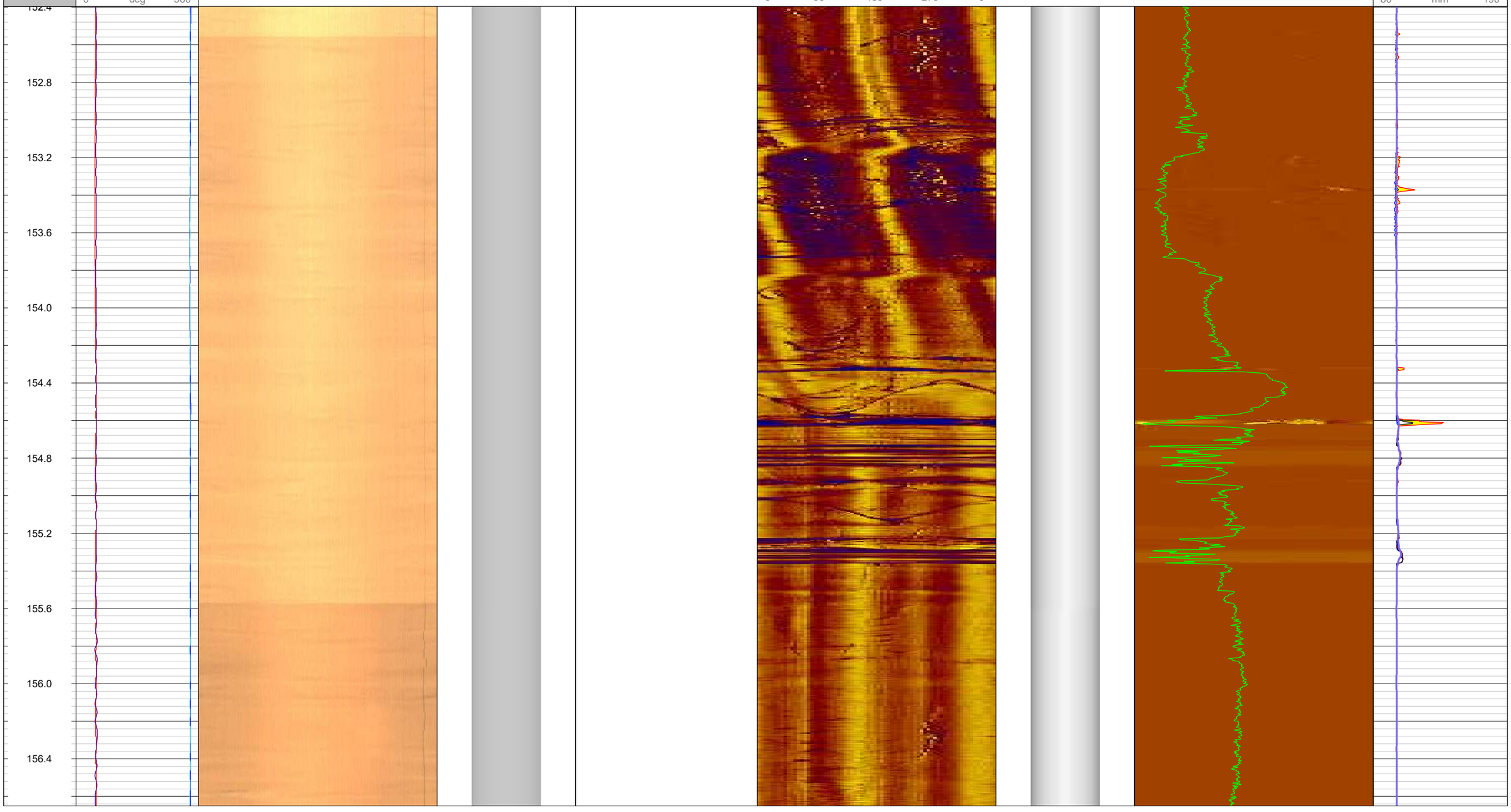
Depth	Orientation	Acoustic and Optical Televiewer Analysis								Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution			Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m										
135.6										
136.0										
136.4										
136.8										
137.2										
137.6										
138.0										
138.4										
138.8										
139.2										
139.6										

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
140.0									
140.4									
140.8									
141.2									
141.6									
142.0									
142.4									
142.8									
143.2									
143.6									

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
144.0								
144.4								
144.8								
145.2								
145.6								
146.0								
146.4								
146.8								
147.2								
147.6								
148.0								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
148.4								
148.8								
149.2								
149.6								
150.0								
150.4								
150.8								
151.2								
151.6								
152.0								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								



Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
156.8									
157.2									
157.6									
158.0									
158.4									
158.8									
159.2									
159.6									
160.0									
160.4									
160.8									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
161.2									
161.6									
162.0									
162.4									
162.8									
163.2									
163.6									
164.0									
164.4									
164.8									

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
165.2								
165.6								
166.0								
166.4								
166.8								
167.2								
167.6								
168.0								
168.4								
168.8								
169.2								

Depth	Orientation	Acoustic and Optical Televiewer Analysis								Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution			Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m										
169.6										
170.0										
170.4										
170.8										
171.2										
171.6										
172.0										
172.4										
172.8										
173.2										
173.6										

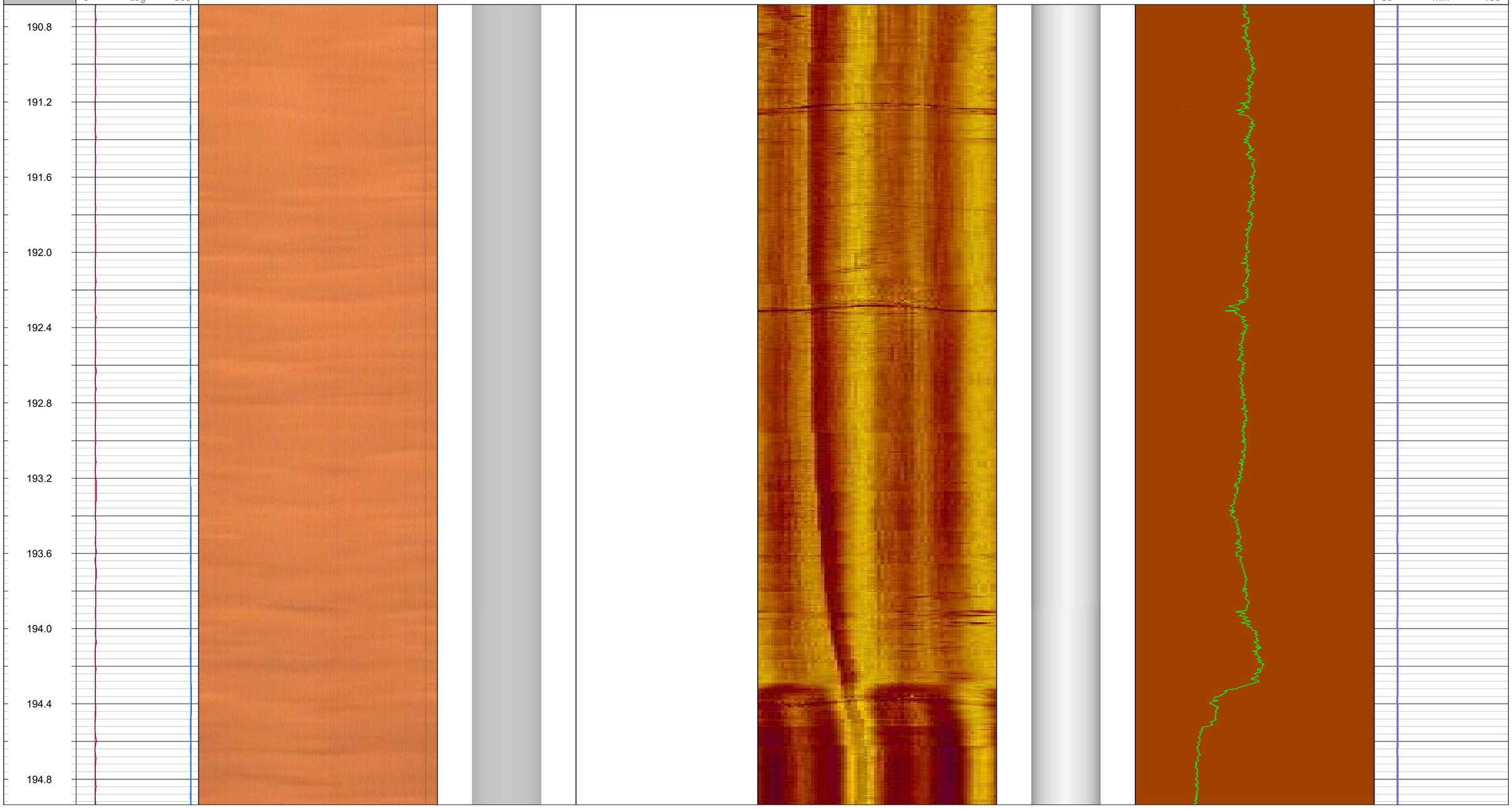
Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
174.0								
174.4								
174.8								
175.2								
175.6								
176.0								
176.4								
176.8								
177.2								
177.6								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
178.0								
178.4								
178.8								
179.2								
179.6								
180.0								
180.4								
180.8								
181.2								
181.6								
182.0								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
182.4								
182.8								
183.2								
183.6								
184.0								
184.4								
184.8								
185.2								
185.6								
186.0								
186.4								

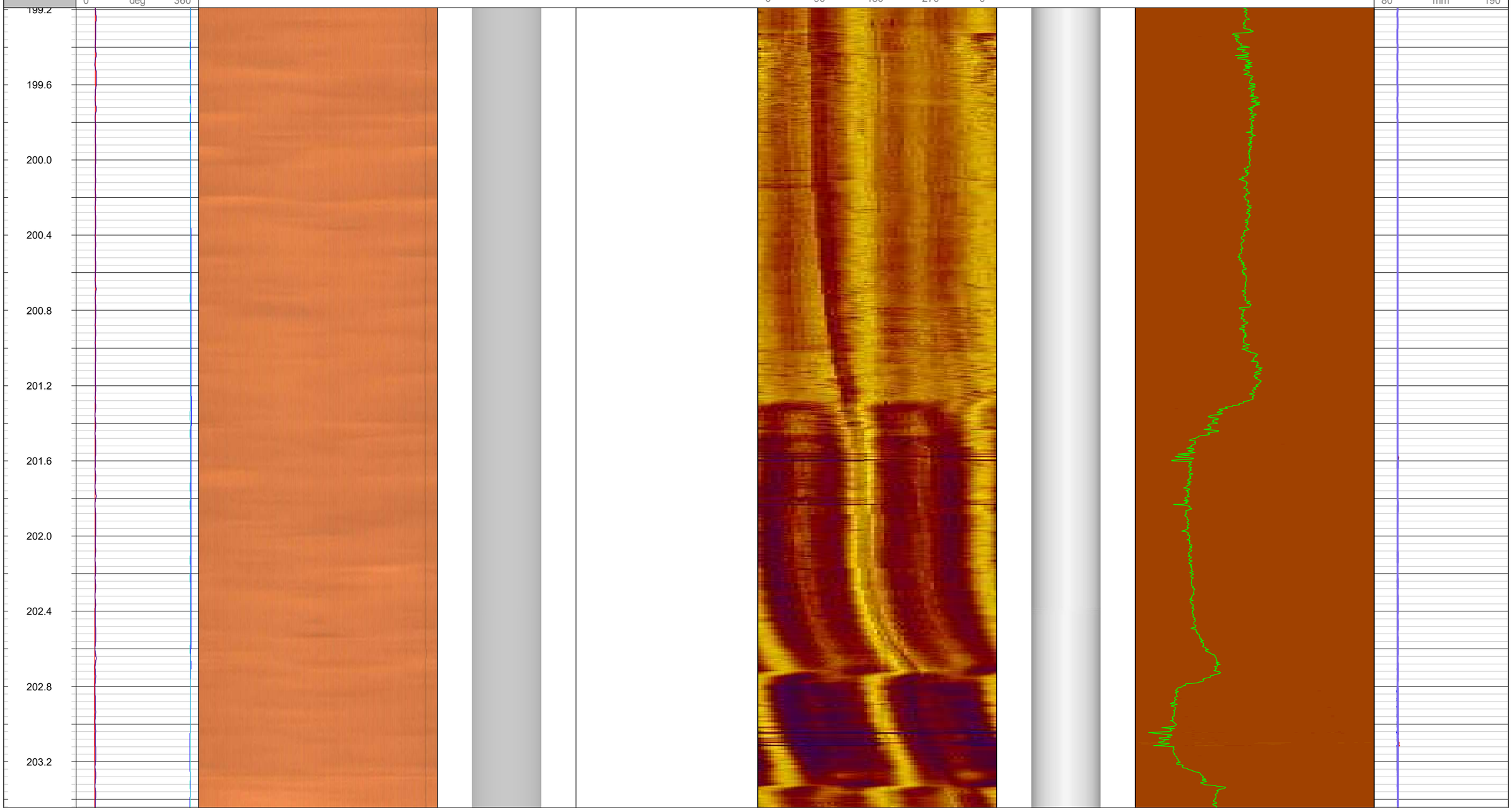
Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
186.8								
187.2								
187.6								
188.0								
188.4								
188.8								
189.2								
189.6								
190.0								
190.4								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190



Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
195.2								
195.6								
196.0								
196.4								
196.8								
197.2								
197.6								
198.0								
198.4								
198.8								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								



Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
203.6								
204.0								
204.4								
204.8								
205.2								
205.6								
206.0								
206.4								
206.8								
207.2								
207.6								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
208.0									
208.4									
208.8									
209.2									
209.6									
210.0									
210.4									
210.8									
211.2									
211.6									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
212.0									
212.4									
212.8									
213.2									
213.6									
214.0									
214.4									
214.8									
215.2									
215.6									
216.0									

Depth

1m:20m

Orientation

Tilt (ATV)
0 deg 90
Azimuth (ATV)
0 deg 360
Tilt (OTV)
0 deg 90
Azimuth (OTV)
0 deg 360

Acoustic and Optical Televiewer Analysis

Image-HS - Zone of Interest
0° 90° 180° 270° 0°
Image-HS - Low Resolution
0° 90° 180° 270° 0°

3D Image Log
-0°

Amplitude-HS - Zone of Interest
0° 90° 180° 270° 0°

Amplitude-HS Normalized - Zone of Interest
0 9000
0° 90° 180° 270° 0°
Amplitude-HS Normalized - Low Resolution
0 12000
0° 90° 180° 270° 0°

3D Acoustic Log
-0°

Reflective Index
0 12000
Centralized TT - Zone of Interest
Centralized TT - Low Resolution

Caliper

Caliper - min from TT
80 mm 190
Caliper - max from TT
80 mm 190
Caliper - ave from TT
80 mm 190
3-Arm Caliper
80 mm 190

216.4
216.8
217.2
217.6
218.0
218.4
218.8
219.2
219.6
220.0
220.4

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
220.8									
221.2									
221.6									
222.0									
222.4									
222.8									
223.2									
223.6									
224.0									
224.4									

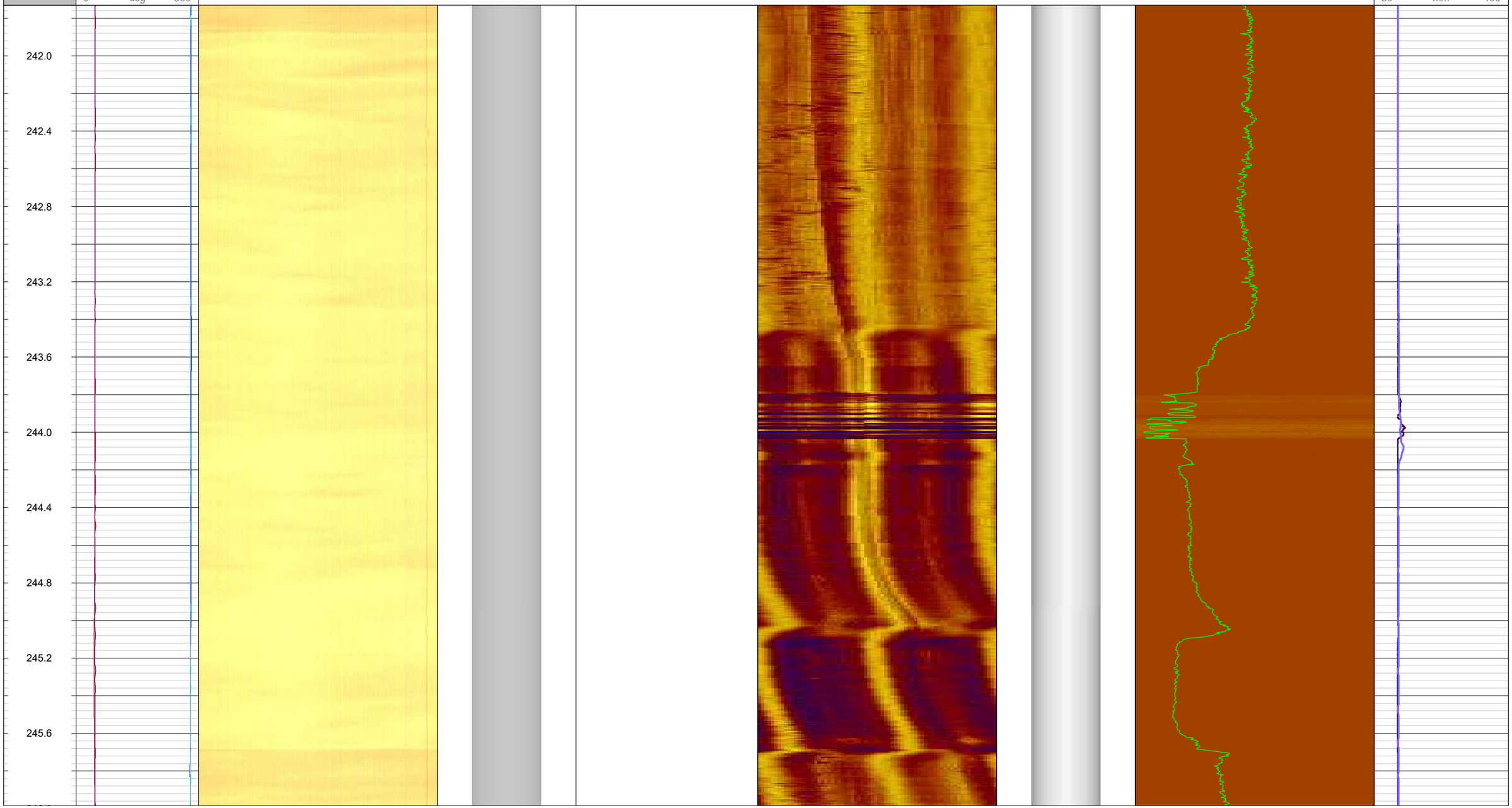
Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
224.8									
225.2									
225.6									
226.0									
226.4									
226.8									
227.2									
227.6									
228.0									
228.4									
228.8									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
229.2								
229.6								
230.0								
230.4								
230.8								
231.2								
231.6								
232.0								
232.4								
232.8								
233.2								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
233.6								
234.0								
234.4								
234.8								
235.2								
235.6								
236.0								
236.4								
236.8								
237.2								

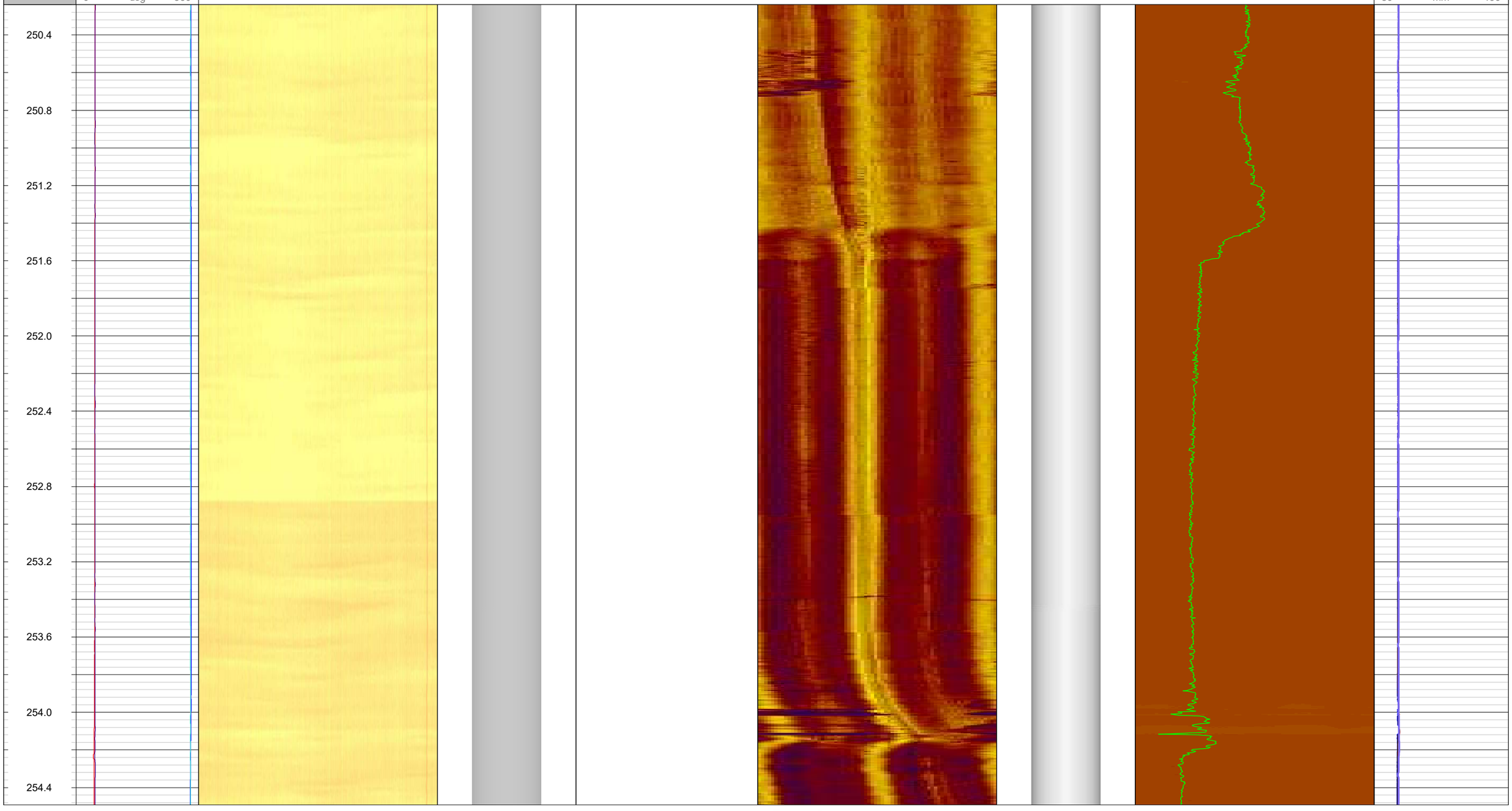
Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
237.6									
238.0									
238.4									
238.8									
239.2									
239.6									
240.0									
240.4									
240.8									
241.2									
241.6									

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190



Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
246.0								
246.4								
246.8								
247.2								
247.6								
248.0								
248.4								
248.8								
249.2								
249.6								
250.0								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190



Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
254.8								
255.2								
255.6								
256.0								
256.4								
256.8								
257.2								
257.6								
258.0								
258.4								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
258.8								
259.2								
259.6								
260.0								
260.4								
260.8								
261.2								
261.6								
262.0								
262.4								
262.8								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
263.2									
263.6									
264.0									
264.4									
264.8									
265.2									
265.6									
266.0									
266.4									
266.8									
267.2									

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
267.6								
268.0								
268.4								
268.8								
269.2								
269.6								
270.0								
270.4								
270.8								
271.2								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
271.6								
272.0								
272.4								
272.8								
273.2								
273.6								
274.0								
274.4								
274.8								
275.2								
275.6								

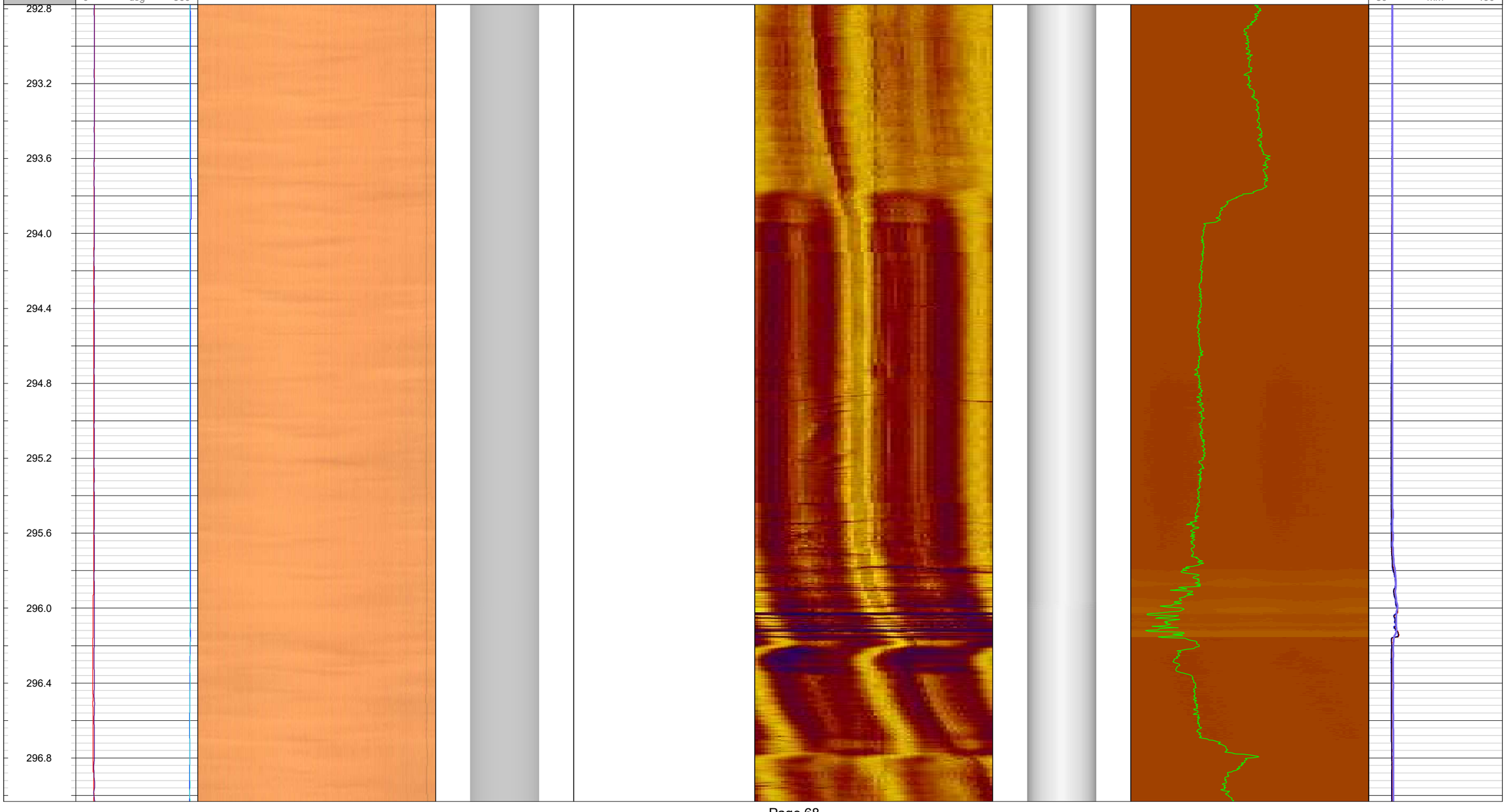
Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
276.0								
276.4								
276.8								
277.2								
277.6								
278.0								
278.4								
278.8								
279.2								
279.6								
280.0								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
280.4								
280.8								
281.2								
281.6								
282.0								
282.4								
282.8								
283.2								
283.6								
284.0								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
284.4								
284.8								
285.2								
285.6								
286.0								
286.4								
286.8								
287.2								
287.6								
288.0								
288.4								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
288.8								
289.2								
289.6								
290.0								
290.4								
290.8								
291.2								
291.6								
292.0								
292.4								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								



Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
297.2								
297.6								
298.0								
298.4								
298.8								
299.2								
299.6								
300.0								
300.4								
300.8								
301.2								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
301.6									
302.0									
302.4									
302.8									
303.2									
303.6									
304.0									
304.4									
304.8									
305.2									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
305.6								
306.0								
306.4								
306.8								
307.2								
307.6								
308.0								
308.4								
308.8								
309.2								
309.6								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
310.0								
310.4								
310.8								
311.2								
311.6								
312.0								
312.4								
312.8								
313.2								
313.6								
314.0								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
314.4								
314.8								
315.2								
315.6								
316.0								
316.4								
316.8								
317.2								
317.6								
318.0								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
318.4									
318.8									
319.2									
319.6									
320.0									
320.4									
320.8									
321.2									
321.6									
322.0									
322.4									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
322.8									
323.2									
323.6									
324.0									
324.4									
324.8									
325.2									
325.6									
326.0									
326.4									
326.8									

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
327.2								
327.6								
328.0								
328.4								
328.8								
329.2								
329.6								
330.0								
330.4								
330.8								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
331.2									
331.6									
332.0									
332.4									
332.8									
333.2									
333.6									
334.0									
334.4									
334.8									
335.2									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
335.6									
336.0									
336.4									
336.8									
337.2									
337.6									
338.0									
338.4									
338.8									
339.2									

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
339.6								
340.0								
340.4								
340.8								
341.2								
341.6								
342.0								
342.4								
342.8								
343.2								
343.6								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
344.0								
344.4								
344.8								
345.2								
345.6								
346.0								
346.4								
346.8								
347.2								
347.6								
348.0								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
348.4								
348.8								
349.2								
349.6								
350.0								
350.4								
350.8								
351.2								
351.6								
352.0								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
352.4									
352.8									
353.2									
353.6									
354.0									
354.4									
354.8									
355.2									
355.6									
356.0									
356.4									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
356.8									
357.2									
357.6									
358.0									
358.4									
358.8									
359.2									
359.6									
360.0									
360.4									
360.8									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
361.2									
361.6									
362.0									
362.4									
362.8									
363.2									
363.6									
364.0									
364.4									
364.8									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
365.2									
365.6									
366.0									
366.4									
366.8									
367.2									
367.6									
368.0									
368.4									
368.8									
369.2									

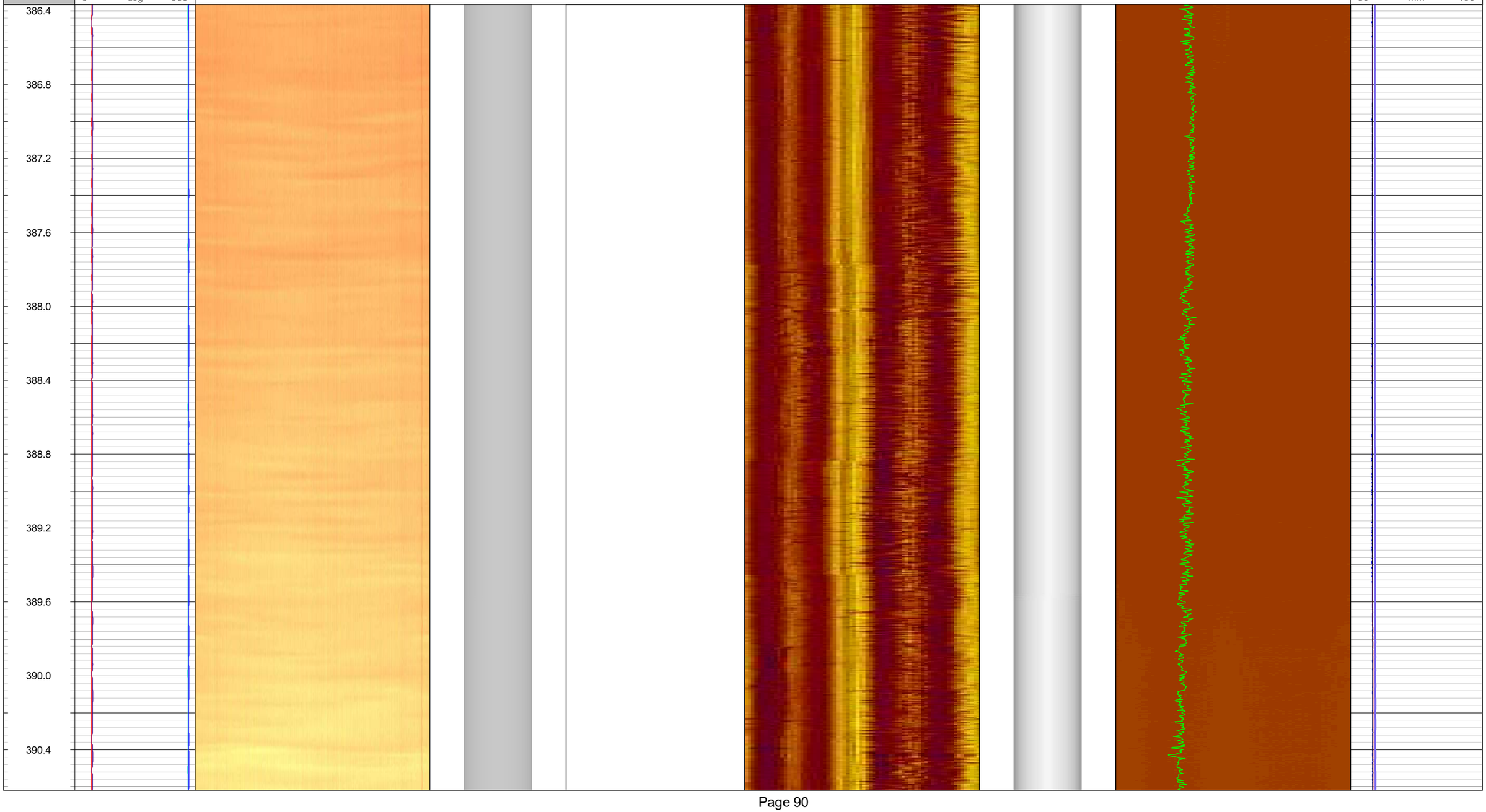
Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
369.6									
370.0									
370.4									
370.8									
371.2									
371.6									
372.0									
372.4									
372.8									
373.2									
373.6									

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
374.0								
374.4								
374.8								
375.2								
375.6								
376.0								
376.4								
376.8								
377.2								
377.6								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
378.0									
378.4									
378.8									
379.2									
379.6									
380.0									
380.4									
380.8									
381.2									
381.6									
382.0									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
382.4								
382.8								
383.2								
383.6								
384.0								
384.4								
384.8								
385.2								
385.6								
386.0								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								



Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
390.8									
391.2									
391.6									
392.0									
392.4									
392.8									
393.2									
393.6									
394.0									
394.4									
394.8									

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
395.2								
395.6								
396.0								
396.4								
396.8								
397.2								
397.6								
398.0								
398.4								
398.8								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
399.2									
399.6									
400.0									
400.4									
400.8									
401.2									
401.6									
402.0									
402.4									
402.8									
403.2									

Depth	Orientation	Acoustic and Optical Televiewer Analysis								Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution			Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m										
403.6										
404.0										
404.4										
404.8										
405.2										
405.6										
406.0										
406.4										
406.8										
407.2										
407.6										

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
408.0									
408.4									
408.8									
409.2									
409.6									
410.0									
410.4									
410.8									
411.2									
411.6									

Depth	Orientation	Acoustic and Optical Televiewer Analysis								Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution			Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m										
412.0										
412.4										
412.8										
413.2										
413.6										
414.0										
414.4										
414.8										
415.2										
415.6										
416.0										

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
416.4								
416.8								
417.2								
417.6								
418.0								
418.4								
418.8								
419.2								
419.6								
420.0								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
420.4								
420.8								
421.2								
421.6								
422.0								
422.4								
422.8								
423.2								
423.6								
424.0								
424.4								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
424.8								
425.2								
425.6								
426.0								
426.4								
426.8								
427.2								
427.6								
428.0								
428.4								
428.8								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
429.2								
429.6								
430.0								
430.4								
430.8								
431.2								
431.6								
432.0								
432.4								
432.8								

Depth

1m:20m

Orientation

Tilt (ATV)
0 deg 90
Azimuth (ATV)
0 deg 360
Tilt (OTV)
0 deg 90
Azimuth (OTV)
0 deg 360

Acoustic and Optical Televiewer Analysis

Image-HS - Zone of Interest
0° 90° 180° 270° 0°
Image-HS - Low Resolution
0° 90° 180° 270° 0°

3D Image Log
-0°

Amplitude-HS - Zone of Interest
0° 90° 180° 270° 0°

Amplitude-HS Normalized - Zone of Interest
0 9000
0° 90° 180° 270° 0°
Amplitude-HS Normalized - Low Resolution
0 12000
0° 90° 180° 270° 0°

3D Acoustic Log
-0°

Reflective Index
0 12000
Centralized TT - Zone of Interest
Centralized TT - Low Resolution

Caliper

Caliper - min from TT
80 mm 190
Caliper - max from TT
80 mm 190
Caliper - ave from TT
80 mm 190
3-Arm Caliper
80 mm 190

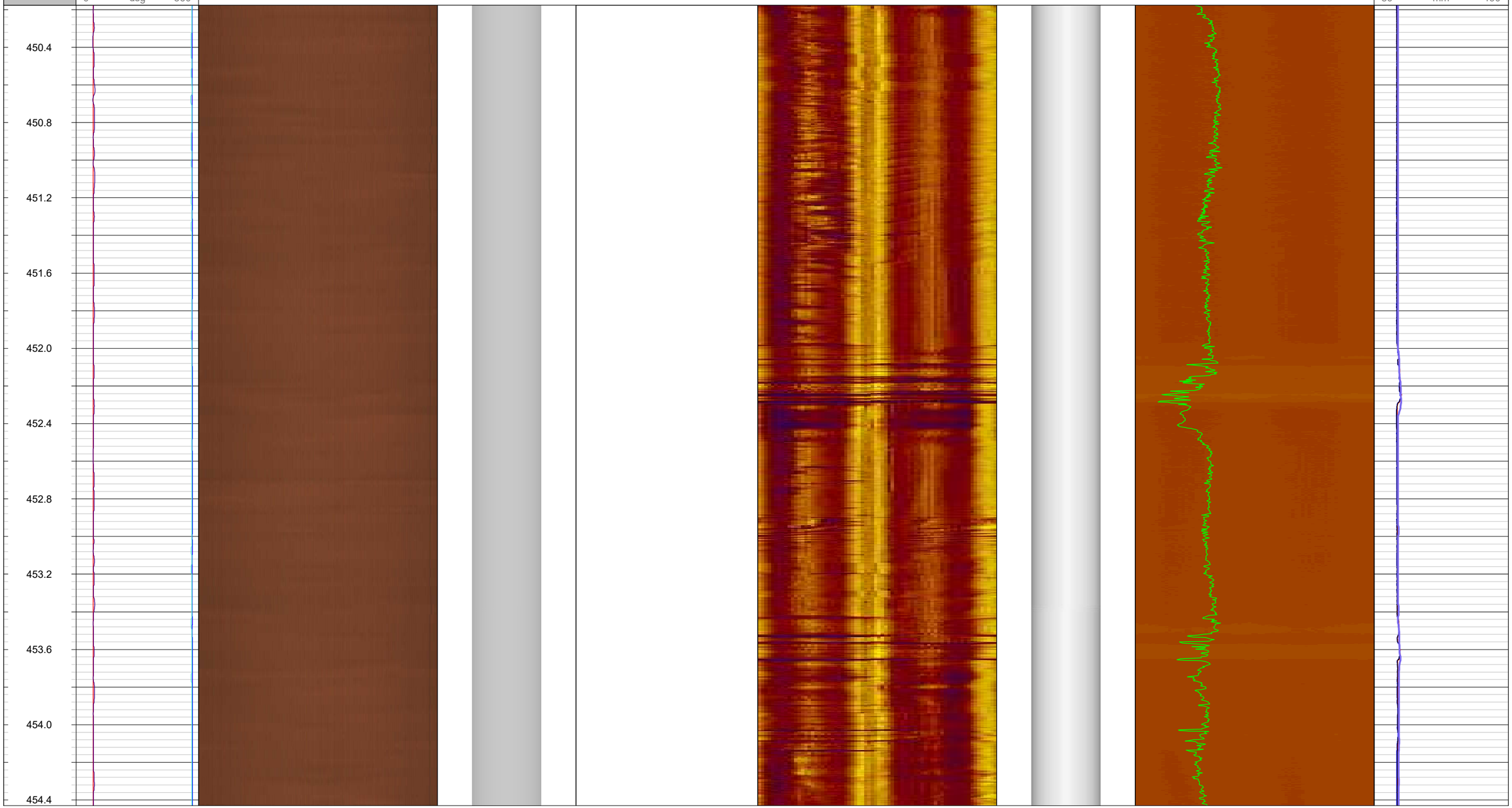
433.2
433.6
434.0
434.4
434.8
435.2
435.6
436.0
436.4
436.8
437.2

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
437.6									
438.0									
438.4									
438.8									
439.2									
439.6									
440.0									
440.4									
440.8									
441.2									
441.6									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
442.0									
442.4									
442.8									
443.2									
443.6									
444.0									
444.4									
444.8									
445.2									
445.6									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
446.0									
446.4									
446.8									
447.2									
447.6									
448.0									
448.4									
448.8									
449.2									
449.6									
450.0									

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190

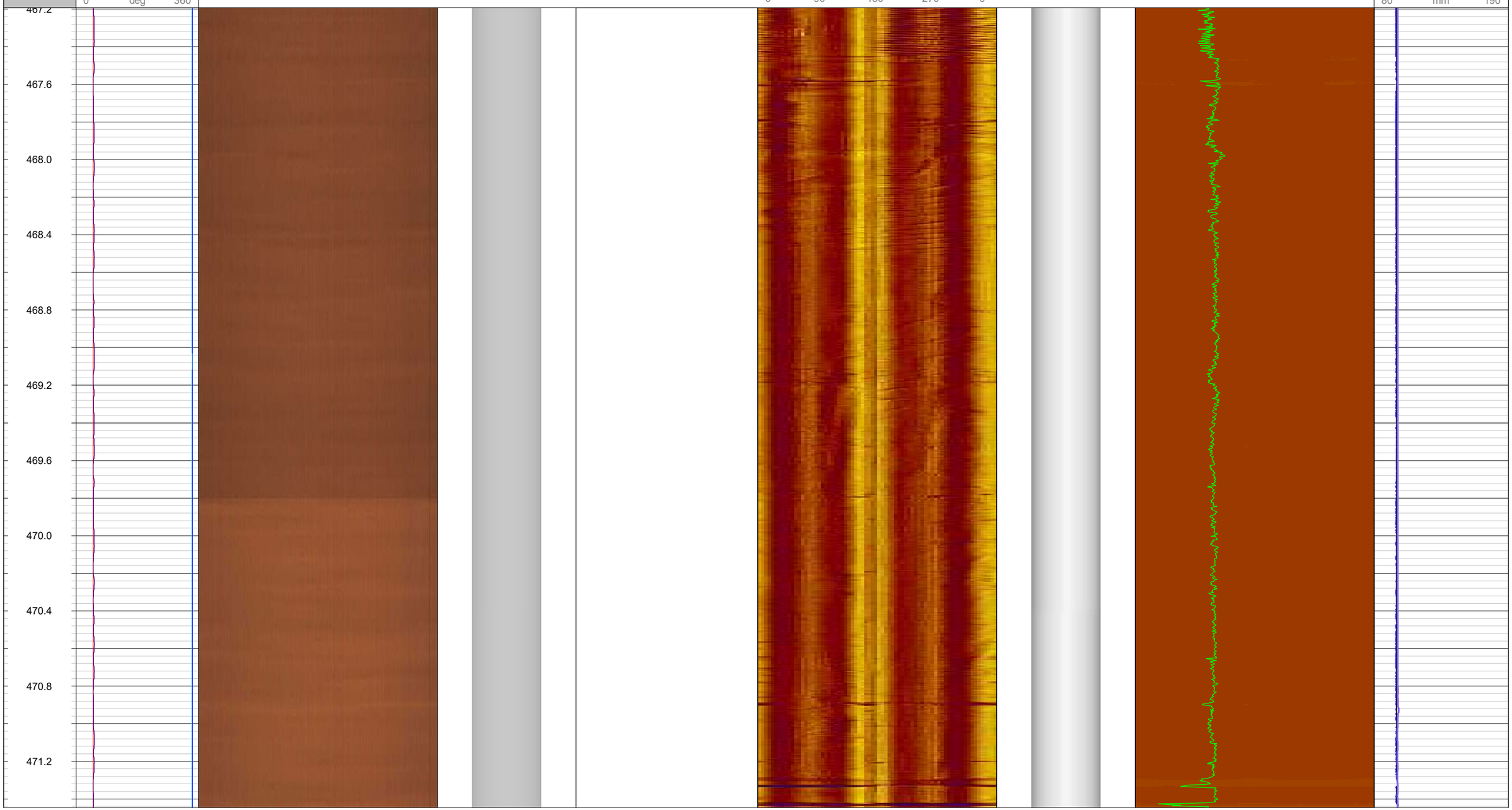


Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
454.8								
455.2								
455.6								
456.0								
456.4								
456.8								
457.2								
457.6								
458.0								
458.4								

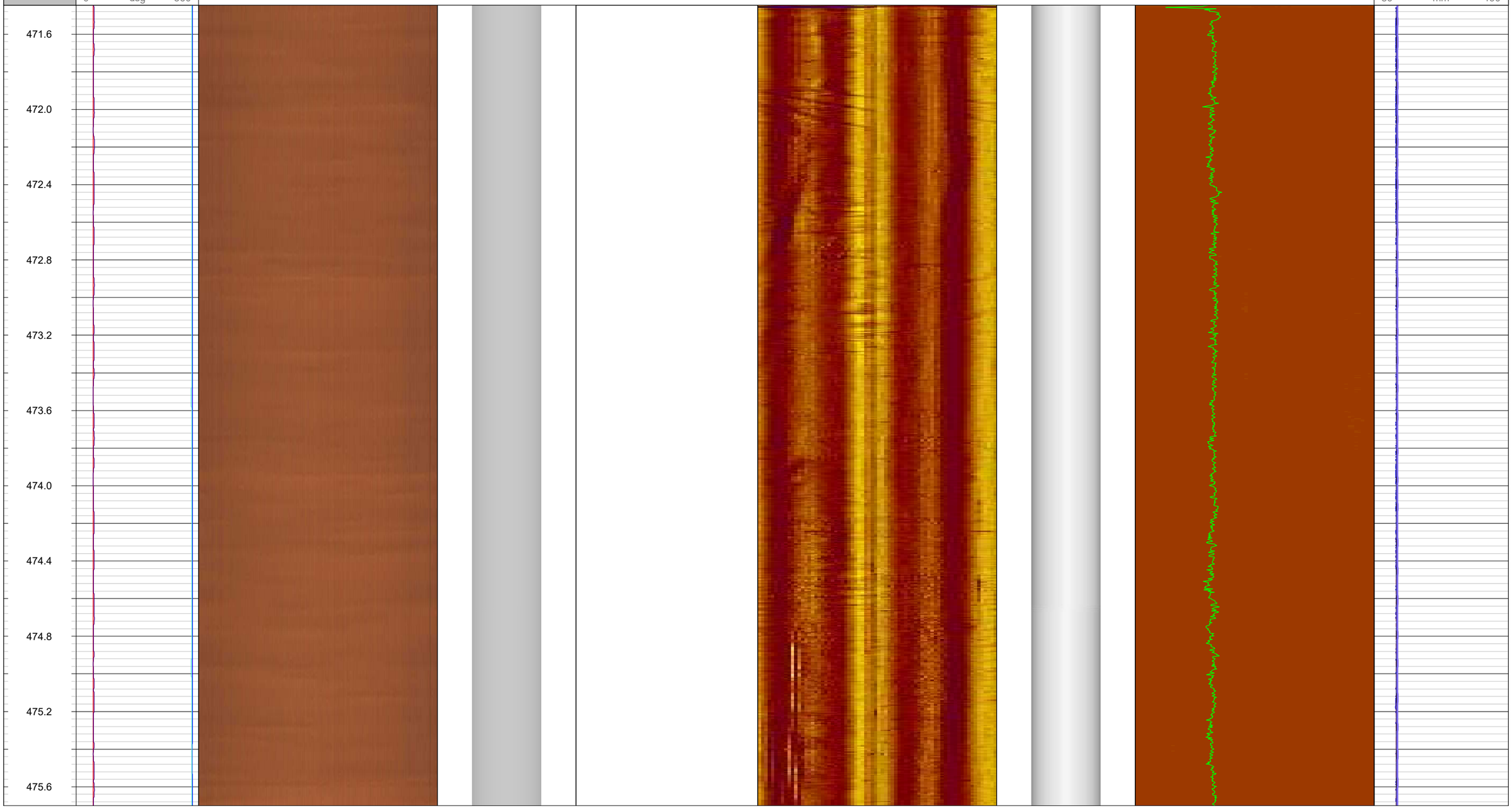
Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
458.8									
459.2									
459.6									
460.0									
460.4									
460.8									
461.2									
461.6									
462.0									
462.4									
462.8									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
463.2									
463.6									
464.0									
464.4									
464.8									
465.2									
465.6									
466.0									
466.4									
466.8									

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190



Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								



Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
476.0									
476.4									
476.8									
477.2									
477.6									
478.0									
478.4									
478.8									
479.2									
479.6									

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190

480.0
480.4
480.8
481.2
481.6
482.0
482.4
482.8
483.2
483.6
484.0

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
484.4									
484.8									
485.2									
485.6									
486.0									
486.4									
486.8									
487.2									
487.6									
488.0									
488.4									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
488.8									
489.2									
489.6									
490.0									
490.4									
490.8									
491.2									
491.6									
492.0									
492.4									

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
492.8								
493.2								
493.6								
494.0								
494.4								
494.8								
495.2								
495.6								
496.0								
496.4								
496.8								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
497.2								
497.6								
498.0								
498.4								
498.8								
499.2								
499.6								
500.0								
500.4								
500.8								
501.2								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
501.6									
502.0									
502.4									
502.8									
503.2									
503.6									
504.0									
504.4									
504.8									
505.2									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
505.6									
506.0									
506.4									
506.8									
507.2									
507.6									
508.0									
508.4									
508.8									
509.2									
509.6									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
510.0									
510.4									
510.8									
511.2									
511.6									
512.0									
512.4									
512.8									
513.2									
513.6									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
514.0									
514.4									
514.8									
515.2									
515.6									
516.0									
516.4									
516.8									
517.2									
517.6									
518.0									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
518.4									
518.8									
519.2									
519.6									
520.0									
520.4									
520.8									
521.2									
521.6									
522.0									
522.4									

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190

522.8
523.2
523.6
524.0
524.4
524.8
525.2
525.6
526.0
526.4

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
526.8									
527.2									
527.6									
528.0									
528.4									
528.8									
529.2									
529.6									
530.0									
530.4									
530.8									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
531.2									
531.6									
532.0									
532.4									
532.8									
533.2									
533.6									
534.0									
534.4									
534.8									
535.2									

Depth	Orientation	Acoustic and Optical Televiewer Analysis								Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution			Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m										
535.6										
536.0										
536.4										
536.8										
537.2										
537.6										
538.0										
538.4										
538.8										
539.2										

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
539.6									
540.0									
540.4									
540.8									
541.2									
541.6									
542.0									
542.4									
542.8									
543.2									
543.6									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
544.0									
544.4									
544.8									
545.2									
545.6									
546.0									
546.4									
546.8									
547.2									
547.6									
548.0									

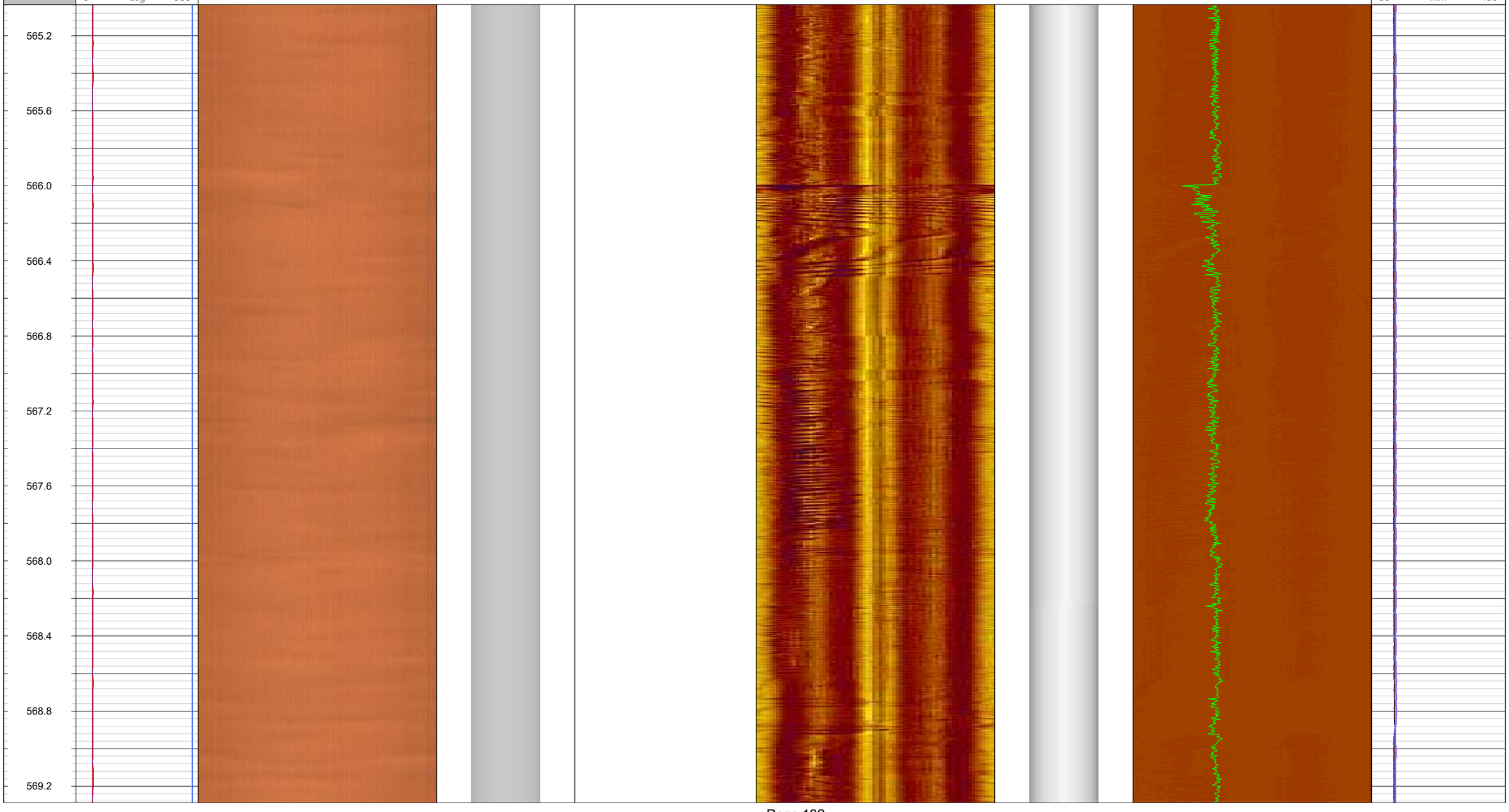
Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
548.4								
548.8								
549.2								
549.6								
550.0								
550.4								
550.8								
551.2								
551.6								
552.0								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
552.4								
552.8								
553.2								
553.6								
554.0								
554.4								
554.8								
555.2								
555.6								
556.0								
556.4								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
556.8									
557.2									
557.6									
558.0									
558.4									
558.8									
559.2									
559.6									
560.0									
560.4									

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
560.8								
561.2								
561.6								
562.0								
562.4								
562.8								
563.2								
563.6								
564.0								
564.4								
564.8								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190



Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
569.6								
570.0								
570.4								
570.8								
571.2								
571.6								
572.0								
572.4								
572.8								
573.2								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190

573.6
574.0
574.4
574.8
575.2
575.6
576.0
576.4
576.8
577.2
577.6

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
578.0									
578.4									
578.8									
579.2									
579.6									
580.0									
580.4									
580.8									
581.2									
581.6									
582.0									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
582.4									
582.8									
583.2									
583.6									
584.0									
584.4									
584.8									
585.2									
585.6									
586.0									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
586.4									
586.8									
587.2									
587.6									
588.0									
588.4									
588.8									
589.2									
589.6									
590.0									
590.4									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
590.8									
591.2									
591.6									
592.0									
592.4									
592.8									
593.2									
593.6									
594.0									
594.4									
594.8									

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
595.2								
595.6								
596.0								
596.4								
596.8								
597.2								
597.6								
598.0								
598.4								
598.8								

Depth	Orientation	Acoustic and Optical Televiewer Analysis								Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution			Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m										
599.2										
599.6										
600.0										
600.4										
600.8										
601.2										
601.6										
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602.4										
602.8										
603.2										

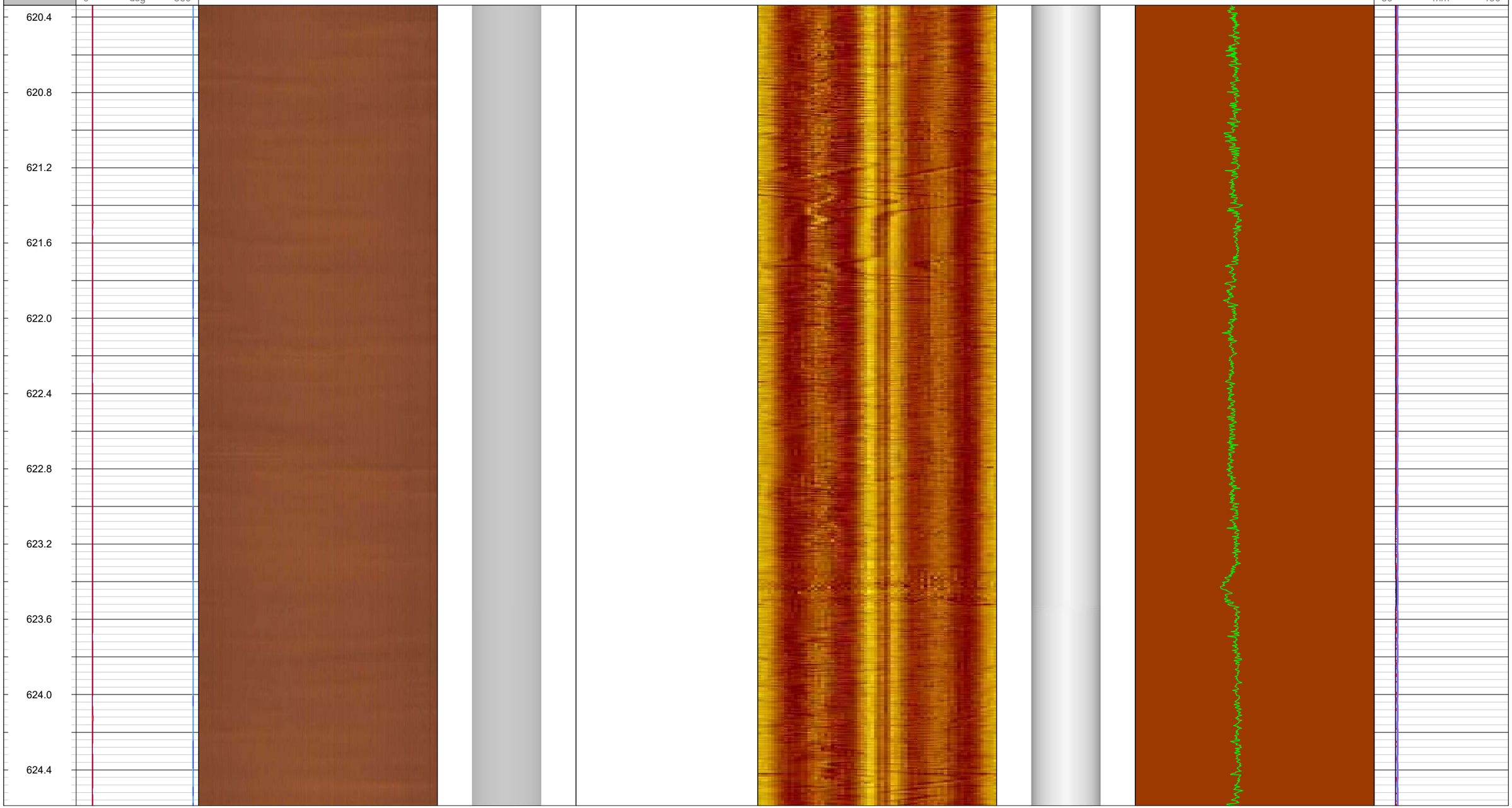
Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
603.6									
604.0									
604.4									
604.8									
605.2									
605.6									
606.0									
606.4									
606.8									
607.2									

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
607.6								
608.0								
608.4								
608.8								
609.2								
609.6								
610.0								
610.4								
610.8								
611.2								
611.6								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
612.0									
612.4									
612.8									
613.2									
613.6									
614.0									
614.4									
614.8									
615.2									
615.6									
616.0									

Depth	Orientation	Acoustic and Optical Televiewer Analysis								Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution			Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m										
616.4										
616.8										
617.2										
617.6										
618.0										
618.4										
618.8										
619.2										
619.6										
620.0										

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190



Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
624.8									
625.2									
625.6									
626.0									
626.4									
626.8									
627.2									
627.6									
628.0									
628.4									
628.8									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
629.2									
629.6									
630.0									
630.4									
630.8									
631.2									
631.6									
632.0									
632.4									
632.8									

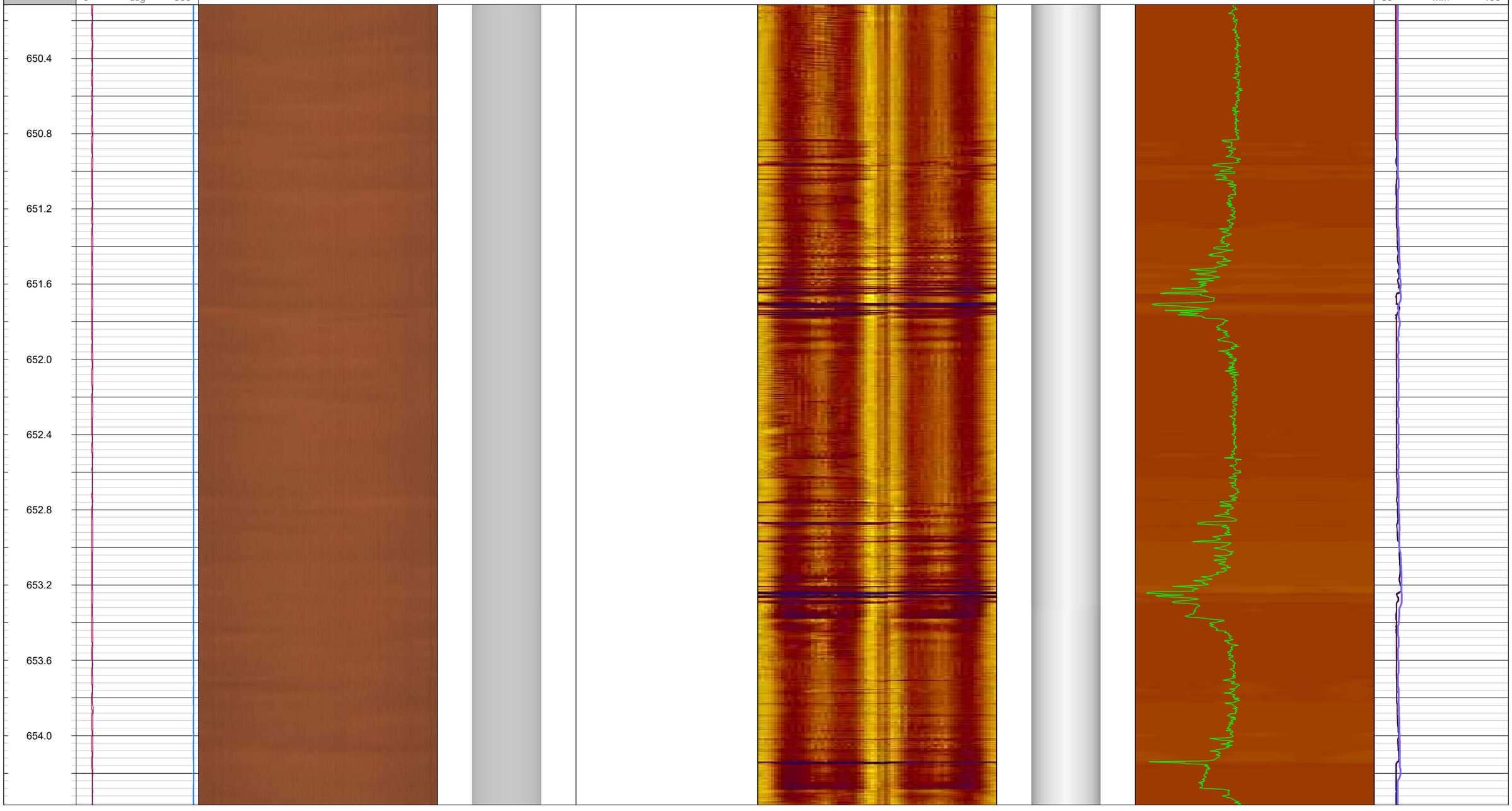
Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
633.2									
633.6									
634.0									
634.4									
634.8									
635.2									
635.6									
636.0									
636.4									
636.8									
637.2									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
637.6									
638.0									
638.4									
638.8									
639.2									
639.6									
640.0									
640.4									
640.8									
641.2									
641.6									

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
642.0								
642.4								
642.8								
643.2								
643.6								
644.0								
644.4								
644.8								
645.2								
645.6								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
646.0								
646.4								
646.8								
647.2								
647.6								
648.0								
648.4								
648.8								
649.2								
649.6								
650.0								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								



Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
654.4									
654.8									
655.2									
655.6									
656.0									
656.4									
656.8									
657.2									
657.6									
658.0									
658.4									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
658.8									
659.2									
659.6									
660.0									
660.4									
660.8									
661.2									
661.6									
662.0									
662.4									
662.8									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
663.2									
663.6									
664.0									
664.4									
664.8									
665.2									
665.6									
666.0									
666.4									
666.8									

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
667.2								
667.6								
668.0								
668.4								
668.8								
669.2								
669.6								
670.0								
670.4								
670.8								
671.2								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
671.6								
672.0								
672.4								
672.8								
673.2								
673.6								
674.0								
674.4								
674.8								
675.2								
675.6								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
676.0								
676.4								
676.8								
677.2								
677.6								
678.0								
678.4								
678.8								
679.2								
679.6								

Depth

1m:20m

Orientation

Tilt (ATV)
0 deg 90
Azimuth (ATV)
0 deg 360
Tilt (OTV)
0 deg 90
Azimuth (OTV)
0 deg 360

Acoustic and Optical Televiewer Analysis

Image-HS - Zone of Interest
0° 90° 180° 270° 0°
Image-HS - Low Resolution
0° 90° 180° 270° 0°

3D Image Log
-0°

Amplitude-HS - Zone of Interest
0° 90° 180° 270° 0°

Amplitude-HS Normalized - Zone of Interest
0 9000
0° 90° 180° 270° 0°
Amplitude-HS Normalized - Low Resolution
0 12000
0° 90° 180° 270° 0°

3D Acoustic Log
-0°

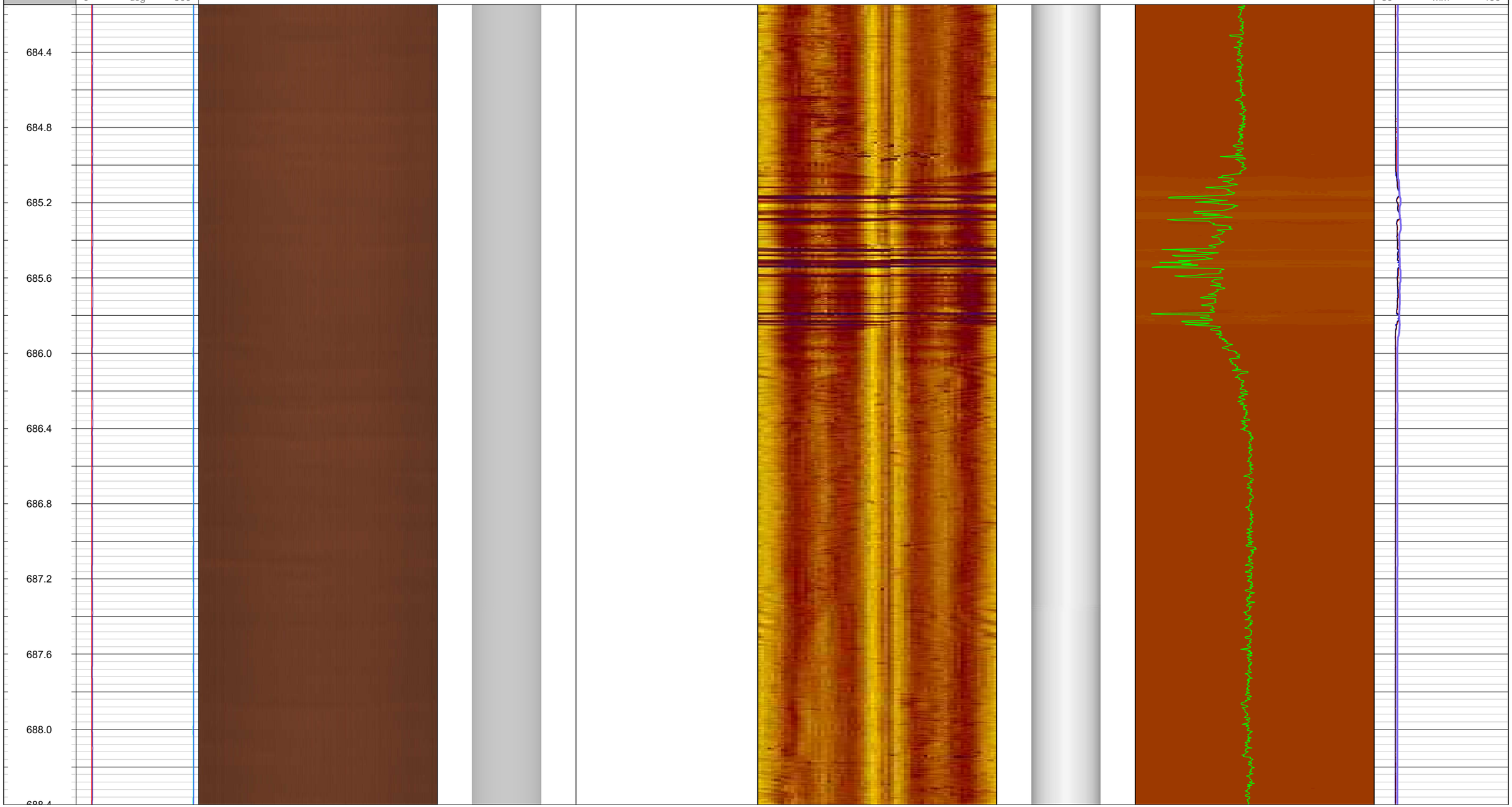
Reflective Index
0 12000
Centralized TT - Zone of Interest
Centralized TT - Low Resolution

Caliper

Caliper - min from TT
80 mm 190
Caliper - max from TT
80 mm 190
Caliper - ave from TT
80 mm 190
3-Arm Caliper
80 mm 190

680.0
680.4
680.8
681.2
681.6
682.0
682.4
682.8
683.2
683.6
684.0

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								



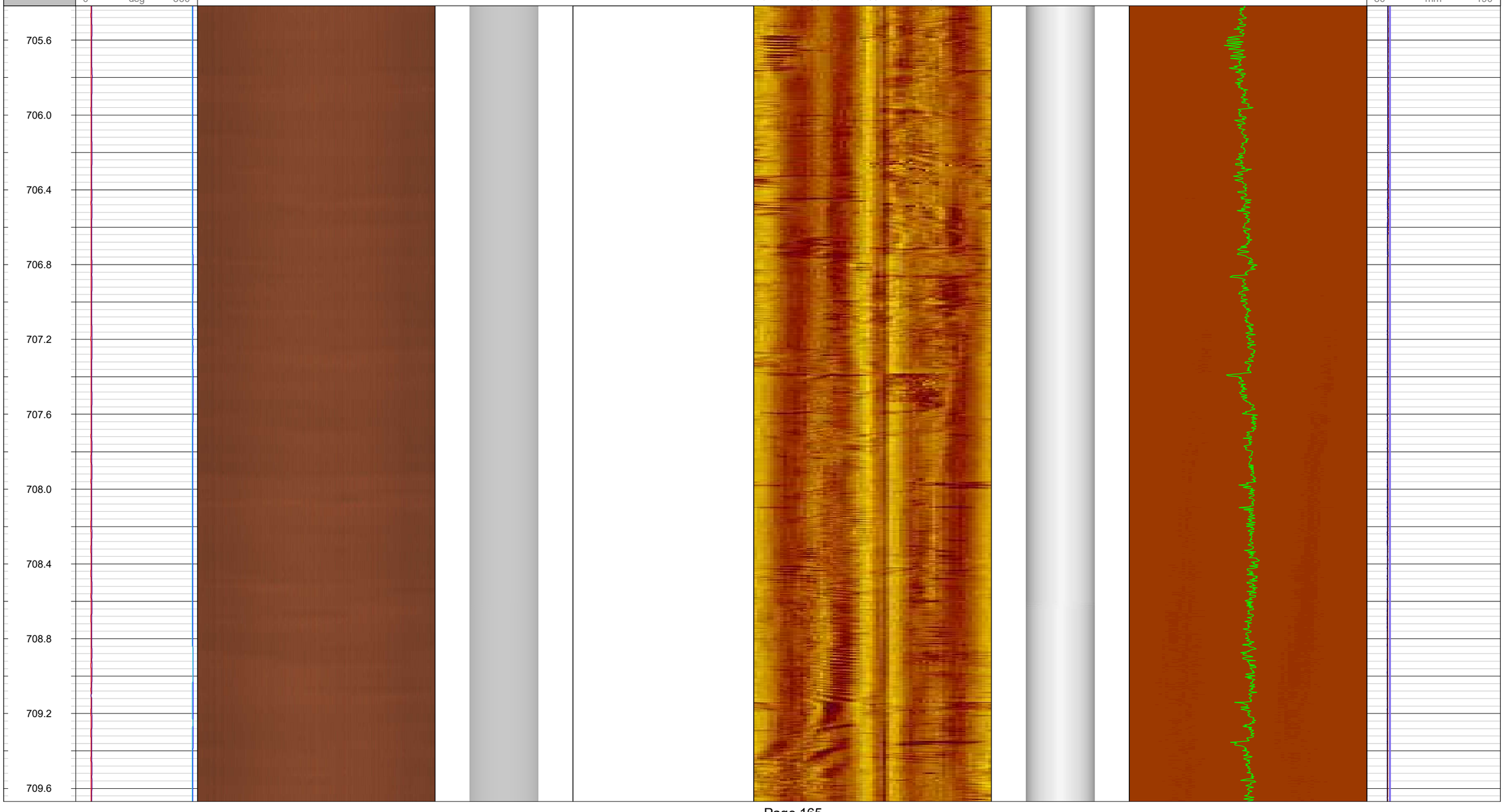
Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
688.4								
688.8								
689.2								
689.6								
690.0								
690.4								
690.8								
691.2								
691.6								
692.0								
692.4								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
692.8									
693.2									
693.6									
694.0									
694.4									
694.8									
695.2									
695.6									
696.0									
696.4									
696.8									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
697.2								
697.6								
698.0								
698.4								
698.8								
699.2								
699.6								
700.0								
700.4								
700.8								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
701.2								
701.6								
702.0								
702.4								
702.8								
703.2								
703.6								
704.0								
704.4								
704.8								
705.2								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								



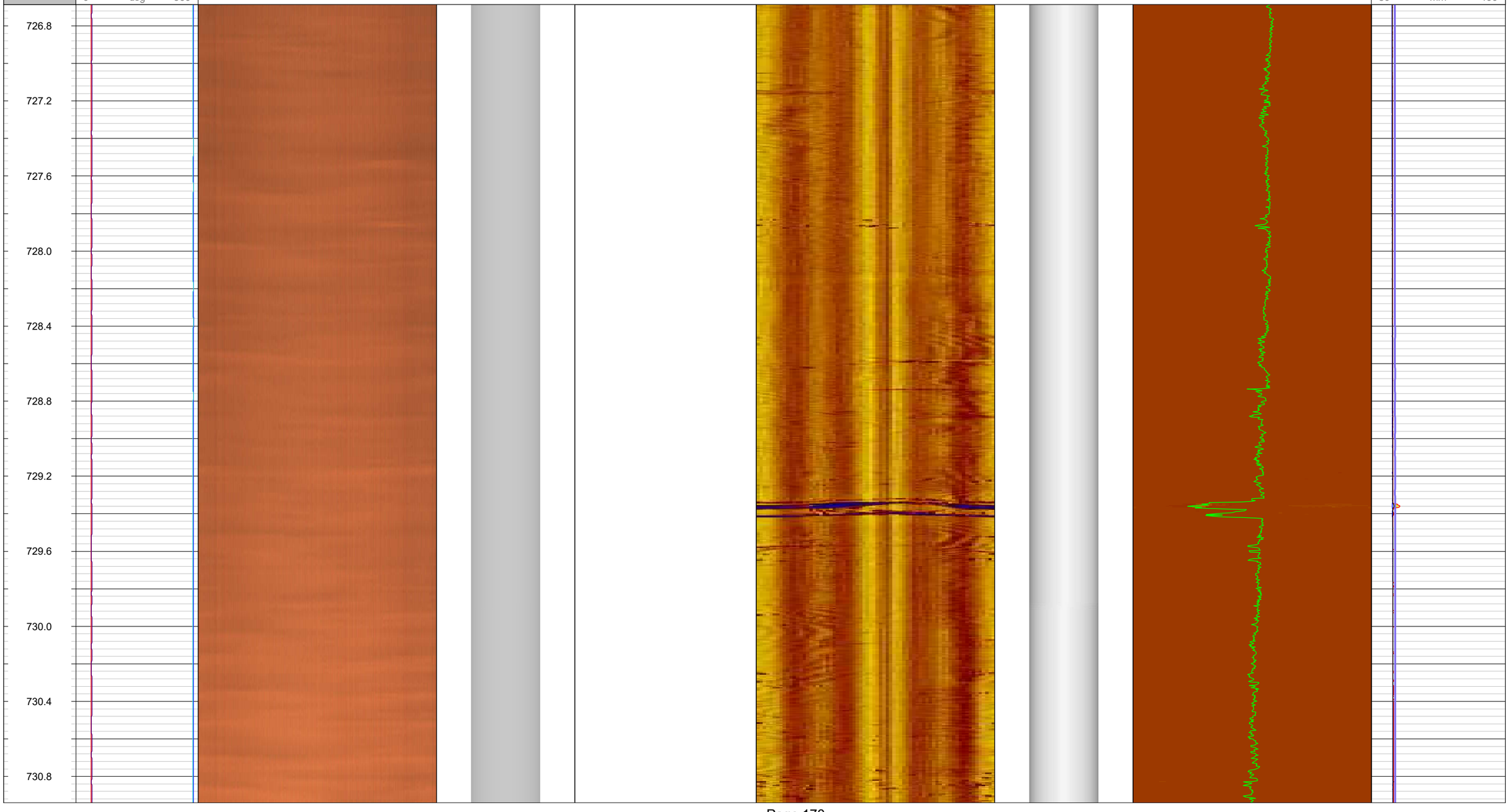
Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
710.0									
710.4									
710.8									
711.2									
711.6									
712.0									
712.4									
712.8									
713.2									
713.6									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
714.0									
714.4									
714.8									
715.2									
715.6									
716.0									
716.4									
716.8									
717.2									
717.6									
718.0									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
718.4									
718.8									
719.2									
719.6									
720.0									
720.4									
720.8									
721.2									
721.6									
722.0									
722.4									

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
722.8								
723.2								
723.6								
724.0								
724.4								
724.8								
725.2								
725.6								
726.0								
726.4								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								



Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
731.2								
731.6								
732.0								
732.4								
732.8								
733.2								
733.6								
734.0								
734.4								
734.8								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								

735.2
735.6
736.0
736.4
736.8
737.2
737.6
738.0
738.4
738.8
739.2

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
739.6								
740.0								
740.4								
740.8								
741.2								
741.6								
742.0								
742.4								
742.8								
743.2								
743.6								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
744.0									
744.4									
744.8									
745.2									
745.6									
746.0									
746.4									
746.8									
747.2									
747.6									

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
748.0								
748.4								
748.8								
749.2								
749.6								
750.0								
750.4								
750.8								
751.2								
751.6								
752.0								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
752.4								
752.8								
753.2								
753.6								
754.0								
754.4								
754.8								
755.2								
755.6								
756.0								
756.4								

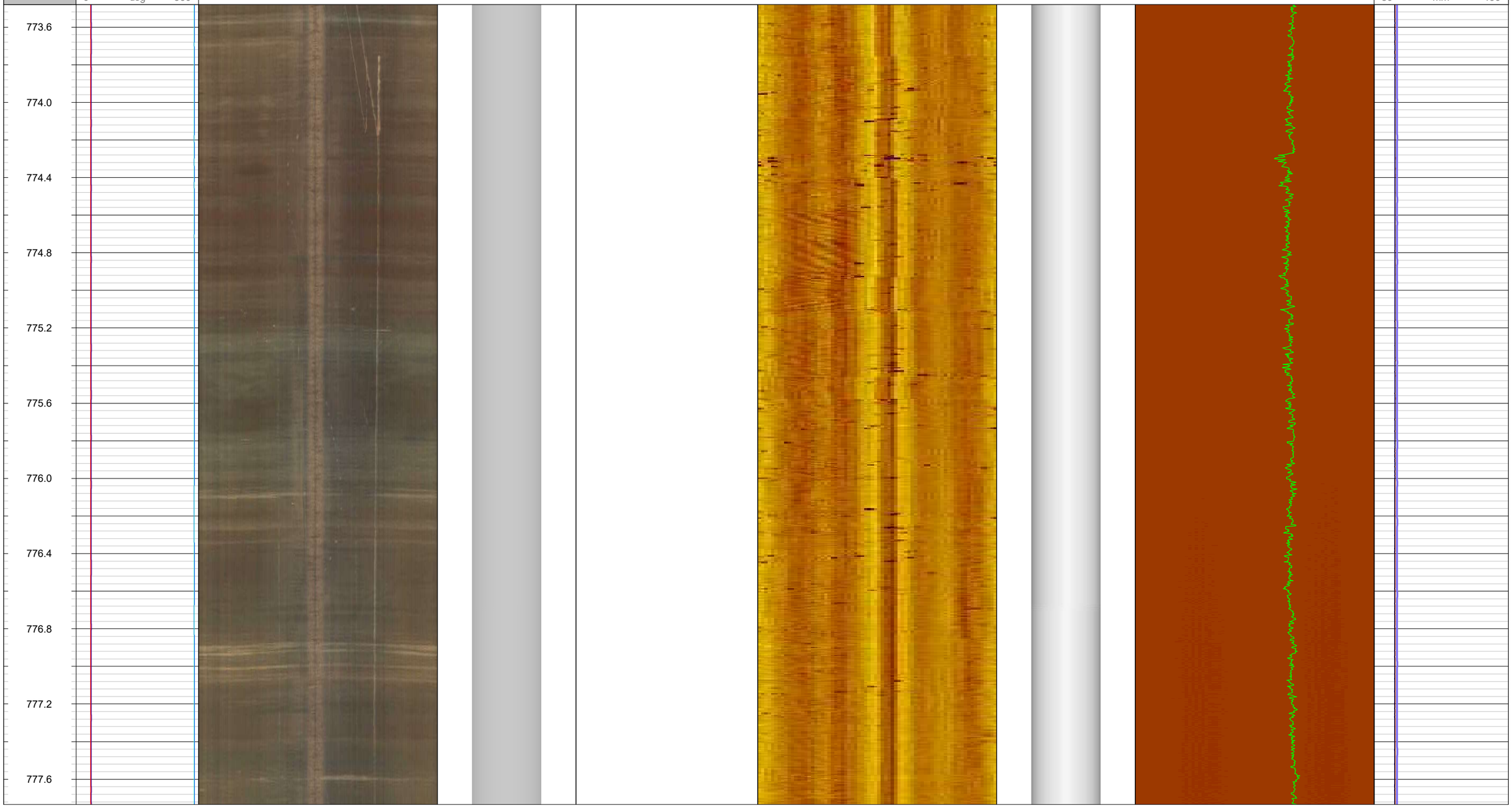
Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
756.8								
757.2								
757.6								
758.0								
758.4								
758.8								
759.2								
759.6								
760.0								
760.4								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
760.8								
761.2								
761.6								
762.0								
762.4								
762.8								
763.2								
763.6								
764.0								
764.4								
764.8								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
765.2								
765.6								
766.0								
766.4								
766.8								
767.2								
767.6								
768.0								
768.4								
768.8								
769.2								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
769.6								
770.0								
770.4								
770.8								
771.2								
771.6								
772.0								
772.4								
772.8								
773.2								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190



Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								



Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190

782.0
782.4
782.8
783.2
783.6
784.0
784.4
784.8
785.2
785.6
786.0

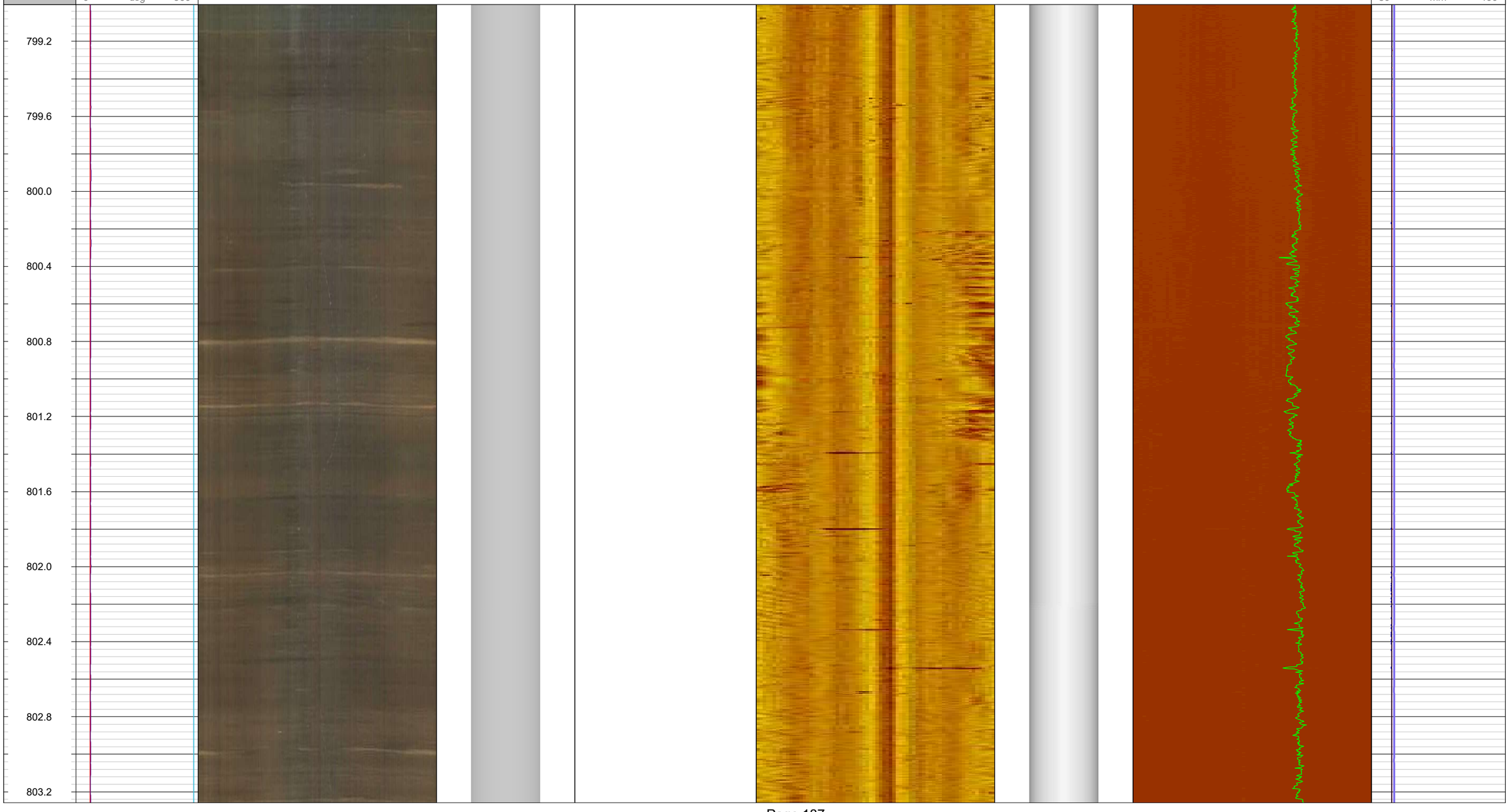
Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
786.4								
786.8								
787.2								
787.6								
788.0								
788.4								
788.8								
789.2								
789.6								
790.0								
790.4								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
790.8								
791.2								
791.6								
792.0								
792.4								
792.8								
793.2								
793.6								
794.0								
794.4								

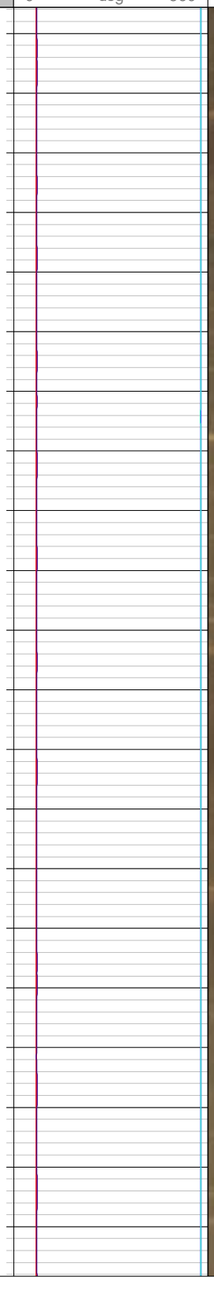
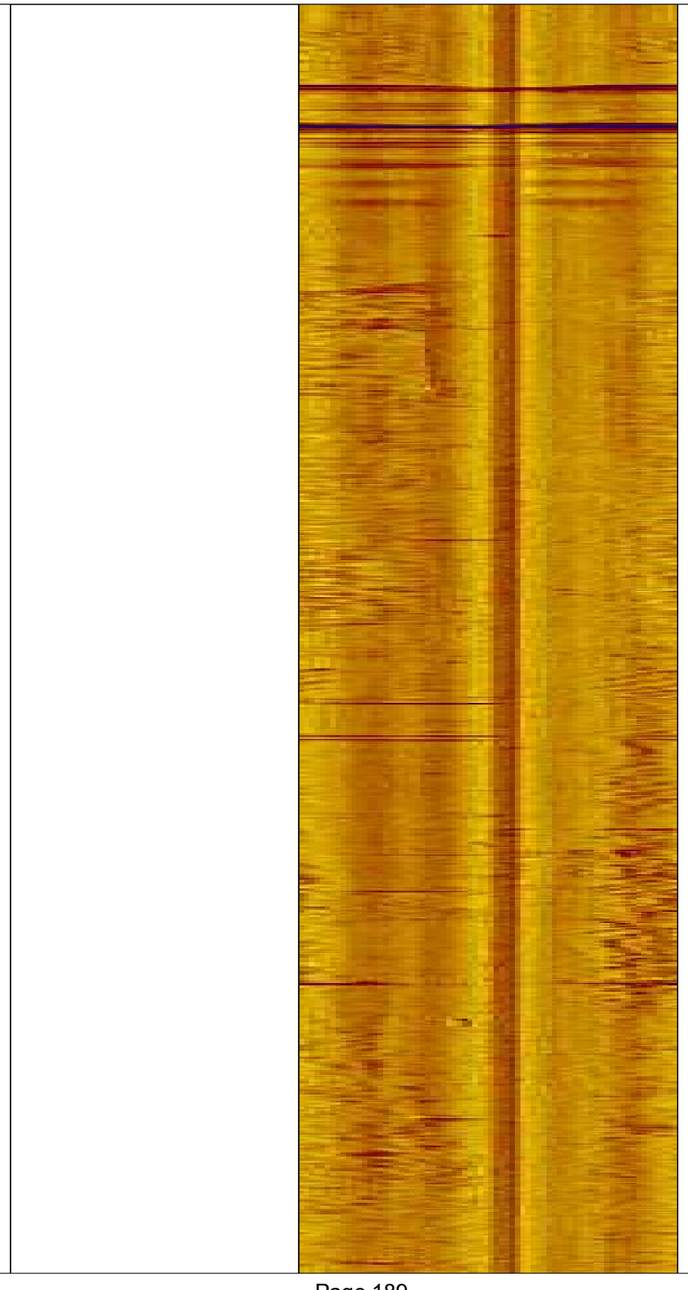
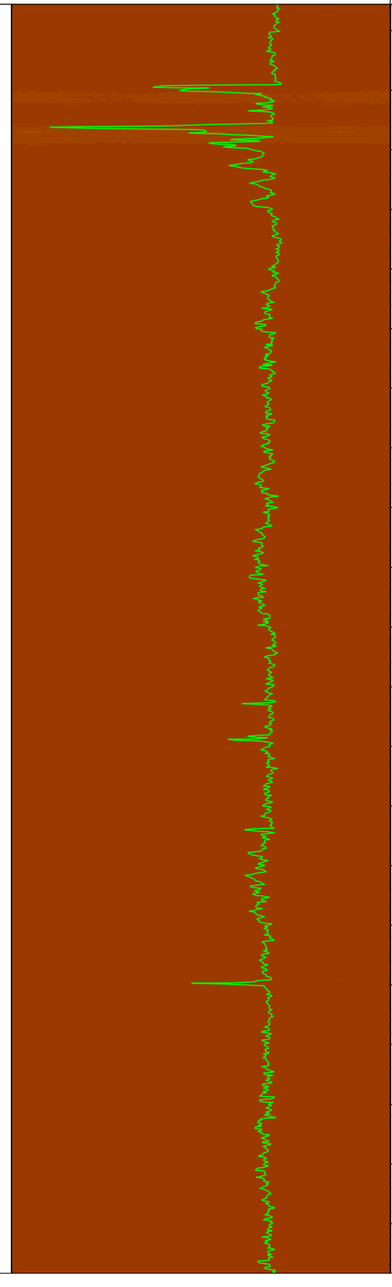
Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190



Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								



Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
803.6								
804.0								
804.4								
804.8								
805.2								
805.6								
806.0								
806.4								
806.8								
807.2								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
807.6								
808.0								
808.4								
808.8								
809.2								
809.6								
810.0								
810.4								
810.8								
811.2								
811.6								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
812.0								
812.4								
812.8								
813.2								
813.6								
814.0								
814.4								
814.8								
815.2								
815.6								
816.0								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
816.4								
816.8								
817.2								
817.6								
818.0								
818.4								
818.8								
819.2								
819.6								
820.0								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
820.4									
820.8									
821.2									
821.6									
822.0									
822.4									
822.8									
823.2									
823.6									
824.0									
824.4									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
824.8									
825.2									
825.6									
826.0									
826.4									
826.8									
827.2									
827.6									
828.0									
828.4									

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
828.8								
829.2								
829.6								
830.0								
830.4								
830.8								
831.2								
831.6								
832.0								
832.4								
832.8								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
833.2									
833.6									
834.0									
834.4									
834.8									
835.2									
835.6									
836.0									
836.4									
836.8									
837.2									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
837.6								
838.0								
838.4								
838.8								
839.2								
839.6								
840.0								
840.4								
840.8								
841.2								

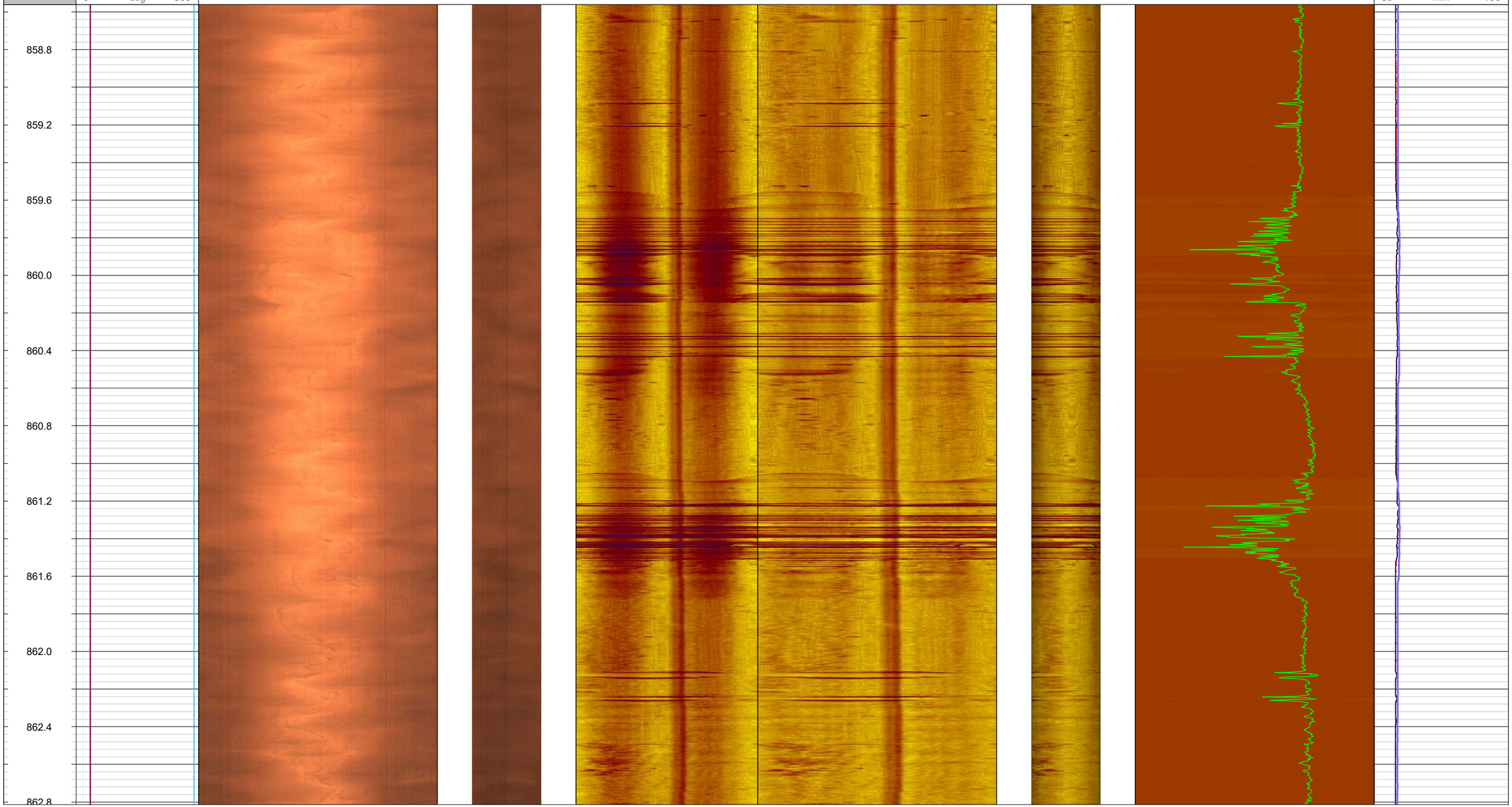
Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
841.6								
842.0								
842.4								
842.8								
843.2								
843.6								
844.0								
844.4								
844.8								
845.2								
845.6								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
846.0									
846.4									
846.8									
847.2									
847.6									
848.0									
848.4									
848.8									
849.2									
849.6									
850.0									

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
850.4									
850.8									
851.2									
851.6									
852.0									
852.4									
852.8									
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853.6									
854.0									

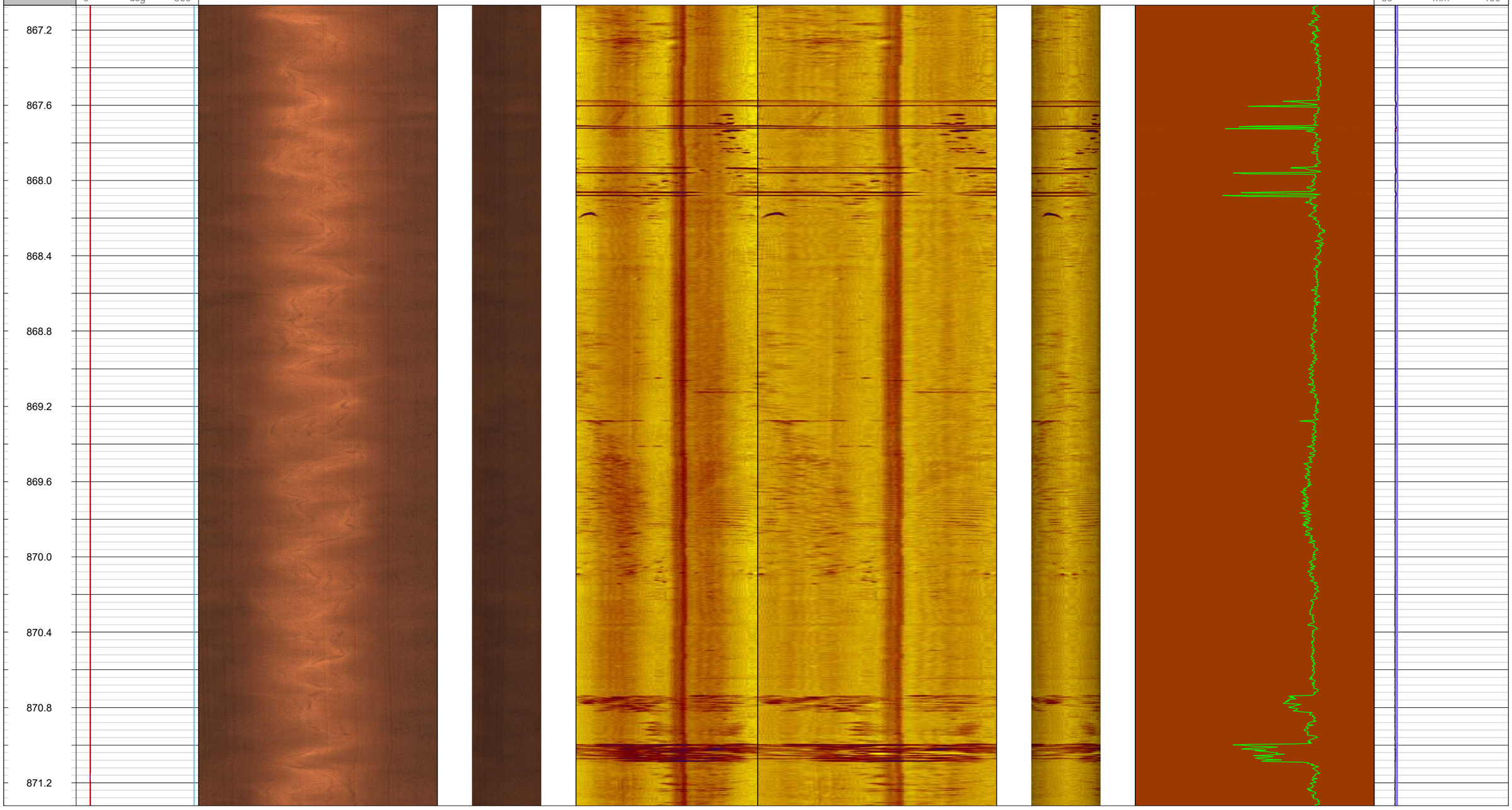
Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution		Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
854.4									
854.8									
855.2									
855.6									
856.0									
856.4									
856.8									
857.2									
857.6									
858.0									
858.4									

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								



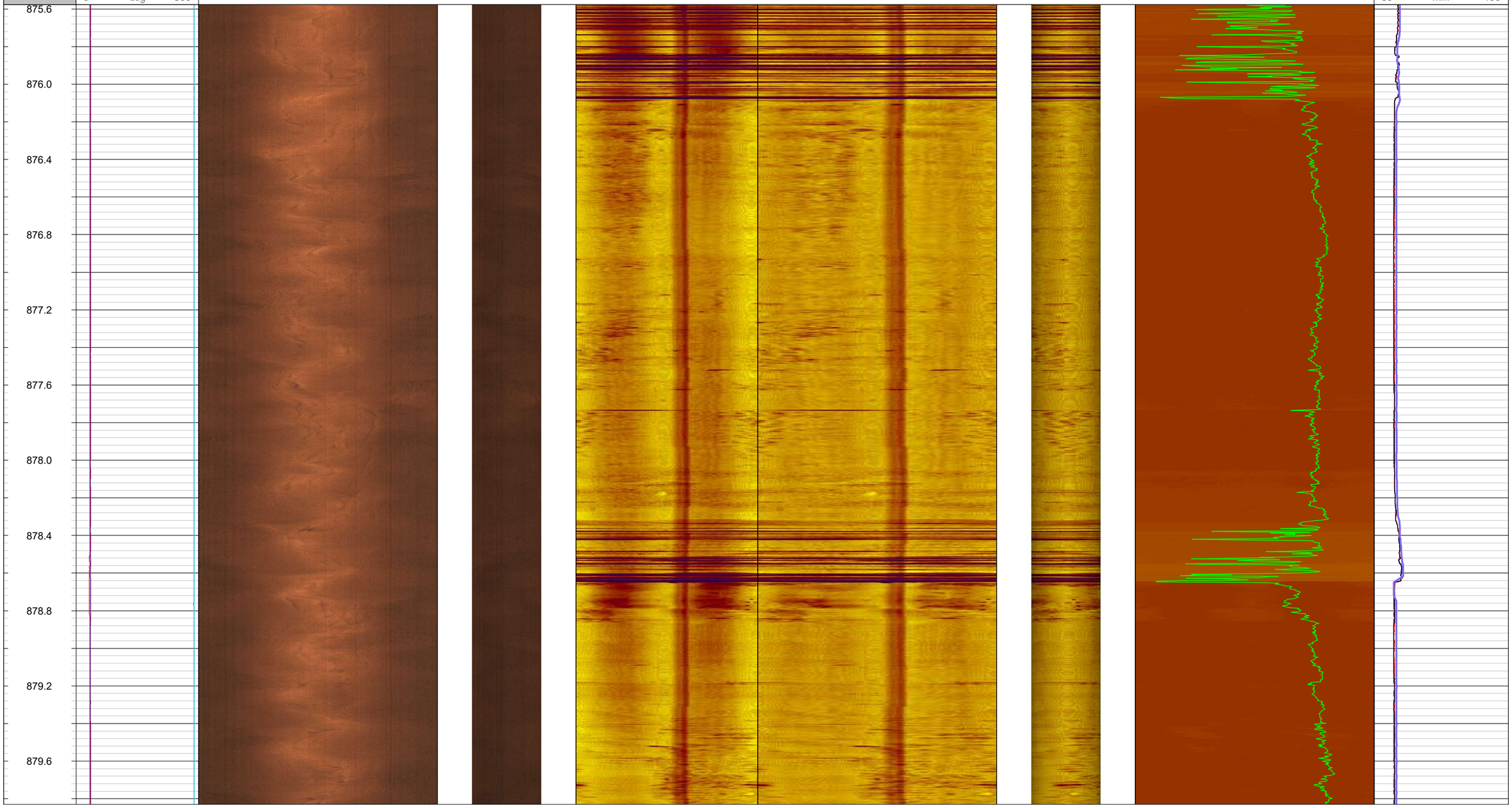
Depth	Orientation	Acoustic and Optical Televiewer Analysis					Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
863.2								
863.6								
864.0								
864.4								
864.8								
865.2								
865.6								
866.0								
866.4								
866.8								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								



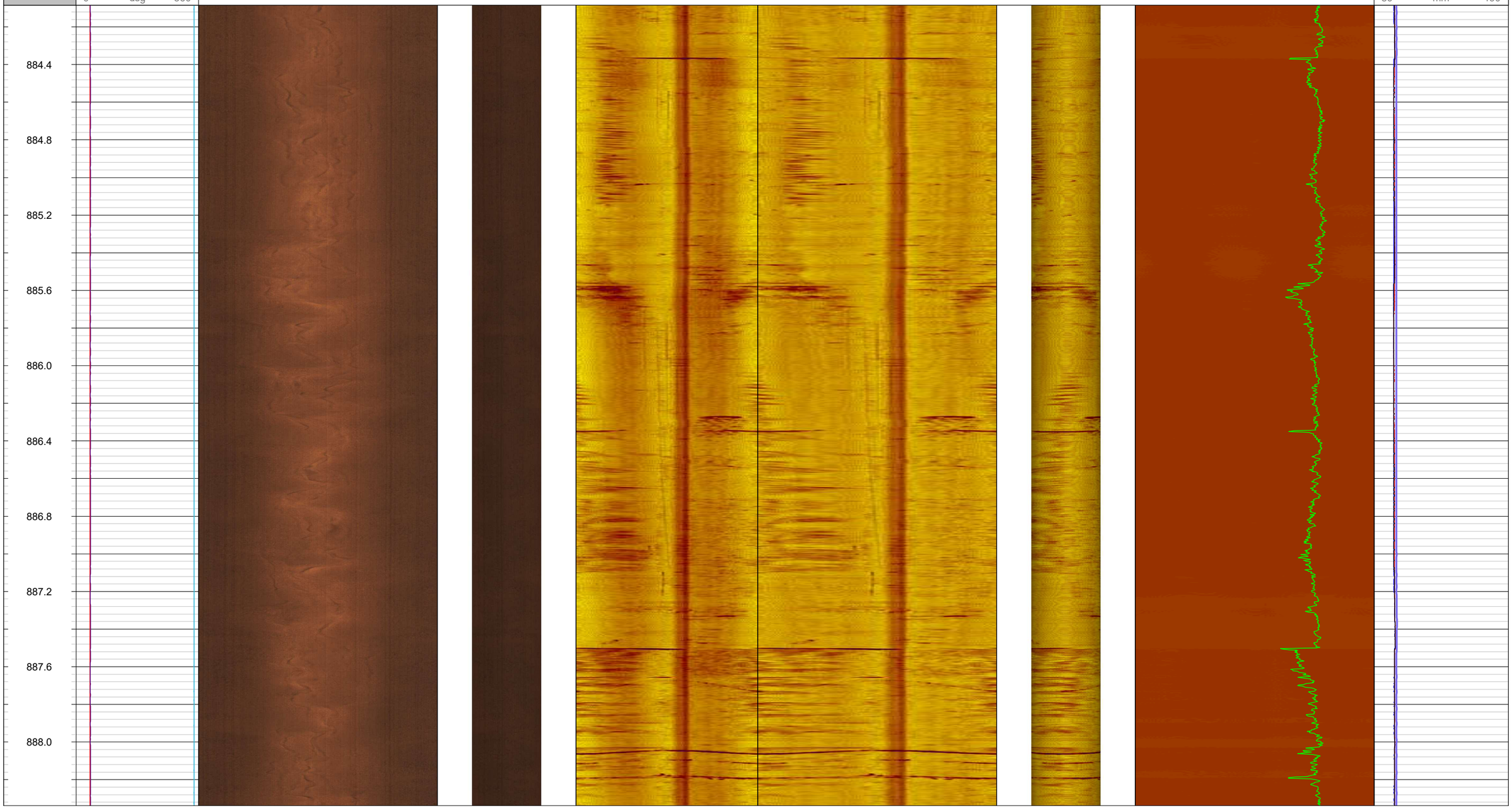
Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
871.6								
872.0								
872.4								
872.8								
873.2								
873.6								
874.0								
874.4								
874.8								
875.2								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								



Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
880.0								
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880.8								
881.2								
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884.0								

Depth	Orientation	Acoustic and Optical Televiewer Analysis					Caliper
1m:20m	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190



Depth	Orientation	Acoustic and Optical Televiewer Analysis								Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution			Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m										
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890.8										
891.2										
891.6										
892.0										
892.4										

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
892.8								
893.2								
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895.2								
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896.0								
896.4								
896.8								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
897.2								
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898.0								
898.4								
898.8								
899.2								
899.6								
900.0								
900.4								
900.8								

Depth	Orientation	Acoustic and Optical Televiewer Analysis							Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m									
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901.6									
902.0									
902.4									
902.8									
903.2									
903.6									
904.0									
904.4									
904.8									
905.2									

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
905.6								
906.0								
906.4								
906.8								
907.2								
907.6								
908.0								
908.4								
908.8								
909.2								
909.6								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
910.0								
910.4								
910.8								
911.2								
911.6								
912.0								
912.4								
912.8								
913.2								
913.6								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
914.0								
914.4								
914.8								
915.2								
915.6								
916.0								
916.4								
916.8								
917.2								
917.6								
918.0								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
918.4								
918.8								
919.2								
919.6								
920.0								
920.4								
920.8								
921.2								
921.6								
922.0								

Depth	Orientation	Acoustic and Optical Televiewer Analysis						Caliper
	Tilt (ATV) 0 deg 90 Azimuth (ATV) 0 deg 360 Tilt (OTV) 0 deg 90 Azimuth (OTV) 0 deg 360	Image-HS - Zone of Interest 0° 90° 180° 270° 0° Image-HS - Low Resolution 0° 90° 180° 270° 0°	3D Image Log -0°	Amplitude-HS - Zone of Interest 0° 90° 180° 270° 0°	Amplitude-HS Normalized - Zone of Interest 0 9000 0° 90° 180° 270° 0° Amplitude-HS Normalized - Low Resolution 0 12000 0° 90° 180° 270° 0°	3D Acoustic Log -0°	Reflective Index 0 12000 Centralized TT - Zone of Interest Centralized TT - Low Resolution	Caliper - min from TT 80 mm 190 Caliper - max from TT 80 mm 190 Caliper - ave from TT 80 mm 190 3-Arm Caliper 80 mm 190
1m:20m								
922.4								
922.8								
923.2								
923.6								
924.0								
924.4								
924.8								
925.2								
925.6								
926.0								
926.4								

Appendix B

Hydrophysical Logs

WP-583 HpL Results
WP-584 HpL Results
WP-585 HpL Results
WP-586 HpL Results
WP-587 HpL Results
WP-588 HpL Results
WP-592 HpL Results
WP-594 HpL Results
WP-598 HpL Results

WP-583 HpL Results

FIGURE WP583:1. Ambient Temperature and Fluid Electrical Conductivity; White Pine Copper ; White Pine North 2024; White Pine, MI; Wellbore: WP583

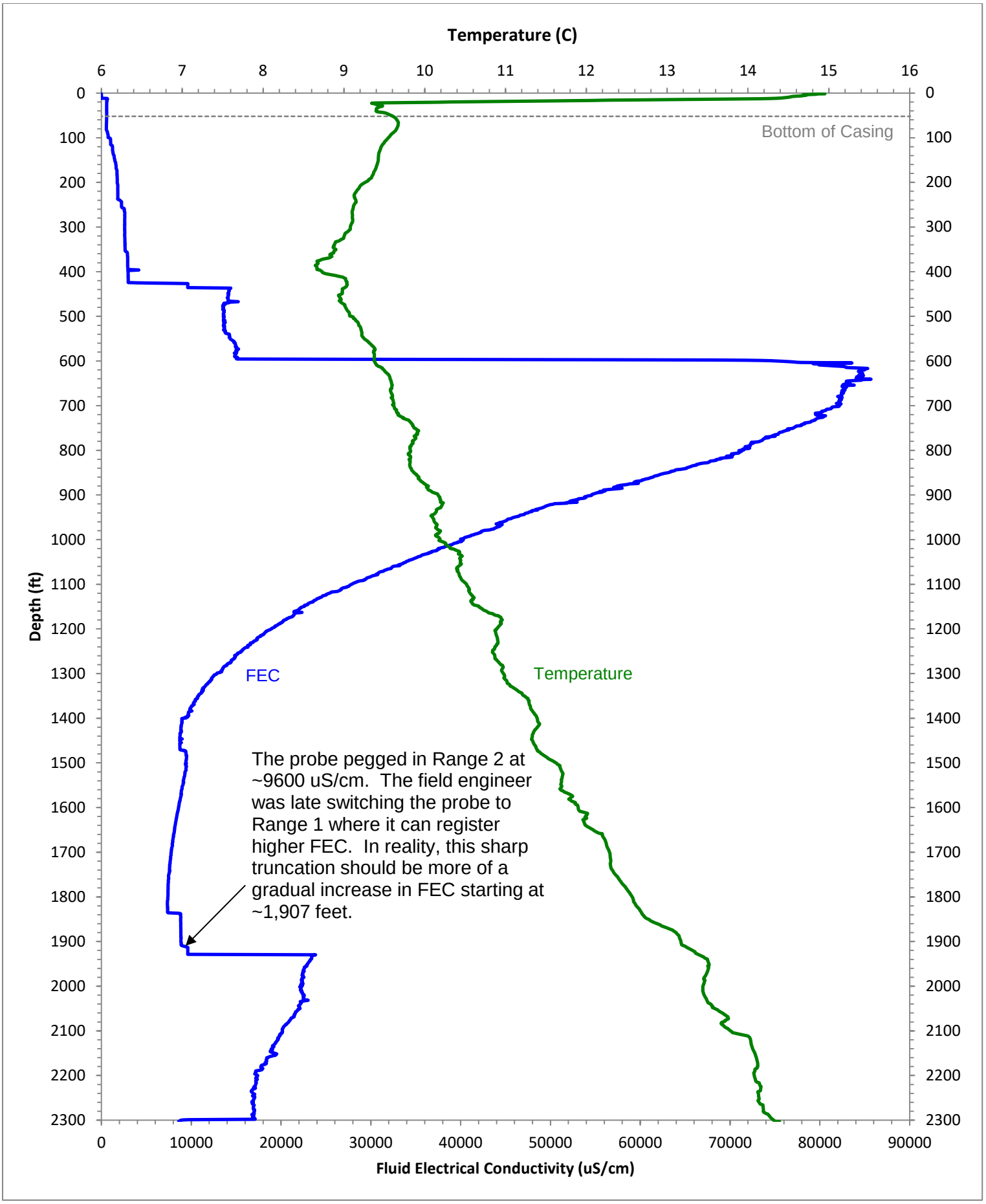


FIGURE WP583:2A. Summary of Hydrophysical Logs During Ambient Flow Characterization; White Pine Copper ; White Pine North 2024; White Pine, MI; Wellbore: WP583

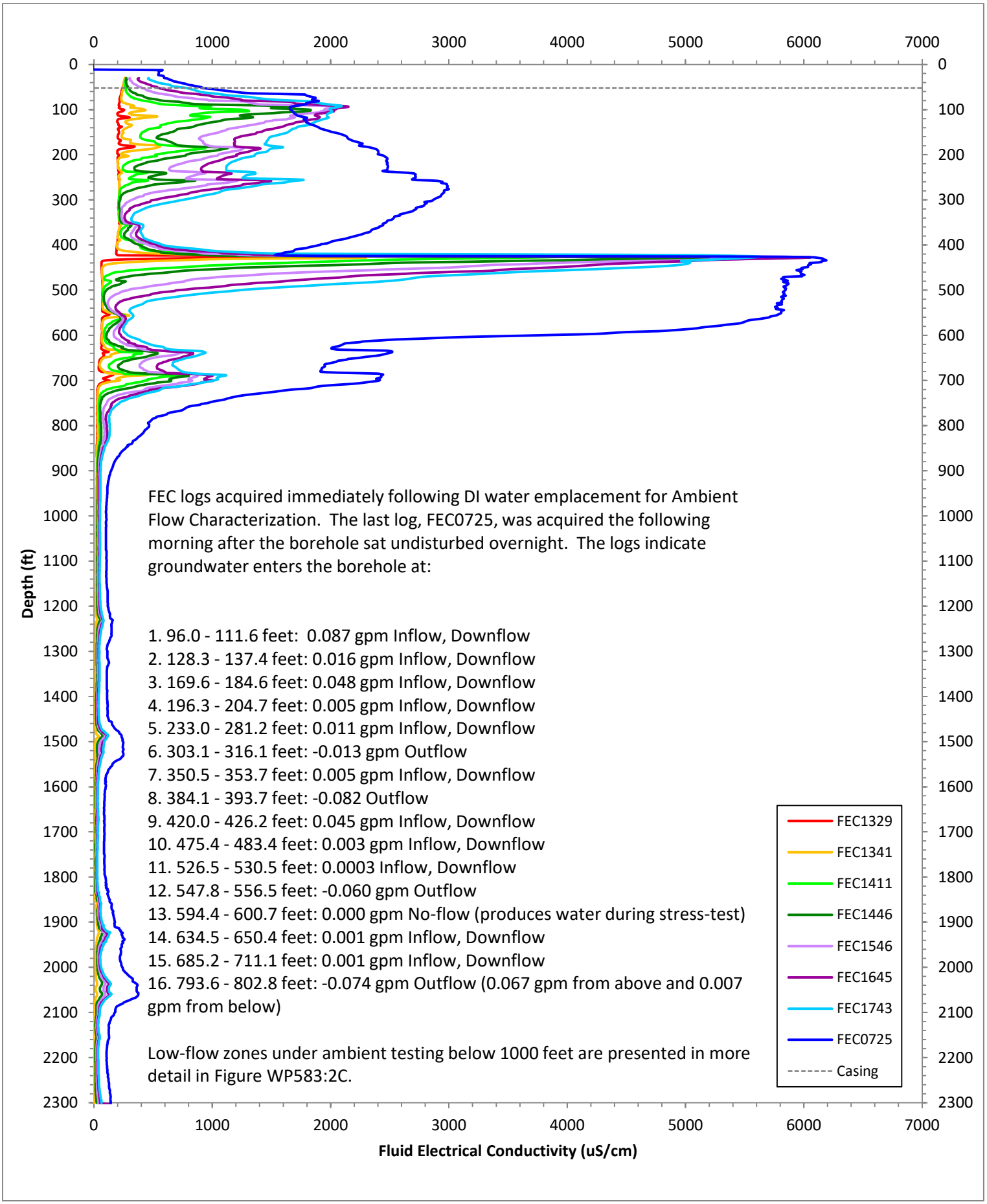


FIGURE WP583:2B. Summary of Hydrophysical Logs During Ambient Flow Characterization: Close-Up View of Top 1,000 Feet; White Pine Copper ; White Pine North 2024; White Pine, MI; Wellbore: WP583

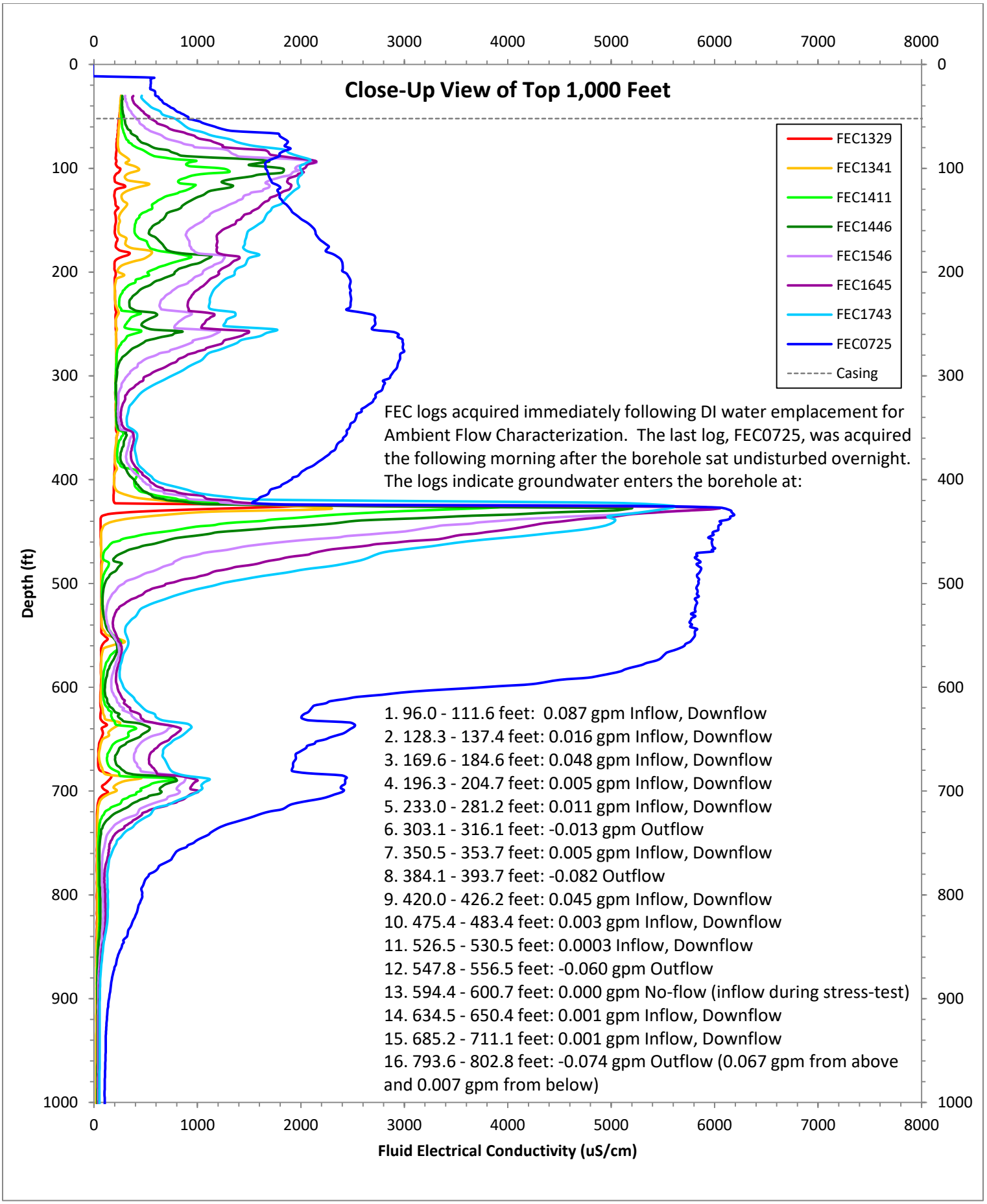


FIGURE WP583:2C. Summary of Hydrophysical Logs During Ambient Flow Characterization: Close-Up View of Bottom 1,300 Feet; White Pine Copper ; White Pine North 2024; White Pine, MI; Wellbore: WP583

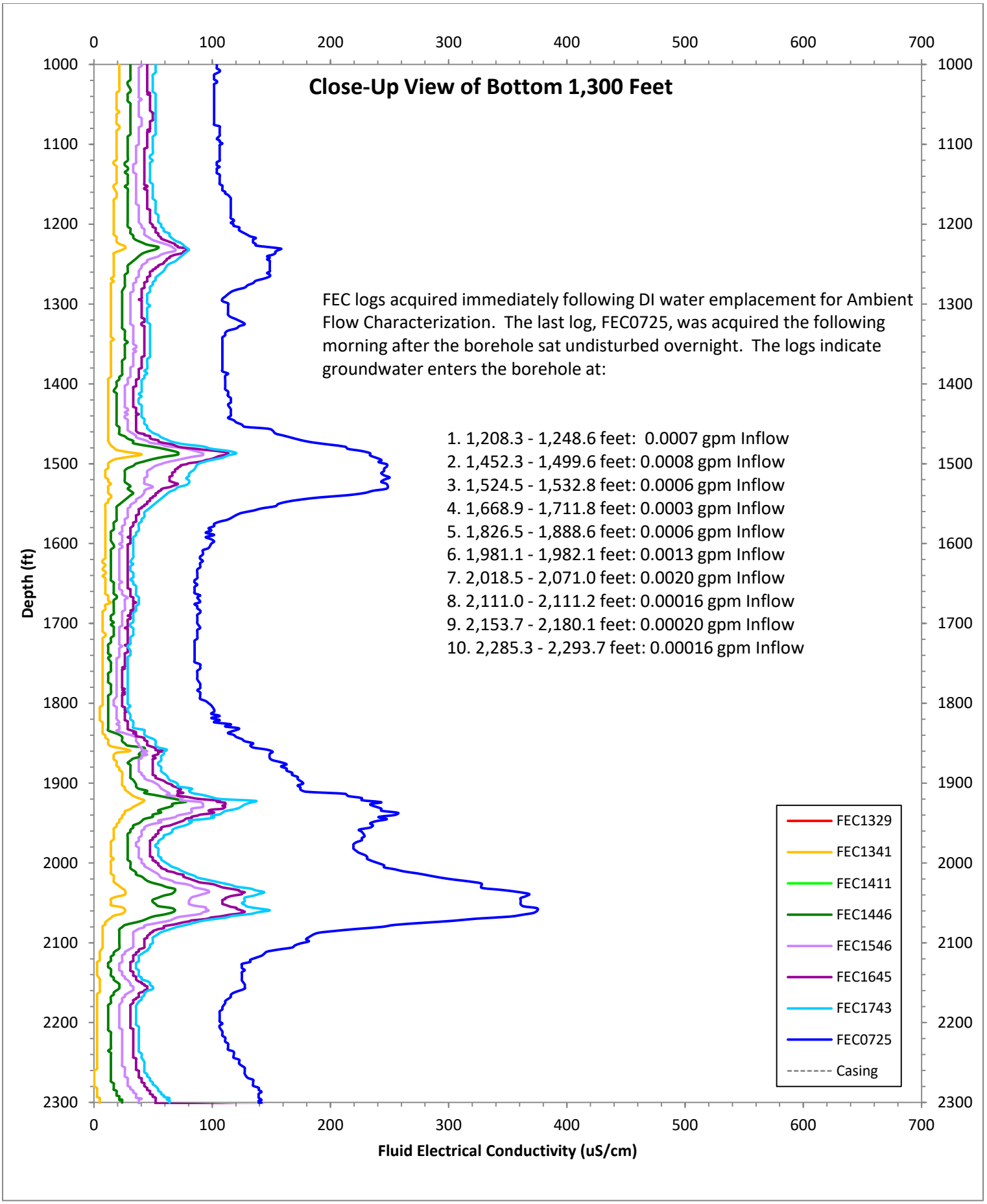


FIGURE WP583:3. Pumping and Drawdown Data During Multiple Pumping Rates After DI Water Emplacement; White Pipe Copper; White Pine Copper North; White Pine, MI; Wellbore: WP583

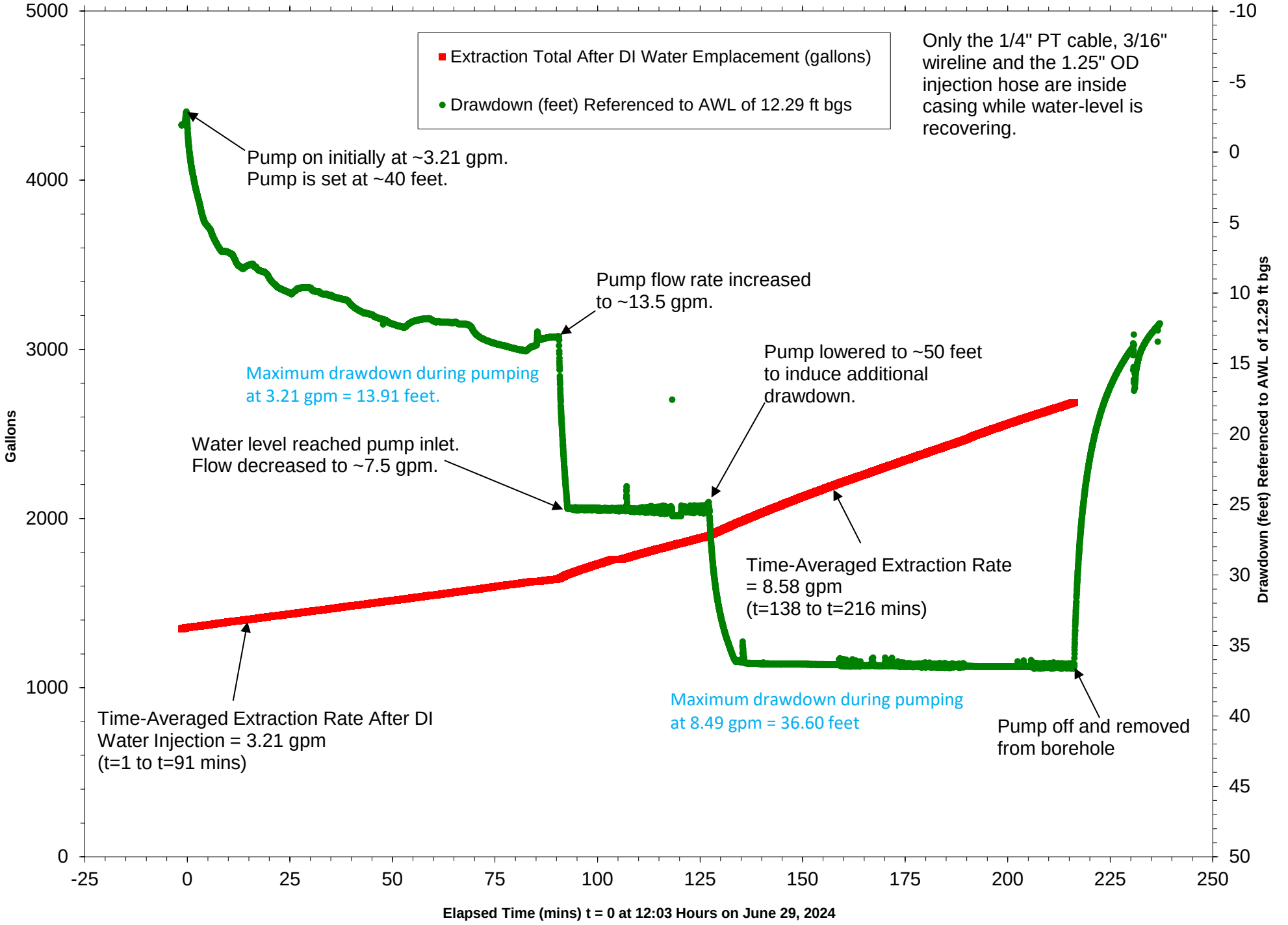


FIGURE WP583:4A. Summary of Hydrophysical Logs During Low-Rate Pumping at 3.21 GPM After DI Water Emplacement For Hydrophysical Stress Testing; White Pine Copper; White Pine North 2024; White Pine, MI; Wellbore: WP583

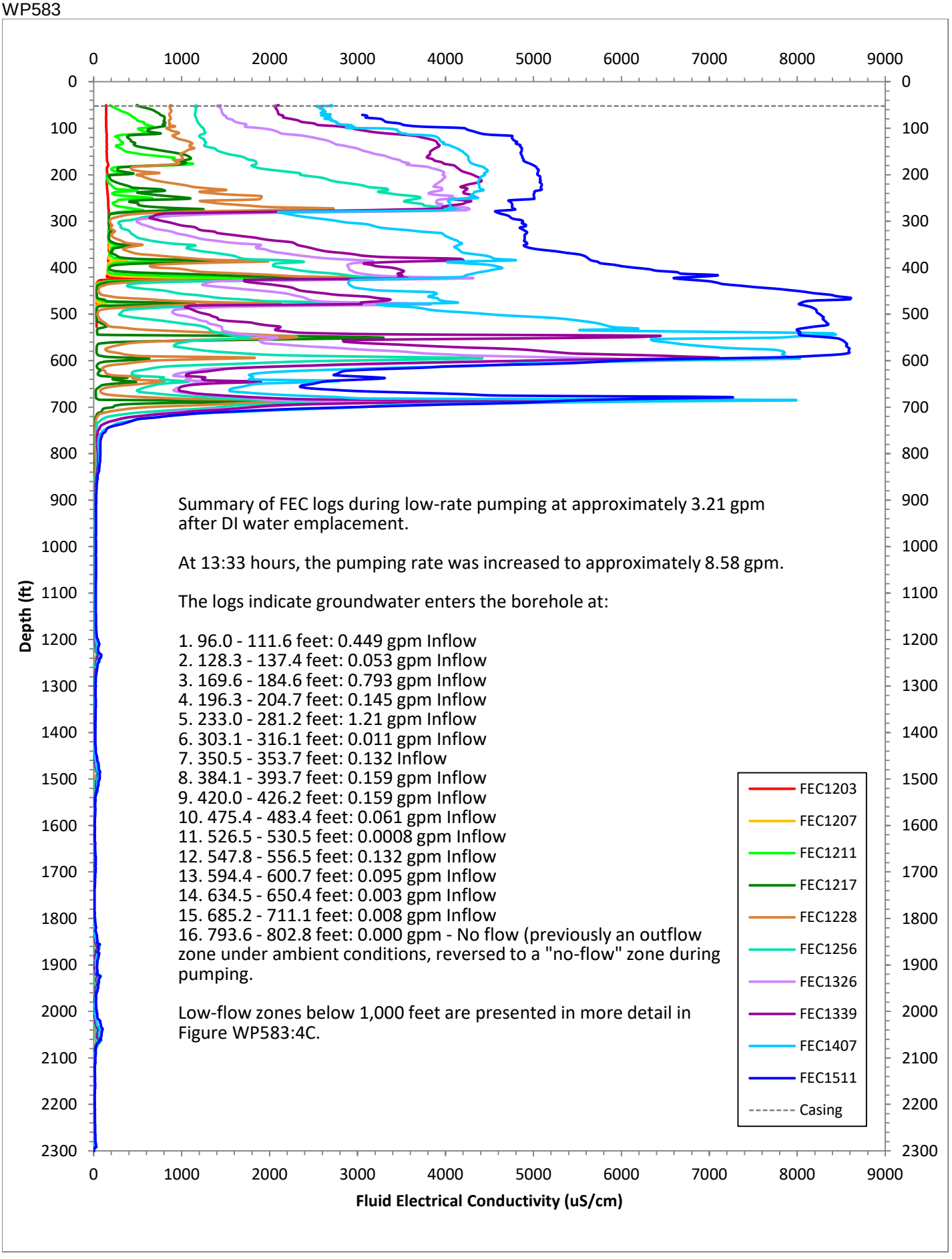


FIGURE WP583:4B. Summary of Hydrophysical Logs During Low-Rate Pumping at 3.21 GPM After DI Water Emplacement For Hydrophysical Stress Testing: Close-Up View of Top 1,000 Feet; White Pine Copper; White Pine North 2024; White Pine, MI; Wellbore: WP583

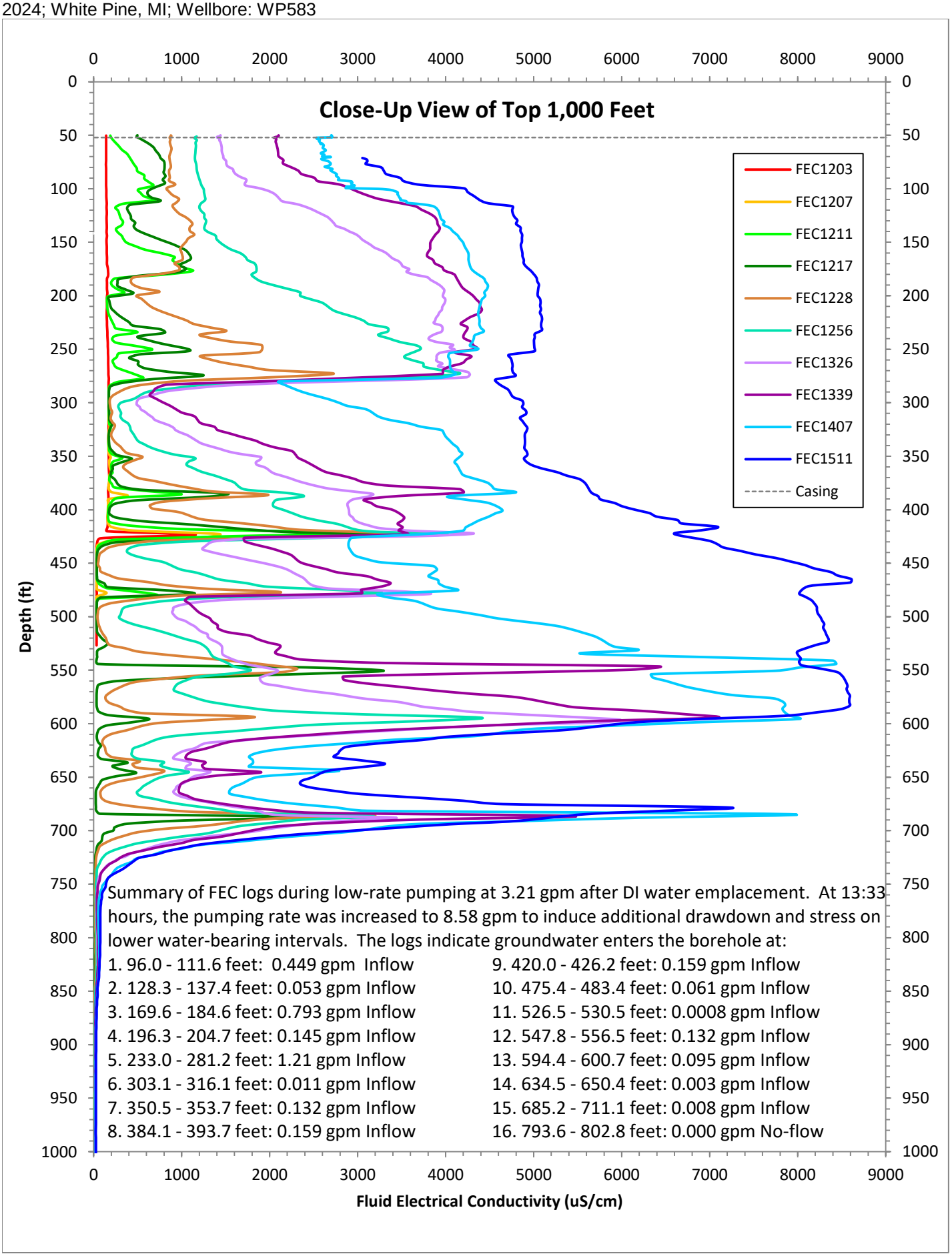


FIGURE WP583:4C. Summary of Hydrophysical Logs During Low-Rate Pumping at 3.21 GPM After DI Water Emplacement For Hydrophysical Stress Testing: Close-Up of Bottom 1,300 Feet; White Pine Copper; White Pine North 2024; White Pine, MI; Wellbore: WP583

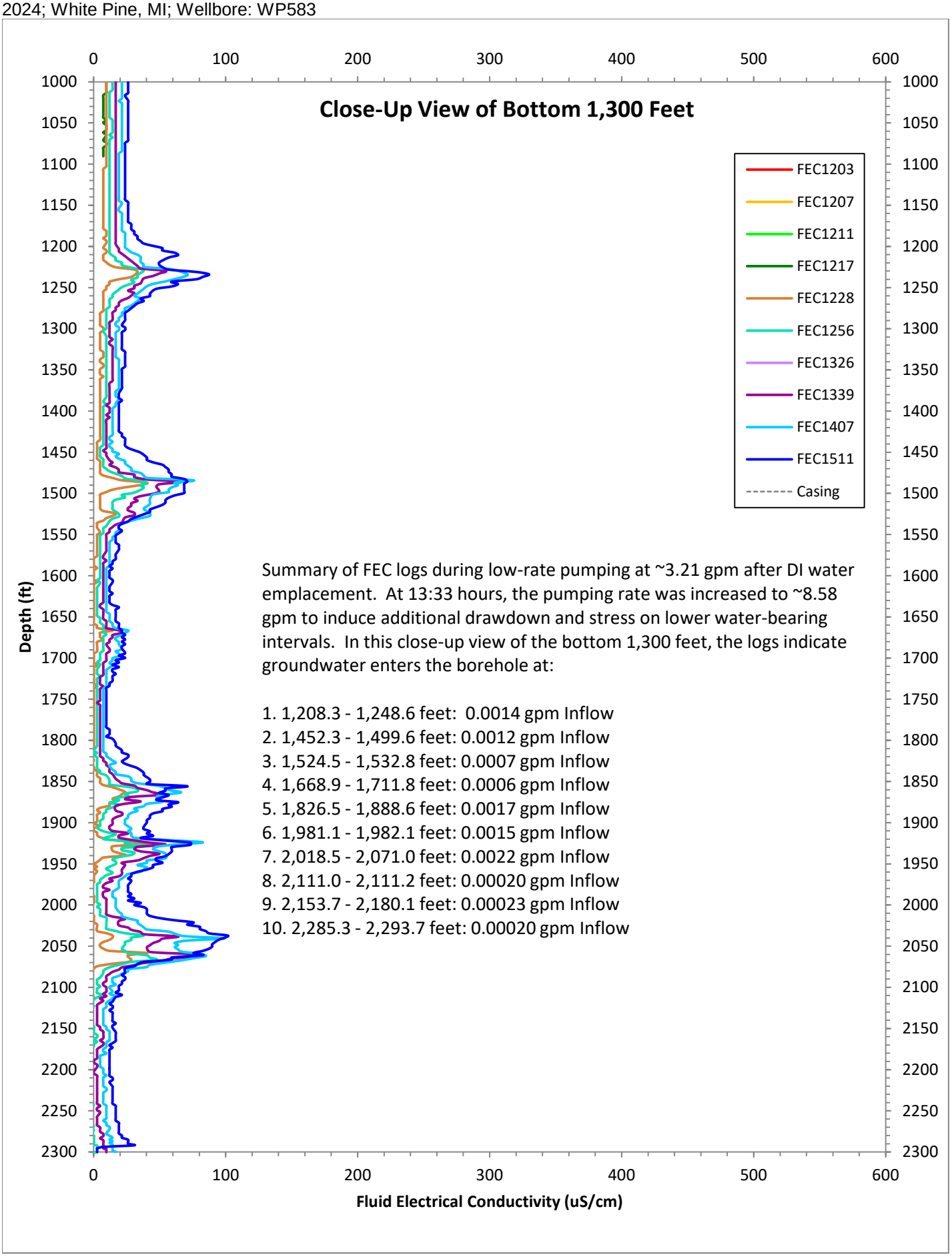


Table WP583:1. Summary Of Hydrophysical Logging Results With Hydraulic Conductivity And Transmissivity Estimations; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP583

Well Name	WP583
Ambient Depth to Water (ftbtoc)	14.92
Ambient Depth to Water (ftbgs)	12.29
Open Hole Interval (ftbtoc)	52.1 - 2,306.4

Diameter of Well (ft)	0.32
Maximum Drawdown (ft)	13.91
Effective Radius (ft)	100
Well Specific Capacity (gpm/ft-dd)	0.25

Hydrophysical Logging Results									
Interval No.	Top of Interval (ft)	Bottom of Interval (ft)	Length of Interval (ft)	Ambient Flow[1] (gpm)	Darcy Velocity in Aquifer[2] (ft/day)	Interval-Specific Flow Rate During Pumping (gpm)	Interval-Specific Hydraulic Conductivity[3] (ft/day)	Transmissivity (ft^2/day)	Interval-Specific Fluid Electrical Conductivity (µS/cm)
1	96.0	111.6	15.6	0.087	NA	0.449	3.29E-01	5.13E+00	19100
2	128.3	137.4	9.1	0.016	NA	0.053	5.78E-02	5.26E-01	11500
3	169.6	184.6	15.0	0.048	NA	0.793	7.05E-01	1.06E+01	10500
4	196.3	204.7	8.4	0.005	NA	0.145	2.36E-01	1.99E+00	29500
5	233.0	281.2	48.2	0.011	NA	1.21	3.53E-01	1.70E+01	18500
6	303.1	316.1	13.0	-0.013	NA	0.011	2.62E-02	3.41E-01	33000
7	350.5	353.7	3.2	0.005	NA	0.132	5.63E-01	1.80E+00	30262
8	384.1	393.7	9.6	-0.082	NA	0.159	3.56E-01	3.42E+00	38963
9	420.0	426.2	6.2	0.045	NA	0.159	2.61E-01	1.62E+00	50735
10	475.4	483.4	8.0	0.003	NA	0.061	1.03E-01	8.23E-01	74000
11	526.5	530.5	4.0	0.0003	NA	0.0008	1.77E-03	7.09E-03	77000
12	547.8	556.5	8.7	-0.060	NA	0.132	3.13E-01	2.72E+00	57000
13	594.4	600.7	6.3	0.000	NA	0.095	2.14E-01	1.35E+00	107690
14	634.5	650.4	15.9	0.001	NA	0.003	1.78E-03	2.84E-02	106515
15	685.2	711.1	25.9	0.001	NA	0.008	3.83E-03	9.93E-02	77000
16	793.6	802.8	9.2	-0.074	NA	0.000	1.14E-01	1.05E+00	NA
17	1208.3	1248.6	40.3	0.0007	NA	0.0014	2.46E-04	9.93E-03	57000
18	1452.3	1499.6	47.3	0.0008	NA	0.0012	1.20E-04	5.68E-03	107690
19	1524.5	1532.8	8.3	0.0006	NA	0.0007	1.71E-04	1.42E-03	106515
20	1668.9	1711.8	42.9	0.0003	NA	0.0006	9.92E-05	4.26E-03	77000
21	1826.5	1888.6	62.1	0.0006	NA	0.0017	2.51E-04	1.56E-02	57000
22	1981.1	1982.1	1.0	0.0013	NA	0.0015	2.84E-03	2.84E-03	107690
23	2018.5	2071.0	52.5	0.0020	NA	0.0022	5.40E-05	2.84E-03	106515
24	2111.0	2111.2	0.2	0.00016	NA	0.00020	2.84E-03	5.68E-04	107690
25	2153.7	2180.1	26.4	0.00020	NA	0.00023	1.61E-05	4.26E-04	77060
26	2285.3	2293.7	8.4	0.00016	NA	0.00020	6.76E-05	5.68E-04	118550
Borehole Transmissivity Using Thiem Equation (ft^2/day)								**4.85E+01**	
Borehole Hydraulic Conductivity (K=T/b; b=length of hole of 2,306.4'-52.1'=2,254.3') (ft/d)							**2.15E-02**		

Note: Negative flow, if any, is outflow from the borehole to the aquifer, positive flow is inflow to the borehole.
Additional Note: flow rates reported above during pumping are modeled during low-rate pumping at 3.21 gpm.

[1] Ambient downflow and upflow are identified in this borehole under ambient conditions.

[2] Darcy Velocity, or Specific Discharge in aquifer, is calculated using the observed volumetric flow rate, the cross-sectional area of the flow interval in the wellbore

[3] Hydraulic conductivity and transmissivity estimates are based on single well drawdown data, a porous-medium equivalent model and the Thiem equation.

All depths reported herein are referenced to ground surface.

NA = Not Applicable

WP-584 HpL Results

FIGURE WP584:1. Ambient Temperature and Fluid Electrical Conductivity; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP584

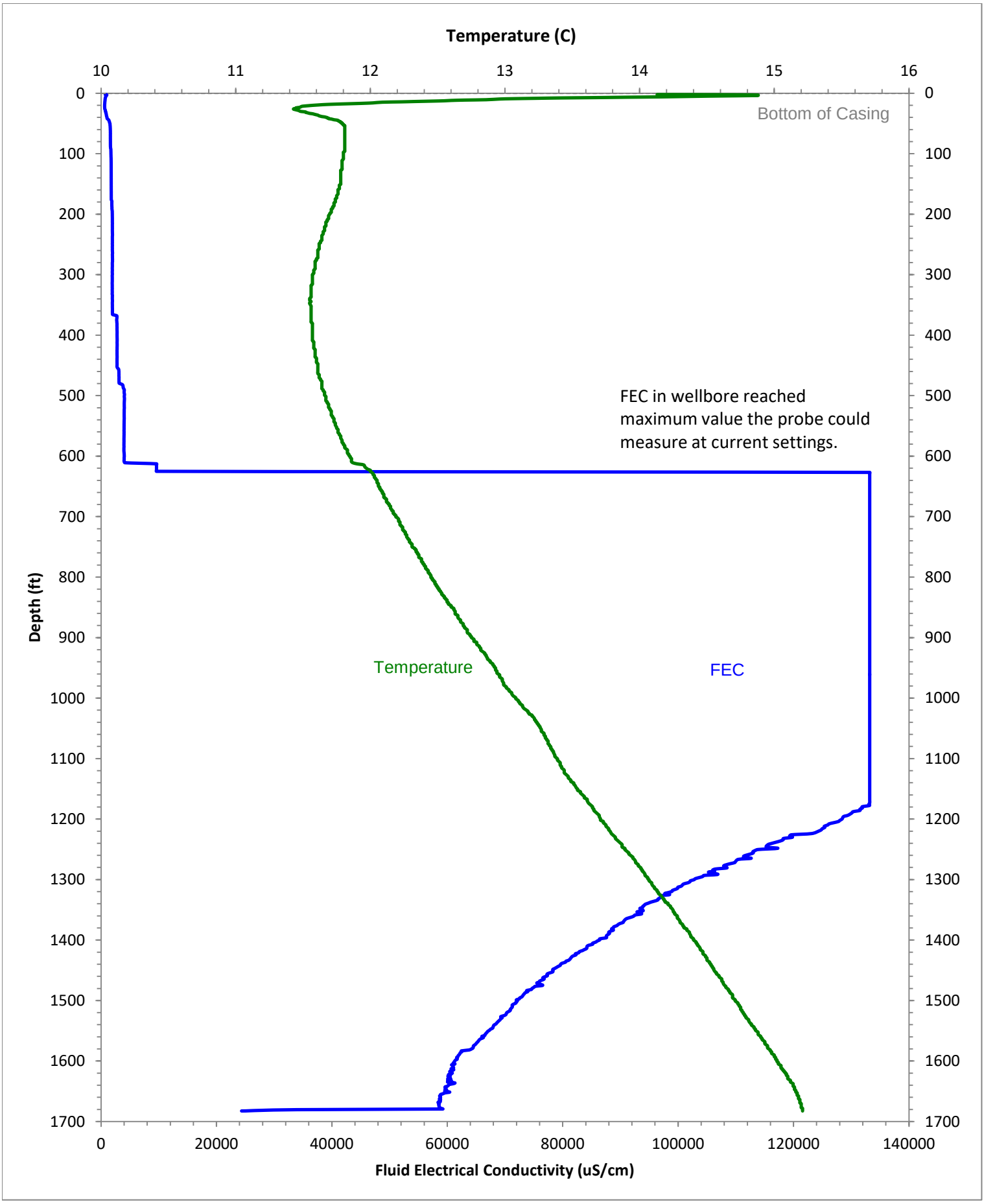


FIGURE WP584:2A. Summary of Hydrophysical Logs During Ambient Flow Characterization; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP584

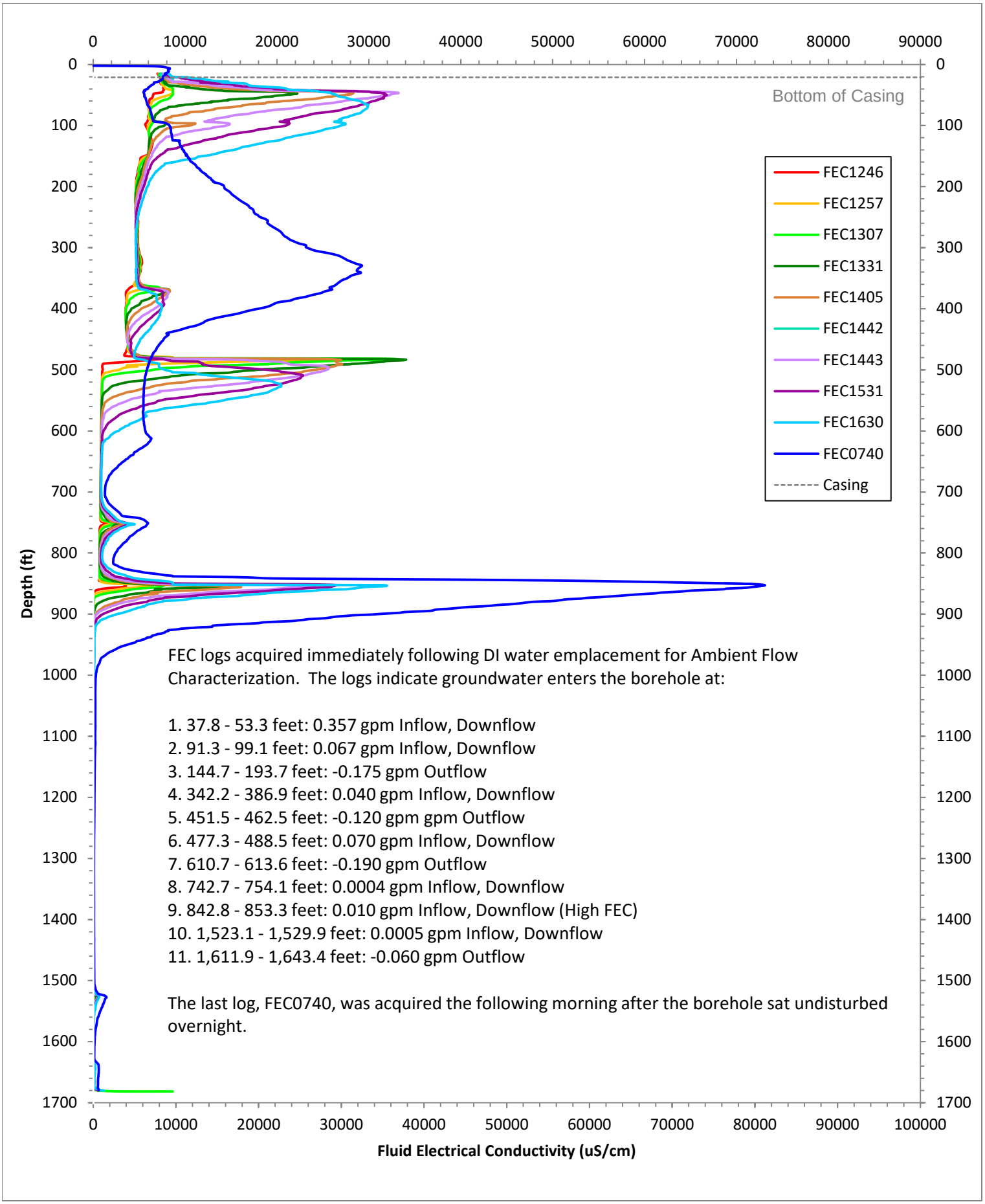


FIGURE WP584:2B. Summary of Hydrophysical Logs During Ambient Flow Characterization - Close-Up of Top 1,000 Feet; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP584

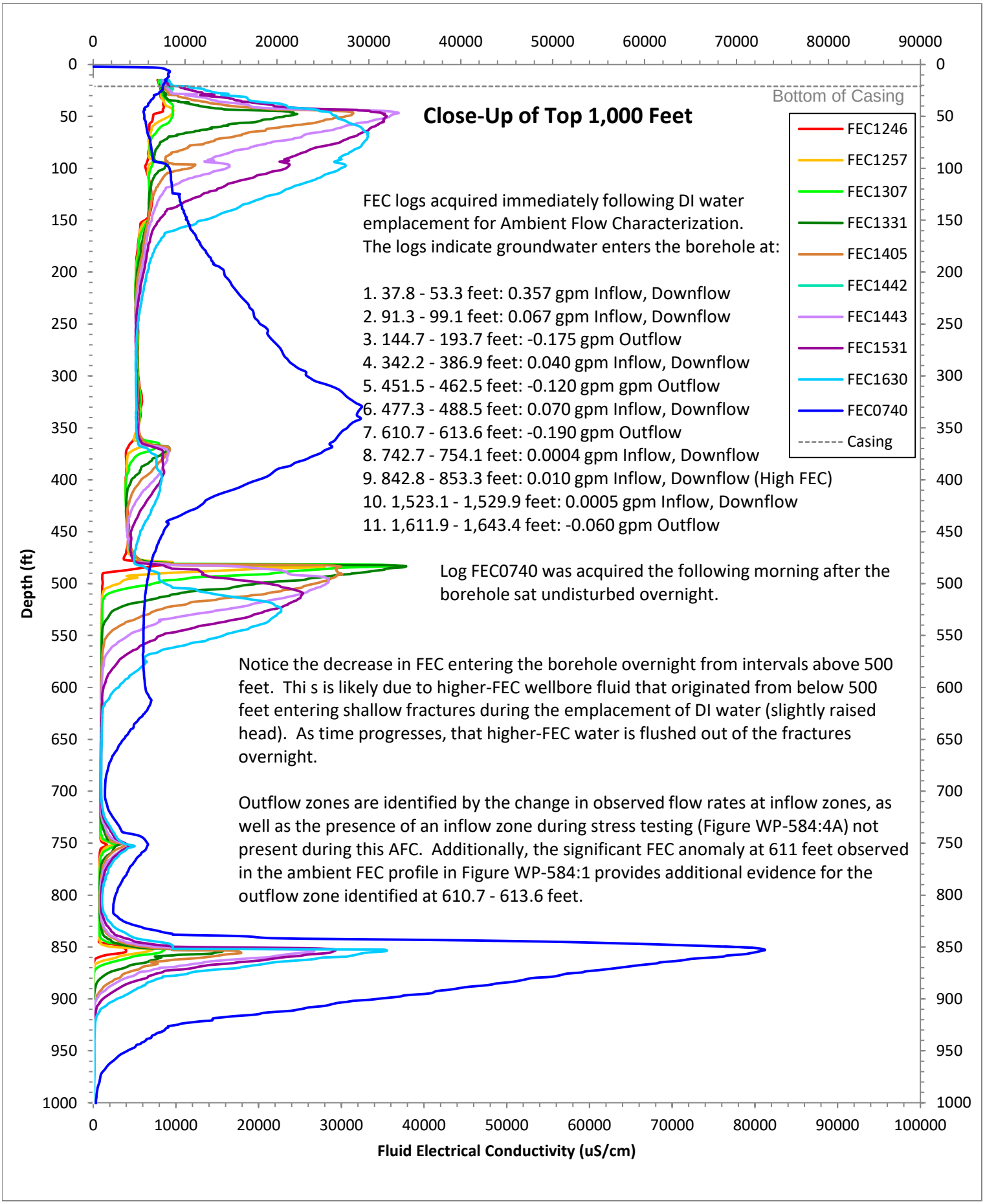


FIGURE WP584:3. Pumping and Drawdown Data During 10 GPM Hydrophysical Stress Test; White Pine Copper; White Pine North Project; White Pine, MI; Wellbore: WP584

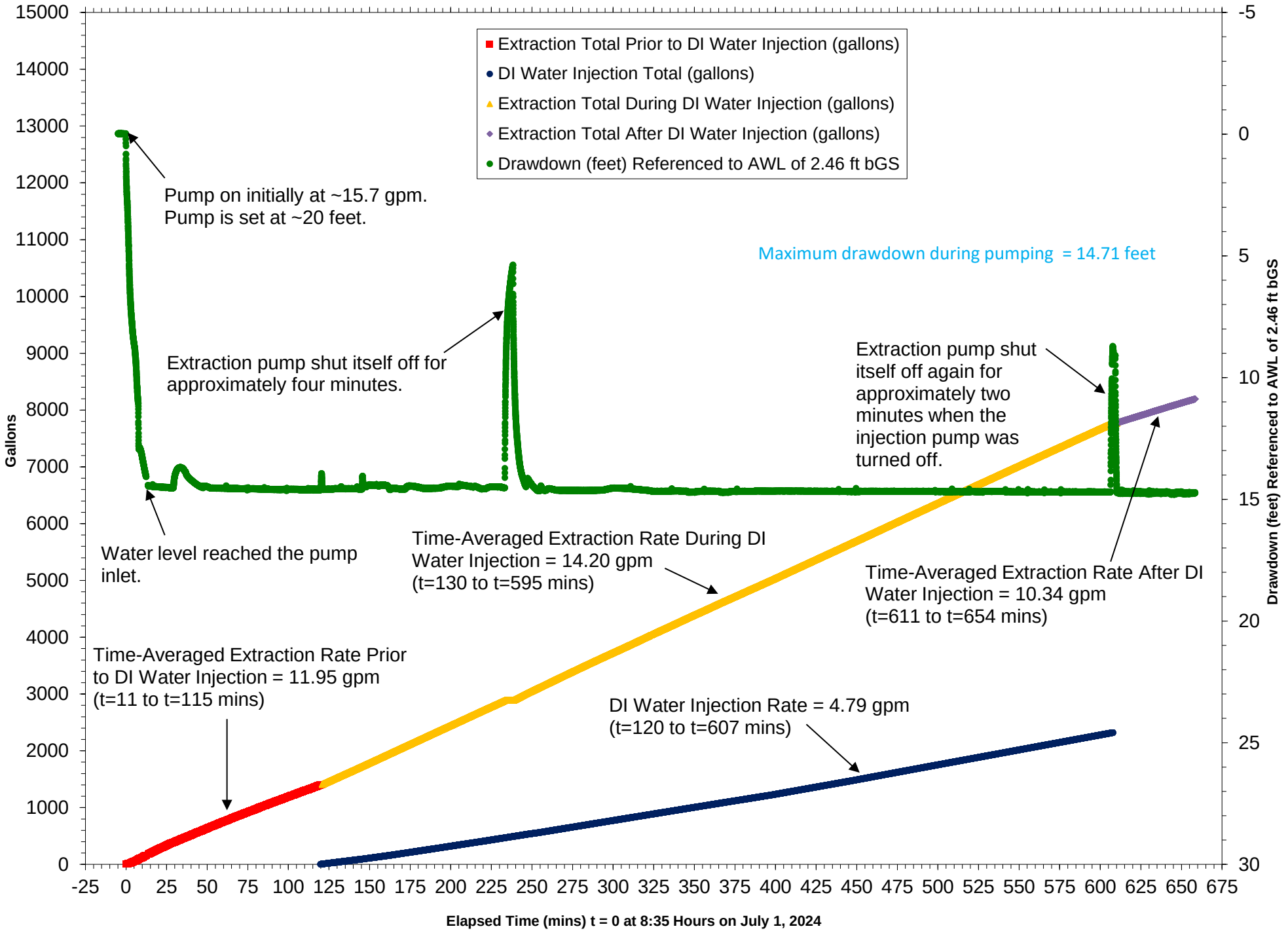


FIGURE WP584:4. Summary of Hydrophysical Logs During 10 GPM Hydrophysical Stress Testing; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP584

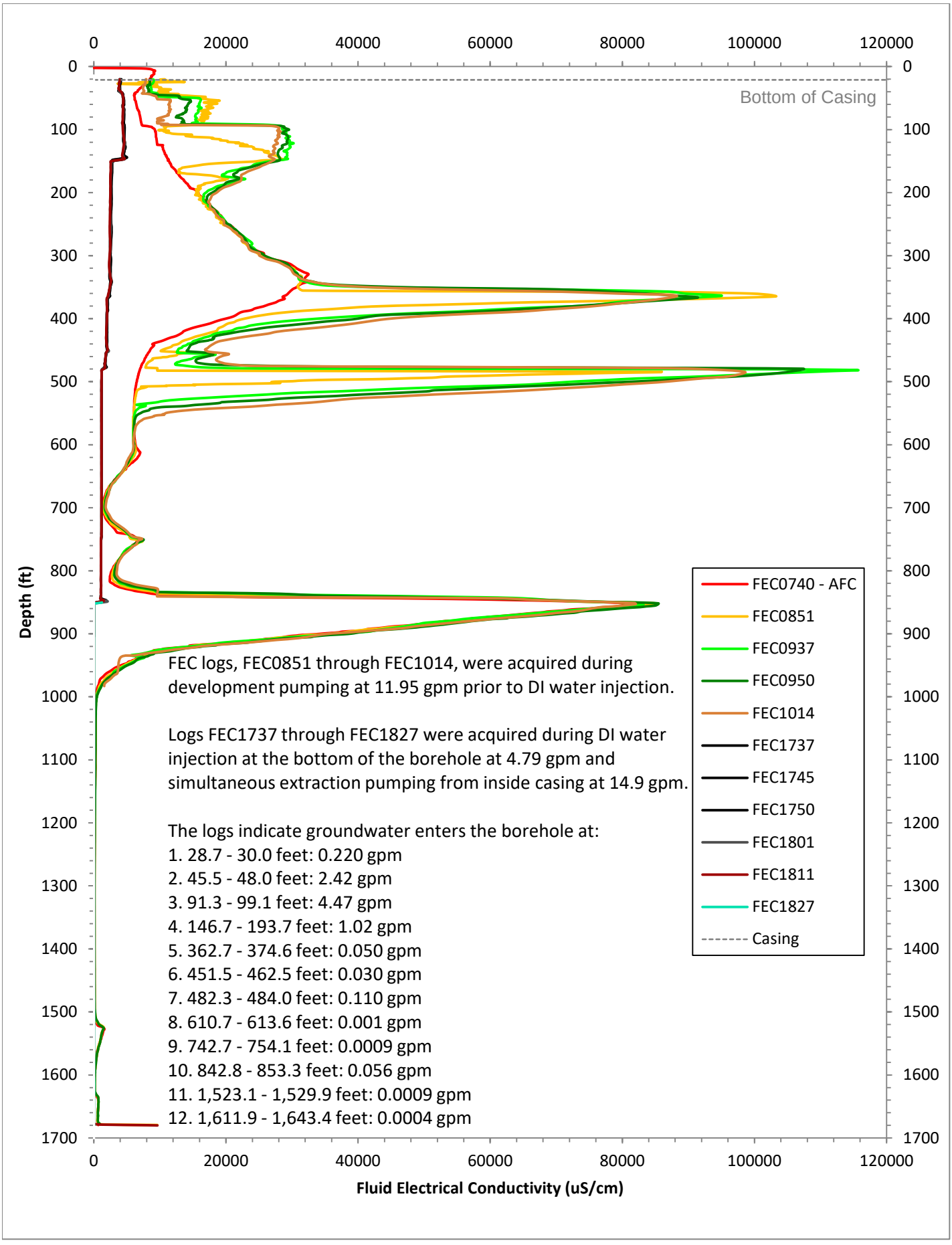


Table WP584:1. Summary Of Hydrophysical Logging Results With Hydraulic Conductivity And Transmissivity Estimations; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP584

Well Name	WP584
Ambient Depth to Water (ftbtoc)	3.62
Ambient Depth to Water (ftbgs)	2.46
Open Hole Interval (ftbtoc)	20.0 - 1680.0

Diameter of Well (ft)	0.42
Maximum Drawdown (ft)	14.71
Effective Radius (ft)	100
Well Specific Capacity (gpm/ft-dd)	0.55

Hydrophysical Logging Results

Interval No.	Top of Interval (ft)	Bottom of Interval (ft)	Length of Interval (ft)	Ambient Flow[1] (gpm)	Darcy Velocity in Aquifer[2] (ft/day)	Interval-Specific Flow Rate During Pumping (gpm)	Interval-Specific Hydraulic Conductivity[3] (ft/day)	Transmissivity (ft^2/day)	Interval-Specific Fluid Electrical Conductivity (µS/cm)
1*	28.7	30.0	1.3	0.000	NA	0.220	2.17E+00	2.83E+00	6114
2	37.8	53.3	15.5	0.357	NA	2.42	1.71E+00	2.65E+01	958
3	91.3	99.1	7.8	0.067	NA	4.47	7.25E+00	5.66E+01	4547
4	144.7	193.7	49.0	-0.175	NA	1.02	3.13E-01	1.54E+01	12836
5	342.2	386.9	44.7	0.040	NA	0.050	2.87E-03	1.28E-01	54049
6	451.5	462.5	11.0	-0.120	NA	0.030	1.75E-01	1.93E+00	107000
7	477.3	488.5	11.2	0.070	NA	0.110	4.59E-02	5.14E-01	100000
8	610.7	613.6	2.9	-0.190	NA	0.001	8.46E-01	2.45E+00	90000
9	742.7	754.1	11.4	0.0004	NA	0.0009	5.64E-04	6.42E-03	90000
10	842.8	853.3	10.5	0.010	NA	0.0560	5.63E-02	5.91E-01	85997
11	1523.1	1529.9	6.8	0.0005	NA	0.0009	8.02E-04	5.46E-03	61300
12	1611.9	1643.4	31.5	-0.060	NA	0.0004	2.46E-02	7.76E-01	61300
Borehole Transmissivity Using Thiem Equation (ft^2/day)								**1.08E+02**	
Borehole Hydraulic Conductivity (K=T/b; b=length of hole of 20.0'-1680.0'=1660.0') (ft/d)							**6.49E-02**		

Note: Negative flow, if any, is outflow from the borehole to the aquifer, positive flow is inflow to the borehole.

[1] Ambient downflow is identified in this borehole under ambient conditions.

[2] Darcy Velocity, or Specific Discharge in aquifer, is calculated using the observed volumetric flow rate, the cross-sectional area of the flow interval in the wellbore and a wellbore convergence factor of 3.0 (Drost, 1968). The Darcy Velocity is only applicable to ambient horizontal flow.

[3] Hydraulic conductivity and transmissivity estimates are based on single well drawdown data, a porous-medium equivalent model and the Thiem equation.

All depths reported herein are referenced to ground surface.

NA = Not Applicable

WP-585 HpL Results

FIGURE WP585:1. Ambient Temperature and Fluid Electrical Conductivity; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP585

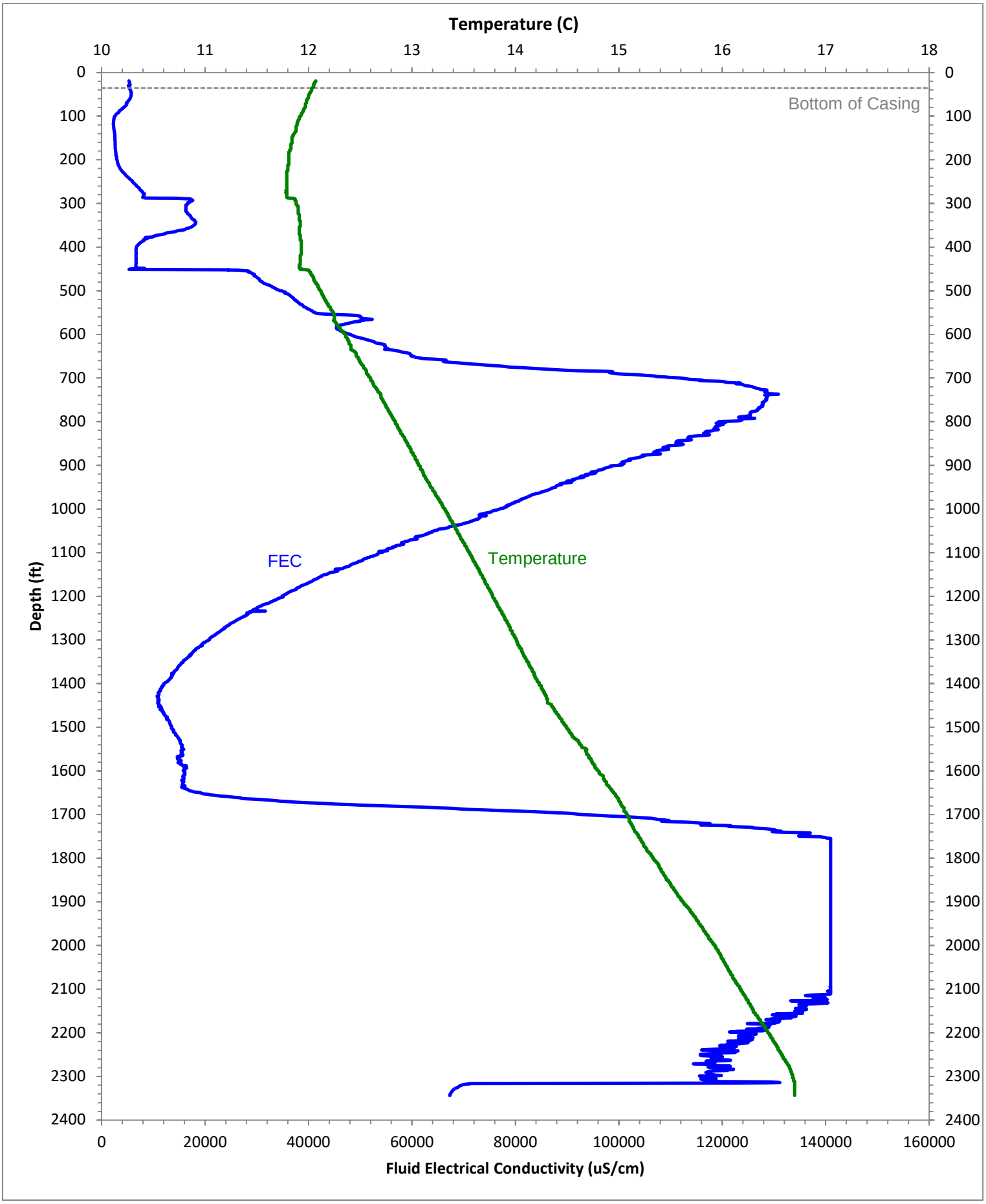


FIGURE WP585:2. Summary of Hydrophysical Logs During Ambient Flow Characterization; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP585

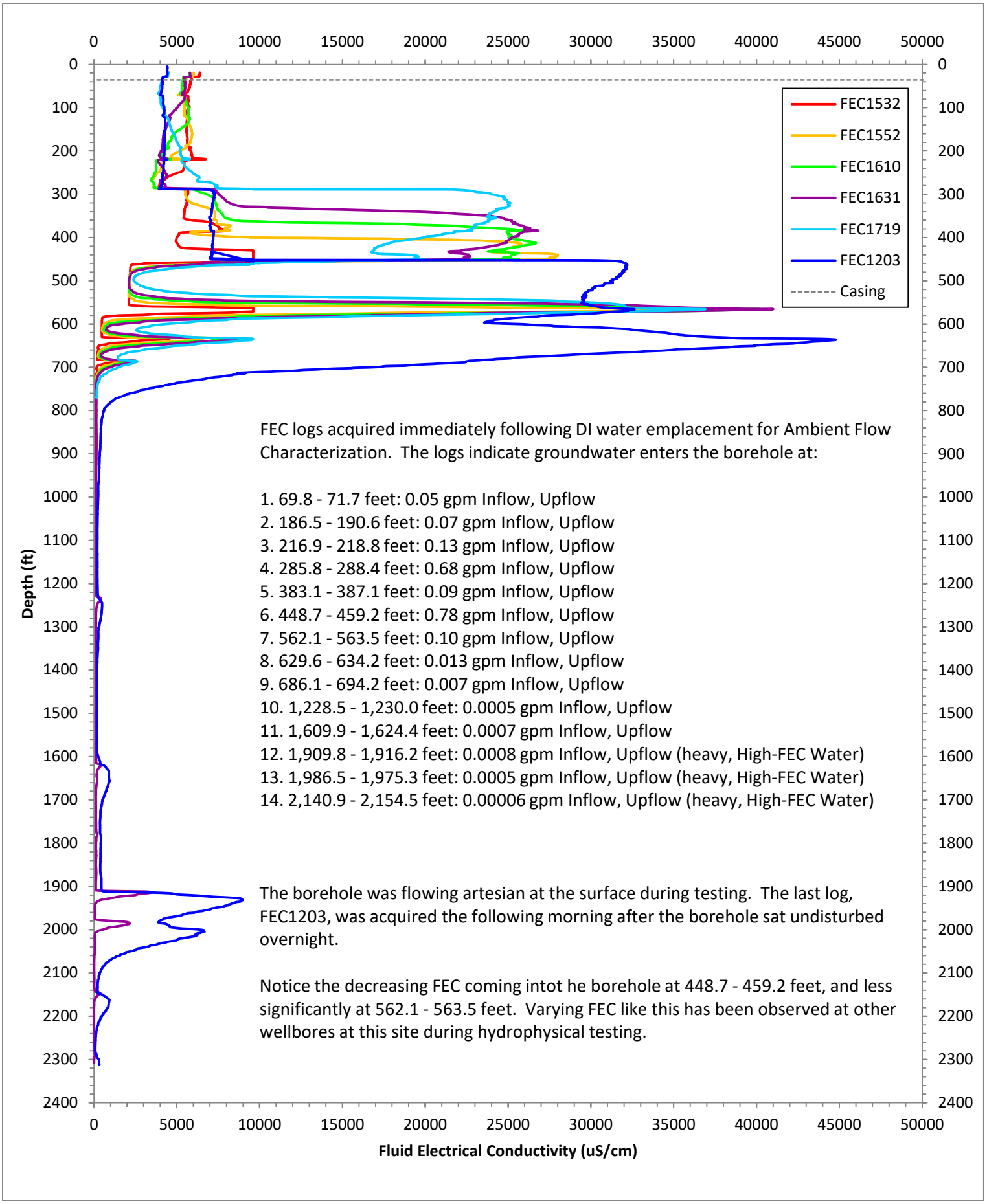


FIGURE WP585:3. Pumping and Drawdown Data During 5.5 GPM Hydrophysical Stress Testing; White Pine Copper; White Pine Copper North; White Pine, MI; Wellbore: WP585

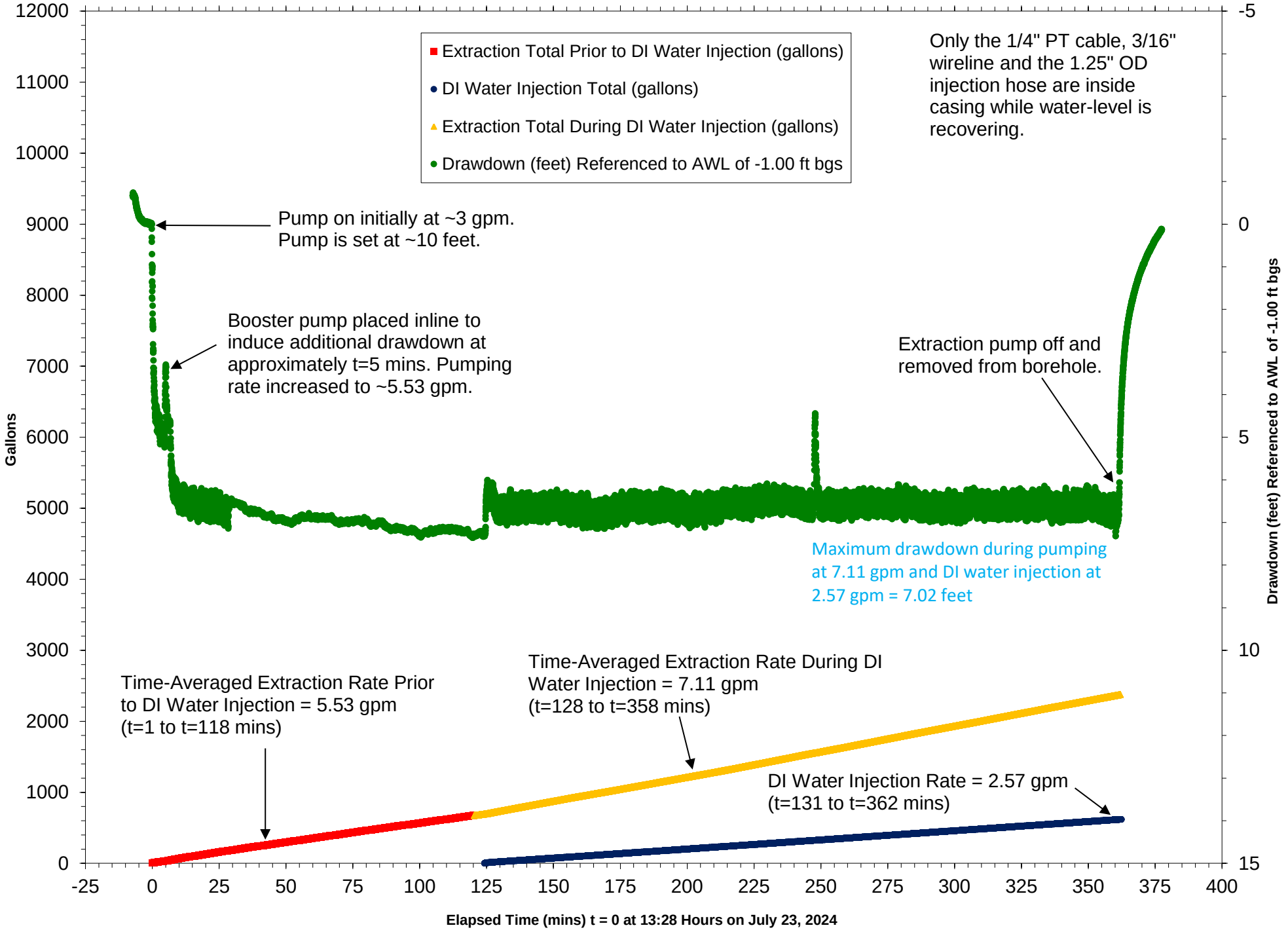


FIGURE WP585:4A. Summary of Hydrophysical Logs During Development Pumping at 5 GPM Prior to DI Water Dilution For Hydrophysical Stress Testing; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP585

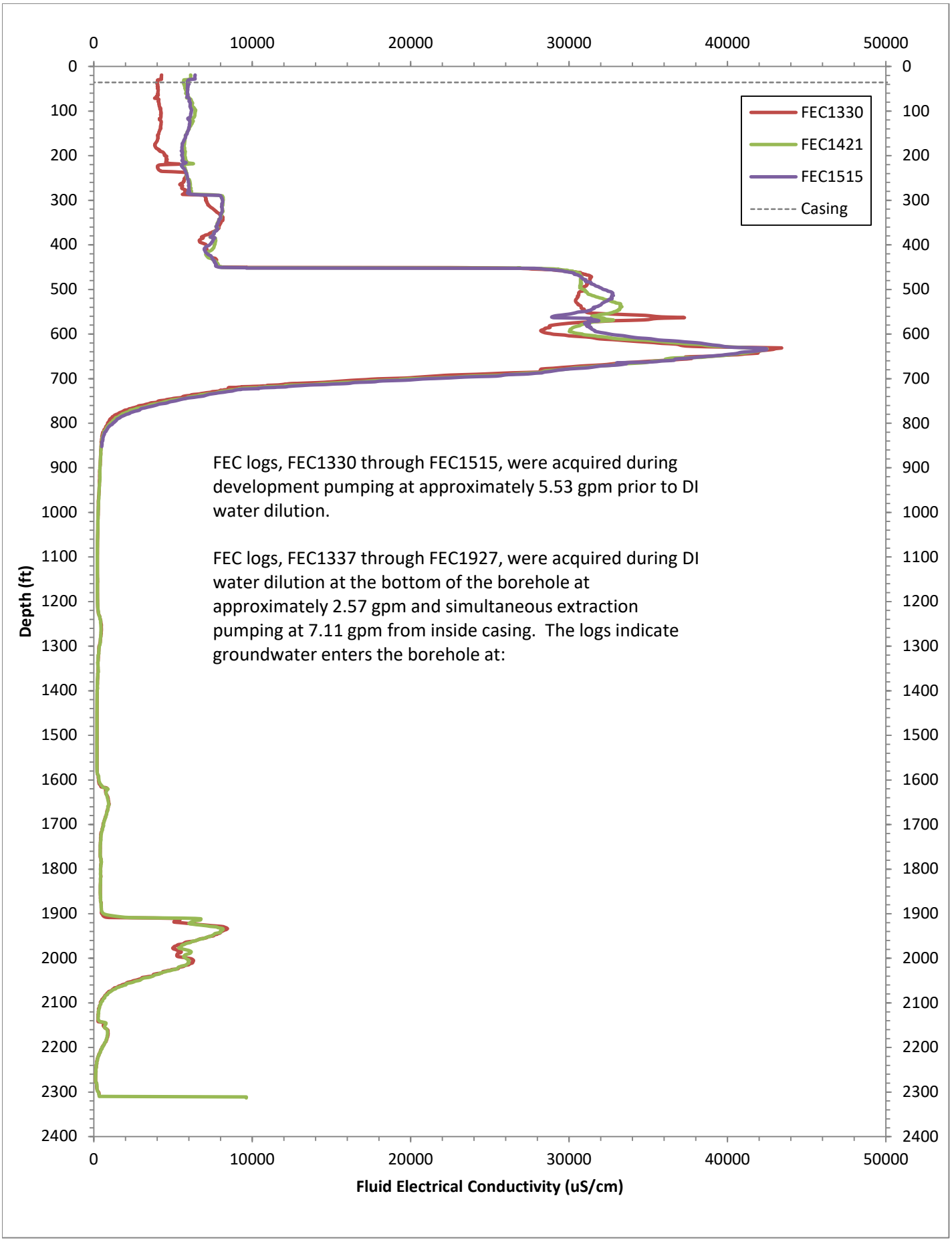


FIGURE WP585:4B. Summary of Hydrophysical Logs During DI Water Dilution at 2.5 GPM and Extraction Pumping at 7.1 GPM For Hydrophysical Stress Testing - Close Up of the Top 900 Feet; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP585

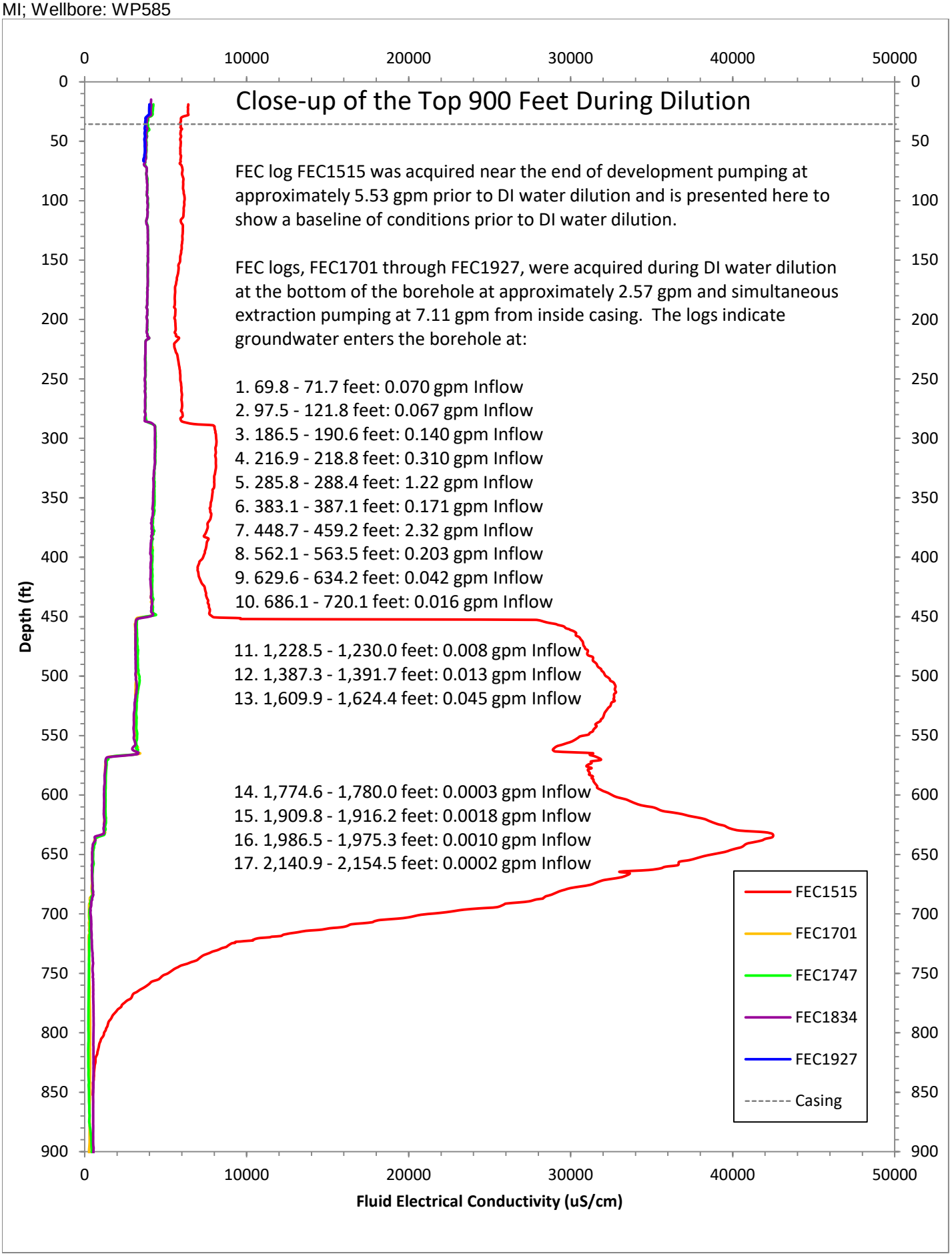


FIGURE WP585:4C. Summary of Hydrophysical Logs During DI Water Dilution at 2.5 GPM and Extraction Pumping at 7.1 GPM - Close Up of the Bottom 1,500 Ft; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP585

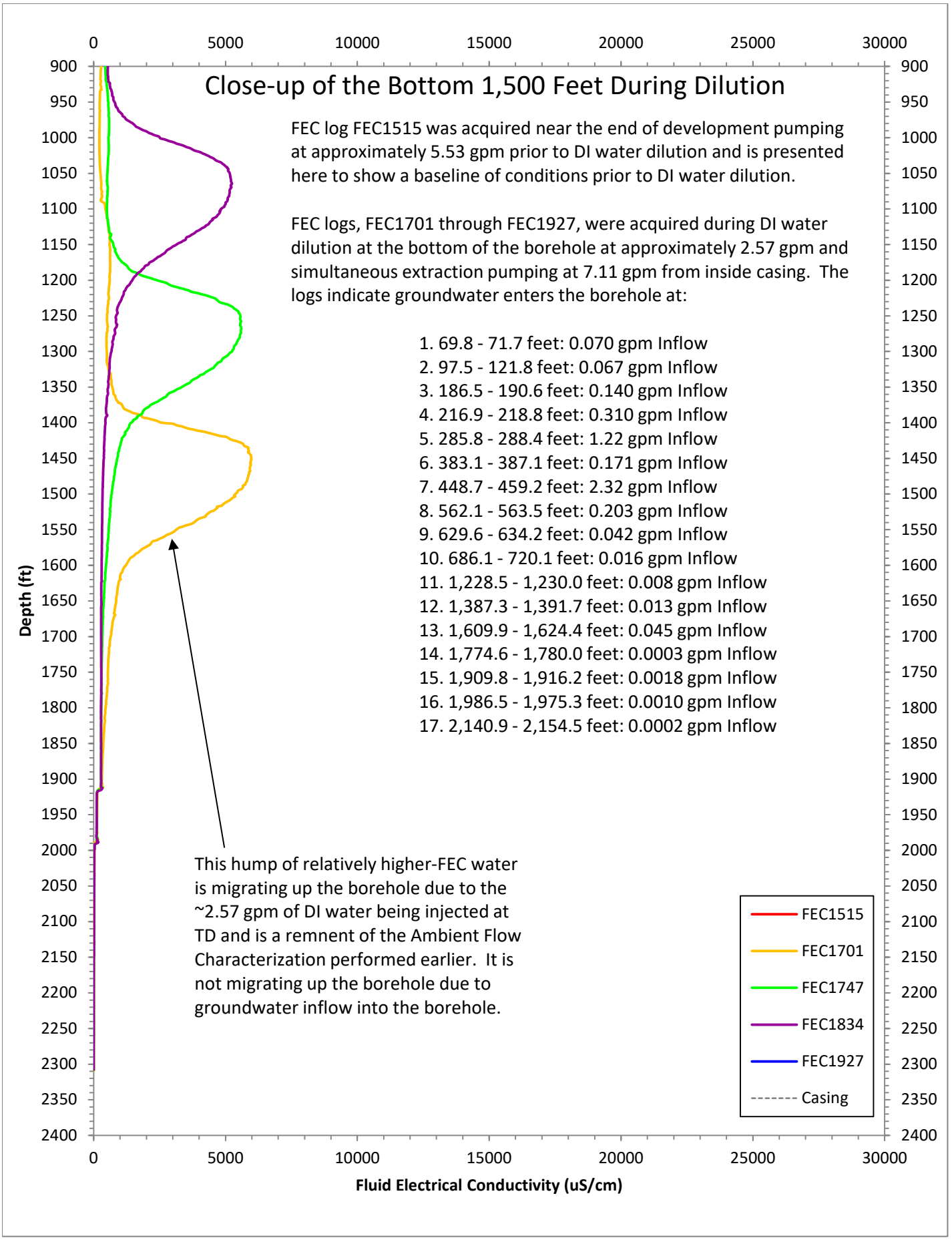


Table WP585:1. Summary Of Hydrophysical Logging Results With Hydraulic Conductivity And Transmissivity Estimations; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP585

Well Name	WP585
Ambient Depth to Water (ftbtoc)	0.00
Ambient Depth to Water (ftbgs)	-1.00
Open Hole Interval (ftbtoc)	35.7 - 2316.0

Diameter of Well (ft)	0.32
Maximum Drawdown (ft)	7.02
Effective Radius (ft)	100
Well Specific Capacity (gpm/ft-dd)	0.66

Hydrophysical Logging Results									
Interval No.	**Top of Interval (ft)**	**Bottom of Interval (ft)**	**Length of Interval (ft)**	**Ambient Flow[1] (gpm)**	**Darcy Velocity in Aquifer[2] (ft/day)**	**Interval-Specific Flow Rate During Pumping (gpm)**	**Interval-Specific Hydraulic Conductivity[3] (ft/day)**	**Transmissivity (ft^2/day)**	**Interval-Specific Fluid Electrical Conductivity (µS/cm)**
1	69.8	71.7	1.9	0.05	NA	0.070	2.96E-01	5.62E-01	1150
2	97.5	121.8	24.3	0.00	NA	0.067	7.75E-02	1.88E+00	1150
3	186.5	190.6	4.1	0.07	NA	0.140	4.80E-01	1.97E+00	6015
4	216.9	218.8	1.9	0.13	NA	0.310	2.66E+00	5.06E+00	6600
5	285.8	288.4	2.6	0.68	NA	1.22	5.84E+00	1.52E+01	1153
6	383.1	387.1	4.0	0.09	NA	0.171	5.69E-01	2.28E+00	8070
7	448.7	459.2	10.5	0.78	NA	2.320	4.12E+00	4.33E+01	5457
8	562.1	563.5	1.4	0.10	NA	0.203	2.07E+00	2.90E+00	31100
9	629.6	634.2	4.6	0.013	NA	0.042	1.77E-01	8.15E-01	48620
10	686.1	720.1	34.0	0.007	NA	0.018	9.10E-03	3.09E-01	28470
11	1228.5	1230	1.5	0.0005	NA	0.008	1.41E-01	2.11E-01	13400
12	1387.3	1391.7	4.4	0.0000	NA	0.013	8.31E-02	3.65E-01	13400
13	1609.9	1624.4	14.5	0.0007	NA	0.045	8.59E-02	1.25E+00	13250
14	1774.6	1780.0	5.4	0.0000	NA	0.0003	1.56E-03	8.43E-03	39800
15	1909.8	1916.2	6.4	0.0008	NA	0.0018	4.39E-03	2.81E-02	240000
16	1975.3	1986.5	11.2	0.0005	NA	0.0010	1.26E-03	1.41E-02	240000
17	2140.9	2154.5	13.6	0.00006	NA	0.0002	2.89E-04	3.94E-03	240000
Borehole Transmissivity Using Thiem Equation (ft^2/day)								**7.61E+01**	
Borehole Hydraulic Conductivity (K=T/b; b=length of hole of 2316.0'-35.7'=2280.3') (ft/d)							**3.34E-02**		

Note: Negative flow, if any, is outflow from the borehole to the aquifer, positive flow is inflow to the borehole.

[1] Ambient upflow is identified in this borehole under ambient conditions.

[2] Darcy Velocity, or Specific Discharge in aquifer, is calculated using the observed volumetric flow rate, the cross-sectional area of the flow interval in the wellbore and

[3] Hydraulic conductivity and transmissivity estimates are based on single well drawdown data, a porous-medium equivalent model and the Thiem equation.

All depths reported herein are referenced to ground surface.

NA = Not Applicable

WP-586 HpL Results

FIGURE WP586:1. Ambient Temperature and Fluid Electrical Conductivity; White Pine Copper; White Pine North 2024; White Pine, MI; Wellbore: WP586

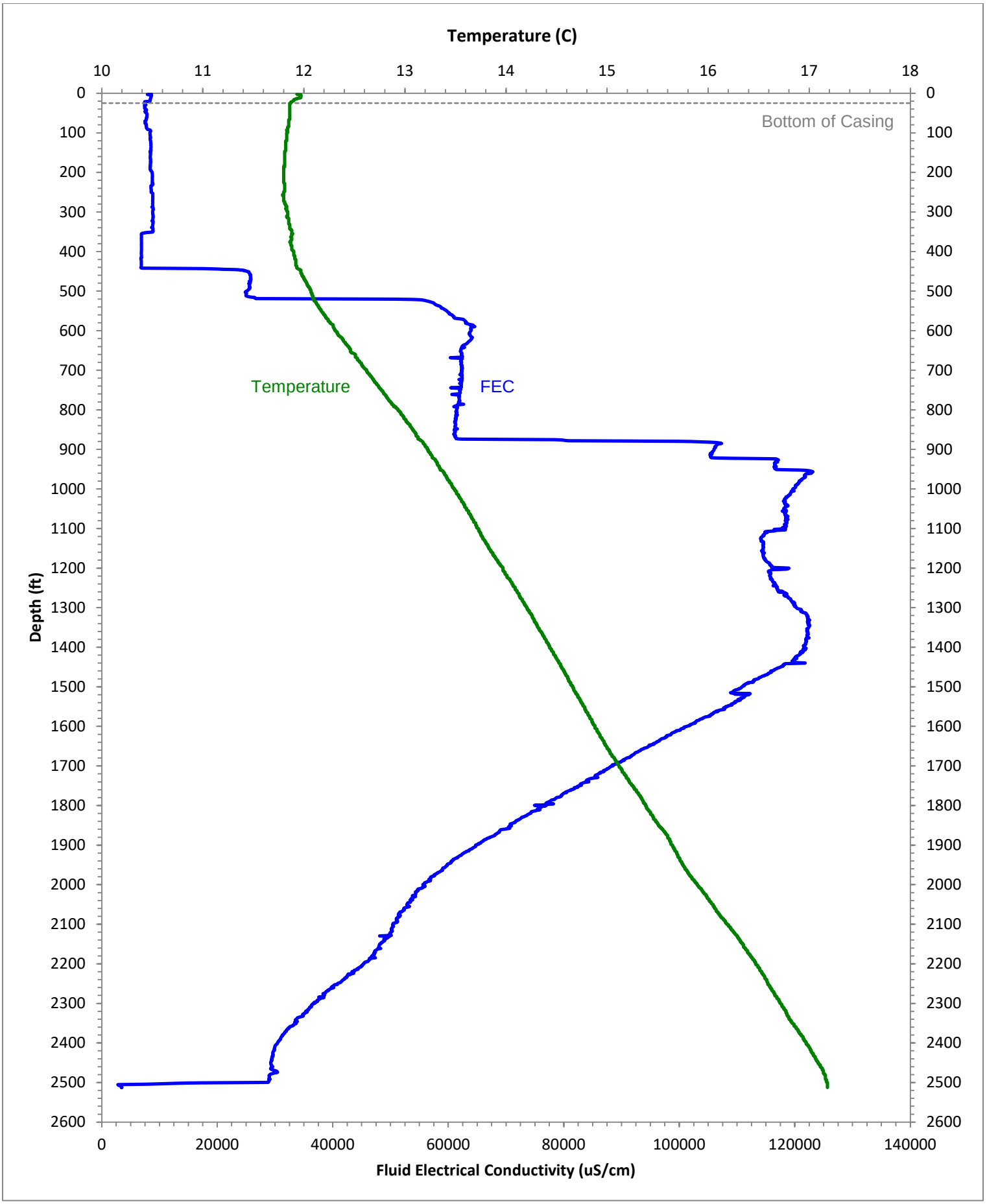


FIGURE WP586:2. Summary of Hydrophysical Logs During Ambient Flow Characterization; White Pine Copper; White Pine North 2024; White Pine, MI; Wellbore: WP586

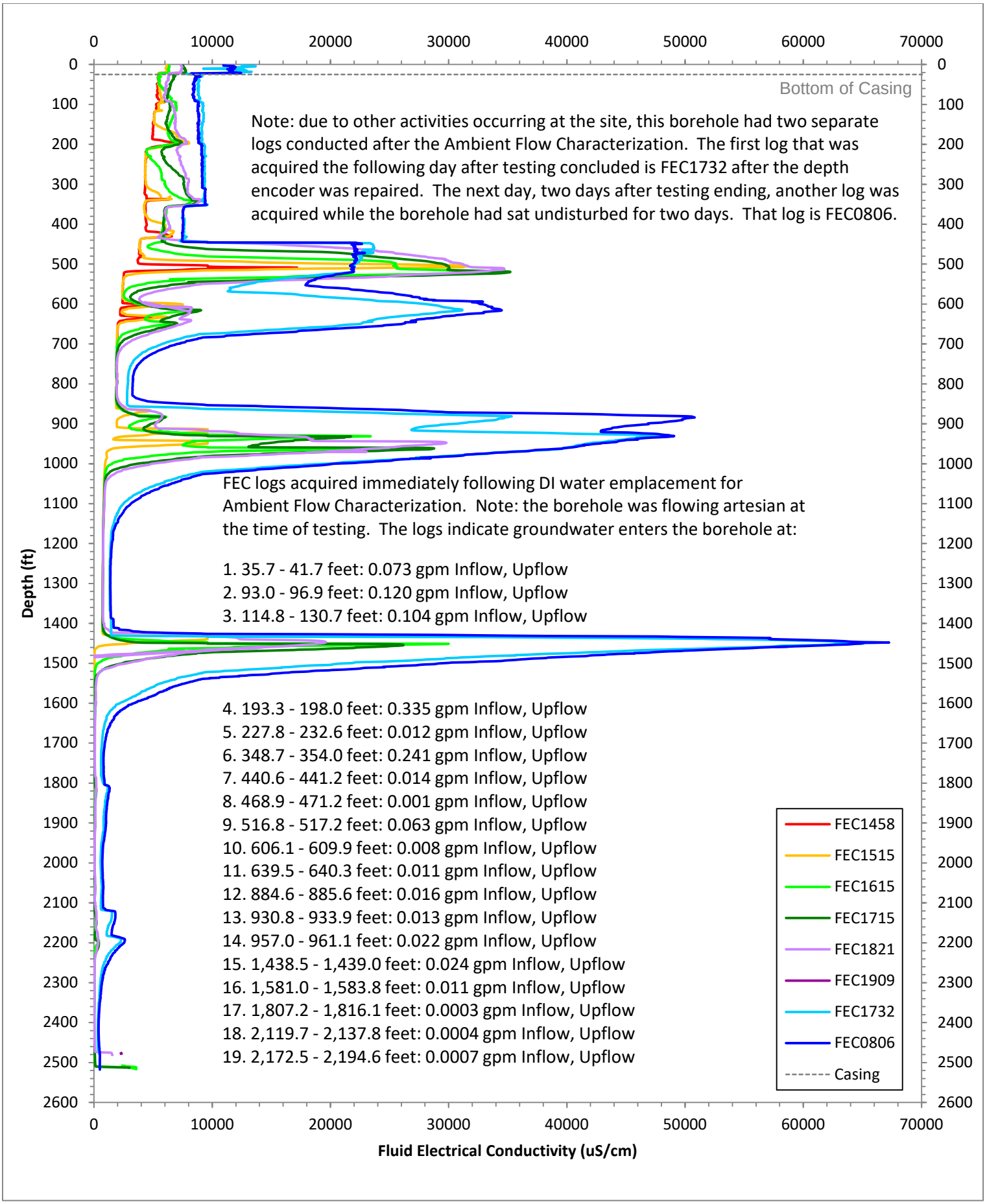


FIGURE WP586:4A. Summary of Hydrophysical Logs During Hydrophysical Stress Testing; White Pine Copper; White Pine North 2024; White Pine, MI; Wellbore: WP586

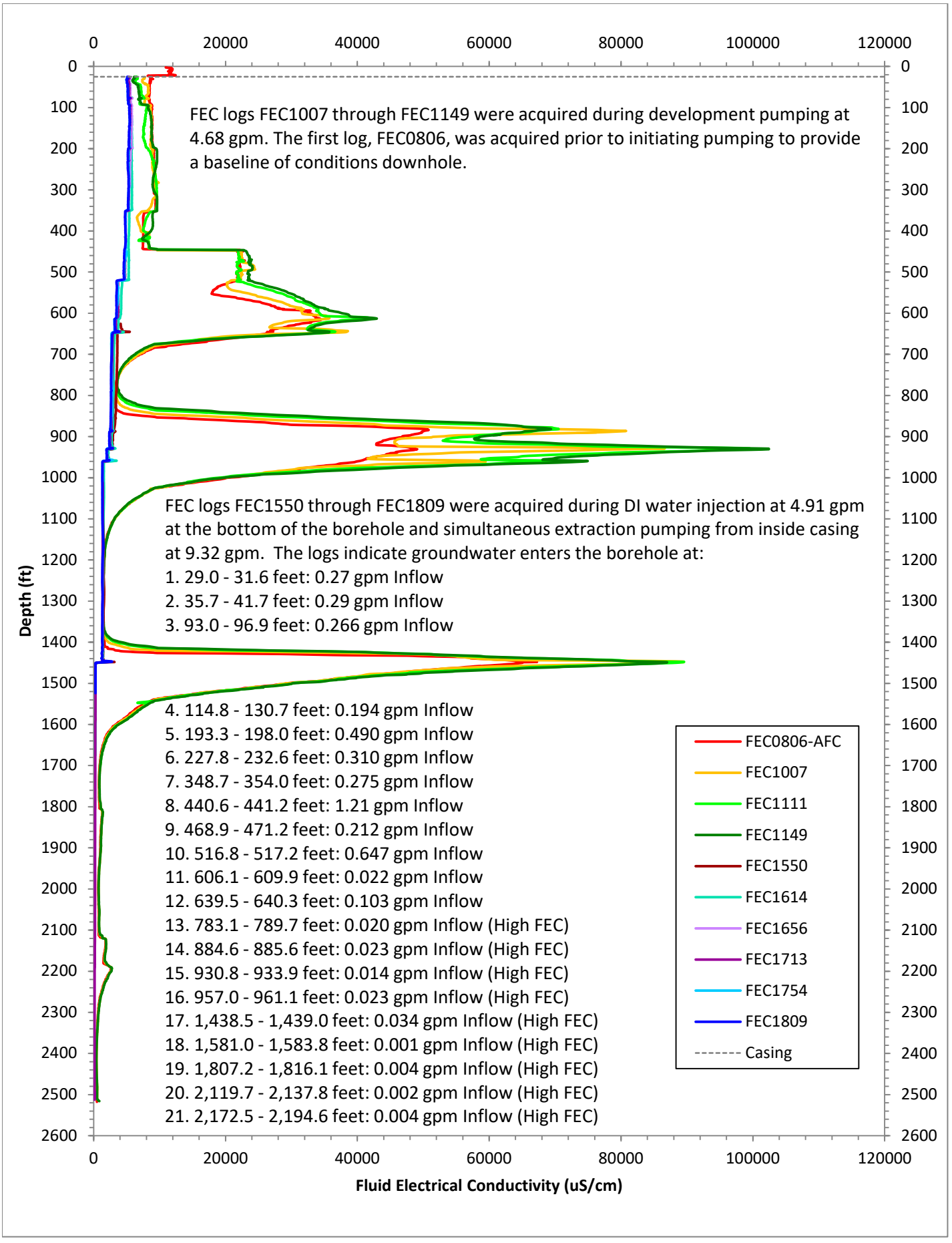
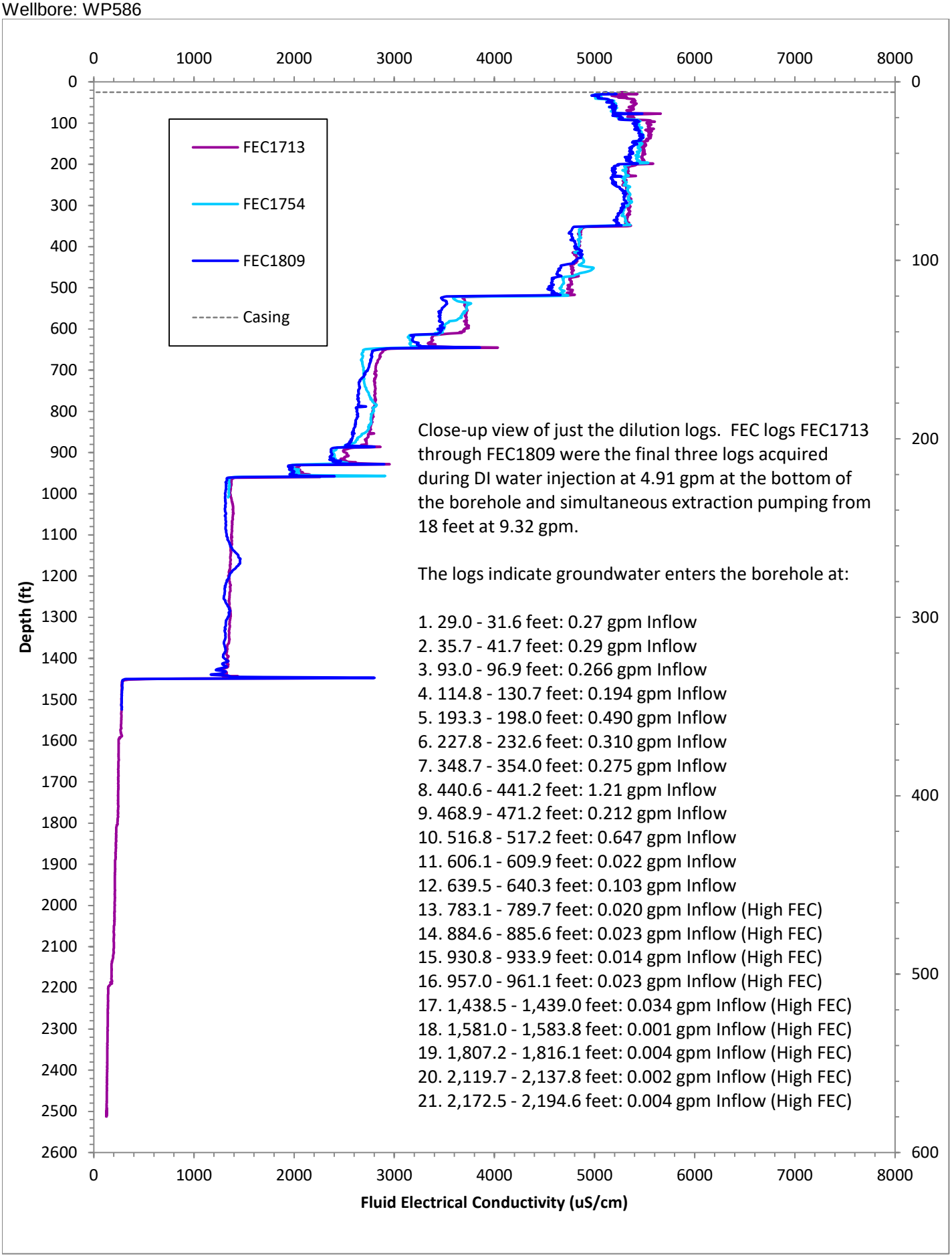


FIGURE WP586:4B. Summary of Hydrophysical Logs During Dilution at 4.91 GPM and Simultaneous Extraction Pumping at 9.32 at 18 Feet For Hydrophysical Stress Testing; White Pine Copper; White Pine North 2024; White Pine, MI; Wellbore: WP586



Close-up view of just the dilution logs. FEC logs FEC1713 through FEC1809 were the final three logs acquired during DI water injection at 4.91 gpm at the bottom of the borehole and simultaneous extraction pumping from 18 feet at 9.32 gpm.

The logs indicate groundwater enters the borehole at:

1. 29.0 - 31.6 feet: 0.27 gpm Inflow
2. 35.7 - 41.7 feet: 0.29 gpm Inflow
3. 93.0 - 96.9 feet: 0.266 gpm Inflow
4. 114.8 - 130.7 feet: 0.194 gpm Inflow
5. 193.3 - 198.0 feet: 0.490 gpm Inflow
6. 227.8 - 232.6 feet: 0.310 gpm Inflow
7. 348.7 - 354.0 feet: 0.275 gpm Inflow
8. 440.6 - 441.2 feet: 1.21 gpm Inflow
9. 468.9 - 471.2 feet: 0.212 gpm Inflow
10. 516.8 - 517.2 feet: 0.647 gpm Inflow
11. 606.1 - 609.9 feet: 0.022 gpm Inflow
12. 639.5 - 640.3 feet: 0.103 gpm Inflow
13. 783.1 - 789.7 feet: 0.020 gpm Inflow (High FEC)
14. 884.6 - 885.6 feet: 0.023 gpm Inflow (High FEC)
15. 930.8 - 933.9 feet: 0.014 gpm Inflow (High FEC)
16. 957.0 - 961.1 feet: 0.023 gpm Inflow (High FEC)
17. 1,438.5 - 1,439.0 feet: 0.034 gpm Inflow (High FEC)
18. 1,581.0 - 1,583.8 feet: 0.001 gpm Inflow (High FEC)
19. 1,807.2 - 1,816.1 feet: 0.004 gpm Inflow (High FEC)
20. 2,119.7 - 2,137.8 feet: 0.002 gpm Inflow (High FEC)
21. 2,172.5 - 2,194.6 feet: 0.004 gpm Inflow (High FEC)

Table WP586:1. Summary Of Hydrophysical Logging Results With Hydraulic Conductivity And Transmissivity Estimations; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP586

Well Name	WP586
Ambient Depth to Water (ftbtoc)	0.00
Ambient Depth to Water (ftbgs)	-1.50
Open Hole Interval (ftbtoc)	24.9 - 2504.5

Diameter of Well (ft)	0.32
Maximum Drawdown (ft)	19.63
Effective Radius (ft)	100
Well Specific Capacity (gpm/ft-dd)	0.22

Hydrophysical Logging Results									
Interval No.	**Top of Interval (ft)**	**Bottom of Interval (ft)**	**Length of Interval (ft)**	**Ambient Flow[1] (gpm)**	**Darcy Velocity in Aquifer[2] (ft/day)**	**Interval-Specific Flow Rate During Pumping (gpm)**	**Interval-Specific Hydraulic Conductivity[3] (ft/day)**	**Transmissivity (ft^2/day)**	**Interval-Specific Fluid Electrical Conductivity (µS/cm)**
1	29.0	31.6	2.6	0.000	NA	0.27	1.04E+00	2.71E+00	4200
2	35.7	41.7	6.0	0.073	NA	0.29	3.64E-01	2.18E+00	4200
3	93.0	96.9	3.9	0.120	NA	0.266	3.76E-01	1.47E+00	8430
4	114.8	130.7	15.9	0.104	NA	0.194	5.69E-02	9.05E-01	8390
5	193.3	198.0	4.7	0.335	NA	0.490	3.32E-01	1.56E+00	8380
6	227.8	232.6	4.8	0.012	NA	0.310	6.24E-01	3.00E+00	8750
7	348.7	354.0	5.3	0.241	NA	0.275	6.45E-02	3.42E-01	9570
8	440.6	441.2	0.6	0.014	NA	1.21	2.00E+01	1.20E+01	8930
9	468.9	471.2	2.3	0.001	NA	0.212	9.22E-01	2.12E+00	21000
10	516.8	517.2	0.4	0.063	NA	0.647	1.47E+01	5.87E+00	24500
11	606.1	609.9	3.8	0.008	NA	0.022	3.70E-02	1.41E-01	61590
12	639.5	640.3	0.8	0.011	NA	0.103	1.16E+00	9.25E-01	61590
13	783.1	789.7	6.6	0.000	NA	0.020	3.05E-02	2.01E-01	100000
14	884.6	885.6	1.0	0.016	NA	0.023	7.04E-02	7.04E-02	100000
15	930.8	933.9	3.1	0.013	NA	0.014	3.24E-03	1.01E-02	121000
16	957.0	961.1	4.1	0.022	NA	0.023	2.45E-03	1.01E-02	121000
17	1438.5	1439.0	0.5	0.024	NA	0.034	2.01E-01	1.01E-01	121000
18	1581.0	1583.8	2.8	0.011	NA	0.001	NA	NA	103500
19	1807.2	1816.1	8.9	0.0003	NA	0.004	4.18E-03	3.72E-02	76100
20	2119.7	2137.8	18.1	0.0004	NA	0.002	8.89E-04	1.61E-02	103500
21	2172.5	2184.6	12.1	0.0007	NA	0.004	2.74E-03	3.32E-02	46950
Borehole Transmissivity Using Thiem Equation (ft^2/day)								**3.37E+01**	
Borehole Hydraulic Conductivity (K=T/b; b=length of hole of 2504.5'-24.9'=2479.6') (ft/d)							**1.36E-02**		

Note: Negative flow, if any, is outflow from the borehole to the aquifer, positive flow is inflow to the borehole.

Additional note: the interval at 1,581.0 - 1,583.8 feet exhibited higher inflow during ambient flow testing than during pumping. This is not typical and the reason is unknown at this time. As such, no permeability estimation can be made for this interval using the hydrophysical data.

[1] Ambient upflow is identified in this borehole under ambient conditions.

[2] Darcy Velocity, or Specific Discharge in aquifer, is calculated using the observed volumetric flow rate, the cross-sectional area of the flow interval in the wellbore

[3] Hydraulic conductivity and transmissivity estimates are based on single well drawdown data, a porous-medium equivalent model and the Thiem equation.

All depths reported herein are referenced to ground surface.

NA = Not Applicable

WP-587 HpL Results

FIGURE WP587:1. Ambient Temperature and Fluid Electrical Conductivity; White Pine Copper; White Pine North 2024; White Pine, MI; Wellbore: WP587

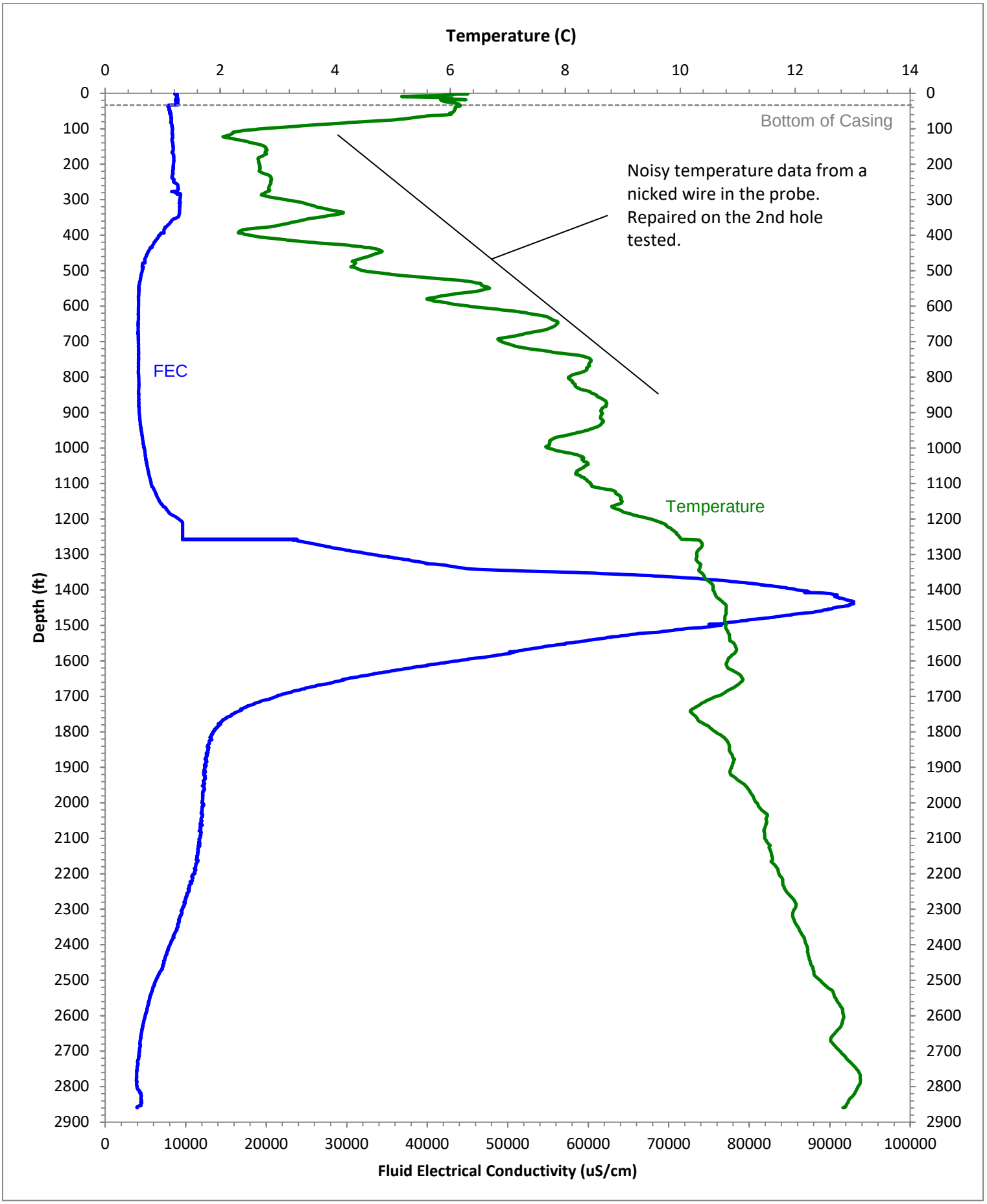


FIGURE WP587:2. Ambient Flow Characterization; White Pine Copper; White Pine North 2024; White Pine, MI; Wellbore: WP587

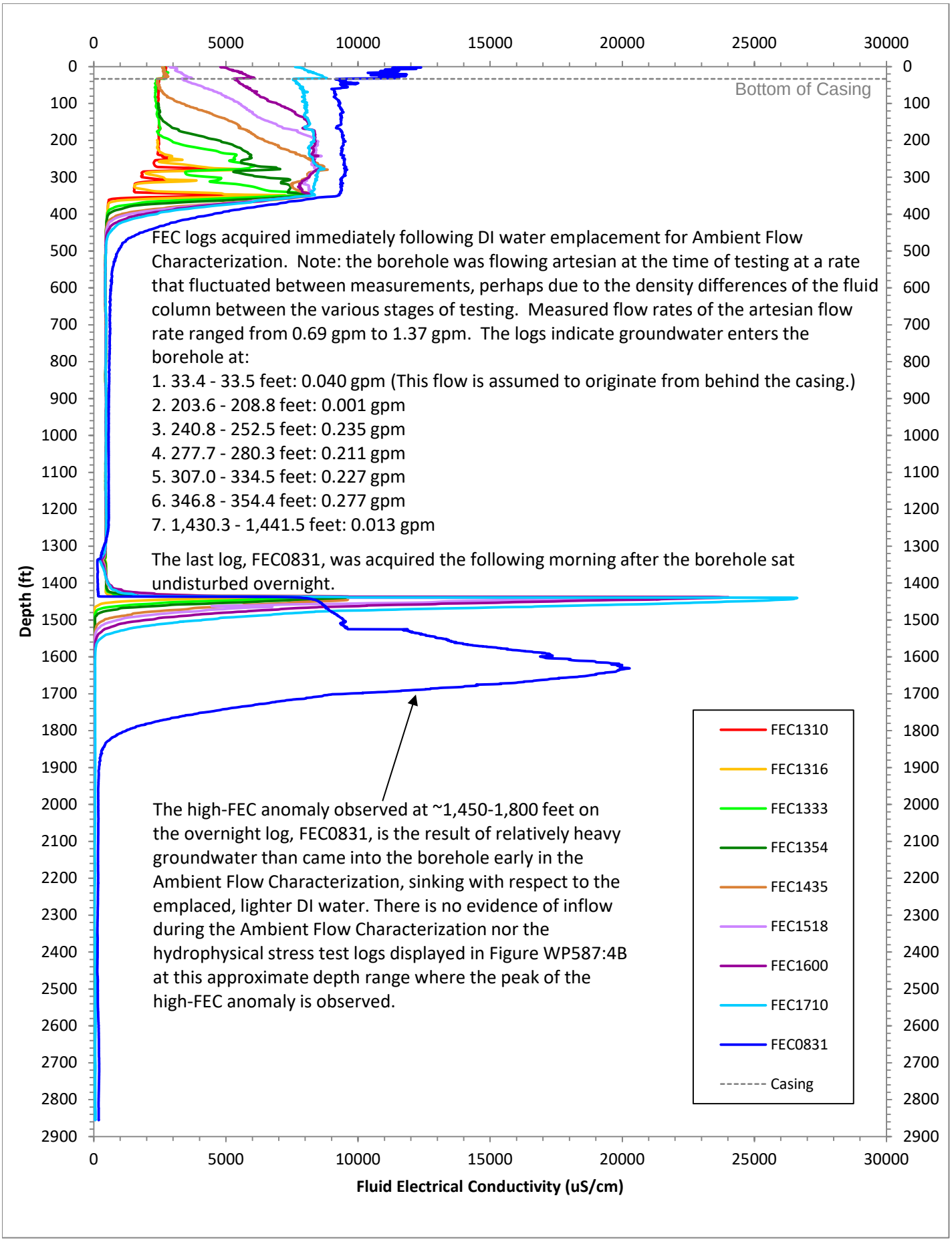


FIGURE WP587:3. Pumping and Drawdown Data During 10 GPM Hydrophysical Stress Testing; White Pine Copper; White Pine North 2024; White Pine, MI; Wellbore: WP587

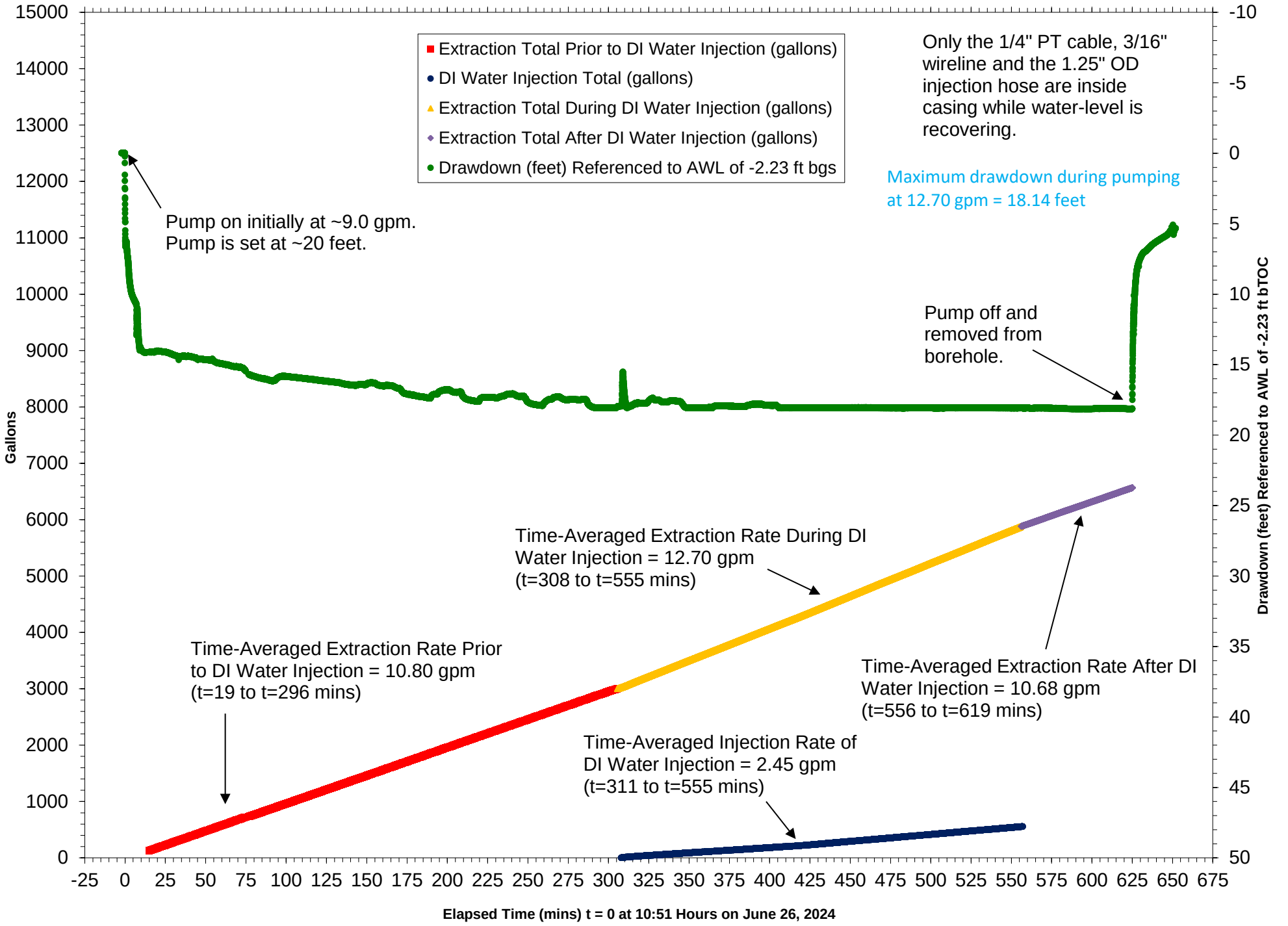


FIGURE WP587:4A. Summary of Hydrophysical Logs During Development Pumping at 10.8 GPM Prior to DI Water Dilution For Hydrophysical Stress Testing; White Pine Copper; White Pine North 2024; White Pine, MI; Wellbore: WP587

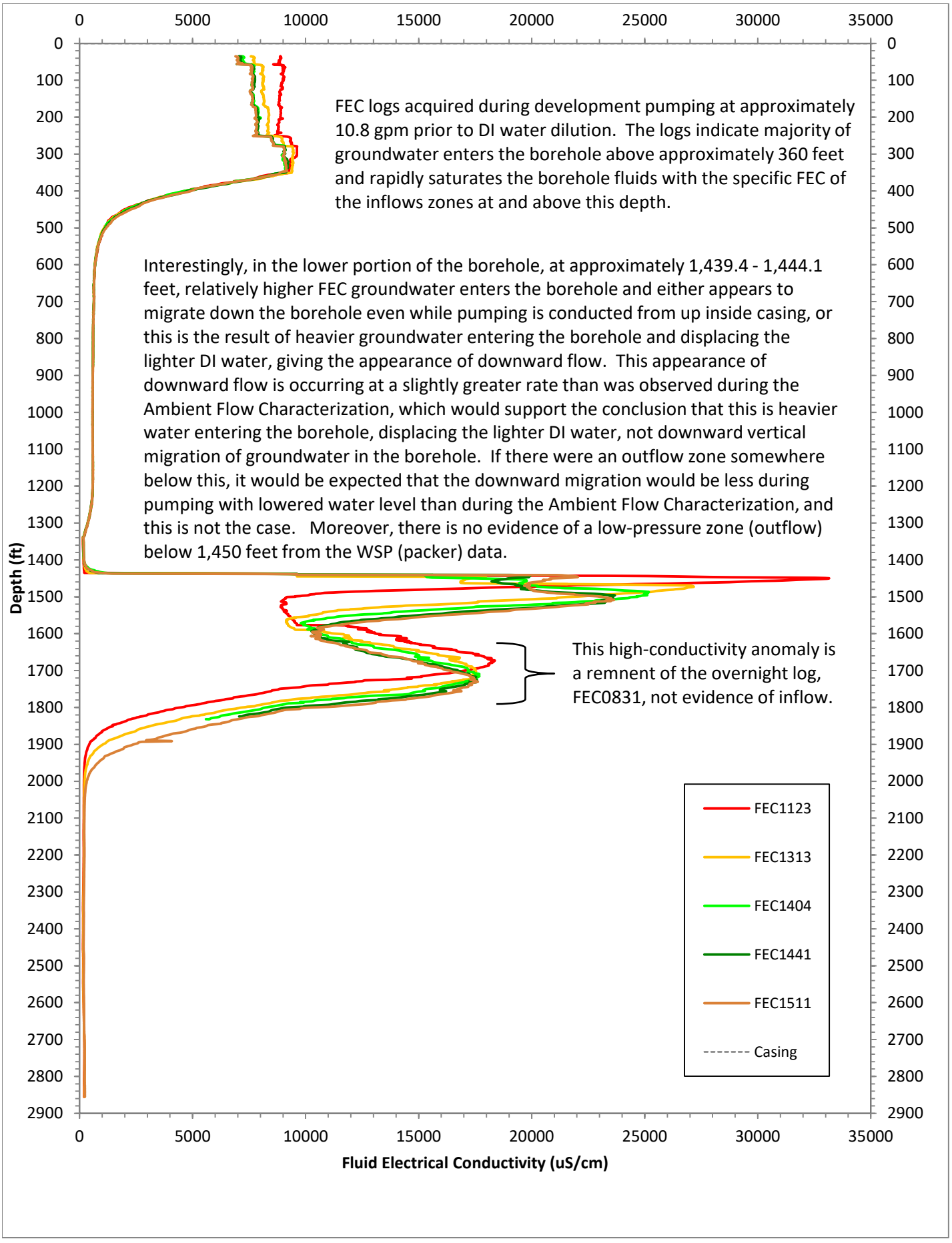


FIGURE WP587:4B. Summary of Hydrophysical Logs During DI Water Injection at 2.25 GPM and Simultaneous Extraction Pumping at 12.7 GPM For Hydrophysical Stress Testing; White Pine Copper; White Pine North 2024; White Pine, MI; Wellbore: WP587

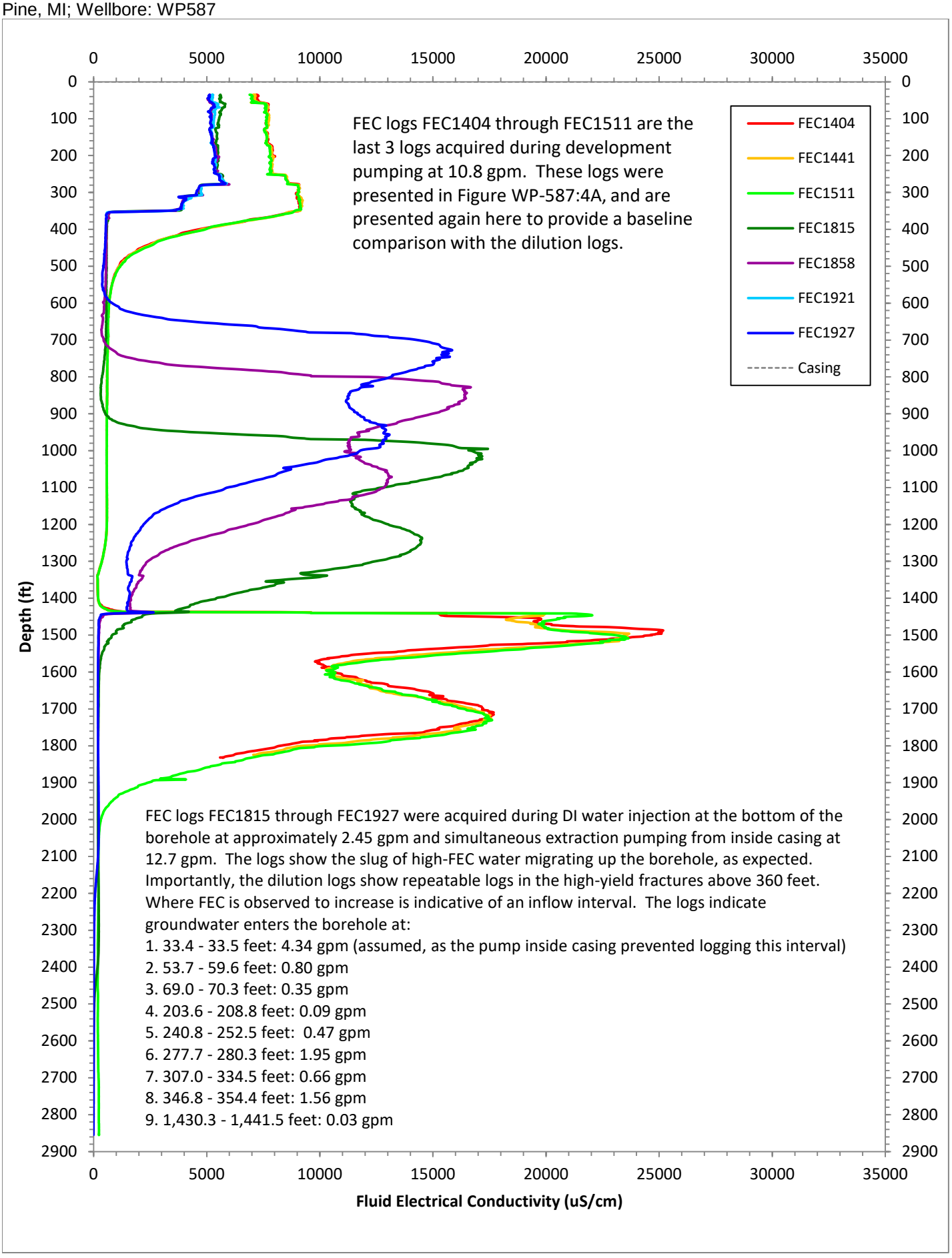


Table WP587:1. Summary Of Hydrophysical Logging Results With Hydraulic Conductivity And Transmissivity Estimations; White Pine Copper; White Pine North 2024; White Pine, MI; Wellbore: WP587

Well Name	WP587
Ambient Depth to Water (ftbtoc)	0.00
Ambient Depth to Water (ftbgs)	-2.23
Open Hole Interval (ftbtoc)	33.4 - 2858.0

Diameter of Well (ft)	0.32
Maximum Drawdown (ft)	18.14
Effective Radius (ft)	100
Well Specific Capacity (gpm/ft-dd)	0.31

Hydrophysical Logging Results

Interval No.	Top of Interval (ft)	Bottom of Interval (ft)	Length of Interval (ft)	Ambient Flow[1] (gpm)	Darcy Velocity in Aquifer[2] (ft/day)	Interval-Specific Flow Rate During Pumping (gpm)	Interval-Specific Hydraulic Conductivity[3] (ft/day)	Transmissivity (ft^2/day)	Interval-Specific Fluid Electrical Conductivity (µS/cm)
1*	33.4	33.5	0.1	0.040	NA	4.34	4.68E+02	4.68E+01	6114
2	53.7	59.6	5.9	0.000	NA	0.80	1.48E+00	8.70E+00	2991
3	69.0	70.3	1.3	0.000	NA	0.35	2.93E+00	3.81E+00	4852
4	203.6	208.8	5.2	0.001	NA	0.09	1.86E-01	9.68E-01	5326
5	240.8	252.5	11.7	0.235	NA	0.47	2.19E-01	2.56E+00	2044
6	277.7	280.3	2.6	0.211	NA	1.95	7.28E+00	1.89E+01	7819
7	307.0	334.5	27.5	0.227	NA	0.66	1.71E-01	4.71E+00	8917
8	346.8	354.4	7.6	0.277	NA	1.56	1.84E+00	1.40E+01	9121
9	1430.3	1441.5	11.2	0.013	NA	0.03	1.65E-02	1.85E-01	92650
Borehole Transmissivity Using Thiem Equation (ft^2/day)								**1.01E+02**	
Borehole Hydraulic Conductivity (K=T/b; b=length of hole of 2858.0'-33.4'=2824.6') (ft/d)							**3.56E-02**		

Note: Negative flow, if any, is outflow from the borehole to the aquifer, positive flow is inflow to the borehole.

* The top of this interval is the bottom of casing.

All depths reported herein are referenced to ground surface.

NA = Not Applicable

WP-588 HpL Results

FIGURE WP588:1. Ambient Temperature and Fluid Electrical Conductivity; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP588

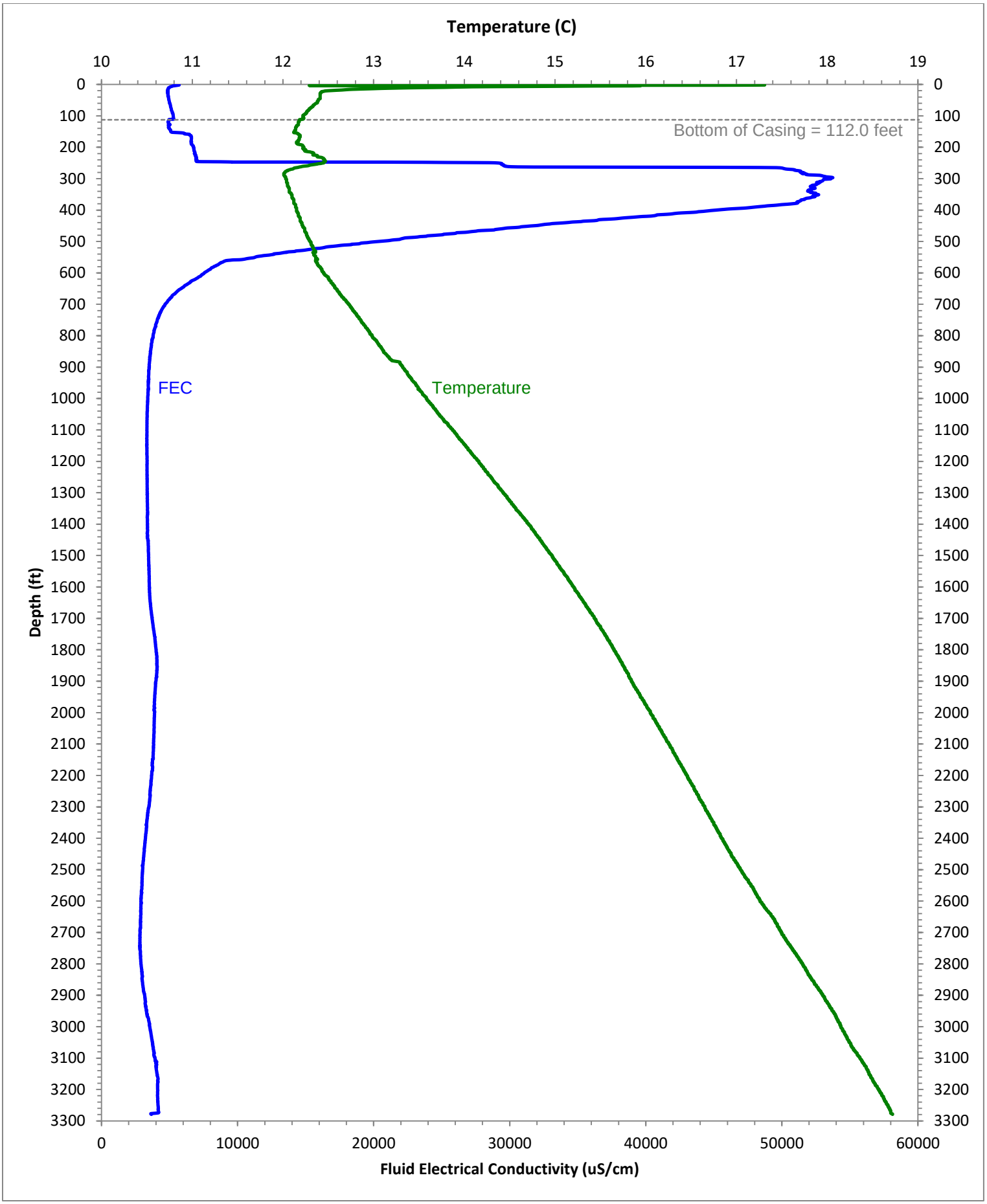


FIGURE WP588:2A. Summary of Hydrophysical Logs During Ambient Flow Characterization; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP588

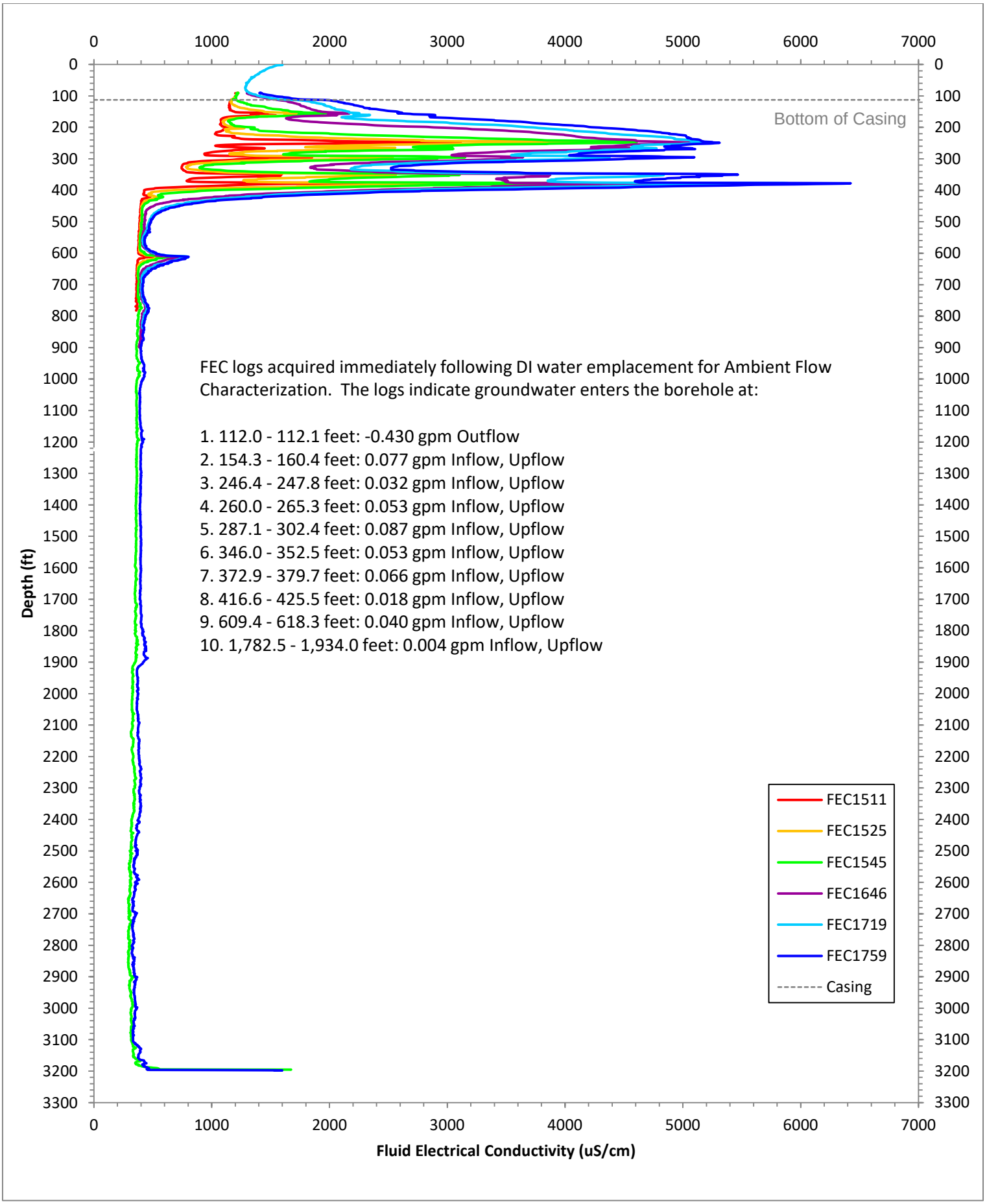


FIGURE WP588:2B. Summary of Hydrophysical Logs During Ambient Flow Characterization: Close-Up View of Top 900 Feet; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP588

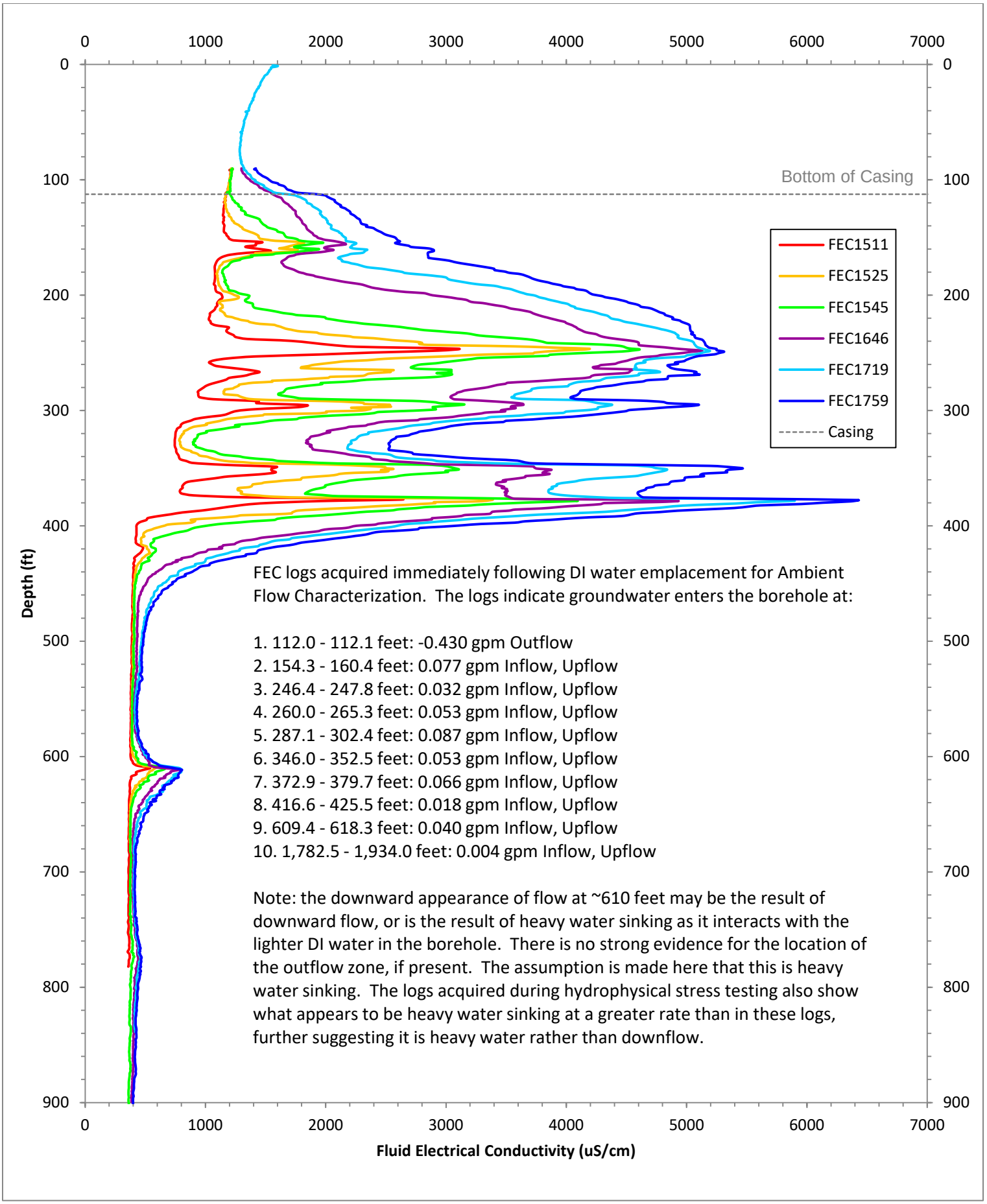


FIGURE WP588:3. Pumping and Drawdown Data During 15.4 GPM Hydrophysical Stress Testing; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP588

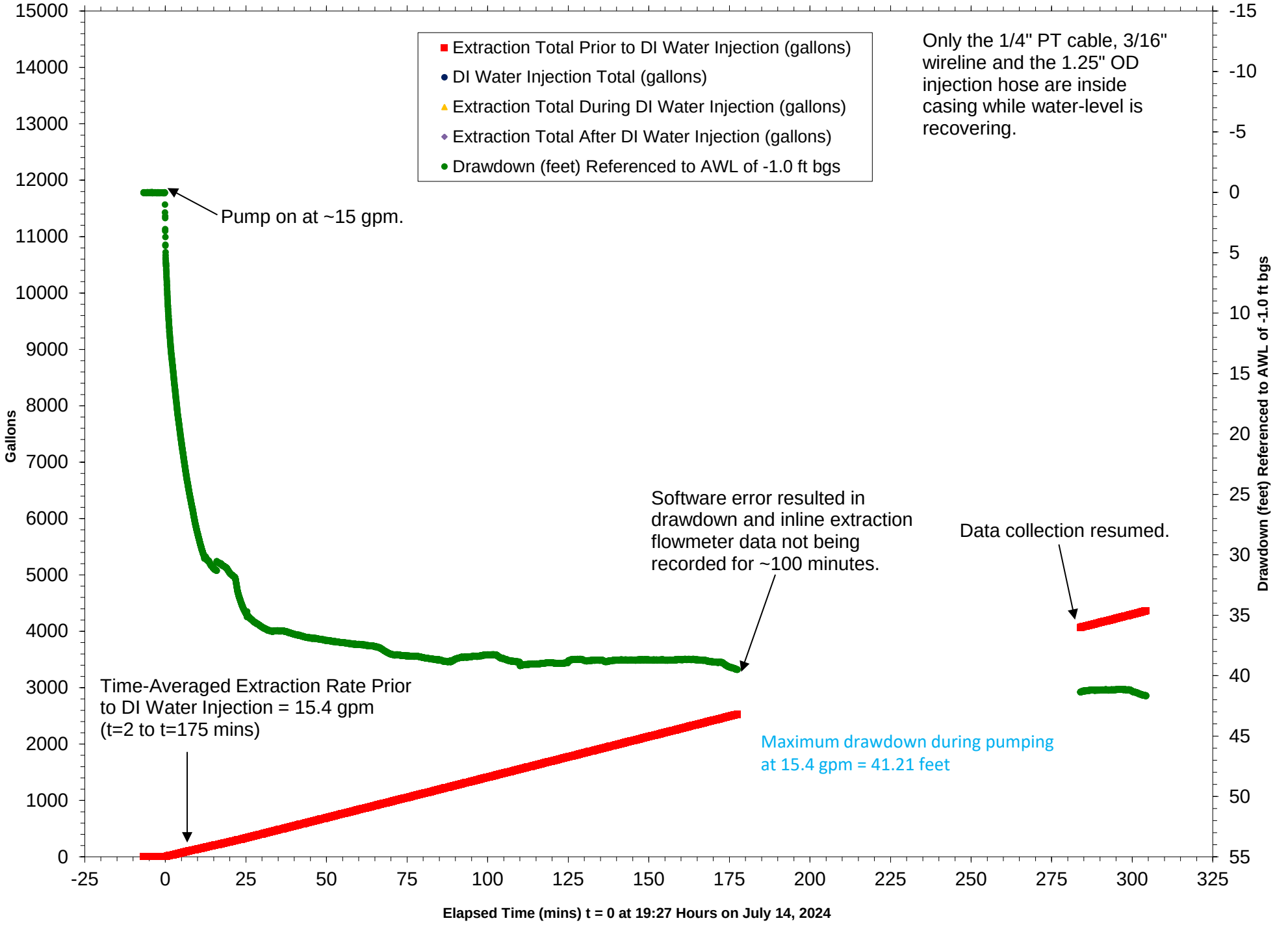


FIGURE WP588:4A. Summary of Hydrophysical Logs During Pumping at 15.4 GPM After DI Water Dilution For Hydrophysical Stress Testing; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP588

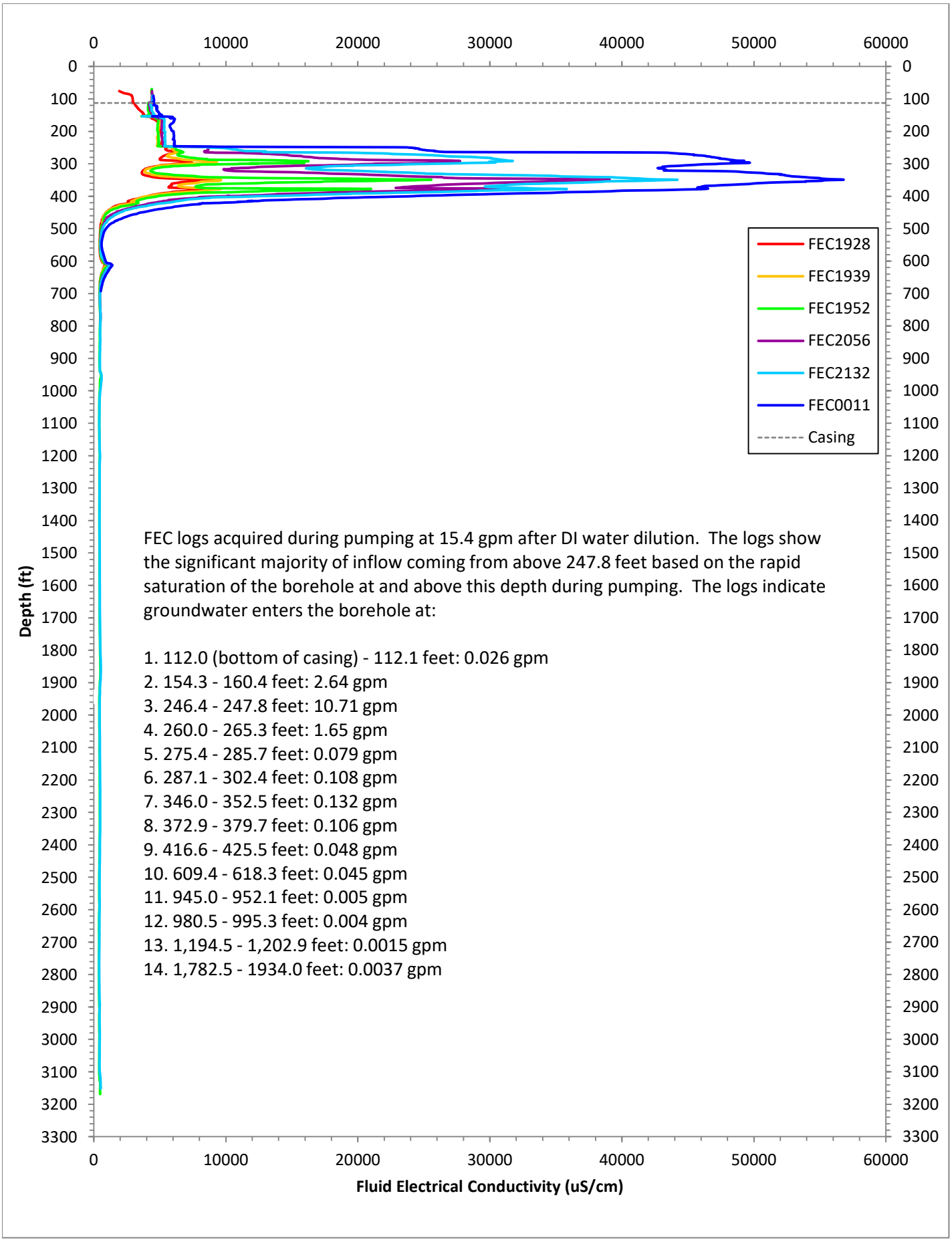


FIGURE WP588:4B. Summary of Hydrophysical Logs During Pumping at 15.4 GPM After DI Water Dilution For Hydrophysical Stress Testing; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP588

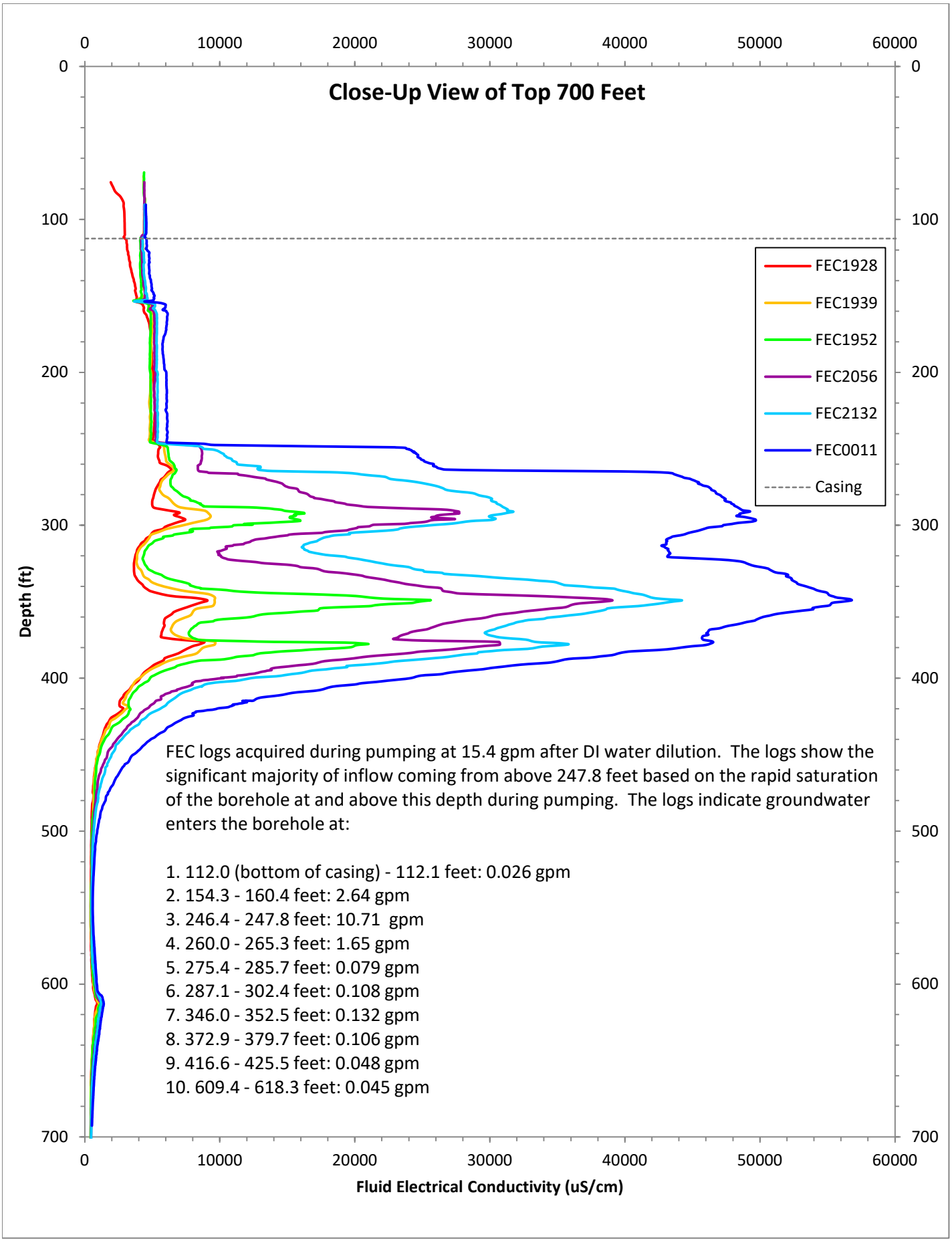


FIGURE WP588:4C. Summary of Hydrophysical Logs During Pumping at 15.4 GPM After DI Water Dilution For Hydrophysical Stress Testing - High-Resolution FEC Scale; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP588

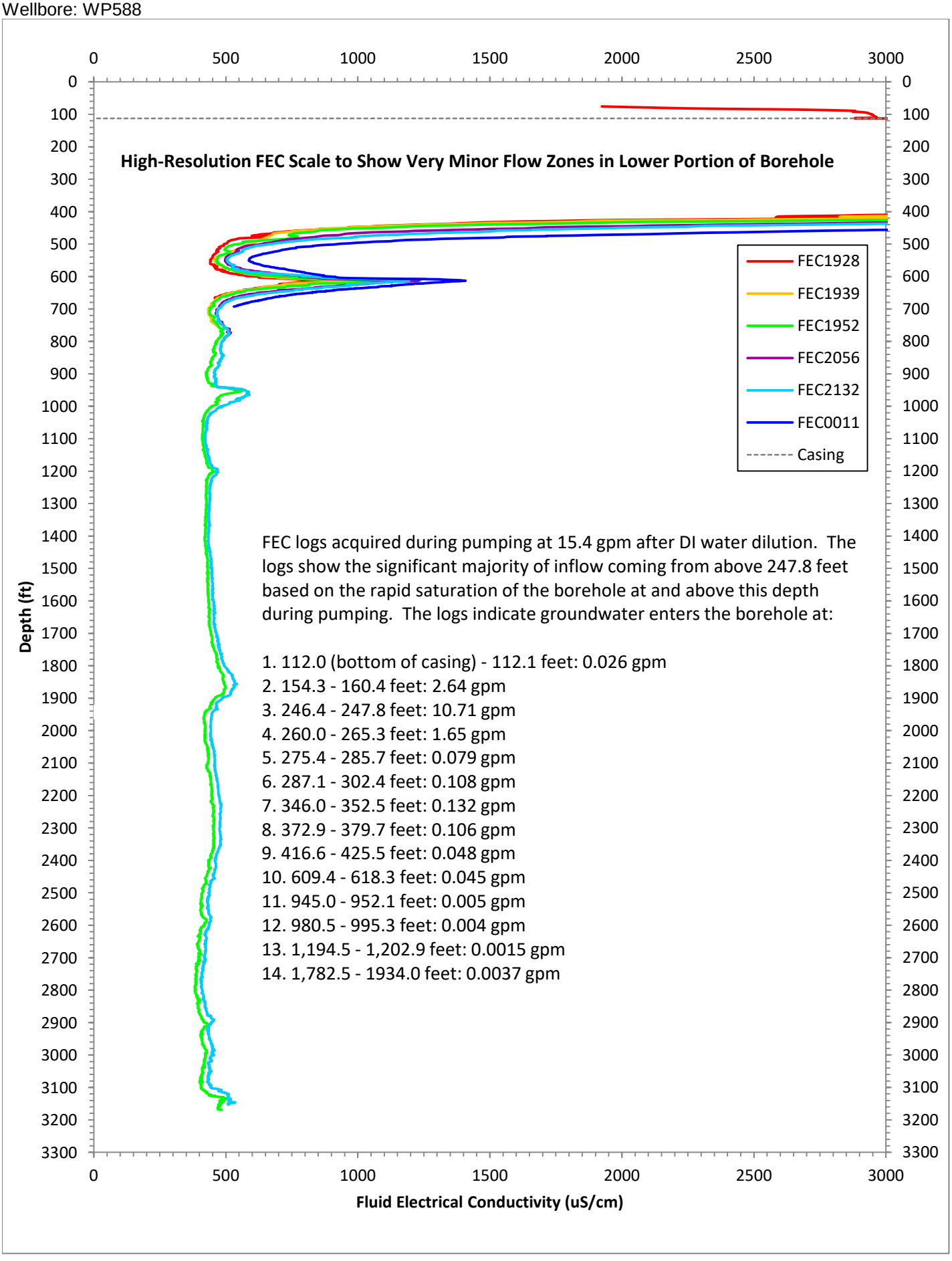


Table WP588:1. Summary Of Hydrophysical Logging Results With Hydraulic Conductivity And Transmissivity Estimations; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP588

Well Name	WP588
Ambient Depth to Water (ftbtoc)	0.75
Ambient Depth to Water (ftbgs)	-1.00
Open Hole Interval (ftbtoc)	112.0 - 3279.3

Diameter of Well (ft)	0.32
Maximum Drawdown (ft)	39.5
Effective Radius (ft)	100
Well Specific Capacity (gpm/ft-dd)	0.39

Hydrophysical Logging Results

Interval No.	Top of Interval (ft)	Bottom of Interval (ft)	Length of Interval (ft)	Ambient Flow[1] (gpm)	Darcy Velocity in Aquifer[2] (ft/day)	Interval-Specific Flow Rate During Pumping (gpm)	Interval-Specific Hydraulic Conductivity[3] (ft/day)	Transmissivity (ft^2/day)	Interval-Specific Fluid Electrical Conductivity (µS/cm)
1*	112.0	112.1	0.1	-0.430	NA	0.026	2.28E+01	2.28E+00	4930
2	154.3	160.4	6.1	0.077	NA	2.64	2.10E+00	1.28E+01	6465
3	246.4	247.8	1.4	0.032	NA	10.71	3.81E+01	5.33E+01	20780
4	260.0	265.3	5.3	0.053	NA	1.65	1.51E+00	7.98E+00	49580
5	275.4	285.7	10.3	0.000	NA	0.079	3.83E-02	3.95E-01	51470
6	287.1	302.4	15.3	0.087	NA	0.108	6.86E-03	1.05E-01	53630
7	346.0	352.5	6.5	0.053	NA	0.132	6.07E-02	3.95E-01	52470
8	372.9	379.7	6.8	0.066	NA	0.106	2.94E-02	2.00E-01	51275
9	416.6	425.5	8.9	0.018	NA	0.048	1.68E-02	1.50E-01	39040
10	609.4	618.3	8.9	0.040	NA	0.045	2.81E-03	2.50E-02	7065
11	945.0	952.1	7.1	0.000	NA	0.005	3.52E-03	2.50E-02	3360
12	980.5	995.3	14.8	0.000	NA	0.004	1.35E-03	2.00E-02	3360
13	1194.5	1202.9	8.4	0.000	NA	0.0015	8.92E-04	7.49E-03	3360
14	1782.5	1934.0	151.5	0.004	NA	0.0037	NA	NA	3360
Borehole Transmissivity Using Thiem Equation (ft^2/day)								**7.77E+01**	
Borehole Hydraulic Conductivity (K=T/b; b=length of hole of 3279.3'-112.0'=3167.3') (ft/d)							**2.45E-02**		

Note: Negative flow, if any, is outflow from the borehole to the aquifer, positive flow is inflow to the borehole.

Additional Note: Based on the rate of increase of mass at interval #14 at 1,782.5 - 1,934.0 feet, more flow came in during ambient flow testing than during stress testing, which is not typical.

* The top of this interval is the bottom of casing.

[1] Ambient upflow is identified in this borehole under ambient conditions.

[2] Darcy Velocity, or Specific Discharge in aquifer, is calculated using the observed volumetric flow rate, the cross-sectional area of the flow interval in the wellbore and

[3] Hydraulic conductivity and transmissivity estimates are based on single well drawdown data, a porous-medium equivalent model and the Thiem equation.

All depths reported herein are referenced to ground surface.

NA = Not Applicable

WP-592 HpL Results

FIGURE WP592:1. Ambient Temperature and Fluid Electrical Conductivity; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP592

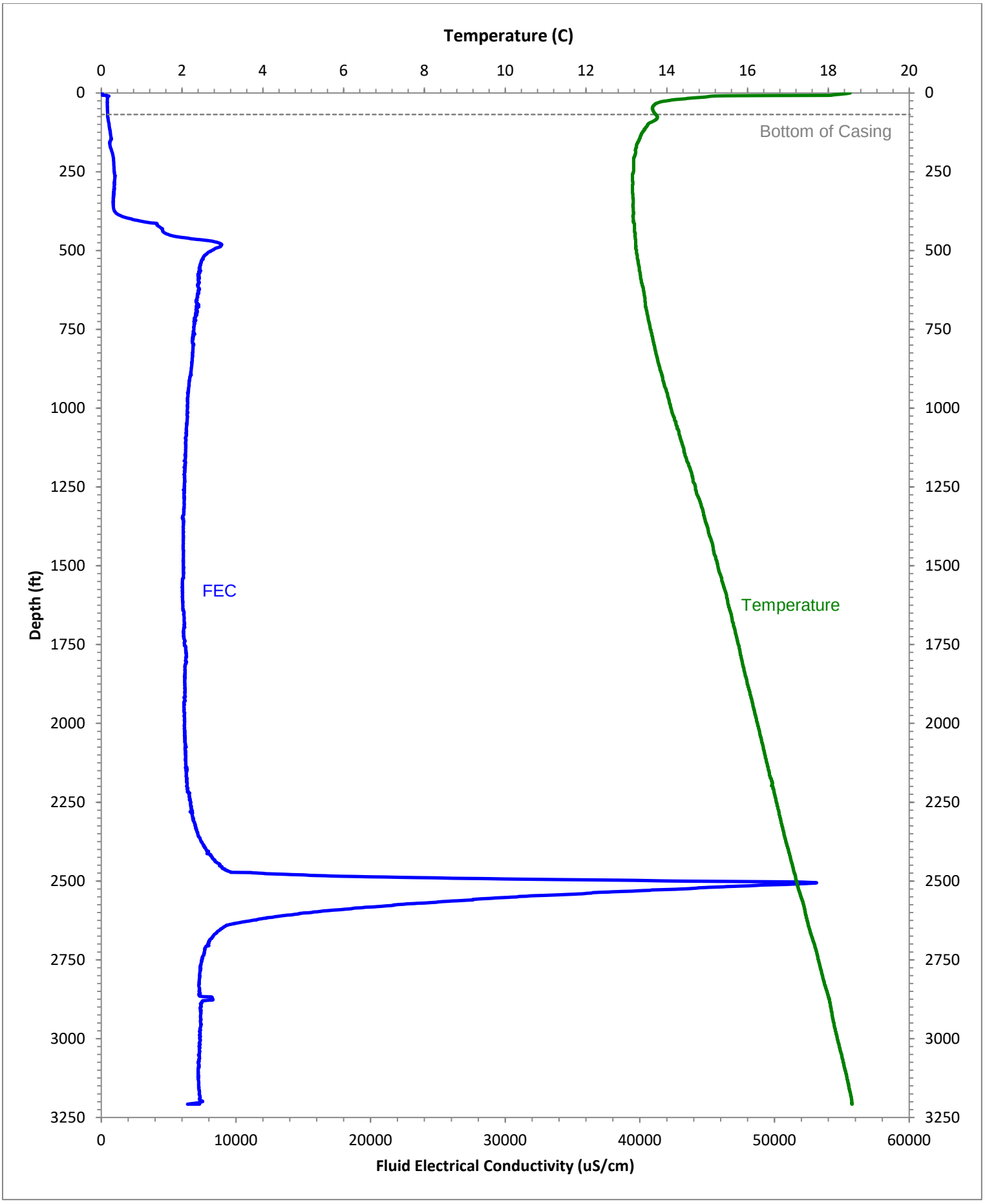


FIGURE WP592:2. Summary of Hydrophysical Logs During Ambient Flow Characterization; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP592

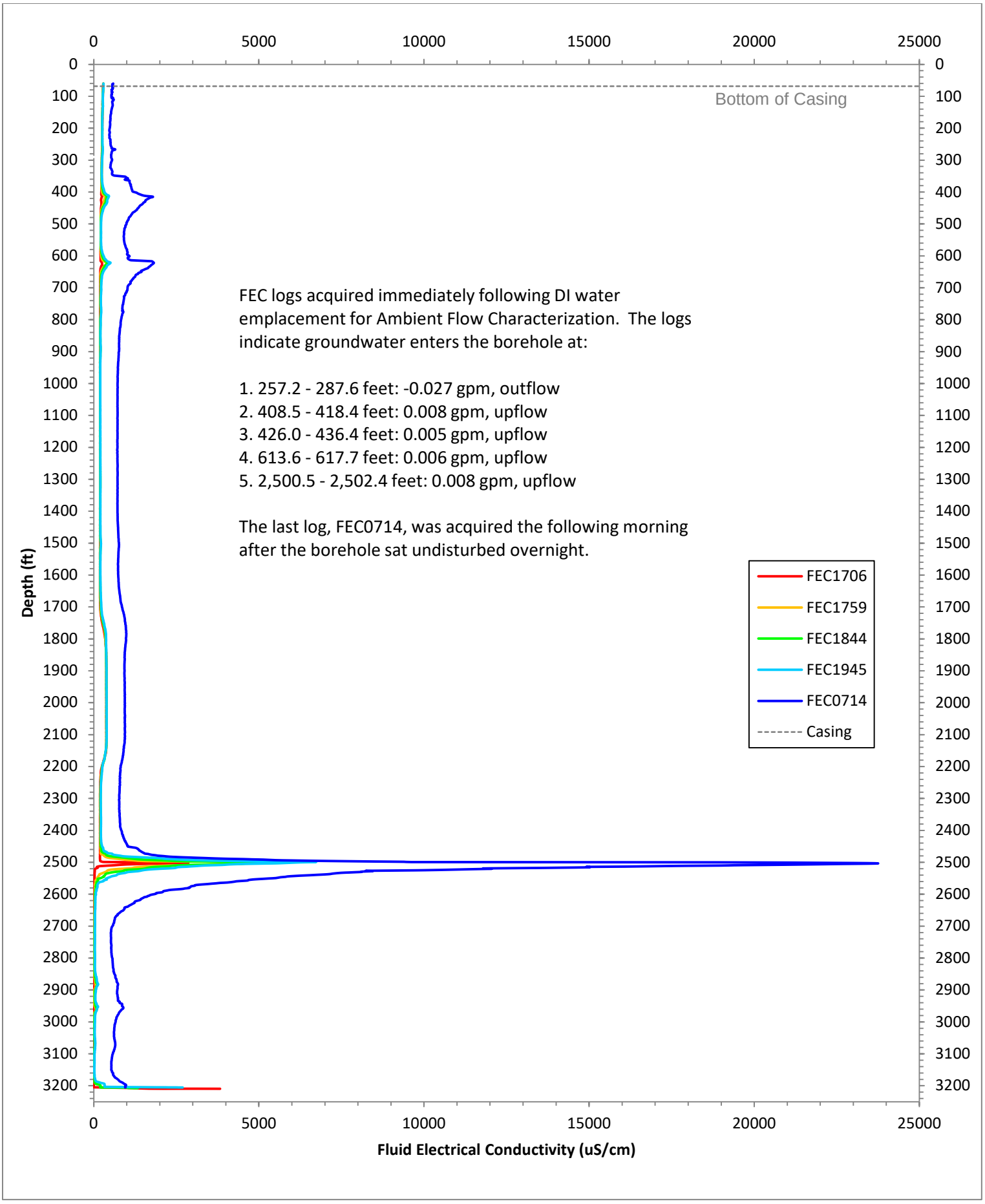


FIGURE WP592:3. Pumping and Drawdown Data During Low-Rate Pumping at 0.4 GPM After DI Water Emplacement; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP592

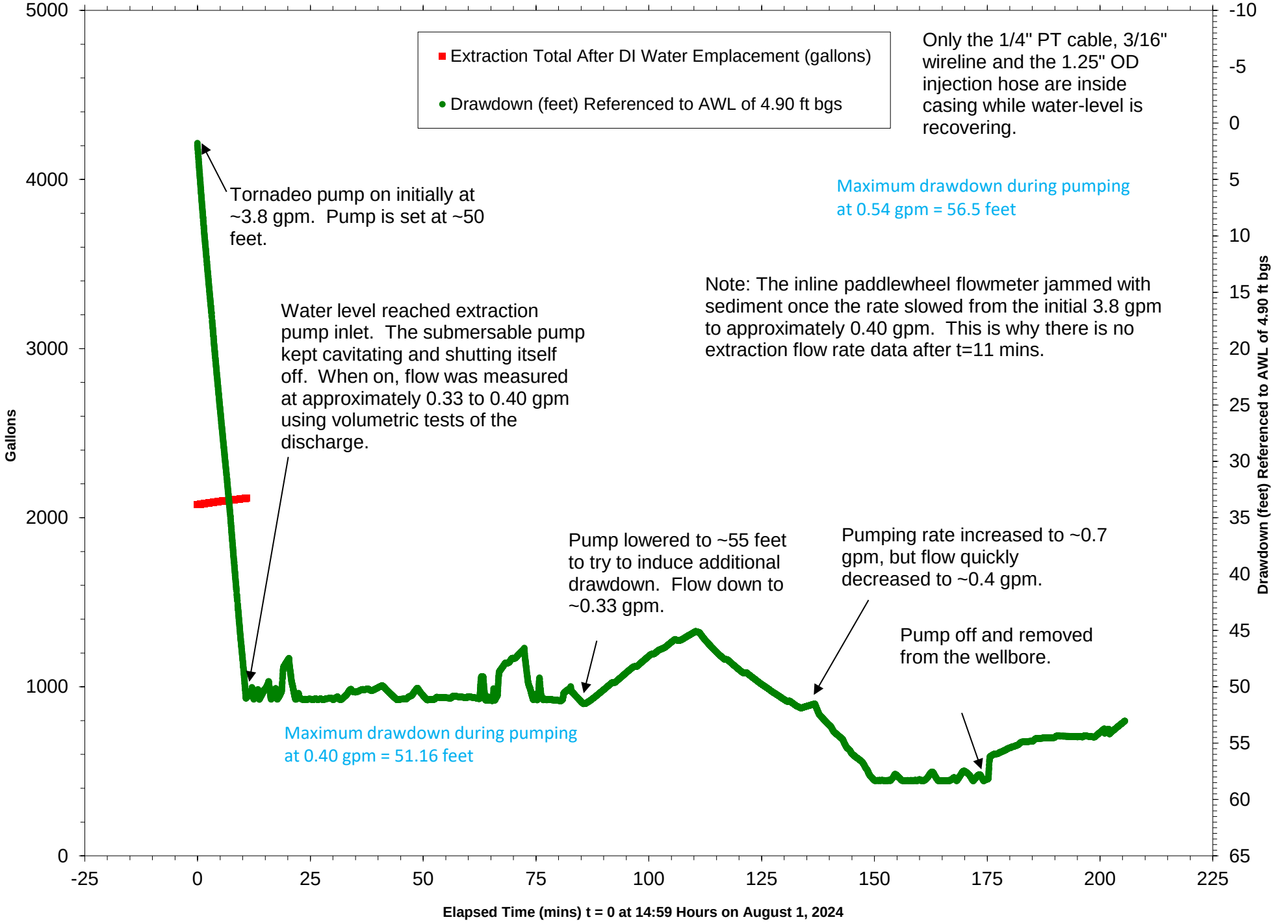


FIGURE WP592:4. Summary of Hydrophysical Logs During Low-Rate Pumping at 0.4 GPM After DI Water Emplacement For Hydrophysical Stress Testing; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP592

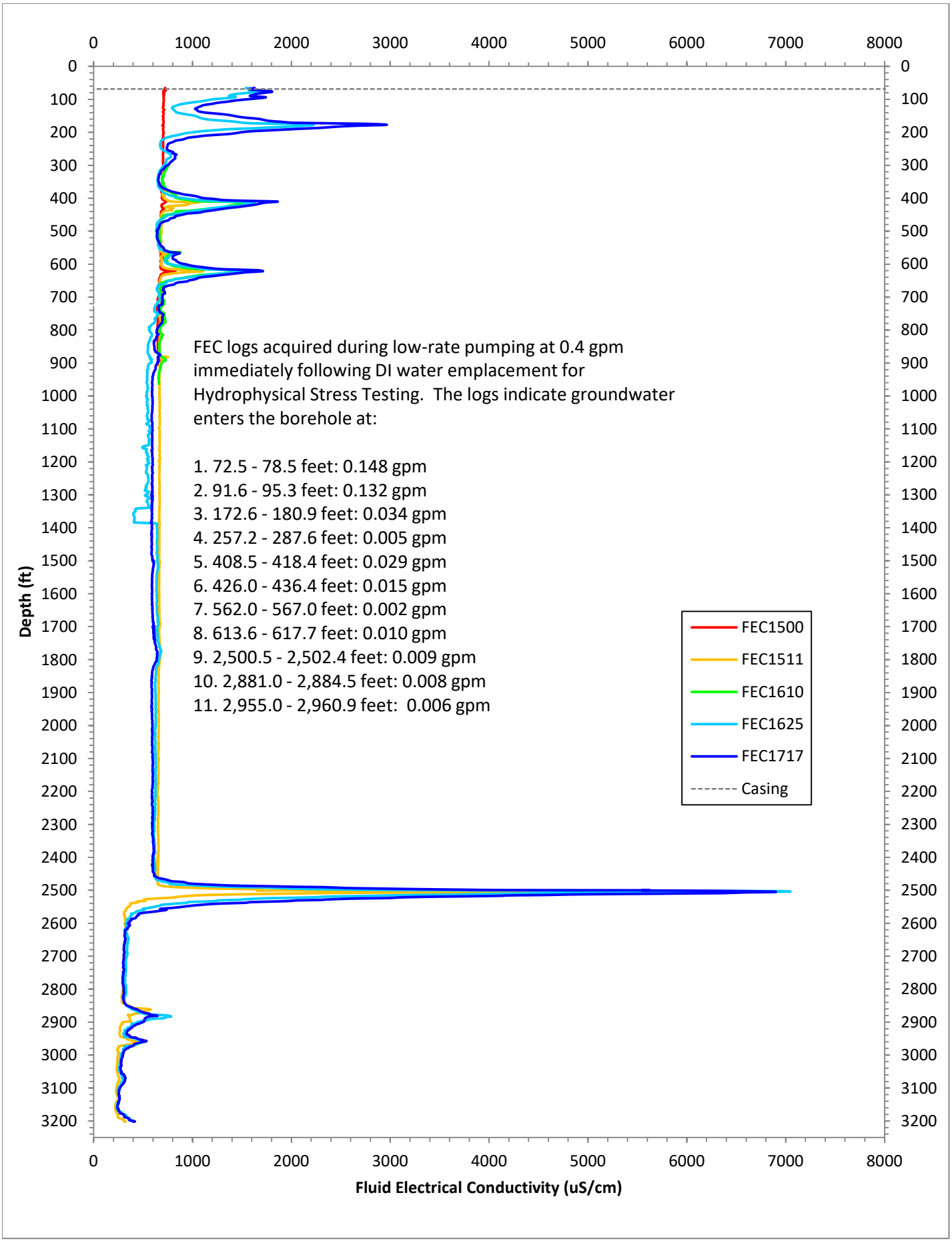


Table WP592:1. Summary Of Hydrophysical Logging Results With Hydraulic Conductivity And Transmissivity Estimations; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP592

Well Name	WP592
Ambient Depth to Water (ftbtoc)	11.30
Ambient Depth to Water (ftbgs)	8.30
Open Hole Interval (ftbtoc)	68.5 - 3210.0

Diameter of Well (ft)	0.32
Maximum Drawdown (ft)	51.16
Effective Radius (ft)	100
Well Specific Capacity (gpm/ft-dd)	0.008

Hydrophysical Logging Results									
Interval No.	**Top of Interval (ft)**	**Bottom of Interval (ft)**	**Length of Interval (ft)**	**Ambient Flow[1] (gpm)**	**Darcy Velocity in Aquifer[2] (ft/day)**	**Interval-Specific Flow Rate During Pumping (gpm)**	**Interval-Specific Hydraulic Conductivity[3] (ft/day)**	**Transmissivity (ft^2/day)**	**Interval-Specific Fluid Electrical Conductivity (µS/cm)**
1	72.5	78.5	6.0	0.000	NA	0.148	9.52E-02	5.71E-01	450
2	91.6	95.3	3.7	0.000	NA	0.132	1.38E-01	5.09E-01	620
3	172.6	180.9	8.3	0.000	NA	0.034	1.58E-02	1.31E-01	700
4	257.2	287.6	30.4	-0.027	NA	0.005	4.06E-03	1.23E-01	1020
5	408.5	418.4	9.9	0.008	NA	0.029	8.18E-03	8.10E-02	3580
6	426.0	436.4	10.4	0.005	NA	0.015	3.71E-03	3.86E-02	4540
7	562.0	567.0	5.0	0.000	NA	0.002	1.54E-03	7.71E-03	7280
8	613.6	617.7	4.1	0.006	NA	0.010	3.76E-03	1.54E-02	7140
9	2500.5	2502.4	1.9	0.008	NA	0.009	2.03E-03	3.86E-03	52090
10	2881.0	2884.5	3.5	0.000	NA	0.008	8.82E-03	3.09E-02	8190
11	2955.0	2960.9	5.9	0.000	NA	0.006	3.92E-03	2.31E-02	7330
Borehole Transmissivity Using Thiem Equation (ft^2/day)								**1.54E+00**	
Borehole Hydraulic Conductivity (K=T/b; b=length of hole of 3210.0'-68.5'=3141.5') (ft/d)							**4.89E-04**		

Note: Negative flow, if any, is outflow from the borehole to the aquifer, positive flow is inflow to the borehole.

[1] Ambient upflow is identified in this borehole under ambient conditions.

[2] Darcy Velocity, or Specific Discharge in aquifer, is calculated using the observed volumetric flow rate, the cross-sectional area of the flow interval in the wellbore and a

[3] Hydraulic conductivity and transmissivity estimates are based on single well drawdown data, a porous-medium equivalent model and the Thiem equation.

WP-594 HpL Results

FIGURE WP594:1. Ambient Temperature and Fluid Electrical Conductivity; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP594

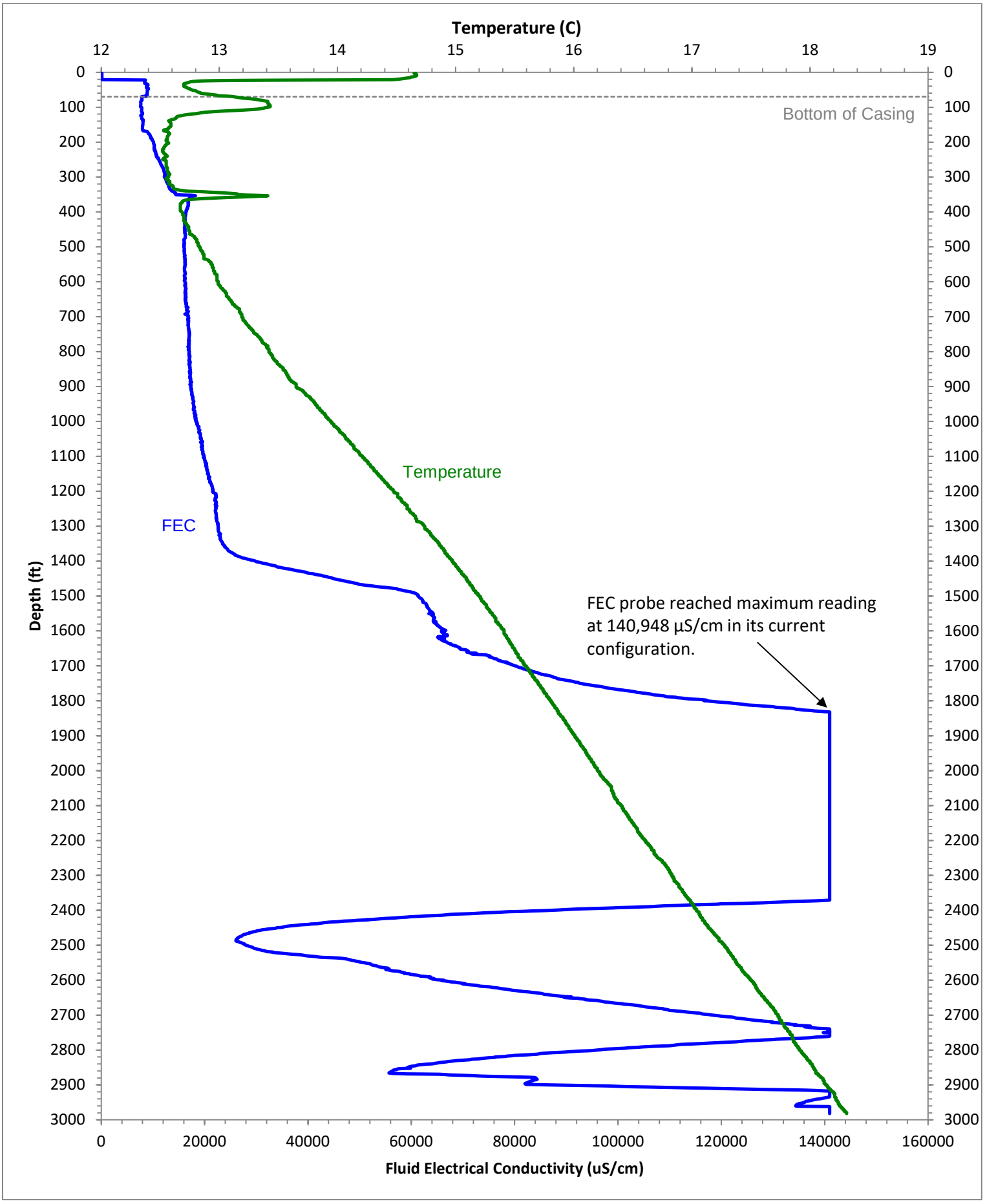
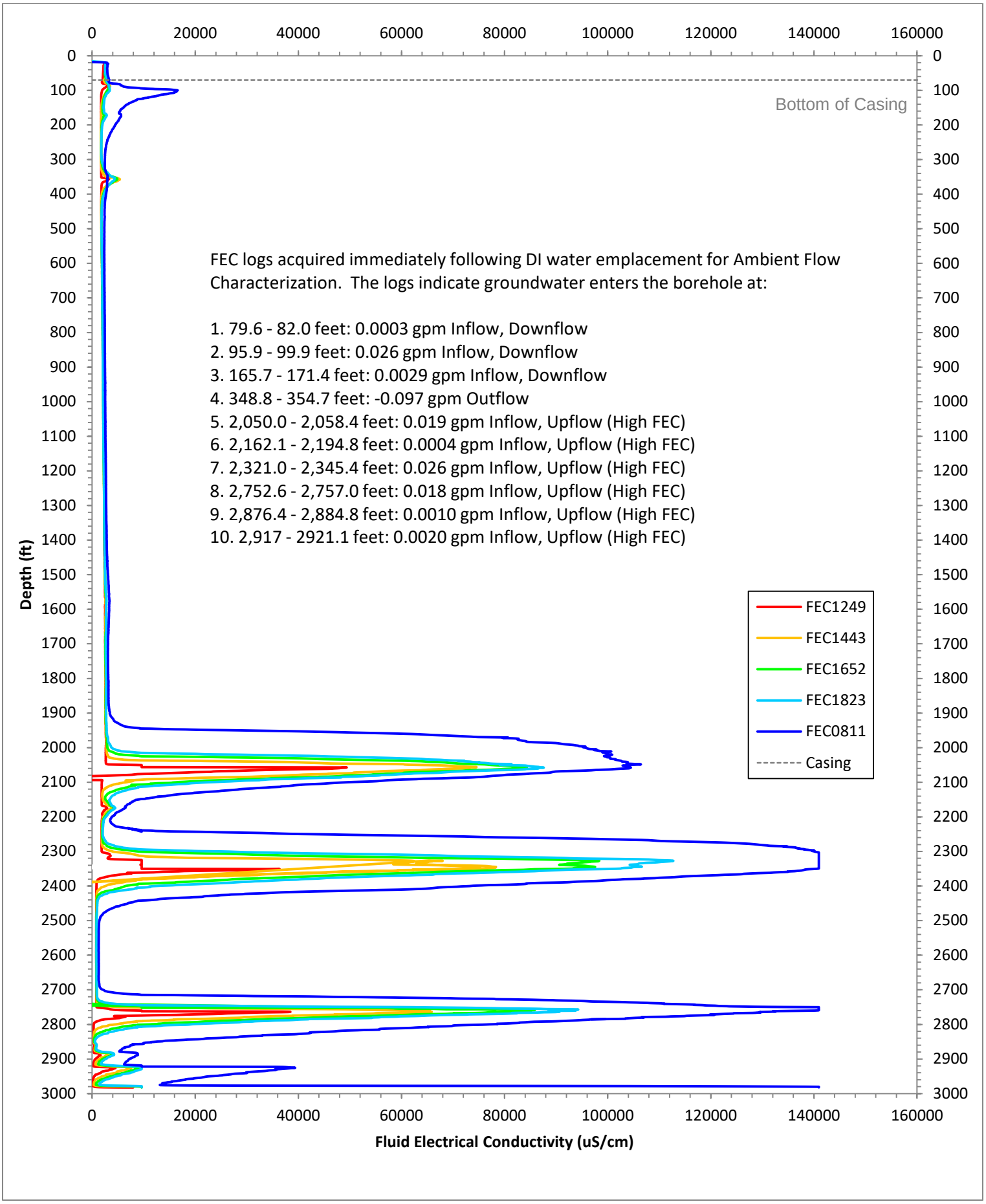


FIGURE WP594:2. Summary of Hydrophysical Logs During Ambient Flow Characterization; White Pine Copper; White Pine North; White Pine, MI; Wellbore:WP594



WP594-fig2.xls

FIGURE WP594:4. Summary of Hydrophysical Logs During Low-Rate Pumping at 1.07 GPM After DI Water Emplacement For Hydrophysical Stress Testing; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP594

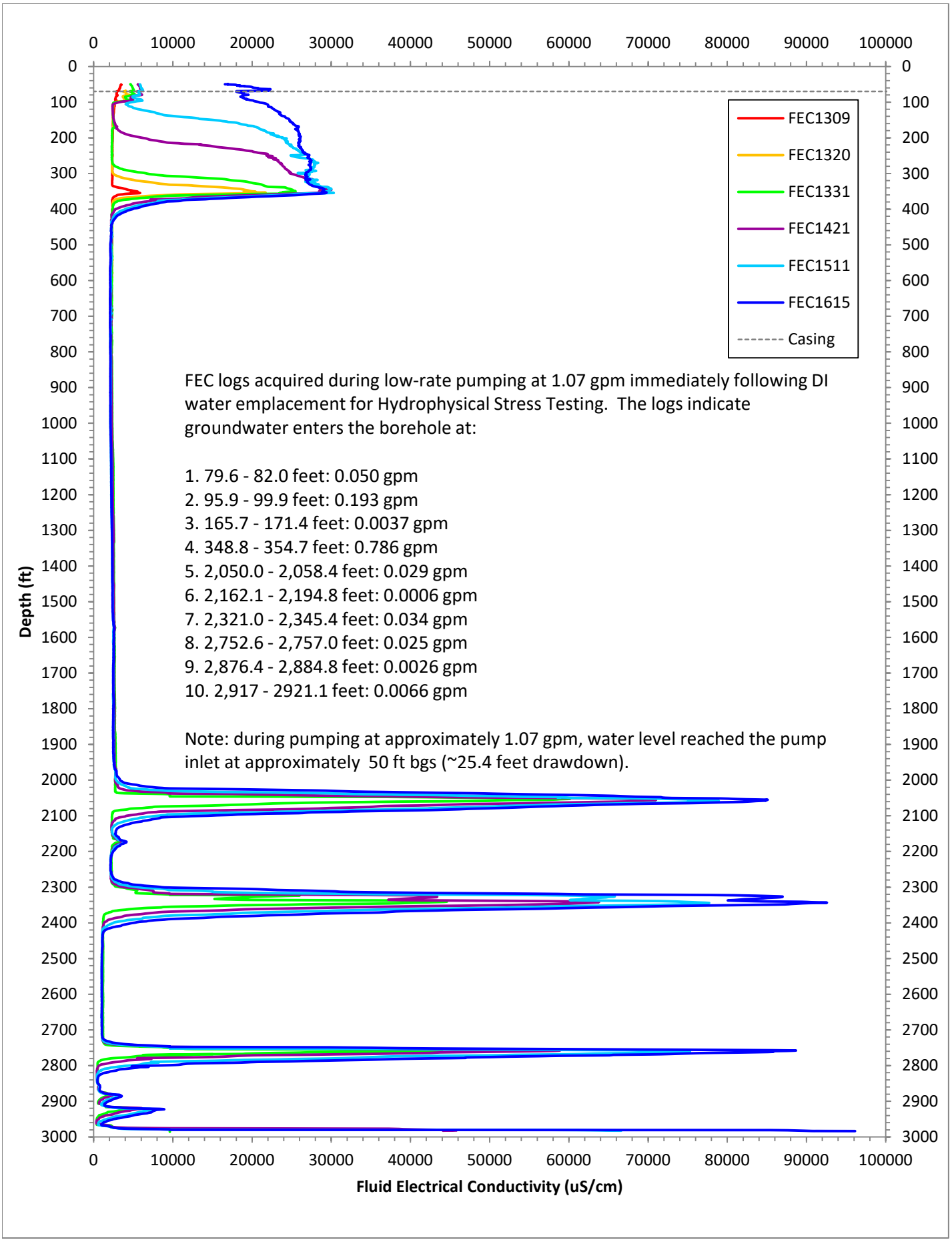


Table WP594:1. Summary Of Hydrophysical Logging Results With Hydraulic Conductivity And Transmissivity Estimations; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP594

Well Name	WP594
Ambient Depth to Water (ftbtoc)	22.56
Ambient Depth to Water (ftbgs)	21.18
Open Hole Interval (ftbtoc)	70.0 - 3018.3

Diameter of Well (ft)	0.32
Maximum Drawdown (ft)	25.4
Effective Radius (ft)	100
Well Specific Capacity (gpm/ft-dd)	0.04

Hydrophysical Logging Results									
Interval No.	**Top of Interval (ft)**	**Bottom of Interval (ft)**	**Length of Interval (ft)**	**Ambient Flow[1] (gpm)**	**Darcy Velocity in Aquifer[2] (ft/day)**	**Interval-Specific Flow Rate During Pumping (gpm)**	**Interval-Specific Hydraulic Conductivity[3] (ft/day)**	**Transmissivity (ft^2/day)**	**Interval-Specific Fluid Electrical Conductivity (µS/cm)**
1	79.6	82.0	2.4	0.0003	NA	0.050	1.61E-01	3.86E-01	12400
2	95.9	99.9	4.0	0.027	NA	0.193	3.22E-01	1.29E+00	12400
3	165.7	171.4	5.7	0.0029	NA	0.0037	1.09E-03	6.22E-03	12400
4	348.8	354.7	5.9	-0.097	NA	0.786	1.16E+00	6.86E+00	30000
5	2050.0	2058.4	8.4	0.019	NA	0.029	9.25E-03	7.77E-02	310000
6	2162.1	2194.8	32.7	0.0004	NA	0.0006	3.56E-05	1.17E-03	240000
7	2321.0	2345.4	24.4	0.026	NA	0.034	2.64E-03	6.45E-02	240000
8	2752.6	2757.0	4.4	0.018	NA	0.025	1.24E-02	5.44E-02	240000
9	2876.4	2884.8	8.4	0.0010	NA	0.0012	1.85E-04	1.55E-03	140000
10	2917.0	2921.1	4.1	0.0020	NA	0.0026	1.14E-03	4.66E-03	130000
Borehole Transmissivity Using Thiem Equation (ft^2/day)								**8.75E+00**	
Borehole Hydraulic Conductivity (K=T/b; b=length of hole of 3018.3'-70.0'=2,948.3') (ft/d)							**2.97E-03**		

Note: Negative flow, if any, is outflow from the borehole to the aquifer, positive flow is inflow to the borehole.

* The bottom of this interval is total depth.

[1] Ambient upflow and downflow are identified in this borehole under ambient conditions.

[2] Darcy Velocity, or Specific Discharge in aquifer, is calculated using the observed volumetric flow rate, the cross-sectional area of the flow interval in the wellbore and

[3] Hydraulic conductivity and transmissivity estimates are based on single well drawdown data, a porous-medium equivalent model and the Thiem equation.

WP-598 HpL Results

FIGURE WP598:1. Ambient Temperature and Fluid Electrical Conductivity; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP598

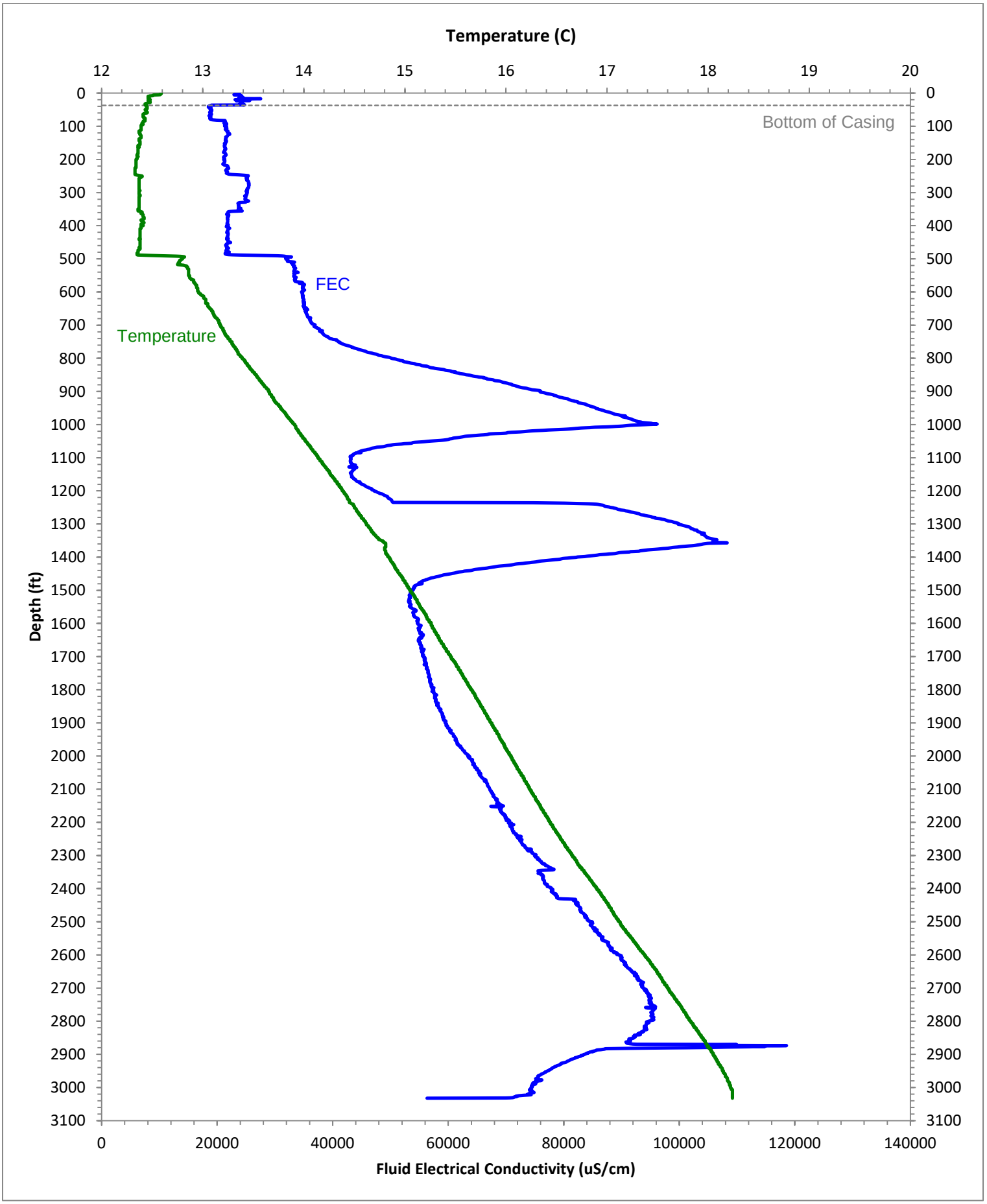


FIGURE WP598:2. Summary of Hydrophysical Logs During Ambient Flow Characterization; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP598

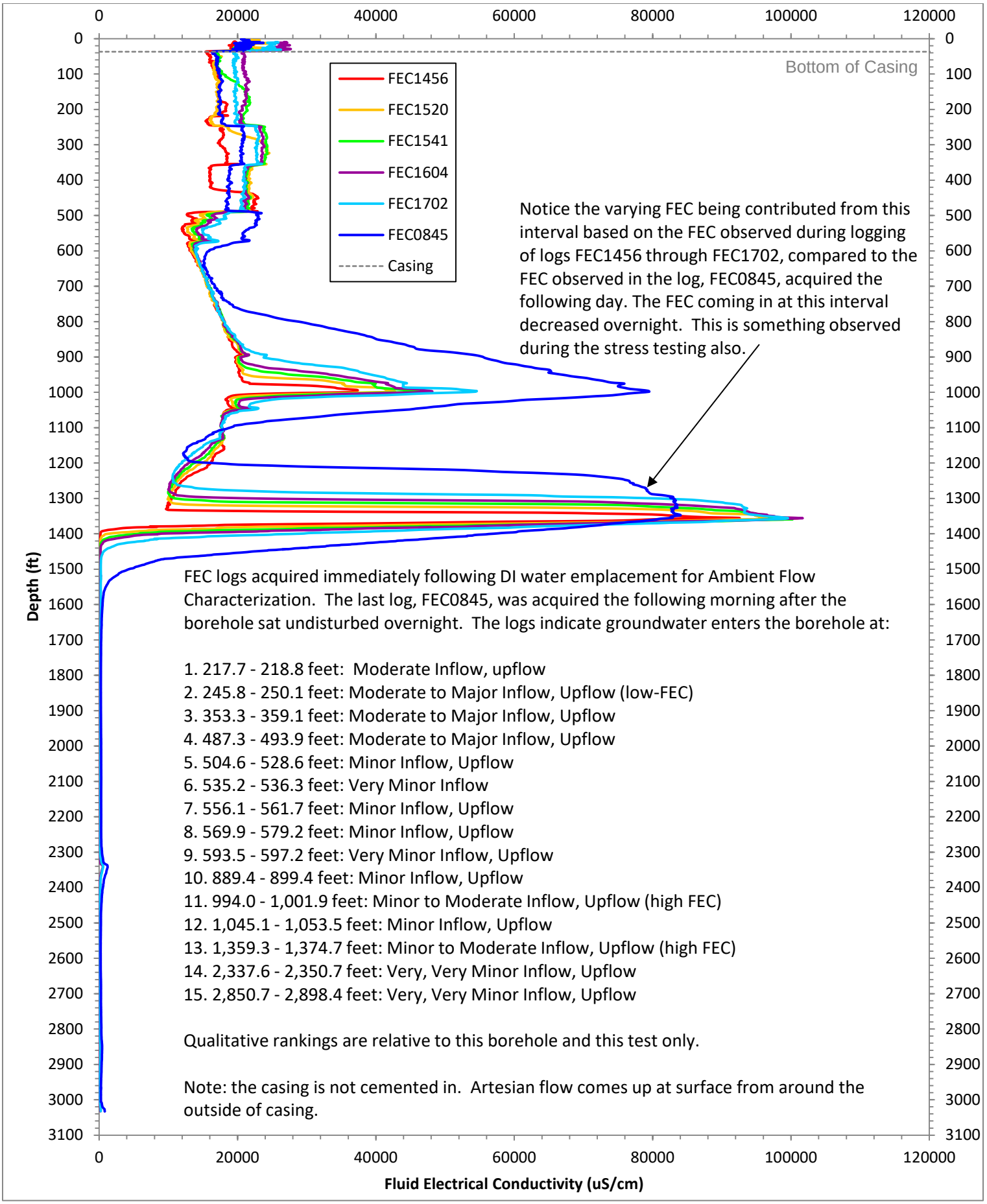


FIGURE WP598:3. Pumping and Drawdown Data During Low-Rate Pumping Before, During, and After DI Water Emplacement; White Pine Copper; White Pine North Project; White Pine, MI; Wellbore: WP598

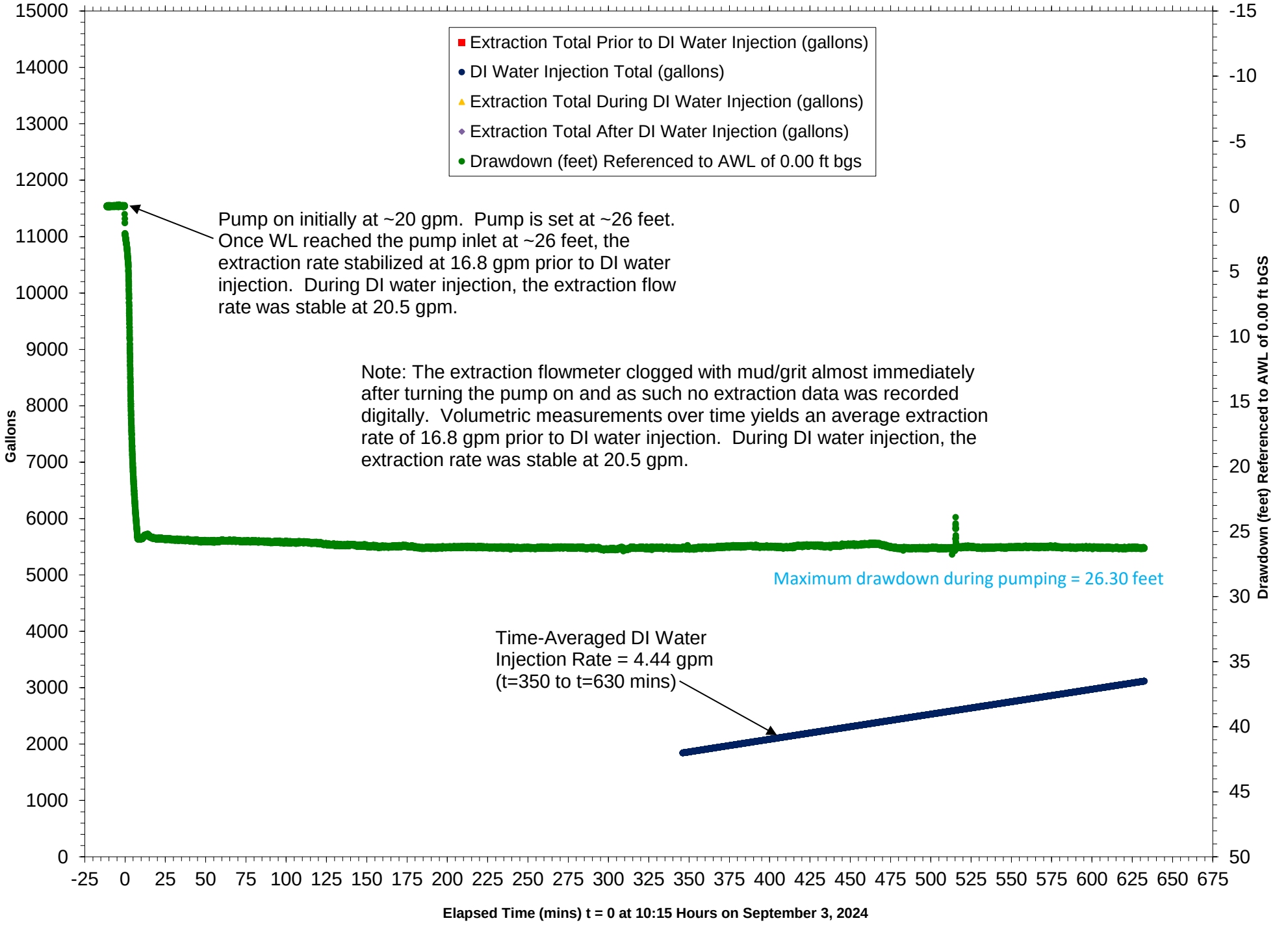


FIGURE WP598:4A. Summary of Hydrophysical Logs During Development Pumping at 16.8 GPM Prior to DI Water Dilution For Hydrophysical Stress Testing; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP598

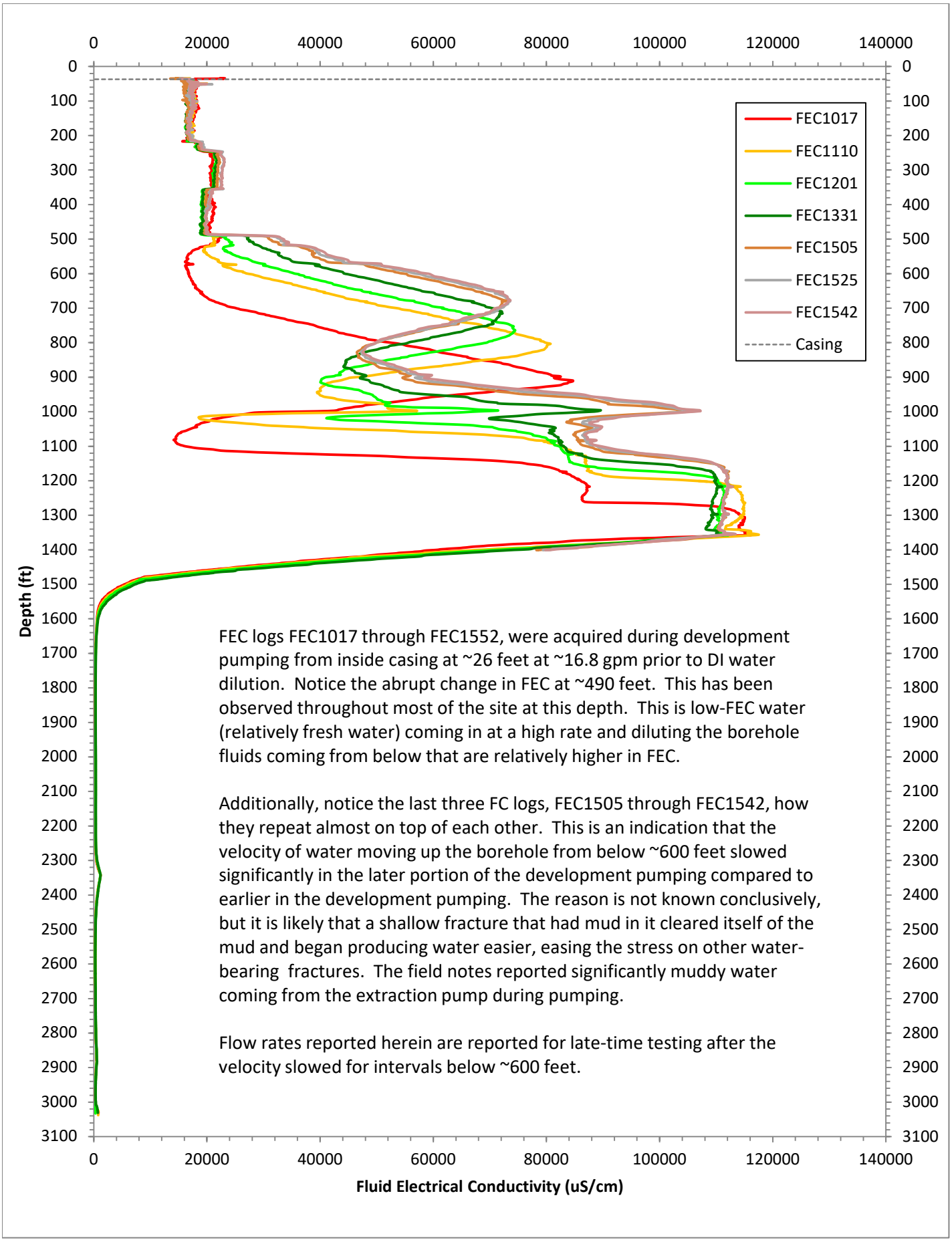


FIGURE WP598:4B. Summary of Hydrophysical Logs During Pumping at 20.5 GPM and DI Water Dilution at 4.44 GPM For Hydrophysical Stress Test: Close-Up View of Top 1,450 Feet; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP598

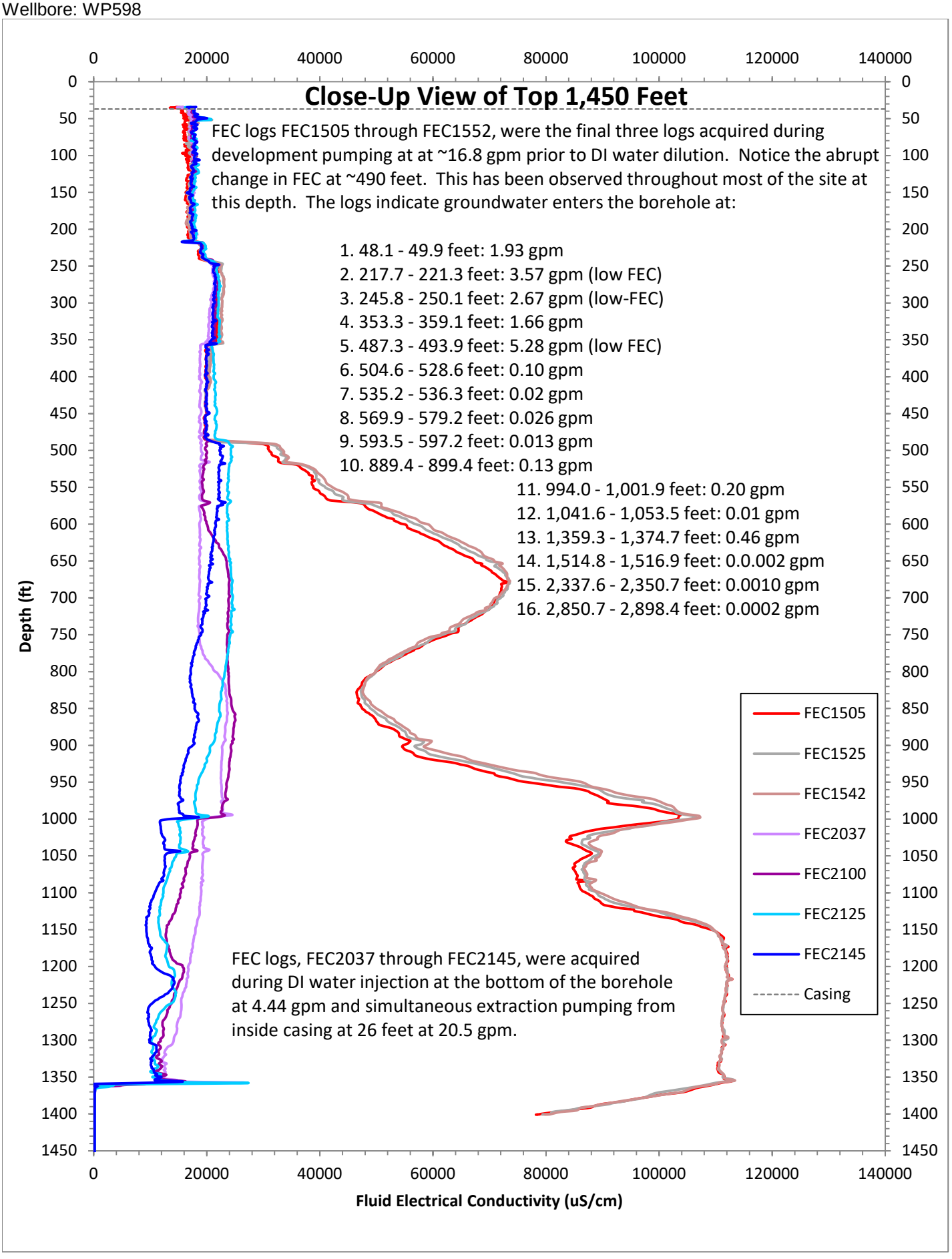


FIGURE WP598:4C. Summary of Hydrophysical Logs During 16 GPM Hydrophysical Stress Test With DI Water Dilution: Close-Up View of Bottom 1,800 Feet on Shortened FEC Scale; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP598

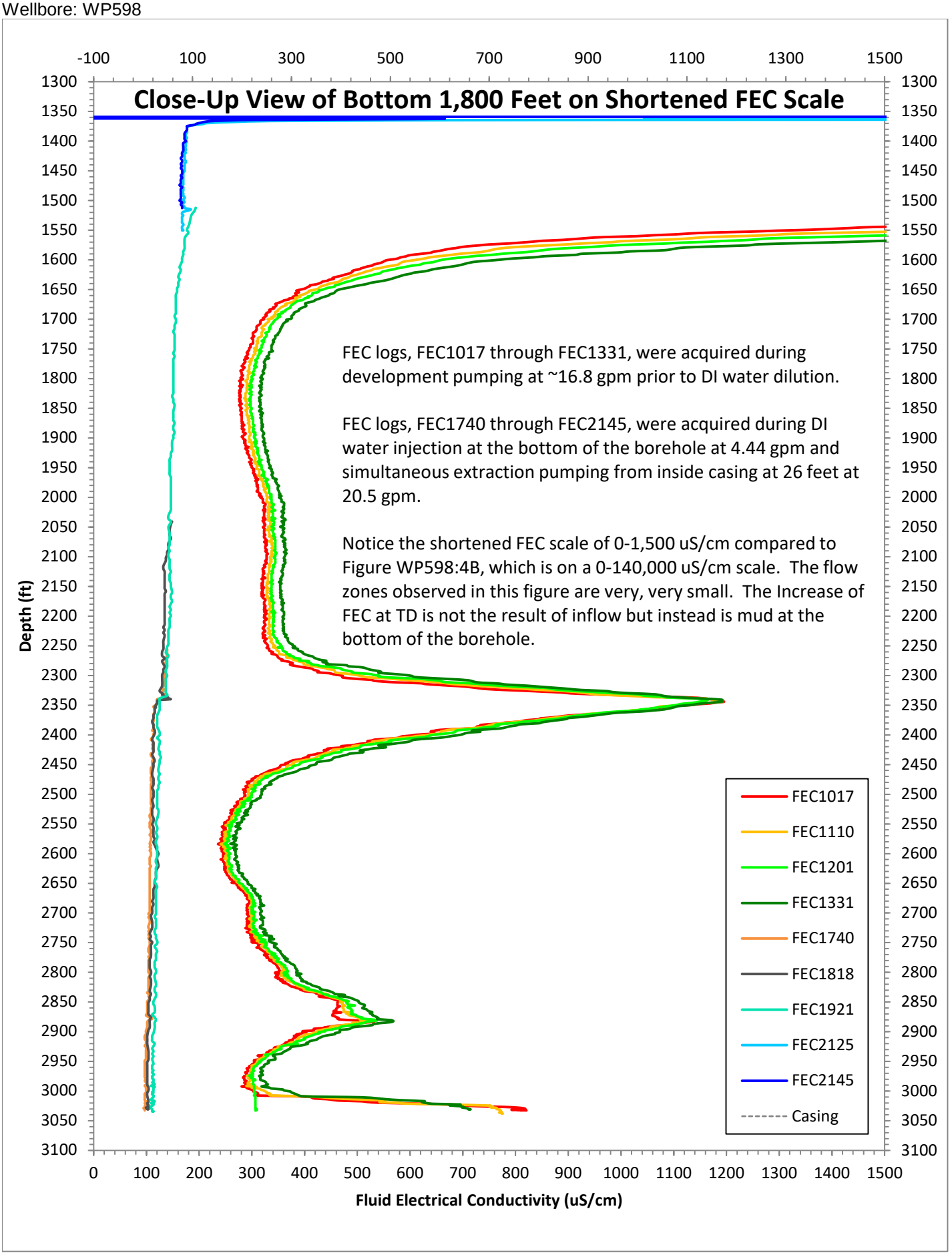


Table WP598:1. Summary Of Hydrophysical Logging Results With Hydraulic Conductivity And Transmissivity Estimations; White Pine Copper; White Pine North; White Pine, MI; Wellbore: WP598

Well Name	WP598
Ambient Depth to Water (ftbtoc)	0.00
Ambient Depth to Water (ftbgs)	-1.75
Open Hole Interval (ftbtoc)	37.0 - 3032.0

Diameter of Well (ft)	0.32
Maximum Drawdown (ft)	26.3
Effective Radius (ft)	100
Well Specific Capacity (gpm/ft-dd)	0.61

Hydrophysical Logging Results									
Interval No.	**Top of Interval (ft)**	**Bottom of Interval (ft)**	**Length of Interval (ft)**	**Ambient Flow[1] (gpm)**	**Darcy Velocity in Aquifer[2] (ft/day)**	**Interval-Specific Flow Rate During Pumping (gpm)**	**Interval-Specific Hydraulic Conductivity[3] (ft/day)**	**Transmissivity (ft^2/day)**	**Interval-Specific Fluid Electrical Conductivity (µS/cm)**
1	48.1	49.9	1.8	0.340	NA	1.93	6.63E+00	1.19E+01	19100
2	217.7	221.3	3.6	0.119	NA	3.57	7.19E+00	2.59E+01	11500
3	245.8	250.1	4.3	0.766	NA	2.67	3.32E+00	1.43E+01	10500
4	353.3	359.1	5.8	0.766	NA	1.66	1.16E+00	6.71E+00	29500
5	487.3	493.9	6.6	1.453	NA	5.28	4.35E+00	2.87E+01	18500
6	504.6	528.6	24.0	0.088	NA	0.10	3.13E-03	7.50E-02	33000
7	535.2	536.3	1.1	0.000	NA	0.02	1.02E-01	1.13E-01	30262
8	569.9	579.2	9.3	0.020	NA	0.026	4.84E-03	4.50E-02	38963
9	593.5	597.7	4.2	0.001	NA	0.013	2.14E-02	9.00E-02	50735
10	889.4	899.4	10.0	0.004	NA	0.13	9.45E-02	9.45E-01	74000
11	994.0	1001.9	7.9	0.119	NA	0.20	7.69E-02	6.08E-01	77000
12	1041.6	1053.5	11.9	0.008	NA	0.01	1.26E-03	1.50E-02	57000
13	1359.3	1374.7	15.4	0.251	NA	0.46	1.02E-01	1.57E+00	107690
14	1514.8	1516.9	2.1	0.000	NA	0.0002	7.15E-04	1.50E-03	106515
15	2337.6	2350.7	13.1	0.0007	NA	0.0010	1.72E-04	2.25E-03	77060
16	2850.7	2898.4	47.7	0.000	NA	0.0002	3.15E-05	1.50E-03	118550
Borehole Transmissivity Using Thiem Equation (ft^2/day)								**9.10E+01**	
Borehole Hydraulic Conductivity (K=T/b; b=length of hole of 3032.0'-37.0'=2995.0') (ft/d)							**3.04E-02**		

Note: Negative flow, if any, is outflow from the borehole to the aquifer, positive flow is inflow to the borehole.

Additional Note: the borehole was flowing artesian at approximately

[1] Ambient upflow is identified in this borehole under ambient conditions.

[2] Darcy Velocity, or Specific Discharge in aquifer, is calculated using the observed volumetric flow rate, the cross-sectional area of the flow interval in the wellbore

[3] Hydraulic conductivity and transmissivity estimates are based on single well drawdown data, a porous-medium equivalent model and the Thiem equation.

All depths reported herein are referenced to ground surface.

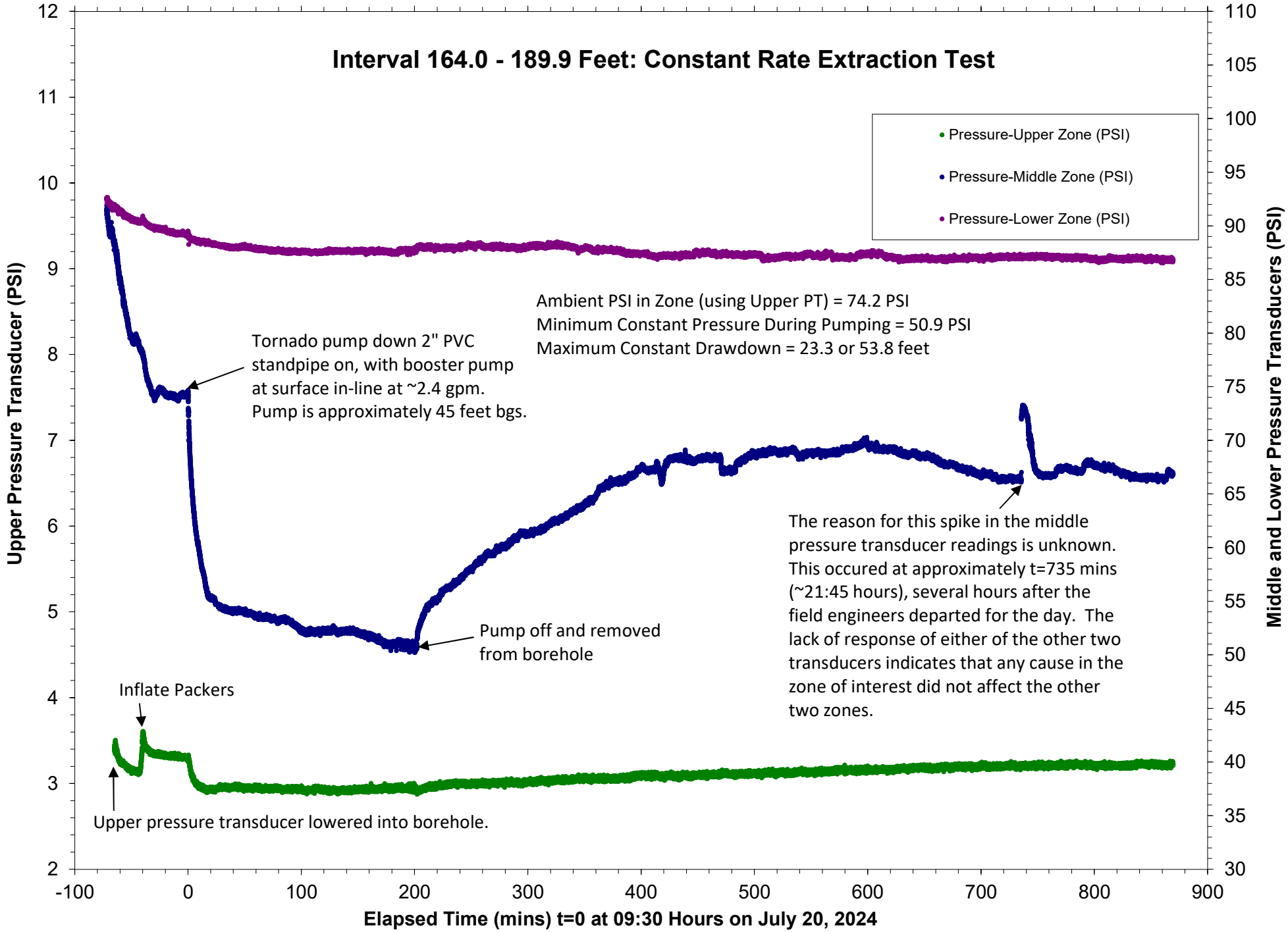
NA = Not Applicable

Appendix C

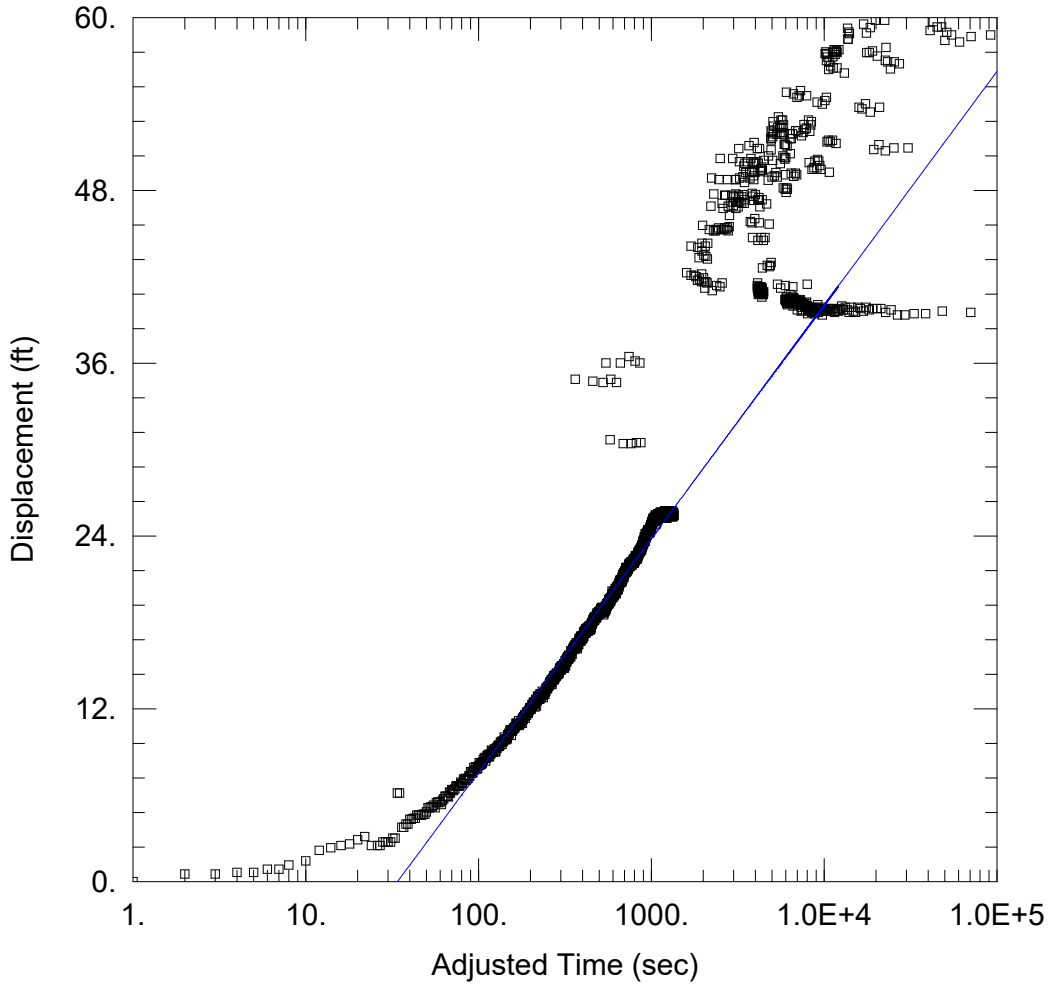
Packer Testing Data

WP-583 - Test Hydrographs and Analyses

FIGURE WP583:5A. Pressure Data During Wireline Straddle Packer Testing at 164.0 to 189.9 Feet, Constant Rate Extraction Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP583



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP583\WP583 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-583 163-189.9 CRE C-J.aqt
Date: 01/29/25 Time: 17:23:59

PROJECT INFORMATION

Company: Foth
Client: NewRange
Project: 0023N202.24
Location: Mesaba, MN
Test Well: MW-23-17-DB1 Slug-In BR
Test Date: 6-4-2024

AQUIFER DATA

Saturated Thickness: 25.9 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
WP-583	0	0

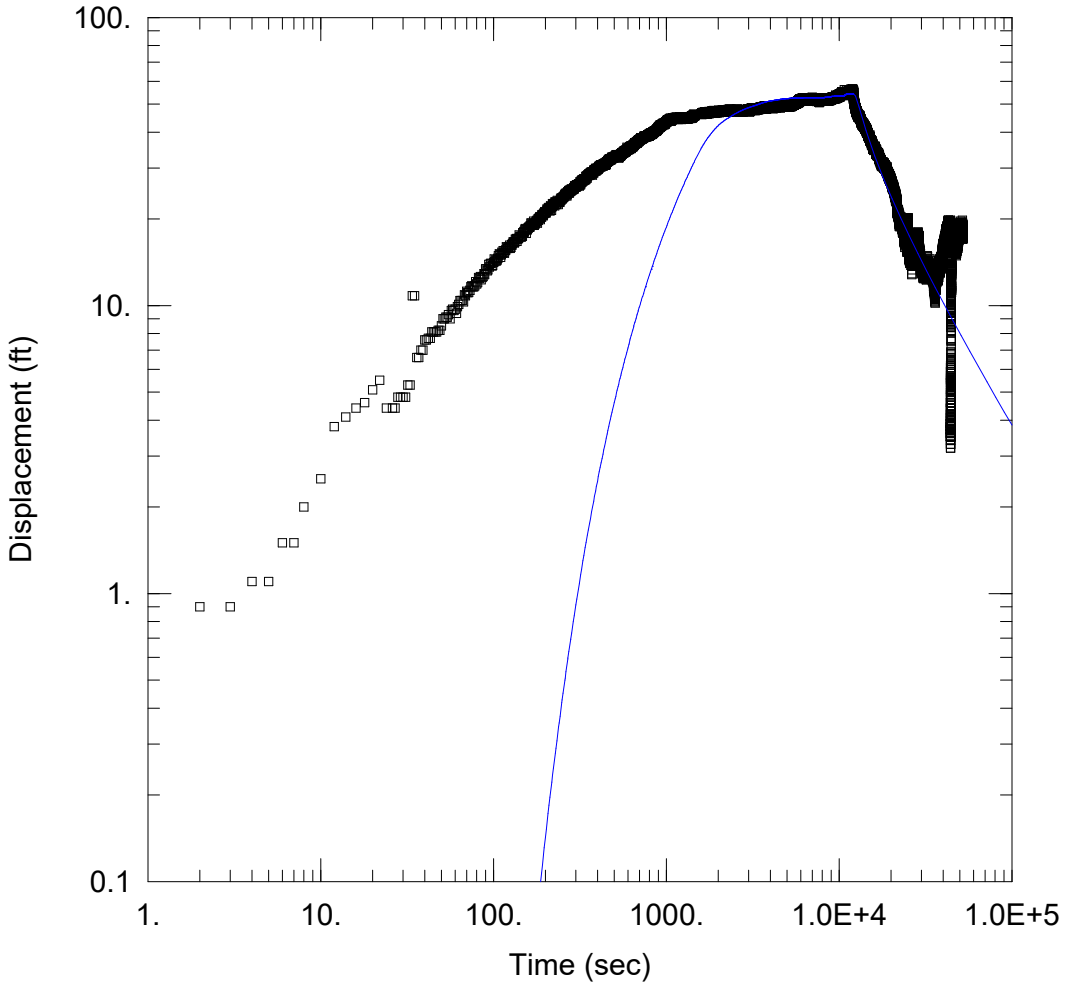
Observation Wells

Well Name	X (ft)	Y (ft)
WP-583	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob

T = 0.03156 cm^2/sec S = 0.1049



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-583 163-189.9 CRE Theis.aqt
Date: 02/05/25 Time: 00:25:21

PROJECT INFORMATION

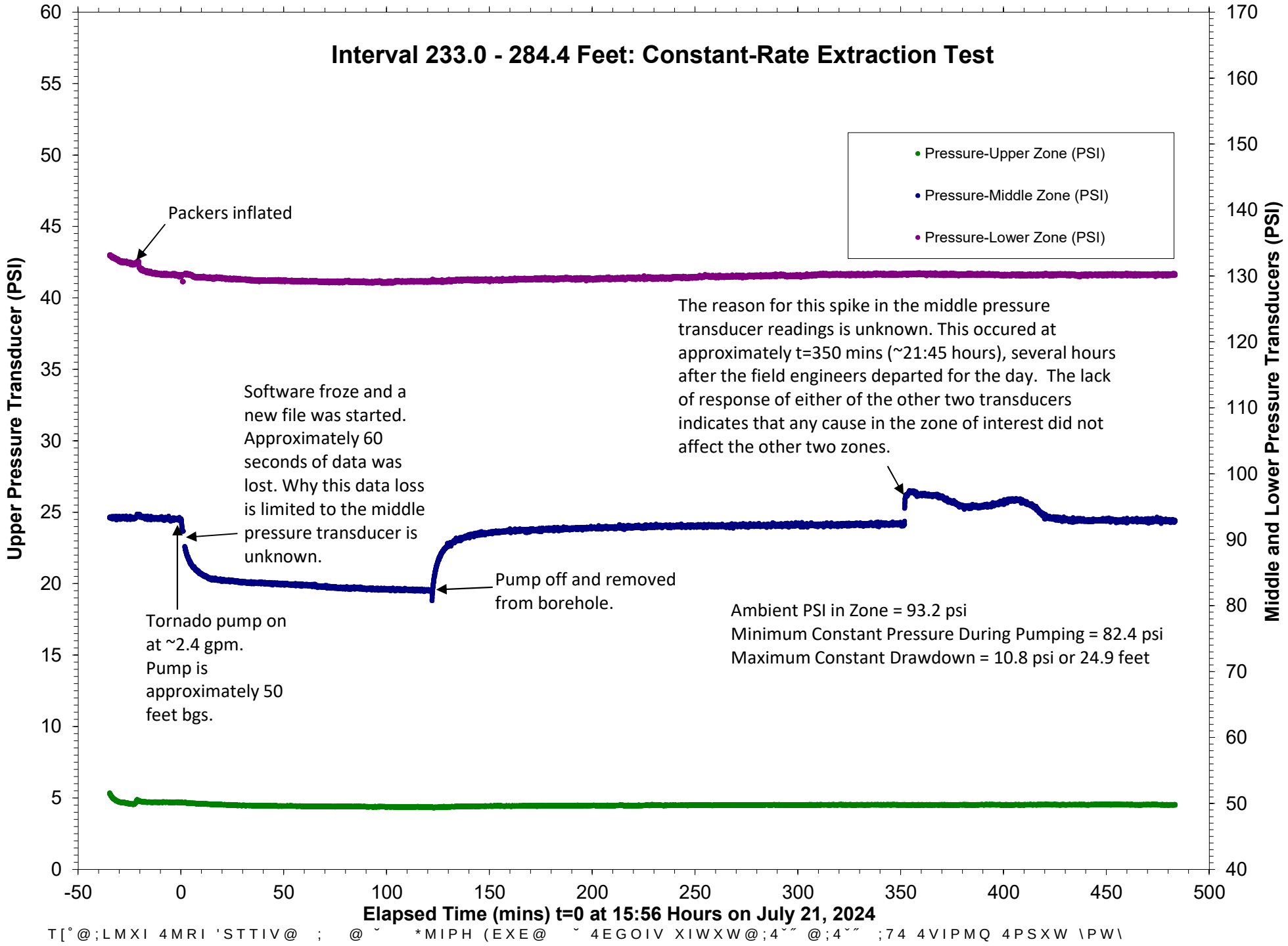
Company: Foth
Client: NewRange
Project: 0023N202.24
Location: Mesaba, MN
Test Well: MW-23-17-DB1 Slug-In BR
Test Date: 6-4-2024

SOLUTION

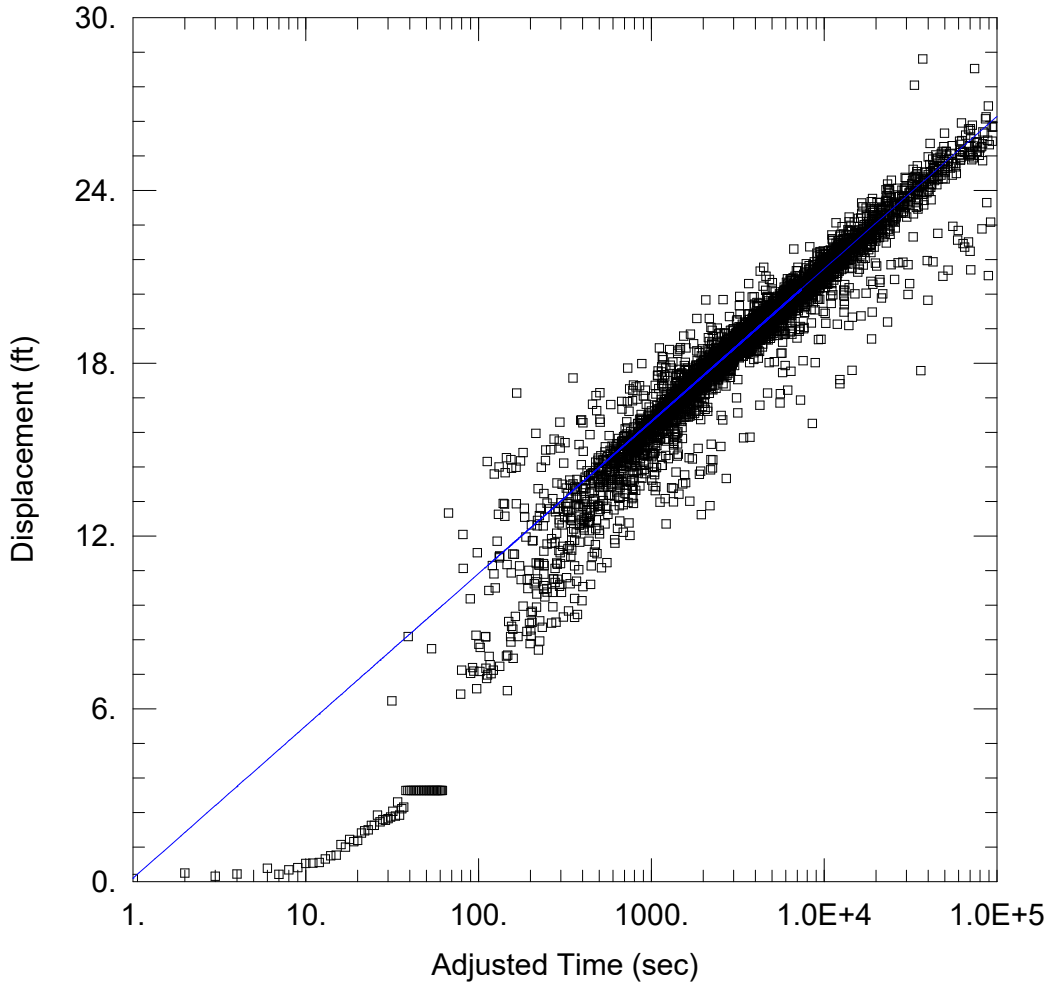
Aquifer Model: Confined
Solution Method: Theis

T = 0.00533 cm^2/sec
S = 0.8427
Kz/Kr = 1.
b = 25.9 ft

FIGURE WP583:5B. Pressure Data During Wireline Straddle Packer Testing at 233.0 to 284.1 Feet, Constant Rate Extraction Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP583



T[°@;LMXI 4MRI 'STTIV@ ; @ ˇ *MIPH (EXE@ ˇ 4EGOIV XIWXW@;4ˇˇ @;4ˇˇ ;74 4VIPMQ 4PSXW \PW\



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-583 233-284.4 CRE C-J.aqt
Date: 02/05/25 Time: 16:30:56

PROJECT INFORMATION

Company: Foth
Client: NewRange
Project: 0023N202.24
Location: Mesaba, MN
Test Well: MW-23-17-DB1 Slug-In BR
Test Date: 6-4-2024

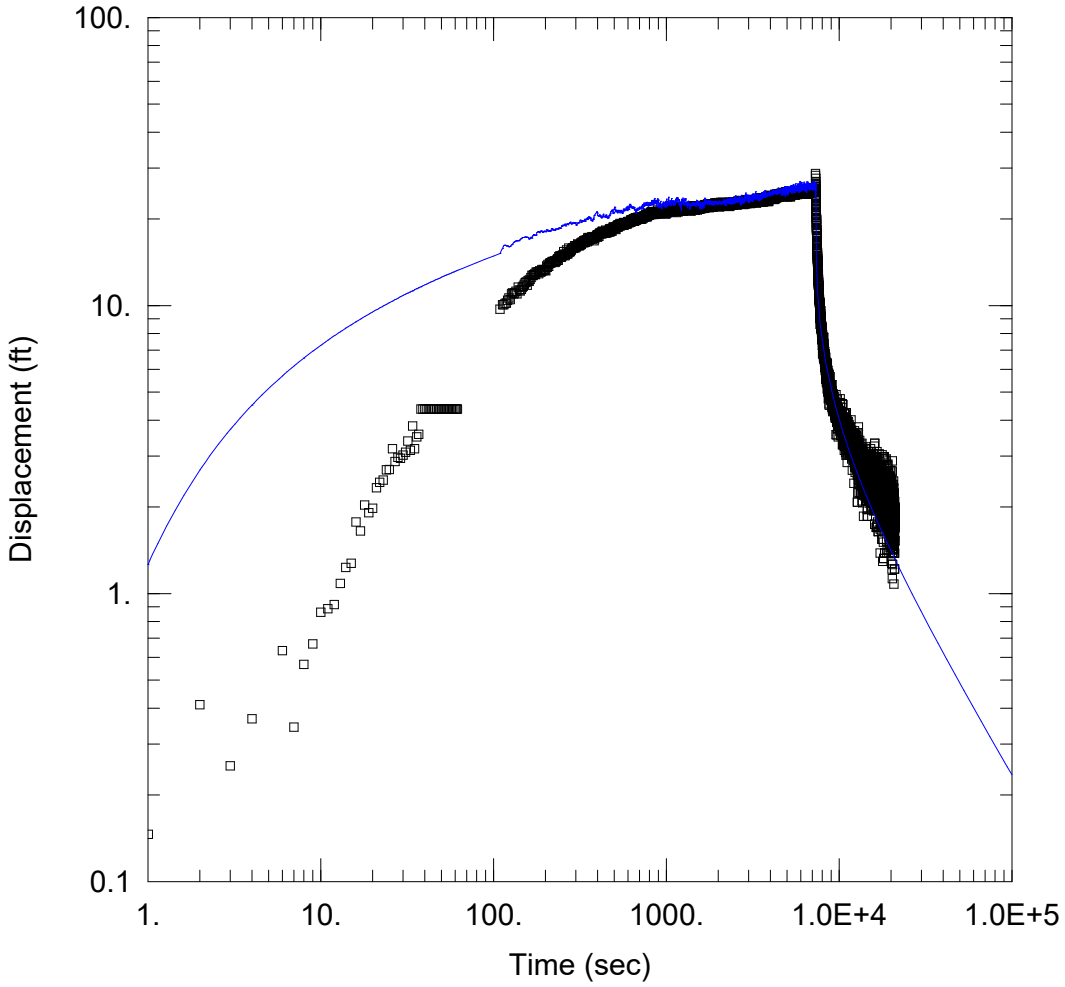
AQUIFER DATA

Saturated Thickness: 51.4 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob

T = 0.1255 cm^2/sec S = 0.01165



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-583 233-284.4 CRE Theis.aqt
Date: 02/06/25 Time: 16:28:34

PROJECT INFORMATION

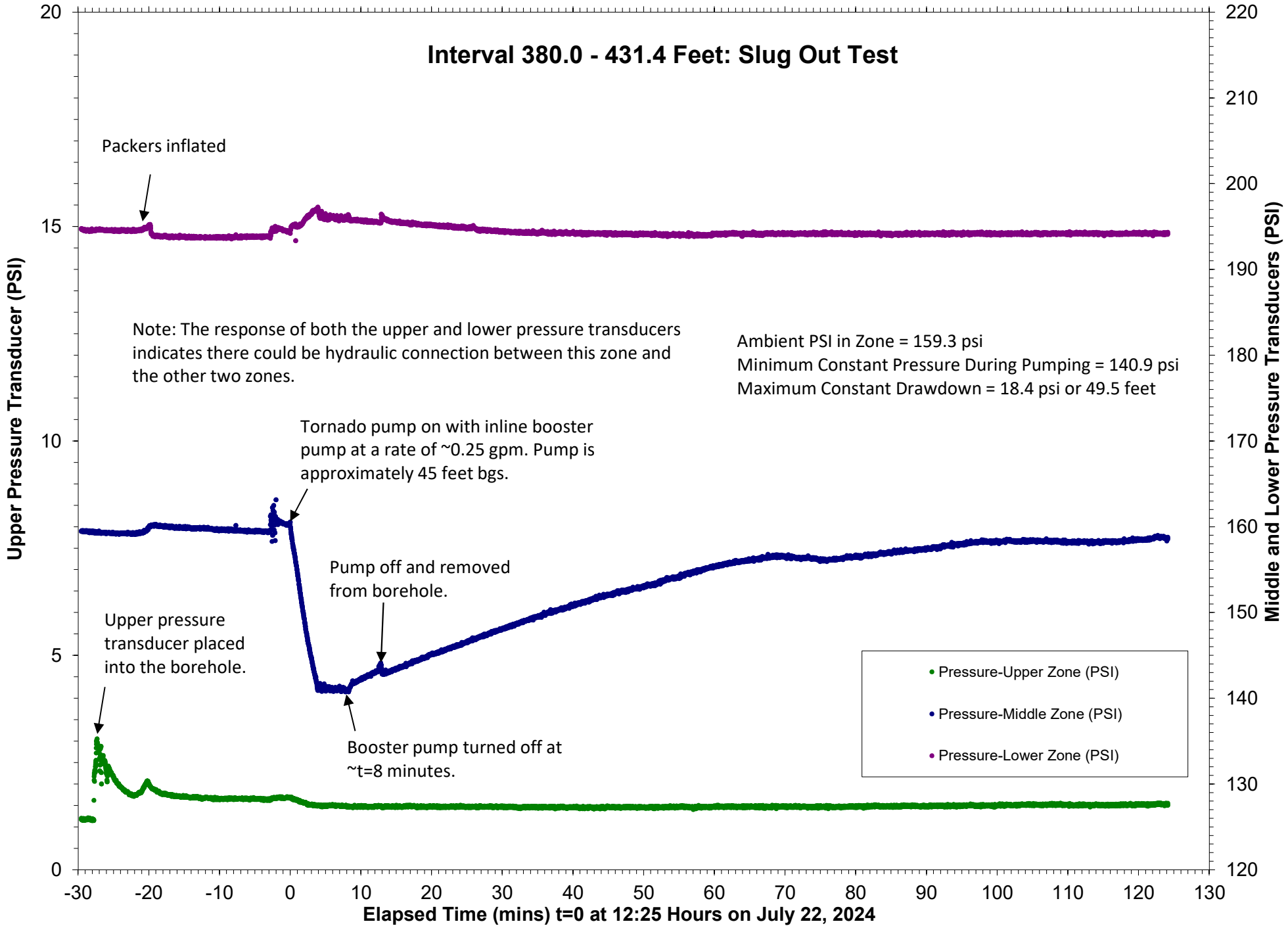
Company: Foth
Client: NewRange
Project: 0023N202.24
Location: Mesaba, MN
Test Well: MW-23-17-DB1 Slug-In BR
Test Date: 6-4-2024

SOLUTION

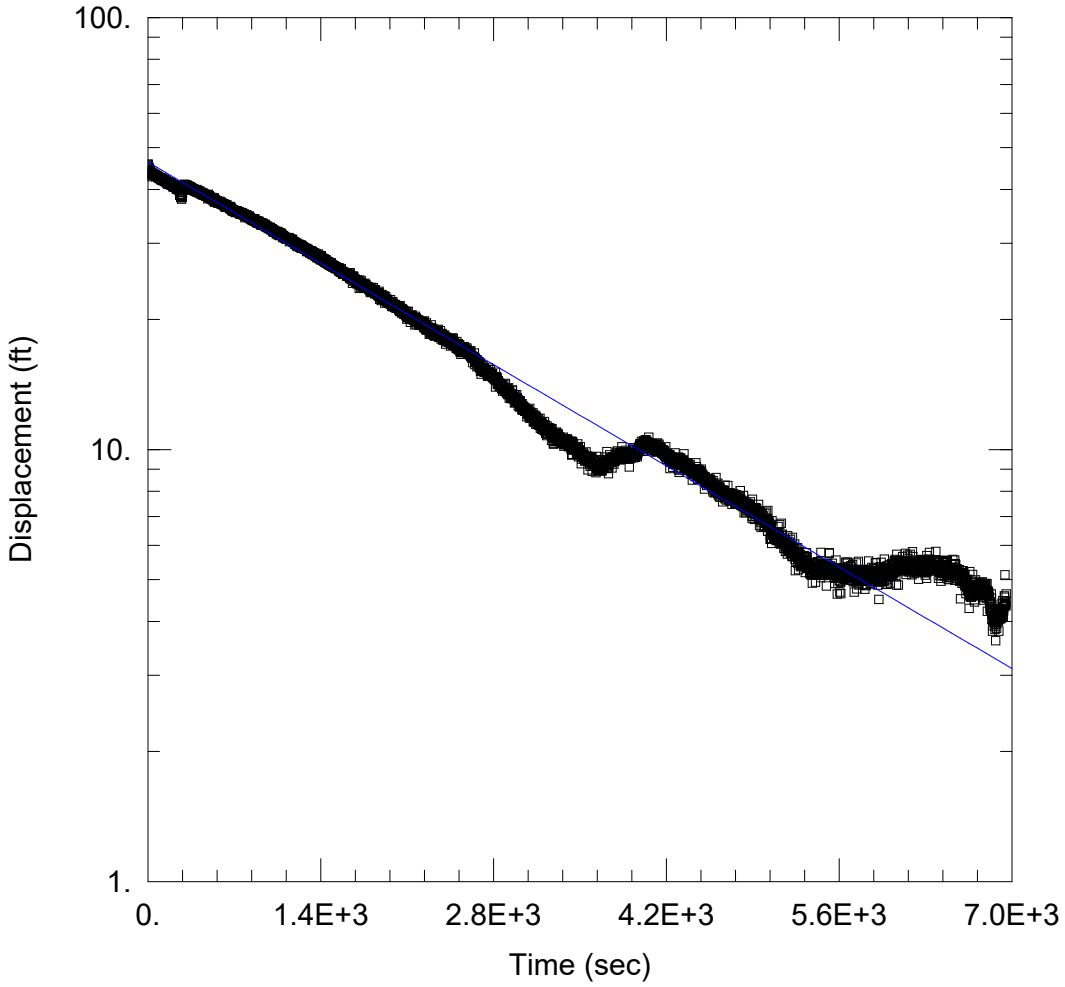
Aquifer Model: Confined
Solution Method: Theis

T = 0.1178 cm^2/sec
S = 0.01435
Kz/Kr = 1.
b = 51.4 ft

FIGURE WP583:5C. Pressure Data During Wireline Straddle Packer Testing at 380.0 to 431.4 Feet, Pump Slug Out Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP583



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP583\WP583 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-583 380-431.4 Slug Out BR.aqt
Date: 02/05/25 Time: 00:51:02

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-583 380-413.4
Test Date: 7/22/2024

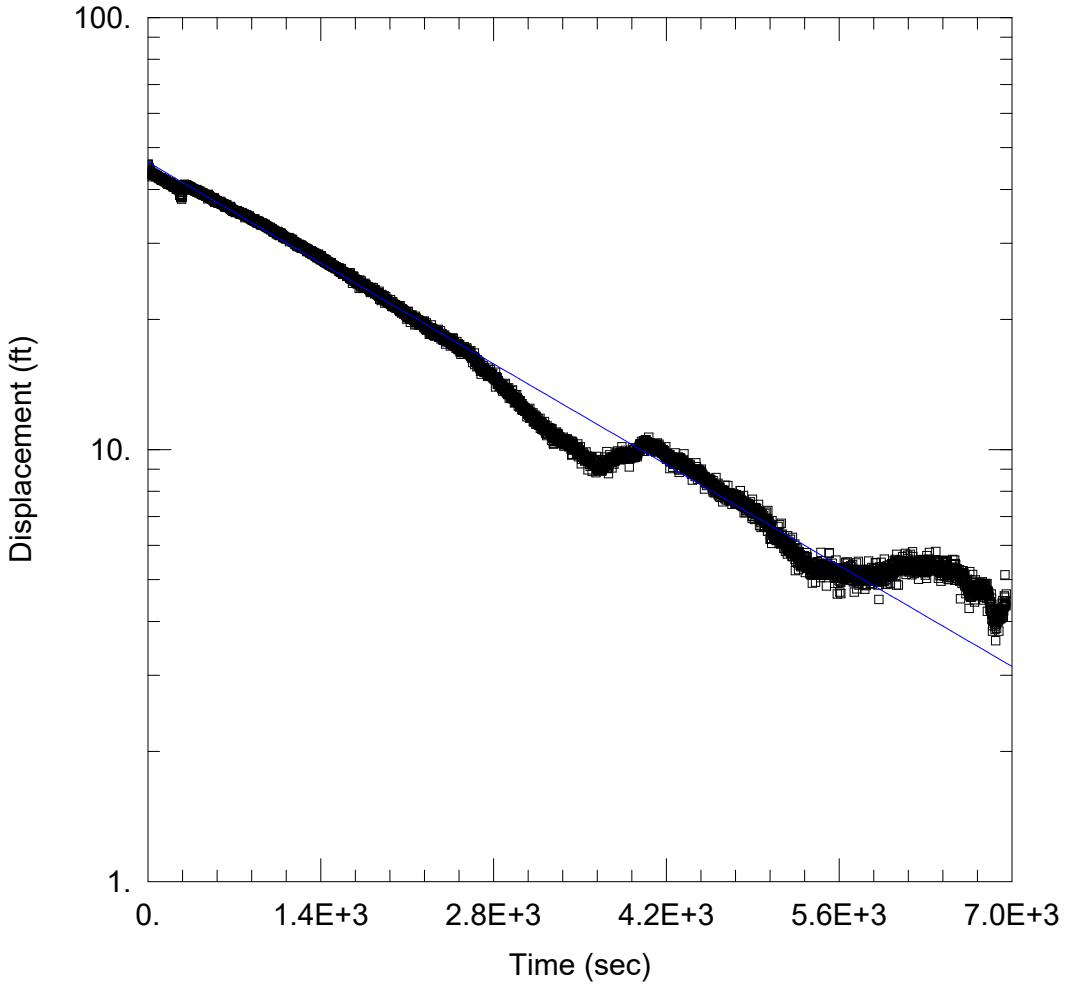
AQUIFER DATA

Saturated Thickness: 51.4 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 3.125E-6 cm/sec y0 = 46.26 ft



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-583 380-431.4 Slug Out HV.aqt
Date: 01/31/25 Time: 17:27:42

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-583 380-413.4
Test Date: 7/22/2024

AQUIFER DATA

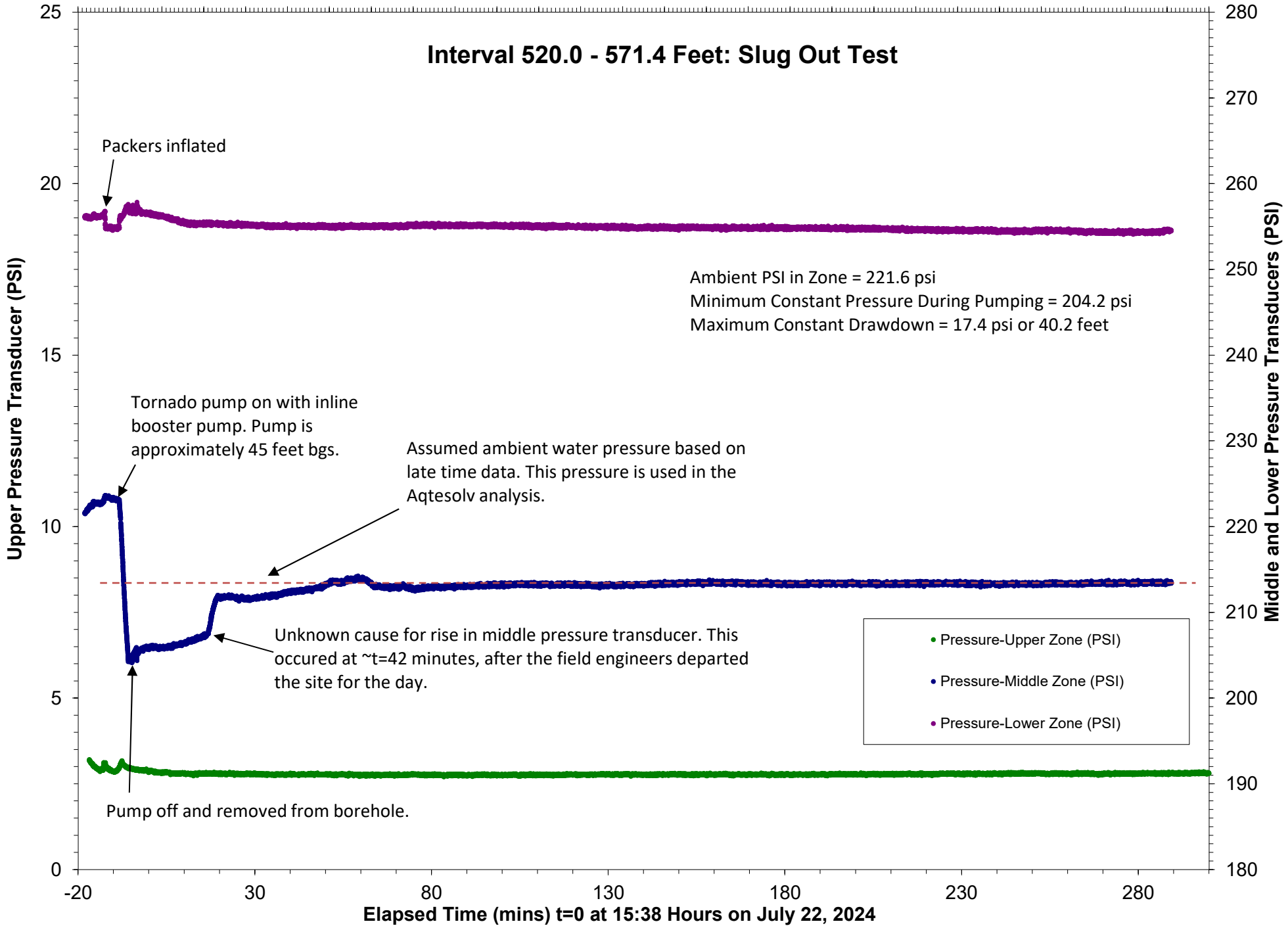
Saturated Thickness: 51.4 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

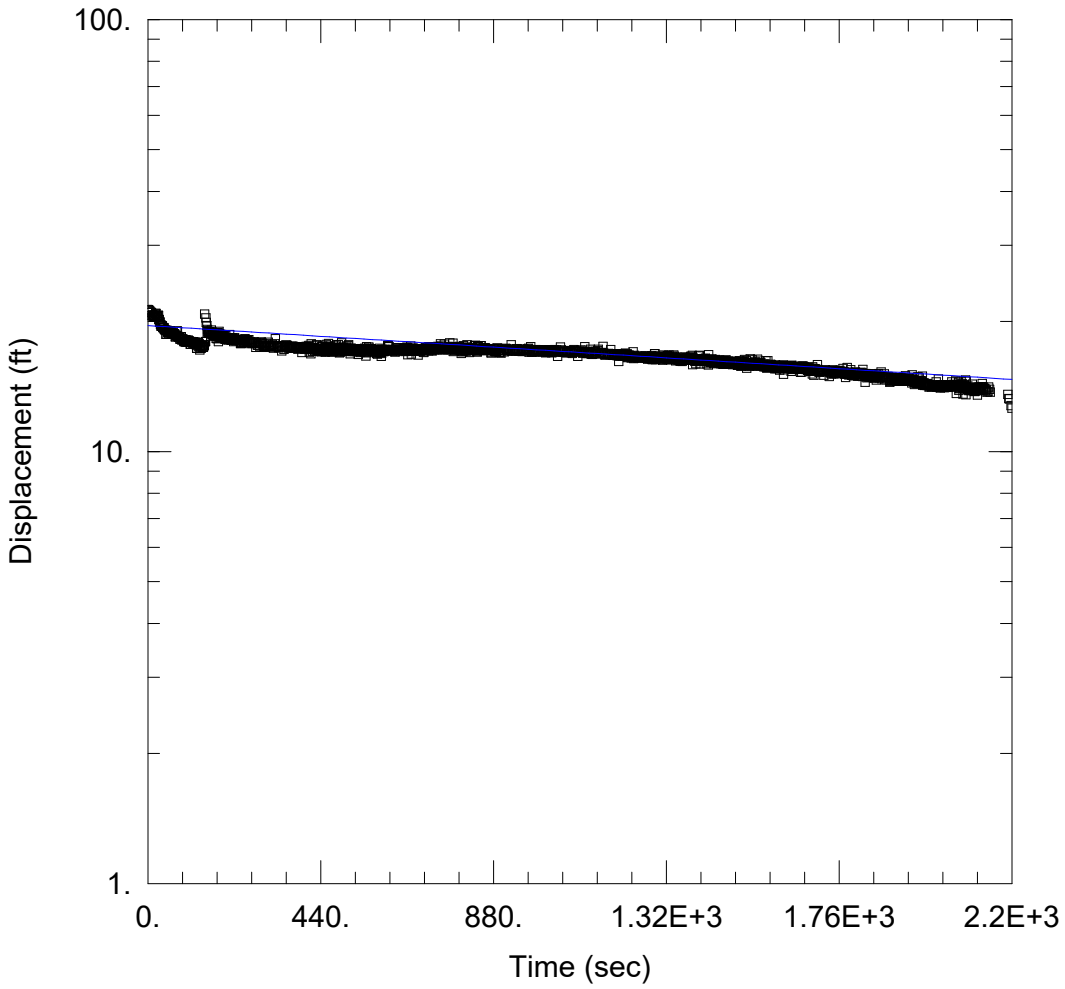
Aquifer Model: Confined Solution Method: Hvorslev

K = 3.588E-6 cm/sec y0 = 46.26 ft

FIGURE WP583:5D. Pressure Data During Wireline Straddle Packer Testing at 520.0 to 571.4 Feet, Pump Slug Out Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP583



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP583\WP583 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-583 520-571.4
Test Date: 7/22/2024

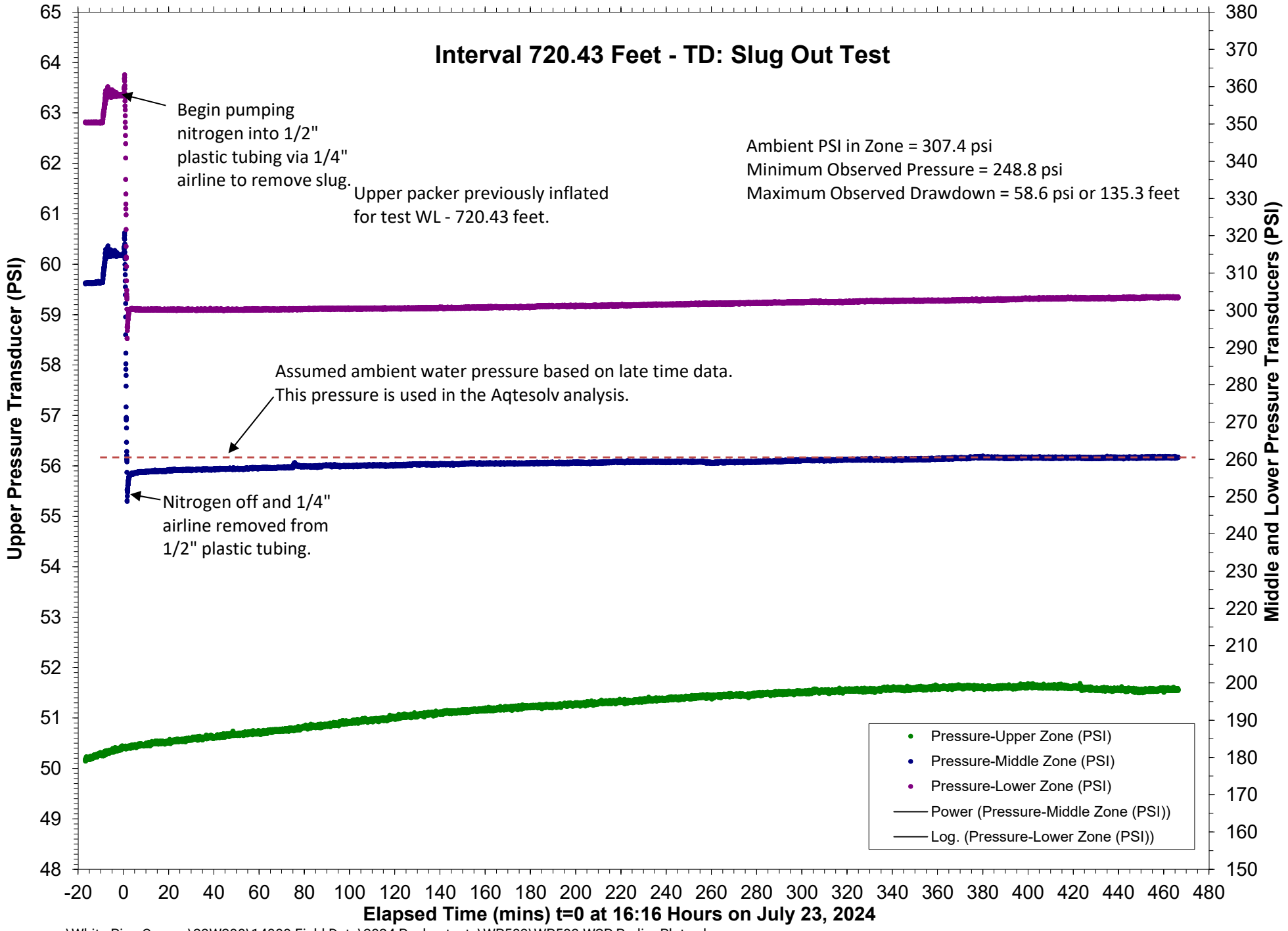
AQUIFER DATA

Saturated Thickness: 51.4 ft
Anisotropy Ratio (Kz/Kr): 1.

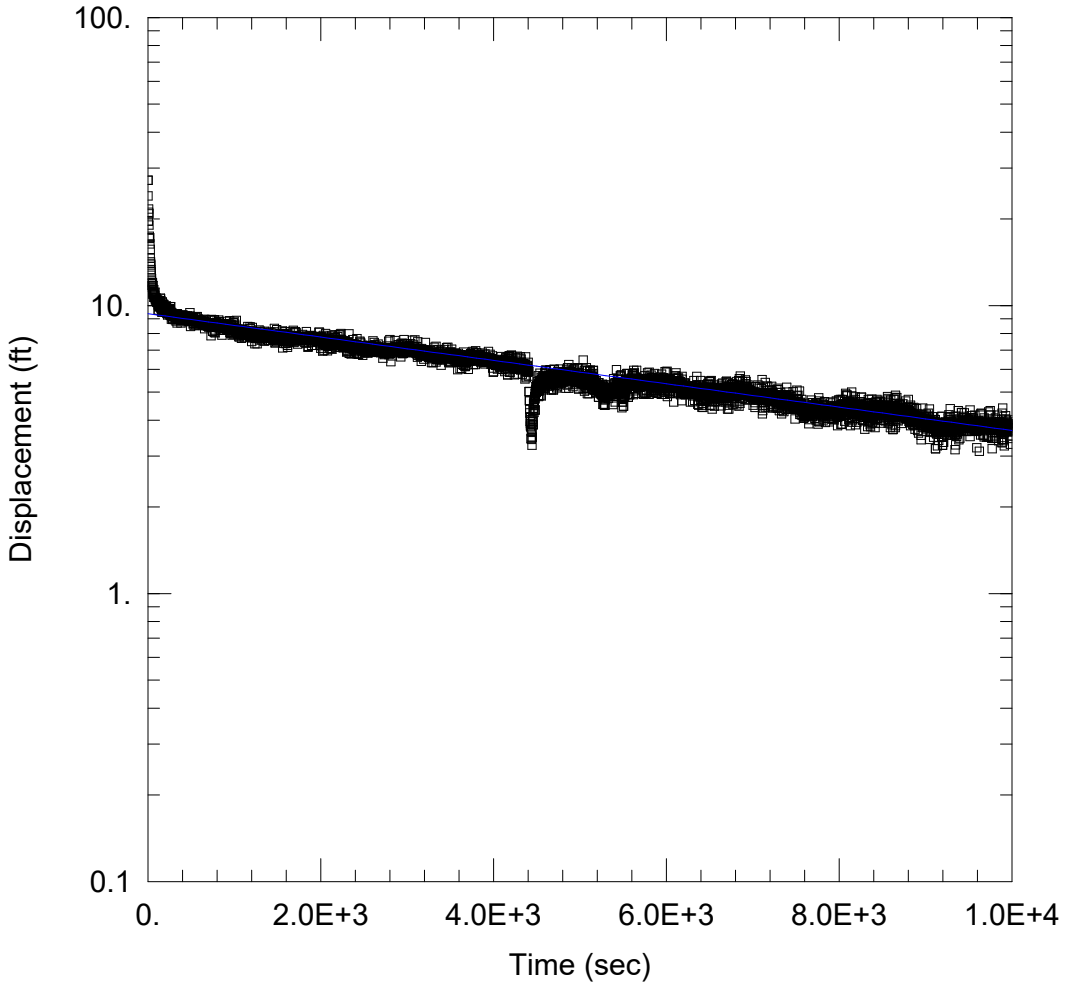
SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice
K = 1.069E-6 cm/sec
y0 = 19.57 ft

FIGURE WP583:5E. Pressure Data During Wireline Straddle Packer Testing at 720.43 Feet to Total Depth, Pump Slug Out Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP583



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP583\WP583 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-583 720.43-TD slug out BR.aqt
Date: 02/07/25 Time: 12:21:09

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-583 520-571.4
Test Date: 7/22/2024

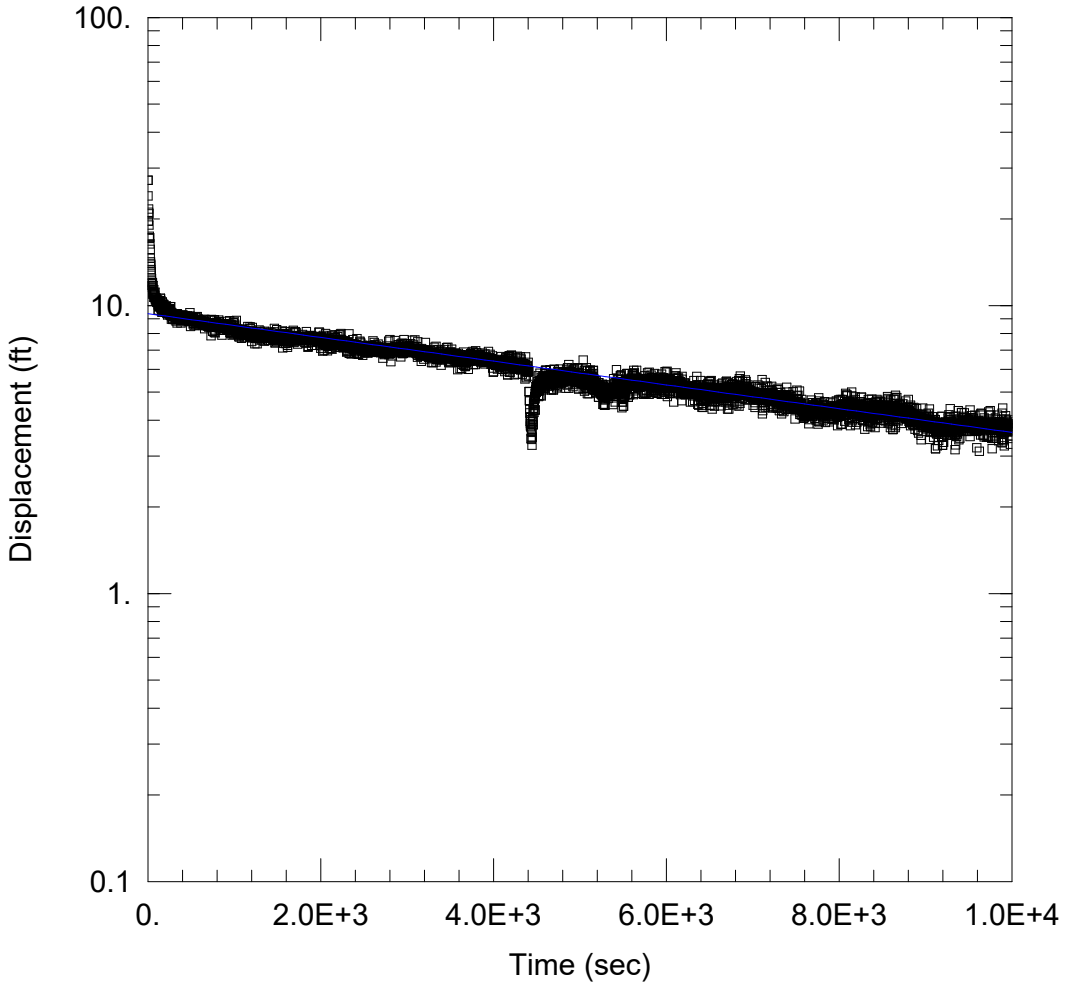
AQUIFER DATA

Saturated Thickness: 1587.5 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 5.008E-9 cm/sec y0 = 9.367 ft



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-583 720.43-TD slug out HV.aqt
Date: 02/07/25 Time: 13:08:32

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-583 520-571.4
Test Date: 7/22/2024

AQUIFER DATA

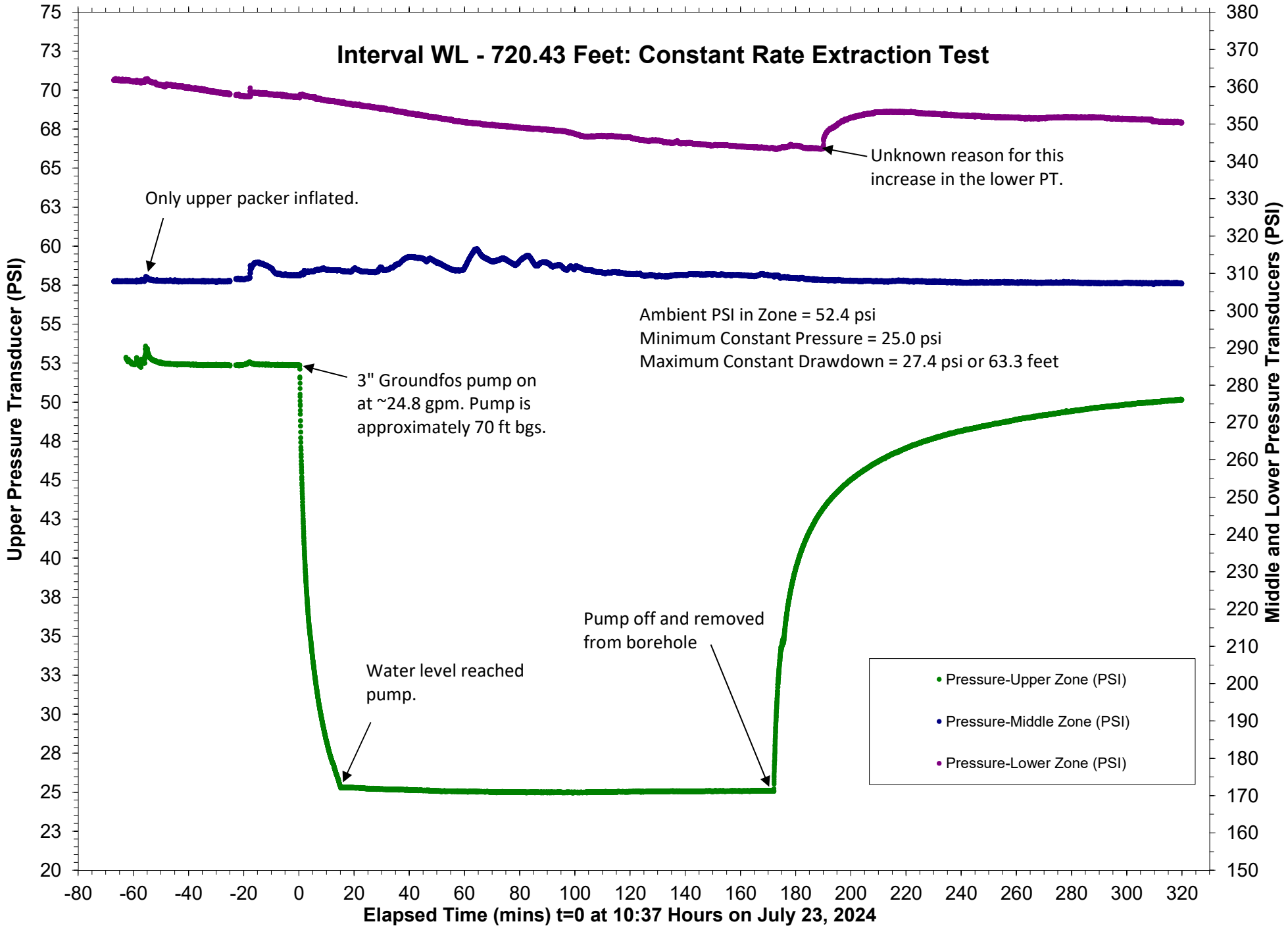
Saturated Thickness: 1587.5 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

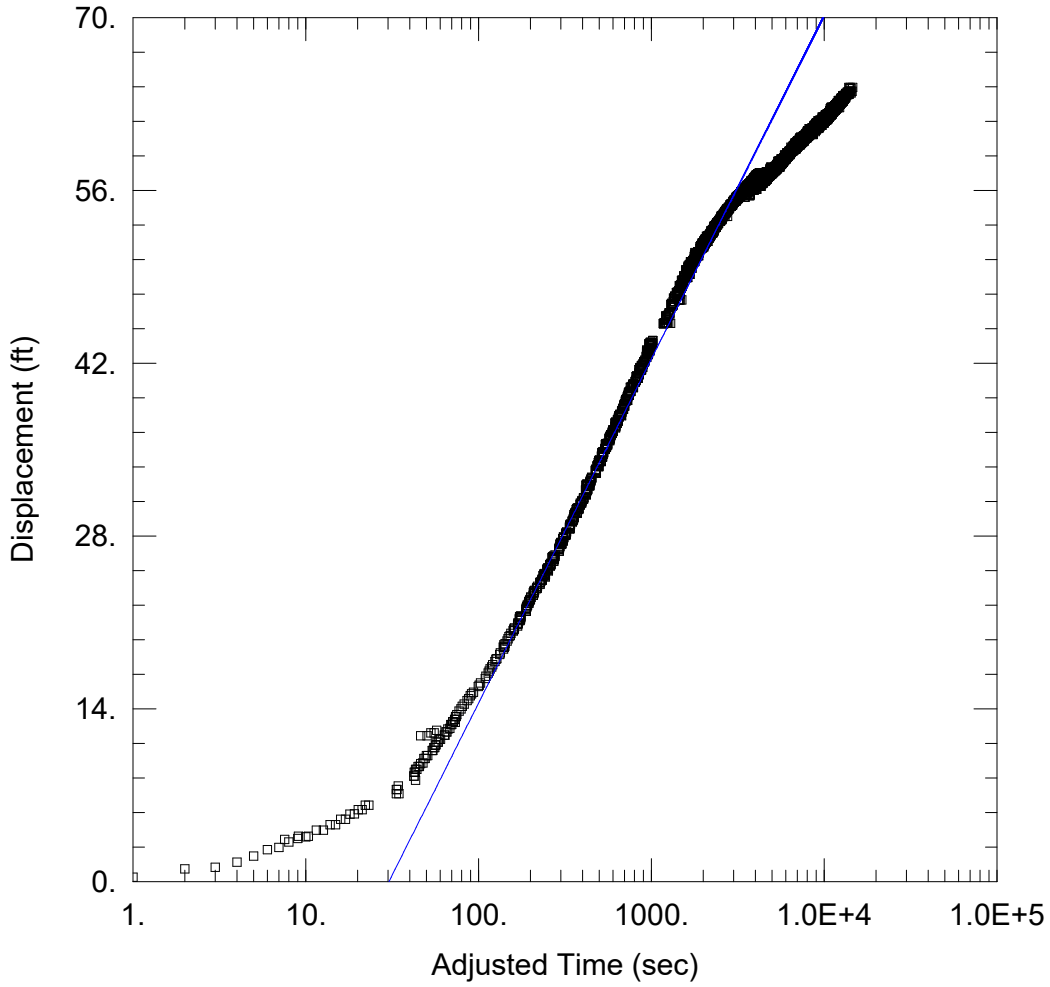
Aquifer Model: Confined Solution Method: Hvorslev

K = 6.161E-9 cm/sec y0 = 9.367 ft

FIGURE WP583:5F. Pressure Data During Wireline Straddle Packer Testing at Water Level to 720.43 Feet, Constant Rate Extraction Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP583



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP583\WP583 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-583 WL-720.43 CRE C-J.aqt
Date: 02/07/25 Time: 13:48:23

PROJECT INFORMATION

Company: Foth
Client: NewRange
Project: 0023N202.24
Location: Mesaba, MN
Test Well: MW-23-17-DB1 Slug-In BR
Test Date: 6-4-2024

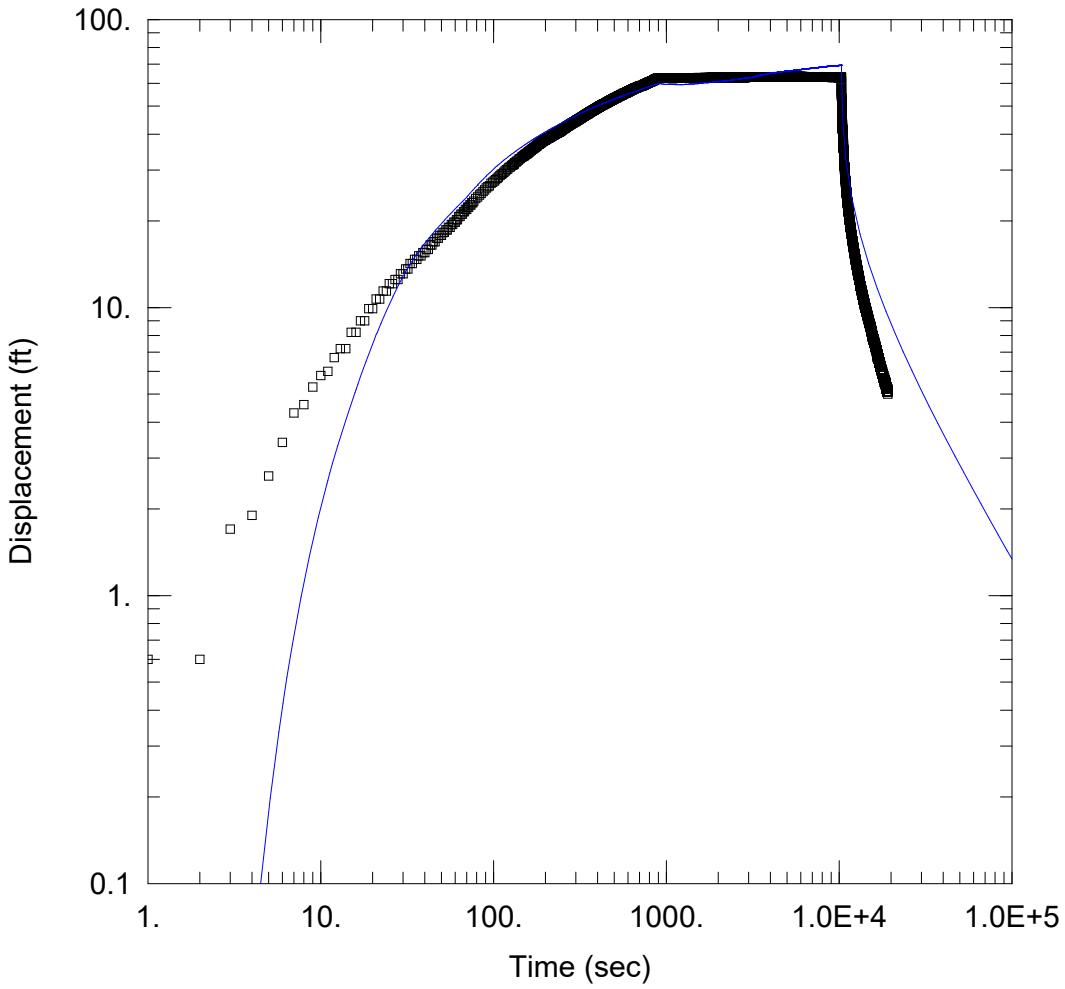
AQUIFER DATA

Saturated Thickness: 668.4 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob

T = 0.2039 cm^2/sec S = 0.6032



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-583 WL-720.43 CRE theis.aqt
Date: 01/31/25 Time: 16:18:12

PROJECT INFORMATION

Company: Foth
Client: NewRange
Project: 0023N202.24
Location: Mesaba, MN
Test Well: MW-23-17-DB1 Slug-In BR
Test Date: 6-4-2024

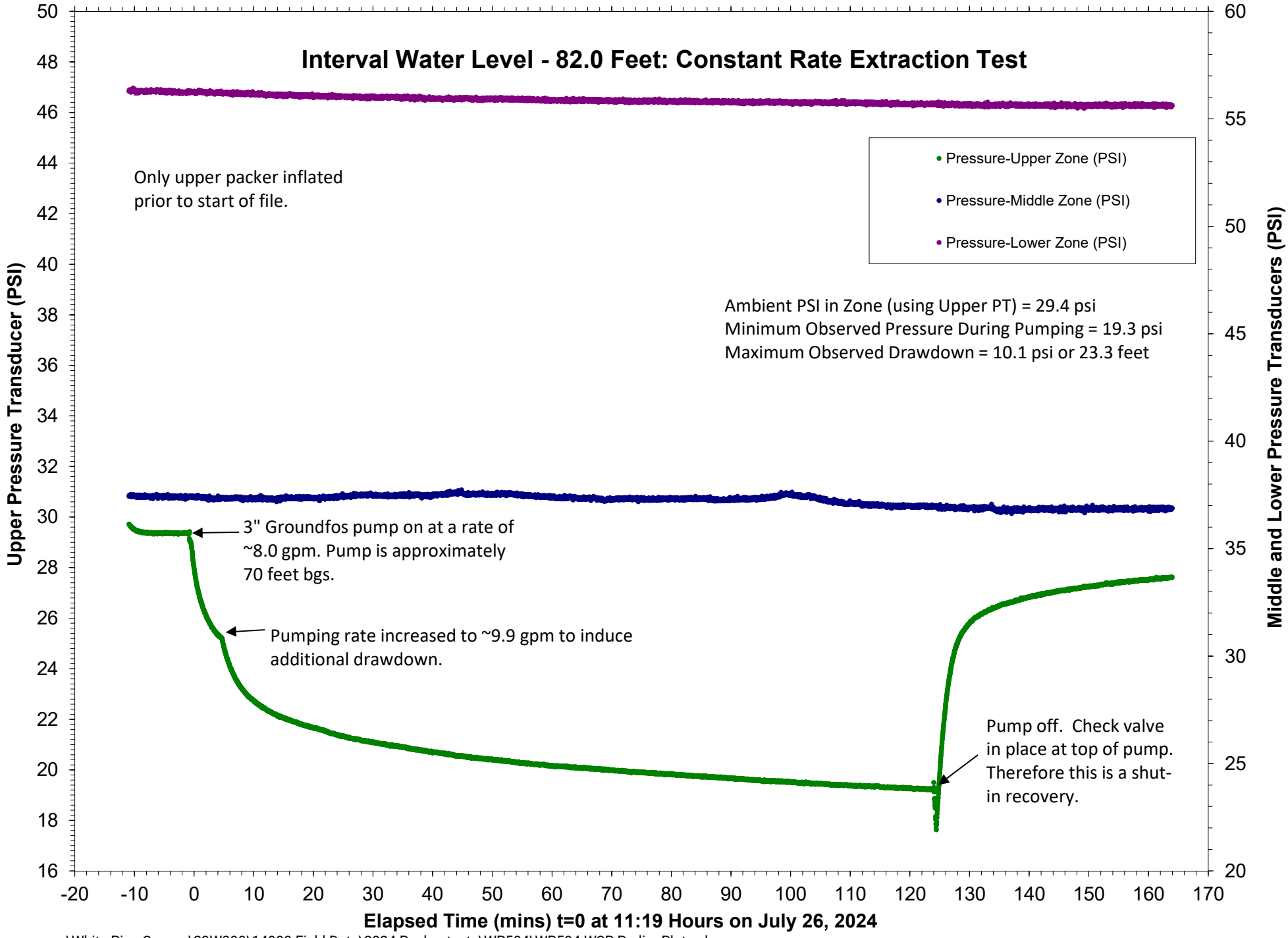
SOLUTION

Aquifer Model: Confined
Solution Method: Theis

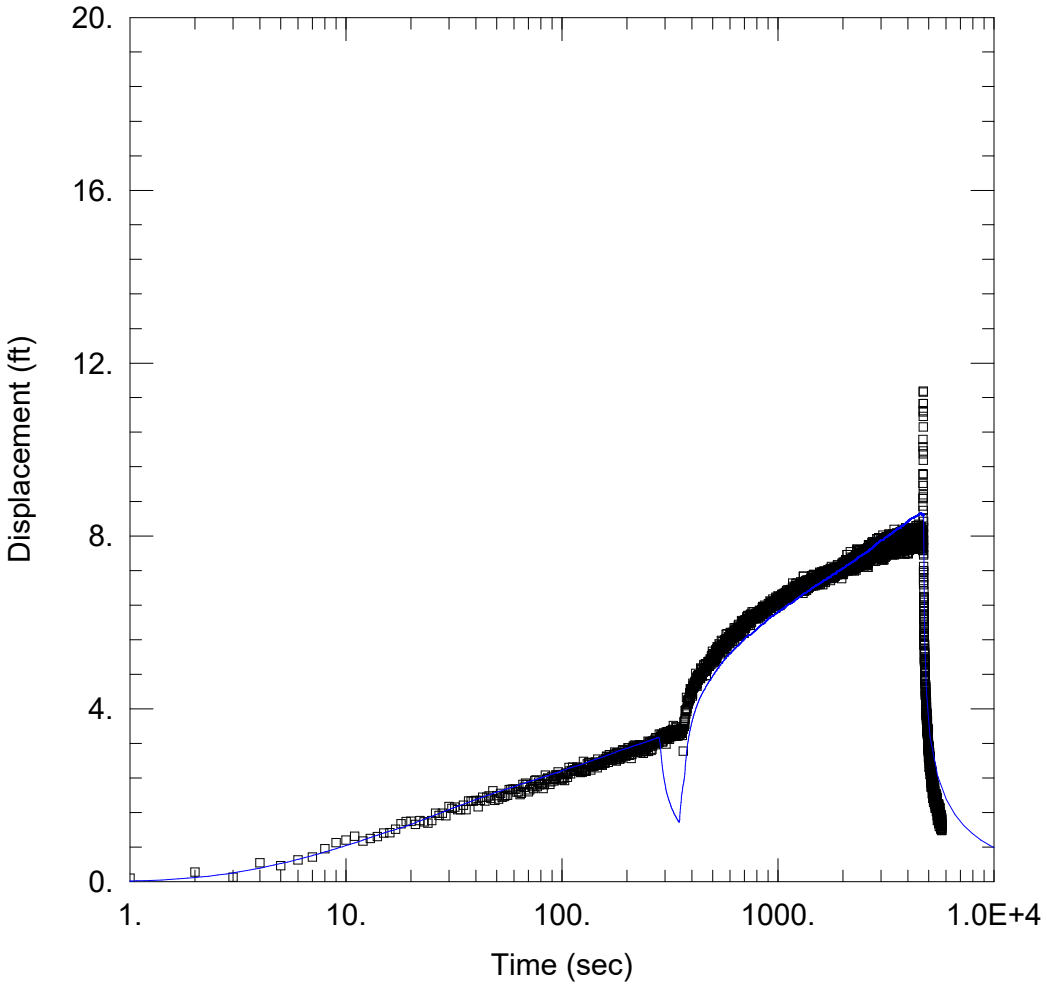
T = 0.2236 cm^2/sec
S = 0.5018
Kz/Kr = 1.
b = 668.4 ft

WP-584 - Test Hydrographs and Analyses

FIGURE WP584:5A. Pressure Data During Wireline Straddle Packer Testing at Water Lvel to 82.0 Feet, Constant Rate Extraction Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP584



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP584\WP584 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-584 82-133.4 CRE Theis.aqt
Date: 02/09/25 Time: 00:11:57

PROJECT INFORMATION

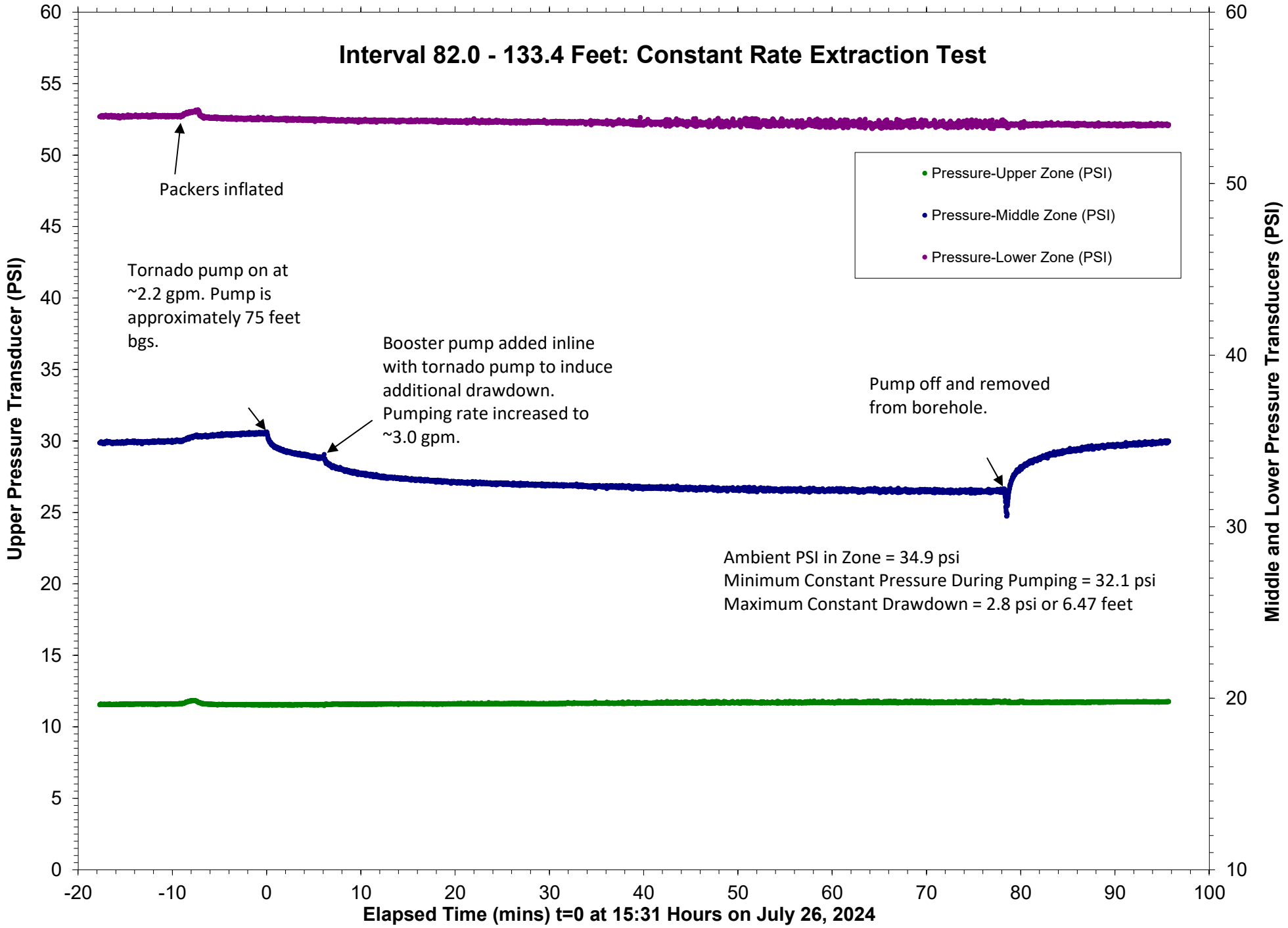
Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-584 WL-82 CRE

SOLUTION

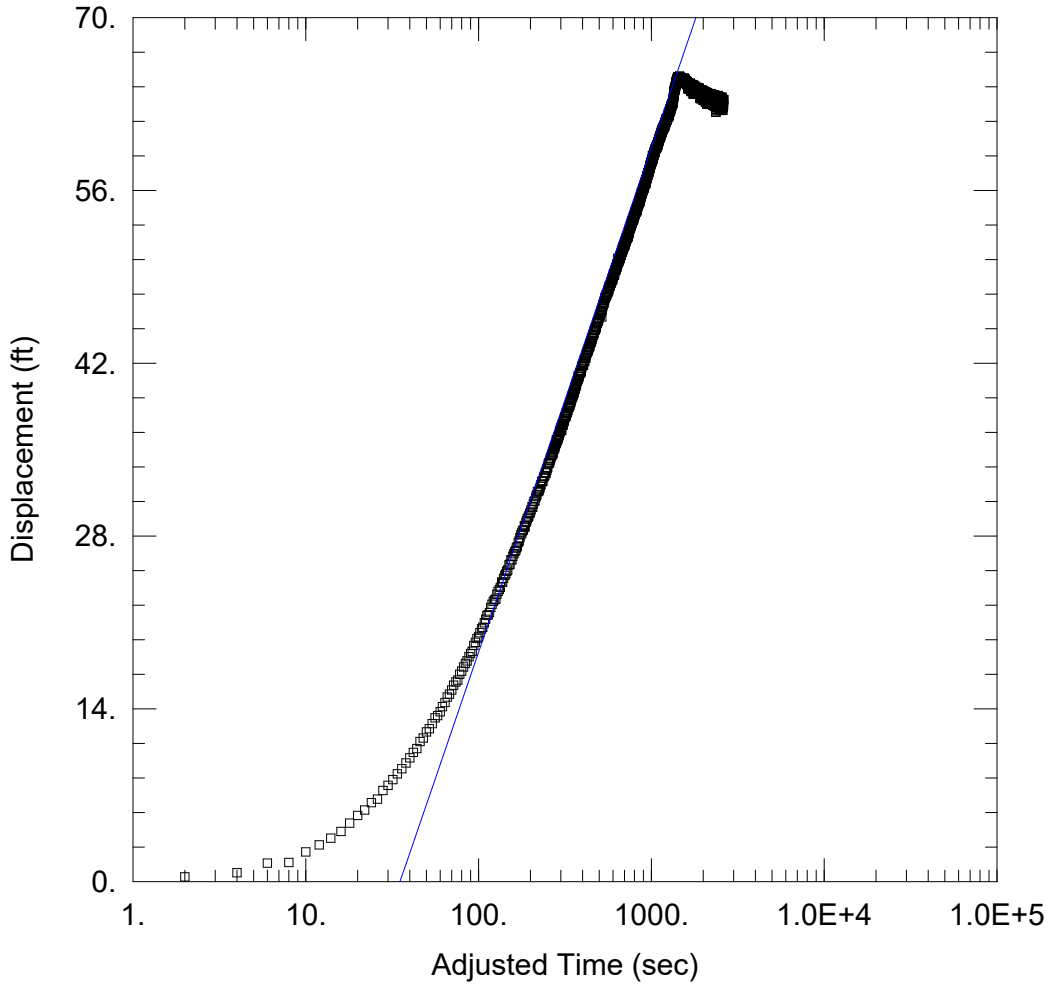
Aquifer Model: Confined
Solution Method: Theis

T = 0.3986 cm^2/sec
S = 0.1281
Kz/Kr = 1.
b = 51.4 ft

FIGURE WP584:5B. Pressure Data During Wireline Straddle Packer Testing at 82.0 to 133.4 Feet, Constant Rate Extraction Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP584



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP584\WP584 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-584 340-391.4 CRE CJ.aqt
Date: 02/09/25 Time: 21:44:08

PROJECT INFORMATION

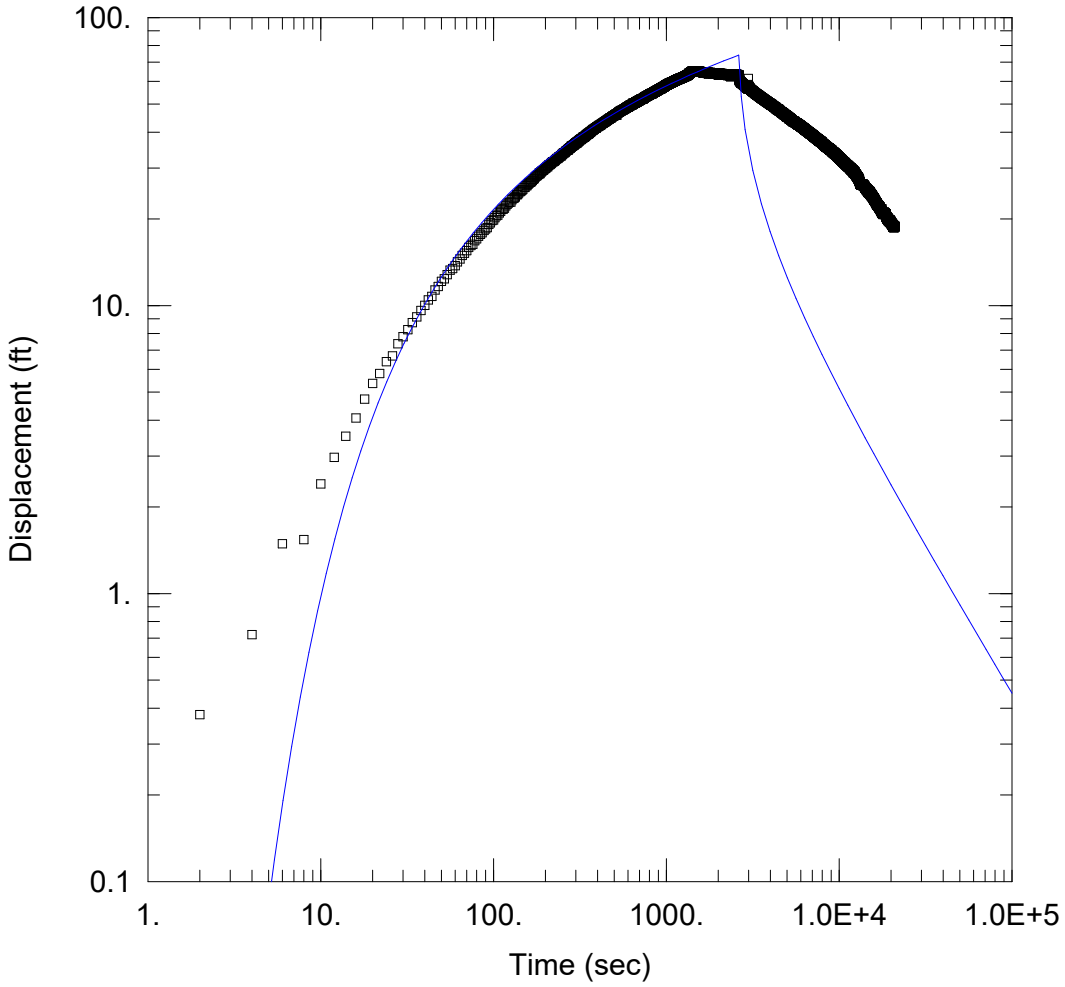
Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-584 340-391.4 CRE

AQUIFER DATA

Saturated Thickness: 51.4 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob
T = 0.01552 cm^2/sec S = 0.03261



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-584 340-391.4 CRE theis hantush.aqt
Date: 02/09/25 Time: 21:42:05

PROJECT INFORMATION

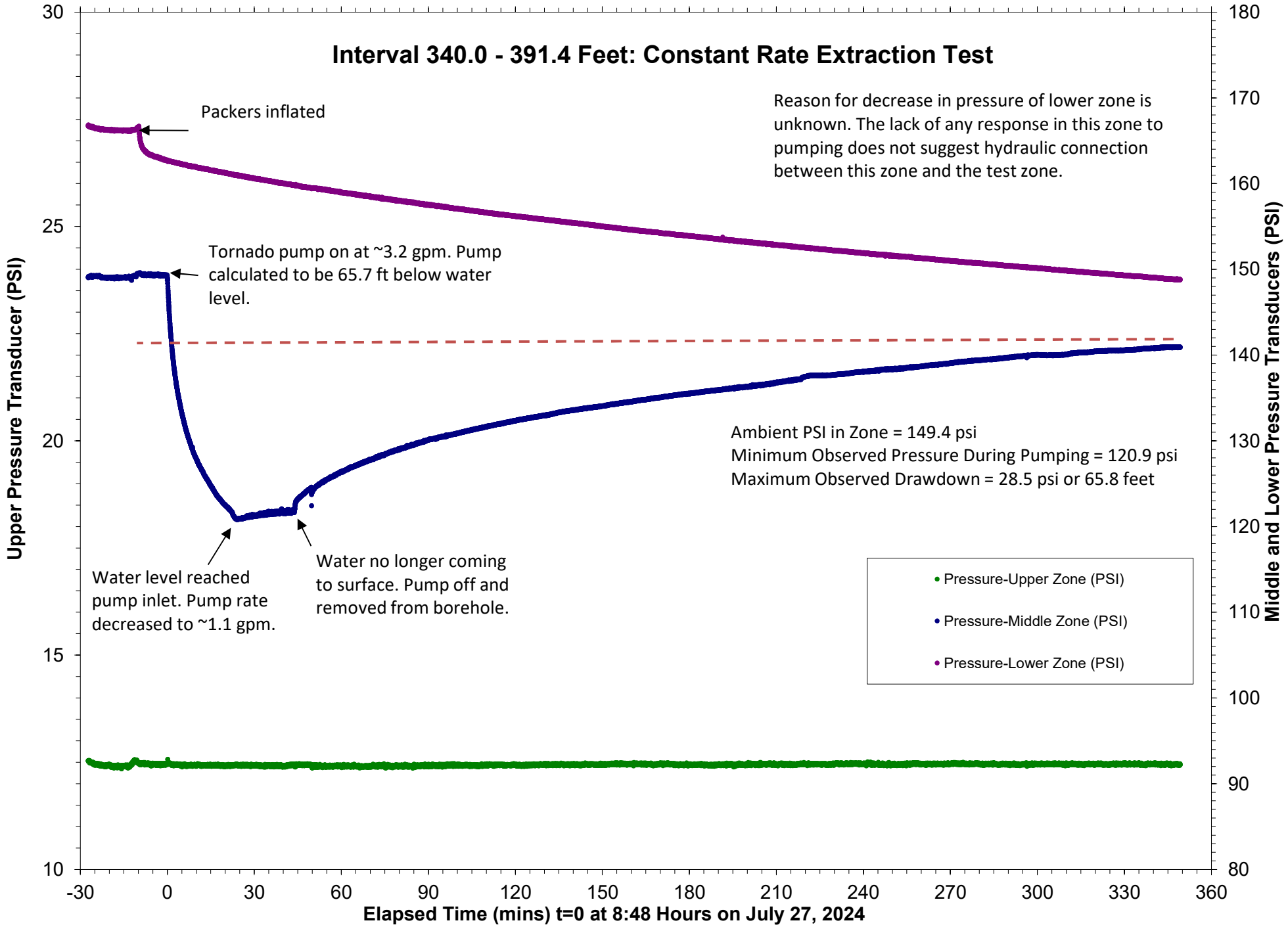
Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-584 340-391.4 CRE

SOLUTION

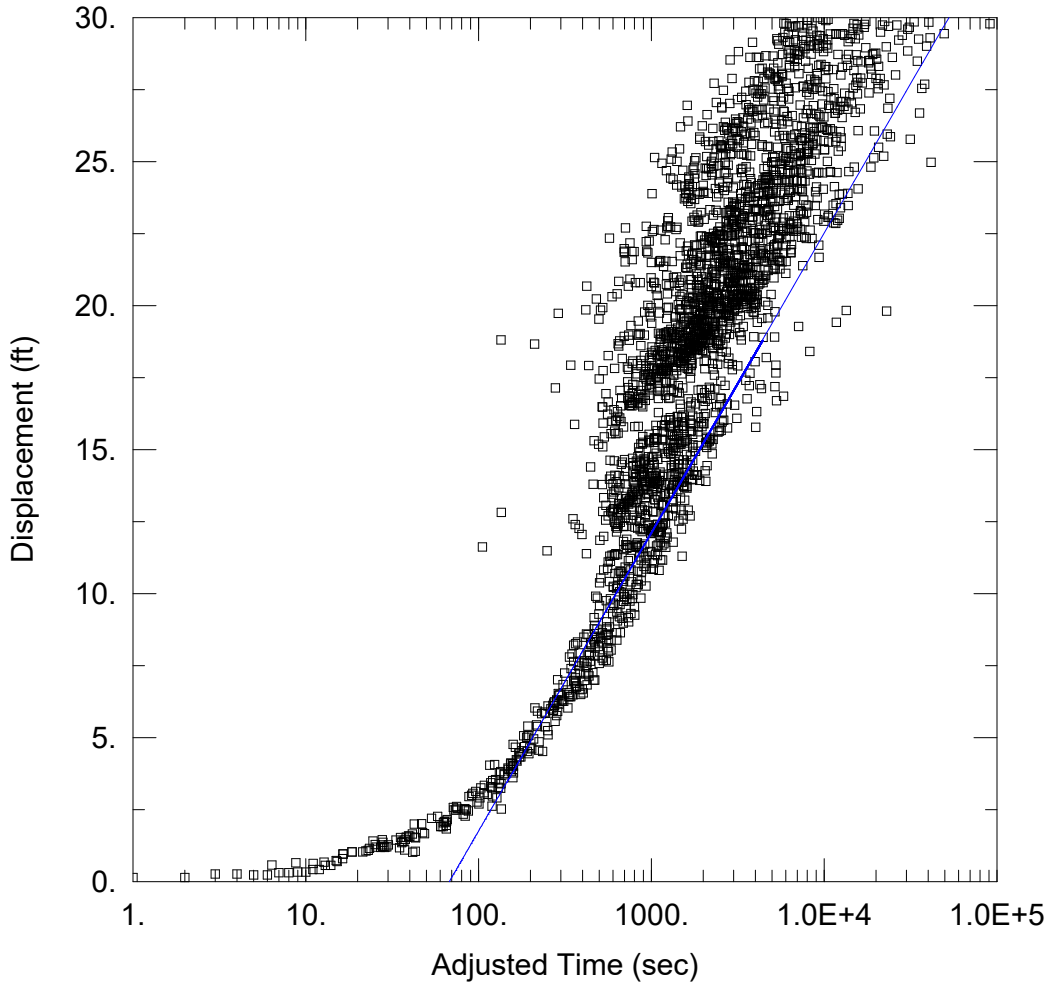
Aquifer Model: Confined
Solution Method: Theis

T = 0.01626 cm^2/sec
S = 0.03261
Kz/Kr = 1.
b = 51.4 ft

FIGURE WP584:5C. Pressure Data During Wireline Straddle Packer Testing at 340.0 to 391.4 Feet, Constant Rate Extraction Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP584



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP584\WP584 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-584 455-506.4 CRE CJ.aqt
Date: 02/10/25 Time: 00:25:30

PROJECT INFORMATION

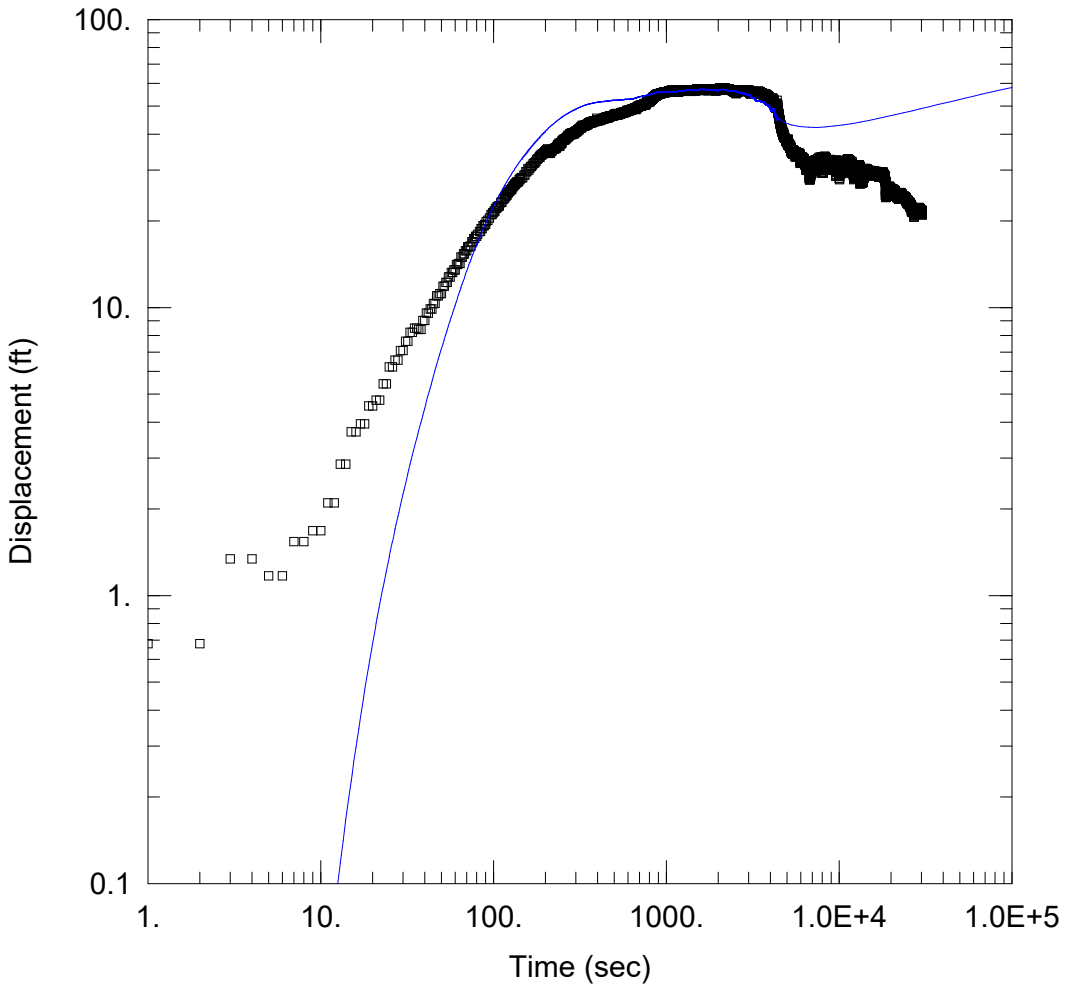
Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-584 455-506.4

AQUIFER DATA

Saturated Thickness: 51.4 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob
T = 0.0117 cm^2/sec S = 4.312



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-584 455-506.4 CRE theis.aqt
Date: 02/09/25 Time: 23:52:54

PROJECT INFORMATION

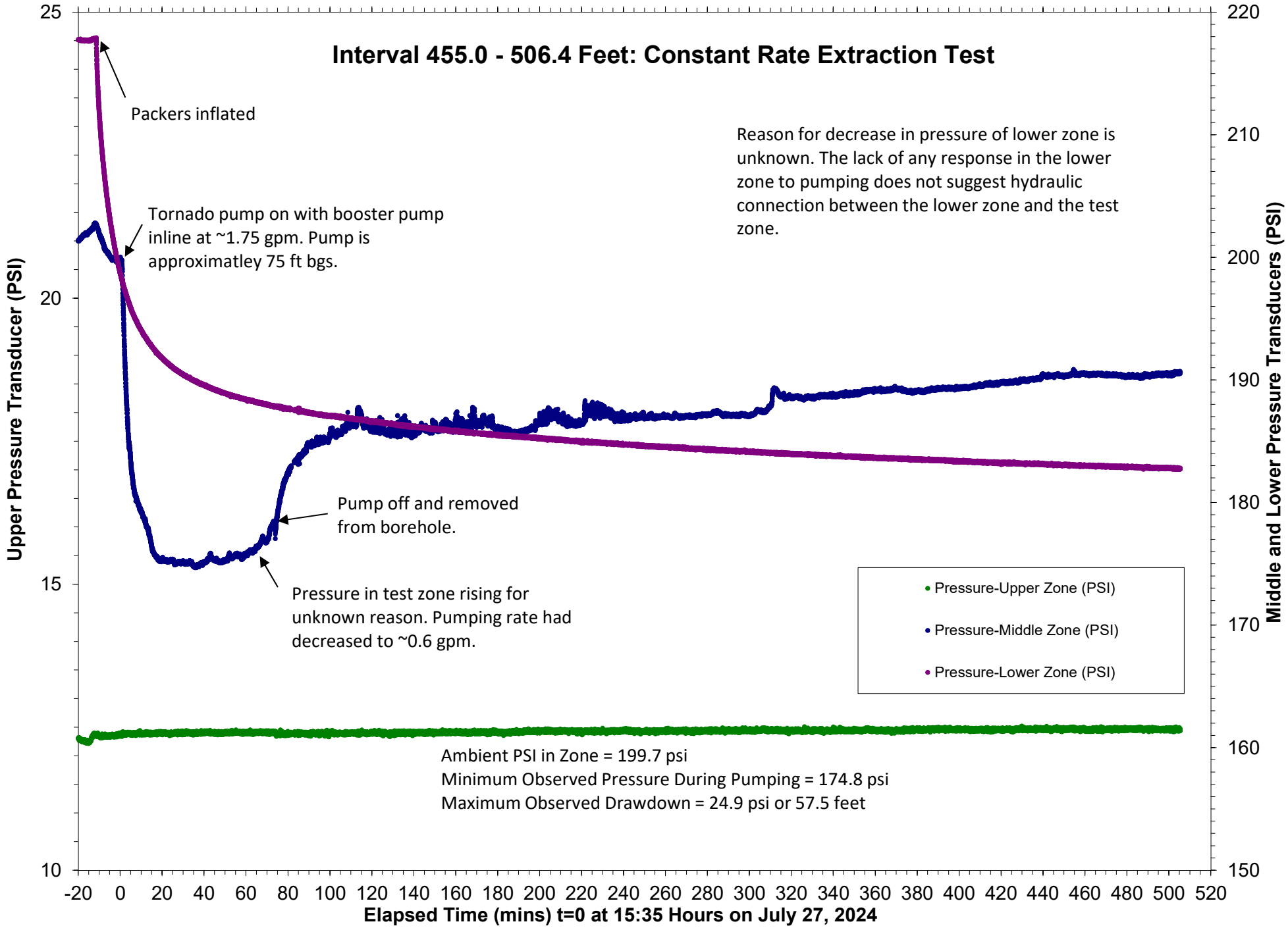
Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-584 455-506.4

SOLUTION

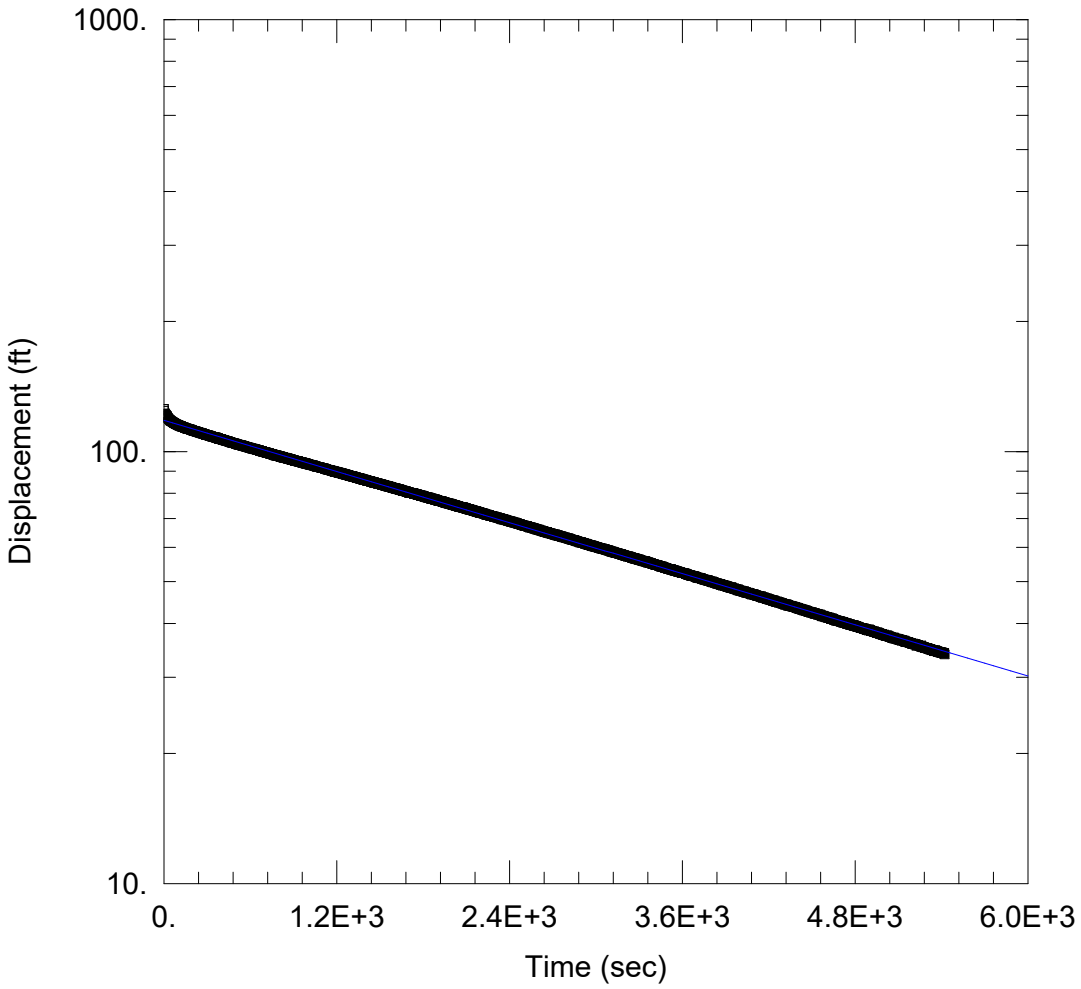
Aquifer Model: Confined
Solution Method: Theis

T = 0.008563 cm^2/sec
S = 4.312
Kz/Kr = 1.
b = 51.4 ft

FIGURE WP584:5D. Pressure Data During Wireline Straddle Packer Testing at 455.0 to 506.4 Feet, Constant Rate Extraction Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP584



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP584\WP584 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-584 820-871.4 Slug out BR.aqt
Date: 02/10/25 Time: 13:53:18

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-584 4820-871.5

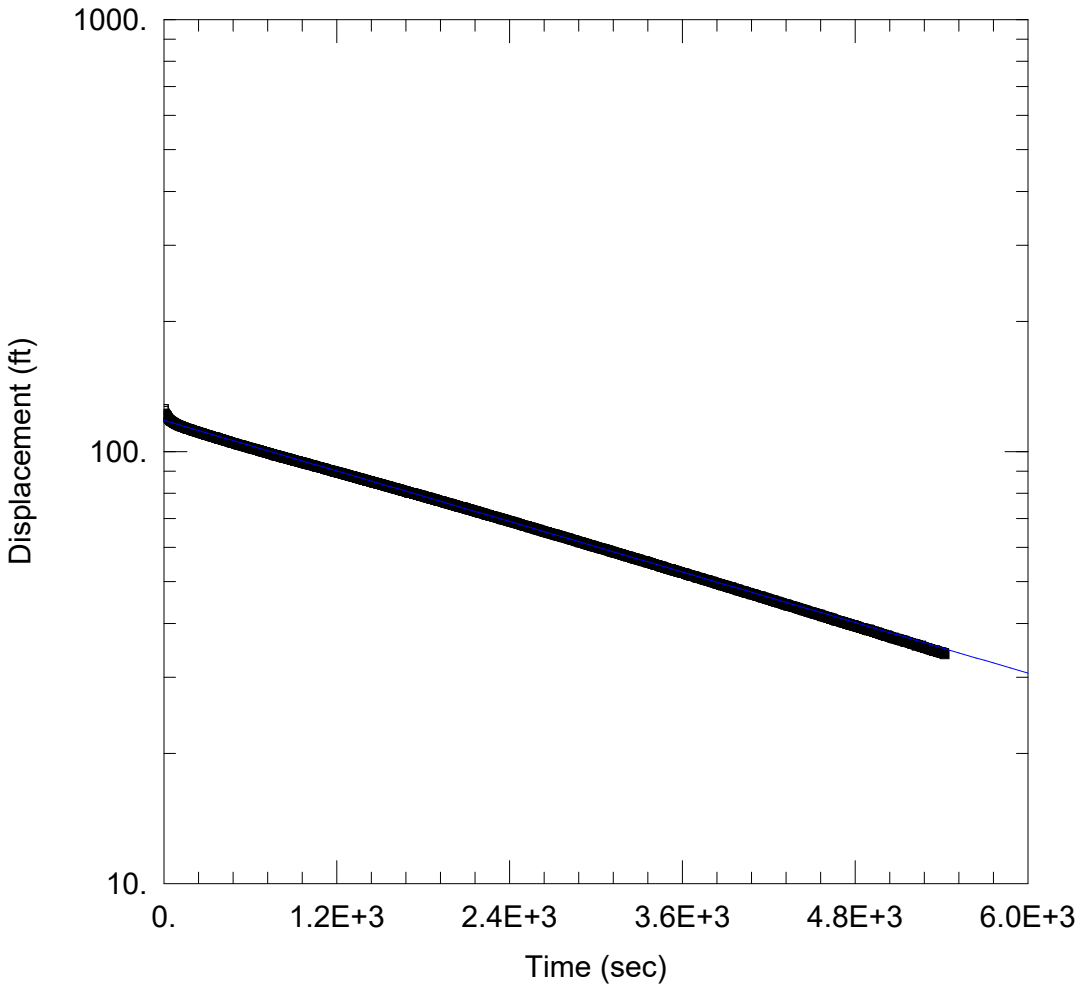
AQUIFER DATA

Saturated Thickness: 51.4 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 1.269E-7 cm/sec y0 = 118. ft



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-584 820-871.4 Slug out HV.aqt
Date: 02/10/25 Time: 13:51:52

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-584 4820-871.5

AQUIFER DATA

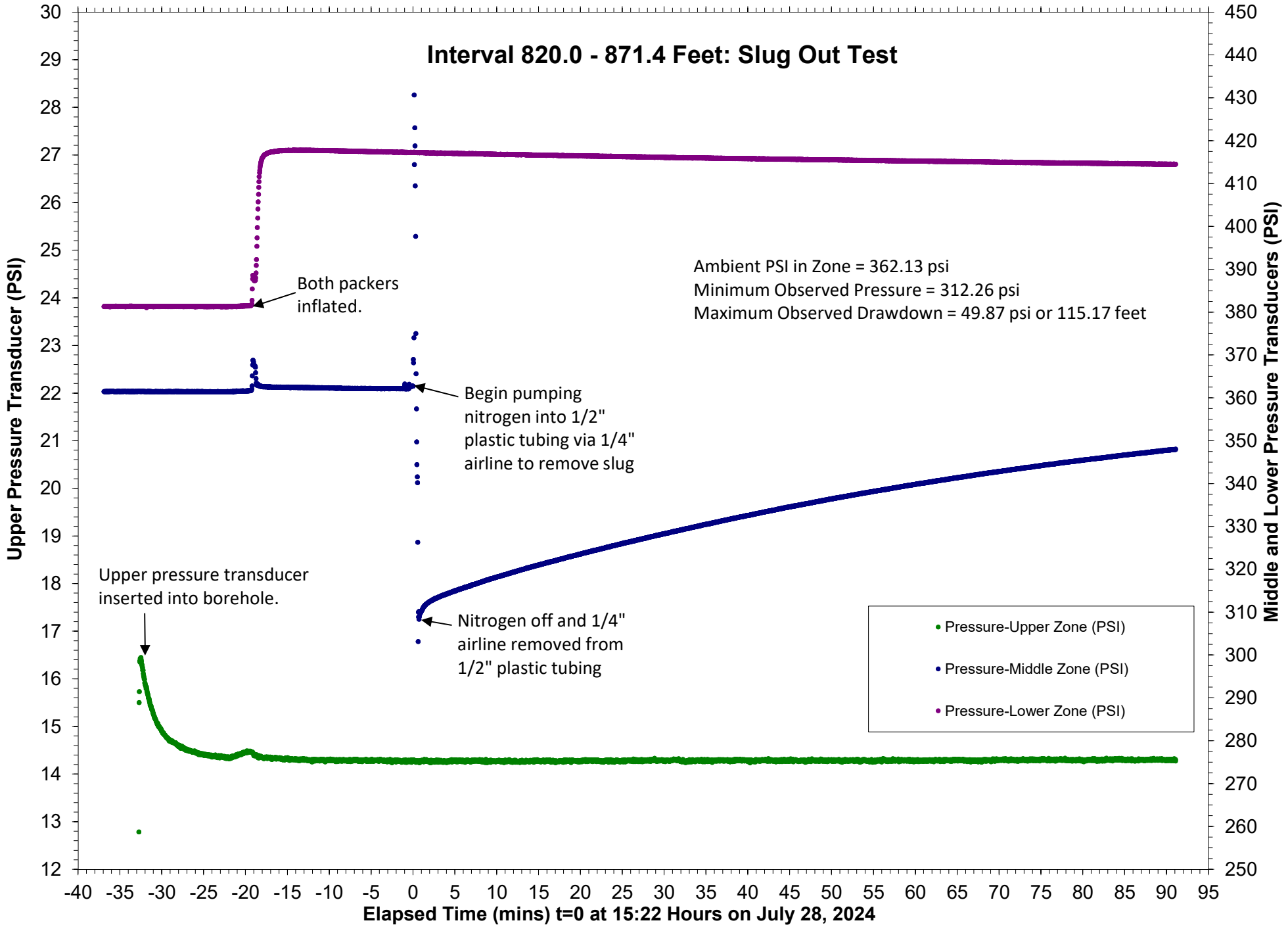
Saturated Thickness: 51.4 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

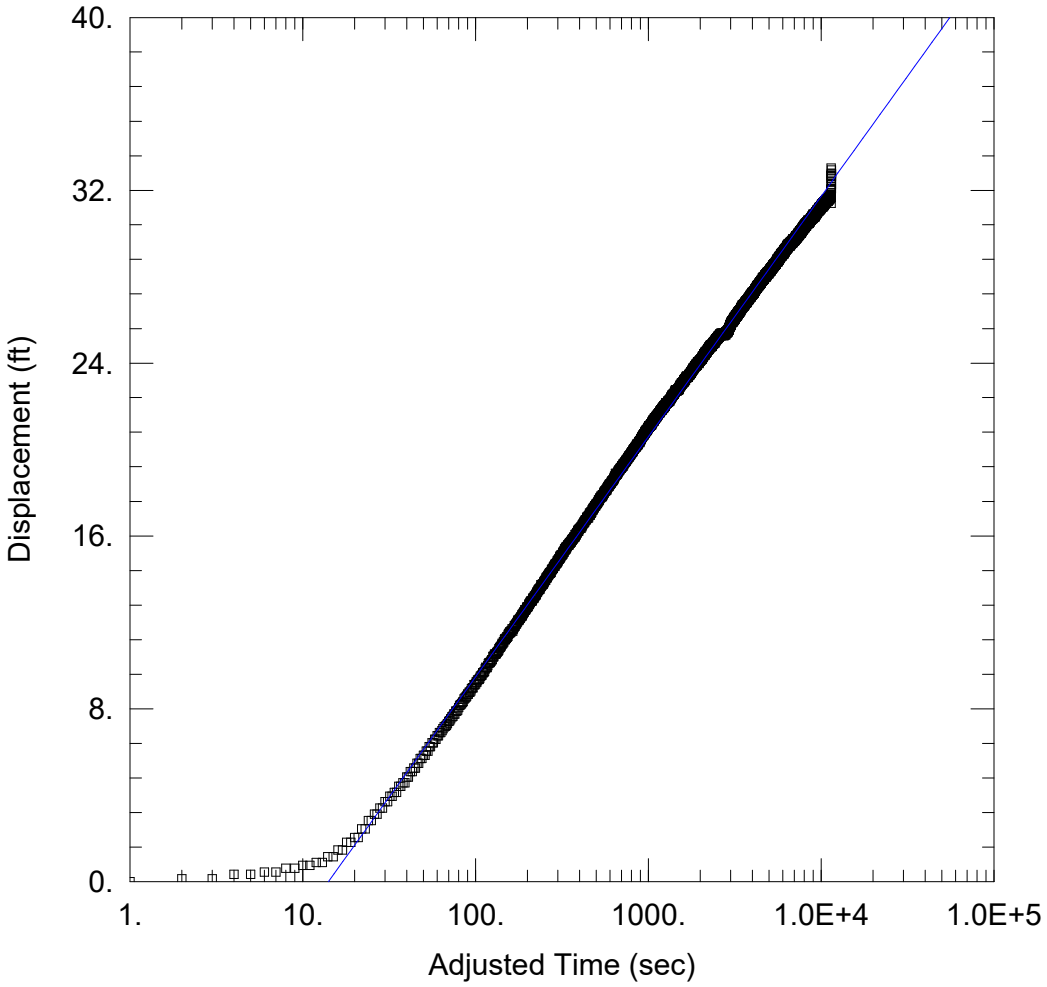
Aquifer Model: Confined Solution Method: Hvorslev

K = 1.526E-7 cm/sec y0 = 118. ft

FIGURE WP584:5E. Pressure Data During Wireline Straddle Packer Testing at 820.0 to 871.4 Feet, Pump Slug Out Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP584



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP584\WP584 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-584 867-WL CRE CJ.aqt
Date: 02/10/25 Time: 01:02:40

PROJECT INFORMATION

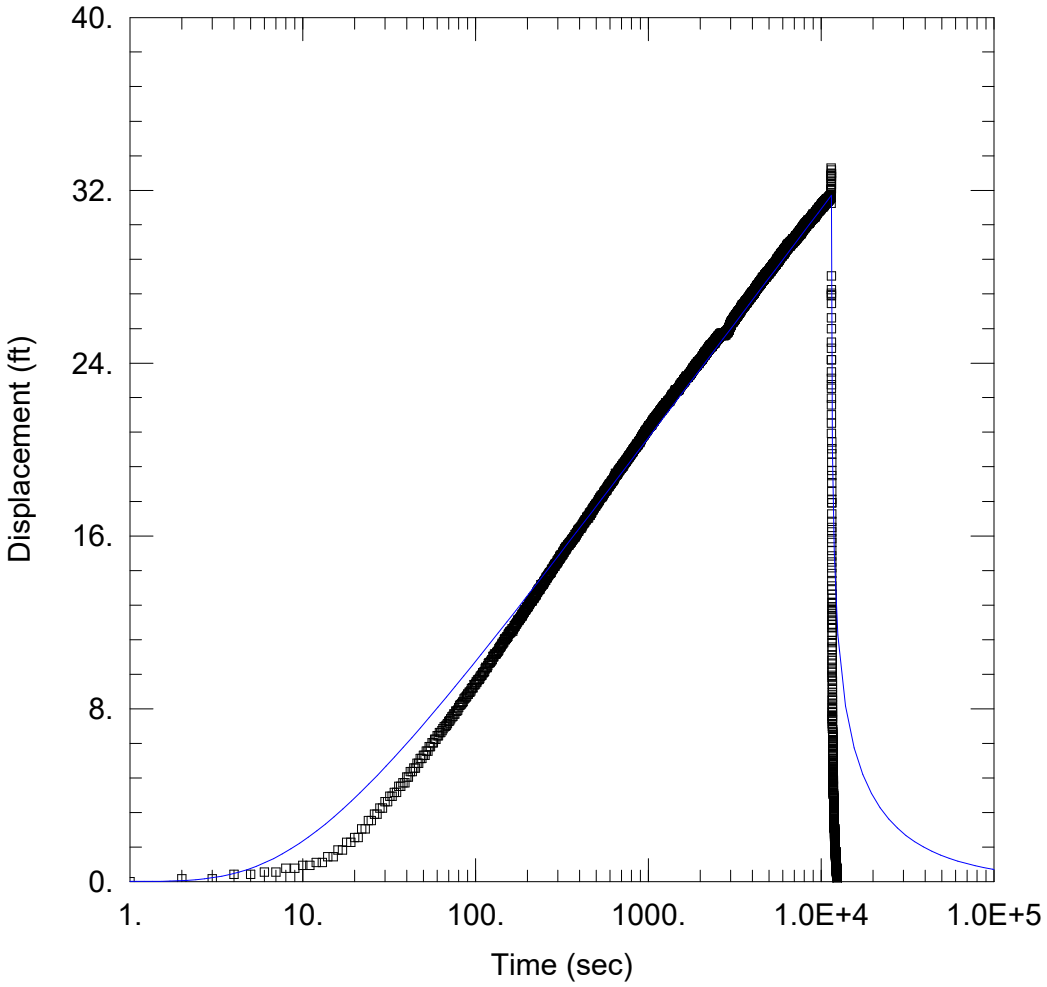
Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-584 WL-867.0

AQUIFER DATA

Saturated Thickness: 847. ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob
T = 0.9711 cm^2/sec S = 0.8171



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-584 867-WL CRE theis.aqt
Date: 02/10/25 Time: 00:56:26

PROJECT INFORMATION

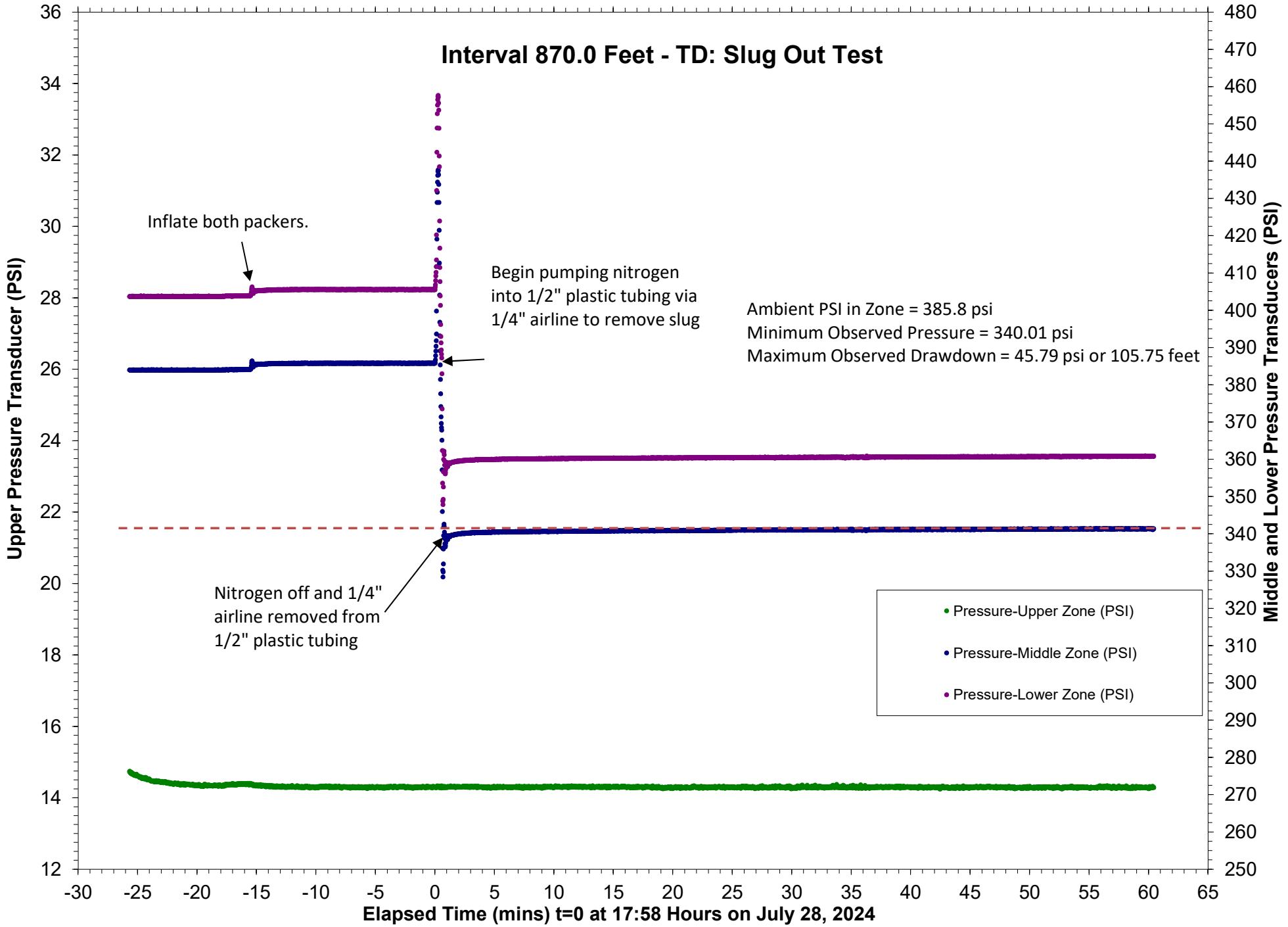
Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-584 WL-867.0

SOLUTION

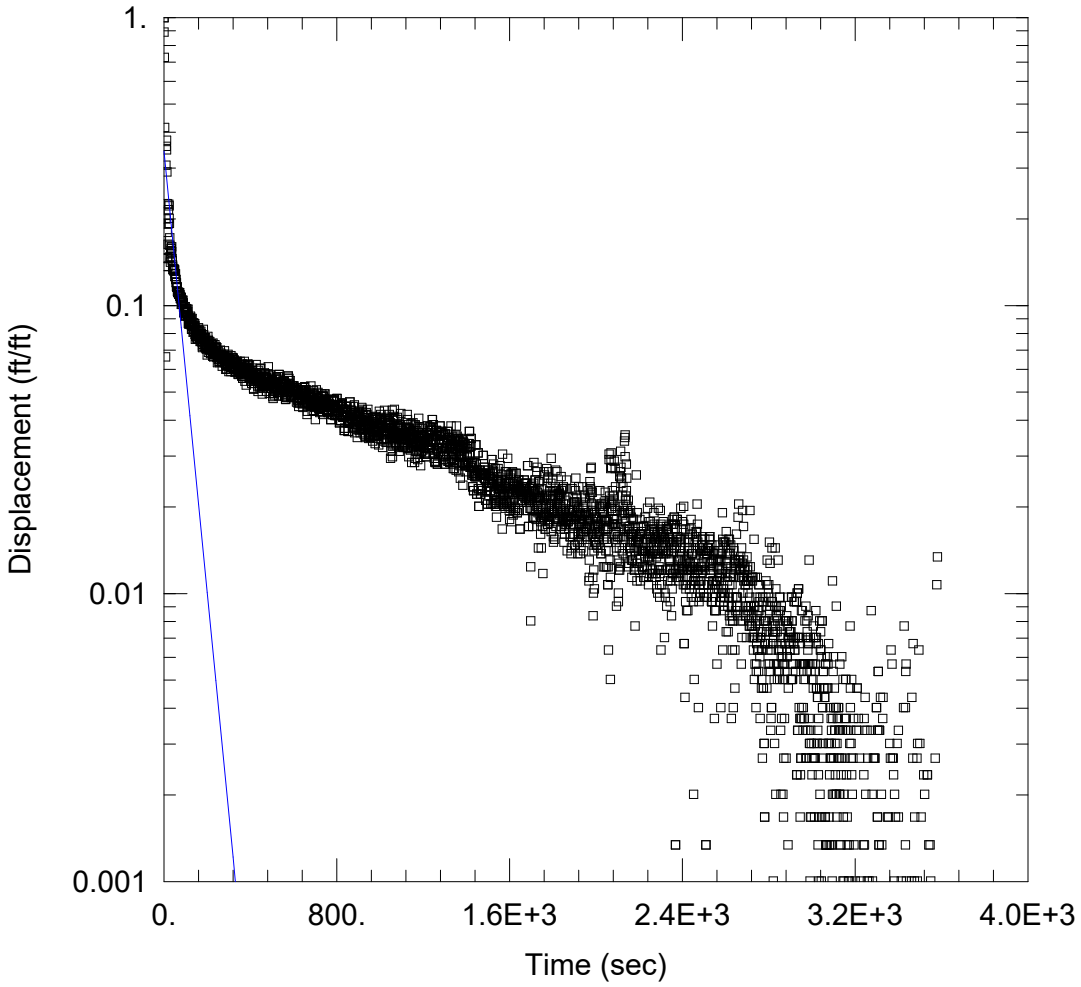
Aquifer Model: Confined
Solution Method: Theis

T = 1.017 cm^2/sec
S = 0.7116
Kz/Kr = 1.
b = 847. ft

FIGURE WP584:5F. Pressure Data During Wireline Straddle Packer Testing at 870.0 Feet to Total Depth, Slug Out Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP584



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP584\WP584 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-584 870-TD slug out BR.aqt
Date: 02/10/25 Time: 00:31:51

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-584 870-TD Slug out BR

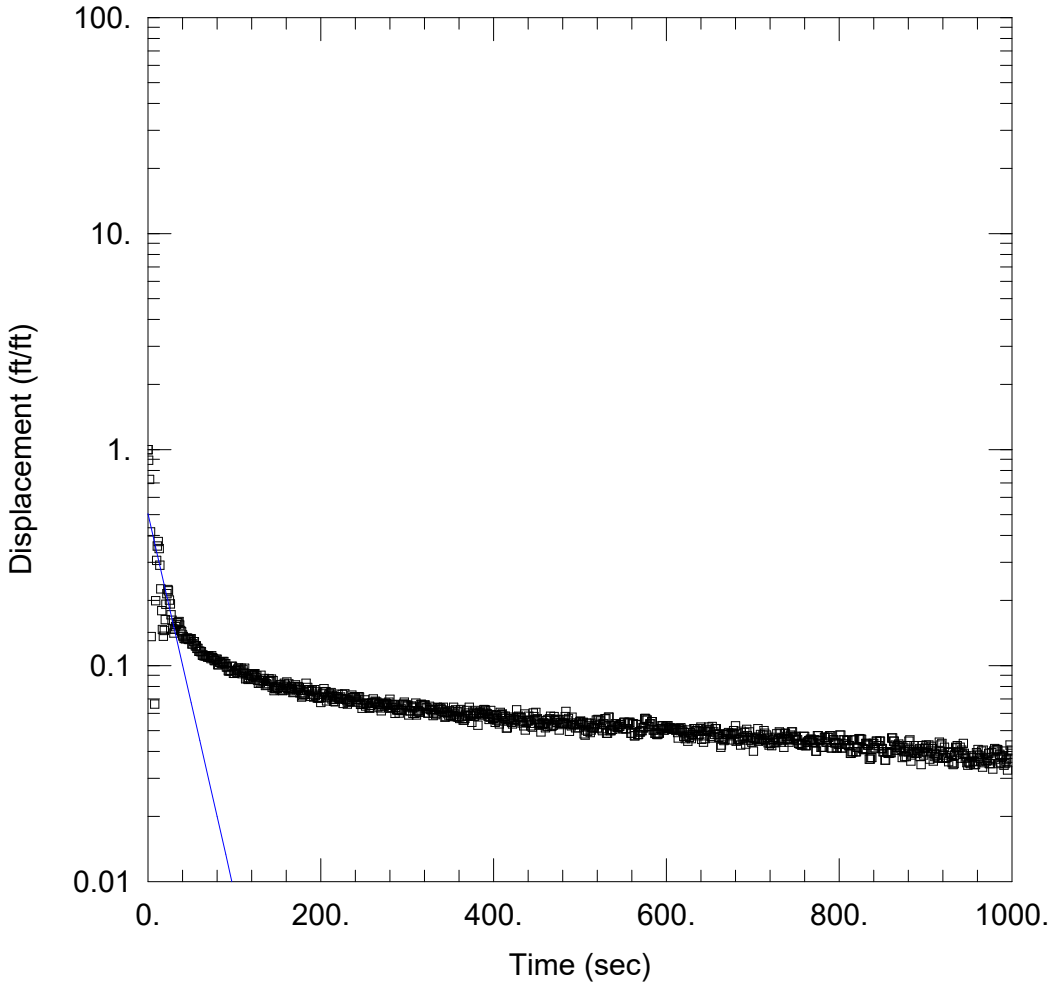
AQUIFER DATA

Saturated Thickness: 813. ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 1.053E-6 cm/sec y0 = 10.26 ft



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-584 870-TD slug out HV.aqt
Date: 02/10/25 Time: 00:45:17

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-584 870-TD Slug out BR

AQUIFER DATA

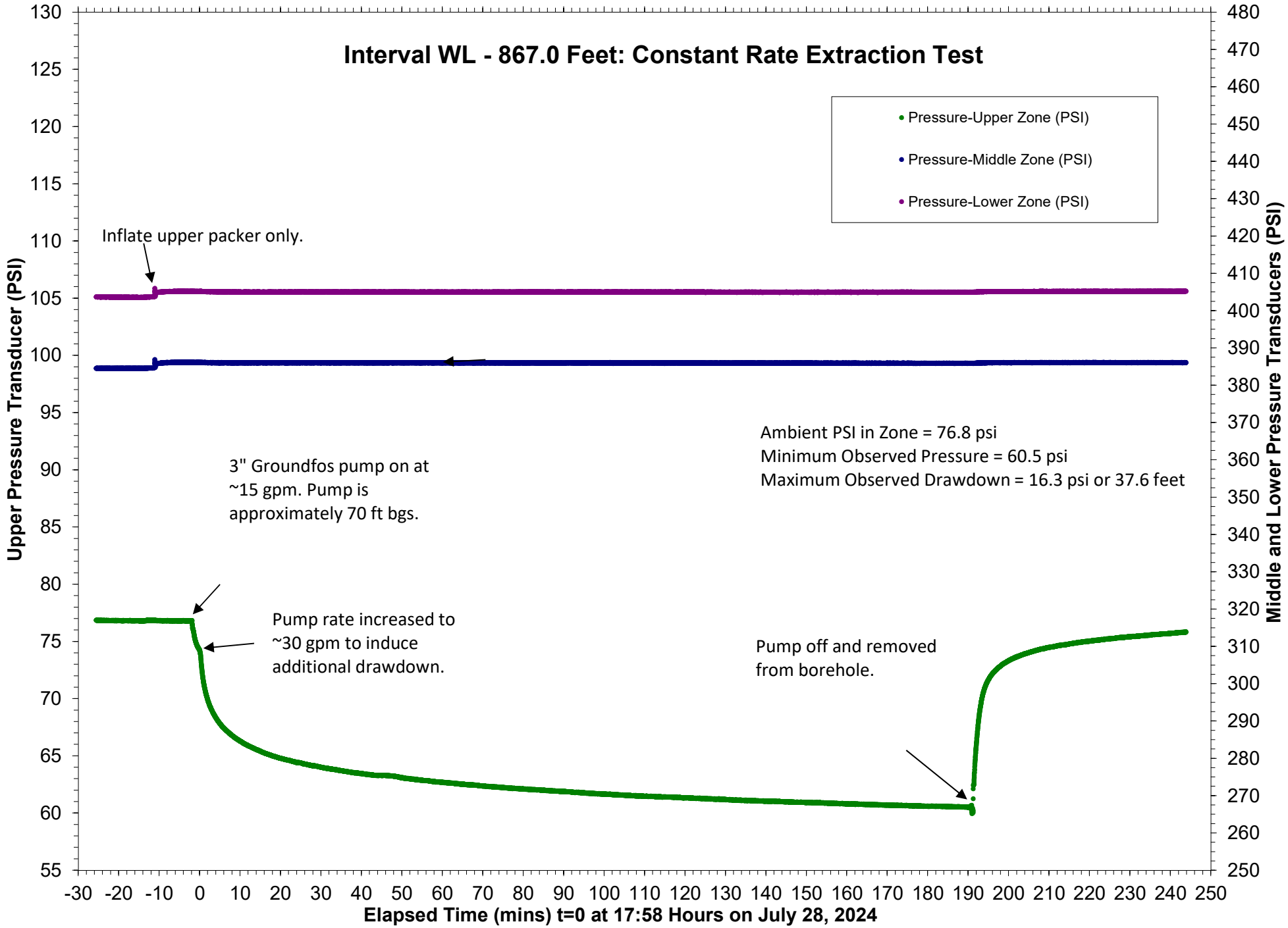
Saturated Thickness: 813. ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

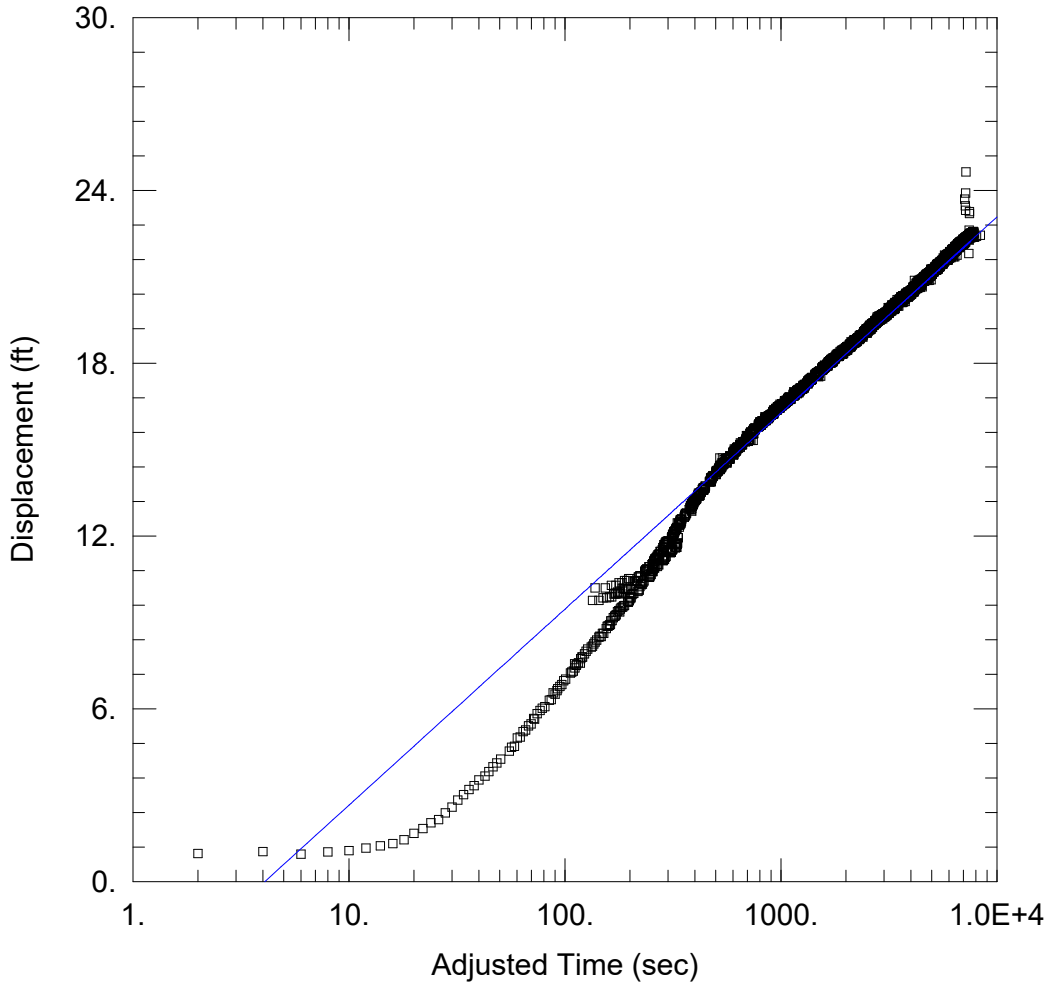
Aquifer Model: Confined Solution Method: Hvorslev

K = 1.732E-6 cm/sec y0 = 15.04 ft

FIGURE WP584:5G. Pressure Data During Wireline Straddle Packer Testing at Water Lvel to 867.0 Feet, Constant Rate Extraction Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP584



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP584\WP584 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-584 WL-82 ft CRE CJ.aqt
Date: 02/07/25 Time: 14:33:33

PROJECT INFORMATION

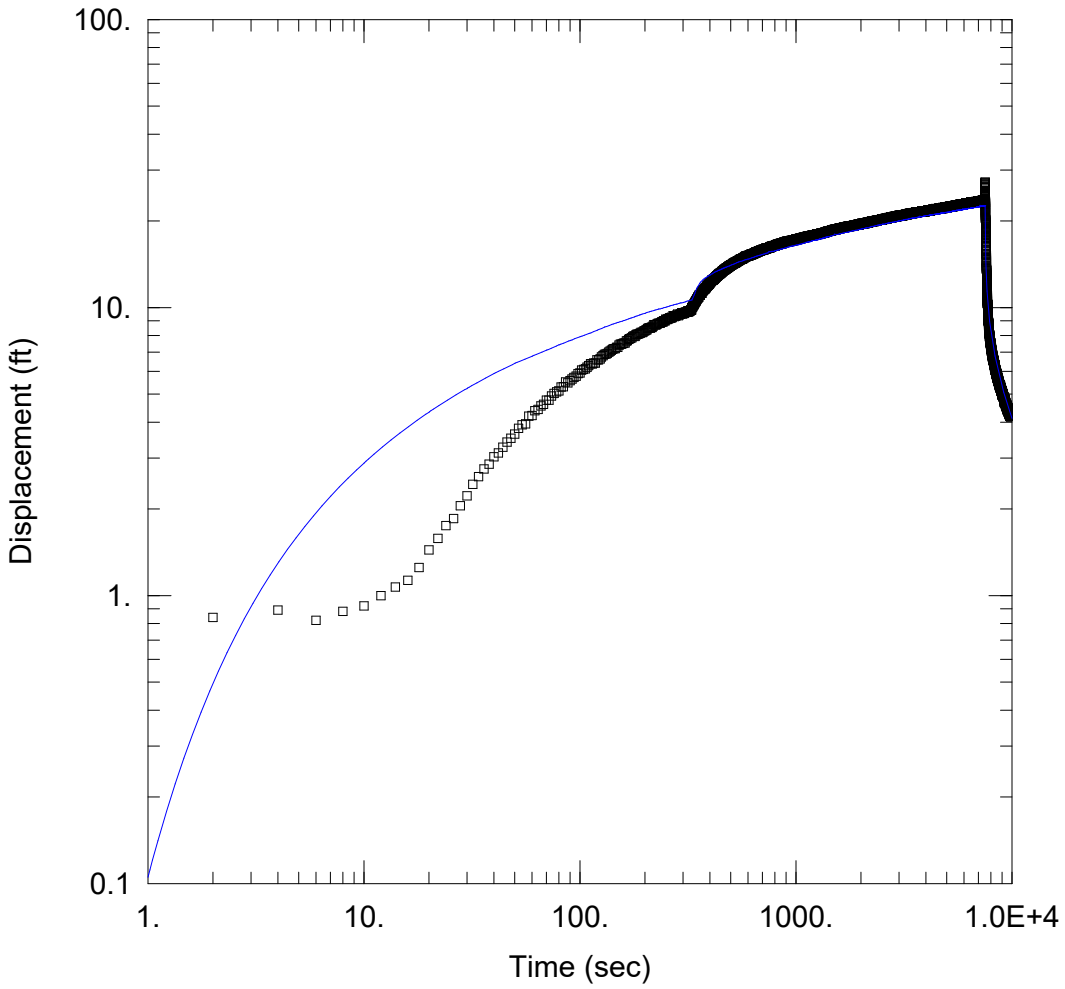
Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-584 WL-82 CRE

AQUIFER DATA

Saturated Thickness: 62. ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob
T = 0.5254 cm^2/sec S = 0.1281



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-584 WL-82 ft CRE Theis.aqt
Date: 02/07/25 Time: 14:40:59

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-584 WL-82 CRE

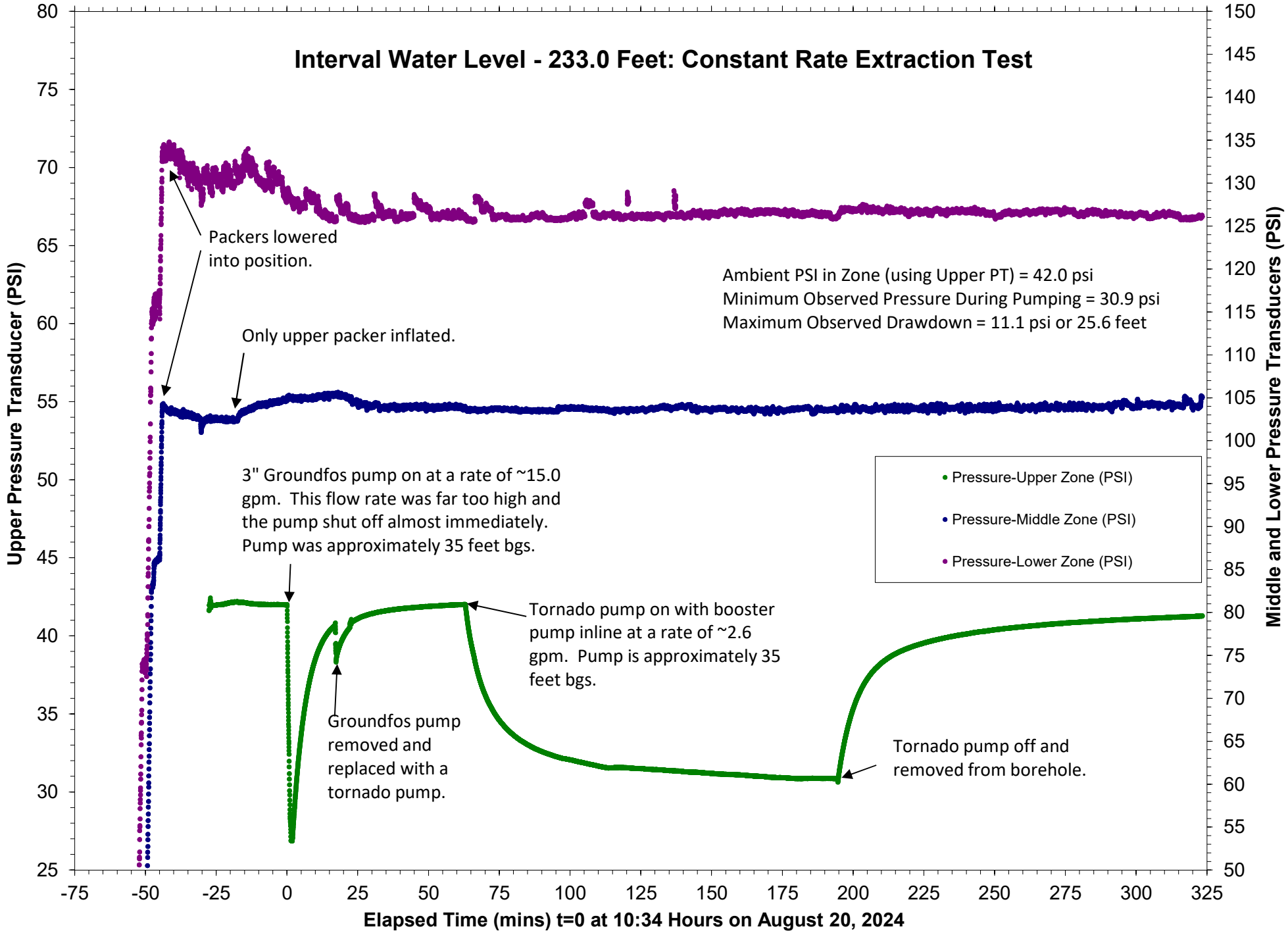
SOLUTION

Aquifer Model: Confined
Solution Method: Theis

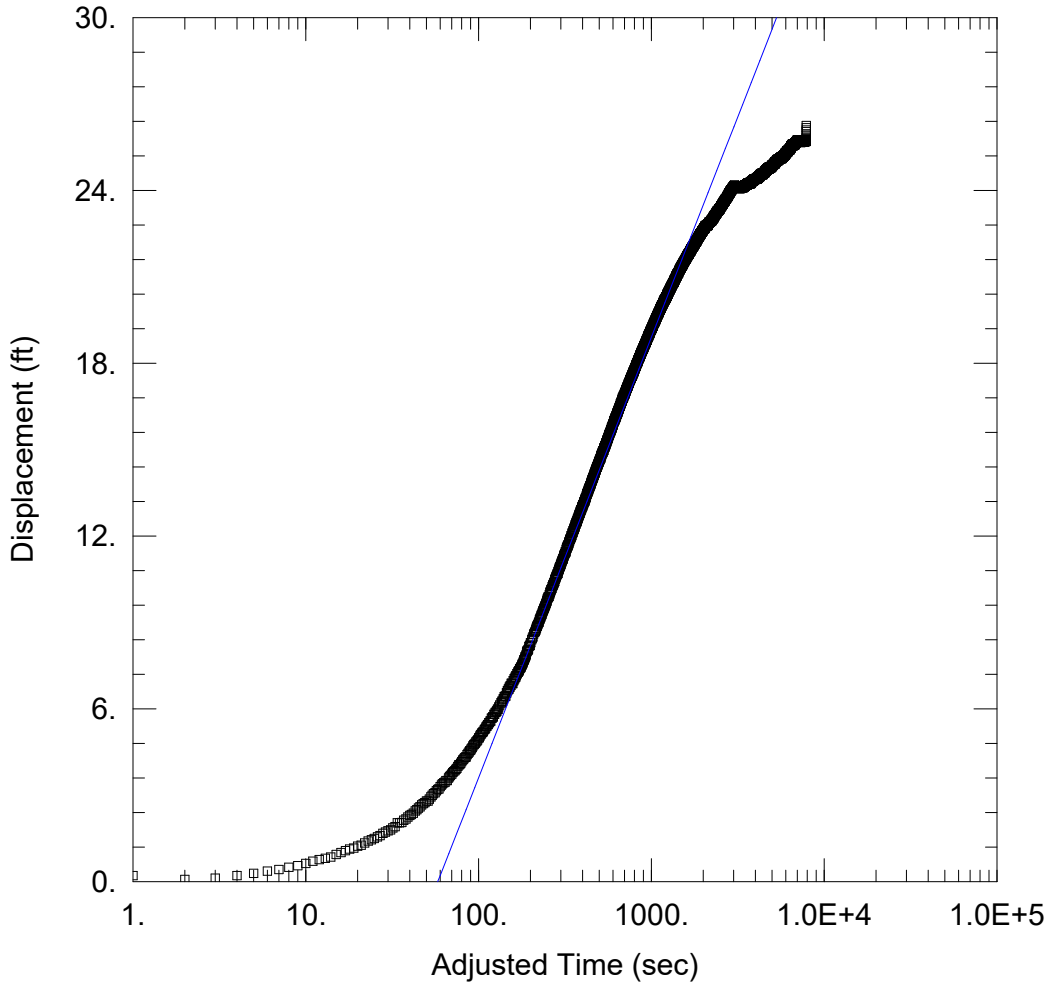
T = 0.5502 cm^2/sec
S = 0.1224
Kz/Kr = 1.
b = 62. ft

WP-585 - Test Hydrographs and Analyses

FIGURE WP585:5A. Pressure Data During Wireline Straddle Packer Testing at Water Level to 233.0 Feet, Constant Rate Extraction Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP585



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP585\WP585 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-585 WL-233 CRE-CJ.aqt
Date: 02/10/25 Time: 12:05:02

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-585

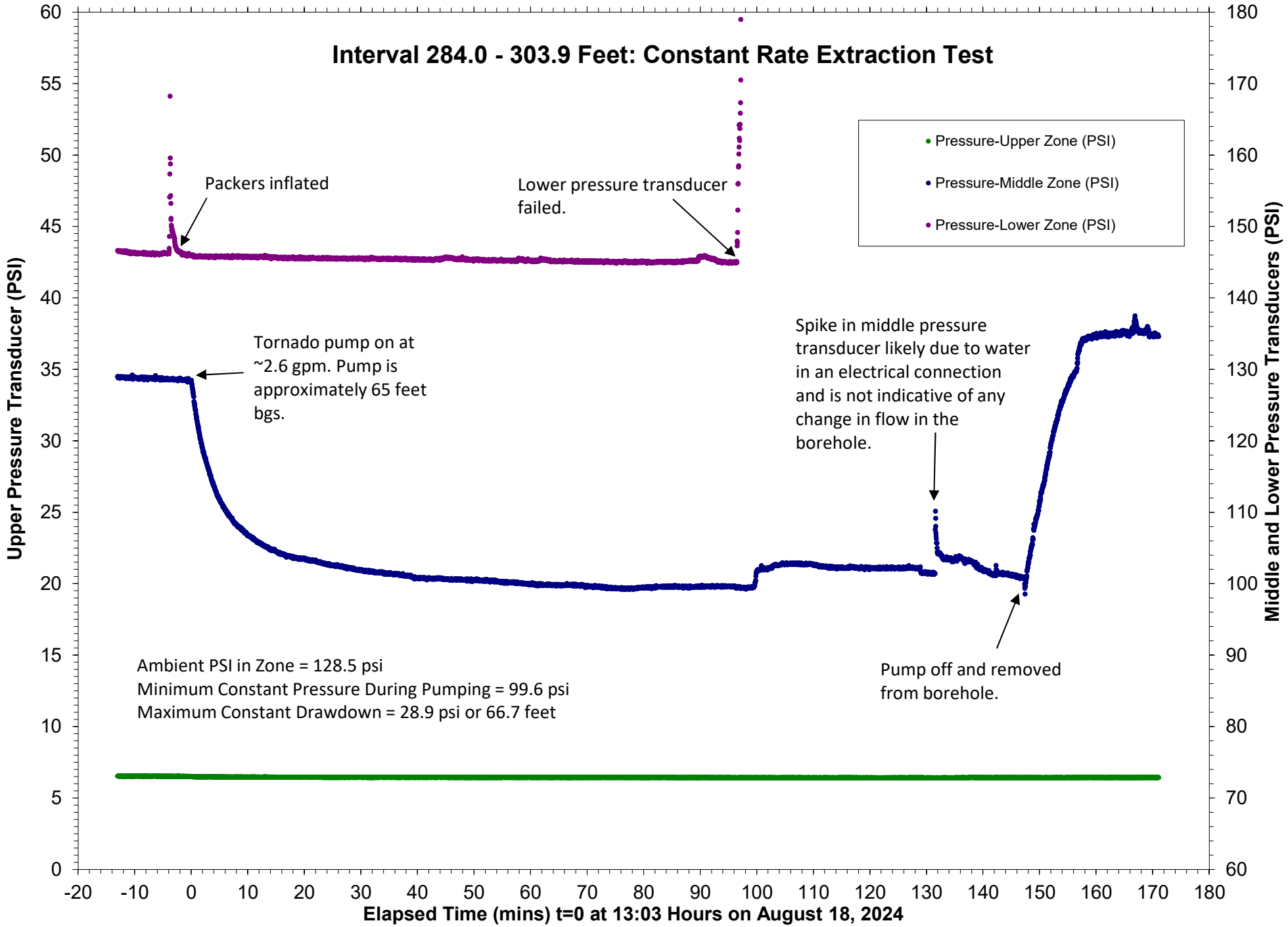
AQUIFER DATA

Saturated Thickness: 203. ft Anisotropy Ratio (Kz/Kr): 1.

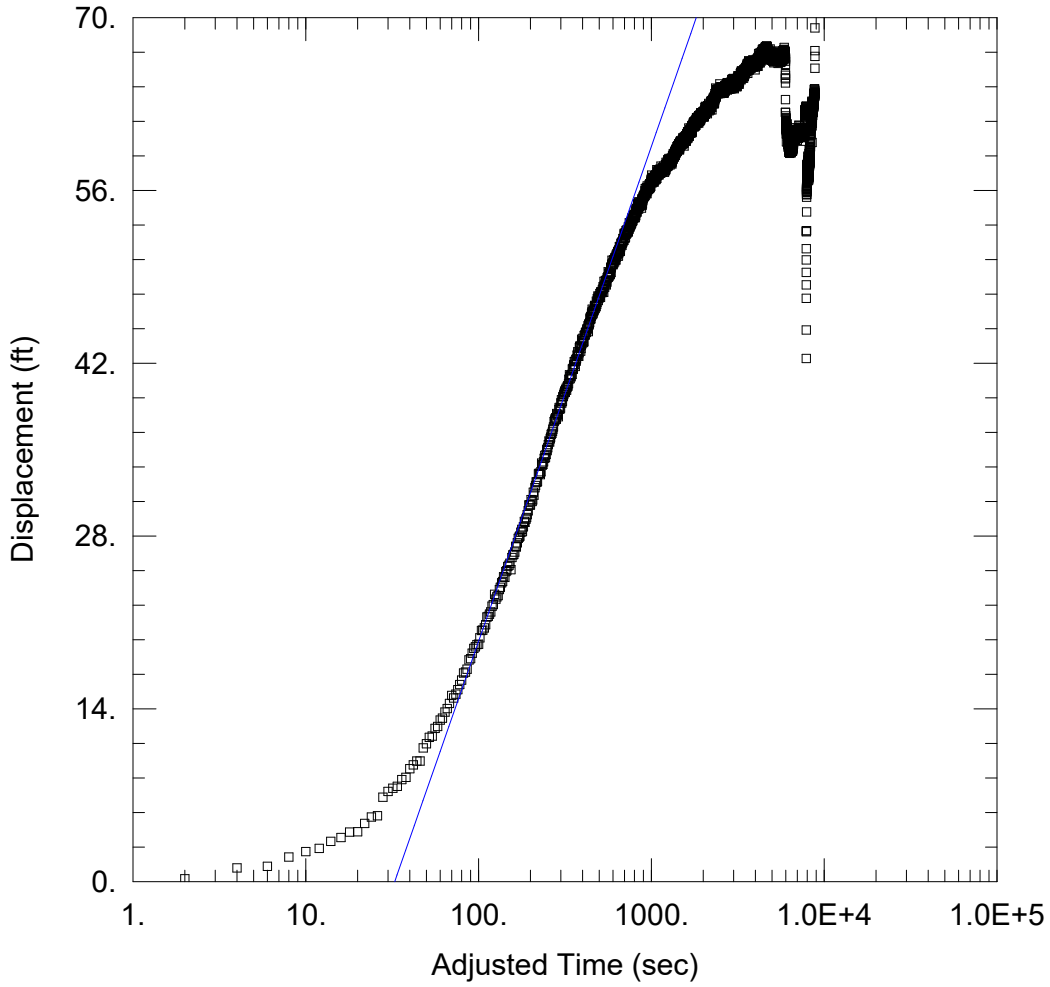
SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob
T = 0.05879 cm^2/sec S = 0.3333

FIGURE WP585:5B. Pressure Data During Wireline Straddle Packer Testing at 284.0 to 303.9 Feet, Constant Rate Extraction Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP585



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP585\WP585 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-585 284-303.9 CRE CJ.aqt
Date: 02/10/25 Time: 12:24:53

PROJECT INFORMATION

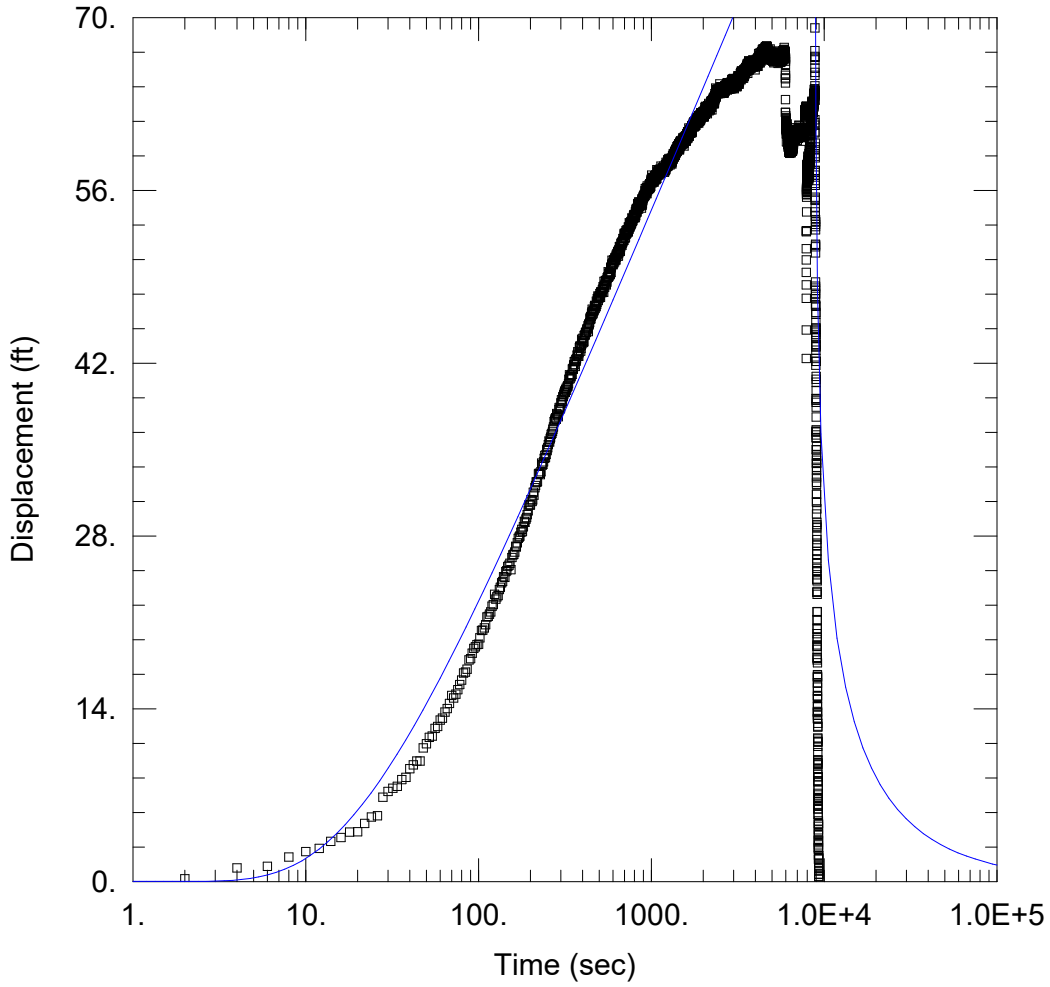
Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-585

AQUIFER DATA

Saturated Thickness: 19.9 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob
T = 0.01948 cm^2/sec S = 0.06216



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-585 284-303.9 CRE theis.aqt
Date: 02/10/25 Time: 12:49:07

PROJECT INFORMATION

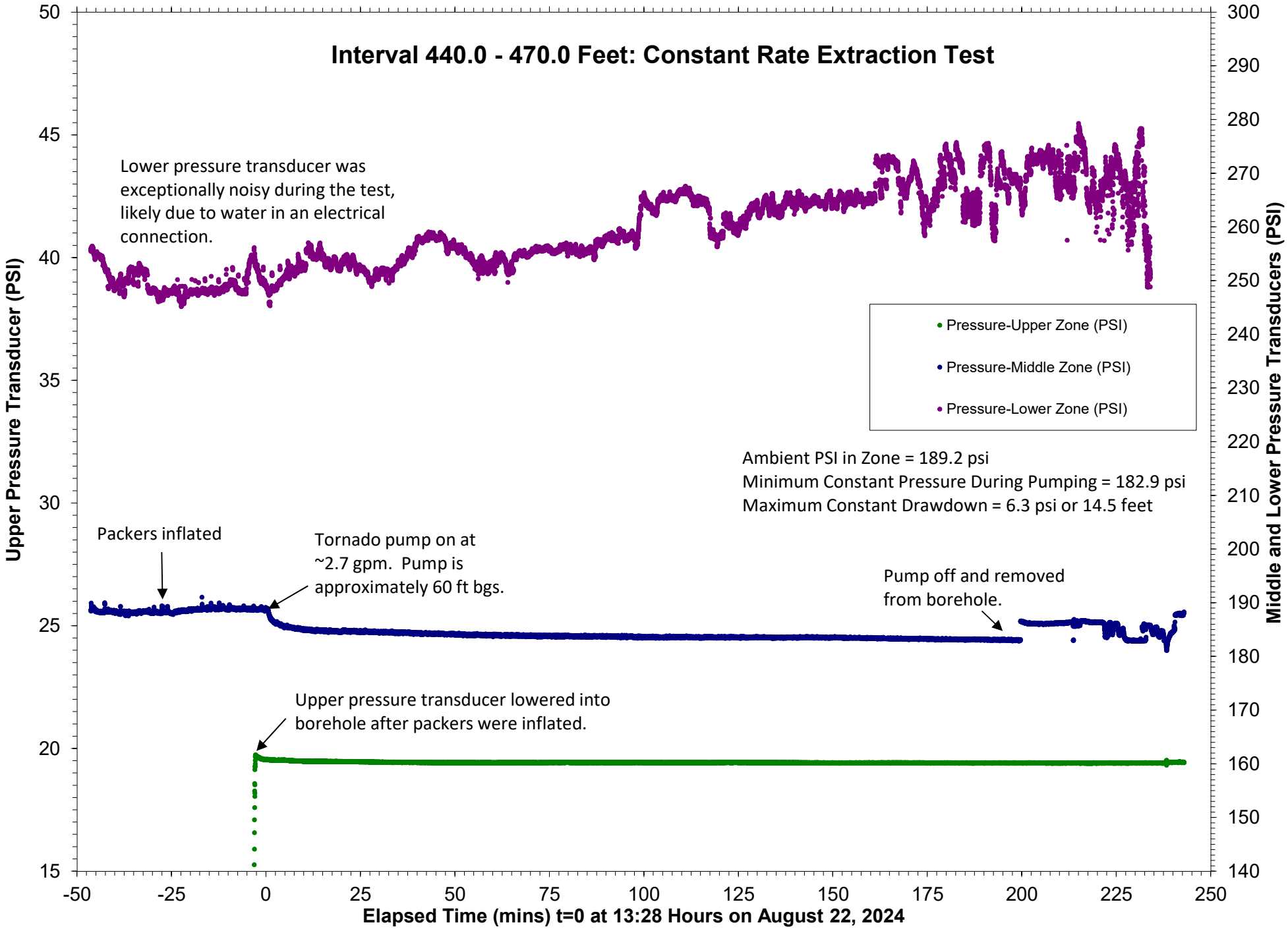
Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-585

SOLUTION

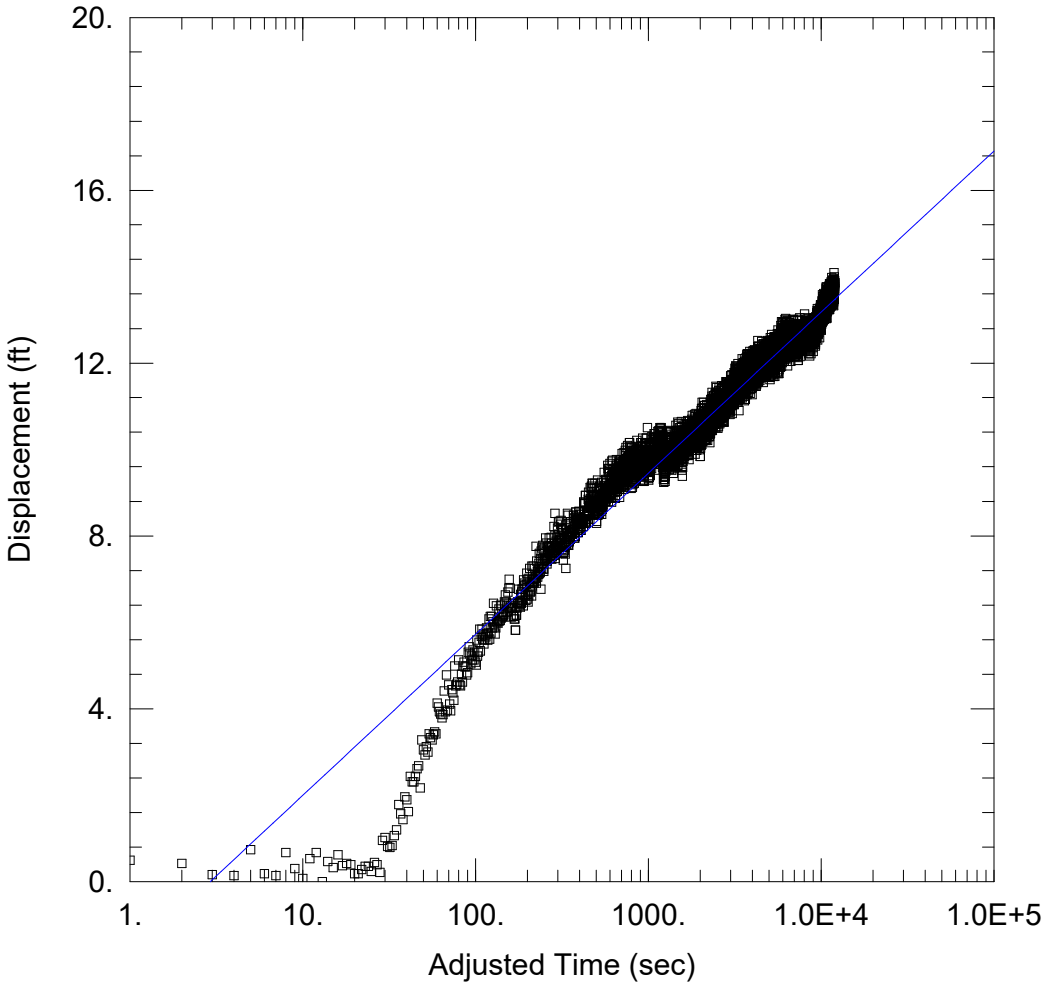
Aquifer Model: Confined
Solution Method: Theis

T = 0.02342 cm^2/sec
S = 0.05414
Kz/Kr = 1.
b = 19.9 ft

FIGURE WP585:5C. Pressure Data During Wireline Straddle Packer Testing at 440.0 to 470.0 Feet, Constant Rate Extraction Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP585



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP585\WP585 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-585 440-470 CRE CJ.aqt
Date: 02/10/25 Time: 13:35:39

PROJECT INFORMATION

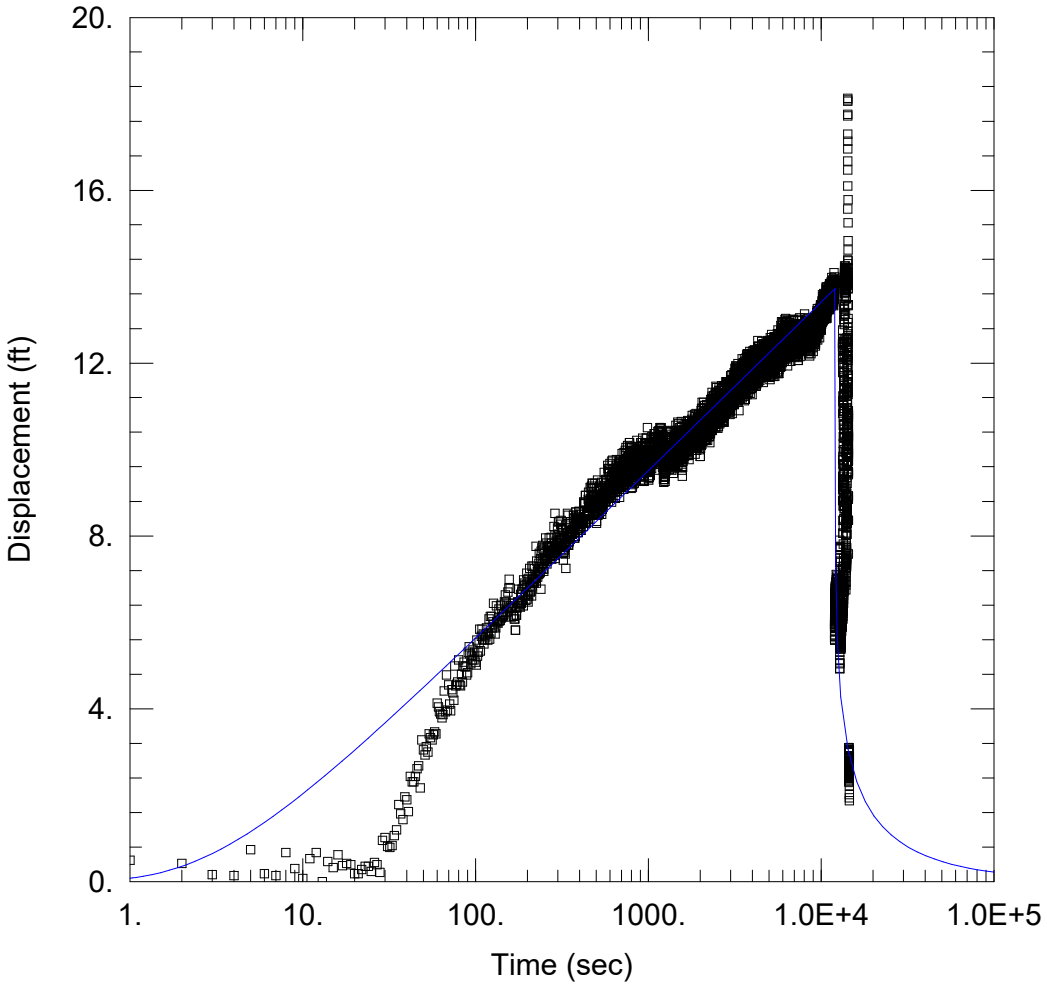
Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-585

AQUIFER DATA

Saturated Thickness: 30. ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob
T = 0.2818 cm^2/sec S = 0.08016



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-585 440-470 CRE theis.aqt
Date: 02/10/25 Time: 13:36:52

PROJECT INFORMATION

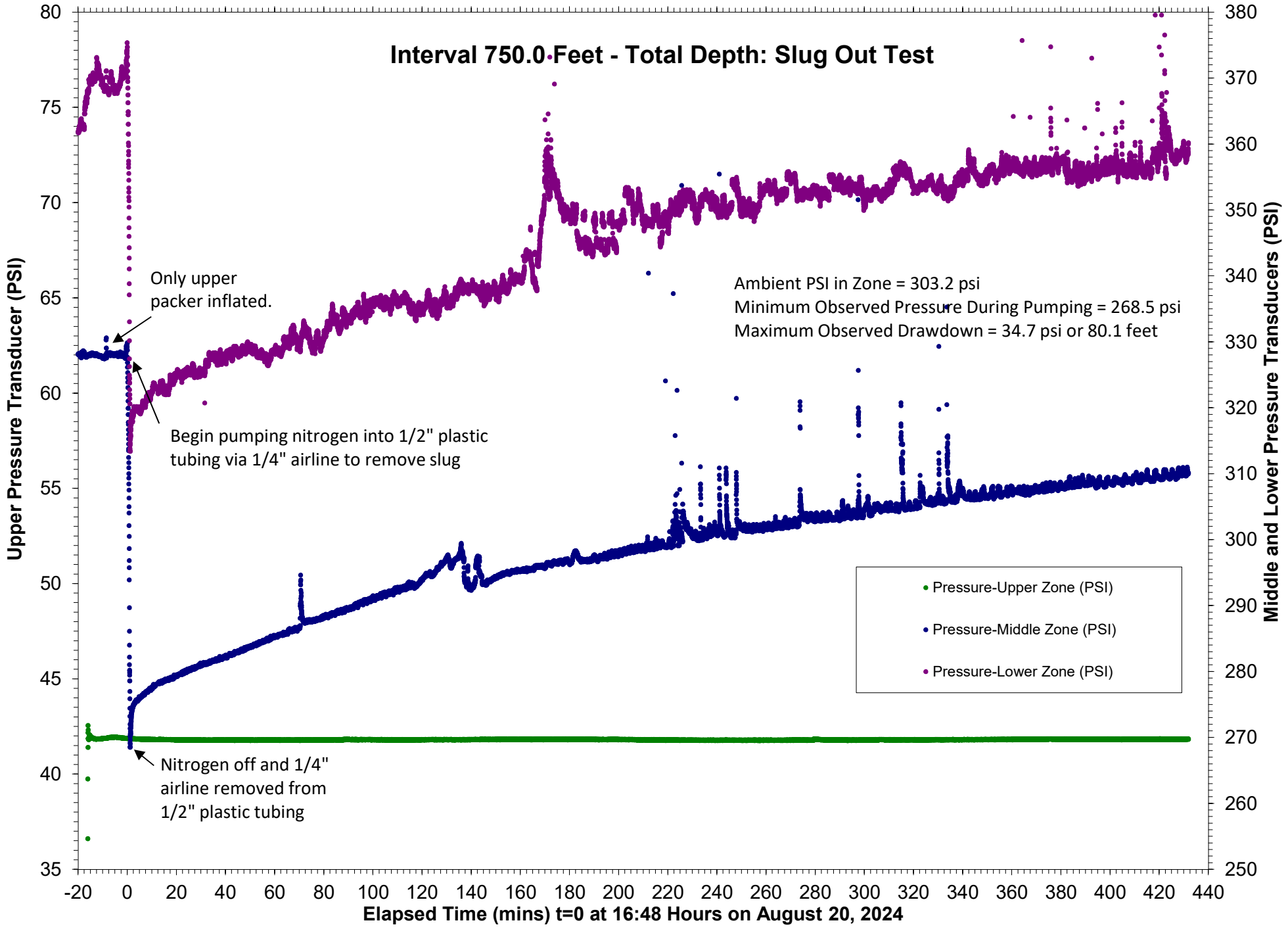
Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-585

SOLUTION

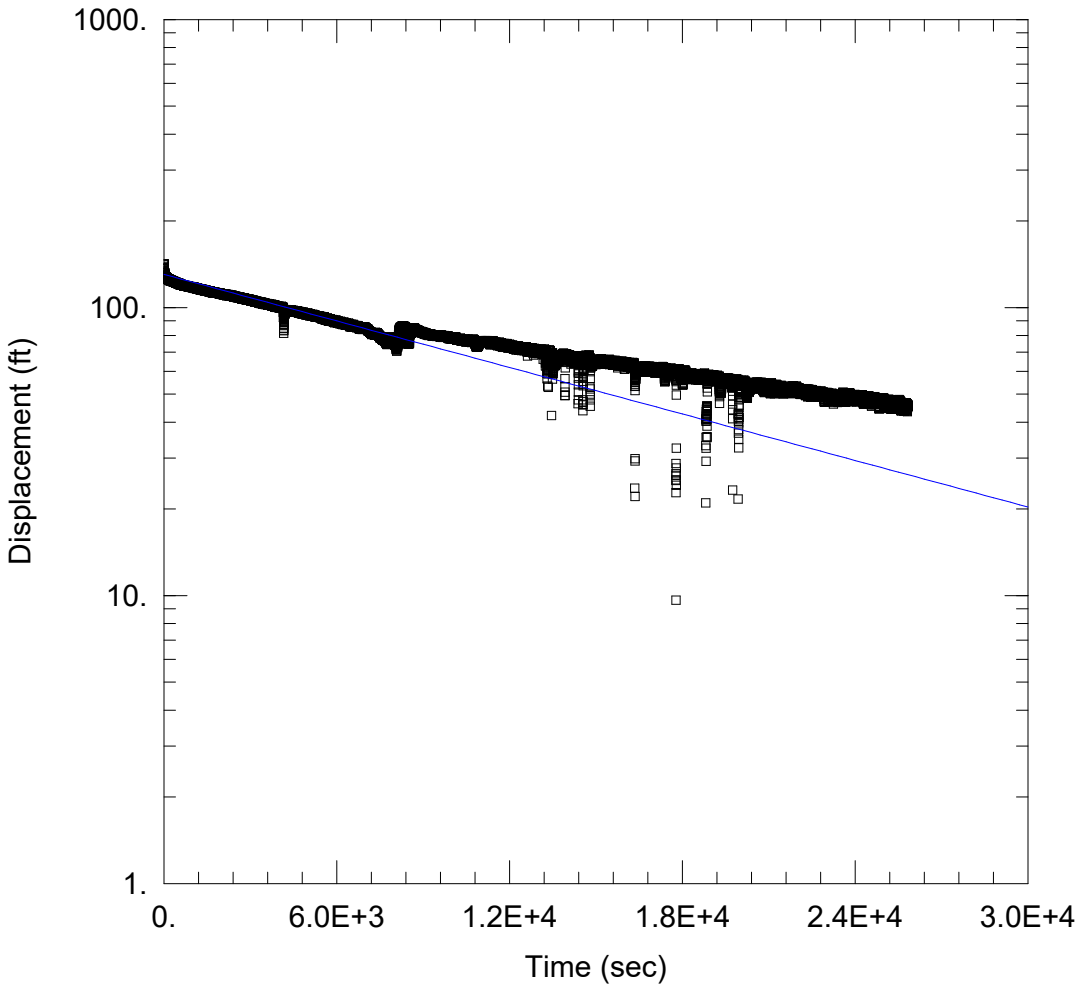
Aquifer Model: Confined
Solution Method: Theis

T = 0.2691 cm^2/sec
S = 0.09638
Kz/Kr = 1.
b = 30. ft

FIGURE WP585:5D. Pressure Data During Wireline Straddle Packer Testing at 750.0 Feet to Total Depth, Pump Slug Out Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP585



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP585\WP585 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-585 750-TD slug out HV.aqt
Date: 02/10/25 Time: 14:17:47

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-585

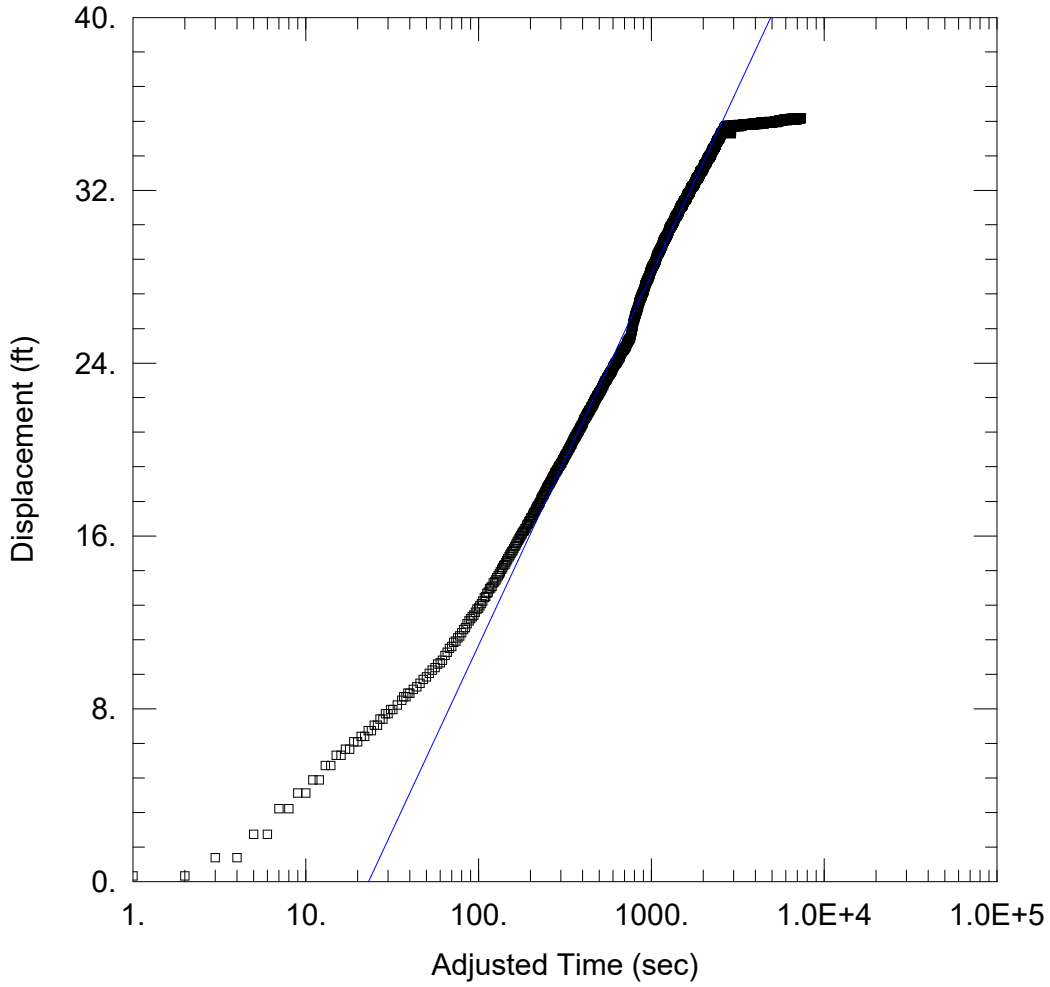
AQUIFER DATA

Saturated Thickness: 1568. ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Hvorslev

K = 1.394E-9 cm/sec y0 = 130.3 ft



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-585 750-WL CRE CJ.aqt
Date: 02/10/25 Time: 14:15:12

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-585

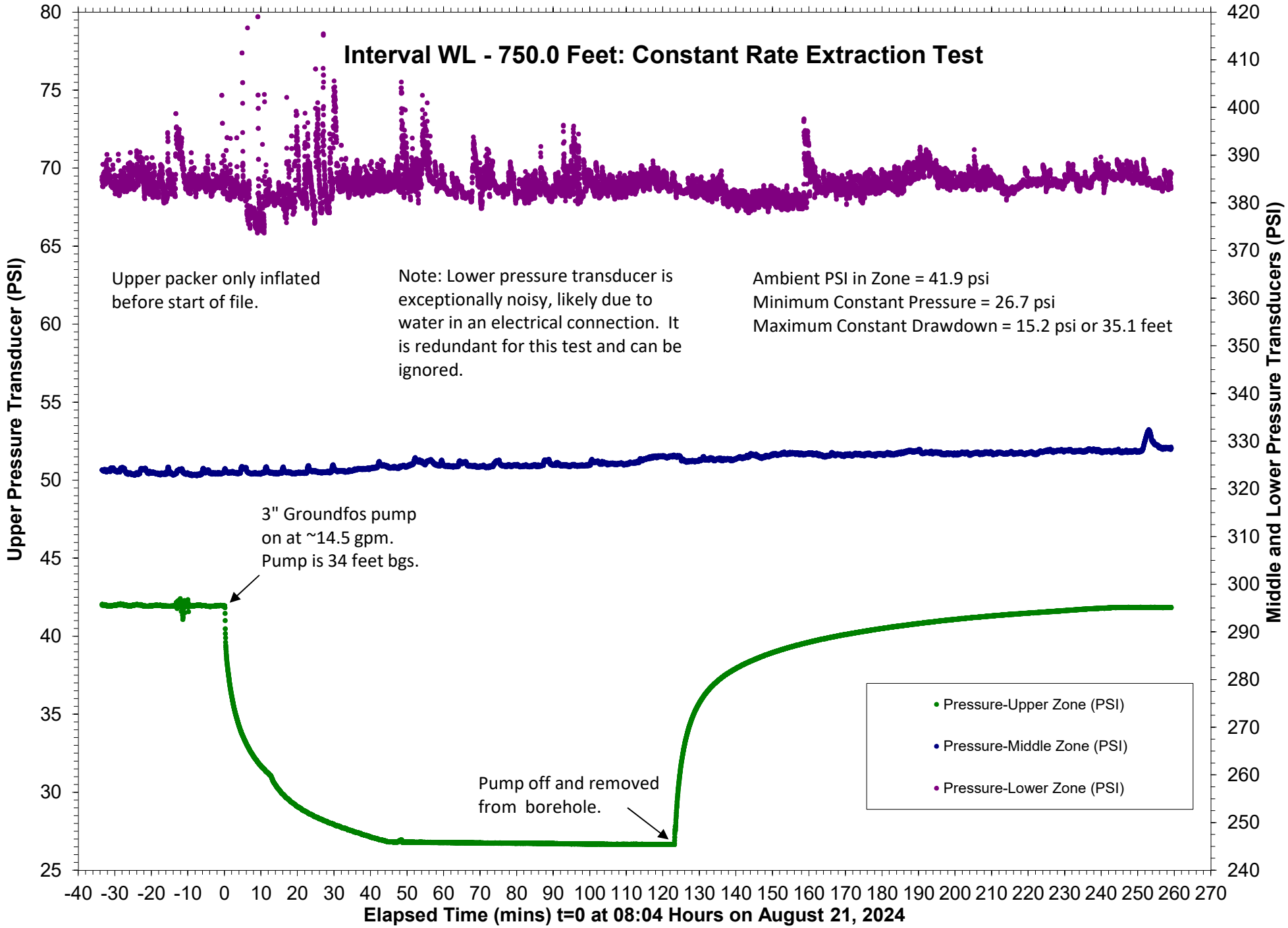
AQUIFER DATA

Saturated Thickness: 720. ft Anisotropy Ratio (Kz/Kr): 1.

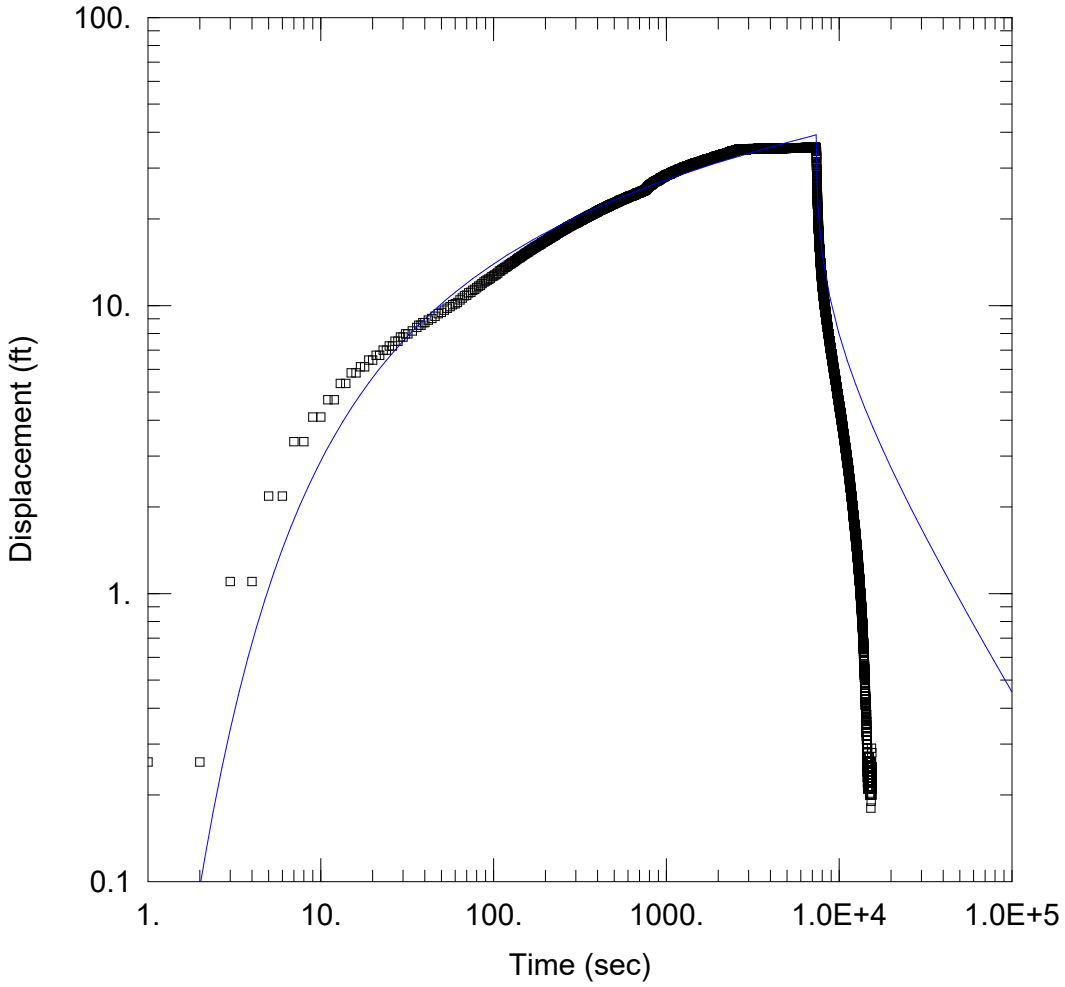
SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob
T = 0.2963 cm^2/sec S = 0.6674

FIGURE WP585:5E. Pressure Data During Wireline Straddle Packer Testing at Water Level to 750.0 Feet,Constant Rate Extraction Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP585



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP585\WP585 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-585 750-WL CRE theis.aqt
Date: 02/10/25 Time: 14:11:59

PROJECT INFORMATION

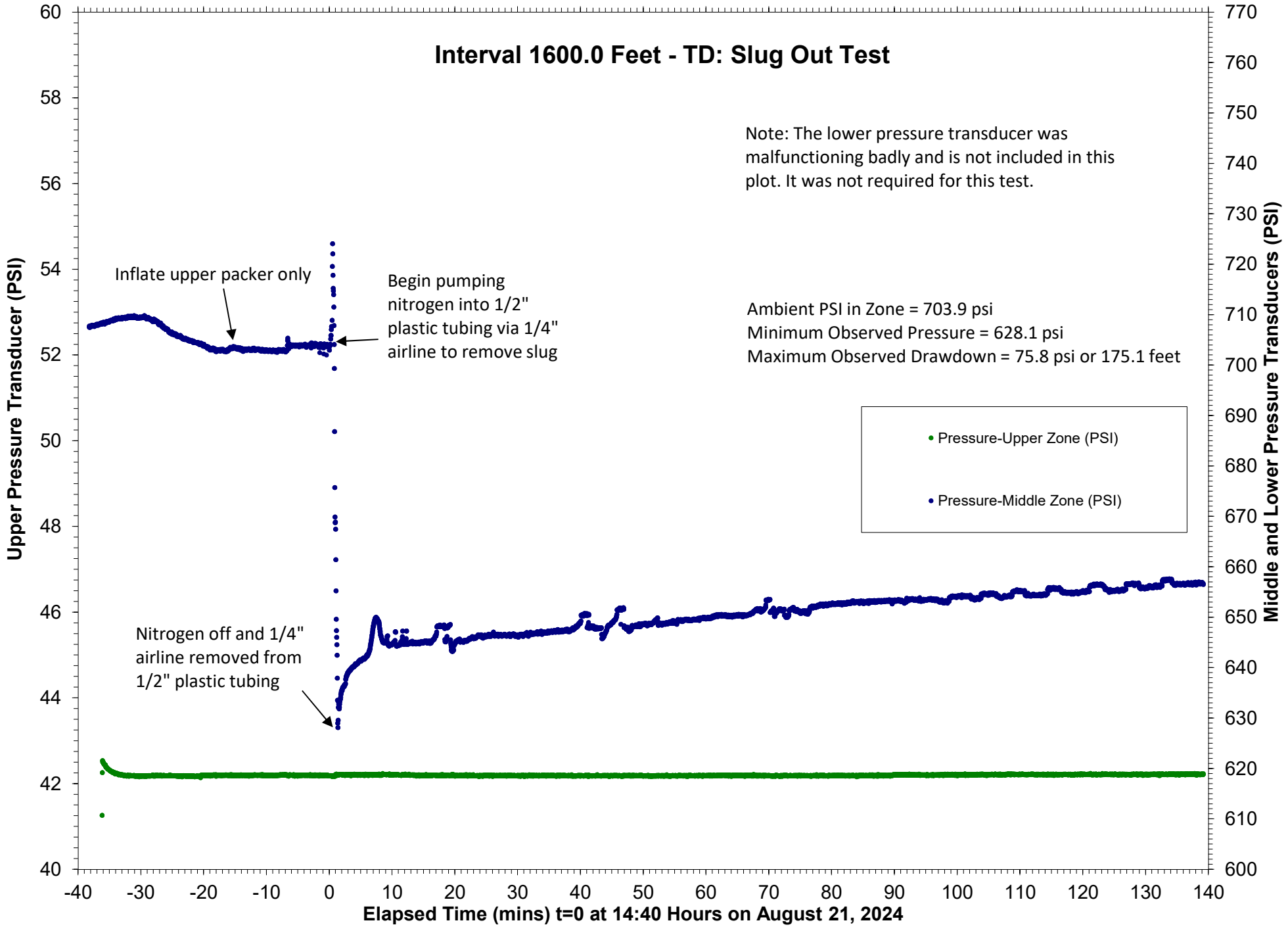
Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-585

SOLUTION

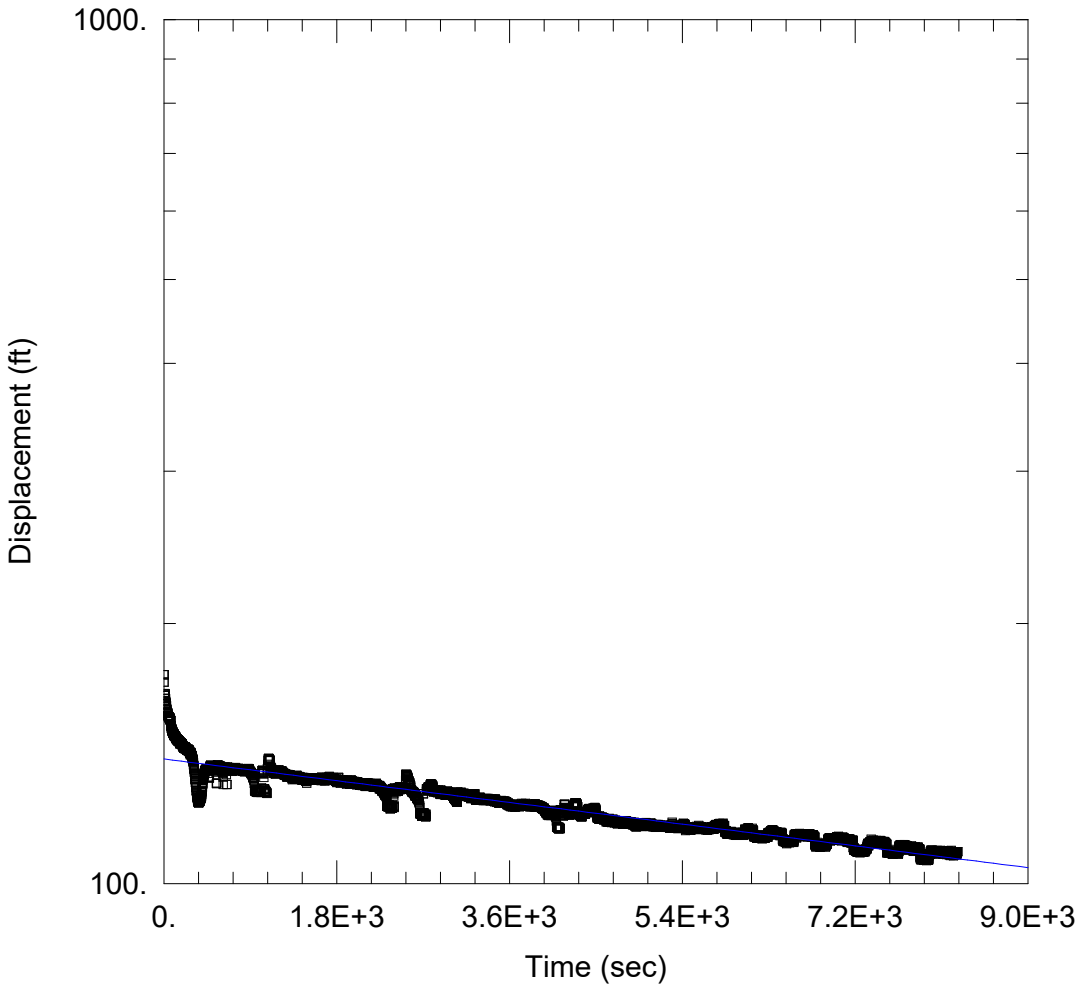
Aquifer Model: Confined
Solution Method: Theis

T = 0.3731 cm^2/sec
S = 0.3668
Kz/Kr = 1.
b = 720. ft

FIGURE WP585:5F. Pressure Data During Wireline Straddle Packer Testing at 1600.0 Feet to Total Depth, Slug Out Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP585



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP585\WP585 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-585 1600-TD BR.aqt
Date: 02/10/25 Time: 14:07:42

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-585

AQUIFER DATA

Saturated Thickness: 718. ft Anisotropy Ratio (Kz/Kr): 1.

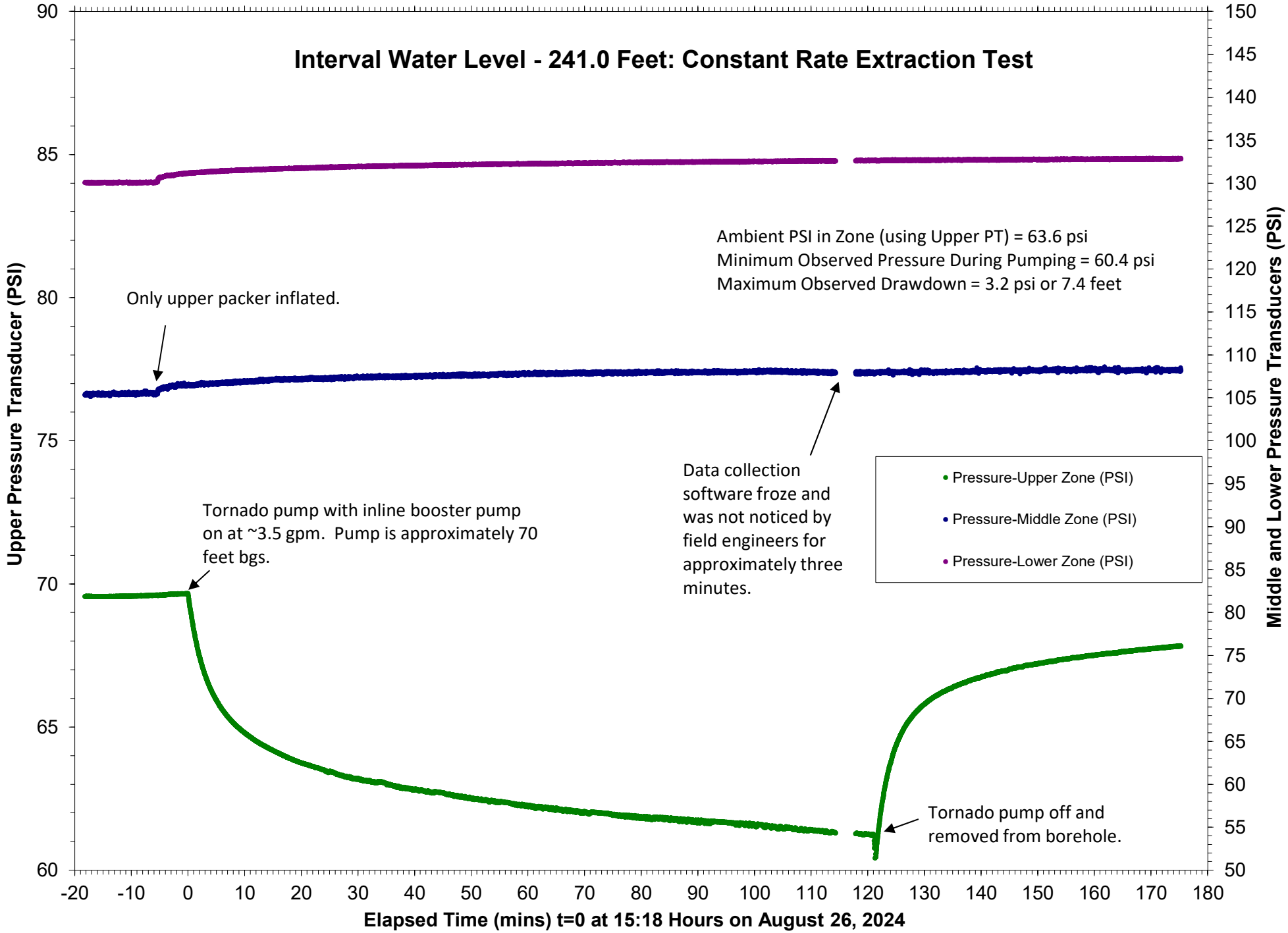
SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

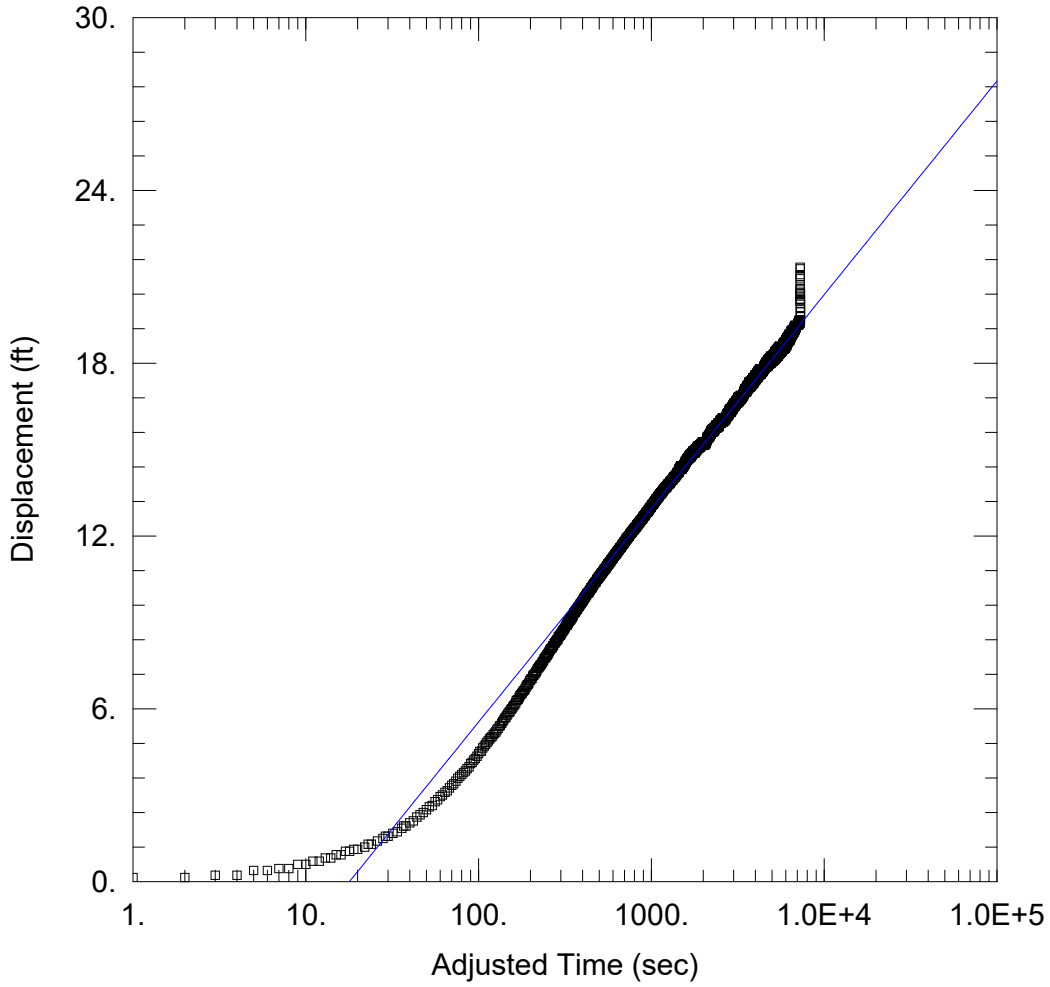
K = 2.229E-9 cm/sec y0 = 139.4 ft

WP-586 - Test Hydrographs and Analyses

FIGURE WP586:5A. Pressure Data During Wireline Straddle Packer Testing at Water Level to 241.0 Feet, Constant Rate Extraction Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP586



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP586\WP586 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-586 WL-241 CRE CJ.aqt
Date: 02/10/25 Time: 20:10:47

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-586

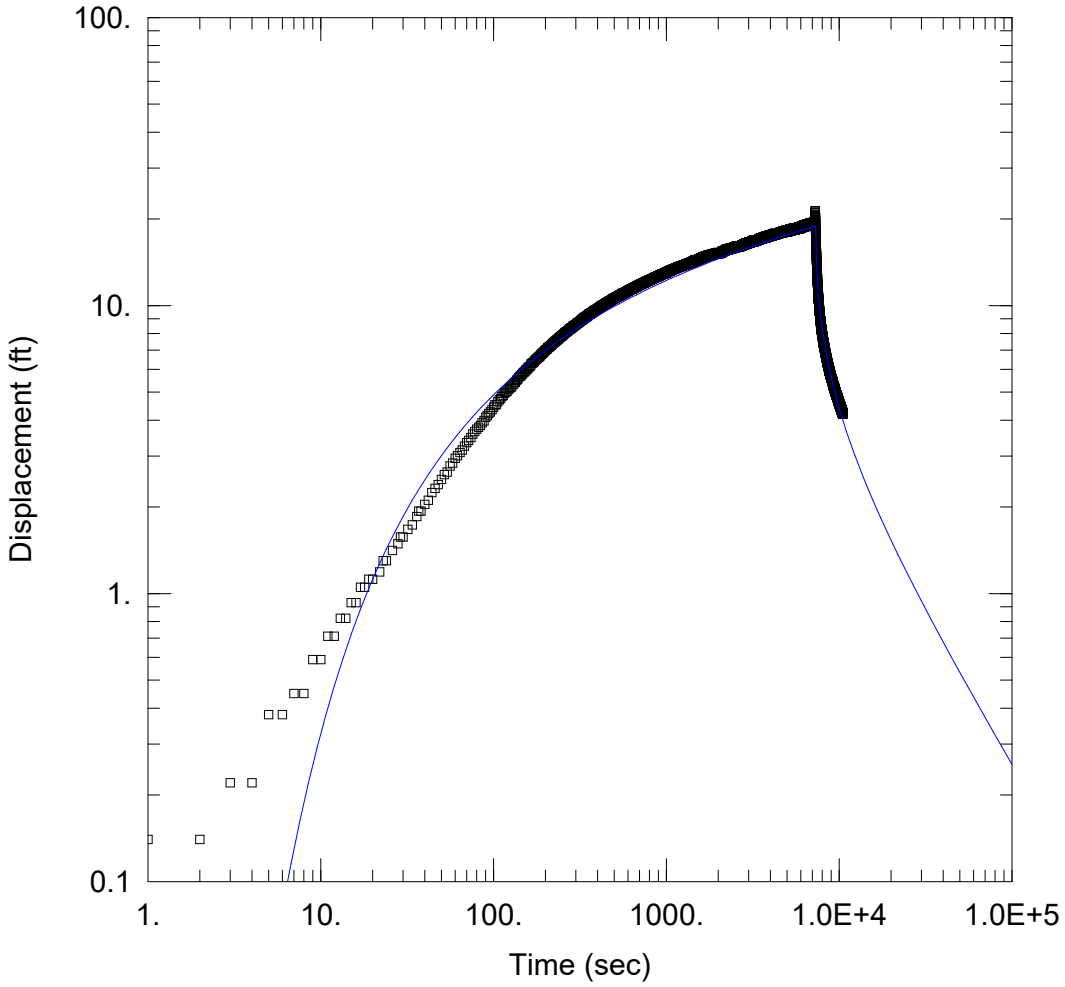
AQUIFER DATA

Saturated Thickness: 221. ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob

T = 0.1682 cm^2/sec S = 0.2939



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-586 WL-241 CRE theis.aqt
Date: 02/10/25 Time: 20:13:15

PROJECT INFORMATION

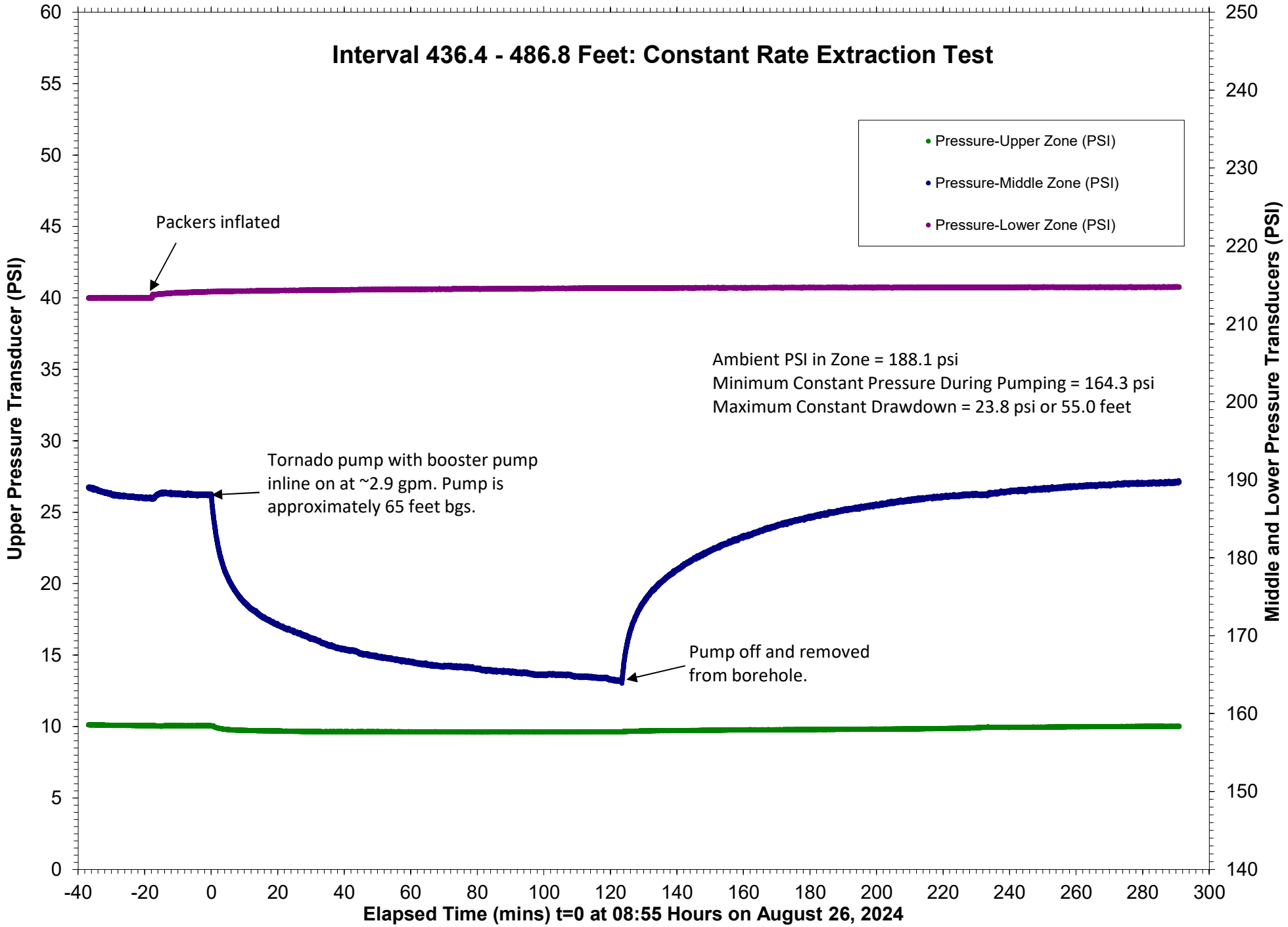
Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-586

SOLUTION

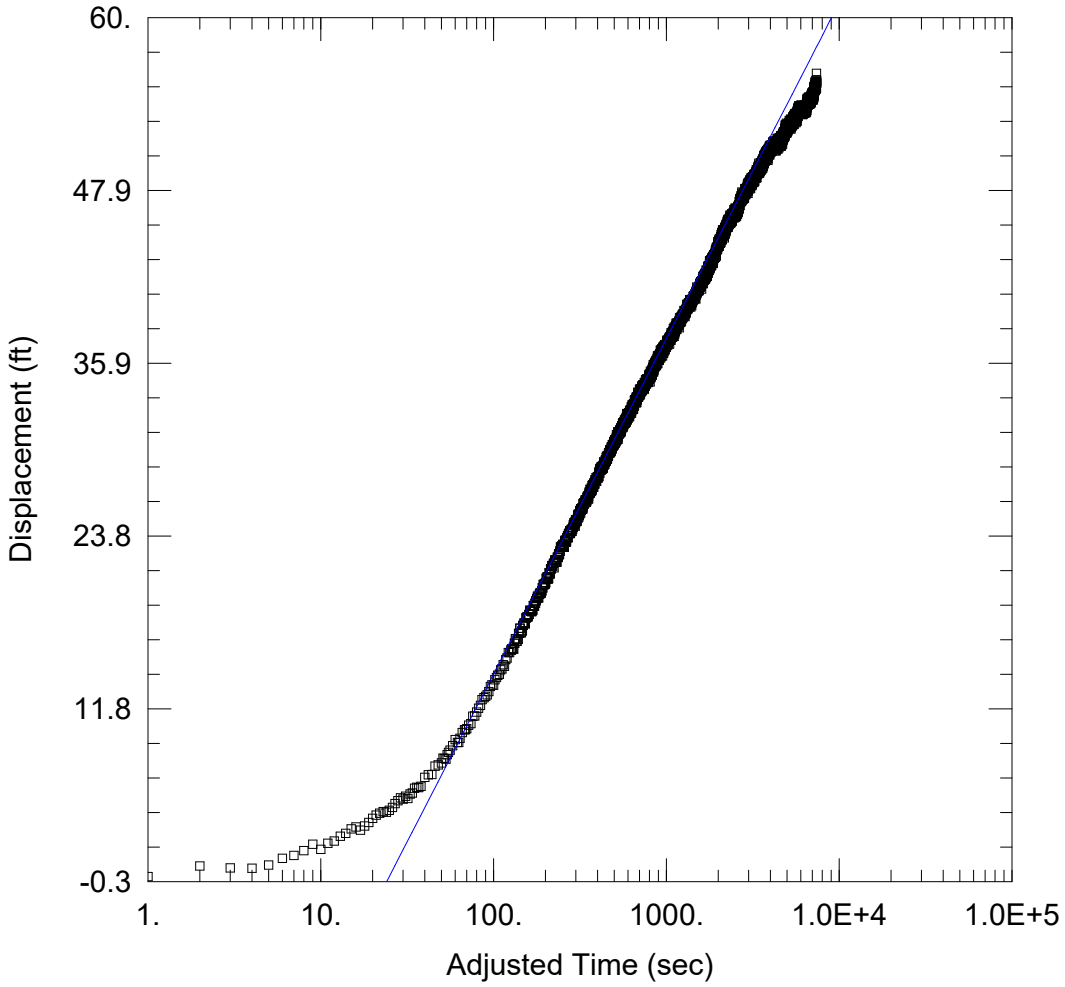
Aquifer Model: Confined
Solution Method: Theis

T = 0.1607 cm^2/sec
S = 0.4249
Kz/Kr = 1.
b = 221. ft

FIGURE WP586:5B. Pressure Data During Wireline Straddle Packer Testing at 436.4 to 486.8 Feet, Constant Rate Extraction Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP586



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP586\WP586 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-586 436.4-486.8 CRE CJ.aqt
Date: 02/10/25 Time: 20:33:54

PROJECT INFORMATION

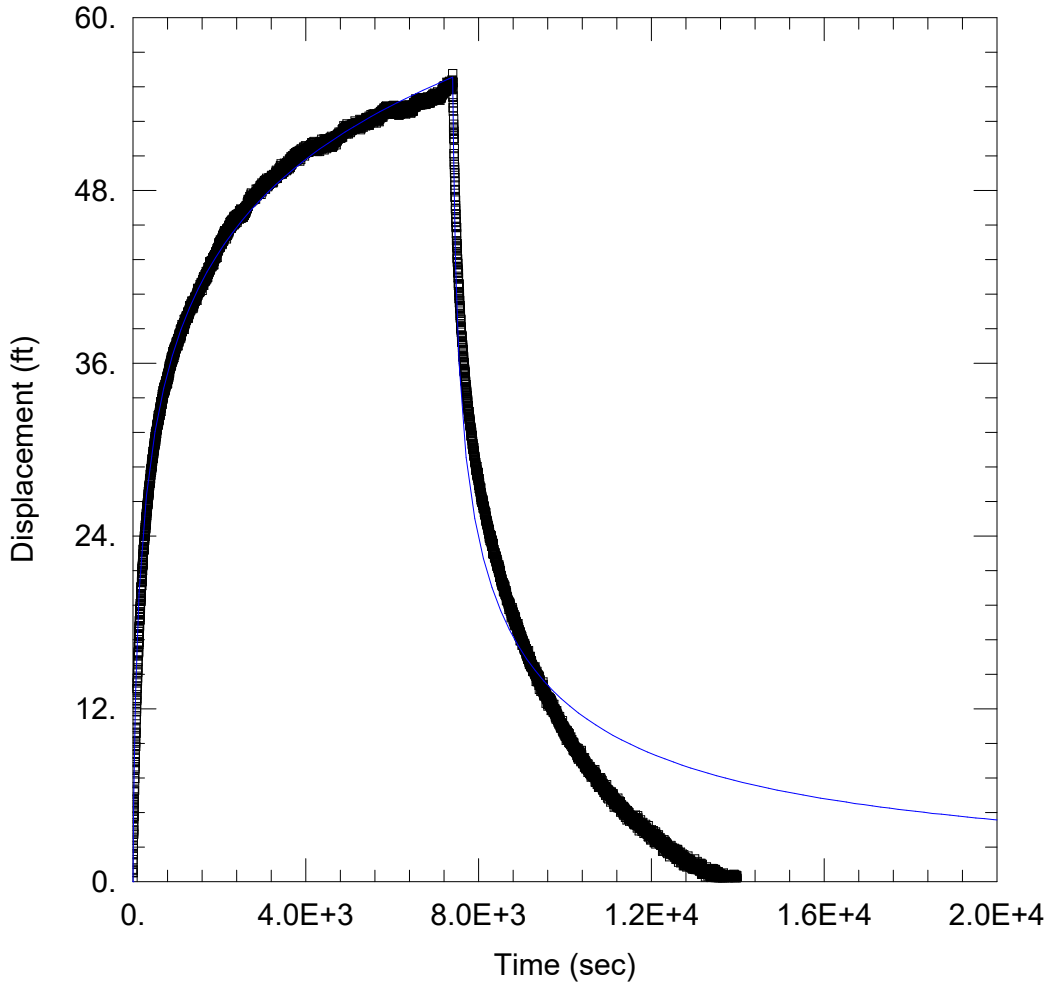
Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-586

AQUIFER DATA

Saturated Thickness: 50.4 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob
T = 0.04244 cm^2/sec S = 0.1026



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-586 436.4-486.8 CRE theis.aqt
Date: 02/10/25 Time: 20:35:57

PROJECT INFORMATION

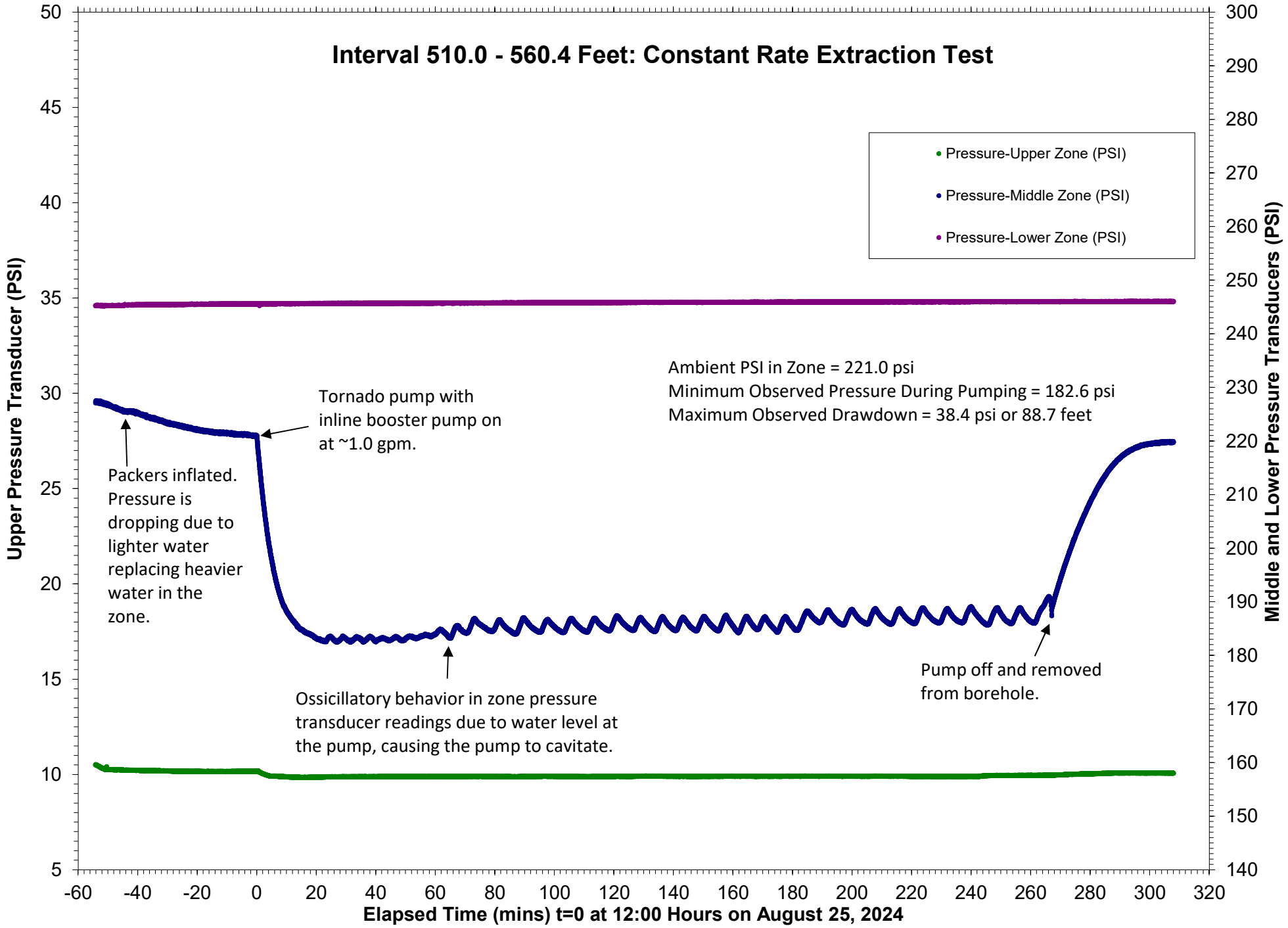
Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-586

SOLUTION

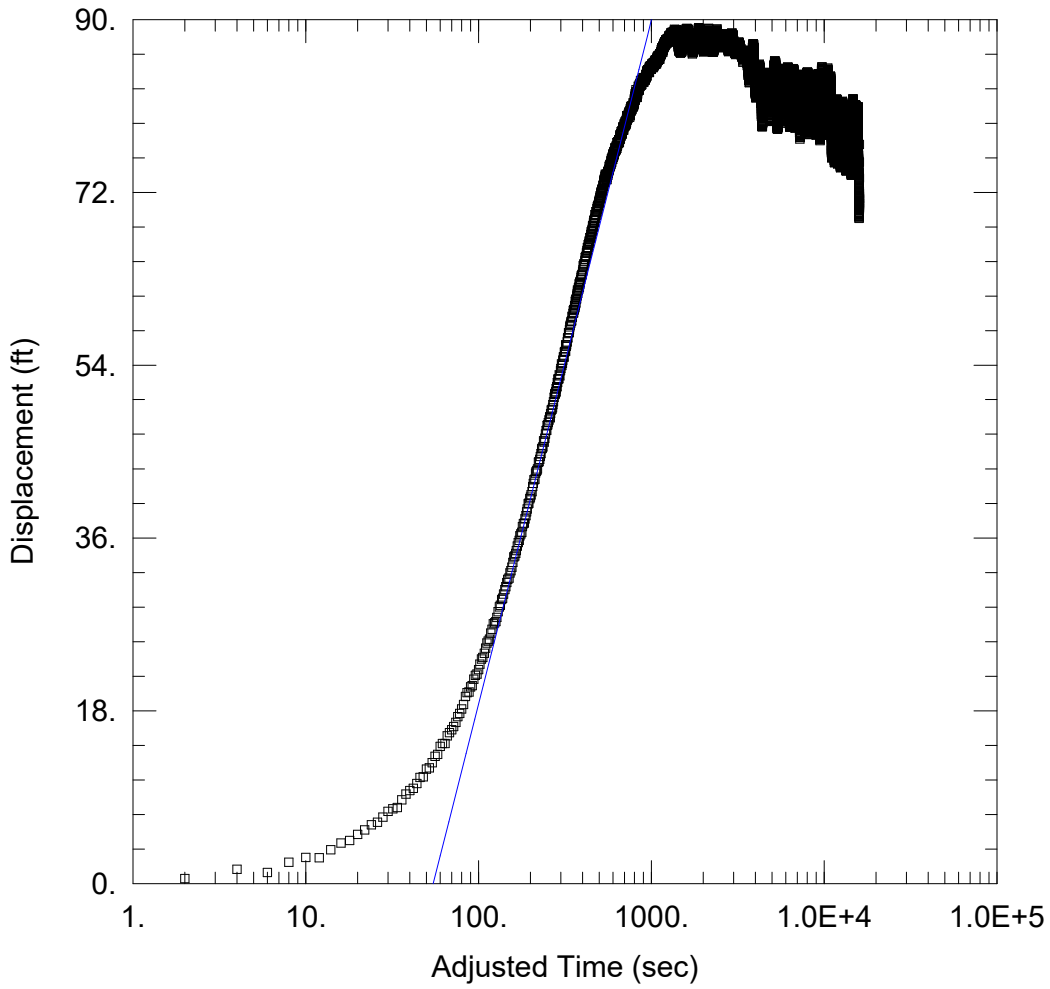
Aquifer Model: Confined
Solution Method: Theis

T = 0.04654 cm^2/sec
S = 0.08148
Kz/Kr = 1.
b = 50.4 ft

FIGURE WP586:5C. Pressure Data During Wireline Straddle Packer Testing at 510.0 to 560.4 Feet, Constant Rate Extraction Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP586



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP586\WP586 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-586 510-560.4 CRE CJ.aqt
Date: 02/10/25 Time: 23:28:01

PROJECT INFORMATION

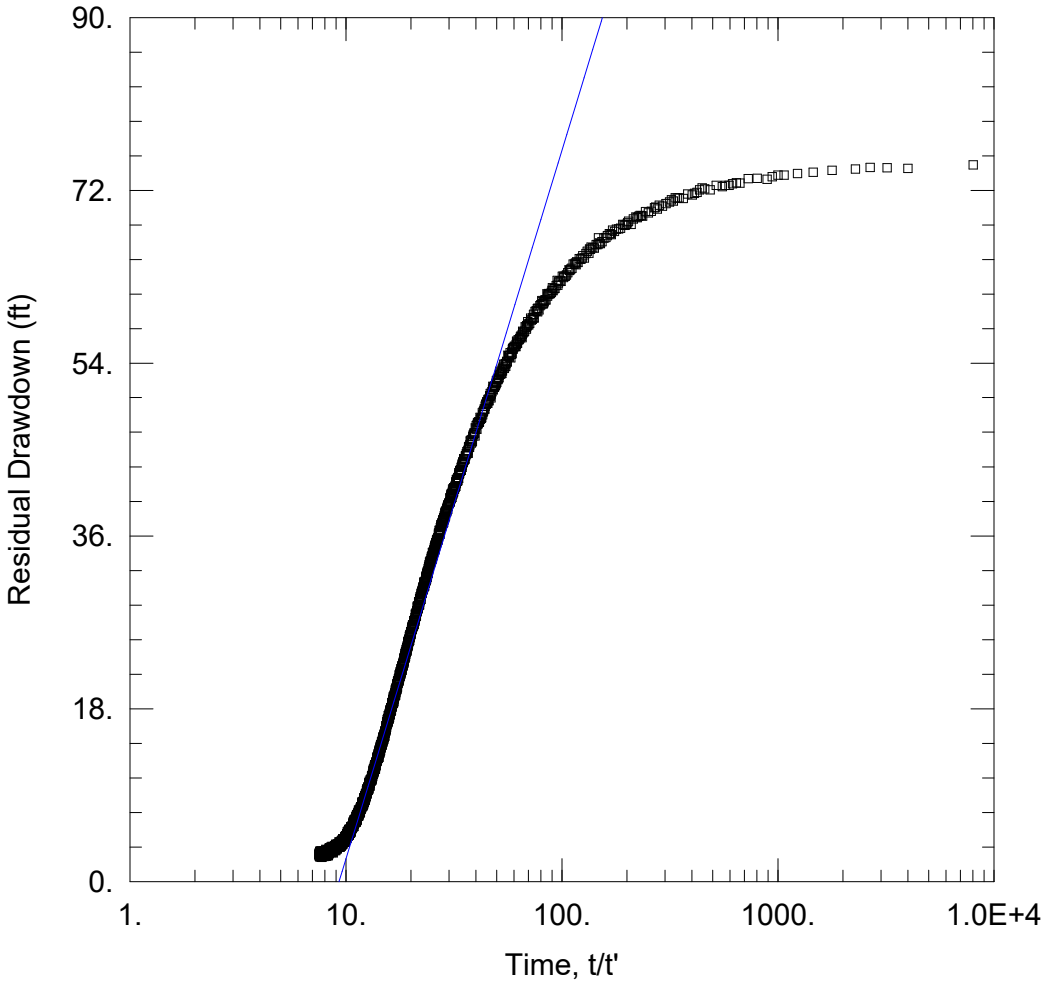
Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-586

AQUIFER DATA

Saturated Thickness: 50.4 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob
T = 0.006923 cm^2/sec S = 0.03689



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-586 510-560.4 CRE theis recovery.aqt
Date: 02/10/25 Time: 23:17:36

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-586

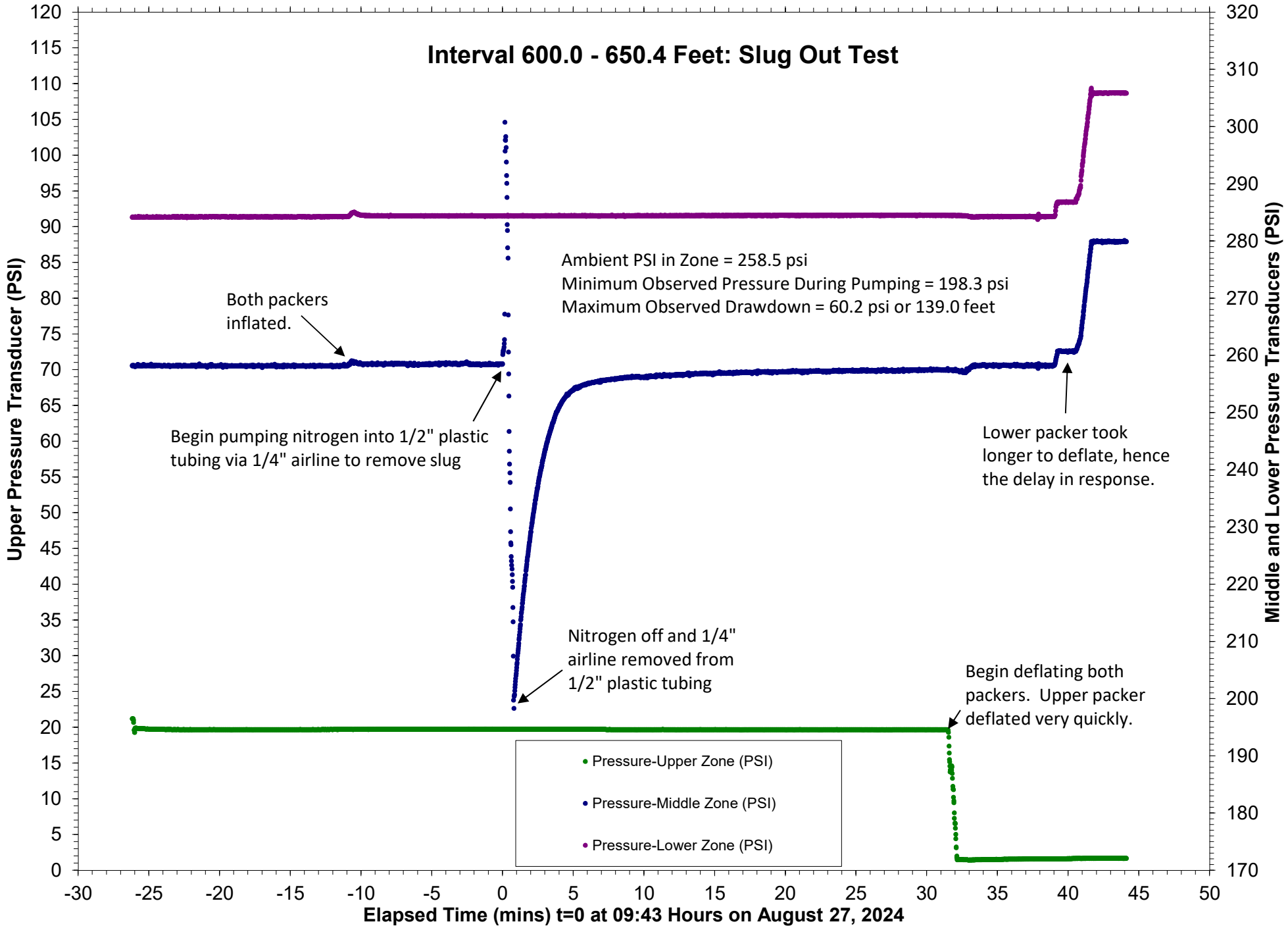
AQUIFER DATA

Saturated Thickness: 50.4 ft Anisotropy Ratio (Kz/Kr): 1.

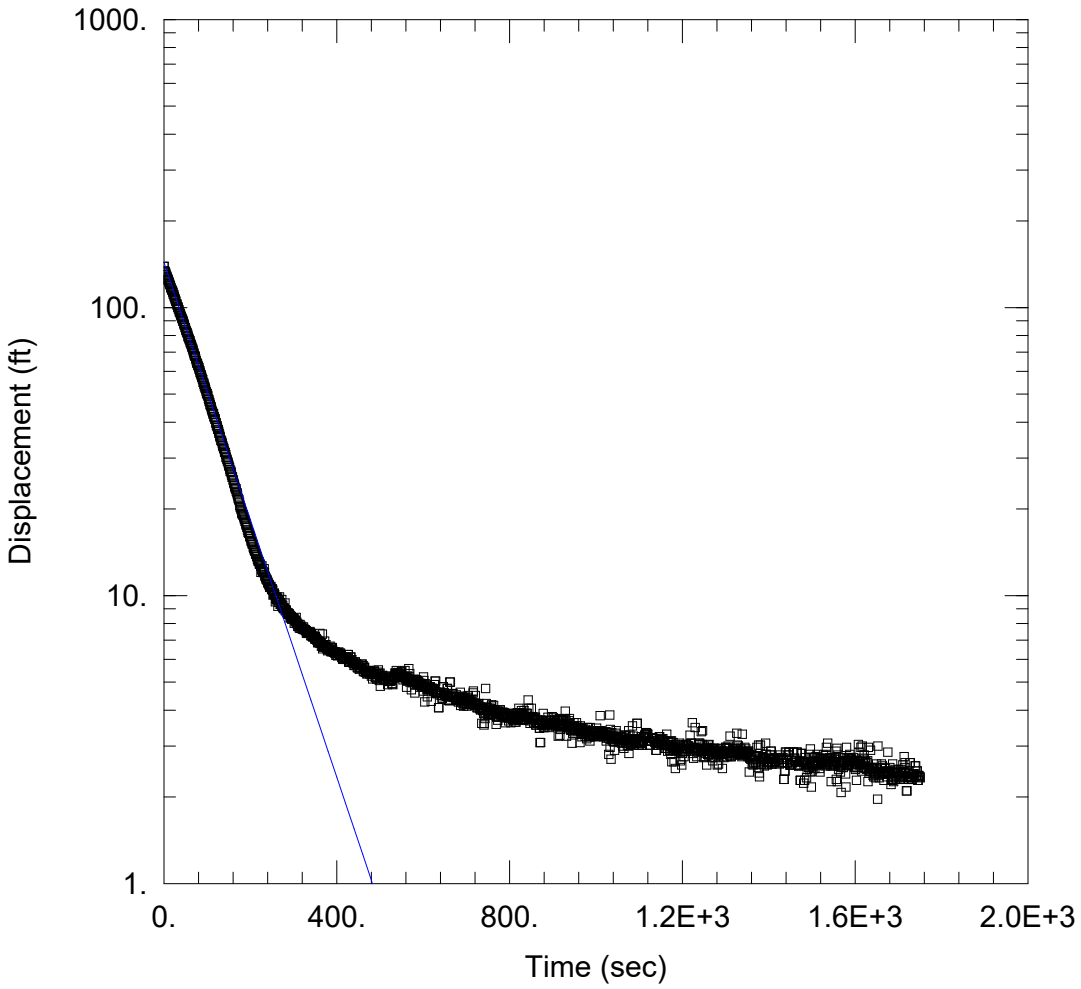
SOLUTION

Aquifer Model: Confined Solution Method: Theis (Recovery)
T = 0.006682 cm^2/sec S/S' = 9.294

FIGURE WP586:5D. Pressure Data During Wireline Straddle Packer Testing at 600.0 to 650.4 Feet, Pump Slug Out Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP586



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP586\WP586 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-586 600-650.4 slug out BR.aqt
Date: 02/10/25 Time: 23:03:15

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-586

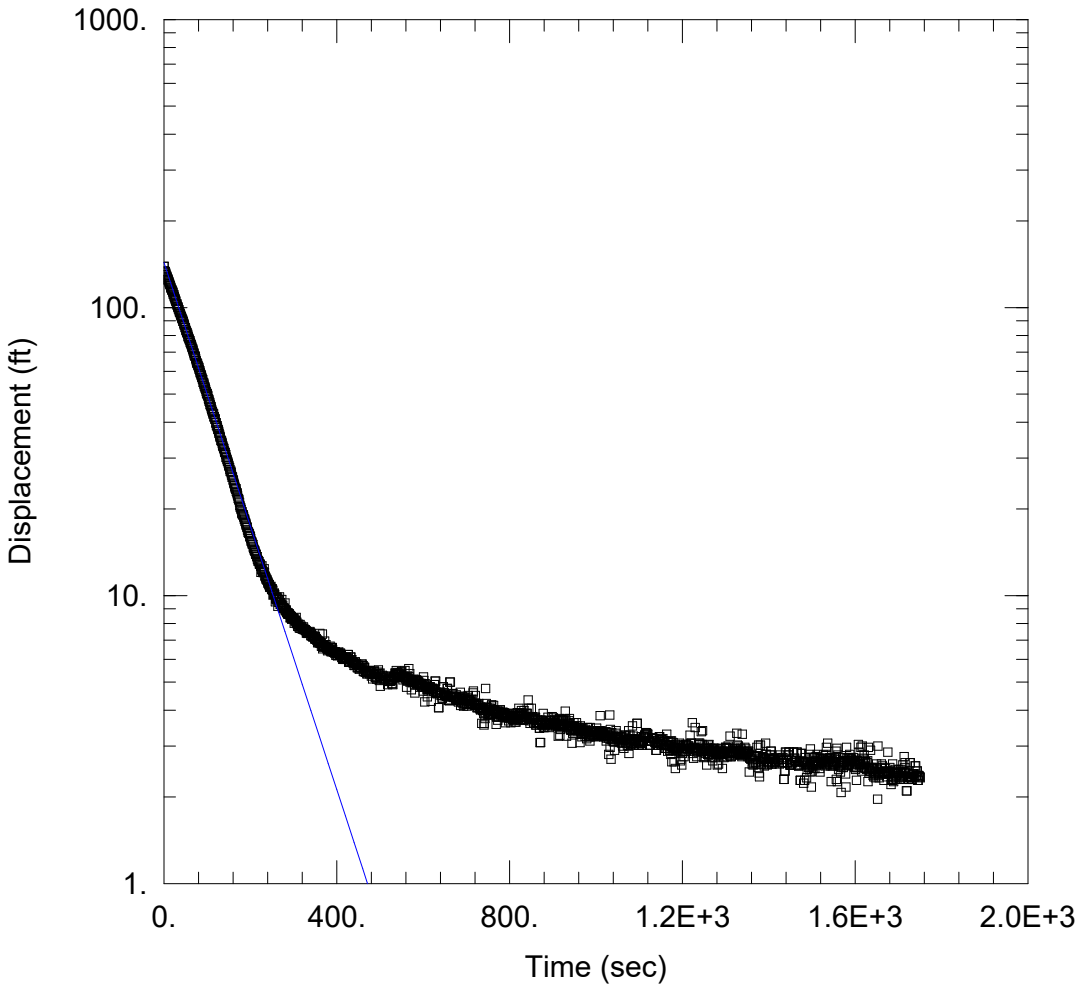
AQUIFER DATA

Saturated Thickness: 50.4 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 6.218E-6 cm/sec y0 = 143.1 ft



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-586 600-650.4 slug out hv.aqt
Date: 02/10/25 Time: 23:05:22

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-586

AQUIFER DATA

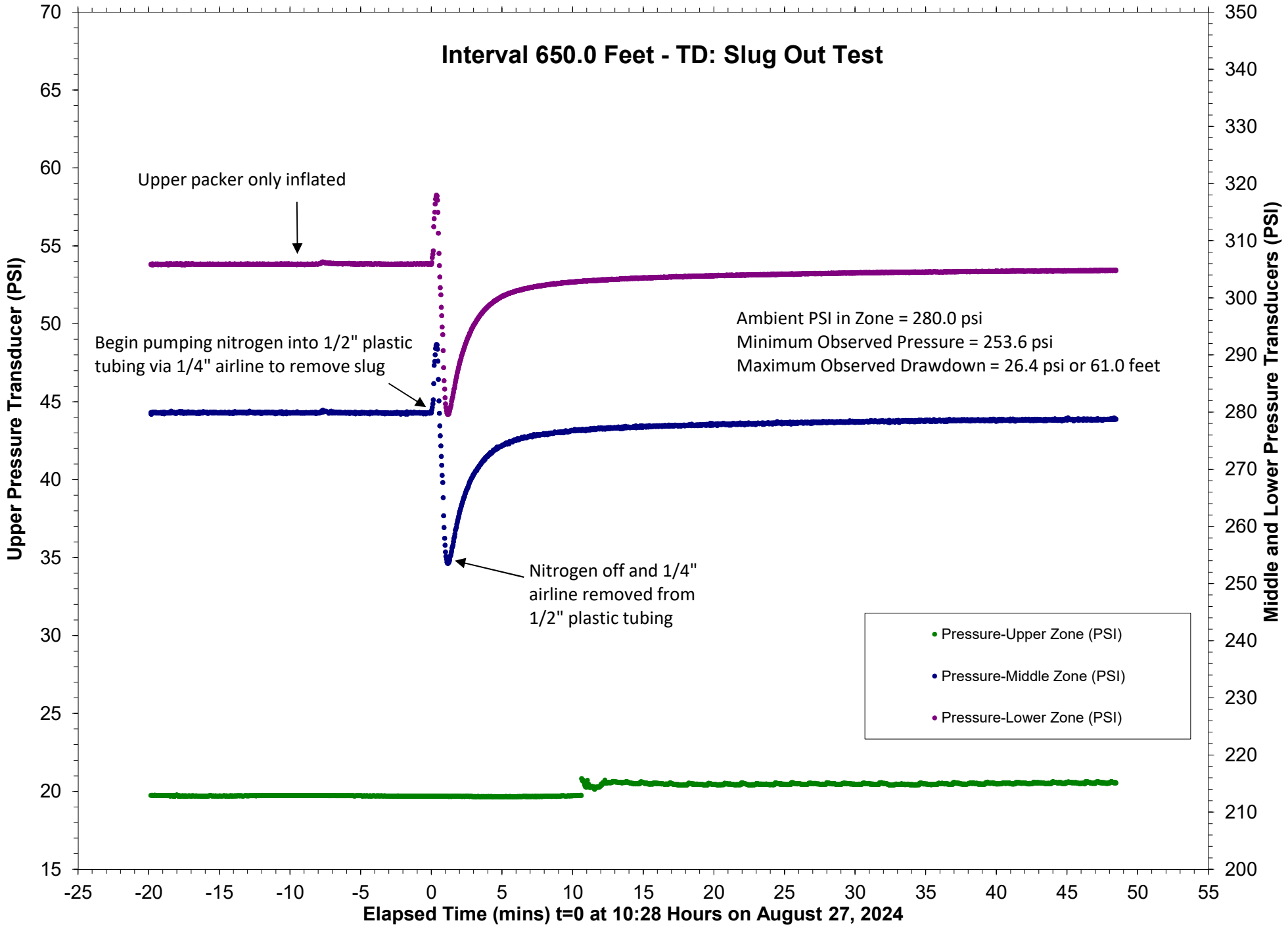
Saturated Thickness: 1855.6 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

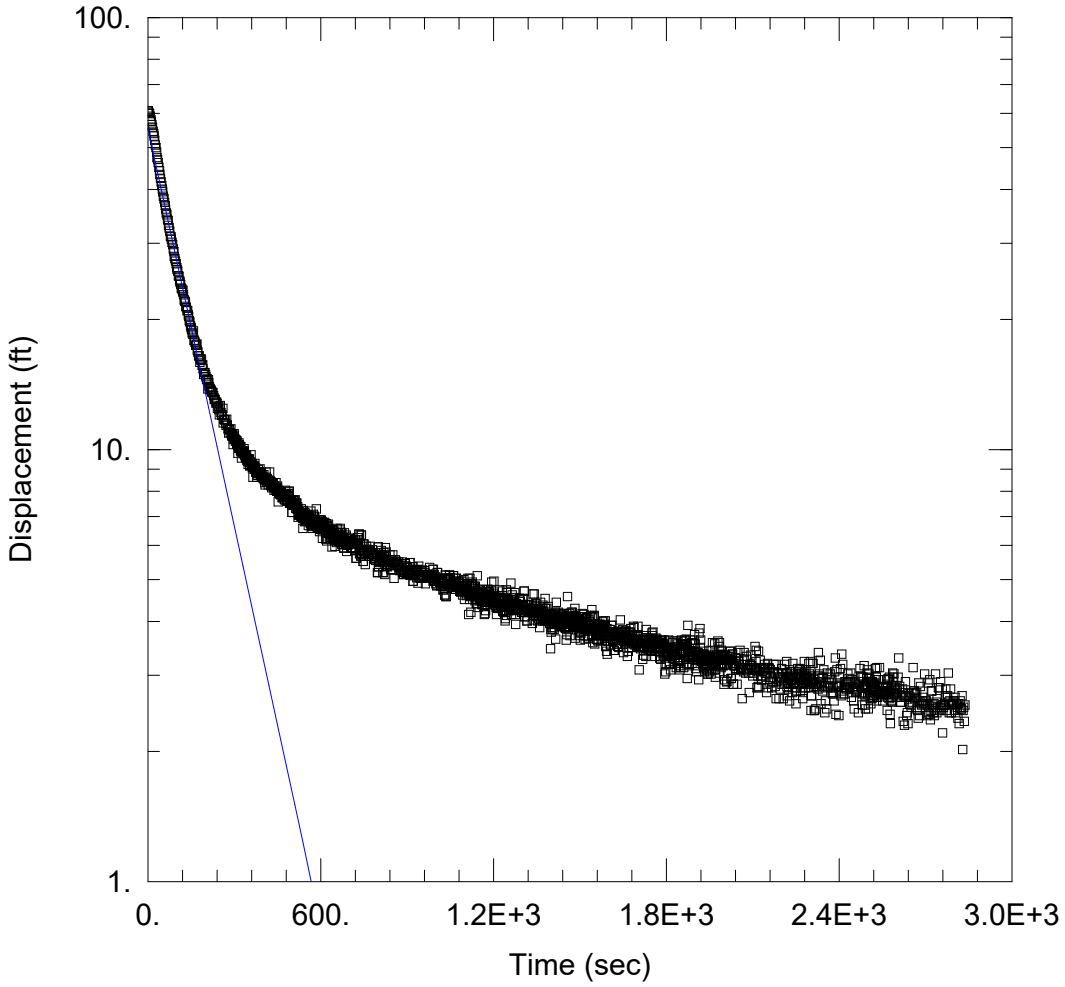
Aquifer Model: Confined Solution Method: Hvorslev

K = 8.988E-6 cm/sec y0 = 143.1 ft

FIGURE WP586:5E. Pressure Data During Wireline Straddle Packer Testing at 650.0 Feet to Total Depth, Pump Slug Out Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP586



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP586\WP586 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-586 650-TD slug out BR.aqt
Date: 02/11/25 Time: 00:02:42

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-586

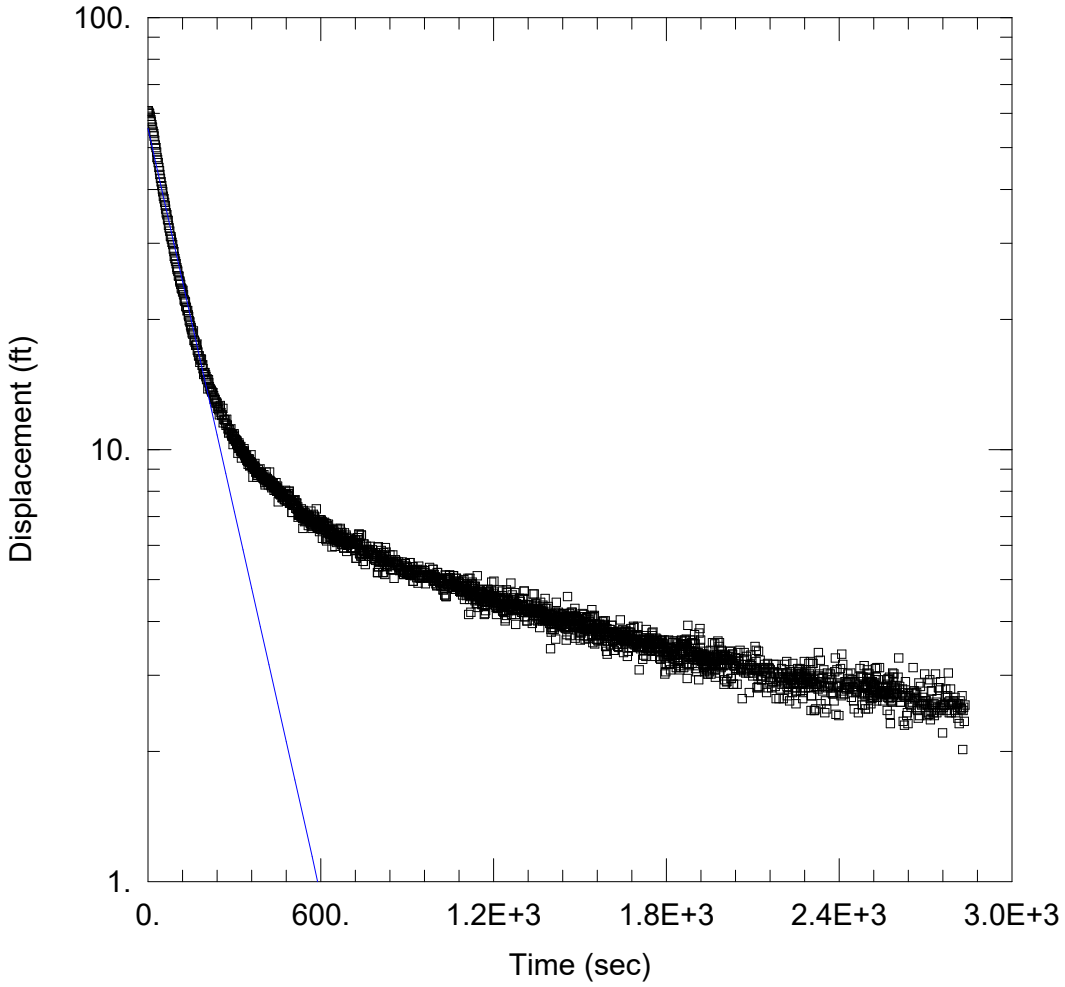
AQUIFER DATA

Saturated Thickness: 1855.6 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 3.838E-6 cm/sec y0 = 55.34 ft



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-586 650-TD slug out HV.aqt
Date: 02/10/25 Time: 23:58:03

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-586

AQUIFER DATA

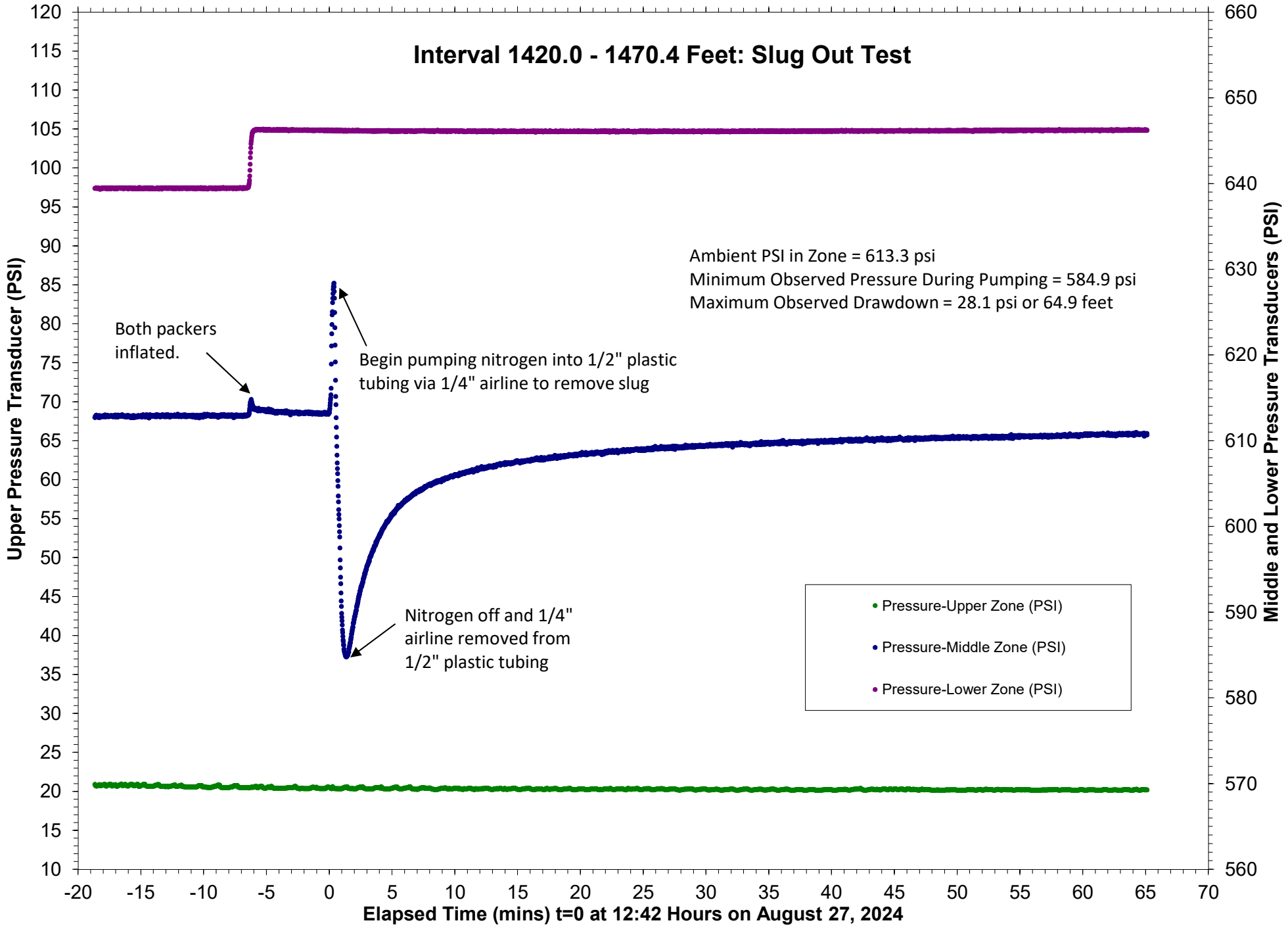
Saturated Thickness: 1855.6 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

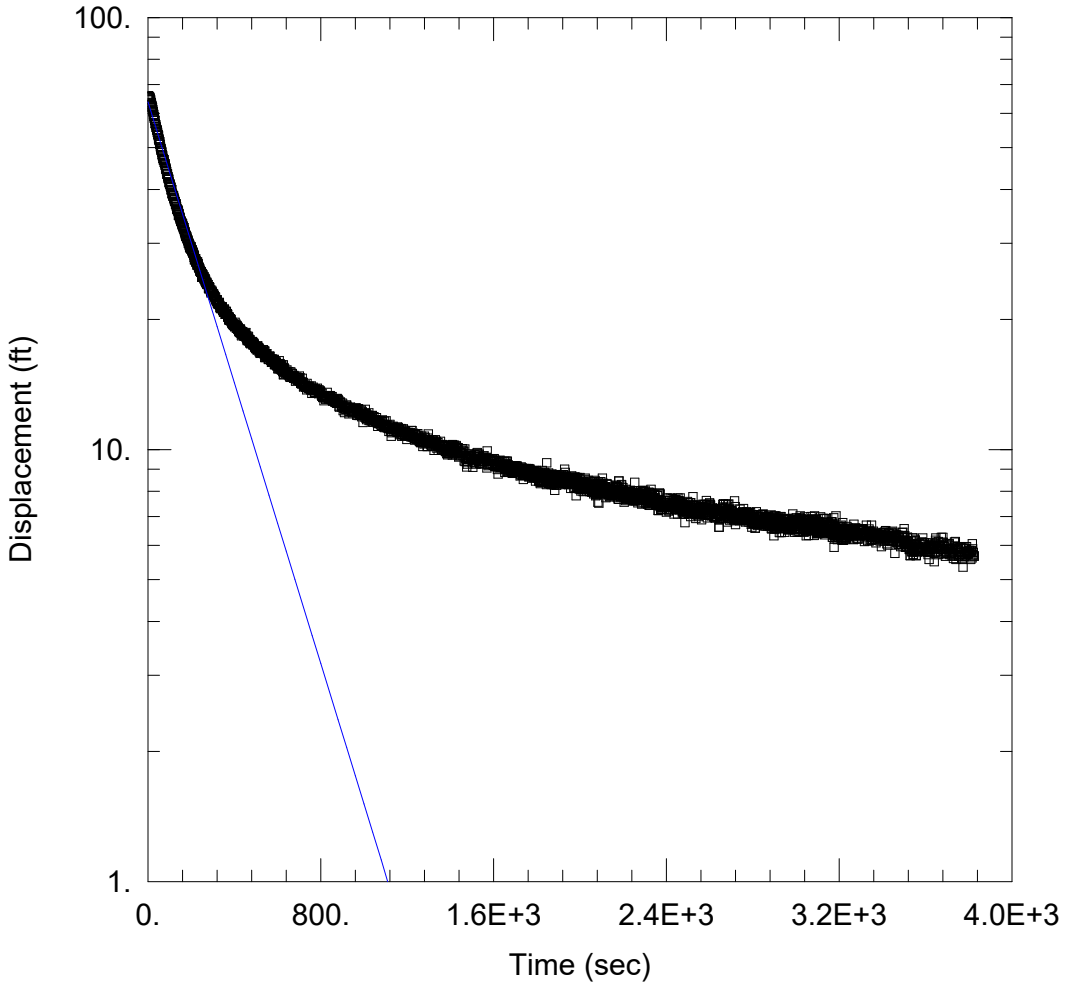
Aquifer Model: Confined Solution Method: Hvorslev

K = 5.809E-6 cm/sec y0 = 55.34 ft

FIGURE WP586:5F. Pressure Data During Wireline Straddle Packer Testing at 1420.0 to 1470.4 Feet, Pump Slug Out Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP586



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP586\WP586 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-586 1420-1470.4 slug out BR.aqt
Date: 02/11/25 Time: 00:45:24

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-586

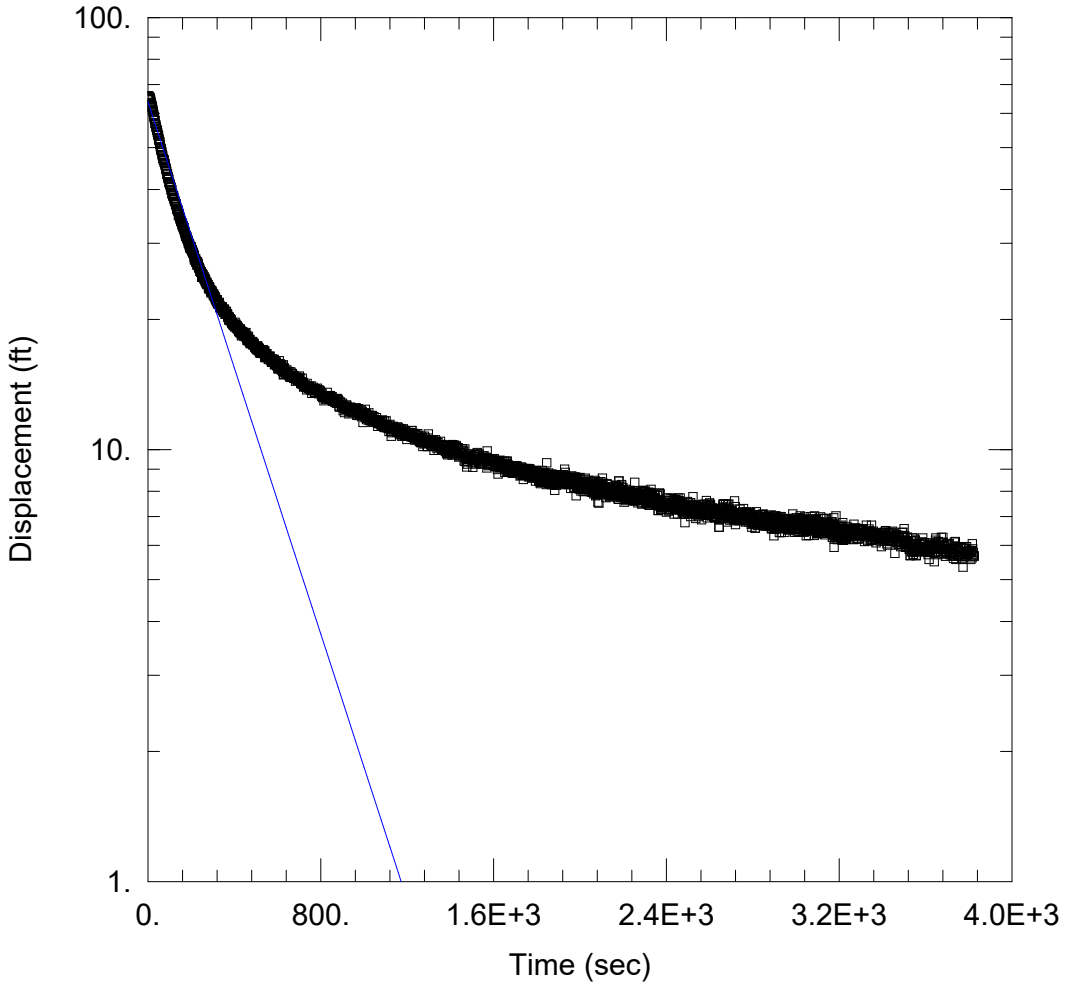
AQUIFER DATA

Saturated Thickness: 50.4 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 2.262E-6 cm/sec y0 = 63.75 ft



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-586 1420-1470.4 slug out HV.aqt
Date: 02/11/25 Time: 00:35:44

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-586

AQUIFER DATA

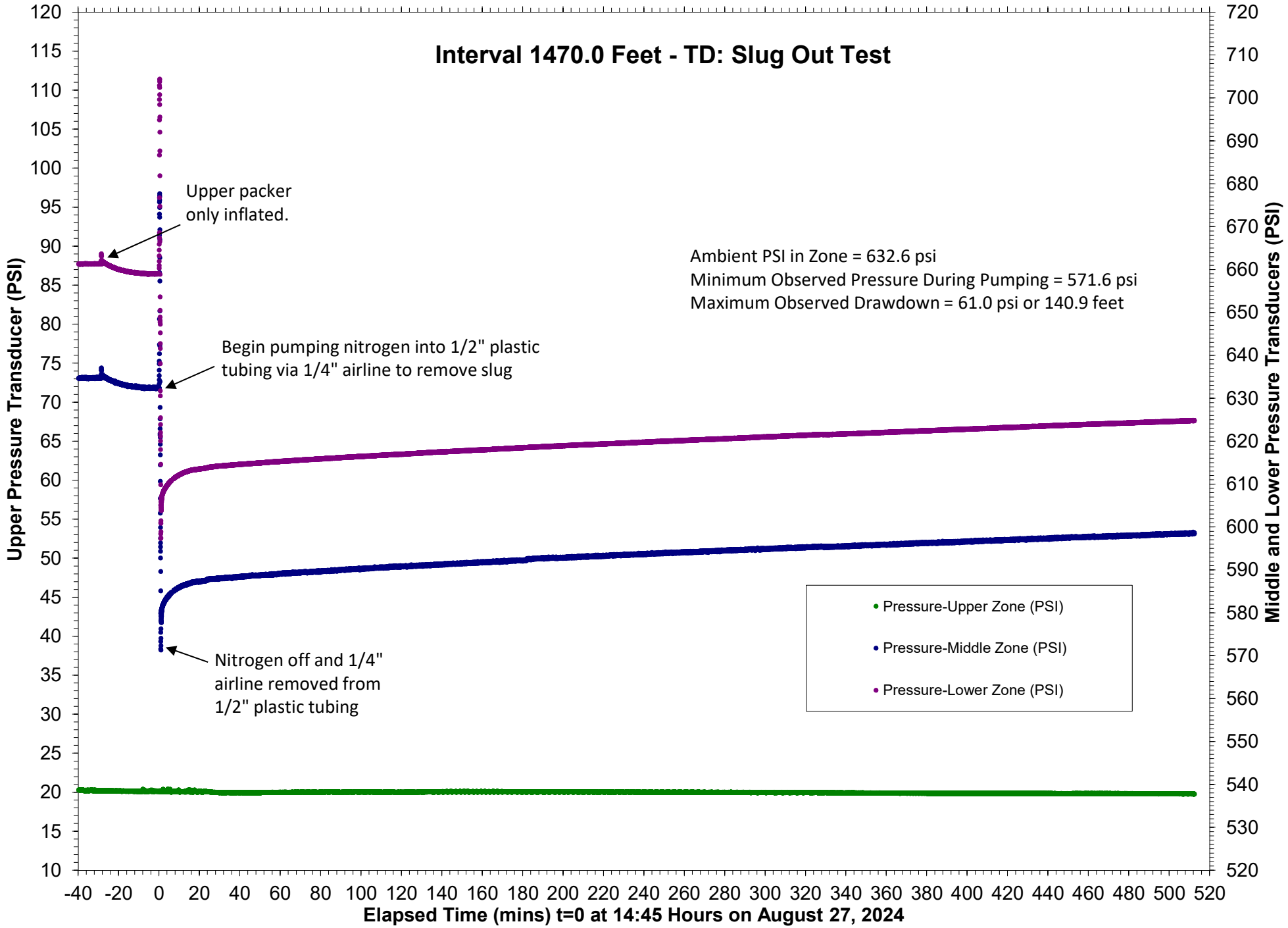
Saturated Thickness: 50.4 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

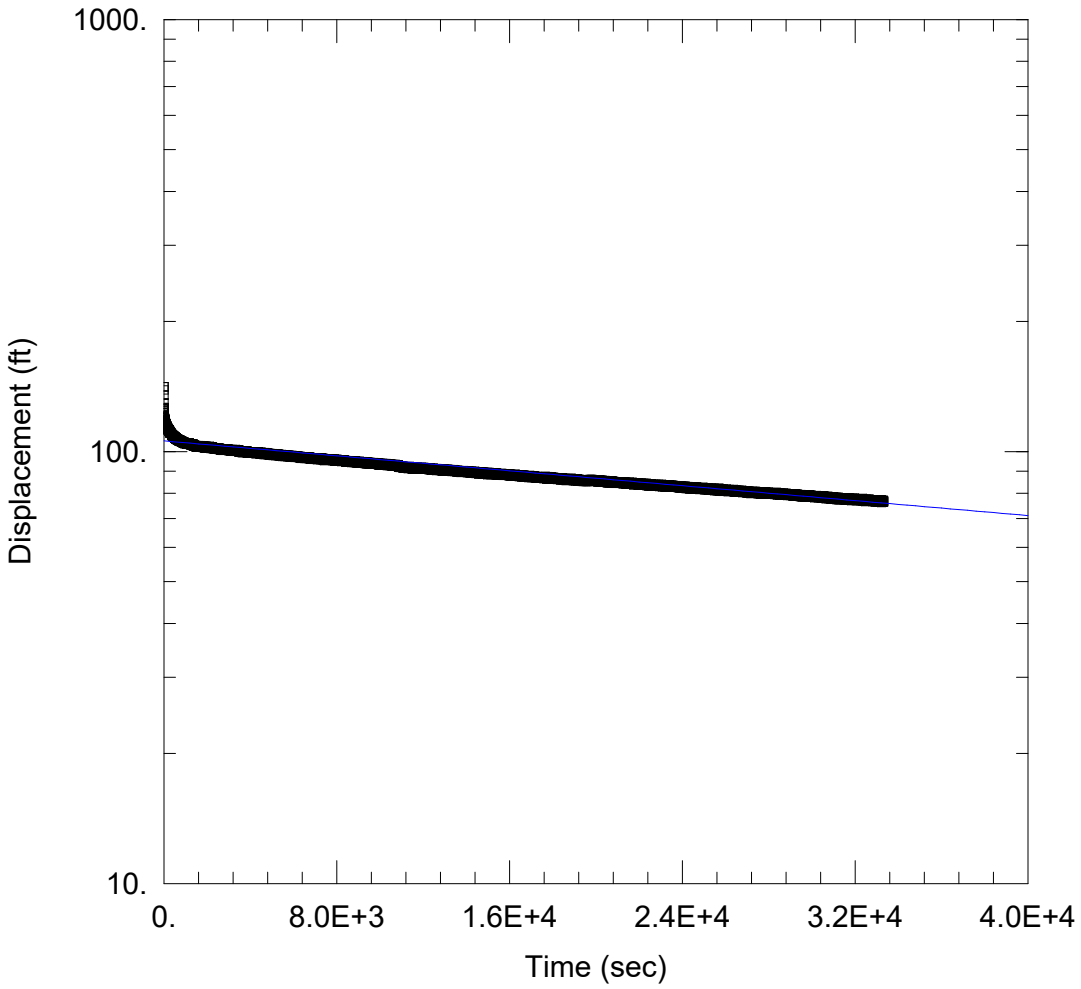
Aquifer Model: Confined Solution Method: Hvorslev

K = 2.481E-6 cm/sec y0 = 63.75 ft

FIGURE WP586:5G. Pressure Data During Wireline Straddle Packer Testing at 1470.0 Feet to Total Depth, Pump Slug Out Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP586



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP586\WP586 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-586 1470.4-TD slug out BR.aqt
Date: 02/11/25 Time: 00:24:15

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-586

AQUIFER DATA

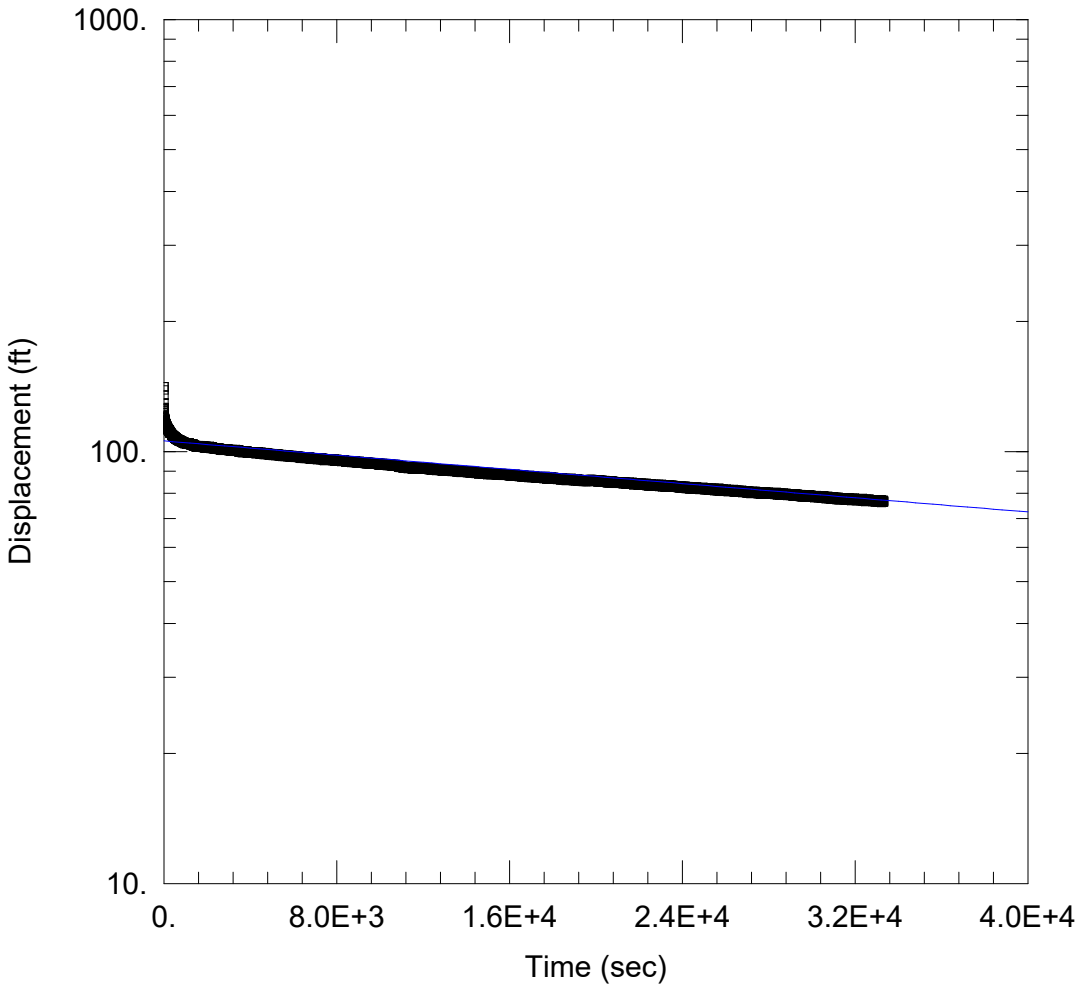
Saturated Thickness: 1036. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (WP-586)

Initial Displacement: 141.2 ft
Total Well Penetration Depth: 50.4 ft
Casing Radius: 0.0209 ft
Static Water Column Height: 2506. ft
Screen Length: 50.4 ft
Well Radius: 0.1575 ft

SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice
K = 5.4E-9 cm/sec
y0 = 105.8 ft



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-586 1470.4-TD slug out HV.aqt
Date: 02/11/25 Time: 00:10:35

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-586

AQUIFER DATA

Saturated Thickness: 1036. ft Anisotropy Ratio (Kz/Kr): 1.

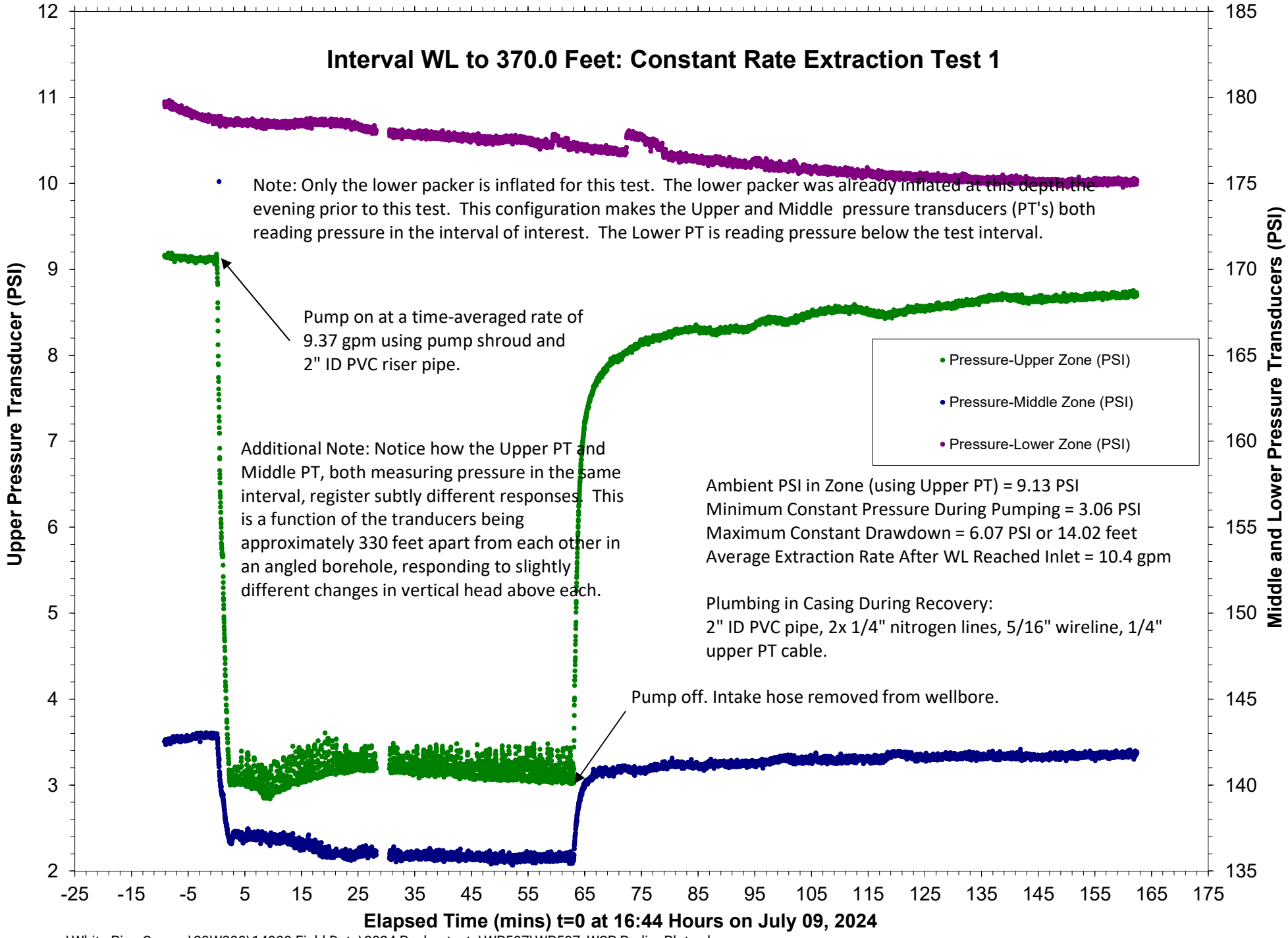
SOLUTION

Aquifer Model: Confined Solution Method: Hvorslev

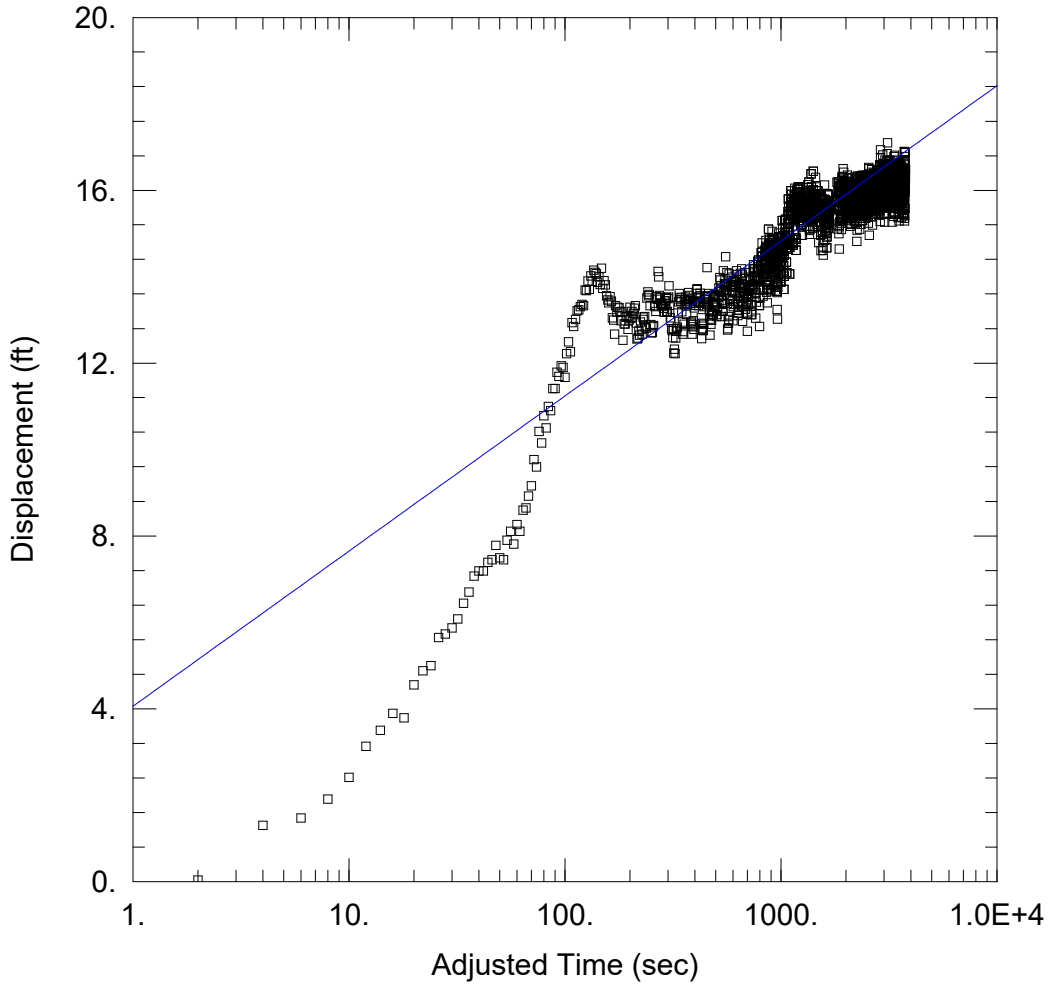
K = 8.08E-9 cm/sec y0 = 105.8 ft

WP-587 - Test Hydrographs and Analyses

FIGURE WP587:5A. Pressure Data During Wireline Straddle Packer Testing at WL to 370.0 Feet, Constant Rate Extraction Test 1; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP587



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP587\WP587_WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-587 WL-370 CRE CJ.aqt
Date: 02/11/25 Time: 23:55:36

PROJECT INFORMATION

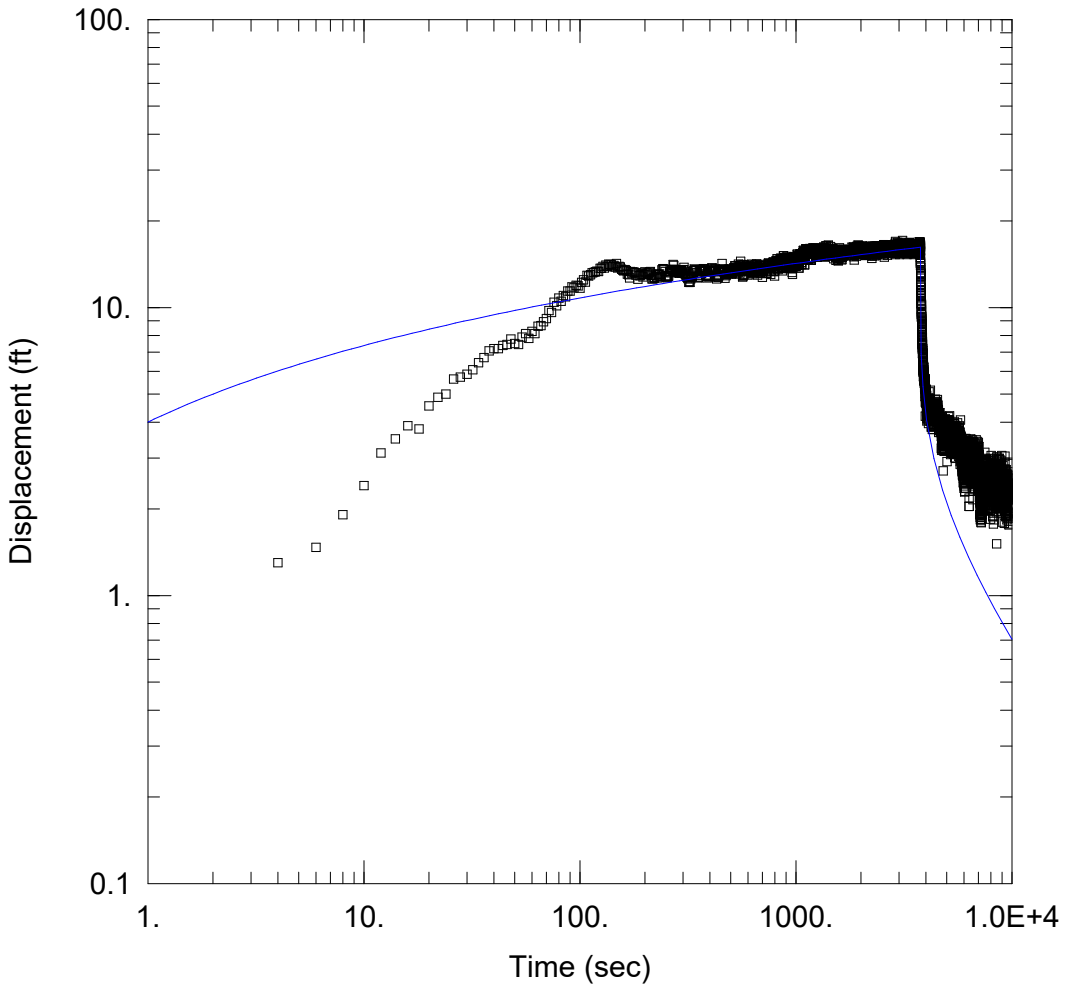
Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-587

AQUIFER DATA

Saturated Thickness: 340. ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob
T = 1.352 cm^2/sec S = 0.009774



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-587 WL-370 CRE theis.aqt
Date: 02/11/25 Time: 23:49:50

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-587

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
WP-587	0	0

Observation Wells

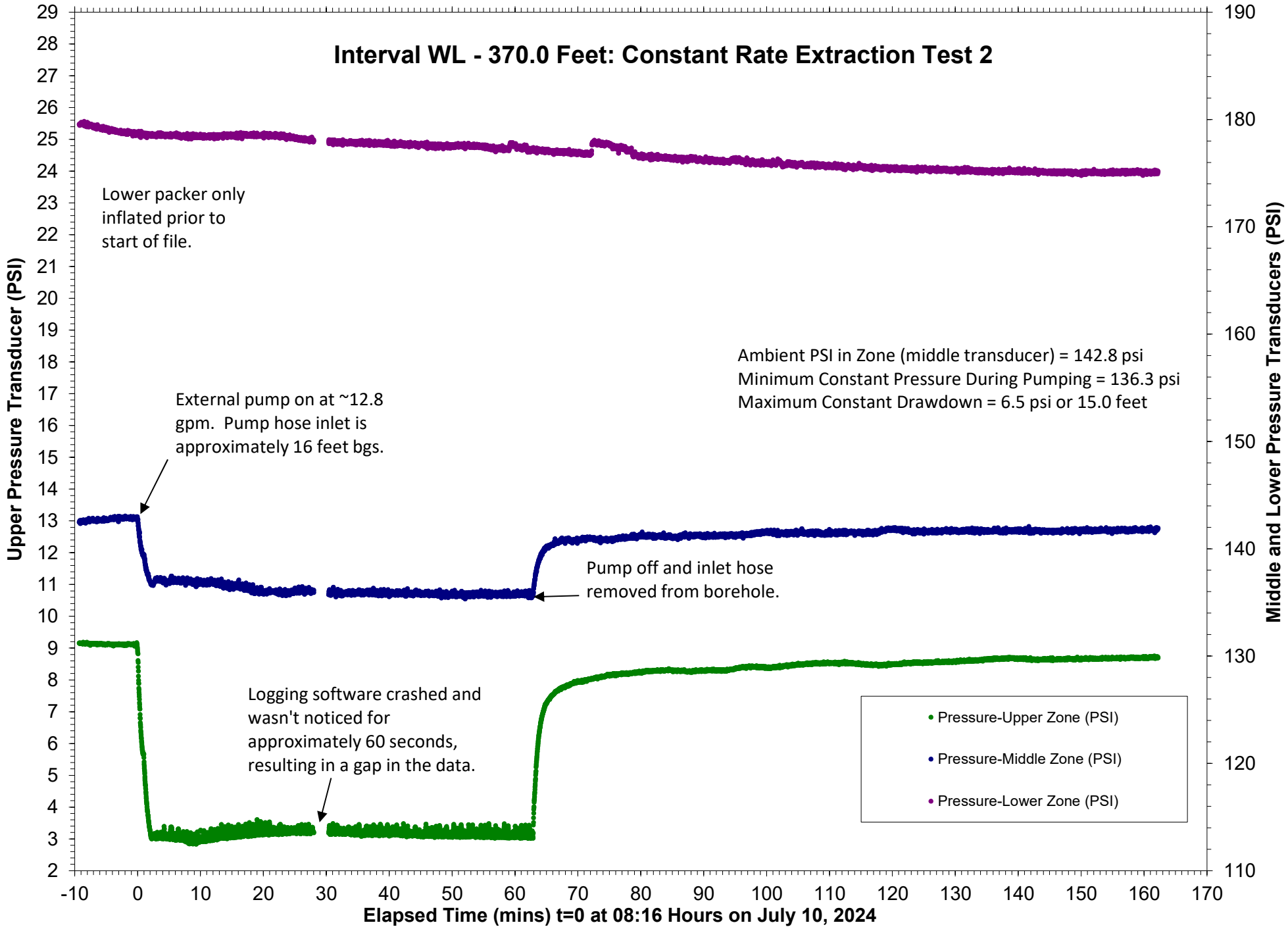
Well Name	X (ft)	Y (ft)
▫ WP-587	0	0

SOLUTION

Aquifer Model: Confined
Solution Method: Theis

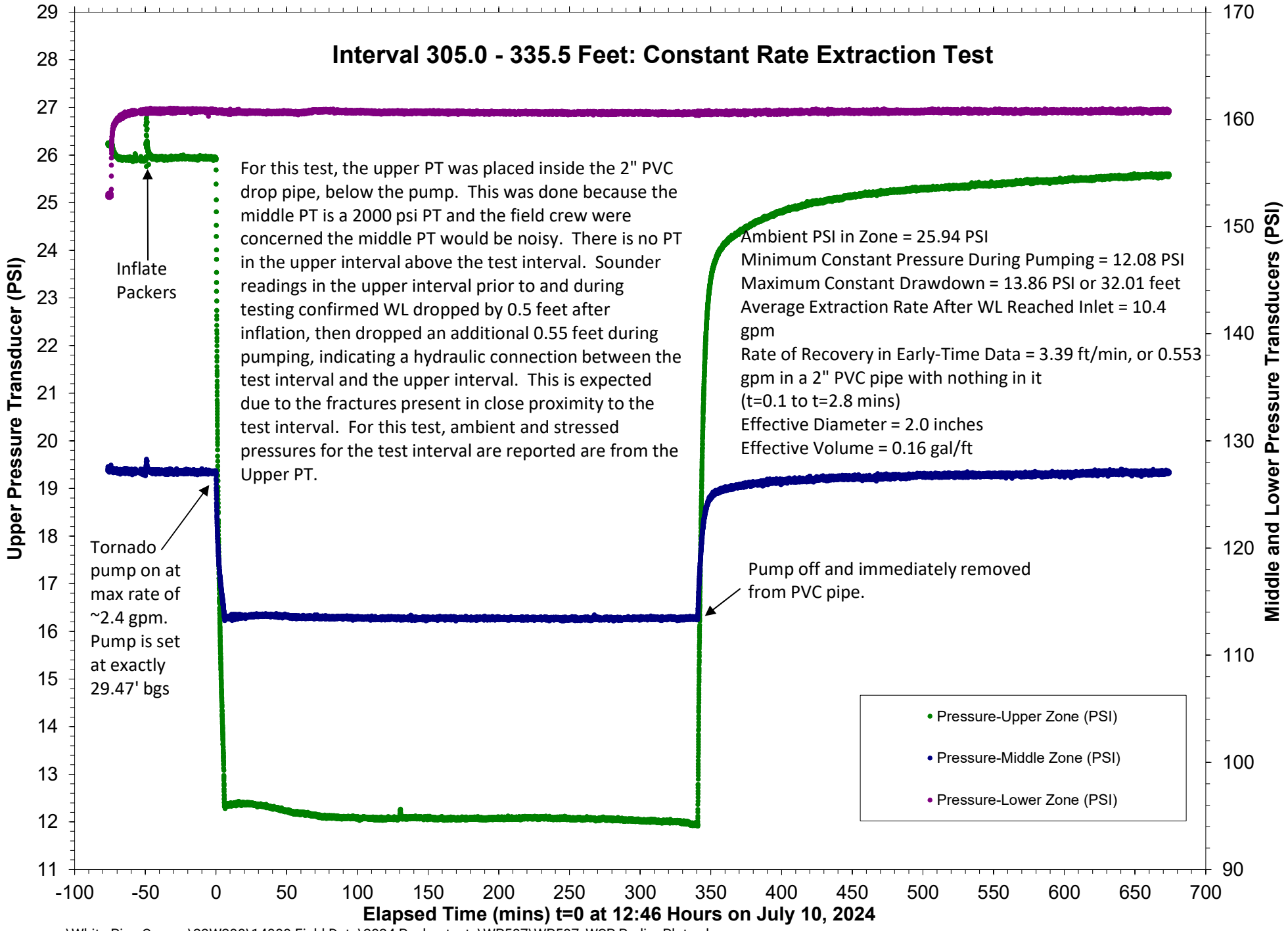
T = 1.416 cm^2/sec
S = 0.009774
Kz/Kr = 1.
b = 340. ft

FIGURE WP587:5B Pressure Data During Wireline Straddle Packer Testing at Water Level to 370.0 Feet, Constant Rate Extraction Test 2; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP587

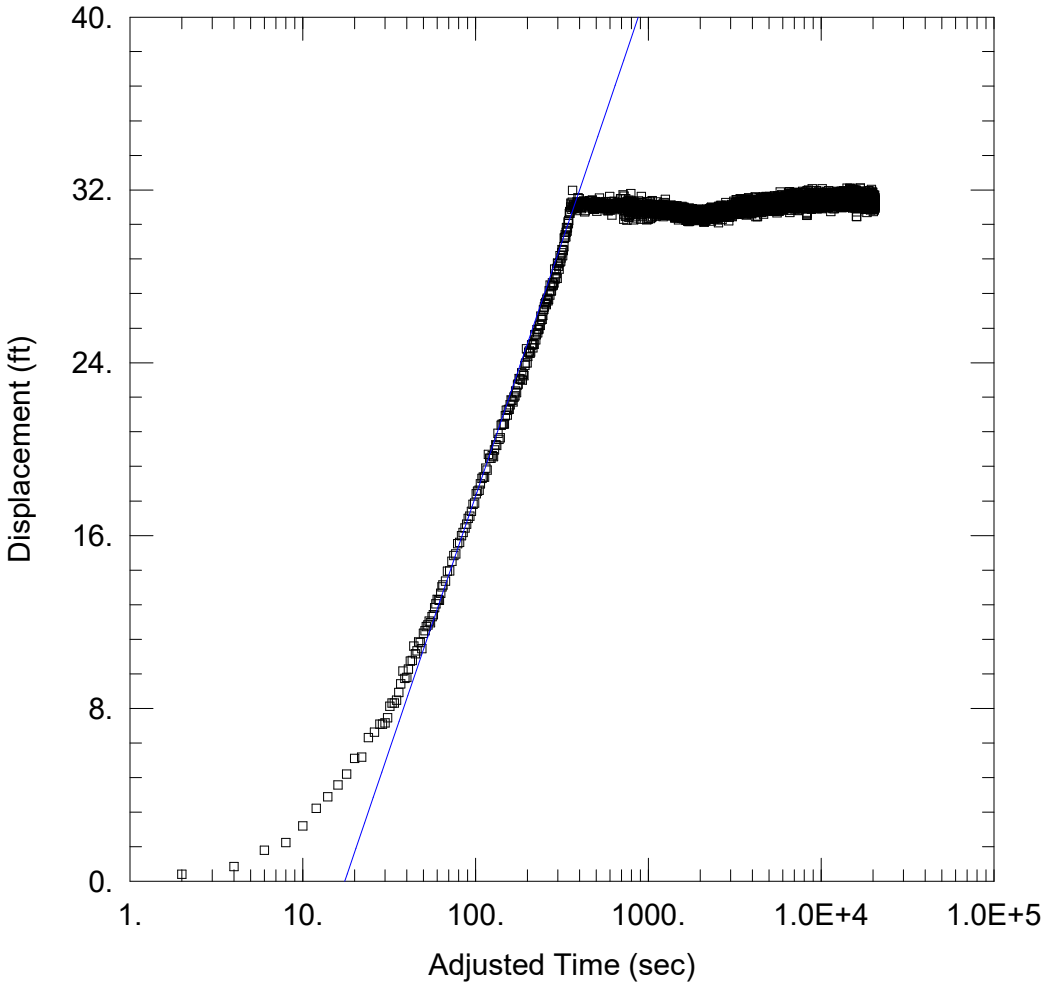


pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP587\WP587_WSP Prelim Plots.xlsx

FIGURE WP587:5C. Pressure Data During Wireline Straddle Packer Testing at 305.0 to 335.5 Feet, Constant Rate Extraction Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP587



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP587\WP587_WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: c:\pw_workdir\pw_ie\fvd_jcb1\d0852682\wp-587 305-335 CRE CJ.aqt
Date: 02/14/25 Time: 12:59:19

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-587

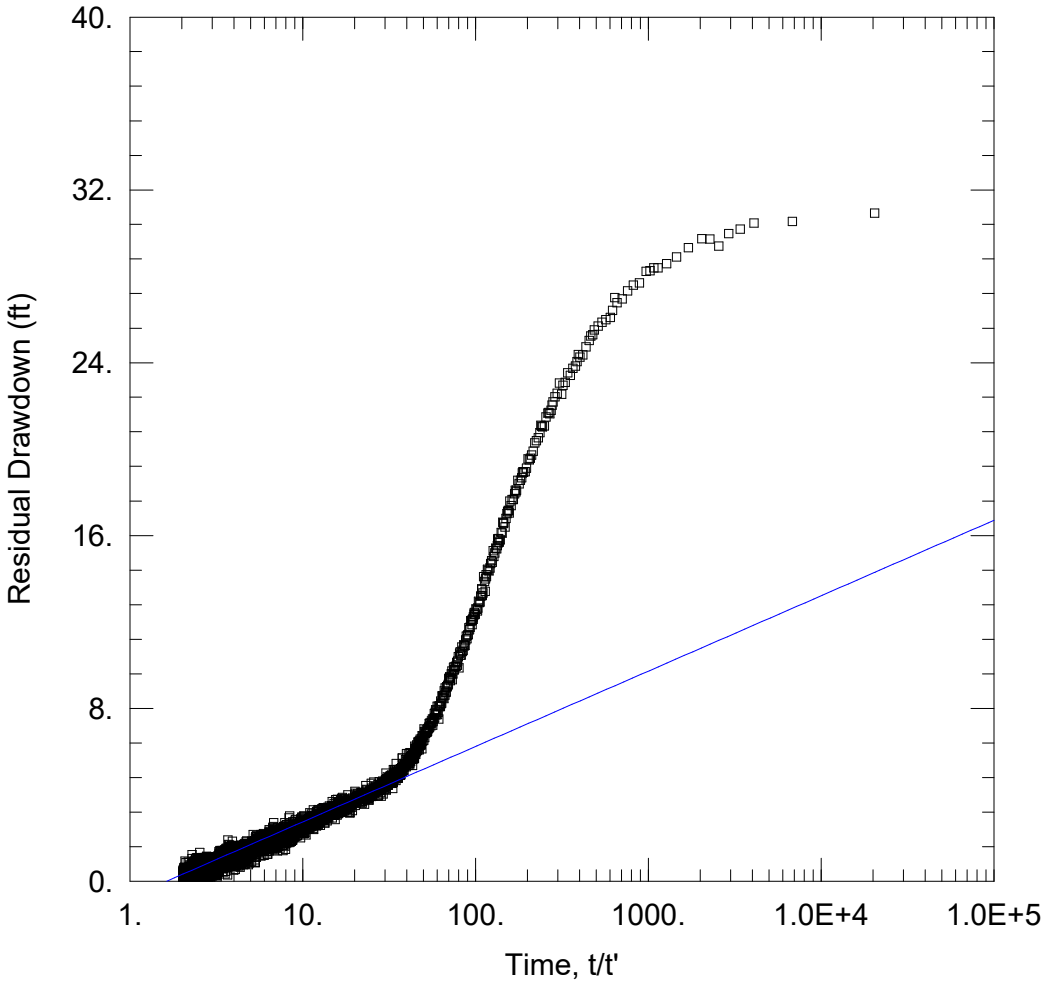
AQUIFER DATA

Saturated Thickness: 30.5 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob

T = 0.03866 cm^2/sec S = 0.06599



WELL TEST ANALYSIS

Data Set: c:\pw_workdir\pw_ie\fvd_jcb1\d0852682\wp-587 305-335 CRE theis recovery.aqt
Date: 02/14/25 Time: 13:02:15

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-587

AQUIFER DATA

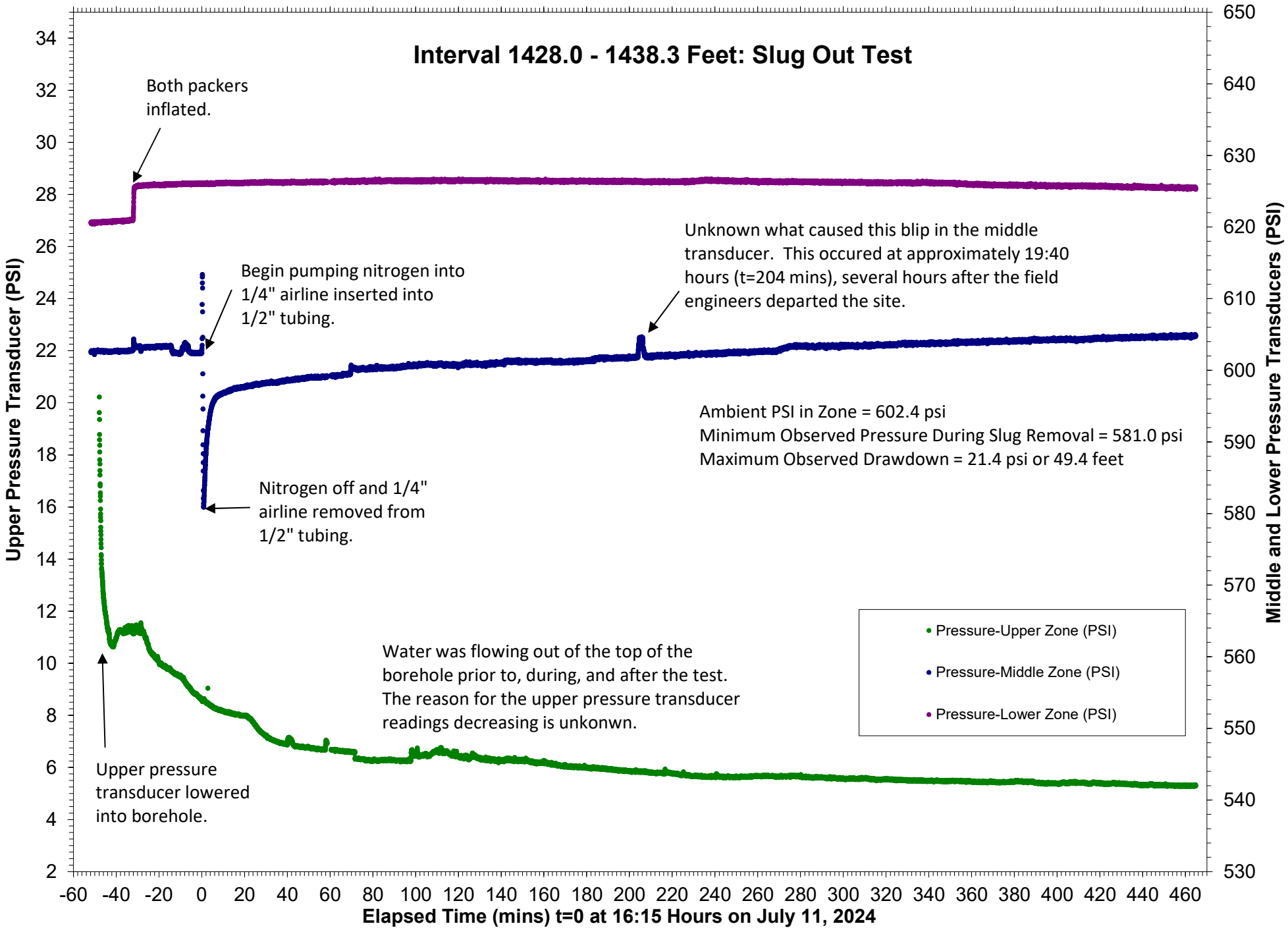
Saturated Thickness: 30.5 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

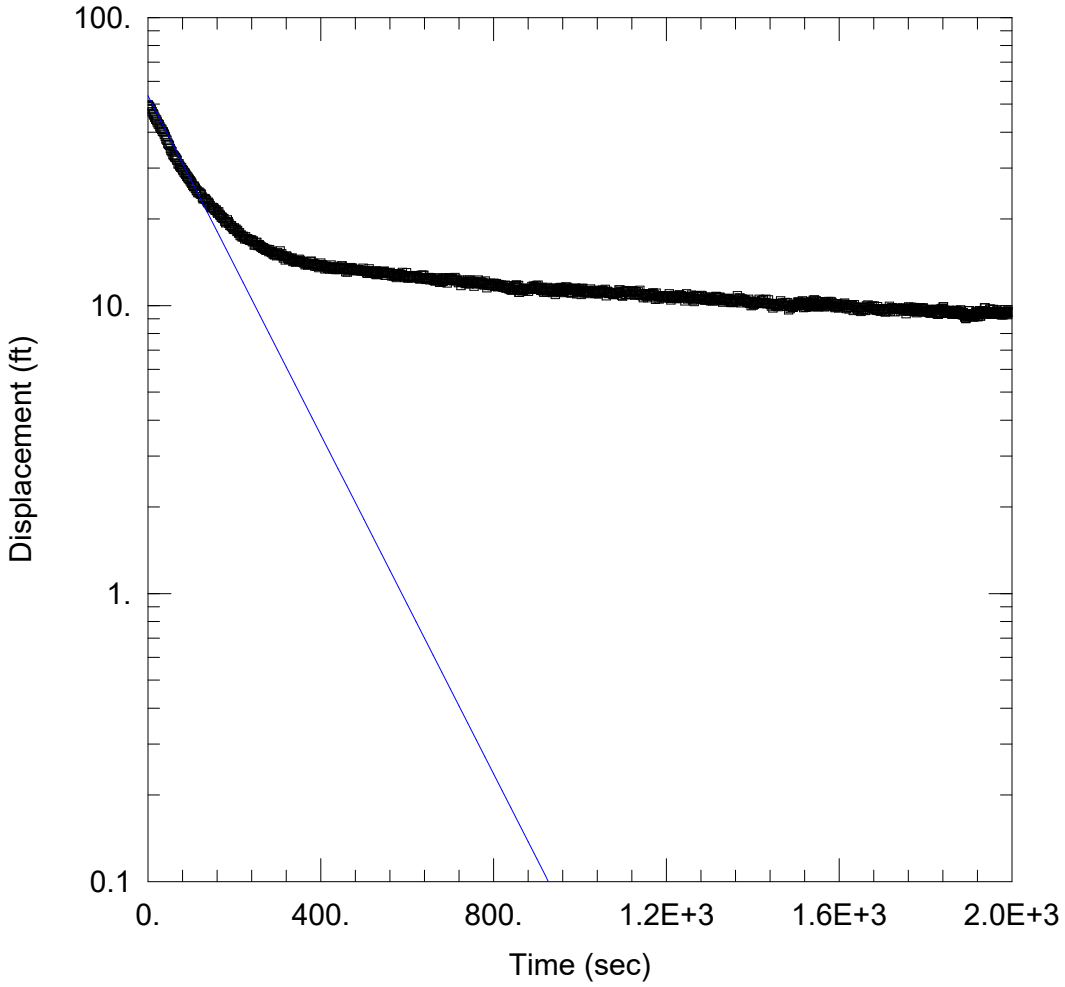
Aquifer Model: Confined Solution Method: Theis (Recovery)

T = 0.261 cm^2/sec S/S' = 1.636

FIGURE WP587:5D Pressure Data During Wireline Straddle Packer Testing at 1428.0 to 1438.3 Feet, Slug Out Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP587



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP587\WP587_WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-587 1428-1438 slug out BR.aqt
Date: 02/12/25 Time: 00:03:17

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-587

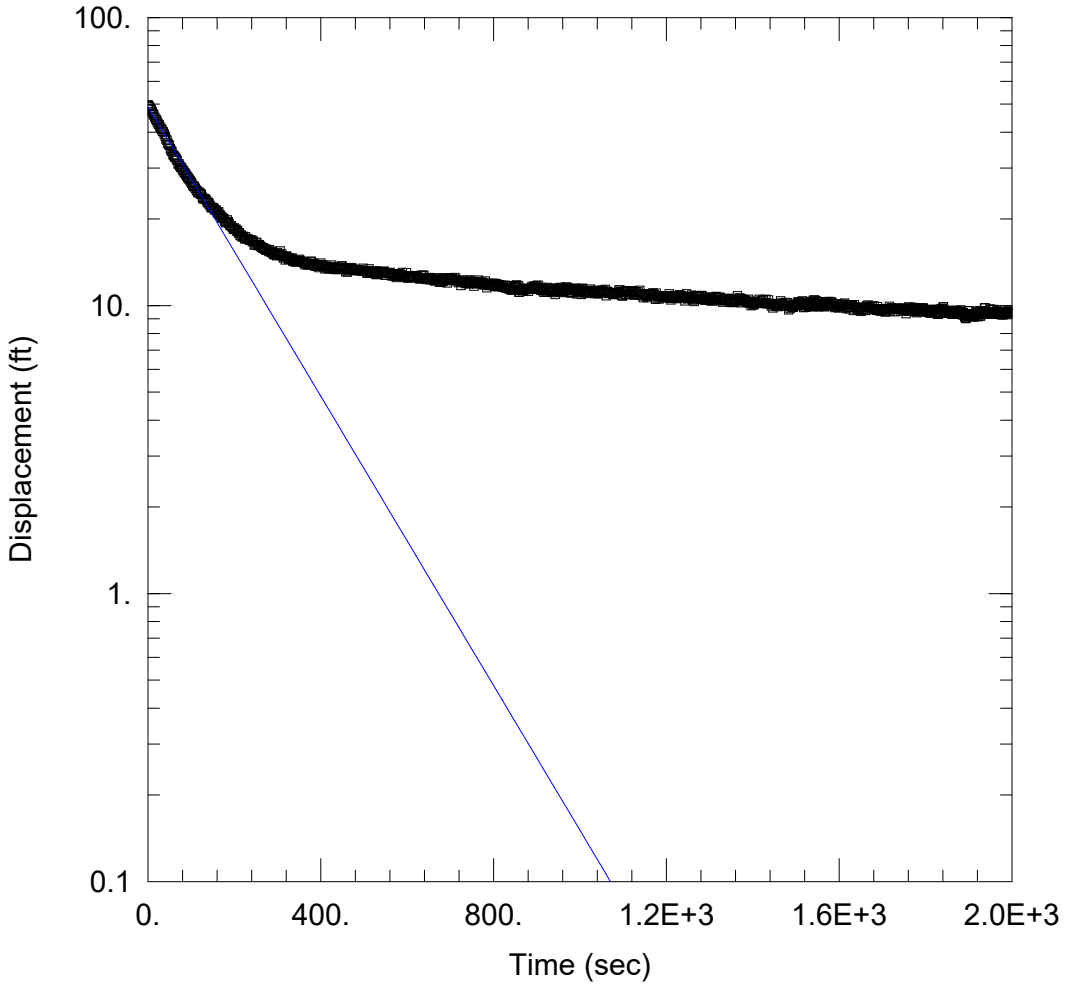
AQUIFER DATA

Saturated Thickness: 10.3 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 1.446E-5 cm/sec y0 = 53.48 ft



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-587 1428-1438 slug out HV.aqt
Date: 02/13/25 Time: 22:35:58

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-587

AQUIFER DATA

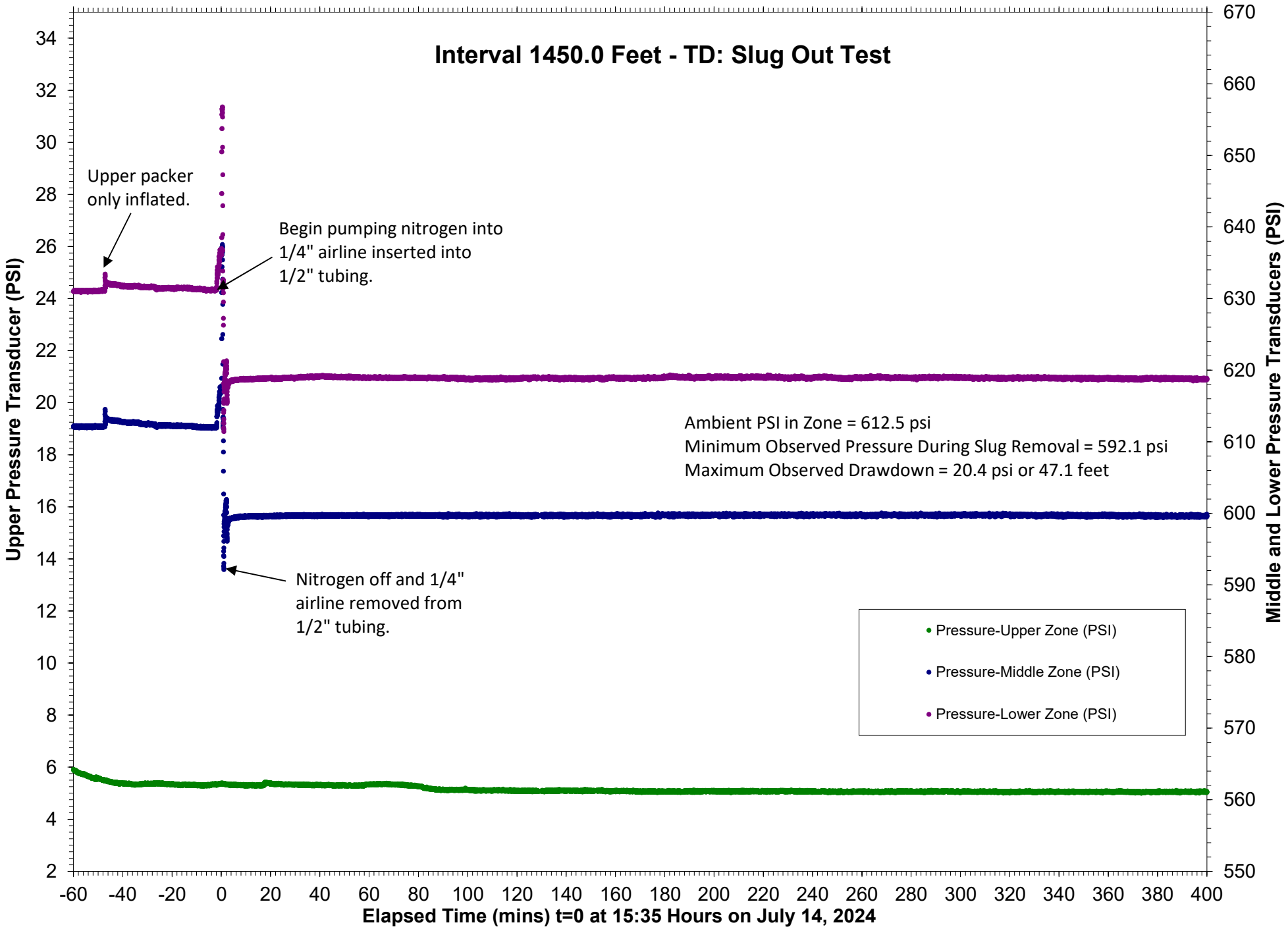
Saturated Thickness: 10.3 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

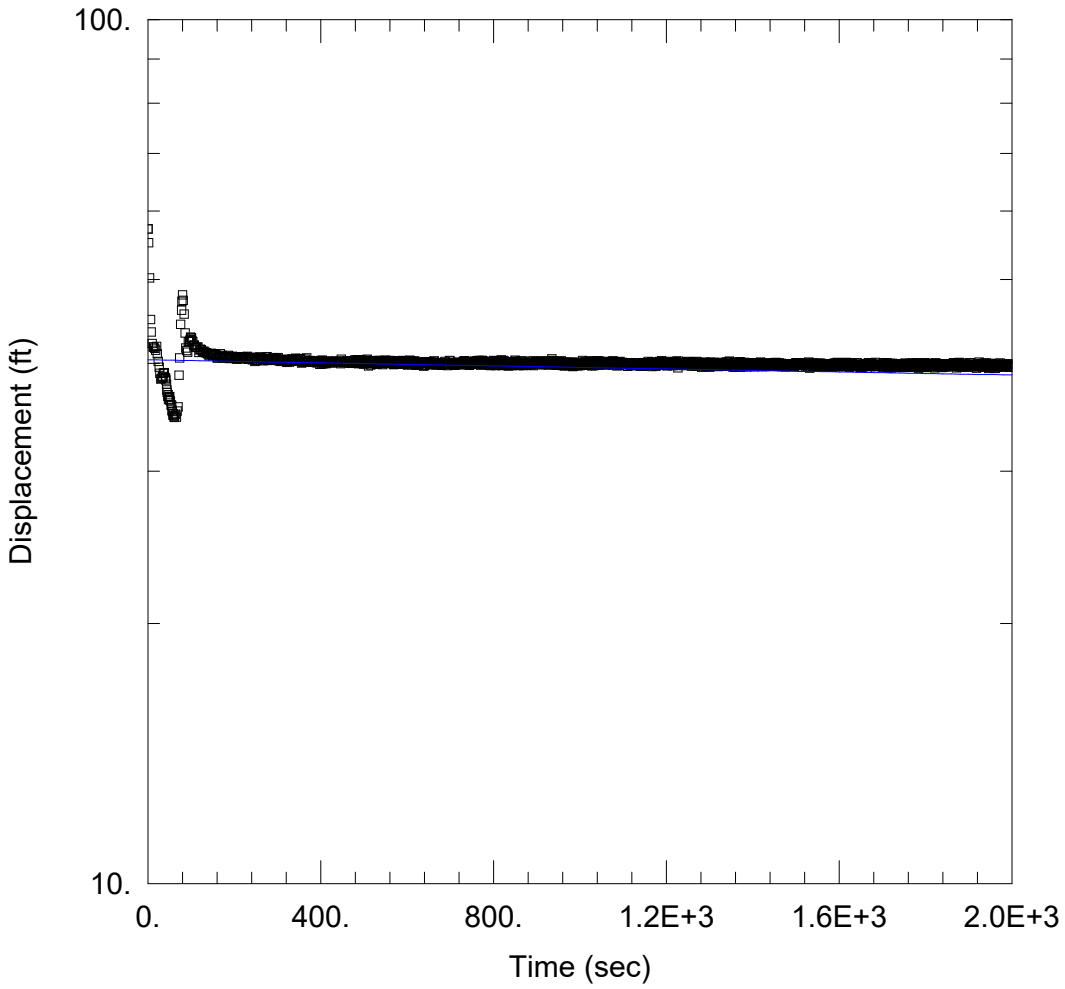
Aquifer Model: Confined Solution Method: Hvorslev

K = 2.038E-5 cm/sec y0 = 48.97 ft

FIGURE WP587:5E Pressure Data During Wireline Straddle Packer Testing at 1450.0 Feet to Total Depth, Slug Out Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP587



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP587\WP587_WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-587 1450- TD BR.aqt
Date: 02/12/25 Time: 00:16:46

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-587

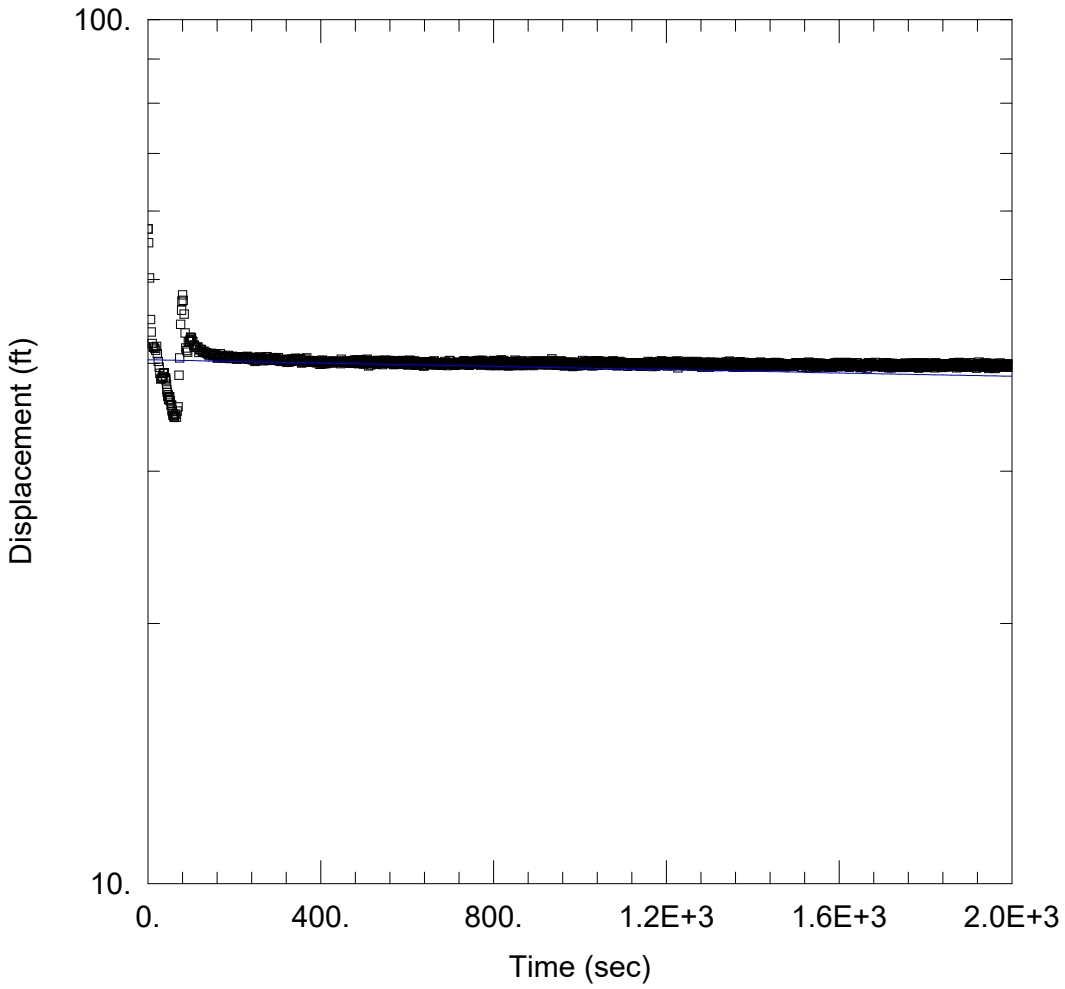
AQUIFER DATA

Saturated Thickness: 1408. ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 7.985E-10 cm/sec y0 = 40.38 ft



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-587 1450- TD HV.aqt
Date: 02/12/25 Time: 00:21:15

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-587

AQUIFER DATA

Saturated Thickness: 1408. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (WP-587)

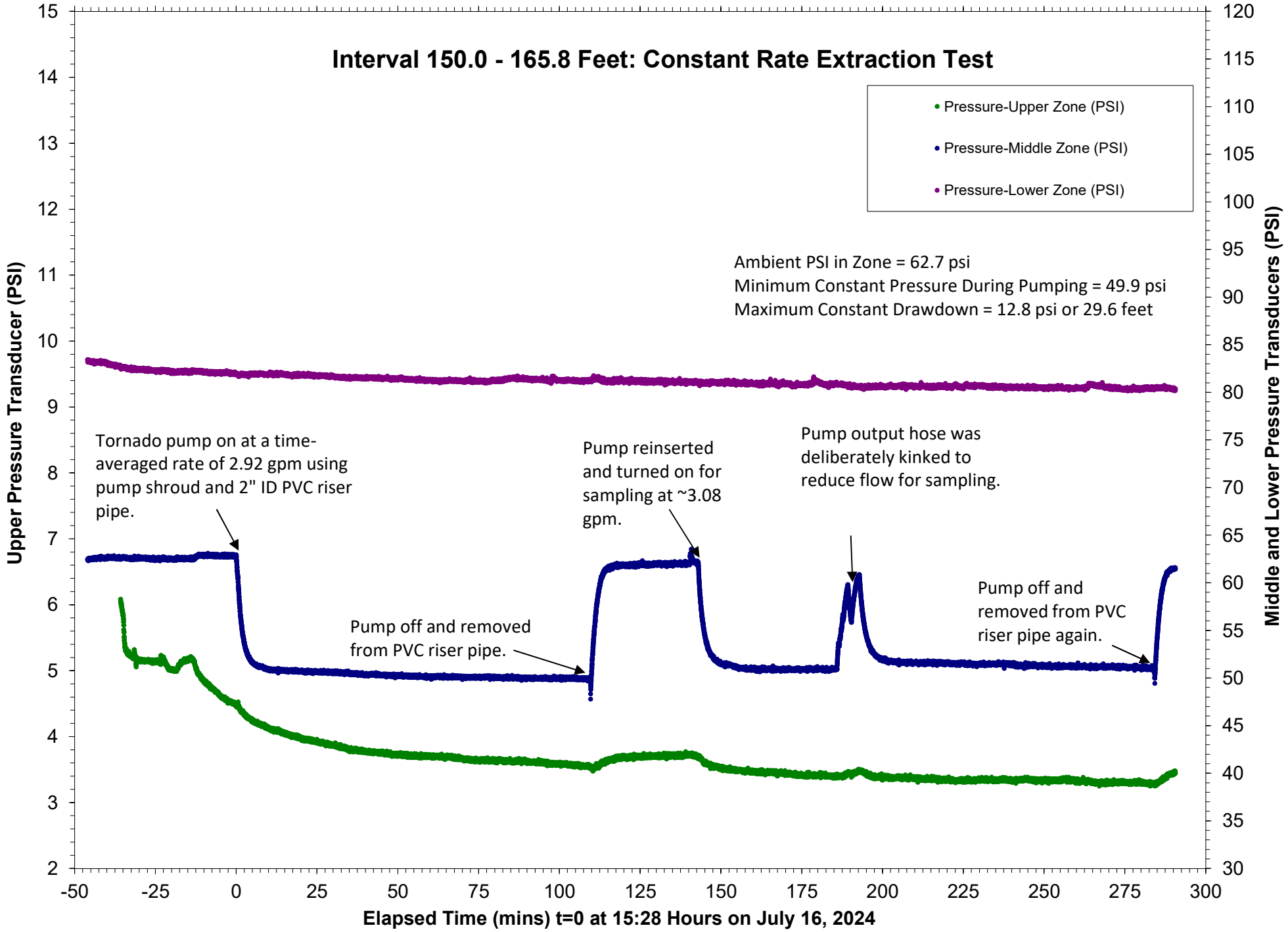
Initial Displacement: 57.25 ft
Total Well Penetration Depth: 1408. ft
Casing Radius: 0.0212 ft
Static Water Column Height: 2858. ft
Screen Length: 1408. ft
Well Radius: 0.1575 ft

SOLUTION

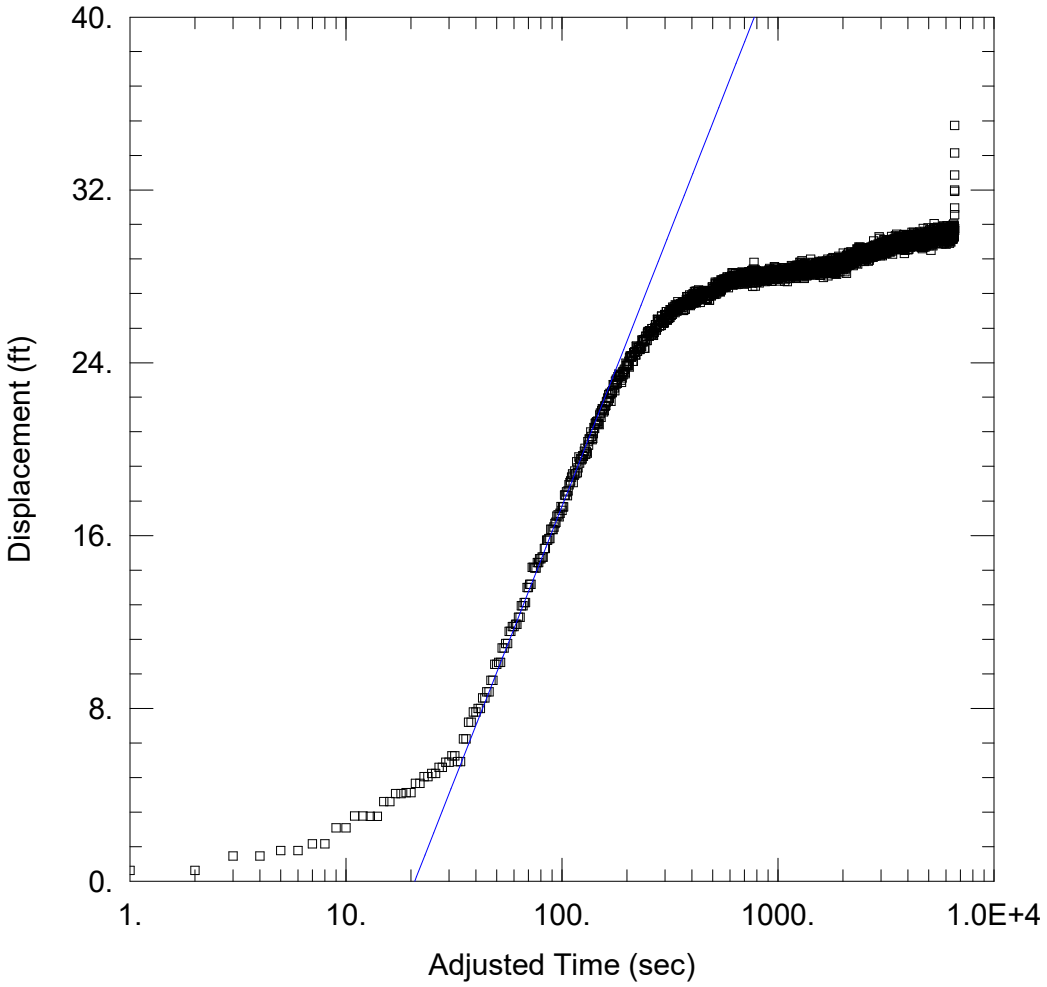
Aquifer Model: Confined
Solution Method: Hvorslev
K = 5.653E-10 cm/sec
y0 = 40.38 ft

WP-588 - Test Hydrographs and Analyses

FIGURE WP588:5A. Pressure Data During Wireline Straddle Packer Testing at 150.0 to 165.8 Feet, Constant Rate Extraction Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP588



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP588\WP588 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: c:\pw_workdir\pw_ie\fvd_jcb1\d0852684\wp-588 150-165.8 CRE CJ.aqt
Date: 02/14/25 Time: 13:28:34

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-588

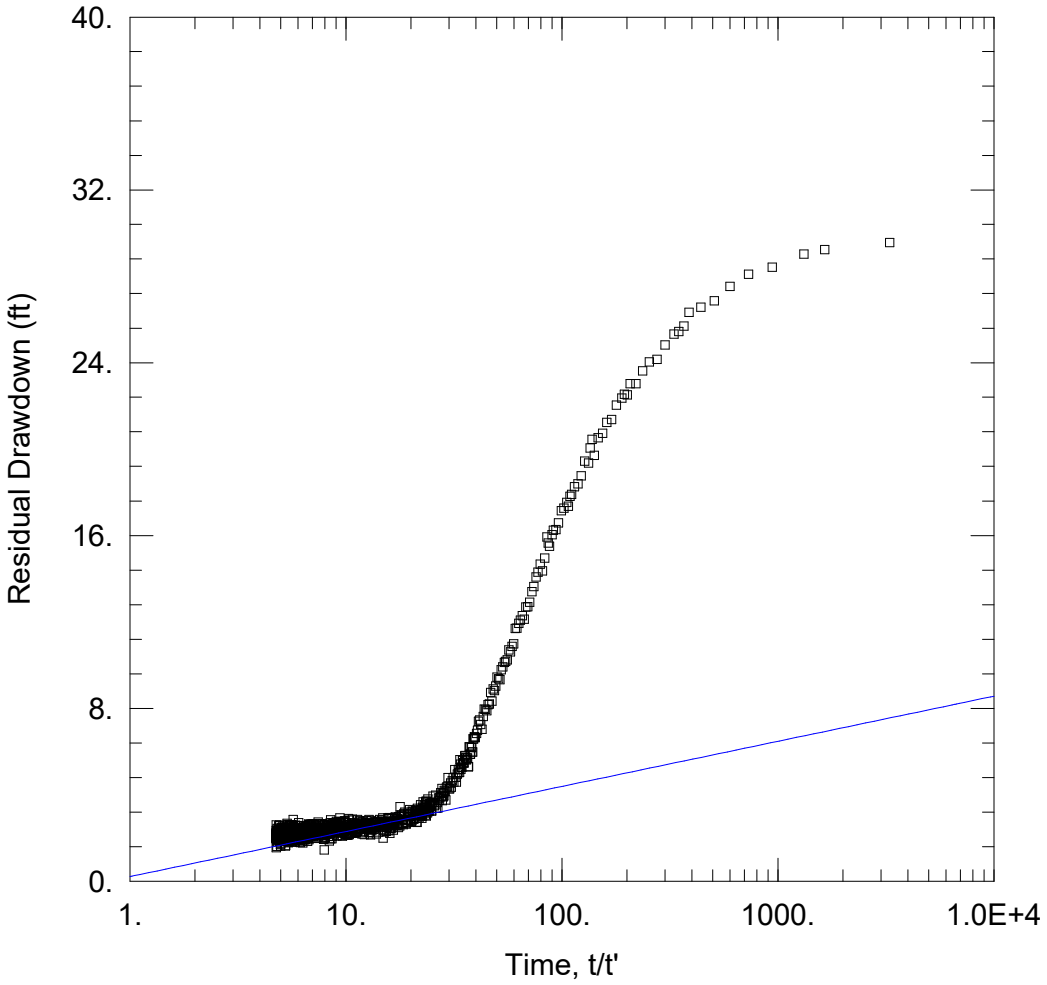
AQUIFER DATA

Saturated Thickness: 15.8 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob

T = 0.04353 cm^2/sec S = 0.08834



WELL TEST ANALYSIS

Data Set: c:\pw_workdir\pw_ie\fvd_jcb1\d0852684\wp-588 150-165.8 CRE theis recovery.aqt
Date: 02/14/25 Time: 13:10:55

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-588

AQUIFER DATA

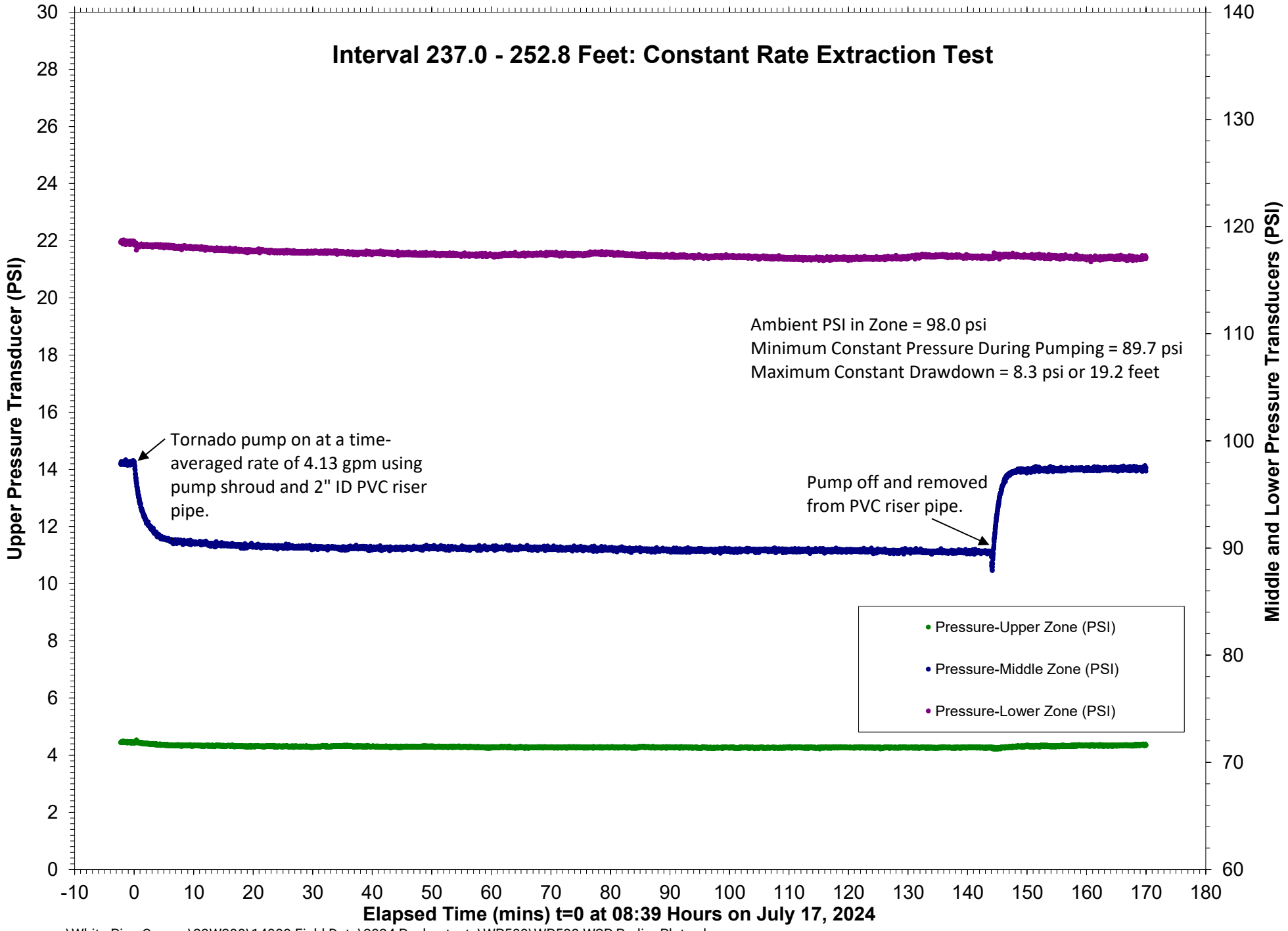
Saturated Thickness: 15.8 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

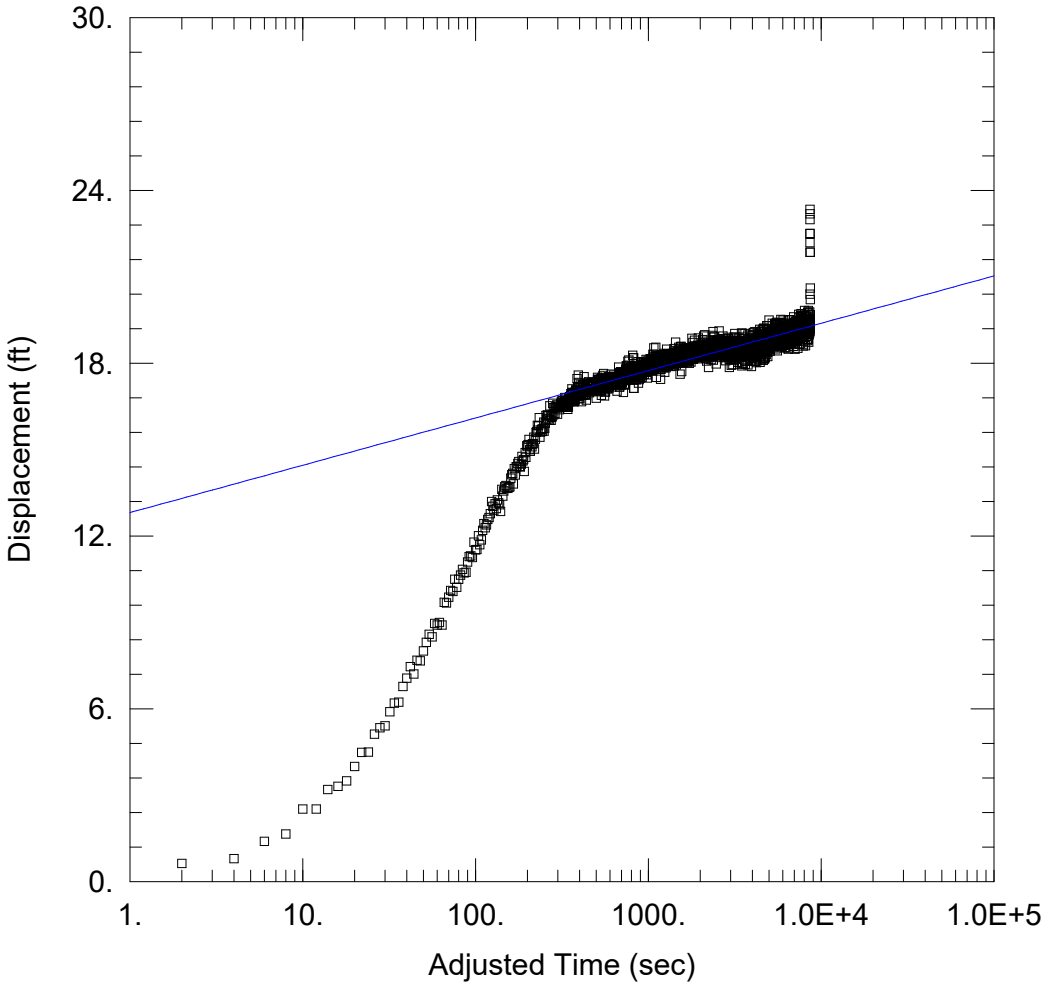
Aquifer Model: Confined Solution Method: Theis (Recovery)

T = 0.5306 cm^2/sec S/S' = 0.7943

FIGURE WP588:5B. Pressure Data During Wireline Straddle Packer Testing at 237.0 to 252.8 Feet, Constant Rate Extraction Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP588



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP588\WP588 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-588 237-252..8 CRE CJ.aqt
Date: 02/12/25 Time: 22:55:35

PROJECT INFORMATION

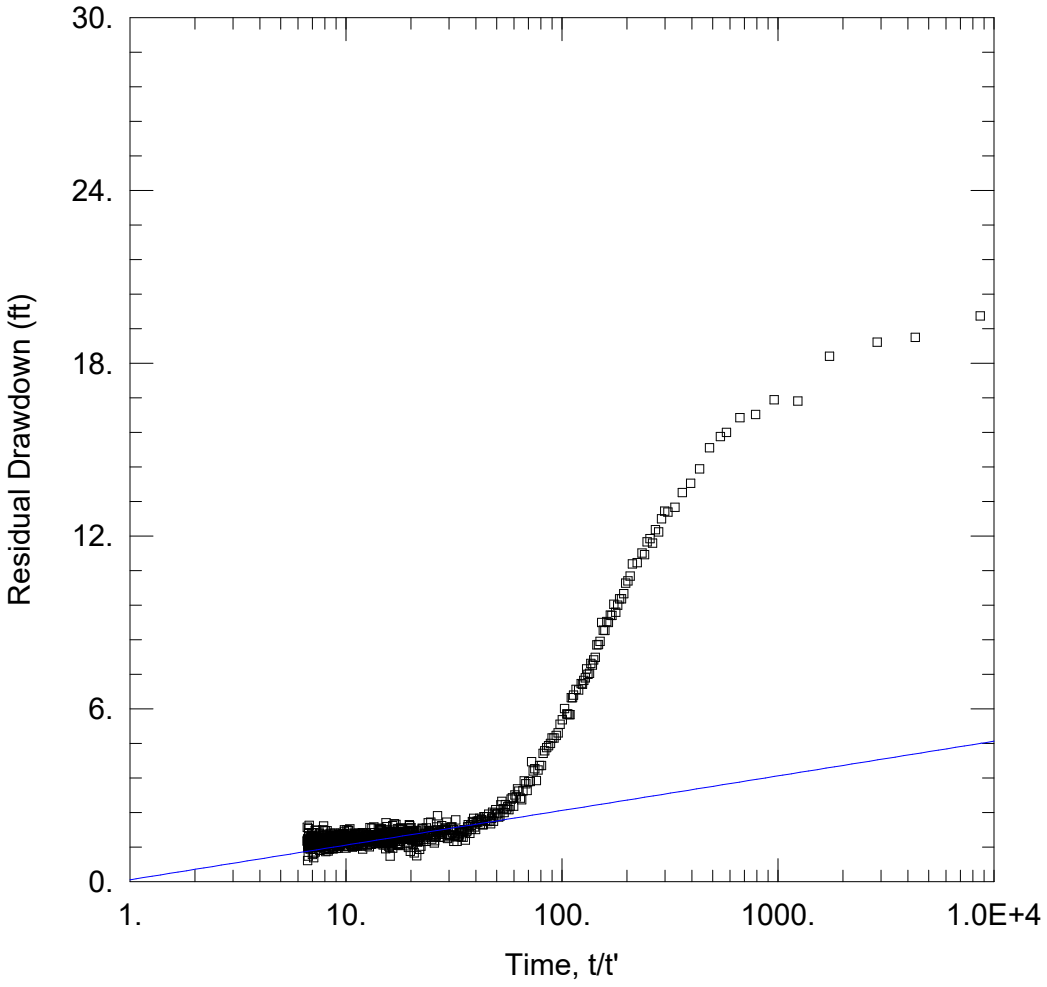
Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-588

AQUIFER DATA

Saturated Thickness: 15.8 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob
T = 0.9531 cm^2/sec S = 1.495E-9



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-588 237-252..8 CRE theis recovery.aqt
Date: 02/12/25 Time: 23:07:43

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-588

AQUIFER DATA

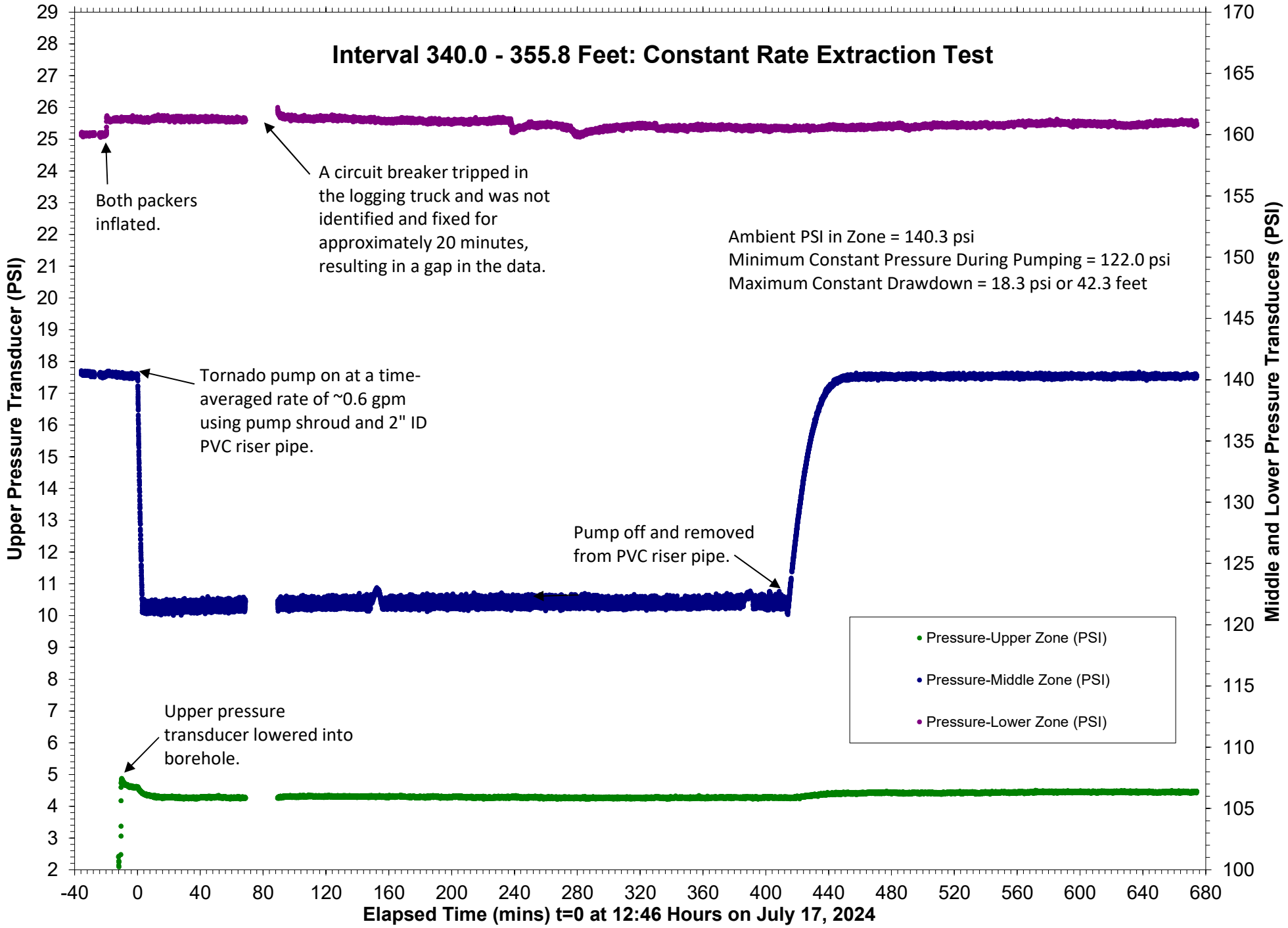
Saturated Thickness: 15.8 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

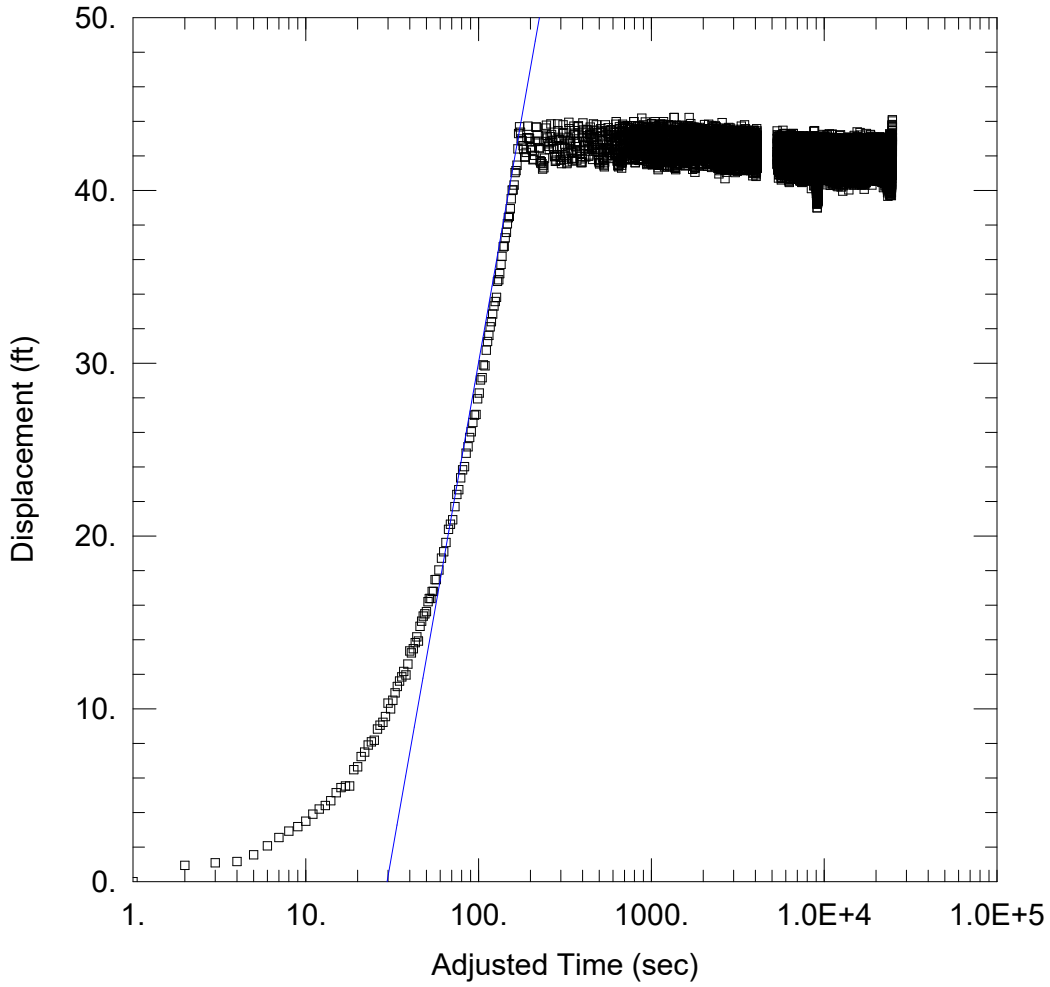
Aquifer Model: Confined Solution Method: Theis (Recovery)

T = 1.303 cm^2/sec S/S' = 0.8907

FIGURE WP588:5C Pressure Data During Wireline Straddle Packer Testing at 340.0 to 355.8 Feet, Constant Rate Extraction Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP588



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP588\WP588 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-588 340-355.8 CRE CJ.aqt
Date: 02/12/25 Time: 23:25:42

PROJECT INFORMATION

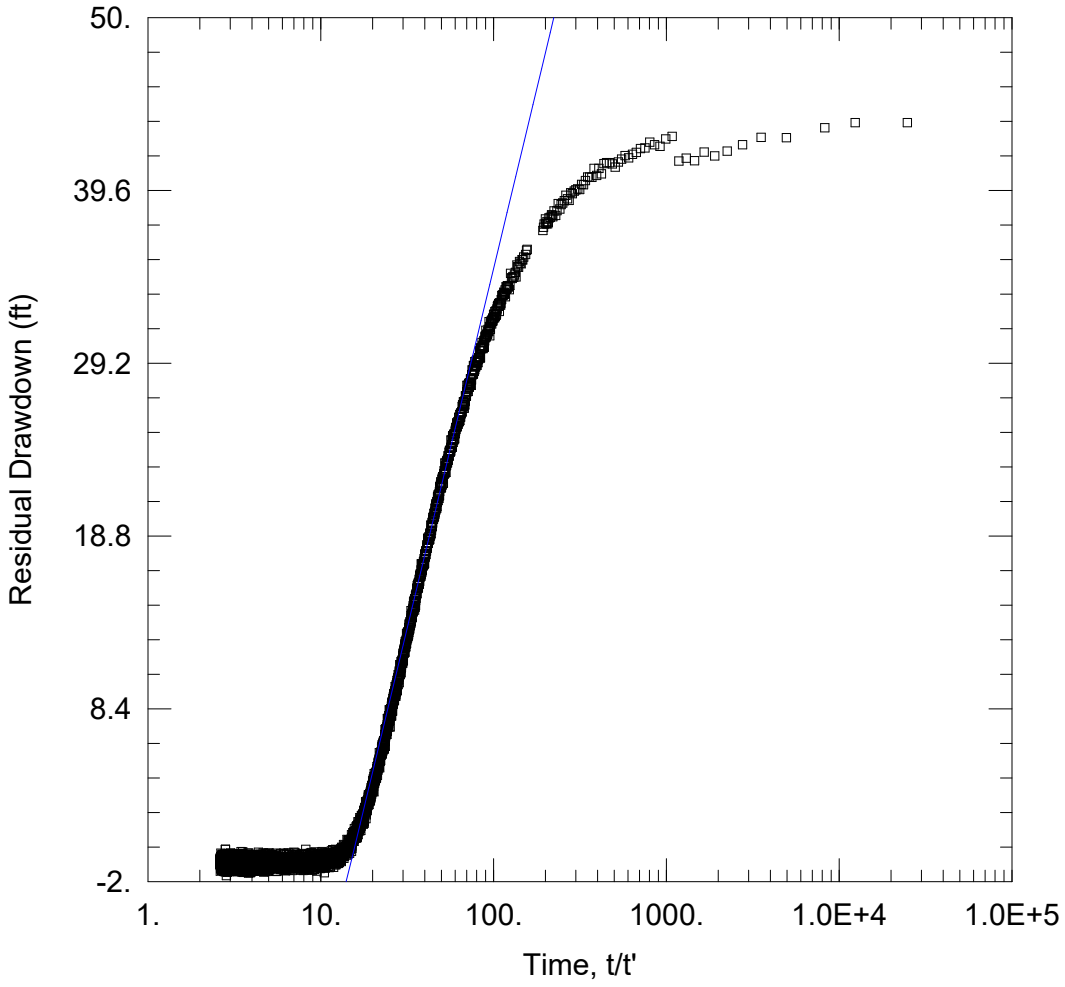
Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-588

AQUIFER DATA

Saturated Thickness: 15.8 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob
T = 0.004011 cm^2/sec S = 0.01155



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-588 340-355.8 CRE theis recovery.aqt
Date: 02/12/25 Time: 23:19:31

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-588

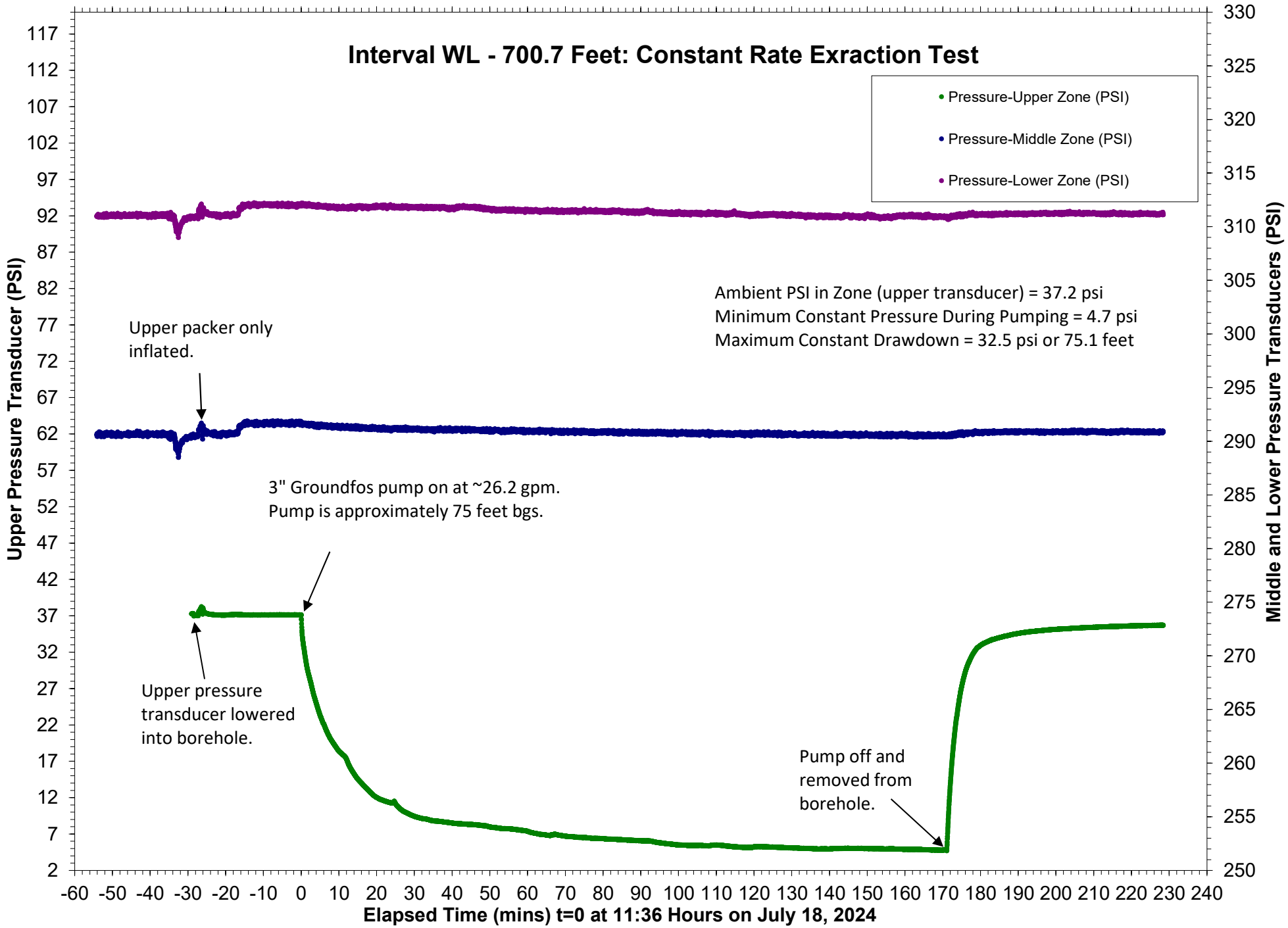
AQUIFER DATA

Saturated Thickness: 15.8 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

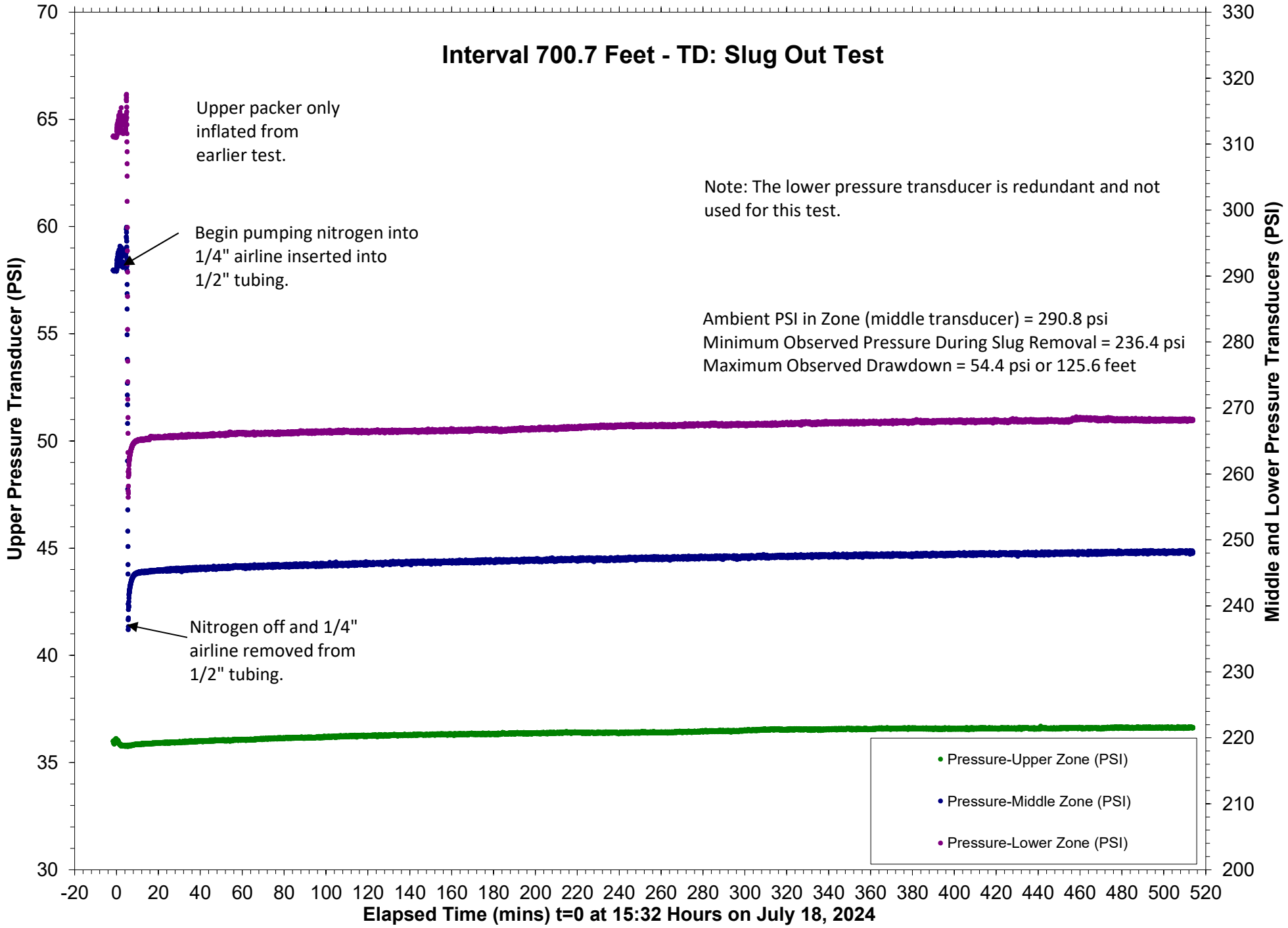
Aquifer Model: Confined Solution Method: Theis (Recovery)
T = 0.005259 cm^2/sec S/S' = 15.64

FIGURE WP588:5D Pressure Data During Wireline Straddle Packer Testing at Water Level to 700.7 Feet, Constant Rate Extraction Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP588



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP588\WP588 WSP Prelim Plots.xlsx

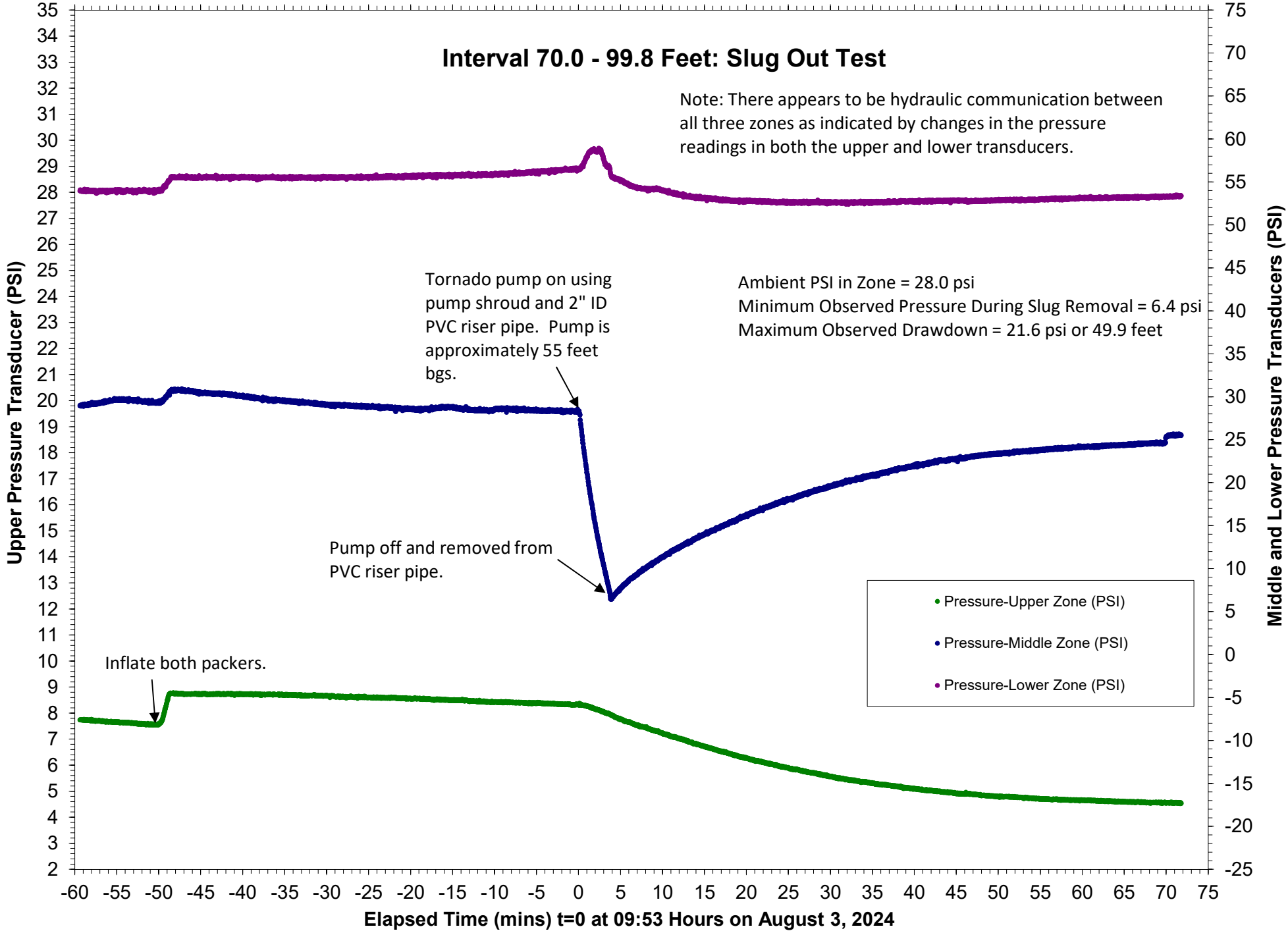
FIGURE WP588:5E Pressure Data During Wireline Straddle Packer Testing at 700.7 Feet to Total Depth, Slug Out Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP588



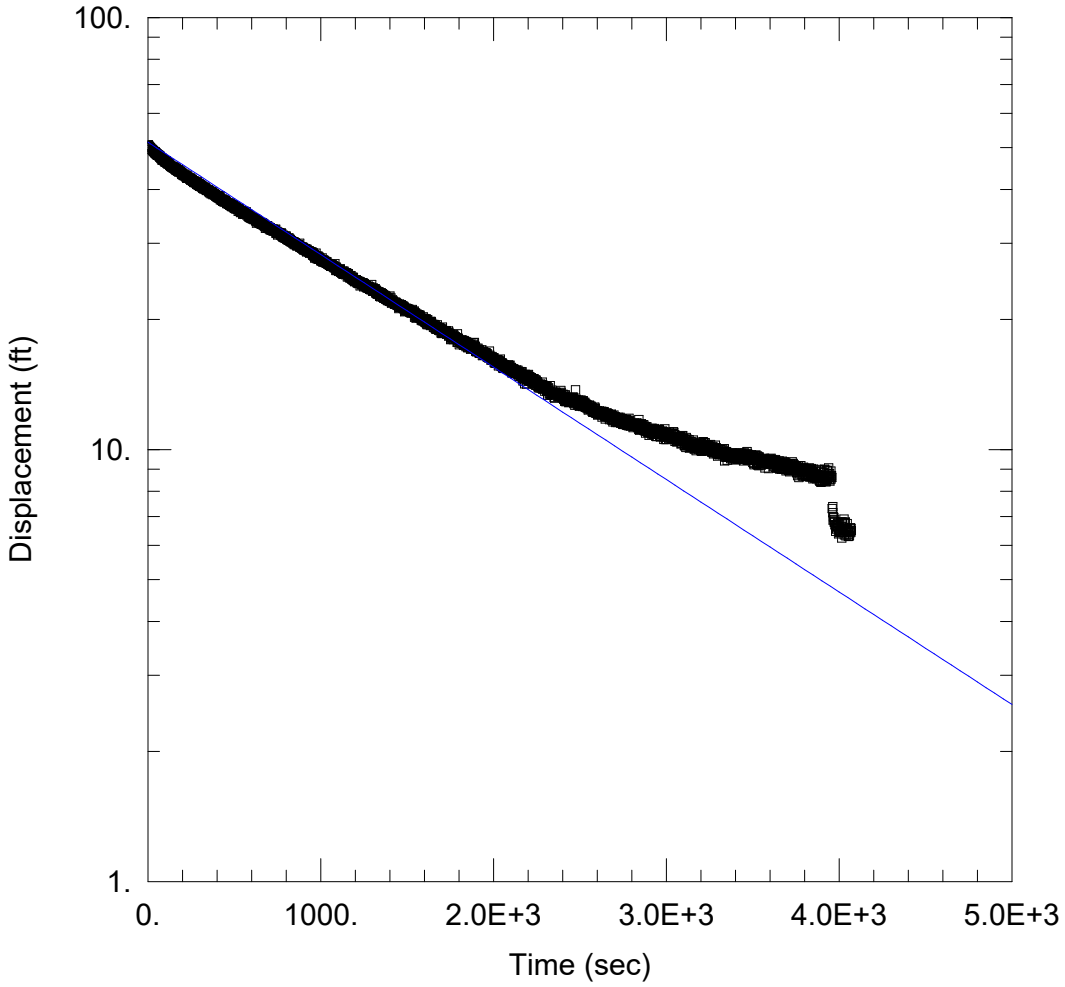
pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP588\WP588 WSP Prelim Plots.xlsx

WP-592 - Test Hydrographs and Analyses

FIGURE WP592:5A. Pressure Data During Wireline Straddle Packer Testing at 70.0 to 99.8 Feet, Slug Out Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP592



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP592\WP592 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-592 70-99.8 slug out BR.aqt
Date: 02/13/25 Time: 20:31:48

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-592

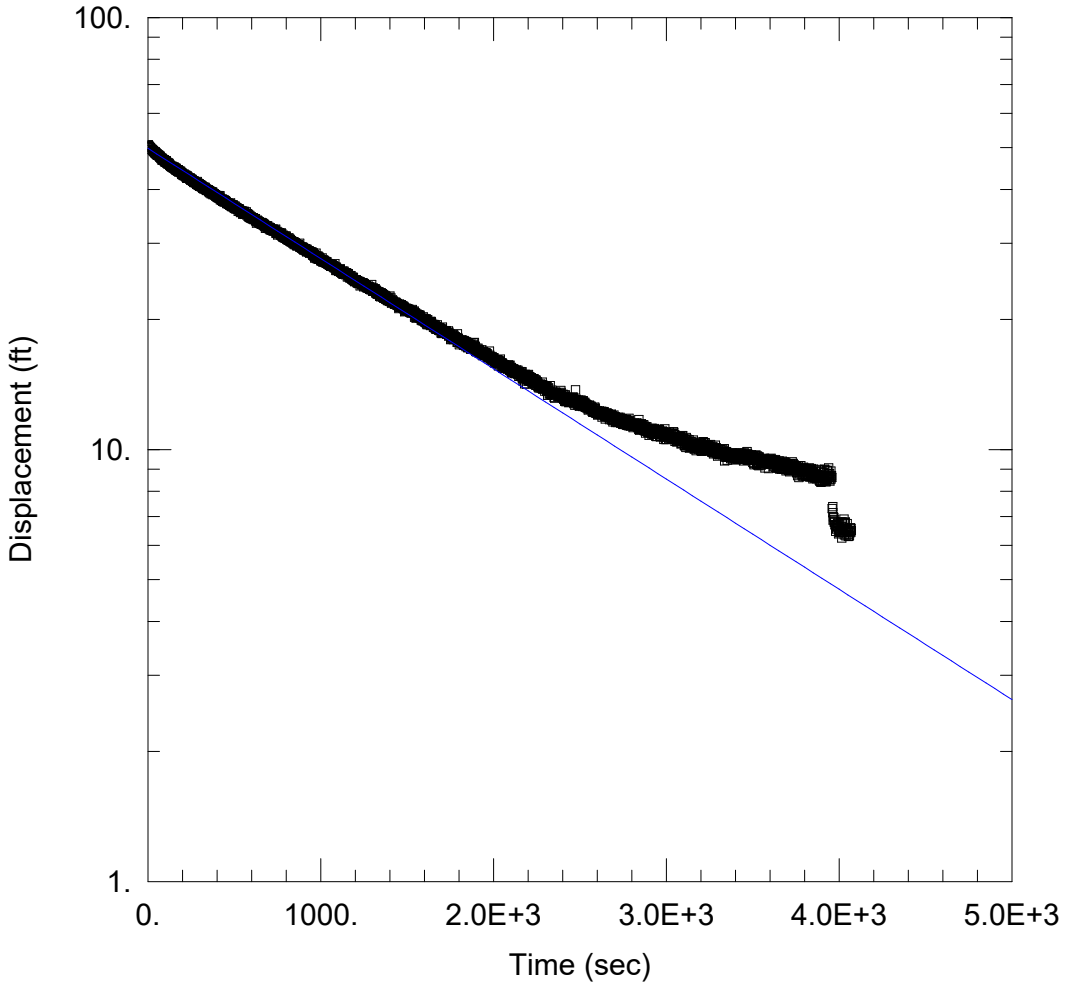
AQUIFER DATA

Saturated Thickness: 29.8 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 7.793E-6 cm/sec y0 = 51.46 ft



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-592 70-99.8 slug out HV.aqt
Date: 02/13/25 Time: 20:38:25

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-592

AQUIFER DATA

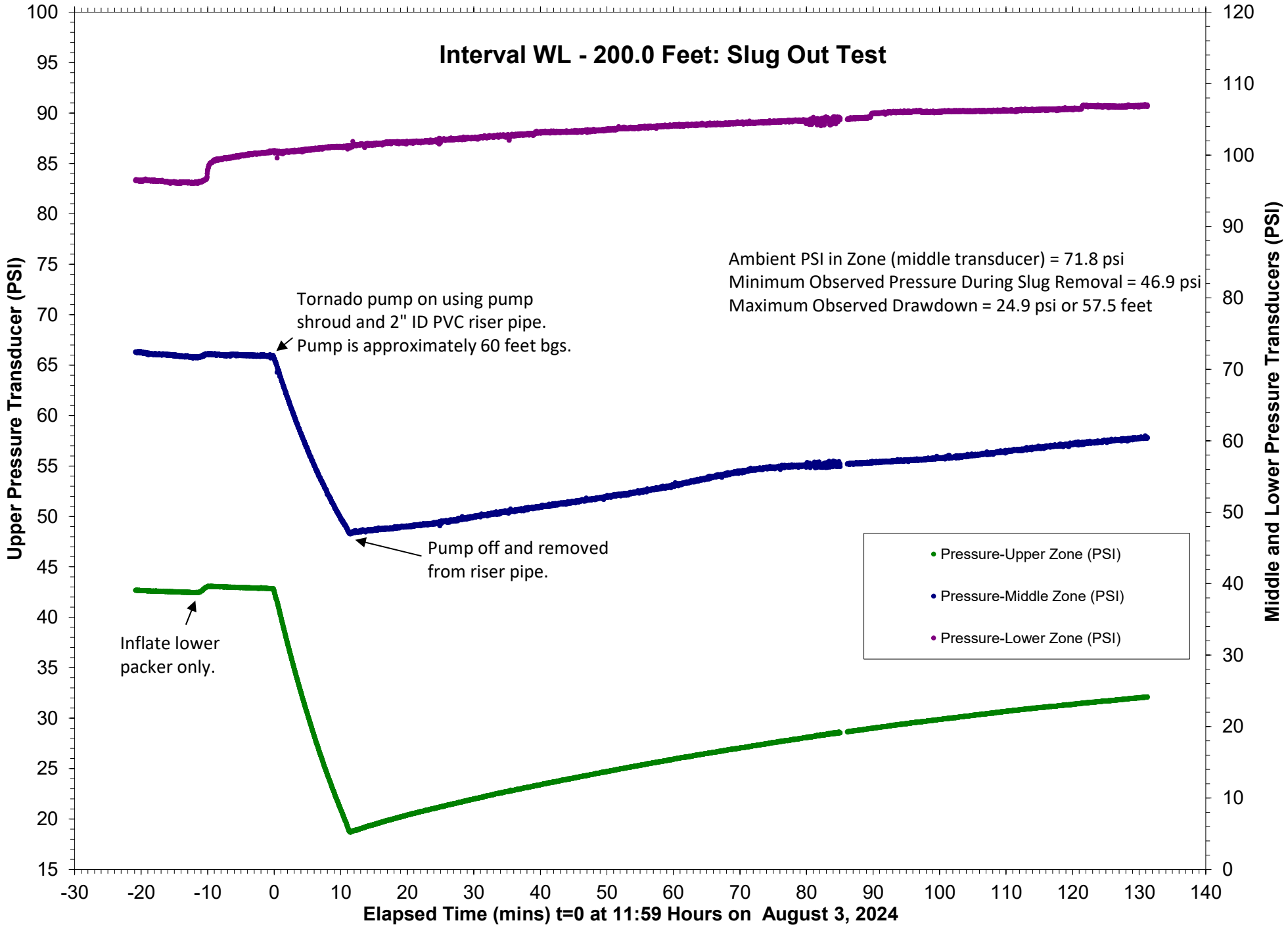
Saturated Thickness: 29.8 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

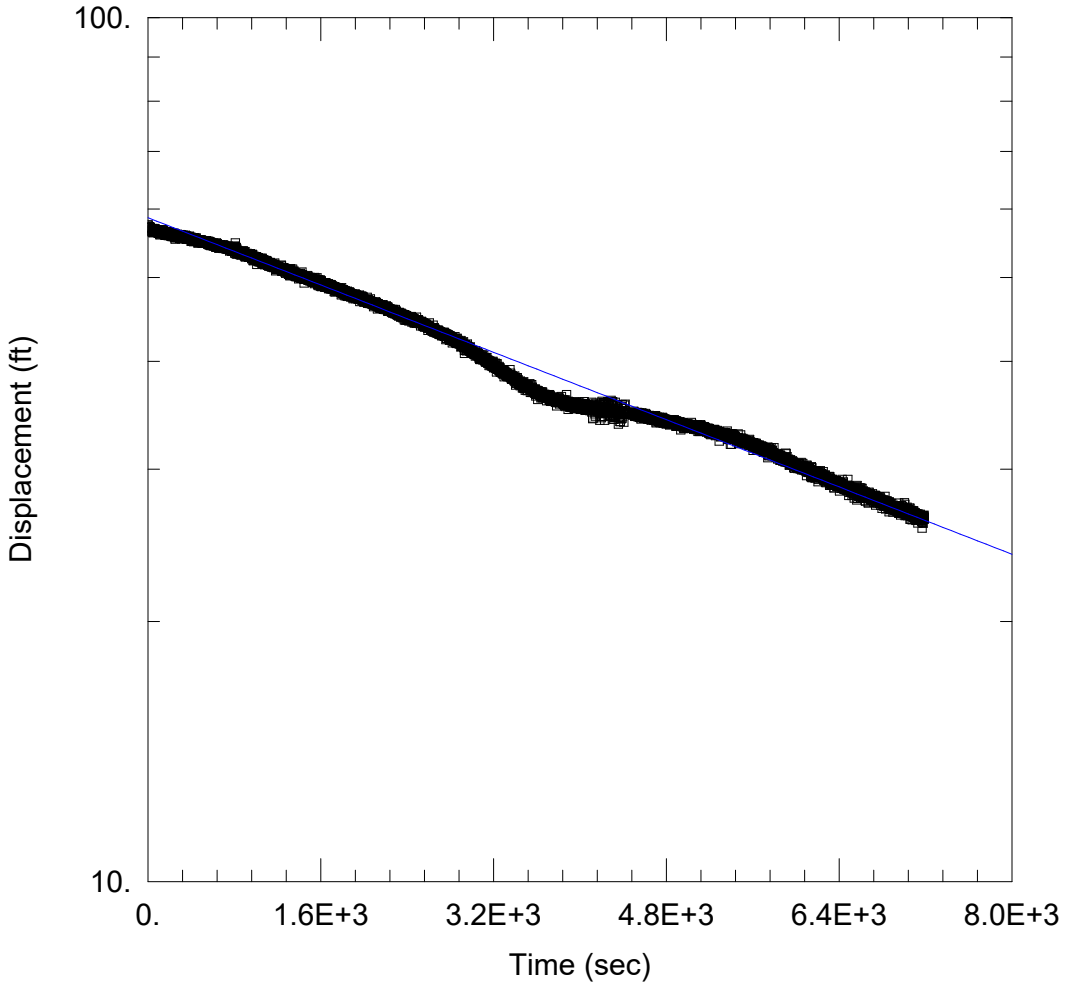
Aquifer Model: Confined Solution Method: Hvorslev

K = 9.919E-6 cm/sec y0 = 49.79 ft

FIGURE WP592:5B. Pressure Data During Wireline Straddle Packer Testing at Water Level to 200.0 Feet, Slug Out Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP592



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP592\WP592 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-592 WL-200 slug out BR.aqt
Date: 02/13/25 Time: 21:11:09

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-592

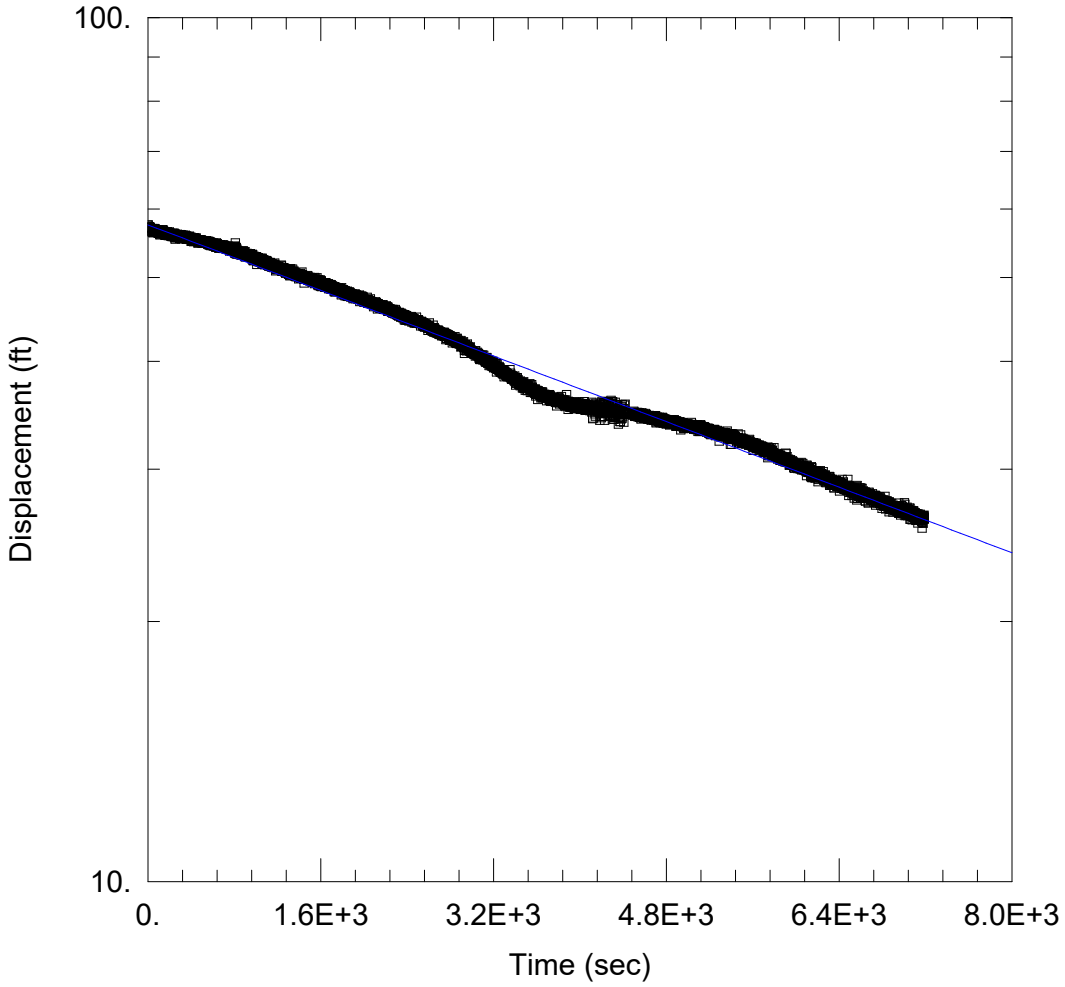
AQUIFER DATA

Saturated Thickness: 131.5 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 4.55E-7 cm/sec y0 = 58.66 ft



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-592 WL-200 slug out HV.aqt
Date: 02/13/25 Time: 21:12:25

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-592

AQUIFER DATA

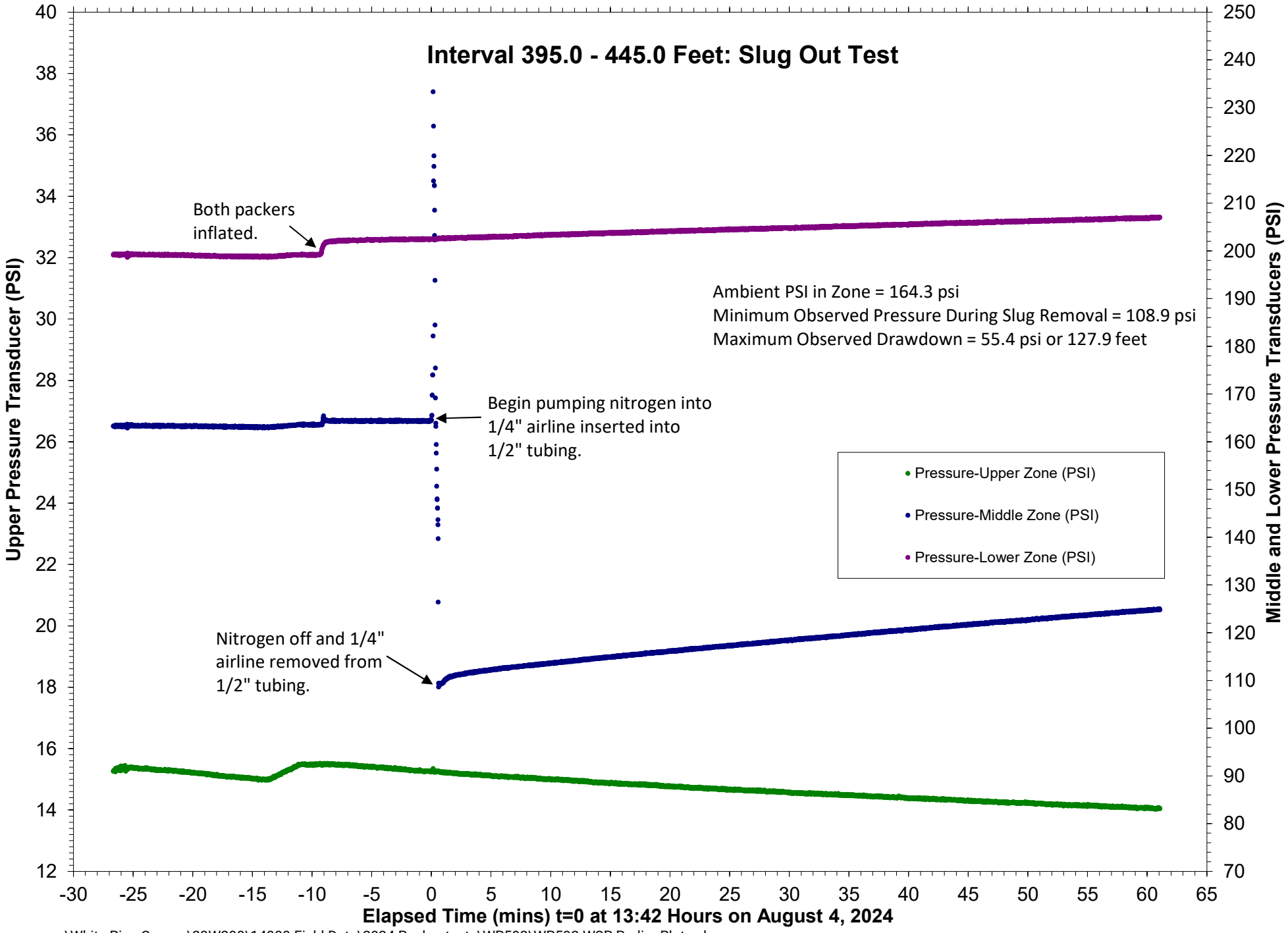
Saturated Thickness: 131.5 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

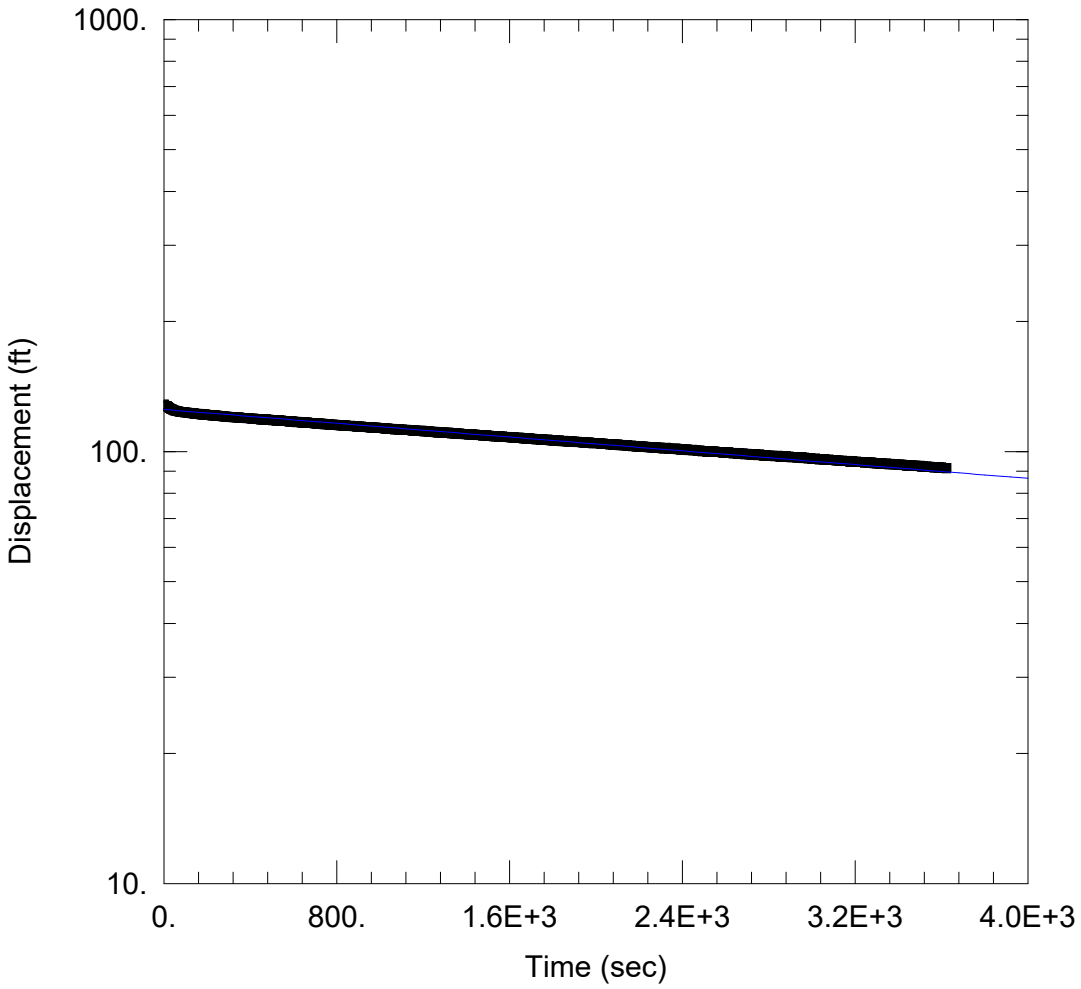
Aquifer Model: Confined Solution Method: Hvorslev

K = 4.18E-7 cm/sec y0 = 57.54 ft

FIGURE WP592:5C Pressure Data During Wireline Straddle Packer Testing at 395.0 to 445.0 Feet, Slug Out Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP592



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP592\WP592 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-592 395-495 slug out BR.aqt
Date: 02/13/25 Time: 20:58:10

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-592

AQUIFER DATA

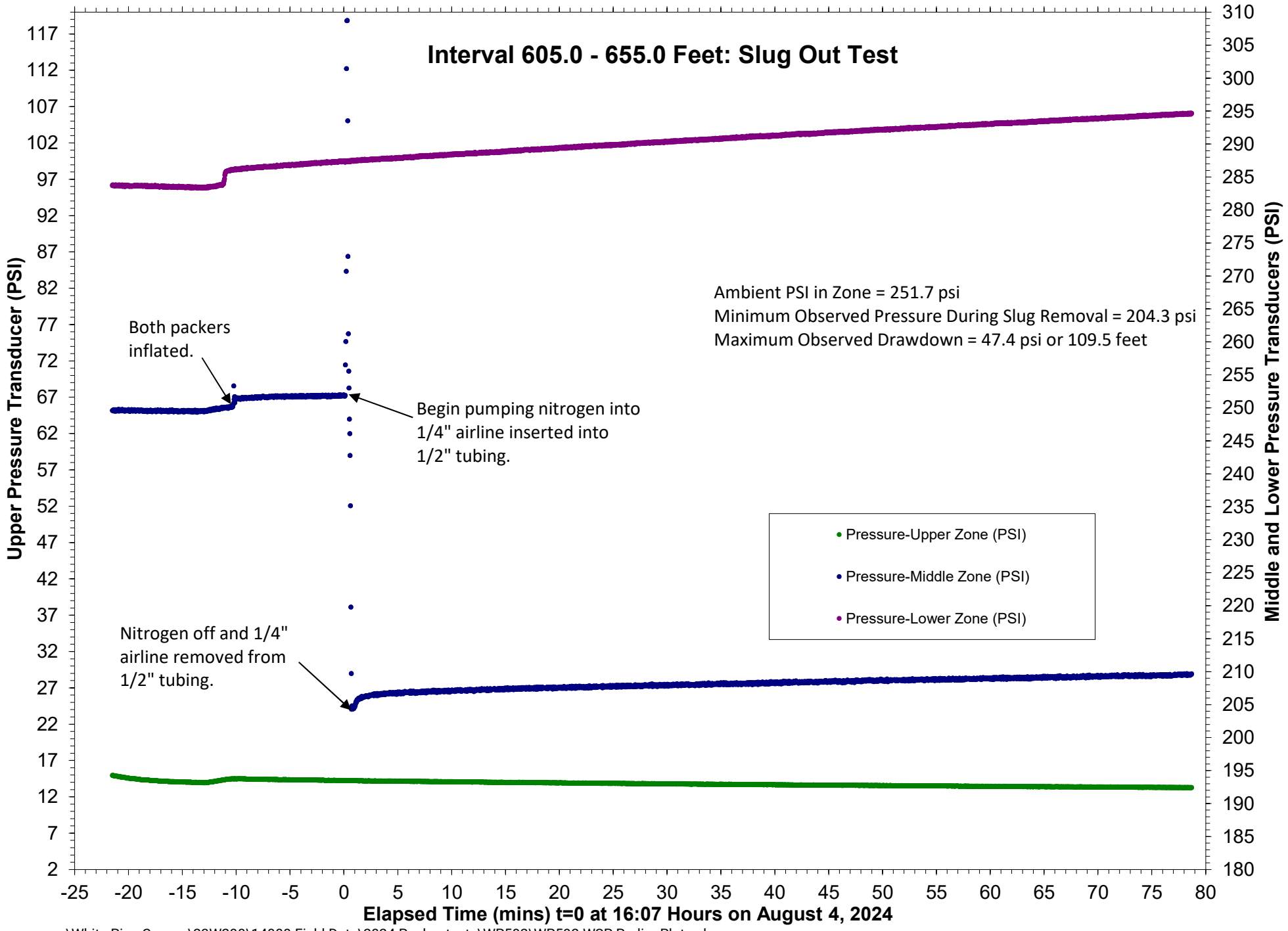
Saturated Thickness: 50. ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

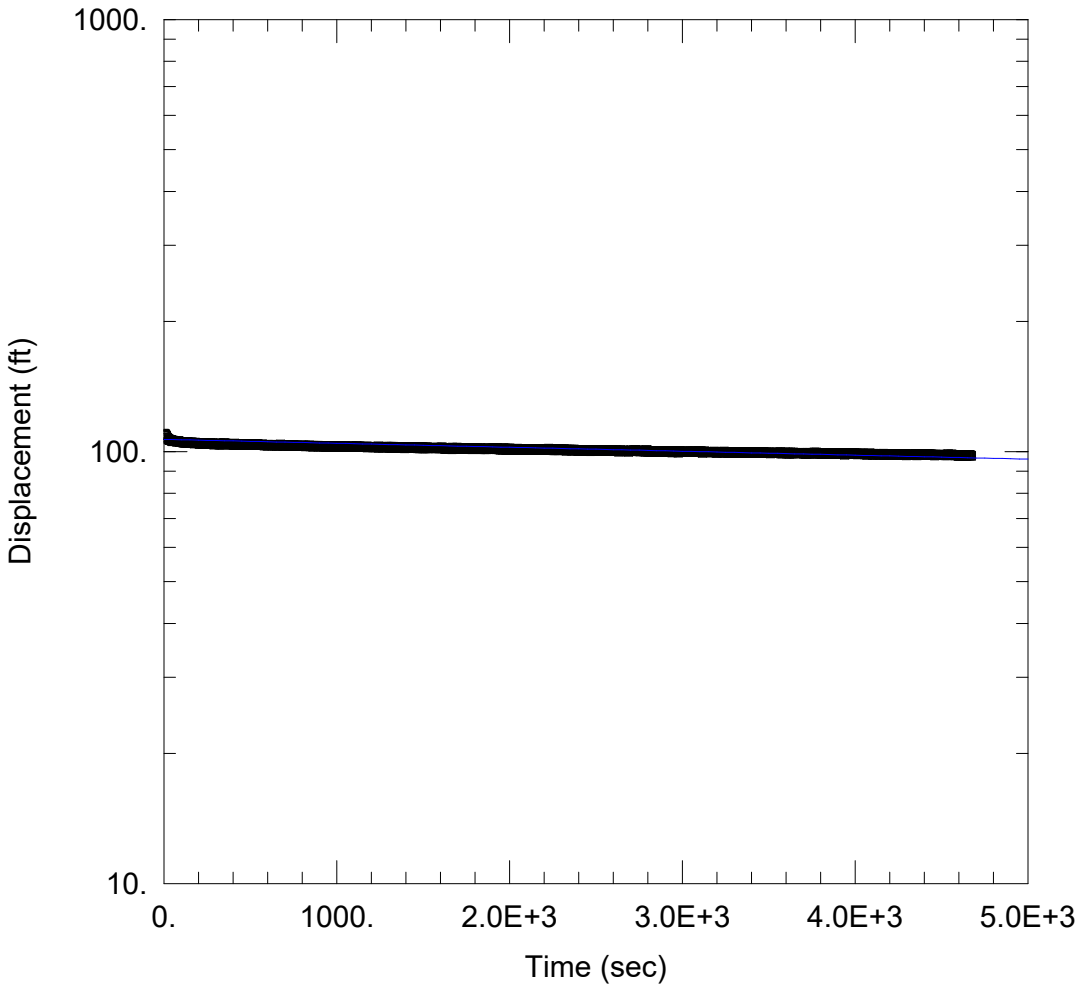
Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 5.745E-8 cm/sec y0 = 125.1 ft

FIGURE WP592:5D Pressure Data During Wireline Straddle Packer Testing at 605.0 to 655.0 Feet, Slug Out Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP592



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP592\WP592 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-592 605-655 slug out BR.aqt
Date: 02/13/25 Time: 20:52:23

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-592

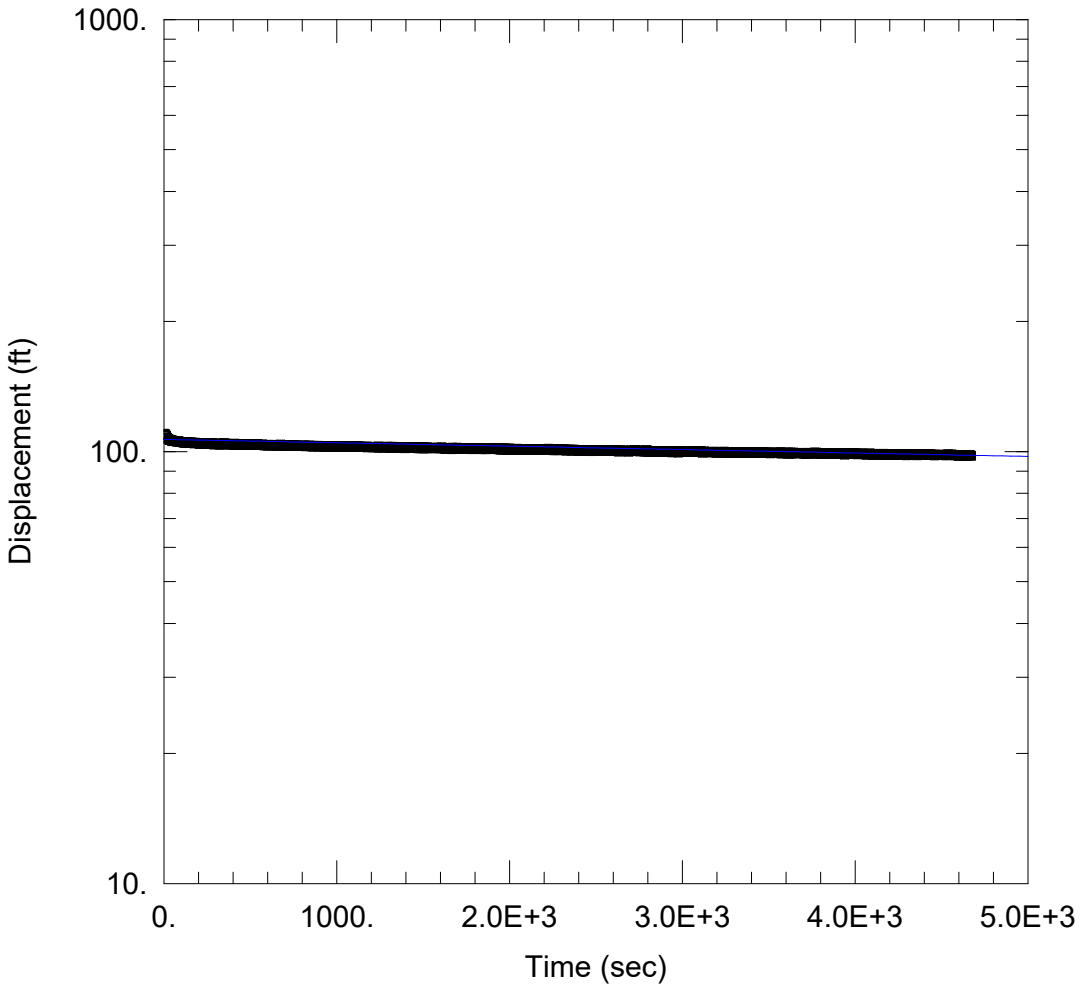
AQUIFER DATA

Saturated Thickness: 50. ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 1.318E-8 cm/sec y0 = 106.7 ft



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-592 605-655 slug out HV.aqt
Date: 02/13/25 Time: 20:55:32

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-592

AQUIFER DATA

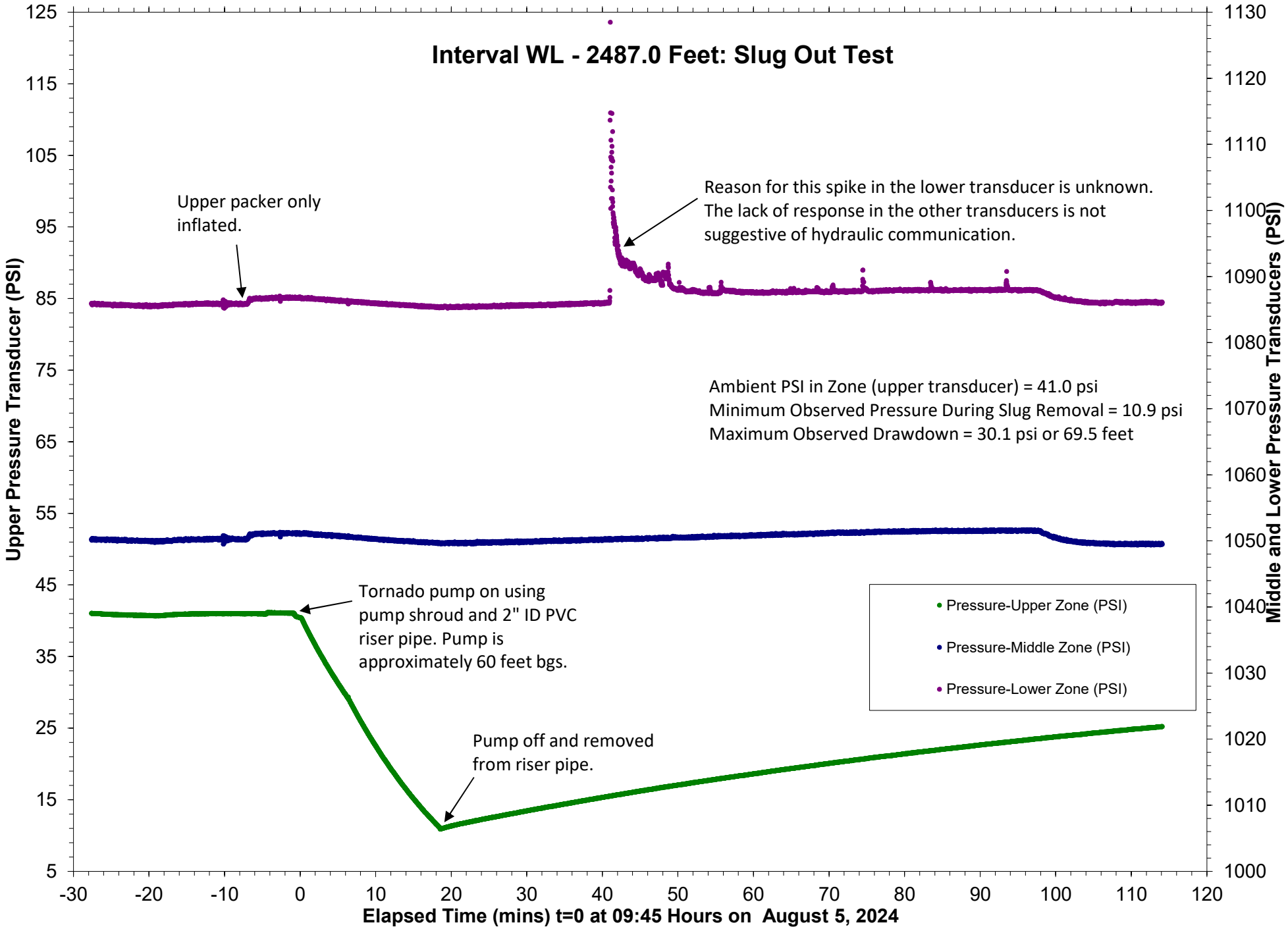
Saturated Thickness: 50. ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

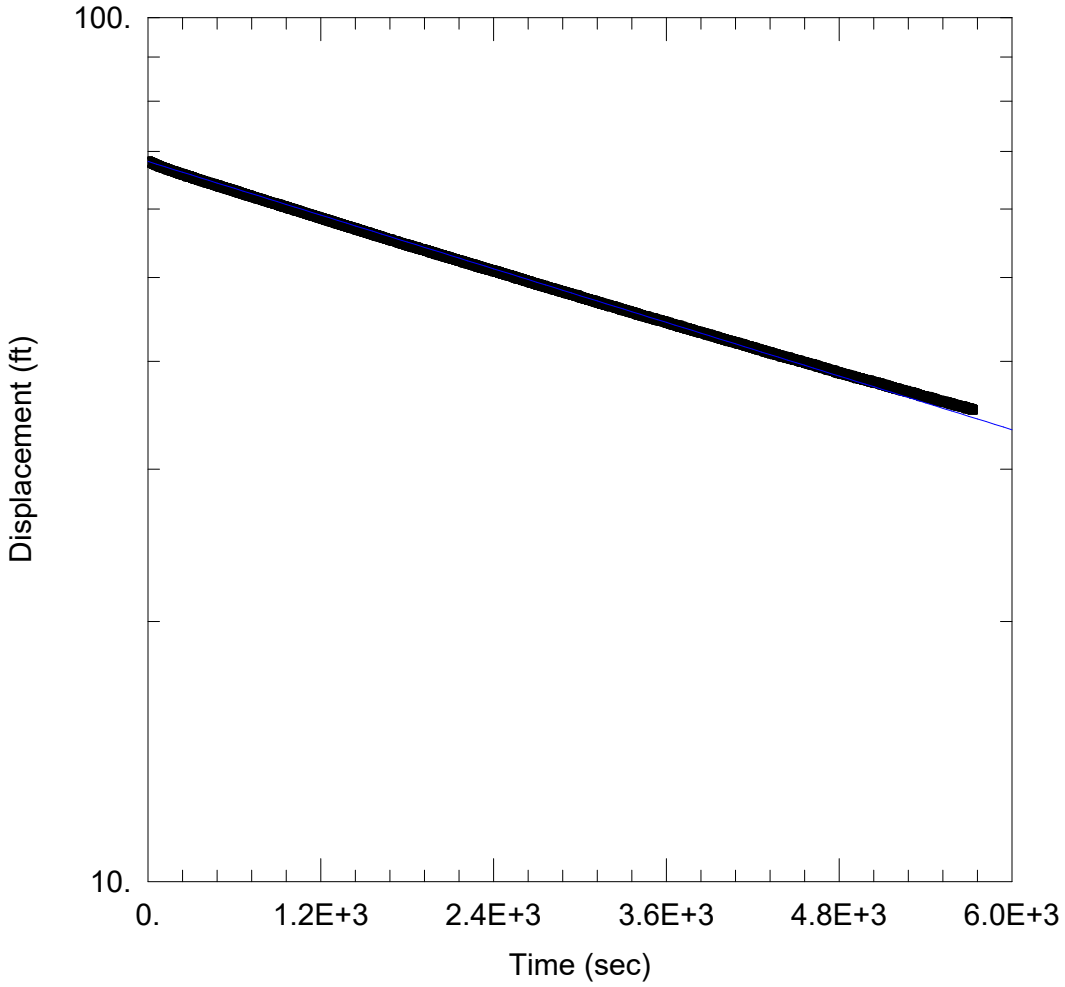
Aquifer Model: Confined Solution Method: Hvorslev

K = 1.318E-8 cm/sec y0 = 106.7 ft

FIGURE WP592:5E Pressure Data During Wireline Straddle Packer Testing at Water Level to 2487.0 Feet, Slug Out Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP592



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP592\WP592 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-592 WL-2487 slug out BR.aqt
Date: 02/13/25 Time: 21:15:08

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-592

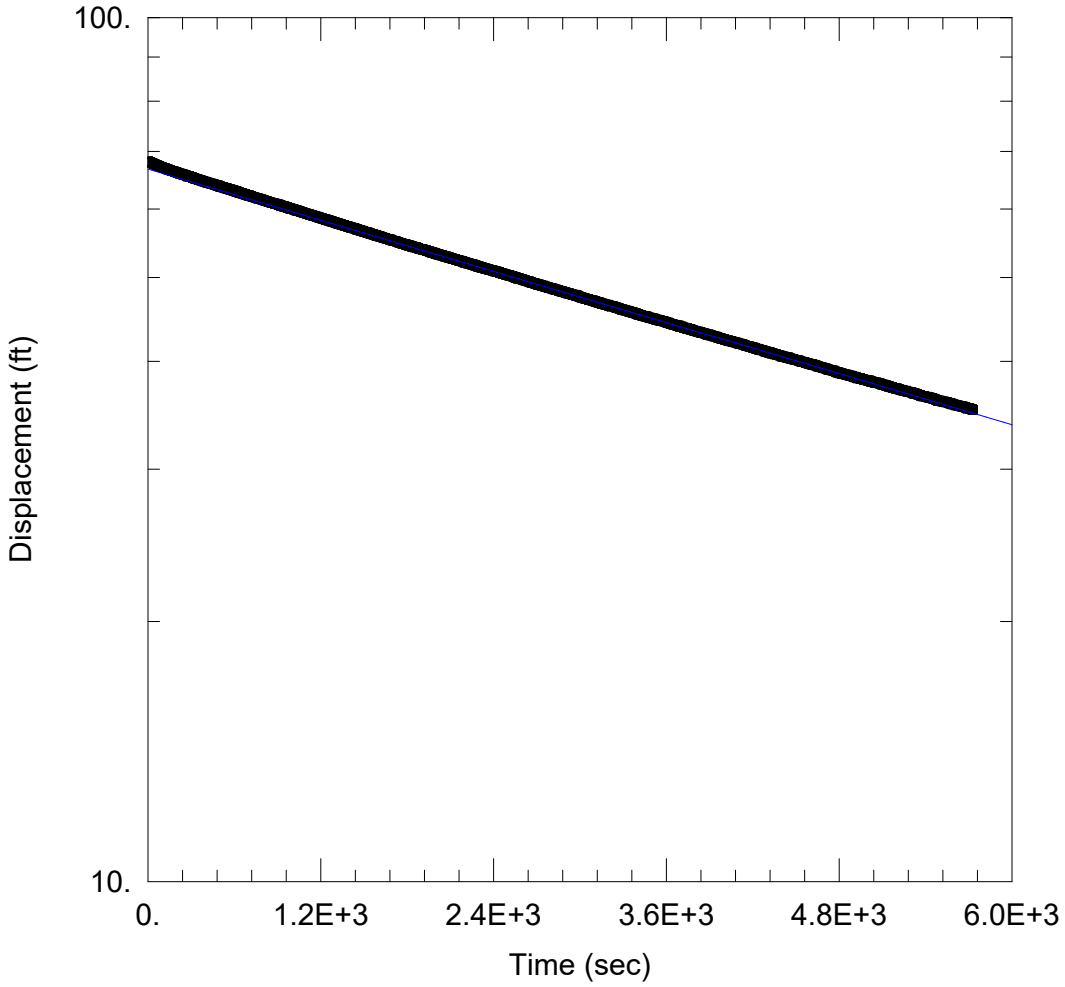
AQUIFER DATA

Saturated Thickness: 2418.5 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 4.01E-8 cm/sec y0 = 68.13 ft



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-592 WL-2487 slug out HV.aqt
Date: 02/13/25 Time: 21:18:11

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-592

AQUIFER DATA

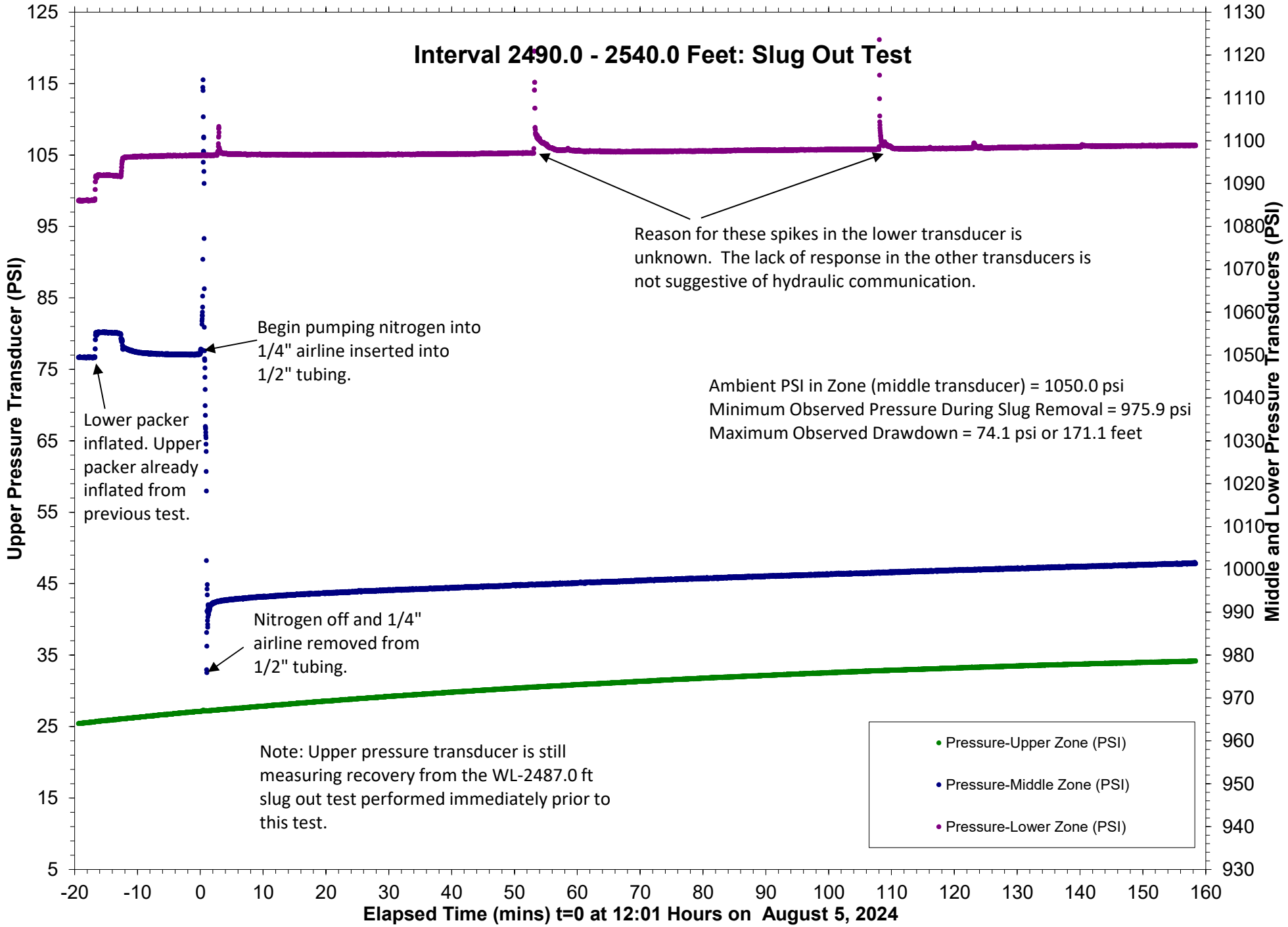
Saturated Thickness: 2418.5 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

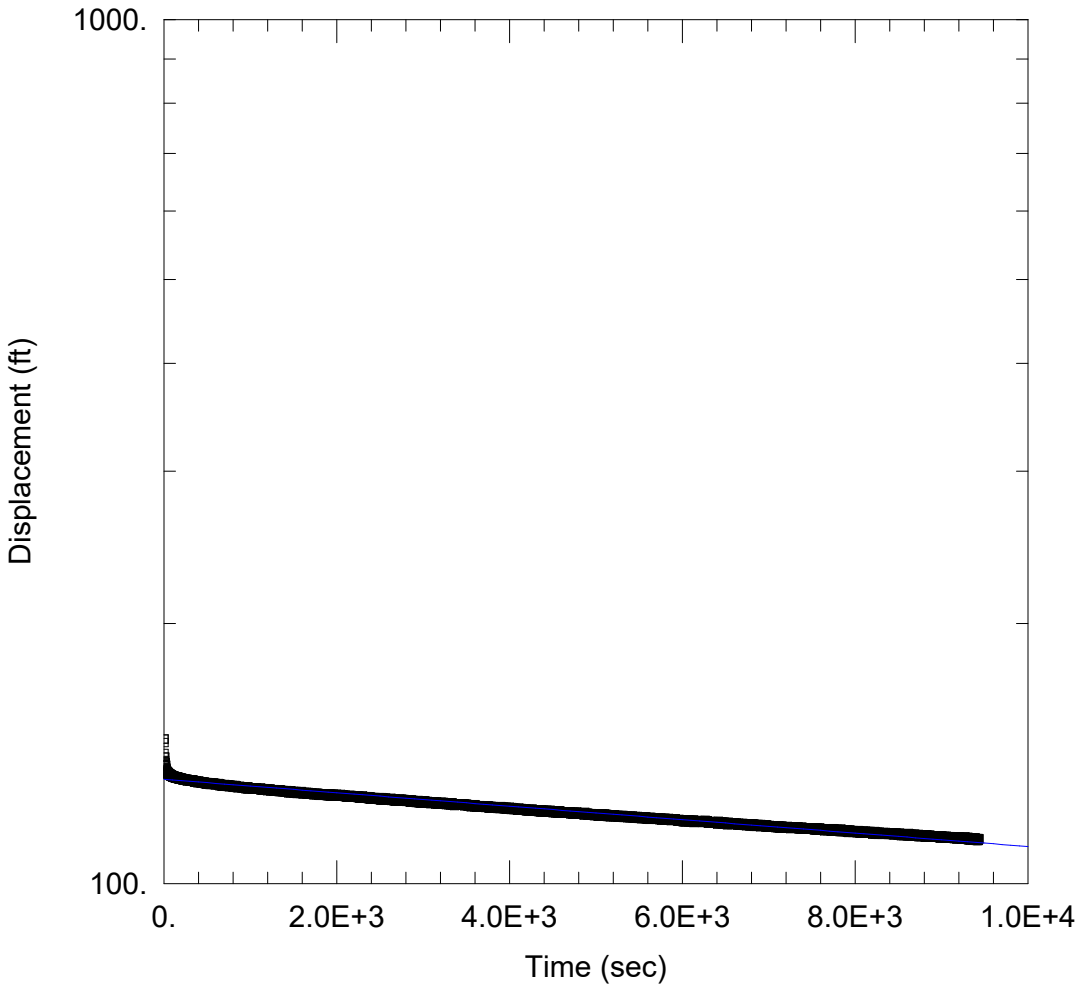
Aquifer Model: Confined Solution Method: Hvorslev

K = 2.361E-8 cm/sec y0 = 66.75 ft

FIGURE WP592:5F Pressure Data During Wireline Straddle Packer Testing at 2490.0 to 2540.0 Feet, Slug Out Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP592



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP592\WP592 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-592 2490-2540 slug out BR.aqt
Date: 02/13/25 Time: 22:15:54

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-592

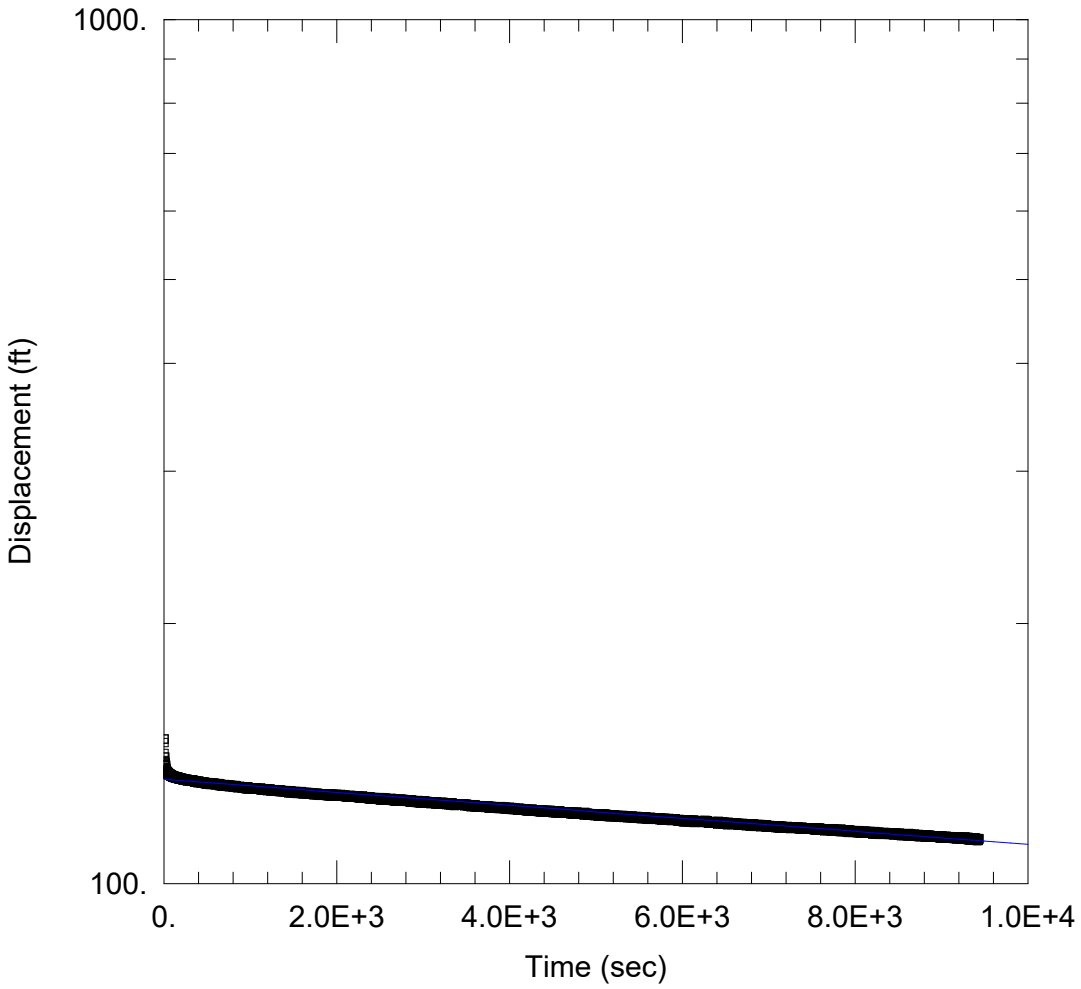
AQUIFER DATA

Saturated Thickness: 50. ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 1.121E-8 cm/sec y0 = 132. ft



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-592 2490-2540 slug out hv.aqt
Date: 02/13/25 Time: 22:01:59

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-592

AQUIFER DATA

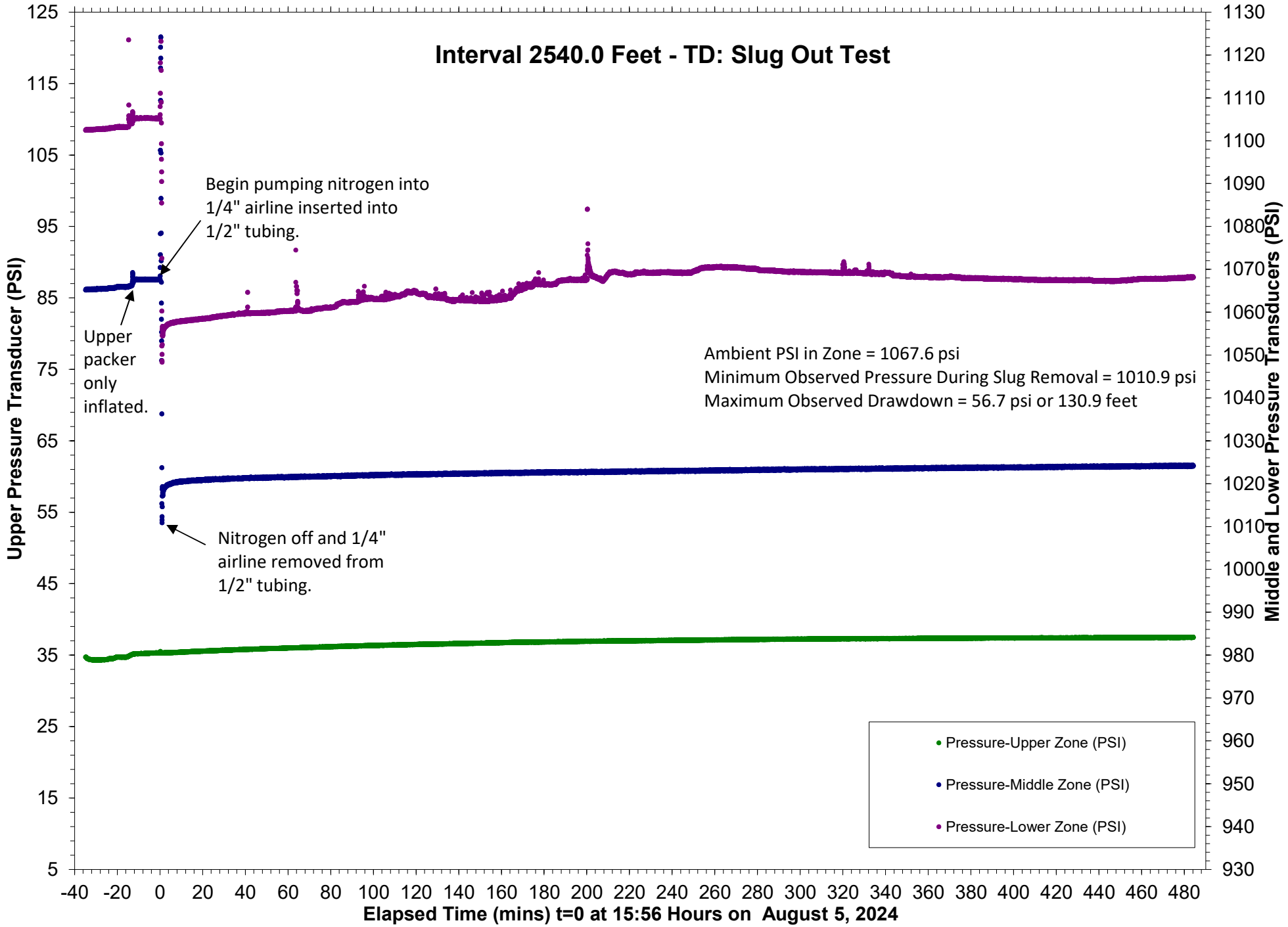
Saturated Thickness: 50. ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

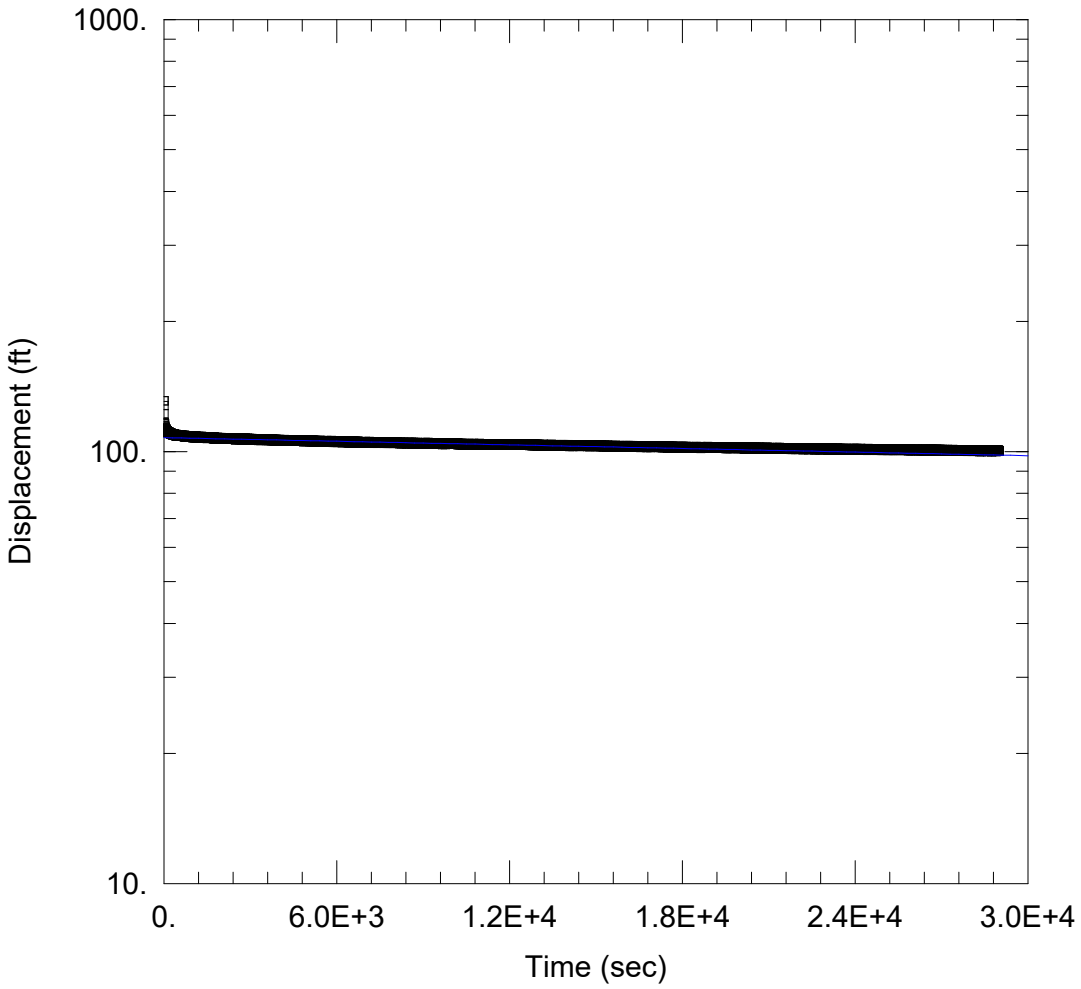
Aquifer Model: Confined Solution Method: Hvorslev

K = 1.257E-8 cm/sec y0 = 132. ft

FIGURE WP592:5G Pressure Data During Wireline Straddle Packer Testing at 2540.0 Feet to Total Depth, Slug Out Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP592



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP592\WP592 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-592 2540-TD slug out BR.aqt
Date: 02/13/25 Time: 21:53:40

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-592

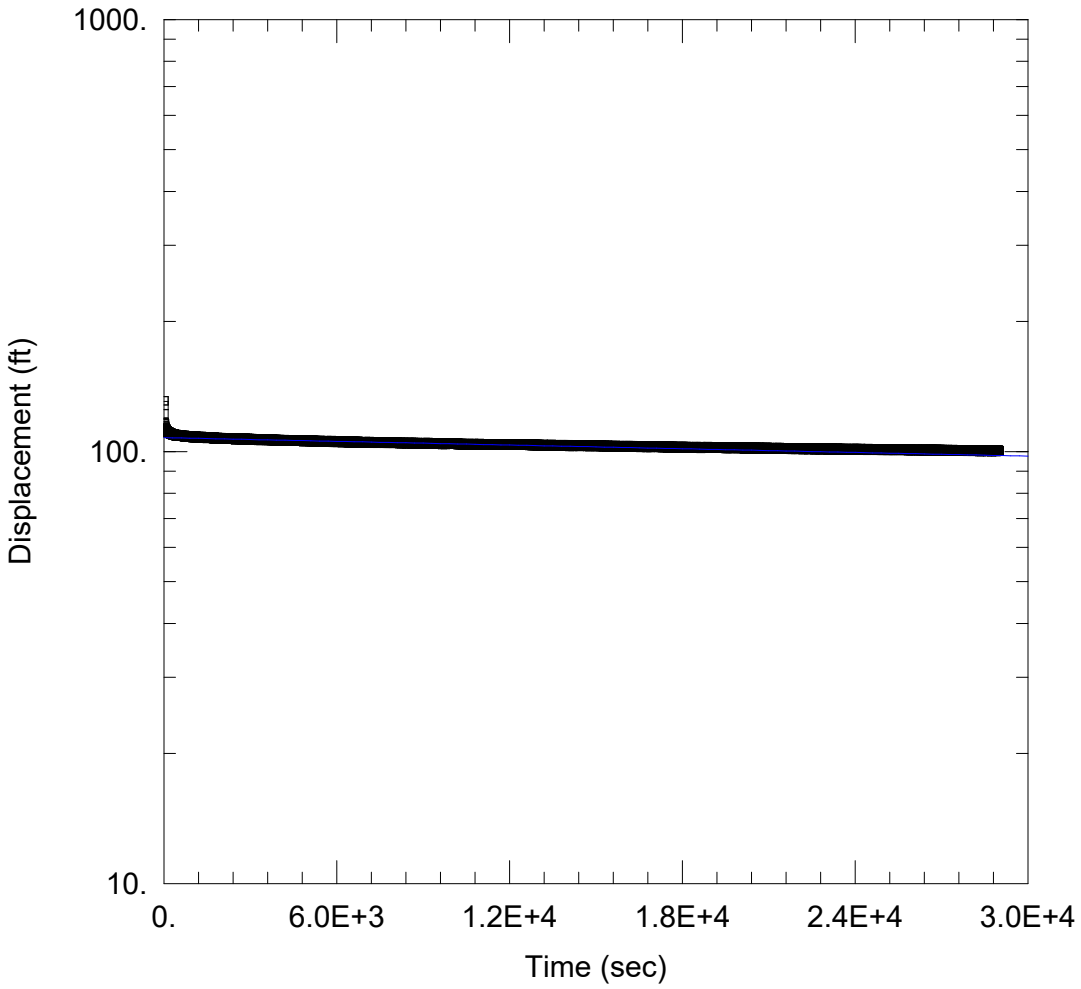
AQUIFER DATA

Saturated Thickness: 728. ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 2.262E-10 cm/sec y0 = 107.7 ft



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-592 2540-TD slug out HV.aqt
Date: 02/13/25 Time: 21:49:47

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-592

AQUIFER DATA

Saturated Thickness: 728. ft Anisotropy Ratio (Kz/Kr): 1.

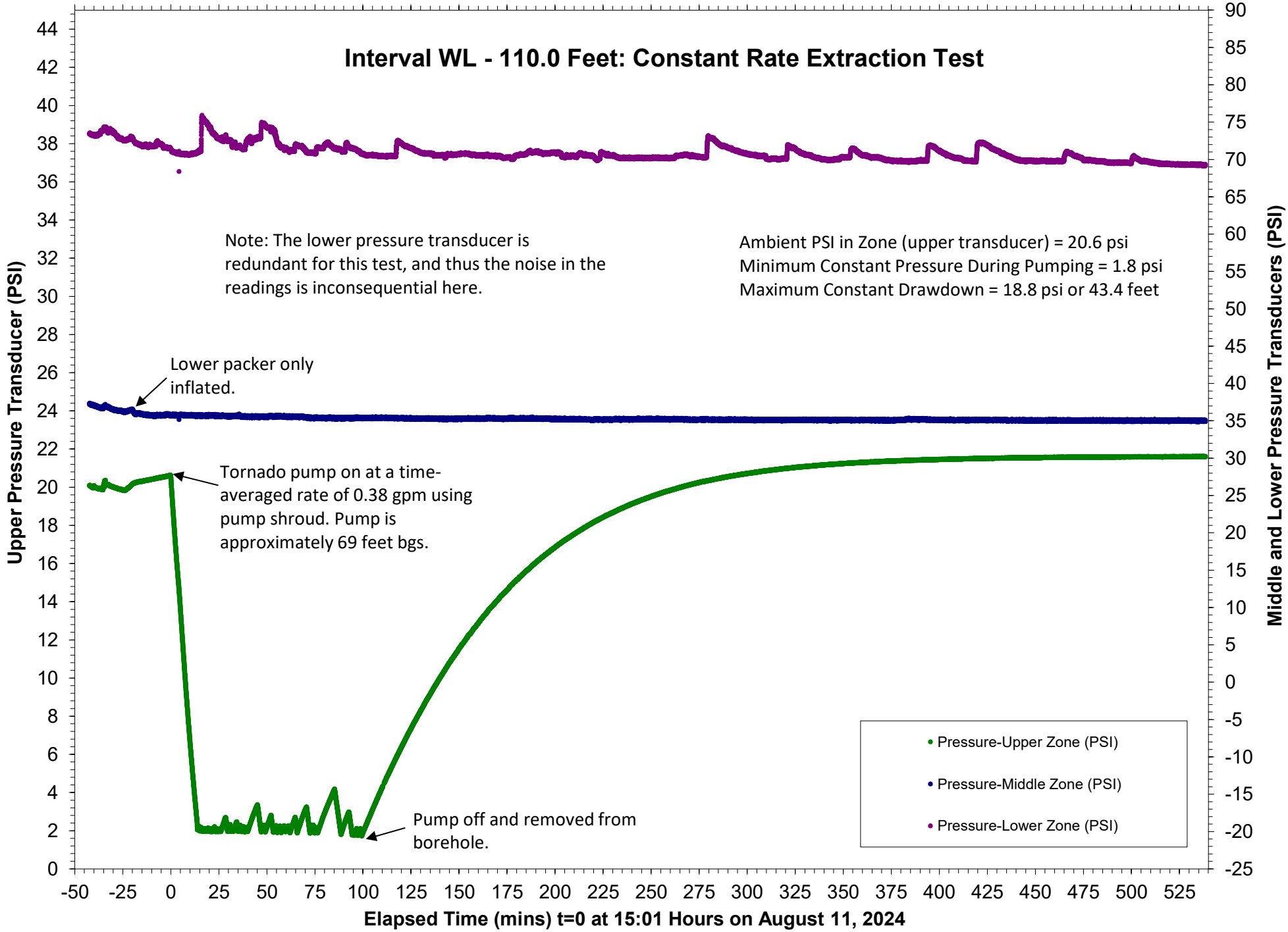
SOLUTION

Aquifer Model: Confined Solution Method: Hvorslev

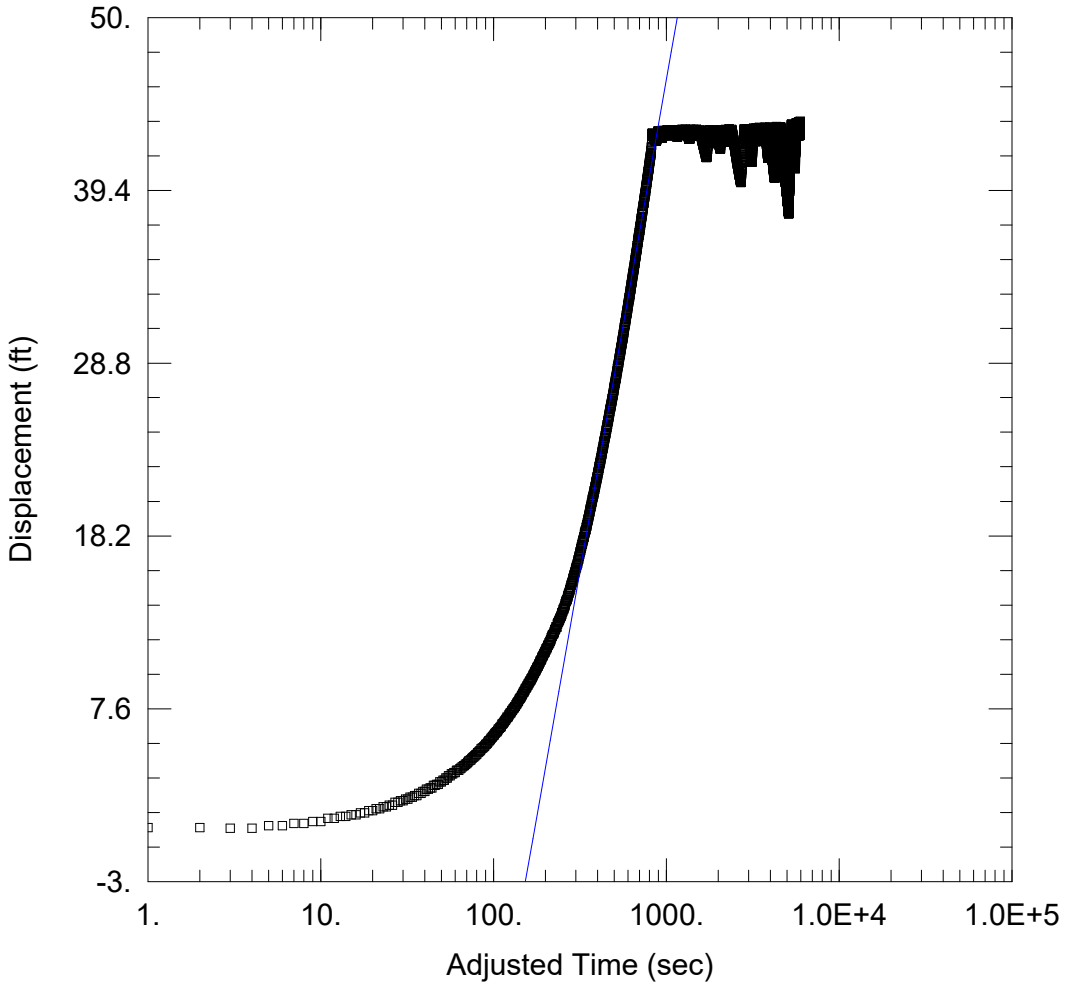
K = 1.638E-10 cm/sec y0 = 107.7 ft

WP-594 - Test Hydrographs and Analyses

FIGURE WP594:5A. Pressure Data During Wireline Straddle Packer Testing at Water Level to 110.0 Feet, Constant Rate Extraction Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP594



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP594\WP594 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-594 WL-110 CRE CJ.aqt
Date: 02/13/25 Time: 23:29:06

PROJECT INFORMATION

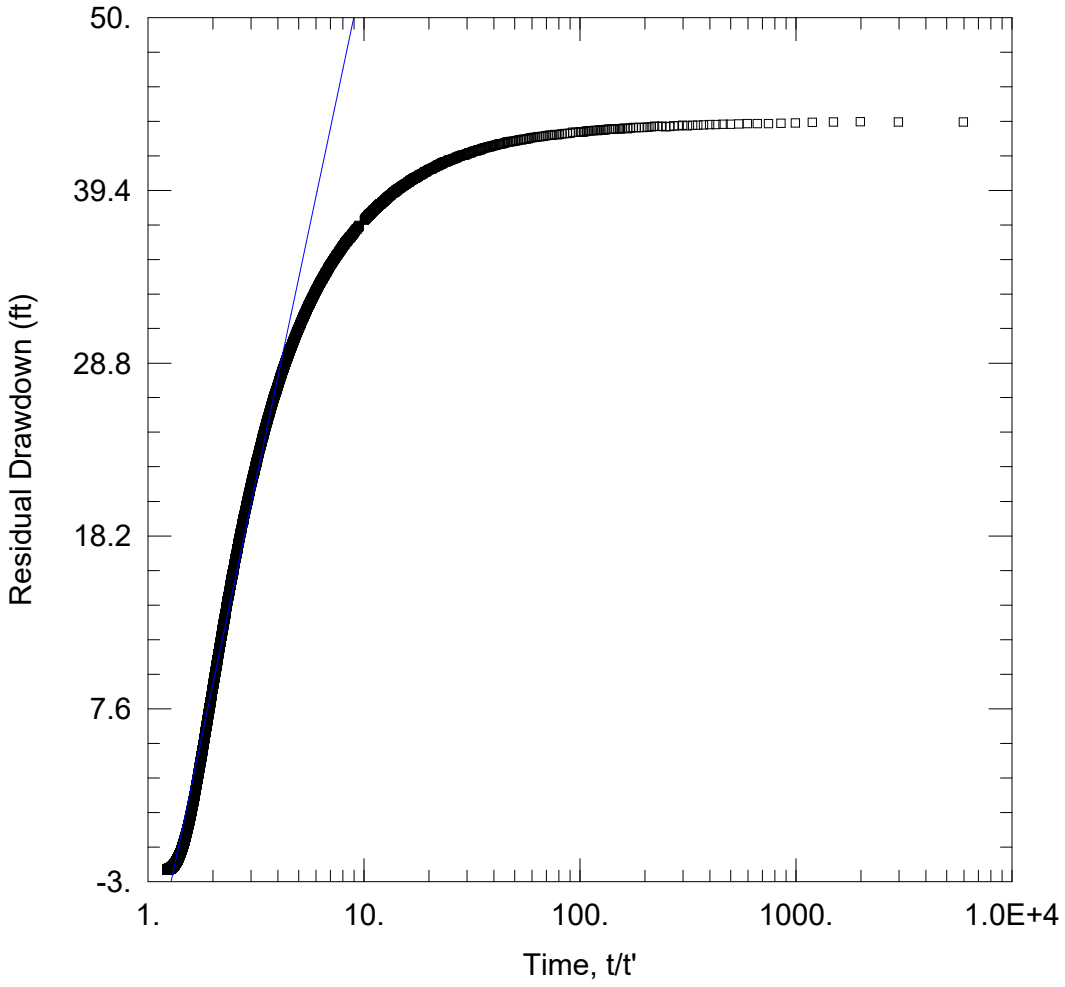
Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-594

AQUIFER DATA

Saturated Thickness: 50.4 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob
T = 0.002389 cm^2/sec S = 0.03995



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-594 WL-110 CRE theis recovery.aqt
Date: 02/13/25 Time: 23:33:45

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-594

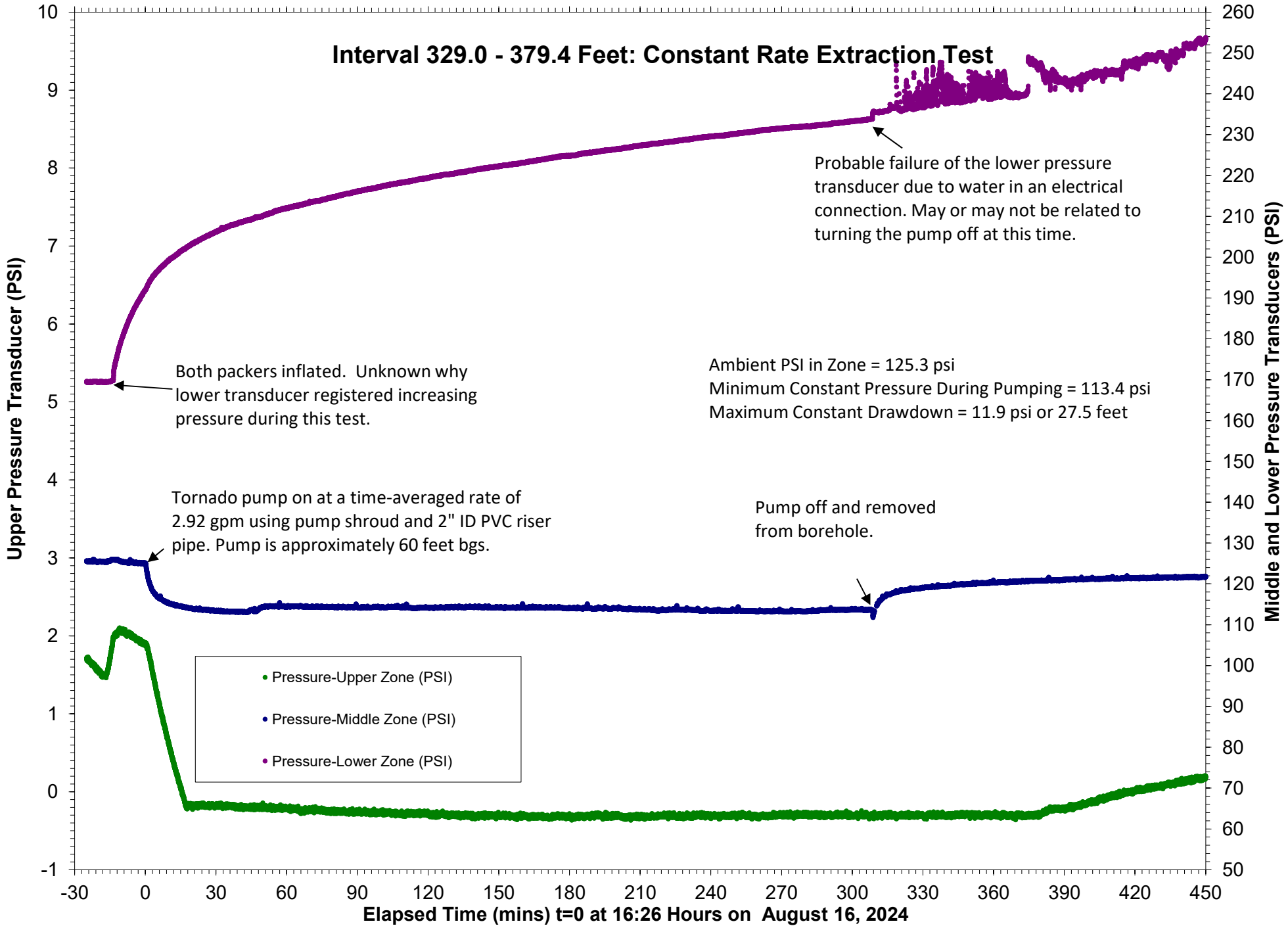
AQUIFER DATA

Saturated Thickness: 50.4 ft Anisotropy Ratio (Kz/Kr): 1.

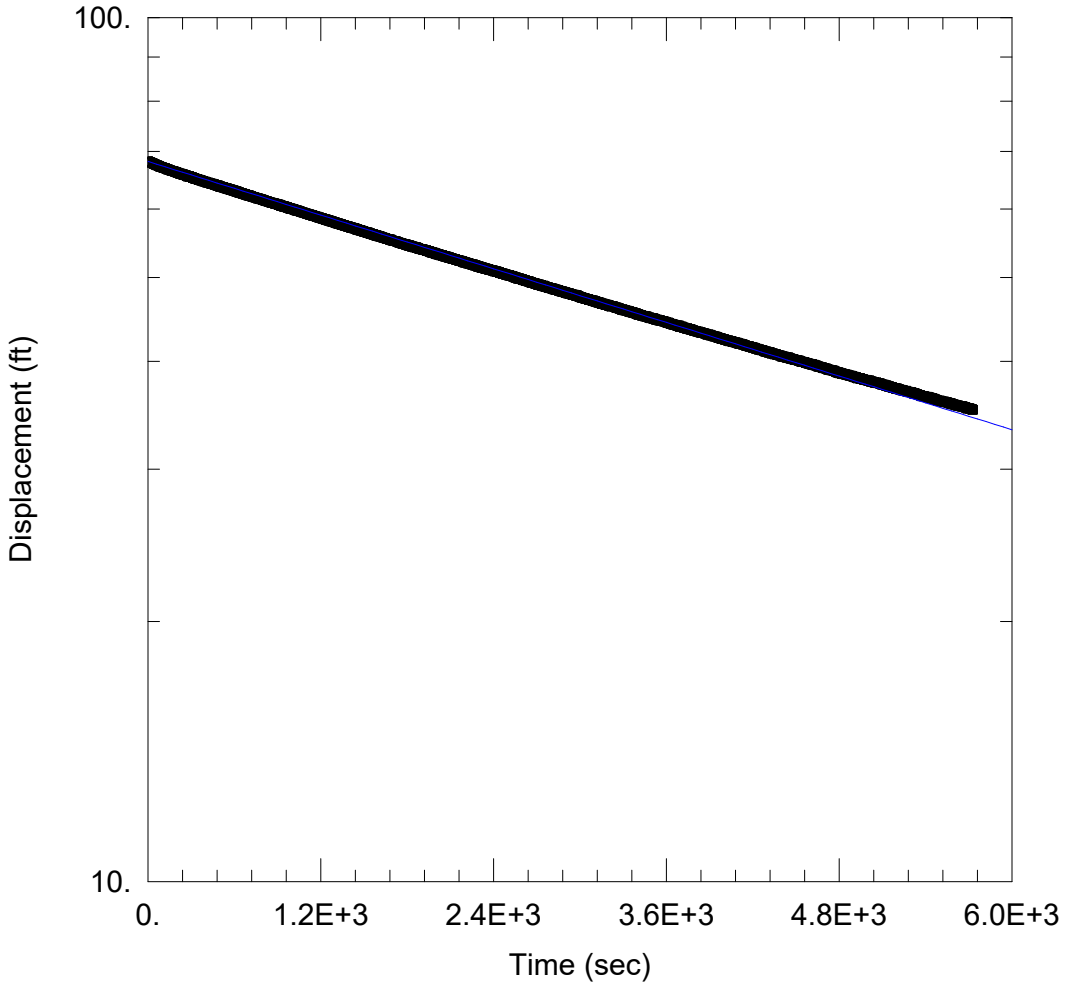
SOLUTION

Aquifer Model: Confined Solution Method: Theis (Recovery)
T = 0.0023 cm^2/sec S/S' = 1.43

FIGURE WP928:5B. Pressure Data During Wireline Straddle Packer Testing at Water Level to 200.0 Feet, Slug Out Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP592



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP594\WP594 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-592 WL-2487 slug out BR.aqt
Date: 02/13/25 Time: 21:15:08

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-592

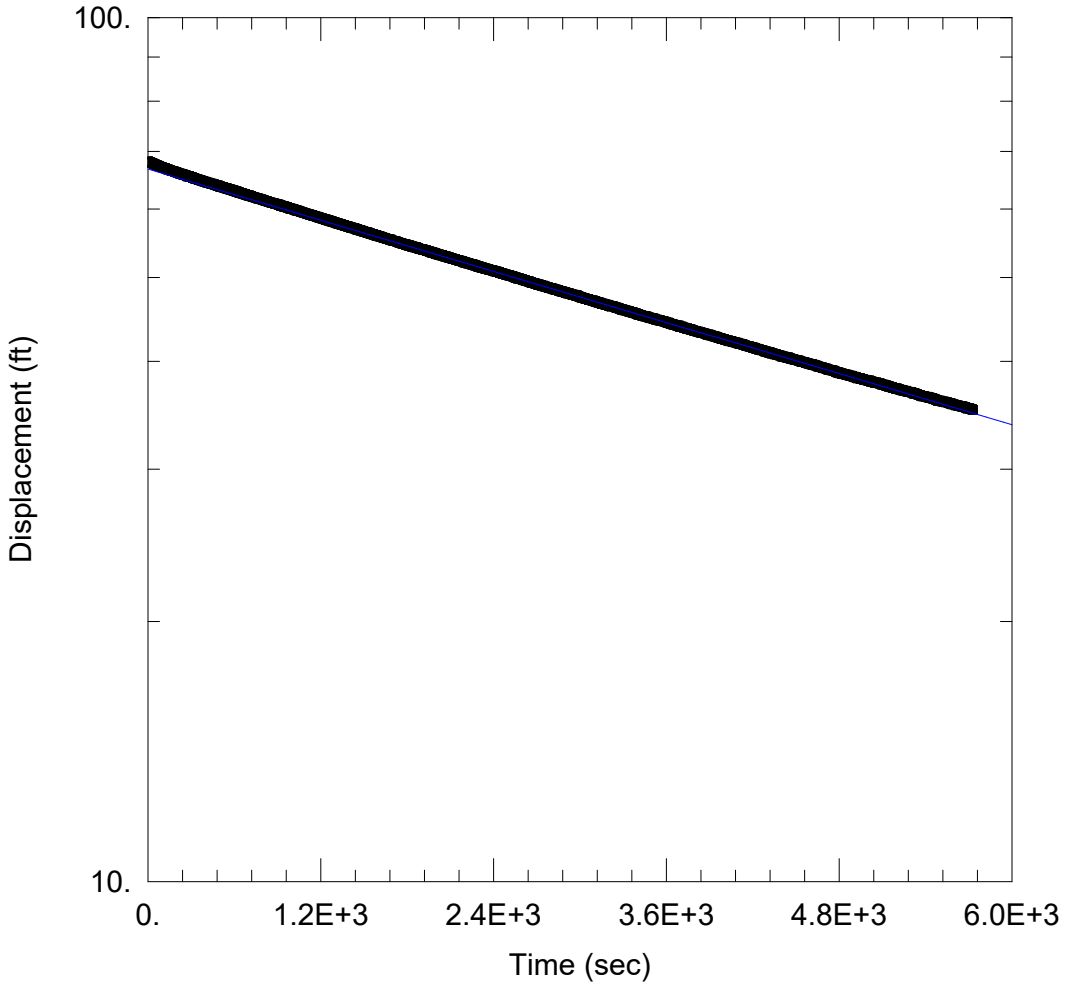
AQUIFER DATA

Saturated Thickness: 2418.5 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 4.01E-8 cm/sec y0 = 68.13 ft



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp-592 WL-2487 slug out HV.aqt
Date: 02/13/25 Time: 21:18:11

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-592

AQUIFER DATA

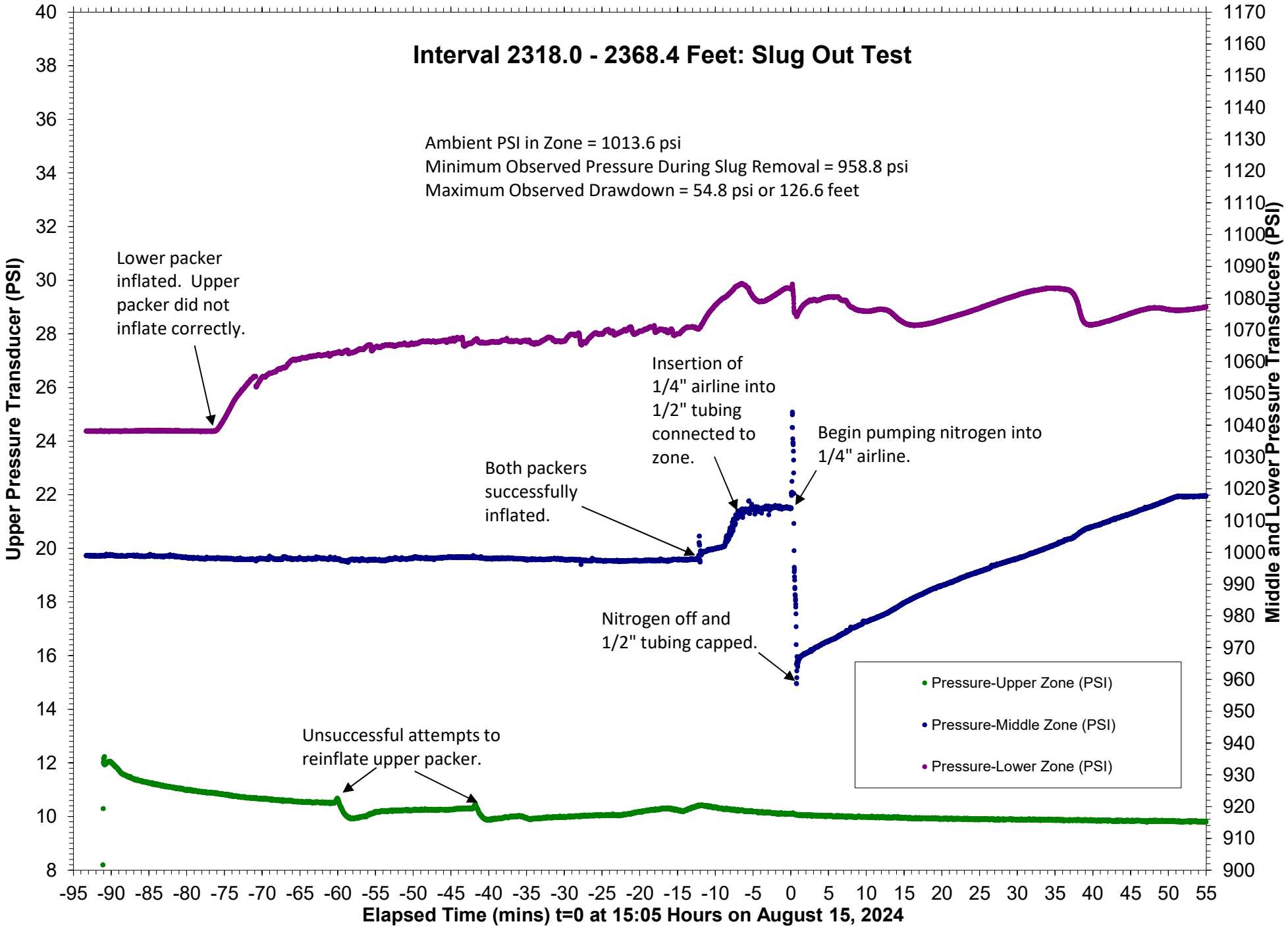
Saturated Thickness: 2418.5 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

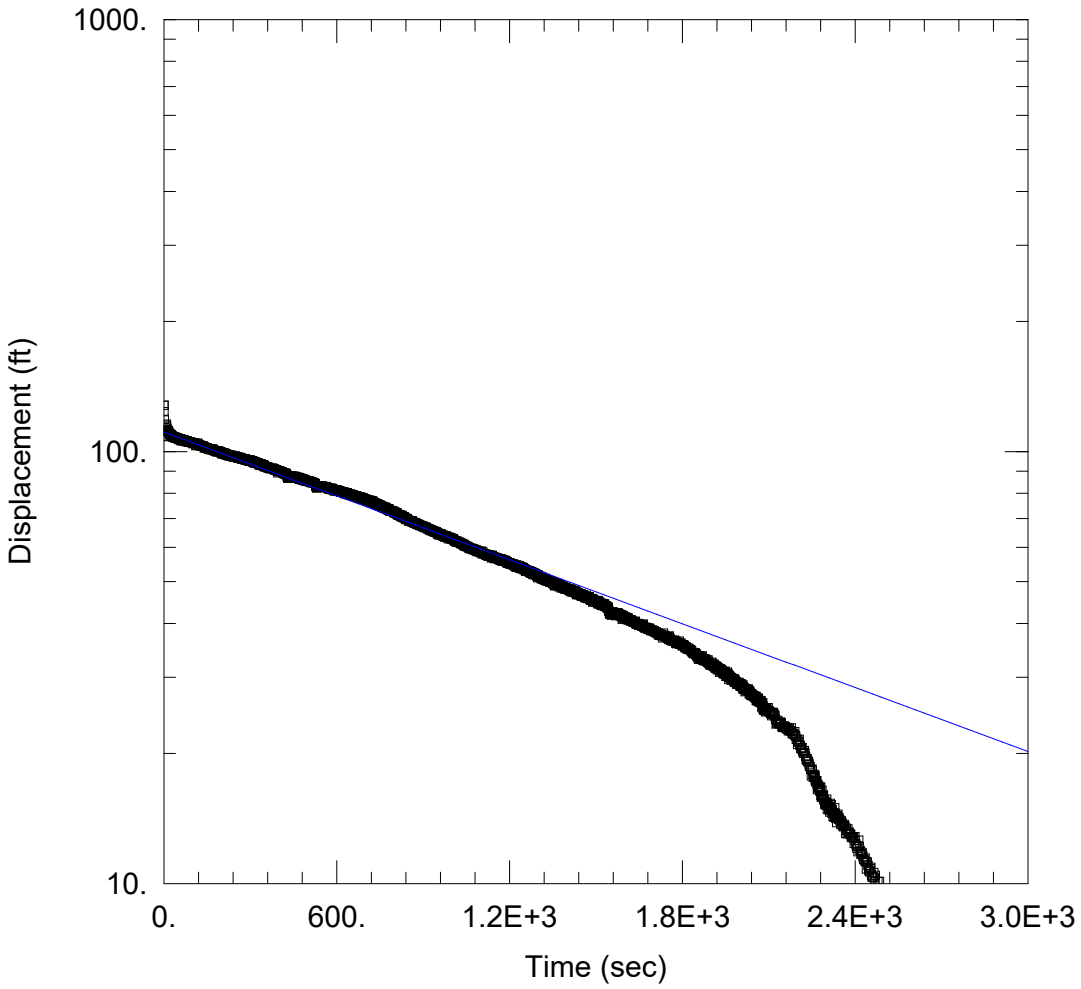
Aquifer Model: Confined Solution Method: Hvorslev

K = 2.361E-8 cm/sec y0 = 66.75 ft

FIGURE WP594:5C Pressure Data During Wireline Straddle Packer Testing at 2318.0 to 2368.4 Feet, Slug Out Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP594



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP594\WP594 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-594 2318-2368.4 slug out BR.aqt
Date: 02/14/25 Time: 00:51:02

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-594

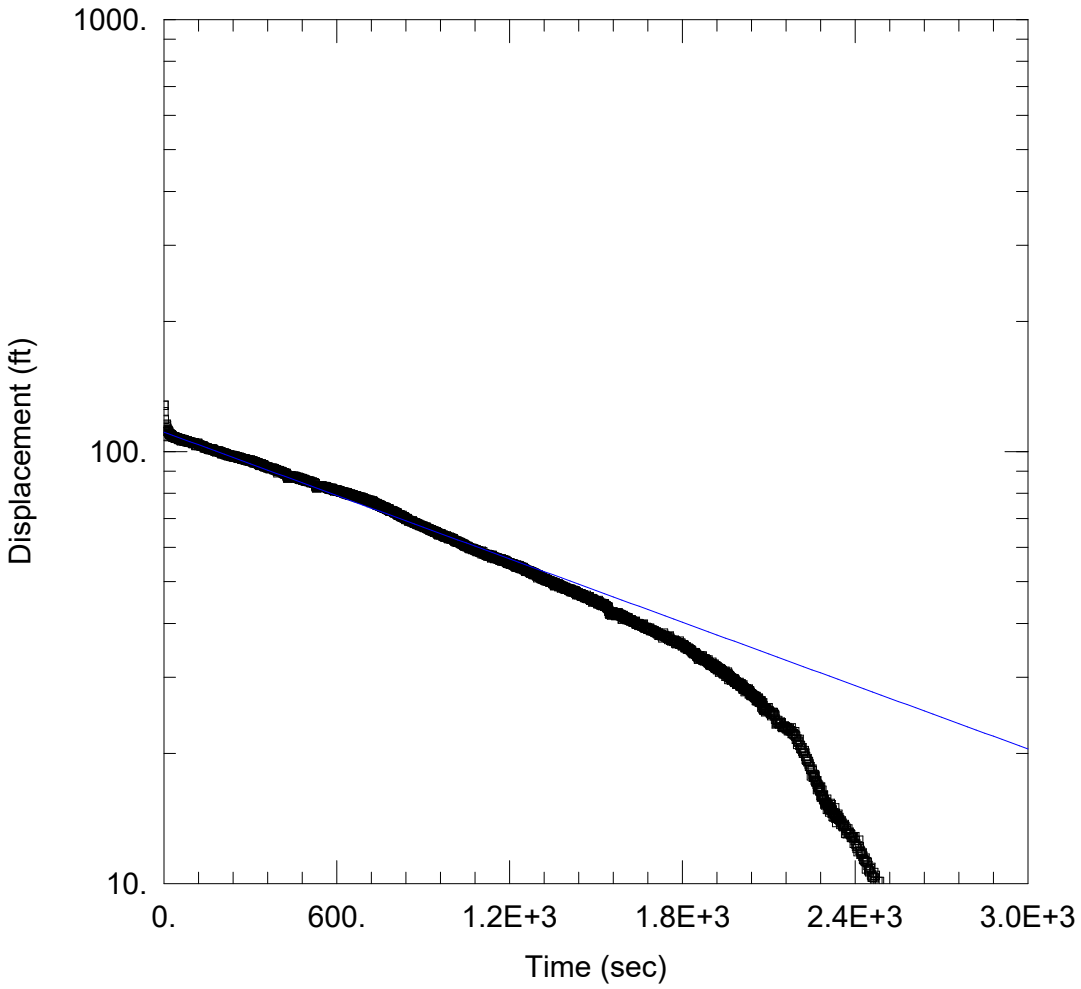
AQUIFER DATA

Saturated Thickness: 50.4 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 3.531E-7 cm/sec y0 = 110.9 ft



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-594 2318-2368.4 slug out HV.aqt
Date: 02/14/25 Time: 00:52:35

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-594

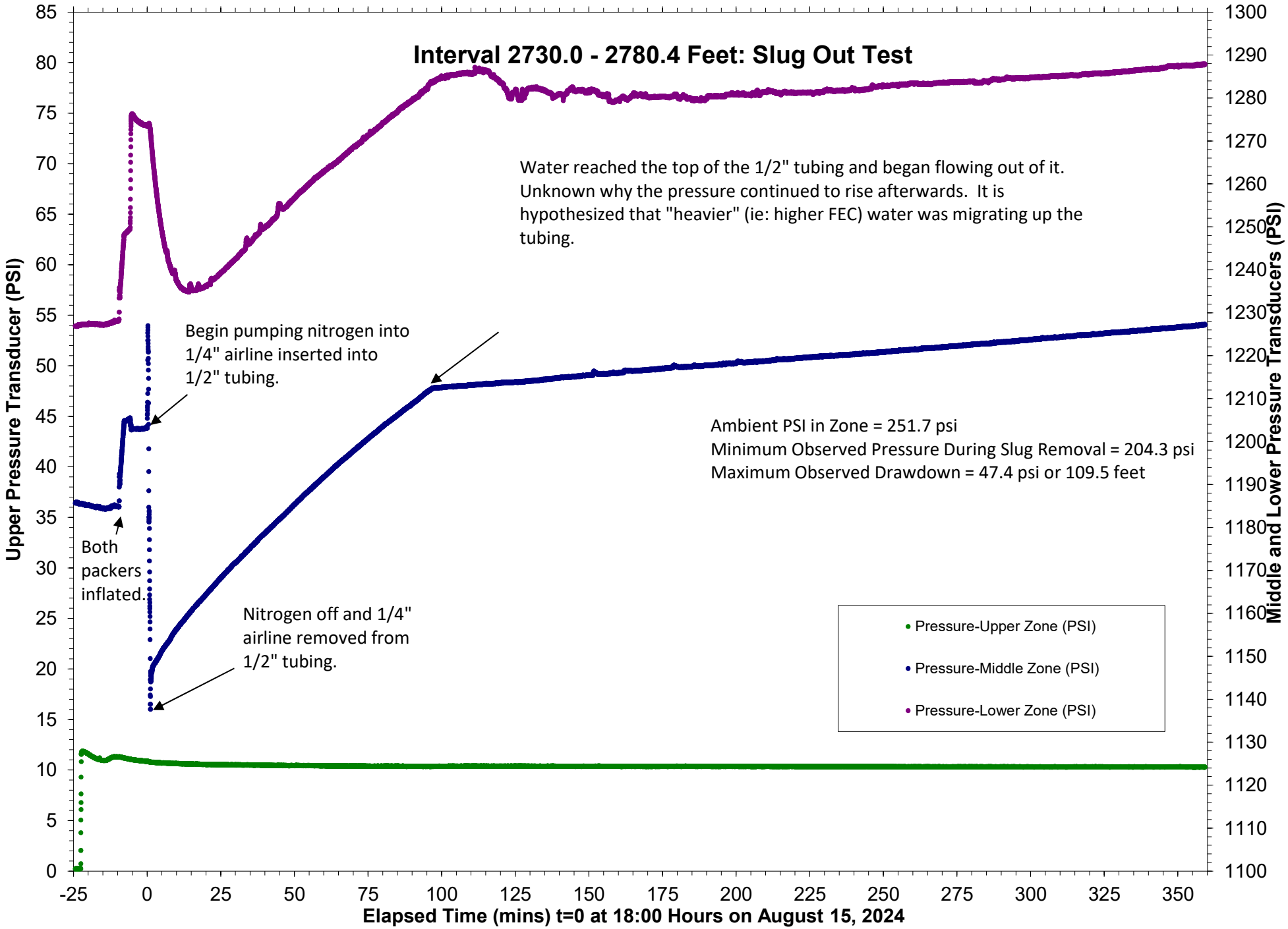
AQUIFER DATA

Saturated Thickness: 50.4 ft Anisotropy Ratio (Kz/Kr): 1.

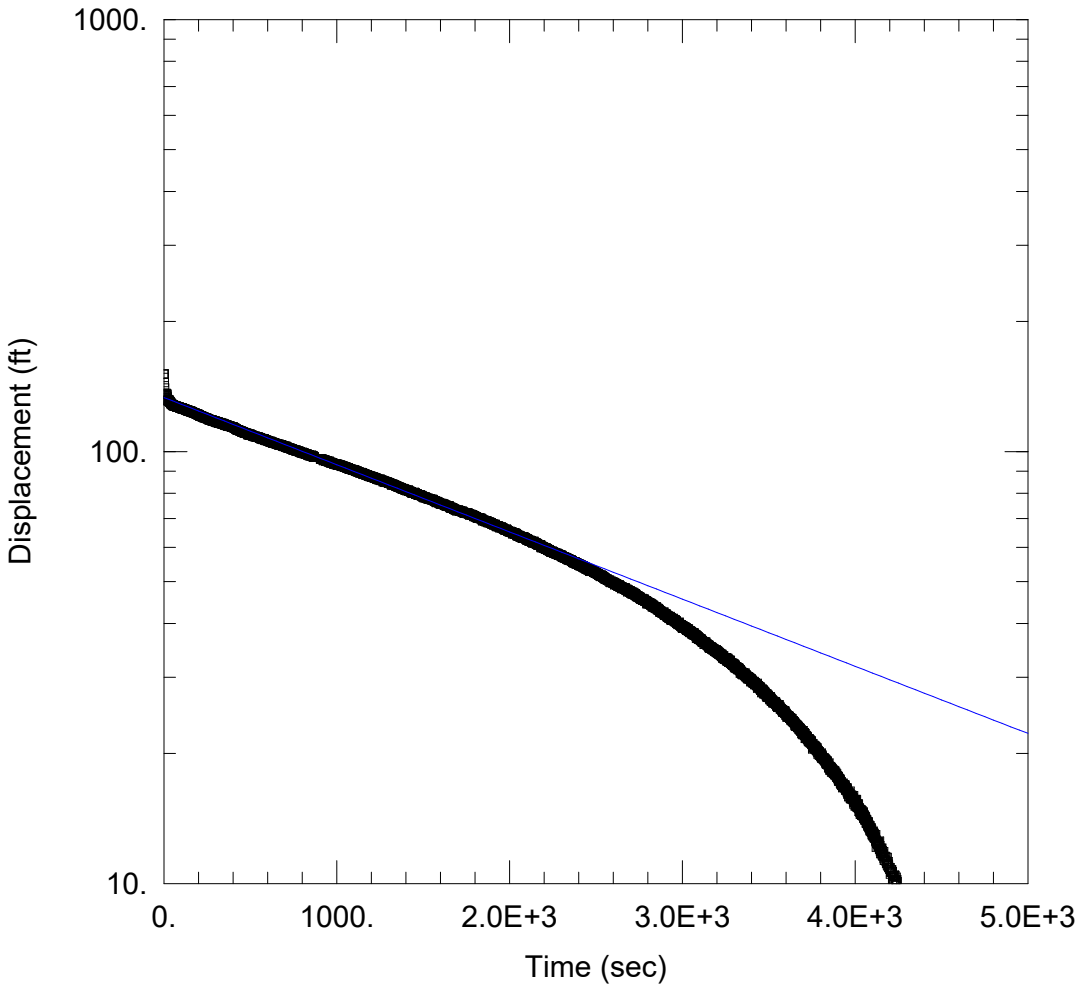
SOLUTION

Aquifer Model: Confined Solution Method: Hvorslev
K = 4.054E-7 cm/sec y0 = 110.9 ft

FIGURE WP594:5D Pressure Data During Wireline Straddle Packer Testing at 2730.0 to 2780.4 Feet, Slug Out Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP594



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP594\WP594 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-594 2730-2780.4 slug out BR.aqt
Date: 02/14/25 Time: 00:00:30

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-594

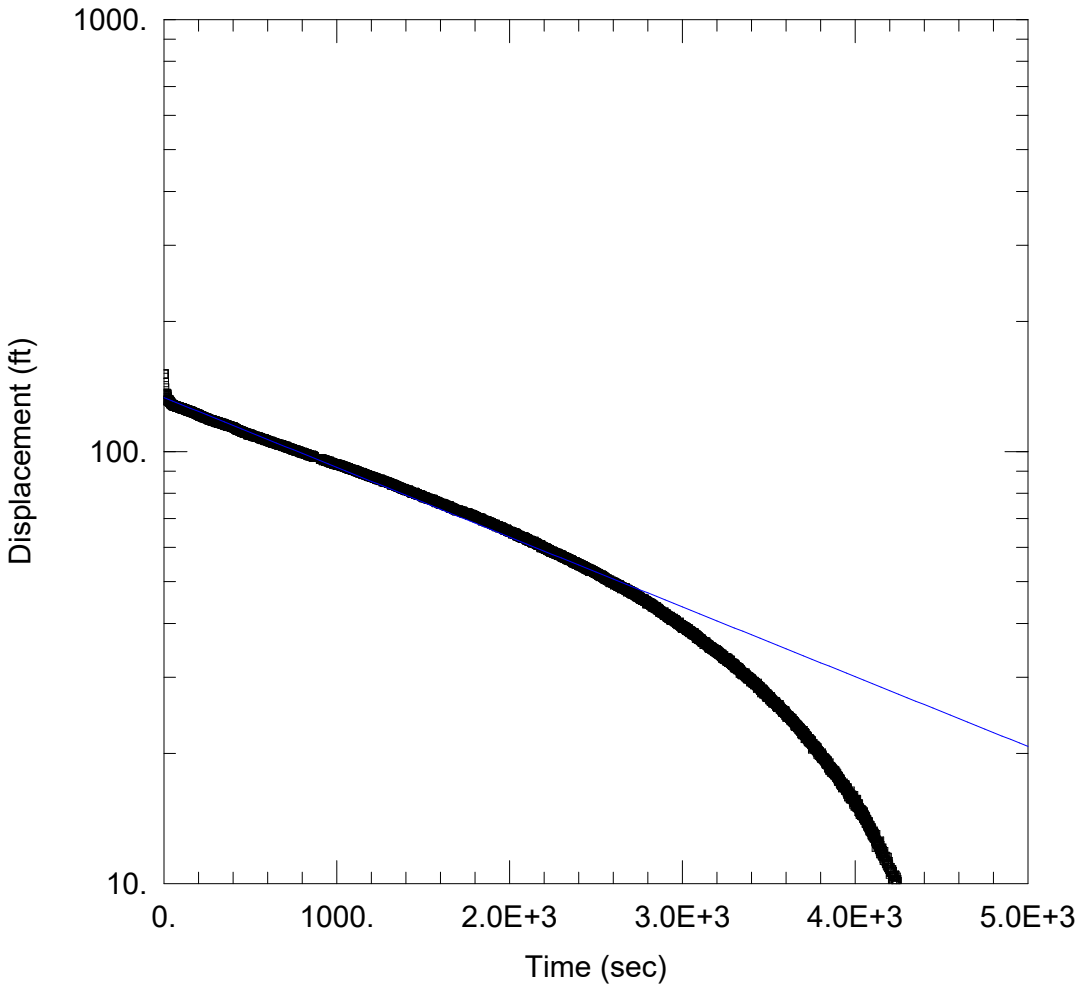
AQUIFER DATA

Saturated Thickness: 50.4 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 2.228E-7 cm/sec y0 = 133.3 ft



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-594 2730-2780.4 slug out HV.aqt
Date: 02/14/25 Time: 00:01:20

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-594

AQUIFER DATA

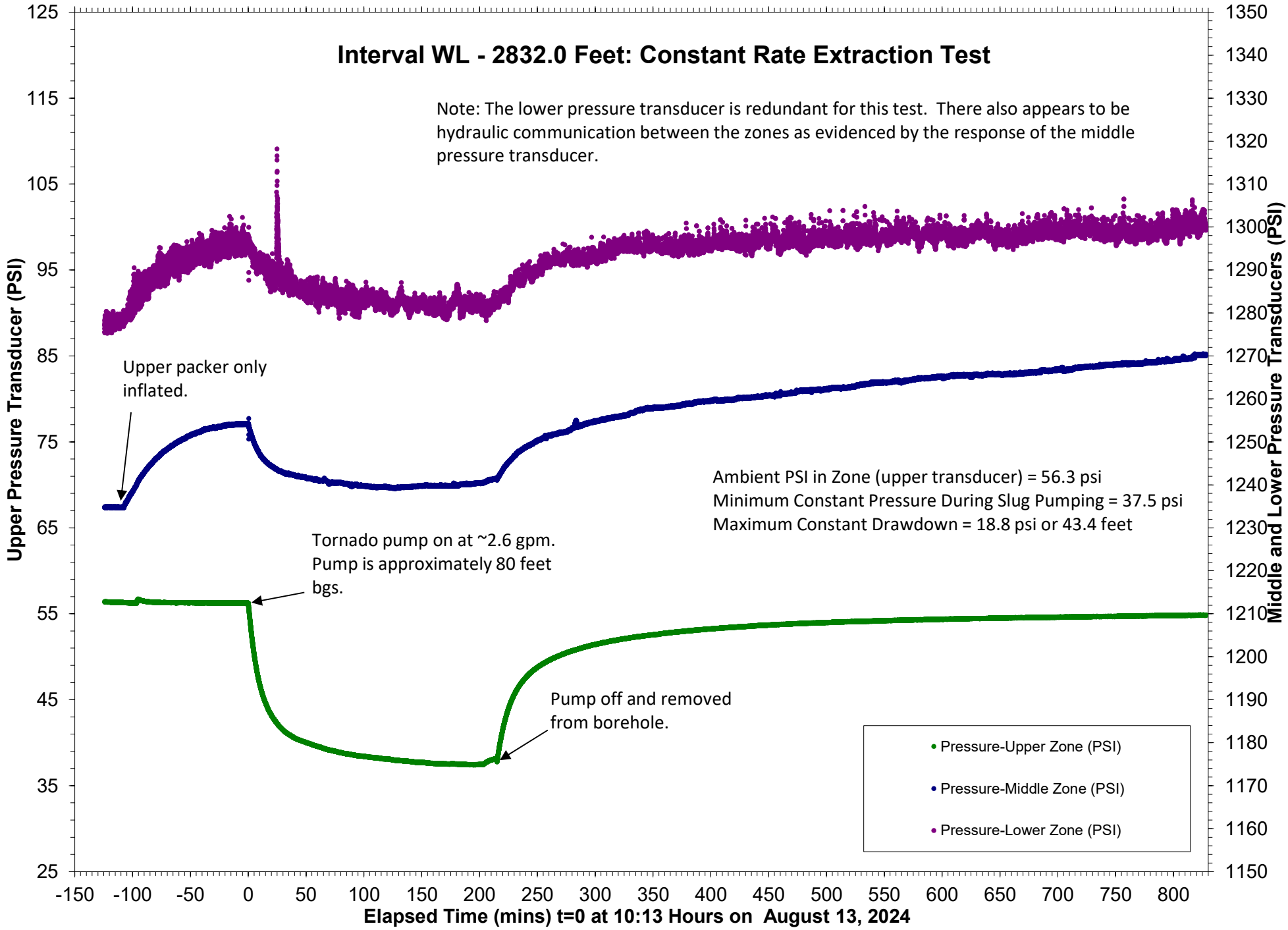
Saturated Thickness: 50.4 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

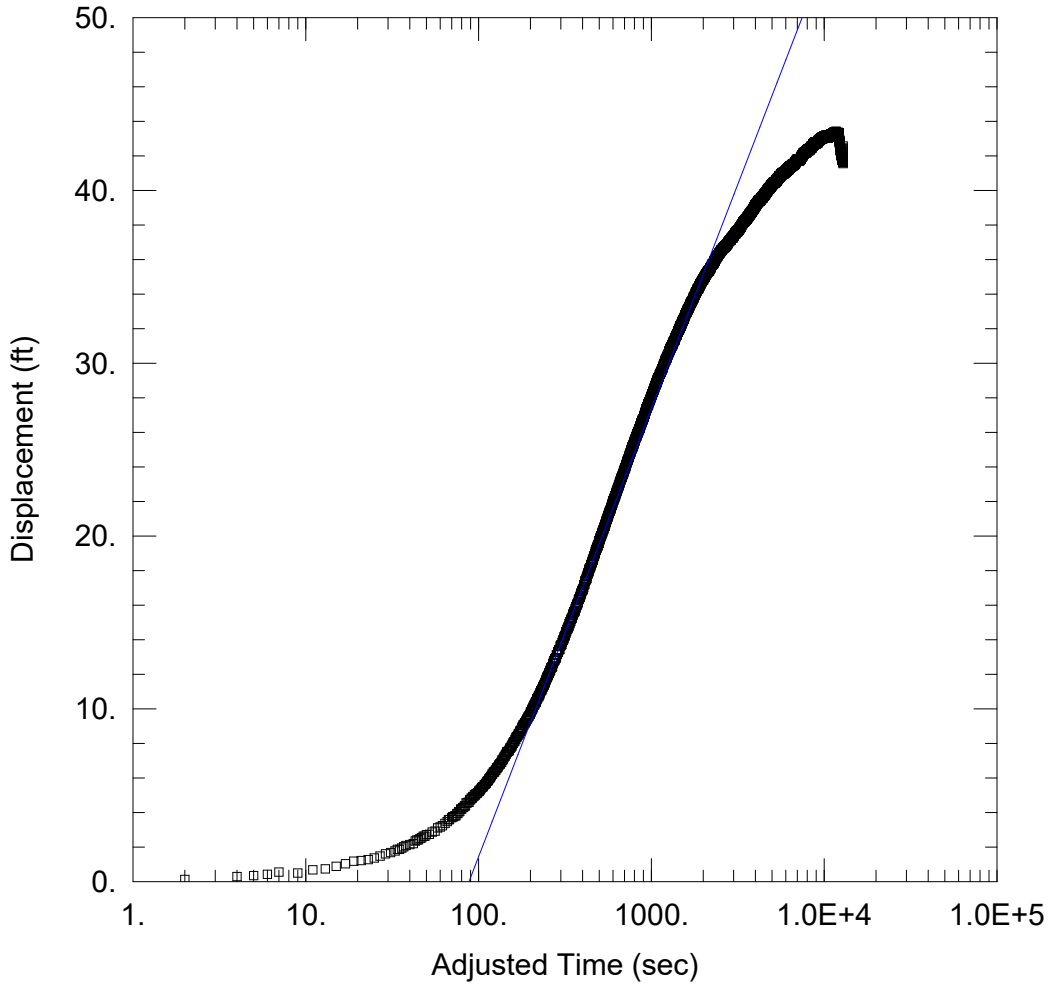
Aquifer Model: Confined Solution Method: Hvorslev

K = 2.678E-7 cm/sec y0 = 133.3 ft

FIGURE WP594:5E Pressure Data During Wireline Straddle Packer Testing at Water Level to 2832.0 Feet, Constant Rate Extraction Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP594



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP594\WP594 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-594 WL-2832.0 CRE CJ.aqt
Date: 02/13/25 Time: 23:11:37

PROJECT INFORMATION

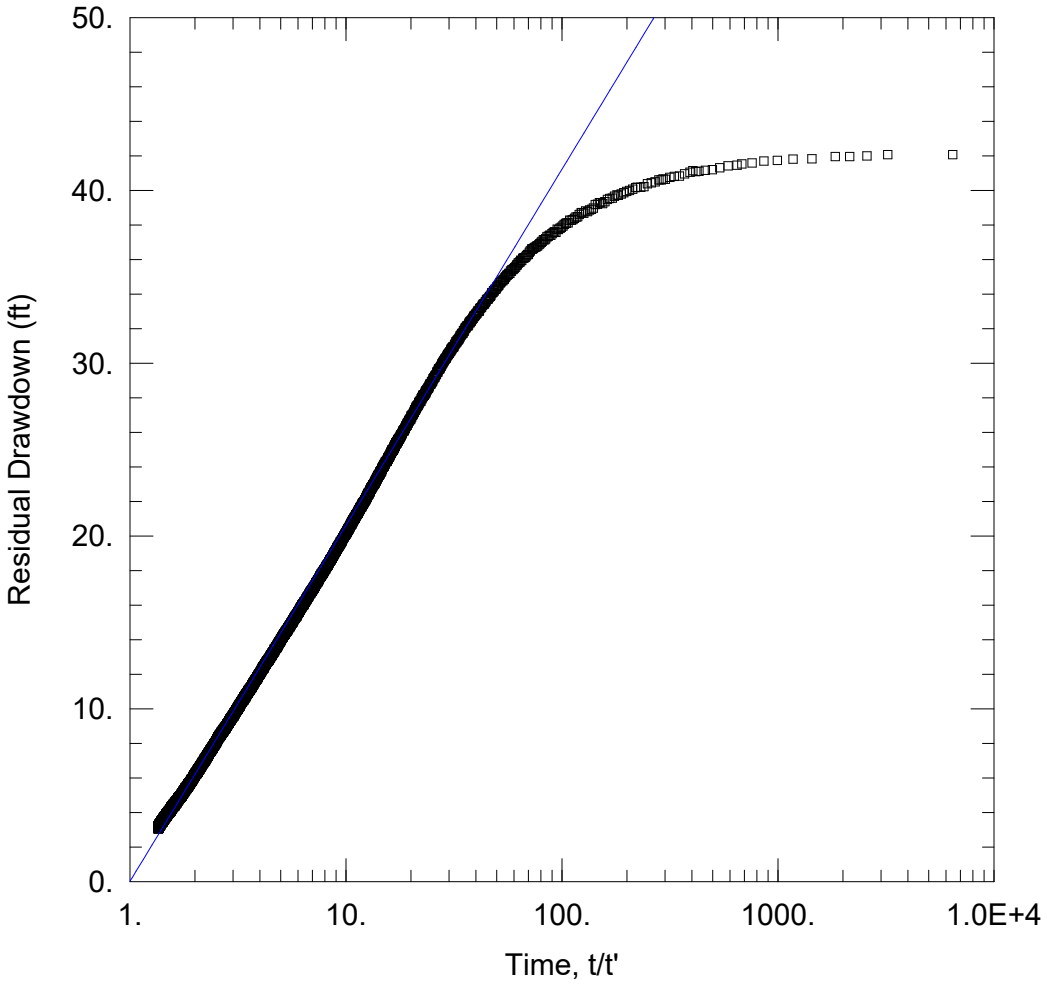
Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-594

AQUIFER DATA

Saturated Thickness: 50.4 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob
T = 0.02939 cm^2/sec S = 0.2523



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-594 WL-2832.0 theis recovery.aqt
Date: 02/13/25 Time: 23:18:07

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-594

AQUIFER DATA

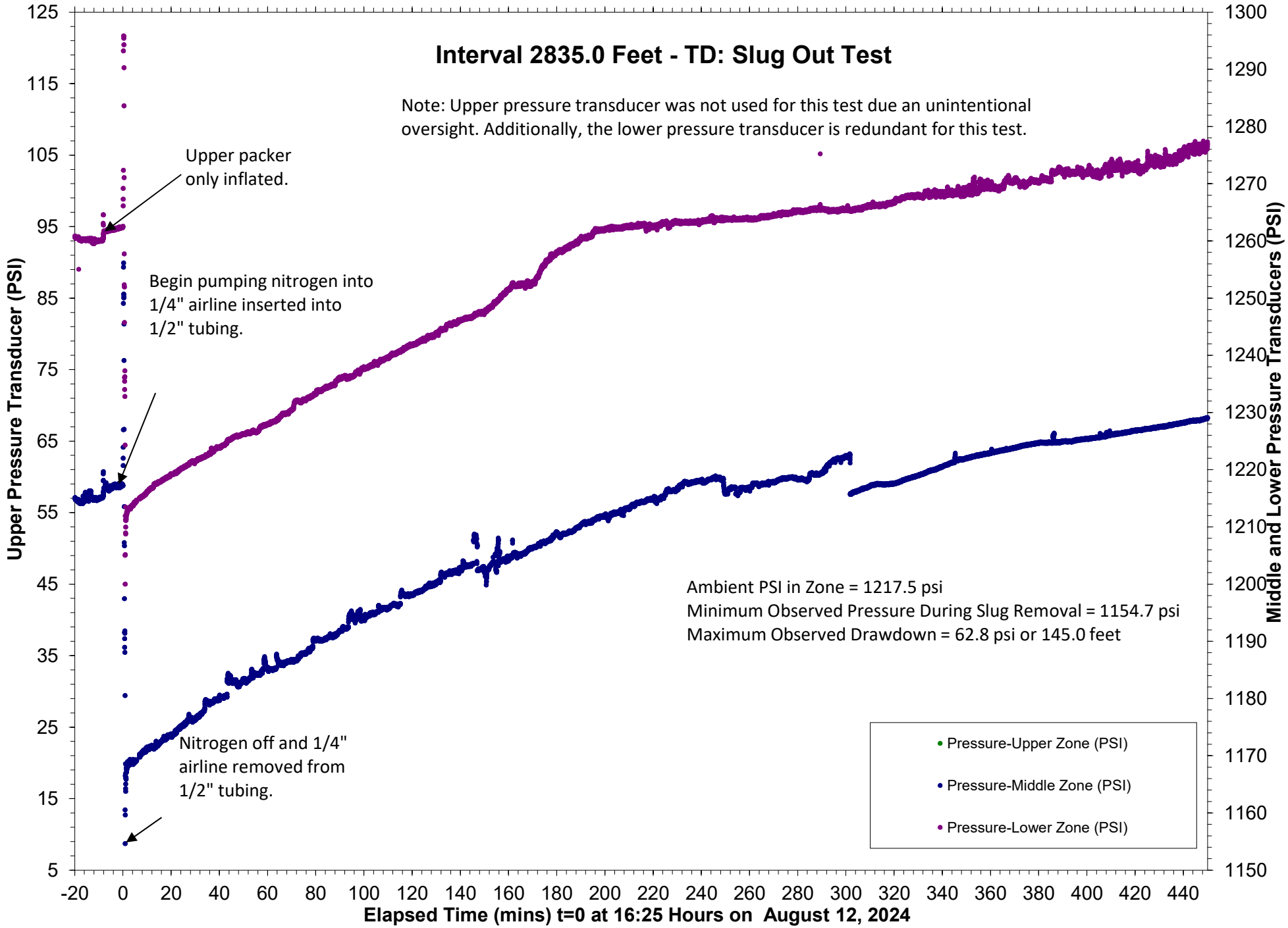
Saturated Thickness: 50.4 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

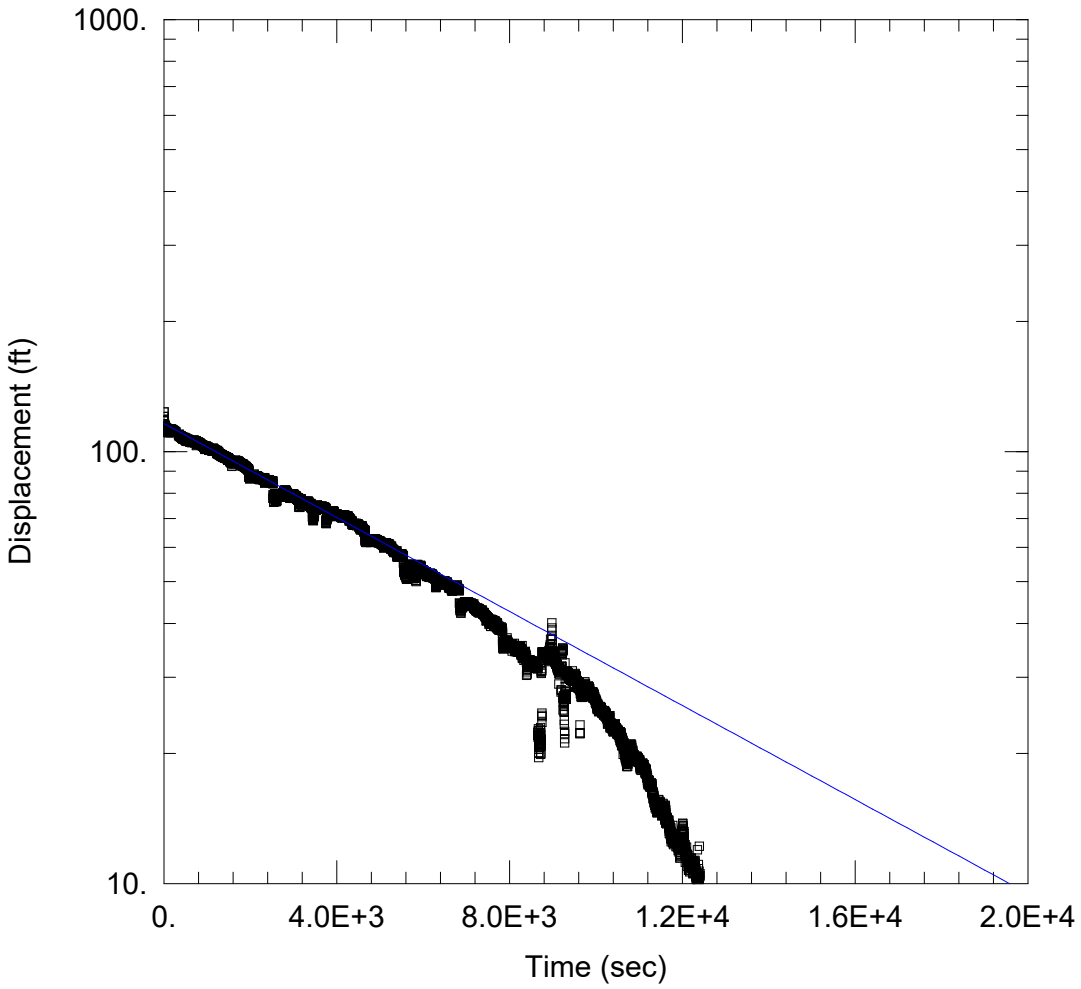
Aquifer Model: Confined Solution Method: Theis (Recovery)

T = 0.037 cm^2/sec S/S' = 1.

FIGURE WP594:5F Pressure Data During Wireline Straddle Packer Testing at 2835.0 Feet to Total Depth, Slug Out Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP594



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP594\WP594 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-594 2837-3080.7 slug out BR.aqt
Date: 02/13/25 Time: 23:49:46

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-594

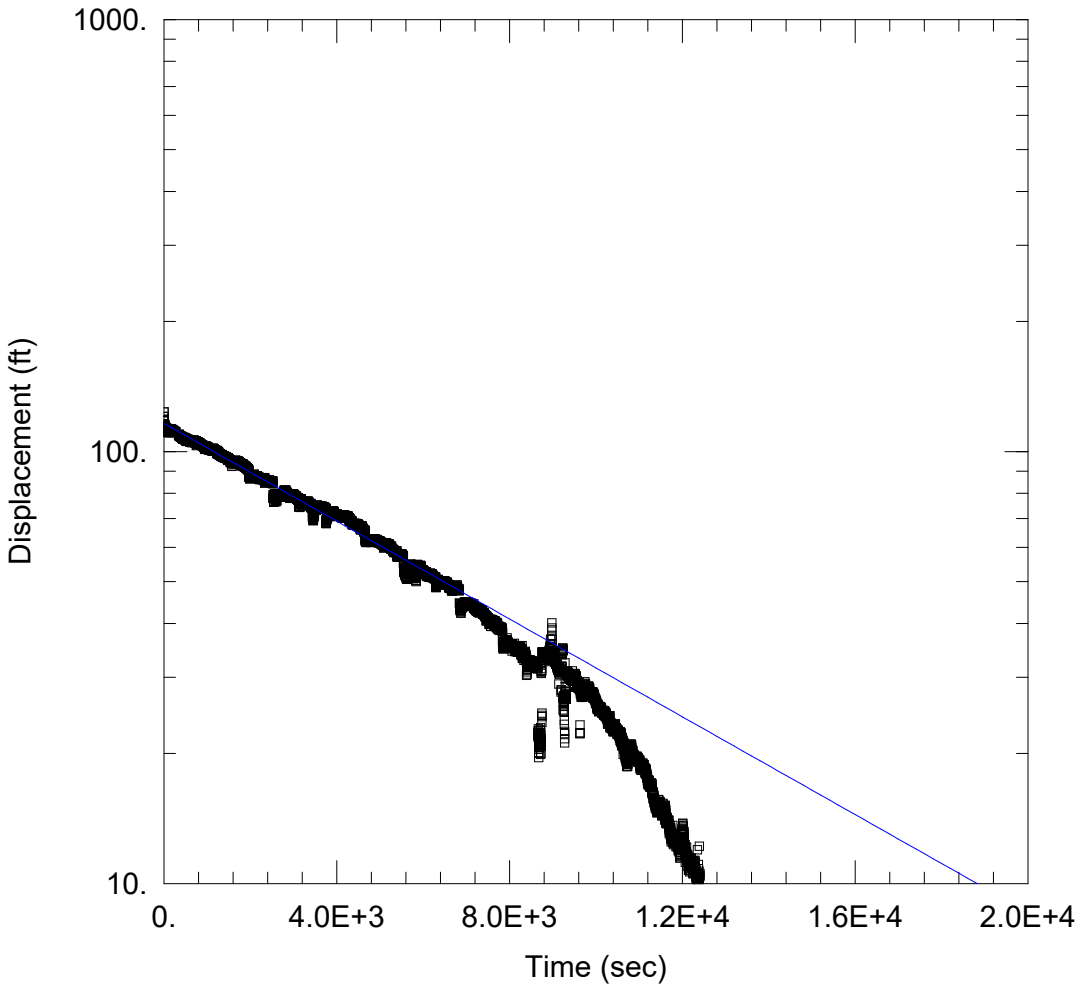
AQUIFER DATA

Saturated Thickness: 243.7 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 2.228E-8 cm/sec y0 = 116.1 ft



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\WP-594 2837-3080.7 slug out HV.aqt
Date: 02/13/25 Time: 23:51:13

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-594

AQUIFER DATA

Saturated Thickness: 243.7 ft Anisotropy Ratio (Kz/Kr): 1.

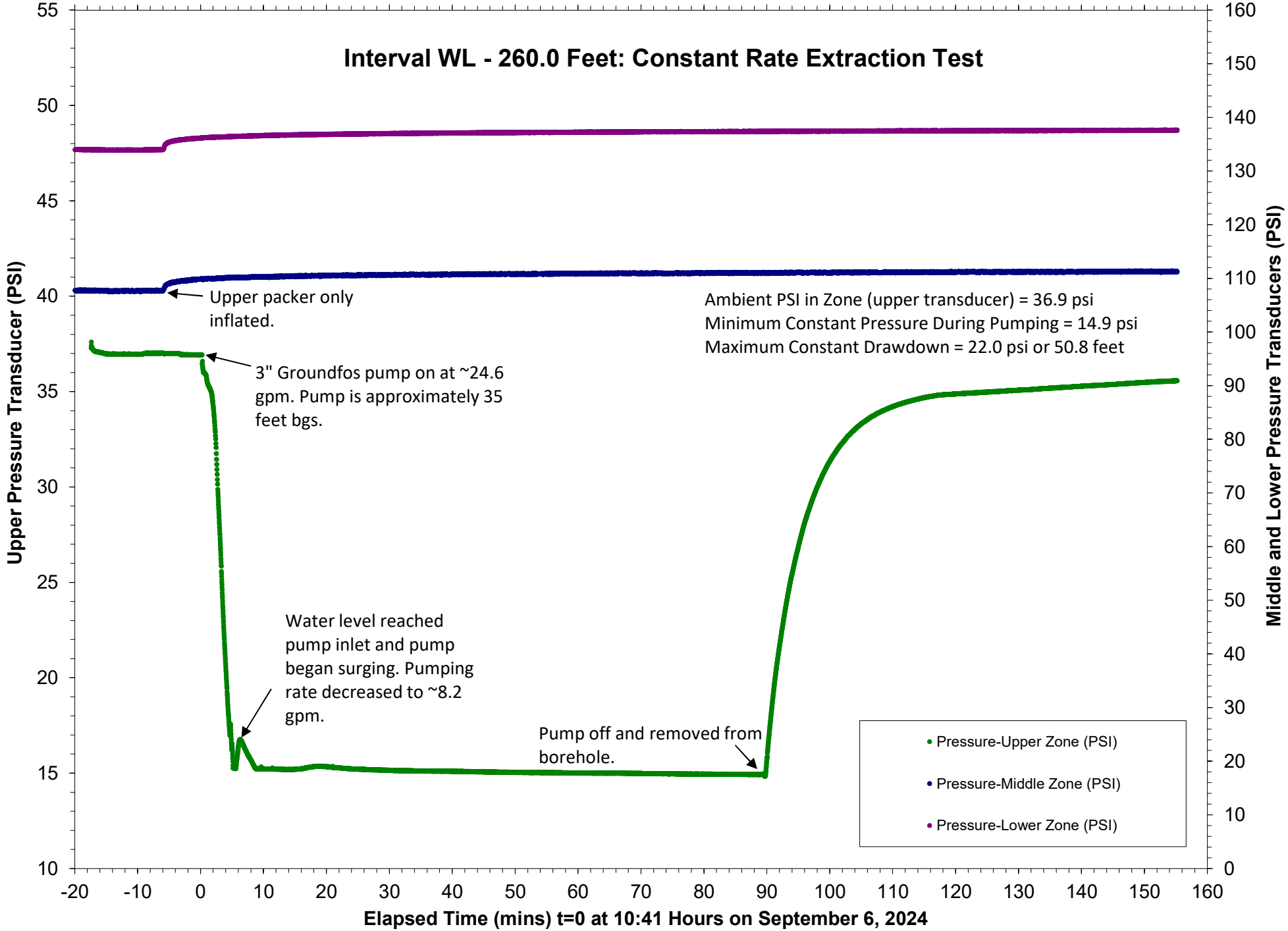
SOLUTION

Aquifer Model: Confined Solution Method: Hvorslev

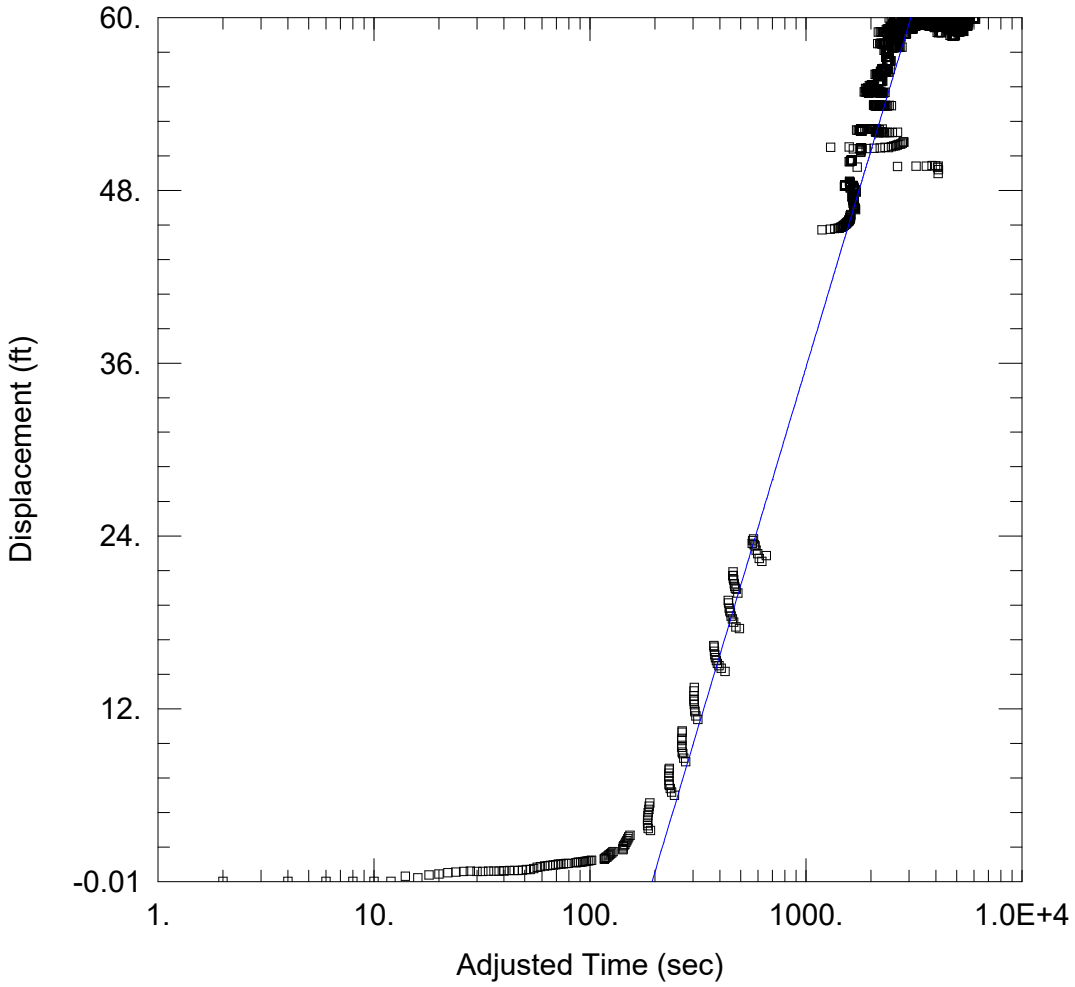
K = 1.94E-8 cm/sec y0 = 116.1 ft

WP-598 - Test Hydrographs and Analyses

FIGURE WP598:5A. Pressure Data During Wireline Straddle Packer Testing at Water Level to 260.0 Feet, Constant Rate Extraction Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP598



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP598\WP598 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp598 WL-260.0 CRE CJ.aqt
Date: 02/14/25 Time: 09:59:12

PROJECT INFORMATION

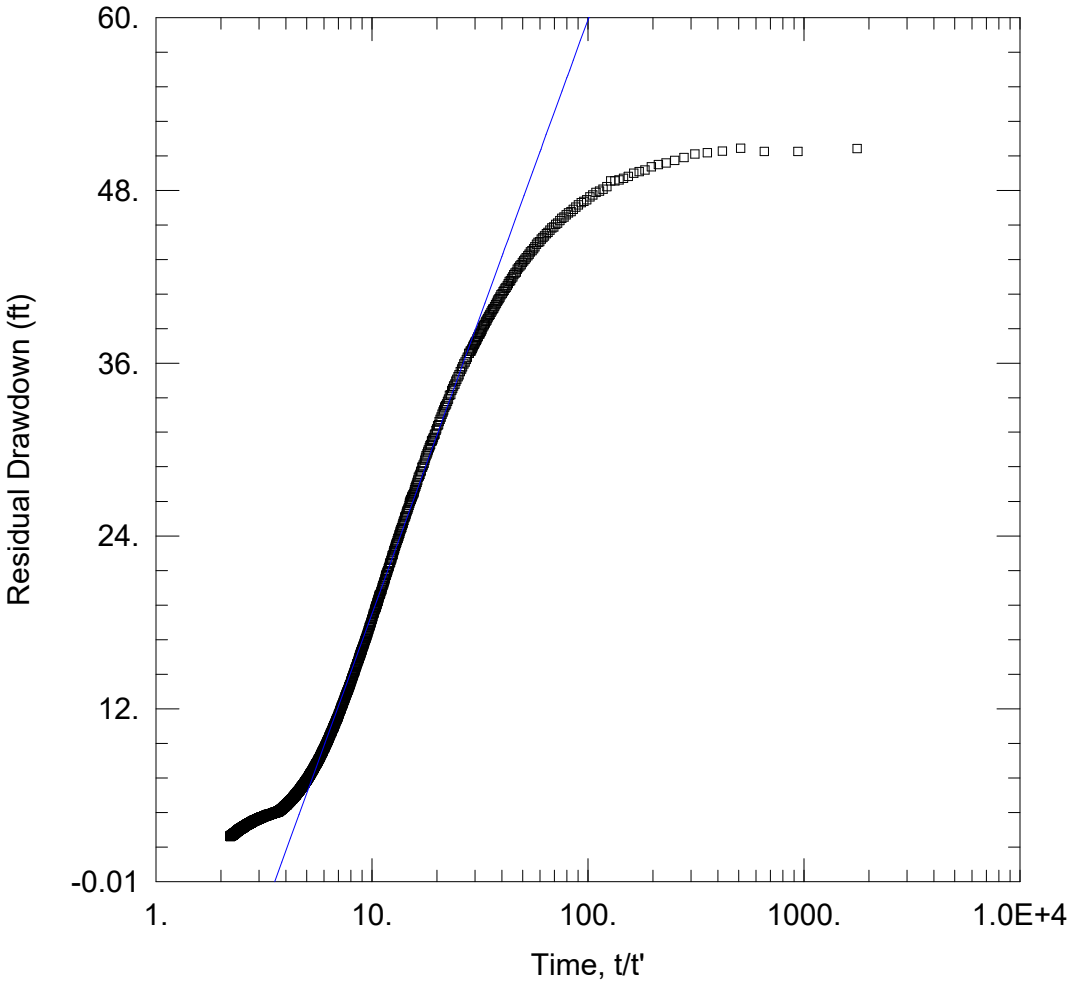
Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-598

AQUIFER DATA

Saturated Thickness: 225.9 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob
T = 0.06012 cm^2/sec S = 1.138



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp598 WL-260.0 CRE theis recovery.aqt
Date: 02/14/25 Time: 10:47:14

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-598

AQUIFER DATA

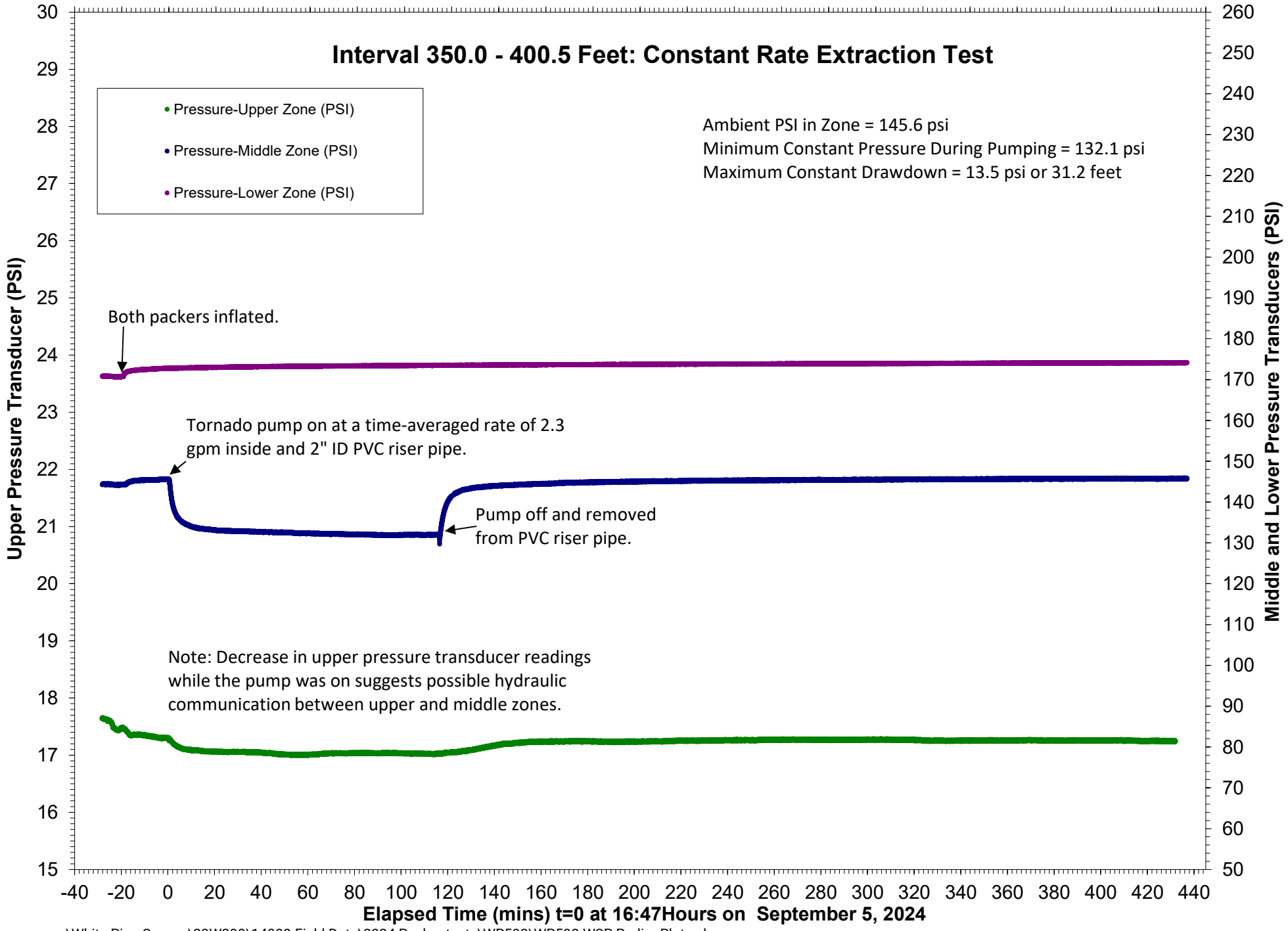
Saturated Thickness: 225.9 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

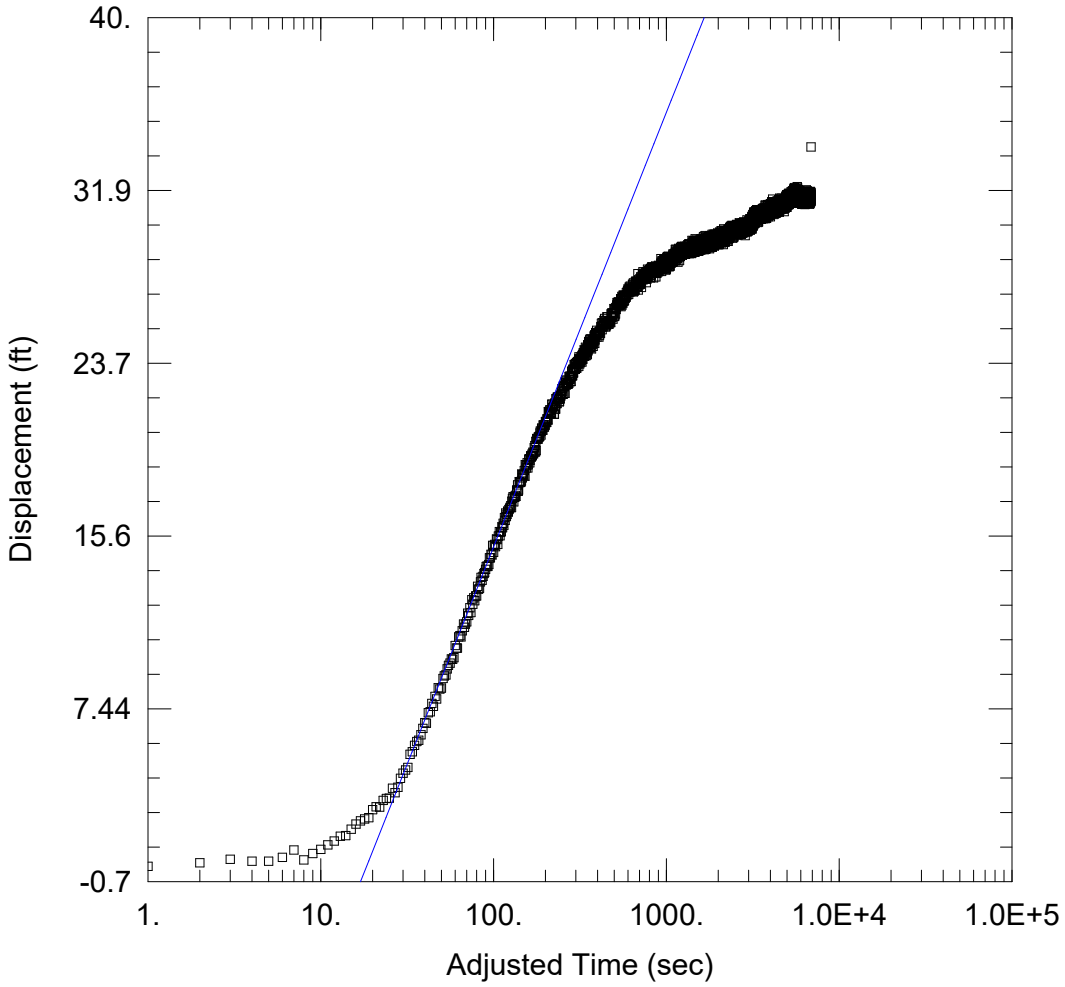
Aquifer Model: Confined Solution Method: Theis (Recovery)

T = 0.073 cm^2/sec S/S' = 3.548

FIGURE WP598:5B. Pressure Data During Wireline Straddle Packer Testing at 350.0 to 400.5 Feet, Constant Rate Extraction Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP598



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP598\WP598 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp598 350-400.5 CRE CJ.aqt
Date: 02/14/25 Time: 12:38:46

PROJECT INFORMATION

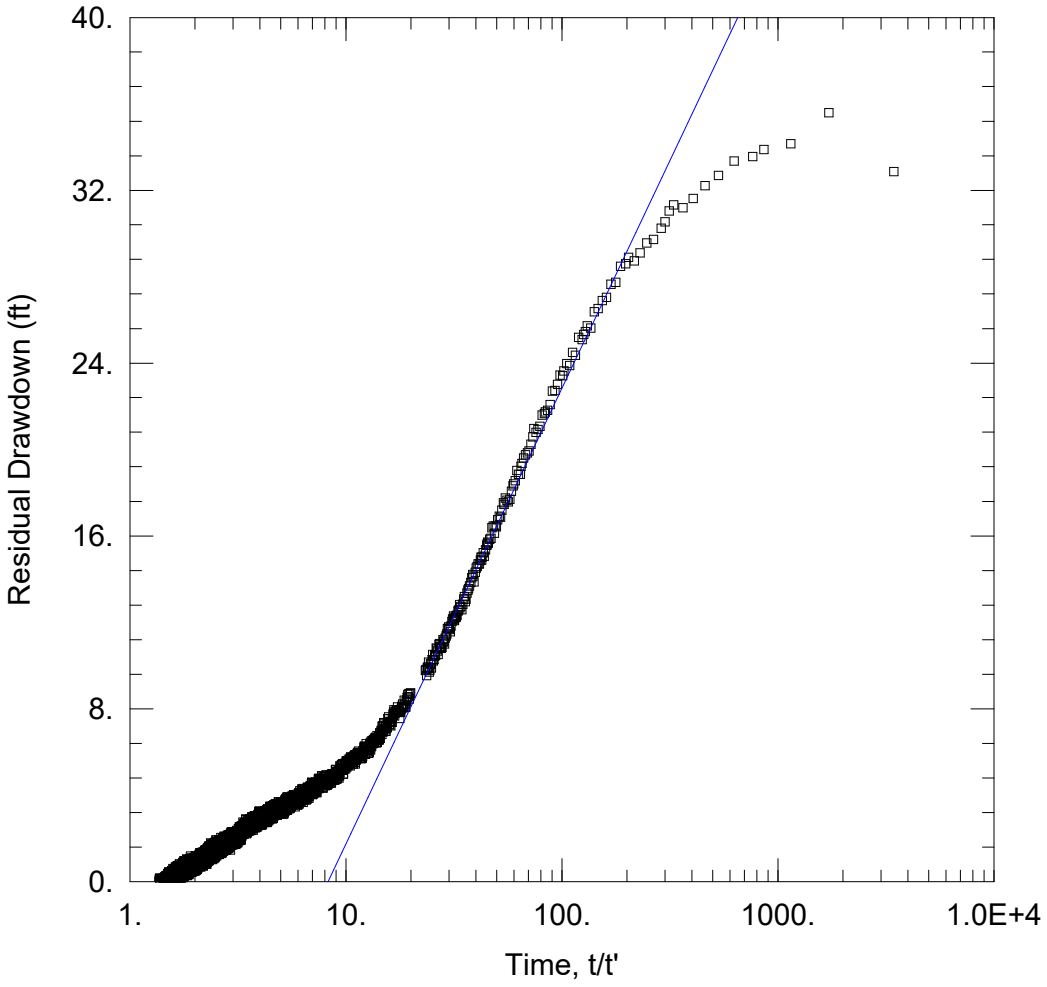
Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-598

AQUIFER DATA

Saturated Thickness: 50.4 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob
T = 0.04365 cm^2/sec S = 0.07822



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp598 350-400.5 CRE theis.aqt
Date: 02/14/25 Time: 12:38:03

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-598

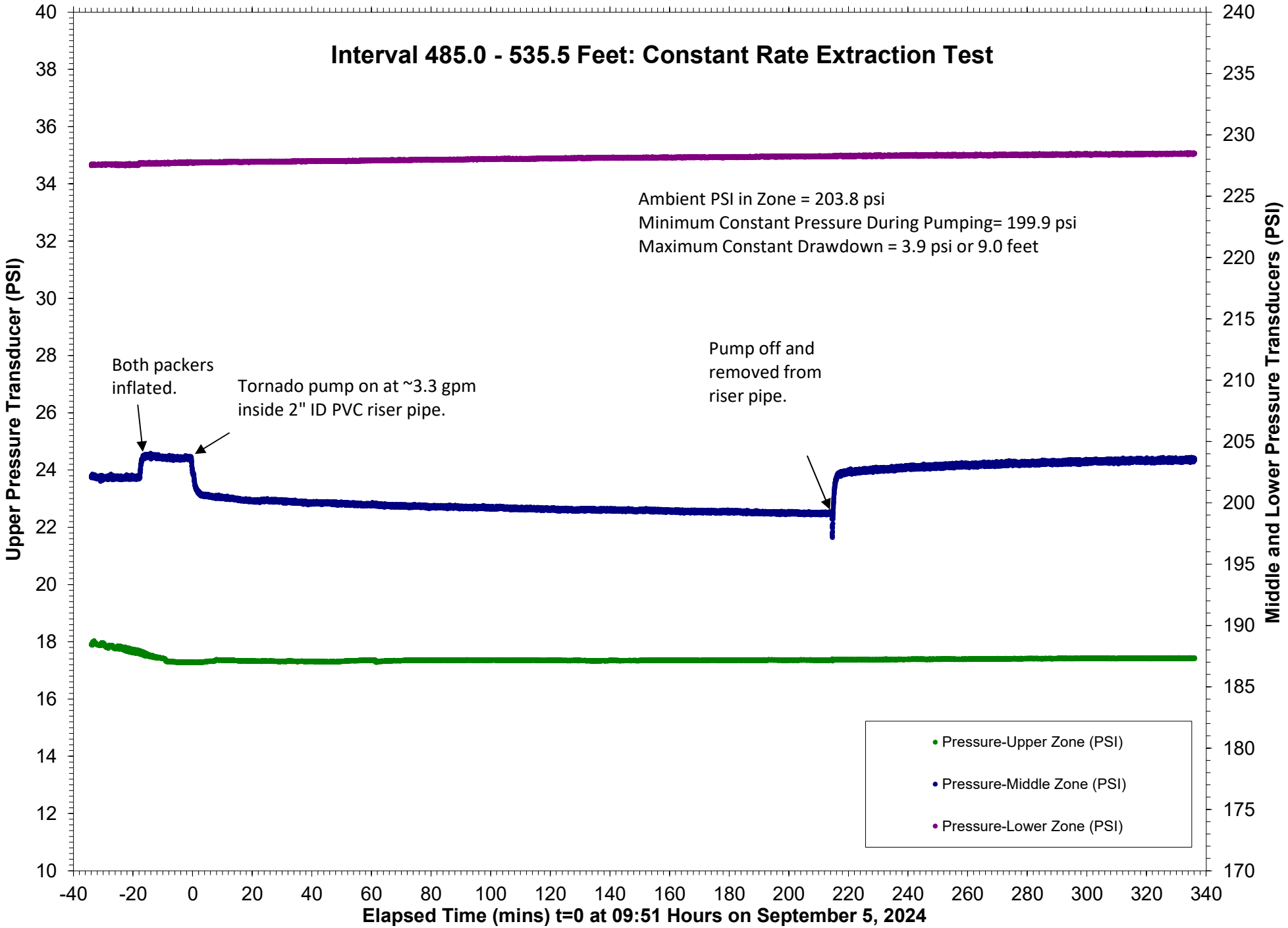
AQUIFER DATA

Saturated Thickness: 225.9 ft Anisotropy Ratio (Kz/Kr): 1.

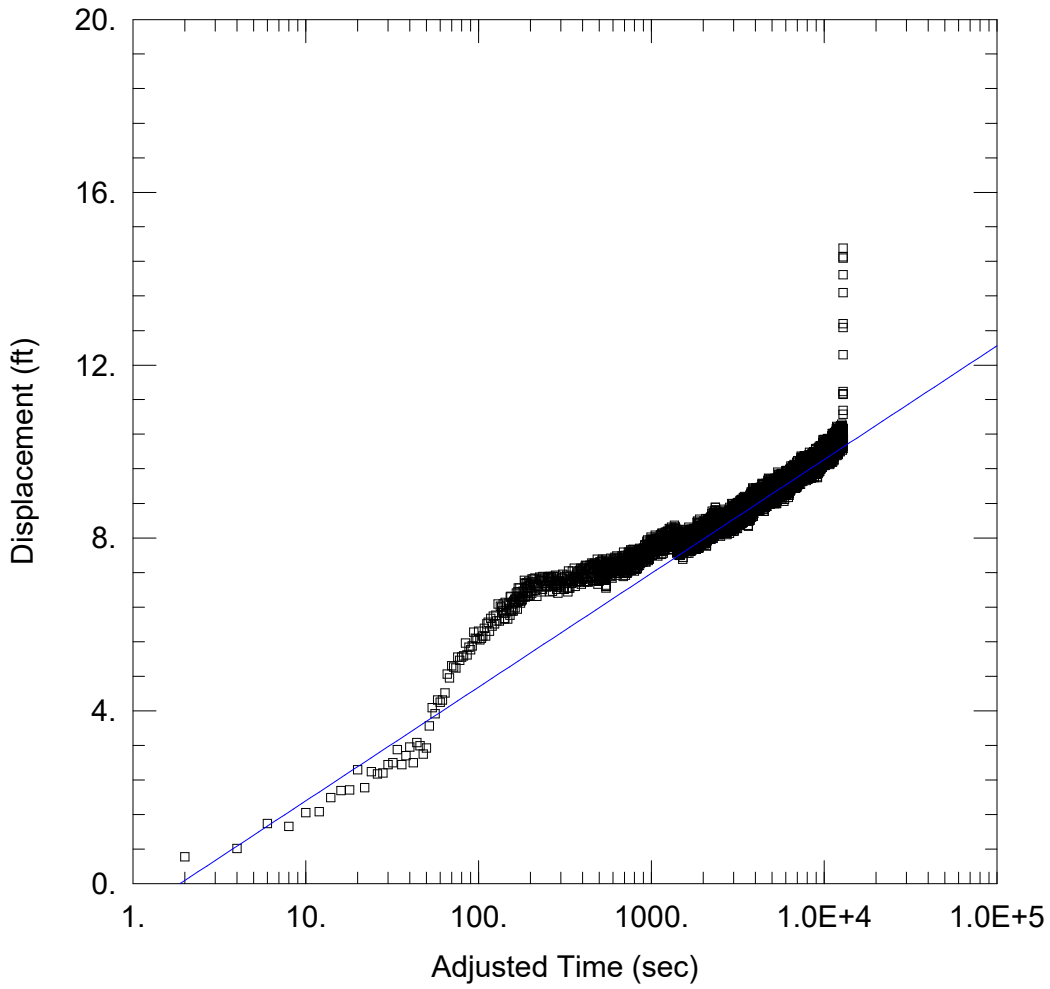
SOLUTION

Aquifer Model: Confined Solution Method: Theis (Recovery)
T = 0.04237 cm^2/sec S/S' = 8.27

FIGURE WP598:5C Pressure Data During Wireline Straddle Packer Testing at 485.0 to 535.0 Feet, Constant Rate Extraction Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP598



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP598\WP598 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp598 485-535.5 CRE CJ.aqt
Date: 02/14/25 Time: 12:09:18

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-598

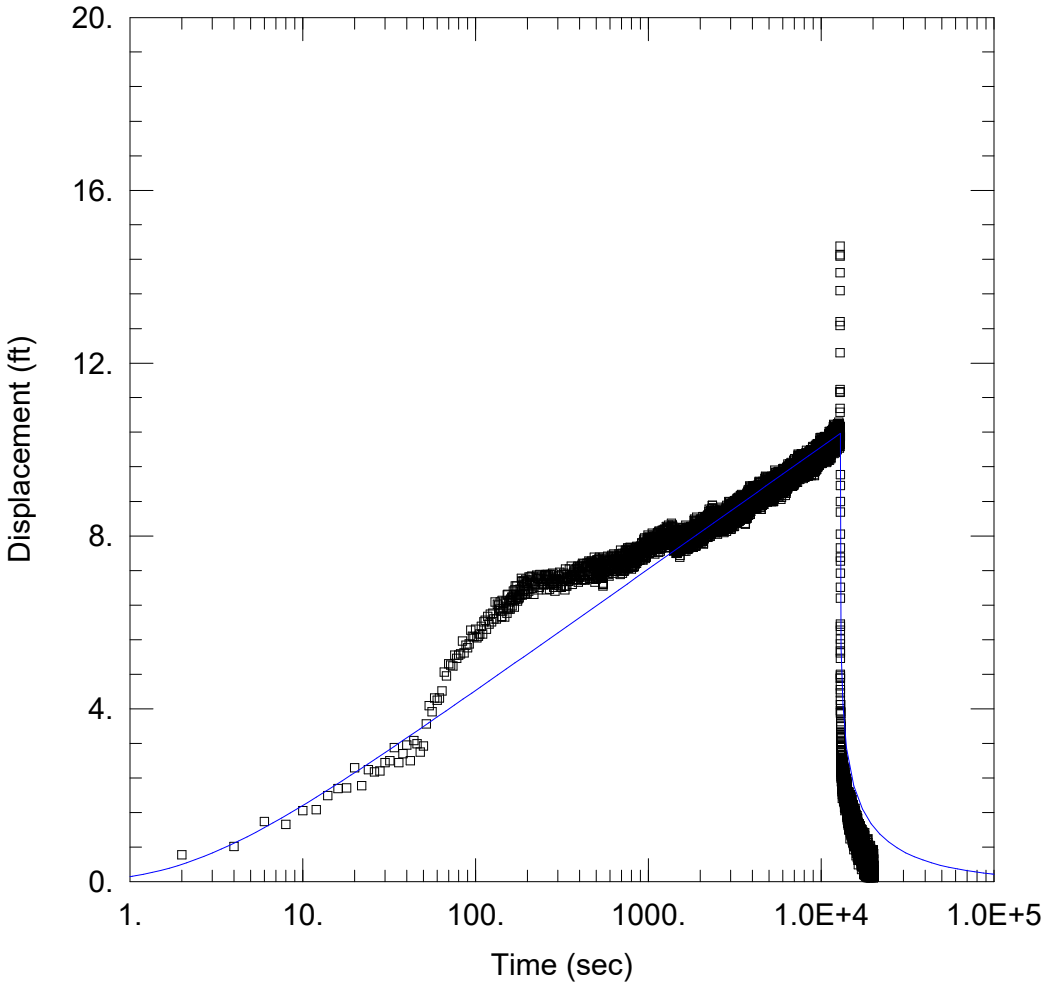
AQUIFER DATA

Saturated Thickness: 50.4 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob

T = 0.4826 cm^2/sec S = 0.08834



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp598 485-535.5 CRE theis.aqt
Date: 02/14/25 Time: 12:15:17

PROJECT INFORMATION

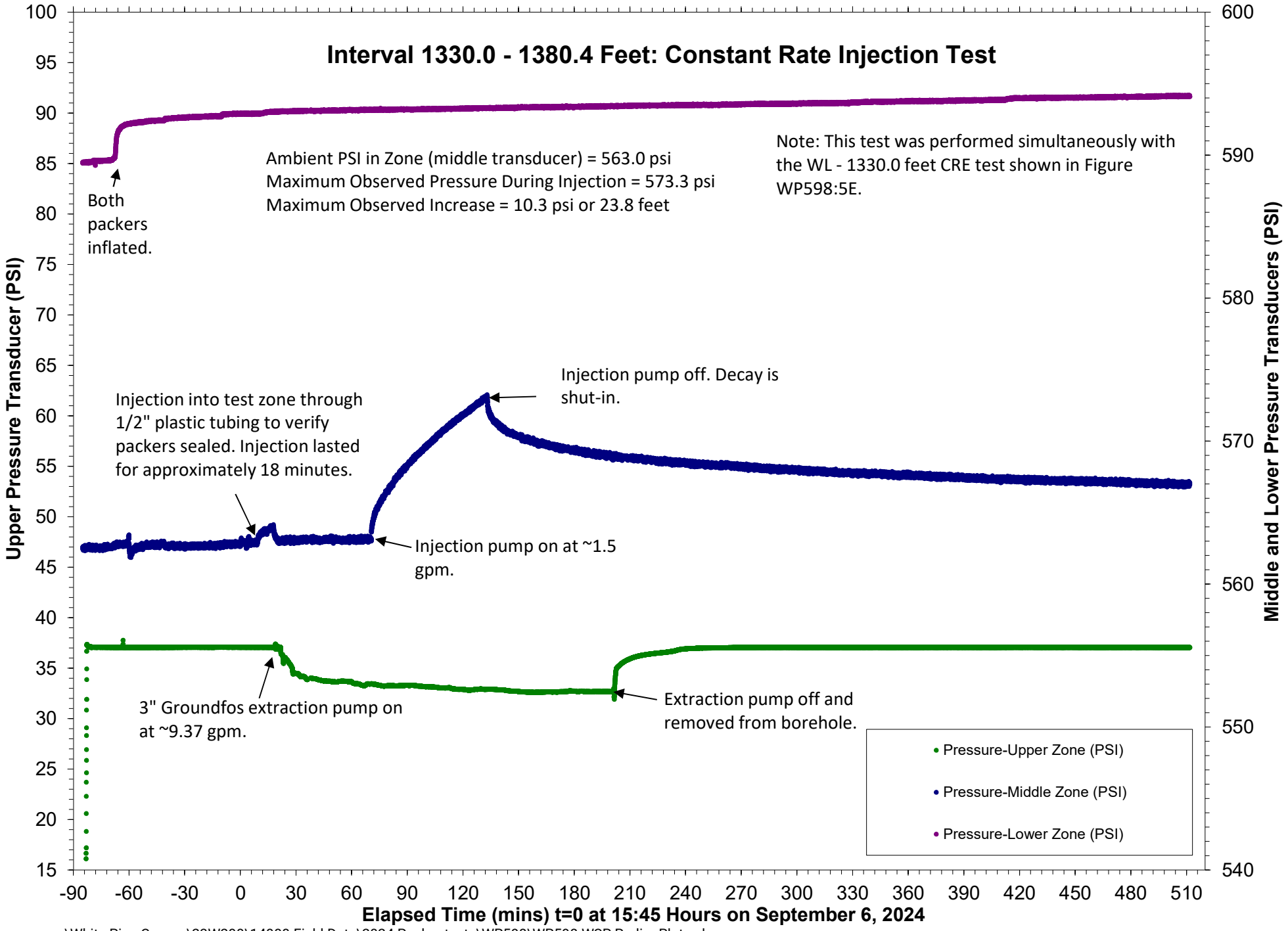
Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-598

SOLUTION

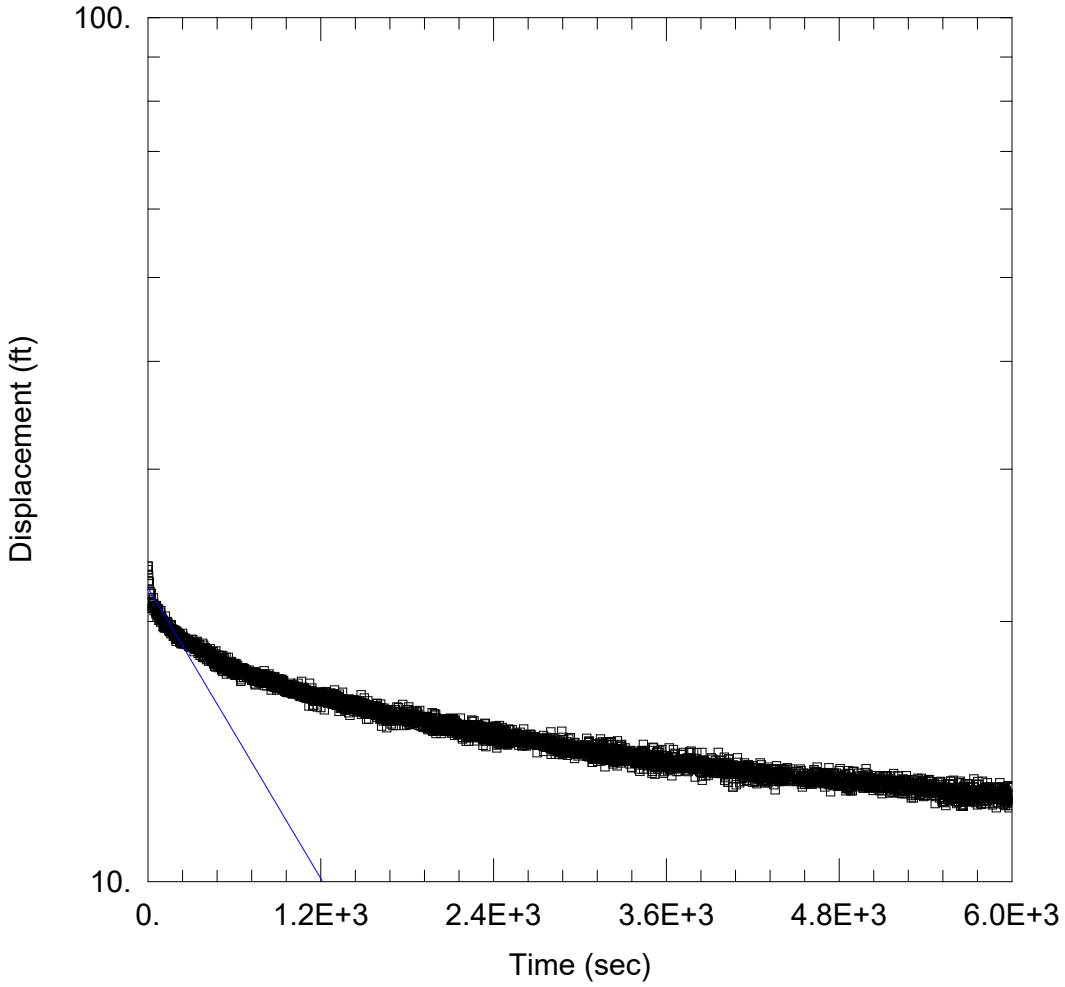
Aquifer Model: Confined
Solution Method: Theis

T = 0.4495 cm^2/sec
S = 0.1213
Kz/Kr = 1.
b = 50.4 ft

FIGURE WP598:5D Pressure Data During Wireline Straddle Packer Testing at 1330.0 to 1380.4 Feet, Constant Rate Injection Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP598



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP598\WP598 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp598 1330-1380.4 slug in BR.aqt
Date: 02/14/25 Time: 12:35:26

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-598

AQUIFER DATA

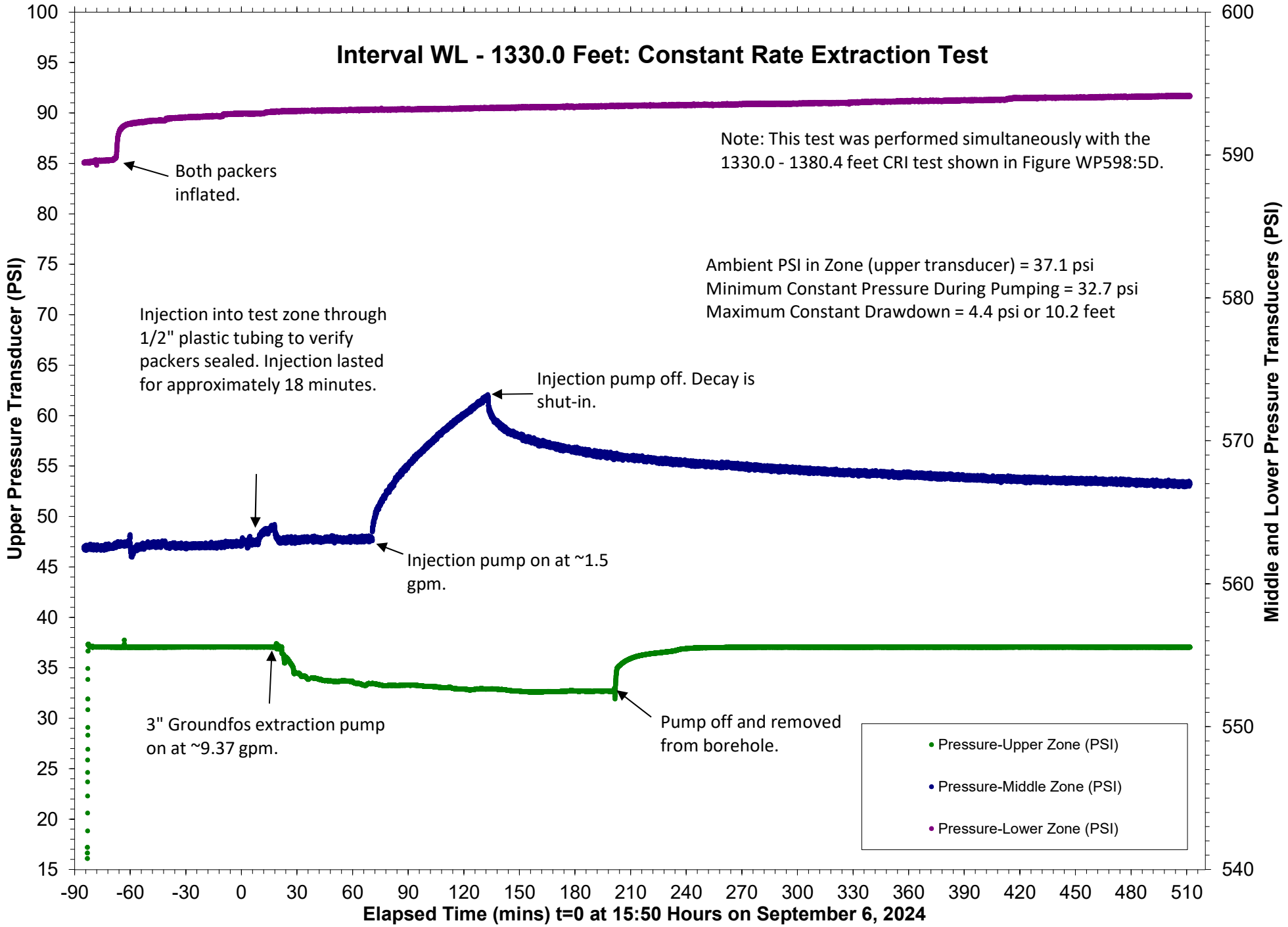
Saturated Thickness: 50.4 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

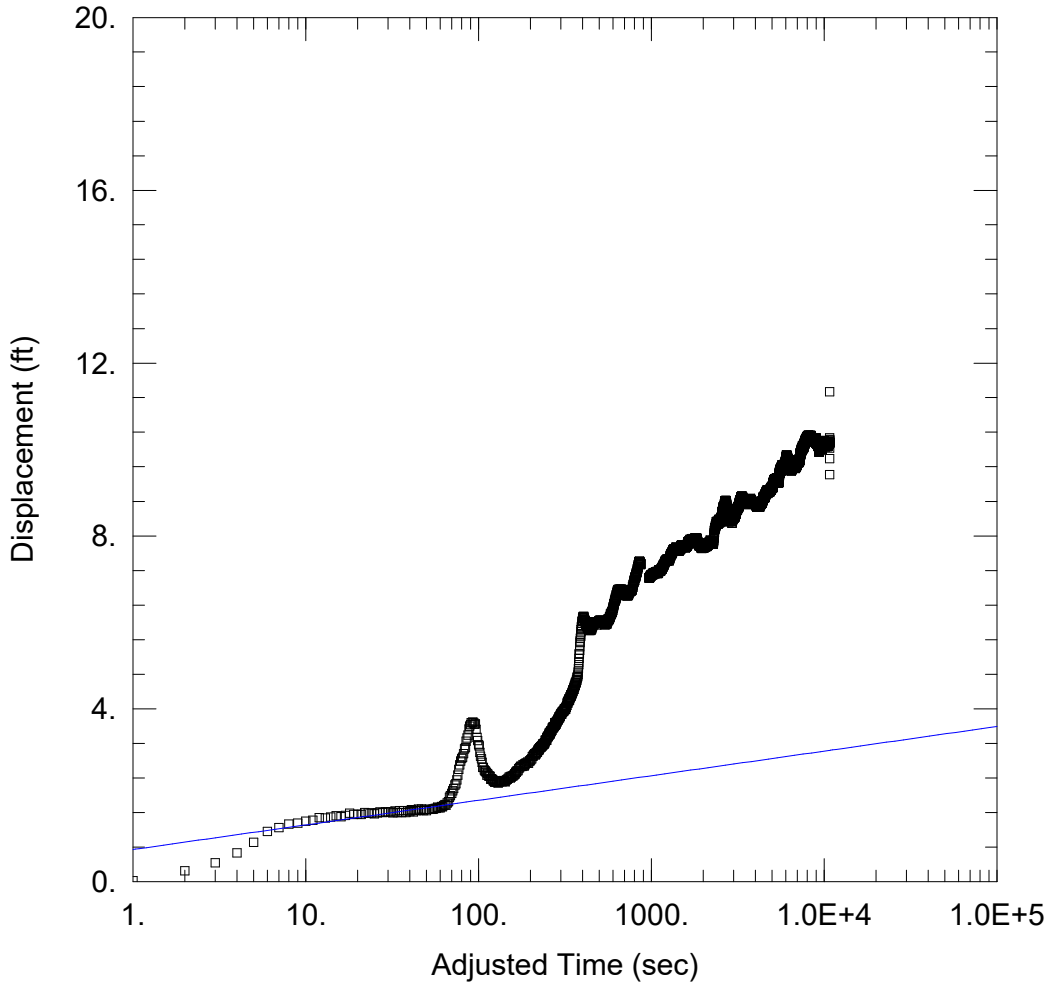
Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 4.018E-7 cm/sec y0 = 21.88 ft

FIGURE WP598:5E Pressure Data During Wireline Straddle Packer Testing at Water Level to 1330.0 Feet, Constant Rate Extraction Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP598



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP598\WP598 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp598 WL-1330 CRE CJ.aqt
Date: 02/14/25 Time: 11:12:39

PROJECT INFORMATION

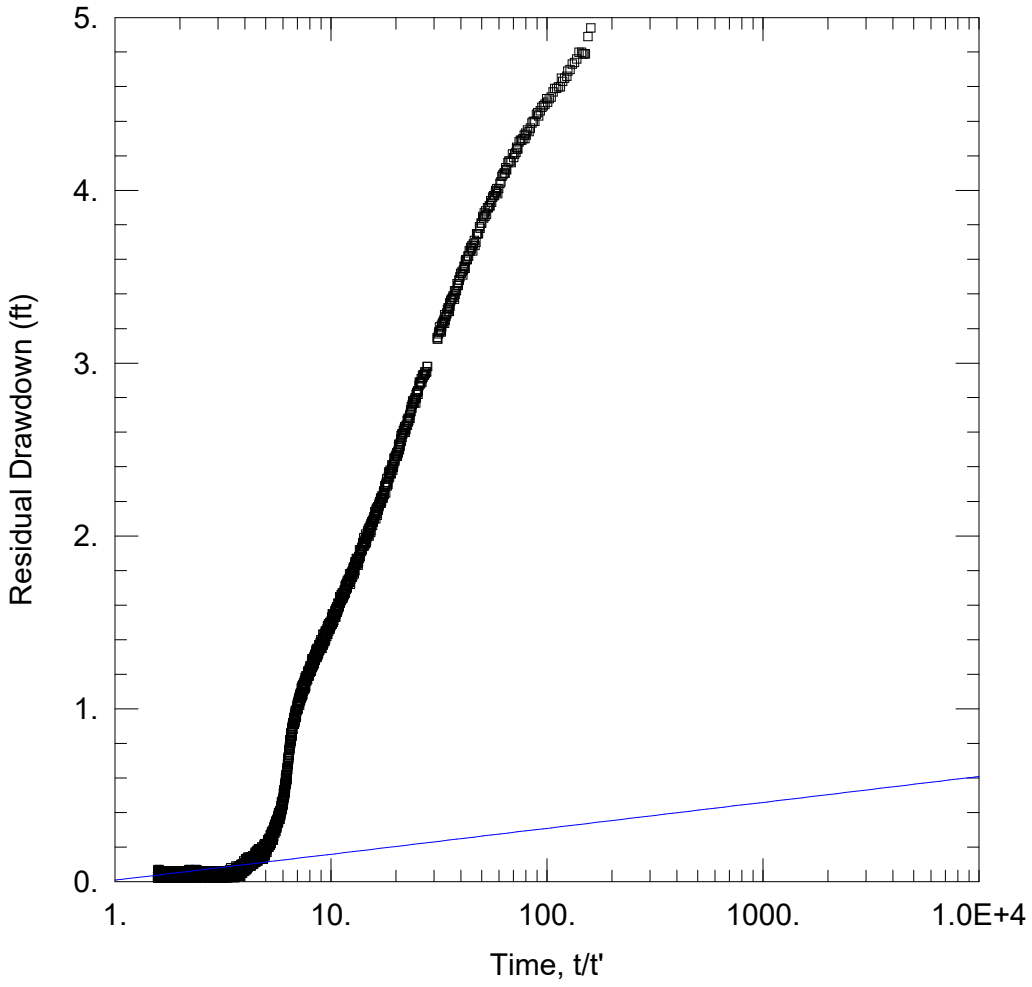
Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-598

AQUIFER DATA

Saturated Thickness: 1295.9 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob
T = 6.242 cm^2/sec S = 0.03042



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp598 WL-1330 CRE theis.aqt
Date: 02/14/25 Time: 11:39:10

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-598

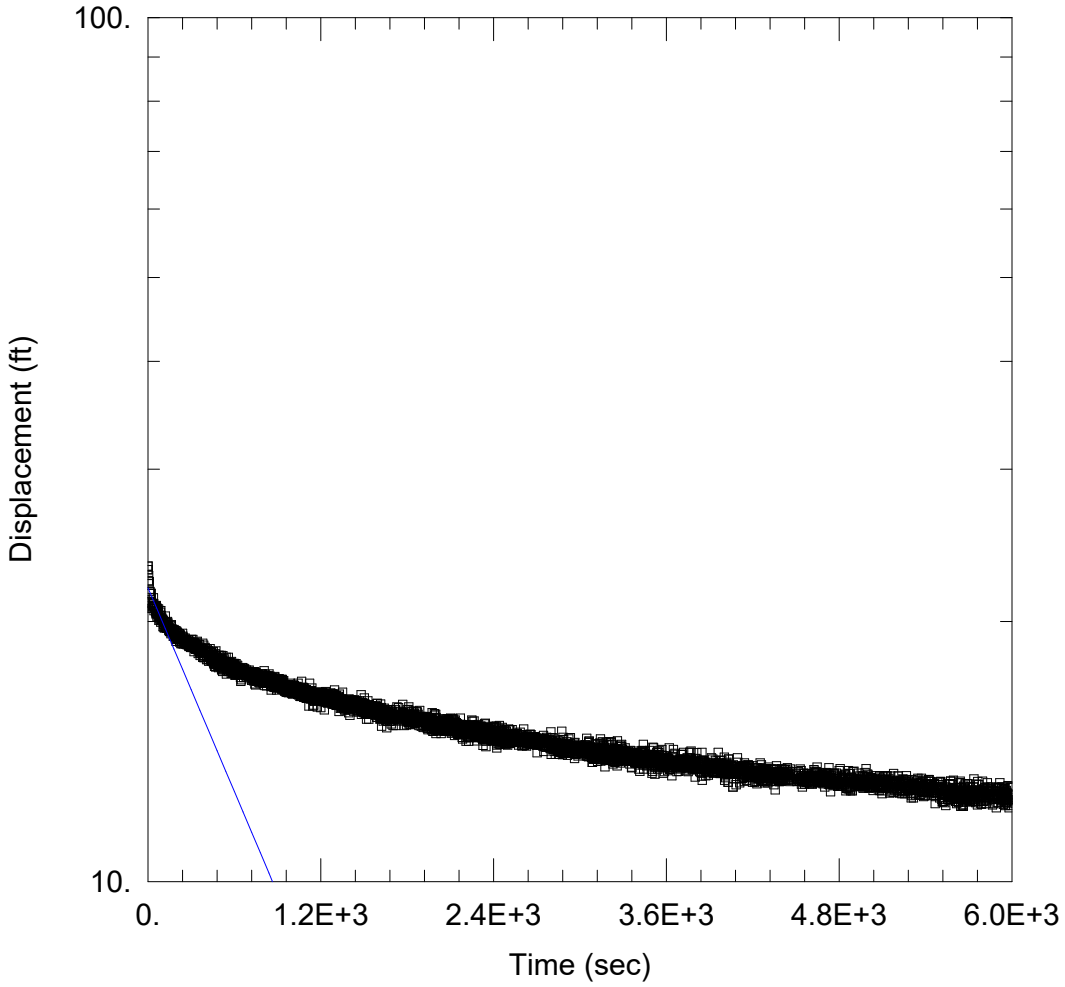
AQUIFER DATA

Saturated Thickness: 1295.9 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Theis (Recovery)

T = 23.7 cm^2/sec S/S' = 0.8883



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp598 1330-1380.4 slug in HV.aqt
Date: 02/14/25 Time: 12:37:16

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-598

AQUIFER DATA

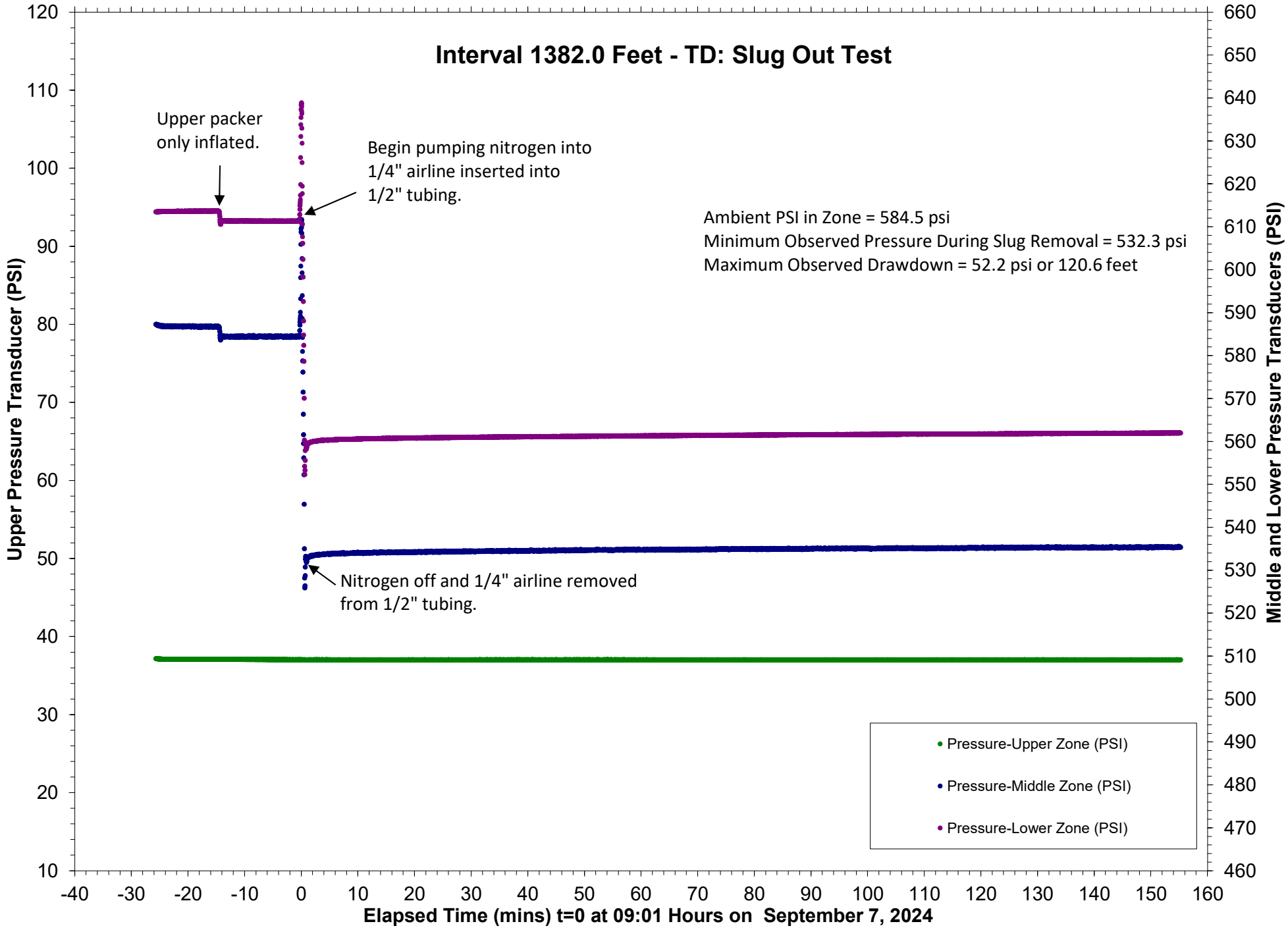
Saturated Thickness: 50.4 ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

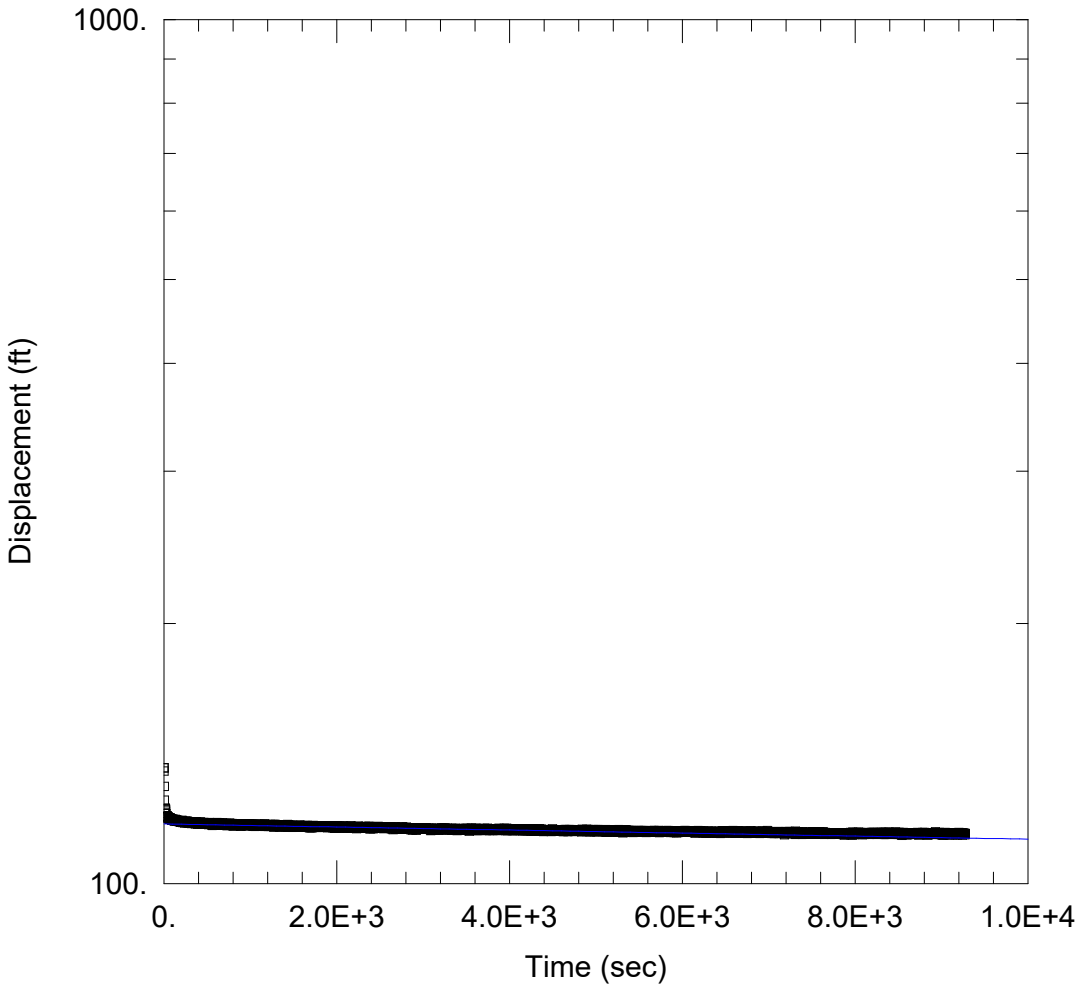
Aquifer Model: Confined Solution Method: Hvorslev

K = 6.517E-7 cm/sec y0 = 21.88 ft

FIGURE WP598:5F Pressure Data During Wireline Straddle Packer Testing at 1382.0 Feet to Total Depth, Slug Out Test; White Pine Copper; White Pine North Project; White Pine, MI; Borehole: WP598



pw:\White Pine Copper\23W200\14000 Field Data\2024 Packer tests\WP598\WP598 WSP Prelim Plots.xlsx



WELL TEST ANALYSIS

Data Set: C:\Users\HLH\Desktop\Temp\White Pine\wp598 1382-TD slug out BR.aqt
Date: 02/14/25 Time: 09:16:04

PROJECT INFORMATION

Company: Foth
Client: White Pine Copper
Project: 0023N202.24
Location: White Pine Michigan
Test Well: WP-598

AQUIFER DATA

Saturated Thickness: 1667. ft Anisotropy Ratio (Kz/Kr): 1.

SOLUTION

Aquifer Model: Confined Solution Method: Hvorslev

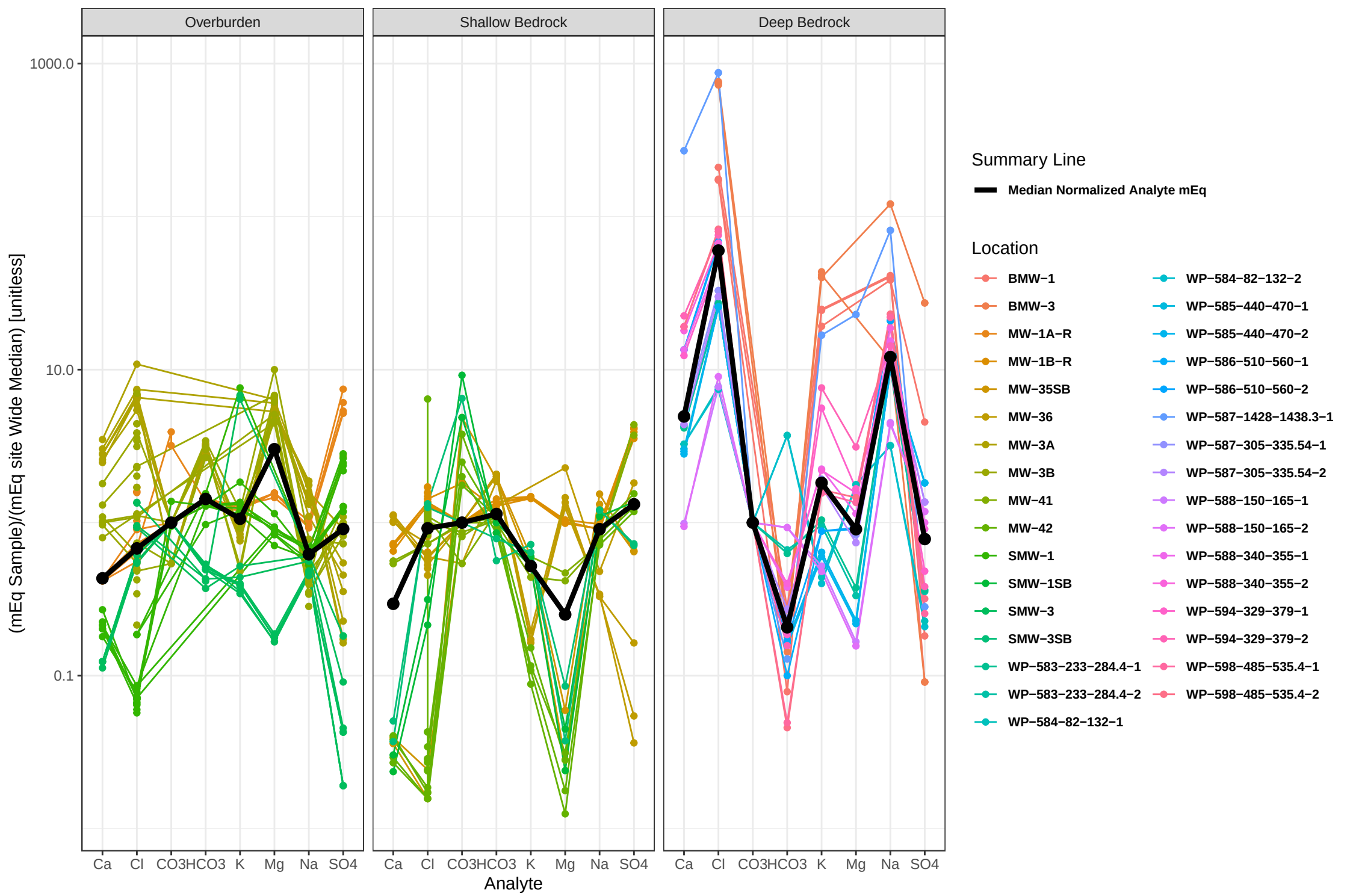
K = 8.814E-11 cm/sec y0 = 117.2 ft

Appendix D

Deep Bedrock Groundwater Quality Data

Schoeller Plots
Trilinear Plots for Deep Bedrock
Brine Analysis Plots
Field Parameters for One-Time Bedrock Groundwater Sampling
Open Borehole Results

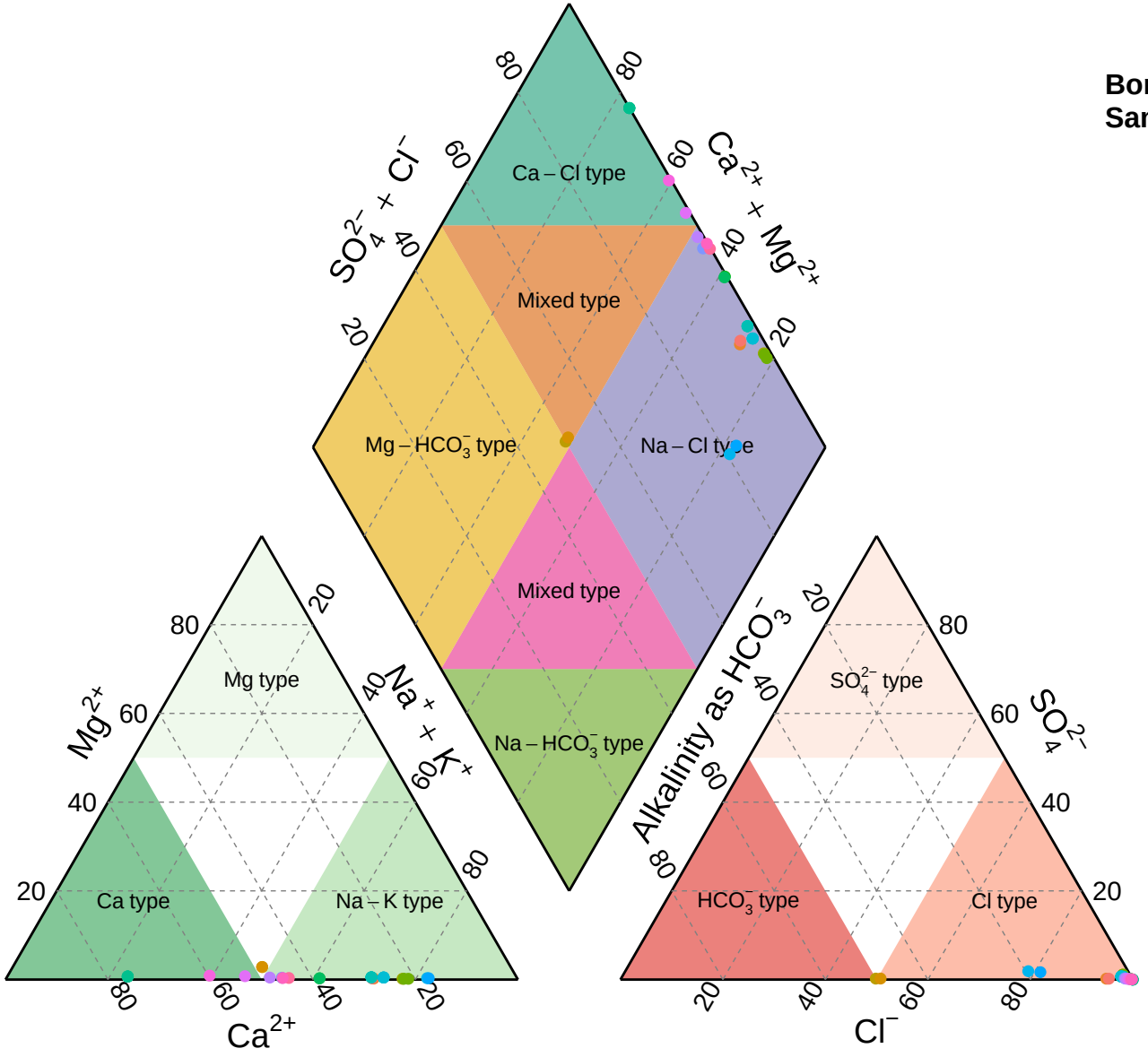
Schoeller Plots



Note(s):
1.) 'Site Wide Median' includes all geologies, all times, and all locations.
2.) 'Median Normalized Analyte mEq' is the median of data per analyte across all locations and all times in a plot pane

Trilinear Plots for Deep Bedrock

Trilinear Plot of one-time Bedrock Water Quality Samples - ALL SAMPLE DEPTHS

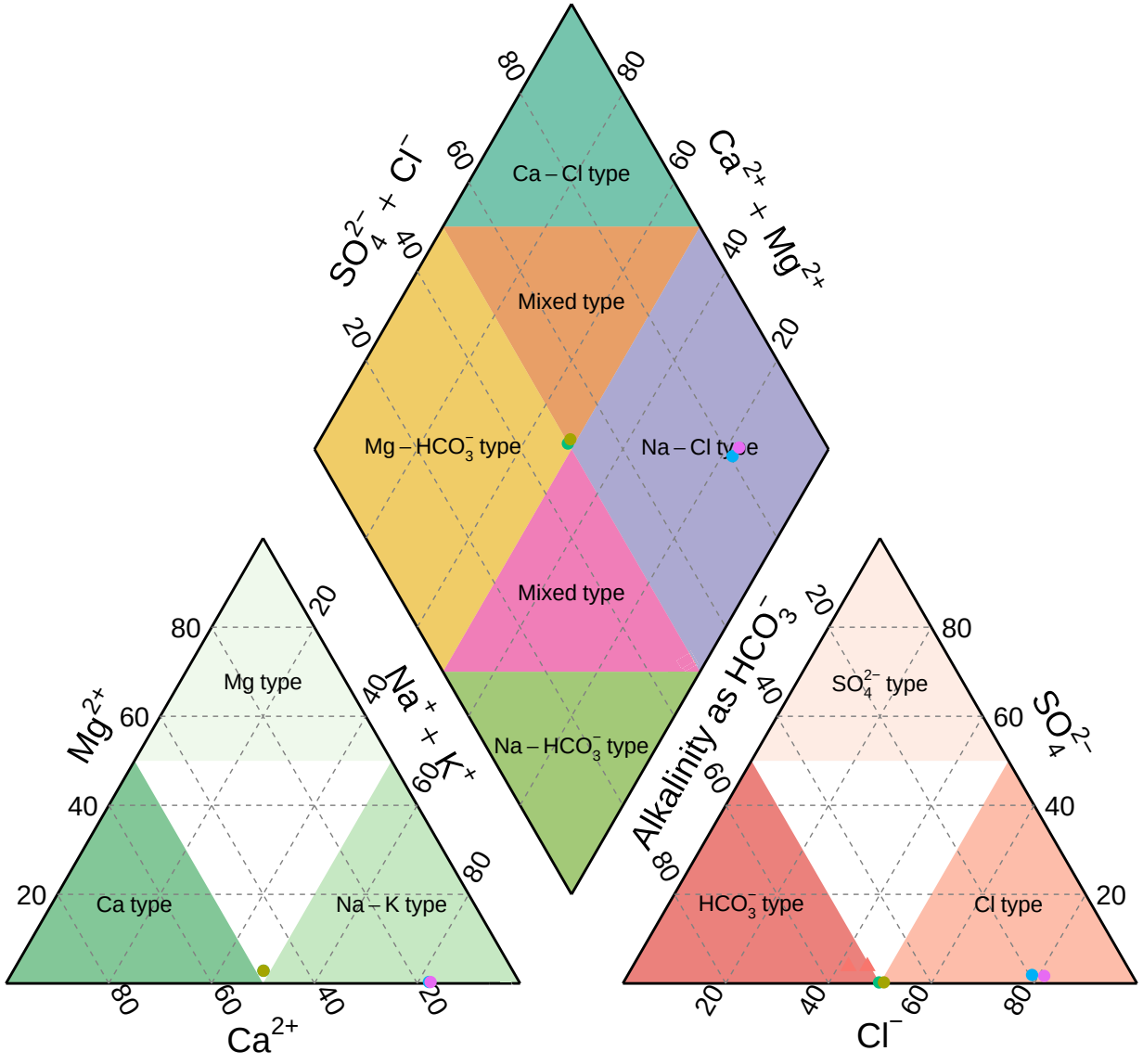


Borehole, Depth Interval & Sample Number:

- WP−583−233−284.4−1
- WP−583−233−284.4−2
- WP−584−82−132−1
- WP−584−82−132−2
- WP−585−440−470−1
- WP−585−440−470−2
- WP−586−510−560−1
- WP−586−510−560−2
- WP−587−1428−1438.3−1
- WP−587−305−335.54−1
- WP−587−305−335.54−2
- WP−588−150−165−1
- WP−588−150−165−2
- WP−588−340−355−1
- WP−588−340−355−2
- WP−594−329−379−1
- WP−594−329−379−2
- WP−598−485−535.4−1
- WP−598−485−535.4−2

(Depth listed as midpoint of interval in lineal feet down borehole)

Trilinear Plot of one-time Bedrock Water Quality Samples - BEDROCK DEPTHS (to 200 feet)

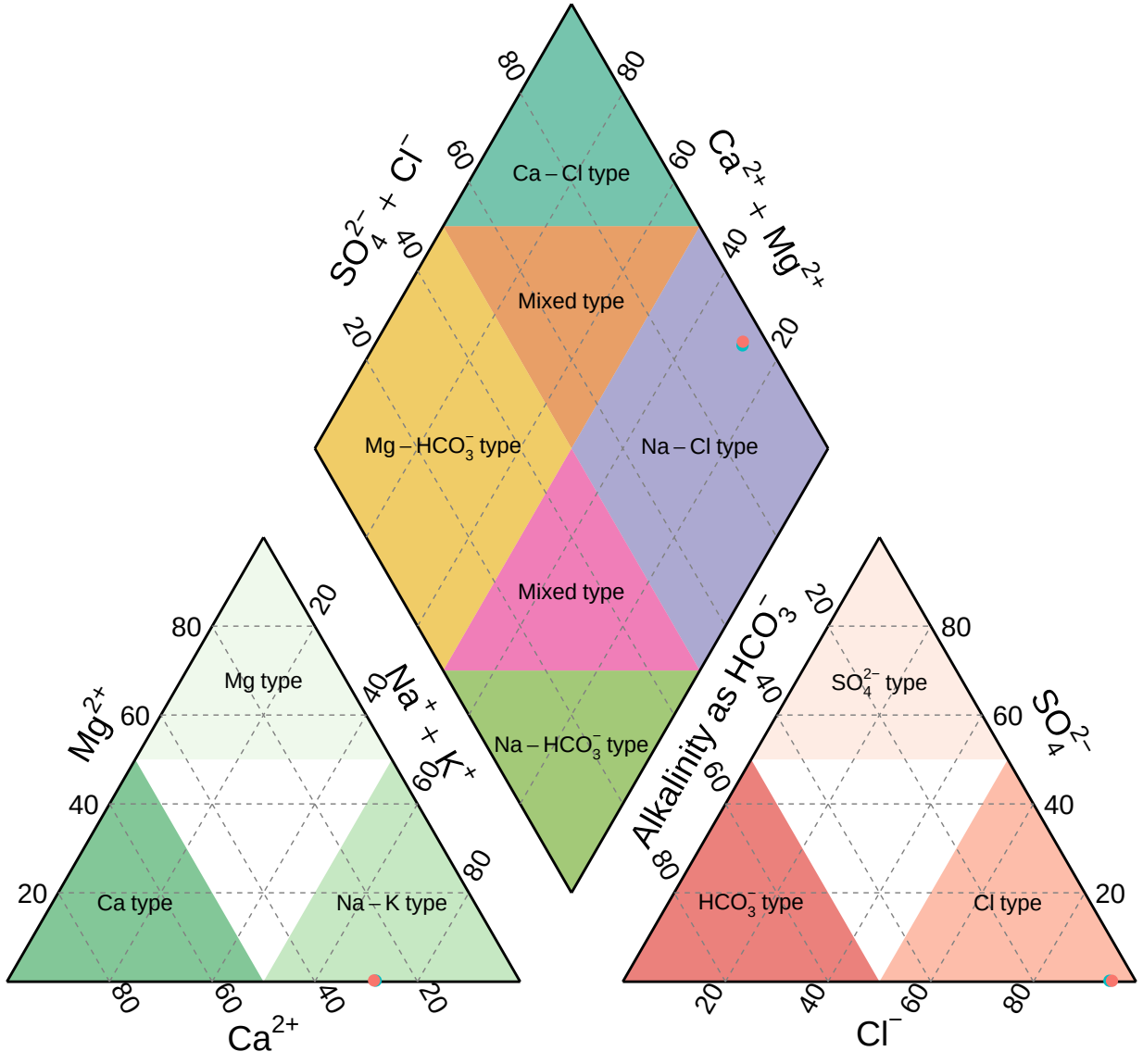


Borehole, Depth Interval & Sample Number:

- WP−584−82−132−1
- WP−584−82−132−2
- WP−588−150−165−1
- WP−588−150−165−2

(Depth listed as midpoint of interval in lineal feet down borehole)

Trilinear Plot of one-time Bedrock Water Quality Samples - BEDROCK DEPTHS (200 to 300 feet)

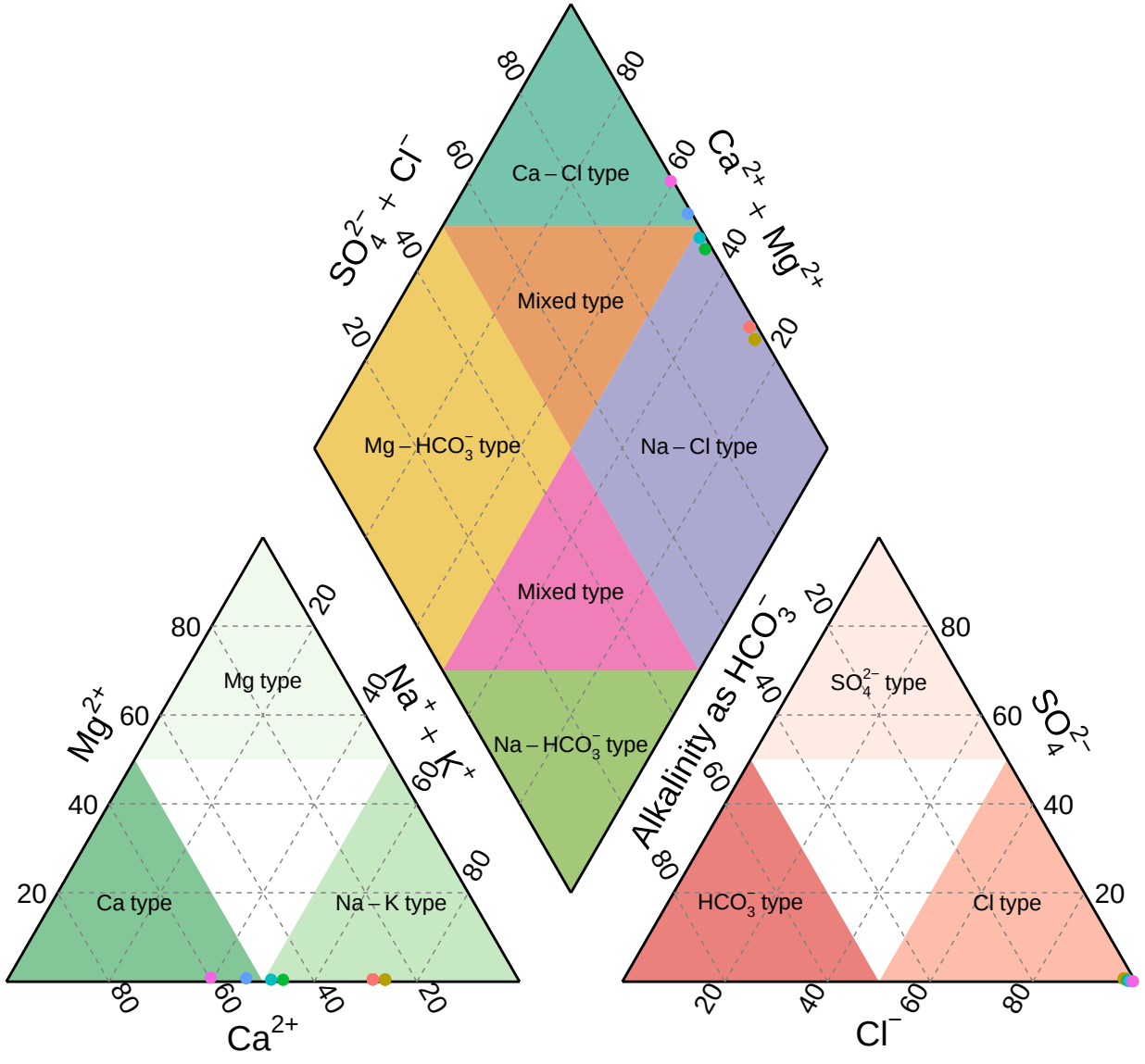


Borehole, Depth Interval & Sample Number:

- WP−583−233−284.4−1
- WP−583−233−284.4−2

(Depth listed as midpoint of interval in lineal feet down borehole)

Trilinear Plot of one-time Bedrock Water Quality Samples - BEDROCK DEPTHS (300 to 400 feet)

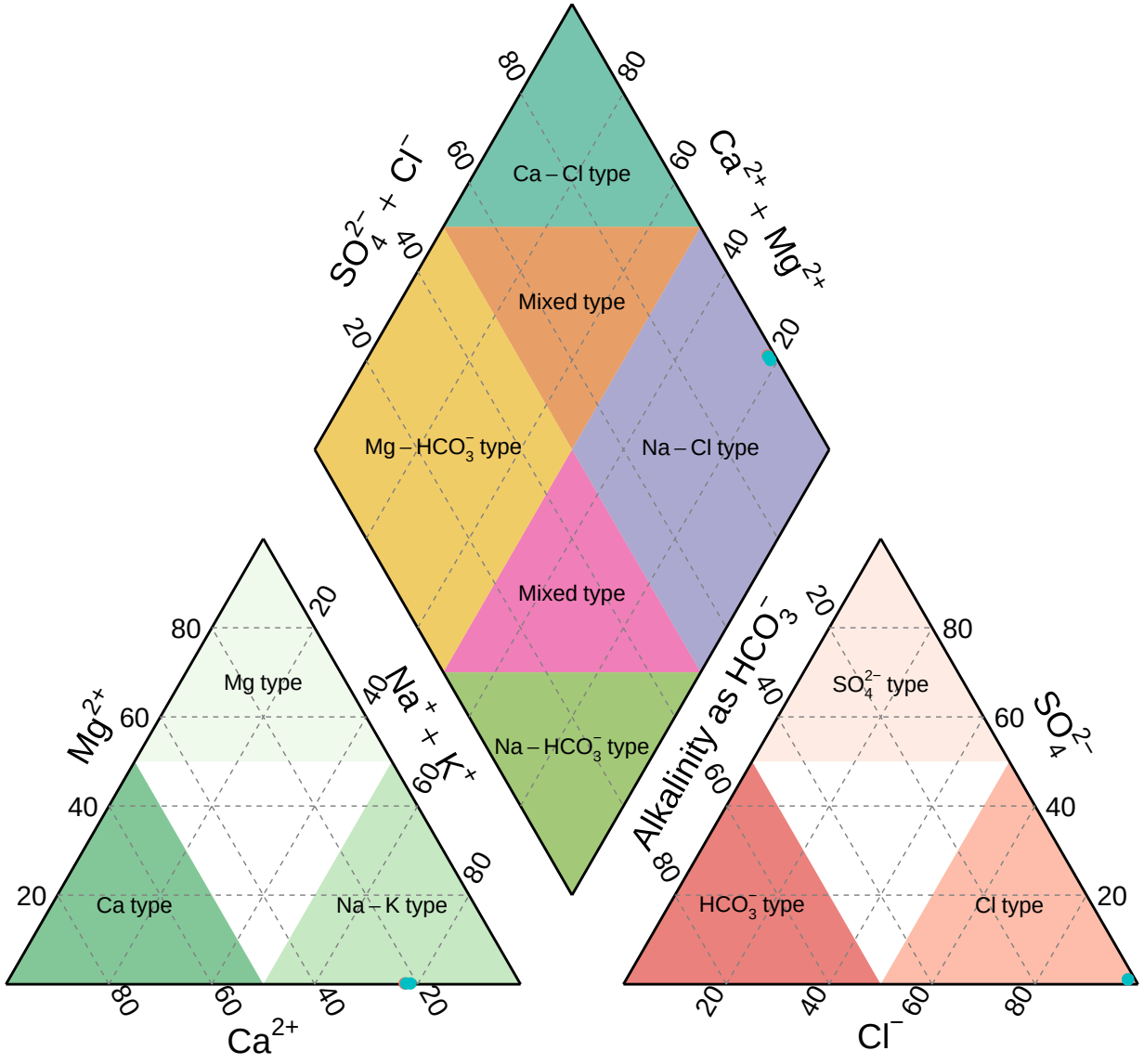


Borehole, Depth Interval & Sample Number:

- WP−587−305−335.54−1
- WP−587−305−335.54−2
- WP−588−340−355−1
- WP−588−340−355−2
- WP−594−329−379−1
- WP−594−329−379−2

(Depth listed as midpoint of interval in lineal feet down borehole)

Trilinear Plot of one-time Bedrock Water Quality Samples - BEDROCK DEPTHS (400 to 500 feet)

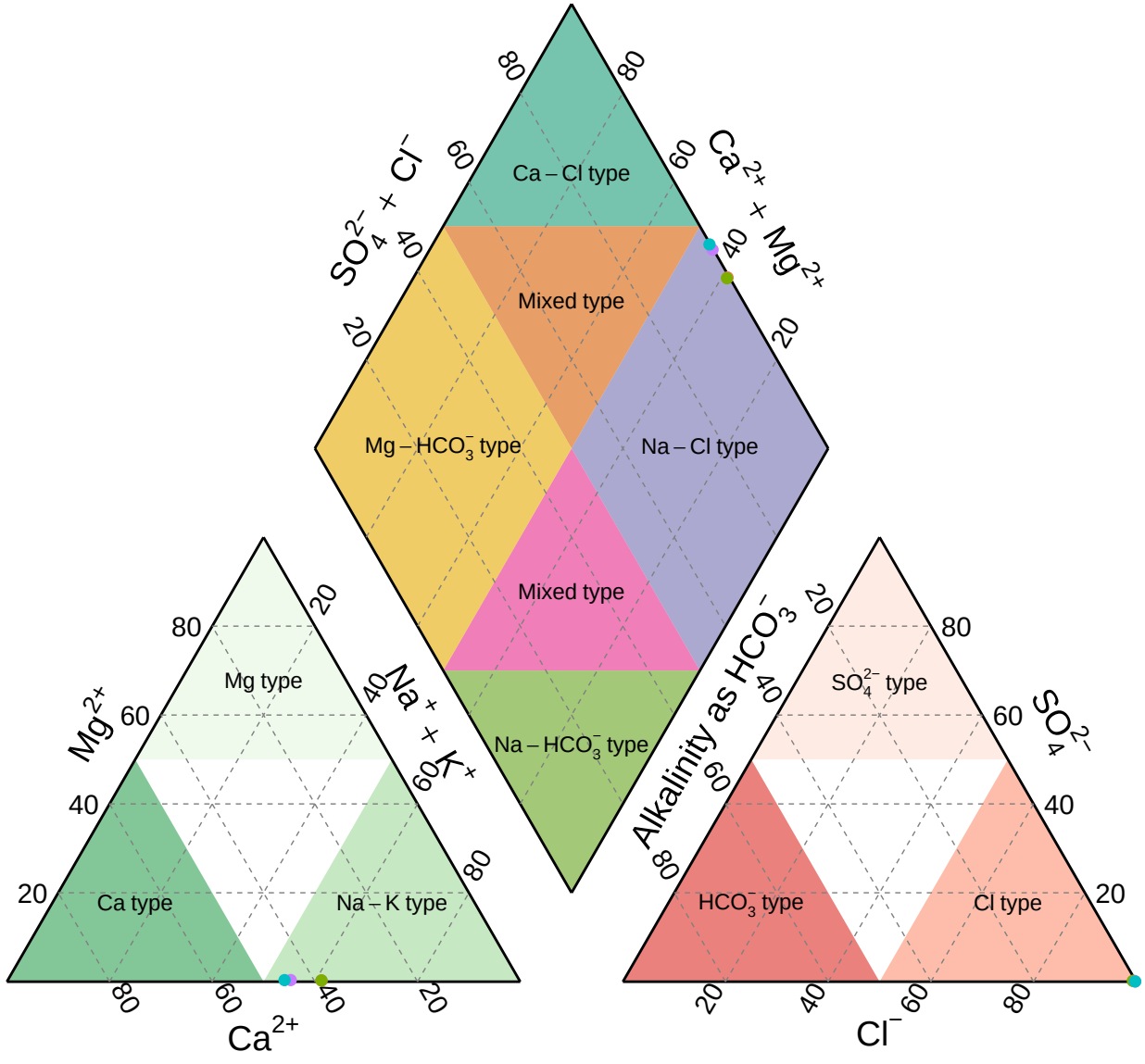


Borehole, Depth Interval & Sample Number:

- WP−585−440−470−1
- WP−585−440−470−2

(Depth listed as midpoint of interval in lineal feet down borehole)

Trilinear Plot of one-time Bedrock Water Quality Samples - BEDROCK DEPTHS (500 to 600 feet)

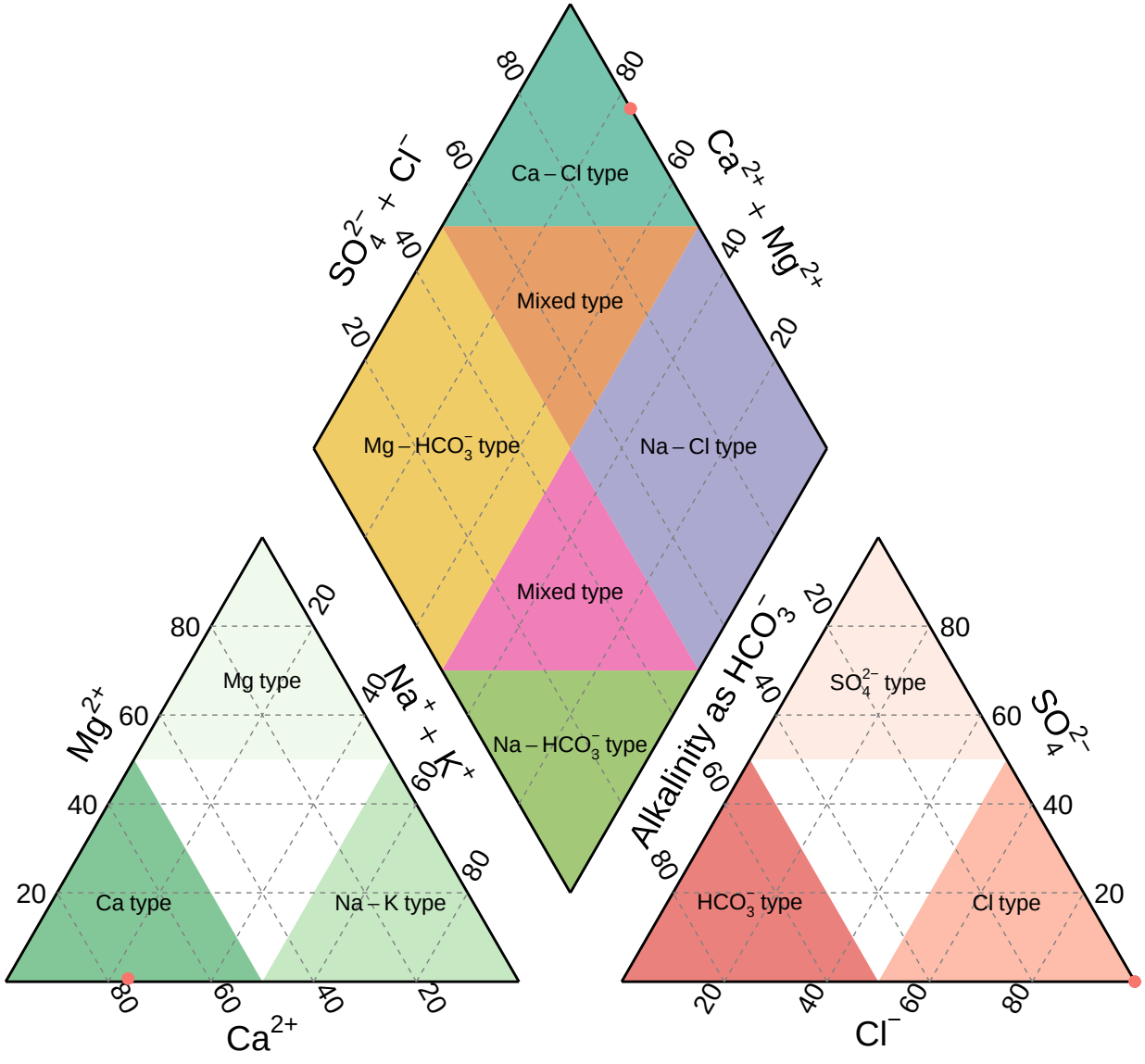


Borehole, Depth Interval & Sample Number:

- WP−586−510−560−1
- WP−586−510−560−2
- WP−598−485−535.4−1
- WP−598−485−535.4−2

(Depth listed as midpoint of interval in lineal feet down borehole)

Trilinear Plot of one-time Bedrock Water Quality Samples - BEDROCK DEPTHS (>600 feet)

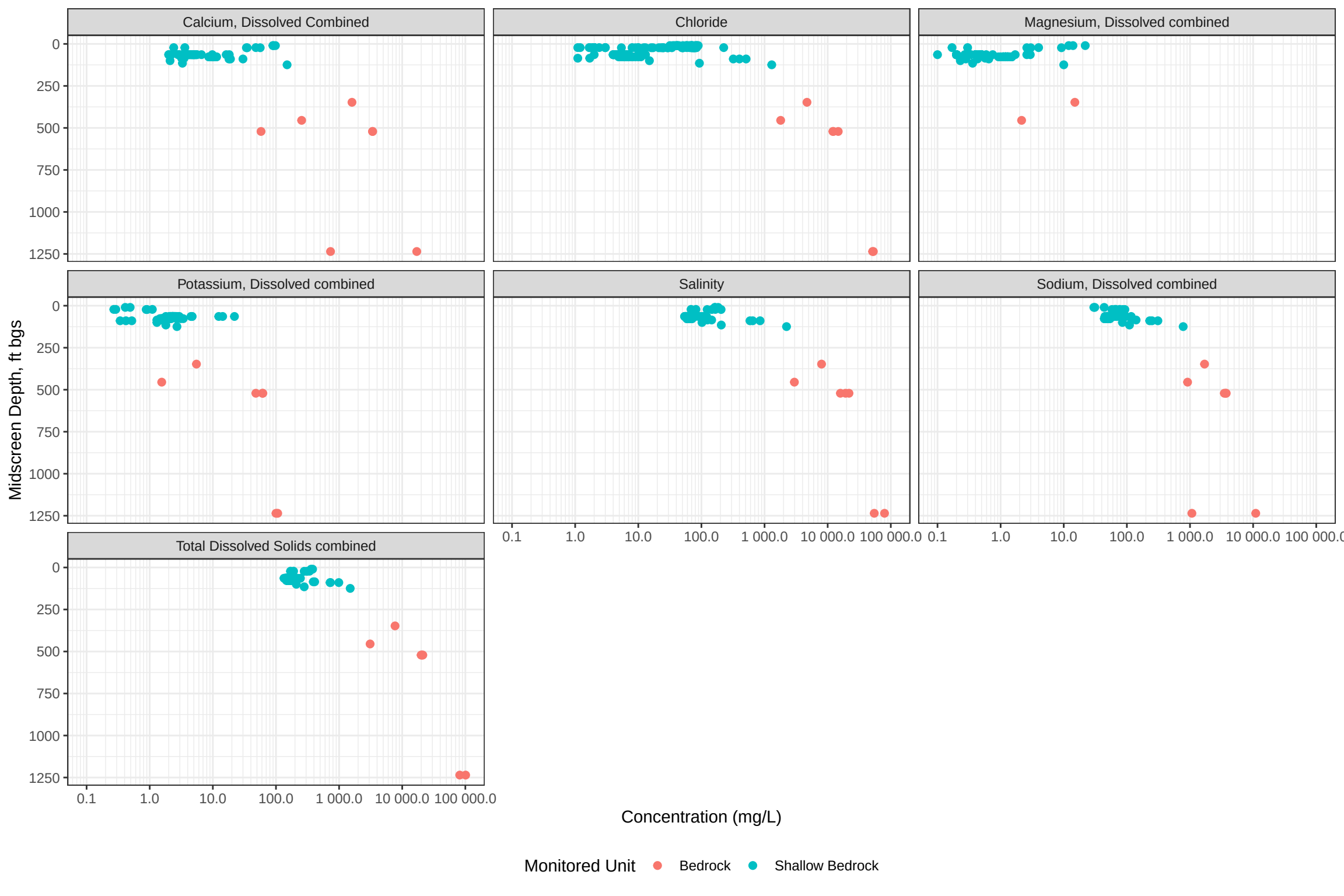


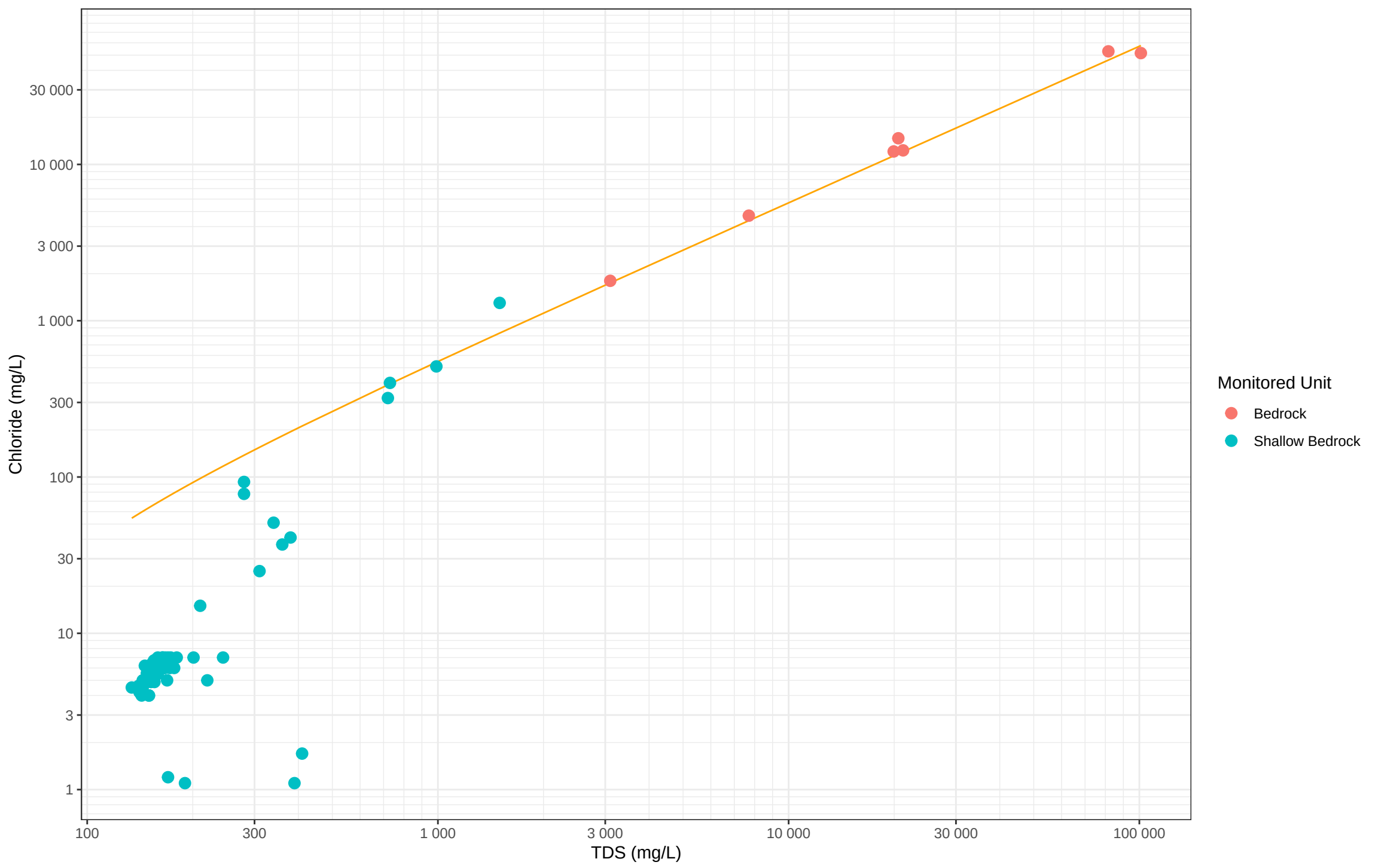
Borehole, Depth Interval & Sample Number:

- WP−587−1428−1438.3−1

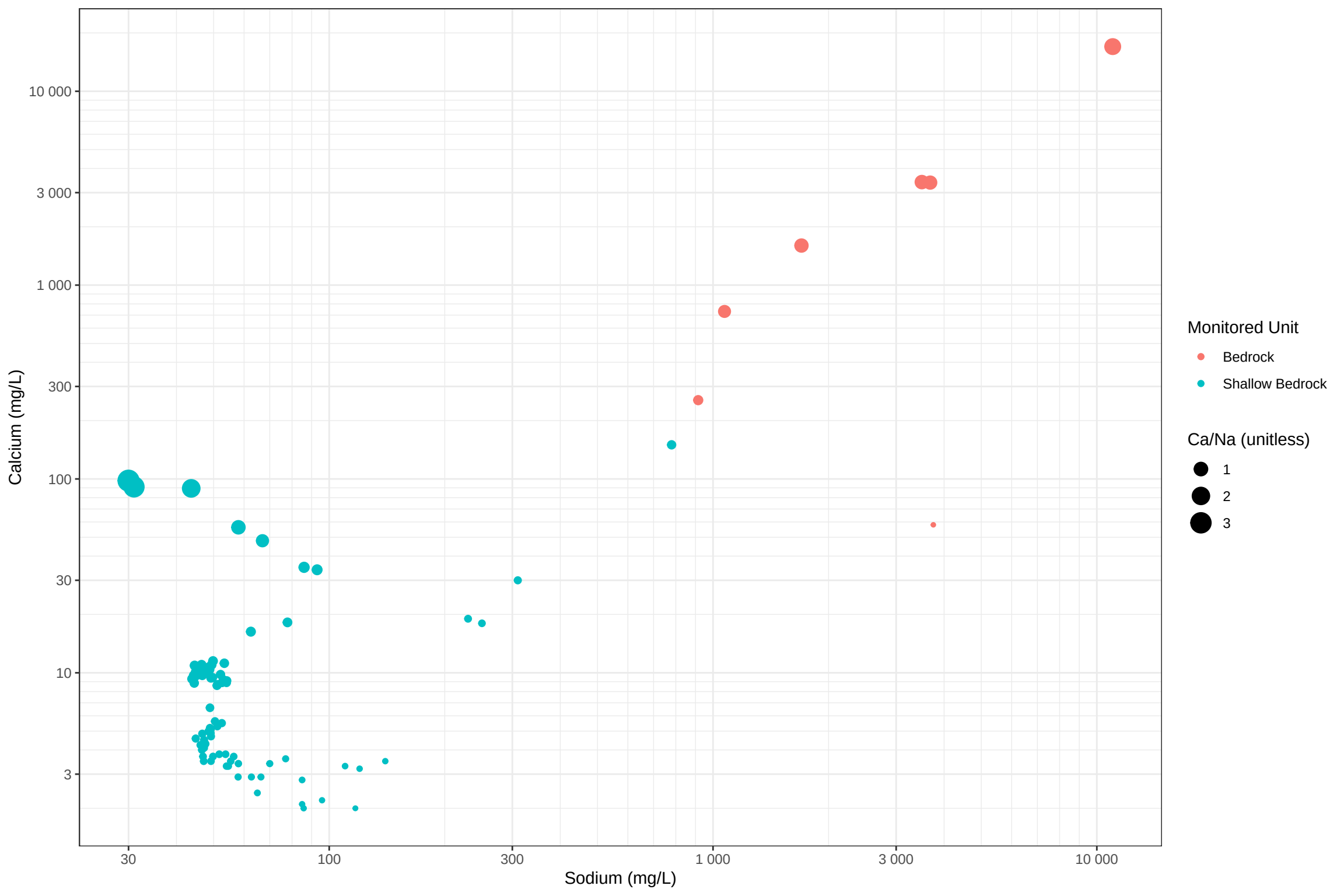
(Depth listed as midpoint of interval in lineal feet down borehole)

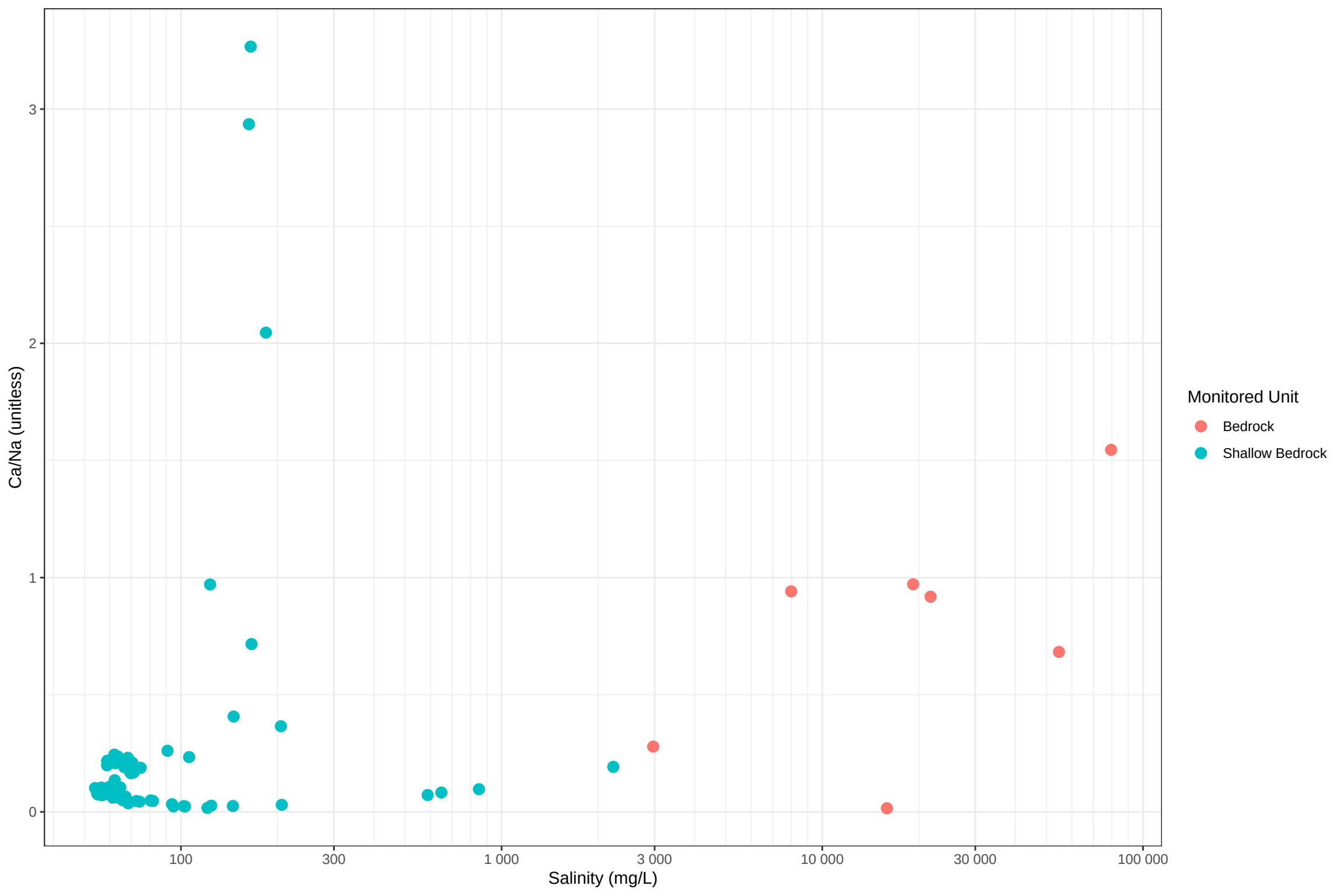
Brine Analysis Plots

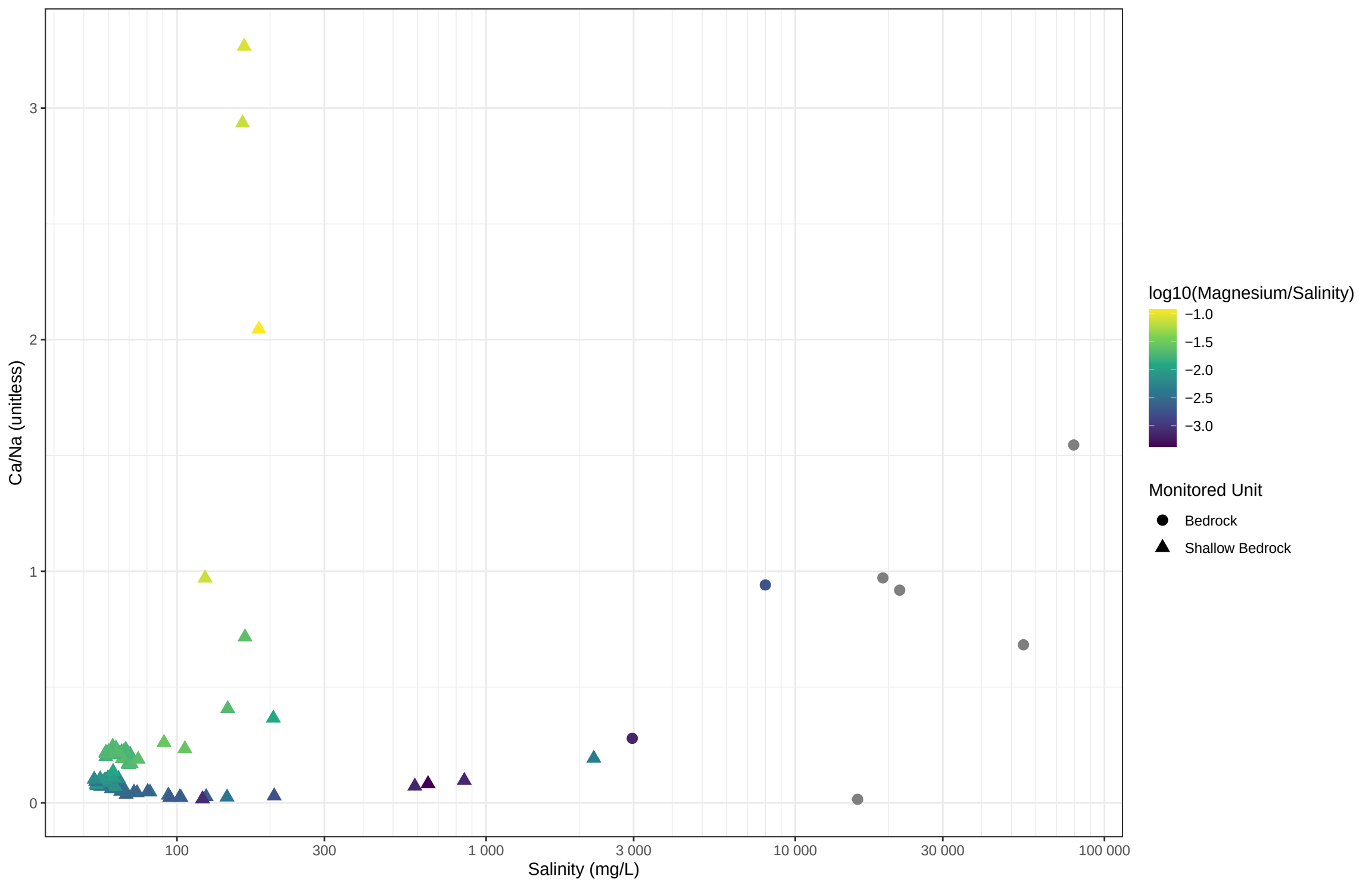

Calcium, Dissolved Combined
Chloride
Magnesium, Dissolved combined
Potassium, Dissolved combined
Salinity
Sodium, Dissolved combined
Total Dissolved Solids combined
Midscreen Depth, ft bgs
0
250
500
750
1000
1250
0.1
1.0
10.0
100.0
1 000.0
10 000.0
100 000.0
Concentration (mg/L)
Monitored Unit
Bedrock
Shallow Bedrock



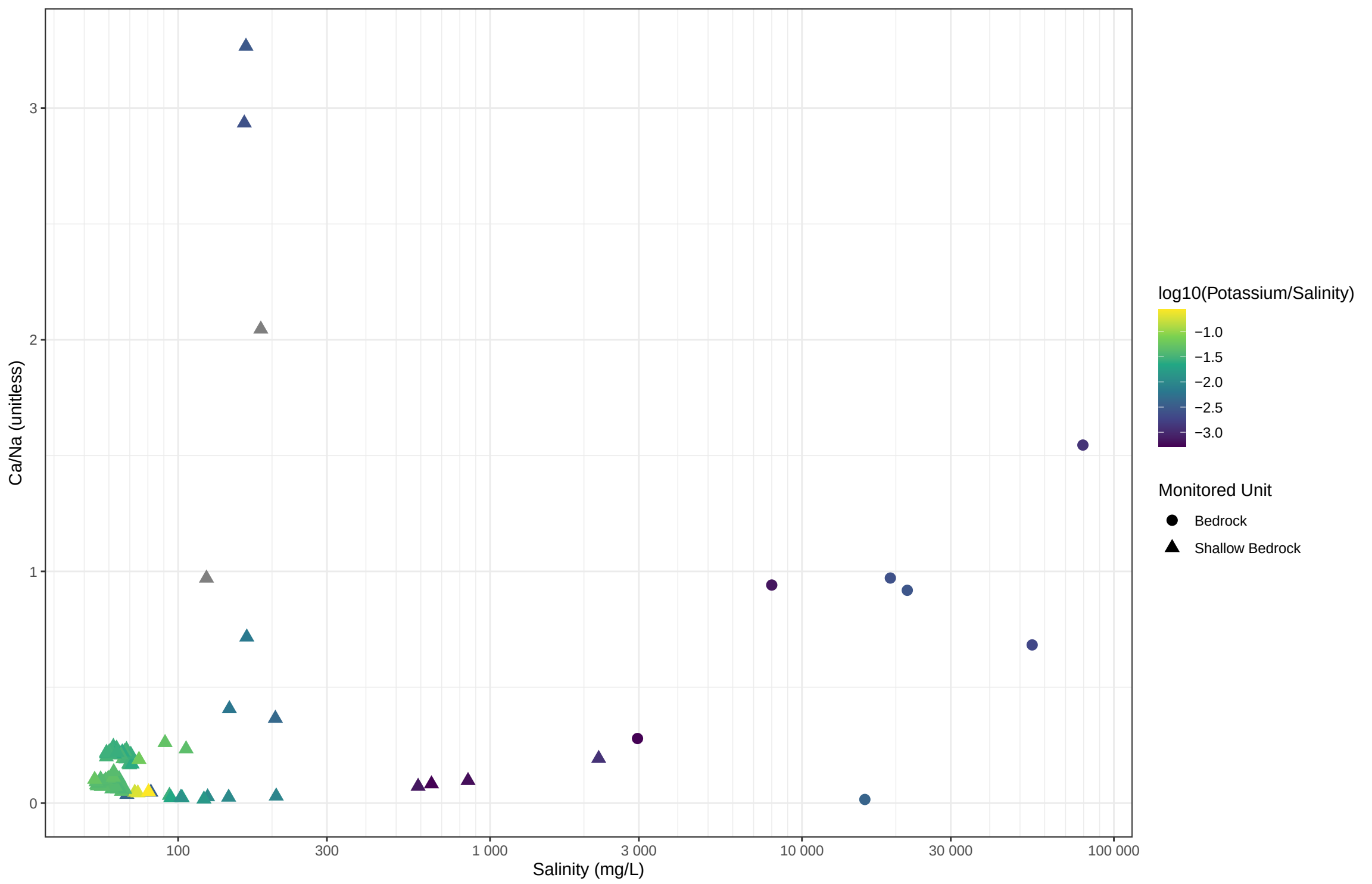
Notes:
Orange line is the modeled Chloride vs TDS (Chloride = m*TDS+b, m = 0.57)


Calcium (mg/L)
10 000
3 000
1 000
300
100
30
10
3
30
100
300
1 000
3 000
10 000
Sodium (mg/L)
Monitored Unit
Bedrock
Shallow Bedrock
Ca/Na (unitless)
1
2
3

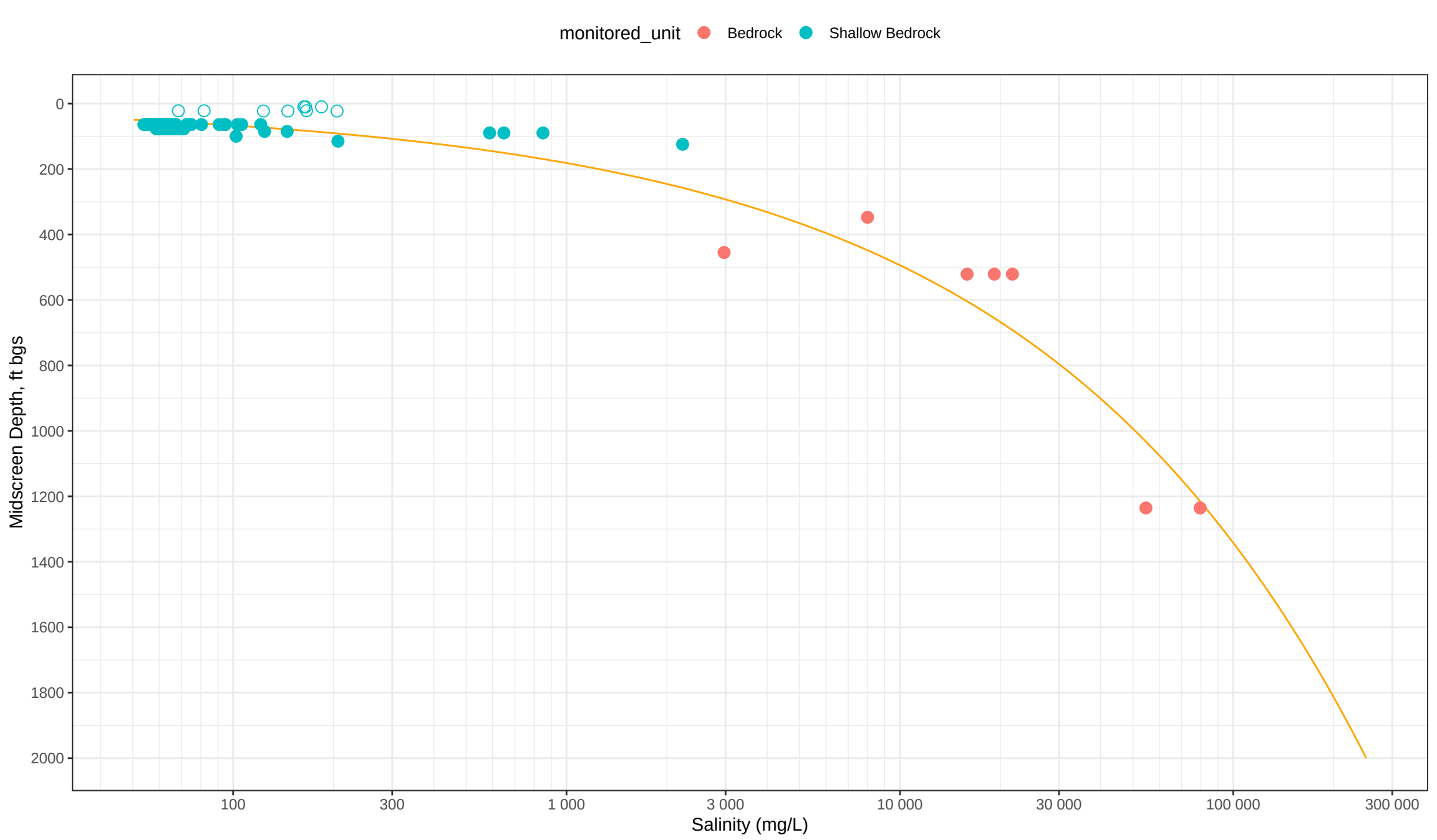

Ca/Na (unitless)
3
2
1
0
100
300
1 000
3 000
10 000
30 000
100 000
Salinity (mg/L)
Monitored Unit
Bedrock
Shallow Bedrock



Notes: Gray colored points have NA as a color value (i.e., no measuremed value in data).



Notes: Gray colored points have NA as a color value (i.e., no measuremed value in data).



Notes:
1.) Orange line is modeled salinity with depth (log(Salinity) = m*log(depth)+b).
2.) Hollow points are values not used in modeling
(density of shallow points overweighted regression so samples <50 ft bgs in midscreen depth removed as a quick/rough filtering of samples that likely have the least impact on describing brine interface).

Field Parameters for One-Time Bedrock Groundwater Sampling

Field Parameters from Interval Pumping & One-time Bedrock Groundwater Sampling
White Pine Copper

Borehole ID	Sampling Interval Depth (ft bgs)	Sample Collected and Submitted for Lab Analysis?	Date	Time	Temp-erature (°C)	pH (s.u.)	Specific conductance (µS/cm)	ORP (mV)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
WP-583	164 - 189.9	no	7/20/2024	12:28	16.13	8.02	3,204	27.2	198	3.9
				12:50	16.10	8.11	3,198	-70.2	129	4.8
	233 - 284.4	**Yes**	7/21/2024	16:39	17.31	7.42	5,000	-120.5	53	3.4
				17:13	-	7.54	6,260	-123.0	9	4.4
				17:46	16.34	7.60	6,310	-107.2	6	3.8
	520 - 571.4	no	7/22/2024	15:46	15.90	7.37	6,510	-46.8	3051	4.3
	Static water level to 720.43	no	7/23/2024	11:38	11.94	7.48	2,840	92.8	1835	8.6
				12:27	12.17	7.41	3,980	-8.4	456	9.5
				12:54	12.85	7.54	4,810	-49.9	277	8.9
				13:19	12.68	7.59	4,950	-51.8	249	9.2
	720.43 to total depth of borehole	no	7/23/2024	16:16	12.68	7.97	1,820	150.1	159	6.3
WP-584	Static water level to 82	no	7/26/2024	16:07	-	7.09	2,987	-32.5	21	0.4
				16:28	11.59	7.17	2,940	-38.3	15	0.9
				16:50	11.59	7.16	2,917	-49.1	6	0.6
	82 - 133.4	**Yes**	7/28/2024	9:32	11.29	7.11	2,938	-46.6	5	2.5
				9:40	11.35	7.14	7,929	-51.6	3	2.7
				10:30	11.43	7.13	2,884	-40.7	2	2.1
				10:58	11.74	7.12	2,866	-37.9	1	2.2
	340 - 390	no	7/27/2024	8:56	13.33	7.04	2,124	-9.6	82	2.2
				9:18	13.45	7.11	2,728	-46.0	61	1.4
	455 - 506.4	no	7/27/2024	15:53	17.66	6.94	3,309	-27.1	40	5.3
				16:27	20.22	6.97	7,571	-31.2	47	6.1
				16:50	22.50	6.76	2,277	-21.2	70	6.3
WP-585	**440 - 470.1**	**Yes**	8/22/2024	14:44	15.38	7.55	6,279	113.9	4	3.4
				14:48	13.90	8.06	6,197	59.8	79	3.2
				15:15	14.79	8.21	6,237	27.2	0	2.7
				15:46	16.00	8.30	6,312	-3.5	0	2.7
				16:20	15.69	8.28	6,044	19.4	0	3.4
				16:33	10.94	8.50	6,305	-114.2	0	0.1
				16:54	11.14	8.48	6,317	-63.8	0	0.3
WP-586	**510 - 560.1**	**Yes**	8/25/2024	12:46	15.50	7.54	12,329	106.6	4	1.6
				13:12	15.76	8.28	15,640	-39.9	5	2.2
				13:30	16.20	8.22	15,981	-46.8	40	2.2
				14:42	16.73	8.20	17,784	-69.8	28	1.4
				15:38	17.49	8.14	18,681	-64.3	3	1.3
				16:01	17.23	8.15	18,231	69.4	4	1.1

Borehole ID	Sampling Interval Depth (ft bgs)	Sample Collected and Submitted for Lab Analysis?	Date	Time	Temp-erature (°C)	pH (s.u.)	Specific conductance (µS/cm)	ORP (mV)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
WP-587	**305 - 335.5**	**Yes**	7/10/2024	13:24	13.94	8.20	8,970	36.6	24	4.5
				13:37	12.99	8.15	8,950	15.9	3900	6.5
				13:47	11.59	8.33	8,730	-32.3	3748	5.2
				13:57	11.08	8.45	8,310	-88.6	2512	4.7
				14:07	11.22	8.45	8,180	-81.7	1721	6.3
				14:20	10.99	8.44	8,160	-102.7	1202	5.4
				14:27	10.76	8.48	8,170	-126.8	-	5.4
				16:20	12.99	8.39	7,430	-122.1	139	5.3
				16:30	10.96	8.49	7,610	-152.1	131	6.3
				16:40	10.58	8.50	7,610	-153.6	117	6.4
				16:54	10.43	8.48	7,560	-158.0	93	6.5
				17:10	10.61	8.48	7,490	-156.4	85	6.5
				17:20	10.52	8.49	7,520	-155.3	72	6.3
				17:30	10.22	8.49	7,510	-158.1	62	6.4
	1428 - 1438.3	**Yes**	7/12/2024	10:45	16.64	6.67	9,600	235.0	13	6.8
				13:10	15.17	6.67	9,370	227.9	14	6.4
				14:57	19.24	7.05	8,860	174.1	8	6.9
				15:35	17.41	7.36	8,720	171.1	17	5.6
				16:20	18.36	7.34	8,770	167.9	12	6.2
				17:00	18.80	7.25	8,560	169.6	12	6.2
				17:41	18.32	7.27	8,490	161.4	6	6.4
				18:00	18.35	7.33	8,430	162.1	5	6.1
			7/13/2024	8:53	16.18	6.59	8,110	259.6	11	5.9
				9:15	16.27	7.12	9,030	202.1	27	5.1
				10:52	19.03	7.30	39,260	195.7	25	4.1
				11:32	18.85	7.28	46,340	199.1	29	4.4
				11:50	18.48	7.44	60,990	182.8	20	4.4
				12:08	19.25	7.46	72,530	190.0	19	4.3
				12:18	19.08	7.52	77,190	195.9	15	3.6
				12:36	21.16	7.46	84,520	189.4	11	4.0
				12:54	20.52	7.47	88,890	195.8	1651	3.5
				13:33	23.49	7.25	93,100	185.9	16	3.8
				14:03	22.63	7.45	94,830	188.1	16	4.0
				15:08	22.17	7.47	96,910	184.7	20	3.3
				15:52	21.92	7.41	98,330	188.7	17	4.0
				17:07	20.38	7.39	99,410	187.4	20	3.8
				17:45	21.18	7.49	102,200	184.5	23	3.7
			7/14/2024	7:53	6.60	16.00	106,430	330.1	19	3.1

Borehole ID	Sampling Interval Depth (ft bgs)	Sample Collected and Submitted for Lab Analysis?	Date	Time	Temp-erature (°C)	pH (s.u.)	Specific conductance (µS/cm)	ORP (mV)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
WP-588	**150.1 - 165**	**Yes**	7/16/2024	16:15	11.47	8.41	2,334	-162.6	28	71.0
				16:30	10.88	8.43	2,344	-180.7	24	1.7
				16:51	10.78	8.45	2,324	-184.5	13	2.4
				17:09	10.68	8.44	2,319	-193.3	10	1.6
				17:45	9.37	8.44	2,290	-212.3	7	0.1
				18:11	10.58	8.32	2,211	-167.9	149	2.6
				18:31	9.36	8.40	2,272	-187.5	22	1.7
	340 - 355.2	**Yes**	7/17/2024	13:25	-	7.54	4,319	-54.5	12	6.8
				13:57	12.19	8.33	4,436	-92.2	13	6.8
				14:25	10.85	8.10	1,100	-125.8	77	6.2
				14:38	11.25	8.06	1,375	-114.5	16	4.3
WP-594	**329 - 379**	**Yes**	8/16/2024	17:34	15.61	7.45	9,905	101.5	58	-
				18:34	10.99	8.29	13,684	-63.9	51	-
				19:34	10.83	8.27	14,676	-104.0	41	-
				20:51	10.75	8.22	15,513	-106.9	7	-
WP-598	**485 - 535.4**	**Yes**	9/5/2024	10:39	10.44	7.84	19,370	178.9	1.1	1.8
				10:45	10.24	8.56	18,430	15.1	1.1	1.2
				10:54	10.24	8.61	18,450	-106.8	1.1	1.1
				10:58	10.20	8.60	18,400	-39.7	1.7	1.2
				11:03	10.18	8.38	18,400	-99.8	1.8	1.2
				12:50	10.14	8.63	18,440	-115.4	0.8	1.1
				12:56	10.14	8.66	18,440	-184.3	0.8	0.9
				13:00	10.13	8.66	18,450	-185.7	0.8	0.9
				13:05	10.13	8.66	18,450	-186.3	0.8	0.9

Note:

Prepared by: MJW4

Checked by: GMB

Sampled intervals for laboratory analyses listed in bold.
ft bgs = feet below ground surface
(°C) = degree Celsius
s.u. = standard units
µS/cm = microseiments per centimeter
mV = millivolts
NTU = nephelometric turbidity unit
mg/L = milligrams per liter

Open Borehole Results

eurofins | Environment Testing

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

ANALYTICAL REPORT

PREPARED FOR

Attn: Jakob Wartman
Foth Infrastructure & Environment, LLC
Missabe Building
227 West 1st. Street, Suite 920
Duluth, Minnesota 55802

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JOB DESCRIPTION

FOTH - White Pines, MI

JOB NUMBER

500-253934-1

Eurofins Chicago
2417 Bond Street
University Park IL 60484

See page two for job notes and contact information.

myEOL

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

Results relate only to the items tested and the sample(s) as received by the laboratory. The results, detection limits (LOD) and Quantitation Limits (LOQ) have been adjusted for sample dilutions and/or solids content.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Chicago Project Manager.

Compliance Statement

The LOD and LOQ reported are adjusted by the dilution factor when a dilution factor greater than 1 is needed. Additionally, where results are indicated as being reported on a dry weight basis, the LOD and LOQ are adjusted for moisture content as well.

Definitions of Limits
- LOD = Limit of Detection = MDL as defined by 40 CFR part 136 Appendix B
- LOQ = Limit of Quantitation = 3.33 x LOD as defined by Wisconsin
- RL = Report Limit = a concentration supported by a standard in the calibration curves

Authorization



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Authorized for release by
Sandie Fredrick, Senior Project Manager
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Job ID: 500-253934-1 Eurofins Chicago

Job Narrative
500-253934-1

Receipt
The samples were received on 7/24/2024 9:20 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.9º C and 1.4º C.

Receipt Exceptions
Missing cooler initially received second day.

The following sample(s) was received outside of holding time: Sample #3 for IC N2, N3. Sampled 7/22/24 received 7/25 (FedEX delay).

Metals
Method 1630: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 350-2462 and analytical batch 350-2488 was outside control limits. Sample matrix interference is suspected.

Method 1630: The following samples analyzed by EPA 1630 required manual integration:
- MB 350-2462/3-A (Instrument Noise)
- 500-253934-E-3-A (Instrument Noise)
- 500-254020-F-1-A (Instrument Noise)
- CCB (Instrument Noise)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
Method 300.0: The following sample was received with less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: WP-583-233-284.4-2 (500-253934-1).

Method 300.0: The following sample was received outside of holding time: WP-583-233-284.4-1 (500-253934-3).

Method 300.0: The following sample was received with less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: WP-583-233-284.4-2 (500-253934-1).

Method SM 2320B: The method blank for analytical batch 500-779874 contained Alkalinity above the reporting limit (RL). Associated sample(s) were not re-analyzed because results were greater than 10X the value found in the method blank.

Method 365.1: ICV recovered low at 76% Recovery. Samples were reprepped out of hold. (ICV 500-781722/9)

Method 365.1: CCV failed low. Samples were reprepped out of hold. (CCV 500-780961/25-A)

Method 365.1: LCS failed low. Samples were reprepped out of hold. Data Confirmed initial analysis. (LCS 500-780961/2-A)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253934-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-583-233-284.4-2
Lab Sample ID: 500-253934-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Uranium	0.53		0.030	0.0098	ug/L	1		1638	Total Recoverable
Uranium	0.53		0.030	0.0098	ug/L	1		1638	Dissolved
Aluminum	36	J	100	25	ug/L	1		6020B	Total Recoverable
Arsenic	0.33	J	1.0	0.23	ug/L	1		6020B	Total Recoverable
Barium	1300		2.5	0.73	ug/L	1		6020B	Total Recoverable
Boron	190	B	50	13	ug/L	1		6020B	Total Recoverable
Calcium	380000		1000	220	ug/L	5		6020B	Total Recoverable
Copper	0.60	J	2.0	0.50	ug/L	1		6020B	Total Recoverable
Iron	1400		100	47	ug/L	1		6020B	Total Recoverable
Lithium	240		10	2.5	ug/L	1		6020B	Total Recoverable
Magnesium	3300		200	49	ug/L	1		6020B	Total Recoverable
Manganese	490		2.5	0.79	ug/L	1		6020B	Total Recoverable
Molybdenum	32		5.0	2.5	ug/L	1		6020B	Total Recoverable
Potassium	2500		500	110	ug/L	1		6020B	Total Recoverable
Sodium	970000		1000	390	ug/L	5		6020B	Total Recoverable
Strontium	10000		4.0	0.64	ug/L	1		6020B	Total Recoverable
Zinc	220		20	6.9	ug/L	1		6020B	Total Recoverable
Arsenic	0.30	J	1.0	0.23	ug/L	1		6020B	Dissolved
Barium	1300		2.5	0.73	ug/L	1		6020B	Dissolved
Boron	190	B	50	13	ug/L	1		6020B	Dissolved
Calcium	380000		1000	220	ug/L	5		6020B	Dissolved
Iron	1200		100	47	ug/L	1		6020B	Dissolved
Lithium	240		10	2.5	ug/L	1		6020B	Dissolved
Magnesium	3200		200	49	ug/L	1		6020B	Dissolved
Manganese	470		2.5	0.79	ug/L	1		6020B	Dissolved
Molybdenum	32		5.0	2.5	ug/L	1		6020B	Dissolved
Potassium	2400		500	110	ug/L	1		6020B	Dissolved
Sodium	970000		1000	390	ug/L	5		6020B	Dissolved
Strontium	10000		4.0	0.64	ug/L	1		6020B	Dissolved
Zinc	94		20	6.9	ug/L	1		6020B	Dissolved
Hardness as calcium carbonate	960		0.91	0.46	mg/L	1		SM 2340B	Total Recoverable
Bromide	22		1.0	0.18	mg/L	1		300.0	Total/NA
Chloride	1800		100	12	mg/L	100		300.0	Total/NA
Fluoride	0.59	J	1.0	0.19	mg/L	1		300.0	Total/NA
Sulfate	3.9		1.0	0.21	mg/L	1		300.0	Total/NA
Alkalinity	93	B	5.0	3.7	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	93	B	5.0	3.7	mg/L	1		SM 2320B	Total/NA
Salinity	4.1		0.33	0.33	psu	1		SM 2520B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: WP-583-233-284.4-2 (Continued) — Lab Sample ID: 500-253934-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	3600		25	11	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	9.0		5.0	1.9	mg/L	1		SM 2540D	Total/NA
Sulfide	3.6		1.0	0.23	mg/L	1		SM 4500 S2 F	Total/NA
Dissolved Organic Carbon	0.49	J	1.0	0.47	mg/L	1		SM 5310C	Dissolved

Client Sample ID: WP-583-233-284.4-R — Lab Sample ID: 500-253934-2

No Detections.

Client Sample ID: WP-583-233-284.4-1 — Lab Sample ID: 500-253934-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Uranium	0.57		0.030	0.0098	ug/L	1		1638	Total Recoverable
Uranium	0.53		0.030	0.0098	ug/L	1		1638	Dissolved
Aluminum	33	J	100	25	ug/L	1		6020B	Total Recoverable
Arsenic	0.34	J	1.0	0.23	ug/L	1		6020B	Total Recoverable
Barium	1300		2.5	0.73	ug/L	1		6020B	Total Recoverable
Boron	180	B	50	13	ug/L	1		6020B	Total Recoverable
Calcium	360000		200	44	ug/L	1		6020B	Total Recoverable
Copper	0.96	J	2.0	0.50	ug/L	1		6020B	Total Recoverable
Iron	1700		100	47	ug/L	1		6020B	Total Recoverable
Lithium	260		10	2.5	ug/L	1		6020B	Total Recoverable
Magnesium	3500		200	49	ug/L	1		6020B	Total Recoverable
Manganese	500		2.5	0.79	ug/L	1		6020B	Total Recoverable
Molybdenum	31		5.0	2.5	ug/L	1		6020B	Total Recoverable
Potassium	2500		500	110	ug/L	1		6020B	Total Recoverable
Sodium	900000		200	77	ug/L	1		6020B	Total Recoverable
Strontium	10000		4.0	0.64	ug/L	1		6020B	Total Recoverable
Zinc	330		20	6.9	ug/L	1		6020B	Total Recoverable
Arsenic	0.28	J	1.0	0.23	ug/L	1		6020B	Dissolved
Barium	1400		2.5	0.73	ug/L	1		6020B	Dissolved
Boron	190	B	50	13	ug/L	1		6020B	Dissolved
Calcium	370000		200	44	ug/L	1		6020B	Dissolved
Iron	1600		100	47	ug/L	1		6020B	Dissolved
Lithium	270		10	2.5	ug/L	1		6020B	Dissolved
Magnesium	3600		200	49	ug/L	1		6020B	Dissolved
Manganese	510		2.5	0.79	ug/L	1		6020B	Dissolved
Molybdenum	32		5.0	2.5	ug/L	1		6020B	Dissolved
Potassium	2600		500	110	ug/L	1		6020B	Dissolved
Sodium	930000		200	77	ug/L	1		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: WP-583-233-284.4-1 (Continued)

Lab Sample ID: 500-253934-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Strontium	11000		4.0	0.64	ug/L	1		6020B	Dissolved
Zinc	210		20	6.9	ug/L	1		6020B	Dissolved
Hardness as calcium carbonate	910		0.91	0.46	mg/L	1		SM 2340B	Total Recoverable
Bromide	28		1.0	0.18	mg/L	1		300.0	Total/NA
Chloride	1900		100	12	mg/L	100		300.0	Total/NA
Sulfate	4.0		1.0	0.21	mg/L	1		300.0	Total/NA
Ammonia	0.17	J	0.20	0.10	mg/L	1		350.1	Total/NA
Alkalinity	88	B	5.0	3.7	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	88	B	5.0	3.7	mg/L	1		SM 2320B	Total/NA
Salinity	4.4		0.33	0.33	psu	1		SM 2520B	Total/NA
Total Dissolved Solids	3700		25	11	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	12		5.0	1.9	mg/L	1		SM 2540D	Total/NA
Dissolved Organic Carbon	0.47	J	1.0	0.47	mg/L	1		SM 5310C	Dissolved

Client Sample ID: WP-583-233-284.4-1-FB

Lab Sample ID: 500-253934-4

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253934-1
Project/Site: FOTH - White Pines, MI

Method	Method Description	Protocol	Laboratory
1630	Methyl Mercury	EPA	EET SSM
1631E	Mercury, Low Level (CVAFS)	EPA	EET SSM
1638	Metals (ICP/MS)	EPA	EET SSM
6020B	Metals (ICP/MS)	SW846	EET CHI
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	EET CHI
300.0	Anions, Ion Chromatography	EPA	EET CHI
335.4	Cyanide, Total	EPA	EET CHI
350.1	Nitrogen, Ammonia	EPA	EET CHI
365.1	Phosphorus, Total	EPA	EET CHI
SM 2320B	Alkalinity	SM	EET CHI
SM 2520B	Salinity	SM	EET CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CHI
SM 2540D	Solids, Total Suspended (TSS)	SM	EET CHI
SM 4500 S2 F	Sulfide, Total	SM	EET CHI
SM 5310C	Organic Carbon, Dissolved (DOC)	SM	EET CHI
SM 5310C	TOC	SM	EET CHI
1630	Distillation, Methyl Mercury	EPA	EET SSM
1638	Preparation, Total Recoverable Metals	EPA	EET SSM
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CHI
365.2/365.3/365	Phosphorus, Total	EPA	EET CHI
Distill/Ammonia	Distillation, Ammonia	None	EET CHI
Distill/CN	Distillation, Cyanide	None	EET CHI

Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253934-1
Project/Site: FOTH - White Pines, MI

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-253934-1	WP-583-233-284.4-2	Water	07/22/24 10:45	07/24/24 09:20
500-253934-2	WP-583-233-284.4-R	Water	07/22/24 10:45	07/24/24 09:20
500-253934-3	WP-583-233-284.4-1	Water	07/22/24 08:35	07/25/24 09:30
500-253934-4	WP-583-233-284.4-1-FB	Water	07/22/24 08:35	07/25/24 09:30

Client Sample ID: WP-583-233-284.4-2
Lab Sample ID: 500-253934-1

Date Collected: 07/22/24 10:45
Matrix: Water
Date Received: 07/24/24 09:20

Method: EPA 1630 - Methyl Mercury

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/29/24 09:45	07/30/24 17:32	1

Method: EPA 1630 - Methyl Mercury - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/29/24 09:45	07/30/24 17:42	1

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/30/24 19:27	1

Method: EPA 1631E - Mercury, Low Level (CVAFS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/30/24 19:31	1

Method: EPA 1638 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.53**		0.030	0.0098	ug/L		07/29/24 12:49	07/29/24 21:17	1

Method: EPA 1638 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.53**		0.030	0.0098	ug/L		07/29/24 12:49	07/29/24 18:59	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**36**	**J**	100	25	ug/L		08/09/24 08:59	08/12/24 12:28	1
Antimony	<1.3		3.0	1.3	ug/L		08/09/24 08:59	08/12/24 12:28	1
Arsenic	**0.33**	**J**	1.0	0.23	ug/L		08/09/24 08:59	08/12/24 12:28	1
Barium	**1300**		2.5	0.73	ug/L		08/09/24 08:59	08/12/24 12:28	1
Beryllium	<0.53		1.0	0.53	ug/L		08/09/24 08:59	08/12/24 12:28	1
Boron	**190**	**B**	50	13	ug/L		08/09/24 08:59	08/12/24 12:28	1
Cadmium	<0.17		0.50	0.17	ug/L		08/09/24 08:59	08/12/24 12:28	1
Calcium	**380000**		1000	220	ug/L		08/09/24 08:59	08/12/24 15:25	5
Chromium	<1.1		5.0	1.1	ug/L		08/09/24 08:59	08/12/24 12:28	1
Cobalt	<0.40		1.0	0.40	ug/L		08/09/24 08:59	08/12/24 12:28	1
Copper	**0.60**	**J**	2.0	0.50	ug/L		08/09/24 08:59	08/12/24 12:28	1
Iron	**1400**		100	47	ug/L		08/09/24 08:59	08/12/24 12:28	1
Lead	<0.19		0.50	0.19	ug/L		08/09/24 08:59	08/12/24 12:28	1
Lithium	**240**		10	2.5	ug/L		08/09/24 08:59	08/12/24 12:28	1
Magnesium	**3300**		200	49	ug/L		08/09/24 08:59	08/12/24 12:28	1
Manganese	**490**		2.5	0.79	ug/L		08/09/24 08:59	08/12/24 12:28	1
Molybdenum	**32**		5.0	2.5	ug/L		08/09/24 08:59	08/12/24 12:28	1
Nickel	<0.63		2.0	0.63	ug/L		08/09/24 08:59	08/12/24 12:28	1
Potassium	**2500**		500	110	ug/L		08/09/24 08:59	08/12/24 12:28	1
Selenium	<0.98		2.5	0.98	ug/L		08/09/24 08:59	08/12/24 12:28	1
Silver	<0.12		0.50	0.12	ug/L		08/09/24 08:59	08/12/24 12:28	1
Sodium	**970000**		1000	390	ug/L		08/09/24 08:59	08/12/24 15:25	5
Strontium	**10000**		4.0	0.64	ug/L		08/09/24 08:59	08/12/24 12:28	1
Thallium	<0.57		2.0	0.57	ug/L		08/09/24 08:59	08/12/24 12:28	1
Tin	<1.3		5.0	1.3	ug/L		08/09/24 08:59	08/12/24 12:28	1
Vanadium	<2.2		5.0	2.2	ug/L		08/09/24 08:59	08/12/24 12:28	1
Zinc	**220**		20	6.9	ug/L		08/09/24 08:59	08/12/24 12:28	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253934-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-583-233-284.4-2
Lab Sample ID: 500-253934-1
Date Collected: 07/22/24 10:45
Matrix: Water
Date Received: 07/24/24 09:20

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		08/09/24 08:59	08/12/24 12:31	1
Antimony	<1.3		3.0	1.3	ug/L		08/09/24 08:59	08/12/24 12:31	1
Arsenic	**0.30**	**J**	1.0	0.23	ug/L		08/09/24 08:59	08/12/24 12:31	1
Barium	**1300**		2.5	0.73	ug/L		08/09/24 08:59	08/12/24 12:31	1
Beryllium	<0.53		1.0	0.53	ug/L		08/09/24 08:59	08/12/24 12:31	1
Boron	**190**	**B**	50	13	ug/L		08/09/24 08:59	08/12/24 12:31	1
Cadmium	<0.17		0.50	0.17	ug/L		08/09/24 08:59	08/12/24 12:31	1
Calcium	**380000**		1000	220	ug/L		08/09/24 08:59	08/12/24 15:28	5
Chromium	<1.1		5.0	1.1	ug/L		08/09/24 08:59	08/12/24 12:31	1
Cobalt	<0.40		1.0	0.40	ug/L		08/09/24 08:59	08/12/24 12:31	1
Copper	<0.50		2.0	0.50	ug/L		08/09/24 08:59	08/12/24 12:31	1
Iron	**1200**		100	47	ug/L		08/09/24 08:59	08/12/24 12:31	1
Lead	<0.19		0.50	0.19	ug/L		08/09/24 08:59	08/12/24 12:31	1
Lithium	**240**		10	2.5	ug/L		08/09/24 08:59	08/12/24 12:31	1
Magnesium	**3200**		200	49	ug/L		08/09/24 08:59	08/12/24 12:31	1
Manganese	**470**		2.5	0.79	ug/L		08/09/24 08:59	08/12/24 12:31	1
Molybdenum	**32**		5.0	2.5	ug/L		08/09/24 08:59	08/12/24 12:31	1
Nickel	<0.63		2.0	0.63	ug/L		08/09/24 08:59	08/12/24 12:31	1
Potassium	**2400**		500	110	ug/L		08/09/24 08:59	08/12/24 12:31	1
Selenium	<0.98		2.5	0.98	ug/L		08/09/24 08:59	08/12/24 12:31	1
Silver	<0.12		0.50	0.12	ug/L		08/09/24 08:59	08/12/24 12:31	1
Sodium	**970000**		1000	390	ug/L		08/09/24 08:59	08/12/24 15:28	5
Strontium	**10000**		4.0	0.64	ug/L		08/09/24 08:59	08/12/24 12:31	1
Thallium	<0.57		2.0	0.57	ug/L		08/09/24 08:59	08/12/24 12:31	1
Tin	<1.3		5.0	1.3	ug/L		08/09/24 08:59	08/12/24 12:31	1
Vanadium	<2.2		5.0	2.2	ug/L		08/09/24 08:59	08/12/24 12:31	1
Zinc	**94**		20	6.9	ug/L		08/09/24 08:59	08/12/24 12:31	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**960**		0.91	0.46	mg/L		08/09/24 08:59	08/14/24 11:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**22**		1.0	0.18	mg/L			07/24/24 11:20	1
Nitrate as N (EPA 300.0)	<0.043	H	1.0	0.043	mg/L			07/26/24 11:03	1
Chloride (EPA 300.0)	**1800**		100	12	mg/L			07/26/24 11:18	100
Nitrite as N (EPA 300.0)	<0.070	H	1.0	0.070	mg/L			07/24/24 11:20	1
Fluoride (EPA 300.0)	**0.59**	**J**	1.0	0.19	mg/L			07/24/24 11:20	1
Nitrate Nitrite as N (EPA 300.0)	<0.070	H	1.0	0.070	mg/L			07/24/24 11:20	1
Sulfate (EPA 300.0)	**3.9**		1.0	0.21	mg/L			07/24/24 11:20	1
Cyanide, Total (EPA 335.4)	<0.0036		0.0050	0.0036	mg/L		08/02/24 10:37	08/02/24 15:56	1
Ammonia (EPA 350.1)	<0.10		0.20	0.10	mg/L		08/14/24 11:34	08/15/24 17:12	1
Phosphorus as P (EPA 365.1)	<0.024	^1- ^- *-	0.050	0.024	mg/L		08/13/24 11:40	08/13/24 17:39	1
Alkalinity (SM 2320B)	**93**	**B**	5.0	3.7	mg/L			08/02/24 19:10	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**93**	**B**	5.0	3.7	mg/L			08/02/24 19:10	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<3.7		5.0	3.7	mg/L			08/02/24 19:10	1
Salinity (SM 2520B)	**4.1**		0.33	0.33	psu			07/29/24 15:23	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253934-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-583-233-284.4-2
Lab Sample ID: 500-253934-1
Date Collected: 07/22/24 10:45
Matrix: Water
Date Received: 07/24/24 09:20

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	3600		25	11	mg/L			07/26/24 03:01	1
Total Suspended Solids (SM 2540D)	9.0		5.0	1.9	mg/L			07/29/24 03:19	1
Sulfide (SM 4500 S2 F)	3.6		1.0	0.23	mg/L			07/26/24 00:21	1
Total Organic Carbon (SM 5310C)	<0.47		1.0	0.47	mg/L			07/30/24 20:38	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon (SM 5310C)	0.49	J	1.0	0.47	mg/L			07/28/24 21:06	1

Client Sample Results

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253934-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-583-233-284.4-R
Lab Sample ID: 500-253934-2
Date Collected: 07/22/24 10:45
Matrix: Water
Date Received: 07/24/24 09:20

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/30/24 19:35	1

Client Sample ID: WP-583-233-284.4-1
Lab Sample ID: 500-253934-3

Date Collected: 07/22/24 08:35
Matrix: Water
Date Received: 07/25/24 09:30

Method: EPA 1630 - Methyl Mercury

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/29/24 09:45	07/30/24 17:53	1

Method: EPA 1630 - Methyl Mercury - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/29/24 09:45	07/30/24 18:03	1

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/30/24 19:39	1

Method: EPA 1631E - Mercury, Low Level (CVAFS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/30/24 19:43	1

Method: EPA 1638 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.57**		0.030	0.0098	ug/L		07/29/24 12:49	07/29/24 21:21	1

Method: EPA 1638 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.53**		0.030	0.0098	ug/L		07/29/24 12:49	07/29/24 20:55	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**33**	**J**	100	25	ug/L		08/12/24 15:45	08/13/24 17:18	1
Antimony	<1.3		3.0	1.3	ug/L		08/12/24 15:45	08/13/24 17:18	1
Arsenic	**0.34**	**J**	1.0	0.23	ug/L		08/12/24 15:45	08/13/24 17:18	1
Barium	**1300**		2.5	0.73	ug/L		08/12/24 15:45	08/13/24 17:18	1
Beryllium	<0.53		1.0	0.53	ug/L		08/12/24 15:45	08/13/24 17:18	1
Boron	**180**	**B**	50	13	ug/L		08/12/24 15:45	08/13/24 17:18	1
Cadmium	<0.17		0.50	0.17	ug/L		08/12/24 15:45	08/13/24 17:18	1
Calcium	**360000**		200	44	ug/L		08/12/24 15:45	08/13/24 17:18	1
Chromium	<1.1		5.0	1.1	ug/L		08/12/24 15:45	08/13/24 17:18	1
Cobalt	<0.40		1.0	0.40	ug/L		08/12/24 15:45	08/13/24 17:18	1
Copper	**0.96**	**J**	2.0	0.50	ug/L		08/12/24 15:45	08/13/24 17:18	1
Iron	**1700**		100	47	ug/L		08/12/24 15:45	08/13/24 17:18	1
Lead	<0.19		0.50	0.19	ug/L		08/12/24 15:45	08/13/24 17:18	1
Lithium	**260**		10	2.5	ug/L		08/12/24 15:45	08/13/24 17:18	1
Magnesium	**3500**		200	49	ug/L		08/12/24 15:45	08/13/24 17:18	1
Manganese	**500**		2.5	0.79	ug/L		08/12/24 15:45	08/13/24 17:18	1
Molybdenum	**31**		5.0	2.5	ug/L		08/12/24 15:45	08/13/24 17:18	1
Nickel	<0.63		2.0	0.63	ug/L		08/12/24 15:45	08/13/24 17:18	1
Potassium	**2500**		500	110	ug/L		08/12/24 15:45	08/13/24 17:18	1
Selenium	<0.98		2.5	0.98	ug/L		08/12/24 15:45	08/13/24 17:18	1
Silver	<0.12		0.50	0.12	ug/L		08/12/24 15:45	08/13/24 17:18	1
Sodium	**900000**		200	77	ug/L		08/12/24 15:45	08/13/24 17:18	1
Strontium	**10000**		4.0	0.64	ug/L		08/12/24 15:45	08/13/24 17:18	1
Thallium	<0.57		2.0	0.57	ug/L		08/12/24 15:45	08/13/24 17:18	1
Tin	<1.3		5.0	1.3	ug/L		08/12/24 15:45	08/13/24 17:18	1
Vanadium	<2.2		5.0	2.2	ug/L		08/12/24 15:45	08/13/24 17:18	1
Zinc	**330**		20	6.9	ug/L		08/12/24 15:45	08/13/24 17:18	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253934-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-583-233-284.4-1
Lab Sample ID: 500-253934-3
Date Collected: 07/22/24 08:35
Matrix: Water
Date Received: 07/25/24 09:30

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		08/12/24 15:45	08/13/24 17:16	1
Antimony	<1.3		3.0	1.3	ug/L		08/12/24 15:45	08/13/24 17:16	1
Arsenic	**0.28**	**J**	1.0	0.23	ug/L		08/12/24 15:45	08/13/24 17:16	1
Barium	**1400**		2.5	0.73	ug/L		08/12/24 15:45	08/13/24 17:16	1
Beryllium	<0.53		1.0	0.53	ug/L		08/12/24 15:45	08/13/24 17:16	1
Boron	**190**	**B**	50	13	ug/L		08/12/24 15:45	08/13/24 17:16	1
Cadmium	<0.17		0.50	0.17	ug/L		08/12/24 15:45	08/13/24 17:16	1
Calcium	**370000**		200	44	ug/L		08/12/24 15:45	08/13/24 17:16	1
Chromium	<1.1		5.0	1.1	ug/L		08/12/24 15:45	08/13/24 17:16	1
Cobalt	<0.40		1.0	0.40	ug/L		08/12/24 15:45	08/13/24 17:16	1
Copper	<0.50		2.0	0.50	ug/L		08/12/24 15:45	08/13/24 17:16	1
Iron	**1600**		100	47	ug/L		08/12/24 15:45	08/13/24 17:16	1
Lead	<0.19		0.50	0.19	ug/L		08/12/24 15:45	08/13/24 17:16	1
Lithium	**270**		10	2.5	ug/L		08/12/24 15:45	08/13/24 17:16	1
Magnesium	**3600**		200	49	ug/L		08/12/24 15:45	08/13/24 17:16	1
Manganese	**510**		2.5	0.79	ug/L		08/12/24 15:45	08/13/24 17:16	1
Molybdenum	**32**		5.0	2.5	ug/L		08/12/24 15:45	08/13/24 17:16	1
Nickel	<0.63		2.0	0.63	ug/L		08/12/24 15:45	08/13/24 17:16	1
Potassium	**2600**		500	110	ug/L		08/12/24 15:45	08/13/24 17:16	1
Selenium	<0.98		2.5	0.98	ug/L		08/12/24 15:45	08/13/24 17:16	1
Silver	<0.12		0.50	0.12	ug/L		08/12/24 15:45	08/13/24 17:16	1
Sodium	**930000**		200	77	ug/L		08/12/24 15:45	08/13/24 17:16	1
Strontium	**11000**		4.0	0.64	ug/L		08/12/24 15:45	08/13/24 17:16	1
Thallium	<0.57		2.0	0.57	ug/L		08/12/24 15:45	08/13/24 17:16	1
Tin	<1.3		5.0	1.3	ug/L		08/12/24 15:45	08/13/24 17:16	1
Vanadium	<2.2		5.0	2.2	ug/L		08/12/24 15:45	08/13/24 17:16	1
Zinc	**210**		20	6.9	ug/L		08/12/24 15:45	08/13/24 17:16	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**910**		0.91	0.46	mg/L		08/12/24 15:45	08/14/24 13:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**28**		1.0	0.18	mg/L			07/25/24 11:31	1
Nitrate as N (EPA 300.0)	<0.043	H H3	1.0	0.043	mg/L			07/25/24 11:31	1
Chloride (EPA 300.0)	**1900**		100	12	mg/L			08/08/24 19:15	100
Nitrite as N (EPA 300.0)	<0.070	H H3	1.0	0.070	mg/L			07/25/24 11:31	1
Fluoride (EPA 300.0)	<0.19		1.0	0.19	mg/L			07/25/24 11:31	1
Nitrate Nitrite as N (EPA 300.0)	<0.070	H H3	1.0	0.070	mg/L			07/25/24 11:31	1
Sulfate (EPA 300.0)	**4.0**		1.0	0.21	mg/L			07/25/24 11:31	1
Cyanide, Total (EPA 335.4)	<0.0036		0.0050	0.0036	mg/L		08/02/24 10:37	08/02/24 15:58	1
Ammonia (EPA 350.1)	**0.17**	**J**	0.20	0.10	mg/L		08/14/24 11:34	08/15/24 17:13	1
Phosphorus as P (EPA 365.1)	<0.024	^1- ^- *-	0.050	0.024	mg/L		08/13/24 11:40	08/13/24 17:40	1
Alkalinity (SM 2320B)	**88**	**B**	5.0	3.7	mg/L			08/02/24 19:20	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**88**	**B**	5.0	3.7	mg/L			08/02/24 19:20	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<3.7		5.0	3.7	mg/L			08/02/24 19:20	1
Salinity (SM 2520B)	**4.4**		0.33	0.33	psu			08/04/24 14:56	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253934-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-583-233-284.4-1
Lab Sample ID: 500-253934-3
Date Collected: 07/22/24 08:35
Matrix: Water
Date Received: 07/25/24 09:30

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	3700		25	11	mg/L			07/26/24 03:03	1
Total Suspended Solids (SM 2540D)	12		5.0	1.9	mg/L			07/29/24 03:22	1
Sulfide (SM 4500 S2 F)	<0.23		1.0	0.23	mg/L			07/26/24 00:24	1
Total Organic Carbon (SM 5310C)	<0.47		1.0	0.47	mg/L			07/30/24 15:30	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon (SM 5310C)	0.47	J	1.0	0.47	mg/L			07/28/24 21:34	1

Client Sample Results

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253934-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-583-233-284.4-1-FB
Lab Sample ID: 500-253934-4
Date Collected: 07/22/24 08:35
Matrix: Water
Date Received: 07/25/24 09:30

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/30/24 19:51	1

Definitions/Glossary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253934-1
Project/Site: FOTH - White Pines, MI

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
^-	Continuing Calibration Verification (CCV) is outside acceptance limits, low biased.
^1-	Initial Calibration Verification (ICV) is outside acceptance limits, low biased.
B	Compound was found in the blank and sample.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Metals

Filtration Batch: 2441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
350-771-A-7-A MB	Method Blank	Total/NA	Water	Filtration	

Prep Batch: 2462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-1	WP-583-233-284.4-2	Dissolved	Water	1630	
500-253934-1	WP-583-233-284.4-2	Total/NA	Water	1630	
500-253934-3	WP-583-233-284.4-1	Dissolved	Water	1630	
500-253934-3	WP-583-233-284.4-1	Total/NA	Water	1630	
MB 350-2462/1-A	Method Blank	Total/NA	Water	1630	
MB 350-2462/2-A	Method Blank	Total/NA	Water	1630	
MB 350-2462/3-A	Method Blank	Total/NA	Water	1630	
LCS 350-2462/4-A	Lab Control Sample	Total/NA	Water	1630	
LCSD 350-2462/5-A	Lab Control Sample Dup	Total/NA	Water	1630	

Prep Batch: 2463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-1	WP-583-233-284.4-2	Dissolved	Water	1638	
500-253934-1	WP-583-233-284.4-2	Total Recoverable	Water	1638	
500-253934-3	WP-583-233-284.4-1	Dissolved	Water	1638	
500-253934-3	WP-583-233-284.4-1	Total Recoverable	Water	1638	
MB 350-2463/1-A	Method Blank	Total Recoverable	Water	1638	
MB 350-2463/2-A	Method Blank	Total Recoverable	Water	1638	
LCS 350-2463/3-A	Lab Control Sample	Total Recoverable	Water	1638	
LCSD 350-2463/4-A	Lab Control Sample Dup	Total Recoverable	Water	1638	
500-253934-1 MS	WP-583-233-284.4-2	Dissolved	Water	1638	
500-253934-1 MSD	WP-583-233-284.4-2	Dissolved	Water	1638	

Analysis Batch: 2472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-1	WP-583-233-284.4-2	Dissolved	Water	1638	2463
500-253934-1	WP-583-233-284.4-2	Total Recoverable	Water	1638	2463
500-253934-3	WP-583-233-284.4-1	Dissolved	Water	1638	2463
500-253934-3	WP-583-233-284.4-1	Total Recoverable	Water	1638	2463
MB 350-2463/1-A	Method Blank	Total Recoverable	Water	1638	2463
MB 350-2463/2-A	Method Blank	Total Recoverable	Water	1638	2463
LCS 350-2463/3-A	Lab Control Sample	Total Recoverable	Water	1638	2463
LCSD 350-2463/4-A	Lab Control Sample Dup	Total Recoverable	Water	1638	2463
500-253934-1 MS	WP-583-233-284.4-2	Dissolved	Water	1638	2463
500-253934-1 MSD	WP-583-233-284.4-2	Dissolved	Water	1638	2463

Analysis Batch: 2481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-1	WP-583-233-284.4-2	Dissolved	Water	1631E	
500-253934-1	WP-583-233-284.4-2	Total/NA	Water	1631E	
500-253934-2	WP-583-233-284.4-R	Total/NA	Water	1631E	
500-253934-3	WP-583-233-284.4-1	Dissolved	Water	1631E	
500-253934-3	WP-583-233-284.4-1	Total/NA	Water	1631E	
500-253934-4	WP-583-233-284.4-1-FB	Total/NA	Water	1631E	
350-771-A-7-A MB	Method Blank	Total/NA	Water	1631E	2441
MB 350-2481/41	Method Blank	Total/NA	Water	1631E	
MB 350-2481/42	Method Blank	Total/NA	Water	1631E	

Metals (Continued)

Analysis Batch: 2481 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 350-2481/43	Method Blank	Total/NA	Water	1631E	
MB 350-2481/52	Method Blank	Total/NA	Water	1631E	
MB 350-2481/53	Method Blank	Total/NA	Water	1631E	
MB 350-2481/54	Method Blank	Total/NA	Water	1631E	
LCS 350-2481/44	Lab Control Sample	Total/NA	Water	1631E	
LCS 350-2481/55	Lab Control Sample	Total/NA	Water	1631E	
LCSD 350-2481/47	Lab Control Sample Dup	Total/NA	Water	1631E	
LCSD 350-2481/56	Lab Control Sample Dup	Total/NA	Water	1631E	

Analysis Batch: 2488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-1	WP-583-233-284.4-2	Dissolved	Water	1630	2462
500-253934-1	WP-583-233-284.4-2	Total/NA	Water	1630	2462
500-253934-3	WP-583-233-284.4-1	Dissolved	Water	1630	2462
500-253934-3	WP-583-233-284.4-1	Total/NA	Water	1630	2462
MB 350-2462/1-A	Method Blank	Total/NA	Water	1630	2462
MB 350-2462/2-A	Method Blank	Total/NA	Water	1630	2462
MB 350-2462/3-A	Method Blank	Total/NA	Water	1630	2462
LCS 350-2462/4-A	Lab Control Sample	Total/NA	Water	1630	2462
LCSD 350-2462/5-A	Lab Control Sample Dup	Total/NA	Water	1630	2462

Prep Batch: 780674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-1	WP-583-233-284.4-2	Dissolved	Water	3005A	
500-253934-1	WP-583-233-284.4-2	Total Recoverable	Water	3005A	
MB 500-780674/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-780674/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 780966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-1	WP-583-233-284.4-2	Dissolved	Water	6020B	780674
500-253934-1	WP-583-233-284.4-2	Total Recoverable	Water	6020B	780674
MB 500-780674/1-A	Method Blank	Total Recoverable	Water	6020B	780674
LCS 500-780674/2-A	Lab Control Sample	Total Recoverable	Water	6020B	780674

Prep Batch: 781004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-3	WP-583-233-284.4-1	Dissolved	Water	3005A	
500-253934-3	WP-583-233-284.4-1	Total Recoverable	Water	3005A	
MB 500-781004/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-781004/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 781097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-1	WP-583-233-284.4-2	Dissolved	Water	6020B	780674
500-253934-1	WP-583-233-284.4-2	Total Recoverable	Water	6020B	780674

Analysis Batch: 781318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-3	WP-583-233-284.4-1	Dissolved	Water	6020B	781004
500-253934-3	WP-583-233-284.4-1	Total Recoverable	Water	6020B	781004

Metals (Continued)

Analysis Batch: 781318 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-781004/1-A	Method Blank	Total Recoverable	Water	6020B	781004
LCS 500-781004/2-A	Lab Control Sample	Total Recoverable	Water	6020B	781004

Analysis Batch: 781363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-1	WP-583-233-284.4-2	Total Recoverable	Water	SM 2340B	780674
500-253934-3	WP-583-233-284.4-1	Total Recoverable	Water	SM 2340B	781004

General Chemistry

Analysis Batch: 778155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-1	WP-583-233-284.4-2	Total/NA	Water	300.0	
MB 500-778155/3	Method Blank	Total/NA	Water	300.0	
LCS 500-778155/4	Lab Control Sample	Total/NA	Water	300.0	
500-253934-1 MS	WP-583-233-284.4-2	Total/NA	Water	300.0	
500-253934-1 MSD	WP-583-233-284.4-2	Total/NA	Water	300.0	

Analysis Batch: 778156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-1	WP-583-233-284.4-2	Total/NA	Water	300.0	
MB 500-778156/3	Method Blank	Total/NA	Water	300.0	
LCS 500-778156/4	Lab Control Sample	Total/NA	Water	300.0	
500-253934-1 MS	WP-583-233-284.4-2	Total/NA	Water	300.0	
500-253934-1 MSD	WP-583-233-284.4-2	Total/NA	Water	300.0	

Analysis Batch: 778269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-1	WP-583-233-284.4-2	Total/NA	Water	300.0	
500-253934-3	WP-583-233-284.4-1	Total/NA	Water	300.0	
MB 500-778269/75	Method Blank	Total/NA	Water	300.0	
MB 500-778269/9	Method Blank	Total/NA	Water	300.0	
LCS 500-778269/10	Lab Control Sample	Total/NA	Water	300.0	
LCS 500-778269/76	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 778270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-1	WP-583-233-284.4-2	Total/NA	Water	300.0	
500-253934-3	WP-583-233-284.4-1	Total/NA	Water	300.0	
MB 500-778270/75	Method Blank	Total/NA	Water	300.0	
MB 500-778270/9	Method Blank	Total/NA	Water	300.0	
LCS 500-778270/10	Lab Control Sample	Total/NA	Water	300.0	
LCS 500-778270/76	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 778480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-1	WP-583-233-284.4-2	Total/NA	Water	SM 2540C	
500-253934-3	WP-583-233-284.4-1	Total/NA	Water	SM 2540C	
MB 500-778480/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-778480/2	Lab Control Sample	Total/NA	Water	SM 2540C	

General Chemistry

Analysis Batch: 778568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-1	WP-583-233-284.4-2	Total/NA	Water	SM 4500 S2 F	
500-253934-3	WP-583-233-284.4-1	Total/NA	Water	SM 4500 S2 F	
MB 500-778568/1	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 500-778568/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 778715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-1	WP-583-233-284.4-2	Total/NA	Water	SM 2540D	
500-253934-3	WP-583-233-284.4-1	Total/NA	Water	SM 2540D	
MB 500-778715/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 500-778715/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Analysis Batch: 778742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-1	WP-583-233-284.4-2	Dissolved	Water	SM 5310C	
500-253934-3	WP-583-233-284.4-1	Dissolved	Water	SM 5310C	
MB 500-778742/7	Method Blank	Dissolved	Water	SM 5310C	
LCS 500-778742/8	Lab Control Sample	Dissolved	Water	SM 5310C	

Analysis Batch: 779224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-1	WP-583-233-284.4-2	Total/NA	Water	SM 5310C	
500-253934-3	WP-583-233-284.4-1	Total/NA	Water	SM 5310C	
MB 500-779224/7	Method Blank	Total/NA	Water	SM 5310C	
LCS 500-779224/8	Lab Control Sample	Total/NA	Water	SM 5310C	

Analysis Batch: 779504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-1	WP-583-233-284.4-2	Total/NA	Water	SM 2520B	

Prep Batch: 779702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-1	WP-583-233-284.4-2	Total/NA	Water	Distill/CN	
500-253934-3	WP-583-233-284.4-1	Total/NA	Water	Distill/CN	
MB 500-779702/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 500-779702/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Analysis Batch: 779754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-1	WP-583-233-284.4-2	Total/NA	Water	335.4	779702
500-253934-3	WP-583-233-284.4-1	Total/NA	Water	335.4	779702
MB 500-779702/1-A	Method Blank	Total/NA	Water	335.4	779702
LCS 500-779702/2-A	Lab Control Sample	Total/NA	Water	335.4	779702

Analysis Batch: 779789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-3	WP-583-233-284.4-1	Total/NA	Water	SM 2520B	

Analysis Batch: 779874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-1	WP-583-233-284.4-2	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 779874 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-3	WP-583-233-284.4-1	Total/NA	Water	SM 2320B	
MB 500-779874/3	Method Blank	Total/NA	Water	SM 2320B	
LCS 500-779874/4	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 780563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-3	WP-583-233-284.4-1	Total/NA	Water	300.0	
MB 500-780563/3	Method Blank	Total/NA	Water	300.0	
LCS 500-780563/4	Lab Control Sample	Total/NA	Water	300.0	

Prep Batch: 780961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-1	WP-583-233-284.4-2	Total/NA	Water	365.2/365.3/365	
500-253934-3	WP-583-233-284.4-1	Total/NA	Water	365.2/365.3/365	
MB 500-780961/1-A	Method Blank	Total/NA	Water	365.2/365.3/365	
LCS 500-780961/2-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	

Prep Batch: 781374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-1	WP-583-233-284.4-2	Total/NA	Water	Distill/Ammonia	
500-253934-3	WP-583-233-284.4-1	Total/NA	Water	Distill/Ammonia	
MB 500-781374/1-A	Method Blank	Total/NA	Water	Distill/Ammonia	
LCS 500-781374/2-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	

Analysis Batch: 781722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-1	WP-583-233-284.4-2	Total/NA	Water	365.1	780961
500-253934-3	WP-583-233-284.4-1	Total/NA	Water	365.1	780961
MB 500-780961/1-A	Method Blank	Total/NA	Water	365.1	780961
LCS 500-780961/2-A	Lab Control Sample	Total/NA	Water	365.1	780961

Analysis Batch: 781794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253934-1	WP-583-233-284.4-2	Total/NA	Water	350.1	781374
500-253934-3	WP-583-233-284.4-1	Total/NA	Water	350.1	781374
MB 500-781374/1-A	Method Blank	Total/NA	Water	350.1	781374
LCS 500-781374/2-A	Lab Control Sample	Total/NA	Water	350.1	781374

Method: 1630 - Methyl Mercury

Lab Sample ID: MB 350-2462/1-A
Matrix: Water
Analysis Batch: 2488

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2462

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/29/24 09:45	07/30/24 15:20	1

Lab Sample ID: MB 350-2462/2-A
Matrix: Water
Analysis Batch: 2488

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2462

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/29/24 09:45	07/30/24 15:30	1

Lab Sample ID: MB 350-2462/3-A
Matrix: Water
Analysis Batch: 2488

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2462

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/29/24 09:45	07/30/24 15:40	1

Lab Sample ID: LCS 350-2462/4-A
Matrix: Water
Analysis Batch: 2488

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 2462

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methyl Mercury	1.00	0.949		ng/L		95	65 - 135

Lab Sample ID: LCSD 350-2462/5-A
Matrix: Water
Analysis Batch: 2488

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 2462

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methyl Mercury	1.00	0.904		ng/L		90	65 - 135	5	35

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: 350-771-A-7-A MB
Matrix: Water
Analysis Batch: 2481

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/30/24 19:02	1

Lab Sample ID: MB 350-2481/41
Matrix: Water
Analysis Batch: 2481

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/30/24 13:59	1

Method: 1631E - Mercury, Low Level (CVAFS) (Continued)

Lab Sample ID: MB 350-2481/42
Matrix: Water
Analysis Batch: 2481

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/30/24 14:03	1

Lab Sample ID: MB 350-2481/43
Matrix: Water
Analysis Batch: 2481

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/30/24 14:07	1

Lab Sample ID: MB 350-2481/52
Matrix: Water
Analysis Batch: 2481

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/30/24 14:45	1

Lab Sample ID: MB 350-2481/53
Matrix: Water
Analysis Batch: 2481

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/30/24 14:49	1

Lab Sample ID: MB 350-2481/54
Matrix: Water
Analysis Batch: 2481

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/30/24 14:53	1

Lab Sample ID: LCS 350-2481/44
Matrix: Water
Analysis Batch: 2481

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.44		ng/L		89	77 - 123

Lab Sample ID: LCS 350-2481/55
Matrix: Water
Analysis Batch: 2481

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.54		ng/L		91	77 - 123

Lab Sample ID: LCSD 350-2481/47
Matrix: Water
Analysis Batch: 2481

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	4.46		ng/L		89	77 - 123	0	24

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: LCSD 350-2481/56
Matrix: Water
Analysis Batch: 2481

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			5.00	4.57		ng/L		91	77 - 123	1	24

Method: 1638 - Metals (ICP/MS)

Lab Sample ID: MB 350-2463/1-A
Matrix: Water
Analysis Batch: 2472

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 2463

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	<0.0098		0.030	0.0098	ug/L		07/29/24 12:49	07/29/24 17:31	1

Lab Sample ID: MB 350-2463/2-A
Matrix: Water
Analysis Batch: 2472

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 2463

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	<0.0098		0.030	0.0098	ug/L		07/29/24 12:49	07/29/24 17:35	1

Lab Sample ID: LCS 350-2463/3-A
Matrix: Water
Analysis Batch: 2472

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 2463

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Uranium			25.0	23.8		ug/L		95	85 - 115		

Lab Sample ID: LCSD 350-2463/4-A
Matrix: Water
Analysis Batch: 2472

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 2463

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Uranium			25.0	23.1		ug/L		92	85 - 115	3	20

Lab Sample ID: 500-253934-1 MS
Matrix: Water
Analysis Batch: 2472

Client Sample ID: WP-583-233-284.4-2
Prep Type: Dissolved
Prep Batch: 2463

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Uranium	0.53		25.0	29.9		ug/L		118	70 - 130		

Lab Sample ID: 500-253934-1 MSD
Matrix: Water
Analysis Batch: 2472

Client Sample ID: WP-583-233-284.4-2
Prep Type: Dissolved
Prep Batch: 2463

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Uranium	0.53		25.0	29.4		ug/L		116	70 - 130	2	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 500-780674/1-A
Matrix: Water
Analysis Batch: 780966

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 780674

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		08/09/24 08:59	08/12/24 12:13	1
Antimony	<1.3		3.0	1.3	ug/L		08/09/24 08:59	08/12/24 12:13	1
Arsenic	<0.23		1.0	0.23	ug/L		08/09/24 08:59	08/12/24 12:13	1
Barium	<0.73		2.5	0.73	ug/L		08/09/24 08:59	08/12/24 12:13	1
Beryllium	<0.53		1.0	0.53	ug/L		08/09/24 08:59	08/12/24 12:13	1
Boron	34.0	J	50	13	ug/L		08/09/24 08:59	08/12/24 12:13	1
Cadmium	<0.17		0.50	0.17	ug/L		08/09/24 08:59	08/12/24 12:13	1
Calcium	<44		200	44	ug/L		08/09/24 08:59	08/12/24 12:13	1
Chromium	<1.1		5.0	1.1	ug/L		08/09/24 08:59	08/12/24 12:13	1
Cobalt	<0.40		1.0	0.40	ug/L		08/09/24 08:59	08/12/24 12:13	1
Copper	<0.50		2.0	0.50	ug/L		08/09/24 08:59	08/12/24 12:13	1
Iron	<47		100	47	ug/L		08/09/24 08:59	08/12/24 12:13	1
Lead	<0.19		0.50	0.19	ug/L		08/09/24 08:59	08/12/24 12:13	1
Lithium	<2.5		10	2.5	ug/L		08/09/24 08:59	08/12/24 12:13	1
Magnesium	<49		200	49	ug/L		08/09/24 08:59	08/12/24 12:13	1
Manganese	<0.79		2.5	0.79	ug/L		08/09/24 08:59	08/12/24 12:13	1
Molybdenum	<2.5		5.0	2.5	ug/L		08/09/24 08:59	08/12/24 12:13	1
Nickel	<0.63		2.0	0.63	ug/L		08/09/24 08:59	08/12/24 12:13	1
Potassium	<110		500	110	ug/L		08/09/24 08:59	08/12/24 12:13	1
Selenium	<0.98		2.5	0.98	ug/L		08/09/24 08:59	08/12/24 12:13	1
Silver	<0.12		0.50	0.12	ug/L		08/09/24 08:59	08/12/24 12:13	1
Sodium	<77		200	77	ug/L		08/09/24 08:59	08/12/24 12:13	1
Strontium	<0.64		4.0	0.64	ug/L		08/09/24 08:59	08/12/24 12:13	1
Thallium	<0.57		2.0	0.57	ug/L		08/09/24 08:59	08/12/24 12:13	1
Tin	<1.3		5.0	1.3	ug/L		08/09/24 08:59	08/12/24 12:13	1
Vanadium	<2.2		5.0	2.2	ug/L		08/09/24 08:59	08/12/24 12:13	1
Zinc	<6.9		20	6.9	ug/L		08/09/24 08:59	08/12/24 12:13	1

Lab Sample ID: LCS 500-780674/2-A
Matrix: Water
Analysis Batch: 780966

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 780674

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	2000	1930		ug/L		96	80 - 120
Antimony	500	496		ug/L		99	80 - 120
Arsenic	100	97.5		ug/L		98	80 - 120
Barium	500	511		ug/L		102	80 - 120
Beryllium	50.0	49.8		ug/L		100	80 - 120
Boron	1000	1020		ug/L		102	80 - 120
Cadmium	50.0	49.7		ug/L		99	80 - 120
Calcium	10000	9130		ug/L		91	80 - 120
Chromium	200	209		ug/L		104	80 - 120
Cobalt	500	526		ug/L		105	80 - 120
Copper	250	258		ug/L		103	80 - 120
Iron	1000	1040		ug/L		104	80 - 120
Lead	100	101		ug/L		101	80 - 120
Lithium	100	104		ug/L		104	80 - 120
Magnesium	10000	10300		ug/L		103	80 - 120
Manganese	500	517		ug/L		103	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 500-780674/2-A
Matrix: Water
Analysis Batch: 780966

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 780674

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Molybdenum	1000	969		ug/L		97	80 - 120
Nickel	500	513		ug/L		103	80 - 120
Potassium	10000	10200		ug/L		102	80 - 120
Selenium	100	96.5		ug/L		96	80 - 120
Silver	50.0	49.5		ug/L		99	80 - 120
Sodium	10000	10300		ug/L		103	80 - 120
Strontium	1000	956		ug/L		96	80 - 120
Thallium	100	104		ug/L		104	80 - 120
Tin	1000	969		ug/L		97	80 - 120
Vanadium	500	510		ug/L		102	80 - 120
Zinc	500	505		ug/L		101	80 - 120

Lab Sample ID: MB 500-781004/1-A
Matrix: Water
Analysis Batch: 781318

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 781004

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		08/12/24 15:45	08/13/24 16:23	1
Antimony	<1.3		3.0	1.3	ug/L		08/12/24 15:45	08/13/24 16:23	1
Arsenic	<0.23		1.0	0.23	ug/L		08/12/24 15:45	08/13/24 16:23	1
Barium	<0.73		2.5	0.73	ug/L		08/12/24 15:45	08/13/24 16:23	1
Beryllium	<0.53		1.0	0.53	ug/L		08/12/24 15:45	08/13/24 16:23	1
Boron	41.3	J	50	13	ug/L		08/12/24 15:45	08/13/24 16:23	1
Cadmium	<0.17		0.50	0.17	ug/L		08/12/24 15:45	08/13/24 16:23	1
Calcium	<44		200	44	ug/L		08/12/24 15:45	08/13/24 16:23	1
Chromium	<1.1		5.0	1.1	ug/L		08/12/24 15:45	08/13/24 16:23	1
Cobalt	<0.40		1.0	0.40	ug/L		08/12/24 15:45	08/13/24 16:23	1
Copper	<0.50		2.0	0.50	ug/L		08/12/24 15:45	08/13/24 16:23	1
Iron	<47		100	47	ug/L		08/12/24 15:45	08/13/24 16:23	1
Lead	<0.19		0.50	0.19	ug/L		08/12/24 15:45	08/13/24 16:23	1
Lithium	<2.5		10	2.5	ug/L		08/12/24 15:45	08/13/24 16:23	1
Magnesium	<49		200	49	ug/L		08/12/24 15:45	08/13/24 16:23	1
Manganese	<0.79		2.5	0.79	ug/L		08/12/24 15:45	08/13/24 16:23	1
Molybdenum	<2.5		5.0	2.5	ug/L		08/12/24 15:45	08/13/24 16:23	1
Nickel	<0.63		2.0	0.63	ug/L		08/12/24 15:45	08/13/24 16:23	1
Potassium	<110		500	110	ug/L		08/12/24 15:45	08/13/24 16:23	1
Selenium	<0.98		2.5	0.98	ug/L		08/12/24 15:45	08/13/24 16:23	1
Silver	<0.12		0.50	0.12	ug/L		08/12/24 15:45	08/13/24 16:23	1
Sodium	<77		200	77	ug/L		08/12/24 15:45	08/13/24 16:23	1
Strontium	<0.64		4.0	0.64	ug/L		08/12/24 15:45	08/13/24 16:23	1
Thallium	<0.57		2.0	0.57	ug/L		08/12/24 15:45	08/13/24 16:23	1
Tin	<1.3		5.0	1.3	ug/L		08/12/24 15:45	08/13/24 16:23	1
Vanadium	<2.2		5.0	2.2	ug/L		08/12/24 15:45	08/13/24 16:23	1
Zinc	<6.9		20	6.9	ug/L		08/12/24 15:45	08/13/24 16:23	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 500-781004/2-A
Matrix: Water
Analysis Batch: 781318

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 781004

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	2000	2010		ug/L		100	80 - 120
Antimony	500	499		ug/L		100	80 - 120
Arsenic	100	98.0		ug/L		98	80 - 120
Barium	500	522		ug/L		104	80 - 120
Beryllium	50.0	53.4		ug/L		107	80 - 120
Boron	1000	1070		ug/L		107	80 - 120
Cadmium	50.0	50.3		ug/L		101	80 - 120
Calcium	10000	8630		ug/L		86	80 - 120
Chromium	200	210		ug/L		105	80 - 120
Cobalt	500	535		ug/L		107	80 - 120
Copper	250	257		ug/L		103	80 - 120
Iron	1000	1050		ug/L		105	80 - 120
Lead	100	102		ug/L		102	80 - 120
Lithium	100	114		ug/L		114	80 - 120
Magnesium	10000	10500		ug/L		105	80 - 120
Manganese	500	522		ug/L		104	80 - 120
Molybdenum	1000	971		ug/L		97	80 - 120
Nickel	500	511		ug/L		102	80 - 120
Potassium	10000	10300		ug/L		103	80 - 120
Selenium	100	97.4		ug/L		97	80 - 120
Silver	50.0	49.9		ug/L		100	80 - 120
Sodium	10000	10400		ug/L		104	80 - 120
Strontium	1000	969		ug/L		97	80 - 120
Thallium	100	104		ug/L		104	80 - 120
Tin	1000	985		ug/L		98	80 - 120
Vanadium	500	517		ug/L		103	80 - 120
Zinc	500	500		ug/L		100	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 500-778155/3
Matrix: Water
Analysis Batch: 778155

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	<0.18		1.0	0.18	mg/L			07/24/24 10:49	1
Fluoride	<0.19		1.0	0.19	mg/L			07/24/24 10:49	1
Sulfate	<0.21		1.0	0.21	mg/L			07/24/24 10:49	1

Lab Sample ID: LCS 500-778155/4
Matrix: Water
Analysis Batch: 778155

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	20.0	19.1		mg/L		96	90 - 110
Fluoride	20.0	21.2		mg/L		106	90 - 110
Sulfate	20.0	19.1		mg/L		95	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 500-253934-1 MS
Matrix: Water
Analysis Batch: 778155

Client Sample ID: WP-583-233-284.4-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	22		10.0	31.3		mg/L		94	80 - 120
Fluoride	0.59	J	10.0	10.4		mg/L		98	80 - 120
Sulfate	3.9		10.0	13.6		mg/L		96	80 - 120

Lab Sample ID: 500-253934-1 MSD
Matrix: Water
Analysis Batch: 778155

Client Sample ID: WP-583-233-284.4-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromide	22		10.0	30.4		mg/L		86	80 - 120	3	20
Fluoride	0.59	J	10.0	10.2		mg/L		96	80 - 120	2	20
Sulfate	3.9		10.0	13.5		mg/L		95	80 - 120	1	20

Lab Sample ID: MB 500-778156/3
Matrix: Water
Analysis Batch: 778156

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	<0.070		1.0	0.070	mg/L			07/24/24 10:49	1
Nitrate Nitrite as N	<0.070		1.0	0.070	mg/L			07/24/24 10:49	1

Lab Sample ID: LCS 500-778156/4
Matrix: Water
Analysis Batch: 778156

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	20.0	19.6		mg/L		98	90 - 110
Nitrate Nitrite as N	40.0	37.3		mg/L		93	90 - 110

Lab Sample ID: 500-253934-1 MS
Matrix: Water
Analysis Batch: 778156

Client Sample ID: WP-583-233-284.4-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	<0.070	H	10.0	11.9		mg/L		119	80 - 120
Nitrate Nitrite as N	<0.070	H	20.0	20.9		mg/L		104	80 - 120

Lab Sample ID: 500-253934-1 MSD
Matrix: Water
Analysis Batch: 778156

Client Sample ID: WP-583-233-284.4-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrite as N	<0.070	H	10.0	11.6		mg/L		116	80 - 120	3	20
Nitrate Nitrite as N	<0.070	H	20.0	20.3		mg/L		102	80 - 120	3	20

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 500-778269/75
Matrix: Water
Analysis Batch: 778269

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.12		1.0	0.12	mg/L			07/26/24 03:43	1

Lab Sample ID: MB 500-778269/9
Matrix: Water
Analysis Batch: 778269

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	<0.18		1.0	0.18	mg/L			07/25/24 10:51	1
Fluoride	<0.19		1.0	0.19	mg/L			07/25/24 10:51	1
Sulfate	<0.21		1.0	0.21	mg/L			07/25/24 10:51	1

Lab Sample ID: LCS 500-778269/10
Matrix: Water
Analysis Batch: 778269

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	20.0	19.2		mg/L		96	90 - 110
Fluoride	20.0	20.2		mg/L		101	90 - 110
Sulfate	20.0	20.1		mg/L		101	90 - 110

Lab Sample ID: LCS 500-778269/76
Matrix: Water
Analysis Batch: 778269

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	20.0	19.3		mg/L		97	90 - 110

Lab Sample ID: MB 500-778270/75
Matrix: Water
Analysis Batch: 778270

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.043		1.0	0.043	mg/L			07/26/24 03:43	1

Lab Sample ID: MB 500-778270/9
Matrix: Water
Analysis Batch: 778270

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.043		1.0	0.043	mg/L			07/25/24 10:51	1
Nitrite as N	<0.070		1.0	0.070	mg/L			07/25/24 10:51	1
Nitrate Nitrite as N	<0.070		1.0	0.070	mg/L			07/25/24 10:51	1

Lab Sample ID: LCS 500-778270/10
Matrix: Water
Analysis Batch: 778270

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	20.0	19.3		mg/L		97	90 - 110
Nitrite as N	20.0	20.3		mg/L		101	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 500-778270/10
Matrix: Water
Analysis Batch: 778270

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	40.0	39.6		mg/L		99	90 - 110

Lab Sample ID: LCS 500-778270/76
Matrix: Water
Analysis Batch: 778270

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	20.0	19.3		mg/L		97	90 - 110

Lab Sample ID: MB 500-780563/3
Matrix: Water
Analysis Batch: 780563

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.12		1.0	0.12	mg/L			08/08/24 18:45	1

Lab Sample ID: LCS 500-780563/4
Matrix: Water
Analysis Batch: 780563

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	20.0	19.3		mg/L		96	90 - 110

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 500-779702/1-A
Matrix: Water
Analysis Batch: 779754

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 779702

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.0036		0.0050	0.0036	mg/L		08/02/24 10:37	08/02/24 15:30	1

Lab Sample ID: LCS 500-779702/2-A
Matrix: Water
Analysis Batch: 779754

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 779702

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.100	0.0970		mg/L		97	90 - 110

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 500-781374/1-A
Matrix: Water
Analysis Batch: 781794

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 781374

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	<0.10		0.20	0.10	mg/L		08/14/24 11:34	08/15/24 17:01	1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCS 500-781374/2-A
Matrix: Water
Analysis Batch: 781794

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 781374

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	2.00	1.96		mg/L		98	90 - 110

Method: 365.1 - Phosphorus, Total

Lab Sample ID: MB 500-780961/1-A
Matrix: Water
Analysis Batch: 781722

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 780961

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus as P	<0.024	^- ^1-	0.050	0.024	mg/L		08/13/24 11:40	08/13/24 17:36	1

Lab Sample ID: LCS 500-780961/2-A
Matrix: Water
Analysis Batch: 781722

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 780961

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phosphorus as P	0.500	0.367	^1- *- ^-	mg/L		73	88 - 123

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 500-779874/3
Matrix: Water
Analysis Batch: 779874

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	5.71		5.0	3.7	mg/L			08/02/24 18:17	1
Bicarbonate Alkalinity as CaCO3	5.71		5.0	3.7	mg/L			08/02/24 18:17	1
Carbonate Alkalinity as CaCO3	<3.7		5.0	3.7	mg/L			08/02/24 18:17	1

Lab Sample ID: LCS 500-779874/4
Matrix: Water
Analysis Batch: 779874

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	100	106		mg/L		106	95 - 121

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 500-778480/1
Matrix: Water
Analysis Batch: 778480

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<4.3		10	4.3	mg/L			07/26/24 02:38	1

Lab Sample ID: LCS 500-778480/2
Matrix: Water
Analysis Batch: 778480

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	250	240		mg/L		96	80 - 120

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 500-778715/1
Matrix: Water
Analysis Batch: 778715

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<1.9		5.0	1.9	mg/L			07/29/24 02:07	1

Lab Sample ID: LCS 500-778715/2
Matrix: Water
Analysis Batch: 778715

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	200	176		mg/L		88	80 - 120

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 500-778568/1
Matrix: Water
Analysis Batch: 778568

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<0.23		1.0	0.23	mg/L			07/25/24 23:14	1

Lab Sample ID: LCS 500-778568/2
Matrix: Water
Analysis Batch: 778568

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	3.64	3.54		mg/L		98	85 - 115

Method: SM 5310C - TOC

Lab Sample ID: MB 500-779224/7
Matrix: Water
Analysis Batch: 779224

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<0.47		1.0	0.47	mg/L			07/30/24 11:17	1

Lab Sample ID: LCS 500-779224/8
Matrix: Water
Analysis Batch: 779224

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	10.0	10.2		mg/L		102	86 - 116

Method: SM 5310C - Organic Carbon, Dissolved (DOC)

Lab Sample ID: MB 500-778742/7
Matrix: Water
Analysis Batch: 778742

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	<0.47		1.0	0.47	mg/L			07/28/24 18:19	1

Method: SM 5310C - Organic Carbon, Dissolved (DOC) (Continued)

Lab Sample ID: LCS 500-778742/8
Matrix: Water
Analysis Batch: 778742

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dissolved Organic Carbon	10.0	10.3		mg/L		103	86 - 116

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-253934-1

Client Sample ID: WP-583-233-284.4-2

Date Collected: 07/22/24 10:45
Date Received: 07/24/24 09:20

Lab Sample ID: 500-253934-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	1630			2462	AJD	EET SSM	07/29/24 09:45
Dissolved	Analysis	1630		1	2488	CL	EET SSM	07/30/24 17:42
Total/NA	Prep	1630			2462	AJD	EET SSM	07/29/24 09:45
Total/NA	Analysis	1630		1	2488	CL	EET SSM	07/30/24 17:32
Dissolved	Analysis	1631E		1	2481	CL	EET SSM	07/30/24 19:31
Total/NA	Analysis	1631E		1	2481	CL	EET SSM	07/30/24 19:27
Dissolved	Prep	1638			2463	V1R	EET SSM	07/29/24 12:49
Dissolved	Analysis	1638		1	2472	V1R	EET SSM	07/29/24 18:59
Total Recoverable	Prep	1638			2463	V1R	EET SSM	07/29/24 12:49
Total Recoverable	Analysis	1638		1	2472	V1R	EET SSM	07/29/24 21:17
Dissolved	Prep	3005A			780674	BDE	EET CHI	08/09/24 08:59 - 08/09/24 14:59 [1]
Dissolved	Analysis	6020B		1	780966	RN	EET CHI	08/12/24 12:31
Dissolved	Prep	3005A			780674	BDE	EET CHI	08/09/24 08:59 - 08/09/24 14:59 [1]
Dissolved	Analysis	6020B		5	781097	RN	EET CHI	08/12/24 15:28
Total Recoverable	Prep	3005A			780674	BDE	EET CHI	08/09/24 08:59 - 08/09/24 14:59 [1]
Total Recoverable	Analysis	6020B		1	780966	RN	EET CHI	08/12/24 12:28
Total Recoverable	Prep	3005A			780674	BDE	EET CHI	08/09/24 08:59 - 08/09/24 14:59 [1]
Total Recoverable	Analysis	6020B		5	781097	RN	EET CHI	08/12/24 15:25
Total Recoverable	Prep	3005A			780674	BDE	EET CHI	08/09/24 08:59 - 08/09/24 14:59 [1]
Total Recoverable	Analysis	SM 2340B		1	781363	DAJ	EET CHI	08/14/24 11:50
Total/NA	Analysis	300.0		1	778155	W1T	EET CHI	07/24/24 11:20
Total/NA	Analysis	300.0		1	778156	W1T	EET CHI	07/24/24 11:20
Total/NA	Analysis	300.0		1	778270	W1T	EET CHI	07/26/24 11:03
Total/NA	Analysis	300.0		100	778269	W1T	EET CHI	07/26/24 11:18
Total/NA	Prep	Distill/CN			779702	KF	EET CHI	08/02/24 10:37 - 08/02/24 11:07 [1]
Total/NA	Analysis	335.4		1	779754	KF	EET CHI	08/02/24 15:56
Total/NA	Prep	Distill/Ammonia			781374	EB	EET CHI	08/14/24 11:34 - 08/14/24 12:34 [1]
Total/NA	Analysis	350.1		1	781794	KF	EET CHI	08/15/24 17:12
Total/NA	Prep	365.2/365.3/365			780961	NSJ	EET CHI	08/13/24 11:40 - 08/13/24 15:40 [1]
Total/NA	Analysis	365.1		1	781722	LP	EET CHI	08/13/24 17:39
Total/NA	Analysis	SM 2320B		1	779874	SO	EET CHI	08/02/24 19:10
Total/NA	Analysis	SM 2520B		1	779504	TR	EET CHI	07/29/24 15:23
Total/NA	Analysis	SM 2540C		1	778480	CLB	EET CHI	07/26/24 03:01
Total/NA	Analysis	SM 2540D		1	778715	CLB	EET CHI	07/29/24 03:19 - 07/29/24 03:22 [1]
Total/NA	Analysis	SM 4500 S2 F		1	778568	CLB	EET CHI	07/26/24 00:21 - 07/26/24 00:24 [1]
Dissolved	Analysis	SM 5310C		1	778742	TR	EET CHI	07/28/24 21:06
Total/NA	Analysis	SM 5310C		1	779224	TR	EET CHI	07/30/24 20:38

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-253934-1

Client Sample ID: WP-583-233-284.4-R

Date Collected: 07/22/24 10:45
Date Received: 07/24/24 09:20

Lab Sample ID: 500-253934-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	2481	CL	EET SSM	07/30/24 19:35

Client Sample ID: WP-583-233-284.4-1

Date Collected: 07/22/24 08:35
Date Received: 07/25/24 09:30

Lab Sample ID: 500-253934-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	1630			2462	AJD	EET SSM	07/29/24 09:45
Dissolved	Analysis	1630		1	2488	CL	EET SSM	07/30/24 18:03
Total/NA	Prep	1630			2462	AJD	EET SSM	07/29/24 09:45
Total/NA	Analysis	1630		1	2488	CL	EET SSM	07/30/24 17:53
Dissolved	Analysis	1631E		1	2481	CL	EET SSM	07/30/24 19:43
Total/NA	Analysis	1631E		1	2481	CL	EET SSM	07/30/24 19:39
Dissolved	Prep	1638			2463	V1R	EET SSM	07/29/24 12:49
Dissolved	Analysis	1638		1	2472	V1R	EET SSM	07/29/24 20:55
Total Recoverable	Prep	1638			2463	V1R	EET SSM	07/29/24 12:49
Total Recoverable	Analysis	1638		1	2472	V1R	EET SSM	07/29/24 21:21
Dissolved	Prep	3005A			781004	S1Z	EET CHI	08/12/24 15:45 - 08/12/24 21:45 [1]
Dissolved	Analysis	6020B		1	781318	RN	EET CHI	08/13/24 17:16
Total Recoverable	Prep	3005A			781004	S1Z	EET CHI	08/12/24 15:45 - 08/12/24 21:45 [1]
Total Recoverable	Analysis	6020B		1	781318	RN	EET CHI	08/13/24 17:18
Total Recoverable	Prep	3005A			781004	S1Z	EET CHI	08/12/24 15:45 - 08/12/24 21:45 [1]
Total Recoverable	Analysis	SM 2340B		1	781363	DAJ	EET CHI	08/14/24 13:16
Total/NA	Analysis	300.0		1	778269	W1T	EET CHI	07/25/24 11:31
Total/NA	Analysis	300.0		1	778270	W1T	EET CHI	07/25/24 11:31
Total/NA	Analysis	300.0		100	780563	W1T	EET CHI	08/08/24 19:15
Total/NA	Prep	Distill/CN			779702	KF	EET CHI	08/02/24 10:37 - 08/02/24 11:07 [1]
Total/NA	Analysis	335.4		1	779754	KF	EET CHI	08/02/24 15:58
Total/NA	Prep	Distill/Ammonia			781374	EB	EET CHI	08/14/24 11:34 - 08/14/24 12:34 [1]
Total/NA	Analysis	350.1		1	781794	KF	EET CHI	08/15/24 17:13
Total/NA	Prep	365.2/365.3/365			780961	NSJ	EET CHI	08/13/24 11:40 - 08/13/24 15:40 [1]
Total/NA	Analysis	365.1		1	781722	LP	EET CHI	08/13/24 17:40
Total/NA	Analysis	SM 2320B		1	779874	SO	EET CHI	08/02/24 19:20
Total/NA	Analysis	SM 2520B		1	779789	TR	EET CHI	08/04/24 14:56
Total/NA	Analysis	SM 2540C		1	778480	CLB	EET CHI	07/26/24 03:03
Total/NA	Analysis	SM 2540D		1	778715	CLB	EET CHI	07/29/24 03:22 - 07/29/24 03:25 [1]
Total/NA	Analysis	SM 4500 S2 F		1	778568	CLB	EET CHI	07/26/24 00:24 - 07/26/24 00:27 [1]
Dissolved	Analysis	SM 5310C		1	778742	TR	EET CHI	07/28/24 21:34
Total/NA	Analysis	SM 5310C		1	779224	TR	EET CHI	07/30/24 15:30

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253934-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-583-233-284.4-1-FB
Lab Sample ID: 500-253934-4

Date Collected: 07/22/24 08:35
Matrix: Water
Date Received: 07/25/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	2481	CL	EET SSM	07/30/24 19:51

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253934-1
Project/Site: FOTH - White Pines, MI

Laboratory: Eurofins Chicago

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Georgia	State	N/A	05-31-25
Georgia (DW)	State	939	05-31-25
Hawaii	State	NA	05-31-25
Illinois	NELAP	IL00035	05-31-25
Indiana	State	C-IL-02	05-31-25
Iowa	State	082	05-01-26
Kansas	NELAP	E-10161	10-31-24
Kentucky (UST)	State	AI # 108083	05-31-25
Kentucky (WW)	State	KY90023	12-31-24
Louisiana (All)	NELAP	02046	06-30-25
Mississippi	State	NA	05-31-25
North Carolina (WW/SW)	State	291	12-31-24
North Dakota	State	R-194	04-29-24 *
Oklahoma	State	8908	08-31-24
South Carolina	State	77001003	04-29-24 *
USDA	US Federal Programs	P330-18-00018	03-30-26
Wisconsin	State	999580010	08-31-24
Wyoming	State	8TMS-Q	05-31-25

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	12-18-24
ANAB	Dept. of Defense ELAP	L2236	08-07-24
ANAB	Dept. of Energy	L2236.01	12-18-24
ANAB	ISO/IEC 17025	L2236	08-07-24
California	State	2954	12-18-24
Florida	NELAP	E87575	12-18-24
Louisiana (All)	NELAP	03073	12-18-24
Maine	State	WA01273	12-18-24
New Jersey	NELAP	WA014	12-18-24
New York	NELAP	11662	12-18-24
Oregon	NELAP	4167-008	07-07-25
US Fish & Wildlife	US Federal Programs	A20571	06-30-25
USDA	US Federal Programs	525-23-4-22573	12-18-24
Washington	State	C788-23a	12-18-24
Wisconsin	State	399133460	12-18-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.


WHITE PINE COPPER
35362 MALL CIRCLE DRIVE

WHITE PINE, MI 49971
UNITED STATES US

CAD: 0780307/CAFE3808

Part # 159469-4C4 MTM/EXP 01/25

TO SAMPLE RECEIPT
EUROFINS CHICAGO
2417 BOND ST.

UNIVERSITY PARK IL 60484

(708) 534-5200 REF:

INV: PO: DEPT:

RMA:

FedEx Express

FedEx TRK# 0221 7414 0291 7069

WED - 24 JUL AA
PRIORITY OVERNIGHT

XP JOTA

60484
IL-US
ORD

500-253934 COC

Eurofins Chicago
2417 Bond Street
University Park, IL 60484
Phone 708-534-5200 Fax 708 534-5211

Chain of Custody Record

eurofins | Environment Testing

500-253934 COC

Client Information	Sampler: May Willison	Lab PM: Fredrick, Sandie		COC No: 500-126105-50170 2
Client Contact: Jakob Wartman	Phone:	E-Mail: Sandra Fredrick@et eurofinsus com		Page: Page 2 of 5
Company: Foth Infrastructure & Environment, LLC	PWSID:			Job #: 500-253934
Address: Missabe Building 227 West 1st. Street, Suite 920	Due Date Requested: Standard			
City: Duluth	TAT Requested (days): Standard			
State, Zip: MN, 55802	Compliance Project: Δ Yes Δ No			
Phone: 218-481-6014(Tel)	PO #: Purchase Order not required			
Email: Jakob Wartman@foth com	WO #:			
Project Name: FOTH - White Pines, MI	Project #: 50023463			
Site:	SSOW#:			

Analysis Requested

Preservation Codes: N None; S H2SO4; CB ZnAcetate/NaOH; B NaOH; D HNO3

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1631E - Mercury, Low Level (CVAFS)	1631E - Dissolved Mercury, Low Level (FF)	2320B, 2540C, 2540D, 300.0_28D, 300_48HR, SM2520_B	350.1, 365.1	SM4500_S2_F - Sulfide	335.4 - Cyanide, Total	SM5310_DOC_C - DOC	6020B, SM2340B	6020B - Dissolved Metals (ICP/MS) - 27 elements	3500_CR_B - Chromium, Hexavalent	3500_CR_B - Dissolved Chromium, Hexavalent (field fi	1638 - Uranium only (ICP/MS)	1638 - Dissolved Uranium only (ICP/MS) (f	Total Number of containers	Special Instructions/Note:
	Preservation Code:							N	N	N	S	CB	B	S	D	D	N	N	D	D		
3	WP-583-233-2844-4	7/22/24	0835	G	Water			X		X	X	X	X		X		X		X	X		
					Water	X			X					X		X		X	X	X		
1	WP-583-233-284.4-2	7/22/24	1045	G	Water		MS	X		X	X	X	X		X		X		X	X		
					Water		MSD		X					X		X		X	X	X		
2	WP-583-233-284.4-2-R				Water																	2 Field Blanks added
4	WP-583-233-284.4-1-FB				Water																	BY EEIA 7/25/24 SH
					Water																	
					Water																	
					Water																	
					Water																	
					Water																	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I, II, III, IV, Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
May Willison	7/23/24 0830	Foth	Stephanie Hernandez	7/25/24 0930	EEIA

Custody Seals Intact	Custody Seal No	Cooler Temperature(s) °C and Other Remarks
Δ Yes Δ No		1.5+1.4



500-253934 Waybi

WHITE PINE COPPER
35362 MALL CIRCLE DRIVE

WHITE PINE, MI 49971
UNITED STATES US

CAD 3030

TO **SAMPLE RECEIPT**
EUROFINS CHICAGO
2417 BOND ST.

UNIVERSITY PARK IL 60484

(708) 534-5200 REF
INV:
PO: DEPT:

RMA:

FedEx
TRK# 0221 7414 0291 7070

WED - 24 JUL AA
PRIORITY OVERNIGHT

XP JOTA

60484
IL-US
ORD

Login Sample Receipt Checklist

Client: Foth Infrastructure & Environment, LLC

Job Number: 500-253934-1

Login Number: 253934
List Number: 1
Creator: Hernandez, Stephanie

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.9,1.4
COC is present.	False	Missing coolers and COC
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	False	Anion hold time missed due to FE delay
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Foth Infrastructure & Environment, LLC

Job Number: 500-253934-1

Login Number: 253934
List Number: 2
Creator: Groden, Kyle J

List Source: Eurofins Seattle Specialty Metals
List Creation: 07/26/24 01:20 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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500-253934 Field Sheet

8/23/2024

Date:	7/26/2024
End Time:	15:07
pH Paper Lot:	HC324723
Analyst:	VHL

Preservative ID	Preservative Type	Container ID
ZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ
ZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ
ZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ
ZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ

Sample ID	Initial pH	Final pH	Preservative ID	Preservative Added (mL)	Comments
500-253934-J-3	<2				
500-253934-J-1	<2				
500-253934-K-1	<2				
500-253934-K-3	<2				VHL 7-26-24

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500-253934 Field Sheet

Date:	7/26/2024
End Time:	15:29
pH Paper Lot:	HC324723
Analyst:	

Preservative ID	Preservative Type	Container ID
ZZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ
ZZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ
ZZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ
ZZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ

Sample ID	Initial pH	Final pH	Preservative ID	Preservative Added (mL)	Comments
500-253934-E-3	<2				
500-253934-F-3	<2				
500-253934-F-1	<2				
500-253934-E-1	<2				

7-26-24

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ANALYTICAL REPORT

PREPARED FOR

Attn: Jakob Wartman
Foth Infrastructure & Environment, LLC
Missabe Building
227 West 1st. Street, Suite 920
Duluth, Minnesota 55802

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JOB DESCRIPTION

FOTH - White Pines, MI

JOB NUMBER

500-254304-1

Eurofins Chicago
2417 Bond Street
University Park IL 60484

See page two for job notes and contact information.

my EOL

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

Results relate only to the items tested and the sample(s) as received by the laboratory. The results, detection limits (LOD) and Quantitation Limits (LOQ) have been adjusted for sample dilutions and/or solids content.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Chicago Project Manager.

Compliance Statement

The LOD and LOQ reported are adjusted by the dilution factor when a dilution factor greater than 1 is needed. Additionally, where results are indicated as being reported on a dry weight basis, the LOD and LOQ are adjusted for moisture content as well.

Definitions of Limits
- LOD = Limit of Detection = MDL as defined by 40 CFR part 136 Appendix B
- LOQ = Limit of Quantitation = 3.33 x LOD as defined by Wisconsin
- RL = Report Limit = a concentration supported by a standard in the calibration curves

Authorization



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Authorized for release by
Sandie Fredrick, Senior Project Manager
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Job Narrative
500-254304-1

Receipt
The samples were received on 7/30/2024 9:45 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 1.8º C, 4.2º C, 5.7º C and 9.5º C.

Receipt Exceptions
The following sample(s) was received outside of holding time IC N3 & N2.

The following sample was received at the laboratory outside the required temperature criteria: We received the 3 1L unpreserved,, NH3 & P, Cn and Methyl Mercury bottles in the cooler that was out of temp.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
Method 300.0: The following sample was analyzed outside of analytical holding time WP-584-82-132-1 (500-254304-1) and WP-584-82-132-2 (500-254304-3).

Method 335.4: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 500-780716 and analytical batch 500-780798 were outside control limits for Cyanide, Total. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method SM 5310C: Field filtered Dissolved Organic Carbon results are slightly greater than Total Organic Carbon results. WP-584-82-132-1 (500-254304-1)

Method 365.1: The initial calibration verification (ICV) associated with batch 500-781671 recovered below the lower control limit for Phosphorus as P. The ICV was out by 1% and the LCS was in control ; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-254304-1

Client Sample ID: WP-584-82-132-1

Lab Sample ID: 500-254304-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Uranium	32		0.030	0.0098	ug/L	1		1638	Total Recoverable
Uranium	32		0.030	0.0098	ug/L	1		1638	Dissolved
Aluminum	69	J	100	25	ug/L	1		6020B	Total Recoverable
Arsenic	0.57	J	1.0	0.23	ug/L	1		6020B	Total Recoverable
Barium	1500		2.5	0.73	ug/L	1		6020B	Total Recoverable
Boron	290	B	50	13	ug/L	1		6020B	Total Recoverable
Calcium	300000		200	44	ug/L	1		6020B	Total Recoverable
Copper	1.9	J	2.0	0.50	ug/L	1		6020B	Total Recoverable
Iron	1000		100	47	ug/L	1		6020B	Total Recoverable
Lithium	99		10	2.5	ug/L	1		6020B	Total Recoverable
Magnesium	17000		200	49	ug/L	1		6020B	Total Recoverable
Manganese	1500		2.5	0.79	ug/L	1		6020B	Total Recoverable
Nickel	1.4	J	2.0	0.63	ug/L	1		6020B	Total Recoverable
Potassium	1100		500	110	ug/L	1		6020B	Total Recoverable
Sodium	310000		200	77	ug/L	1		6020B	Total Recoverable
Strontium	8900		4.0	0.64	ug/L	1		6020B	Total Recoverable
Zinc	200		20	6.9	ug/L	1		6020B	Total Recoverable
Arsenic	0.55	J	1.0	0.23	ug/L	1		6020B	Dissolved
Barium	1500		2.5	0.73	ug/L	1		6020B	Dissolved
Boron	280	B	50	13	ug/L	1		6020B	Dissolved
Calcium	290000		200	44	ug/L	1		6020B	Dissolved
Iron	860		100	47	ug/L	1		6020B	Dissolved
Lithium	96		10	2.5	ug/L	1		6020B	Dissolved
Magnesium	17000		200	49	ug/L	1		6020B	Dissolved
Manganese	1500		2.5	0.79	ug/L	1		6020B	Dissolved
Nickel	0.86	J	2.0	0.63	ug/L	1		6020B	Dissolved
Potassium	1100		500	110	ug/L	1		6020B	Dissolved
Sodium	290000		200	77	ug/L	1		6020B	Dissolved
Strontium	8700		4.0	0.64	ug/L	1		6020B	Dissolved
Zinc	290		20	6.9	ug/L	1		6020B	Dissolved
Hardness as calcium carbonate	820		0.91	0.46	mg/L	1		SM 2340B	Total Recoverable
Bromide	8.5		1.0	0.18	mg/L	1		300.0	Total/NA
Chloride	540		50	5.8	mg/L	50		300.0	Total/NA
Fluoride	0.23	J	1.0	0.19	mg/L	1		300.0	Total/NA
Sulfate	2.5		1.0	0.21	mg/L	1		300.0	Total/NA
Ammonia	0.29		0.20	0.10	mg/L	1		350.1	Total/NA
Alkalinity	520		5.0	3.7	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	520		5.0	3.7	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-254304-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-584-82-132-1 (Continued) — Lab Sample ID: 500-254304-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Salinity	1.7		0.33	0.33	psu	1		SM 2520B	Total/NA
Total Dissolved Solids	1700		10	4.3	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	3.6	J	5.0	1.9	mg/L	1		SM 2540D	Total/NA
Total Organic Carbon	4.3		1.0	0.47	mg/L	1		SM 5310C	Total/NA
Dissolved Organic Carbon	4.4		1.0	0.47	mg/L	1		SM 5310C	Dissolved

Client Sample ID: WP-584-82-132-1 FB — Lab Sample ID: 500-254304-2

No Detections.

Client Sample ID: WP-584-82-132-2 — Lab Sample ID: 500-254304-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Uranium	32		0.030	0.0098	ug/L	1		1638	Total Recoverable
Uranium	31		0.030	0.0098	ug/L	1		1638	Dissolved
Arsenic	0.48	J	1.0	0.23	ug/L	1		6020B	Total Recoverable
Barium	1500		2.5	0.73	ug/L	1		6020B	Total Recoverable
Boron	280	B	50	13	ug/L	1		6020B	Total Recoverable
Calcium	280000		200	44	ug/L	1		6020B	Total Recoverable
Iron	800		100	47	ug/L	1		6020B	Total Recoverable
Lithium	95		10	2.5	ug/L	1		6020B	Total Recoverable
Magnesium	17000		200	49	ug/L	1		6020B	Total Recoverable
Manganese	1500		2.5	0.79	ug/L	1		6020B	Total Recoverable
Nickel	0.75	J	2.0	0.63	ug/L	1		6020B	Total Recoverable
Potassium	1000		500	110	ug/L	1		6020B	Total Recoverable
Sodium	290000		200	77	ug/L	1		6020B	Total Recoverable
Strontium	8400		4.0	0.64	ug/L	1		6020B	Total Recoverable
Zinc	130		20	6.9	ug/L	1		6020B	Total Recoverable
Arsenic	0.49	J	1.0	0.23	ug/L	1		6020B	Dissolved
Barium	1500		2.5	0.73	ug/L	1		6020B	Dissolved
Boron	290	B	50	13	ug/L	1		6020B	Dissolved
Calcium	290000		200	44	ug/L	1		6020B	Dissolved
Iron	740		100	47	ug/L	1		6020B	Dissolved
Lithium	96		10	2.5	ug/L	1		6020B	Dissolved
Magnesium	17000		200	49	ug/L	1		6020B	Dissolved
Manganese	1500		2.5	0.79	ug/L	1		6020B	Dissolved
Nickel	0.73	J	2.0	0.63	ug/L	1		6020B	Dissolved
Potassium	1000		500	110	ug/L	1		6020B	Dissolved
Sodium	290000		200	77	ug/L	1		6020B	Dissolved
Strontium	8500		4.0	0.64	ug/L	1		6020B	Dissolved
Zinc	230		20	6.9	ug/L	1		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: WP-584-82-132-2 (Continued)
Lab Sample ID: 500-254304-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Hardness as calcium carbonate	780		0.91	0.46	mg/L	1		SM 2340B	Total Recoverable
Bromide	8.2		1.0	0.18	mg/L	1		300.0	Total/NA
Chloride	520		50	5.8	mg/L	50		300.0	Total/NA
Fluoride	0.23	J	1.0	0.19	mg/L	1		300.0	Total/NA
Sulfate	2.3		1.0	0.21	mg/L	1		300.0	Total/NA
Alkalinity	520		5.0	3.7	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	520		5.0	3.7	mg/L	1		SM 2320B	Total/NA
Salinity	1.7		0.33	0.33	psu	1		SM 2520B	Total/NA
Total Dissolved Solids	1700		10	4.3	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	3.2	J	5.0	1.9	mg/L	1		SM 2540D	Total/NA
Total Organic Carbon	3.9		1.0	0.47	mg/L	1		SM 5310C	Total/NA
Dissolved Organic Carbon	4.0		1.0	0.47	mg/L	1		SM 5310C	Dissolved

Client Sample ID: WP-584-82-132-2 FB
Lab Sample ID: 500-254304-4

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-254304-1

Method	Method Description	Protocol	Laboratory
1630	Methyl Mercury	EPA	EET SSM
1631E	Mercury, Low Level (CVAFS)	EPA	EET SSM
1638	Metals (ICP/MS)	EPA	EET SSM
6020B	Metals (ICP/MS)	SW846	EET CHI
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	EET CHI
300.0	Anions, Ion Chromatography	EPA	EET CHI
335.4	Cyanide, Total	EPA	EET CHI
350.1	Nitrogen, Ammonia	EPA	EET CHI
365.1	Phosphorus, Total	EPA	EET CHI
SM 2320B	Alkalinity	SM	EET CHI
SM 2520B	Salinity	SM	EET CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CHI
SM 2540D	Solids, Total Suspended (TSS)	SM	EET CHI
SM 4500 S2 F	Sulfide, Total	SM	EET CHI
SM 5310C	Organic Carbon, Dissolved (DOC)	SM	EET CHI
SM 5310C	TOC	SM	EET CHI
1630	Distillation, Methyl Mercury	EPA	EET SSM
1638	Preparation, Total Recoverable Metals	EPA	EET SSM
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CHI
365.2/365.3/365	Phosphorus, Total	EPA	EET CHI
Distill/Ammonia	Distillation, Ammonia	None	EET CHI
Distill/CN	Distillation, Cyanide	None	EET CHI

Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-254304-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-254304-1	WP-584-82-132-1	Water	07/28/24 09:50	07/30/24 09:45
500-254304-2	WP-584-82-132-1 FB	Water	07/28/24 00:00	07/30/24 09:45
500-254304-3	WP-584-82-132-2	Water	07/28/24 11:15	07/30/24 09:45
500-254304-4	WP-584-82-132-2 FB	Water	07/28/24 00:00	07/30/24 09:45

Client Sample ID: WP-584-82-132-1
Lab Sample ID: 500-254304-1

Date Collected: 07/28/24 09:50
Matrix: Water
Date Received: 07/30/24 09:45

Method: EPA 1630 - Methyl Mercury

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		08/02/24 11:02	08/03/24 00:35	1

Method: EPA 1630 - Methyl Mercury - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		08/02/24 11:02	08/03/24 00:45	1

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			08/02/24 18:53	1

Method: EPA 1631E - Mercury, Low Level (CVAFS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			08/02/24 18:57	1

Method: EPA 1638 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**32**		0.030	0.0098	ug/L		08/05/24 14:37	08/06/24 19:41	1

Method: EPA 1638 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**32**		0.030	0.0098	ug/L		08/05/24 14:37	08/06/24 20:21	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**69**	**J**	100	25	ug/L		08/14/24 08:44	08/16/24 13:10	1
Antimony	<1.3		3.0	1.3	ug/L		08/14/24 08:44	08/16/24 13:10	1
Arsenic	**0.57**	**J**	1.0	0.23	ug/L		08/14/24 08:44	08/16/24 13:10	1
Barium	**1500**		2.5	0.73	ug/L		08/14/24 08:44	08/16/24 13:10	1
Beryllium	<0.53		1.0	0.53	ug/L		08/14/24 08:44	08/16/24 13:10	1
Boron	**290**	**B**	50	13	ug/L		08/14/24 08:44	08/16/24 13:10	1
Cadmium	<0.17		0.50	0.17	ug/L		08/14/24 08:44	08/16/24 13:10	1
Calcium	**300000**		200	44	ug/L		08/14/24 08:44	08/16/24 13:10	1
Chromium	<1.1		5.0	1.1	ug/L		08/14/24 08:44	08/16/24 13:10	1
Cobalt	<0.40		1.0	0.40	ug/L		08/14/24 08:44	08/16/24 13:10	1
Copper	**1.9**	**J**	2.0	0.50	ug/L		08/14/24 08:44	08/16/24 13:10	1
Iron	**1000**		100	47	ug/L		08/14/24 08:44	08/16/24 13:10	1
Lead	<0.19		0.50	0.19	ug/L		08/14/24 08:44	08/16/24 13:10	1
Lithium	**99**		10	2.5	ug/L		08/14/24 08:44	08/16/24 13:10	1
Magnesium	**17000**		200	49	ug/L		08/14/24 08:44	08/16/24 13:10	1
Manganese	**1500**		2.5	0.79	ug/L		08/14/24 08:44	08/16/24 13:10	1
Molybdenum	<2.5		5.0	2.5	ug/L		08/14/24 08:44	08/16/24 13:10	1
Nickel	**1.4**	**J**	2.0	0.63	ug/L		08/14/24 08:44	08/16/24 13:10	1
Potassium	**1100**		500	110	ug/L		08/14/24 08:44	08/16/24 13:10	1
Selenium	<0.98		2.5	0.98	ug/L		08/14/24 08:44	08/16/24 13:10	1
Silver	<0.12		0.50	0.12	ug/L		08/14/24 08:44	08/16/24 13:10	1
Sodium	**310000**		200	77	ug/L		08/14/24 08:44	08/16/24 13:10	1
Strontium	**8900**		4.0	0.64	ug/L		08/14/24 08:44	08/16/24 13:10	1
Thallium	<0.57		2.0	0.57	ug/L		08/14/24 08:44	08/16/24 13:10	1
Tin	<1.3		5.0	1.3	ug/L		08/14/24 08:44	08/16/24 13:10	1
Vanadium	<2.2		5.0	2.2	ug/L		08/14/24 08:44	08/16/24 13:10	1
Zinc	**200**		20	6.9	ug/L		08/14/24 08:44	08/16/24 13:10	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-254304-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-584-82-132-1
Lab Sample ID: 500-254304-1
Date Collected: 07/28/24 09:50
Matrix: Water
Date Received: 07/30/24 09:45

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		08/14/24 08:44	08/16/24 13:14	1
Antimony	<1.3		3.0	1.3	ug/L		08/14/24 08:44	08/16/24 13:14	1
Arsenic	**0.55**	**J**	1.0	0.23	ug/L		08/14/24 08:44	08/16/24 13:14	1
Barium	**1500**		2.5	0.73	ug/L		08/14/24 08:44	08/16/24 13:14	1
Beryllium	<0.53		1.0	0.53	ug/L		08/14/24 08:44	08/16/24 13:14	1
Boron	**280**	**B**	50	13	ug/L		08/14/24 08:44	08/16/24 13:14	1
Cadmium	<0.17		0.50	0.17	ug/L		08/14/24 08:44	08/16/24 13:14	1
Calcium	**290000**		200	44	ug/L		08/14/24 08:44	08/16/24 13:14	1
Chromium	<1.1		5.0	1.1	ug/L		08/14/24 08:44	08/16/24 13:14	1
Cobalt	<0.40		1.0	0.40	ug/L		08/14/24 08:44	08/16/24 13:14	1
Copper	<0.50		2.0	0.50	ug/L		08/14/24 08:44	08/16/24 13:14	1
Iron	**860**		100	47	ug/L		08/14/24 08:44	08/16/24 13:14	1
Lead	<0.19		0.50	0.19	ug/L		08/14/24 08:44	08/16/24 13:14	1
Lithium	**96**		10	2.5	ug/L		08/14/24 08:44	08/16/24 13:14	1
Magnesium	**17000**		200	49	ug/L		08/14/24 08:44	08/16/24 13:14	1
Manganese	**1500**		2.5	0.79	ug/L		08/14/24 08:44	08/16/24 13:14	1
Molybdenum	<2.5		5.0	2.5	ug/L		08/14/24 08:44	08/16/24 13:14	1
Nickel	**0.86**	**J**	2.0	0.63	ug/L		08/14/24 08:44	08/16/24 13:14	1
Potassium	**1100**		500	110	ug/L		08/14/24 08:44	08/16/24 13:14	1
Selenium	<0.98		2.5	0.98	ug/L		08/14/24 08:44	08/16/24 13:14	1
Silver	<0.12		0.50	0.12	ug/L		08/14/24 08:44	08/16/24 13:14	1
Sodium	**290000**		200	77	ug/L		08/14/24 08:44	08/16/24 13:14	1
Strontium	**8700**		4.0	0.64	ug/L		08/14/24 08:44	08/16/24 13:14	1
Thallium	<0.57		2.0	0.57	ug/L		08/14/24 08:44	08/16/24 13:14	1
Tin	<1.3		5.0	1.3	ug/L		08/14/24 08:44	08/16/24 13:14	1
Vanadium	<2.2		5.0	2.2	ug/L		08/14/24 08:44	08/16/24 13:14	1
Zinc	**290**		20	6.9	ug/L		08/14/24 08:44	08/16/24 13:14	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**820**		0.91	0.46	mg/L		08/14/24 08:44	08/16/24 14:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**8.5**		1.0	0.18	mg/L			07/31/24 15:24	1
Nitrate as N (EPA 300.0)	<0.043	H H3	1.0	0.043	mg/L			07/31/24 15:24	1
Chloride (EPA 300.0)	**540**		50	5.8	mg/L			08/14/24 03:53	50
Nitrite as N (EPA 300.0)	<0.070	H H3	1.0	0.070	mg/L			07/31/24 15:24	1
Fluoride (EPA 300.0)	**0.23**	**J**	1.0	0.19	mg/L			07/31/24 15:24	1
Nitrate Nitrite as N (EPA 300.0)	<0.070	H H3	1.0	0.070	mg/L			07/31/24 15:24	1
Sulfate (EPA 300.0)	**2.5**		1.0	0.21	mg/L			07/31/24 15:24	1
Cyanide, Total (EPA 335.4)	<0.0036	F1	0.0050	0.0036	mg/L		08/09/24 11:42	08/10/24 11:11	1
Ammonia (EPA 350.1)	**0.29**		0.20	0.10	mg/L		08/15/24 11:06	08/16/24 14:33	1
Phosphorus as P (EPA 365.1)	<0.024	^1- *-	0.050	0.024	mg/L		08/13/24 11:40	08/15/24 12:13	1
Alkalinity (SM 2320B)	**520**		5.0	3.7	mg/L			08/07/24 01:55	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**520**		5.0	3.7	mg/L			08/07/24 01:55	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<3.7		5.0	3.7	mg/L			08/07/24 01:55	1
Salinity (SM 2520B)	**1.7**		0.33	0.33	psu			08/04/24 14:56	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-254304-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-584-82-132-1
Lab Sample ID: 500-254304-1
Date Collected: 07/28/24 09:50
Matrix: Water
Date Received: 07/30/24 09:45

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1700		10	4.3	mg/L			08/01/24 03:24	1
Total Suspended Solids (SM 2540D)	3.6	J	5.0	1.9	mg/L			08/02/24 16:45	1
Sulfide (SM 4500 S2 F)	<0.23		1.0	0.23	mg/L			08/01/24 22:43	1
Total Organic Carbon (SM 5310C)	4.3		1.0	0.47	mg/L			08/09/24 04:21	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon (SM 5310C)	4.4		1.0	0.47	mg/L			08/13/24 08:18	1

Client Sample Results

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-254304-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-584-82-132-1 FB
Lab Sample ID: 500-254304-2
Date Collected: 07/28/24 00:00
Matrix: Water
Date Received: 07/30/24 09:45

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			08/02/24 19:01	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-254304-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-584-82-132-2
Lab Sample ID: 500-254304-3
Date Collected: 07/28/24 11:15
Matrix: Water
Date Received: 07/30/24 09:45

Method: EPA 1630 - Methyl Mercury

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		08/02/24 11:02	08/03/24 00:55	1

Method: EPA 1630 - Methyl Mercury - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		08/02/24 11:02	08/03/24 01:05	1

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			08/02/24 19:05	1

Method: EPA 1631E - Mercury, Low Level (CVAFS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			08/02/24 19:10	1

Method: EPA 1638 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**32**		0.030	0.0098	ug/L		08/05/24 14:37	08/06/24 19:45	1

Method: EPA 1638 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**31**		0.030	0.0098	ug/L		08/05/24 14:37	08/06/24 20:25	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		08/14/24 08:44	08/16/24 13:12	1
Antimony	<1.3		3.0	1.3	ug/L		08/14/24 08:44	08/16/24 13:12	1
Arsenic	**0.48**	**J**	1.0	0.23	ug/L		08/14/24 08:44	08/16/24 13:12	1
Barium	**1500**		2.5	0.73	ug/L		08/14/24 08:44	08/16/24 13:12	1
Beryllium	<0.53		1.0	0.53	ug/L		08/14/24 08:44	08/16/24 13:12	1
Boron	**280**	**B**	50	13	ug/L		08/14/24 08:44	08/16/24 13:12	1
Cadmium	<0.17		0.50	0.17	ug/L		08/14/24 08:44	08/16/24 13:12	1
Calcium	**280000**		200	44	ug/L		08/14/24 08:44	08/16/24 13:12	1
Chromium	<1.1		5.0	1.1	ug/L		08/14/24 08:44	08/16/24 13:12	1
Cobalt	<0.40		1.0	0.40	ug/L		08/14/24 08:44	08/16/24 13:12	1
Copper	<0.50		2.0	0.50	ug/L		08/14/24 08:44	08/16/24 13:12	1
Iron	**800**		100	47	ug/L		08/14/24 08:44	08/16/24 13:12	1
Lead	<0.19		0.50	0.19	ug/L		08/14/24 08:44	08/16/24 13:12	1
Lithium	**95**		10	2.5	ug/L		08/14/24 08:44	08/16/24 13:12	1
Magnesium	**17000**		200	49	ug/L		08/14/24 08:44	08/16/24 13:12	1
Manganese	**1500**		2.5	0.79	ug/L		08/14/24 08:44	08/16/24 13:12	1
Molybdenum	<2.5		5.0	2.5	ug/L		08/14/24 08:44	08/16/24 13:12	1
Nickel	**0.75**	**J**	2.0	0.63	ug/L		08/14/24 08:44	08/16/24 13:12	1
Potassium	**1000**		500	110	ug/L		08/14/24 08:44	08/16/24 13:12	1
Selenium	<0.98		2.5	0.98	ug/L		08/14/24 08:44	08/16/24 13:12	1
Silver	<0.12		0.50	0.12	ug/L		08/14/24 08:44	08/16/24 13:12	1
Sodium	**290000**		200	77	ug/L		08/14/24 08:44	08/16/24 13:12	1
Strontium	**8400**		4.0	0.64	ug/L		08/14/24 08:44	08/16/24 13:12	1
Thallium	<0.57		2.0	0.57	ug/L		08/14/24 08:44	08/16/24 13:12	1
Tin	<1.3		5.0	1.3	ug/L		08/14/24 08:44	08/16/24 13:12	1
Vanadium	<2.2		5.0	2.2	ug/L		08/14/24 08:44	08/16/24 13:12	1
Zinc	**130**		20	6.9	ug/L		08/14/24 08:44	08/16/24 13:12	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-254304-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-584-82-132-2
Lab Sample ID: 500-254304-3
Date Collected: 07/28/24 11:15
Matrix: Water
Date Received: 07/30/24 09:45

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		08/14/24 08:44	08/16/24 13:16	1
Antimony	<1.3		3.0	1.3	ug/L		08/14/24 08:44	08/16/24 13:16	1
Arsenic	**0.49**	**J**	1.0	0.23	ug/L		08/14/24 08:44	08/16/24 13:16	1
Barium	**1500**		2.5	0.73	ug/L		08/14/24 08:44	08/16/24 13:16	1
Beryllium	<0.53		1.0	0.53	ug/L		08/14/24 08:44	08/16/24 13:16	1
Boron	**290**	**B**	50	13	ug/L		08/14/24 08:44	08/16/24 13:16	1
Cadmium	<0.17		0.50	0.17	ug/L		08/14/24 08:44	08/16/24 13:16	1
Calcium	**290000**		200	44	ug/L		08/14/24 08:44	08/16/24 13:16	1
Chromium	<1.1		5.0	1.1	ug/L		08/14/24 08:44	08/16/24 13:16	1
Cobalt	<0.40		1.0	0.40	ug/L		08/14/24 08:44	08/16/24 13:16	1
Copper	<0.50		2.0	0.50	ug/L		08/14/24 08:44	08/16/24 13:16	1
Iron	**740**		100	47	ug/L		08/14/24 08:44	08/16/24 13:16	1
Lead	<0.19		0.50	0.19	ug/L		08/14/24 08:44	08/16/24 13:16	1
Lithium	**96**		10	2.5	ug/L		08/14/24 08:44	08/16/24 13:16	1
Magnesium	**17000**		200	49	ug/L		08/14/24 08:44	08/16/24 13:16	1
Manganese	**1500**		2.5	0.79	ug/L		08/14/24 08:44	08/16/24 13:16	1
Molybdenum	<2.5		5.0	2.5	ug/L		08/14/24 08:44	08/16/24 13:16	1
Nickel	**0.73**	**J**	2.0	0.63	ug/L		08/14/24 08:44	08/16/24 13:16	1
Potassium	**1000**		500	110	ug/L		08/14/24 08:44	08/16/24 13:16	1
Selenium	<0.98		2.5	0.98	ug/L		08/14/24 08:44	08/16/24 13:16	1
Silver	<0.12		0.50	0.12	ug/L		08/14/24 08:44	08/16/24 13:16	1
Sodium	**290000**		200	77	ug/L		08/14/24 08:44	08/16/24 13:16	1
Strontium	**8500**		4.0	0.64	ug/L		08/14/24 08:44	08/16/24 13:16	1
Thallium	<0.57		2.0	0.57	ug/L		08/14/24 08:44	08/16/24 13:16	1
Tin	<1.3		5.0	1.3	ug/L		08/14/24 08:44	08/16/24 13:16	1
Vanadium	<2.2		5.0	2.2	ug/L		08/14/24 08:44	08/16/24 13:16	1
Zinc	**230**		20	6.9	ug/L		08/14/24 08:44	08/16/24 13:16	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**780**		0.91	0.46	mg/L		08/14/24 08:44	08/16/24 14:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**8.2**		1.0	0.18	mg/L			07/30/24 15:31	1
Nitrate as N (EPA 300.0)	<0.043	H	1.0	0.043	mg/L			07/30/24 15:31	1
Chloride (EPA 300.0)	**520**		50	5.8	mg/L			08/14/24 04:38	50
Nitrite as N (EPA 300.0)	<0.070	H	1.0	0.070	mg/L			07/30/24 15:31	1
Fluoride (EPA 300.0)	**0.23**	**J**	1.0	0.19	mg/L			07/30/24 15:31	1
Nitrate Nitrite as N (EPA 300.0)	<0.070	H	1.0	0.070	mg/L			07/30/24 15:31	1
Sulfate (EPA 300.0)	**2.3**		1.0	0.21	mg/L			07/30/24 15:31	1
Cyanide, Total (EPA 335.4)	<0.0036		0.0050	0.0036	mg/L		08/09/24 11:42	08/10/24 11:15	1
Ammonia (EPA 350.1)	<0.10		0.20	0.10	mg/L		08/15/24 11:06	08/16/24 14:34	1
Phosphorus as P (EPA 365.1)	<0.024	^1- *-	0.050	0.024	mg/L		08/13/24 11:40	08/15/24 12:14	1
Alkalinity (SM 2320B)	**520**		5.0	3.7	mg/L			08/07/24 02:05	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**520**		5.0	3.7	mg/L			08/07/24 02:05	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<3.7		5.0	3.7	mg/L			08/07/24 02:05	1
Salinity (SM 2520B)	**1.7**		0.33	0.33	psu			08/04/24 14:56	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-254304-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-584-82-132-2
Lab Sample ID: 500-254304-3
Date Collected: 07/28/24 11:15
Matrix: Water
Date Received: 07/30/24 09:45

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1700		10	4.3	mg/L			08/01/24 03:27	1
Total Suspended Solids (SM 2540D)	3.2	J	5.0	1.9	mg/L			08/02/24 16:47	1
Sulfide (SM 4500 S2 F)	<0.23		1.0	0.23	mg/L			08/01/24 22:47	1
Total Organic Carbon (SM 5310C)	3.9		1.0	0.47	mg/L			08/13/24 22:07	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon (SM 5310C)	4.0		1.0	0.47	mg/L			08/13/24 08:18	1

Client Sample Results

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-254304-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-584-82-132-2 FB
Lab Sample ID: 500-254304-4
Date Collected: 07/28/24 00:00
Matrix: Water
Date Received: 07/30/24 09:45

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			08/02/24 19:14	1

Definitions/Glossary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-254304-1
Project/Site: FOTH - White Pines, MI

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
^1-	Initial Calibration Verification (ICV) is outside acceptance limits, low biased.
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Metals

Prep Batch: 2496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-1	WP-584-82-132-1	Dissolved	Water	1630	
500-254304-1	WP-584-82-132-1	Total/NA	Water	1630	
500-254304-3	WP-584-82-132-2	Dissolved	Water	1630	
500-254304-3	WP-584-82-132-2	Total/NA	Water	1630	
MB 350-2496/1-A	Method Blank	Total/NA	Water	1630	
MB 350-2496/2-A	Method Blank	Total/NA	Water	1630	
MB 350-2496/3-A	Method Blank	Total/NA	Water	1630	
LCS 350-2496/4-A	Lab Control Sample	Total/NA	Water	1630	
LCSD 350-2496/5-A	Lab Control Sample Dup	Total/NA	Water	1630	

Prep Batch: 2504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-1	WP-584-82-132-1	Dissolved	Water	1638	
500-254304-1	WP-584-82-132-1	Total Recoverable	Water	1638	
500-254304-3	WP-584-82-132-2	Dissolved	Water	1638	
500-254304-3	WP-584-82-132-2	Total Recoverable	Water	1638	
MB 350-2504/1-A	Method Blank	Total Recoverable	Water	1638	
MB 350-2504/2-A	Method Blank	Total Recoverable	Water	1638	
LCS 350-2504/3-A	Lab Control Sample	Total Recoverable	Water	1638	
LCSD 350-2504/4-A	Lab Control Sample Dup	Total Recoverable	Water	1638	

Analysis Batch: 2505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-1	WP-584-82-132-1	Dissolved	Water	1631E	
500-254304-1	WP-584-82-132-1	Total/NA	Water	1631E	
500-254304-2	WP-584-82-132-1 FB	Total/NA	Water	1631E	
500-254304-3	WP-584-82-132-2	Dissolved	Water	1631E	
500-254304-3	WP-584-82-132-2	Total/NA	Water	1631E	
500-254304-4	WP-584-82-132-2 FB	Total/NA	Water	1631E	
MB 350-2505/15	Method Blank	Total/NA	Water	1631E	
MB 350-2505/16	Method Blank	Total/NA	Water	1631E	
MB 350-2505/17	Method Blank	Total/NA	Water	1631E	
LCS 350-2505/18	Lab Control Sample	Total/NA	Water	1631E	
LCSD 350-2505/19	Lab Control Sample Dup	Total/NA	Water	1631E	

Analysis Batch: 2513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-1	WP-584-82-132-1	Dissolved	Water	1630	2496
500-254304-1	WP-584-82-132-1	Total/NA	Water	1630	2496
500-254304-3	WP-584-82-132-2	Dissolved	Water	1630	2496
500-254304-3	WP-584-82-132-2	Total/NA	Water	1630	2496
MB 350-2496/1-A	Method Blank	Total/NA	Water	1630	2496
MB 350-2496/2-A	Method Blank	Total/NA	Water	1630	2496
MB 350-2496/3-A	Method Blank	Total/NA	Water	1630	2496
LCS 350-2496/4-A	Lab Control Sample	Total/NA	Water	1630	2496
LCSD 350-2496/5-A	Lab Control Sample Dup	Total/NA	Water	1630	2496

Analysis Batch: 2516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-1	WP-584-82-132-1	Dissolved	Water	1638	2504
500-254304-1	WP-584-82-132-1	Total Recoverable	Water	1638	2504

Metals (Continued)

Analysis Batch: 2516 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-3	WP-584-82-132-2	Dissolved	Water	1638	2504
500-254304-3	WP-584-82-132-2	Total Recoverable	Water	1638	2504
MB 350-2504/1-A	Method Blank	Total Recoverable	Water	1638	2504
MB 350-2504/2-A	Method Blank	Total Recoverable	Water	1638	2504
LCS 350-2504/3-A	Lab Control Sample	Total Recoverable	Water	1638	2504
LCSD 350-2504/4-A	Lab Control Sample Dup	Total Recoverable	Water	1638	2504

Prep Batch: 781335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-1	WP-584-82-132-1	Dissolved	Water	3005A	
500-254304-1	WP-584-82-132-1	Total Recoverable	Water	3005A	
500-254304-3	WP-584-82-132-2	Dissolved	Water	3005A	
500-254304-3	WP-584-82-132-2	Total Recoverable	Water	3005A	
MB 500-781335/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-781335/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 781875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-1	WP-584-82-132-1	Dissolved	Water	6020B	781335
500-254304-1	WP-584-82-132-1	Total Recoverable	Water	6020B	781335
500-254304-3	WP-584-82-132-2	Dissolved	Water	6020B	781335
500-254304-3	WP-584-82-132-2	Total Recoverable	Water	6020B	781335
MB 500-781335/1-A	Method Blank	Total Recoverable	Water	6020B	781335
LCS 500-781335/2-A	Lab Control Sample	Total Recoverable	Water	6020B	781335

Analysis Batch: 781916

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-1	WP-584-82-132-1	Total Recoverable	Water	SM 2340B	781335
500-254304-3	WP-584-82-132-2	Total Recoverable	Water	SM 2340B	781335

General Chemistry

Analysis Batch: 779012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-3	WP-584-82-132-2	Total/NA	Water	300.0	
MB 500-779012/3	Method Blank	Total/NA	Water	300.0	
LCS 500-779012/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 779013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-3	WP-584-82-132-2	Total/NA	Water	300.0	
MB 500-779013/3	Method Blank	Total/NA	Water	300.0	
LCS 500-779013/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 779249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-1	WP-584-82-132-1	Total/NA	Water	300.0	
MB 500-779249/3	Method Blank	Total/NA	Water	300.0	
LCS 500-779249/4	Lab Control Sample	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 779250

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-1	WP-584-82-132-1	Total/NA	Water	300.0	
MB 500-779250/3	Method Blank	Total/NA	Water	300.0	
LCS 500-779250/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 779370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-1	WP-584-82-132-1	Total/NA	Water	SM 2540C	
500-254304-3	WP-584-82-132-2	Total/NA	Water	SM 2540C	
MB 500-779370/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-779370/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 779580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-1	WP-584-82-132-1	Total/NA	Water	SM 4500 S2 F	
500-254304-3	WP-584-82-132-2	Total/NA	Water	SM 4500 S2 F	
MB 500-779580/1	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 500-779580/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 779749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-1	WP-584-82-132-1	Total/NA	Water	SM 2540D	
500-254304-3	WP-584-82-132-2	Total/NA	Water	SM 2540D	
MB 500-779749/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 500-779749/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Analysis Batch: 779789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-1	WP-584-82-132-1	Total/NA	Water	SM 2520B	
500-254304-3	WP-584-82-132-2	Total/NA	Water	SM 2520B	

Analysis Batch: 780255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-1	WP-584-82-132-1	Total/NA	Water	SM 2320B	
500-254304-3	WP-584-82-132-2	Total/NA	Water	SM 2320B	
MB 500-780255/53	Method Blank	Total/NA	Water	SM 2320B	
LCS 500-780255/54	Lab Control Sample	Total/NA	Water	SM 2320B	

Prep Batch: 780716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-1	WP-584-82-132-1	Total/NA	Water	Distill/CN	
500-254304-3	WP-584-82-132-2	Total/NA	Water	Distill/CN	
MB 500-780716/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 500-780716/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	
500-254304-1 MS	WP-584-82-132-1	Total/NA	Water	Distill/CN	
500-254304-1 MSD	WP-584-82-132-1	Total/NA	Water	Distill/CN	

Analysis Batch: 780798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-1	WP-584-82-132-1	Total/NA	Water	335.4	780716
500-254304-3	WP-584-82-132-2	Total/NA	Water	335.4	780716
MB 500-780716/1-A	Method Blank	Total/NA	Water	335.4	780716

General Chemistry (Continued)

Analysis Batch: 780798 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-780716/2-A	Lab Control Sample	Total/NA	Water	335.4	780716
500-254304-1 MS	WP-584-82-132-1	Total/NA	Water	335.4	780716
500-254304-1 MSD	WP-584-82-132-1	Total/NA	Water	335.4	780716

Analysis Batch: 780802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-1	WP-584-82-132-1	Total/NA	Water	SM 5310C	
MB 500-780802/31	Method Blank	Total/NA	Water	SM 5310C	
LCS 500-780802/32	Lab Control Sample	Total/NA	Water	SM 5310C	

Prep Batch: 780970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-1	WP-584-82-132-1	Total/NA	Water	365.2/365.3/365	
500-254304-3	WP-584-82-132-2	Total/NA	Water	365.2/365.3/365	
MB 500-780970/1-A	Method Blank	Total/NA	Water	365.2/365.3/365	
LCS 500-780970/2-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	

Analysis Batch: 781098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-1	WP-584-82-132-1	Dissolved	Water	SM 5310C	
500-254304-3	WP-584-82-132-2	Dissolved	Water	SM 5310C	
MB 500-781098/7	Method Blank	Dissolved	Water	SM 5310C	
LCS 500-781098/8	Lab Control Sample	Dissolved	Water	SM 5310C	

Analysis Batch: 781160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-1	WP-584-82-132-1	Total/NA	Water	300.0	
500-254304-3	WP-584-82-132-2	Total/NA	Water	300.0	
MB 500-781160/35	Method Blank	Total/NA	Water	300.0	
LCS 500-781160/36	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 781274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-3	WP-584-82-132-2	Total/NA	Water	SM 5310C	
MB 500-781274/7	Method Blank	Total/NA	Water	SM 5310C	
LCS 500-781274/8	Lab Control Sample	Total/NA	Water	SM 5310C	

Prep Batch: 781617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-1	WP-584-82-132-1	Total/NA	Water	Distill/Ammonia	
500-254304-3	WP-584-82-132-2	Total/NA	Water	Distill/Ammonia	
MB 500-781617/1-A	Method Blank	Total/NA	Water	Distill/Ammonia	
LCS 500-781617/2-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	

Analysis Batch: 781671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-1	WP-584-82-132-1	Total/NA	Water	365.1	780970
500-254304-3	WP-584-82-132-2	Total/NA	Water	365.1	780970
MB 500-780970/1-A	Method Blank	Total/NA	Water	365.1	780970
LCS 500-780970/2-A	Lab Control Sample	Total/NA	Water	365.1	780970

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-254304-1
Project/Site: FOTH - White Pines, MI

General Chemistry

Analysis Batch: 782356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254304-1	WP-584-82-132-1	Total/NA	Water	350.1	781617
500-254304-3	WP-584-82-132-2	Total/NA	Water	350.1	781617
MB 500-781617/1-A	Method Blank	Total/NA	Water	350.1	781617
LCS 500-781617/2-A	Lab Control Sample	Total/NA	Water	350.1	781617

Method: 1630 - Methyl Mercury

Lab Sample ID: MB 350-2496/1-A
Matrix: Water
Analysis Batch: 2513

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2496

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		08/02/24 11:02	08/02/24 20:19	1

Lab Sample ID: MB 350-2496/2-A
Matrix: Water
Analysis Batch: 2513

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2496

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		08/02/24 11:02	08/02/24 20:30	1

Lab Sample ID: MB 350-2496/3-A
Matrix: Water
Analysis Batch: 2513

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2496

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		08/02/24 11:02	08/02/24 20:40	1

Lab Sample ID: LCS 350-2496/4-A
Matrix: Water
Analysis Batch: 2513

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 2496

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methyl Mercury	1.00	1.04		ng/L		104	65 - 135

Lab Sample ID: LCSD 350-2496/5-A
Matrix: Water
Analysis Batch: 2513

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 2496

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methyl Mercury	1.00	0.997		ng/L		100	65 - 135	4	35

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 350-2505/15
Matrix: Water
Analysis Batch: 2505

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			08/02/24 17:30	1

Lab Sample ID: MB 350-2505/16
Matrix: Water
Analysis Batch: 2505

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			08/02/24 17:34	1

Method: 1631E - Mercury, Low Level (CVAFS) (Continued)

Lab Sample ID: MB 350-2505/17
Matrix: Water
Analysis Batch: 2505

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			08/02/24 17:38	1

Lab Sample ID: LCS 350-2505/18
Matrix: Water
Analysis Batch: 2505

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.63		ng/L		93	77 - 123

Lab Sample ID: LCSD 350-2505/19
Matrix: Water
Analysis Batch: 2505

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	4.64		ng/L		93	77 - 123	0	24

Method: 1638 - Metals (ICP/MS)

Lab Sample ID: MB 350-2504/1-A
Matrix: Water
Analysis Batch: 2516

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 2504

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	<0.0098		0.030	0.0098	ug/L		08/05/24 14:37	08/06/24 18:07	1

Lab Sample ID: MB 350-2504/2-A
Matrix: Water
Analysis Batch: 2516

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 2504

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	<0.0098		0.030	0.0098	ug/L		08/05/24 14:37	08/06/24 18:10	1

Lab Sample ID: LCS 350-2504/3-A
Matrix: Water
Analysis Batch: 2516

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 2504

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Uranium	25.0	22.6		ug/L		90	85 - 115

Lab Sample ID: LCSD 350-2504/4-A
Matrix: Water
Analysis Batch: 2516

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 2504

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Uranium	25.0	22.6		ug/L		90	85 - 115	0	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 500-781335/1-A
Matrix: Water
Analysis Batch: 781875

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 781335

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		08/14/24 08:44	08/16/24 12:15	1
Antimony	<1.3		3.0	1.3	ug/L		08/14/24 08:44	08/16/24 12:15	1
Arsenic	<0.23		1.0	0.23	ug/L		08/14/24 08:44	08/16/24 12:15	1
Barium	<0.73		2.5	0.73	ug/L		08/14/24 08:44	08/16/24 12:15	1
Beryllium	<0.53		1.0	0.53	ug/L		08/14/24 08:44	08/16/24 12:15	1
Boron	27.6	J	50	13	ug/L		08/14/24 08:44	08/16/24 12:15	1
Cadmium	<0.17		0.50	0.17	ug/L		08/14/24 08:44	08/16/24 12:15	1
Calcium	<44		200	44	ug/L		08/14/24 08:44	08/16/24 12:15	1
Chromium	<1.1		5.0	1.1	ug/L		08/14/24 08:44	08/16/24 12:15	1
Cobalt	<0.40		1.0	0.40	ug/L		08/14/24 08:44	08/16/24 12:15	1
Copper	<0.50		2.0	0.50	ug/L		08/14/24 08:44	08/16/24 12:15	1
Iron	<47		100	47	ug/L		08/14/24 08:44	08/16/24 12:15	1
Lead	<0.19		0.50	0.19	ug/L		08/14/24 08:44	08/16/24 12:15	1
Lithium	<2.5		10	2.5	ug/L		08/14/24 08:44	08/16/24 12:15	1
Magnesium	<49		200	49	ug/L		08/14/24 08:44	08/16/24 12:15	1
Manganese	<0.79		2.5	0.79	ug/L		08/14/24 08:44	08/16/24 12:15	1
Molybdenum	<2.5		5.0	2.5	ug/L		08/14/24 08:44	08/16/24 12:15	1
Nickel	<0.63		2.0	0.63	ug/L		08/14/24 08:44	08/16/24 12:15	1
Potassium	<110		500	110	ug/L		08/14/24 08:44	08/16/24 12:15	1
Selenium	<0.98		2.5	0.98	ug/L		08/14/24 08:44	08/16/24 12:15	1
Silver	<0.12		0.50	0.12	ug/L		08/14/24 08:44	08/16/24 12:15	1
Sodium	<77		200	77	ug/L		08/14/24 08:44	08/16/24 12:15	1
Strontium	<0.64		4.0	0.64	ug/L		08/14/24 08:44	08/16/24 12:15	1
Thallium	<0.57		2.0	0.57	ug/L		08/14/24 08:44	08/16/24 12:15	1
Tin	<1.3		5.0	1.3	ug/L		08/14/24 08:44	08/16/24 12:15	1
Vanadium	<2.2		5.0	2.2	ug/L		08/14/24 08:44	08/16/24 12:15	1
Zinc	<6.9		20	6.9	ug/L		08/14/24 08:44	08/16/24 12:15	1

Lab Sample ID: LCS 500-781335/2-A
Matrix: Water
Analysis Batch: 781875

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 781335

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	2000	1980		ug/L		99	80 - 120
Antimony	500	510		ug/L		102	80 - 120
Arsenic	100	101		ug/L		101	80 - 120
Barium	500	520		ug/L		104	80 - 120
Beryllium	50.0	52.7		ug/L		105	80 - 120
Boron	1000	1030		ug/L		103	80 - 120
Cadmium	50.0	51.9		ug/L		104	80 - 120
Calcium	10000	8920		ug/L		89	80 - 120
Chromium	200	214		ug/L		107	80 - 120
Cobalt	500	541		ug/L		108	80 - 120
Copper	250	264		ug/L		106	80 - 120
Iron	1000	1070		ug/L		107	80 - 120
Lead	100	103		ug/L		103	80 - 120
Lithium	100	108		ug/L		108	80 - 120
Magnesium	10000	10600		ug/L		106	80 - 120
Manganese	500	528		ug/L		106	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 500-781335/2-A
Matrix: Water
Analysis Batch: 781875

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 781335

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Molybdenum	1000	1010		ug/L		101	80 - 120
Nickel	500	520		ug/L		104	80 - 120
Potassium	10000	10600		ug/L		106	80 - 120
Selenium	100	100		ug/L		100	80 - 120
Silver	50.0	51.1		ug/L		102	80 - 120
Sodium	10000	10500		ug/L		105	80 - 120
Strontium	1000	999		ug/L		100	80 - 120
Thallium	100	107		ug/L		107	80 - 120
Tin	1000	1010		ug/L		101	80 - 120
Vanadium	500	520		ug/L		104	80 - 120
Zinc	500	517		ug/L		103	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 500-779012/3
Matrix: Water
Analysis Batch: 779012

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	<0.18		1.0	0.18	mg/L			07/30/24 10:50	1
Fluoride	<0.19		1.0	0.19	mg/L			07/30/24 10:50	1
Sulfate	<0.21		1.0	0.21	mg/L			07/30/24 10:50	1

Lab Sample ID: LCS 500-779012/4
Matrix: Water
Analysis Batch: 779012

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	20.0	18.9		mg/L		94	90 - 110
Fluoride	20.0	20.6		mg/L		103	90 - 110
Sulfate	20.0	21.2		mg/L		106	90 - 110

Lab Sample ID: MB 500-779013/3
Matrix: Water
Analysis Batch: 779013

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.043		1.0	0.043	mg/L			07/30/24 10:50	1
Nitrite as N	<0.070		1.0	0.070	mg/L			07/30/24 10:50	1
Nitrate Nitrite as N	<0.070		1.0	0.070	mg/L			07/30/24 10:50	1

Lab Sample ID: LCS 500-779013/4
Matrix: Water
Analysis Batch: 779013

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	20.0	19.6		mg/L		98	90 - 110
Nitrite as N	20.0	20.9		mg/L		104	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 500-779249/3
Matrix: Water
Analysis Batch: 779249

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	<0.18		1.0	0.18	mg/L			07/31/24 12:01	1
Fluoride	<0.19		1.0	0.19	mg/L			07/31/24 12:01	1
Sulfate	<0.21		1.0	0.21	mg/L			07/31/24 12:01	1

Lab Sample ID: LCS 500-779249/4
Matrix: Water
Analysis Batch: 779249

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	20.0	18.7		mg/L		94	90 - 110
Fluoride	20.0	20.5		mg/L		103	90 - 110
Sulfate	20.0	21.3		mg/L		106	90 - 110

Lab Sample ID: MB 500-779250/3
Matrix: Water
Analysis Batch: 779250

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.043		1.0	0.043	mg/L			07/31/24 12:01	1
Nitrite as N	<0.070		1.0	0.070	mg/L			07/31/24 12:01	1
Nitrate Nitrite as N	<0.070		1.0	0.070	mg/L			07/31/24 12:01	1

Lab Sample ID: LCS 500-779250/4
Matrix: Water
Analysis Batch: 779250

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	20.0	19.5		mg/L		98	90 - 110
Nitrite as N	20.0	20.8		mg/L		104	90 - 110

Lab Sample ID: MB 500-781160/35
Matrix: Water
Analysis Batch: 781160

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.12		1.0	0.12	mg/L			08/13/24 21:03	1

Lab Sample ID: LCS 500-781160/36
Matrix: Water
Analysis Batch: 781160

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	20.0	19.4		mg/L		97	90 - 110

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 500-780716/1-A
Matrix: Water
Analysis Batch: 780798

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 780716

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.0036		0.0050	0.0036	mg/L		08/09/24 11:42	08/10/24 10:09	1

Lab Sample ID: LCS 500-780716/2-A
Matrix: Water
Analysis Batch: 780798

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 780716

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.100	0.0962		mg/L		96	90 - 110

Lab Sample ID: 500-254304-1 MS
Matrix: Water
Analysis Batch: 780798

Client Sample ID: WP-584-82-132-1
Prep Type: Total/NA
Prep Batch: 780716

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	<0.0036	F1	0.100	0.0821	F1	mg/L		82	90 - 110

Lab Sample ID: 500-254304-1 MSD
Matrix: Water
Analysis Batch: 780798

Client Sample ID: WP-584-82-132-1
Prep Type: Total/NA
Prep Batch: 780716

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	<0.0036	F1	0.100	0.0842	F1	mg/L		84	90 - 110	3	20

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 500-781617/1-A
Matrix: Water
Analysis Batch: 782356

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 781617

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	<0.10		0.20	0.10	mg/L		08/15/24 11:06	08/16/24 14:23	1

Lab Sample ID: LCS 500-781617/2-A
Matrix: Water
Analysis Batch: 782356

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 781617

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	2.00	1.80		mg/L		90	90 - 110

Method: 365.1 - Phosphorus, Total

Lab Sample ID: MB 500-780970/1-A
Matrix: Water
Analysis Batch: 781671

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 780970

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus as P	<0.024	^1-	0.050	0.024	mg/L		08/13/24 11:40	08/15/24 12:04	1

Method: 365.1 - Phosphorus, Total (Continued)

Lab Sample ID: LCS 500-780970/2-A
Matrix: Water
Analysis Batch: 781671

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 780970

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phosphorus as P	0.500	0.410	^1- *-	mg/L		82	88 - 123

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 500-780255/53
Matrix: Water
Analysis Batch: 780255

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	<3.7		5.0	3.7	mg/L			08/06/24 23:21	1
Bicarbonate Alkalinity as CaCO3	<3.7		5.0	3.7	mg/L			08/06/24 23:21	1
Carbonate Alkalinity as CaCO3	<3.7		5.0	3.7	mg/L			08/06/24 23:21	1

Lab Sample ID: LCS 500-780255/54
Matrix: Water
Analysis Batch: 780255

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	100	105		mg/L		105	95 - 121

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 500-779370/1
Matrix: Water
Analysis Batch: 779370

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<4.3		10	4.3	mg/L			08/01/24 02:28	1

Lab Sample ID: LCS 500-779370/2
Matrix: Water
Analysis Batch: 779370

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	250	264		mg/L		106	80 - 120

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 500-779749/1
Matrix: Water
Analysis Batch: 779749

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<1.9		5.0	1.9	mg/L			08/02/24 15:55	1

Lab Sample ID: LCS 500-779749/2
Matrix: Water
Analysis Batch: 779749

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	200	201		mg/L		100	80 - 120

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 500-779580/1
Matrix: Water
Analysis Batch: 779580

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<0.23		1.0	0.23	mg/L			08/01/24 21:24	1

Lab Sample ID: LCS 500-779580/2
Matrix: Water
Analysis Batch: 779580

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	3.64	3.26		mg/L		90	85 - 115

Method: SM 5310C - TOC

Lab Sample ID: MB 500-780802/31
Matrix: Water
Analysis Batch: 780802

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<0.47		1.0	0.47	mg/L			08/09/24 00:09	1

Lab Sample ID: LCS 500-780802/32
Matrix: Water
Analysis Batch: 780802

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	10.0	10.3		mg/L		103	86 - 116

Lab Sample ID: MB 500-781274/7
Matrix: Water
Analysis Batch: 781274

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<0.47		1.0	0.47	mg/L			08/13/24 14:39	1

Lab Sample ID: LCS 500-781274/8
Matrix: Water
Analysis Batch: 781274

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	10.0	10.1		mg/L		101	86 - 116

Method: SM 5310C - Organic Carbon, Dissolved (DOC)

Lab Sample ID: MB 500-781098/7
Matrix: Water
Analysis Batch: 781098

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	<0.47		1.0	0.47	mg/L			08/13/24 08:18	1

Method: SM 5310C - Organic Carbon, Dissolved (DOC) (Continued)

Lab Sample ID: LCS 500-781098/8
Matrix: Water
Analysis Batch: 781098

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dissolved Organic Carbon	10.0	9.89		mg/L		99	86 - 116

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-254304-1

Client Sample ID: WP-584-82-132-1

Lab Sample ID: 500-254304-1

Date Collected: 07/28/24 09:50

Matrix: Water

Date Received: 07/30/24 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	1630			2496	AJD	EET SSM	08/02/24 11:02
Dissolved	Analysis	1630		1	2513	CL	EET SSM	08/03/24 00:45
Total/NA	Prep	1630			2496	AJD	EET SSM	08/02/24 11:02
Total/NA	Analysis	1630		1	2513	CL	EET SSM	08/03/24 00:35
Dissolved	Analysis	1631E		1	2505	AJD	EET SSM	08/02/24 18:57
Total/NA	Analysis	1631E		1	2505	AJD	EET SSM	08/02/24 18:53
Dissolved	Prep	1638			2504	CL	EET SSM	08/05/24 14:37
Dissolved	Analysis	1638		1	2516	V1R	EET SSM	08/06/24 20:21
Total Recoverable	Prep	1638			2504	CL	EET SSM	08/05/24 14:37
Total Recoverable	Analysis	1638		1	2516	V1R	EET SSM	08/06/24 19:41
Dissolved	Prep	3005A			781335	BDE	EET CHI	08/14/24 08:44 - 08/14/24 14:44 [1]
Dissolved	Analysis	6020B		1	781875	RN	EET CHI	08/16/24 13:14
Total Recoverable	Prep	3005A			781335	BDE	EET CHI	08/14/24 08:44 - 08/14/24 14:44 [1]
Total Recoverable	Analysis	6020B		1	781875	RN	EET CHI	08/16/24 13:10
Total Recoverable	Prep	3005A			781335	BDE	EET CHI	08/14/24 08:44 - 08/14/24 14:44 [1]
Total Recoverable	Analysis	SM 2340B		1	781916	PFK	EET CHI	08/16/24 14:48
Total/NA	Analysis	300.0		50	781160	W1T	EET CHI	08/14/24 03:53
Total/NA	Analysis	300.0		1	779249	W1T	EET CHI	07/31/24 15:24
Total/NA	Analysis	300.0		1	779250	W1T	EET CHI	07/31/24 15:24
Total/NA	Prep	Distill/CN			780716	AC	EET CHI	08/09/24 11:42 - 08/09/24 12:12 [1]
Total/NA	Analysis	335.4		1	780798	KF	EET CHI	08/10/24 11:11
Total/NA	Prep	Distill/Ammonia			781617	EB	EET CHI	08/15/24 11:06 - 08/15/24 12:06 [1]
Total/NA	Analysis	350.1		1	782356	KF	EET CHI	08/16/24 14:33
Total/NA	Prep	365.2/365.3/365			780970	NSJ	EET CHI	08/13/24 11:40 - 08/13/24 15:40 [1]
Total/NA	Analysis	365.1		1	781671	KF	EET CHI	08/15/24 12:13
Total/NA	Analysis	SM 2320B		1	780255	SO	EET CHI	08/07/24 01:55
Total/NA	Analysis	SM 2520B		1	779789	TR	EET CHI	08/04/24 14:56
Total/NA	Analysis	SM 2540C		1	779370	CLB	EET CHI	08/01/24 03:24
Total/NA	Analysis	SM 2540D		1	779749	SO	EET CHI	08/02/24 16:45 - 08/02/24 16:47 [1]
Total/NA	Analysis	SM 4500 S2 F		1	779580	CLB	EET CHI	08/01/24 22:43 - 08/01/24 22:47 [1]
Dissolved	Analysis	SM 5310C		1	781098	TR	EET CHI	08/13/24 08:18
Total/NA	Analysis	SM 5310C		1	780802	TR	EET CHI	08/09/24 04:21

Client Sample ID: WP-584-82-132-1 FB

Lab Sample ID: 500-254304-2

Date Collected: 07/28/24 00:00

Matrix: Water

Date Received: 07/30/24 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	2505	AJD	EET SSM	08/02/24 19:01

Client Sample ID: WP-584-82-132-2

Lab Sample ID: 500-254304-3

Date Collected: 07/28/24 11:15

Matrix: Water

Date Received: 07/30/24 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	1630			2496	AJD	EET SSM	08/02/24 11:02
Dissolved	Analysis	1630		1	2513	CL	EET SSM	08/03/24 01:05
Total/NA	Prep	1630			2496	AJD	EET SSM	08/02/24 11:02
Total/NA	Analysis	1630		1	2513	CL	EET SSM	08/03/24 00:55
Dissolved	Analysis	1631E		1	2505	AJD	EET SSM	08/02/24 19:10
Total/NA	Analysis	1631E		1	2505	AJD	EET SSM	08/02/24 19:05
Dissolved	Prep	1638			2504	CL	EET SSM	08/05/24 14:37
Dissolved	Analysis	1638		1	2516	V1R	EET SSM	08/06/24 20:25
Total Recoverable	Prep	1638			2504	CL	EET SSM	08/05/24 14:37
Total Recoverable	Analysis	1638		1	2516	V1R	EET SSM	08/06/24 19:45
Dissolved	Prep	3005A			781335	BDE	EET CHI	08/14/24 08:44 - 08/14/24 14:44 [1]
Dissolved	Analysis	6020B		1	781875	RN	EET CHI	08/16/24 13:16
Total Recoverable	Prep	3005A			781335	BDE	EET CHI	08/14/24 08:44 - 08/14/24 14:44 [1]
Total Recoverable	Analysis	6020B		1	781875	RN	EET CHI	08/16/24 13:12
Total Recoverable	Prep	3005A			781335	BDE	EET CHI	08/14/24 08:44 - 08/14/24 14:44 [1]
Total Recoverable	Analysis	SM 2340B		1	781916	PFK	EET CHI	08/16/24 14:48
Total/NA	Analysis	300.0		50	781160	W1T	EET CHI	08/14/24 04:38
Total/NA	Analysis	300.0		1	779012	W1T	EET CHI	07/30/24 15:31
Total/NA	Analysis	300.0		1	779013	W1T	EET CHI	07/30/24 15:31
Total/NA	Prep	Distill/CN			780716	AC	EET CHI	08/09/24 11:42 - 08/09/24 12:12 [1]
Total/NA	Analysis	335.4		1	780798	KF	EET CHI	08/10/24 11:15
Total/NA	Prep	Distill/Ammonia			781617	EB	EET CHI	08/15/24 11:06 - 08/15/24 12:06 [1]
Total/NA	Analysis	350.1		1	782356	KF	EET CHI	08/16/24 14:34
Total/NA	Prep	365.2/365.3/365			780970	NSJ	EET CHI	08/13/24 11:40 - 08/13/24 15:40 [1]
Total/NA	Analysis	365.1		1	781671	KF	EET CHI	08/15/24 12:14
Total/NA	Analysis	SM 2320B		1	780255	SO	EET CHI	08/07/24 02:05
Total/NA	Analysis	SM 2520B		1	779789	TR	EET CHI	08/04/24 14:56
Total/NA	Analysis	SM 2540C		1	779370	CLB	EET CHI	08/01/24 03:27
Total/NA	Analysis	SM 2540D		1	779749	SO	EET CHI	08/02/24 16:47 - 08/02/24 16:50 [1]
Total/NA	Analysis	SM 4500 S2 F		1	779580	CLB	EET CHI	08/01/24 22:47 - 08/01/24 22:51 [1]
Dissolved	Analysis	SM 5310C		1	781098	TR	EET CHI	08/13/24 08:18
Total/NA	Analysis	SM 5310C		1	781274	TR	EET CHI	08/13/24 22:07

Client Sample ID: WP-584-82-132-2 FB

Lab Sample ID: 500-254304-4

Date Collected: 07/28/24 00:00

Matrix: Water

Date Received: 07/30/24 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	2505	AJD	EET SSM	08/02/24 19:14

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-254304-1
Project/Site: FOTH - White Pines, MI

Laboratory: Eurofins Chicago

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Georgia	State	N/A	05-31-25
Georgia (DW)	State	939	05-31-25
Hawaii	State	NA	05-31-25
Illinois	NELAP	IL00035	05-31-25
Indiana	State	C-IL-02	05-31-25
Iowa	State	082	05-01-26
Kansas	NELAP	E-10161	10-31-24
Kentucky (UST)	State	AI # 108083	05-31-25
Kentucky (WW)	State	KY90023	12-31-24
Louisiana (All)	NELAP	02046	06-30-25
Mississippi	State	NA	05-31-25
North Carolina (WW/SW)	State	291	12-31-24
North Dakota	State	R-194	04-29-24 *
Oklahoma	State	8908	08-31-24
South Carolina	State	77001003	04-29-24 *
USDA	US Federal Programs	P330-18-00018	03-30-26
Wisconsin	State	999580010	08-31-24
Wyoming	State	8TMS-Q	05-31-25

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	12-18-24
ANAB	Dept. of Defense ELAP	L2236	08-07-24
ANAB	Dept. of Energy	L2236.01	12-18-24
ANAB	ISO/IEC 17025	L2236	08-07-24
California	State	2954	12-18-24
Florida	NELAP	E87575	12-18-24
Louisiana (All)	NELAP	03073	12-18-24
Maine	State	WA01273	12-18-24
New Jersey	NELAP	WA014	12-18-24
New York	NELAP	11662	12-18-24
Oregon	NELAP	4167-008	07-07-25
US Fish & Wildlife	US Federal Programs	A20571	06-30-25
USDA	US Federal Programs	525-23-4-22573	12-18-24
Washington	State	C788-23a	12-18-24
Wisconsin	State	399133460	12-18-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Chicago
2417 Bond Street
University Park, IL 60484
Phone 708-534-5200 Fax 708-534-5211

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Justin Bowa	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-126105-50170 4
Client Contact: Jakob Wartman	Phone: 920-858 1535	E-Mail: Sandra Fredrick@et.eurofinsus com	State of Origin:	Page: Page 1 of 1 (Page 4 of 5)
Company: Foth Infrastructure & Environment, LLC	PWSID			Job #: 500-254304

Address: Missabe Building 227 West 1st. Street, Suite 920
City: Duluth
State, Zip: MN, 55802
Phone: 218-481-6014(Tel)
Email: Jakob Wartman@foth com
Project Name: FOTH - White Pines, MI
Site

500-254304 COC

Due Date Requested:
TAT Requested (days): Standard
Compliance Project: Δ Yes Δ No
PO #: Purchase Order not required
WO #:
Project #: 50023463
SSOW#:

Preservation Codes
N None
S H2SO4
CB ZnAcetate/NaOH
B NaOH
D HNO3
Other:

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1631E - Mercury, Low Level (CVAFS)	1631E - Dissolved Mercury, Low Level (FF)	2320B, 2540C, 2540D, 300.0_28D, 300_48HR, SM2520_B	350.1, 365.1	SM4500_S2_F - Sulfide	335.4 - Cyanide, Total	SM5310_DOC_C - DOC	6020B, SM2340B	6020B - Dissolved Metals (ICP/MS) - 27 elements	3500_CR_B - Chromium, Hexavalent	3500_CR_B - Dissolved Chromium, Hexavalent (field fi	1638 - Uranium only (ICP/MS)	1638 - Dissolved Uranium only (ICP/MS) (f	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	S	CB	B	S	D	D	N	N	D	D		
1/2 3/4 WP 584-82-132-1 / FB	07/28/24	0450	G	Water			X	X	X	X	X	X	X	X	X		X	X	X	3	
WP-584-82 132 2 / FB	7/28/24	1115	G	Water			x	x	x	x	x	x	x	x	x		x	x	x	3	Be aware of hold times
				Water																	
				Water																	
				Water																	
				Water																	
				Water																	
				Water																	
				Water																	
				Water																	
				Water																	
				Water																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I, II, III, IV, Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by: ~~Justin~~	Date	Time	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Justin Bowa	7/29/24 0900	Foth	Shri Kadt	7/30/24 0945	EEN
2	Relinquished by	Date/Time	Company	Received by: Shri Kadt	7/30/24 0950	EEN
3	Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No:
Cooler Temperature(s) °C and Other Remarks: 4.3→4.3, 1.9→1.8, 5.8→5.7, 9.8→9.5


JUSTIN BROWN
WHITE PINE COPPER
35503 MALL CIRCLE
WHITE PINE, MI 49971
UNITED STATES US
ACTWGT: 25.00 LB MAN
CAD: 0780307/CAFE3808
TO SAMPLE RECEIPT
EUROFINS CHICAGO
2417 BOND ST.
UNIVERSITY PARK IL 60484
(708) 634-6200
REF:
INV:
PO:
DEPT:
RMA:
FedEx Express
TRK# 0221 7414 0291 7323
TUE - 30 JUL AA
PRIORITY OVERNIGHT
XP JOTA
60484
IL-US
ORD
5025547 29Jul2024 CHXA 581G6/A12D/C0B8


JUSTIN BROWN
WHITE PINE COPPER
35503 MALL CIRCLE
WHITE PINE, MI 49971
UNITED STATES US
ACTWGT: 25.00 LB MAN
CAD: 0780307/CAFE3808
TO SAMPLE RECEIPT
EUROFINS CHICAGO
2417 BOND ST.
UNIVERSITY PARK IL 60484
(708) 634-6200
REF:
INV:
PO:
DEPT:
RMA:
FedEx Express
TRK# 0221 7414 0291 7301
TUE - 30 JUL AA
PRIORITY OVERNIGHT
XP JOTA
60484
IL-US
ORD

JUSTIN BROWN
WHITE PINE COPPER
35503 MALL CIRCLE

WHITE PINE, MI 49971
UNITED STATES US

ACTWGT: 25.00 LB MAN
CAD: 0780307/CAFE3808

Part # 165969-494 MTWEXP'01/25

TO SAMPLE RECEIPT
EUROFINS CHICAGO
2417 BOND ST.

43-742

UNIVERSITY PARK IL 60484

(708) 634-6200 REF:
INV:
PO: DEPT:

RMA:

FedEx Express

J241023112201uv

RETURNS MON-SAT
TUE - 30 JUL AA
PRIORITY OVERNIGHT

FedEx
TRK# 0221 7414 0291 7345

60484
IL-US
ORD

XP JOTA

5025547 29Jul2024 CMXA 581G6/A12D/C0B8

ORIGIN ID:OLVA (800) 463-3339

FEDEX OVERGOODS
2841 DEMOCRAT ROAD

MEMPHIS, TN 38118
UNITED STATES US

SHIP DATE: 30JUL24
ACTWGT: 30.00 LB
CAD: 251405390/WSXI3100

BILL THIRD PARTY

TO ATTN: SAMPLE RECIEVING
EUROFINS TESTAMERICA (CHICAGO)
EUROFINS TESTAMERICA (CHICAGO)
2417 BOND ST
UNIVERSITY PARK IL 60484

(708) 634-6200 REF: PK:16890547
INV:
PO: DEPT:

FedEx Express

J243024071301uv

REL# 3785346

WED - 31 JUL 10:30A
PRIORITY OVERNIGHT

TRK# 0201 2776 7423 5233

XS JOTA

60484
IL-US ORD

Eurofins Chicago
2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record

eurofins
Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Fredrick, Sandie	Carrier Tracking No(s)	COC No: 500-191133.1
Client Contact: Shipping/Receiving	Phone	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest,		Accreditations Required (See note)		Job #: 500-254304-1
Address: 5755 8th Street East, ,	Due Date Requested: 8/19/2024			Preservation Codes: -
City: Tacoma	TAT Requested (days):			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #			
Email	WO #			
Project Name: FOTH - White Pines, MI	Project #: 50023463			
Site	SSOW#			Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1638/1638_Prep_W Uranium only (ICP/MS)	1638/FIELD_FLTRD Dissolved Uranium only (ICP/MS) (f	1630_ME/FIELD_FLTRD Dissolved Methyl Mercury (field filtered	1630_ME/1630_Dist_PFP Methyl Mercury	1631E/ Mercury, Low Level (CVAFS)	1631E/FIELD_FLTRD Dissolved Mercury, Low Level (FF)	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
WP-584-82-132-1 (500-254304-1)	7/28/24	09:50 Eastern		Water			X	X	X	X	X	X	8	
WP-584-82-132-1 FB (500-254304-2)	7/28/24	Eastern		Water							X		2	
WP-584-82-132-2 (500-254304-3)	7/28/24	11:15 Eastern		Water			X	X	X	X	X	X	8	
WP-584-82-132-1 FB (500-254304-4)	7/28/24	Eastern		Water							X		2	
														Ls Blk

Therm. ID: SC0[illegible] Cust. Seal: (Y) / N
Uncorr./Corr. Temp: 1.3 1.3 °C
Delivery: UPS / FedEx / Other [illegible]
Ice Type: Blue / Dry / Wet / None
Label Ver. V Packing: B

Note Since laboratory accreditations are subject to change, Eurofins Chicago places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwar accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Chicago laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Chicago attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Chicago

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed 7051 7620 4878	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	07/31/24 1530	EETA	[signature]	8/1/24 9:38	EETA
2						
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks

Ver: 04/02/2024

Eurofins Chicago
2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Fredrick, Sandie	Carrier Tracking No(s)	COC No: 500-191131.1
Client Contact: Shipping/Receiving	Phone	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest,		Accreditations Required (See note): State - Wisconsin		Job #: 500-254283-1
Address: 5755 8th Street East, ,	Due Date Requested: 8/20/2024			
City: Tacoma	TAT Requested (days):			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #			
Email	WO #			
Project Name: White Pines, MI	Project #: 50023455			
Site	SSOW#			

Analysis Requested

Preservation Codes: -

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1638/1638_Prep_W Uranium only (ICP/MS)	1631E/ Mercury, Low Level (CVAFS)	1630_ME/1630_Dist_PFP Methyl Mercury	1638/FIELD_FLTRD Dissolved Uranium only (ICP/MS) (field f	1631E/FIELD_FLTRD Dissolved Mercury, Low Level (CVAFS) (fi	1630_ME/FIELD_FLTRD Dissolved Methyl Mercury (field filtered	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
MW-31_20240730 (500-254283-1)	7/30/24	09:20 Eastern		Water			X	X	X	X	X	X	8	
MW-31_20240730_FBLL (500-254283-2)	7/30/24	09:20 Eastern		Water				X					2	

Therm. ID: SC02 Cust. Seal: (Y) / N
Uncorr./Corr. Temp: 3 / 1.7 °C
Delivery: UPS / FedEx / Other: _____
Ice Type: Blue / Dry / Wet / None
Label Ver. 2 Packing: B

Note Since laboratory accreditations are subject to change, Eurofins Chicago places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarde accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Chicago laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Chicago attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Chicago

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed 7051 7620 4878	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	07/31/24 1530	EETA	[signature]	8/1/24 9:35	ELPS
2	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
3	Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks

Ver: 04/02/2024

Eurofins Chicago
2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Fredrick, Sandie	Carrier Tracking No(s)	COC No: 500-191130.1
Client Contact: Shipping/Receiving	Phone	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest,		Accreditations Required (See note): State - Wisconsin		Job #: 500-254282-1
Address: 5755 8th Street East, ,	Due Date Requested: 8/20/2024			Preservation Codes: -
City: Tacoma	TAT Requested (days):			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #			
Email	WO #			
Project Name: White Pines, MI	Project #: 50023455			
Site	SSOW#			Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1638/1638_Prep_W Uranium only (ICP/MS)	1631E/ Mercury, Low Level (CVAFS)	1630_ME/1630_Dist_PFP Methyl Mercury	1638/FIELD_FLTRD Dissolved Uranium only (ICP/MS) (field f	1631E/FIELD_FLTRD Dissolved Mercury, Low Level (CVAFS) (fi	1630_ME/FIELD_FLTRD Dissolved Methyl Mercury (field filtered	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
SBD-01_20240729 (500-254282-1)	7/29/24	15:30 Eastern		Water			X	X	X	X	X	X	8	
SBD-01_20240729_FBLL (500-254282-2)	7/29/24	15:30 Eastern		Water				X					2	

Ly Blue

Therm. ID: SC02 Cust. Seal: (Y) / N
Uncorr./Corr. Temp: 1.3 / 1.5 °C
Delivery: UPS / FedEx / Other: ____
Ice Type: Blue / Dry / Wet / None
Label Ver.: ____ Packing: D

Note Since laboratory accreditations are subject to change, Eurofins Chicago places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Chicago laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Chicago attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Chicago

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed 7051 7620 4878	☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	07/31/24 1530	EETA	[signature]	8/1/24 9:35	[illegible]
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks

Ver: 04/02/2024

Eurofins Chicago
2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Fredrick, Sandie	Carrier Tracking No(s)	COC No: 500-191128.1
Client Contact: Shipping/Receiving	Phone	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest,		Accreditations Required (See note): State - Wisconsin		Job #: 500-254281-1
Address: 5755 8th Street East, ,	Due Date Requested: 8/20/2024			
City: Tacoma	TAT Requested (days):			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #			
Email	WO #			
Project Name: White Pines, MI	Project #: 50023455			
Site	SSOW#			

Analysis Requested

Preservation Codes: -

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1638/1638_Prep_W Uranium only (ICP/MS)	1631E/ Mercury, Low Level (CVAFS)	1630_ME/1630_Dist_PFP Methyl Mercury	1638/FIELD_FLTRD Dissolved Uranium only (ICP/MS) (field f	1631E/FIELD_FLTRD Dissolved Mercury, Low Level (CVAFS) (fi	1630_ME/FIELD_FLTRD Dissolved Methyl Mercury (field filtered	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
PNC-02_20240729 (500-254281-1)	7/29/24	17:20 Eastern		Water			X	X	X	X	X	X	8	
PNC-02_20240729_FBLL (500-254281-2)	7/29/24	17:20 Eastern		Water				X					2	

Lg Blue

Therm. ID: SC02 Cust. Seal: Y / N
Uncorr./Corr. Temp: 1.3 / 1.2 °C
Delivery: UPS / FedEx / Other: ____
Ice Type: Blue / Dry / Wet / None
Label Ver.: ____ Packing: D

Note Since laboratory accreditations are subject to change, Eurofins Chicago places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Chicago laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Chicago attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Chicago

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed 7051 7620 4878	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	07/31/24 1530	EET A	[signature]	8/1/24 9:35	EET S
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks

Ver: 04/02/2024

Login Sample Receipt Checklist

Client: Foth Infrastructure & Environment, LLC

Job Number: 500-254304-1

Login Number: 254304
List Number: 1
Creator: Scott, Sherri L

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	
Cooler Temperature is recorded.	True	4.2,1.8,5.7,9.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Foth Infrastructure & Environment, LLC

Job Number: 500-254304-1

Login Number: 254304
List Number: 2
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 08/01/24 01:51 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

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500-254304 Field Sheet

Date:	8/1/2024
End Time:	17:05
pH Paper Lot:	324723
Analyst:	VL

Preservative ID	Preservative Type	Container ID
A	Hydrochloric Acid	na
A	Nitric Acid	na
ZZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ
ZZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ

Sample ID	Initial pH	Final pH	Preservative ID	Preservative Added (mL)	Comments
500-254304-J-3	<2				
500-254304-K-3	<2				
500-254304-M-1	<2				
500-254304-L-1	<2				
500-254304-E-1	<2				
500-254304-F-1	<2				
500-254304-E-3	<2				
500-254304-F-3	<2				

VL 8/2/24

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jakob Wartman
Foth Infrastructure & Environment, LLC
Missabe Building
227 West 1st. Street, Suite 920
Duluth, Minnesota 55802

Generated 9/12/2024 4:50:48 PM

JOB DESCRIPTION

FOTH - White Pines, MI

JOB NUMBER

500-255601-1

Eurofins Chicago
2417 Bond Street
University Park IL 60484

See page two for job notes and contact information.

Eurofins Chicago

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

Results relate only to the items tested and the sample(s) as received by the laboratory. The results, detection limits (LOD) and Quantitation Limits (LOQ) have been adjusted for sample dilutions and/or solids content.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Chicago Project Manager.

Compliance Statement

The LOD and LOQ reported are adjusted by the dilution factor when a dilution factor greater than 1 is needed. Additionally, where results are indicated as being reported on a dry weight basis, the LOD and LOQ are adjusted for moisture content as well.

Definitions of Limits
- LOD = Limit of Detection = MDL as defined by 40 CFR part 136 Appendix B
- LOQ = Limit of Quantitation = 3.33 x LOD as defined by Wisconsin
- RL = Report Limit = a concentration supported by a standard in the calibration curves

Authorization



Generated
9/12/2024 4:50:48 PM

Authorized for release by
Sandie Fredrick, Senior Project Manager
Sandra.Fredrick@et.eurofinsus.com
(920)261-1660

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Job ID: 500-255601-1 Eurofins Chicago

Job Narrative
500-255601-1

Receipt
The samples were received on 8/24/2024 9:55 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 6 coolers at receipt time were 2.9º C, 3.5º C, 3.8º C, 4.2º C, 4.5º C and 5.3º C.

Receipt Exceptions
One or more containers for the following sample(s) was received empty: Sample #5- DUP-1 Dissolved LL Hg kit received empty. Canceled method.

The following sample(s) was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): Field Blanks for LL Hg, added to COC and logged.

Metals
Methods 200.8, 6020B: The following samples were diluted to bring the concentration of target analytes within the calibration range: WP-585-440-470-1 (500-255601-1), WP-585-440-470-2 (500-255601-3) and DUP-1 (500-255601-5). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
Method SM 5310C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 500-783381 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 335.4: The matrix spike duplicate (MSD) recoveries for preparation batch 500-783489 and analytical batch 500-783772 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 365.1: The method blank for preparation batch 500-783635 and analytical batch 500-783821 contained Phosphorus as P above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Method SM 2320B: The method blank for analytical batch 500-783995 contained Alkalinity and Bicarbonate Alkalinity as CaCO3 above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Methods 350.1, SM 4500 NH3 G: Associated Laboratory Control Sample failed slightly low at 84% Recovery (acceptance criteria is 86-113%). Sample was re-prepped and reanalyzed with confirming results. Initial result has been reported as Primary. WP-585-440-470-1 (500-255601-1), WP-585-440-470-2 (500-255601-3) and DUP-1 (500-255601-5)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-255601-1

Client Sample ID: WP-585-440-470-1

Lab Sample ID: 500-255601-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Uranium	0.27	B	0.030	0.0098	ug/L	1		1638	Total Recoverable
Uranium	0.27	B	0.030	0.0098	ug/L	1		1638	Dissolved
Barium	350		2.5	0.73	ug/L	1		6020B	Total Recoverable
Boron	730	B	50	13	ug/L	1		6020B	Total Recoverable
Calcium	260000	B	200	44	ug/L	1		6020B	Total Recoverable
Iron	59	J	100	47	ug/L	1		6020B	Total Recoverable
Lithium	270	B	50	13	ug/L	5		6020B	Total Recoverable
Magnesium	2200		200	49	ug/L	1		6020B	Total Recoverable
Manganese	150		2.5	0.79	ug/L	1		6020B	Total Recoverable
Molybdenum	51		5.0	2.5	ug/L	1		6020B	Total Recoverable
Potassium	1500		500	110	ug/L	1		6020B	Total Recoverable
Selenium	1.0	J	2.5	0.98	ug/L	1		6020B	Total Recoverable
Sodium	930000	B	1000	390	ug/L	5		6020B	Total Recoverable
Strontium	6600	B	20	3.2	ug/L	5		6020B	Total Recoverable
Zinc	49		20	6.9	ug/L	1		6020B	Total Recoverable
Barium	370		2.5	0.73	ug/L	1		6020B	Dissolved
Boron	770	B	50	13	ug/L	1		6020B	Dissolved
Calcium	270000	B	200	44	ug/L	1		6020B	Dissolved
Copper	0.99	J	2.0	0.50	ug/L	1		6020B	Dissolved
Iron	57	J	100	47	ug/L	1		6020B	Dissolved
Lithium	280	B	50	13	ug/L	5		6020B	Dissolved
Magnesium	2200		200	49	ug/L	1		6020B	Dissolved
Manganese	160		2.5	0.79	ug/L	1		6020B	Dissolved
Molybdenum	53		5.0	2.5	ug/L	1		6020B	Dissolved
Potassium	1600		500	110	ug/L	1		6020B	Dissolved
Selenium	1.1	J	2.5	0.98	ug/L	1		6020B	Dissolved
Sodium	930000	B	1000	390	ug/L	5		6020B	Dissolved
Strontium	6700	B	20	3.2	ug/L	5		6020B	Dissolved
Zinc	13	J	20	6.9	ug/L	1		6020B	Dissolved
Hardness as calcium carbonate	650		0.91	0.46	mg/L	1		SM 2340B	Total Recoverable
Bromide	21		1.0	0.18	mg/L	1		300.0	Total/NA
Chloride	1800		100	12	mg/L	100		300.0	Total/NA
Fluoride	1.8		1.0	0.19	mg/L	1		300.0	Total/NA
Sulfate	20		1.0	0.21	mg/L	1		300.0	Total/NA
Ammonia	0.17	J *-	0.20	0.10	mg/L	1		350.1	Total/NA
Phosphorus as P	0.024	J B	0.050	0.024	mg/L	1		365.1	Total/NA
Alkalinity	23	B	5.0	3.7	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	23	B	5.0	3.7	mg/L	1		SM 2320B	Total/NA
Salinity	3.8		0.33	0.33	psu	1		SM 2520B	Total/NA
Total Dissolved Solids	3200		25	11	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

Detection Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-255601-1

Client Sample ID: WP-585-440-470-1 FB — Lab Sample ID: 500-255601-2

No Detections.

Client Sample ID: WP-585-440-470-2 — Lab Sample ID: 500-255601-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Uranium	0.28	B	0.030	0.0098	ug/L	1		1638	Total Recoverable
Uranium	0.26	B	0.030	0.0098	ug/L	1		1638	Dissolved
Barium	350		2.5	0.73	ug/L	1		6020B	Total Recoverable
Boron	760	B	50	13	ug/L	1		6020B	Total Recoverable
Calcium	260000	B	200	44	ug/L	1		6020B	Total Recoverable
Iron	56	J	100	47	ug/L	1		6020B	Total Recoverable
Lithium	270	B	50	13	ug/L	5		6020B	Total Recoverable
Magnesium	2200		200	49	ug/L	1		6020B	Total Recoverable
Manganese	150		2.5	0.79	ug/L	1		6020B	Total Recoverable
Molybdenum	51		5.0	2.5	ug/L	1		6020B	Total Recoverable
Potassium	1500		500	110	ug/L	1		6020B	Total Recoverable
Sodium	930000	B	1000	390	ug/L	5		6020B	Total Recoverable
Strontium	6600	B	20	3.2	ug/L	5		6020B	Total Recoverable
Zinc	40		20	6.9	ug/L	1		6020B	Total Recoverable
Barium	360		2.5	0.73	ug/L	1		6020B	Dissolved
Boron	760	B	50	13	ug/L	1		6020B	Dissolved
Calcium	260000	B	200	44	ug/L	1		6020B	Dissolved
Lithium	260	B	50	13	ug/L	5		6020B	Dissolved
Magnesium	2200		200	49	ug/L	1		6020B	Dissolved
Manganese	160		2.5	0.79	ug/L	1		6020B	Dissolved
Molybdenum	52		5.0	2.5	ug/L	1		6020B	Dissolved
Potassium	1600		500	110	ug/L	1		6020B	Dissolved
Selenium	1.4	J	2.5	0.98	ug/L	1		6020B	Dissolved
Sodium	910000	B	1000	390	ug/L	5		6020B	Dissolved
Strontium	6500	B	20	3.2	ug/L	5		6020B	Dissolved
Hardness as calcium carbonate	660		0.91	0.46	mg/L	1		SM 2340B	Total Recoverable
Bromide	21		1.0	0.18	mg/L	1		300.0	Total/NA
Chloride	1800		100	12	mg/L	100		300.0	Total/NA
Fluoride	1.9		1.0	0.19	mg/L	1		300.0	Total/NA
Sulfate	20		1.0	0.21	mg/L	1		300.0	Total/NA
Alkalinity	23	B	5.0	3.7	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	23	B	5.0	3.7	mg/L	1		SM 2320B	Total/NA
Salinity	3.7		0.33	0.33	psu	1		SM 2520B	Total/NA
Total Dissolved Solids	3100		25	11	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WP-585-440-470-2 FB — Lab Sample ID: 500-255601-4

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

Detection Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-255601-1

Client Sample ID: DUP-1 — Lab Sample ID: 500-255601-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Uranium	0.26	B	0.030	0.0098	ug/L	1		1638	Total Recoverable
Uranium	0.27	B	0.030	0.0098	ug/L	1		1638	Dissolved
Barium	360		2.5	0.73	ug/L	1		6020B	Total Recoverable
Boron	770	B	50	13	ug/L	1		6020B	Total Recoverable
Calcium	270000	B	200	44	ug/L	1		6020B	Total Recoverable
Copper	0.88	J	2.0	0.50	ug/L	1		6020B	Total Recoverable
Iron	57	J	100	47	ug/L	1		6020B	Total Recoverable
Lithium	270	B	50	13	ug/L	5		6020B	Total Recoverable
Magnesium	2200		200	49	ug/L	1		6020B	Total Recoverable
Manganese	160		2.5	0.79	ug/L	1		6020B	Total Recoverable
Molybdenum	52		5.0	2.5	ug/L	1		6020B	Total Recoverable
Potassium	1600		500	110	ug/L	1		6020B	Total Recoverable
Selenium	1.1	J	2.5	0.98	ug/L	1		6020B	Total Recoverable
Sodium	930000	B	1000	390	ug/L	5		6020B	Total Recoverable
Strontium	6600	B	20	3.2	ug/L	5		6020B	Total Recoverable
Zinc	39		20	6.9	ug/L	1		6020B	Total Recoverable
Barium	350		2.5	0.73	ug/L	1		6020B	Dissolved
Boron	730	B	50	13	ug/L	1		6020B	Dissolved
Calcium	250000	B	200	44	ug/L	1		6020B	Dissolved
Lithium	270	B	50	13	ug/L	5		6020B	Dissolved
Magnesium	2100		200	49	ug/L	1		6020B	Dissolved
Manganese	150		2.5	0.79	ug/L	1		6020B	Dissolved
Molybdenum	50		5.0	2.5	ug/L	1		6020B	Dissolved
Potassium	1500		500	110	ug/L	1		6020B	Dissolved
Selenium	1.2	J	2.5	0.98	ug/L	1		6020B	Dissolved
Sodium	920000	B	1000	390	ug/L	5		6020B	Dissolved
Strontium	6600	B	20	3.2	ug/L	5		6020B	Dissolved
Hardness as calcium carbonate	680		0.91	0.46	mg/L	1		SM 2340B	Total Recoverable
Bromide	21		1.0	0.18	mg/L	1		300.0	Total/NA
Chloride	1800		100	12	mg/L	100		300.0	Total/NA
Fluoride	1.9		1.0	0.19	mg/L	1		300.0	Total/NA
Sulfate	20		1.0	0.21	mg/L	1		300.0	Total/NA
Alkalinity	22	B	5.0	3.7	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	22	B	5.0	3.7	mg/L	1		SM 2320B	Total/NA
Salinity	3.8		0.33	0.33	psu	1		SM 2520B	Total/NA
Total Dissolved Solids	3100		25	11	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-1 FB — Lab Sample ID: 500-255601-6

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

Method Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255601-1
Project/Site: FOTH - White Pines, MI

Method	Method Description	Protocol	Laboratory
1630	Methyl Mercury	EPA	EET SSM
1631E	Mercury, Low Level (CVAFS)	EPA	EET SSM
1638	Metals (ICP/MS)	EPA	EET SSM
6020B	Metals (ICP/MS)	SW846	EET CHI
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	EET CHI
300.0	Anions, Ion Chromatography	EPA	EET CHI
335.4	Cyanide, Total	EPA	EET CHI
350.1	Nitrogen, Ammonia	EPA	EET CHI
365.1	Phosphorus, Total	EPA	EET CHI
SM 2320B	Alkalinity	SM	EET CHI
SM 2520B	Salinity	SM	EET CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CHI
SM 2540D	Solids, Total Suspended (TSS)	SM	EET CHI
SM 4500 S2 F	Sulfide, Total	SM	EET CHI
SM 5310C	Organic Carbon, Dissolved (DOC)	SM	EET CHI
SM 5310C	TOC	SM	EET CHI
1630	Distillation, Methyl Mercury	EPA	EET SSM
1638	Preparation, Total Recoverable Metals	EPA	EET SSM
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CHI
365.2/365.3/365	Phosphorus, Total	EPA	EET CHI
Distill/Ammonia	Distillation, Ammonia	None	EET CHI
Distill/CN	Distillation, Cyanide	None	EET CHI

Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-255601-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-255601-1	WP-585-440-470-1	Water	08/22/24 15:30	08/24/24 09:55
500-255601-2	WP-585-440-470-1 FB	Water	08/22/24 15:30	08/24/24 09:55
500-255601-3	WP-585-440-470-2	Water	08/22/24 17:00	08/24/24 09:55
500-255601-4	WP-585-440-470-2 FB	Water	08/22/24 17:00	08/24/24 09:55
500-255601-5	DUP-1	Water	08/22/24 23:59	08/24/24 09:55
500-255601-6	DUP-1 FB	Water	08/22/24 23:59	08/24/24 09:55

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255601-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-585-440-470-1
Lab Sample ID: 500-255601-1
Date Collected: 08/22/24 15:30
Matrix: Water
Date Received: 08/24/24 09:55

Method: EPA 1630 - Methyl Mercury

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		09/03/24 13:09	09/04/24 16:50	1

Method: EPA 1630 - Methyl Mercury - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		09/03/24 13:09	09/04/24 17:00	1

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			08/30/24 17:53	1

Method: EPA 1631E - Mercury, Low Level (CVAFS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			08/30/24 17:57	1

Method: EPA 1638 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.27**	**B**	0.030	0.0098	ug/L		08/30/24 11:35	08/30/24 18:11	1

Method: EPA 1638 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.27**	**B**	0.030	0.0098	ug/L		08/30/24 11:35	08/30/24 17:53	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		08/27/24 08:53	08/29/24 16:50	1
Antimony	<1.3		3.0	1.3	ug/L		08/27/24 08:53	08/29/24 16:50	1
Arsenic	<0.23		1.0	0.23	ug/L		08/27/24 08:53	08/29/24 16:50	1
Barium	**350**		2.5	0.73	ug/L		08/27/24 08:53	08/29/24 16:50	1
Beryllium	<0.53		1.0	0.53	ug/L		08/27/24 08:53	08/29/24 16:50	1
Boron	**730**	**B**	50	13	ug/L		08/27/24 08:53	08/29/24 16:50	1
Cadmium	<0.17		0.50	0.17	ug/L		08/27/24 08:53	08/29/24 16:50	1
Calcium	**260000**	**B**	200	44	ug/L		08/27/24 08:53	08/29/24 16:50	1
Chromium	<1.1		5.0	1.1	ug/L		08/27/24 08:53	08/29/24 16:50	1
Cobalt	<0.40		1.0	0.40	ug/L		08/27/24 08:53	08/29/24 16:50	1
Copper	<0.50		2.0	0.50	ug/L		08/27/24 08:53	08/29/24 16:50	1
Iron	**59**	**J**	100	47	ug/L		08/27/24 08:53	08/29/24 16:50	1
Lead	<0.19		0.50	0.19	ug/L		08/27/24 08:53	08/29/24 16:50	1
Lithium	**270**	**B**	50	13	ug/L		08/27/24 08:53	08/30/24 11:17	5
Magnesium	**2200**		200	49	ug/L		08/27/24 08:53	08/29/24 16:50	1
Manganese	**150**		2.5	0.79	ug/L		08/27/24 08:53	08/29/24 16:50	1
Molybdenum	**51**		5.0	2.5	ug/L		08/27/24 08:53	08/29/24 16:50	1
Nickel	<0.63		2.0	0.63	ug/L		08/27/24 08:53	08/29/24 16:50	1
Potassium	**1500**		500	110	ug/L		08/27/24 08:53	08/29/24 16:50	1
Selenium	**1.0**	**J**	2.5	0.98	ug/L		08/27/24 08:53	08/29/24 16:50	1
Silver	<0.12		0.50	0.12	ug/L		08/27/24 08:53	08/29/24 16:50	1
Sodium	**930000**	**B**	1000	390	ug/L		08/27/24 08:53	08/30/24 11:17	5
Strontium	**6600**	**B**	20	3.2	ug/L		08/27/24 08:53	08/30/24 11:17	5
Thallium	<0.57		2.0	0.57	ug/L		08/27/24 08:53	08/29/24 16:50	1
Tin	<1.3		5.0	1.3	ug/L		08/27/24 08:53	08/29/24 16:50	1
Vanadium	<2.2		5.0	2.2	ug/L		08/27/24 08:53	08/29/24 16:50	1
Zinc	**49**		20	6.9	ug/L		08/27/24 08:53	08/29/24 16:50	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-255601-1

Client Sample ID: WP-585-440-470-1

Date Collected: 08/22/24 15:30
Date Received: 08/24/24 09:55

Lab Sample ID: 500-255601-1

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		08/27/24 08:53	08/29/24 17:02	1
Antimony	<1.3		3.0	1.3	ug/L		08/27/24 08:53	08/29/24 17:02	1
Arsenic	<0.23		1.0	0.23	ug/L		08/27/24 08:53	08/29/24 17:02	1
Barium	**370**		2.5	0.73	ug/L		08/27/24 08:53	08/29/24 17:02	1
Beryllium	<0.53		1.0	0.53	ug/L		08/27/24 08:53	08/29/24 17:02	1
Boron	**770**	**B**	50	13	ug/L		08/27/24 08:53	08/29/24 17:02	1
Cadmium	<0.17		0.50	0.17	ug/L		08/27/24 08:53	08/29/24 17:02	1
Calcium	**270000**	**B**	200	44	ug/L		08/27/24 08:53	08/29/24 17:02	1
Chromium	<1.1		5.0	1.1	ug/L		08/27/24 08:53	08/29/24 17:02	1
Cobalt	<0.40		1.0	0.40	ug/L		08/27/24 08:53	08/29/24 17:02	1
Copper	**0.99**	**J**	2.0	0.50	ug/L		08/27/24 08:53	08/29/24 17:02	1
Iron	**57**	**J**	100	47	ug/L		08/27/24 08:53	08/29/24 17:02	1
Lead	<0.19		0.50	0.19	ug/L		08/27/24 08:53	08/29/24 17:02	1
Lithium	**280**	**B**	50	13	ug/L		08/27/24 08:53	08/30/24 11:24	5
Magnesium	**2200**		200	49	ug/L		08/27/24 08:53	08/29/24 17:02	1
Manganese	**160**		2.5	0.79	ug/L		08/27/24 08:53	08/29/24 17:02	1
Molybdenum	**53**		5.0	2.5	ug/L		08/27/24 08:53	08/29/24 17:02	1
Nickel	<0.63		2.0	0.63	ug/L		08/27/24 08:53	08/29/24 17:02	1
Potassium	**1600**		500	110	ug/L		08/27/24 08:53	08/29/24 17:02	1
Selenium	**1.1**	**J**	2.5	0.98	ug/L		08/27/24 08:53	08/29/24 17:02	1
Silver	<0.12		0.50	0.12	ug/L		08/27/24 08:53	08/29/24 17:02	1
Sodium	**930000**	**B**	1000	390	ug/L		08/27/24 08:53	08/30/24 11:24	5
Strontium	**6700**	**B**	20	3.2	ug/L		08/27/24 08:53	08/30/24 11:24	5
Thallium	<0.57		2.0	0.57	ug/L		08/27/24 08:53	08/29/24 17:02	1
Tin	<1.3		5.0	1.3	ug/L		08/27/24 08:53	08/29/24 17:02	1
Vanadium	<2.2		5.0	2.2	ug/L		08/27/24 08:53	08/29/24 17:02	1
Zinc	**13**	**J**	20	6.9	ug/L		08/27/24 08:53	08/29/24 17:02	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**650**		0.91	0.46	mg/L		08/27/24 08:53	08/30/24 10:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**21**		1.0	0.18	mg/L			08/24/24 12:48	1
Nitrate as N (EPA 300.0)	<0.043		1.0	0.043	mg/L			08/24/24 12:48	1
Chloride (EPA 300.0)	**1800**		100	12	mg/L			08/28/24 22:01	100
Nitrite as N (EPA 300.0)	<0.070		1.0	0.070	mg/L			08/24/24 12:48	1
Fluoride (EPA 300.0)	**1.8**		1.0	0.19	mg/L			08/24/24 12:48	1
Nitrate Nitrite as N (EPA 300.0)	<0.070		1.0	0.070	mg/L			08/24/24 12:48	1
Sulfate (EPA 300.0)	**20**		1.0	0.21	mg/L			08/24/24 12:48	1
Cyanide, Total (EPA 335.4)	<0.0036		0.0050	0.0036	mg/L		08/27/24 14:51	08/28/24 16:33	1
Ammonia (EPA 350.1)	**0.17**	**J *-**	0.20	0.10	mg/L		09/04/24 15:15	09/06/24 10:36	1
Phosphorus as P (EPA 365.1)	**0.024**	**J B**	0.050	0.024	mg/L		08/28/24 09:30	08/29/24 08:48	1
Alkalinity (SM 2320B)	**23**	**B**	5.0	3.7	mg/L			08/29/24 14:00	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**23**	**B**	5.0	3.7	mg/L			08/29/24 14:00	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<3.7		5.0	3.7	mg/L			08/29/24 14:00	1
Salinity (SM 2520B)	**3.8**		0.33	0.33	psu			09/08/24 13:34	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255601-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-585-440-470-1
Lab Sample ID: 500-255601-1
Date Collected: 08/22/24 15:30
Matrix: Water
Date Received: 08/24/24 09:55

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**3200**		25	11	mg/L			08/25/24 23:18	1
Total Suspended Solids (SM 2540D)	<1.9		5.0	1.9	mg/L			08/28/24 16:21	1
Sulfide (SM 4500 S2 F)	<0.23		1.0	0.23	mg/L			08/28/24 21:51	1
Total Organic Carbon (SM 5310C)	<0.47		1.0	0.47	mg/L			08/26/24 15:05	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon (SM 5310C)	<0.47	F1	1.0	0.47	mg/L			08/27/24 07:40	1

Client Sample Results

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255601-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-585-440-470-1 FB
Lab Sample ID: 500-255601-2
Date Collected: 08/22/24 15:30
Matrix: Water
Date Received: 08/24/24 09:55

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			08/30/24 18:02	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255601-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-585-440-470-2
Lab Sample ID: 500-255601-3
Date Collected: 08/22/24 17:00
Matrix: Water
Date Received: 08/24/24 09:55

Method: EPA 1630 - Methyl Mercury

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		09/03/24 13:09	09/04/24 17:10	1

Method: EPA 1630 - Methyl Mercury - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		09/03/24 13:09	09/04/24 17:20	1

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			08/30/24 18:06	1

Method: EPA 1631E - Mercury, Low Level (CVAFS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			08/30/24 18:10	1

Method: EPA 1638 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.28**	**B**	0.030	0.0098	ug/L		08/30/24 11:35	08/30/24 17:09	1

Method: EPA 1638 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.26**	**B**	0.030	0.0098	ug/L		08/30/24 11:35	08/30/24 18:04	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		08/27/24 08:53	08/29/24 16:52	1
Antimony	<1.3		3.0	1.3	ug/L		08/27/24 08:53	08/29/24 16:52	1
Arsenic	<0.23		1.0	0.23	ug/L		08/27/24 08:53	08/29/24 16:52	1
Barium	**350**		2.5	0.73	ug/L		08/27/24 08:53	08/29/24 16:52	1
Beryllium	<0.53		1.0	0.53	ug/L		08/27/24 08:53	08/29/24 16:52	1
Boron	**760**	**B**	50	13	ug/L		08/27/24 08:53	08/29/24 16:52	1
Cadmium	<0.17		0.50	0.17	ug/L		08/27/24 08:53	08/29/24 16:52	1
Calcium	**260000**	**B**	200	44	ug/L		08/27/24 08:53	08/29/24 16:52	1
Chromium	<1.1		5.0	1.1	ug/L		08/27/24 08:53	08/29/24 16:52	1
Cobalt	<0.40		1.0	0.40	ug/L		08/27/24 08:53	08/29/24 16:52	1
Copper	<0.50		2.0	0.50	ug/L		08/27/24 08:53	08/29/24 16:52	1
Iron	**56**	**J**	100	47	ug/L		08/27/24 08:53	08/29/24 16:52	1
Lead	<0.19		0.50	0.19	ug/L		08/27/24 08:53	08/29/24 16:52	1
Lithium	**270**	**B**	50	13	ug/L		08/27/24 08:53	08/30/24 11:20	5
Magnesium	**2200**		200	49	ug/L		08/27/24 08:53	08/29/24 16:52	1
Manganese	**150**		2.5	0.79	ug/L		08/27/24 08:53	08/29/24 16:52	1
Molybdenum	**51**		5.0	2.5	ug/L		08/27/24 08:53	08/29/24 16:52	1
Nickel	<0.63		2.0	0.63	ug/L		08/27/24 08:53	08/29/24 16:52	1
Potassium	**1500**		500	110	ug/L		08/27/24 08:53	08/29/24 16:52	1
Selenium	<0.98		2.5	0.98	ug/L		08/27/24 08:53	08/29/24 16:52	1
Silver	<0.12		0.50	0.12	ug/L		08/27/24 08:53	08/29/24 16:52	1
Sodium	**930000**	**B**	1000	390	ug/L		08/27/24 08:53	08/30/24 11:20	5
Strontium	**6600**	**B**	20	3.2	ug/L		08/27/24 08:53	08/30/24 11:20	5
Thallium	<0.57		2.0	0.57	ug/L		08/27/24 08:53	08/29/24 16:52	1
Tin	<1.3		5.0	1.3	ug/L		08/27/24 08:53	08/29/24 16:52	1
Vanadium	<2.2		5.0	2.2	ug/L		08/27/24 08:53	08/29/24 16:52	1
Zinc	**40**		20	6.9	ug/L		08/27/24 08:53	08/29/24 16:52	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255601-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-585-440-470-2
Lab Sample ID: 500-255601-3
Date Collected: 08/22/24 17:00
Matrix: Water
Date Received: 08/24/24 09:55

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		08/27/24 08:53	08/29/24 17:04	1
Antimony	<1.3		3.0	1.3	ug/L		08/27/24 08:53	08/29/24 17:04	1
Arsenic	<0.23		1.0	0.23	ug/L		08/27/24 08:53	08/29/24 17:04	1
Barium	**360**		2.5	0.73	ug/L		08/27/24 08:53	08/29/24 17:04	1
Beryllium	<0.53		1.0	0.53	ug/L		08/27/24 08:53	08/29/24 17:04	1
Boron	**760**	**B**	50	13	ug/L		08/27/24 08:53	08/29/24 17:04	1
Cadmium	<0.17		0.50	0.17	ug/L		08/27/24 08:53	08/29/24 17:04	1
Calcium	**260000**	**B**	200	44	ug/L		08/27/24 08:53	08/29/24 17:04	1
Chromium	<1.1		5.0	1.1	ug/L		08/27/24 08:53	08/29/24 17:04	1
Cobalt	<0.40		1.0	0.40	ug/L		08/27/24 08:53	08/29/24 17:04	1
Copper	<0.50		2.0	0.50	ug/L		08/27/24 08:53	08/29/24 17:04	1
Iron	<47		100	47	ug/L		08/27/24 08:53	08/29/24 17:04	1
Lead	<0.19		0.50	0.19	ug/L		08/27/24 08:53	08/29/24 17:04	1
Lithium	**260**	**B**	50	13	ug/L		08/27/24 08:53	08/30/24 11:27	5
Magnesium	**2200**		200	49	ug/L		08/27/24 08:53	08/29/24 17:04	1
Manganese	**160**		2.5	0.79	ug/L		08/27/24 08:53	08/29/24 17:04	1
Molybdenum	**52**		5.0	2.5	ug/L		08/27/24 08:53	08/29/24 17:04	1
Nickel	<0.63		2.0	0.63	ug/L		08/27/24 08:53	08/29/24 17:04	1
Potassium	**1600**		500	110	ug/L		08/27/24 08:53	08/29/24 17:04	1
Selenium	**1.4**	**J**	2.5	0.98	ug/L		08/27/24 08:53	08/29/24 17:04	1
Silver	<0.12		0.50	0.12	ug/L		08/27/24 08:53	08/29/24 17:04	1
Sodium	**910000**	**B**	1000	390	ug/L		08/27/24 08:53	08/30/24 11:27	5
Strontium	**6500**	**B**	20	3.2	ug/L		08/27/24 08:53	08/30/24 11:27	5
Thallium	<0.57		2.0	0.57	ug/L		08/27/24 08:53	08/29/24 17:04	1
Tin	<1.3		5.0	1.3	ug/L		08/27/24 08:53	08/29/24 17:04	1
Vanadium	<2.2		5.0	2.2	ug/L		08/27/24 08:53	08/29/24 17:04	1
Zinc	<6.9		20	6.9	ug/L		08/27/24 08:53	08/29/24 17:04	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**660**		0.91	0.46	mg/L		08/27/24 08:53	08/30/24 10:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**21**		1.0	0.18	mg/L			08/24/24 13:19	1
Nitrate as N (EPA 300.0)	<0.043		1.0	0.043	mg/L			08/24/24 13:19	1
Chloride (EPA 300.0)	**1800**		100	12	mg/L			08/28/24 22:16	100
Nitrite as N (EPA 300.0)	<0.070		1.0	0.070	mg/L			08/24/24 13:19	1
Fluoride (EPA 300.0)	**1.9**		1.0	0.19	mg/L			08/24/24 13:19	1
Nitrate Nitrite as N (EPA 300.0)	<0.070		1.0	0.070	mg/L			08/24/24 13:19	1
Sulfate (EPA 300.0)	**20**		1.0	0.21	mg/L			08/24/24 13:19	1
Cyanide, Total (EPA 335.4)	<0.0036		0.0050	0.0036	mg/L		08/27/24 14:51	08/28/24 16:35	1
Ammonia (EPA 350.1)	<0.10	*-	0.20	0.10	mg/L		09/04/24 15:15	09/06/24 10:37	1
Phosphorus as P (EPA 365.1)	<0.024		0.050	0.024	mg/L		08/28/24 09:30	08/29/24 08:49	1
Alkalinity (SM 2320B)	**23**	**B**	5.0	3.7	mg/L			08/29/24 14:09	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**23**	**B**	5.0	3.7	mg/L			08/29/24 14:09	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<3.7		5.0	3.7	mg/L			08/29/24 14:09	1
Salinity (SM 2520B)	**3.7**		0.33	0.33	psu			09/08/24 13:34	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255601-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-585-440-470-2
Lab Sample ID: 500-255601-3
Date Collected: 08/22/24 17:00
Matrix: Water
Date Received: 08/24/24 09:55

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**3100**		25	11	mg/L			08/25/24 23:20	1
Total Suspended Solids (SM 2540D)	<1.9		5.0	1.9	mg/L			08/28/24 16:23	1
Sulfide (SM 4500 S2 F)	<0.23		1.0	0.23	mg/L			08/28/24 21:54	1
Total Organic Carbon (SM 5310C)	<0.47		1.0	0.47	mg/L			08/26/24 15:34	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon (SM 5310C)	<0.47		1.0	0.47	mg/L			08/27/24 07:40	1

Client Sample Results

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255601-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-585-440-470-2 FB
Lab Sample ID: 500-255601-4
Date Collected: 08/22/24 17:00
Matrix: Water
Date Received: 08/24/24 09:55

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			08/30/24 18:14	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-255601-1

Client Sample ID: DUP-1
Date Collected: 08/22/24 23:59
Date Received: 08/24/24 09:55

Lab Sample ID: 500-255601-5
Matrix: Water

Method: EPA 1630 - Methyl Mercury

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		09/03/24 13:09	09/04/24 17:30	1

Method: EPA 1630 - Methyl Mercury - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		09/03/24 13:09	09/04/24 17:41	1

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			08/30/24 18:18	1

Method: EPA 1638 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.26**	**B**	0.030	0.0098	ug/L		08/30/24 11:35	08/30/24 18:15	1

Method: EPA 1638 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.27**	**B**	0.030	0.0098	ug/L		08/30/24 11:35	08/30/24 18:07	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		08/27/24 08:53	08/29/24 16:54	1
Antimony	<1.3		3.0	1.3	ug/L		08/27/24 08:53	08/29/24 16:54	1
Arsenic	<0.23		1.0	0.23	ug/L		08/27/24 08:53	08/29/24 16:54	1
Barium	**360**		2.5	0.73	ug/L		08/27/24 08:53	08/29/24 16:54	1
Beryllium	<0.53		1.0	0.53	ug/L		08/27/24 08:53	08/29/24 16:54	1
Boron	**770**	**B**	50	13	ug/L		08/27/24 08:53	08/29/24 16:54	1
Cadmium	<0.17		0.50	0.17	ug/L		08/27/24 08:53	08/29/24 16:54	1
Calcium	**270000**	**B**	200	44	ug/L		08/27/24 08:53	08/29/24 16:54	1
Chromium	<1.1		5.0	1.1	ug/L		08/27/24 08:53	08/29/24 16:54	1
Cobalt	<0.40		1.0	0.40	ug/L		08/27/24 08:53	08/29/24 16:54	1
Copper	**0.88**	**J**	2.0	0.50	ug/L		08/27/24 08:53	08/29/24 16:54	1
Iron	**57**	**J**	100	47	ug/L		08/27/24 08:53	08/29/24 16:54	1
Lead	<0.19		0.50	0.19	ug/L		08/27/24 08:53	08/29/24 16:54	1
Lithium	**270**	**B**	50	13	ug/L		08/27/24 08:53	08/30/24 11:22	5
Magnesium	**2200**		200	49	ug/L		08/27/24 08:53	08/29/24 16:54	1
Manganese	**160**		2.5	0.79	ug/L		08/27/24 08:53	08/29/24 16:54	1
Molybdenum	**52**		5.0	2.5	ug/L		08/27/24 08:53	08/29/24 16:54	1
Nickel	<0.63		2.0	0.63	ug/L		08/27/24 08:53	08/29/24 16:54	1
Potassium	**1600**		500	110	ug/L		08/27/24 08:53	08/29/24 16:54	1
Selenium	**1.1**	**J**	2.5	0.98	ug/L		08/27/24 08:53	08/29/24 16:54	1
Silver	<0.12		0.50	0.12	ug/L		08/27/24 08:53	08/29/24 16:54	1
Sodium	**930000**	**B**	1000	390	ug/L		08/27/24 08:53	08/30/24 11:22	5
Strontium	**6600**	**B**	20	3.2	ug/L		08/27/24 08:53	08/30/24 11:22	5
Thallium	<0.57		2.0	0.57	ug/L		08/27/24 08:53	08/29/24 16:54	1
Tin	<1.3		5.0	1.3	ug/L		08/27/24 08:53	08/29/24 16:54	1
Vanadium	<2.2		5.0	2.2	ug/L		08/27/24 08:53	08/29/24 16:54	1
Zinc	**39**		20	6.9	ug/L		08/27/24 08:53	08/29/24 16:54	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		08/27/24 08:53	08/29/24 17:06	1

Client Sample ID: DUP-1
Date Collected: 08/22/24 23:59
Date Received: 08/24/24 09:55

Lab Sample ID: 500-255601-5
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.3		3.0	1.3	ug/L		08/27/24 08:53	08/29/24 17:06	1
Arsenic	<0.23		1.0	0.23	ug/L		08/27/24 08:53	08/29/24 17:06	1
Barium	**350**		2.5	0.73	ug/L		08/27/24 08:53	08/29/24 17:06	1
Beryllium	<0.53		1.0	0.53	ug/L		08/27/24 08:53	08/29/24 17:06	1
Boron	**730**	**B**	50	13	ug/L		08/27/24 08:53	08/29/24 17:06	1
Cadmium	<0.17		0.50	0.17	ug/L		08/27/24 08:53	08/29/24 17:06	1
Calcium	**250000**	**B**	200	44	ug/L		08/27/24 08:53	08/29/24 17:06	1
Chromium	<1.1		5.0	1.1	ug/L		08/27/24 08:53	08/29/24 17:06	1
Cobalt	<0.40		1.0	0.40	ug/L		08/27/24 08:53	08/29/24 17:06	1
Copper	<0.50		2.0	0.50	ug/L		08/27/24 08:53	08/29/24 17:06	1
Iron	<47		100	47	ug/L		08/27/24 08:53	08/29/24 17:06	1
Lead	<0.19		0.50	0.19	ug/L		08/27/24 08:53	08/29/24 17:06	1
Lithium	**270**	**B**	50	13	ug/L		08/27/24 08:53	08/30/24 11:29	5
Magnesium	**2100**		200	49	ug/L		08/27/24 08:53	08/29/24 17:06	1
Manganese	**150**		2.5	0.79	ug/L		08/27/24 08:53	08/29/24 17:06	1
Molybdenum	**50**		5.0	2.5	ug/L		08/27/24 08:53	08/29/24 17:06	1
Nickel	<0.63		2.0	0.63	ug/L		08/27/24 08:53	08/29/24 17:06	1
Potassium	**1500**		500	110	ug/L		08/27/24 08:53	08/29/24 17:06	1
Selenium	**1.2**	**J**	2.5	0.98	ug/L		08/27/24 08:53	08/29/24 17:06	1
Silver	<0.12		0.50	0.12	ug/L		08/27/24 08:53	08/29/24 17:06	1
Sodium	**920000**	**B**	1000	390	ug/L		08/27/24 08:53	08/30/24 11:29	5
Strontium	**6600**	**B**	20	3.2	ug/L		08/27/24 08:53	08/30/24 11:29	5
Thallium	<0.57		2.0	0.57	ug/L		08/27/24 08:53	08/29/24 17:06	1
Tin	<1.3		5.0	1.3	ug/L		08/27/24 08:53	08/29/24 17:06	1
Vanadium	<2.2		5.0	2.2	ug/L		08/27/24 08:53	08/29/24 17:06	1
Zinc	<6.9		20	6.9	ug/L		08/27/24 08:53	08/29/24 17:06	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**680**		0.91	0.46	mg/L		08/27/24 08:53	08/30/24 10:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**21**		1.0	0.18	mg/L			08/24/24 13:35	1
Nitrate as N (EPA 300.0)	<0.043		1.0	0.043	mg/L			08/24/24 13:35	1
Chloride (EPA 300.0)	**1800**		100	12	mg/L			08/28/24 22:32	100
Nitrite as N (EPA 300.0)	<0.070		1.0	0.070	mg/L			08/24/24 13:35	1
Fluoride (EPA 300.0)	**1.9**		1.0	0.19	mg/L			08/24/24 13:35	1
Nitrate Nitrite as N (EPA 300.0)	<0.070		1.0	0.070	mg/L			08/24/24 13:35	1
Sulfate (EPA 300.0)	**20**		1.0	0.21	mg/L			08/24/24 13:35	1
Cyanide, Total (EPA 335.4)	<0.0036	F1	0.0050	0.0036	mg/L		08/27/24 14:51	08/28/24 16:36	1
Ammonia (EPA 350.1)	<0.10	*-	0.20	0.10	mg/L		09/04/24 15:15	09/06/24 10:37	1
Phosphorus as P (EPA 365.1)	<0.024		0.050	0.024	mg/L		09/09/24 09:15	09/09/24 17:08	1
Alkalinity (SM 2320B)	**22**	**B**	5.0	3.7	mg/L			08/29/24 14:17	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**22**	**B**	5.0	3.7	mg/L			08/29/24 14:17	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<3.7		5.0	3.7	mg/L			08/29/24 14:17	1
Salinity (SM 2520B)	**3.8**		0.33	0.33	psu			09/08/24 13:34	1
Total Dissolved Solids (SM 2540C)	**3100**		25	11	mg/L			08/25/24 23:23	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255601-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: DUP-1
Lab Sample ID: 500-255601-5
Date Collected: 08/22/24 23:59
Matrix: Water
Date Received: 08/24/24 09:55

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	<1.9		5.0	1.9	mg/L			08/28/24 16:26	1
Sulfide (SM 4500 S2 F)	<0.23		1.0	0.23	mg/L			08/28/24 21:58	1
Total Organic Carbon (SM 5310C)	<0.47		1.0	0.47	mg/L			08/26/24 16:02	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon (SM 5310C)	<0.47		1.0	0.47	mg/L			08/27/24 07:40	1

Client Sample Results

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255601-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: DUP-1 FB
Lab Sample ID: 500-255601-6
Date Collected: 08/22/24 23:59
Matrix: Water
Date Received: 08/24/24 09:55

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			09/03/24 16:50	1

Definitions/Glossary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255601-1
Project/Site: FOTH - White Pines, MI

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Metals

Prep Batch: 2665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-1	WP-585-440-470-1	Dissolved	Water	1638	
500-255601-1	WP-585-440-470-1	Total Recoverable	Water	1638	
500-255601-3	WP-585-440-470-2	Dissolved	Water	1638	
500-255601-3	WP-585-440-470-2	Total Recoverable	Water	1638	
500-255601-5	DUP-1	Dissolved	Water	1638	
500-255601-5	DUP-1	Total Recoverable	Water	1638	
MB 350-2665/1-A	Method Blank	Total Recoverable	Water	1638	
MB 350-2665/2-A	Method Blank	Total Recoverable	Water	1638	
LCS 350-2665/3-A	Lab Control Sample	Total Recoverable	Water	1638	
LCSD 350-2665/4-A	Lab Control Sample Dup	Total Recoverable	Water	1638	
500-255601-3 MS	WP-585-440-470-2	Total Recoverable	Water	1638	
500-255601-3 MSD	WP-585-440-470-2	Total Recoverable	Water	1638	

Analysis Batch: 2681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-1	WP-585-440-470-1	Dissolved	Water	1631E	
500-255601-1	WP-585-440-470-1	Total/NA	Water	1631E	
500-255601-2	WP-585-440-470-1 FB	Total/NA	Water	1631E	
500-255601-3	WP-585-440-470-2	Dissolved	Water	1631E	
500-255601-3	WP-585-440-470-2	Total/NA	Water	1631E	
500-255601-4	WP-585-440-470-2 FB	Total/NA	Water	1631E	
500-255601-5	DUP-1	Total/NA	Water	1631E	
MB 350-2681/27	Method Blank	Total/NA	Water	1631E	
MB 350-2681/28	Method Blank	Total/NA	Water	1631E	
MB 350-2681/29	Method Blank	Total/NA	Water	1631E	
LCS 350-2681/34	Lab Control Sample	Total/NA	Water	1631E	
LCSD 350-2681/35	Lab Control Sample Dup	Total/NA	Water	1631E	

Prep Batch: 2683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-1	WP-585-440-470-1	Dissolved	Water	1630	
500-255601-1	WP-585-440-470-1	Total/NA	Water	1630	
500-255601-3	WP-585-440-470-2	Dissolved	Water	1630	
500-255601-3	WP-585-440-470-2	Total/NA	Water	1630	
500-255601-5	DUP-1	Dissolved	Water	1630	
500-255601-5	DUP-1	Total/NA	Water	1630	
MB 350-2683/1-A	Method Blank	Total/NA	Water	1630	
MB 350-2683/2-A	Method Blank	Total/NA	Water	1630	
MB 350-2683/3-A	Method Blank	Total/NA	Water	1630	
LCS 350-2683/4-A	Lab Control Sample	Total/NA	Water	1630	
LCSD 350-2683/5-A	Lab Control Sample Dup	Total/NA	Water	1630	

Analysis Batch: 2696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-1	WP-585-440-470-1	Dissolved	Water	1638	2665
500-255601-1	WP-585-440-470-1	Total Recoverable	Water	1638	2665
500-255601-3	WP-585-440-470-2	Dissolved	Water	1638	2665
500-255601-3	WP-585-440-470-2	Total Recoverable	Water	1638	2665
500-255601-5	DUP-1	Dissolved	Water	1638	2665
500-255601-5	DUP-1	Total Recoverable	Water	1638	2665
MB 350-2665/1-A	Method Blank	Total Recoverable	Water	1638	2665

Metals (Continued)

Analysis Batch: 2696 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 350-2665/2-A	Method Blank	Total Recoverable	Water	1638	2665
LCS 350-2665/3-A	Lab Control Sample	Total Recoverable	Water	1638	2665
LCSD 350-2665/4-A	Lab Control Sample Dup	Total Recoverable	Water	1638	2665
500-255601-3 MS	WP-585-440-470-2	Total Recoverable	Water	1638	2665
500-255601-3 MSD	WP-585-440-470-2	Total Recoverable	Water	1638	2665

Analysis Batch: 2697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-6	DUP-1 FB	Total/NA	Water	1631E	
MB 350-2697/18	Method Blank	Total/NA	Water	1631E	
MB 350-2697/19	Method Blank	Total/NA	Water	1631E	
MB 350-2697/20	Method Blank	Total/NA	Water	1631E	
LCS 350-2697/28	Lab Control Sample	Total/NA	Water	1631E	
LCSD 350-2697/29	Lab Control Sample Dup	Total/NA	Water	1631E	

Analysis Batch: 2710

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-1	WP-585-440-470-1	Dissolved	Water	1630	2683
500-255601-1	WP-585-440-470-1	Total/NA	Water	1630	2683
500-255601-3	WP-585-440-470-2	Dissolved	Water	1630	2683
500-255601-3	WP-585-440-470-2	Total/NA	Water	1630	2683
500-255601-5	DUP-1	Dissolved	Water	1630	2683
500-255601-5	DUP-1	Total/NA	Water	1630	2683
MB 350-2683/1-A	Method Blank	Total/NA	Water	1630	2683
MB 350-2683/2-A	Method Blank	Total/NA	Water	1630	2683
MB 350-2683/3-A	Method Blank	Total/NA	Water	1630	2683
LCS 350-2683/4-A	Lab Control Sample	Total/NA	Water	1630	2683
LCSD 350-2683/5-A	Lab Control Sample Dup	Total/NA	Water	1630	2683

Prep Batch: 783411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-1	WP-585-440-470-1	Dissolved	Water	3005A	
500-255601-1	WP-585-440-470-1	Total Recoverable	Water	3005A	
500-255601-3	WP-585-440-470-2	Dissolved	Water	3005A	
500-255601-3	WP-585-440-470-2	Total Recoverable	Water	3005A	
500-255601-5	DUP-1	Dissolved	Water	3005A	
500-255601-5	DUP-1	Total Recoverable	Water	3005A	
MB 500-783411/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-783411/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 783978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-1	WP-585-440-470-1	Dissolved	Water	6020B	783411
500-255601-1	WP-585-440-470-1	Total Recoverable	Water	6020B	783411
500-255601-3	WP-585-440-470-2	Dissolved	Water	6020B	783411
500-255601-3	WP-585-440-470-2	Total Recoverable	Water	6020B	783411
500-255601-5	DUP-1	Dissolved	Water	6020B	783411
500-255601-5	DUP-1	Total Recoverable	Water	6020B	783411
MB 500-783411/1-A	Method Blank	Total Recoverable	Water	6020B	783411
LCS 500-783411/2-A	Lab Control Sample	Total Recoverable	Water	6020B	783411

Metals

Analysis Batch: 784035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-1	WP-585-440-470-1	Total Recoverable	Water	SM 2340B	783411
500-255601-3	WP-585-440-470-2	Total Recoverable	Water	SM 2340B	783411
500-255601-5	DUP-1	Total Recoverable	Water	SM 2340B	783411

Analysis Batch: 784174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-1	WP-585-440-470-1	Dissolved	Water	6020B	783411
500-255601-1	WP-585-440-470-1	Total Recoverable	Water	6020B	783411
500-255601-3	WP-585-440-470-2	Dissolved	Water	6020B	783411
500-255601-3	WP-585-440-470-2	Total Recoverable	Water	6020B	783411
500-255601-5	DUP-1	Dissolved	Water	6020B	783411
500-255601-5	DUP-1	Total Recoverable	Water	6020B	783411

General Chemistry

Analysis Batch: 783081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-1	WP-585-440-470-1	Total/NA	Water	300.0	
500-255601-3	WP-585-440-470-2	Total/NA	Water	300.0	
500-255601-5	DUP-1	Total/NA	Water	300.0	
MB 500-783081/3	Method Blank	Total/NA	Water	300.0	
LCS 500-783081/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 783082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-1	WP-585-440-470-1	Total/NA	Water	300.0	
500-255601-3	WP-585-440-470-2	Total/NA	Water	300.0	
500-255601-5	DUP-1	Total/NA	Water	300.0	
MB 500-783082/3	Method Blank	Total/NA	Water	300.0	
LCS 500-783082/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 783139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-1	WP-585-440-470-1	Total/NA	Water	SM 2540C	
500-255601-3	WP-585-440-470-2	Total/NA	Water	SM 2540C	
500-255601-5	DUP-1	Total/NA	Water	SM 2540C	
MB 500-783139/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-783139/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 783350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-1	WP-585-440-470-1	Total/NA	Water	SM 5310C	
500-255601-3	WP-585-440-470-2	Total/NA	Water	SM 5310C	
500-255601-5	DUP-1	Total/NA	Water	SM 5310C	
MB 500-783350/7	Method Blank	Total/NA	Water	SM 5310C	
LCS 500-783350/8	Lab Control Sample	Total/NA	Water	SM 5310C	

Analysis Batch: 783381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-1	WP-585-440-470-1	Dissolved	Water	SM 5310C	
500-255601-3	WP-585-440-470-2	Dissolved	Water	SM 5310C	

General Chemistry (Continued)

Analysis Batch: 783381 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-5	DUP-1	Dissolved	Water	SM 5310C	
MB 500-783381/7	Method Blank	Dissolved	Water	SM 5310C	
LCS 500-783381/8	Lab Control Sample	Dissolved	Water	SM 5310C	
500-255601-1 MS	WP-585-440-470-1	Dissolved	Water	SM 5310C	
500-255601-1 MSD	WP-585-440-470-1	Dissolved	Water	SM 5310C	

Prep Batch: 783489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-1	WP-585-440-470-1	Total/NA	Water	Distill/CN	
500-255601-3	WP-585-440-470-2	Total/NA	Water	Distill/CN	
500-255601-5	DUP-1	Total/NA	Water	Distill/CN	
MB 500-783489/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 500-783489/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	
500-255601-5 MS	DUP-1	Total/NA	Water	Distill/CN	
500-255601-5 MSD	DUP-1	Total/NA	Water	Distill/CN	

Analysis Batch: 783633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-1	WP-585-440-470-1	Total/NA	Water	300.0	
500-255601-3	WP-585-440-470-2	Total/NA	Water	300.0	
500-255601-5	DUP-1	Total/NA	Water	300.0	
MB 500-783633/33	Method Blank	Total/NA	Water	300.0	
LCS 500-783633/34	Lab Control Sample	Total/NA	Water	300.0	

Prep Batch: 783635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-1	WP-585-440-470-1	Total/NA	Water	365.2/365.3/365	
500-255601-3	WP-585-440-470-2	Total/NA	Water	365.2/365.3/365	
MB 500-783635/1-A	Method Blank	Total/NA	Water	365.2/365.3/365	
LCS 500-783635/2-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	

Analysis Batch: 783711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-1	WP-585-440-470-1	Total/NA	Water	SM 2540D	
500-255601-3	WP-585-440-470-2	Total/NA	Water	SM 2540D	
500-255601-5	DUP-1	Total/NA	Water	SM 2540D	
MB 500-783711/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 500-783711/2	Lab Control Sample	Total/NA	Water	SM 2540D	
500-255601-3 DU	WP-585-440-470-2	Total/NA	Water	SM 2540D	

Analysis Batch: 783747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-1	WP-585-440-470-1	Total/NA	Water	SM 4500 S2 F	
500-255601-3	WP-585-440-470-2	Total/NA	Water	SM 4500 S2 F	
500-255601-5	DUP-1	Total/NA	Water	SM 4500 S2 F	
MB 500-783747/1	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 500-783747/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 783772

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-1	WP-585-440-470-1	Total/NA	Water	335.4	783489

General Chemistry (Continued)

Analysis Batch: 783772 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-3	WP-585-440-470-2	Total/NA	Water	335.4	783489
500-255601-5	DUP-1	Total/NA	Water	335.4	783489
MB 500-783489/1-A	Method Blank	Total/NA	Water	335.4	783489
LCS 500-783489/2-A	Lab Control Sample	Total/NA	Water	335.4	783489
500-255601-5 MS	DUP-1	Total/NA	Water	335.4	783489
500-255601-5 MSD	DUP-1	Total/NA	Water	335.4	783489

Analysis Batch: 783821

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-1	WP-585-440-470-1	Total/NA	Water	365.1	783635
500-255601-3	WP-585-440-470-2	Total/NA	Water	365.1	783635
MB 500-783635/1-A	Method Blank	Total/NA	Water	365.1	783635
LCS 500-783635/2-A	Lab Control Sample	Total/NA	Water	365.1	783635

Analysis Batch: 783995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-1	WP-585-440-470-1	Total/NA	Water	SM 2320B	
500-255601-3	WP-585-440-470-2	Total/NA	Water	SM 2320B	
500-255601-5	DUP-1	Total/NA	Water	SM 2320B	
MB 500-783995/3	Method Blank	Total/NA	Water	SM 2320B	
LCS 500-783995/4	Lab Control Sample	Total/NA	Water	SM 2320B	

Prep Batch: 784489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-1	WP-585-440-470-1	Total/NA	Water	Distill/Ammonia	
500-255601-3	WP-585-440-470-2	Total/NA	Water	Distill/Ammonia	
500-255601-5	DUP-1	Total/NA	Water	Distill/Ammonia	
MB 500-784489/1-A	Method Blank	Total/NA	Water	Distill/Ammonia	
LCS 500-784489/2-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	

Analysis Batch: 784892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-1	WP-585-440-470-1	Total/NA	Water	350.1	784489
500-255601-3	WP-585-440-470-2	Total/NA	Water	350.1	784489
500-255601-5	DUP-1	Total/NA	Water	350.1	784489
MB 500-784489/1-A	Method Blank	Total/NA	Water	350.1	784489
LCS 500-784489/2-A	Lab Control Sample	Total/NA	Water	350.1	784489

Analysis Batch: 784974

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-1	WP-585-440-470-1	Total/NA	Water	SM 2520B	
500-255601-3	WP-585-440-470-2	Total/NA	Water	SM 2520B	
500-255601-5	DUP-1	Total/NA	Water	SM 2520B	

Prep Batch: 785143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-5	DUP-1	Total/NA	Water	365.2/365.3/365	
MB 500-785143/1-A	Method Blank	Total/NA	Water	365.2/365.3/365	
LCS 500-785143/2-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	

QC Association Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255601-1
Project/Site: FOTH - White Pines, MI

General Chemistry

Analysis Batch: 785490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255601-5	DUP-1	Total/NA	Water	365.1	785143
MB 500-785143/1-A	Method Blank	Total/NA	Water	365.1	785143
LCS 500-785143/2-A	Lab Control Sample	Total/NA	Water	365.1	785143

Method: 1630 - Methyl Mercury

Lab Sample ID: MB 350-2683/1-A
Matrix: Water
Analysis Batch: 2710
Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2683

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		09/03/24 13:09	09/04/24 14:57	1

Lab Sample ID: MB 350-2683/2-A
Matrix: Water
Analysis Batch: 2710
Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2683

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		09/03/24 13:09	09/04/24 15:08	1

Lab Sample ID: MB 350-2683/3-A
Matrix: Water
Analysis Batch: 2710
Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2683

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		09/03/24 13:09	09/04/24 15:18	1

Lab Sample ID: LCS 350-2683/4-A
Matrix: Water
Analysis Batch: 2710
Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 2683

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methyl Mercury	1.00	0.950		ng/L		95	65 - 135

Lab Sample ID: LCSD 350-2683/5-A
Matrix: Water
Analysis Batch: 2710
Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 2683

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methyl Mercury	1.00	0.903		ng/L		90	65 - 135	5	35

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 350-2681/27
Matrix: Water
Analysis Batch: 2681
Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			08/30/24 14:42	1

Lab Sample ID: MB 350-2681/28
Matrix: Water
Analysis Batch: 2681
Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			08/30/24 14:47	1

Method: 1631E - Mercury, Low Level (CVAFS) (Continued)

Lab Sample ID: MB 350-2681/29
Matrix: Water
Analysis Batch: 2681

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			08/30/24 14:51	1

Lab Sample ID: LCS 350-2681/34
Matrix: Water
Analysis Batch: 2681

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.48		ng/L		90	77 - 123

Lab Sample ID: LCSD 350-2681/35
Matrix: Water
Analysis Batch: 2681

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	4.40		ng/L		88	77 - 123	2	24

Lab Sample ID: MB 350-2697/18
Matrix: Water
Analysis Batch: 2697

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			09/03/24 12:45	1

Lab Sample ID: MB 350-2697/19
Matrix: Water
Analysis Batch: 2697

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			09/03/24 12:49	1

Lab Sample ID: MB 350-2697/20
Matrix: Water
Analysis Batch: 2697

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			09/03/24 12:53	1

Lab Sample ID: LCS 350-2697/28
Matrix: Water
Analysis Batch: 2697

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.50		ng/L		90	77 - 123

Lab Sample ID: LCSD 350-2697/29
Matrix: Water
Analysis Batch: 2697

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	4.49		ng/L		90	77 - 123	0	24

Method: 1638 - Metals (ICP/MS)

Lab Sample ID: MB 350-2665/1-A
Matrix: Water
Analysis Batch: 2696

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 2665

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	0.0104	J	0.030	0.0098	ug/L		08/30/24 11:35	08/30/24 15:53	1

Lab Sample ID: MB 350-2665/2-A
Matrix: Water
Analysis Batch: 2696

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 2665

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	<0.0098		0.030	0.0098	ug/L		08/30/24 11:35	08/30/24 15:56	1

Lab Sample ID: LCS 350-2665/3-A
Matrix: Water
Analysis Batch: 2696

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 2665

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Uranium	25.0	23.5		ug/L		94	85 - 115

Lab Sample ID: LCSD 350-2665/4-A
Matrix: Water
Analysis Batch: 2696

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 2665

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Uranium	25.0	23.4		ug/L		93	85 - 115	1	20

Lab Sample ID: 500-255601-3 MS
Matrix: Water
Analysis Batch: 2696

Client Sample ID: WP-585-440-470-2
Prep Type: Total Recoverable
Prep Batch: 2665

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Uranium	0.28	B	25.0	25.5		ug/L		101	70 - 130

Lab Sample ID: 500-255601-3 MSD
Matrix: Water
Analysis Batch: 2696

Client Sample ID: WP-585-440-470-2
Prep Type: Total Recoverable
Prep Batch: 2665

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Uranium	0.28	B	25.0	25.2		ug/L		100	70 - 130	1	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 500-783411/1-A
Matrix: Water
Analysis Batch: 783978

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 783411

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		08/27/24 08:53	08/29/24 16:09	1
Antimony	<1.3		3.0	1.3	ug/L		08/27/24 08:53	08/29/24 16:09	1
Arsenic	<0.23		1.0	0.23	ug/L		08/27/24 08:53	08/29/24 16:09	1
Barium	<0.73		2.5	0.73	ug/L		08/27/24 08:53	08/29/24 16:09	1
Beryllium	<0.53		1.0	0.53	ug/L		08/27/24 08:53	08/29/24 16:09	1
Boron	23.1	J	50	13	ug/L		08/27/24 08:53	08/29/24 16:09	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 500-783411/1-A
Matrix: Water
Analysis Batch: 783978

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 783411

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.17		0.50	0.17	ug/L		08/27/24 08:53	08/29/24 16:09	1
Calcium	56.0	J	200	44	ug/L		08/27/24 08:53	08/29/24 16:09	1
Chromium	<1.1		5.0	1.1	ug/L		08/27/24 08:53	08/29/24 16:09	1
Cobalt	<0.40		1.0	0.40	ug/L		08/27/24 08:53	08/29/24 16:09	1
Copper	<0.50		2.0	0.50	ug/L		08/27/24 08:53	08/29/24 16:09	1
Iron	<47		100	47	ug/L		08/27/24 08:53	08/29/24 16:09	1
Lead	<0.19		0.50	0.19	ug/L		08/27/24 08:53	08/29/24 16:09	1
Lithium	<2.5		10	2.5	ug/L		08/27/24 08:53	08/29/24 16:09	1
Magnesium	<49		200	49	ug/L		08/27/24 08:53	08/29/24 16:09	1
Manganese	<0.79		2.5	0.79	ug/L		08/27/24 08:53	08/29/24 16:09	1
Molybdenum	<2.5		5.0	2.5	ug/L		08/27/24 08:53	08/29/24 16:09	1
Nickel	<0.63		2.0	0.63	ug/L		08/27/24 08:53	08/29/24 16:09	1
Potassium	<110		500	110	ug/L		08/27/24 08:53	08/29/24 16:09	1
Selenium	<0.98		2.5	0.98	ug/L		08/27/24 08:53	08/29/24 16:09	1
Silver	<0.12		0.50	0.12	ug/L		08/27/24 08:53	08/29/24 16:09	1
Sodium	170	J	200	77	ug/L		08/27/24 08:53	08/29/24 16:09	1
Strontium	0.934	J	4.0	0.64	ug/L		08/27/24 08:53	08/29/24 16:09	1
Thallium	<0.57		2.0	0.57	ug/L		08/27/24 08:53	08/29/24 16:09	1
Tin	<1.3		5.0	1.3	ug/L		08/27/24 08:53	08/29/24 16:09	1
Vanadium	<2.2		5.0	2.2	ug/L		08/27/24 08:53	08/29/24 16:09	1
Zinc	<6.9		20	6.9	ug/L		08/27/24 08:53	08/29/24 16:09	1

Lab Sample ID: LCS 500-783411/2-A
Matrix: Water
Analysis Batch: 783978

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 783411

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	2000	2000		ug/L		100	80 - 120
Antimony	500	508		ug/L		102	80 - 120
Arsenic	100	95.9		ug/L		96	80 - 120
Barium	500	495		ug/L		99	80 - 120
Beryllium	50.0	50.0		ug/L		100	80 - 120
Boron	1000	1010		ug/L		101	80 - 120
Cadmium	50.0	50.6		ug/L		101	80 - 120
Calcium	10000	8500		ug/L		85	80 - 120
Chromium	200	202		ug/L		101	80 - 120
Cobalt	500	508		ug/L		102	80 - 120
Copper	250	252		ug/L		101	80 - 120
Iron	1000	1050		ug/L		105	80 - 120
Lead	100	100		ug/L		100	80 - 120
Lithium	100	110		ug/L		110	80 - 120
Magnesium	10000	10600		ug/L		106	80 - 120
Manganese	500	515		ug/L		103	80 - 120
Molybdenum	1000	982		ug/L		98	80 - 120
Nickel	500	496		ug/L		99	80 - 120
Potassium	10000	10400		ug/L		104	80 - 120
Selenium	100	97.9		ug/L		98	80 - 120
Silver	50.0	49.0		ug/L		98	80 - 120
Sodium	10000	10500		ug/L		105	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 500-783411/2-A
Matrix: Water
Analysis Batch: 783978

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 783411

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Strontium	1000	972		ug/L		97	80 - 120
Thallium	100	103		ug/L		103	80 - 120
Tin	1000	1010		ug/L		101	80 - 120
Vanadium	500	506		ug/L		101	80 - 120
Zinc	500	493		ug/L		99	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 500-783081/3
Matrix: Water
Analysis Batch: 783081

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	<0.18		1.0	0.18	mg/L			08/24/24 12:17	1
Fluoride	<0.19		1.0	0.19	mg/L			08/24/24 12:17	1
Sulfate	<0.21		1.0	0.21	mg/L			08/24/24 12:17	1

Lab Sample ID: LCS 500-783081/4
Matrix: Water
Analysis Batch: 783081

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	20.0	19.8		mg/L		99	90 - 110
Fluoride	20.0	21.0		mg/L		105	90 - 110
Sulfate	20.0	21.8		mg/L		109	90 - 110

Lab Sample ID: MB 500-783082/3
Matrix: Water
Analysis Batch: 783082

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.043		1.0	0.043	mg/L			08/24/24 12:17	1
Nitrite as N	<0.070		1.0	0.070	mg/L			08/24/24 12:17	1
Nitrate Nitrite as N	<0.070		1.0	0.070	mg/L			08/24/24 12:17	1

Lab Sample ID: LCS 500-783082/4
Matrix: Water
Analysis Batch: 783082

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	20.0	17.9		mg/L		90	90 - 110
Nitrite as N	20.0	21.7		mg/L		108	90 - 110

Lab Sample ID: MB 500-783633/33
Matrix: Water
Analysis Batch: 783633

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.12		1.0	0.12	mg/L			08/28/24 18:53	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 500-783633/34
Matrix: Water
Analysis Batch: 783633

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	19.7		mg/L		99	90 - 110		

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 500-783489/1-A
Matrix: Water
Analysis Batch: 783772

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 783489

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.0036		0.0050	0.0036	mg/L		08/27/24 14:51	08/28/24 15:39	1

Lab Sample ID: LCS 500-783489/2-A
Matrix: Water
Analysis Batch: 783772

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 783489

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.100	0.0984		mg/L		98	90 - 110		

Lab Sample ID: 500-255601-5 MS
Matrix: Water
Analysis Batch: 783772

Client Sample ID: DUP-1
Prep Type: Total/NA
Prep Batch: 783489

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	<0.0036	F1	0.100	0.0905		mg/L		91	90 - 110		

Lab Sample ID: 500-255601-5 MSD
Matrix: Water
Analysis Batch: 783772

Client Sample ID: DUP-1
Prep Type: Total/NA
Prep Batch: 783489

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	<0.0036	F1	0.100	0.0856	F1	mg/L		86	90 - 110	6	20

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 500-784489/1-A
Matrix: Water
Analysis Batch: 784892

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 784489

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	<0.10		0.20	0.10	mg/L		09/04/24 15:15	09/06/24 10:27	1

Lab Sample ID: LCS 500-784489/2-A
Matrix: Water
Analysis Batch: 784892

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 784489

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia			2.00	1.69	*-	mg/L		84	90 - 110		

Method: 365.1 - Phosphorus, Total

Lab Sample ID: MB 500-783635/1-A
Matrix: Water
Analysis Batch: 783821

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 783635

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus as P	0.0260	J	0.050	0.024	mg/L		08/28/24 09:30	08/29/24 08:37	1

Lab Sample ID: LCS 500-783635/2-A
Matrix: Water
Analysis Batch: 783821

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 783635

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phosphorus as P	1.00	0.918		mg/L		92	88 - 123

Lab Sample ID: MB 500-785143/1-A
Matrix: Water
Analysis Batch: 785490

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 785143

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus as P	<0.024		0.050	0.024	mg/L		09/09/24 09:15	09/09/24 17:07	1

Lab Sample ID: LCS 500-785143/2-A
Matrix: Water
Analysis Batch: 785490

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 785143

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phosphorus as P	1.00	0.893		mg/L		89	88 - 123

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 500-783995/3
Matrix: Water
Analysis Batch: 783995

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	4.58	J	5.0	3.7	mg/L			08/29/24 12:33	1
Bicarbonate Alkalinity as CaCO3	4.58	J	5.0	3.7	mg/L			08/29/24 12:33	1
Carbonate Alkalinity as CaCO3	<3.7		5.0	3.7	mg/L			08/29/24 12:33	1

Lab Sample ID: LCS 500-783995/4
Matrix: Water
Analysis Batch: 783995

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	100	102		mg/L		102	95 - 121

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 500-783139/1
Matrix: Water
Analysis Batch: 783139

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<4.3		10	4.3	mg/L			08/25/24 22:54	1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 500-783139/2
Matrix: Water
Analysis Batch: 783139

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			250	270		mg/L		108	80 - 120		

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 500-783711/1
Matrix: Water
Analysis Batch: 783711

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<1.9		5.0	1.9	mg/L			08/28/24 16:02	1

Lab Sample ID: LCS 500-783711/2
Matrix: Water
Analysis Batch: 783711

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			200	184		mg/L		92	80 - 120		

Lab Sample ID: 500-255601-3 DU
Matrix: Water
Analysis Batch: 783711

Client Sample ID: WP-585-440-470-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	<1.9			<1.9		mg/L				NC	5

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 500-783747/1
Matrix: Water
Analysis Batch: 783747

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<0.23		1.0	0.23	mg/L			08/28/24 21:35	1

Lab Sample ID: LCS 500-783747/2
Matrix: Water
Analysis Batch: 783747

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfide			3.64	3.65		mg/L		101	85 - 115		

Method: SM 5310C - TOC

Lab Sample ID: MB 500-783350/7
Matrix: Water
Analysis Batch: 783350

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<0.47		1.0	0.47	mg/L			08/26/24 13:13	1

Method: SM 5310C - TOC (Continued)

Lab Sample ID: LCS 500-783350/8
Matrix: Water
Analysis Batch: 783350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Organic Carbon			10.0	10.2		mg/L		102	86 - 116		

Method: SM 5310C - Organic Carbon, Dissolved (DOC)

Lab Sample ID: MB 500-783381/7
Matrix: Water
Analysis Batch: 783381

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	<0.47		1.0	0.47	mg/L			08/27/24 07:40	1

Lab Sample ID: LCS 500-783381/8
Matrix: Water
Analysis Batch: 783381

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Dissolved Organic Carbon			10.0	10.2		mg/L		102	86 - 116		

Lab Sample ID: 500-255601-1 MS
Matrix: Water
Analysis Batch: 783381

Client Sample ID: WP-585-440-470-1
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Dissolved Organic Carbon	<0.47	F1	10.0	7.21	F1	mg/L		72	75 - 125		

Lab Sample ID: 500-255601-1 MSD
Matrix: Water
Analysis Batch: 783381

Client Sample ID: WP-585-440-470-1
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dissolved Organic Carbon	<0.47	F1	10.0	7.25	F1	mg/L		72	75 - 125	0	20

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-255601-1

Client Sample ID: WP-585-440-470-1

Lab Sample ID: 500-255601-1

Date Collected: 08/22/24 15:30

Matrix: Water

Date Received: 08/24/24 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	1630			2683	JS	EET SSM	09/03/24 13:09
Dissolved	Analysis	1630		1	2710	CL	EET SSM	09/04/24 17:00
Total/NA	Prep	1630			2683	JS	EET SSM	09/03/24 13:09
Total/NA	Analysis	1630		1	2710	CL	EET SSM	09/04/24 16:50
Dissolved	Analysis	1631E		1	2681	AJD	EET SSM	08/30/24 17:57
Total/NA	Analysis	1631E		1	2681	AJD	EET SSM	08/30/24 17:53
Dissolved	Prep	1638			2665	CL	EET SSM	08/30/24 11:35
Dissolved	Analysis	1638		1	2696	V1R	EET SSM	08/30/24 17:53
Total Recoverable	Prep	1638			2665	CL	EET SSM	08/30/24 11:35
Total Recoverable	Analysis	1638		1	2696	V1R	EET SSM	08/30/24 18:11
Dissolved	Prep	3005A			783411	BDE	EET CHI	08/27/24 08:53 - 08/27/24 14:53 [1]
Dissolved	Analysis	6020B		1	783978	RN	EET CHI	08/29/24 17:02
Dissolved	Prep	3005A			783411	BDE	EET CHI	08/27/24 08:53 - 08/27/24 14:53 [1]
Dissolved	Analysis	6020B		5	784174	RN	EET CHI	08/30/24 11:24
Total Recoverable	Prep	3005A			783411	BDE	EET CHI	08/27/24 08:53 - 08/27/24 14:53 [1]
Total Recoverable	Analysis	6020B		1	783978	RN	EET CHI	08/29/24 16:50
Total Recoverable	Prep	3005A			783411	BDE	EET CHI	08/27/24 08:53 - 08/27/24 14:53 [1]
Total Recoverable	Analysis	6020B		5	784174	RN	EET CHI	08/30/24 11:17
Total Recoverable	Prep	3005A			783411	BDE	EET CHI	08/27/24 08:53 - 08/27/24 14:53 [1]
Total Recoverable	Analysis	SM 2340B		1	784035	DAJ	EET CHI	08/30/24 10:21
Total/NA	Analysis	300.0		1	783081	W1T	EET CHI	08/24/24 12:48
Total/NA	Analysis	300.0		1	783082	W1T	EET CHI	08/24/24 12:48
Total/NA	Analysis	300.0		100	783633	MB	EET CHI	08/28/24 22:01
Total/NA	Prep	Distill/CN			783489	AC	EET CHI	08/27/24 14:51 - 08/27/24 15:21 [1]
Total/NA	Analysis	335.4		1	783772	AC	EET CHI	08/28/24 16:33
Total/NA	Prep	Distill/Ammonia			784489	EB	EET CHI	09/04/24 15:15 - 09/04/24 16:15 [1]
Total/NA	Analysis	350.1		1	784892	KF	EET CHI	09/06/24 10:36
Total/NA	Prep	365.2/365.3/365			783635	ER	EET CHI	08/28/24 09:30 - 08/28/24 13:22 [1]
Total/NA	Analysis	365.1		1	783821	KF	EET CHI	08/29/24 08:48
Total/NA	Analysis	SM 2320B		1	783995	ER	EET CHI	08/29/24 14:00
Total/NA	Analysis	SM 2520B		1	784974	TR	EET CHI	09/08/24 13:34
Total/NA	Analysis	SM 2540C		1	783139	CLB	EET CHI	08/25/24 23:18
Total/NA	Analysis	SM 2540D		1	783711	SO	EET CHI	08/28/24 16:21 - 08/28/24 16:23 [1]
Total/NA	Analysis	SM 4500 S2 F		1	783747	CLB	EET CHI	08/28/24 21:51 - 08/28/24 21:54 [1]
Dissolved	Analysis	SM 5310C		1	783381	TR	EET CHI	08/27/24 07:40
Total/NA	Analysis	SM 5310C		1	783350	TR	EET CHI	08/26/24 15:05

Client Sample ID: WP-585-440-470-1 FB

Lab Sample ID: 500-255601-2

Date Collected: 08/22/24 15:30

Matrix: Water

Date Received: 08/24/24 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	2681	AJD	EET SSM	08/30/24 18:02

Client Sample ID: WP-585-440-470-2

Lab Sample ID: 500-255601-3

Date Collected: 08/22/24 17:00

Matrix: Water

Date Received: 08/24/24 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	1630			2683	JS	EET SSM	09/03/24 13:09
Dissolved	Analysis	1630		1	2710	CL	EET SSM	09/04/24 17:20
Total/NA	Prep	1630			2683	JS	EET SSM	09/03/24 13:09
Total/NA	Analysis	1630		1	2710	CL	EET SSM	09/04/24 17:10
Dissolved	Analysis	1631E		1	2681	AJD	EET SSM	08/30/24 18:10
Total/NA	Analysis	1631E		1	2681	AJD	EET SSM	08/30/24 18:06
Dissolved	Prep	1638			2665	CL	EET SSM	08/30/24 11:35
Dissolved	Analysis	1638		1	2696	V1R	EET SSM	08/30/24 18:04
Total Recoverable	Prep	1638			2665	CL	EET SSM	08/30/24 11:35
Total Recoverable	Analysis	1638		1	2696	V1R	EET SSM	08/30/24 17:09
Dissolved	Prep	3005A			783411	BDE	EET CHI	08/27/24 08:53 - 08/27/24 14:53 [1]
Dissolved	Analysis	6020B		1	783978	RN	EET CHI	08/29/24 17:04
Dissolved	Prep	3005A			783411	BDE	EET CHI	08/27/24 08:53 - 08/27/24 14:53 [1]
Dissolved	Analysis	6020B		5	784174	RN	EET CHI	08/30/24 11:27
Total Recoverable	Prep	3005A			783411	BDE	EET CHI	08/27/24 08:53 - 08/27/24 14:53 [1]
Total Recoverable	Analysis	6020B		1	783978	RN	EET CHI	08/29/24 16:52
Total Recoverable	Prep	3005A			783411	BDE	EET CHI	08/27/24 08:53 - 08/27/24 14:53 [1]
Total Recoverable	Analysis	6020B		5	784174	RN	EET CHI	08/30/24 11:20
Total Recoverable	Prep	3005A			783411	BDE	EET CHI	08/27/24 08:53 - 08/27/24 14:53 [1]
Total Recoverable	Analysis	SM 2340B		1	784035	DAJ	EET CHI	08/30/24 10:21
Total/NA	Analysis	300.0		1	783081	W1T	EET CHI	08/24/24 13:19
Total/NA	Analysis	300.0		1	783082	W1T	EET CHI	08/24/24 13:19
Total/NA	Analysis	300.0		100	783633	MB	EET CHI	08/28/24 22:16
Total/NA	Prep	Distill/CN			783489	AC	EET CHI	08/27/24 14:51 - 08/27/24 15:21 [1]
Total/NA	Analysis	335.4		1	783772	AC	EET CHI	08/28/24 16:35
Total/NA	Prep	Distill/Ammonia			784489	EB	EET CHI	09/04/24 15:15 - 09/04/24 16:15 [1]
Total/NA	Analysis	350.1		1	784892	KF	EET CHI	09/06/24 10:37
Total/NA	Prep	365.2/365.3/365			783635	ER	EET CHI	08/28/24 09:30 - 08/28/24 13:22 [1]
Total/NA	Analysis	365.1		1	783821	KF	EET CHI	08/29/24 08:49
Total/NA	Analysis	SM 2320B		1	783995	ER	EET CHI	08/29/24 14:09
Total/NA	Analysis	SM 2520B		1	784974	TR	EET CHI	09/08/24 13:34
Total/NA	Analysis	SM 2540C		1	783139	CLB	EET CHI	08/25/24 23:20
Total/NA	Analysis	SM 2540D		1	783711	SO	EET CHI	08/28/24 16:23 - 08/28/24 16:24 [1]
Total/NA	Analysis	SM 4500 S2 F		1	783747	CLB	EET CHI	08/28/24 21:54 - 08/28/24 21:58 [1]
Dissolved	Analysis	SM 5310C		1	783381	TR	EET CHI	08/27/24 07:40
Total/NA	Analysis	SM 5310C		1	783350	TR	EET CHI	08/26/24 15:34

Client Sample ID: WP-585-440-470-2 FB

Lab Sample ID: 500-255601-4

Date Collected: 08/22/24 17:00

Matrix: Water

Date Received: 08/24/24 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	2681	AJD	EET SSM	08/30/24 18:14

Client Sample ID: DUP-1

Lab Sample ID: 500-255601-5

Date Collected: 08/22/24 23:59

Matrix: Water

Date Received: 08/24/24 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	1630			2683	JS	EET SSM	09/03/24 13:09
Dissolved	Analysis	1630		1	2710	CL	EET SSM	09/04/24 17:41
Total/NA	Prep	1630			2683	JS	EET SSM	09/03/24 13:09
Total/NA	Analysis	1630		1	2710	CL	EET SSM	09/04/24 17:30
Total/NA	Analysis	1631E		1	2681	AJD	EET SSM	08/30/24 18:18
Dissolved	Prep	1638			2665	CL	EET SSM	08/30/24 11:35
Dissolved	Analysis	1638		1	2696	V1R	EET SSM	08/30/24 18:07
Total Recoverable	Prep	1638			2665	CL	EET SSM	08/30/24 11:35
Total Recoverable	Analysis	1638		1	2696	V1R	EET SSM	08/30/24 18:15
Dissolved	Prep	3005A			783411	BDE	EET CHI	08/27/24 08:53 - 08/27/24 14:53 [1]
Dissolved	Analysis	6020B		1	783978	RN	EET CHI	08/29/24 17:06
Dissolved	Prep	3005A			783411	BDE	EET CHI	08/27/24 08:53 - 08/27/24 14:53 [1]
Dissolved	Analysis	6020B		5	784174	RN	EET CHI	08/30/24 11:29
Total Recoverable	Prep	3005A			783411	BDE	EET CHI	08/27/24 08:53 - 08/27/24 14:53 [1]
Total Recoverable	Analysis	6020B		1	783978	RN	EET CHI	08/29/24 16:54
Total Recoverable	Prep	3005A			783411	BDE	EET CHI	08/27/24 08:53 - 08/27/24 14:53 [1]
Total Recoverable	Analysis	6020B		5	784174	RN	EET CHI	08/30/24 11:22
Total Recoverable	Prep	3005A			783411	BDE	EET CHI	08/27/24 08:53 - 08/27/24 14:53 [1]
Total Recoverable	Analysis	SM 2340B		1	784035	DAJ	EET CHI	08/30/24 10:21
Total/NA	Analysis	300.0		1	783081	W1T	EET CHI	08/24/24 13:35
Total/NA	Analysis	300.0		1	783082	W1T	EET CHI	08/24/24 13:35
Total/NA	Analysis	300.0		100	783633	MB	EET CHI	08/28/24 22:32
Total/NA	Prep	Distill/CN			783489	AC	EET CHI	08/27/24 14:51 - 08/27/24 15:21 [1]
Total/NA	Analysis	335.4		1	783772	AC	EET CHI	08/28/24 16:36
Total/NA	Prep	Distill/Ammonia			784489	EB	EET CHI	09/04/24 15:15 - 09/04/24 16:15 [1]
Total/NA	Analysis	350.1		1	784892	KF	EET CHI	09/06/24 10:37
Total/NA	Prep	365.2/365.3/365			785143	ER	EET CHI	09/09/24 09:15 - 09/09/24 13:15 [1]
Total/NA	Analysis	365.1		1	785490	KF	EET CHI	09/09/24 17:08
Total/NA	Analysis	SM 2320B		1	783995	ER	EET CHI	08/29/24 14:17
Total/NA	Analysis	SM 2520B		1	784974	TR	EET CHI	09/08/24 13:34
Total/NA	Analysis	SM 2540C		1	783139	CLB	EET CHI	08/25/24 23:23
Total/NA	Analysis	SM 2540D		1	783711	SO	EET CHI	08/28/24 16:26 - 08/28/24 16:27 [1]
Total/NA	Analysis	SM 4500 S2 F		1	783747	CLB	EET CHI	08/28/24 21:58 - 08/28/24 22:01 [1]
Dissolved	Analysis	SM 5310C		1	783381	TR	EET CHI	08/27/24 07:40
Total/NA	Analysis	SM 5310C		1	783350	TR	EET CHI	08/26/24 16:02

Client Sample ID: DUP-1 FB

Lab Sample ID: 500-255601-6

Date Collected: 08/22/24 23:59

Matrix: Water

Date Received: 08/24/24 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	2697	CL	EET SSM	09/03/24 16:50

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-255601-1

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255601-1
Project/Site: FOTH - White Pines, MI

Laboratory: Eurofins Chicago

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Georgia	State	N/A	05-31-25
Georgia (DW)	State	939	05-31-25
Hawaii	State	NA	05-31-25
Illinois	NELAP	IL00035	05-31-25
Indiana	State	C-IL-02	05-31-25
Iowa	State	082	05-01-26
Kansas	NELAP	E-10161	10-31-24
Kentucky (UST)	State	AI # 108083	05-31-25
Kentucky (WW)	State	KY90023	12-31-24
Louisiana (All)	NELAP	02046	06-30-25
Mississippi	State	NA	05-31-25
North Carolina (WW/SW)	State	291	12-31-24
North Dakota	State	R-194	04-29-24 *
Oklahoma	State	8908	08-31-24 *
South Carolina	State	77001003	04-29-24 *
USDA	US Federal Programs	P330-18-00018	03-30-26
Wisconsin	State	999580010	08-31-25
Wyoming	State	8TMS-Q	05-31-25

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	12-18-24
ANAB	Dept. of Defense ELAP	L2236	01-19-25
ANAB	Dept. of Energy	L2236.01	12-18-24
ANAB	ISO/IEC 17025	L2236	01-19-25
California	State	2954	12-18-24
Florida	NELAP	E87575	12-18-24
Louisiana (All)	NELAP	03073	12-18-24
Maine	State	WA01273	12-18-24
New Jersey	NELAP	WA014	12-18-24
New York	NELAP	11662	12-18-24
Oregon	NELAP	4167-008	07-07-25
US Fish & Wildlife	US Federal Programs	A20571	06-30-25
USDA	US Federal Programs	525-23-4-22573	12-18-24
Washington	State	C788-23a	12-18-24
Wisconsin	State	399133460	12-18-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

2417 Bond Street
University Park, IL 60484
Phone (708) 534-5200 Phone (708) 534-5211

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Justin Brown	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-126105-50170.1
Client Contact: Jakob Wartman	Phone: 920-858-1535	E-Mail: Sandra.Fredrick@et.eurofinsus com	State of Origin: MI	Page: Page 1 of 1
Company: Foth Infrastructure & Environment, LLC	PWSID:			Job #: 500-255601
Address: Missabe Building 227 West 1st. Street, Suite 920	Due Date Requested: regular			
City: Duluth	TAT Requested (days): regular			
State, Zip: MN, 55802	Compliance Project: Δ Yes Δ No			
Phone: 218-481-6014(Tel)	PO #: Purchase Order not required			
Email: Jakob.Wartman@foth.com	WO #:			
Project Name: FOTH - White Pines, MI	Project #: 50023463			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
N - None
S - H2SO4
CB - ZnAcetate/NaOH
B - NaOH
D - HNO3

500-255601 COC

Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1631E - Mercury, Low Level (CVAFS)	1631E - Dissolved Mercury, Low Level (FF)	2320B, 2540C, 2540D, 300.0_28D, 300_48HR, SM2520_B	350.1 Ammonia, 365.1 Phosphorus	SM4500_S2_F - Sulfide	335.4 - Cyanide, Total	SM5310_DOC_C - DOC	6020B - Total Metals (27), SM2340B - Hardness	6020B - Dissolved Metals (ICP/MS) - 27 elements	3500_CR_B - Chromium, Hexavalent LL H2 Field Lock	3500_CR_B - Dissolved Chromium, Hexavalent (Field Filtered)	1638 - Uranium only (ICP/MS) Total & Dissolved	163 - Methyl Hg - Total & Dissolved	Total Number of containers	Special Instructions/Note:
				Preservation Code.				N	N	N	S	CB	B	S	D	D	N	N	D	D		
1/2	WP-585-440-470-1 / FB	8/22/24	1530	G	Water			X		X	X	X	X		X		X	X	X	X		
				G	Water	X			X					X		X			X	X		
3/4	WP-585-440-470-2 / FB	8/22/24	1700	G	Water			X		X	X	X	X		X		X	X	X	X		
				G	Water	X			X					X		X			X	X		
5/6	DUP-1 / FB	8/22/24		G	Water			X		X	X	X	X		X		X	X	X	X		
					Water	X		X						X		X			X	X		
					Water																	
					Water																	
					Water																	
					Water																	
					Water																	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I, II, III, IV, Other (specify): standard

Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Justin Brown	8/23/24 0900	FOTH	Stephanie Hernandez	8/24/24 0955	EETA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company

Custody Seals Intact | Custody Seal No.

Cooler Temperature(s) °C and Other Remarks: 5.4+5.3, 3.0+2.9, 3.9+3.8, 4.6+4.3, 4.2, 3.6+3.5

9/12/2024


JUSTIN BR
WHITE PINE COPPER
35362 MALL CIRCLE DRIVE
WHITE PINE, MI 49971
UNITED STATES US
ACTWGT: 25.00 LB MAN
CAD: 0780307/CAFE3808
Part # 159469-434 MTW EXP 01/25
TO SAMPLE RECEIPT
EUROFINS CHICAGO
2417 BOND ST.
5.4+5.3
UNIVERSITY PARK IL 60484
(708) 534-5200
REF:
INV:
PO:
DEPT
RMA:
FedEx Express
J241023112201uv
FedEx
TRK# 0221 4051 7962 3441
SATURDAY 12:00P
PRIORITY OVERNIGHT
XØ JOTA
60484
IL-US
ORD
5025547 23Aug2024 CMXA 581G6/A12D/CØ88


500-255601 Waybi
JUSTIN BROWN
WHITE PINE COPPER
35503 MALL CIRCLE
WHITE PINE, MI 49971
UNITED STATES US
ACTWGT: 25.00 LB MAN
CAD: 0780307/CAFE3808
Part # 159469-434 MTW EXP 01/25
TO SAMPLE RECEIPT
EUROFINS CHICAGO
2417 BOND ST.
3.0+2.9
UNIVERSITY PARK IL 60484
(708) 534-5200
REF:
INV:
PO:
DEPT:
RMA.
FedEx Express
J241023112201uv
FedEx
TRK# 0221 7414 0291 7275
SATURDAY 12:00P
PRIORITY OVERNIGHT
XØ JOTA
60484
IL-US
ORD
5025547 23Aug2024 CMXA 581G6/A12D/CØ88


ACTWGT: 25.00 LB MAN
CAD: 0780307/CAFE3808
39138
ARM IL 60484
DEPT:
FedEx
Express
SATURDAY 12:00P
PRIORITY OVERNIGHT
4051 7962 3420
60484
IL-US
ORD


JUSTIN BROWN
WHITE PINE COPPER
35362 MALL CIRCLE DRIVE
WHITE PINE, MI 49971
UNITED STATES US
TO SAMPLE RECEIPT
EUROFINS CHICAGO
2417 BOND ST.
UNIVERSITY PARK IL 60484
(708) 534-5200
REF:
INV:
PO:
DEPT:
RMA:
FedEx
Express
RETURNS MON-SAT
PRIORITY OVERNIGHT
TRK# 0221 4051 7962 3452
SATURDAY 12:00P
PRIORITY OVERNIGHT
60484
IL-US
ORD

JUSTIN BROWN
WHITE PINE COPPER
35362 MALL CIRCLE DRIVE

WHITE PINE, MI 49971
UNITED STATES US

ACTWGT: 25.00 LB MAN
CAD: 0780307/CAFE3808

Part # 59-69-434 MTW EXP 02/25

TO SAMPLE RECEIPT
EUROFINS CHICAGO
2417 BOND ST.

4.3+4.2

UNIVERSITY PARK IL 60484
(708) 534-5200 REF:
INV:
PO: DEPT:

RMA:

FedEx Express

J241023112201uv

FedEx
TRK# 0221 4051 7962 3419

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO JOTA

60484
IL-US
ORD

5025547 23Aug2024 CMXA 581G6/A12D/C0B8

JUSTIN BROWN (FOTH)
WHITE PINE COPPER
35362 MALL CIRCLE DRIVE

WHITE PINE, MI 49971
UNITED STATES US

ACTWGT: 20.00 LB MAN
CAD: 0780307/CAFE3808

Part # 59-69-434 MTW EXP 02/25

TO SAMPLE RECEIPT
EUROFINS CHICAGO
2417 BOND ST.

UNIVERSITY PARK IL 60484
(708) 534-5200 REF:
INV:
PO: DEPT:

RMA:

FedEx Express

J241023112201uv

RETURNS MON-SAT

FedEx
TRK# 0221 4051 7962 5374

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO JOTA

3.6+3.5

60484
IL-US
ORD

5025547 23Aug2024 CMXA 581G6/A12D/C0B8

Eurofins Chicago
2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM	Carrier Tracking No(s)	COC No
		Fredrick, Sandie		500-191977.1
Client Contact	**Phone**	**E-Mail**	**State of Origin**	**Page**
Shipping/Receiving		Sandra.Fredrick@et.eurofinsus.com	Michigan	Page 1 of 1
Company		**Accreditations Required (See note)**		**Job #**
Eurofins Environment Testing Northwest,				500-255601-1
Address	**Due Date Requested:**			
5755 8th Street East, ,	9/9/2024			
City	**TAT Requested (days):**			
Tacoma				
State, Zip				
WA, 98424				
Phone	**PO #**			
253-922-2310(Tel)				
Email	**WO #**			
Project Name	**Project #**			
FOTH - White Pines, MI	50023463			
Site	**SSOW#**			

Analysis Requested

Preservation Codes:
-

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1638/1638_Prep_W Uranium only (ICP/MS)	1638/FIELD_FLTRD Dissolved Uranium only (ICP/MS) (f	1630_ME/FIELD_FLTRD Dissolved Methyl Mercury (field filtered	1630_ME/1630_Dist_PFP Methyl Mercury	1631E/ Mercury, Low Level (CVAFS)	1631E/FIELD_FLTRD Dissolved Mercury, Low Level (FF)	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
WP-585-440-470-1 (500-255601-1)	8/22/24	15:30 Eastern	G	Water			X	X	X	X	X	X	8	
WP-585-440-470-1 FB (500-255601-2)	8/22/24	15:30 Eastern	G	Water							X		2	
WP-585-440-470-2 (500-255601-3)	8/22/24	17:00 Eastern	G	Water			X	X	X	X	X	X	8	
WP-585-440-470-2 FB (500-255601-4)	8/22/24	17:00 Eastern	G	Water							X		2	
DUP-1 (500-255601-5)	8/22/24	23:59 Eastern	G	Water			X	X	X	X	X		6	
DUP-1 FB (500-255601-6)	8/22/24	23:59 Eastern	G	Water							X		2	

Therm. ID: SC02 Cust. Seal: (Y) / N
Uncorr./Corr. Temp: 0.3 / 0.3 °C
Delivery: UPS / FedEx / Other: _____
Ice Type: Blue / Dry / Wet / None
Label Ver.: 12 Packing: D

Note Since laboratory accreditations are subject to change, Eurofins Chicago places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipm ntly maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Chicago laboratory or other instructions will be provided Any c ention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Chicago

Possible Hazard Identification	Sample Disposal (A fee may be asse
Unconfirmed 7051 7620 734U	☐ Return To Client ☐ Dispos... By Lab ... Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	8/26/24 1045		[signature]	8/27/24 1015	EFNS
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact:	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks
Δ Yes Δ No		

Eurofins Calscience
2841 Dow Avenue, Suite 100
Tustin, CA 92780
Phone: 714-895-5494

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM. Thompson, Lori	Carrier Tracking No(s)	COC No 570-392361.1
Client Contact Shipping/Receiving	Phone	E-Mail. Lori.Thompson@et.eurofinsus.com	State of Origin California	Page Page 1 of 1
Company Eurofins Environment Testing Northwest,		Accreditations Required (See note) NELAP - Oregon; State - California		Job # 570-196395-1
Address 5755 8th Street East, ,	Due Date Requested: 9/6/2024			
City Tacoma	TAT Requested (days):			
State, Zip WA, 98424				
Phone. 253-922-2310(Tel)	PO #:			
Email:	WO #			
Project Name: Port of Long Beach Deep Draft Navigation / 5833.12	Project # 57000560			
Site: Kinnetic - Lower Los Angeles River	SSOW#			

Analysis Requested

Preservation Codes: -

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1638/1638_Prep_W (MOD) Custom List 5: 8-12 Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
LB24-MCE-A (570-196395-1)	8/21/24	10:12 Pacific	G	Water			X	1	
LB24-MCW-A (570-196395-2)	8/22/24	13:20 Pacific	G	Water			X	1	
LB24-TB-A (570-196395-3)	8/21/24	10:27 Pacific	G	Water			X	1	
LB24-TB-B (570-196395-4)	8/21/24	10:28 Pacific	G	Water			X	1	
LB24-PJAC-A (570-196395-5)	8/21/24	10:07 Pacific	G	Water			X	1	
LB24-PJAC-B (570-196395-6)	8/22/24	13:20 Pacific	G	Water			X	1	
LB24-PJAC-C (570-196395-7)	8/22/24	13:20 Pacific	G	Water			X	1	
LB24-PJAC-T (570-196395-8)	8/22/24	13:20 Pacific	G	Water			X	1	
POLB Background Water (570-196395-9)	8/22/24	12:40 Pacific	G	Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Calscience places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwa maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Calscience laboratory or other instructions will be provided. Any cha attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Calscience

Therm. ID: SC03 Cust. Seal: (Y) / N
Uncorr./Corr. Temp: 0.3 /1.3 °C
Delivery: UPS / FedEx / Other. ____
Ice Type: Blue / Dry / Wet / None
Label Ver.: M Packing: B

Possible Hazard Identification	Sample Disposal (A fee may be assessed if sa
Unconfirmed 4113 2939 2741	☐ Return To Client ☐ Disposal By La
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time:	Company	Received by	Date/Time:	Company
	8/26/24 1224	EC		8/27/24 10:20	ECL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins Lancaster Laboratories Environme
2425 New Holland Pike
Lancaster, PA 17601
Phone: 717-656-2300 Fax: 717-656-2681

Chain of Custody Record

eurofins

Client Information (Sub Contract Lab)	Sampler	Lab PM: Moeller, Megan	Carrier Tracking No(s)	COC No: 410-3069792 1
Client Contact: Shipping/Receiving	Phone	E-Mail: Megan Moeller@et eurofinsus com	State of Origin: New Jersey	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest,		Accreditations Required (See note): NELAP - New Jersey		Job #: 410-185568-3
Address: 5755 8th Street East, ,	Due Date Requested: 9/20/2024			
City: Tacoma	TAT Requested (days):			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #			
Email	WO #			
Project Name: IAOC H (Reservoirs), EMBRC	Project #: 41001131			
Site: Bayway Refinery Complex EMBRC	SSOW#			

Analysis Requested

Preservation Codes: -

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1630_ME/1630_Prep_S_LL Methyl Mercury	1630_ME/1630_Dist_PFP Methyl Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
SED-H50_0-0.5 (410-185568-1)	8/23/24	08.55 Eastern	G	Solid			X		1	
SED-H51_0-0.5 (410-185568-4)	8/23/24	11 30 Eastern	G	Solid			X		1	
SED-H51_1-1 5 (410-185568-5)	8/23/24	11 35 Eastern	G	Solid			X		1	
Field Blank (410-185568-8)	8/23/24	12:30 Eastern	G	Water				X	1	
										Sm Blue

Therm. ID: SC04 Cust. Seal: (Y) / N
Uncorr./Corr. Temp: 24.1 / 24.0 °C
Delivery: UPS / (FedEx) / Other
Ice Type: Blue / Dry / (Wet) / None
Label Ver. 4 Packing: 10

Note: Since laboratory accreditations are subject to change, Eurofins Lancaster Laboratories Environment Testing, LLC places the ownership of method, analyte & accreditation compliance upon our subcontra ...ody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Lancaster Laboratories Env... ...laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Lancaster Laboratories Environment Testing, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Lancaster Laboratories Environment Testing, LLC.

Possible Hazard Identification: Unconfirmed 6449 7740 2765	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	8/26/24 1440	FEDEX		8/27/24 1030	EPLS
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks

Eurofins Lancaster Laboratories Environme
2425 New Holland Pike
Lancaster, PA 17601
Phone: 717-656-2300 Fax: 717-656-2681

Chain of Custody Record

eurofins

Client Information (Sub Contract Lab)	Sampler	Lab PM	Carrier Tracking No(s)	COC No
		Moeller, Megan		410-3069792 1
Client Contact	Phone	E-Mail	State of Origin	Page
Shipping/Receiving		Megan Moeller@et eurofinsus com	New Jersey	Page 1 of 1
Company		Accreditations Required (See note)		Job #
Eurofins Environment Testing Northwest,		NELAP - New Jersey		410-185329-3
Address	Due Date Requested:	Analysis Requested		Preservation Codes:
5755 8th Street East, ,	9/19/2024			-
City	TAT Requested (days):			
Tacoma				
State, Zip				
WA, 98424				
Phone	PO #			
253-922-2310(Tel)				
Email	WO #			
Project Name	Project #			
IAOC H (Reservoirs), EMBRC	41001131			
Site	SSOW#			Other:
Bayway Refinery Complex EMBRC				

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1630_ME/1630_Prep_S_LL Methyl Mercury	1630_ME/1630_Dist_PFP Methyl Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
SED-H46_0-0 5 (410-185329-1)	8/22/24	09.35 Eastern	G	Solid			X		1	
SED-H47_0-0.5 (410-185329-4)	8/22/24	09 50 Eastern	G	Solid			X		1	
SED-H47_1-1.5 (410-185329-5)	8/22/24	09.55 Eastern	G	Solid			X		1	
SED-H49_0-0.5 (410-185329-8)	8/22/24	10:30 Eastern	G	Solid			X		1	
SED-H48_0-0 5 (410-185329-11)	8/22/24	11:45 Eastern	G	Solid			X		1	
SED-H48_1-1 5 (410-185329-12)	8/22/24	11.50 Eastern	G	Solid			X		1	
Field Blank (410-185329-15)	8/22/24	13.00 Eastern	G	Water				X	1	Sm Blue

Therm. ID: SC04 Cust. Seal: (Y) N
Uncorr./Corr. Temp: 4.1 /4.0 °C
Delivery: UPS / FedEx / Other
Ice Type: Blue / Dry / Wet / None
Label Ver.: Packing: B

Note Since laboratory accreditations are subject to change, Eurofins Lancaster Laboratories Environment Testing, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract l the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Lancaster Laboratories Enviro changes to accreditation status should be brought to Eurofins Lancaster Laboratories Environment Testing, LLC attention immediately If all requested accreditations are current to date, return the signed Chain o Environment Testing, LLC

Possible Hazard Identification	Sample Disposal (A fee may be assessed if
Unconfirmed 6449 7740 2715	Return To Client / Disposal By Lab / Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date.	Time	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	8/26/24 14 40	ET		8/27/24 10:30	
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks

2 COOLERS

Eurofins Calscience
2841 Dow Avenue, Suite 100
Tustin, CA 92780
Phone: 714-895-5494

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM. Chang, Terri	Carrier Tracking No(s)	COC No: 570-392257.1
Client Contact: Shipping/Receiving	Phone.	E-Mail: Terri.Chang@et.eurofinsus.com	State of Origin: Hawaii	Page: Page 1 of 3
Company: Eurofins Environment Testing Northwest,		Accreditations Required (See note): NELAP - Oregon; State - California		Job #: 570-196128-1
Address: 5755 8th Street East, ,	Due Date Requested: 9/9/2024			
City: Tacoma	TAT Requested (days):			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #			
Email	WO #.			
Project Name. 2408088 / NPDES Permit No.HI0000094 Effluent 5 Yr	Project # 57019910			
Site:	SSOW#			

Therm. ID: SC03 Cust. Seal: (Y) / N
Uncorr./Corr. Temp: 0.1 /0.1 °C
Delivery: UPS / FedEx / Other
Ice Type: Blue / Dry / Wet / None
Label Ver.: N Packing: B

Therm. ID: SC02 Cust. Seal: (Y) N
Uncorr./Corr. Temp: -0.2/-0.2 °C
Delivery: UPS / FedEx / Other:
Ice Type: Blue / Dry / (Wet) / None
Label Ver.: N Packing: B

4y RM
4y RM

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1631E/ Mercury, Total	Total	Special Instructions/Note:
			Preservation Code:						
Kahului Outfall 001 (570-196128-1)	8/18/24	21:56 Hawaiian	G	Water			X	2	
Kahului Outfall 001 (570-196128-2)	8/19/24	00:54 Hawaiian	G	Water			X	2	
Kahului Outfall 001 (570-196128-3)	8/19/24	04:00 Hawaiian	G	Water			X	2	
Kahului Outfall 001 (570-196128-4)	8/19/24	07:01 Hawaiian	G	Water			X	2	
Kahului Outfall 002 (570-196128-5)	8/18/24	22:07 Hawaiian	G	Water			X	2	
Kahului Outfall 002 (570-196128-6)	8/19/24	01:10 Hawaiian	G	Water			X	2	
Kahului Outfall 002 (570-196128-7)	8/19/24	04:07 Hawaiian	G	Water			X	2	
Kahului Outfall 003 (570-196128-8)	8/19/24	07:14 Hawaiian	G	Water			X	2	
Kahului Intake 1 (570-196128-17)	8/18/24	22:47 Hawaiian	G	Water			X	2	

Note. Since laboratory accreditations are subject to change, Eurofins Calscience places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Calscience laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Calscience attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Calscience.

Possible Hazard Identification: Unconfirmed 4113 2839 2330	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment

Relinquished by	Date/Time: 8/16/24 910	Company EC	Received by	Date/Time: 8/17/24 1010	Company ESLS
Relinquished by.	Date/Time:	Company	Received by	Date/Time.	Company
Relinquished by.	Date/Time.	Company	Received by.	Date/Time.	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins Calscience
2841 Dow Avenue, Suite 100
Tustin, CA 92780
Phone: 714-895-5494

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Chang, Terri	Carrier Tracking No(s)	COC No: 570-392257.2
Client Contact: Shipping/Receiving	Phone	E-Mail: Terri.Chang@et.eurofinsus.com	State of Origin: Hawaii	Page: Page 2 of 3
Company: Eurofins Environment Testing Northwest,		Accreditations Required (See note): NELAP - Oregon; State - California		Job #: 570-196128-1
Address: 5755 8th Street East, ,	Due Date Requested: 9/9/2024			
City: Tacoma	TAT Requested (days):			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #			
Email	WO #			
Project Name: 2408088 / NPDES Permit No.HI0000094 Effluent 5 Yr	Project #: 57019910			
Site.	SSOW#:			

Analysis Requested

Preservation Codes: -

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1631E/ Mercury, Total	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
Kahului Intake 1 (570-196128-18)	8/19/24	02:18 Hawaiian	G	Water			X	1	
Kahului Intake 1 (570-196128-19)	8/19/24	05:03 Hawaiian	G	Water			X	2	
Kahului Intake 1 (570-196128-20)	8/19/24	08:21 Hawaiian	G	Water			X	2	
Kahului Intake 2 (570-196128-21)	8/18/24	22:53 Hawaiian	G	Water			X	2	
Kahului Intake 2 (570-196128-22)	8/19/24	02:22 Hawaiian	G	Water			X	2	
Kahului Intake 2 (570-196128-23)	8/19/24	05:09 Hawaiian	G	Water			X	2	
Kahului Intake 2 (570-196128-24)	8/19/24	08:28 Hawaiian	G	Water			X	2	
Kahului Intake 2 (570-196128-25)	8/18/24	22:59 Hawaiian	G	Water			X	2	
Kahului Intake 3 (570-196128-26)	8/19/24	02:27 Hawaiian	G	Water			X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Calscience places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Calscience laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Calscience attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Calscience.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		8/20/24 910	EC		8/21/24 1000	ECTN
2	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
3	Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks.

Eurofins Calscience
2841 Dow Avenue, Suite 100
Tustin, CA 92780
Phone: 714-895-5494

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler	Lab PM. Chang, Terri	Carrier Tracking No(s)	COC No 570-392257.3
Client Contact: Shipping/Receiving	Phone.	E-Mail Terri.Chang@et.eurofinsus.com	State of Origin. Hawaii	Page Page 3 of 3
Company Eurofins Environment Testing Northwest,		Accreditations Required (See note) NELAP - Oregon; State - California		Job #. 570-196128-1
Address. 5755 8th Street East, ,	Due Date Requested: 9/9/2024			Preservation Codes: -
City Tacoma	TAT Requested (days):			
State, Zip WA, 98424				
Phone. 253-922-2310(Tel)	PO #			
Email	WO #			Other:
Project Name 2408088 / NPDES Permit No.HI0000094 Effluent 5 Yr	Project # 57019910			
Site	SSOW#.			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1631E/ Mercury, Total	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
Kahului Intake 3 (570-196128-27)	8/19/24	05:15 Hawaiian	G	Water			X	1	
Kahului Intake 3 (570-196128-28)	8/19/24	08:33 Hawaiian	G	Water			X	2	
Kahului Intake 4 (570-196128-29)	8/18/24	23:03 Hawaiian	G	Water			X	2	
Kahului Intake 4 (570-196128-30)	8/19/24	02:31 Hawaiian	G	Water			X	2	
Kahului Intake 4 (570-196128-31)	8/19/24	05:29 Hawaiian	G	Water			X	2	
Kahului Intake 4 (570-196128-32)	8/19/24	08:38 Hawaiian	G	Water			X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Calscience places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Calscience laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Calscience attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Calscience.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	8/26/24 910	EC		8/27/24 [illegible]	TUM ECTN
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins Orlando
481 Newburyport Avenue
Altamonte Springs, FL 32701
Phone: 407-339-5984 Fax: 407-260-6110

Chain of Custody Record

eurofins

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Pasipanki, Carlene	Carrier Tracking No(s):	COC No: 670-34976.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: carlene.pasipanki@et.eurofinsus.com	State of Origin: Florida	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest,		Accreditations Required (See note): NELAP - Florida		Job #: 670-46181-1
Address: 5755 8th Street East, ,	Due Date Requested: 9/6/2024			Preservation Codes: -
City: Tacoma	TAT Requested (days):			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #:			
Email:	WO #:			
Project Name: Aquarium Testing	Project #: 67001280			
Site:	SSOW#:			Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1640/1640_Prep Al, Sb, As, Ba, Cd, Cr, Co, Cu, Fe, Pb,	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X		X	
Main Tank (670-46181-1)	8/22/24	14:00 Eastern	G	Water			X	1	Matrix is Seawater

Box

Therm. ID: SC03 Cust. Seal: Y / N
Uncorr./Corr. Temp: 22.5/22.3 °C
Delivery: UPS / FedEx / Other
Ice Type: Blue / Dry / Wet None
Label Ver. 12 Packing: B

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under ... laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	8/26/24 1200			8/27/24 10:10	ETN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Foth Infrastructure & Environment, LLC

Job Number: 500-255601-1

Login Number: 255601
List Number: 1
Creator: Hernandez, Stephanie

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.3,2.9,3.8,4.5,4.2,3.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Received extra samples not listed on COC.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	False	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Foth Infrastructure & Environment, LLC

Job Number: 500-255601-1

Login Number: 255601
List Number: 2
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 08/27/24 01:50 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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500-255601 Field Sheet

Date:	8/27/2024
End Time:	1400
pH Paper Lot:	HC324 723
Analyst:	

Preservative ID	Preservative Type	Container ID
A	Hydrochloric Acid	na
ZZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ
ZZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ
ZZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ

Sample ID	Initial pH	Final pH	Preservative ID	Preservative Added (mL)	Comments
500-255601-F-5	CL				
500-255601-E-1	CL				
500-255601-F-3	CL				
500-255601-E-5	CL			N 8/27/24	
500-255601-E-3	CL				
500-255601-F-1	CL				

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500-255601 Field Sheet

Date:	8/27/2024
End Time:	1711
pH Paper Lot:	hc324723
Analyst:	

Preservative ID	Preservative Type	Container ID
A	Nitric Acid	na
ZZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ
ZZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ
ZZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ

Sample ID	Initial pH	Final pH	Preservative ID	Preservative Added (mL)	Comments
500-255601-L-1	<2				
500-255601-K-3	<2				
500-255601-J-3	<2				
500-255601-J-5	<2				
500-255601-M-1	<2				
500-255601-K-5	<2				

8/27/24

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500-255601 Field Sheet

Date:	8/27/2024
End Time:	1430
KI Paper Lot:	na
Analyst:	

Preservative ID	Preservative Type	Container ID
A	Bromine Monochloride (0.2N)	19630
ZZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ
ZZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ
ZZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ

Sample ID	Pres. Used (ID)	Oxidized (Y/N)?	Pres. Vol. (mL)/Percent (%)		Comments
500-255601-A-1	A	Y	.8	2	
500-255601-B-1	A	Y	.8	2	
500-255601-C-1	A	Y	.8	2	
500-255601-D-1	A	Y	.8	2	
500-255601-A-2	A	Y	.8	2	
500-255601-B-2	A	Y	.8	2	
500-255601-A-3	A	Y	.8	2	
500-255601-B-3	A	Y	.8	2	
500-255601-C-3	A	Y	.8	2	
500-255601-D-3	A	Y	.8	2	
500-255601-A-4	A	Y	.8	2	
500-255601-B-4	A	Y	.8	2	
500-255601-A-5	A	Y	.8	2	
500-255601-B-5	A	Y	.8	2	
500-255601-A-6	A	Y	.8	2	
500-255601-B-6	A	Y	.8	2	

8/27/24

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ANALYTICAL REPORT

PREPARED FOR

Attn: Jakob Wartman
Foth Infrastructure & Environment, LLC
Missabe Building
227 West 1st. Street, Suite 920
Duluth, Minnesota 55802

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JOB DESCRIPTION

FOTH - White Pines, MI

JOB NUMBER

500-255735-1

Eurofins Chicago
2417 Bond Street
University Park IL 60484

See page two for job notes and contact information.

my EOL

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

Results relate only to the items tested and the sample(s) as received by the laboratory. The results, detection limits (LOD) and Quantitation Limits (LOQ) have been adjusted for sample dilutions and/or solids content.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Chicago Project Manager.

Compliance Statement

The LOD and LOQ reported are adjusted by the dilution factor when a dilution factor greater than 1 is needed. Additionally, where results are indicated as being reported on a dry weight basis, the LOD and LOQ are adjusted for moisture content as well.

Definitions of Limits
- LOD = Limit of Detection = MDL as defined by 40 CFR part 136 Appendix B
- LOQ = Limit of Quantitation = 3.33 x LOD as defined by Wisconsin
- RL = Report Limit = a concentration supported by a standard in the calibration curves

Authorization



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Authorized for release by
Sandie Fredrick, Senior Project Manager
Sandra.Fredrick@et.eurofinsus.com
(920)261-1660

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Job ID: 500-255735-1 — Eurofins Chicago

Job Narrative
500-255735-1

Receipt
The samples were received on 8/28/2024 9:50 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 3.6º C, 3.7º C, 5.1º C and 5.8º C.

Receipt Exceptions
The following sample(s) was received outside of holding time: Samples #1 and #2 for N2,N3.

The following sample(s) was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC) -1 and -2 field blanks.Added to COC as samples #3 and #4 and logged.

Metals
Method 6020B: The continuing calibration verification (CCV) associated with batch 500-784174 recovered above the upper control limit for Beryllium and Lithium. The samples associated with this CCV were the MB and LCS and both recovered within control limits for the affected analytes; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
Method 300.0: The following samples were received outside of holding time: WP-586-510-560-1 (500-255735-1) and WP-586-510-560-2 (500-255735-2).

Method SM 2320B: The method blank for analytical batch 500-783995 contained Alkalinity and Bicarbonate Alkalinity as CaCO3 above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Methods 300.0, 9056A: The method blank for analytical batch 500-784419 contained Chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Method 335.4: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 500-783694 and analytical batch 500-783772 were outside control limits for Cyanide, Total. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255735-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-586-510-560-1
Lab Sample ID: 500-255735-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.47	J	0.50	0.20	ng/L	1		1631E	Total/NA
Uranium	0.74	B	0.030	0.0098	ug/L	1		1638	Total Recoverable
Uranium	0.46	B	0.030	0.0098	ug/L	1		1638	Dissolved
Aluminum	1100		100	25	ug/L	1		6020B	Total Recoverable
Arsenic	0.57	J	1.0	0.23	ug/L	1		6020B	Total Recoverable
Barium	3000		2.5	0.73	ug/L	1		6020B	Total Recoverable
Boron	380	B	50	13	ug/L	1		6020B	Total Recoverable
Calcium	1100000		200	44	ug/L	1		6020B	Total Recoverable
Chromium	6.8		5.0	1.1	ug/L	1		6020B	Total Recoverable
Cobalt	0.66	J	1.0	0.40	ug/L	1		6020B	Total Recoverable
Copper	21		2.0	0.50	ug/L	1		6020B	Total Recoverable
Iron	1500		100	47	ug/L	1		6020B	Total Recoverable
Lead	0.49	J	0.50	0.19	ug/L	1		6020B	Total Recoverable
Lithium	490		10	2.5	ug/L	1		6020B	Total Recoverable
Magnesium	8900		200	49	ug/L	1		6020B	Total Recoverable
Manganese	790	B	2.5	0.79	ug/L	1		6020B	Total Recoverable
Molybdenum	43		5.0	2.5	ug/L	1		6020B	Total Recoverable
Nickel	2.0		2.0	0.63	ug/L	1		6020B	Total Recoverable
Potassium	2600		500	110	ug/L	1		6020B	Total Recoverable
Silver	0.30	J	0.50	0.12	ug/L	1		6020B	Total Recoverable
Sodium	1900000		200	77	ug/L	1		6020B	Total Recoverable
Strontium	29000		4.0	0.64	ug/L	1		6020B	Total Recoverable
Vanadium	3.2	J	5.0	2.2	ug/L	1		6020B	Total Recoverable
Zinc	920	B	20	6.9	ug/L	1		6020B	Total Recoverable
Arsenic	0.28	J	1.0	0.23	ug/L	1		6020B	Dissolved
Barium	3000		2.5	0.73	ug/L	1		6020B	Dissolved
Boron	380	B	50	13	ug/L	1		6020B	Dissolved
Calcium	1200000		200	44	ug/L	1		6020B	Dissolved
Copper	2.5		2.0	0.50	ug/L	1		6020B	Dissolved
Iron	52	J	100	47	ug/L	1		6020B	Dissolved
Lithium	500		10	2.5	ug/L	1		6020B	Dissolved
Magnesium	8700		200	49	ug/L	1		6020B	Dissolved
Manganese	770	B	2.5	0.79	ug/L	1		6020B	Dissolved
Molybdenum	41		5.0	2.5	ug/L	1		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: WP-586-510-560-1 (Continued)

Lab Sample ID: 500-255735-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	0.91	J	2.0	0.63	ug/L	1		6020B	Dissolved
Potassium	2200		500	110	ug/L	1		6020B	Dissolved
Sodium	1900000		200	77	ug/L	1		6020B	Dissolved
Strontium	31000		4.0	0.64	ug/L	1		6020B	Dissolved
Zinc	920	B	20	6.9	ug/L	1		6020B	Dissolved
Hardness as calcium carbonate	2900		0.91	0.46	mg/L	1		SM 2340B	Total Recoverable
Bromide	51		5.0	0.90	mg/L	5		300.0	Total/NA
Chloride	4600	B	200	23	mg/L	200		300.0	Total/NA
Sulfate	8.9		1.0	0.21	mg/L	1		300.0	Total/NA
Phosphorus as P	0.045	J	0.050	0.024	mg/L	1		365.1	Total/NA
Alkalinity	14	B	5.0	3.7	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	14	B	5.0	3.7	mg/L	1		SM 2320B	Total/NA
Salinity	11		0.33	0.33	psu	1		SM 2520B	Total/NA
Total Dissolved Solids	8700		100	43	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	31		6.3	2.4	mg/L	1		SM 2540D	Total/NA

Client Sample ID: WP-586-510-560-2

Lab Sample ID: 500-255735-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Uranium	1.2	B	0.030	0.0098	ug/L	1		1638	Total Recoverable
Uranium	1.1	B	0.030	0.0098	ug/L	1		1638	Dissolved
Aluminum	120		100	25	ug/L	1		6020B	Total Recoverable
Antimony	1.9	J	3.0	1.3	ug/L	1		6020B	Total Recoverable
Arsenic	0.28	J	1.0	0.23	ug/L	1		6020B	Total Recoverable
Barium	3000		2.5	0.73	ug/L	1		6020B	Total Recoverable
Boron	380	B	50	13	ug/L	1		6020B	Total Recoverable
Calcium	1200000		200	44	ug/L	1		6020B	Total Recoverable
Chromium	1.9	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Copper	2.3		2.0	0.50	ug/L	1		6020B	Total Recoverable
Iron	230		100	47	ug/L	1		6020B	Total Recoverable
Lithium	500		10	2.5	ug/L	1		6020B	Total Recoverable
Magnesium	9000		200	49	ug/L	1		6020B	Total Recoverable
Manganese	790	B	2.5	0.79	ug/L	1		6020B	Total Recoverable
Molybdenum	40		5.0	2.5	ug/L	1		6020B	Total Recoverable
Nickel	0.93	J	2.0	0.63	ug/L	1		6020B	Total Recoverable
Potassium	2200		500	110	ug/L	1		6020B	Total Recoverable
Selenium	0.98	J	2.5	0.98	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: WP-586-510-560-2 (Continued) — Lab Sample ID: 500-255735-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	1900000		200	77	ug/L	1		6020B	Total Recoverable
Strontium	31000		4.0	0.64	ug/L	1		6020B	Total Recoverable
Zinc	390	B	20	6.9	ug/L	1		6020B	Total Recoverable
Arsenic	0.28	J	1.0	0.23	ug/L	1		6020B	Dissolved
Barium	3000		2.5	0.73	ug/L	1		6020B	Dissolved
Boron	380	B	50	13	ug/L	1		6020B	Dissolved
Calcium	1200000		200	44	ug/L	1		6020B	Dissolved
Chromium	1.1	J	5.0	1.1	ug/L	1		6020B	Dissolved
Copper	3.0		2.0	0.50	ug/L	1		6020B	Dissolved
Iron	110		100	47	ug/L	1		6020B	Dissolved
Lithium	500		10	2.5	ug/L	1		6020B	Dissolved
Magnesium	8900		200	49	ug/L	1		6020B	Dissolved
Manganese	790	B	2.5	0.79	ug/L	1		6020B	Dissolved
Molybdenum	39		5.0	2.5	ug/L	1		6020B	Dissolved
Nickel	0.74	J	2.0	0.63	ug/L	1		6020B	Dissolved
Potassium	2200		500	110	ug/L	1		6020B	Dissolved
Selenium	1.1	J	2.5	0.98	ug/L	1		6020B	Dissolved
Sodium	1900000		200	77	ug/L	1		6020B	Dissolved
Strontium	31000		4.0	0.64	ug/L	1		6020B	Dissolved
Zinc	370	B	20	6.9	ug/L	1		6020B	Dissolved
Hardness as calcium carbonate	3000		0.91	0.46	mg/L	1		SM 2340B	Total Recoverable
Bromide	53		5.0	0.90	mg/L	5		300.0	Total/NA
Chloride	4800	B	200	23	mg/L	200		300.0	Total/NA
Sulfate	8.3		1.0	0.21	mg/L	1		300.0	Total/NA
Alkalinity	24	B	5.0	3.7	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	24	B	5.0	3.7	mg/L	1		SM 2320B	Total/NA
Salinity	11		0.33	0.33	psu	1		SM 2520B	Total/NA
Total Dissolved Solids	8900		100	43	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	3.6	J	5.0	1.9	mg/L	1		SM 2540D	Total/NA
Sulfide	2.3		1.0	0.23	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: WP-586-510-560-1 FB — Lab Sample ID: 500-255735-3

No Detections.

Client Sample ID: WP-586-510-560-2 FB — Lab Sample ID: 500-255735-4

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255735-1
Project/Site: FOTH - White Pines, MI

Method	Method Description	Protocol	Laboratory
1630	Methyl Mercury	EPA	EET SSM
1631E	Mercury, Low Level (CVAFS)	EPA	EET SSM
1638	Metals (ICP/MS)	EPA	EET SSM
6020B	Metals (ICP/MS)	SW846	EET CHI
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	EET CHI
300.0	Anions, Ion Chromatography	EPA	EET CHI
335.4	Cyanide, Total	EPA	EET CHI
350.1	Nitrogen, Ammonia	EPA	EET CHI
365.1	Phosphorus, Total	EPA	EET CHI
SM 2320B	Alkalinity	SM	EET CHI
SM 2520B	Salinity	SM	EET CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CHI
SM 2540D	Solids, Total Suspended (TSS)	SM	EET CHI
SM 4500 S2 F	Sulfide, Total	SM	EET CHI
SM 5310C	Organic Carbon, Dissolved (DOC)	SM	EET CHI
SM 5310C	TOC	SM	EET CHI
1630	Distillation, Methyl Mercury	EPA	EET SSM
1638	Preparation, Total Recoverable Metals	EPA	EET SSM
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CHI
365.2/365.3/365	Phosphorus, Total	EPA	EET CHI
Distill/Ammonia	Distillation, Ammonia	None	EET CHI
Distill/CN	Distillation, Cyanide	None	EET CHI

Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-255735-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-255735-1	WP-586-510-560-1	Water	08/25/24 13:30	08/28/24 09:50
500-255735-2	WP-586-510-560-2	Water	08/25/24 16:15	08/28/24 09:50
500-255735-3	WP-586-510-560-1 FB	Water	08/25/24 13:30	08/28/24 09:50
500-255735-4	WP-586-510-560-2 FB	Water	08/25/24 16:15	08/28/24 09:50

Client Sample ID: WP-586-510-560-1
Lab Sample ID: 500-255735-1

Date Collected: 08/25/24 13:30
Matrix: Water
Date Received: 08/28/24 09:50

Method: EPA 1630 - Methyl Mercury

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		09/03/24 13:09	09/04/24 17:51	1

Method: EPA 1630 - Methyl Mercury - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		09/04/24 13:46	09/05/24 16:41	1

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.47**	**J**	0.50	0.20	ng/L			09/03/24 17:02	1

Method: EPA 1631E - Mercury, Low Level (CVAFS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			09/03/24 17:14	1

Method: EPA 1638 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.74**	**B**	0.030	0.0098	ug/L		08/30/24 11:35	08/30/24 19:35	1

Method: EPA 1638 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.46**	**B**	0.030	0.0098	ug/L		08/30/24 11:35	08/30/24 19:20	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**1100**		100	25	ug/L		08/29/24 08:36	08/30/24 16:16	1
Antimony	<1.3		3.0	1.3	ug/L		08/29/24 08:36	09/05/24 16:28	1
Arsenic	**0.57**	**J**	1.0	0.23	ug/L		08/29/24 08:36	08/30/24 16:16	1
Barium	**3000**		2.5	0.73	ug/L		08/29/24 08:36	08/30/24 16:16	1
Beryllium	<0.53		1.0	0.53	ug/L		08/29/24 08:36	08/30/24 16:16	1
Boron	**380**	**B**	50	13	ug/L		08/29/24 08:36	09/10/24 15:36	1
Cadmium	<0.17		0.50	0.17	ug/L		08/29/24 08:36	08/30/24 16:16	1
Calcium	**1100000**		200	44	ug/L		08/29/24 08:36	08/30/24 16:16	1
Chromium	**6.8**		5.0	1.1	ug/L		08/29/24 08:36	08/30/24 16:16	1
Cobalt	**0.66**	**J**	1.0	0.40	ug/L		08/29/24 08:36	08/30/24 16:16	1
Copper	**21**		2.0	0.50	ug/L		08/29/24 08:36	08/30/24 16:16	1
Iron	**1500**		100	47	ug/L		08/29/24 08:36	08/30/24 16:16	1
Lead	**0.49**	**J**	0.50	0.19	ug/L		08/29/24 08:36	08/30/24 16:16	1
Lithium	**490**		10	2.5	ug/L		08/29/24 08:36	08/30/24 16:16	1
Magnesium	**8900**		200	49	ug/L		08/29/24 08:36	08/30/24 16:16	1
Manganese	**790**	**B**	2.5	0.79	ug/L		08/29/24 08:36	08/30/24 16:16	1
Molybdenum	**43**		5.0	2.5	ug/L		08/29/24 08:36	08/30/24 16:16	1
Nickel	**2.0**		2.0	0.63	ug/L		08/29/24 08:36	08/30/24 16:16	1
Potassium	**2600**		500	110	ug/L		08/29/24 08:36	08/30/24 16:16	1
Selenium	<0.98		2.5	0.98	ug/L		08/29/24 08:36	08/30/24 16:16	1
Silver	**0.30**	**J**	0.50	0.12	ug/L		08/29/24 08:36	08/30/24 16:16	1
Sodium	**1900000**		200	77	ug/L		08/29/24 08:36	08/30/24 16:16	1
Strontium	**29000**		4.0	0.64	ug/L		08/29/24 08:36	08/30/24 16:16	1
Thallium	<0.57		2.0	0.57	ug/L		08/29/24 08:36	08/30/24 16:16	1
Tin	<1.3		5.0	1.3	ug/L		08/29/24 08:36	08/30/24 16:16	1
Vanadium	**3.2**	**J**	5.0	2.2	ug/L		08/29/24 08:36	08/30/24 16:16	1
Zinc	**920**	**B**	20	6.9	ug/L		08/29/24 08:36	08/30/24 16:16	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255735-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-586-510-560-1
Lab Sample ID: 500-255735-1
Date Collected: 08/25/24 13:30
Matrix: Water
Date Received: 08/28/24 09:50

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		08/29/24 08:36	08/30/24 16:25	1
Antimony	<1.3		3.0	1.3	ug/L		08/29/24 08:36	09/05/24 16:38	1
Arsenic	**0.28**	**J**	1.0	0.23	ug/L		08/29/24 08:36	08/30/24 16:25	1
Barium	**3000**		2.5	0.73	ug/L		08/29/24 08:36	08/30/24 16:25	1
Beryllium	<0.53		1.0	0.53	ug/L		08/29/24 08:36	08/30/24 16:25	1
Boron	**380**	**B**	50	13	ug/L		08/29/24 08:36	09/10/24 15:41	1
Cadmium	<0.17		0.50	0.17	ug/L		08/29/24 08:36	08/30/24 16:25	1
Calcium	**1200000**		200	44	ug/L		08/29/24 08:36	08/30/24 16:25	1
Chromium	<1.1		5.0	1.1	ug/L		08/29/24 08:36	08/30/24 16:25	1
Cobalt	<0.40		1.0	0.40	ug/L		08/29/24 08:36	08/30/24 16:25	1
Copper	**2.5**		2.0	0.50	ug/L		08/29/24 08:36	09/05/24 16:38	1
Iron	**52**	**J**	100	47	ug/L		08/29/24 08:36	08/30/24 16:25	1
Lead	<0.19		0.50	0.19	ug/L		08/29/24 08:36	08/30/24 16:25	1
Lithium	**500**		10	2.5	ug/L		08/29/24 08:36	08/30/24 16:25	1
Magnesium	**8700**		200	49	ug/L		08/29/24 08:36	08/30/24 16:25	1
Manganese	**770**	**B**	2.5	0.79	ug/L		08/29/24 08:36	08/30/24 16:25	1
Molybdenum	**41**		5.0	2.5	ug/L		08/29/24 08:36	08/30/24 16:25	1
Nickel	**0.91**	**J**	2.0	0.63	ug/L		08/29/24 08:36	08/30/24 16:25	1
Potassium	**2200**		500	110	ug/L		08/29/24 08:36	08/30/24 16:25	1
Selenium	<0.98		2.5	0.98	ug/L		08/29/24 08:36	08/30/24 16:25	1
Silver	<0.12		0.50	0.12	ug/L		08/29/24 08:36	08/30/24 16:25	1
Sodium	**1900000**		200	77	ug/L		08/29/24 08:36	08/30/24 16:25	1
Strontium	**31000**		4.0	0.64	ug/L		08/29/24 08:36	08/30/24 16:25	1
Thallium	<0.57		2.0	0.57	ug/L		08/29/24 08:36	08/30/24 16:25	1
Tin	<1.3		5.0	1.3	ug/L		08/29/24 08:36	08/30/24 16:25	1
Vanadium	<2.2		5.0	2.2	ug/L		08/29/24 08:36	08/30/24 16:25	1
Zinc	**920**	**B**	20	6.9	ug/L		08/29/24 08:36	08/30/24 16:25	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**2900**		0.91	0.46	mg/L		08/29/24 08:36	09/03/24 11:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**51**		5.0	0.90	mg/L			09/04/24 13:51	5
Nitrate as N (EPA 300.0)	<0.043	H	1.0	0.043	mg/L			08/28/24 13:08	1
Chloride (EPA 300.0)	**4600**	**B**	200	23	mg/L			09/04/24 14:06	200
Nitrite as N (EPA 300.0)	<0.070	H	1.0	0.070	mg/L			08/28/24 13:08	1
Fluoride (EPA 300.0)	<0.19		1.0	0.19	mg/L			08/28/24 13:08	1
Nitrate Nitrite as N (EPA 300.0)	<0.070	H	1.0	0.070	mg/L			08/28/24 13:08	1
Sulfate (EPA 300.0)	**8.9**		1.0	0.21	mg/L			08/28/24 13:08	1
Cyanide, Total (EPA 335.4)	<0.0036		0.0050	0.0036	mg/L		08/28/24 14:38	08/28/24 16:58	1
Ammonia (EPA 350.1)	<0.10		0.20	0.10	mg/L		09/05/24 10:55	09/12/24 12:16	1
Phosphorus as P (EPA 365.1)	**0.045**	**J**	0.050	0.024	mg/L		09/09/24 09:15	09/09/24 17:08	1
Alkalinity (SM 2320B)	**14**	**B**	5.0	3.7	mg/L			08/29/24 19:39	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**14**	**B**	5.0	3.7	mg/L			08/29/24 19:39	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<3.7		5.0	3.7	mg/L			08/29/24 19:39	1
Salinity (SM 2520B)	**11**		0.33	0.33	psu			09/08/24 13:34	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255735-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-586-510-560-1
Lab Sample ID: 500-255735-1
Date Collected: 08/25/24 13:30
Matrix: Water
Date Received: 08/28/24 09:50

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**8700**		100	43	mg/L			08/28/24 23:21	1
Total Suspended Solids (SM 2540D)	**31**		6.3	2.4	mg/L			08/29/24 13:51	1
Sulfide (SM 4500 S2 F)	<0.23		1.0	0.23	mg/L			08/28/24 22:41	1
Total Organic Carbon (SM 5310C)	<0.47		1.0	0.47	mg/L			09/04/24 14:16	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon (SM 5310C)	<0.47		1.0	0.47	mg/L			09/04/24 07:53	1

Client Sample ID: WP-586-510-560-2
Lab Sample ID: 500-255735-2
Date Collected: 08/25/24 16:15
Matrix: Water
Date Received: 08/28/24 09:50

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			09/03/24 17:19	1

Method: EPA 1631E - Mercury, Low Level (CVAFS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			09/03/24 17:23	1

Method: EPA 1638 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**1.2**	**B**	0.030	0.0098	ug/L		08/30/24 11:35	08/30/24 19:38	1

Method: EPA 1638 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**1.1**	**B**	0.030	0.0098	ug/L		08/30/24 11:35	08/30/24 19:31	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**120**		100	25	ug/L		08/29/24 08:36	08/30/24 16:18	1
Antimony	**1.9**	**J**	3.0	1.3	ug/L		08/29/24 08:36	09/05/24 16:30	1
Arsenic	**0.28**	**J**	1.0	0.23	ug/L		08/29/24 08:36	08/30/24 16:18	1
Barium	**3000**		2.5	0.73	ug/L		08/29/24 08:36	08/30/24 16:18	1
Beryllium	<0.53		1.0	0.53	ug/L		08/29/24 08:36	08/30/24 16:18	1
Boron	**380**	**B**	50	13	ug/L		08/29/24 08:36	09/10/24 15:39	1
Cadmium	<0.17		0.50	0.17	ug/L		08/29/24 08:36	08/30/24 16:18	1
Calcium	**1200000**		200	44	ug/L		08/29/24 08:36	08/30/24 16:18	1
Chromium	**1.9**	**J**	5.0	1.1	ug/L		08/29/24 08:36	08/30/24 16:18	1
Cobalt	<0.40		1.0	0.40	ug/L		08/29/24 08:36	08/30/24 16:18	1
Copper	**2.3**		2.0	0.50	ug/L		08/29/24 08:36	08/30/24 16:18	1
Iron	**230**		100	47	ug/L		08/29/24 08:36	08/30/24 16:18	1
Lead	<0.19		0.50	0.19	ug/L		08/29/24 08:36	08/30/24 16:18	1
Lithium	**500**		10	2.5	ug/L		08/29/24 08:36	08/30/24 16:18	1
Magnesium	**9000**		200	49	ug/L		08/29/24 08:36	08/30/24 16:18	1
Manganese	**790**	**B**	2.5	0.79	ug/L		08/29/24 08:36	08/30/24 16:18	1
Molybdenum	**40**		5.0	2.5	ug/L		08/29/24 08:36	08/30/24 16:18	1
Nickel	**0.93**	**J**	2.0	0.63	ug/L		08/29/24 08:36	08/30/24 16:18	1
Potassium	**2200**		500	110	ug/L		08/29/24 08:36	08/30/24 16:18	1
Selenium	**0.98**	**J**	2.5	0.98	ug/L		08/29/24 08:36	08/30/24 16:18	1
Silver	<0.12		0.50	0.12	ug/L		08/29/24 08:36	08/30/24 16:18	1
Sodium	**1900000**		200	77	ug/L		08/29/24 08:36	08/30/24 16:18	1
Strontium	**31000**		4.0	0.64	ug/L		08/29/24 08:36	08/30/24 16:18	1
Thallium	<0.57		2.0	0.57	ug/L		08/29/24 08:36	08/30/24 16:18	1
Tin	<1.3		5.0	1.3	ug/L		08/29/24 08:36	08/30/24 16:18	1
Vanadium	<2.2		5.0	2.2	ug/L		08/29/24 08:36	08/30/24 16:18	1
Zinc	**390**	**B**	20	6.9	ug/L		08/29/24 08:36	08/30/24 16:18	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		08/29/24 08:36	08/30/24 16:27	1
Antimony	<1.3		3.0	1.3	ug/L		08/29/24 08:36	09/05/24 16:40	1
Arsenic	**0.28**	**J**	1.0	0.23	ug/L		08/29/24 08:36	08/30/24 16:27	1
Barium	**3000**		2.5	0.73	ug/L		08/29/24 08:36	08/30/24 16:27	1
Beryllium	<0.53		1.0	0.53	ug/L		08/29/24 08:36	08/30/24 16:27	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255735-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-586-510-560-2
Lab Sample ID: 500-255735-2
Date Collected: 08/25/24 16:15
Matrix: Water
Date Received: 08/28/24 09:50

Method: SW846 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**380**	**B**	50	13	ug/L		08/29/24 08:36	09/10/24 15:43	1
Cadmium	<0.17		0.50	0.17	ug/L		08/29/24 08:36	08/30/24 16:27	1
Calcium	**1200000**		200	44	ug/L		08/29/24 08:36	08/30/24 16:27	1
Chromium	**1.1**	**J**	5.0	1.1	ug/L		08/29/24 08:36	08/30/24 16:27	1
Cobalt	<0.40		1.0	0.40	ug/L		08/29/24 08:36	08/30/24 16:27	1
Copper	**3.0**		2.0	0.50	ug/L		08/29/24 08:36	09/05/24 16:40	1
Iron	**110**		100	47	ug/L		08/29/24 08:36	08/30/24 16:27	1
Lead	<0.19		0.50	0.19	ug/L		08/29/24 08:36	08/30/24 16:27	1
Lithium	**500**		10	2.5	ug/L		08/29/24 08:36	08/30/24 16:27	1
Magnesium	**8900**		200	49	ug/L		08/29/24 08:36	08/30/24 16:27	1
Manganese	**790**	**B**	2.5	0.79	ug/L		08/29/24 08:36	08/30/24 16:27	1
Molybdenum	**39**		5.0	2.5	ug/L		08/29/24 08:36	08/30/24 16:27	1
Nickel	**0.74**	**J**	2.0	0.63	ug/L		08/29/24 08:36	08/30/24 16:27	1
Potassium	**2200**		500	110	ug/L		08/29/24 08:36	08/30/24 16:27	1
Selenium	**1.1**	**J**	2.5	0.98	ug/L		08/29/24 08:36	08/30/24 16:27	1
Silver	<0.12		0.50	0.12	ug/L		08/29/24 08:36	08/30/24 16:27	1
Sodium	**1900000**		200	77	ug/L		08/29/24 08:36	08/30/24 16:27	1
Strontium	**31000**		4.0	0.64	ug/L		08/29/24 08:36	08/30/24 16:27	1
Thallium	<0.57		2.0	0.57	ug/L		08/29/24 08:36	08/30/24 16:27	1
Tin	<1.3		5.0	1.3	ug/L		08/29/24 08:36	08/30/24 16:27	1
Vanadium	<2.2		5.0	2.2	ug/L		08/29/24 08:36	08/30/24 16:27	1
Zinc	**370**	**B**	20	6.9	ug/L		08/29/24 08:36	08/30/24 16:27	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**3000**		0.91	0.46	mg/L		08/29/24 08:36	09/03/24 11:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**53**		5.0	0.90	mg/L			09/04/24 14:22	5
Nitrate as N (EPA 300.0)	<0.043	H	1.0	0.043	mg/L			08/28/24 13:24	1
Chloride (EPA 300.0)	**4800**	**B**	200	23	mg/L			09/04/24 14:37	200
Nitrite as N (EPA 300.0)	<0.070	H	1.0	0.070	mg/L			08/28/24 13:24	1
Fluoride (EPA 300.0)	<0.19		1.0	0.19	mg/L			08/28/24 13:24	1
Nitrate Nitrite as N (EPA 300.0)	<0.070	H	1.0	0.070	mg/L			08/28/24 13:24	1
Sulfate (EPA 300.0)	**8.3**		1.0	0.21	mg/L			08/28/24 13:24	1
Cyanide, Total (EPA 335.4)	<0.0036	F1	0.0050	0.0036	mg/L		08/28/24 14:38	08/28/24 17:00	1
Ammonia (EPA 350.1)	<0.10		0.20	0.10	mg/L		09/05/24 10:55	09/12/24 12:16	1
Phosphorus as P (EPA 365.1)	<0.024		0.050	0.024	mg/L		09/09/24 09:15	09/09/24 17:08	1
Alkalinity (SM 2320B)	**24**	**B**	5.0	3.7	mg/L			08/29/24 19:47	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**24**	**B**	5.0	3.7	mg/L			08/29/24 19:47	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<3.7		5.0	3.7	mg/L			08/29/24 19:47	1
Salinity (SM 2520B)	**11**		0.33	0.33	psu			09/08/24 13:34	1
Total Dissolved Solids (SM 2540C)	**8900**		100	43	mg/L			08/28/24 23:23	1
Total Suspended Solids (SM 2540D)	**3.6**	**J**	5.0	1.9	mg/L			08/29/24 13:53	1
Sulfide (SM 4500 S2 F)	**2.3**		1.0	0.23	mg/L			08/28/24 22:44	1
Total Organic Carbon (SM 5310C)	<0.47		1.0	0.47	mg/L			09/04/24 14:43	1

Client Sample Results

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255735-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-586-510-560-2
Lab Sample ID: 500-255735-2
Date Collected: 08/25/24 16:15
Matrix: Water
Date Received: 08/28/24 09:50

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon (SM 5310C)	<0.47		1.0	0.47	mg/L			09/04/24 07:53	1

Client Sample Results

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255735-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-586-510-560-1 FB
Lab Sample ID: 500-255735-3
Date Collected: 08/25/24 13:30
Matrix: Water
Date Received: 08/28/24 09:50

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			09/03/24 17:27	1

Client Sample Results

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255735-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-586-510-560-2 FB
Lab Sample ID: 500-255735-4
Date Collected: 08/25/24 16:15
Matrix: Water
Date Received: 08/28/24 09:50

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			09/03/24 17:31	1

Definitions/Glossary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255735-1
Project/Site: FOTH - White Pines, MI

Qualifiers

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Metals

Prep Batch: 2666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Dissolved	Water	1638	
500-255735-1	WP-586-510-560-1	Total Recoverable	Water	1638	
500-255735-2	WP-586-510-560-2	Dissolved	Water	1638	
500-255735-2	WP-586-510-560-2	Total Recoverable	Water	1638	
MB 350-2666/1-A	Method Blank	Total Recoverable	Water	1638	
MB 350-2666/2-A	Method Blank	Total Recoverable	Water	1638	
LCS 350-2666/3-A	Lab Control Sample	Total Recoverable	Water	1638	
LCSD 350-2666/4-A	Lab Control Sample Dup	Total Recoverable	Water	1638	

Prep Batch: 2683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Total/NA	Water	1630	
MB 350-2683/1-A	Method Blank	Total/NA	Water	1630	
MB 350-2683/2-A	Method Blank	Total/NA	Water	1630	
MB 350-2683/3-A	Method Blank	Total/NA	Water	1630	
LCS 350-2683/4-A	Lab Control Sample	Total/NA	Water	1630	
LCSD 350-2683/5-A	Lab Control Sample Dup	Total/NA	Water	1630	

Prep Batch: 2692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Dissolved	Water	1630	
MB 350-2692/23-A	Method Blank	Total/NA	Water	1630	
MB 350-2692/24-A	Method Blank	Total/NA	Water	1630	
MB 350-2692/25-A	Method Blank	Total/NA	Water	1630	
LCS 350-2692/26-A	Lab Control Sample	Total/NA	Water	1630	
LCSD 350-2692/27-A	Lab Control Sample Dup	Total/NA	Water	1630	

Analysis Batch: 2696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Dissolved	Water	1638	2666
500-255735-1	WP-586-510-560-1	Total Recoverable	Water	1638	2666
500-255735-2	WP-586-510-560-2	Dissolved	Water	1638	2666
500-255735-2	WP-586-510-560-2	Total Recoverable	Water	1638	2666
MB 350-2666/1-A	Method Blank	Total Recoverable	Water	1638	2666
MB 350-2666/2-A	Method Blank	Total Recoverable	Water	1638	2666
LCS 350-2666/3-A	Lab Control Sample	Total Recoverable	Water	1638	2666
LCSD 350-2666/4-A	Lab Control Sample Dup	Total Recoverable	Water	1638	2666

Analysis Batch: 2697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Dissolved	Water	1631E	
500-255735-1	WP-586-510-560-1	Total/NA	Water	1631E	
500-255735-2	WP-586-510-560-2	Dissolved	Water	1631E	
500-255735-2	WP-586-510-560-2	Total/NA	Water	1631E	
500-255735-3	WP-586-510-560-1 FB	Total/NA	Water	1631E	
500-255735-4	WP-586-510-560-2 FB	Total/NA	Water	1631E	
MB 350-2697/18	Method Blank	Total/NA	Water	1631E	
MB 350-2697/19	Method Blank	Total/NA	Water	1631E	
MB 350-2697/20	Method Blank	Total/NA	Water	1631E	
LCS 350-2697/28	Lab Control Sample	Total/NA	Water	1631E	
LCSD 350-2697/29	Lab Control Sample Dup	Total/NA	Water	1631E	

Metals

Analysis Batch: 2710

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Total/NA	Water	1630	2683
MB 350-2683/1-A	Method Blank	Total/NA	Water	1630	2683
MB 350-2683/2-A	Method Blank	Total/NA	Water	1630	2683
MB 350-2683/3-A	Method Blank	Total/NA	Water	1630	2683
LCS 350-2683/4-A	Lab Control Sample	Total/NA	Water	1630	2683
LCSD 350-2683/5-A	Lab Control Sample Dup	Total/NA	Water	1630	2683

Analysis Batch: 2722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Dissolved	Water	1630	2692
MB 350-2692/23-A	Method Blank	Total/NA	Water	1630	2692
MB 350-2692/24-A	Method Blank	Total/NA	Water	1630	2692
MB 350-2692/25-A	Method Blank	Total/NA	Water	1630	2692
LCS 350-2692/26-A	Lab Control Sample	Total/NA	Water	1630	2692
LCSD 350-2692/27-A	Lab Control Sample Dup	Total/NA	Water	1630	2692

Prep Batch: 783793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Dissolved	Water	3005A	
500-255735-1	WP-586-510-560-1	Total Recoverable	Water	3005A	
500-255735-2	WP-586-510-560-2	Dissolved	Water	3005A	
500-255735-2	WP-586-510-560-2	Total Recoverable	Water	3005A	
MB 500-783793/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-783793/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 784174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Dissolved	Water	6020B	783793
500-255735-1	WP-586-510-560-1	Total Recoverable	Water	6020B	783793
500-255735-2	WP-586-510-560-2	Dissolved	Water	6020B	783793
500-255735-2	WP-586-510-560-2	Total Recoverable	Water	6020B	783793
MB 500-783793/1-A	Method Blank	Total Recoverable	Water	6020B	783793
LCS 500-783793/2-A	Lab Control Sample	Total Recoverable	Water	6020B	783793

Analysis Batch: 784236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Total Recoverable	Water	SM 2340B	783793
500-255735-2	WP-586-510-560-2	Total Recoverable	Water	SM 2340B	783793

Analysis Batch: 784845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Dissolved	Water	6020B	783793
500-255735-1	WP-586-510-560-1	Total Recoverable	Water	6020B	783793
500-255735-2	WP-586-510-560-2	Dissolved	Water	6020B	783793
500-255735-2	WP-586-510-560-2	Total Recoverable	Water	6020B	783793
MB 500-783793/1-A	Method Blank	Total Recoverable	Water	6020B	783793
LCS 500-783793/2-A	Lab Control Sample	Total Recoverable	Water	6020B	783793

Analysis Batch: 785268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-783793/1-A	Method Blank	Total Recoverable	Water	6020B	783793

Metals (Continued)

Analysis Batch: 785268 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-783793/2-A	Lab Control Sample	Total Recoverable	Water	6020B	783793

Analysis Batch: 785456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Dissolved	Water	6020B	783793
500-255735-1	WP-586-510-560-1	Total Recoverable	Water	6020B	783793
500-255735-2	WP-586-510-560-2	Dissolved	Water	6020B	783793
500-255735-2	WP-586-510-560-2	Total Recoverable	Water	6020B	783793
MB 500-783793/1-A	Method Blank	Total Recoverable	Water	6020B	783793
LCS 500-783793/2-A	Lab Control Sample	Total Recoverable	Water	6020B	783793

General Chemistry

Analysis Batch: 783653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Total/NA	Water	300.0	
500-255735-2	WP-586-510-560-2	Total/NA	Water	300.0	
MB 500-783653/3	Method Blank	Total/NA	Water	300.0	
LCS 500-783653/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 783654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Total/NA	Water	300.0	
500-255735-2	WP-586-510-560-2	Total/NA	Water	300.0	
MB 500-783654/3	Method Blank	Total/NA	Water	300.0	
LCS 500-783654/4	Lab Control Sample	Total/NA	Water	300.0	

Prep Batch: 783694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Total/NA	Water	Distill/CN	
500-255735-2	WP-586-510-560-2	Total/NA	Water	Distill/CN	
500-255735-2 MS	WP-586-510-560-2	Total/NA	Water	Distill/CN	
500-255735-2 MSD	WP-586-510-560-2	Total/NA	Water	Distill/CN	

Analysis Batch: 783743

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Total/NA	Water	SM 2540C	
500-255735-2	WP-586-510-560-2	Total/NA	Water	SM 2540C	
MB 500-783743/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-783743/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 783747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Total/NA	Water	SM 4500 S2 F	
500-255735-2	WP-586-510-560-2	Total/NA	Water	SM 4500 S2 F	
MB 500-783747/1	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 500-783747/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 783772

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Total/NA	Water	335.4	783694

General Chemistry (Continued)

Analysis Batch: 783772 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-2	WP-586-510-560-2	Total/NA	Water	335.4	783694
500-255735-2 MS	WP-586-510-560-2	Total/NA	Water	335.4	783694
500-255735-2 MSD	WP-586-510-560-2	Total/NA	Water	335.4	783694

Analysis Batch: 783880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Total/NA	Water	SM 2540D	
500-255735-2	WP-586-510-560-2	Total/NA	Water	SM 2540D	
MB 500-783880/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 500-783880/2	Lab Control Sample	Total/NA	Water	SM 2540D	
500-255735-2 DU	WP-586-510-560-2	Total/NA	Water	SM 2540D	

Analysis Batch: 783995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Total/NA	Water	SM 2320B	
500-255735-2	WP-586-510-560-2	Total/NA	Water	SM 2320B	
MB 500-783995/53	Method Blank	Total/NA	Water	SM 2320B	
LCS 500-783995/54	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 784419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Total/NA	Water	300.0	
500-255735-1	WP-586-510-560-1	Total/NA	Water	300.0	
500-255735-2	WP-586-510-560-2	Total/NA	Water	300.0	
500-255735-2	WP-586-510-560-2	Total/NA	Water	300.0	
MB 500-784419/3	Method Blank	Total/NA	Water	300.0	
LCS 500-784419/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 784591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Total/NA	Water	SM 5310C	
500-255735-2	WP-586-510-560-2	Total/NA	Water	SM 5310C	
MB 500-784591/7	Method Blank	Total/NA	Water	SM 5310C	
LCS 500-784591/8	Lab Control Sample	Total/NA	Water	SM 5310C	

Analysis Batch: 784605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Dissolved	Water	SM 5310C	
500-255735-2	WP-586-510-560-2	Dissolved	Water	SM 5310C	
MB 500-784605/7	Method Blank	Dissolved	Water	SM 5310C	
LCS 500-784605/8	Lab Control Sample	Dissolved	Water	SM 5310C	

Prep Batch: 784648

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Total/NA	Water	Distill/Ammonia	
500-255735-2	WP-586-510-560-2	Total/NA	Water	Distill/Ammonia	
MB 500-784648/1-A	Method Blank	Total/NA	Water	Distill/Ammonia	
LCS 500-784648/2-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	

General Chemistry

Analysis Batch: 784974

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Total/NA	Water	SM 2520B	
500-255735-2	WP-586-510-560-2	Total/NA	Water	SM 2520B	

Prep Batch: 785143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Total/NA	Water	365.2/365.3/365	
500-255735-2	WP-586-510-560-2	Total/NA	Water	365.2/365.3/365	
MB 500-785143/1-A	Method Blank	Total/NA	Water	365.2/365.3/365	
LCS 500-785143/2-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	

Analysis Batch: 785490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Total/NA	Water	365.1	785143
500-255735-2	WP-586-510-560-2	Total/NA	Water	365.1	785143
MB 500-785143/1-A	Method Blank	Total/NA	Water	365.1	785143
LCS 500-785143/2-A	Lab Control Sample	Total/NA	Water	365.1	785143

Analysis Batch: 785756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255735-1	WP-586-510-560-1	Total/NA	Water	350.1	784648
500-255735-2	WP-586-510-560-2	Total/NA	Water	350.1	784648
MB 500-784648/1-A	Method Blank	Total/NA	Water	350.1	784648
LCS 500-784648/2-A	Lab Control Sample	Total/NA	Water	350.1	784648

Method: 1630 - Methyl Mercury

Lab Sample ID: MB 350-2683/1-A
Matrix: Water
Analysis Batch: 2710

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2683

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		09/03/24 13:09	09/04/24 14:57	1

Lab Sample ID: MB 350-2683/2-A
Matrix: Water
Analysis Batch: 2710

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2683

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		09/03/24 13:09	09/04/24 15:08	1

Lab Sample ID: MB 350-2683/3-A
Matrix: Water
Analysis Batch: 2710

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2683

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		09/03/24 13:09	09/04/24 15:18	1

Lab Sample ID: LCS 350-2683/4-A
Matrix: Water
Analysis Batch: 2710

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 2683

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methyl Mercury	1.00	0.950		ng/L		95	65 - 135

Lab Sample ID: LCSD 350-2683/5-A
Matrix: Water
Analysis Batch: 2710

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 2683

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methyl Mercury	1.00	0.903		ng/L		90	65 - 135	5	35

Lab Sample ID: MB 350-2692/23-A
Matrix: Water
Analysis Batch: 2722

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2692

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		09/04/24 13:46	09/05/24 13:58	1

Lab Sample ID: MB 350-2692/24-A
Matrix: Water
Analysis Batch: 2722

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2692

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		09/04/24 13:46	09/05/24 14:08	1

Lab Sample ID: MB 350-2692/25-A
Matrix: Water
Analysis Batch: 2722

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2692

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		09/04/24 13:46	09/05/24 14:18	1

Method: 1630 - Methyl Mercury

Lab Sample ID: LCS 350-2692/26-A
Matrix: Water
Analysis Batch: 2722

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 2692

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Methyl Mercury			1.00	0.686		ng/L		69	65 - 135		

Lab Sample ID: LCSD 350-2692/27-A
Matrix: Water
Analysis Batch: 2722

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 2692

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methyl Mercury			1.00	0.935		ng/L		94	65 - 135	31	35

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 350-2697/18
Matrix: Water
Analysis Batch: 2697

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			09/03/24 12:45	1

Lab Sample ID: MB 350-2697/19
Matrix: Water
Analysis Batch: 2697

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			09/03/24 12:49	1

Lab Sample ID: MB 350-2697/20
Matrix: Water
Analysis Batch: 2697

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			09/03/24 12:53	1

Lab Sample ID: LCS 350-2697/28
Matrix: Water
Analysis Batch: 2697

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			5.00	4.50		ng/L		90	77 - 123		

Lab Sample ID: LCSD 350-2697/29
Matrix: Water
Analysis Batch: 2697

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			5.00	4.49		ng/L		90	77 - 123	0	24

Method: 1638 - Metals (ICP/MS)

Lab Sample ID: MB 350-2666/1-A
Matrix: Water
Analysis Batch: 2696

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 2666

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	0.0158	J	0.030	0.0098	ug/L		08/30/24 11:35	08/30/24 16:07	1

Lab Sample ID: MB 350-2666/2-A
Matrix: Water
Analysis Batch: 2696

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 2666

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	<0.0098		0.030	0.0098	ug/L		08/30/24 11:35	08/30/24 16:11	1

Lab Sample ID: LCS 350-2666/3-A
Matrix: Water
Analysis Batch: 2696

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 2666

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Uranium	25.0	23.8		ug/L		95	85 - 115

Lab Sample ID: LCSD 350-2666/4-A
Matrix: Water
Analysis Batch: 2696

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 2666

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Uranium	25.0	23.6		ug/L		94	85 - 115	1	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 500-783793/1-A
Matrix: Water
Analysis Batch: 784174

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 783793

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		08/29/24 08:36	08/30/24 14:14	1
Arsenic	<0.23		1.0	0.23	ug/L		08/29/24 08:36	08/30/24 14:14	1
Barium	<0.73		2.5	0.73	ug/L		08/29/24 08:36	08/30/24 14:14	1
Beryllium	<0.53	^+	1.0	0.53	ug/L		08/29/24 08:36	08/30/24 14:14	1
Cadmium	<0.17		0.50	0.17	ug/L		08/29/24 08:36	08/30/24 14:14	1
Calcium	<44		200	44	ug/L		08/29/24 08:36	08/30/24 14:14	1
Chromium	<1.1		5.0	1.1	ug/L		08/29/24 08:36	08/30/24 14:14	1
Cobalt	<0.40		1.0	0.40	ug/L		08/29/24 08:36	08/30/24 14:14	1
Copper	<0.50		2.0	0.50	ug/L		08/29/24 08:36	08/30/24 14:14	1
Iron	<47		100	47	ug/L		08/29/24 08:36	08/30/24 14:14	1
Lead	<0.19		0.50	0.19	ug/L		08/29/24 08:36	08/30/24 14:14	1
Lithium	<2.5	^+	10	2.5	ug/L		08/29/24 08:36	08/30/24 14:14	1
Magnesium	<49		200	49	ug/L		08/29/24 08:36	08/30/24 14:14	1
Manganese	0.954	J	2.5	0.79	ug/L		08/29/24 08:36	08/30/24 14:14	1
Molybdenum	<2.5		5.0	2.5	ug/L		08/29/24 08:36	08/30/24 14:14	1
Nickel	<0.63		2.0	0.63	ug/L		08/29/24 08:36	08/30/24 14:14	1
Potassium	<110		500	110	ug/L		08/29/24 08:36	08/30/24 14:14	1
Selenium	<0.98		2.5	0.98	ug/L		08/29/24 08:36	08/30/24 14:14	1
Silver	<0.12		0.50	0.12	ug/L		08/29/24 08:36	08/30/24 14:14	1
Sodium	<77		200	77	ug/L		08/29/24 08:36	08/30/24 14:14	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 500-783793/1-A
Matrix: Water
Analysis Batch: 784174

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 783793

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Strontium	<0.64		4.0	0.64	ug/L		08/29/24 08:36	08/30/24 14:14	1
Thallium	<0.57		2.0	0.57	ug/L		08/29/24 08:36	08/30/24 14:14	1
Tin	<1.3		5.0	1.3	ug/L		08/29/24 08:36	08/30/24 14:14	1
Vanadium	<2.2		5.0	2.2	ug/L		08/29/24 08:36	08/30/24 14:14	1
Zinc	7.55	J	20	6.9	ug/L		08/29/24 08:36	08/30/24 14:14	1

Lab Sample ID: MB 500-783793/1-A
Matrix: Water
Analysis Batch: 784845

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 783793

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.3		3.0	1.3	ug/L		08/29/24 08:36	09/05/24 15:35	1

Lab Sample ID: MB 500-783793/1-A
Matrix: Water
Analysis Batch: 785268

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 783793

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		08/29/24 08:36	09/09/24 14:14	1
Antimony	<1.3		3.0	1.3	ug/L		08/29/24 08:36	09/09/24 14:14	1
Arsenic	<0.23		1.0	0.23	ug/L		08/29/24 08:36	09/09/24 14:14	1
Barium	<0.73		2.5	0.73	ug/L		08/29/24 08:36	09/09/24 14:14	1
Beryllium	<0.53		1.0	0.53	ug/L		08/29/24 08:36	09/09/24 14:14	1
Boron	15.0	J	50	13	ug/L		08/29/24 08:36	09/09/24 14:14	1
Cadmium	<0.17		0.50	0.17	ug/L		08/29/24 08:36	09/09/24 14:14	1
Calcium	<44		200	44	ug/L		08/29/24 08:36	09/09/24 14:14	1
Chromium	<1.1		5.0	1.1	ug/L		08/29/24 08:36	09/09/24 14:14	1
Cobalt	<0.40		1.0	0.40	ug/L		08/29/24 08:36	09/09/24 14:14	1
Copper	<0.50		2.0	0.50	ug/L		08/29/24 08:36	09/09/24 14:14	1
Iron	<47		100	47	ug/L		08/29/24 08:36	09/09/24 14:14	1
Lead	<0.19		0.50	0.19	ug/L		08/29/24 08:36	09/09/24 14:14	1
Lithium	<2.5		10	2.5	ug/L		08/29/24 08:36	09/09/24 14:14	1
Magnesium	<49		200	49	ug/L		08/29/24 08:36	09/09/24 14:14	1
Manganese	0.841	J	2.5	0.79	ug/L		08/29/24 08:36	09/09/24 14:14	1
Molybdenum	<2.5		5.0	2.5	ug/L		08/29/24 08:36	09/09/24 14:14	1
Nickel	0.919	J	2.0	0.63	ug/L		08/29/24 08:36	09/09/24 14:14	1
Potassium	<110		500	110	ug/L		08/29/24 08:36	09/09/24 14:14	1
Selenium	<0.98		2.5	0.98	ug/L		08/29/24 08:36	09/09/24 14:14	1
Silver	<0.12		0.50	0.12	ug/L		08/29/24 08:36	09/09/24 14:14	1
Sodium	<77		200	77	ug/L		08/29/24 08:36	09/09/24 14:14	1
Strontium	<0.64		4.0	0.64	ug/L		08/29/24 08:36	09/09/24 14:14	1
Thallium	<0.57		2.0	0.57	ug/L		08/29/24 08:36	09/09/24 14:14	1
Tin	<1.3		5.0	1.3	ug/L		08/29/24 08:36	09/09/24 14:14	1
Vanadium	<2.2		5.0	2.2	ug/L		08/29/24 08:36	09/09/24 14:14	1
Zinc	7.54	J	20	6.9	ug/L		08/29/24 08:36	09/09/24 14:14	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 500-783793/1-A
Matrix: Water
Analysis Batch: 785456

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 783793

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	20.1	J	50	13	ug/L		08/29/24 08:36	09/10/24 15:32	1

Lab Sample ID: LCS 500-783793/2-A
Matrix: Water
Analysis Batch: 784174

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 783793

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	2000	2080		ug/L		104	80 - 120
Arsenic	100	98.9		ug/L		99	80 - 120
Barium	500	512		ug/L		102	80 - 120
Beryllium	50.0	56.5	^+	ug/L		113	80 - 120
Cadmium	50.0	52.3		ug/L		105	80 - 120
Calcium	10000	8730		ug/L		87	80 - 120
Chromium	200	225		ug/L		112	80 - 120
Cobalt	500	534		ug/L		107	80 - 120
Copper	250	269		ug/L		107	80 - 120
Iron	1000	1140		ug/L		114	80 - 120
Lead	100	107		ug/L		107	80 - 120
Lithium	100	119	^+	ug/L		119	80 - 120
Magnesium	10000	11300		ug/L		113	80 - 120
Manganese	500	549		ug/L		110	80 - 120
Molybdenum	1000	1030		ug/L		103	80 - 120
Nickel	500	526		ug/L		105	80 - 120
Potassium	10000	10900		ug/L		109	80 - 120
Selenium	100	97.9		ug/L		98	80 - 120
Silver	50.0	53.4		ug/L		107	80 - 120
Sodium	10000	11200		ug/L		112	80 - 120
Strontium	1000	971		ug/L		97	80 - 120
Thallium	100	109		ug/L		109	80 - 120
Tin	1000	1040		ug/L		104	80 - 120
Vanadium	500	549		ug/L		110	80 - 120
Zinc	500	517		ug/L		103	80 - 120

Lab Sample ID: LCS 500-783793/2-A
Matrix: Water
Analysis Batch: 784845

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 783793

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	500	509		ug/L		102	80 - 120

Lab Sample ID: LCS 500-783793/2-A
Matrix: Water
Analysis Batch: 785268

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 783793

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	2000	2000		ug/L		100	80 - 120
Antimony	500	506		ug/L		101	80 - 120
Arsenic	100	98.8		ug/L		99	80 - 120
Barium	500	506		ug/L		101	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 500-783793/2-A
Matrix: Water
Analysis Batch: 785268

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 783793

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	50.0	51.8		ug/L		104	80 - 120
Boron	1000	1030		ug/L		103	80 - 120
Cadmium	50.0	51.4		ug/L		103	80 - 120
Calcium	10000	9120		ug/L		91	80 - 120
Chromium	200	208		ug/L		104	80 - 120
Cobalt	500	528		ug/L		106	80 - 120
Copper	250	260		ug/L		104	80 - 120
Iron	1000	1090		ug/L		109	80 - 120
Lead	100	102		ug/L		102	80 - 120
Lithium	100	107		ug/L		107	80 - 120
Magnesium	10000	10700		ug/L		107	80 - 120
Manganese	500	533		ug/L		107	80 - 120
Molybdenum	1000	1000		ug/L		100	80 - 120
Nickel	500	513		ug/L		103	80 - 120
Potassium	10000	10500		ug/L		105	80 - 120
Selenium	100	100		ug/L		100	80 - 120
Silver	50.0	51.3		ug/L		103	80 - 120
Sodium	10000	10600		ug/L		106	80 - 120
Strontium	1000	985		ug/L		98	80 - 120
Thallium	100	103		ug/L		103	80 - 120
Tin	1000	1010		ug/L		101	80 - 120
Vanadium	500	516		ug/L		103	80 - 120
Zinc	500	511		ug/L		102	80 - 120

Lab Sample ID: LCS 500-783793/2-A
Matrix: Water
Analysis Batch: 785456

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 783793

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1040		ug/L		104	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 500-783653/3
Matrix: Water
Analysis Batch: 783653

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.19		1.0	0.19	mg/L			08/28/24 12:23	1
Sulfate	<0.21		1.0	0.21	mg/L			08/28/24 12:23	1

Lab Sample ID: LCS 500-783653/4
Matrix: Water
Analysis Batch: 783653

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	20.0	19.1		mg/L		95	90 - 110
Sulfate	20.0	20.1		mg/L		100	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 500-783654/3
Matrix: Water
Analysis Batch: 783654

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.043		1.0	0.043	mg/L			08/28/24 12:23	1
Nitrite as N	<0.070		1.0	0.070	mg/L			08/28/24 12:23	1
Nitrate Nitrite as N	<0.070		1.0	0.070	mg/L			08/28/24 12:23	1

Lab Sample ID: LCS 500-783654/4
Matrix: Water
Analysis Batch: 783654

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	20.0	19.3		mg/L		97	90 - 110
Nitrite as N	20.0	19.8		mg/L		99	90 - 110

Lab Sample ID: MB 500-784419/3
Matrix: Water
Analysis Batch: 784419

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	<0.18		1.0	0.18	mg/L			09/04/24 10:49	1
Chloride	0.219	J	1.0	0.12	mg/L			09/04/24 10:49	1

Lab Sample ID: LCS 500-784419/4
Matrix: Water
Analysis Batch: 784419

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	20.0	19.1		mg/L		95	90 - 110
Chloride	20.0	19.5		mg/L		98	90 - 110

Method: 335.4 - Cyanide, Total

Lab Sample ID: 500-255735-2 MS
Matrix: Water
Analysis Batch: 783772

Client Sample ID: WP-586-510-560-2
Prep Type: Total/NA
Prep Batch: 783694

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	<0.0036	F1	0.100	0.0688	F1	mg/L		69	90 - 110

Lab Sample ID: 500-255735-2 MSD
Matrix: Water
Analysis Batch: 783772

Client Sample ID: WP-586-510-560-2
Prep Type: Total/NA
Prep Batch: 783694

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	<0.0036	F1	0.100	0.0688	F1	mg/L		69	90 - 110	0	20

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 500-784648/1-A
Matrix: Water
Analysis Batch: 785756

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 784648

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	<0.10		0.20	0.10	mg/L		09/05/24 10:55	09/12/24 12:11	1

Lab Sample ID: LCS 500-784648/2-A
Matrix: Water
Analysis Batch: 785756

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 784648

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	2.00	1.84		mg/L		92	90 - 110

Method: 365.1 - Phosphorus, Total

Lab Sample ID: MB 500-785143/1-A
Matrix: Water
Analysis Batch: 785490

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 785143

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus as P	<0.024		0.050	0.024	mg/L		09/09/24 09:15	09/09/24 17:07	1

Lab Sample ID: LCS 500-785143/2-A
Matrix: Water
Analysis Batch: 785490

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 785143

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phosphorus as P	1.00	0.893		mg/L		89	88 - 123

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 500-783995/53
Matrix: Water
Analysis Batch: 783995

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	4.18	J	5.0	3.7	mg/L			08/29/24 19:27	1
Bicarbonate Alkalinity as CaCO3	4.18	J	5.0	3.7	mg/L			08/29/24 19:27	1
Carbonate Alkalinity as CaCO3	<3.7		5.0	3.7	mg/L			08/29/24 19:27	1

Lab Sample ID: LCS 500-783995/54
Matrix: Water
Analysis Batch: 783995

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	100	102		mg/L		102	95 - 121

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 500-783743/1
Matrix: Water
Analysis Batch: 783743

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<4.3		10	4.3	mg/L			08/28/24 22:51	1

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: LCS 500-783743/2
Matrix: Water
Analysis Batch: 783743

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			250	246		mg/L		98	80 - 120		

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 500-783880/1
Matrix: Water
Analysis Batch: 783880

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<1.9		5.0	1.9	mg/L			08/29/24 13:33	1

Lab Sample ID: LCS 500-783880/2
Matrix: Water
Analysis Batch: 783880

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			200	172		mg/L		86	80 - 120		

Lab Sample ID: 500-255735-2 DU
Matrix: Water
Analysis Batch: 783880

Client Sample ID: WP-586-510-560-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	3.6	J		3.60	J	mg/L				0	5

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 500-783747/1
Matrix: Water
Analysis Batch: 783747

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<0.23		1.0	0.23	mg/L			08/28/24 21:35	1

Lab Sample ID: LCS 500-783747/2
Matrix: Water
Analysis Batch: 783747

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfide			3.64	3.65		mg/L		101	85 - 115		

Method: SM 5310C - TOC

Lab Sample ID: MB 500-784591/7
Matrix: Water
Analysis Batch: 784591

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<0.47		1.0	0.47	mg/L			09/04/24 11:55	1

Method: SM 5310C - TOC (Continued)

Lab Sample ID: LCS 500-784591/8
Matrix: Water
Analysis Batch: 784591

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Organic Carbon			10.0	9.84		mg/L		98	86 - 116		

Method: SM 5310C - Organic Carbon, Dissolved (DOC)

Lab Sample ID: MB 500-784605/7
Matrix: Water
Analysis Batch: 784605

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	<0.47		1.0	0.47	mg/L			09/04/24 07:53	1

Lab Sample ID: LCS 500-784605/8
Matrix: Water
Analysis Batch: 784605

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Dissolved Organic Carbon			10.0	9.84		mg/L		98	86 - 116		

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-255735-1

Client Sample ID: WP-586-510-560-1

Date Collected: 08/25/24 13:30
Date Received: 08/28/24 09:50

Lab Sample ID: 500-255735-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	1630			2692	JS	EET SSM	09/04/24 13:46
Dissolved	Analysis	1630		1	2722	CL	EET SSM	09/05/24 16:41
Total/NA	Prep	1630			2683	JS	EET SSM	09/03/24 13:09
Total/NA	Analysis	1630		1	2710	CL	EET SSM	09/04/24 17:51
Dissolved	Analysis	1631E		1	2697	CL	EET SSM	09/03/24 17:14
Total/NA	Analysis	1631E		1	2697	CL	EET SSM	09/03/24 17:02
Dissolved	Prep	1638			2666	CL	EET SSM	08/30/24 11:35
Dissolved	Analysis	1638		1	2696	V1R	EET SSM	08/30/24 19:20
Total Recoverable	Prep	1638			2666	CL	EET SSM	08/30/24 11:35
Total Recoverable	Analysis	1638		1	2696	V1R	EET SSM	08/30/24 19:35
Dissolved	Prep	3005A			783793	BDE	EET CHI	08/29/24 08:36 - 08/29/24 14:36 [1]
Dissolved	Analysis	6020B		1	784174	RN	EET CHI	08/30/24 16:25
Dissolved	Prep	3005A			783793	BDE	EET CHI	08/29/24 08:36 - 08/29/24 14:36 [1]
Dissolved	Analysis	6020B		1	784845	RN	EET CHI	09/05/24 16:38
Dissolved	Prep	3005A			783793	BDE	EET CHI	08/29/24 08:36 - 08/29/24 14:36 [1]
Dissolved	Analysis	6020B		1	785456	RN	EET CHI	09/10/24 15:41
Total Recoverable	Prep	3005A			783793	BDE	EET CHI	08/29/24 08:36 - 08/29/24 14:36 [1]
Total Recoverable	Analysis	6020B		1	784174	RN	EET CHI	08/30/24 16:16
Total Recoverable	Prep	3005A			783793	BDE	EET CHI	08/29/24 08:36 - 08/29/24 14:36 [1]
Total Recoverable	Analysis	6020B		1	784845	RN	EET CHI	09/05/24 16:28
Total Recoverable	Prep	3005A			783793	BDE	EET CHI	08/29/24 08:36 - 08/29/24 14:36 [1]
Total Recoverable	Analysis	6020B		1	785456	RN	EET CHI	09/10/24 15:36
Total Recoverable	Prep	3005A			783793	BDE	EET CHI	08/29/24 08:36 - 08/29/24 14:36 [1]
Total Recoverable	Analysis	SM 2340B		1	784236	TJW	EET CHI	09/03/24 11:28
Total/NA	Analysis	300.0		1	783653	W1T	EET CHI	08/28/24 13:08
Total/NA	Analysis	300.0		1	783654	W1T	EET CHI	08/28/24 13:08
Total/NA	Analysis	300.0		5	784419	MB	EET CHI	09/04/24 13:51
Total/NA	Analysis	300.0		200	784419	MB	EET CHI	09/04/24 14:06
Total/NA	Prep	Distill/CN			783694	AC	EET CHI	08/28/24 14:38 - 08/28/24 15:08 [1]
Total/NA	Analysis	335.4		1	783772	AC	EET CHI	08/28/24 16:58
Total/NA	Prep	Distill/Ammonia			784648	EB	EET CHI	09/05/24 10:55 - 09/05/24 11:55 [1]
Total/NA	Analysis	350.1		1	785756	KF	EET CHI	09/12/24 12:16
Total/NA	Prep	365.2/365.3/365			785143	ER	EET CHI	09/09/24 09:15 - 09/09/24 13:15 [1]
Total/NA	Analysis	365.1		1	785490	KF	EET CHI	09/09/24 17:08
Total/NA	Analysis	SM 2320B		1	783995	ER	EET CHI	08/29/24 19:39
Total/NA	Analysis	SM 2520B		1	784974	TR	EET CHI	09/08/24 13:34
Total/NA	Analysis	SM 2540C		1	783743	CLB	EET CHI	08/28/24 23:21
Total/NA	Analysis	SM 2540D		1	783880	SO	EET CHI	08/29/24 13:51 - 08/29/24 13:53 [1]
Total/NA	Analysis	SM 4500 S2 F		1	783747	CLB	EET CHI	08/28/24 22:41 - 08/28/24 22:44 [1]
Dissolved	Analysis	SM 5310C		1	784605	TR	EET CHI	09/04/24 07:53
Total/NA	Analysis	SM 5310C		1	784591	TR	EET CHI	09/04/24 14:16

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-255735-1

Client Sample ID: WP-586-510-560-2

Date Collected: 08/25/24 16:15
Date Received: 08/28/24 09:50

Lab Sample ID: 500-255735-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	1631E		1	2697	CL	EET SSM	09/03/24 17:23
Total/NA	Analysis	1631E		1	2697	CL	EET SSM	09/03/24 17:19
Dissolved	Prep	1638			2666	CL	EET SSM	08/30/24 11:35
Dissolved	Analysis	1638		1	2696	V1R	EET SSM	08/30/24 19:31
Total Recoverable	Prep	1638			2666	CL	EET SSM	08/30/24 11:35
Total Recoverable	Analysis	1638		1	2696	V1R	EET SSM	08/30/24 19:38
Dissolved	Prep	3005A			783793	BDE	EET CHI	08/29/24 08:36 - 08/29/24 14:36 [1]
Dissolved	Analysis	6020B		1	784174	RN	EET CHI	08/30/24 16:27
Dissolved	Prep	3005A			783793	BDE	EET CHI	08/29/24 08:36 - 08/29/24 14:36 [1]
Dissolved	Analysis	6020B		1	784845	RN	EET CHI	09/05/24 16:40
Dissolved	Prep	3005A			783793	BDE	EET CHI	08/29/24 08:36 - 08/29/24 14:36 [1]
Dissolved	Analysis	6020B		1	785456	RN	EET CHI	09/10/24 15:43
Total Recoverable	Prep	3005A			783793	BDE	EET CHI	08/29/24 08:36 - 08/29/24 14:36 [1]
Total Recoverable	Analysis	6020B		1	784174	RN	EET CHI	08/30/24 16:18
Total Recoverable	Prep	3005A			783793	BDE	EET CHI	08/29/24 08:36 - 08/29/24 14:36 [1]
Total Recoverable	Analysis	6020B		1	784845	RN	EET CHI	09/05/24 16:30
Total Recoverable	Prep	3005A			783793	BDE	EET CHI	08/29/24 08:36 - 08/29/24 14:36 [1]
Total Recoverable	Analysis	6020B		1	785456	RN	EET CHI	09/10/24 15:39
Total Recoverable	Prep	3005A			783793	BDE	EET CHI	08/29/24 08:36 - 08/29/24 14:36 [1]
Total Recoverable	Analysis	SM 2340B		1	784236	TJW	EET CHI	09/03/24 11:28
Total/NA	Analysis	300.0		1	783653	W1T	EET CHI	08/28/24 13:24
Total/NA	Analysis	300.0		1	783654	W1T	EET CHI	08/28/24 13:24
Total/NA	Analysis	300.0		5	784419	MB	EET CHI	09/04/24 14:22
Total/NA	Analysis	300.0		200	784419	MB	EET CHI	09/04/24 14:37
Total/NA	Prep	Distill/CN			783694	AC	EET CHI	08/28/24 14:38 - 08/28/24 15:08 [1]
Total/NA	Analysis	335.4		1	783772	AC	EET CHI	08/28/24 17:00
Total/NA	Prep	Distill/Ammonia			784648	EB	EET CHI	09/05/24 10:55 - 09/05/24 11:55 [1]
Total/NA	Analysis	350.1		1	785756	KF	EET CHI	09/12/24 12:16
Total/NA	Prep	365.2/365.3/365			785143	ER	EET CHI	09/09/24 09:15 - 09/09/24 13:15 [1]
Total/NA	Analysis	365.1		1	785490	KF	EET CHI	09/09/24 17:08
Total/NA	Analysis	SM 2320B		1	783995	ER	EET CHI	08/29/24 19:47
Total/NA	Analysis	SM 2520B		1	784974	TR	EET CHI	09/08/24 13:34
Total/NA	Analysis	SM 2540C		1	783743	CLB	EET CHI	08/28/24 23:23
Total/NA	Analysis	SM 2540D		1	783880	SO	EET CHI	08/29/24 13:53 - 08/29/24 13:54 [1]
Total/NA	Analysis	SM 4500 S2 F		1	783747	CLB	EET CHI	08/28/24 22:44 - 08/28/24 22:48 [1]
Dissolved	Analysis	SM 5310C		1	784605	TR	EET CHI	09/04/24 07:53
Total/NA	Analysis	SM 5310C		1	784591	TR	EET CHI	09/04/24 14:43

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255735-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-586-510-560-1 FB
Lab Sample ID: 500-255735-3
Date Collected: 08/25/24 13:30
Matrix: Water
Date Received: 08/28/24 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	2697	CL	EET SSM	09/03/24 17:27

Client Sample ID: WP-586-510-560-2 FB
Lab Sample ID: 500-255735-4
Date Collected: 08/25/24 16:15
Matrix: Water
Date Received: 08/28/24 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	2697	CL	EET SSM	09/03/24 17:31

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255735-1
Project/Site: FOTH - White Pines, MI

Laboratory: Eurofins Chicago

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Georgia	State	N/A	05-31-25
Georgia (DW)	State	939	05-31-25
Hawaii	State	NA	05-31-25
Illinois	NELAP	IL00035	05-31-25
Indiana	State	C-IL-02	05-31-25
Iowa	State	082	05-01-26
Kansas	NELAP	E-10161	10-31-24
Kentucky (UST)	State	AI # 108083	05-31-25
Kentucky (WW)	State	KY90023	12-31-24
Louisiana (All)	NELAP	02046	06-30-25
Mississippi	State	NA	05-31-25
North Carolina (WW/SW)	State	291	12-31-24
North Dakota	State	R-194	04-29-24 *
Oklahoma	State	8908	08-31-24 *
South Carolina	State	77001003	04-29-24 *
USDA	US Federal Programs	P330-18-00018	03-30-26
Wisconsin	State	999580010	08-31-25
Wyoming	State	8TMS-Q	05-31-25

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	12-18-24
ANAB	Dept. of Defense ELAP	L2236	01-19-25
ANAB	Dept. of Energy	L2236.01	12-18-24
ANAB	ISO/IEC 17025	L2236	01-19-25
California	State	2954	12-18-24
Florida	NELAP	E87575	12-18-24
Louisiana (All)	NELAP	03073	12-18-24
Maine	State	WA01273	12-18-24
New Jersey	NELAP	WA014	12-18-24
New York	NELAP	11662	12-18-24
Oregon	NELAP	4167-008	07-07-25
US Fish & Wildlife	US Federal Programs	A20571	06-30-25
USDA	US Federal Programs	525-23-4-22573	12-18-24
Washington	State	C788-23a	12-18-24
Wisconsin	State	399133460	12-18-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Chicago
2417 Bond Street
University Park, IL 60484
Phone (708) 534-5200 Phone (708) 534-5211

Chain of Custody Record

eurofins | Environment Testing

500-255735 COC

Client Information	Sampler: JcB	Lab PM: Fredrick, Sandie	Carrier:	COC No: 500-126105-50170.1
Client Contact: Jakob Wartman	Phone:	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State:	Page: Page 1 of 5
Company: Foth Infrastructure & Environment, LLC	PWSID:			Job #: 500-255735
Address: Missabe Building 227 West 1st Street, Suite 920	Due Date Requested:			
City: Duluth	TAT Requested (days): Standard			
State, Zip: MN, 55802	Compliance Project: Δ Yes Δ No			
Phone: 218-481-6014(Tel)	PO #: Purchase Order not required			
Email: Jakob.Wartman@foth.com	WO #:			
Project Name: FOTH - White Pines, MI	Project #: 50023463			
Site: White Pine North	SSOW#:			

Analysis Requested

Preservation Codes: N - None; S - H2SO4; CB - ZnAcetate/NaOH; B - NaOH; D - HNO3

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1631E - Mercury, Low Level (CVAFS)	1631E - Dissolved Mercury, Low Level (FF)	2320B, 2540C, 2540D, 300.0_28D, 300_48HR, SM2520_B	350.1 Ammonia, 365.1 Phosphorus	SM4500_S2_F - Sulfide	335.4 - Cyanide, Total	SM5310_DOC_C - DOC	6020B - Total Metals (27), SM2340B - Hardness	6020B - Dissolved Metals (ICP/MS) - 27 elements	[illegible]	TOC	[illegible]	[illegible]	1638 - Uranium only (ICP/MS) Total & Dissolved	163 - Methyl Hg - Total & Dissolved	Total Number of containers	Special Instructions/Note:
	Preservation Code:					X	X	N	N	N	S	CB	B	S	D	D	N		N	D	D	X		
1	WP-586-510-560-1	8/25/24	1330	G	Water	X			X					X		X				X	X	7	
1	WP-586-510-560-1	8/25/24	1330	G	Water			X		X	X	X	X		X		X			X	X	15	
2	WP-586-510-560-2	8/25/24	1615	G	Water	X			X					X		X				X		6	no Methyl Merc
1	WP-586-510-560-2	8/25/24	1615	G	Water			X		X	X	X	X		X		X			X		14	no Methyl Merc
3	WP-586-510-560-1 FB				Water																		added by EEIA 8/28/24 SH
4	WP-586-510-560-2 FB				Water																		
					Water																		
					Water																		
					Water																		
					Water																		
					Water																		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Justin Bauer	8/25/24	Foth	Stephanie Hernandez	8/28/24 0950	EEIA

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks: 3.8+3.7, 5.2+5.1, 5.9+5.8, 3.7+3.6

9/4/2024


PRIORITY OVERNIGHT
TRCK 4051 7962 8064
HANDLING
TOTAL
ORIGIN ID RRLA (218) 481-6014
JUSTIN BROWN (FOTH)
WHITE PINE COPPER
35362 MALL CIRCLE DRIVE
WHITE PINE, MI 49971
UNITED STATES US
SHIP DATE 26AUG24
ACTWGT 25 00 LB MAN
CAD. 0780307/CAFE3808
TO SAMPLE RECEIPT
EUROFINS CHICAGO
2417 BOND ST.
UNIVERSITY PARK IL 60484
(708) 634-6200
REF
DEPT
RMA
FedEx Express
FedEx.
TRK# 0221 4051 7962 8064
SATURDAY 12:00P
PRIORITY OVERNIGHT
60484
IL-US
ORD
X0 JOTA
3090370 27Aug 13:15 MEMH 677G6/A12D/6FE5


Ref
Dep
Date 26Aug24
Wgt 25 00 LBS
DV
SHIPPING
SPECIAL
HANDLING
TOTAL
500-255735 Waybi
PRIORITY OVERNIGHT
TRCK 4051 7962 8042
ORIGIN ID RRLA (218) 481-6014
JUSTIN BROWN (FOTH)
WHITE PINE COPPER
35362 MALL CIRCLE DRIVE
WHITE PINE, MI 49971
UNITED STATES US
SHIP DATE 26AUG24
ACTWGT 25 00 LB MAN
CAD 0780307/CAFE3808
TO SAMPLE RECEIPT
EUROFINS CHICAGO
2417 BOND ST.
UNIVERSITY PARK IL 60484
(708) 634-6200
REF
DEPT
RMA
FedEx Express
FedEx.
TRK# 0221 4051 7962 8042
SATURDAY 12:00P
PRIORITY OVERNIGHT
60484
IL-US
ORD
X0 JOTA
3090370 27Aug 13:17 MEMH 677G6/A12D/6FE5


JUSTIN BROWN
WHITE PINE COPPER
35362 MALL CIRCLE DRIVE
WHITE PINE, MI 49971
UNITED STATES US
ACTWGT: 25.00 LB MAN
CAD: 0780307/CAFE3808
TO SAMPLE RECEIPT
EUROFINS CHICAGO
2417 BOND ST.
UNIVERSITY PARK IL 60484
(708) 534-6200
INV:
PO:
REF:
DEPT:
RMA
FedEx Express
TRK# 0221 4051 7962 3463
RETURNS MON-SAT
PRIORITY OVERNIGHT
FedEx.
TRK# 0221 4051 7962 3463
SATURDAY AA
PRIORITY OVERNIGHT
X0 JOTA
60484
IL-US
ORD
3090378 27Aug 13:10 MEMH 577G6/A12D/5FE6


Ref
Dep
Date 26Aug24
Wgt 25 00 LBS
DV
Svcs PRIORITY OVERNIGHT Master 4051 7962 8010
TRCK 4051 7962 8053
SHIPPING 0 00
SPECIAL 0 00
HANDLING 0 00
0 00 TOTAL 0 00
ORIGIN ID RRLA (218) 481-6014
JUSTIN BROWN (FOTH)
WHITE PINE COPPER
35362 MALL CIRCLE DRIVE
WHITE PINE, MI 49971
UNITED STATES US
SHIP DATE 26AUG24
ACTWGT 25 00 LB MAN
CAD 0780307/CAFE3808
TO SAMPLE RECEIPT
EUROFINS CHICAGO
2417 BOND ST.
UNIVERSITY PARK IL 60484
(708) 534-6200
INV
PO
REF
DEPT
RMA
FedEx Express
TRK# 0221 4051 796
FedEx.
TRK# 0221 4051 7962 8053
SATURDAY 12:00P
PRIORITY OVERNIGHT
X0 JOTA
60484
IL-US
ORD
3090378 27Aug 13:10 MEMH 577G6/A12D/5FE6

Login Sample Receipt Checklist

Client: Foth Infrastructure & Environment, LLC

Job Number: 500-255735-1

Login Number: 255735
List Number: 1
Creator: Hernandez, Stephanie

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.7,5.1,5.8,3.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Received extra samples not listed on COC.
Samples are received within Holding Time (excluding tests with immediate HTs)	False	Refer to Job Narrative for details.
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Foth Infrastructure & Environment, LLC

Job Number: 500-255735-1

Login Number: 255735
List Number: 2
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 08/29/24 12:22 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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500-255735 Field Sheet

Date:	8/29/2024
End Time:	12:25
KI Paper Lot:	na
Analyst:	VL

Preservative ID	Preservative Type	Container ID
A	Bromine Monochloride (0.2N)	24911
ZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ
ZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ
ZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ

Sample ID	Pres. Used (ID)	Oxidized (Y/N)?	Pres. Vol. (mL)/Percent (%)		Comments
500-255735-A-1	A	Y	.8	2	
500-255735-B-1	A	Y	.8	2	
500-255735-C-1	A	Y	.8	2	
500-255735-D-1	A	Y	.8	2	
500-255735-A-2	A	Y	.8	2	
500-255735-B-2	A	Y	.8	2	
500-255735-C-2	A	Y	.8	2	
500-255735-D-2	A	Y	.8	2	
500-255735-A-3	A	Y	.8	2	
500-255735-B-3	A	Y	.8	2	
500-255735-A-4	A	Y	.8	2	
500-255735-B-4	A	Y	.8	2	
500-255735-A-1	A	Y	.8	2	
500-255735-B-1	A	Y	.8	2	

VL 8/29/24

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500-255735 Field Sheet

Date:	8/29/2024
End Time:	12:55
pH Paper Lot:	hc324723
Analyst:	

Preservative ID	Preservative Type	Container ID
A	Nitric Acid	na
ZZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ
ZZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ
ZZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ

Sample ID	Initial pH	Final pH	Preservative ID	Preservative Added (mL)	Comments
500-255735-L-1	<2				
500-255735-K-1	<2			VR 8/29/24	
500-255735-K-2	<2				
500-255735-L-2	<2				

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ANALYTICAL REPORT

PREPARED FOR

Attn: Jakob Wartman
Foth Infrastructure & Environment, LLC
Missabe Building
227 West 1st. Street, Suite 920
Duluth, Minnesota 55802

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JOB DESCRIPTION

FOTH - White Pines, MI

JOB NUMBER

500-253415-1

Eurofins Chicago
2417 Bond Street
University Park IL 60484

See page two for job notes and contact information.

Eurofins Chicago

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

Results relate only to the items tested and the sample(s) as received by the laboratory. The results, detection limits (LOD) and Quantitation Limits (LOQ) have been adjusted for sample dilutions and/or solids content.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Chicago Project Manager.

Compliance Statement

The LOD and LOQ reported are adjusted by the dilution factor when a dilution factor greater than 1 is needed. Additionally, where results are indicated as being reported on a dry weight basis, the LOD and LOQ are adjusted for moisture content as well.

Definitions of Limits
- LOD = Limit of Detection = MDL as defined by 40 CFR part 136 Appendix B
- LOQ = Limit of Quantitation = 3.33 x LOD as defined by Wisconsin
- RL = Report Limit = a concentration supported by a standard in the calibration curves

Authorization



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Revision 1

Authorized for release by
Sandie Fredrick, Senior Project Manager
Sandra.Fredrick@et.eurofinsus.com
(920)261-1660

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Job ID: 500-253415-1 Eurofins Chicago

Job Narrative
500-253415-1

Revision
The report being provided is a revision of the original report sent on 8/15/2024. The report (revision 1) is being revised due to: Revision required by QA due to issue with Phosphorus.

Receipt
The samples were received on 7/12/2024 9:45 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.6º C and 2.0º C.

Receipt Exceptions

The following sample(s) was received outside of holding time: for total and dissolved Cr+6 Sampled 7/10, received 7/12.

The following sample(s) was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC):Field Blank LL Hg, added to COC and logged.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
Method SM 3500 CR B: The method blank for analytical batch 500-776538 contained Chromium, hexavalent above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Method SM 3500 CR B: The following samples were received outside of holding time: WP-587-305-335.54-1 (500-253415-1) and WP-587-305-335.54-2 (500-253415-2).

Method 300.0: The following sample was received with less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: WP-587-305-335.54-1 (500-253415-1).

Method 365.1: The initial calibration verification (ICV), continuing calibration verification (CCV), laboratory control sample (LCS) and Matrix Spike/Matrix Spike Duplicate (MS/MSD) fell outside the lower control limits for Phosphorus as P. The associated samples WP-587-305-335.54-2 (500-253415-2) were re-prepared and re-analyzed outside of hold. The ICV in the re-analysis batch recovered at 89% with a limit of 90%. All other quality control parameters with in range. The sample results in re-analysis confirmed original results. In-hold data is reported.

Method 365.1: The initial calibration verification (ICV), continuing calibration verification (CCV), laboratory control sample (LCS) and Matrix Spike/Matrix Spike Duplicate (MS/MSD) fell outside the lower control limits for Phosphorus as P. The associated samples WP-587-305-335.54-1 (500-253415-1) were re-prepared and re-analyzed outside of hold. The ICV in the re-analysis batch recovered at 89% with a limit of 90%. All other quality control parameters with in range. Sample WP-587-305-335.54-1 (500-253415-1) results were higher in the re-analysis. Both sets of data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253415-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-587-305-335.54-1
Lab Sample ID: 500-253415-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.50		0.50	0.20	ng/L	1		1631E	Total/NA
Uranium	0.43		0.030	0.0098	ug/L	1		1638	Total Recoverable
Uranium	0.038		0.030	0.0098	ug/L	1		1638	Dissolved
Aluminum	12000		100	25	ug/L	1		6020B	Total Recoverable
Arsenic	2.7		1.0	0.23	ug/L	1		6020B	Total Recoverable
Barium	420		2.5	0.73	ug/L	1		6020B	Total Recoverable
Boron	1400	B	50	13	ug/L	1		6020B	Total Recoverable
Calcium	450000	B	200	44	ug/L	1		6020B	Total Recoverable
Chromium	27		5.0	1.1	ug/L	1		6020B	Total Recoverable
Cobalt	5.4		1.0	0.40	ug/L	1		6020B	Total Recoverable
Copper	32	B	2.0	0.50	ug/L	1		6020B	Total Recoverable
Iron	11000		100	47	ug/L	1		6020B	Total Recoverable
Lead	3.3	B	0.50	0.19	ug/L	1		6020B	Total Recoverable
Lithium	250		10	2.5	ug/L	1		6020B	Total Recoverable
Magnesium	11000		200	49	ug/L	1		6020B	Total Recoverable
Manganese	780		2.5	0.79	ug/L	1		6020B	Total Recoverable
Molybdenum	29		5.0	2.5	ug/L	1		6020B	Total Recoverable
Nickel	15		2.0	0.63	ug/L	1		6020B	Total Recoverable
Potassium	7300		500	110	ug/L	1		6020B	Total Recoverable
Selenium	1.1	J	2.5	0.98	ug/L	1		6020B	Total Recoverable
Silver	2.7		0.50	0.12	ug/L	1		6020B	Total Recoverable
Sodium	1100000		200	77	ug/L	1		6020B	Total Recoverable
Strontium	7800		4.0	0.64	ug/L	1		6020B	Total Recoverable
Tin	2.1	J	5.0	1.3	ug/L	1		6020B	Total Recoverable
Vanadium	20		5.0	2.2	ug/L	1		6020B	Total Recoverable
Zinc	190	B	20	6.9	ug/L	1		6020B	Total Recoverable
Aluminum	39	J F1	100	25	ug/L	1		6020B	Dissolved
Arsenic	0.23	J	1.0	0.23	ug/L	1		6020B	Dissolved
Barium	320	F1	2.5	0.73	ug/L	1		6020B	Dissolved
Boron	1200	B	50	13	ug/L	1		6020B	Dissolved
Calcium	440000	B	200	44	ug/L	1		6020B	Dissolved
Copper	1.1	J B	2.0	0.50	ug/L	1		6020B	Dissolved
Iron	170	F1	100	47	ug/L	1		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: WP-587-305-335.54-1 (Continued)

Lab Sample ID: 500-253415-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	250	F1	10	2.5	ug/L	1		6020B	Dissolved
Magnesium	8000	F1	200	49	ug/L	1		6020B	Dissolved
Manganese	540	F1	2.5	0.79	ug/L	1		6020B	Dissolved
Molybdenum	29		5.0	2.5	ug/L	1		6020B	Dissolved
Nickel	0.69	J	2.0	0.63	ug/L	1		6020B	Dissolved
Potassium	4800	F1	500	110	ug/L	1		6020B	Dissolved
Sodium	1100000		200	77	ug/L	1		6020B	Dissolved
Strontium	7600		4.0	0.64	ug/L	1		6020B	Dissolved
Tin	1.5	J	5.0	1.3	ug/L	1		6020B	Dissolved
Zinc	310	B	20	6.9	ug/L	1		6020B	Dissolved
Hardness as calcium carbonate	1200		0.91	0.46	mg/L	1		SM 2340B	Total Recoverable
Bromide	26		1.0	0.18	mg/L	1		300.0	Total/NA
Chloride	2300		100	12	mg/L	100		300.0	Total/NA
Fluoride	0.42	J	1.0	0.19	mg/L	1		300.0	Total/NA
Sulfate	15		1.0	0.21	mg/L	1		300.0	Total/NA
Phosphorus as P	0.30	^1- *- ^-	0.050	0.024	mg/L	1		365.1	Total/NA
Alkalinity	33		5.0	3.7	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	33		5.0	3.7	mg/L	1		SM 2320B	Total/NA
Salinity	5.3		0.33	0.33	psu	1		SM 2520B	Total/NA
Total Dissolved Solids	4500		25	11	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	310		83	32	mg/L	1		SM 2540D	Total/NA
Chromium, hexavalent	0.0047	J H3 B	0.010	0.0032	mg/L	1		SM 3500 CR B	Total/NA
Cr (III)	0.022		0.010	0.010	mg/L	1		SM 3500 CR B	Total/NA
Chromium, hexavalent	0.0051	J H3 B	0.010	0.0032	mg/L	1		SM 3500 CR B	Dissolved

Client Sample ID: WP-587-305-335.54-2

Lab Sample ID: 500-253415-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.22	J	0.50	0.20	ng/L	1		1631E	Total/NA
Mercury	0.24	J	0.50	0.20	ng/L	1		1631E	Dissolved
Uranium	0.083		0.030	0.0098	ug/L	1		1638	Total Recoverable
Uranium	0.046		0.030	0.0098	ug/L	1		1638	Dissolved
Aluminum	920		100	25	ug/L	1		6020B	Total Recoverable
Arsenic	0.41	J	1.0	0.23	ug/L	1		6020B	Total Recoverable
Barium	290		2.5	0.73	ug/L	1		6020B	Total Recoverable
Boron	1200	B	50	13	ug/L	1		6020B	Total Recoverable
Calcium	380000	B	200	44	ug/L	1		6020B	Total Recoverable
Chromium	2.4	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Cobalt	0.49	J	1.0	0.40	ug/L	1		6020B	Total Recoverable
Copper	3.6	B	2.0	0.50	ug/L	1		6020B	Total Recoverable
Iron	1300		100	47	ug/L	1		6020B	Total Recoverable
Lead	0.37	J B	0.50	0.19	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: WP-587-305-335.54-2 (Continued)

Lab Sample ID: 500-253415-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	230		10	2.5	ug/L	1		6020B	Total Recoverable
Magnesium	7200		200	49	ug/L	1		6020B	Total Recoverable
Manganese	500		2.5	0.79	ug/L	1		6020B	Total Recoverable
Molybdenum	25		5.0	2.5	ug/L	1		6020B	Total Recoverable
Nickel	1.6	J	2.0	0.63	ug/L	1		6020B	Total Recoverable
Potassium	4400		500	110	ug/L	1		6020B	Total Recoverable
Silver	0.26	J	0.50	0.12	ug/L	1		6020B	Total Recoverable
Sodium	1100000		200	77	ug/L	1		6020B	Total Recoverable
Strontium	6600		4.0	0.64	ug/L	1		6020B	Total Recoverable
Tin	2.4	J	5.0	1.3	ug/L	1		6020B	Total Recoverable
Zinc	600	B	20	6.9	ug/L	1		6020B	Total Recoverable
Aluminum	28	J	100	25	ug/L	1		6020B	Dissolved
Barium	290		2.5	0.73	ug/L	1		6020B	Dissolved
Boron	1400	B	50	13	ug/L	1		6020B	Dissolved
Calcium	390000	B	200	44	ug/L	1		6020B	Dissolved
Copper	0.58	J B	2.0	0.50	ug/L	1		6020B	Dissolved
Iron	460		100	47	ug/L	1		6020B	Dissolved
Lithium	240		10	2.5	ug/L	1		6020B	Dissolved
Magnesium	7100		200	49	ug/L	1		6020B	Dissolved
Manganese	490		2.5	0.79	ug/L	1		6020B	Dissolved
Molybdenum	25		5.0	2.5	ug/L	1		6020B	Dissolved
Potassium	4300		500	110	ug/L	1		6020B	Dissolved
Sodium	1100000		200	77	ug/L	1		6020B	Dissolved
Strontium	6800		4.0	0.64	ug/L	1		6020B	Dissolved
Zinc	150	B	20	6.9	ug/L	1		6020B	Dissolved
Hardness as calcium carbonate	980		0.91	0.46	mg/L	1		SM 2340B	Total Recoverable
Bromide	27		1.0	0.18	mg/L	1		300.0	Total/NA
Chloride	2100		100	12	mg/L	100		300.0	Total/NA
Fluoride	0.44	J	1.0	0.19	mg/L	1		300.0	Total/NA
Sulfate	15		1.0	0.21	mg/L	1		300.0	Total/NA
Alkalinity	38		5.0	3.7	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	38		5.0	3.7	mg/L	1		SM 2320B	Total/NA
Salinity	4.8		0.33	0.33	psu	1		SM 2520B	Total/NA
Total Dissolved Solids	4200		25	11	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	33		8.3	3.2	mg/L	1		SM 2540D	Total/NA
Chromium, hexavalent	0.0061	J H3 B	0.010	0.0032	mg/L	1		SM 3500 CR B	Total/NA
Chromium, hexavalent	0.0064	J H3 B	0.010	0.0032	mg/L	1		SM 3500 CR B	Dissolved

Client Sample ID: WP-587-305-335.54-1 Field Blank

Lab Sample ID: 500-253415-3

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253415-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-587-305-335.54-2 Field Blank **Lab Sample ID: 500-253415-4**

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253415-1
Project/Site: FOTH - White Pines, MI

Method	Method Description	Protocol	Laboratory
1630	Methyl Mercury	EPA	EET SSM
1631E	Mercury, Low Level (CVAFS)	EPA	EET SSM
1638	Metals (ICP/MS)	EPA	EET SSM
6020B	Metals (ICP/MS)	SW846	EET CHI
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	EET CHI
300.0	Anions, Ion Chromatography	EPA	EET CHI
335.4	Cyanide, Total	EPA	EET CHI
350.1	Nitrogen, Ammonia	EPA	EET CHI
365.1	Phosphorus, Total	EPA	EET CHI
SM 2320B	Alkalinity	SM	EET CHI
SM 2520B	Salinity	SM	EET CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CHI
SM 2540D	Solids, Total Suspended (TSS)	SM	EET CHI
SM 3500 CR B	Chromium, Hexavalent	SM	EET CHI
SM 3500 CR B	Chromium, Trivalent	SM	EET CHI
SM 4500 S2 F	Sulfide, Total	SM	EET CHI
SM 5310C	Organic Carbon, Dissolved (DOC)	SM	EET CHI
SM 5310C	TOC	SM	EET CHI
1630	Distillation, Methyl Mercury	EPA	EET SSM
1638	Preparation, Total Recoverable Metals	EPA	EET SSM
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CHI
365.2/365.3/365	Phosphorus, Total	EPA	EET CHI
Distill/Ammonia	Distillation, Ammonia	None	EET CHI
Distill/CN	Distillation, Cyanide	None	EET CHI

Protocol References:

EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200
EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253415-1
Project/Site: FOTH - White Pines, MI

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-253415-1	WP-587-305-335.54-1	Water	07/10/24 14:35	07/12/24 09:45
500-253415-2	WP-587-305-335.54-2	Water	07/10/24 17:40	07/12/24 09:45
500-253415-3	WP-587-305-335.54-1 Field Blank	Water	07/10/24 00:00	07/12/24 09:45
500-253415-4	WP-587-305-335.54-2 Field Blank	Water	07/10/24 00:00	07/12/24 09:45

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253415-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-587-305-335.54-1
Lab Sample ID: 500-253415-1
Date Collected: 07/10/24 14:35
Matrix: Water
Date Received: 07/12/24 09:45

Method: EPA 1630 - Methyl Mercury

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/18/24 12:31	07/19/24 17:49	1

Method: EPA 1630 - Methyl Mercury - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/18/24 12:31	07/19/24 17:28	1

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.50**		0.50	0.20	ng/L			07/19/24 20:34	1

Method: EPA 1631E - Mercury, Low Level (CVAFS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/19/24 20:38	1

Method: EPA 1638 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.43**		0.030	0.0098	ug/L		07/23/24 16:04	07/29/24 19:32	1

Method: EPA 1638 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.038**		0.030	0.0098	ug/L		07/23/24 16:04	07/29/24 18:08	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**12000**		100	25	ug/L		07/26/24 15:50	07/30/24 22:37	1
Antimony	<1.3		3.0	1.3	ug/L		07/26/24 15:50	07/30/24 22:37	1
Arsenic	**2.7**		1.0	0.23	ug/L		07/26/24 15:50	07/30/24 22:37	1
Barium	**420**		2.5	0.73	ug/L		07/26/24 15:50	07/30/24 22:37	1
Beryllium	<0.53		1.0	0.53	ug/L		07/26/24 15:50	07/30/24 22:37	1
Boron	**1400**	**B**	50	13	ug/L		07/31/24 15:18	08/02/24 12:35	1
Cadmium	<0.17		0.50	0.17	ug/L		07/26/24 15:50	07/30/24 22:37	1
Calcium	**450000**	**B**	200	44	ug/L		07/26/24 15:50	07/30/24 22:37	1
Chromium	**27**		5.0	1.1	ug/L		07/26/24 15:50	07/30/24 22:37	1
Cobalt	**5.4**		1.0	0.40	ug/L		07/26/24 15:50	07/30/24 22:37	1
Copper	**32**	**B**	2.0	0.50	ug/L		07/26/24 15:50	07/30/24 22:37	1
Iron	**11000**		100	47	ug/L		07/26/24 15:50	07/30/24 22:37	1
Lead	**3.3**	**B**	0.50	0.19	ug/L		07/26/24 15:50	07/30/24 22:37	1
Lithium	**250**		10	2.5	ug/L		07/26/24 15:50	07/30/24 22:37	1
Magnesium	**11000**		200	49	ug/L		07/26/24 15:50	07/30/24 22:37	1
Manganese	**780**		2.5	0.79	ug/L		07/26/24 15:50	07/30/24 22:37	1
Molybdenum	**29**		5.0	2.5	ug/L		07/26/24 15:50	07/30/24 22:37	1
Nickel	**15**		2.0	0.63	ug/L		07/26/24 15:50	07/30/24 22:37	1
Potassium	**7300**		500	110	ug/L		07/26/24 15:50	07/30/24 22:37	1
Selenium	**1.1**	**J**	2.5	0.98	ug/L		07/26/24 15:50	07/30/24 22:37	1
Silver	**2.7**		0.50	0.12	ug/L		07/26/24 15:50	07/30/24 22:37	1
Sodium	**1100000**		200	77	ug/L		07/26/24 15:50	07/30/24 22:37	1
Strontium	**7800**		4.0	0.64	ug/L		07/26/24 15:50	07/30/24 22:37	1
Thallium	<0.57		2.0	0.57	ug/L		07/26/24 15:50	07/30/24 22:37	1
Tin	**2.1**	**J**	5.0	1.3	ug/L		07/26/24 15:50	07/30/24 22:37	1
Vanadium	**20**		5.0	2.2	ug/L		07/26/24 15:50	07/30/24 22:37	1
Zinc	**190**	**B**	20	6.9	ug/L		07/31/24 15:18	08/01/24 17:15	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253415-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-587-305-335.54-1
Lab Sample ID: 500-253415-1
Date Collected: 07/10/24 14:35
Matrix: Water
Date Received: 07/12/24 09:45

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**39**	**J F1**	100	25	ug/L		07/26/24 15:50	07/30/24 22:47	1
Antimony	<1.3		3.0	1.3	ug/L		07/26/24 15:50	07/30/24 22:47	1
Arsenic	**0.23**	**J**	1.0	0.23	ug/L		07/26/24 15:50	07/30/24 22:47	1
Barium	**320**	**F1**	2.5	0.73	ug/L		07/26/24 15:50	07/30/24 22:47	1
Beryllium	<0.53		1.0	0.53	ug/L		07/26/24 15:50	07/30/24 22:47	1
Boron	**1200**	**B**	50	13	ug/L		07/31/24 15:18	08/02/24 12:30	1
Cadmium	<0.17		0.50	0.17	ug/L		07/26/24 15:50	07/30/24 22:47	1
Calcium	**440000**	**B**	200	44	ug/L		07/26/24 15:50	07/30/24 22:47	1
Chromium	<1.1		5.0	1.1	ug/L		07/26/24 15:50	07/30/24 22:47	1
Cobalt	<0.40		1.0	0.40	ug/L		07/26/24 15:50	07/30/24 22:47	1
Copper	**1.1**	**J B**	2.0	0.50	ug/L		07/26/24 15:50	07/30/24 22:47	1
Iron	**170**	**F1**	100	47	ug/L		07/26/24 15:50	07/30/24 22:47	1
Lead	<0.19		0.50	0.19	ug/L		07/26/24 15:50	07/30/24 22:47	1
Lithium	**250**	**F1**	10	2.5	ug/L		07/26/24 15:50	07/30/24 22:47	1
Magnesium	**8000**	**F1**	200	49	ug/L		07/26/24 15:50	07/30/24 22:47	1
Manganese	**540**	**F1**	2.5	0.79	ug/L		07/26/24 15:50	07/30/24 22:47	1
Molybdenum	**29**		5.0	2.5	ug/L		07/26/24 15:50	07/30/24 22:47	1
Nickel	**0.69**	**J**	2.0	0.63	ug/L		07/26/24 15:50	07/30/24 22:47	1
Potassium	**4800**	**F1**	500	110	ug/L		07/26/24 15:50	07/30/24 22:47	1
Selenium	<0.98		2.5	0.98	ug/L		07/26/24 15:50	07/30/24 22:47	1
Silver	<0.12		0.50	0.12	ug/L		07/26/24 15:50	07/30/24 22:47	1
Sodium	**1100000**		200	77	ug/L		07/26/24 15:50	07/30/24 22:47	1
Strontium	**7600**		4.0	0.64	ug/L		07/26/24 15:50	07/30/24 22:47	1
Thallium	<0.57		2.0	0.57	ug/L		07/26/24 15:50	07/30/24 22:47	1
Tin	**1.5**	**J**	5.0	1.3	ug/L		07/26/24 15:50	07/30/24 22:47	1
Vanadium	<2.2		5.0	2.2	ug/L		07/26/24 15:50	07/30/24 22:47	1
Zinc	**310**	**B**	20	6.9	ug/L		07/31/24 15:18	08/01/24 17:11	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**1200**		0.91	0.46	mg/L		07/26/24 15:50	07/31/24 10:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**26**		1.0	0.18	mg/L			07/12/24 14:04	1
Nitrate as N (EPA 300.0)	<0.043	H	1.0	0.043	mg/L			07/12/24 14:04	1
Chloride (EPA 300.0)	**2300**		100	12	mg/L			08/02/24 01:42	100
Nitrite as N (EPA 300.0)	<0.070	H	1.0	0.070	mg/L			07/12/24 14:04	1
Fluoride (EPA 300.0)	**0.42**	**J**	1.0	0.19	mg/L			07/12/24 14:04	1
Nitrate Nitrite as N (EPA 300.0)	<0.070	H	1.0	0.070	mg/L			07/12/24 14:04	1
Sulfate (EPA 300.0)	**15**		1.0	0.21	mg/L			07/12/24 14:04	1
Cyanide, Total (EPA 335.4)	<0.0036		0.0050	0.0036	mg/L		07/22/24 11:06	07/22/24 18:14	1
Ammonia (EPA 350.1)	<0.10		0.20	0.10	mg/L		08/06/24 14:48	08/06/24 19:24	1
Phosphorus as P (EPA 365.1)	**0.30**	**^1- *- ^-**	0.050	0.024	mg/L		08/07/24 11:15	08/07/24 19:19	1
Alkalinity (SM 2320B)	**33**		5.0	3.7	mg/L			07/19/24 16:55	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**33**		5.0	3.7	mg/L			07/19/24 16:55	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<3.7		5.0	3.7	mg/L			07/19/24 16:55	1
Salinity (SM 2520B)	**5.3**		0.33	0.33	psu			07/29/24 09:57	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253415-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-587-305-335.54-1
Lab Sample ID: 500-253415-1
Date Collected: 07/10/24 14:35
Matrix: Water
Date Received: 07/12/24 09:45

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**4500**		25	11	mg/L			07/16/24 00:51	1
Total Suspended Solids (SM 2540D)	**310**		83	32	mg/L			07/17/24 15:00	1
Chromium, hexavalent (SM 3500 CR B)	**0.0047**	**J H3 B**	0.010	0.0032	mg/L			07/12/24 13:52	1
Cr (III) (SM 3500 CR B)	**0.022**		0.010	0.010	mg/L			07/15/24 08:14	1
Sulfide (SM 4500 S2 F)	<0.23		1.0	0.23	mg/L			07/15/24 22:14	1
Total Organic Carbon (SM 5310C)	<0.47		1.0	0.47	mg/L			07/30/24 12:13	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent (SM 3500 CR B)	**0.0051**	**J H3 B**	0.010	0.0032	mg/L			07/12/24 13:52	1
Cr (III) (SM 3500 CR B)	<0.010		0.010	0.010	mg/L			08/05/24 10:10	1
Dissolved Organic Carbon (SM 5310C)	<0.47		1.0	0.47	mg/L			07/18/24 07:44	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253415-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-587-305-335.54-2
Lab Sample ID: 500-253415-2
Date Collected: 07/10/24 17:40
Matrix: Water
Date Received: 07/12/24 09:45

Method: EPA 1630 - Methyl Mercury

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/18/24 12:31	07/19/24 17:18	1

Method: EPA 1630 - Methyl Mercury - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/18/24 12:31	07/19/24 17:38	1

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.22**	**J**	0.50	0.20	ng/L			07/19/24 20:42	1

Method: EPA 1631E - Mercury, Low Level (CVAFS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.24**	**J**	0.50	0.20	ng/L			07/19/24 20:46	1

Method: EPA 1638 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.083**		0.030	0.0098	ug/L		07/23/24 16:04	07/29/24 19:35	1

Method: EPA 1638 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.046**		0.030	0.0098	ug/L		07/23/24 16:04	07/29/24 19:28	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**920**		100	25	ug/L		07/26/24 15:50	07/30/24 22:45	1
Antimony	<1.3		3.0	1.3	ug/L		07/26/24 15:50	07/30/24 22:45	1
Arsenic	**0.41**	**J**	1.0	0.23	ug/L		07/26/24 15:50	07/30/24 22:45	1
Barium	**290**		2.5	0.73	ug/L		07/26/24 15:50	07/30/24 22:45	1
Beryllium	<0.53		1.0	0.53	ug/L		07/26/24 15:50	07/30/24 22:45	1
Boron	**1200**	**B**	50	13	ug/L		07/31/24 15:18	08/02/24 12:37	1
Cadmium	<0.17		0.50	0.17	ug/L		07/26/24 15:50	07/30/24 22:45	1
Calcium	**380000**	**B**	200	44	ug/L		07/26/24 15:50	07/30/24 22:45	1
Chromium	**2.4**	**J**	5.0	1.1	ug/L		07/26/24 15:50	07/30/24 22:45	1
Cobalt	**0.49**	**J**	1.0	0.40	ug/L		07/26/24 15:50	07/30/24 22:45	1
Copper	**3.6**	**B**	2.0	0.50	ug/L		07/26/24 15:50	07/30/24 22:45	1
Iron	**1300**		100	47	ug/L		07/26/24 15:50	07/30/24 22:45	1
Lead	**0.37**	**J B**	0.50	0.19	ug/L		07/26/24 15:50	07/30/24 22:45	1
Lithium	**230**		10	2.5	ug/L		07/26/24 15:50	07/30/24 22:45	1
Magnesium	**7200**		200	49	ug/L		07/26/24 15:50	07/30/24 22:45	1
Manganese	**500**		2.5	0.79	ug/L		07/26/24 15:50	07/30/24 22:45	1
Molybdenum	**25**		5.0	2.5	ug/L		07/26/24 15:50	07/30/24 22:45	1
Nickel	**1.6**	**J**	2.0	0.63	ug/L		07/26/24 15:50	07/30/24 22:45	1
Potassium	**4400**		500	110	ug/L		07/26/24 15:50	07/30/24 22:45	1
Selenium	<0.98		2.5	0.98	ug/L		07/26/24 15:50	07/30/24 22:45	1
Silver	**0.26**	**J**	0.50	0.12	ug/L		07/26/24 15:50	07/30/24 22:45	1
Sodium	**1100000**		200	77	ug/L		07/26/24 15:50	07/30/24 22:45	1
Strontium	**6600**		4.0	0.64	ug/L		07/26/24 15:50	07/30/24 22:45	1
Thallium	<0.57		2.0	0.57	ug/L		07/26/24 15:50	07/30/24 22:45	1
Tin	**2.4**	**J**	5.0	1.3	ug/L		07/26/24 15:50	07/30/24 22:45	1
Vanadium	<2.2		5.0	2.2	ug/L		07/26/24 15:50	07/30/24 22:45	1
Zinc	**600**	**B**	20	6.9	ug/L		07/31/24 15:18	08/01/24 17:17	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253415-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-587-305-335.54-2
Lab Sample ID: 500-253415-2
Date Collected: 07/10/24 17:40
Matrix: Water
Date Received: 07/12/24 09:45

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**28**	**J**	100	25	ug/L		07/26/24 15:50	07/30/24 22:49	1
Antimony	<1.3		3.0	1.3	ug/L		07/26/24 15:50	07/30/24 22:49	1
Arsenic	<0.23		1.0	0.23	ug/L		07/26/24 15:50	07/30/24 22:49	1
Barium	**290**		2.5	0.73	ug/L		07/26/24 15:50	07/30/24 22:49	1
Beryllium	<0.53		1.0	0.53	ug/L		07/26/24 15:50	07/30/24 22:49	1
Boron	**1400**	**B**	50	13	ug/L		07/31/24 15:18	08/02/24 12:32	1
Cadmium	<0.17		0.50	0.17	ug/L		07/26/24 15:50	07/30/24 22:49	1
Calcium	**390000**	**B**	200	44	ug/L		07/26/24 15:50	07/30/24 22:49	1
Chromium	<1.1		5.0	1.1	ug/L		07/26/24 15:50	07/30/24 22:49	1
Cobalt	<0.40		1.0	0.40	ug/L		07/26/24 15:50	07/30/24 22:49	1
Copper	**0.58**	**J B**	2.0	0.50	ug/L		07/26/24 15:50	07/30/24 22:49	1
Iron	**460**		100	47	ug/L		07/26/24 15:50	07/30/24 22:49	1
Lead	<0.19		0.50	0.19	ug/L		07/26/24 15:50	07/30/24 22:49	1
Lithium	**240**		10	2.5	ug/L		07/26/24 15:50	07/30/24 22:49	1
Magnesium	**7100**		200	49	ug/L		07/26/24 15:50	07/30/24 22:49	1
Manganese	**490**		2.5	0.79	ug/L		07/26/24 15:50	07/30/24 22:49	1
Molybdenum	**25**		5.0	2.5	ug/L		07/26/24 15:50	07/30/24 22:49	1
Nickel	<0.63		2.0	0.63	ug/L		07/26/24 15:50	07/30/24 22:49	1
Potassium	**4300**		500	110	ug/L		07/26/24 15:50	07/30/24 22:49	1
Selenium	<0.98		2.5	0.98	ug/L		07/26/24 15:50	07/30/24 22:49	1
Silver	<0.12		0.50	0.12	ug/L		07/26/24 15:50	07/30/24 22:49	1
Sodium	**1100000**		200	77	ug/L		07/26/24 15:50	07/30/24 22:49	1
Strontium	**6800**		4.0	0.64	ug/L		07/26/24 15:50	07/30/24 22:49	1
Thallium	<0.57		2.0	0.57	ug/L		07/26/24 15:50	07/30/24 22:49	1
Tin	<1.3		5.0	1.3	ug/L		07/26/24 15:50	07/30/24 22:49	1
Vanadium	<2.2		5.0	2.2	ug/L		07/26/24 15:50	07/30/24 22:49	1
Zinc	**150**	**B**	20	6.9	ug/L		07/31/24 15:18	08/01/24 17:13	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**980**		0.91	0.46	mg/L		07/26/24 15:50	07/31/24 10:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**27**		1.0	0.18	mg/L			07/12/24 14:20	1
Nitrate as N (EPA 300.0)	<0.043		1.0	0.043	mg/L			07/12/24 14:20	1
Chloride (EPA 300.0)	**2100**		100	12	mg/L			08/02/24 01:58	100
Nitrite as N (EPA 300.0)	<0.070		1.0	0.070	mg/L			07/12/24 14:20	1
Fluoride (EPA 300.0)	**0.44**	**J**	1.0	0.19	mg/L			07/12/24 14:20	1
Nitrate Nitrite as N (EPA 300.0)	<0.070		1.0	0.070	mg/L			07/12/24 14:20	1
Sulfate (EPA 300.0)	**15**		1.0	0.21	mg/L			07/12/24 14:20	1
Cyanide, Total (EPA 335.4)	<0.0036		0.0050	0.0036	mg/L		07/22/24 11:58	07/23/24 15:07	1
Ammonia (EPA 350.1)	<0.10		0.20	0.10	mg/L		08/06/24 14:48	08/06/24 19:24	1
Phosphorus as P (EPA 365.1)	<0.024	^1- *- ^-	0.050	0.024	mg/L		08/07/24 11:15	08/07/24 19:20	1
Alkalinity (SM 2320B)	**38**		5.0	3.7	mg/L			07/19/24 17:04	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**38**		5.0	3.7	mg/L			07/19/24 17:04	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<3.7		5.0	3.7	mg/L			07/19/24 17:04	1
Salinity (SM 2520B)	**4.8**		0.33	0.33	psu			07/29/24 09:57	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253415-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-587-305-335.54-2
Lab Sample ID: 500-253415-2
Date Collected: 07/10/24 17:40
Matrix: Water
Date Received: 07/12/24 09:45

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**4200**		25	11	mg/L			07/16/24 00:54	1
Total Suspended Solids (SM 2540D)	**33**		8.3	3.2	mg/L			07/17/24 15:03	1
Chromium, hexavalent (SM 3500 CR B)	**0.0061**	**J H3 B**	0.010	0.0032	mg/L			07/12/24 13:53	1
Cr (III) (SM 3500 CR B)	<0.010		0.010	0.010	mg/L			07/15/24 08:14	1
Sulfide (SM 4500 S2 F)	<0.23		1.0	0.23	mg/L			07/15/24 22:18	1
Total Organic Carbon (SM 5310C)	<0.47		1.0	0.47	mg/L			07/30/24 12:42	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent (SM 3500 CR B)	**0.0064**	**J H3 B**	0.010	0.0032	mg/L			07/12/24 13:53	1
Cr (III) (SM 3500 CR B)	<0.010		0.010	0.010	mg/L			08/05/24 10:10	1
Dissolved Organic Carbon (SM 5310C)	<0.47		1.0	0.47	mg/L			07/18/24 07:44	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253415-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-587-305-335.54-1 Field Blank
Lab Sample ID: 500-253415-3
Date Collected: 07/10/24 00:00
Matrix: Water
Date Received: 07/12/24 09:45

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/19/24 20:50	1

Client Sample Results

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253415-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-587-305-335.54-2 Field Blank
Lab Sample ID: 500-253415-4
Date Collected: 07/10/24 00:00
Matrix: Water
Date Received: 07/12/24 09:45

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/19/24 20:54	1

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F3	Duplicate RPD exceeds the control limit
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
^-	Continuing Calibration Verification (CCV) is outside acceptance limits, low biased.
^1-	Initial Calibration Verification (ICV) is outside acceptance limits, low biased.
B	Compound was found in the blank and sample.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Metals

Prep Batch: 2400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Dissolved	Water	1630	
500-253415-1	WP-587-305-335.54-1	Total/NA	Water	1630	
500-253415-2	WP-587-305-335.54-2	Dissolved	Water	1630	
500-253415-2	WP-587-305-335.54-2	Total/NA	Water	1630	
MB 350-2400/1-A	Method Blank	Total/NA	Water	1630	
MB 350-2400/2-A	Method Blank	Total/NA	Water	1630	
MB 350-2400/3-A	Method Blank	Total/NA	Water	1630	
LCS 350-2400/4-A	Lab Control Sample	Total/NA	Water	1630	
LCSD 350-2400/5-A	Lab Control Sample Dup	Total/NA	Water	1630	

Analysis Batch: 2421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Dissolved	Water	1631E	
500-253415-1	WP-587-305-335.54-1	Total/NA	Water	1631E	
500-253415-2	WP-587-305-335.54-2	Dissolved	Water	1631E	
500-253415-2	WP-587-305-335.54-2	Total/NA	Water	1631E	
500-253415-3	WP-587-305-335.54-1 Field Blank	Total/NA	Water	1631E	
500-253415-4	WP-587-305-335.54-2 Field Blank	Total/NA	Water	1631E	
MB 350-2421/23	Method Blank	Total/NA	Water	1631E	
MB 350-2421/24	Method Blank	Total/NA	Water	1631E	
MB 350-2421/25	Method Blank	Total/NA	Water	1631E	
LCS 350-2421/26	Lab Control Sample	Total/NA	Water	1631E	
LCSD 350-2421/27	Lab Control Sample Dup	Total/NA	Water	1631E	

Analysis Batch: 2422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Dissolved	Water	1630	2400
500-253415-1	WP-587-305-335.54-1	Total/NA	Water	1630	2400
500-253415-2	WP-587-305-335.54-2	Dissolved	Water	1630	2400
500-253415-2	WP-587-305-335.54-2	Total/NA	Water	1630	2400
MB 350-2400/1-A	Method Blank	Total/NA	Water	1630	2400
MB 350-2400/2-A	Method Blank	Total/NA	Water	1630	2400
MB 350-2400/3-A	Method Blank	Total/NA	Water	1630	2400
LCS 350-2400/4-A	Lab Control Sample	Total/NA	Water	1630	2400
LCSD 350-2400/5-A	Lab Control Sample Dup	Total/NA	Water	1630	2400

Prep Batch: 2432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Dissolved	Water	1638	
500-253415-1	WP-587-305-335.54-1	Total Recoverable	Water	1638	
500-253415-2	WP-587-305-335.54-2	Dissolved	Water	1638	
500-253415-2	WP-587-305-335.54-2	Total Recoverable	Water	1638	
MB 350-2432/1-A	Method Blank	Total Recoverable	Water	1638	
MB 350-2432/2-A	Method Blank	Total Recoverable	Water	1638	
LCS 350-2432/3-A	Lab Control Sample	Total Recoverable	Water	1638	
LCSD 350-2432/4-A	Lab Control Sample Dup	Total Recoverable	Water	1638	
500-253415-1 MS	WP-587-305-335.54-1	Dissolved	Water	1638	
500-253415-1 MSD	WP-587-305-335.54-1	Dissolved	Water	1638	

Metals

Analysis Batch: 2472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Dissolved	Water	1638	2432
500-253415-1	WP-587-305-335.54-1	Total Recoverable	Water	1638	2432
500-253415-2	WP-587-305-335.54-2	Dissolved	Water	1638	2432
500-253415-2	WP-587-305-335.54-2	Total Recoverable	Water	1638	2432
MB 350-2432/1-A	Method Blank	Total Recoverable	Water	1638	2432
MB 350-2432/2-A	Method Blank	Total Recoverable	Water	1638	2432
LCS 350-2432/3-A	Lab Control Sample	Total Recoverable	Water	1638	2432
LCSD 350-2432/4-A	Lab Control Sample Dup	Total Recoverable	Water	1638	2432
500-253415-1 MS	WP-587-305-335.54-1	Dissolved	Water	1638	2432
500-253415-1 MSD	WP-587-305-335.54-1	Dissolved	Water	1638	2432

Prep Batch: 778644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Dissolved	Water	3005A	
500-253415-1	WP-587-305-335.54-1	Total Recoverable	Water	3005A	
500-253415-2	WP-587-305-335.54-2	Dissolved	Water	3005A	
500-253415-2	WP-587-305-335.54-2	Total Recoverable	Water	3005A	
MB 500-778644/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-778644/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-253415-1 MS	WP-587-305-335.54-1	Dissolved	Water	3005A	
500-253415-1 MSD	WP-587-305-335.54-1	Dissolved	Water	3005A	
500-253415-1 DU	WP-587-305-335.54-1	Dissolved	Water	3005A	

Prep Batch: 779116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Dissolved	Water	3005A	
500-253415-1	WP-587-305-335.54-1	Total Recoverable	Water	3005A	
500-253415-2	WP-587-305-335.54-2	Dissolved	Water	3005A	
500-253415-2	WP-587-305-335.54-2	Total Recoverable	Water	3005A	
MB 500-779116/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-779116/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 779182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Dissolved	Water	6020B	778644
500-253415-1	WP-587-305-335.54-1	Total Recoverable	Water	6020B	778644
500-253415-2	WP-587-305-335.54-2	Dissolved	Water	6020B	778644
500-253415-2	WP-587-305-335.54-2	Total Recoverable	Water	6020B	778644
MB 500-778644/1-A	Method Blank	Total Recoverable	Water	6020B	778644
LCS 500-778644/2-A	Lab Control Sample	Total Recoverable	Water	6020B	778644
500-253415-1 MS	WP-587-305-335.54-1	Dissolved	Water	6020B	778644
500-253415-1 MSD	WP-587-305-335.54-1	Dissolved	Water	6020B	778644
500-253415-1 DU	WP-587-305-335.54-1	Dissolved	Water	6020B	778644

Analysis Batch: 779240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Total Recoverable	Water	SM 2340B	778644
500-253415-2	WP-587-305-335.54-2	Total Recoverable	Water	SM 2340B	778644

Metals

Analysis Batch: 779619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Dissolved	Water	6020B	779116
500-253415-1	WP-587-305-335.54-1	Total Recoverable	Water	6020B	779116
500-253415-2	WP-587-305-335.54-2	Dissolved	Water	6020B	779116
500-253415-2	WP-587-305-335.54-2	Total Recoverable	Water	6020B	779116
MB 500-779116/1-A	Method Blank	Total Recoverable	Water	6020B	779116
LCS 500-779116/2-A	Lab Control Sample	Total Recoverable	Water	6020B	779116

Analysis Batch: 779737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Dissolved	Water	6020B	779116
500-253415-1	WP-587-305-335.54-1	Total Recoverable	Water	6020B	779116
500-253415-2	WP-587-305-335.54-2	Dissolved	Water	6020B	779116
500-253415-2	WP-587-305-335.54-2	Total Recoverable	Water	6020B	779116
MB 500-779116/1-A	Method Blank	Total Recoverable	Water	6020B	779116
LCS 500-779116/2-A	Lab Control Sample	Total Recoverable	Water	6020B	779116

General Chemistry

Analysis Batch: 776477

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Total/NA	Water	300.0	
500-253415-2	WP-587-305-335.54-2	Total/NA	Water	300.0	
MB 500-776477/3	Method Blank	Total/NA	Water	300.0	
LCS 500-776477/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 776478

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Total/NA	Water	300.0	
500-253415-2	WP-587-305-335.54-2	Total/NA	Water	300.0	
MB 500-776478/3	Method Blank	Total/NA	Water	300.0	
LCS 500-776478/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 776538

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Dissolved	Water	SM 3500 CR B	
500-253415-1	WP-587-305-335.54-1	Total/NA	Water	SM 3500 CR B	
500-253415-2	WP-587-305-335.54-2	Dissolved	Water	SM 3500 CR B	
500-253415-2	WP-587-305-335.54-2	Total/NA	Water	SM 3500 CR B	
MB 500-776538/9	Method Blank	Total/NA	Water	SM 3500 CR B	
LCS 500-776538/10	Lab Control Sample	Total/NA	Water	SM 3500 CR B	

Analysis Batch: 776630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Total/NA	Water	SM 3500 CR B	
500-253415-2	WP-587-305-335.54-2	Total/NA	Water	SM 3500 CR B	

Analysis Batch: 776798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Total/NA	Water	SM 4500 S2 F	
500-253415-2	WP-587-305-335.54-2	Total/NA	Water	SM 4500 S2 F	
MB 500-776798/1	Method Blank	Total/NA	Water	SM 4500 S2 F	

General Chemistry (Continued)

Analysis Batch: 776798 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-776798/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 776800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Total/NA	Water	SM 2540C	
500-253415-2	WP-587-305-335.54-2	Total/NA	Water	SM 2540C	
MB 500-776800/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-776800/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 777163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Total/NA	Water	SM 2540D	
500-253415-2	WP-587-305-335.54-2	Total/NA	Water	SM 2540D	
MB 500-777163/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 500-777163/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Analysis Batch: 777240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Dissolved	Water	SM 5310C	
500-253415-2	WP-587-305-335.54-2	Dissolved	Water	SM 5310C	
MB 500-777240/7	Method Blank	Dissolved	Water	SM 5310C	
LCS 500-777240/8	Lab Control Sample	Dissolved	Water	SM 5310C	

Analysis Batch: 777696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Total/NA	Water	SM 2320B	
500-253415-2	WP-587-305-335.54-2	Total/NA	Water	SM 2320B	
MB 500-777696/28	Method Blank	Total/NA	Water	SM 2320B	
LCS 500-777696/4	Lab Control Sample	Total/NA	Water	SM 2320B	

Prep Batch: 777764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Total/NA	Water	Distill/CN	
MB 500-777764/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 500-777764/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Prep Batch: 777768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-2	WP-587-305-335.54-2	Total/NA	Water	Distill/CN	
MB 500-777768/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 500-777768/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Analysis Batch: 777904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Total/NA	Water	335.4	777764
MB 500-777764/1-A	Method Blank	Total/NA	Water	335.4	777764
LCS 500-777764/2-A	Lab Control Sample	Total/NA	Water	335.4	777764

Analysis Batch: 778018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-2	WP-587-305-335.54-2	Total/NA	Water	335.4	777768

General Chemistry (Continued)

Analysis Batch: 778018 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-777768/1-A	Method Blank	Total/NA	Water	335.4	777768
LCS 500-777768/2-A	Lab Control Sample	Total/NA	Water	335.4	777768

Analysis Batch: 778811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Total/NA	Water	SM 2520B	
500-253415-2	WP-587-305-335.54-2	Total/NA	Water	SM 2520B	

Analysis Batch: 779224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Total/NA	Water	SM 5310C	
500-253415-2	WP-587-305-335.54-2	Total/NA	Water	SM 5310C	
MB 500-779224/7	Method Blank	Total/NA	Water	SM 5310C	
LCS 500-779224/8	Lab Control Sample	Total/NA	Water	SM 5310C	

Analysis Batch: 779535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Total/NA	Water	300.0	
500-253415-2	WP-587-305-335.54-2	Total/NA	Water	300.0	
MB 500-779535/33	Method Blank	Total/NA	Water	300.0	
LCS 500-779535/34	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 779911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Dissolved	Water	SM 3500 CR B	
500-253415-2	WP-587-305-335.54-2	Dissolved	Water	SM 3500 CR B	

Prep Batch: 780105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Total/NA	Water	Distill/Ammonia	
500-253415-2	WP-587-305-335.54-2	Total/NA	Water	Distill/Ammonia	
MB 500-780105/1-A	Method Blank	Total/NA	Water	Distill/Ammonia	
LCS 500-780105/2-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	

Analysis Batch: 780256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Total/NA	Water	350.1	780105
500-253415-2	WP-587-305-335.54-2	Total/NA	Water	350.1	780105
MB 500-780105/1-A	Method Blank	Total/NA	Water	350.1	780105
LCS 500-780105/2-A	Lab Control Sample	Total/NA	Water	350.1	780105

Prep Batch: 780738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Total/NA	Water	365.2/365.3/365	
500-253415-2	WP-587-305-335.54-2	Total/NA	Water	365.2/365.3/365	
MB 500-780738/1-A	Method Blank	Total/NA	Water	365.2/365.3/365	
LCS 500-780738/2-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	

Prep Batch: 781406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1 - RE	WP-587-305-335.54-1	Total/NA	Water	365.2/365.3/365	

General Chemistry (Continued)

Prep Batch: 781406 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-781406/3-A	Method Blank	Total/NA	Water	365.2/365.3/365	
LCS 500-781406/4-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	
LCSD 500-781406/5-A	Lab Control Sample Dup	Total/NA	Water	365.2/365.3/365	

Analysis Batch: 781671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1 - RE	WP-587-305-335.54-1	Total/NA	Water	365.1	781406
MB 500-781406/3-A	Method Blank	Total/NA	Water	365.1	781406
LCS 500-781406/4-A	Lab Control Sample	Total/NA	Water	365.1	781406
LCSD 500-781406/5-A	Lab Control Sample Dup	Total/NA	Water	365.1	781406

Analysis Batch: 781723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253415-1	WP-587-305-335.54-1	Total/NA	Water	365.1	780738
500-253415-2	WP-587-305-335.54-2	Total/NA	Water	365.1	780738
MB 500-780738/1-A	Method Blank	Total/NA	Water	365.1	780738
LCS 500-780738/2-A	Lab Control Sample	Total/NA	Water	365.1	780738

Method: 1630 - Methyl Mercury

Lab Sample ID: MB 350-2400/1-A
Matrix: Water
Analysis Batch: 2422

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2400

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/18/24 12:31	07/19/24 15:05	1

Lab Sample ID: MB 350-2400/2-A
Matrix: Water
Analysis Batch: 2422

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2400

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/18/24 12:31	07/19/24 15:16	1

Lab Sample ID: MB 350-2400/3-A
Matrix: Water
Analysis Batch: 2422

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2400

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/18/24 12:31	07/19/24 15:26	1

Lab Sample ID: LCS 350-2400/4-A
Matrix: Water
Analysis Batch: 2422

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 2400

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methyl Mercury	1.00	0.894		ng/L		89	65 - 135

Lab Sample ID: LCSD 350-2400/5-A
Matrix: Water
Analysis Batch: 2422

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 2400

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methyl Mercury	1.00	0.808		ng/L		81	65 - 135	10	35

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 350-2421/23
Matrix: Water
Analysis Batch: 2421

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/19/24 17:02	1

Lab Sample ID: MB 350-2421/24
Matrix: Water
Analysis Batch: 2421

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/19/24 17:06	1

Method: 1631E - Mercury, Low Level (CVAFS) (Continued)

Lab Sample ID: MB 350-2421/25
Matrix: Water
Analysis Batch: 2421

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/19/24 17:10	1

Lab Sample ID: LCS 350-2421/26
Matrix: Water
Analysis Batch: 2421

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.72		ng/L		94	77 - 123

Lab Sample ID: LCSD 350-2421/27
Matrix: Water
Analysis Batch: 2421

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	4.72		ng/L		94	77 - 123	0	24

Method: 1638 - Metals (ICP/MS)

Lab Sample ID: MB 350-2432/1-A
Matrix: Water
Analysis Batch: 2472

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 2432

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	<0.0098		0.030	0.0098	ug/L		07/23/24 16:04	07/29/24 17:17	1

Lab Sample ID: MB 350-2432/2-A
Matrix: Water
Analysis Batch: 2472

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 2432

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	<0.0098		0.030	0.0098	ug/L		07/23/24 16:04	07/29/24 17:20	1

Lab Sample ID: LCS 350-2432/3-A
Matrix: Water
Analysis Batch: 2472

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 2432

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Uranium	25.0	22.9		ug/L		92	85 - 115

Lab Sample ID: LCSD 350-2432/4-A
Matrix: Water
Analysis Batch: 2472

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 2432

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Uranium	25.0	23.6		ug/L		94	85 - 115	3	20

Method: 1638 - Metals (ICP/MS) (Continued)

Lab Sample ID: 500-253415-1 MS
Matrix: Water
Analysis Batch: 2472

Client Sample ID: WP-587-305-335.54-1
Prep Type: Dissolved
Prep Batch: 2432

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Uranium	0.038		25.0	25.7		ug/L		102	70 - 130

Lab Sample ID: 500-253415-1 MSD
Matrix: Water
Analysis Batch: 2472

Client Sample ID: WP-587-305-335.54-1
Prep Type: Dissolved
Prep Batch: 2432

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Uranium	0.038		25.0	25.6		ug/L		102	70 - 130	0	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 500-778644/1-A
Matrix: Water
Analysis Batch: 779182

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 778644

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		07/26/24 15:50	07/30/24 22:32	1
Antimony	<1.3		3.0	1.3	ug/L		07/26/24 15:50	07/30/24 22:32	1
Arsenic	<0.23		1.0	0.23	ug/L		07/26/24 15:50	07/30/24 22:32	1
Barium	<0.73		2.5	0.73	ug/L		07/26/24 15:50	07/30/24 22:32	1
Beryllium	<0.53		1.0	0.53	ug/L		07/26/24 15:50	07/30/24 22:32	1
Cadmium	<0.17		0.50	0.17	ug/L		07/26/24 15:50	07/30/24 22:32	1
Calcium	59.2	J	200	44	ug/L		07/26/24 15:50	07/30/24 22:32	1
Chromium	<1.1		5.0	1.1	ug/L		07/26/24 15:50	07/30/24 22:32	1
Cobalt	<0.40		1.0	0.40	ug/L		07/26/24 15:50	07/30/24 22:32	1
Copper	0.684	J	2.0	0.50	ug/L		07/26/24 15:50	07/30/24 22:32	1
Iron	<47		100	47	ug/L		07/26/24 15:50	07/30/24 22:32	1
Lead	0.196	J	0.50	0.19	ug/L		07/26/24 15:50	07/30/24 22:32	1
Lithium	<2.5		10	2.5	ug/L		07/26/24 15:50	07/30/24 22:32	1
Magnesium	<49		200	49	ug/L		07/26/24 15:50	07/30/24 22:32	1
Manganese	<0.79		2.5	0.79	ug/L		07/26/24 15:50	07/30/24 22:32	1
Molybdenum	<2.5		5.0	2.5	ug/L		07/26/24 15:50	07/30/24 22:32	1
Nickel	<0.63		2.0	0.63	ug/L		07/26/24 15:50	07/30/24 22:32	1
Potassium	<110		500	110	ug/L		07/26/24 15:50	07/30/24 22:32	1
Selenium	<0.98		2.5	0.98	ug/L		07/26/24 15:50	07/30/24 22:32	1
Silver	<0.12		0.50	0.12	ug/L		07/26/24 15:50	07/30/24 22:32	1
Sodium	<77		200	77	ug/L		07/26/24 15:50	07/30/24 22:32	1
Strontium	<0.64		4.0	0.64	ug/L		07/26/24 15:50	07/30/24 22:32	1
Thallium	<0.57		2.0	0.57	ug/L		07/26/24 15:50	07/30/24 22:32	1
Tin	<1.3		5.0	1.3	ug/L		07/26/24 15:50	07/30/24 22:32	1
Vanadium	<2.2		5.0	2.2	ug/L		07/26/24 15:50	07/30/24 22:32	1

Lab Sample ID: LCS 500-778644/2-A
Matrix: Water
Analysis Batch: 779182

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 778644

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	2000	2000		ug/L		100	80 - 120
Antimony	500	494		ug/L		99	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 500-778644/2-A
Matrix: Water
Analysis Batch: 779182

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 778644

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	100	99.2		ug/L		99	80 - 120
Barium	500	523		ug/L		105	80 - 120
Beryllium	50.0	52.1		ug/L		104	80 - 120
Cadmium	50.0	49.9		ug/L		100	80 - 120
Calcium	10000	9210		ug/L		92	80 - 120
Chromium	200	212		ug/L		106	80 - 120
Cobalt	500	537		ug/L		107	80 - 120
Copper	250	259		ug/L		103	80 - 120
Iron	1000	1050		ug/L		105	80 - 120
Lead	100	103		ug/L		103	80 - 120
Lithium	100	106		ug/L		106	80 - 120
Magnesium	10000	10500		ug/L		105	80 - 120
Manganese	500	523		ug/L		105	80 - 120
Molybdenum	1000	965		ug/L		97	80 - 120
Nickel	500	519		ug/L		104	80 - 120
Potassium	10000	10400		ug/L		104	80 - 120
Selenium	100	98.1		ug/L		98	80 - 120
Silver	50.0	50.7		ug/L		101	80 - 120
Sodium	10000	10500		ug/L		105	80 - 120
Strontium	1000	985		ug/L		99	80 - 120
Thallium	100	105		ug/L		105	80 - 120
Tin	1000	975		ug/L		97	80 - 120
Vanadium	500	509		ug/L		102	80 - 120

Lab Sample ID: MB 500-779116/1-A
Matrix: Water
Analysis Batch: 779619

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 779116

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	12.5	J	20	6.9	ug/L		07/31/24 15:18	08/01/24 16:41	1

Lab Sample ID: MB 500-779116/1-A
Matrix: Water
Analysis Batch: 779737

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 779116

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	35.7	J	50	13	ug/L		07/31/24 15:18	08/02/24 12:26	1

Lab Sample ID: LCS 500-779116/2-A
Matrix: Water
Analysis Batch: 779619

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 779116

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	500	552		ug/L		110	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 500-779116/2-A
Matrix: Water
Analysis Batch: 779737

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 779116

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron			1000	1130		ug/L		113	80 - 120		

Lab Sample ID: 500-253415-1 MS
Matrix: Water
Analysis Batch: 779182

Client Sample ID: WP-587-305-335.54-1
Prep Type: Dissolved
Prep Batch: 778644

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Aluminum	39	J F1	2000	18600	F1	ug/L		930	75 - 125		
Antimony	<1.3		500	511		ug/L		102	75 - 125		
Arsenic	0.23	J	100	108		ug/L		107	75 - 125		
Barium	320	F1	500	938		ug/L		123	75 - 125		
Beryllium	<0.53		50.0	44.3		ug/L		89	75 - 125		
Cadmium	<0.17		50.0	47.8		ug/L		96	75 - 125		
Calcium	440000	B	10000	428000	4	ug/L		-135	75 - 125		
Chromium	<1.1		200	216		ug/L		108	75 - 125		
Cobalt	<0.40		500	464		ug/L		93	75 - 125		
Copper	1.1	J B	250	281		ug/L		112	75 - 125		
Iron	170	F1	1000	11400	F1	ug/L		1121	75 - 125		
Lead	<0.19		100	102		ug/L		102	75 - 125		
Lithium	250	F1	100	315	F1	ug/L		67	75 - 125		
Magnesium	8000	F1	10000	20300		ug/L		123	75 - 125		
Manganese	540	F1	500	1200	F1	ug/L		132	75 - 125		
Molybdenum	29		1000	1010		ug/L		98	75 - 125		
Nickel	0.69	J	500	517		ug/L		103	75 - 125		
Potassium	4800	F1	10000	18500	F1	ug/L		137	75 - 125		
Selenium	<0.98		100	106		ug/L		106	75 - 125		
Silver	<0.12		50.0	49.5		ug/L		99	75 - 125		
Sodium	1100000		10000	1070000	4	ug/L		-784	75 - 125		
Strontium	7600		1000	8250	4	ug/L		63	75 - 125		
Thallium	<0.57		100	100		ug/L		100	75 - 125		
Tin	1.5	J	1000	996		ug/L		99	75 - 125		
Vanadium	<2.2		500	493		ug/L		99	75 - 125		

Lab Sample ID: 500-253415-1 MSD
Matrix: Water
Analysis Batch: 779182

Client Sample ID: WP-587-305-335.54-1
Prep Type: Dissolved
Prep Batch: 778644

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	39	J F1	2000	19700	F1	ug/L		984	75 - 125	6	20
Antimony	<1.3		500	525		ug/L		105	75 - 125	3	20
Arsenic	0.23	J	100	110		ug/L		110	75 - 125	2	20
Barium	320	F1	500	983	F1	ug/L		132	75 - 125	5	20
Beryllium	<0.53		50.0	46.8		ug/L		94	75 - 125	6	20
Cadmium	<0.17		50.0	49.2		ug/L		98	75 - 125	3	20
Calcium	440000	B	10000	449000	4	ug/L		67	75 - 125	5	20
Chromium	<1.1		200	223		ug/L		112	75 - 125	3	20
Cobalt	<0.40		500	474		ug/L		95	75 - 125	2	20
Copper	1.1	J B	250	293		ug/L		117	75 - 125	4	20
Iron	170	F1	1000	11700	F1	ug/L		1152	75 - 125	3	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 500-253415-1 MSD
Matrix: Water
Analysis Batch: 779182

Client Sample ID: WP-587-305-335.54-1
Prep Type: Dissolved
Prep Batch: 778644

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	<0.19		100	104		ug/L		104	75 - 125	3	20
Lithium	250	F1	100	332		ug/L		84	75 - 125	5	20
Magnesium	8000	F1	10000	21200	F1	ug/L		132	75 - 125	4	20
Manganese	540	F1	500	1250	F1	ug/L		141	75 - 125	4	20
Molybdenum	29		1000	1050		ug/L		102	75 - 125	3	20
Nickel	0.69	J	500	533		ug/L		106	75 - 125	3	20
Potassium	4800	F1	10000	19200	F1	ug/L		143	75 - 125	3	20
Selenium	<0.98		100	109		ug/L		109	75 - 125	2	20
Silver	<0.12		50.0	50.6		ug/L		101	75 - 125	2	20
Sodium	1100000		10000	1110000	4	ug/L		-349	75 - 125	4	20
Strontium	7600		1000	8570	4	ug/L		96	75 - 125	4	20
Thallium	<0.57		100	102		ug/L		102	75 - 125	2	20
Tin	1.5	J	1000	1030		ug/L		102	75 - 125	3	20
Vanadium	<2.2		500	507		ug/L		101	75 - 125	3	20

Lab Sample ID: 500-253415-1 DU
Matrix: Water
Analysis Batch: 779182

Client Sample ID: WP-587-305-335.54-1
Prep Type: Dissolved
Prep Batch: 778644

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Aluminum	39	J F1		11900	F3	ug/L				199	20
Antimony	<1.3			<1.3		ug/L				NC	20
Arsenic	0.23	J		2.78	F3	ug/L				169	20
Barium	320	F1		409	F3	ug/L				23	20
Beryllium	<0.53			<0.53		ug/L				NC	20
Cadmium	<0.17			<0.17		ug/L				NC	20
Calcium	440000	B		435000		ug/L				2	20
Chromium	<1.1			26.2		ug/L				NC	20
Cobalt	<0.40			5.42		ug/L				NC	20
Copper	1.1	J B		31.1	F3	ug/L				186	20
Iron	170	F1		10500	F3	ug/L				194	20
Lead	<0.19			3.16		ug/L				NC	20
Lithium	250	F1		238		ug/L				4	20
Magnesium	8000	F1		11000	F3	ug/L				31	20
Manganese	540	F1		765	F3	ug/L				34	20
Molybdenum	29			28.7		ug/L				2	20
Nickel	0.69	J		15.0	F3	ug/L				182	20
Potassium	4800	F1		7090	F3	ug/L				38	20
Selenium	<0.98			1.04	J	ug/L				NC	20
Silver	<0.12			2.78		ug/L				NC	20
Sodium	1100000			1100000		ug/L				4	20
Strontium	7600			7550		ug/L				0.8	20
Thallium	<0.57			<0.57		ug/L				NC	20
Tin	1.5	J		1.33	J	ug/L				10	20
Vanadium	<2.2			19.9		ug/L				NC	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 500-776477/3
Matrix: Water
Analysis Batch: 776477

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	<0.18		1.0	0.18	mg/L			07/12/24 13:34	1
Fluoride	<0.19		1.0	0.19	mg/L			07/12/24 13:34	1
Sulfate	<0.21		1.0	0.21	mg/L			07/12/24 13:34	1

Lab Sample ID: LCS 500-776477/4
Matrix: Water
Analysis Batch: 776477

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	20.0	18.2		mg/L		91	90 - 110
Fluoride	20.0	20.0		mg/L		100	90 - 110
Sulfate	20.0	21.0		mg/L		105	90 - 110

Lab Sample ID: MB 500-776478/3
Matrix: Water
Analysis Batch: 776478

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.043		1.0	0.043	mg/L			07/12/24 13:34	1
Nitrite as N	<0.070		1.0	0.070	mg/L			07/12/24 13:34	1
Nitrate Nitrite as N	<0.070		1.0	0.070	mg/L			07/12/24 13:34	1

Lab Sample ID: LCS 500-776478/4
Matrix: Water
Analysis Batch: 776478

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	20.0	19.7		mg/L		99	90 - 110
Nitrite as N	20.0	19.7		mg/L		99	90 - 110

Lab Sample ID: MB 500-779535/33
Matrix: Water
Analysis Batch: 779535

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.12		1.0	0.12	mg/L			08/02/24 01:12	1

Lab Sample ID: LCS 500-779535/34
Matrix: Water
Analysis Batch: 779535

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	20.0	19.2		mg/L		96	90 - 110

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 500-777764/1-A
Matrix: Water
Analysis Batch: 777904

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 777764

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.0036		0.0050	0.0036	mg/L		07/22/24 11:06	07/22/24 17:10	1

Lab Sample ID: LCS 500-777764/2-A
Matrix: Water
Analysis Batch: 777904

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 777764

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.100	0.102		mg/L		102	90 - 110

Lab Sample ID: MB 500-777768/1-A
Matrix: Water
Analysis Batch: 778018

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 777768

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.0036		0.0050	0.0036	mg/L		07/22/24 11:58	07/23/24 15:26	1

Lab Sample ID: LCS 500-777768/2-A
Matrix: Water
Analysis Batch: 778018

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 777768

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.100	0.106		mg/L		106	90 - 110

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 500-780105/1-A
Matrix: Water
Analysis Batch: 780256

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 780105

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	<0.10		0.20	0.10	mg/L		08/06/24 14:48	08/06/24 19:19	1

Lab Sample ID: LCS 500-780105/2-A
Matrix: Water
Analysis Batch: 780256

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 780105

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	2.00	1.80		mg/L		90	90 - 110

Method: 365.1 - Phosphorus, Total

Lab Sample ID: MB 500-780738/1-A
Matrix: Water
Analysis Batch: 781723

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 780738

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus as P	<0.024	^1- ^-	0.050	0.024	mg/L		08/07/24 11:15	08/07/24 19:19	1

Method: 365.1 - Phosphorus, Total (Continued)

Lab Sample ID: LCS 500-780738/2-A
Matrix: Water
Analysis Batch: 781723

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 780738

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phosphorus as P	1.00	0.438	^1- *- ^-	mg/L		44	88 - 123

Lab Sample ID: MB 500-781406/3-A
Matrix: Water
Analysis Batch: 781671

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 781406

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus as P	<0.024	^1-	0.050	0.024	mg/L		08/14/24 12:35	08/15/24 12:16	1

Lab Sample ID: LCS 500-781406/4-A
Matrix: Water
Analysis Batch: 781671

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 781406

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phosphorus as P	1.00	0.864	^1- *-	mg/L		86	88 - 123

Lab Sample ID: LCSD 500-781406/5-A
Matrix: Water
Analysis Batch: 781671

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 781406

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phosphorus as P	1.00	0.866	^1- *-	mg/L		87	88 - 123	0	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 500-777696/28
Matrix: Water
Analysis Batch: 777696

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	<3.7		5.0	3.7	mg/L			07/19/24 20:43	1
Bicarbonate Alkalinity as CaCO3	<3.7		5.0	3.7	mg/L			07/19/24 20:43	1
Carbonate Alkalinity as CaCO3	<3.7		5.0	3.7	mg/L			07/19/24 20:43	1

Lab Sample ID: LCS 500-777696/4
Matrix: Water
Analysis Batch: 777696

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	100	105		mg/L		105	95 - 121

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 500-776800/1
Matrix: Water
Analysis Batch: 776800

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<4.3		10	4.3	mg/L			07/16/24 00:18	1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 500-776800/2
Matrix: Water
Analysis Batch: 776800

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	250	252		mg/L		101	80 - 120

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 500-777163/1
Matrix: Water
Analysis Batch: 777163

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<1.9		5.0	1.9	mg/L			07/17/24 14:34	1

Lab Sample ID: LCS 500-777163/2
Matrix: Water
Analysis Batch: 777163

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	200	176		mg/L		88	80 - 120

Method: SM 3500 CR B - Chromium, Hexavalent

Lab Sample ID: MB 500-776538/9
Matrix: Water
Analysis Batch: 776538

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	0.00390	J	0.010	0.0032	mg/L			07/12/24 13:49	1

Lab Sample ID: LCS 500-776538/10
Matrix: Water
Analysis Batch: 776538

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	0.250	0.253		mg/L		101	85 - 115

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 500-776798/1
Matrix: Water
Analysis Batch: 776798

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<0.23		1.0	0.23	mg/L			07/15/24 21:17	1

Lab Sample ID: LCS 500-776798/2
Matrix: Water
Analysis Batch: 776798

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	3.64	3.41		mg/L		94	85 - 115

Method: SM 5310C - TOC

Lab Sample ID: MB 500-779224/7
Matrix: Water
Analysis Batch: 779224

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<0.47		1.0	0.47	mg/L			07/30/24 11:17	1

Lab Sample ID: LCS 500-779224/8
Matrix: Water
Analysis Batch: 779224

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	10.0	10.2		mg/L		102	86 - 116

Method: SM 5310C - Organic Carbon, Dissolved (DOC)

Lab Sample ID: MB 500-777240/7
Matrix: Water
Analysis Batch: 777240

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	<0.47		1.0	0.47	mg/L			07/18/24 07:44	1

Lab Sample ID: LCS 500-777240/8
Matrix: Water
Analysis Batch: 777240

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dissolved Organic Carbon	10.0	10.2		mg/L		102	86 - 116

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-253415-1

Client Sample ID: WP-587-305-335.54-1

Date Collected: 07/10/24 14:35
Date Received: 07/12/24 09:45

Lab Sample ID: 500-253415-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	1630			2400	CL	EET SSM	07/18/24 12:31
Dissolved	Analysis	1630		1	2422	CL	EET SSM	07/19/24 17:28
Total/NA	Prep	1630			2400	CL	EET SSM	07/18/24 12:31
Total/NA	Analysis	1630		1	2422	CL	EET SSM	07/19/24 17:49
Dissolved	Analysis	1631E		1	2421	COW	EET SSM	07/19/24 20:38
Total/NA	Analysis	1631E		1	2421	COW	EET SSM	07/19/24 20:34
Dissolved	Prep	1638			2432	V1R	EET SSM	07/23/24 16:04
Dissolved	Analysis	1638		1	2472	V1R	EET SSM	07/29/24 18:08
Total Recoverable	Prep	1638			2432	V1R	EET SSM	07/23/24 16:04
Total Recoverable	Analysis	1638		1	2472	V1R	EET SSM	07/29/24 19:32
Dissolved	Prep	3005A			778644	S1Z	EET CHI	07/26/24 15:50 - 07/26/24 21:50 [1]
Dissolved	Analysis	6020B		1	779182	S1Z	EET CHI	07/30/24 22:47
Dissolved	Prep	3005A			779116	S1Z	EET CHI	07/31/24 15:18 - 07/31/24 21:18 [1]
Dissolved	Analysis	6020B		1	779619	RN	EET CHI	08/01/24 17:11
Dissolved	Prep	3005A			779116	S1Z	EET CHI	07/31/24 15:18 - 07/31/24 21:18 [1]
Dissolved	Analysis	6020B		1	779737	RN	EET CHI	08/02/24 12:30
Total Recoverable	Prep	3005A			778644	S1Z	EET CHI	07/26/24 15:50 - 07/26/24 21:50 [1]
Total Recoverable	Analysis	6020B		1	779182	S1Z	EET CHI	07/30/24 22:37
Total Recoverable	Prep	3005A			779116	S1Z	EET CHI	07/31/24 15:18 - 07/31/24 21:18 [1]
Total Recoverable	Analysis	6020B		1	779619	RN	EET CHI	08/01/24 17:15
Total Recoverable	Prep	3005A			779116	S1Z	EET CHI	07/31/24 15:18 - 07/31/24 21:18 [1]
Total Recoverable	Analysis	6020B		1	779737	RN	EET CHI	08/02/24 12:35
Total Recoverable	Prep	3005A			778644	S1Z	EET CHI	07/26/24 15:50 - 07/26/24 21:50 [1]
Total Recoverable	Analysis	SM 2340B		1	779240	DAJ	EET CHI	07/31/24 10:52
Total/NA	Analysis	300.0		1	776477	NMB	EET CHI	07/12/24 14:04
Total/NA	Analysis	300.0		1	776478	NMB	EET CHI	07/12/24 14:04
Total/NA	Analysis	300.0		100	779535	W1T	EET CHI	08/02/24 01:42
Total/NA	Prep	Distill/CN			777764	KF	EET CHI	07/22/24 11:06 - 07/22/24 11:36 [1]
Total/NA	Analysis	335.4		1	777904	KF	EET CHI	07/22/24 18:14
Total/NA	Prep	Distill/Ammonia			780105	EB	EET CHI	08/06/24 14:48 - 08/06/24 15:48 [1]
Total/NA	Analysis	350.1		1	780256	KF	EET CHI	08/06/24 19:24
Total/NA	Prep	365.2/365.3/365			780738	NSJ	EET CHI	08/07/24 11:15 - 08/07/24 15:15 [1]
Total/NA	Analysis	365.1		1	781723	KF	EET CHI	08/07/24 19:19
Total/NA	Prep	365.2/365.3/365	RE		781406	PFK	EET CHI	08/14/24 12:35 - 08/14/24 16:35 [1]
Total/NA	Analysis	365.1	RE	1	781671	KF	EET CHI	08/15/24 12:17
Total/NA	Analysis	SM 2320B		1	777696	SO	EET CHI	07/19/24 16:55
Total/NA	Analysis	SM 2520B		1	778811	TR	EET CHI	07/29/24 09:57
Total/NA	Analysis	SM 2540C		1	776800	CLB	EET CHI	07/16/24 00:51
Total/NA	Analysis	SM 2540D		1	777163	SO	EET CHI	07/17/24 15:00 - 07/17/24 15:03 [1]
Dissolved	Analysis	SM 3500 CR B		1	779911	TJW	EET CHI	08/05/24 10:10
Dissolved	Analysis	SM 3500 CR B		1	776538	MB	EET CHI	07/12/24 13:52 - 07/12/24 13:52 [1]
Total/NA	Analysis	SM 3500 CR B		1	776538	MB	EET CHI	07/12/24 13:52 - 07/12/24 13:53 [1]
Total/NA	Analysis	SM 3500 CR B		1	776630	TJW	EET CHI	07/15/24 08:14

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-253415-1

Client Sample ID: WP-587-305-335.54-1

Lab Sample ID: 500-253415-1

Date Collected: 07/10/24 14:35

Matrix: Water

Date Received: 07/12/24 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 4500 S2 F		1	776798	CLB	EET CHI	07/15/24 22:14 - 07/15/24 22:18 [1]
Dissolved	Analysis	SM 5310C		1	777240	TR	EET CHI	07/18/24 07:44
Total/NA	Analysis	SM 5310C		1	779224	TR	EET CHI	07/30/24 12:13

Client Sample ID: WP-587-305-335.54-2

Lab Sample ID: 500-253415-2

Date Collected: 07/10/24 17:40

Matrix: Water

Date Received: 07/12/24 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	1630			2400	CL	EET SSM	07/18/24 12:31
Dissolved	Analysis	1630		1	2422	CL	EET SSM	07/19/24 17:38
Total/NA	Prep	1630			2400	CL	EET SSM	07/18/24 12:31
Total/NA	Analysis	1630		1	2422	CL	EET SSM	07/19/24 17:18
Dissolved	Analysis	1631E		1	2421	COW	EET SSM	07/19/24 20:46
Total/NA	Analysis	1631E		1	2421	COW	EET SSM	07/19/24 20:42
Dissolved	Prep	1638			2432	V1R	EET SSM	07/23/24 16:04
Dissolved	Analysis	1638		1	2472	V1R	EET SSM	07/29/24 19:28
Total Recoverable	Prep	1638			2432	V1R	EET SSM	07/23/24 16:04
Total Recoverable	Analysis	1638		1	2472	V1R	EET SSM	07/29/24 19:35
Dissolved	Prep	3005A			778644	S1Z	EET CHI	07/26/24 15:50 - 07/26/24 21:50 [1]
Dissolved	Analysis	6020B		1	779182	S1Z	EET CHI	07/30/24 22:49
Dissolved	Prep	3005A			779116	S1Z	EET CHI	07/31/24 15:18 - 07/31/24 21:18 [1]
Dissolved	Analysis	6020B		1	779619	RN	EET CHI	08/01/24 17:13
Dissolved	Prep	3005A			779116	S1Z	EET CHI	07/31/24 15:18 - 07/31/24 21:18 [1]
Dissolved	Analysis	6020B		1	779737	RN	EET CHI	08/02/24 12:32
Total Recoverable	Prep	3005A			778644	S1Z	EET CHI	07/26/24 15:50 - 07/26/24 21:50 [1]
Total Recoverable	Analysis	6020B		1	779182	S1Z	EET CHI	07/30/24 22:45
Total Recoverable	Prep	3005A			779116	S1Z	EET CHI	07/31/24 15:18 - 07/31/24 21:18 [1]
Total Recoverable	Analysis	6020B		1	779619	RN	EET CHI	08/01/24 17:17
Total Recoverable	Prep	3005A			779116	S1Z	EET CHI	07/31/24 15:18 - 07/31/24 21:18 [1]
Total Recoverable	Analysis	6020B		1	779737	RN	EET CHI	08/02/24 12:37
Total Recoverable	Prep	3005A			778644	S1Z	EET CHI	07/26/24 15:50 - 07/26/24 21:50 [1]
Total Recoverable	Analysis	SM 2340B		1	779240	DAJ	EET CHI	07/31/24 10:52
Total/NA	Analysis	300.0		1	776477	NMB	EET CHI	07/12/24 14:20
Total/NA	Analysis	300.0		1	776478	NMB	EET CHI	07/12/24 14:20
Total/NA	Analysis	300.0		100	779535	W1T	EET CHI	08/02/24 01:58
Total/NA	Prep	Distill/CN			777768	KF	EET CHI	07/22/24 11:58 - 07/22/24 12:28 [1]
Total/NA	Analysis	335.4		1	778018	KF	EET CHI	07/23/24 15:07
Total/NA	Prep	Distill/Ammonia			780105	EB	EET CHI	08/06/24 14:48 - 08/06/24 15:48 [1]
Total/NA	Analysis	350.1		1	780256	KF	EET CHI	08/06/24 19:24
Total/NA	Prep	365.2/365.3/365			780738	NSJ	EET CHI	08/07/24 11:15 - 08/07/24 15:15 [1]
Total/NA	Analysis	365.1		1	781723	KF	EET CHI	08/07/24 19:20
Total/NA	Analysis	SM 2320B		1	777696	SO	EET CHI	07/19/24 17:04

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253415-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-587-305-335.54-2
Lab Sample ID: 500-253415-2
Date Collected: 07/10/24 17:40
Matrix: Water
Date Received: 07/12/24 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2520B		1	778811	TR	EET CHI	07/29/24 09:57
Total/NA	Analysis	SM 2540C		1	776800	CLB	EET CHI	07/16/24 00:54
Total/NA	Analysis	SM 2540D		1	777163	SO	EET CHI	07/17/24 15:03 - 07/17/24 15:07 [1]
Dissolved	Analysis	SM 3500 CR B		1	779911	TJW	EET CHI	08/05/24 10:10
Dissolved	Analysis	SM 3500 CR B		1	776538	MB	EET CHI	07/12/24 13:53 - 07/12/24 13:53 [1]
Total/NA	Analysis	SM 3500 CR B		1	776538	MB	EET CHI	07/12/24 13:53 - 07/12/24 13:54 [1]
Total/NA	Analysis	SM 3500 CR B		1	776630	TJW	EET CHI	07/15/24 08:14
Total/NA	Analysis	SM 4500 S2 F		1	776798	CLB	EET CHI	07/15/24 22:18 - 07/15/24 22:22 [1]
Dissolved	Analysis	SM 5310C		1	777240	TR	EET CHI	07/18/24 07:44
Total/NA	Analysis	SM 5310C		1	779224	TR	EET CHI	07/30/24 12:42

Client Sample ID: WP-587-305-335.54-1 Field Blank
Lab Sample ID: 500-253415-3
Date Collected: 07/10/24 00:00
Matrix: Water
Date Received: 07/12/24 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	2421	COW	EET SSM	07/19/24 20:50

Client Sample ID: WP-587-305-335.54-2 Field Blank
Lab Sample ID: 500-253415-4
Date Collected: 07/10/24 00:00
Matrix: Water
Date Received: 07/12/24 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	2421	COW	EET SSM	07/19/24 20:54

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253415-1
Project/Site: FOTH - White Pines, MI

Laboratory: Eurofins Chicago

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Georgia	State	N/A	05-31-25
Georgia (DW)	State	939	05-31-25
Hawaii	State	NA	05-31-25
Illinois	NELAP	IL00035	05-31-25
Indiana	State	C-IL-02	05-31-25
Iowa	State	082	05-01-26
Kansas	NELAP	E-10161	10-31-24
Kentucky (UST)	State	AI # 108083	05-31-25
Kentucky (WW)	State	KY90023	12-31-24
Louisiana (All)	NELAP	02046	06-30-25
Mississippi	State	NA	05-31-25
North Carolina (WW/SW)	State	291	12-31-24
North Dakota	State	R-194	04-29-24 *
Oklahoma	State	8908	08-31-24
South Carolina	State	77001003	04-29-24 *
USDA	US Federal Programs	P330-18-00018	03-30-26
Wisconsin	State	999580010	08-31-24
Wyoming	State	8TMS-Q	05-31-25

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	12-18-24
ANAB	Dept. of Defense ELAP	L2236	08-07-24
ANAB	Dept. of Energy	L2236.01	12-18-24
ANAB	ISO/IEC 17025	L2236	08-07-24
California	State	2954	12-18-24
Florida	NELAP	E87575	12-18-24
Louisiana (All)	NELAP	03073	12-18-24
Maine	State	WA01273	12-18-24
New Jersey	NELAP	WA014	12-18-24
New York	NELAP	11662	12-18-24
Oregon	NELAP	4167-008	07-07-25
US Fish & Wildlife	US Federal Programs	A20571	06-30-25
USDA	US Federal Programs	525-23-4-22573	12-18-24
Washington	State	C788-23a	12-18-24
Wisconsin	State	399133460	12-18-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

2417 Bond Street
University Park, IL 60484
Phone (708) 534-5200 Phone (708) 534-5211

Chain of Custody Record

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Client Information	Sampler: May Willison	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-126105-50170 1
Client Contact: Jakob Wartman	Phone: (608)774-4492	E-Mail: Sandra Fredrick@et.eurofinsus com	State of Origin:	Page: Page ~~1 of 5~~ 1 of 1
Company: Foth Infrastructure & Environment, LLC	PWSID:	Analysis Requested		Job #: 500-253415

Address	Due Date Requested:	City	TAT Requested (days)	State, Zip	Compliance Project: Δ Yes Δ No	Phone	PO #	Email	WO #	Project Name	Project #	Site	SSOW#:
Missabe Building 227 West 1st Street, Suite 920	standard	Duluth	standard	MN, 55802		218-481-6014(Tel)	Purchase Order not required	Jakob Wartman@foth com		FOTH - White Pines, MI	50023463		

Preservation Codes:
N - None
S - H2SO4
CB ZnAcetate/NaOH
B - NaOH
D - HNO3

500-253415 COC

Other: —

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1631E - Mercury, Low Level (CVAFS)	1631E - Dissolved Mercury, Low Level (FF)	2320B, 2540C, 2540D, 300.0_28D, 300_48HR, SM2520_B	350.1 Ammonia, 365.1 Phosphorus	SM4500_S2_F - Sulfide	335.4 - Cyanide, Total	SM5310_DOC_C - DOC	6020B - Total Metals (27), SM2340B - Hardness	6020B - Dissolved Metals (ICP/MS) - 27 elements	3500_CR_B - Chromium, Hexavalent	3500_CR_B - Dissolved Chromium, Hexavalent (field fi	1638 - Uranium only (ICP/MS) Total & Dissolved	163 - Methyl Hg - Total & Dissolved	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	N	N	S	CB	B	S	D	D	N	N	D	D	X	
1 WP-587-305-335.54-1	7/10/24	1435	G	Water			X		X	X	X	X		X		X		X	X		
2 WP-587-305-335 54-1	7/10/24	1435	G	Water	X			X					X		X		X	X	X		
3 WP-587-305-335.54-2	7/10/24	1740	G	Water			X		X	X	X	X		X		X		X	X		
4 WP-587-305-335 54-2	7/10/24	1740	G	Water	X			X					X		X		X	X	X		
5 WP-587-305-335-54-1 FB				Water																	} Added by EEIA 7112124 GH
6 WP-587-305-335-54-2 FB				Water																	
				Water																	
				Water																	
				Water																	
				Water																	
				Water																	

7112124 GH

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I, II, III, IV, Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date:	Time	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
May Willison	7/11/24 0730	Foth	Stephanie Hernandez	7/12/24 0945	EEIA
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No..	Cooler Temperature(s) °C and Other Remarks:	
		1.9+2.0, 1.5+1.4	





500-253415 Waybi

Login Sample Receipt Checklist

Client: Foth Infrastructure & Environment, LLC

Job Number: 500-253415-1

Login Number: 253415
List Number: 1
Creator: Hernandez, Stephanie

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.0,1.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	False	Refer to Job Narrative for details.
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Foth Infrastructure & Environment, LLC

Job Number: 500-253415-1

Login Number: 253415
List Number: 2
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 07/17/24 12:48 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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500-253415 Field Sheet

Date:	7/17/2024
End Time:	13:35
pH Paper Lot:	hc324723
Analyst:	

Preservative ID	Preservative Type	Container ID
A	Hydrochloric Acid	NA
A	Nitric Acid	
ZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ
ZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ

Sample ID	Initial pH	Final pH	Preservative ID	Preservative Added (mL)	Comments
500-253415-E-1	<2				
500-253415-F-2	<2				
500-253415-F-1	<2				
500-253415-E-2	<2			2	
500-253415-M-2	<2				
500-253415-M-1	<2			7/17/24	
500-253415-L-2	<2				
500-253415-L-1	<2				

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ANALYTICAL REPORT

PREPARED FOR

Attn: Jakob Wartman
Foth Infrastructure & Environment, LLC
Missabe Building
227 West 1st. Street, Suite 920
Duluth, Minnesota 55802

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JOB DESCRIPTION

FOTH - White Pines, MI

JOB NUMBER

500-253605-1

Eurofins Chicago
2417 Bond Street
University Park IL 60484

See page two for job notes and contact information.

Eurofins Chicago

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

Results relate only to the items tested and the sample(s) as received by the laboratory. The results, detection limits (LOD) and Quantitation Limits (LOQ) have been adjusted for sample dilutions and/or solids content.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Chicago Project Manager.

Compliance Statement

The LOD and LOQ reported are adjusted by the dilution factor when a dilution factor greater than 1 is needed. Additionally, where results are indicated as being reported on a dry weight basis, the LOD and LOQ are adjusted for moisture content as well.

Definitions of Limits
- LOD = Limit of Detection = MDL as defined by 40 CFR part 136 Appendix B
- LOQ = Limit of Quantitation = 3.33 x LOD as defined by Wisconsin
- RL = Report Limit = a concentration supported by a standard in the calibration curves

Authorization



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Revision 1

Authorized for release by
Sandie Fredrick, Senior Project Manager
Sandra.Fredrick@et.eurofinsus.com
(920)261-1660

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Job ID: 500-253605-1 Eurofins Chicago

Job Narrative
500-253605-1

Revision
The report being provided is a revision of the original report sent on 8/15/2024. The report (revision 1) is being revised due to: The revision has been added to report the MS % recovery Phosphorus result for 500-253605-1 MS.

Receipt
The samples were received on 7/17/2024 9:40 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.0º C.

Receipt Exceptions
The following sample(s) was received outside of holding time: for IC N2,N3, and CR+6. Sampled 7/14, received 7/17.

The following sample(s) was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): LL Hg field blanks, added to COC as sample #2 and logged.

Metals
Method 6020B: The continuing calibration verification (CCV 500-779980/53) associated with batch 500-779980 recovered above the upper control limit for Aluminum. The samples associated with this CCV recovered below the reporting limit for the affected analytes or were QC samples that recovered within control limits; therefore, the data have been reported. The associated samples are impacted: WP-587-1428-1438.3-1 (500-253605-1), (500-253605-N-1-B DU), (500-253605-N-1-C MS), (500-253605-N-1-D MSD) and (500-253605-N-1-A SD ^5).

Method 6020B: The following samples were diluted to bring the concentration of target analytes within the calibration range: WP-587-1428-1438.3-1 (500-253605-1), (500-253605-N-1-B DU ^100), (500-253605-N-1-C MS ^100), (500-253605-N-1-D MSD ^100) and (500-253605-N-1-A SD ^500). Elevated reporting limits (RLs) are provided.

Method 6020B: The linear range check (LRC) result for batch 500-780295 was outside of control limits. The affected analytes are: Lithium. Sample results were within the high calibration standard, and have been reported as qualified data.

Method 1630: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for the following sample associated with preparation batch 350-2438 and analytical batch 350-2446 were outside control limits: (885-8172-B-1-B MS) and (885-8172-B-1-C MSD). The associated laboratory control sample (LCS) recovery met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
Method 300.0: The following sample was received outside of holding time: WP-587-1428-1438.3-1 (500-253605-1).

Methods 7196A, SM 3500 CR B: The method blank for analytical batch 500-777202 contained Chromium, hexavalent above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Method SM 3500 CR B: The following samples were received outside of holding time. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: WP-587-1428-1438.3-1 (500-253605-1).

Method SM 5310C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 500-778742 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method SM 2520B: Sample had to be diluted to fit within the conversion range. Sample results were too high when run straight. WP-587-1428-1438.3-1 (500-253605-1)

Methods 335.4, 9012B: The MB and CCB for preparation batch 500-777966 contained Cyanide, Total above the reporting limit (RL). None of the samples associated with this MB and CCB contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

Job ID: 500-253605-1 (Continued) Eurofins Chicago

Method 365.1: The initial calibration verification (ICV), continuing calibration verification (CCV), laboratory control sample (LCS) and Matrix Spike/Matrix Spike Duplicate (MS/MSD) fell outside the lower control limits for Phosphorus as P. The associated samples WP-587-1428-1438.3-1 (500-253605-1) were re-prepared and re-analyzed outside of hold. The ICV in the re-analysis batch recovered at 89% with a limit of 90%. All other quality control parameters with in range. The sample results in re-analysis confirmed original results. In-hold data is reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-253605-1

Client Sample ID: WP-587-1428-1438.3-1

Lab Sample ID: 500-253605-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl Mercury	0.025	J	0.050	0.022	ng/L	1		1630	Total/NA
Mercury	0.65		0.50	0.20	ng/L	1		1631E	Total/NA
Mercury	0.42	J	0.50	0.20	ng/L	1		1631E	Dissolved
Uranium	0.43		0.030	0.0098	ug/L	1		1638	Total Recoverable
Uranium	0.43		0.030	0.0098	ug/L	1		1638	Dissolved
Aluminum	55	J ^+	100	25	ug/L	1		6020B	Total Recoverable
Arsenic	7.2	F1	1.0	0.23	ug/L	1		6020B	Total Recoverable
Barium	19000		13	3.7	ug/L	5		6020B	Total Recoverable
Boron	350	F1 B	50	13	ug/L	1		6020B	Total Recoverable
Cadmium	0.22	J	0.50	0.17	ug/L	1		6020B	Total Recoverable
Calcium	24000000		20000	4400	ug/L	100		6020B	Total Recoverable
Cobalt	1.1	F1	1.0	0.40	ug/L	1		6020B	Total Recoverable
Copper	110		10	2.5	ug/L	5		6020B	Total Recoverable
Iron	1700	F1	100	47	ug/L	1		6020B	Total Recoverable
Lead	3.9		2.5	0.93	ug/L	5		6020B	Total Recoverable
Lithium	2000	^5-	1000	250	ug/L	100		6020B	Total Recoverable
Magnesium	230000		1000	250	ug/L	5		6020B	Total Recoverable
Manganese	15000		2.5	0.79	ug/L	1		6020B	Total Recoverable
Molybdenum	24		5.0	2.5	ug/L	1		6020B	Total Recoverable
Nickel	12		2.0	0.63	ug/L	1		6020B	Total Recoverable
Potassium	44000		2500	560	ug/L	5		6020B	Total Recoverable
Selenium	2.2	J	2.5	0.98	ug/L	1		6020B	Total Recoverable
Silver	0.56		0.50	0.12	ug/L	1		6020B	Total Recoverable
Sodium	8500000		20000	7700	ug/L	100		6020B	Total Recoverable
Strontium	410000		400	64	ug/L	100		6020B	Total Recoverable
Tin	2.0	J F1	5.0	1.3	ug/L	1		6020B	Total Recoverable
Zinc	21000		20	6.9	ug/L	1		6020B	Total Recoverable
Arsenic	11		1.0	0.23	ug/L	1		6020B	Dissolved
Barium	18000		13	3.7	ug/L	5		6020B	Dissolved
Boron	420	B	50	13	ug/L	1		6020B	Dissolved
Cadmium	0.32	J	0.50	0.17	ug/L	1		6020B	Dissolved
Calcium	24000000		20000	4400	ug/L	100		6020B	Dissolved
Cobalt	1.2		1.0	0.40	ug/L	1		6020B	Dissolved
Copper	70		10	2.5	ug/L	5		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: WP-587-1428-1438.3-1 (Continued)

Lab Sample ID: 500-253605-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	350		100	47	ug/L	1		6020B	Dissolved
Lead	0.97	J	2.5	0.93	ug/L	5		6020B	Dissolved
Lithium	1900	^5-	1000	250	ug/L	100		6020B	Dissolved
Magnesium	220000		1000	250	ug/L	5		6020B	Dissolved
Manganese	15000		2.5	0.79	ug/L	1		6020B	Dissolved
Molybdenum	25		5.0	2.5	ug/L	1		6020B	Dissolved
Nickel	14		2.0	0.63	ug/L	1		6020B	Dissolved
Potassium	42000		2500	560	ug/L	5		6020B	Dissolved
Selenium	3.3		2.5	0.98	ug/L	1		6020B	Dissolved
Silver	0.51		0.50	0.12	ug/L	1		6020B	Dissolved
Sodium	7400000		20000	7700	ug/L	100		6020B	Dissolved
Strontium	420000		400	64	ug/L	100		6020B	Dissolved
Zinc	23000		20	6.9	ug/L	1		6020B	Dissolved
Hardness as calcium carbonate	60000		0.91	0.46	mg/L	1		SM 2340B	Total Recoverable
Bromide	830	J	2000	360	mg/L	2000		300.0	Total/NA
Chloride	61000		2000	230	mg/L	2000		300.0	Total/NA
Sulfate	3.1		1.0	0.21	mg/L	1		300.0	Total/NA
Alkalinity	18		5.0	3.7	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	18		5.0	3.7	mg/L	1		SM 2320B	Total/NA
Salinity	110		6.6	6.6	psu	20		SM 2520B	Total/NA
Total Dissolved Solids	90000		1000	430	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	130		8.3	3.2	mg/L	1		SM 2540D	Total/NA
Chromium, hexavalent	0.0066	J H3 B	0.010	0.0032	mg/L	1		SM 3500 CR B	Dissolved

Client Sample ID: Field Blank

Lab Sample ID: 500-253605-2

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253605-1
Project/Site: FOTH - White Pines, MI

Method	Method Description	Protocol	Laboratory
1630	Methyl Mercury	EPA	EET SSM
1631E	Mercury, Low Level (CVAFS)	EPA	EET SSM
1638	Metals (ICP/MS)	EPA	EET SSM
6020B	Metals (ICP/MS)	SW846	EET CHI
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	EET CHI
300.0	Anions, Ion Chromatography	EPA	EET CHI
335.4	Cyanide, Total	EPA	EET CHI
350.1	Nitrogen, Ammonia	EPA	EET CHI
365.1	Phosphorus, Total	EPA	EET CHI
SM 2320B	Alkalinity	SM	EET CHI
SM 2520B	Salinity	SM	EET CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CHI
SM 2540D	Solids, Total Suspended (TSS)	SM	EET CHI
SM 3500 CR B	Chromium, Hexavalent	SM	EET CHI
SM 3500 CR B	Chromium, Trivalent	SM	EET CHI
SM 4500 S2 F	Sulfide, Total	SM	EET CHI
SM 5310C	Organic Carbon, Dissolved (DOC)	SM	EET CHI
SM 5310C	TOC	SM	EET CHI
1630	Distillation, Methyl Mercury	EPA	EET SSM
1638	Preparation, Total Recoverable Metals	EPA	EET SSM
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CHI
365.2/365.3/365	Phosphorus, Total	EPA	EET CHI
Distill/Ammonia	Distillation, Ammonia	None	EET CHI
Distill/CN	Distillation, Cyanide	None	EET CHI

Protocol References:

EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200
EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253605-1
Project/Site: FOTH - White Pines, MI

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-253605-1	WP-587-1428-1438.3-1	Water	07/14/24 13:00	07/17/24 09:40
500-253605-2	Field Blank	Water	07/14/24 00:00	07/17/24 09:40

Client Sample ID: WP-587-1428-1438.3-1
Lab Sample ID: 500-253605-1

Date Collected: 07/14/24 13:00
Matrix: Water
Date Received: 07/17/24 09:40

Method: EPA 1630 - Methyl Mercury

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	**0.025**	**J**	0.050	0.022	ng/L		07/24/24 11:26	07/24/24 20:55	1

Method: EPA 1630 - Methyl Mercury - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/24/24 11:26	07/24/24 21:26	1

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.65**		0.50	0.20	ng/L			07/23/24 18:31	1

Method: EPA 1631E - Mercury, Low Level (CVAFS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.42**	**J**	0.50	0.20	ng/L			07/23/24 18:36	1

Method: EPA 1638 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.43**		0.030	0.0098	ug/L		07/23/24 16:04	07/30/24 12:02	1

Method: EPA 1638 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.43**		0.030	0.0098	ug/L		07/23/24 16:04	07/30/24 11:59	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**55**	**J ^+**	100	25	ug/L		08/02/24 10:30	08/05/24 12:12	1
Antimony	<1.3	F1	3.0	1.3	ug/L		08/02/24 10:30	08/05/24 12:12	1
Arsenic	**7.2**	**F1**	1.0	0.23	ug/L		08/02/24 10:30	08/05/24 12:12	1
Barium	**19000**		13	3.7	ug/L		08/02/24 10:30	08/06/24 11:21	5
Beryllium	<0.53	F1	1.0	0.53	ug/L		08/02/24 10:30	08/05/24 12:12	1
Boron	**350**	**F1 B**	50	13	ug/L		08/02/24 10:30	08/05/24 12:12	1
Cadmium	**0.22**	**J**	0.50	0.17	ug/L		08/02/24 10:30	08/05/24 12:12	1
Calcium	**24000000**		20000	4400	ug/L		08/02/24 10:30	08/06/24 11:23	100
Chromium	<1.1	F1	5.0	1.1	ug/L		08/02/24 10:30	08/05/24 12:12	1
Cobalt	**1.1**	**F1**	1.0	0.40	ug/L		08/02/24 10:30	08/05/24 12:12	1
Copper	**110**		10	2.5	ug/L		08/02/24 10:30	08/06/24 11:21	5
Iron	**1700**	**F1**	100	47	ug/L		08/02/24 10:30	08/05/24 12:12	1
Lead	**3.9**		2.5	0.93	ug/L		08/02/24 10:30	08/06/24 11:21	5
Lithium	**2000**	**^5-**	1000	250	ug/L		08/02/24 10:30	08/07/24 12:05	100
Magnesium	**230000**		1000	250	ug/L		08/02/24 10:30	08/06/24 11:21	5
Manganese	**15000**		2.5	0.79	ug/L		08/02/24 10:30	08/05/24 12:12	1
Molybdenum	**24**		5.0	2.5	ug/L		08/02/24 10:30	08/05/24 12:12	1
Nickel	**12**		2.0	0.63	ug/L		08/02/24 10:30	08/05/24 12:12	1
Potassium	**44000**		2500	560	ug/L		08/02/24 10:30	08/06/24 11:21	5
Selenium	**2.2**	**J**	2.5	0.98	ug/L		08/02/24 10:30	08/05/24 12:12	1
Silver	**0.56**		0.50	0.12	ug/L		08/02/24 10:30	08/05/24 12:12	1
Sodium	**8500000**		20000	7700	ug/L		08/02/24 10:30	08/06/24 11:23	100
Strontium	**410000**		400	64	ug/L		08/02/24 10:30	08/06/24 11:23	100
Thallium	<2.9		10	2.9	ug/L		08/02/24 10:30	08/06/24 11:21	5
Tin	**2.0**	**J F1**	5.0	1.3	ug/L		08/02/24 10:30	08/05/24 12:12	1
Vanadium	<2.2		5.0	2.2	ug/L		08/02/24 10:30	08/05/24 12:12	1
Zinc	**21000**		20	6.9	ug/L		08/02/24 10:30	08/05/24 12:12	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253605-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-587-1428-1438.3-1
Lab Sample ID: 500-253605-1
Date Collected: 07/14/24 13:00
Matrix: Water
Date Received: 07/17/24 09:40

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25	^+	100	25	ug/L		08/02/24 10:30	08/05/24 12:24	1
Antimony	<1.3		3.0	1.3	ug/L		08/02/24 10:30	08/05/24 12:24	1
Arsenic	**11**		1.0	0.23	ug/L		08/02/24 10:30	08/05/24 12:24	1
Barium	**18000**		13	3.7	ug/L		08/02/24 10:30	08/06/24 11:51	5
Beryllium	<0.53		1.0	0.53	ug/L		08/02/24 10:30	08/05/24 12:24	1
Boron	**420**	**B**	50	13	ug/L		08/02/24 10:30	08/05/24 12:24	1
Cadmium	**0.32**	**J**	0.50	0.17	ug/L		08/02/24 10:30	08/05/24 12:24	1
Calcium	**24000000**		20000	4400	ug/L		08/02/24 10:30	08/06/24 11:56	100
Chromium	<1.1		5.0	1.1	ug/L		08/02/24 10:30	08/05/24 12:24	1
Cobalt	**1.2**		1.0	0.40	ug/L		08/02/24 10:30	08/05/24 12:24	1
Copper	**70**		10	2.5	ug/L		08/02/24 10:30	08/06/24 11:51	5
Iron	**350**		100	47	ug/L		08/02/24 10:30	08/05/24 12:24	1
Lead	**0.97**	**J**	2.5	0.93	ug/L		08/02/24 10:30	08/06/24 11:51	5
Lithium	**1900**	**^5-**	1000	250	ug/L		08/02/24 10:30	08/07/24 12:16	100
Magnesium	**220000**		1000	250	ug/L		08/02/24 10:30	08/06/24 11:51	5
Manganese	**15000**		2.5	0.79	ug/L		08/02/24 10:30	08/05/24 12:24	1
Molybdenum	**25**		5.0	2.5	ug/L		08/02/24 10:30	08/05/24 12:24	1
Nickel	**14**		2.0	0.63	ug/L		08/02/24 10:30	08/05/24 12:24	1
Potassium	**42000**		2500	560	ug/L		08/02/24 10:30	08/06/24 11:51	5
Selenium	**3.3**		2.5	0.98	ug/L		08/02/24 10:30	08/05/24 12:24	1
Silver	**0.51**		0.50	0.12	ug/L		08/02/24 10:30	08/05/24 12:24	1
Sodium	**7400000**		20000	7700	ug/L		08/02/24 10:30	08/06/24 11:56	100
Strontium	**420000**		400	64	ug/L		08/02/24 10:30	08/06/24 11:56	100
Thallium	<2.9		10	2.9	ug/L		08/02/24 10:30	08/06/24 11:51	5
Tin	<1.3		5.0	1.3	ug/L		08/02/24 10:30	08/05/24 12:24	1
Vanadium	<2.2		5.0	2.2	ug/L		08/02/24 10:30	08/05/24 12:24	1
Zinc	**23000**		20	6.9	ug/L		08/02/24 10:30	08/05/24 12:24	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**60000**		0.91	0.46	mg/L		08/02/24 10:30	08/07/24 16:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**830**	**J**	2000	360	mg/L			07/17/24 15:04	2000
Nitrate as N (EPA 300.0)	<0.043	H3	1.0	0.043	mg/L			07/17/24 13:30	1
Chloride (EPA 300.0)	**61000**		2000	230	mg/L			07/17/24 15:04	2000
Nitrite as N (EPA 300.0)	<0.070	H3	1.0	0.070	mg/L			07/17/24 13:30	1
Fluoride (EPA 300.0)	<0.19		1.0	0.19	mg/L			07/17/24 13:30	1
Nitrate Nitrite as N (EPA 300.0)	<0.070	H3	1.0	0.070	mg/L			07/17/24 13:30	1
Sulfate (EPA 300.0)	**3.1**		1.0	0.21	mg/L			07/17/24 13:30	1
Cyanide, Total (EPA 335.4)	<0.0036		0.0050	0.0036	mg/L		07/23/24 10:24	07/24/24 18:10	1
Ammonia (EPA 350.1)	<0.10		0.20	0.10	mg/L		08/07/24 12:42	08/09/24 13:22	1
Phosphorus as P (EPA 365.1)	<0.024	F1 F2 ^1- *- ^-	0.050	0.024	mg/L		08/07/24 11:15	08/07/24 19:20	1
Alkalinity (SM 2320B)	**18**		5.0	3.7	mg/L			07/19/24 17:33	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**18**		5.0	3.7	mg/L			07/19/24 17:33	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<3.7		5.0	3.7	mg/L			07/19/24 17:33	1
Salinity (SM 2520B)	**110**		6.6	6.6	psu			08/04/24 14:56	20

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253605-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-587-1428-1438.3-1
Lab Sample ID: 500-253605-1
Date Collected: 07/14/24 13:00
Matrix: Water
Date Received: 07/17/24 09:40

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**90000**		1000	430	mg/L			07/18/24 03:25	1
Total Suspended Solids (SM 2540D)	**130**		8.3	3.2	mg/L			07/19/24 14:13	1
Chromium, hexavalent (SM 3500 CR B)	<0.0032	H3	0.010	0.0032	mg/L			07/17/24 17:23	1
Cr (III) (SM 3500 CR B)	<0.010		0.010	0.010	mg/L			07/22/24 10:59	1
Sulfide (SM 4500 S2 F)	<0.23		1.0	0.23	mg/L			07/17/24 22:49	1
Total Organic Carbon (SM 5310C)	<0.47		1.0	0.47	mg/L			07/30/24 13:10	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent (SM 3500 CR B)	**0.0066**	**J H3 B**	0.010	0.0032	mg/L			07/17/24 17:23	1
Cr (III) (SM 3500 CR B)	<0.010		0.010	0.010	mg/L			08/06/24 07:02	1
Dissolved Organic Carbon (SM 5310C)	<0.47	F1	1.0	0.47	mg/L			07/28/24 19:15	1

Client Sample Results

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253605-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: Field Blank
Lab Sample ID: 500-253605-2
Date Collected: 07/14/24 00:00
Matrix: Water
Date Received: 07/17/24 09:40

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/23/24 18:40	1

Qualifiers

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
^5-	Linear Range Check (LRC) is outside acceptance limits, low biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
^-	Continuing Calibration Verification (CCV) is outside acceptance limits, low biased.
^1-	Initial Calibration Verification (ICV) is outside acceptance limits, low biased.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Metals

Prep Batch: 2432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1	WP-587-1428-1438.3-1	Dissolved	Water	1638	
500-253605-1	WP-587-1428-1438.3-1	Total Recoverable	Water	1638	
MB 350-2432/1-A	Method Blank	Total Recoverable	Water	1638	
MB 350-2432/2-A	Method Blank	Total Recoverable	Water	1638	
LCS 350-2432/3-A	Lab Control Sample	Total Recoverable	Water	1638	
LCSD 350-2432/4-A	Lab Control Sample Dup	Total Recoverable	Water	1638	

Prep Batch: 2438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1	WP-587-1428-1438.3-1	Dissolved	Water	1630	
500-253605-1	WP-587-1428-1438.3-1	Total/NA	Water	1630	
MB 350-2438/1-A	Method Blank	Total/NA	Water	1630	
MB 350-2438/2-A	Method Blank	Total/NA	Water	1630	
MB 350-2438/3-A	Method Blank	Total/NA	Water	1630	
LCS 350-2438/4-A	Lab Control Sample	Total/NA	Water	1630	
LCSD 350-2438/5-A	Lab Control Sample Dup	Total/NA	Water	1630	

Analysis Batch: 2439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1	WP-587-1428-1438.3-1	Dissolved	Water	1631E	
500-253605-1	WP-587-1428-1438.3-1	Total/NA	Water	1631E	
500-253605-2	Field Blank	Total/NA	Water	1631E	
MB 350-2439/92	Method Blank	Total/NA	Water	1631E	
MB 350-2439/93	Method Blank	Total/NA	Water	1631E	
MB 350-2439/94	Method Blank	Total/NA	Water	1631E	
LCS 350-2439/95	Lab Control Sample	Total/NA	Water	1631E	
LCSD 350-2439/96	Lab Control Sample Dup	Total/NA	Water	1631E	

Analysis Batch: 2446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1	WP-587-1428-1438.3-1	Dissolved	Water	1630	2438
500-253605-1	WP-587-1428-1438.3-1	Total/NA	Water	1630	2438
MB 350-2438/1-A	Method Blank	Total/NA	Water	1630	2438
MB 350-2438/2-A	Method Blank	Total/NA	Water	1630	2438
MB 350-2438/3-A	Method Blank	Total/NA	Water	1630	2438
LCS 350-2438/4-A	Lab Control Sample	Total/NA	Water	1630	2438
LCSD 350-2438/5-A	Lab Control Sample Dup	Total/NA	Water	1630	2438

Analysis Batch: 2472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 350-2432/1-A	Method Blank	Total Recoverable	Water	1638	2432
MB 350-2432/2-A	Method Blank	Total Recoverable	Water	1638	2432
LCS 350-2432/3-A	Lab Control Sample	Total Recoverable	Water	1638	2432
LCSD 350-2432/4-A	Lab Control Sample Dup	Total Recoverable	Water	1638	2432

Analysis Batch: 2475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1	WP-587-1428-1438.3-1	Dissolved	Water	1638	2432
500-253605-1	WP-587-1428-1438.3-1	Total Recoverable	Water	1638	2432

Metals

Prep Batch: 779693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1	WP-587-1428-1438.3-1	Dissolved	Water	3005A	
500-253605-1	WP-587-1428-1438.3-1	Total Recoverable	Water	3005A	
MB 500-779693/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-779693/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-253605-1 MS	WP-587-1428-1438.3-1	Total Recoverable	Water	3005A	
500-253605-1 MSD	WP-587-1428-1438.3-1	Total Recoverable	Water	3005A	
500-253605-1 DU	WP-587-1428-1438.3-1	Total Recoverable	Water	3005A	

Analysis Batch: 779980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1	WP-587-1428-1438.3-1	Dissolved	Water	6020B	779693
500-253605-1	WP-587-1428-1438.3-1	Total Recoverable	Water	6020B	779693
MB 500-779693/1-A	Method Blank	Total Recoverable	Water	6020B	779693
LCS 500-779693/2-A	Lab Control Sample	Total Recoverable	Water	6020B	779693
500-253605-1 MS	WP-587-1428-1438.3-1	Total Recoverable	Water	6020B	779693
500-253605-1 MSD	WP-587-1428-1438.3-1	Total Recoverable	Water	6020B	779693
500-253605-1 DU	WP-587-1428-1438.3-1	Total Recoverable	Water	6020B	779693

Analysis Batch: 779997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1	WP-587-1428-1438.3-1	Total Recoverable	Water	SM 2340B	779693

Analysis Batch: 780135

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1	WP-587-1428-1438.3-1	Dissolved	Water	6020B	779693
500-253605-1	WP-587-1428-1438.3-1	Dissolved	Water	6020B	779693
500-253605-1	WP-587-1428-1438.3-1	Total Recoverable	Water	6020B	779693
500-253605-1	WP-587-1428-1438.3-1	Total Recoverable	Water	6020B	779693
MB 500-779693/1-A	Method Blank	Total Recoverable	Water	6020B	779693
LCS 500-779693/2-A	Lab Control Sample	Total Recoverable	Water	6020B	779693
500-253605-1 MS	WP-587-1428-1438.3-1	Total Recoverable	Water	6020B	779693
500-253605-1 MS	WP-587-1428-1438.3-1	Total Recoverable	Water	6020B	779693
500-253605-1 MSD	WP-587-1428-1438.3-1	Total Recoverable	Water	6020B	779693
500-253605-1 MSD	WP-587-1428-1438.3-1	Total Recoverable	Water	6020B	779693
500-253605-1 DU	WP-587-1428-1438.3-1	Total Recoverable	Water	6020B	779693
500-253605-1 DU	WP-587-1428-1438.3-1	Total Recoverable	Water	6020B	779693

Analysis Batch: 780295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1	WP-587-1428-1438.3-1	Dissolved	Water	6020B	779693
500-253605-1	WP-587-1428-1438.3-1	Total Recoverable	Water	6020B	779693
500-253605-1 MS	WP-587-1428-1438.3-1	Total Recoverable	Water	6020B	779693
500-253605-1 MSD	WP-587-1428-1438.3-1	Total Recoverable	Water	6020B	779693
500-253605-1 DU	WP-587-1428-1438.3-1	Total Recoverable	Water	6020B	779693

General Chemistry

Analysis Batch: 777044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1	WP-587-1428-1438.3-1	Total/NA	Water	300.0	
500-253605-1	WP-587-1428-1438.3-1	Total/NA	Water	300.0	

General Chemistry (Continued)

Analysis Batch: 777044 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-777044/3	Method Blank	Total/NA	Water	300.0	
LCS 500-777044/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 777045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1	WP-587-1428-1438.3-1	Total/NA	Water	300.0	
MB 500-777045/3	Method Blank	Total/NA	Water	300.0	
LCS 500-777045/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 777202

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1	WP-587-1428-1438.3-1	Dissolved	Water	SM 3500 CR B	
500-253605-1	WP-587-1428-1438.3-1	Total/NA	Water	SM 3500 CR B	
MB 500-777202/9	Method Blank	Total/NA	Water	SM 3500 CR B	
LCS 500-777202/10	Lab Control Sample	Total/NA	Water	SM 3500 CR B	
500-253605-1 MS	WP-587-1428-1438.3-1	Dissolved	Water	SM 3500 CR B	
500-253605-1 MSD	WP-587-1428-1438.3-1	Dissolved	Water	SM 3500 CR B	

Analysis Batch: 777224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1	WP-587-1428-1438.3-1	Total/NA	Water	SM 2540C	
MB 500-777224/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-777224/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 777261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1	WP-587-1428-1438.3-1	Total/NA	Water	SM 4500 S2 F	
MB 500-777261/1	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 500-777261/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 777557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1	WP-587-1428-1438.3-1	Total/NA	Water	SM 2540D	
MB 500-777557/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 500-777557/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Analysis Batch: 777696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1	WP-587-1428-1438.3-1	Total/NA	Water	SM 2320B	
MB 500-777696/28	Method Blank	Total/NA	Water	SM 2320B	
LCS 500-777696/4	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 777758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1	WP-587-1428-1438.3-1	Dissolved	Water	SM 3500 CR B	
500-253605-1	WP-587-1428-1438.3-1	Total/NA	Water	SM 3500 CR B	

Prep Batch: 777966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1	WP-587-1428-1438.3-1	Total/NA	Water	Distill/CN	
MB 500-777966/1-A	Method Blank	Total/NA	Water	Distill/CN	

General Chemistry (Continued)

Prep Batch: 777966 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-777966/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Analysis Batch: 778742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1	WP-587-1428-1438.3-1	Dissolved	Water	SM 5310C	
MB 500-778742/7	Method Blank	Dissolved	Water	SM 5310C	
LCS 500-778742/8	Lab Control Sample	Dissolved	Water	SM 5310C	
500-253605-1 MS	WP-587-1428-1438.3-1	Dissolved	Water	SM 5310C	
500-253605-1 MSD	WP-587-1428-1438.3-1	Dissolved	Water	SM 5310C	

Analysis Batch: 779224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1	WP-587-1428-1438.3-1	Total/NA	Water	SM 5310C	
MB 500-779224/7	Method Blank	Total/NA	Water	SM 5310C	
LCS 500-779224/8	Lab Control Sample	Total/NA	Water	SM 5310C	

Analysis Batch: 779789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1	WP-587-1428-1438.3-1	Total/NA	Water	SM 2520B	

Prep Batch: 780276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1	WP-587-1428-1438.3-1	Total/NA	Water	Distill/Ammonia	
MB 500-780276/1-A	Method Blank	Total/NA	Water	Distill/Ammonia	
LCS 500-780276/2-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	

Analysis Batch: 780473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1	WP-587-1428-1438.3-1	Total/NA	Water	335.4	777966
MB 500-777966/1-A	Method Blank	Total/NA	Water	335.4	777966
LCS 500-777966/2-A	Lab Control Sample	Total/NA	Water	335.4	777966

Prep Batch: 780738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1	WP-587-1428-1438.3-1	Total/NA	Water	365.2/365.3/365	
MB 500-780738/1-A	Method Blank	Total/NA	Water	365.2/365.3/365	
LCS 500-780738/2-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	
500-253605-1 MS	WP-587-1428-1438.3-1	Total/NA	Water	365.2/365.3/365	
500-253605-1 MSD	WP-587-1428-1438.3-1	Total/NA	Water	365.2/365.3/365	

Analysis Batch: 780750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1	WP-587-1428-1438.3-1	Total/NA	Water	350.1	780276
MB 500-780276/1-A	Method Blank	Total/NA	Water	350.1	780276
LCS 500-780276/2-A	Lab Control Sample	Total/NA	Water	350.1	780276

Analysis Batch: 781723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1	WP-587-1428-1438.3-1	Total/NA	Water	365.1	780738
MB 500-780738/1-A	Method Blank	Total/NA	Water	365.1	780738
LCS 500-780738/2-A	Lab Control Sample	Total/NA	Water	365.1	780738

General Chemistry (Continued)

Analysis Batch: 781723 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253605-1 MS	WP-587-1428-1438.3-1	Total/NA	Water	365.1	780738
500-253605-1 MSD	WP-587-1428-1438.3-1	Total/NA	Water	365.1	780738

Method: 1630 - Methyl Mercury

Lab Sample ID: MB 350-2438/1-A
Matrix: Water
Analysis Batch: 2446

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2438

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/24/24 11:26	07/24/24 17:21	1

Lab Sample ID: MB 350-2438/2-A
Matrix: Water
Analysis Batch: 2446

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2438

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/24/24 11:26	07/24/24 17:31	1

Lab Sample ID: MB 350-2438/3-A
Matrix: Water
Analysis Batch: 2446

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2438

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/24/24 11:26	07/24/24 17:42	1

Lab Sample ID: LCS 350-2438/4-A
Matrix: Water
Analysis Batch: 2446

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 2438

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methyl Mercury	1.00	1.10		ng/L		110	65 - 135

Lab Sample ID: LCSD 350-2438/5-A
Matrix: Water
Analysis Batch: 2446

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 2438

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methyl Mercury	1.00	1.08		ng/L		108	65 - 135	2	35

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 350-2439/92
Matrix: Water
Analysis Batch: 2439

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/23/24 17:37	1

Lab Sample ID: MB 350-2439/93
Matrix: Water
Analysis Batch: 2439

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/23/24 17:42	1

Method: 1631E - Mercury, Low Level (CVAFS) (Continued)

Lab Sample ID: MB 350-2439/94
Matrix: Water
Analysis Batch: 2439

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/23/24 17:46	1

Lab Sample ID: LCS 350-2439/95
Matrix: Water
Analysis Batch: 2439

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.42		ng/L		88	77 - 123

Lab Sample ID: LCSD 350-2439/96
Matrix: Water
Analysis Batch: 2439

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	4.35		ng/L		87	77 - 123	2	24

Method: 1638 - Metals (ICP/MS)

Lab Sample ID: MB 350-2432/1-A
Matrix: Water
Analysis Batch: 2472

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 2432

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	<0.0098		0.030	0.0098	ug/L		07/23/24 16:04	07/29/24 17:17	1

Lab Sample ID: MB 350-2432/2-A
Matrix: Water
Analysis Batch: 2472

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 2432

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	<0.0098		0.030	0.0098	ug/L		07/23/24 16:04	07/29/24 17:20	1

Lab Sample ID: LCS 350-2432/3-A
Matrix: Water
Analysis Batch: 2472

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 2432

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Uranium	25.0	22.9		ug/L		92	85 - 115

Lab Sample ID: LCSD 350-2432/4-A
Matrix: Water
Analysis Batch: 2472

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 2432

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Uranium	25.0	23.6		ug/L		94	85 - 115	3	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 500-779693/1-A
Matrix: Water
Analysis Batch: 779980

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 779693

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		08/02/24 10:30	08/05/24 11:44	1
Antimony	<1.3		3.0	1.3	ug/L		08/02/24 10:30	08/05/24 11:44	1
Arsenic	<0.23		1.0	0.23	ug/L		08/02/24 10:30	08/05/24 11:44	1
Barium	<0.73		2.5	0.73	ug/L		08/02/24 10:30	08/05/24 11:44	1
Beryllium	<0.53		1.0	0.53	ug/L		08/02/24 10:30	08/05/24 11:44	1
Boron	27.2	J	50	13	ug/L		08/02/24 10:30	08/05/24 11:44	1
Cadmium	<0.17		0.50	0.17	ug/L		08/02/24 10:30	08/05/24 11:44	1
Calcium	<44		200	44	ug/L		08/02/24 10:30	08/05/24 11:44	1
Chromium	<1.1		5.0	1.1	ug/L		08/02/24 10:30	08/05/24 11:44	1
Cobalt	<0.40		1.0	0.40	ug/L		08/02/24 10:30	08/05/24 11:44	1
Iron	<47		100	47	ug/L		08/02/24 10:30	08/05/24 11:44	1
Lead	<0.19		0.50	0.19	ug/L		08/02/24 10:30	08/05/24 11:44	1
Lithium	<2.5		10	2.5	ug/L		08/02/24 10:30	08/05/24 11:44	1
Magnesium	<49		200	49	ug/L		08/02/24 10:30	08/05/24 11:44	1
Manganese	<0.79		2.5	0.79	ug/L		08/02/24 10:30	08/05/24 11:44	1
Molybdenum	<2.5		5.0	2.5	ug/L		08/02/24 10:30	08/05/24 11:44	1
Nickel	<0.63		2.0	0.63	ug/L		08/02/24 10:30	08/05/24 11:44	1
Potassium	<110		500	110	ug/L		08/02/24 10:30	08/05/24 11:44	1
Selenium	<0.98		2.5	0.98	ug/L		08/02/24 10:30	08/05/24 11:44	1
Silver	<0.12		0.50	0.12	ug/L		08/02/24 10:30	08/05/24 11:44	1
Sodium	<77		200	77	ug/L		08/02/24 10:30	08/05/24 11:44	1
Strontium	<0.64		4.0	0.64	ug/L		08/02/24 10:30	08/05/24 11:44	1
Thallium	<0.57		2.0	0.57	ug/L		08/02/24 10:30	08/05/24 11:44	1
Tin	<1.3		5.0	1.3	ug/L		08/02/24 10:30	08/05/24 11:44	1
Vanadium	<2.2		5.0	2.2	ug/L		08/02/24 10:30	08/05/24 11:44	1
Zinc	<6.9		20	6.9	ug/L		08/02/24 10:30	08/05/24 11:44	1

Lab Sample ID: MB 500-779693/1-A
Matrix: Water
Analysis Batch: 780135

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 779693

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	<0.50		2.0	0.50	ug/L		08/02/24 10:30	08/06/24 11:10	1

Lab Sample ID: LCS 500-779693/2-A
Matrix: Water
Analysis Batch: 779980

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 779693

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	2000	1960		ug/L		98	80 - 120
Antimony	500	509		ug/L		102	80 - 120
Arsenic	100	98.8		ug/L		99	80 - 120
Barium	500	512		ug/L		102	80 - 120
Beryllium	50.0	50.6		ug/L		101	80 - 120
Boron	1000	1100		ug/L		110	80 - 120
Cadmium	50.0	50.1		ug/L		100	80 - 120
Calcium	10000	8860		ug/L		89	80 - 120
Chromium	200	207		ug/L		104	80 - 120
Cobalt	500	527		ug/L		105	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 500-779693/2-A
Matrix: Water
Analysis Batch: 779980

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 779693

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	1000	1040		ug/L		104	80 - 120
Lead	100	102		ug/L		102	80 - 120
Lithium	100	104		ug/L		104	80 - 120
Magnesium	10000	10400		ug/L		104	80 - 120
Manganese	500	515		ug/L		103	80 - 120
Molybdenum	1000	974		ug/L		97	80 - 120
Nickel	500	517		ug/L		103	80 - 120
Potassium	10000	10300		ug/L		103	80 - 120
Selenium	100	98.4		ug/L		98	80 - 120
Silver	50.0	50.2		ug/L		100	80 - 120
Sodium	10000	10300		ug/L		103	80 - 120
Strontium	1000	977		ug/L		98	80 - 120
Thallium	100	104		ug/L		104	80 - 120
Tin	1000	1000		ug/L		100	80 - 120
Vanadium	500	505		ug/L		101	80 - 120
Zinc	500	514		ug/L		103	80 - 120

Lab Sample ID: LCS 500-779693/2-A
Matrix: Water
Analysis Batch: 780135

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 779693

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	250	251		ug/L		101	80 - 120

Lab Sample ID: 500-253605-1 MS
Matrix: Water
Analysis Batch: 779980

Client Sample ID: WP-587-1428-1438.3-1
Prep Type: Total Recoverable
Prep Batch: 779693

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	55	J ^+	2000	2080	^+	ug/L		101	75 - 125
Antimony	<1.3	F1	500	346	F1	ug/L		69	75 - 125
Arsenic	7.2	F1	100	148	F1	ug/L		141	75 - 125
Beryllium	<0.53	F1	50.0	24.8	F1	ug/L		50	75 - 125
Boron	350	F1 B	1000	1070	F1	ug/L		72	75 - 125
Cadmium	0.22	J	50.0	43.0		ug/L		86	75 - 125
Chromium	<1.1	F1	200	140	F1	ug/L		70	75 - 125
Cobalt	1.1	F1	500	337	F1	ug/L		67	75 - 125
Iron	1700	F1	1000	2340	F1	ug/L		65	75 - 125
Manganese	15000		500	15100	4	ug/L		57	75 - 125
Molybdenum	24		1000	1170		ug/L		114	75 - 125
Nickel	12		500	547		ug/L		107	75 - 125
Selenium	2.2	J	100	113		ug/L		111	75 - 125
Silver	0.56		50.0	41.9		ug/L		83	75 - 125
Tin	2.0	J F1	1000	732	F1	ug/L		73	75 - 125
Vanadium	<2.2		500	418		ug/L		84	75 - 125
Zinc	21000		500	24300	4	ug/L		613	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 500-253605-1 MS
Matrix: Water
Analysis Batch: 780135

Client Sample ID: WP-587-1428-1438.3-1
Prep Type: Total Recoverable
Prep Batch: 779693

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	19000		500	17600	4	ug/L		-254	75 - 125
Copper	110		250	317		ug/L		84	75 - 125
Iron	2200	F1	1000	2870	F1	ug/L		69	75 - 125
Lead	3.9		100	97.8		ug/L		94	75 - 125
Magnesium	230000		10000	217000	4	ug/L		-86	75 - 125
Potassium	44000		10000	50000	4	ug/L		59	75 - 125
Thallium	<2.9		100	96.6		ug/L		97	75 - 125

Lab Sample ID: 500-253605-1 MS
Matrix: Water
Analysis Batch: 780135

Client Sample ID: WP-587-1428-1438.3-1
Prep Type: Total Recoverable
Prep Batch: 779693

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	24000000		10000	23200000	4	ug/L		-3111	75 - 125
Sodium	8500000		10000	8620000	4	ug/L		865	75 - 125
Strontium	410000		1000	413000	4	ug/L		-162	75 - 125

Lab Sample ID: 500-253605-1 MS
Matrix: Water
Analysis Batch: 780295

Client Sample ID: WP-587-1428-1438.3-1
Prep Type: Total Recoverable
Prep Batch: 779693

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lithium	2000	^5-	100	2030	^5- 4	ug/L		51	75 - 125

Lab Sample ID: 500-253605-1 MSD
Matrix: Water
Analysis Batch: 779980

Client Sample ID: WP-587-1428-1438.3-1
Prep Type: Total Recoverable
Prep Batch: 779693

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	55	J ^+	2000	2070	^+	ug/L		101	75 - 125	0	20
Antimony	<1.3	F1	500	347	F1	ug/L		69	75 - 125	0	20
Arsenic	7.2	F1	100	146	F1	ug/L		138	75 - 125	2	20
Beryllium	<0.53	F1	50.0	25.4	F1	ug/L		51	75 - 125	2	20
Boron	350	F1 B	1000	1120		ug/L		76	75 - 125	4	20
Cadmium	0.22	J	50.0	42.8		ug/L		85	75 - 125	0	20
Chromium	<1.1	F1	200	136	F1	ug/L		68	75 - 125	3	20
Cobalt	1.1	F1	500	332	F1	ug/L		66	75 - 125	1	20
Iron	1700	F1	1000	2350	F1	ug/L		66	75 - 125	1	20
Manganese	15000		500	15400	4	ug/L		107	75 - 125	2	20
Molybdenum	24		1000	1160		ug/L		113	75 - 125	1	20
Nickel	12		500	529		ug/L		103	75 - 125	3	20
Selenium	2.2	J	100	114		ug/L		112	75 - 125	1	20
Silver	0.56		50.0	41.2		ug/L		81	75 - 125	2	20
Tin	2.0	J F1	1000	733	F1	ug/L		73	75 - 125	0	20
Vanadium	<2.2		500	412		ug/L		82	75 - 125	1	20
Zinc	21000		500	24200	4	ug/L		577	75 - 125	1	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 500-253605-1 MSD
Matrix: Water
Analysis Batch: 780135

Client Sample ID: WP-587-1428-1438.3-1
Prep Type: Total Recoverable
Prep Batch: 779693

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Barium	19000		500	17000	4	ug/L		-369	75 - 125	3	20
Copper	110		250	296		ug/L		75	75 - 125	7	20
Lead	3.9		100	90.7		ug/L		87	75 - 125	8	20
Magnesium	230000		10000	210000	4	ug/L		-160	75 - 125	3	20
Potassium	44000		10000	48100	4	ug/L		40	75 - 125	4	20
Thallium	<2.9		100	90.3		ug/L		90	75 - 125	7	20

Lab Sample ID: 500-253605-1 MSD
Matrix: Water
Analysis Batch: 780135

Client Sample ID: WP-587-1428-1438.3-1
Prep Type: Total Recoverable
Prep Batch: 779693

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	<1300	*+ ^+	1000	<1300	^+	ug/L		NC	75 - 125	NC	20
Calcium	24000000		10000	23500000	4	ug/L		-573	75 - 125	1	20
Nickel	<63	F1 F2	500	202	F1 F2	ug/L		40	75 - 125	24	20
Selenium	<98	F1	100	127	J F1	ug/L		127	75 - 125	3	20
Sodium	8500000		10000	8730000	4	ug/L		1937	75 - 125	1	20
Strontium	410000		1000	422000	4	ug/L		764	75 - 125	2	20

Lab Sample ID: 500-253605-1 MSD
Matrix: Water
Analysis Batch: 780295

Client Sample ID: WP-587-1428-1438.3-1
Prep Type: Total Recoverable
Prep Batch: 779693

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium	2000	^5-	100	1980	^5- 4	ug/L		-2	75 - 125	3	20

Lab Sample ID: 500-253605-1 DU
Matrix: Water
Analysis Batch: 779980

Client Sample ID: WP-587-1428-1438.3-1
Prep Type: Total Recoverable
Prep Batch: 779693

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Aluminum	55	J ^+		64.5	J ^+	ug/L				16	20
Antimony	<1.3	F1		<1.3		ug/L				NC	20
Arsenic	7.2	F1		9.25	F3	ug/L				25	20
Beryllium	<0.53	F1		<0.53		ug/L				NC	20
Boron	350	F1 B		339		ug/L				4	20
Cadmium	0.22	J		0.272	J	ug/L				20	20
Calcium	22000000	^2 E		23700000		ug/L				7	20
Chromium	<1.1	F1		<1.1		ug/L				NC	20
Cobalt	1.1	F1		1.15		ug/L				1	20
Iron	1700	F1		1620		ug/L				4	20
Manganese	15000			14500		ug/L				2	20
Molybdenum	24			24.6		ug/L				3	20
Nickel	12			13.8		ug/L				15	20
Selenium	2.2	J		2.47	J	ug/L				10	20
Silver	0.56			0.549		ug/L				2	20
Tin	2.0	J F1		<1.3		ug/L				NC	20
Vanadium	<2.2			<2.2		ug/L				NC	20
Zinc	21000			23800		ug/L				11	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 500-253605-1 DU
Matrix: Water
Analysis Batch: 780135

Client Sample ID: WP-587-1428-1438.3-1
Prep Type: Total Recoverable
Prep Batch: 779693

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Barium	19000			18800		ug/L				0.07	20
Copper	110			107		ug/L				0.9	20
Lead	3.9			3.67		ug/L				5	20
Magnesium	230000			223000		ug/L				1	20
Potassium	44000			44000		ug/L				0.08	20
Thallium	<2.9			<2.9		ug/L				NC	20

Lab Sample ID: 500-253605-1 DU
Matrix: Water
Analysis Batch: 780135

Client Sample ID: WP-587-1428-1438.3-1
Prep Type: Total Recoverable
Prep Batch: 779693

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Calcium	24000000			23200000		ug/L				1	20
Sodium	8500000			8120000		ug/L				5	20
Strontium	410000			412000		ug/L				0.7	20

Lab Sample ID: 500-253605-1 DU
Matrix: Water
Analysis Batch: 780295

Client Sample ID: WP-587-1428-1438.3-1
Prep Type: Total Recoverable
Prep Batch: 779693

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Lithium	2000	^5-		1910		ug/L				4	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 500-777044/3
Matrix: Water
Analysis Batch: 777044

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	<0.18		1.0	0.18	mg/L			07/17/24 08:44	1
Chloride	<0.12		1.0	0.12	mg/L			07/17/24 08:44	1
Fluoride	<0.19		1.0	0.19	mg/L			07/17/24 08:44	1
Sulfate	<0.21		1.0	0.21	mg/L			07/17/24 08:44	1

Lab Sample ID: LCS 500-777044/4
Matrix: Water
Analysis Batch: 777044

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Bromide			20.0	19.4		mg/L		97	90 - 110		
Chloride			20.0	20.6		mg/L		103	90 - 110		
Fluoride			20.0	20.1		mg/L		101	90 - 110		
Sulfate			20.0	20.8		mg/L		104	90 - 110		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 500-777045/3
Matrix: Water
Analysis Batch: 777045

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.043		1.0	0.043	mg/L			07/17/24 08:44	1
Nitrite as N	<0.070		1.0	0.070	mg/L			07/17/24 08:44	1
Nitrate Nitrite as N	<0.070		1.0	0.070	mg/L			07/17/24 08:44	1

Lab Sample ID: LCS 500-777045/4
Matrix: Water
Analysis Batch: 777045

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	20.0	18.9		mg/L		94	90 - 110
Nitrite as N	20.0	20.7		mg/L		103	90 - 110

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 500-777966/1-A
Matrix: Water
Analysis Batch: 780473

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 777966

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00630		0.0050	0.0036	mg/L		07/23/24 10:24	07/24/24 17:10	1

Lab Sample ID: LCS 500-777966/2-A
Matrix: Water
Analysis Batch: 780473

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 777966

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.100	0.102		mg/L		102	90 - 110

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 500-780276/1-A
Matrix: Water
Analysis Batch: 780750

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 780276

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	<0.10		0.20	0.10	mg/L		08/07/24 12:42	08/09/24 13:11	1

Lab Sample ID: LCS 500-780276/2-A
Matrix: Water
Analysis Batch: 780750

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 780276

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	2.00	1.89		mg/L		95	90 - 110

Method: 365.1 - Phosphorus, Total

Lab Sample ID: MB 500-780738/1-A
Matrix: Water
Analysis Batch: 781723

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 780738

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus as P	<0.024	^1- ^-	0.050	0.024	mg/L		08/07/24 11:15	08/07/24 19:19	1

Lab Sample ID: LCS 500-780738/2-A
Matrix: Water
Analysis Batch: 781723

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 780738

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phosphorus as P	1.00	0.438	^1- *- ^-	mg/L		44	88 - 123

Lab Sample ID: 500-253605-1 MS
Matrix: Water
Analysis Batch: 781723

Client Sample ID: WP-587-1428-1438.3-1
Prep Type: Total/NA
Prep Batch: 780738

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Phosphorus as P	<0.024	F1 F2 ^1- *- ^-	0.500	0.0580	^1- F1 ^-	mg/L		12	75 - 125

Lab Sample ID: 500-253605-1 MSD
Matrix: Water
Analysis Batch: 781723

Client Sample ID: WP-587-1428-1438.3-1
Prep Type: Total/NA
Prep Batch: 780738

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phosphorus as P	<0.024	F1 F2 ^1- *- ^-	0.500	0.208	^1- F1 F2 ^-	mg/L		42	75 - 125	113	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 500-777696/28
Matrix: Water
Analysis Batch: 777696

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	<3.7		5.0	3.7	mg/L			07/19/24 20:43	1
Bicarbonate Alkalinity as CaCO3	<3.7		5.0	3.7	mg/L			07/19/24 20:43	1
Carbonate Alkalinity as CaCO3	<3.7		5.0	3.7	mg/L			07/19/24 20:43	1

Lab Sample ID: LCS 500-777696/4
Matrix: Water
Analysis Batch: 777696

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	100	105		mg/L		105	95 - 121

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 500-777224/1
Matrix: Water
Analysis Batch: 777224

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<4.3		10	4.3	mg/L			07/18/24 02:54	1

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: LCS 500-777224/2
Matrix: Water
Analysis Batch: 777224

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			250	232		mg/L		93	80 - 120		

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 500-777557/1
Matrix: Water
Analysis Batch: 777557

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<1.9		5.0	1.9	mg/L			07/19/24 13:31	1

Lab Sample ID: LCS 500-777557/2
Matrix: Water
Analysis Batch: 777557

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			200	172		mg/L		86	80 - 120		

Method: SM 3500 CR B - Chromium, Hexavalent

Lab Sample ID: MB 500-777202/9
Matrix: Water
Analysis Batch: 777202

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	0.00330	J	0.010	0.0032	mg/L			07/17/24 17:21	1

Lab Sample ID: LCS 500-777202/10
Matrix: Water
Analysis Batch: 777202

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chromium, hexavalent			0.250	0.259		mg/L		104	85 - 115		

Lab Sample ID: 500-253605-1 MS
Matrix: Water
Analysis Batch: 777202

Client Sample ID: WP-587-1428-1438.3-1
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chromium, hexavalent	0.0066	J H3 B	0.250	0.234		mg/L		91	85 - 115		

Lab Sample ID: 500-253605-1 MSD
Matrix: Water
Analysis Batch: 777202

Client Sample ID: WP-587-1428-1438.3-1
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium, hexavalent	0.0066	J H3 B	0.250	0.238		mg/L		92	85 - 115	2	20

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 500-777261/1
Matrix: Water
Analysis Batch: 777261

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<0.23		1.0	0.23	mg/L			07/17/24 21:54	1

Lab Sample ID: LCS 500-777261/2
Matrix: Water
Analysis Batch: 777261

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	3.64	3.38		mg/L		93	85 - 115

Method: SM 5310C - TOC

Lab Sample ID: MB 500-779224/7
Matrix: Water
Analysis Batch: 779224

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<0.47		1.0	0.47	mg/L			07/30/24 11:17	1

Lab Sample ID: LCS 500-779224/8
Matrix: Water
Analysis Batch: 779224

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	10.0	10.2		mg/L		102	86 - 116

Method: SM 5310C - Organic Carbon, Dissolved (DOC)

Lab Sample ID: MB 500-778742/7
Matrix: Water
Analysis Batch: 778742

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	<0.47		1.0	0.47	mg/L			07/28/24 18:19	1

Lab Sample ID: LCS 500-778742/8
Matrix: Water
Analysis Batch: 778742

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dissolved Organic Carbon	10.0	10.3		mg/L		103	86 - 116

Lab Sample ID: 500-253605-1 MS
Matrix: Water
Analysis Batch: 778742

Client Sample ID: WP-587-1428-1438.3-1
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Dissolved Organic Carbon	<0.47	F1	10.0	<0.47	F1	mg/L		0	75 - 125

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-253605-1

Method: SM 5310C - Organic Carbon, Dissolved (DOC) (Continued)

Lab Sample ID: 500-253605-1 MSD
Matrix: Water
Analysis Batch: 778742

Client Sample ID: WP-587-1428-1438.3-1
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dissolved Organic Carbon	<0.47	F1	10.0	<0.47	F1	mg/L		0	75 - 125	NC	20

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-253605-1

Client Sample ID: WP-587-1428-1438.3-1

Date Collected: 07/14/24 13:00
Date Received: 07/17/24 09:40

Lab Sample ID: 500-253605-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	1630			2438	AJD	EET SSM	07/24/24 11:26
Dissolved	Analysis	1630		1	2446	CL	EET SSM	07/24/24 21:26
Total/NA	Prep	1630			2438	AJD	EET SSM	07/24/24 11:26
Total/NA	Analysis	1630		1	2446	CL	EET SSM	07/24/24 20:55
Dissolved	Analysis	1631E		1	2439	AJD	EET SSM	07/23/24 18:36
Total/NA	Analysis	1631E		1	2439	AJD	EET SSM	07/23/24 18:31
Dissolved	Prep	1638			2432	V1R	EET SSM	07/23/24 16:04
Dissolved	Analysis	1638		1	2475	V1R	EET SSM	07/30/24 11:59
Total Recoverable	Prep	1638			2432	V1R	EET SSM	07/23/24 16:04
Total Recoverable	Analysis	1638		1	2475	V1R	EET SSM	07/30/24 12:02
Dissolved	Prep	3005A			779693	RN	EET CHI	08/02/24 10:30 - 08/02/24 16:30 [1]
Dissolved	Analysis	6020B		1	779980	RN	EET CHI	08/05/24 12:24
Dissolved	Prep	3005A			779693	RN	EET CHI	08/02/24 10:30 - 08/02/24 16:30 [1]
Dissolved	Analysis	6020B		5	780135	RN	EET CHI	08/06/24 11:51
Dissolved	Prep	3005A			779693	RN	EET CHI	08/02/24 10:30 - 08/02/24 16:30 [1]
Dissolved	Analysis	6020B		100	780135	RN	EET CHI	08/06/24 11:56
Dissolved	Prep	3005A			779693	RN	EET CHI	08/02/24 10:30 - 08/02/24 16:30 [1]
Dissolved	Analysis	6020B		100	780295	RN	EET CHI	08/07/24 12:16
Total Recoverable	Prep	3005A			779693	RN	EET CHI	08/02/24 10:30 - 08/02/24 16:30 [1]
Total Recoverable	Analysis	6020B		1	779980	RN	EET CHI	08/05/24 12:12
Total Recoverable	Prep	3005A			779693	RN	EET CHI	08/02/24 10:30 - 08/02/24 16:30 [1]
Total Recoverable	Analysis	6020B		5	780135	RN	EET CHI	08/06/24 11:21
Total Recoverable	Prep	3005A			779693	RN	EET CHI	08/02/24 10:30 - 08/02/24 16:30 [1]
Total Recoverable	Analysis	6020B		100	780135	RN	EET CHI	08/06/24 11:23
Total Recoverable	Prep	3005A			779693	RN	EET CHI	08/02/24 10:30 - 08/02/24 16:30 [1]
Total Recoverable	Analysis	6020B		100	780295	RN	EET CHI	08/07/24 12:05
Total Recoverable	Prep	3005A			779693	RN	EET CHI	08/02/24 10:30 - 08/02/24 16:30 [1]
Total Recoverable	Analysis	SM 2340B		1	779997	DAJ	EET CHI	08/07/24 16:18
Total/NA	Analysis	300.0		1	777044	W1T	EET CHI	07/17/24 13:30
Total/NA	Analysis	300.0		1	777045	W1T	EET CHI	07/17/24 13:30
Total/NA	Analysis	300.0		2000	777044	W1T	EET CHI	07/17/24 15:04
Total/NA	Prep	Distill/CN			777966	MB	EET CHI	07/23/24 10:24 - 07/23/24 11:24 [1]
Total/NA	Analysis	335.4		1	780473	KF	EET CHI	07/24/24 18:10
Total/NA	Prep	Distill/Ammonia			780276	EB	EET CHI	08/07/24 12:42 - 08/07/24 13:42 [1]
Total/NA	Analysis	350.1		1	780750	MB	EET CHI	08/09/24 13:22
Total/NA	Prep	365.2/365.3/365			780738	NSJ	EET CHI	08/07/24 11:15 - 08/07/24 15:15 [1]
Total/NA	Analysis	365.1		1	781723	KF	EET CHI	08/07/24 19:20
Total/NA	Analysis	SM 2320B		1	777696	SO	EET CHI	07/19/24 17:33
Total/NA	Analysis	SM 2520B		20	779789	TR	EET CHI	08/04/24 14:56
Total/NA	Analysis	SM 2540C		1	777224	CLB	EET CHI	07/18/24 03:25
Total/NA	Analysis	SM 2540D		1	777557	SO	EET CHI	07/19/24 14:13 - 07/19/24 14:15 [1]
Dissolved	Analysis	SM 3500 CR B		1	777202	MB	EET CHI	07/17/24 17:23
Dissolved	Analysis	SM 3500 CR B		1	777758	LP	EET CHI	08/06/24 07:02

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253605-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-587-1428-1438.3-1
Lab Sample ID: 500-253605-1
Date Collected: 07/14/24 13:00
Matrix: Water
Date Received: 07/17/24 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 3500 CR B		1	777202	MB	EET CHI	07/17/24 17:23
Total/NA	Analysis	SM 3500 CR B		1	777758	LP	EET CHI	07/22/24 10:59
Total/NA	Analysis	SM 4500 S2 F		1	777261	CLB	EET CHI	07/17/24 22:49 - 07/17/24 22:54 [1]
Dissolved	Analysis	SM 5310C		1	778742	TR	EET CHI	07/28/24 19:15
Total/NA	Analysis	SM 5310C		1	779224	TR	EET CHI	07/30/24 13:10

Client Sample ID: Field Blank
Lab Sample ID: 500-253605-2
Date Collected: 07/14/24 00:00
Matrix: Water
Date Received: 07/17/24 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	2439	AJD	EET SSM	07/23/24 18:40

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253605-1
Project/Site: FOTH - White Pines, MI

Laboratory: Eurofins Chicago

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Georgia	State	N/A	05-31-25
Georgia (DW)	State	939	05-31-25
Hawaii	State	NA	05-31-25
Illinois	NELAP	IL00035	05-31-25
Indiana	State	C-IL-02	05-31-25
Iowa	State	082	05-01-26
Kansas	NELAP	E-10161	10-31-24
Kentucky (UST)	State	AI # 108083	05-31-25
Kentucky (WW)	State	KY90023	12-31-24
Louisiana (All)	NELAP	02046	06-30-25
Mississippi	State	NA	05-31-25
North Carolina (WW/SW)	State	291	12-31-24
North Dakota	State	R-194	04-29-24 *
Oklahoma	State	8908	08-31-24
South Carolina	State	77001003	04-29-24 *
USDA	US Federal Programs	P330-18-00018	03-30-26
Wisconsin	State	999580010	08-31-24
Wyoming	State	8TMS-Q	05-31-25

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	12-18-24
ANAB	Dept. of Defense ELAP	L2236	08-07-24
ANAB	Dept. of Energy	L2236.01	12-18-24
ANAB	ISO/IEC 17025	L2236	08-07-24
California	State	2954	12-18-24
Florida	NELAP	E87575	12-18-24
Louisiana (All)	NELAP	03073	12-18-24
Maine	State	WA01273	12-18-24
New Jersey	NELAP	WA014	12-18-24
New York	NELAP	11662	12-18-24
Oregon	NELAP	4167-008	07-07-25
US Fish & Wildlife	US Federal Programs	A20571	06-30-25
USDA	US Federal Programs	525-23-4-22573	12-18-24
Washington	State	C788-23a	12-18-24
Wisconsin	State	399133460	12-18-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

2417 Bond Street
University Park, IL 60484
Phone (708) 534-5200 Phone (708) 534-5211

Chain of Custody Record

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500-253605 COC

Client Information	Sampler: May Willson	Lab PM: Fredrick, Sandie	Carrier	COC No: 500-126105-50170 1
Client Contact: Jakob Wartman	Phone:	E-Mail: Sandra Fredrick@et eurofinsus com	State	Page: Page 1 of 5
Company: Foth Infrastructure & Environment, LLC	PWSID	Analysis Requested		Job #: 500-253605
Address: Missabe Building 227 West 1st Street, Suite 920	Due Date Requested: standard			
City: Duluth	TAT Requested (days): standard			
State Zip: MN, 55802	Compliance Project: Δ Yes Δ No			
Phone: 218-481-6014(Tel)	PO #: Purchase Order not required			
Email: Jakob Wartman@foth com	WO #			
Project Name: FOTH - White Pines, MI	Project #: 50023463			
Site	SSOW#:			

Preservation Codes:
N - None
S - H2SO4
CB - ZnAcetate/NaOH
B - NaOH
D - HNO3

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1631E - Mercury, Low Level (CVAFS)	1631E - Dissolved Mercury, Low Level (FF)	2320B, 2540C, 2540D, 300.0_28D, 300_48HR, SM2520_B	350.1 Ammonia, 365.1 Phosphorus	SM4500_S2_F - Sulfide	335.4 - Cyanide, Total	SM5310_DOC_C - DOC	6020B - Total Metals (27), SM2340B - Hardness	6020B - Dissolved Metals (ICP/MS) - 27 elements	3500_CR_B - Chromium, Hexavalent	3500_CR_B - Dissolved Chromium, Hexavalent (field fi	1638 - Uranium only (ICP/MS) Total & Dissolved	163 - Methyl Hg - Total & Dissolved	Total Number of containers	Special Instructions/Note:
				Preservation Code:				N	N	N	S	CB	B	S	D	D	N	N	D	D		
1	WP-587-1428-1438.3-1	7/14/24	1300	G	Water			X		X	X	X	X		X		X		X	X		
1		7/14/24	1300	G	Water	X			X					X		X		X	X	X		
2	Field Blank				Water																	Added by EETA 7/17/24 EH
					Water																	
					Water																	
					Water																	
					Water																	
					Water																	
					Water																	
					Water																	
					Water																	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I, II, III, IV, Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company
May Willson	7/16/24 1000	Foth	Stephanie Hemondy	7/17/24 0940	EETA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 2.1+2.0


JUSTIN BROWN
WHITE PINE COPPER
35503 MALL CIRCLE

WHITE PINE, MI 49971
UNITED STATES US

ACTWGT: 25.00 LB MAN
CAD: 0780307/CAFE3808

Part # 156969-454 TW EXP 01/25

TO SAMPLE RECEIPT
EUROFINS CHICAGO
2417 BOND ST.

UNIVERSITY PARK IL 60484
(708) 534-5200 REF:
INV:
PO: DEPT:

RMA:

FedEx Express

J241023112201u

RETURNS MON - SAT

FedEx.
TRK# 0221 7414 0291 7297

WED - 17 JUL AA
PRIORITY OVERNIGHT

XP JOTA

60484
IL-US
ORD

5878505 16Jul2024 GRBA/581G9/F0F4/C0B8

500-253605 Waybi

Login Sample Receipt Checklist

Client: Foth Infrastructure & Environment, LLC

Job Number: 500-253605-1

Login Number: 253605
List Number: 1
Creator: Hernandez, Stephanie

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Received Field Blank(s) not listed on COC.
Samples are received within Holding Time (excluding tests with immediate HTs)	False	Refer to Job Narrative for details.
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Foth Infrastructure & Environment, LLC

Job Number: 500-253605-1

Login Number: 253605
List Number: 2
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 07/18/24 01:05 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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500-253605 Field Sheet

Date:	7/18/2024
End Time:	1324
pH Paper Lot:	324723
Analyst:	SZ

Preservative ID	Preservative Type	Container ID
A	Hydrochloric Acid	NA
A	Nitric Acid	NA
ZZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ
ZZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ

Sample ID	Initial pH	Final pH	Preservative ID	Preservative Added (mL)	Comments
500-253605-l-1	2				
500-253605-m-1	2			10	
500-253605-e-1	2				
500-253605-f-1	2			7/18/24	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Jakob Wartman
Foth Infrastructure & Environment, LLC
Missabe Building
227 West 1st. Street, Suite 920
Duluth, Minnesota 55802

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JOB DESCRIPTION

FOTH - White Pines, MI

JOB NUMBER

500-253745-1

Eurofins Chicago
2417 Bond Street
University Park IL 60484

See page two for job notes and contact information.

my EOL

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

Results relate only to the items tested and the sample(s) as received by the laboratory. The results, detection limits (LOD) and Quantitation Limits (LOQ) have been adjusted for sample dilutions and/or solids content.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Chicago Project Manager.

Compliance Statement

The LOD and LOQ reported are adjusted by the dilution factor when a dilution factor greater than 1 is needed. Additionally, where results are indicated as being reported on a dry weight basis, the LOD and LOQ are adjusted for moisture content as well.

Definitions of Limits
- LOD = Limit of Detection = MDL as defined by 40 CFR part 136 Appendix B
- LOQ = Limit of Quantitation = 3.33 x LOD as defined by Wisconsin
- RL = Report Limit = a concentration supported by a standard in the calibration curves

Authorization



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Authorized for release by
Sandie Fredrick, Senior Project Manager
Sandra.Fredrick@et.eurofinsus.com
(920)261-1660

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Job ID: 500-253745-1 Eurofins Chicago

Job Narrative
500-253745-1

Receipt
The samples were received on 7/19/2024 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 1.5º C, 3.1º C, 4.3º C and 4.9º C.

Receipt Exceptions
The following sample(s) was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC) Each sample had two field blank kits, addded to COC and logged.

The following sample(s) was received outside of holding time: for IC N2 and N3 WP-588-340-355-1 (500-253745-3).

Metals
Method 6020B: The continuing calibration verification (CCV) associated with batch 500-779182 recovered above the upper control limit for Aluminum. The samples associated with this CCV were below the reporting limit for the affected analytes; therefore, the data have been reported. The associated samples are impacted: WP-588-150-165-1 (500-253745-1), WP-588-150-165-2 (500-253745-2), WP-588-340-355-1 (500-253745-3), WP-588-340-355-2 (500-253745-4) and (CCV 500-779182/100).

Method 6020B: The following samples were diluted to bring the concentration of target analytes within the calibration range: WP-588-150-165-1 (500-253745-1), WP-588-150-165-2 (500-253745-2), WP-588-340-355-1 (500-253745-3) and WP-588-340-355-2 (500-253745-4). Elevated reporting limits (RLs) are provided.

Method 1630: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for the following sample associated with preparation batch 350-2438 and analytical batch 350-2446 were outside control limits: (885-8172-B-1-B MS) and (885-8172-B-1-C MSD). The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method 1630: The following samples analyzed by EPA 1630 required manual integration:
- 500-253745-f-1-a (Instrument Noise)
- 500-253745-e-2-a (Peak Not Integrated)
- 500-253745-e-4-a (Instrument Noise)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
Method 300.0: Due to the high concentration of Bromide, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 500-777558 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method 300.0: The following sample was analyzed outside of analytical holding time WP-588-340-355-1 (500-253745-3).

Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 500-777559 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 300.0: The following samples were received outside of holding time: WP-588-150-165-1 (500-253745-1) and WP-588-150-165-2 (500-253745-2).

Method SM 2320B: The method blank for analytical batch 500-779286 contained Alkalinity above the reporting limit (RL). Associated sample(s) were not re-analyzed because results were greater than 10X the value found in the method blank.

Method 365.1: The following samples were analyzed twice once within hold time and another outside of hold time with comparable results. The original analysis within hold time has been qualified and reported. WP-588-150-165-1 (500-253745-1), WP-588-150-165-2 (500-253745-2), WP-588-340-355-1 (500-253745-3) and WP-588-340-355-2 (500-253745-4)

Method 365.1: ICV recovered low at 76% Recovery due to low bias in ICB. (ICV 500-781722/9)

Method 365.1: LCS failed low with 73% recovery due to low bias in ICB. (LCS 500-780961/2-A)

Job ID: 500-253745-1 (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253745-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-588-150-165-1
Lab Sample ID: 500-253745-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Uranium	1.8		0.030	0.0098	ug/L	1		1638	Total Recoverable
Uranium	1.8		0.030	0.0098	ug/L	1		1638	Dissolved
Aluminum	800		500	120	ug/L	5		6020B	Total Recoverable
Arsenic	0.47	J	1.0	0.23	ug/L	1		6020B	Total Recoverable
Barium	240		2.5	0.73	ug/L	1		6020B	Total Recoverable
Boron	940	B	50	13	ug/L	1		6020B	Total Recoverable
Calcium	79000	B	200	44	ug/L	1		6020B	Total Recoverable
Chromium	4.0	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Copper	6.5		2.0	0.50	ug/L	1		6020B	Total Recoverable
Iron	1500		100	47	ug/L	1		6020B	Total Recoverable
Lead	0.25	J	0.50	0.19	ug/L	1		6020B	Total Recoverable
Lithium	99		10	2.5	ug/L	1		6020B	Total Recoverable
Magnesium	1600		200	49	ug/L	1		6020B	Total Recoverable
Manganese	170		2.5	0.79	ug/L	1		6020B	Total Recoverable
Molybdenum	18		5.0	2.5	ug/L	1		6020B	Total Recoverable
Nickel	1.1	J	2.0	0.63	ug/L	1		6020B	Total Recoverable
Potassium	1300		500	110	ug/L	1		6020B	Total Recoverable
Silver	0.13	J	0.50	0.12	ug/L	1		6020B	Total Recoverable
Sodium	420000		1000	390	ug/L	5		6020B	Total Recoverable
Strontium	1500		4.0	0.64	ug/L	1		6020B	Total Recoverable
Zinc	83		20	6.9	ug/L	1		6020B	Total Recoverable
Arsenic	0.38	J	1.0	0.23	ug/L	1		6020B	Dissolved
Barium	260		2.5	0.73	ug/L	1		6020B	Dissolved
Boron	960	B	50	13	ug/L	1		6020B	Dissolved
Calcium	88000	B	200	44	ug/L	1		6020B	Dissolved
Iron	580		100	47	ug/L	1		6020B	Dissolved
Lithium	110		10	2.5	ug/L	1		6020B	Dissolved
Magnesium	1600		200	49	ug/L	1		6020B	Dissolved
Manganese	160		2.5	0.79	ug/L	1		6020B	Dissolved
Molybdenum	20		5.0	2.5	ug/L	1		6020B	Dissolved
Potassium	1300		500	110	ug/L	1		6020B	Dissolved
Selenium	1.1	J	2.5	0.98	ug/L	1		6020B	Dissolved
Sodium	410000		1000	390	ug/L	5		6020B	Dissolved
Strontium	1700		4.0	0.64	ug/L	1		6020B	Dissolved
Zinc	76		20	6.9	ug/L	1		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: WP-588-150-165-1 (Continued) — Lab Sample ID: 500-253745-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Hardness as calcium carbonate	200		0.91	0.46	mg/L	1		SM 2340B	Total Recoverable
Bromide	6.2		1.0	0.18	mg/L	1		300.0	Total/NA
Chloride	540		50	5.8	mg/L	50		300.0	Total/NA
Fluoride	0.53	J	1.0	0.19	mg/L	1		300.0	Total/NA
Sulfate	13		1.0	0.21	mg/L	1		300.0	Total/NA
Alkalinity	130	B	5.0	3.7	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	130	B	5.0	3.7	mg/L	1		SM 2320B	Total/NA
Salinity	1.2		0.33	0.33	psu	1		SM 2520B	Total/NA
Total Dissolved Solids	1300		10	4.3	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	17		5.0	1.9	mg/L	1		SM 2540D	Total/NA
Total Organic Carbon	0.53	J	1.0	0.47	mg/L	1		SM 5310C	Total/NA
Dissolved Organic Carbon	0.63	J	1.0	0.47	mg/L	1		SM 5310C	Dissolved

Client Sample ID: WP-588-150-165-2 — Lab Sample ID: 500-253745-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Uranium	1.8		0.030	0.0098	ug/L	1		1638	Total Recoverable
Uranium	1.9		0.030	0.0098	ug/L	1		1638	Dissolved
Aluminum	340		100	25	ug/L	1		6020B	Total Recoverable
Arsenic	0.37	J	1.0	0.23	ug/L	1		6020B	Total Recoverable
Barium	250		2.5	0.73	ug/L	1		6020B	Total Recoverable
Boron	980	B	50	13	ug/L	1		6020B	Total Recoverable
Calcium	83000	B	200	44	ug/L	1		6020B	Total Recoverable
Chromium	1.6	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Copper	3.4		2.0	0.50	ug/L	1		6020B	Total Recoverable
Iron	980		100	47	ug/L	1		6020B	Total Recoverable
Lithium	100		10	2.5	ug/L	1		6020B	Total Recoverable
Magnesium	1600		200	49	ug/L	1		6020B	Total Recoverable
Manganese	160		2.5	0.79	ug/L	1		6020B	Total Recoverable
Molybdenum	18		5.0	2.5	ug/L	1		6020B	Total Recoverable
Nickel	0.70	J	2.0	0.63	ug/L	1		6020B	Total Recoverable
Potassium	1300		500	110	ug/L	1		6020B	Total Recoverable
Sodium	410000		1000	390	ug/L	5		6020B	Total Recoverable
Strontium	1600		4.0	0.64	ug/L	1		6020B	Total Recoverable
Zinc	96		20	6.9	ug/L	1		6020B	Total Recoverable
Arsenic	0.33	J	1.0	0.23	ug/L	1		6020B	Dissolved
Barium	250		2.5	0.73	ug/L	1		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: WP-588-150-165-2 (Continued)

Lab Sample ID: 500-253745-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	990	B	50	13	ug/L	1		6020B	Dissolved
Calcium	84000	B	200	44	ug/L	1		6020B	Dissolved
Iron	580		100	47	ug/L	1		6020B	Dissolved
Lithium	110		10	2.5	ug/L	1		6020B	Dissolved
Magnesium	1500		200	49	ug/L	1		6020B	Dissolved
Manganese	160		2.5	0.79	ug/L	1		6020B	Dissolved
Molybdenum	19		5.0	2.5	ug/L	1		6020B	Dissolved
Potassium	1200		500	110	ug/L	1		6020B	Dissolved
Selenium	1.2	J	2.5	0.98	ug/L	1		6020B	Dissolved
Sodium	400000		1000	390	ug/L	5		6020B	Dissolved
Strontium	1600		4.0	0.64	ug/L	1		6020B	Dissolved
Zinc	77		20	6.9	ug/L	1		6020B	Dissolved
Hardness as calcium carbonate	210		0.91	0.46	mg/L	1		SM 2340B	Total Recoverable
Bromide	6.1		1.0	0.18	mg/L	1		300.0	Total/NA
Chloride	630		50	5.8	mg/L	50		300.0	Total/NA
Fluoride	0.53	J	1.0	0.19	mg/L	1		300.0	Total/NA
Sulfate	13		1.0	0.21	mg/L	1		300.0	Total/NA
Alkalinity	130		5.0	3.7	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	130		5.0	3.7	mg/L	1		SM 2320B	Total/NA
Salinity	1.2		0.33	0.33	psu	1		SM 2520B	Total/NA
Total Dissolved Solids	1300		10	4.3	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	7.4		5.0	1.9	mg/L	1		SM 2540D	Total/NA
Total Organic Carbon	0.64	J	1.0	0.47	mg/L	1		SM 5310C	Total/NA
Dissolved Organic Carbon	0.63	J	1.0	0.47	mg/L	1		SM 5310C	Dissolved

Client Sample ID: WP-588-340-355-1

Lab Sample ID: 500-253745-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.32	J	0.50	0.20	ng/L	1		1631E	Total/NA
Uranium	0.32		0.030	0.0098	ug/L	1		1638	Total Recoverable
Uranium	0.28		0.030	0.0098	ug/L	1		1638	Dissolved
Aluminum	890		100	25	ug/L	1		6020B	Total Recoverable
Arsenic	0.55	J	1.0	0.23	ug/L	1		6020B	Total Recoverable
Barium	2600		2.5	0.73	ug/L	1		6020B	Total Recoverable
Boron	430	B	50	13	ug/L	1		6020B	Total Recoverable
Calcium	940000	B	200	44	ug/L	1		6020B	Total Recoverable
Chromium	3.6	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Cobalt	0.54	J	1.0	0.40	ug/L	1		6020B	Total Recoverable
Copper	8.4		2.0	0.50	ug/L	1		6020B	Total Recoverable
Iron	2200		100	47	ug/L	1		6020B	Total Recoverable
Lead	0.42	J	0.50	0.19	ug/L	1		6020B	Total Recoverable
Lithium	260		10	2.5	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: WP-588-340-355-1 (Continued) — Lab Sample ID: 500-253745-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	9100		200	49	ug/L	1		6020B	Total Recoverable
Manganese	780		2.5	0.79	ug/L	1		6020B	Total Recoverable
Molybdenum	47		5.0	2.5	ug/L	1		6020B	Total Recoverable
Nickel	1.9	J	2.0	0.63	ug/L	1		6020B	Total Recoverable
Potassium	5000		500	110	ug/L	1		6020B	Total Recoverable
Sodium	1200000		2000	770	ug/L	10		6020B	Total Recoverable
Strontium	20000		4.0	0.64	ug/L	1		6020B	Total Recoverable
Vanadium	2.2	J	5.0	2.2	ug/L	1		6020B	Total Recoverable
Zinc	400		20	6.9	ug/L	1		6020B	Total Recoverable
Arsenic	0.31	J	1.0	0.23	ug/L	1		6020B	Dissolved
Barium	3500		2.5	0.73	ug/L	1		6020B	Dissolved
Boron	420	B	50	13	ug/L	1		6020B	Dissolved
Calcium	1200000	B	200	44	ug/L	1		6020B	Dissolved
Copper	0.50	J	2.0	0.50	ug/L	1		6020B	Dissolved
Iron	630		100	47	ug/L	1		6020B	Dissolved
Lithium	330		10	2.5	ug/L	1		6020B	Dissolved
Magnesium	11000		200	49	ug/L	1		6020B	Dissolved
Manganese	960		2.5	0.79	ug/L	1		6020B	Dissolved
Molybdenum	52		5.0	2.5	ug/L	1		6020B	Dissolved
Nickel	1.0	J	2.0	0.63	ug/L	1		6020B	Dissolved
Potassium	5600		500	110	ug/L	1		6020B	Dissolved
Selenium	2.1	J	2.5	0.98	ug/L	1		6020B	Dissolved
Sodium	1400000		2000	770	ug/L	10		6020B	Dissolved
Strontium	25000		4.0	0.64	ug/L	1		6020B	Dissolved
Zinc	220		20	6.9	ug/L	1		6020B	Dissolved
Hardness as calcium carbonate	2400		0.91	0.46	mg/L	1		SM 2340B	Total Recoverable
Bromide	40		1.0	0.18	mg/L	1		300.0	Total/NA
Chloride	3800		200	23	mg/L	200		300.0	Total/NA
Fluoride	1.1		1.0	0.19	mg/L	1		300.0	Total/NA
Sulfate	11		1.0	0.21	mg/L	1		300.0	Total/NA
Ammonia	0.11	J	0.20	0.10	mg/L	1		350.1	Total/NA
Alkalinity	53		5.0	3.7	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	53		5.0	3.7	mg/L	1		SM 2320B	Total/NA
Salinity	7.5		0.33	0.33	psu	1		SM 2520B	Total/NA
Total Dissolved Solids	6700		50	22	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	24		7.1	2.8	mg/L	1		SM 2540D	Total/NA

Client Sample ID: WP-588-340-355-2 — Lab Sample ID: 500-253745-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.20	J	0.50	0.20	ng/L	1		1631E	Total/NA
Uranium	0.32		0.030	0.0098	ug/L	1		1638	Total Recoverable
Uranium	0.28		0.030	0.0098	ug/L	1		1638	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: WP-588-340-355-2 (Continued)
Lab Sample ID: 500-253745-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	460		100	25	ug/L	1		6020B	Total Recoverable
Arsenic	0.44	J	1.0	0.23	ug/L	1		6020B	Total Recoverable
Barium	4100		2.5	0.73	ug/L	1		6020B	Total Recoverable
Boron	410	B	50	13	ug/L	1		6020B	Total Recoverable
Calcium	1400000	B	200	44	ug/L	1		6020B	Total Recoverable
Chromium	3.5	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Copper	3.4		2.0	0.50	ug/L	1		6020B	Total Recoverable
Iron	1400		100	47	ug/L	1		6020B	Total Recoverable
Lithium	330		10	2.5	ug/L	1		6020B	Total Recoverable
Magnesium	13000		200	49	ug/L	1		6020B	Total Recoverable
Manganese	1200		2.5	0.79	ug/L	1		6020B	Total Recoverable
Molybdenum	48		5.0	2.5	ug/L	1		6020B	Total Recoverable
Nickel	1.4	J	2.0	0.63	ug/L	1		6020B	Total Recoverable
Potassium	5100		500	110	ug/L	1		6020B	Total Recoverable
Selenium	1.5	J	2.5	0.98	ug/L	1		6020B	Total Recoverable
Sodium	1500000		2000	770	ug/L	10		6020B	Total Recoverable
Strontium	30000		4.0	0.64	ug/L	1		6020B	Total Recoverable
Zinc	280		20	6.9	ug/L	1		6020B	Total Recoverable
Arsenic	0.37	J	1.0	0.23	ug/L	1		6020B	Dissolved
Barium	4800		2.5	0.73	ug/L	1		6020B	Dissolved
Boron	390	B	50	13	ug/L	1		6020B	Dissolved
Calcium	1600000	B	200	44	ug/L	1		6020B	Dissolved
Copper	0.51	J	2.0	0.50	ug/L	1		6020B	Dissolved
Iron	850		100	47	ug/L	1		6020B	Dissolved
Lithium	360		10	2.5	ug/L	1		6020B	Dissolved
Magnesium	15000		200	49	ug/L	1		6020B	Dissolved
Manganese	1300		2.5	0.79	ug/L	1		6020B	Dissolved
Molybdenum	50		5.0	2.5	ug/L	1		6020B	Dissolved
Nickel	1.0	J	2.0	0.63	ug/L	1		6020B	Dissolved
Potassium	5500		500	110	ug/L	1		6020B	Dissolved
Selenium	2.6		2.5	0.98	ug/L	1		6020B	Dissolved
Sodium	1700000		2000	770	ug/L	10		6020B	Dissolved
Strontium	35000		4.0	0.64	ug/L	1		6020B	Dissolved
Zinc	260		20	6.9	ug/L	1		6020B	Dissolved
Hardness as calcium carbonate	3700		0.91	0.46	mg/L	1		SM 2340B	Total Recoverable
Bromide	50		1.0	0.18	mg/L	1		300.0	Total/NA
Chloride	4700		200	23	mg/L	200		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: WP-588-340-355-2 (Continued) — Lab Sample ID: 500-253745-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	1.2		1.0	0.19	mg/L	1		300.0	Total/NA
Sulfate	10		1.0	0.21	mg/L	1		300.0	Total/NA
Alkalinity	56		5.0	3.7	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	56		5.0	3.7	mg/L	1		SM 2320B	Total/NA
Salinity	9.0		0.33	0.33	psu	1		SM 2520B	Total/NA
Total Dissolved Solids	7700		100	43	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	12		5.0	1.9	mg/L	1		SM 2540D	Total/NA

Client Sample ID: WP-588-150-165-1 FB — Lab Sample ID: 500-253745-5

No Detections.

Client Sample ID: WP-588-150-165-2 FB — Lab Sample ID: 500-253745-6

No Detections.

Client Sample ID: WP-588-340-355-1 FB — Lab Sample ID: 500-253745-7

No Detections.

Client Sample ID: WP-588-340-355-2 FB — Lab Sample ID: 500-253745-8

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253745-1
Project/Site: FOTH - White Pines, MI

Method	Method Description	Protocol	Laboratory
1630	Methyl Mercury	EPA	EET SSM
1631E	Mercury, Low Level (CVAFS)	EPA	EET SSM
1638	Metals (ICP/MS)	EPA	EET SSM
6020B	Metals (ICP/MS)	SW846	EET CHI
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	EET CHI
300.0	Anions, Ion Chromatography	EPA	EET CHI
335.4	Cyanide, Total	EPA	EET CHI
350.1	Nitrogen, Ammonia	EPA	EET CHI
365.1	Phosphorus, Total	EPA	EET CHI
SM 2320B	Alkalinity	SM	EET CHI
SM 2520B	Salinity	SM	EET CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CHI
SM 2540D	Solids, Total Suspended (TSS)	SM	EET CHI
SM 4500 S2 F	Sulfide, Total	SM	EET CHI
SM 5310C	Organic Carbon, Dissolved (DOC)	SM	EET CHI
SM 5310C	TOC	SM	EET CHI
1630	Distillation, Methyl Mercury	EPA	EET SSM
1638	Preparation, Total Recoverable Metals	EPA	EET SSM
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CHI
365.2/365.3/365	Phosphorus, Total	EPA	EET CHI
Distill/Ammonia	Distillation, Ammonia	None	EET CHI
Distill/CN	Distillation, Cyanide	None	EET CHI

Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-253745-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-253745-1	WP-588-150-165-1	Water	07/16/24 19:10	07/19/24 10:00
500-253745-2	WP-588-150-165-2	Water	07/16/24 20:12	07/19/24 10:00
500-253745-3	WP-588-340-355-1	Water	07/17/24 15:00	07/19/24 10:00
500-253745-4	WP-588-340-355-2	Water	07/17/24 19:00	07/19/24 10:00
500-253745-5	WP-588-150-165-1 FB	Water	07/16/24 00:00	07/19/24 10:00
500-253745-6	WP-588-150-165-2 FB	Water	07/16/24 00:00	07/19/24 10:00
500-253745-7	WP-588-340-355-1 FB	Water	07/17/24 00:00	07/19/24 10:00
500-253745-8	WP-588-340-355-2 FB	Water	07/17/24 00:00	07/19/24 10:00

Client Sample ID: WP-588-150-165-1
Lab Sample ID: 500-253745-1

Date Collected: 07/16/24 19:10
Matrix: Water
Date Received: 07/19/24 10:00

Method: EPA 1630 - Methyl Mercury

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/24/24 11:26	07/24/24 19:34	1

Method: EPA 1630 - Methyl Mercury - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/24/24 11:26	07/24/24 19:44	1

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/25/24 15:52	1

Method: EPA 1631E - Mercury, Low Level (CVAFS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/25/24 16:04	1

Method: EPA 1638 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**1.8**		0.030	0.0098	ug/L		07/26/24 16:16	07/29/24 12:32	1

Method: EPA 1638 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**1.8**		0.030	0.0098	ug/L		07/26/24 16:16	07/29/24 11:59	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**800**		500	120	ug/L		07/29/24 09:20	07/31/24 15:55	5
Antimony	<1.3		3.0	1.3	ug/L		07/29/24 09:20	07/31/24 00:46	1
Arsenic	**0.47**	**J**	1.0	0.23	ug/L		07/29/24 09:20	07/31/24 00:46	1
Barium	**240**		2.5	0.73	ug/L		07/29/24 09:20	07/31/24 00:46	1
Beryllium	<0.53		1.0	0.53	ug/L		07/29/24 09:20	07/31/24 00:46	1
Boron	**940**	**B**	50	13	ug/L		07/29/24 09:20	07/31/24 00:46	1
Cadmium	<0.17		0.50	0.17	ug/L		07/29/24 09:20	07/31/24 00:46	1
Calcium	**79000**	**B**	200	44	ug/L		07/29/24 09:20	07/31/24 00:46	1
Chromium	**4.0**	**J**	5.0	1.1	ug/L		07/29/24 09:20	07/31/24 00:46	1
Cobalt	<0.40		1.0	0.40	ug/L		07/29/24 09:20	07/31/24 00:46	1
Copper	**6.5**		2.0	0.50	ug/L		07/29/24 09:20	07/31/24 00:46	1
Iron	**1500**		100	47	ug/L		07/29/24 09:20	07/31/24 00:46	1
Lead	**0.25**	**J**	0.50	0.19	ug/L		07/29/24 09:20	07/31/24 00:46	1
Lithium	**99**		10	2.5	ug/L		07/29/24 09:20	07/31/24 00:46	1
Magnesium	**1600**		200	49	ug/L		07/29/24 09:20	07/31/24 00:46	1
Manganese	**170**		2.5	0.79	ug/L		07/29/24 09:20	07/31/24 00:46	1
Molybdenum	**18**		5.0	2.5	ug/L		07/29/24 09:20	07/31/24 00:46	1
Nickel	**1.1**	**J**	2.0	0.63	ug/L		07/29/24 09:20	07/31/24 00:46	1
Potassium	**1300**		500	110	ug/L		07/29/24 09:20	07/31/24 00:46	1
Selenium	<0.98		2.5	0.98	ug/L		07/29/24 09:20	07/31/24 00:46	1
Silver	**0.13**	**J**	0.50	0.12	ug/L		07/29/24 09:20	07/31/24 00:46	1
Sodium	**420000**		1000	390	ug/L		07/29/24 09:20	07/31/24 15:55	5
Strontium	**1500**		4.0	0.64	ug/L		07/29/24 09:20	07/31/24 00:46	1
Thallium	<0.57		2.0	0.57	ug/L		07/29/24 09:20	07/31/24 00:46	1
Tin	<1.3		5.0	1.3	ug/L		07/29/24 09:20	07/31/24 00:46	1
Vanadium	<2.2		5.0	2.2	ug/L		07/29/24 09:20	07/31/24 00:46	1
Zinc	**83**		20	6.9	ug/L		07/29/24 09:20	07/31/24 00:46	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253745-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-588-150-165-1
Lab Sample ID: 500-253745-1
Date Collected: 07/16/24 19:10
Matrix: Water
Date Received: 07/19/24 10:00

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25	^+	100	25	ug/L		07/29/24 09:20	07/31/24 00:55	1
Antimony	<1.3		3.0	1.3	ug/L		07/29/24 09:20	07/31/24 00:55	1
Arsenic	**0.38**	**J**	1.0	0.23	ug/L		07/29/24 09:20	07/31/24 00:55	1
Barium	**260**		2.5	0.73	ug/L		07/29/24 09:20	07/31/24 00:55	1
Beryllium	<0.53		1.0	0.53	ug/L		07/29/24 09:20	07/31/24 00:55	1
Boron	**960**	**B**	50	13	ug/L		07/29/24 09:20	07/31/24 00:55	1
Cadmium	<0.17		0.50	0.17	ug/L		07/29/24 09:20	07/31/24 00:55	1
Calcium	**88000**	**B**	200	44	ug/L		07/29/24 09:20	07/31/24 00:55	1
Chromium	<1.1		5.0	1.1	ug/L		07/29/24 09:20	07/31/24 00:55	1
Cobalt	<0.40		1.0	0.40	ug/L		07/29/24 09:20	07/31/24 00:55	1
Copper	<0.50		2.0	0.50	ug/L		07/29/24 09:20	07/31/24 00:55	1
Iron	**580**		100	47	ug/L		07/29/24 09:20	07/31/24 00:55	1
Lead	<0.19		0.50	0.19	ug/L		07/29/24 09:20	07/31/24 00:55	1
Lithium	**110**		10	2.5	ug/L		07/29/24 09:20	07/31/24 00:55	1
Magnesium	**1600**		200	49	ug/L		07/29/24 09:20	07/31/24 00:55	1
Manganese	**160**		2.5	0.79	ug/L		07/29/24 09:20	07/31/24 00:55	1
Molybdenum	**20**		5.0	2.5	ug/L		07/29/24 09:20	07/31/24 00:55	1
Nickel	<0.63		2.0	0.63	ug/L		07/29/24 09:20	07/31/24 00:55	1
Potassium	**1300**		500	110	ug/L		07/29/24 09:20	07/31/24 00:55	1
Selenium	**1.1**	**J**	2.5	0.98	ug/L		07/29/24 09:20	07/31/24 00:55	1
Silver	<0.12		0.50	0.12	ug/L		07/29/24 09:20	07/31/24 00:55	1
Sodium	**410000**		1000	390	ug/L		07/29/24 09:20	07/31/24 16:17	5
Strontium	**1700**		4.0	0.64	ug/L		07/29/24 09:20	07/31/24 00:55	1
Thallium	<0.57		2.0	0.57	ug/L		07/29/24 09:20	07/31/24 00:55	1
Tin	<1.3		5.0	1.3	ug/L		07/29/24 09:20	07/31/24 00:55	1
Vanadium	<2.2		5.0	2.2	ug/L		07/29/24 09:20	07/31/24 00:55	1
Zinc	**76**		20	6.9	ug/L		07/29/24 09:20	07/31/24 00:55	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**200**		0.91	0.46	mg/L		07/29/24 09:20	07/31/24 10:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**6.2**		1.0	0.18	mg/L			07/19/24 15:55	1
Nitrate as N (EPA 300.0)	<0.043	H H3	1.0	0.043	mg/L			07/19/24 15:55	1
Chloride (EPA 300.0)	**540**		50	5.8	mg/L			08/02/24 09:18	50
Nitrite as N (EPA 300.0)	<0.070	H H3	1.0	0.070	mg/L			07/19/24 15:55	1
Fluoride (EPA 300.0)	**0.53**	**J**	1.0	0.19	mg/L			07/19/24 15:55	1
Nitrate Nitrite as N (EPA 300.0)	<0.070	H H3	1.0	0.070	mg/L			07/19/24 15:55	1
Sulfate (EPA 300.0)	**13**		1.0	0.21	mg/L			07/19/24 15:55	1
Cyanide, Total (EPA 335.4)	<0.0036	*-	0.0050	0.0036	mg/L		07/27/24 10:25	07/29/24 15:41	1
Ammonia (EPA 350.1)	<0.10		0.20	0.10	mg/L		08/06/24 11:44	08/06/24 19:12	1
Phosphorus as P (EPA 365.1)	<0.024	^1- *- ^-	0.050	0.024	mg/L		08/13/24 11:40	08/13/24 17:36	1
Alkalinity (SM 2320B)	**130**	**B**	5.0	3.7	mg/L			07/30/24 20:21	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**130**	**B**	5.0	3.7	mg/L			07/30/24 20:21	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<3.7		5.0	3.7	mg/L			07/30/24 20:21	1
Salinity (SM 2520B)	**1.2**		0.33	0.33	psu			07/29/24 09:57	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253745-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-588-150-165-1
Lab Sample ID: 500-253745-1
Date Collected: 07/16/24 19:10
Matrix: Water
Date Received: 07/19/24 10:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1300		10	4.3	mg/L			07/22/24 21:16	1
Total Suspended Solids (SM 2540D)	17		5.0	1.9	mg/L			07/23/24 15:30	1
Sulfide (SM 4500 S2 F)	<0.23		1.0	0.23	mg/L			07/23/24 01:15	1
Total Organic Carbon (SM 5310C)	0.53	J	1.0	0.47	mg/L			07/30/24 13:38	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon (SM 5310C)	0.63	J	1.0	0.47	mg/L			07/22/24 19:36	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-253745-1

Client Sample ID: WP-588-150-165-2

Date Collected: 07/16/24 20:12
Date Received: 07/19/24 10:00

Lab Sample ID: 500-253745-2

Matrix: Water

Method: EPA 1630 - Methyl Mercury

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/24/24 11:26	07/24/24 19:54	1

Method: EPA 1630 - Methyl Mercury - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/24/24 11:26	07/24/24 20:04	1

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/25/24 16:08	1

Method: EPA 1631E - Mercury, Low Level (CVAFS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/25/24 16:12	1

Method: EPA 1638 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**1.8**		0.030	0.0098	ug/L		07/26/24 16:16	07/29/24 12:36	1

Method: EPA 1638 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**1.9**		0.030	0.0098	ug/L		07/26/24 16:16	07/29/24 12:21	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**340**		100	25	ug/L		07/29/24 09:20	07/31/24 15:57	1
Antimony	<1.3		3.0	1.3	ug/L		07/29/24 09:20	07/31/24 00:48	1
Arsenic	**0.37**	**J**	1.0	0.23	ug/L		07/29/24 09:20	07/31/24 00:48	1
Barium	**250**		2.5	0.73	ug/L		07/29/24 09:20	07/31/24 00:48	1
Beryllium	<0.53		1.0	0.53	ug/L		07/29/24 09:20	07/31/24 00:48	1
Boron	**980**	**B**	50	13	ug/L		07/29/24 09:20	07/31/24 00:48	1
Cadmium	<0.17		0.50	0.17	ug/L		07/29/24 09:20	07/31/24 00:48	1
Calcium	**83000**	**B**	200	44	ug/L		07/29/24 09:20	07/31/24 00:48	1
Chromium	**1.6**	**J**	5.0	1.1	ug/L		07/29/24 09:20	07/31/24 00:48	1
Cobalt	<0.40		1.0	0.40	ug/L		07/29/24 09:20	07/31/24 00:48	1
Copper	**3.4**		2.0	0.50	ug/L		07/29/24 09:20	07/31/24 00:48	1
Iron	**980**		100	47	ug/L		07/29/24 09:20	07/31/24 00:48	1
Lead	<0.19		0.50	0.19	ug/L		07/29/24 09:20	07/31/24 00:48	1
Lithium	**100**		10	2.5	ug/L		07/29/24 09:20	07/31/24 00:48	1
Magnesium	**1600**		200	49	ug/L		07/29/24 09:20	07/31/24 00:48	1
Manganese	**160**		2.5	0.79	ug/L		07/29/24 09:20	07/31/24 00:48	1
Molybdenum	**18**		5.0	2.5	ug/L		07/29/24 09:20	07/31/24 00:48	1
Nickel	**0.70**	**J**	2.0	0.63	ug/L		07/29/24 09:20	07/31/24 00:48	1
Potassium	**1300**		500	110	ug/L		07/29/24 09:20	07/31/24 00:48	1
Selenium	<0.98		2.5	0.98	ug/L		07/29/24 09:20	07/31/24 00:48	1
Silver	<0.12		0.50	0.12	ug/L		07/29/24 09:20	07/31/24 00:48	1
Sodium	**410000**		1000	390	ug/L		07/29/24 09:20	07/31/24 16:00	5
Strontium	**1600**		4.0	0.64	ug/L		07/29/24 09:20	07/31/24 00:48	1
Thallium	<0.57		2.0	0.57	ug/L		07/29/24 09:20	07/31/24 00:48	1
Tin	<1.3		5.0	1.3	ug/L		07/29/24 09:20	07/31/24 00:48	1
Vanadium	<2.2		5.0	2.2	ug/L		07/29/24 09:20	07/31/24 00:48	1
Zinc	**96**		20	6.9	ug/L		07/29/24 09:20	07/31/24 00:48	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253745-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-588-150-165-2
Lab Sample ID: 500-253745-2
Date Collected: 07/16/24 20:12
Matrix: Water
Date Received: 07/19/24 10:00

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25	^+	100	25	ug/L		07/29/24 09:20	07/31/24 00:57	1
Antimony	<1.3		3.0	1.3	ug/L		07/29/24 09:20	07/31/24 00:57	1
Arsenic	**0.33**	**J**	1.0	0.23	ug/L		07/29/24 09:20	07/31/24 00:57	1
Barium	**250**		2.5	0.73	ug/L		07/29/24 09:20	07/31/24 00:57	1
Beryllium	<0.53		1.0	0.53	ug/L		07/29/24 09:20	07/31/24 00:57	1
Boron	**990**	**B**	50	13	ug/L		07/29/24 09:20	07/31/24 00:57	1
Cadmium	<0.17		0.50	0.17	ug/L		07/29/24 09:20	07/31/24 00:57	1
Calcium	**84000**	**B**	200	44	ug/L		07/29/24 09:20	07/31/24 00:57	1
Chromium	<1.1		5.0	1.1	ug/L		07/29/24 09:20	07/31/24 00:57	1
Cobalt	<0.40		1.0	0.40	ug/L		07/29/24 09:20	07/31/24 00:57	1
Copper	<0.50		2.0	0.50	ug/L		07/29/24 09:20	07/31/24 00:57	1
Iron	**580**		100	47	ug/L		07/29/24 09:20	07/31/24 00:57	1
Lead	<0.19		0.50	0.19	ug/L		07/29/24 09:20	07/31/24 00:57	1
Lithium	**110**		10	2.5	ug/L		07/29/24 09:20	07/31/24 00:57	1
Magnesium	**1500**		200	49	ug/L		07/29/24 09:20	07/31/24 00:57	1
Manganese	**160**		2.5	0.79	ug/L		07/29/24 09:20	07/31/24 00:57	1
Molybdenum	**19**		5.0	2.5	ug/L		07/29/24 09:20	07/31/24 00:57	1
Nickel	<0.63		2.0	0.63	ug/L		07/29/24 09:20	07/31/24 00:57	1
Potassium	**1200**		500	110	ug/L		07/29/24 09:20	07/31/24 00:57	1
Selenium	**1.2**	**J**	2.5	0.98	ug/L		07/29/24 09:20	07/31/24 00:57	1
Silver	<0.12		0.50	0.12	ug/L		07/29/24 09:20	07/31/24 00:57	1
Sodium	**400000**		1000	390	ug/L		07/29/24 09:20	07/31/24 16:19	5
Strontium	**1600**		4.0	0.64	ug/L		07/29/24 09:20	07/31/24 00:57	1
Thallium	<0.57		2.0	0.57	ug/L		07/29/24 09:20	07/31/24 00:57	1
Tin	<1.3		5.0	1.3	ug/L		07/29/24 09:20	07/31/24 00:57	1
Vanadium	<2.2		5.0	2.2	ug/L		07/29/24 09:20	07/31/24 00:57	1
Zinc	**77**		20	6.9	ug/L		07/29/24 09:20	07/31/24 00:57	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**210**		0.91	0.46	mg/L		07/29/24 09:20	07/31/24 10:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**6.1**		1.0	0.18	mg/L			07/19/24 16:11	1
Nitrate as N (EPA 300.0)	<0.043	H H3	1.0	0.043	mg/L			07/19/24 16:11	1
Chloride (EPA 300.0)	**630**		50	5.8	mg/L			08/01/24 13:18	50
Nitrite as N (EPA 300.0)	<0.070	H H3	1.0	0.070	mg/L			07/19/24 16:11	1
Fluoride (EPA 300.0)	**0.53**	**J**	1.0	0.19	mg/L			07/19/24 16:11	1
Nitrate Nitrite as N (EPA 300.0)	<0.070	H H3	1.0	0.070	mg/L			07/19/24 16:11	1
Sulfate (EPA 300.0)	**13**		1.0	0.21	mg/L			07/19/24 16:11	1
Cyanide, Total (EPA 335.4)	<0.0036		0.0050	0.0036	mg/L		07/29/24 11:08	07/30/24 14:25	1
Ammonia (EPA 350.1)	<0.10		0.20	0.10	mg/L		08/06/24 11:44	08/06/24 19:12	1
Phosphorus as P (EPA 365.1)	<0.024	^1- *- ^-	0.050	0.024	mg/L		08/13/24 11:40	08/13/24 17:37	1
Alkalinity (SM 2320B)	**130**		5.0	3.7	mg/L			07/30/24 20:42	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**130**		5.0	3.7	mg/L			07/30/24 20:42	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<3.7		5.0	3.7	mg/L			07/30/24 20:42	1
Salinity (SM 2520B)	**1.2**		0.33	0.33	psu			07/29/24 09:57	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253745-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-588-150-165-2
Lab Sample ID: 500-253745-2
Date Collected: 07/16/24 20:12
Matrix: Water
Date Received: 07/19/24 10:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1300		10	4.3	mg/L			07/22/24 21:19	1
Total Suspended Solids (SM 2540D)	7.4		5.0	1.9	mg/L			07/23/24 15:33	1
Sulfide (SM 4500 S2 F)	<0.23		1.0	0.23	mg/L			07/23/24 01:19	1
Total Organic Carbon (SM 5310C)	0.64	J	1.0	0.47	mg/L			07/30/24 14:06	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon (SM 5310C)	0.63	J	1.0	0.47	mg/L			07/22/24 20:04	1

Client Sample ID: WP-588-340-355-1
Lab Sample ID: 500-253745-3

Date Collected: 07/17/24 15:00
Matrix: Water
Date Received: 07/19/24 10:00

Method: EPA 1630 - Methyl Mercury

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/24/24 11:26	07/24/24 20:15	1

Method: EPA 1630 - Methyl Mercury - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/24/24 11:26	07/24/24 20:25	1

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.32**	**J**	0.50	0.20	ng/L			07/25/24 16:17	1

Method: EPA 1631E - Mercury, Low Level (CVAFS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/25/24 16:21	1

Method: EPA 1638 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.32**		0.030	0.0098	ug/L		07/26/24 16:16	07/29/24 12:39	1

Method: EPA 1638 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.28**		0.030	0.0098	ug/L		07/26/24 16:16	07/29/24 12:25	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**890**		100	25	ug/L		07/29/24 09:20	07/31/24 16:02	1
Antimony	<1.3		3.0	1.3	ug/L		07/29/24 09:20	07/31/24 00:51	1
Arsenic	**0.55**	**J**	1.0	0.23	ug/L		07/29/24 09:20	07/31/24 00:51	1
Barium	**2600**		2.5	0.73	ug/L		07/29/24 09:20	07/31/24 00:51	1
Beryllium	<0.53		1.0	0.53	ug/L		07/29/24 09:20	07/31/24 00:51	1
Boron	**430**	**B**	50	13	ug/L		07/29/24 09:20	07/31/24 00:51	1
Cadmium	<0.17		0.50	0.17	ug/L		07/29/24 09:20	07/31/24 00:51	1
Calcium	**940000**	**B**	200	44	ug/L		07/29/24 09:20	07/31/24 00:51	1
Chromium	**3.6**	**J**	5.0	1.1	ug/L		07/29/24 09:20	07/31/24 00:51	1
Cobalt	**0.54**	**J**	1.0	0.40	ug/L		07/29/24 09:20	07/31/24 00:51	1
Copper	**8.4**		2.0	0.50	ug/L		07/29/24 09:20	07/31/24 00:51	1
Iron	**2200**		100	47	ug/L		07/29/24 09:20	07/31/24 00:51	1
Lead	**0.42**	**J**	0.50	0.19	ug/L		07/29/24 09:20	07/31/24 00:51	1
Lithium	**260**		10	2.5	ug/L		07/29/24 09:20	07/31/24 00:51	1
Magnesium	**9100**		200	49	ug/L		07/29/24 09:20	07/31/24 00:51	1
Manganese	**780**		2.5	0.79	ug/L		07/29/24 09:20	07/31/24 00:51	1
Molybdenum	**47**		5.0	2.5	ug/L		07/29/24 09:20	07/31/24 00:51	1
Nickel	**1.9**	**J**	2.0	0.63	ug/L		07/29/24 09:20	07/31/24 00:51	1
Potassium	**5000**		500	110	ug/L		07/29/24 09:20	07/31/24 00:51	1
Selenium	<0.98		2.5	0.98	ug/L		07/29/24 09:20	07/31/24 00:51	1
Silver	<0.12		0.50	0.12	ug/L		07/29/24 09:20	07/31/24 00:51	1
Sodium	**1200000**		2000	770	ug/L		07/29/24 09:20	07/31/24 16:05	10
Strontium	**20000**		4.0	0.64	ug/L		07/29/24 09:20	07/31/24 00:51	1
Thallium	<0.57		2.0	0.57	ug/L		07/29/24 09:20	07/31/24 00:51	1
Tin	<1.3		5.0	1.3	ug/L		07/29/24 09:20	07/31/24 00:51	1
Vanadium	**2.2**	**J**	5.0	2.2	ug/L		07/29/24 09:20	07/31/24 00:51	1
Zinc	**400**		20	6.9	ug/L		07/29/24 09:20	07/31/24 00:51	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253745-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-588-340-355-1
Lab Sample ID: 500-253745-3
Date Collected: 07/17/24 15:00
Matrix: Water
Date Received: 07/19/24 10:00

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25	^+	100	25	ug/L		07/29/24 09:20	07/31/24 00:59	1
Antimony	<1.3		3.0	1.3	ug/L		07/29/24 09:20	07/31/24 00:59	1
Arsenic	**0.31**	**J**	1.0	0.23	ug/L		07/29/24 09:20	07/31/24 00:59	1
Barium	**3500**		2.5	0.73	ug/L		07/29/24 09:20	07/31/24 00:59	1
Beryllium	<0.53		1.0	0.53	ug/L		07/29/24 09:20	07/31/24 00:59	1
Boron	**420**	**B**	50	13	ug/L		07/29/24 09:20	07/31/24 00:59	1
Cadmium	<0.17		0.50	0.17	ug/L		07/29/24 09:20	07/31/24 00:59	1
Calcium	**1200000**	**B**	200	44	ug/L		07/29/24 09:20	07/31/24 00:59	1
Chromium	<1.1		5.0	1.1	ug/L		07/29/24 09:20	07/31/24 00:59	1
Cobalt	<0.40		1.0	0.40	ug/L		07/29/24 09:20	07/31/24 00:59	1
Copper	**0.50**	**J**	2.0	0.50	ug/L		07/29/24 09:20	07/31/24 00:59	1
Iron	**630**		100	47	ug/L		07/29/24 09:20	07/31/24 00:59	1
Lead	<0.19		0.50	0.19	ug/L		07/29/24 09:20	07/31/24 00:59	1
Lithium	**330**		10	2.5	ug/L		07/29/24 09:20	07/31/24 00:59	1
Magnesium	**11000**		200	49	ug/L		07/29/24 09:20	07/31/24 00:59	1
Manganese	**960**		2.5	0.79	ug/L		07/29/24 09:20	07/31/24 00:59	1
Molybdenum	**52**		5.0	2.5	ug/L		07/29/24 09:20	07/31/24 00:59	1
Nickel	**1.0**	**J**	2.0	0.63	ug/L		07/29/24 09:20	07/31/24 00:59	1
Potassium	**5600**		500	110	ug/L		07/29/24 09:20	07/31/24 00:59	1
Selenium	**2.1**	**J**	2.5	0.98	ug/L		07/29/24 09:20	07/31/24 00:59	1
Silver	<0.12		0.50	0.12	ug/L		07/29/24 09:20	07/31/24 00:59	1
Sodium	**1400000**		2000	770	ug/L		07/29/24 09:20	07/31/24 16:22	10
Strontium	**25000**		4.0	0.64	ug/L		07/29/24 09:20	07/31/24 00:59	1
Thallium	<0.57		2.0	0.57	ug/L		07/29/24 09:20	07/31/24 00:59	1
Tin	<1.3		5.0	1.3	ug/L		07/29/24 09:20	07/31/24 00:59	1
Vanadium	<2.2		5.0	2.2	ug/L		07/29/24 09:20	07/31/24 00:59	1
Zinc	**220**		20	6.9	ug/L		07/29/24 09:20	07/31/24 00:59	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**2400**		0.91	0.46	mg/L		07/29/24 09:20	07/31/24 10:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**40**		1.0	0.18	mg/L			07/19/24 14:53	1
Nitrate as N (EPA 300.0)	<0.043	H	1.0	0.043	mg/L			07/19/24 14:53	1
Chloride (EPA 300.0)	**3800**		200	23	mg/L			08/01/24 13:33	200
Nitrite as N (EPA 300.0)	<0.070	H	1.0	0.070	mg/L			07/19/24 14:53	1
Fluoride (EPA 300.0)	**1.1**		1.0	0.19	mg/L			07/19/24 14:53	1
Nitrate Nitrite as N (EPA 300.0)	<0.070	H	1.0	0.070	mg/L			07/19/24 14:53	1
Sulfate (EPA 300.0)	**11**		1.0	0.21	mg/L			07/19/24 14:53	1
Cyanide, Total (EPA 335.4)	<0.0036		0.0050	0.0036	mg/L		07/30/24 10:52	07/31/24 17:19	1
Ammonia (EPA 350.1)	**0.11**	**J**	0.20	0.10	mg/L		08/06/24 11:44	08/06/24 19:19	1
Phosphorus as P (EPA 365.1)	<0.024	^1- *- ^-	0.050	0.024	mg/L		08/13/24 11:40	08/13/24 17:37	1
Alkalinity (SM 2320B)	**53**		5.0	3.7	mg/L			07/30/24 20:50	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**53**		5.0	3.7	mg/L			07/30/24 20:50	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<3.7		5.0	3.7	mg/L			07/30/24 20:50	1
Salinity (SM 2520B)	**7.5**		0.33	0.33	psu			07/29/24 09:57	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253745-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-588-340-355-1
Lab Sample ID: 500-253745-3
Date Collected: 07/17/24 15:00
Matrix: Water
Date Received: 07/19/24 10:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**6700**		50	22	mg/L			07/22/24 21:21	1
Total Suspended Solids (SM 2540D)	**24**		7.1	2.8	mg/L			07/24/24 17:21	1
Sulfide (SM 4500 S2 F)	<0.23		1.0	0.23	mg/L			07/23/24 01:23	1
Total Organic Carbon (SM 5310C)	<0.47		1.0	0.47	mg/L			07/30/24 14:33	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon (SM 5310C)	<0.47		1.0	0.47	mg/L			07/22/24 20:32	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253745-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-588-340-355-2
Lab Sample ID: 500-253745-4
Date Collected: 07/17/24 19:00
Matrix: Water
Date Received: 07/19/24 10:00

Method: EPA 1630 - Methyl Mercury

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/24/24 11:26	07/24/24 20:35	1

Method: EPA 1630 - Methyl Mercury - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/24/24 11:26	07/24/24 20:45	1

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.20**	**J**	0.50	0.20	ng/L			07/25/24 16:29	1

Method: EPA 1631E - Mercury, Low Level (CVAFS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/25/24 16:33	1

Method: EPA 1638 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.32**		0.030	0.0098	ug/L		07/26/24 16:16	07/29/24 12:43	1

Method: EPA 1638 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.28**		0.030	0.0098	ug/L		07/26/24 16:16	07/29/24 12:28	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**460**		100	25	ug/L		07/29/24 09:20	07/31/24 16:07	1
Antimony	<1.3		3.0	1.3	ug/L		07/29/24 09:20	07/31/24 00:53	1
Arsenic	**0.44**	**J**	1.0	0.23	ug/L		07/29/24 09:20	07/31/24 00:53	1
Barium	**4100**		2.5	0.73	ug/L		07/29/24 09:20	07/31/24 00:53	1
Beryllium	<0.53		1.0	0.53	ug/L		07/29/24 09:20	07/31/24 00:53	1
Boron	**410**	**B**	50	13	ug/L		07/29/24 09:20	07/31/24 00:53	1
Cadmium	<0.17		0.50	0.17	ug/L		07/29/24 09:20	07/31/24 00:53	1
Calcium	**1400000**	**B**	200	44	ug/L		07/29/24 09:20	07/31/24 00:53	1
Chromium	**3.5**	**J**	5.0	1.1	ug/L		07/29/24 09:20	07/31/24 00:53	1
Cobalt	<0.40		1.0	0.40	ug/L		07/29/24 09:20	07/31/24 00:53	1
Copper	**3.4**		2.0	0.50	ug/L		07/29/24 09:20	07/31/24 00:53	1
Iron	**1400**		100	47	ug/L		07/29/24 09:20	07/31/24 00:53	1
Lead	<0.19		0.50	0.19	ug/L		07/29/24 09:20	07/31/24 00:53	1
Lithium	**330**		10	2.5	ug/L		07/29/24 09:20	07/31/24 00:53	1
Magnesium	**13000**		200	49	ug/L		07/29/24 09:20	07/31/24 00:53	1
Manganese	**1200**		2.5	0.79	ug/L		07/29/24 09:20	07/31/24 00:53	1
Molybdenum	**48**		5.0	2.5	ug/L		07/29/24 09:20	07/31/24 00:53	1
Nickel	**1.4**	**J**	2.0	0.63	ug/L		07/29/24 09:20	07/31/24 00:53	1
Potassium	**5100**		500	110	ug/L		07/29/24 09:20	07/31/24 00:53	1
Selenium	**1.5**	**J**	2.5	0.98	ug/L		07/29/24 09:20	07/31/24 00:53	1
Silver	<0.12		0.50	0.12	ug/L		07/29/24 09:20	07/31/24 00:53	1
Sodium	**1500000**		2000	770	ug/L		07/29/24 09:20	07/31/24 16:10	10
Strontium	**30000**		4.0	0.64	ug/L		07/29/24 09:20	07/31/24 00:53	1
Thallium	<0.57		2.0	0.57	ug/L		07/29/24 09:20	07/31/24 00:53	1
Tin	<1.3		5.0	1.3	ug/L		07/29/24 09:20	07/31/24 00:53	1
Vanadium	<2.2		5.0	2.2	ug/L		07/29/24 09:20	07/31/24 00:53	1
Zinc	**280**		20	6.9	ug/L		07/29/24 09:20	07/31/24 00:53	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-253745-1

Client Sample ID: WP-588-340-355-2

Date Collected: 07/17/24 19:00
Date Received: 07/19/24 10:00

Lab Sample ID: 500-253745-4

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25	^+	100	25	ug/L		07/29/24 09:20	07/31/24 01:01	1
Antimony	<1.3		3.0	1.3	ug/L		07/29/24 09:20	07/31/24 01:01	1
Arsenic	**0.37**	**J**	1.0	0.23	ug/L		07/29/24 09:20	07/31/24 01:01	1
Barium	**4800**		2.5	0.73	ug/L		07/29/24 09:20	07/31/24 01:01	1
Beryllium	<0.53		1.0	0.53	ug/L		07/29/24 09:20	07/31/24 01:01	1
Boron	**390**	**B**	50	13	ug/L		07/29/24 09:20	07/31/24 01:01	1
Cadmium	<0.17		0.50	0.17	ug/L		07/29/24 09:20	07/31/24 01:01	1
Calcium	**1600000**	**B**	200	44	ug/L		07/29/24 09:20	07/31/24 01:01	1
Chromium	<1.1		5.0	1.1	ug/L		07/29/24 09:20	07/31/24 01:01	1
Cobalt	<0.40		1.0	0.40	ug/L		07/29/24 09:20	07/31/24 01:01	1
Copper	**0.51**	**J**	2.0	0.50	ug/L		07/29/24 09:20	07/31/24 01:01	1
Iron	**850**		100	47	ug/L		07/29/24 09:20	07/31/24 01:01	1
Lead	<0.19		0.50	0.19	ug/L		07/29/24 09:20	07/31/24 01:01	1
Lithium	**360**		10	2.5	ug/L		07/29/24 09:20	07/31/24 01:01	1
Magnesium	**15000**		200	49	ug/L		07/29/24 09:20	07/31/24 01:01	1
Manganese	**1300**		2.5	0.79	ug/L		07/29/24 09:20	07/31/24 01:01	1
Molybdenum	**50**		5.0	2.5	ug/L		07/29/24 09:20	07/31/24 01:01	1
Nickel	**1.0**	**J**	2.0	0.63	ug/L		07/29/24 09:20	07/31/24 01:01	1
Potassium	**5500**		500	110	ug/L		07/29/24 09:20	07/31/24 01:01	1
Selenium	**2.6**		2.5	0.98	ug/L		07/29/24 09:20	07/31/24 01:01	1
Silver	<0.12		0.50	0.12	ug/L		07/29/24 09:20	07/31/24 01:01	1
Sodium	**1700000**		2000	770	ug/L		07/29/24 09:20	07/31/24 16:24	10
Strontium	**35000**		4.0	0.64	ug/L		07/29/24 09:20	07/31/24 01:01	1
Thallium	<0.57		2.0	0.57	ug/L		07/29/24 09:20	07/31/24 01:01	1
Tin	<1.3		5.0	1.3	ug/L		07/29/24 09:20	07/31/24 01:01	1
Vanadium	<2.2		5.0	2.2	ug/L		07/29/24 09:20	07/31/24 01:01	1
Zinc	**260**		20	6.9	ug/L		07/29/24 09:20	07/31/24 01:01	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**3700**		0.91	0.46	mg/L		07/29/24 09:20	07/31/24 10:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**50**		1.0	0.18	mg/L			07/19/24 15:08	1
Nitrate as N (EPA 300.0)	<0.043		1.0	0.043	mg/L			07/19/24 15:08	1
Chloride (EPA 300.0)	**4700**		200	23	mg/L			08/01/24 13:49	200
Nitrite as N (EPA 300.0)	<0.070	F1	1.0	0.070	mg/L			07/19/24 15:08	1
Fluoride (EPA 300.0)	**1.2**		1.0	0.19	mg/L			07/19/24 15:08	1
Nitrate Nitrite as N (EPA 300.0)	<0.070		1.0	0.070	mg/L			07/19/24 15:08	1
Sulfate (EPA 300.0)	**10**		1.0	0.21	mg/L			07/19/24 15:08	1
Cyanide, Total (EPA 335.4)	<0.0036		0.0050	0.0036	mg/L		07/30/24 10:52	07/31/24 17:21	1
Ammonia (EPA 350.1)	<0.10		0.20	0.10	mg/L		08/06/24 14:48	08/06/24 19:21	1
Phosphorus as P (EPA 365.1)	<0.024	^1- *- ^-	0.050	0.024	mg/L		08/13/24 11:40	08/13/24 17:38	1
Alkalinity (SM 2320B)	**56**		5.0	3.7	mg/L			07/30/24 21:03	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**56**		5.0	3.7	mg/L			07/30/24 21:03	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<3.7		5.0	3.7	mg/L			07/30/24 21:03	1
Salinity (SM 2520B)	**9.0**		0.33	0.33	psu			07/29/24 09:57	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253745-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-588-340-355-2
Lab Sample ID: 500-253745-4
Date Collected: 07/17/24 19:00
Matrix: Water
Date Received: 07/19/24 10:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**7700**		100	43	mg/L			07/22/24 21:24	1
Total Suspended Solids (SM 2540D)	**12**		5.0	1.9	mg/L			07/24/24 17:23	1
Sulfide (SM 4500 S2 F)	<0.23		1.0	0.23	mg/L			07/23/24 01:27	1
Total Organic Carbon (SM 5310C)	<0.47		1.0	0.47	mg/L			07/30/24 15:02	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon (SM 5310C)	<0.47		1.0	0.47	mg/L			07/22/24 21:00	1

Client Sample Results

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253745-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-588-150-165-1 FB
Lab Sample ID: 500-253745-5
Date Collected: 07/16/24 00:00
Matrix: Water
Date Received: 07/19/24 10:00

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/25/24 16:37	1

Client Sample Results

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253745-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-588-150-165-2 FB
Lab Sample ID: 500-253745-6
Date Collected: 07/16/24 00:00
Matrix: Water
Date Received: 07/19/24 10:00

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/25/24 16:41	1

Client Sample Results

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253745-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-588-340-355-1 FB
Lab Sample ID: 500-253745-7
Date Collected: 07/17/24 00:00
Matrix: Water
Date Received: 07/19/24 10:00

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/30/24 16:37	1

Client Sample Results

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253745-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-588-340-355-2 FB
Lab Sample ID: 500-253745-8
Date Collected: 07/17/24 00:00
Matrix: Water
Date Received: 07/19/24 10:00

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/30/24 16:41	1

Qualifiers

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
^-	Continuing Calibration Verification (CCV) is outside acceptance limits, low biased.
^1-	Initial Calibration Verification (ICV) is outside acceptance limits, low biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Metals

Prep Batch: 2438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-1	WP-588-150-165-1	Dissolved	Water	1630	
500-253745-1	WP-588-150-165-1	Total/NA	Water	1630	
500-253745-2	WP-588-150-165-2	Dissolved	Water	1630	
500-253745-2	WP-588-150-165-2	Total/NA	Water	1630	
500-253745-3	WP-588-340-355-1	Dissolved	Water	1630	
500-253745-3	WP-588-340-355-1	Total/NA	Water	1630	
500-253745-4	WP-588-340-355-2	Dissolved	Water	1630	
500-253745-4	WP-588-340-355-2	Total/NA	Water	1630	
MB 350-2438/1-A	Method Blank	Total/NA	Water	1630	
MB 350-2438/2-A	Method Blank	Total/NA	Water	1630	
MB 350-2438/3-A	Method Blank	Total/NA	Water	1630	
LCS 350-2438/4-A	Lab Control Sample	Total/NA	Water	1630	
LCSD 350-2438/5-A	Lab Control Sample Dup	Total/NA	Water	1630	

Analysis Batch: 2446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-1	WP-588-150-165-1	Dissolved	Water	1630	2438
500-253745-1	WP-588-150-165-1	Total/NA	Water	1630	2438
500-253745-2	WP-588-150-165-2	Dissolved	Water	1630	2438
500-253745-2	WP-588-150-165-2	Total/NA	Water	1630	2438
500-253745-3	WP-588-340-355-1	Dissolved	Water	1630	2438
500-253745-3	WP-588-340-355-1	Total/NA	Water	1630	2438
500-253745-4	WP-588-340-355-2	Dissolved	Water	1630	2438
500-253745-4	WP-588-340-355-2	Total/NA	Water	1630	2438
MB 350-2438/1-A	Method Blank	Total/NA	Water	1630	2438
MB 350-2438/2-A	Method Blank	Total/NA	Water	1630	2438
MB 350-2438/3-A	Method Blank	Total/NA	Water	1630	2438
LCS 350-2438/4-A	Lab Control Sample	Total/NA	Water	1630	2438
LCSD 350-2438/5-A	Lab Control Sample Dup	Total/NA	Water	1630	2438

Prep Batch: 2455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-1	WP-588-150-165-1	Dissolved	Water	1638	
500-253745-1	WP-588-150-165-1	Total Recoverable	Water	1638	
500-253745-2	WP-588-150-165-2	Dissolved	Water	1638	
500-253745-2	WP-588-150-165-2	Total Recoverable	Water	1638	
500-253745-3	WP-588-340-355-1	Dissolved	Water	1638	
500-253745-3	WP-588-340-355-1	Total Recoverable	Water	1638	
500-253745-4	WP-588-340-355-2	Dissolved	Water	1638	
500-253745-4	WP-588-340-355-2	Total Recoverable	Water	1638	
MB 350-2455/1-A	Method Blank	Total Recoverable	Water	1638	
MB 350-2455/2-A	Method Blank	Total Recoverable	Water	1638	
LCS 350-2455/4-A	Lab Control Sample	Total Recoverable	Water	1638	
LCSD 350-2455/5-A	Lab Control Sample Dup	Total Recoverable	Water	1638	
500-253745-1 MS	WP-588-150-165-1	Dissolved	Water	1638	
500-253745-1 MSD	WP-588-150-165-1	Dissolved	Water	1638	

Analysis Batch: 2458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-1	WP-588-150-165-1	Dissolved	Water	1631E	
500-253745-1	WP-588-150-165-1	Total/NA	Water	1631E	

Metals (Continued)

Analysis Batch: 2458 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-2	WP-588-150-165-2	Dissolved	Water	1631E	
500-253745-2	WP-588-150-165-2	Total/NA	Water	1631E	
500-253745-3	WP-588-340-355-1	Dissolved	Water	1631E	
500-253745-3	WP-588-340-355-1	Total/NA	Water	1631E	
500-253745-4	WP-588-340-355-2	Dissolved	Water	1631E	
500-253745-4	WP-588-340-355-2	Total/NA	Water	1631E	
500-253745-5	WP-588-150-165-1 FB	Total/NA	Water	1631E	
500-253745-6	WP-588-150-165-2 FB	Total/NA	Water	1631E	
MB 350-2458/14	Method Blank	Total/NA	Water	1631E	
MB 350-2458/15	Method Blank	Total/NA	Water	1631E	
MB 350-2458/16	Method Blank	Total/NA	Water	1631E	
LCS 350-2458/20	Lab Control Sample	Total/NA	Water	1631E	
LCSD 350-2458/23	Lab Control Sample Dup	Total/NA	Water	1631E	

Analysis Batch: 2467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-1	WP-588-150-165-1	Dissolved	Water	1638	2455
500-253745-1	WP-588-150-165-1	Total Recoverable	Water	1638	2455
500-253745-2	WP-588-150-165-2	Dissolved	Water	1638	2455
500-253745-2	WP-588-150-165-2	Total Recoverable	Water	1638	2455
500-253745-3	WP-588-340-355-1	Dissolved	Water	1638	2455
500-253745-3	WP-588-340-355-1	Total Recoverable	Water	1638	2455
500-253745-4	WP-588-340-355-2	Dissolved	Water	1638	2455
500-253745-4	WP-588-340-355-2	Total Recoverable	Water	1638	2455
MB 350-2455/1-A	Method Blank	Total Recoverable	Water	1638	2455
MB 350-2455/2-A	Method Blank	Total Recoverable	Water	1638	2455
LCS 350-2455/4-A	Lab Control Sample	Total Recoverable	Water	1638	2455
LCSD 350-2455/5-A	Lab Control Sample Dup	Total Recoverable	Water	1638	2455
500-253745-1 MS	WP-588-150-165-1	Dissolved	Water	1638	2455
500-253745-1 MSD	WP-588-150-165-1	Dissolved	Water	1638	2455

Analysis Batch: 2481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-7	WP-588-340-355-1 FB	Total/NA	Water	1631E	
500-253745-8	WP-588-340-355-2 FB	Total/NA	Water	1631E	
MB 350-2481/30	Method Blank	Total/NA	Water	1631E	
MB 350-2481/31	Method Blank	Total/NA	Water	1631E	
MB 350-2481/32	Method Blank	Total/NA	Water	1631E	
LCS 350-2481/35	Lab Control Sample	Total/NA	Water	1631E	
LCSD 350-2481/36	Lab Control Sample Dup	Total/NA	Water	1631E	

Prep Batch: 778802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-1	WP-588-150-165-1	Dissolved	Water	3005A	
500-253745-1	WP-588-150-165-1	Total Recoverable	Water	3005A	
500-253745-2	WP-588-150-165-2	Dissolved	Water	3005A	
500-253745-2	WP-588-150-165-2	Total Recoverable	Water	3005A	
500-253745-3	WP-588-340-355-1	Dissolved	Water	3005A	
500-253745-3	WP-588-340-355-1	Total Recoverable	Water	3005A	
500-253745-4	WP-588-340-355-2	Dissolved	Water	3005A	
500-253745-4	WP-588-340-355-2	Total Recoverable	Water	3005A	

Metals (Continued)

Prep Batch: 778802 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-778802/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-778802/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 779182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-1	WP-588-150-165-1	Dissolved	Water	6020B	778802
500-253745-1	WP-588-150-165-1	Total Recoverable	Water	6020B	778802
500-253745-2	WP-588-150-165-2	Dissolved	Water	6020B	778802
500-253745-2	WP-588-150-165-2	Total Recoverable	Water	6020B	778802
500-253745-3	WP-588-340-355-1	Dissolved	Water	6020B	778802
500-253745-3	WP-588-340-355-1	Total Recoverable	Water	6020B	778802
500-253745-4	WP-588-340-355-2	Dissolved	Water	6020B	778802
500-253745-4	WP-588-340-355-2	Total Recoverable	Water	6020B	778802
MB 500-778802/1-A	Method Blank	Total Recoverable	Water	6020B	778802
LCS 500-778802/2-A	Lab Control Sample	Total Recoverable	Water	6020B	778802

Analysis Batch: 779242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-1	WP-588-150-165-1	Total Recoverable	Water	SM 2340B	778802
500-253745-2	WP-588-150-165-2	Total Recoverable	Water	SM 2340B	778802
500-253745-3	WP-588-340-355-1	Total Recoverable	Water	SM 2340B	778802
500-253745-4	WP-588-340-355-2	Total Recoverable	Water	SM 2340B	778802

Analysis Batch: 779417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-1	WP-588-150-165-1	Dissolved	Water	6020B	778802
500-253745-1	WP-588-150-165-1	Total Recoverable	Water	6020B	778802
500-253745-2	WP-588-150-165-2	Dissolved	Water	6020B	778802
500-253745-2	WP-588-150-165-2	Total Recoverable	Water	6020B	778802
500-253745-2	WP-588-150-165-2	Total Recoverable	Water	6020B	778802
500-253745-3	WP-588-340-355-1	Dissolved	Water	6020B	778802
500-253745-3	WP-588-340-355-1	Total Recoverable	Water	6020B	778802
500-253745-3	WP-588-340-355-1	Total Recoverable	Water	6020B	778802
500-253745-4	WP-588-340-355-2	Dissolved	Water	6020B	778802
500-253745-4	WP-588-340-355-2	Total Recoverable	Water	6020B	778802
500-253745-4	WP-588-340-355-2	Total Recoverable	Water	6020B	778802

General Chemistry

Analysis Batch: 777558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-1	WP-588-150-165-1	Total/NA	Water	300.0	
500-253745-2	WP-588-150-165-2	Total/NA	Water	300.0	
500-253745-3	WP-588-340-355-1	Total/NA	Water	300.0	
500-253745-4	WP-588-340-355-2	Total/NA	Water	300.0	
MB 500-777558/3	Method Blank	Total/NA	Water	300.0	
LCS 500-777558/4	Lab Control Sample	Total/NA	Water	300.0	
500-253745-4 MS	WP-588-340-355-2	Total/NA	Water	300.0	
500-253745-4 MSD	WP-588-340-355-2	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 777559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-1	WP-588-150-165-1	Total/NA	Water	300.0	
500-253745-2	WP-588-150-165-2	Total/NA	Water	300.0	
500-253745-3	WP-588-340-355-1	Total/NA	Water	300.0	
500-253745-4	WP-588-340-355-2	Total/NA	Water	300.0	
MB 500-777559/3	Method Blank	Total/NA	Water	300.0	
LCS 500-777559/4	Lab Control Sample	Total/NA	Water	300.0	
500-253745-4 MS	WP-588-340-355-2	Total/NA	Water	300.0	
500-253745-4 MSD	WP-588-340-355-2	Total/NA	Water	300.0	

Analysis Batch: 777854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-1	WP-588-150-165-1	Total/NA	Water	SM 2540C	
500-253745-2	WP-588-150-165-2	Total/NA	Water	SM 2540C	
500-253745-3	WP-588-340-355-1	Total/NA	Water	SM 2540C	
500-253745-4	WP-588-340-355-2	Total/NA	Water	SM 2540C	
MB 500-777854/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-777854/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 777855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-1	WP-588-150-165-1	Total/NA	Water	SM 4500 S2 F	
500-253745-2	WP-588-150-165-2	Total/NA	Water	SM 4500 S2 F	
500-253745-3	WP-588-340-355-1	Total/NA	Water	SM 4500 S2 F	
500-253745-4	WP-588-340-355-2	Total/NA	Water	SM 4500 S2 F	
MB 500-777855/1	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 500-777855/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 777897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-1	WP-588-150-165-1	Dissolved	Water	SM 5310C	
500-253745-2	WP-588-150-165-2	Dissolved	Water	SM 5310C	
500-253745-3	WP-588-340-355-1	Dissolved	Water	SM 5310C	
500-253745-4	WP-588-340-355-2	Dissolved	Water	SM 5310C	
MB 500-777897/7	Method Blank	Dissolved	Water	SM 5310C	
LCS 500-777897/8	Lab Control Sample	Dissolved	Water	SM 5310C	

Analysis Batch: 778006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-1	WP-588-150-165-1	Total/NA	Water	SM 2540D	
500-253745-2	WP-588-150-165-2	Total/NA	Water	SM 2540D	
MB 500-778006/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 500-778006/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Analysis Batch: 778220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-3	WP-588-340-355-1	Total/NA	Water	SM 2540D	
500-253745-4	WP-588-340-355-2	Total/NA	Water	SM 2540D	
MB 500-778220/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 500-778220/2	Lab Control Sample	Total/NA	Water	SM 2540D	

General Chemistry

Prep Batch: 778677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-1	WP-588-150-165-1	Total/NA	Water	Distill/CN	
MB 500-778677/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 500-778677/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Analysis Batch: 778811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-1	WP-588-150-165-1	Total/NA	Water	SM 2520B	
500-253745-2	WP-588-150-165-2	Total/NA	Water	SM 2520B	
500-253745-3	WP-588-340-355-1	Total/NA	Water	SM 2520B	
500-253745-4	WP-588-340-355-2	Total/NA	Water	SM 2520B	

Prep Batch: 778852

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-2	WP-588-150-165-2	Total/NA	Water	Distill/CN	
MB 500-778852/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 500-778852/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Prep Batch: 779019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-3	WP-588-340-355-1	Total/NA	Water	Distill/CN	
500-253745-4	WP-588-340-355-2	Total/NA	Water	Distill/CN	
MB 500-779019/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 500-779019/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Analysis Batch: 779075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-2	WP-588-150-165-2	Total/NA	Water	335.4	778852
MB 500-778852/1-A	Method Blank	Total/NA	Water	335.4	778852
LCS 500-778852/2-A	Lab Control Sample	Total/NA	Water	335.4	778852

Analysis Batch: 779224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-1	WP-588-150-165-1	Total/NA	Water	SM 5310C	
500-253745-2	WP-588-150-165-2	Total/NA	Water	SM 5310C	
500-253745-3	WP-588-340-355-1	Total/NA	Water	SM 5310C	
500-253745-4	WP-588-340-355-2	Total/NA	Water	SM 5310C	
MB 500-779224/7	Method Blank	Total/NA	Water	SM 5310C	
LCS 500-779224/8	Lab Control Sample	Total/NA	Water	SM 5310C	

Analysis Batch: 779286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-1	WP-588-150-165-1	Total/NA	Water	SM 2320B	
500-253745-2	WP-588-150-165-2	Total/NA	Water	SM 2320B	
500-253745-3	WP-588-340-355-1	Total/NA	Water	SM 2320B	
500-253745-4	WP-588-340-355-2	Total/NA	Water	SM 2320B	
MB 500-779286/28	Method Blank	Total/NA	Water	SM 2320B	
MB 500-779286/53	Method Blank	Total/NA	Water	SM 2320B	
LCS 500-779286/29	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 500-779286/54	Lab Control Sample	Total/NA	Water	SM 2320B	

General Chemistry

Analysis Batch: 779304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-2	WP-588-150-165-2	Total/NA	Water	300.0	
500-253745-3	WP-588-340-355-1	Total/NA	Water	300.0	
500-253745-4	WP-588-340-355-2	Total/NA	Water	300.0	
MB 500-779304/65	Method Blank	Total/NA	Water	300.0	
LCS 500-779304/66	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 779435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-1	WP-588-150-165-1	Total/NA	Water	335.4	778677
MB 500-778677/1-A	Method Blank	Total/NA	Water	335.4	778677
LCS 500-778677/2-A	Lab Control Sample	Total/NA	Water	335.4	778677

Analysis Batch: 779535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-1	WP-588-150-165-1	Total/NA	Water	300.0	
MB 500-779535/63	Method Blank	Total/NA	Water	300.0	
LCS 500-779535/64	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 779743

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-3	WP-588-340-355-1	Total/NA	Water	335.4	779019
500-253745-4	WP-588-340-355-2	Total/NA	Water	335.4	779019
MB 500-779019/1-A	Method Blank	Total/NA	Water	335.4	779019
LCS 500-779019/2-A	Lab Control Sample	Total/NA	Water	335.4	779019

Prep Batch: 780079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-1	WP-588-150-165-1	Total/NA	Water	Distill/Ammonia	
500-253745-2	WP-588-150-165-2	Total/NA	Water	Distill/Ammonia	
500-253745-3	WP-588-340-355-1	Total/NA	Water	Distill/Ammonia	
MB 500-780079/1-A	Method Blank	Total/NA	Water	Distill/Ammonia	
LCS 500-780079/2-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	

Prep Batch: 780105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-4	WP-588-340-355-2	Total/NA	Water	Distill/Ammonia	
MB 500-780105/1-A	Method Blank	Total/NA	Water	Distill/Ammonia	
LCS 500-780105/2-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	

Analysis Batch: 780256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-1	WP-588-150-165-1	Total/NA	Water	350.1	780079
500-253745-2	WP-588-150-165-2	Total/NA	Water	350.1	780079
500-253745-3	WP-588-340-355-1	Total/NA	Water	350.1	780079
500-253745-4	WP-588-340-355-2	Total/NA	Water	350.1	780105
MB 500-780079/1-A	Method Blank	Total/NA	Water	350.1	780079
MB 500-780105/1-A	Method Blank	Total/NA	Water	350.1	780105
LCS 500-780079/2-A	Lab Control Sample	Total/NA	Water	350.1	780079
LCS 500-780105/2-A	Lab Control Sample	Total/NA	Water	350.1	780105

General Chemistry

Prep Batch: 780961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-1	WP-588-150-165-1	Total/NA	Water	365.2/365.3/365	
500-253745-2	WP-588-150-165-2	Total/NA	Water	365.2/365.3/365	
500-253745-3	WP-588-340-355-1	Total/NA	Water	365.2/365.3/365	
500-253745-4	WP-588-340-355-2	Total/NA	Water	365.2/365.3/365	
MB 500-780961/1-A	Method Blank	Total/NA	Water	365.2/365.3/365	
LCS 500-780961/2-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	

Analysis Batch: 781722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-253745-1	WP-588-150-165-1	Total/NA	Water	365.1	780961
500-253745-2	WP-588-150-165-2	Total/NA	Water	365.1	780961
500-253745-3	WP-588-340-355-1	Total/NA	Water	365.1	780961
500-253745-4	WP-588-340-355-2	Total/NA	Water	365.1	780961
MB 500-780961/1-A	Method Blank	Total/NA	Water	365.1	780961
LCS 500-780961/2-A	Lab Control Sample	Total/NA	Water	365.1	780961

Method: 1630 - Methyl Mercury

Lab Sample ID: MB 350-2438/1-A
Matrix: Water
Analysis Batch: 2446

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2438

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/24/24 11:26	07/24/24 17:21	1

Lab Sample ID: MB 350-2438/2-A
Matrix: Water
Analysis Batch: 2446

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2438

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/24/24 11:26	07/24/24 17:31	1

Lab Sample ID: MB 350-2438/3-A
Matrix: Water
Analysis Batch: 2446

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2438

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		07/24/24 11:26	07/24/24 17:42	1

Lab Sample ID: LCS 350-2438/4-A
Matrix: Water
Analysis Batch: 2446

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 2438

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methyl Mercury	1.00	1.10		ng/L		110	65 - 135

Lab Sample ID: LCSD 350-2438/5-A
Matrix: Water
Analysis Batch: 2446

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 2438

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methyl Mercury	1.00	1.08		ng/L		108	65 - 135	2	35

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 350-2458/14
Matrix: Water
Analysis Batch: 2458

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/25/24 12:08	1

Lab Sample ID: MB 350-2458/15
Matrix: Water
Analysis Batch: 2458

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/25/24 12:12	1

Method: 1631E - Mercury, Low Level (CVAFS) (Continued)

Lab Sample ID: MB 350-2458/16
Matrix: Water
Analysis Batch: 2458

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/25/24 12:16	1

Lab Sample ID: LCS 350-2458/20
Matrix: Water
Analysis Batch: 2458

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.38		ng/L		88	77 - 123

Lab Sample ID: LCSD 350-2458/23
Matrix: Water
Analysis Batch: 2458

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	4.28		ng/L		86	77 - 123	2	24

Lab Sample ID: MB 350-2481/30
Matrix: Water
Analysis Batch: 2481

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/30/24 13:13	1

Lab Sample ID: MB 350-2481/31
Matrix: Water
Analysis Batch: 2481

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/30/24 13:17	1

Lab Sample ID: MB 350-2481/32
Matrix: Water
Analysis Batch: 2481

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			07/30/24 13:22	1

Lab Sample ID: LCS 350-2481/35
Matrix: Water
Analysis Batch: 2481

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.52		ng/L		90	77 - 123

Lab Sample ID: LCSD 350-2481/36
Matrix: Water
Analysis Batch: 2481

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	4.49		ng/L		90	77 - 123	1	24

Method: 1638 - Metals (ICP/MS)

Lab Sample ID: MB 350-2455/1-A
Matrix: Water
Analysis Batch: 2467

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 2455

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	<0.0098		0.030	0.0098	ug/L		07/26/24 16:16	07/29/24 11:30	1

Lab Sample ID: MB 350-2455/2-A
Matrix: Water
Analysis Batch: 2467

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 2455

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	<0.0098		0.030	0.0098	ug/L		07/26/24 16:16	07/29/24 11:34	1

Lab Sample ID: LCS 350-2455/4-A
Matrix: Water
Analysis Batch: 2467

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 2455

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Uranium	25.0	24.4		ug/L		98	85 - 115

Lab Sample ID: LCSD 350-2455/5-A
Matrix: Water
Analysis Batch: 2467

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 2455

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Uranium	25.0	24.4		ug/L		97	85 - 115	0	20

Lab Sample ID: 500-253745-1 MS
Matrix: Water
Analysis Batch: 2467

Client Sample ID: WP-588-150-165-1
Prep Type: Dissolved
Prep Batch: 2455

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Uranium	1.8		25.0	26.9		ug/L		101	70 - 130

Lab Sample ID: 500-253745-1 MSD
Matrix: Water
Analysis Batch: 2467

Client Sample ID: WP-588-150-165-1
Prep Type: Dissolved
Prep Batch: 2455

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Uranium	1.8		25.0	26.3		ug/L		98	70 - 130	2	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 500-778802/1-A
Matrix: Water
Analysis Batch: 779182

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 778802

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		07/29/24 09:20	07/31/24 00:17	1
Antimony	<1.3		3.0	1.3	ug/L		07/29/24 09:20	07/31/24 00:17	1
Arsenic	<0.23		1.0	0.23	ug/L		07/29/24 09:20	07/31/24 00:17	1
Barium	<0.73		2.5	0.73	ug/L		07/29/24 09:20	07/31/24 00:17	1
Beryllium	<0.53		1.0	0.53	ug/L		07/29/24 09:20	07/31/24 00:17	1
Boron	18.0	J	50	13	ug/L		07/29/24 09:20	07/31/24 00:17	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 500-778802/1-A
Matrix: Water
Analysis Batch: 779182

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 778802

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.17		0.50	0.17	ug/L		07/29/24 09:20	07/31/24 00:17	1
Calcium	97.1	J	200	44	ug/L		07/29/24 09:20	07/31/24 00:17	1
Chromium	<1.1		5.0	1.1	ug/L		07/29/24 09:20	07/31/24 00:17	1
Cobalt	<0.40		1.0	0.40	ug/L		07/29/24 09:20	07/31/24 00:17	1
Copper	<0.50		2.0	0.50	ug/L		07/29/24 09:20	07/31/24 00:17	1
Iron	<47		100	47	ug/L		07/29/24 09:20	07/31/24 00:17	1
Lead	<0.19		0.50	0.19	ug/L		07/29/24 09:20	07/31/24 00:17	1
Lithium	<2.5		10	2.5	ug/L		07/29/24 09:20	07/31/24 00:17	1
Magnesium	<49		200	49	ug/L		07/29/24 09:20	07/31/24 00:17	1
Manganese	<0.79		2.5	0.79	ug/L		07/29/24 09:20	07/31/24 00:17	1
Molybdenum	<2.5		5.0	2.5	ug/L		07/29/24 09:20	07/31/24 00:17	1
Nickel	<0.63		2.0	0.63	ug/L		07/29/24 09:20	07/31/24 00:17	1
Potassium	<110		500	110	ug/L		07/29/24 09:20	07/31/24 00:17	1
Selenium	<0.98		2.5	0.98	ug/L		07/29/24 09:20	07/31/24 00:17	1
Silver	<0.12		0.50	0.12	ug/L		07/29/24 09:20	07/31/24 00:17	1
Sodium	<77		200	77	ug/L		07/29/24 09:20	07/31/24 00:17	1
Strontium	<0.64		4.0	0.64	ug/L		07/29/24 09:20	07/31/24 00:17	1
Thallium	<0.57		2.0	0.57	ug/L		07/29/24 09:20	07/31/24 00:17	1
Tin	<1.3		5.0	1.3	ug/L		07/29/24 09:20	07/31/24 00:17	1
Vanadium	<2.2		5.0	2.2	ug/L		07/29/24 09:20	07/31/24 00:17	1
Zinc	<6.9		20	6.9	ug/L		07/29/24 09:20	07/31/24 00:17	1

Lab Sample ID: LCS 500-778802/2-A
Matrix: Water
Analysis Batch: 779182

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 778802

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	2000	1980		ug/L		99	80 - 120
Antimony	500	497		ug/L		99	80 - 120
Arsenic	100	99.2		ug/L		99	80 - 120
Barium	500	519		ug/L		104	80 - 120
Beryllium	50.0	52.3		ug/L		105	80 - 120
Boron	1000	1050		ug/L		105	80 - 120
Cadmium	50.0	49.5		ug/L		99	80 - 120
Calcium	10000	8990		ug/L		90	80 - 120
Chromium	200	210		ug/L		105	80 - 120
Cobalt	500	530		ug/L		106	80 - 120
Copper	250	260		ug/L		104	80 - 120
Iron	1000	1040		ug/L		104	80 - 120
Lead	100	102		ug/L		102	80 - 120
Lithium	100	103		ug/L		103	80 - 120
Magnesium	10000	10400		ug/L		104	80 - 120
Manganese	500	518		ug/L		104	80 - 120
Molybdenum	1000	963		ug/L		96	80 - 120
Nickel	500	509		ug/L		102	80 - 120
Potassium	10000	10300		ug/L		103	80 - 120
Selenium	100	99.6		ug/L		100	80 - 120
Silver	50.0	50.1		ug/L		100	80 - 120
Sodium	10000	10400		ug/L		104	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 500-778802/2-A
Matrix: Water
Analysis Batch: 779182

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 778802

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Strontium	1000	969		ug/L		97	80 - 120
Thallium	100	104		ug/L		104	80 - 120
Tin	1000	967		ug/L		97	80 - 120
Vanadium	500	506		ug/L		101	80 - 120
Zinc	500	515		ug/L		103	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 500-777558/3
Matrix: Water
Analysis Batch: 777558

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	<0.18		1.0	0.18	mg/L			07/19/24 14:22	1
Fluoride	<0.19		1.0	0.19	mg/L			07/19/24 14:22	1
Sulfate	<0.21		1.0	0.21	mg/L			07/19/24 14:22	1

Lab Sample ID: LCS 500-777558/4
Matrix: Water
Analysis Batch: 777558

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	20.0	19.8		mg/L		99	90 - 110
Fluoride	20.0	20.6		mg/L		103	90 - 110
Sulfate	20.0	21.3		mg/L		107	90 - 110

Lab Sample ID: 500-253745-4 MS
Matrix: Water
Analysis Batch: 777558

Client Sample ID: WP-588-340-355-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	50		10.0	53.1	E 4	mg/L		33	80 - 120
Fluoride	1.2		10.0	12.0		mg/L		108	80 - 120
Sulfate	10		10.0	20.6		mg/L		104	80 - 120

Lab Sample ID: 500-253745-4 MSD
Matrix: Water
Analysis Batch: 777558

Client Sample ID: WP-588-340-355-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromide	50		10.0	52.8	E 4	mg/L		31	80 - 120	1	20
Fluoride	1.2		10.0	11.9		mg/L		107	80 - 120	1	20
Sulfate	10		10.0	20.5		mg/L		104	80 - 120	0	20

Lab Sample ID: MB 500-777559/3
Matrix: Water
Analysis Batch: 777559

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.043		1.0	0.043	mg/L			07/19/24 14:22	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 500-777559/3
Matrix: Water
Analysis Batch: 777559

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	<0.070		1.0	0.070	mg/L			07/19/24 14:22	1
Nitrate Nitrite as N	<0.070		1.0	0.070	mg/L			07/19/24 14:22	1

Lab Sample ID: LCS 500-777559/4
Matrix: Water
Analysis Batch: 777559

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	20.0	19.6		mg/L		98	90 - 110
Nitrite as N	20.0	21.2		mg/L		106	90 - 110

Lab Sample ID: 500-253745-4 MS
Matrix: Water
Analysis Batch: 777559

Client Sample ID: WP-588-340-355-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	<0.043		10.0	8.65		mg/L		87	80 - 120
Nitrite as N	<0.070	F1	10.0	21.6	F1	mg/L		216	80 - 120

Lab Sample ID: 500-253745-4 MSD
Matrix: Water
Analysis Batch: 777559

Client Sample ID: WP-588-340-355-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	<0.043		10.0	8.60		mg/L		86	80 - 120	1	20
Nitrite as N	<0.070	F1	10.0	20.9	F1	mg/L		209	80 - 120	3	20

Lab Sample ID: MB 500-779304/65
Matrix: Water
Analysis Batch: 779304

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.12		1.0	0.12	mg/L			08/01/24 08:52	1

Lab Sample ID: LCS 500-779304/66
Matrix: Water
Analysis Batch: 779304

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	20.0	20.9		mg/L		104	90 - 110

Lab Sample ID: MB 500-779535/63
Matrix: Water
Analysis Batch: 779535

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.12		1.0	0.12	mg/L			08/02/24 08:47	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 500-779535/64
Matrix: Water
Analysis Batch: 779535

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	20.0	19.2		mg/L		96	90 - 110

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 500-778677/1-A
Matrix: Water
Analysis Batch: 779435

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 778677

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.0036		0.0050	0.0036	mg/L		07/27/24 10:25	07/29/24 15:05	1

Lab Sample ID: LCS 500-778677/2-A
Matrix: Water
Analysis Batch: 779435

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 778677

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.100	0.0711	*-	mg/L		71	90 - 110

Lab Sample ID: MB 500-778852/1-A
Matrix: Water
Analysis Batch: 779075

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 778852

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.0036	^-	0.0050	0.0036	mg/L		07/29/24 11:08	07/30/24 13:34	1

Lab Sample ID: LCS 500-778852/2-A
Matrix: Water
Analysis Batch: 779075

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 778852

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.100	0.102	^-	mg/L		102	90 - 110

Lab Sample ID: MB 500-779019/1-A
Matrix: Water
Analysis Batch: 779743

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 779019

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.0036		0.0050	0.0036	mg/L		07/30/24 10:52	07/31/24 16:51	1

Lab Sample ID: LCS 500-779019/2-A
Matrix: Water
Analysis Batch: 779743

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 779019

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.100	0.109		mg/L		109	90 - 110

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 500-780079/1-A
Matrix: Water
Analysis Batch: 780256

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 780079

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	<0.10		0.20	0.10	mg/L		08/06/24 11:44	08/06/24 19:07	1

Lab Sample ID: LCS 500-780079/2-A
Matrix: Water
Analysis Batch: 780256

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 780079

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	2.00	1.96		mg/L		98	90 - 110

Lab Sample ID: MB 500-780105/1-A
Matrix: Water
Analysis Batch: 780256

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 780105

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	<0.10		0.20	0.10	mg/L		08/06/24 14:48	08/06/24 19:19	1

Lab Sample ID: LCS 500-780105/2-A
Matrix: Water
Analysis Batch: 780256

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 780105

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	2.00	1.80		mg/L		90	90 - 110

Method: 365.1 - Phosphorus, Total

Lab Sample ID: MB 500-780961/1-A
Matrix: Water
Analysis Batch: 781722

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 780961

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus as P	<0.024	^1- ^-	0.050	0.024	mg/L		08/13/24 11:40	08/13/24 17:36	1

Lab Sample ID: LCS 500-780961/2-A
Matrix: Water
Analysis Batch: 781722

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 780961

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phosphorus as P	0.500	0.367	^1- *- ^-	mg/L		73	88 - 123

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 500-779286/28
Matrix: Water
Analysis Batch: 779286

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	6.15		5.0	3.7	mg/L			07/30/24 16:38	1
Bicarbonate Alkalinity as CaCO3	6.15		5.0	3.7	mg/L			07/30/24 16:38	1
Carbonate Alkalinity as CaCO3	<3.7		5.0	3.7	mg/L			07/30/24 16:38	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: MB 500-779286/53
Matrix: Water
Analysis Batch: 779286

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	<3.7		5.0	3.7	mg/L			07/30/24 20:30	1
Bicarbonate Alkalinity as CaCO3	<3.7		5.0	3.7	mg/L			07/30/24 20:30	1
Carbonate Alkalinity as CaCO3	<3.7		5.0	3.7	mg/L			07/30/24 20:30	1

Lab Sample ID: LCS 500-779286/29
Matrix: Water
Analysis Batch: 779286

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	100	104		mg/L		104	95 - 121

Lab Sample ID: LCS 500-779286/54
Matrix: Water
Analysis Batch: 779286

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	100	106		mg/L		106	95 - 121

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 500-777854/1
Matrix: Water
Analysis Batch: 777854

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<4.3		10	4.3	mg/L			07/22/24 20:43	1

Lab Sample ID: LCS 500-777854/2
Matrix: Water
Analysis Batch: 777854

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	250	238		mg/L		95	80 - 120

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 500-778006/1
Matrix: Water
Analysis Batch: 778006

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<1.9		5.0	1.9	mg/L			07/23/24 14:28	1

Lab Sample ID: LCS 500-778006/2
Matrix: Water
Analysis Batch: 778006

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	200	185		mg/L		93	80 - 120

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: MB 500-778220/1
Matrix: Water
Analysis Batch: 778220

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<1.9		5.0	1.9	mg/L			07/24/24 16:43	1

Lab Sample ID: LCS 500-778220/2
Matrix: Water
Analysis Batch: 778220

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	200	174		mg/L		87	80 - 120

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 500-777855/1
Matrix: Water
Analysis Batch: 777855

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<0.23		1.0	0.23	mg/L			07/23/24 00:10	1

Lab Sample ID: LCS 500-777855/2
Matrix: Water
Analysis Batch: 777855

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	3.64	3.38		mg/L		93	85 - 115

Method: SM 5310C - TOC

Lab Sample ID: MB 500-779224/7
Matrix: Water
Analysis Batch: 779224

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<0.47		1.0	0.47	mg/L			07/30/24 11:17	1

Lab Sample ID: LCS 500-779224/8
Matrix: Water
Analysis Batch: 779224

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	10.0	10.2		mg/L		102	86 - 116

Method: SM 5310C - Organic Carbon, Dissolved (DOC)

Lab Sample ID: MB 500-777897/7
Matrix: Water
Analysis Batch: 777897

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	<0.47		1.0	0.47	mg/L			07/22/24 11:38	1

Method: SM 5310C - Organic Carbon, Dissolved (DOC) (Continued)

Lab Sample ID: LCS 500-777897/8
Matrix: Water
Analysis Batch: 777897

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dissolved Organic Carbon	10.0	10.0		mg/L		100	86 - 116

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-253745-1

Client Sample ID: WP-588-150-165-1

Date Collected: 07/16/24 19:10
Date Received: 07/19/24 10:00

Lab Sample ID: 500-253745-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	1630			2438	AJD	EET SSM	07/24/24 11:26
Dissolved	Analysis	1630		1	2446	CL	EET SSM	07/24/24 19:44
Total/NA	Prep	1630			2438	AJD	EET SSM	07/24/24 11:26
Total/NA	Analysis	1630		1	2446	CL	EET SSM	07/24/24 19:34
Dissolved	Analysis	1631E		1	2458	AJD	EET SSM	07/25/24 16:04
Total/NA	Analysis	1631E		1	2458	AJD	EET SSM	07/25/24 15:52
Dissolved	Prep	1638			2455	V1R	EET SSM	07/26/24 16:16
Dissolved	Analysis	1638		1	2467	V1R	EET SSM	07/29/24 11:59
Total Recoverable	Prep	1638			2455	V1R	EET SSM	07/26/24 16:16
Total Recoverable	Analysis	1638		1	2467	V1R	EET SSM	07/29/24 12:32
Dissolved	Prep	3005A			778802	BDE	EET CHI	07/29/24 09:20 - 07/29/24 15:20 [1]
Dissolved	Analysis	6020B		1	779182	S1Z	EET CHI	07/31/24 00:55
Dissolved	Prep	3005A			778802	BDE	EET CHI	07/29/24 09:20 - 07/29/24 15:20 [1]
Dissolved	Analysis	6020B		5	779417	RN	EET CHI	07/31/24 16:17
Total Recoverable	Prep	3005A			778802	BDE	EET CHI	07/29/24 09:20 - 07/29/24 15:20 [1]
Total Recoverable	Analysis	6020B		1	779182	S1Z	EET CHI	07/31/24 00:46
Total Recoverable	Prep	3005A			778802	BDE	EET CHI	07/29/24 09:20 - 07/29/24 15:20 [1]
Total Recoverable	Analysis	6020B		5	779417	RN	EET CHI	07/31/24 15:55
Total Recoverable	Prep	3005A			778802	BDE	EET CHI	07/29/24 09:20 - 07/29/24 15:20 [1]
Total Recoverable	Analysis	SM 2340B		1	779242	DAJ	EET CHI	07/31/24 10:52
Total/NA	Analysis	300.0		50	779535	W1T	EET CHI	08/02/24 09:18
Total/NA	Analysis	300.0		1	777558	W1T	EET CHI	07/19/24 15:55
Total/NA	Analysis	300.0		1	777559	W1T	EET CHI	07/19/24 15:55
Total/NA	Prep	Distill/CN			778677	MB	EET CHI	07/27/24 10:25 - 07/27/24 10:55 [1]
Total/NA	Analysis	335.4		1	779435	KF	EET CHI	07/29/24 15:41
Total/NA	Prep	Distill/Ammonia			780079	EB	EET CHI	08/06/24 11:44 - 08/06/24 12:44 [1]
Total/NA	Analysis	350.1		1	780256	KF	EET CHI	08/06/24 19:12
Total/NA	Prep	365.2/365.3/365			780961	NSJ	EET CHI	08/13/24 11:40 - 08/13/24 15:40 [1]
Total/NA	Analysis	365.1		1	781722	LP	EET CHI	08/13/24 17:36
Total/NA	Analysis	SM 2320B		1	779286	LEG	EET CHI	07/30/24 20:21
Total/NA	Analysis	SM 2520B		1	778811	TR	EET CHI	07/29/24 09:57
Total/NA	Analysis	SM 2540C		1	777854	CLB	EET CHI	07/22/24 21:16
Total/NA	Analysis	SM 2540D		1	778006	SO	EET CHI	07/23/24 15:30 - 07/23/24 15:33 [1]
Total/NA	Analysis	SM 4500 S2 F		1	777855	CLB	EET CHI	07/23/24 01:15 - 07/23/24 01:19 [1]
Dissolved	Analysis	SM 5310C		1	777897	TR	EET CHI	07/22/24 19:36
Total/NA	Analysis	SM 5310C		1	779224	TR	EET CHI	07/30/24 13:38

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-253745-1

Client Sample ID: WP-588-150-165-2

Date Collected: 07/16/24 20:12
Date Received: 07/19/24 10:00

Lab Sample ID: 500-253745-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	1630			2438	AJD	EET SSM	07/24/24 11:26
Dissolved	Analysis	1630		1	2446	CL	EET SSM	07/24/24 20:04
Total/NA	Prep	1630			2438	AJD	EET SSM	07/24/24 11:26
Total/NA	Analysis	1630		1	2446	CL	EET SSM	07/24/24 19:54
Dissolved	Analysis	1631E		1	2458	AJD	EET SSM	07/25/24 16:12
Total/NA	Analysis	1631E		1	2458	AJD	EET SSM	07/25/24 16:08
Dissolved	Prep	1638			2455	V1R	EET SSM	07/26/24 16:16
Dissolved	Analysis	1638		1	2467	V1R	EET SSM	07/29/24 12:21
Total Recoverable	Prep	1638			2455	V1R	EET SSM	07/26/24 16:16
Total Recoverable	Analysis	1638		1	2467	V1R	EET SSM	07/29/24 12:36
Dissolved	Prep	3005A			778802	BDE	EET CHI	07/29/24 09:20 - 07/29/24 15:20 [1]
Dissolved	Analysis	6020B		1	779182	S1Z	EET CHI	07/31/24 00:57
Dissolved	Prep	3005A			778802	BDE	EET CHI	07/29/24 09:20 - 07/29/24 15:20 [1]
Dissolved	Analysis	6020B		5	779417	RN	EET CHI	07/31/24 16:19
Total Recoverable	Prep	3005A			778802	BDE	EET CHI	07/29/24 09:20 - 07/29/24 15:20 [1]
Total Recoverable	Analysis	6020B		1	779182	S1Z	EET CHI	07/31/24 00:48
Total Recoverable	Prep	3005A			778802	BDE	EET CHI	07/29/24 09:20 - 07/29/24 15:20 [1]
Total Recoverable	Analysis	6020B		1	779417	RN	EET CHI	07/31/24 15:57
Total Recoverable	Prep	3005A			778802	BDE	EET CHI	07/29/24 09:20 - 07/29/24 15:20 [1]
Total Recoverable	Analysis	6020B		5	779417	RN	EET CHI	07/31/24 16:00
Total Recoverable	Prep	3005A			778802	BDE	EET CHI	07/29/24 09:20 - 07/29/24 15:20 [1]
Total Recoverable	Analysis	SM 2340B		1	779242	DAJ	EET CHI	07/31/24 10:52
Total/NA	Analysis	300.0		1	777558	W1T	EET CHI	07/19/24 16:11
Total/NA	Analysis	300.0		1	777559	W1T	EET CHI	07/19/24 16:11
Total/NA	Analysis	300.0		50	779304	NMB	EET CHI	08/01/24 13:18
Total/NA	Prep	Distill/CN			778852	KF	EET CHI	07/29/24 11:08 - 07/29/24 11:38 [1]
Total/NA	Analysis	335.4		1	779075	KF	EET CHI	07/30/24 14:25
Total/NA	Prep	Distill/Ammonia			780079	EB	EET CHI	08/06/24 11:44 - 08/06/24 12:44 [1]
Total/NA	Analysis	350.1		1	780256	KF	EET CHI	08/06/24 19:12
Total/NA	Prep	365.2/365.3/365			780961	NSJ	EET CHI	08/13/24 11:40 - 08/13/24 15:40 [1]
Total/NA	Analysis	365.1		1	781722	LP	EET CHI	08/13/24 17:37
Total/NA	Analysis	SM 2320B		1	779286	LEG	EET CHI	07/30/24 20:42
Total/NA	Analysis	SM 2520B		1	778811	TR	EET CHI	07/29/24 09:57
Total/NA	Analysis	SM 2540C		1	777854	CLB	EET CHI	07/22/24 21:19
Total/NA	Analysis	SM 2540D		1	778006	SO	EET CHI	07/23/24 15:33 - 07/23/24 15:37 [1]
Total/NA	Analysis	SM 4500 S2 F		1	777855	CLB	EET CHI	07/23/24 01:19 - 07/23/24 01:23 [1]
Dissolved	Analysis	SM 5310C		1	777897	TR	EET CHI	07/22/24 20:04
Total/NA	Analysis	SM 5310C		1	779224	TR	EET CHI	07/30/24 14:06

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-253745-1

Client Sample ID: WP-588-340-355-1

Date Collected: 07/17/24 15:00
Date Received: 07/19/24 10:00

Lab Sample ID: 500-253745-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	1630			2438	AJD	EET SSM	07/24/24 11:26
Dissolved	Analysis	1630		1	2446	CL	EET SSM	07/24/24 20:25
Total/NA	Prep	1630			2438	AJD	EET SSM	07/24/24 11:26
Total/NA	Analysis	1630		1	2446	CL	EET SSM	07/24/24 20:15
Dissolved	Analysis	1631E		1	2458	AJD	EET SSM	07/25/24 16:21
Total/NA	Analysis	1631E		1	2458	AJD	EET SSM	07/25/24 16:17
Dissolved	Prep	1638			2455	V1R	EET SSM	07/26/24 16:16
Dissolved	Analysis	1638		1	2467	V1R	EET SSM	07/29/24 12:25
Total Recoverable	Prep	1638			2455	V1R	EET SSM	07/26/24 16:16
Total Recoverable	Analysis	1638		1	2467	V1R	EET SSM	07/29/24 12:39
Dissolved	Prep	3005A			778802	BDE	EET CHI	07/29/24 09:20 - 07/29/24 15:20 [1]
Dissolved	Analysis	6020B		1	779182	S1Z	EET CHI	07/31/24 00:59
Dissolved	Prep	3005A			778802	BDE	EET CHI	07/29/24 09:20 - 07/29/24 15:20 [1]
Dissolved	Analysis	6020B		10	779417	RN	EET CHI	07/31/24 16:22
Total Recoverable	Prep	3005A			778802	BDE	EET CHI	07/29/24 09:20 - 07/29/24 15:20 [1]
Total Recoverable	Analysis	6020B		1	779182	S1Z	EET CHI	07/31/24 00:51
Total Recoverable	Prep	3005A			778802	BDE	EET CHI	07/29/24 09:20 - 07/29/24 15:20 [1]
Total Recoverable	Analysis	6020B		1	779417	RN	EET CHI	07/31/24 16:02
Total Recoverable	Prep	3005A			778802	BDE	EET CHI	07/29/24 09:20 - 07/29/24 15:20 [1]
Total Recoverable	Analysis	6020B		10	779417	RN	EET CHI	07/31/24 16:05
Total Recoverable	Prep	3005A			778802	BDE	EET CHI	07/29/24 09:20 - 07/29/24 15:20 [1]
Total Recoverable	Analysis	SM 2340B		1	779242	DAJ	EET CHI	07/31/24 10:52
Total/NA	Analysis	300.0		1	777558	W1T	EET CHI	07/19/24 14:53
Total/NA	Analysis	300.0		1	777559	W1T	EET CHI	07/19/24 14:53
Total/NA	Analysis	300.0		200	779304	NMB	EET CHI	08/01/24 13:33
Total/NA	Prep	Distill/CN			779019	KF	EET CHI	07/30/24 10:52 - 07/30/24 11:22 [1]
Total/NA	Analysis	335.4		1	779743	KF	EET CHI	07/31/24 17:19
Total/NA	Prep	Distill/Ammonia			780079	EB	EET CHI	08/06/24 11:44 - 08/06/24 12:44 [1]
Total/NA	Analysis	350.1		1	780256	KF	EET CHI	08/06/24 19:19
Total/NA	Prep	365.2/365.3/365			780961	NSJ	EET CHI	08/13/24 11:40 - 08/13/24 15:40 [1]
Total/NA	Analysis	365.1		1	781722	LP	EET CHI	08/13/24 17:37
Total/NA	Analysis	SM 2320B		1	779286	LEG	EET CHI	07/30/24 20:50
Total/NA	Analysis	SM 2520B		1	778811	TR	EET CHI	07/29/24 09:57
Total/NA	Analysis	SM 2540C		1	777854	CLB	EET CHI	07/22/24 21:21
Total/NA	Analysis	SM 2540D		1	778220	SO	EET CHI	07/24/24 17:21 - 07/24/24 17:23 [1]
Total/NA	Analysis	SM 4500 S2 F		1	777855	CLB	EET CHI	07/23/24 01:23 - 07/23/24 01:27 [1]
Dissolved	Analysis	SM 5310C		1	777897	TR	EET CHI	07/22/24 20:32
Total/NA	Analysis	SM 5310C		1	779224	TR	EET CHI	07/30/24 14:33

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-253745-1

Client Sample ID: WP-588-340-355-2

Date Collected: 07/17/24 19:00
Date Received: 07/19/24 10:00

Lab Sample ID: 500-253745-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	1630			2438	AJD	EET SSM	07/24/24 11:26
Dissolved	Analysis	1630		1	2446	CL	EET SSM	07/24/24 20:45
Total/NA	Prep	1630			2438	AJD	EET SSM	07/24/24 11:26
Total/NA	Analysis	1630		1	2446	CL	EET SSM	07/24/24 20:35
Dissolved	Analysis	1631E		1	2458	AJD	EET SSM	07/25/24 16:33
Total/NA	Analysis	1631E		1	2458	AJD	EET SSM	07/25/24 16:29
Dissolved	Prep	1638			2455	V1R	EET SSM	07/26/24 16:16
Dissolved	Analysis	1638		1	2467	V1R	EET SSM	07/29/24 12:28
Total Recoverable	Prep	1638			2455	V1R	EET SSM	07/26/24 16:16
Total Recoverable	Analysis	1638		1	2467	V1R	EET SSM	07/29/24 12:43
Dissolved	Prep	3005A			778802	BDE	EET CHI	07/29/24 09:20 - 07/29/24 15:20 [1]
Dissolved	Analysis	6020B		1	779182	S1Z	EET CHI	07/31/24 01:01
Dissolved	Prep	3005A			778802	BDE	EET CHI	07/29/24 09:20 - 07/29/24 15:20 [1]
Dissolved	Analysis	6020B		10	779417	RN	EET CHI	07/31/24 16:24
Total Recoverable	Prep	3005A			778802	BDE	EET CHI	07/29/24 09:20 - 07/29/24 15:20 [1]
Total Recoverable	Analysis	6020B		1	779182	S1Z	EET CHI	07/31/24 00:53
Total Recoverable	Prep	3005A			778802	BDE	EET CHI	07/29/24 09:20 - 07/29/24 15:20 [1]
Total Recoverable	Analysis	6020B		1	779417	RN	EET CHI	07/31/24 16:07
Total Recoverable	Prep	3005A			778802	BDE	EET CHI	07/29/24 09:20 - 07/29/24 15:20 [1]
Total Recoverable	Analysis	6020B		10	779417	RN	EET CHI	07/31/24 16:10
Total Recoverable	Prep	3005A			778802	BDE	EET CHI	07/29/24 09:20 - 07/29/24 15:20 [1]
Total Recoverable	Analysis	SM 2340B		1	779242	DAJ	EET CHI	07/31/24 10:52
Total/NA	Analysis	300.0		1	777558	W1T	EET CHI	07/19/24 15:08
Total/NA	Analysis	300.0		1	777559	W1T	EET CHI	07/19/24 15:08
Total/NA	Analysis	300.0		200	779304	NMB	EET CHI	08/01/24 13:49
Total/NA	Prep	Distill/CN			779019	KF	EET CHI	07/30/24 10:52 - 07/30/24 11:22 [1]
Total/NA	Analysis	335.4		1	779743	KF	EET CHI	07/31/24 17:21
Total/NA	Prep	Distill/Ammonia			780105	EB	EET CHI	08/06/24 14:48 - 08/06/24 15:48 [1]
Total/NA	Analysis	350.1		1	780256	KF	EET CHI	08/06/24 19:21
Total/NA	Prep	365.2/365.3/365			780961	NSJ	EET CHI	08/13/24 11:40 - 08/13/24 15:40 [1]
Total/NA	Analysis	365.1		1	781722	LP	EET CHI	08/13/24 17:38
Total/NA	Analysis	SM 2320B		1	779286	LEG	EET CHI	07/30/24 21:03
Total/NA	Analysis	SM 2520B		1	778811	TR	EET CHI	07/29/24 09:57
Total/NA	Analysis	SM 2540C		1	777854	CLB	EET CHI	07/22/24 21:24
Total/NA	Analysis	SM 2540D		1	778220	SO	EET CHI	07/24/24 17:23 - 07/24/24 17:25 [1]
Total/NA	Analysis	SM 4500 S2 F		1	777855	CLB	EET CHI	07/23/24 01:27 - 07/23/24 01:31 [1]
Dissolved	Analysis	SM 5310C		1	777897	TR	EET CHI	07/22/24 21:00
Total/NA	Analysis	SM 5310C		1	779224	TR	EET CHI	07/30/24 15:02

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253745-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-588-150-165-1 FB
Lab Sample ID: 500-253745-5
Date Collected: 07/16/24 00:00
Matrix: Water
Date Received: 07/19/24 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	2458	AJD	EET SSM	07/25/24 16:37

Client Sample ID: WP-588-150-165-2 FB
Lab Sample ID: 500-253745-6
Date Collected: 07/16/24 00:00
Matrix: Water
Date Received: 07/19/24 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	2458	AJD	EET SSM	07/25/24 16:41

Client Sample ID: WP-588-340-355-1 FB
Lab Sample ID: 500-253745-7
Date Collected: 07/17/24 00:00
Matrix: Water
Date Received: 07/19/24 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	2481	CL	EET SSM	07/30/24 16:37

Client Sample ID: WP-588-340-355-2 FB
Lab Sample ID: 500-253745-8
Date Collected: 07/17/24 00:00
Matrix: Water
Date Received: 07/19/24 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	2481	CL	EET SSM	07/30/24 16:41

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-253745-1
Project/Site: FOTH - White Pines, MI

Laboratory: Eurofins Chicago

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Georgia	State	N/A	05-31-25
Georgia (DW)	State	939	05-31-25
Hawaii	State	NA	05-31-25
Illinois	NELAP	IL00035	05-31-25
Indiana	State	C-IL-02	05-31-25
Iowa	State	082	05-01-26
Kansas	NELAP	E-10161	10-31-24
Kentucky (UST)	State	AI # 108083	05-31-25
Kentucky (WW)	State	KY90023	12-31-24
Louisiana (All)	NELAP	02046	06-30-25
Mississippi	State	NA	05-31-25
North Carolina (WW/SW)	State	291	12-31-24
North Dakota	State	R-194	04-29-24 *
Oklahoma	State	8908	08-31-24
South Carolina	State	77001003	04-29-24 *
USDA	US Federal Programs	P330-18-00018	03-30-26
Wisconsin	State	999580010	08-31-24
Wyoming	State	8TMS-Q	05-31-25

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	12-18-24
ANAB	Dept. of Defense ELAP	L2236	08-07-24
ANAB	Dept. of Energy	L2236.01	12-18-24
ANAB	ISO/IEC 17025	L2236	08-07-24
California	State	2954	12-18-24
Florida	NELAP	E87575	12-18-24
Louisiana (All)	NELAP	03073	12-18-24
Maine	State	WA01273	12-18-24
New Jersey	NELAP	WA014	12-18-24
New York	NELAP	11662	12-18-24
Oregon	NELAP	4167-008	07-07-25
US Fish & Wildlife	US Federal Programs	A20571	06-30-25
USDA	US Federal Programs	525-23-4-22573	12-18-24
Washington	State	C788-23a	12-18-24
Wisconsin	State	399133460	12-18-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

2417 Bond Street
University Park, IL 60484
Phone (708) 534-5200 Phone (708) 534-5211

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Justin Brown	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-126105-50170 1
Client Contact: Jakob Wartman	Phone:	E-Mail: Sandra Fredrick@et eurofinsus com	State of Origin: Michigan	Page: Page 1 of 1
Company: Foth Infrastructure & Environment, LLC	PWSID:			Job #: 500-253745
Address: Missabe Building 227 West 1st Street, Suite 920	Due Date Requested:			
City: Duluth	TAT Requested (days): Standard			
State, Zip: MN, 55802	Compliance Project: Δ Yes Δ No			
Phone: 218-481-6014(Tel)	PO #: Purchase Order not required			
Email: Jakob Wartman@foth com	WO #:			
Project Name: FOTH - White Pines, MI	Project #: 50023463			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
N - None
S - H2SO4
CB - ZnAceta
B - NaOH
D HNO3

500-253745 COC

Other

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1631E - Mercury, Low Level (CVAFS)	1631E - Dissolved Mercury, Low Level (FF)	2320B, 2540C, 2540D, 300.0_28D, 300_48HR, SM2520_B	350.1 Ammonia, 365.1 Phosphorus	SM4500_S2_F - Sulfide	335.4 - Cyanide, Total	SM5310_DOC_C - DOC	6020B - Total Metals (27), SM2340B - Hardness	6020B - Dissolved Metals (ICP/MS) - 27 elements	[redacted]	[redacted]	1638 - Uranium only (ICP/MS) Total & Dissolved	163 - Methyl Hg - Total & Dissolved	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	S	CB	B	S	D	D	N	N	D	D		
1 WP-588-150-165-1	7/16/2024	1910	C	Water			X	X	X	X	X	X	X	X	X	X	X	X	X	2y	
2 WP-588-150-165-2	7/16/2024	2012	C	Water			X	X	X	X	X	X	X	X	X	X	X	X	X	2y	
3 WP-588-340-355-1	7/17/2024	1500	C	Water			X	X	X	X	X	X	X	X	X			X	X	2	
4 WP-588-340-355-2	7/17/2024	1400	C	Water			X	X	X	X	X	X	X	X	X			X	X	2	
5 WP-588-150-165-1 FB				Water																	
6 WP-588-150-165-2 FB				Water																	
7 WP-588-340-355-1 FB				Water																	
8 WP-588-340-355-2 FB				Water																	
				Water																	
				Water																	
				Water																	

added by EETA 7/19/24 SH

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I, II, III, IV, Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company
Justin Brown	7/18/2024	Foth	Stephanie Hernandez	7/19/24 1000	EETA
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 5.0+4.9, 1.6+1.5, 4.4+4.3, 3.2+3.1


IN BROWN
E PINE COPPER
03 MALL CIRCLE
E PINE, MI 49971
TED STATES US
ACTWGT: 25.00 LB MAN
CAD: 0780307/CAFE3808
SAMPLE RECEIPT
EUROFINS CHICAGO
2417 BOND ST.
UNIVERSITY PARK IL 60484
(708) 534-5200
REF:
INV:
PO:
DEPT:
RMA:
FedEx
Express
TRK# 0221 7414 0291 7334
FRI - 19 JUL AA
PRIORITY OVERNIGHT
XP JOTA
60484
IL-US
ORD
5025547 18Jul2024 CMXA 581G9/E0E4/C0B8


500-253745 Waybi
JUSTIN BROWN
WHITE PINE COPPER
35503 MALL CIRCLE
WHITE PINE, MI 49971
UNITED STATES US
ACTWGT: 25.00 LB MAN
CAD: 0780307/CAFE3808
TO SAMPLE RECEIPT
EUROFINS CHICAGO
2417 BOND ST.
UNIVERSITY PARK IL 60484
(708) 534-5200
INV:
PO:
REF:
DEPT:
RMA:
FedEx
Express
TRK# 0221 7414 0291 7312
FRI - 19 JUL AA
PRIORITY OVERNIGHT
XP JOTA
60484
IL-US
ORD
5025547 18Jul2024 CMXA 581G9/E0E4/C0B8

JUSTIN BROWN
WHITE PINE COPPER
35503 MALL CIRCLE

WHITE PINE, MI 49971
UNITED STATES US

ACTWGT: 25.00 LB MAN
CAD: 0780307/CAFE3808

Part # 159469-494 MTN EXP 01/25

TO **SAMPLE RECEIPT**
EUROFINS CHICAGO
2417 BOND ST.

UNIVERSITY PARK IL 60484

(708) 534-6200 REF:
INV:
PO: DEPT:

RMA:

FedEx Express

J241023117220 1uv

FedEx TRK# 0221 7414 0291 7286

FRI - 19 JUL AA
PRIORITY OVERNIGHT

XP JOTA

60484
IL-US
ORD

5025547 18Jul2024 CMXA 581G9/E0E4/C0B8

WHITE PINE COPPER
35362 MALL CIRCLE DRIVE

WHITE PINE, MI 49971
UNITED STATES US

CAD: 0780307/CAFE3808

Part # 159469-494 MTN EXP 01/25

TO **SAMPLE RECEIPT**
EUROFINS CHICAGO
2417 BOND ST.

UNIVERSITY PARK IL 60484

(708) 534-6200 REF:
INV:
PO: DEPT:

RMA

FedEx Express

J241023117220 1uv

FedEx TRK# 0221 7414 0291 7080

FRI - 19 JUL AA
PRIORITY OVERNIGHT

XP JOTA

60484
IL-US
ORD

5025547 18Jul2024 CMXA 581G9/E0E4/C0B8

Eurofins Chicago
2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler	Lab PM: Fredrick, Sandie	Carrier Tracking No(s)	COC No: 500-190741.1
Client Contact: Shipping/Receiving	Phone	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest,		Accreditations Required (See note)		Job #: 500-253745-1
Address: 5755 8th Street East, ,	Due Date Requested: 8/1/2024			Preservation Codes: -
City: Tacoma	TAT Requested (days):			
State, Zip: WA, 98424				
Phone: 206-622-6960(Tel)	PO #			
Email	WO #			Other:
Project Name: FOTH - White Pines, MI	Project #: 50023463			
Site	SSOW#			

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1638/1638_Prep_W Uranium only (ICP/MS)	1638/FIELD_FLTRD Dissolved Uranium only (ICP/MS) (f	1630_ME/FIELD_FLTRD Dissolved Methyl Mercury (field filtered	1630_ME/1630_Dist_PFP Methyl Mercury	1631E/ Mercury, Low Level (CVAFS)	1631E/FIELD_FLTRD Dissolved Mercury, Low Level (FF)	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
WP-588-150-165-1 (500-253745-1)	7/16/24	19:10 Eastern		Water			X	X	X	X	X	X	8	
WP-588-150-165-2 (500-253745-2)	7/16/24	20:12 Eastern		Water			X	X	X	X	X	X	8	
WP-588-340-355-1 (500-253745-3)	7/17/24	15:00 Eastern		Water			X	X	X	X	X	X	8	
WP-588-340-355-2 (500-253745-4)	7/17/24	19:00 Eastern		Water			X	X	X	X	X	X	8	
WP-588-150-165-1 FB (500-253745-5)	7/16/24	Eastern		Water							X		4	
WP-588-150-165-2 FB (500-253745-6)	7/16/24	Eastern		Water							X		4	
WP-588-340-355-1 FB (500-253745-7)	7/17/24	Eastern		Water							X		4	
WP-588-340-355-2 FB (500-253745-8)	7/17/24	Eastern		Water							X		4	
														Lg Blue

Note: Since laboratory accreditations are subject to change, Eurofins Chicago places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Chicago laboratory or other instructions will be provided. Any changes to accr immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Chicago.

Therm. ID: SC02 Cust. Seal: Y / N
Uncorr./Corr. Temp: 1.0 / 1.0 °C
Delivery: UPS / FedEx / Other: ____
Ice Type: Blue / Dry / Wet / None
Label Ver.: V Packing: D

Possible Hazard Identification	Sample Disposal (A fee may be assessed if sam
Unconfirmed 7051 7620 9085	☐ Return To Client ☐ Disposal By Lab
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Alan Scott	7/22/24 0915			7/23/24 9:35	ESS
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks

Ver: 04/02/2024

Login Sample Receipt Checklist

Client: Foth Infrastructure & Environment, LLC

Job Number: 500-253745-1

Login Number: 253745
List Number: 1
Creator: Hernandez, Stephanie

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.9,1.5,4.3,3.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	False	Refer to Job Narrative for details.
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Foth Infrastructure & Environment, LLC

Job Number: 500-253745-1

Login Number: 253745
List Number: 2
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 07/23/24 01:21 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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500-253745 Field Sheet

Date:	7/23/2024
End Time:	14:06
KI Paper Lot:	na
Analyst:	

Preservative ID	Preservative Type	Container ID
A	Bromine Monochloride (0.2N)	19628
zzzzzzzzzzzzzzzz	zzzzzzzzzzzzzzzzzzzzzzzz	zzzzzzzzzz
zzzzzzzzzzzzzzzz	zzzzzzzzzzzzzzzzzzzzzzzz	zzzzzzzzzz
zzzzzzzzzzzzzzzz	zzzzzzzzzzzzzzzzzzzzzzzz	zzzzzzzzzz

Sample ID	Pres. Used (ID)	Oxidized (Y/N)?	Pres. Vol. (mL)/Percent (%)		Comments
500-253745-A-1	A	Y	.8	2	
500-253745-B-1	A	Y	.8	2	
500-253745-C-1	A	Y	.8	2	
500-253745-D-1	A	Y	.8	2	
500-253745-A-2	A	Y	.8	2	
500-253745-B-2	A	Y	.8	2	
500-253745-C-2	A	Y	.8	2	
500-253745-D-2	A	Y	.8	2	
500-253745-A-3	A	Y	.8	2	
500-253745-B-3	A	Y	.8	2	
500-253745-C-3	A	Y	.8	2	
500-253745-D-3	A	Y	.8	2	7/23/24
500-253745-A-4	A	Y	.8	2	
500-253745-B-4	A	Y	.8	2	
500-253745-C-4	A	Y	.8	2	
500-253745-D-4	A	Y	.8	2	
500-253745-A-5	A	Y	.8	2	
500-253745-B-5	A	Y	.8	2	
500-253745-C-5	A	Y	.8	2	
500-253745-D-5	A	Y	.8	2	
500-253745-A-6	A	Y	.8	2	
500-253745-B-6	A	Y	.8	2	
500-253745-C-6	A	Y	.8	2	
500-253745-D-6	A	Y	.8	2	
500-253745-A-7	A	Y	.8	2	
500-253745-B-7	A	Y	.8	2	
500-253745-C-7	A	Y	.8	2	
500-253745-D-7	A	Y	.8	2	
500-253745-A-8	A	Y	.8	2	
500-253745-B-8	A	Y	.8	2	
500-253745-C-8	A	Y	.8	2	
500-253745-D-8	A	Y	.8	2	

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500-253745 Field Sheet

Date:	7/23/2024
End Time:	14:40
pH Paper Lot:	HC324723
Analyst:	

Preservative ID	Preservative Type	Container ID
A	Hydrochloric Acid	na
A	Nitric Acid	na
ZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ
ZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ

Sample ID	Initial pH	Final pH	Preservative ID	Preservative Added (mL)	Comments
500-253745-L-1	<2				
500-253745-M-4	<2				
500-253745-M-1	<2				
500-253745-L-2	<2				
500-253745-L-4	<2				
500-253745-M-3	<2				
500-253745-M-2	<2				
500-253745-L-3	<2				
500-253745-F-1	<2				
500-253745-F-4	<2				
500-253745-E-2	<2				
500-253745-E-3	<2				
500-253745-E-1	<2				
500-253745-F-2	<2				
500-253745-F-3	<2				
500-253745-E-4	<2				

7/23/24

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ANALYTICAL REPORT

PREPARED FOR

Attn: Jakob Wartman
Foth Infrastructure & Environment, LLC
Missabe Building
227 West 1st. Street, Suite 920
Duluth, Minnesota 55802

Generated 9/13/2024 8:29:03 AM

JOB DESCRIPTION

FOTH - White Pines, MI

JOB NUMBER

500-255332-1

Eurofins Chicago
2417 Bond Street
University Park IL 60484

See page two for job notes and contact information.

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

Results relate only to the items tested and the sample(s) as received by the laboratory. The results, detection limits (LOD) and Quantitation Limits (LOQ) have been adjusted for sample dilutions and/or solids content.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Chicago Project Manager.

Compliance Statement

The LOD and LOQ reported are adjusted by the dilution factor when a dilution factor greater than 1 is needed. Additionally, where results are indicated as being reported on a dry weight basis, the LOD and LOQ are adjusted for moisture content as well.

Definitions of Limits
- LOD = Limit of Detection = MDL as defined by 40 CFR part 136 Appendix B
- LOQ = Limit of Quantitation = 3.33 x LOD as defined by Wisconsin
- RL = Report Limit = a concentration supported by a standard in the calibration curves

Authorization



Generated
9/13/2024 8:29:03 AM

Authorized for release by
Sandie Fredrick, Senior Project Manager
Sandra.Fredrick@et.eurofinsus.com
(920)261-1660

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Job ID: 500-255332-1 Eurofins Chicago

Job Narrative
500-255332-1

Receipt
The samples were received on 8/20/2024 9:35 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.2º C and 2.7º C.

Receipt Exceptions
The following sample(s) was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): Received Field Blanks for both samples. Added to COC and logged.

The following sample(s) was received outside of holding time: Samples #1 and #3 for IC N2 and N3.

Metals
Method 6020B: The following samples were diluted to bring the concentration of target analytes within the calibration range: WP-594-329-379-1 (500-255332-1) and WP-594-329-379-2 (500-255332-3). Elevated reporting limits (RLs) are provided.

Methods 1638, 200.8 LL: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for the following sample associated with preparation batch 350-2601 and analytical batch 350-2639 were outside control limits: (580-143051-E-3-B MS) and (580-143051-E-3-C MSD). The associated laboratory control sample (LCS) recovery met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
Method 300.0: The following samples were received outside of holding time: WP-594-329-379-1 (500-255332-1) and WP-594-329-379-2 (500-255332-3).

Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 500-782361 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 500-782360 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method SM 2320B: The method blank for analytical batch 500-783207 contained Alkalinity above the reporting limit (RL). Associated sample(s) were not re-analyzed because results were greater than 10X the value found in the method blank.

Method SM 2320B: The method blank for analytical batch 500-783995 contained Alkalinity and Bicarbonate Alkalinity as CaCO3 above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Methods 350.1, SM 4500 NH3 G: Associated Laboratory Control Sample failed slightly low at 84% Recovery (acceptance criteria is 86-113%). Sample was re-prepped and reanalyzed with confirming results. Initial result has been reported as Primary. WP-594-329-379-1 (500-255332-1) and WP-594-329-379-2 (500-255332-3)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255332-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-594-329-379-1
Lab Sample ID: 500-255332-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.58		0.50	0.20	ng/L	1		1631E	Total/NA
Uranium	0.15	B	0.030	0.0098	ug/L	1		1638	Total Recoverable
Uranium	0.11	B	0.030	0.0098	ug/L	1		1638	Dissolved
Aluminum	580		100	25	ug/L	1		6020B	Total Recoverable
Arsenic	0.51	J	1.0	0.23	ug/L	1		6020B	Total Recoverable
Barium	1900		2.5	0.73	ug/L	1		6020B	Total Recoverable
Boron	330		50	13	ug/L	1		6020B	Total Recoverable
Calcium	1100000		200	44	ug/L	1		6020B	Total Recoverable
Chromium	12		5.0	1.1	ug/L	1		6020B	Total Recoverable
Cobalt	0.73	J	1.0	0.40	ug/L	1		6020B	Total Recoverable
Copper	31		2.0	0.50	ug/L	1		6020B	Total Recoverable
Iron	4600		100	47	ug/L	1		6020B	Total Recoverable
Lead	0.61		0.50	0.19	ug/L	1		6020B	Total Recoverable
Lithium	180		10	2.5	ug/L	1		6020B	Total Recoverable
Magnesium	16000		200	49	ug/L	1		6020B	Total Recoverable
Manganese	1200		2.5	0.79	ug/L	1		6020B	Total Recoverable
Molybdenum	29		5.0	2.5	ug/L	1		6020B	Total Recoverable
Nickel	4.2		2.0	0.63	ug/L	1		6020B	Total Recoverable
Potassium	14000		500	110	ug/L	1		6020B	Total Recoverable
Silver	0.15	J	0.50	0.12	ug/L	1		6020B	Total Recoverable
Sodium	950000		2000	770	ug/L	10		6020B	Total Recoverable
Strontium	21000		40	6.4	ug/L	10		6020B	Total Recoverable
Tin	1.9	J B	5.0	1.3	ug/L	1		6020B	Total Recoverable
Zinc	3100		20	6.9	ug/L	1		6020B	Total Recoverable
Arsenic	0.27	J	1.0	0.23	ug/L	1		6020B	Dissolved
Barium	1900		2.5	0.73	ug/L	1		6020B	Dissolved
Boron	300		50	13	ug/L	1		6020B	Dissolved
Calcium	1100000		200	44	ug/L	1		6020B	Dissolved
Copper	4.6		2.0	0.50	ug/L	1		6020B	Dissolved
Lithium	170		10	2.5	ug/L	1		6020B	Dissolved
Magnesium	16000		200	49	ug/L	1		6020B	Dissolved
Manganese	1100		2.5	0.79	ug/L	1		6020B	Dissolved
Molybdenum	28		5.0	2.5	ug/L	1		6020B	Dissolved
Nickel	0.73	J	2.0	0.63	ug/L	1		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: WP-594-329-379-1 (Continued) — Lab Sample ID: 500-255332-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	14000		500	110	ug/L	1		6020B	Dissolved
Sodium	950000		2000	770	ug/L	10		6020B	Dissolved
Strontium	21000		40	6.4	ug/L	10		6020B	Dissolved
Tin	1.9	J B	5.0	1.3	ug/L	1		6020B	Dissolved
Zinc	1100		20	6.9	ug/L	1		6020B	Dissolved
Hardness as calcium carbonate	2800		0.91	0.46	mg/L	1		SM 2340B	Total Recoverable
Bromide	53		5.0	0.90	mg/L	5		300.0	Total/NA
Chloride	3500		200	23	mg/L	200		300.0	Total/NA
Fluoride	1.9		1.0	0.19	mg/L	1		300.0	Total/NA
Sulfate	5.3		1.0	0.21	mg/L	1		300.0	Total/NA
Ammonia	0.82	*-	0.20	0.10	mg/L	1		350.1	Total/NA
Alkalinity	26	B	5.0	3.7	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	26	B	5.0	3.7	mg/L	1		SM 2320B	Total/NA
Salinity	7.9		0.33	0.33	psu	1		SM 2520B	Total/NA
Total Dissolved Solids	6600		50	22	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	37		8.3	3.2	mg/L	1		SM 2540D	Total/NA
Total Organic Carbon	1.7		1.0	0.47	mg/L	1		SM 5310C	Total/NA
Dissolved Organic Carbon	1.7		1.0	0.47	mg/L	1		SM 5310C	Dissolved

Client Sample ID: WP-594-329-379-1 FB — Lab Sample ID: 500-255332-2

No Detections.

Client Sample ID: WP-594-329-379-2 — Lab Sample ID: 500-255332-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.34	J	0.50	0.20	ng/L	1		1631E	Total/NA
Mercury	0.28	J	0.50	0.20	ng/L	1		1631E	Dissolved
Uranium	0.17	B	0.030	0.0098	ug/L	1		1638	Total Recoverable
Uranium	0.18	B	0.030	0.0098	ug/L	1		1638	Dissolved
Aluminum	65	J	100	25	ug/L	1		6020B	Total Recoverable
Arsenic	0.42	J	1.0	0.23	ug/L	1		6020B	Total Recoverable
Barium	3400		2.5	0.73	ug/L	1		6020B	Total Recoverable
Boron	300		50	13	ug/L	1		6020B	Total Recoverable
Calcium	2000000		200	44	ug/L	1		6020B	Total Recoverable
Chromium	2.7	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Copper	12		2.0	0.50	ug/L	1		6020B	Total Recoverable
Iron	1200		100	47	ug/L	1		6020B	Total Recoverable
Lithium	230		10	2.5	ug/L	1		6020B	Total Recoverable
Magnesium	31000		200	49	ug/L	1		6020B	Total Recoverable
Manganese	2200		2.5	0.79	ug/L	1		6020B	Total Recoverable
Molybdenum	37		5.0	2.5	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: WP-594-329-379-2 (Continued)

Lab Sample ID: 500-255332-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	1.5	J	2.0	0.63	ug/L	1		6020B	Total Recoverable
Potassium	19000		500	110	ug/L	1		6020B	Total Recoverable
Sodium	1300000		2000	770	ug/L	10		6020B	Total Recoverable
Strontium	38000		40	6.4	ug/L	10		6020B	Total Recoverable
Tin	2.3	J B	5.0	1.3	ug/L	1		6020B	Total Recoverable
Zinc	1300		20	6.9	ug/L	1		6020B	Total Recoverable
Arsenic	0.39	J	1.0	0.23	ug/L	1		6020B	Dissolved
Barium	3500		2.5	0.73	ug/L	1		6020B	Dissolved
Boron	280		50	13	ug/L	1		6020B	Dissolved
Calcium	2000000		200	44	ug/L	1		6020B	Dissolved
Copper	1.7	J	2.0	0.50	ug/L	1		6020B	Dissolved
Iron	600		100	47	ug/L	1		6020B	Dissolved
Lithium	220		10	2.5	ug/L	1		6020B	Dissolved
Magnesium	30000		200	49	ug/L	1		6020B	Dissolved
Manganese	2200		2.5	0.79	ug/L	1		6020B	Dissolved
Molybdenum	38		5.0	2.5	ug/L	1		6020B	Dissolved
Nickel	1.0	J	2.0	0.63	ug/L	1		6020B	Dissolved
Potassium	19000		500	110	ug/L	1		6020B	Dissolved
Sodium	1300000		2000	770	ug/L	10		6020B	Dissolved
Strontium	39000		40	6.4	ug/L	10		6020B	Dissolved
Tin	2.0	J B	5.0	1.3	ug/L	1		6020B	Dissolved
Zinc	1000		20	6.9	ug/L	1		6020B	Dissolved
Hardness as calcium carbonate	5100		0.91	0.46	mg/L	1		SM 2340B	Total Recoverable
Bromide	76		5.0	0.90	mg/L	5		300.0	Total/NA
Chloride	5300		200	23	mg/L	200		300.0	Total/NA
Fluoride	2.6		1.0	0.19	mg/L	1		300.0	Total/NA
Sulfate	4.2	F1	1.0	0.21	mg/L	1		300.0	Total/NA
Ammonia	1.7	*-	0.20	0.10	mg/L	1		350.1	Total/NA
Alkalinity	22	B	5.0	3.7	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	22	B	5.0	3.7	mg/L	1		SM 2320B	Total/NA
Salinity	12		0.33	0.33	psu	1		SM 2520B	Total/NA
Total Dissolved Solids	10000		100	43	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	9.2		5.0	1.9	mg/L	1		SM 2540D	Total/NA
Total Organic Carbon	1.6		1.0	0.47	mg/L	1		SM 5310C	Total/NA
Dissolved Organic Carbon	1.7		1.0	0.47	mg/L	1		SM 5310C	Dissolved

Client Sample ID: WP-594-329-379-2 FB

Lab Sample ID: 500-255332-4

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-255332-1

Method	Method Description	Protocol	Laboratory
1630	Methyl Mercury	EPA	EET SSM
1631E	Mercury, Low Level (CVAFS)	EPA	EET SSM
1638	Metals (ICP/MS)	EPA	EET SSM
6020B	Metals (ICP/MS)	SW846	EET CHI
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	EET CHI
300.0	Anions, Ion Chromatography	EPA	EET CHI
335.4	Cyanide, Total	EPA	EET CHI
350.1	Nitrogen, Ammonia	EPA	EET CHI
365.1	Phosphorus, Total	EPA	EET CHI
SM 2320B	Alkalinity	SM	EET CHI
SM 2520B	Salinity	SM	EET CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CHI
SM 2540D	Solids, Total Suspended (TSS)	SM	EET CHI
SM 4500 S2 F	Sulfide, Total	SM	EET CHI
SM 5310C	Organic Carbon, Dissolved (DOC)	SM	EET CHI
SM 5310C	TOC	SM	EET CHI
1630	Distillation, Methyl Mercury	EPA	EET SSM
1638	Preparation, Total Recoverable Metals	EPA	EET SSM
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CHI
365.2/365.3/365	Phosphorus, Total	EPA	EET CHI
Distill/Ammonia	Distillation, Ammonia	None	EET CHI
Distill/CN	Distillation, Cyanide	None	EET CHI

Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-255332-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-255332-1	WP-594-329-379-1	Water	08/16/24 17:34	08/20/24 09:35
500-255332-2	WP-594-329-379-1 FB	Water	08/16/24 17:34	08/20/24 09:35
500-255332-3	WP-594-329-379-2	Water	08/16/24 20:51	08/20/24 09:35
500-255332-4	WP-594-329-379-2 FB	Water	08/16/24 20:51	08/20/24 09:35

Client Sample ID: WP-594-329-379-1
Lab Sample ID: 500-255332-1

Date Collected: 08/16/24 17:34
Matrix: Water
Date Received: 08/20/24 09:35

Method: EPA 1630 - Methyl Mercury

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		08/27/24 11:18	08/28/24 02:09	1

Method: EPA 1630 - Methyl Mercury - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		08/27/24 11:18	08/28/24 02:20	1

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.58**		0.50	0.20	ng/L			08/23/24 16:51	1

Method: EPA 1631E - Mercury, Low Level (CVAFS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			08/23/24 17:04	1

Method: EPA 1638 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.15**	**B**	0.030	0.0098	ug/L		08/21/24 15:44	08/23/24 20:07	1

Method: EPA 1638 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.11**	**B**	0.030	0.0098	ug/L		08/21/24 15:44	08/23/24 20:00	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**580**		100	25	ug/L		08/21/24 09:01	08/26/24 13:34	1
Antimony	<1.3		3.0	1.3	ug/L		08/21/24 09:01	08/26/24 13:34	1
Arsenic	**0.51**	**J**	1.0	0.23	ug/L		08/21/24 09:01	08/26/24 13:34	1
Barium	**1900**		2.5	0.73	ug/L		08/21/24 09:01	08/26/24 13:34	1
Beryllium	<0.53		1.0	0.53	ug/L		08/21/24 09:01	08/27/24 14:51	1
Boron	**330**		50	13	ug/L		08/21/24 09:01	08/29/24 15:55	1
Cadmium	<0.17		0.50	0.17	ug/L		08/21/24 09:01	08/26/24 13:34	1
Calcium	**1100000**		200	44	ug/L		08/21/24 09:01	08/26/24 13:34	1
Chromium	**12**		5.0	1.1	ug/L		08/21/24 09:01	08/27/24 14:51	1
Cobalt	**0.73**	**J**	1.0	0.40	ug/L		08/21/24 09:01	08/27/24 14:51	1
Copper	**31**		2.0	0.50	ug/L		08/21/24 09:01	08/27/24 14:51	1
Iron	**4600**		100	47	ug/L		08/21/24 09:01	08/27/24 14:51	1
Lead	**0.61**		0.50	0.19	ug/L		08/21/24 09:01	08/26/24 13:34	1
Lithium	**180**		10	2.5	ug/L		08/21/24 09:01	08/27/24 14:51	1
Magnesium	**16000**		200	49	ug/L		08/21/24 09:01	08/27/24 14:51	1
Manganese	**1200**		2.5	0.79	ug/L		08/21/24 09:01	08/26/24 13:34	1
Molybdenum	**29**		5.0	2.5	ug/L		08/21/24 09:01	08/26/24 13:34	1
Nickel	**4.2**		2.0	0.63	ug/L		08/21/24 09:01	08/26/24 13:34	1
Potassium	**14000**		500	110	ug/L		08/21/24 09:01	08/26/24 13:34	1
Selenium	<0.98		2.5	0.98	ug/L		08/21/24 09:01	08/26/24 13:34	1
Silver	**0.15**	**J**	0.50	0.12	ug/L		08/21/24 09:01	08/26/24 13:34	1
Sodium	**950000**		2000	770	ug/L		08/21/24 09:01	08/27/24 15:03	10
Strontium	**21000**		40	6.4	ug/L		08/21/24 09:01	08/27/24 15:03	10
Thallium	<0.57		2.0	0.57	ug/L		08/21/24 09:01	08/27/24 14:51	1
Tin	**1.9**	**J B**	5.0	1.3	ug/L		08/21/24 09:01	08/26/24 13:34	1
Vanadium	<2.2		5.0	2.2	ug/L		08/21/24 09:01	08/27/24 14:51	1
Zinc	**3100**		20	6.9	ug/L		08/21/24 09:01	08/26/24 13:34	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-255332-1

Client Sample ID: WP-594-329-379-1

Date Collected: 08/16/24 17:34
Date Received: 08/20/24 09:35

Lab Sample ID: 500-255332-1

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		08/21/24 09:01	08/27/24 14:56	1
Antimony	<1.3		3.0	1.3	ug/L		08/21/24 09:01	08/26/24 13:43	1
Arsenic	**0.27**	**J**	1.0	0.23	ug/L		08/21/24 09:01	08/26/24 13:43	1
Barium	**1900**		2.5	0.73	ug/L		08/21/24 09:01	08/26/24 13:43	1
Beryllium	<0.53		1.0	0.53	ug/L		08/21/24 09:01	08/27/24 14:56	1
Boron	**300**		50	13	ug/L		08/21/24 09:01	08/29/24 16:04	1
Cadmium	<0.17		0.50	0.17	ug/L		08/21/24 09:01	08/26/24 13:43	1
Calcium	**1100000**		200	44	ug/L		08/21/24 09:01	08/26/24 13:43	1
Chromium	<1.1		5.0	1.1	ug/L		08/21/24 09:01	08/27/24 14:56	1
Cobalt	<0.40		1.0	0.40	ug/L		08/21/24 09:01	08/27/24 14:56	1
Copper	**4.6**		2.0	0.50	ug/L		08/21/24 09:01	08/27/24 14:56	1
Iron	<47		100	47	ug/L		08/21/24 09:01	08/27/24 14:56	1
Lead	<0.19		0.50	0.19	ug/L		08/21/24 09:01	08/27/24 14:56	1
Lithium	**170**		10	2.5	ug/L		08/21/24 09:01	08/27/24 14:56	1
Magnesium	**16000**		200	49	ug/L		08/21/24 09:01	08/27/24 14:56	1
Manganese	**1100**		2.5	0.79	ug/L		08/21/24 09:01	08/26/24 13:43	1
Molybdenum	**28**		5.0	2.5	ug/L		08/21/24 09:01	08/26/24 13:43	1
Nickel	**0.73**	**J**	2.0	0.63	ug/L		08/21/24 09:01	08/26/24 13:43	1
Potassium	**14000**		500	110	ug/L		08/21/24 09:01	08/26/24 13:43	1
Selenium	<0.98		2.5	0.98	ug/L		08/21/24 09:01	08/26/24 13:43	1
Silver	<0.12		0.50	0.12	ug/L		08/21/24 09:01	08/26/24 13:43	1
Sodium	**950000**		2000	770	ug/L		08/21/24 09:01	08/27/24 15:38	10
Strontium	**21000**		40	6.4	ug/L		08/21/24 09:01	08/27/24 15:38	10
Thallium	<0.57		2.0	0.57	ug/L		08/21/24 09:01	08/27/24 14:56	1
Tin	**1.9**	**J B**	5.0	1.3	ug/L		08/21/24 09:01	08/26/24 13:43	1
Vanadium	<2.2		5.0	2.2	ug/L		08/21/24 09:01	08/27/24 14:56	1
Zinc	**1100**		20	6.9	ug/L		08/21/24 09:01	08/27/24 14:56	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**2800**		0.91	0.46	mg/L		08/21/24 09:01	08/26/24 15:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**53**		5.0	0.90	mg/L			08/25/24 03:18	5
Nitrate as N (EPA 300.0)	<0.043	H	1.0	0.043	mg/L			08/20/24 11:40	1
Chloride (EPA 300.0)	**3500**		200	23	mg/L			08/25/24 03:34	200
Nitrite as N (EPA 300.0)	<0.070	H	1.0	0.070	mg/L			08/20/24 11:40	1
Fluoride (EPA 300.0)	**1.9**		1.0	0.19	mg/L			08/20/24 11:40	1
Nitrate Nitrite as N (EPA 300.0)	<0.070	H	1.0	0.070	mg/L			08/20/24 11:40	1
Sulfate (EPA 300.0)	**5.3**		1.0	0.21	mg/L			08/20/24 11:40	1
Cyanide, Total (EPA 335.4)	<0.0036		0.0050	0.0036	mg/L		08/22/24 12:13	08/23/24 11:28	1
Ammonia (EPA 350.1)	**0.82**	***-**	0.20	0.10	mg/L		09/04/24 15:15	09/06/24 10:31	1
Phosphorus as P (EPA 365.1)	<0.024		0.050	0.024	mg/L		08/22/24 14:15	08/23/24 12:14	1
Alkalinity (SM 2320B)	**26**	**B**	5.0	3.7	mg/L			08/29/24 12:46	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**26**	**B**	5.0	3.7	mg/L			08/29/24 12:46	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<3.7		5.0	3.7	mg/L			08/29/24 12:46	1
Salinity (SM 2520B)	**7.9**		0.33	0.33	psu			09/08/24 13:34	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255332-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-594-329-379-1
Lab Sample ID: 500-255332-1
Date Collected: 08/16/24 17:34
Matrix: Water
Date Received: 08/20/24 09:35

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	6600		50	22	mg/L			08/21/24 02:02	1
Total Suspended Solids (SM 2540D)	37		8.3	3.2	mg/L			08/23/24 14:08	1
Sulfide (SM 4500 S2 F)	<0.23		1.0	0.23	mg/L			08/20/24 22:45	1
Total Organic Carbon (SM 5310C)	1.7		1.0	0.47	mg/L			08/26/24 14:09	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon (SM 5310C)	1.7		1.0	0.47	mg/L			08/27/24 07:40	1

Client Sample Results

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255332-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-594-329-379-1 FB
Lab Sample ID: 500-255332-2
Date Collected: 08/16/24 17:34
Matrix: Water
Date Received: 08/20/24 09:35

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			08/23/24 17:08	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255332-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-594-329-379-2
Lab Sample ID: 500-255332-3
Date Collected: 08/16/24 20:51
Matrix: Water
Date Received: 08/20/24 09:35

Method: EPA 1630 - Methyl Mercury

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		08/27/24 11:18	08/28/24 02:31	1

Method: EPA 1630 - Methyl Mercury - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		08/27/24 11:18	08/28/24 02:43	1

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.34**	**J**	0.50	0.20	ng/L			08/23/24 17:12	1

Method: EPA 1631E - Mercury, Low Level (CVAFS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.28**	**J**	0.50	0.20	ng/L			08/23/24 17:16	1

Method: EPA 1638 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.17**	**B**	0.030	0.0098	ug/L		08/21/24 15:44	08/23/24 20:11	1

Method: EPA 1638 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.18**	**B**	0.030	0.0098	ug/L		08/21/24 15:44	08/23/24 20:03	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**65**	**J**	100	25	ug/L		08/21/24 09:01	08/26/24 13:36	1
Antimony	<1.3		3.0	1.3	ug/L		08/21/24 09:01	08/26/24 13:36	1
Arsenic	**0.42**	**J**	1.0	0.23	ug/L		08/21/24 09:01	08/26/24 13:36	1
Barium	**3400**		2.5	0.73	ug/L		08/21/24 09:01	08/26/24 13:36	1
Beryllium	<0.53		1.0	0.53	ug/L		08/21/24 09:01	08/27/24 14:54	1
Boron	**300**		50	13	ug/L		08/21/24 09:01	08/29/24 15:57	1
Cadmium	<0.17		0.50	0.17	ug/L		08/21/24 09:01	08/26/24 13:36	1
Calcium	**2000000**		200	44	ug/L		08/21/24 09:01	08/26/24 13:36	1
Chromium	**2.7**	**J**	5.0	1.1	ug/L		08/21/24 09:01	08/27/24 14:54	1
Cobalt	<0.40		1.0	0.40	ug/L		08/21/24 09:01	08/27/24 14:54	1
Copper	**12**		2.0	0.50	ug/L		08/21/24 09:01	08/27/24 14:54	1
Iron	**1200**		100	47	ug/L		08/21/24 09:01	08/27/24 14:54	1
Lead	<0.19		0.50	0.19	ug/L		08/21/24 09:01	08/26/24 13:36	1
Lithium	**230**		10	2.5	ug/L		08/21/24 09:01	08/27/24 14:54	1
Magnesium	**31000**		200	49	ug/L		08/21/24 09:01	08/27/24 14:54	1
Manganese	**2200**		2.5	0.79	ug/L		08/21/24 09:01	08/26/24 13:36	1
Molybdenum	**37**		5.0	2.5	ug/L		08/21/24 09:01	08/26/24 13:36	1
Nickel	**1.5**	**J**	2.0	0.63	ug/L		08/21/24 09:01	08/26/24 13:36	1
Potassium	**19000**		500	110	ug/L		08/21/24 09:01	08/26/24 13:36	1
Selenium	<0.98		2.5	0.98	ug/L		08/21/24 09:01	08/26/24 13:36	1
Silver	<0.12		0.50	0.12	ug/L		08/21/24 09:01	08/26/24 13:36	1
Sodium	**1300000**		2000	770	ug/L		08/21/24 09:01	08/27/24 15:35	10
Strontium	**38000**		40	6.4	ug/L		08/21/24 09:01	08/27/24 15:35	10
Thallium	<0.57		2.0	0.57	ug/L		08/21/24 09:01	08/27/24 14:54	1
Tin	**2.3**	**J B**	5.0	1.3	ug/L		08/21/24 09:01	08/26/24 13:36	1
Vanadium	<2.2		5.0	2.2	ug/L		08/21/24 09:01	08/27/24 14:54	1
Zinc	**1300**		20	6.9	ug/L		08/21/24 09:01	08/26/24 13:36	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255332-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-594-329-379-2
Lab Sample ID: 500-255332-3
Date Collected: 08/16/24 20:51
Matrix: Water
Date Received: 08/20/24 09:35

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		08/21/24 09:01	08/27/24 14:58	1
Antimony	<1.3		3.0	1.3	ug/L		08/21/24 09:01	08/26/24 13:45	1
Arsenic	**0.39**	**J**	1.0	0.23	ug/L		08/21/24 09:01	08/26/24 13:45	1
Barium	**3500**		2.5	0.73	ug/L		08/21/24 09:01	08/26/24 13:45	1
Beryllium	<0.53		1.0	0.53	ug/L		08/21/24 09:01	08/27/24 14:58	1
Boron	**280**		50	13	ug/L		08/21/24 09:01	08/29/24 16:06	1
Cadmium	<0.17		0.50	0.17	ug/L		08/21/24 09:01	08/26/24 13:45	1
Calcium	**2000000**		200	44	ug/L		08/21/24 09:01	08/26/24 13:45	1
Chromium	<1.1		5.0	1.1	ug/L		08/21/24 09:01	08/27/24 14:58	1
Cobalt	<0.40		1.0	0.40	ug/L		08/21/24 09:01	08/27/24 14:58	1
Copper	**1.7**	**J**	2.0	0.50	ug/L		08/21/24 09:01	08/27/24 14:58	1
Iron	**600**		100	47	ug/L		08/21/24 09:01	08/27/24 14:58	1
Lead	<0.19		0.50	0.19	ug/L		08/21/24 09:01	08/27/24 14:58	1
Lithium	**220**		10	2.5	ug/L		08/21/24 09:01	08/27/24 14:58	1
Magnesium	**30000**		200	49	ug/L		08/21/24 09:01	08/27/24 14:58	1
Manganese	**2200**		2.5	0.79	ug/L		08/21/24 09:01	08/26/24 13:45	1
Molybdenum	**38**		5.0	2.5	ug/L		08/21/24 09:01	08/26/24 13:45	1
Nickel	**1.0**	**J**	2.0	0.63	ug/L		08/21/24 09:01	08/26/24 13:45	1
Potassium	**19000**		500	110	ug/L		08/21/24 09:01	08/26/24 13:45	1
Selenium	<0.98		2.5	0.98	ug/L		08/21/24 09:01	08/26/24 13:45	1
Silver	<0.12		0.50	0.12	ug/L		08/21/24 09:01	08/26/24 13:45	1
Sodium	**1300000**		2000	770	ug/L		08/21/24 09:01	08/27/24 15:00	10
Strontium	**39000**		40	6.4	ug/L		08/21/24 09:01	08/27/24 15:00	10
Thallium	<0.57		2.0	0.57	ug/L		08/21/24 09:01	08/27/24 14:58	1
Tin	**2.0**	**J B**	5.0	1.3	ug/L		08/21/24 09:01	08/26/24 13:45	1
Vanadium	<2.2		5.0	2.2	ug/L		08/21/24 09:01	08/27/24 14:58	1
Zinc	**1000**		20	6.9	ug/L		08/21/24 09:01	08/27/24 14:58	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**5100**		0.91	0.46	mg/L		08/21/24 09:01	08/26/24 15:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**76**		5.0	0.90	mg/L			08/25/24 03:49	5
Nitrate as N (EPA 300.0)	<0.043	H F1	1.0	0.043	mg/L			08/20/24 11:55	1
Chloride (EPA 300.0)	**5300**		200	23	mg/L			08/25/24 04:04	200
Nitrite as N (EPA 300.0)	<0.070	H F1	1.0	0.070	mg/L			08/20/24 11:55	1
Fluoride (EPA 300.0)	**2.6**		1.0	0.19	mg/L			08/20/24 11:55	1
Nitrate Nitrite as N (EPA 300.0)	<0.070	H F1	1.0	0.070	mg/L			08/20/24 11:55	1
Sulfate (EPA 300.0)	**4.2**	**F1**	1.0	0.21	mg/L			08/20/24 11:55	1
Cyanide, Total (EPA 335.4)	<0.0036		0.0050	0.0036	mg/L		08/22/24 12:13	08/23/24 11:30	1
Ammonia (EPA 350.1)	**1.7**	***-**	0.20	0.10	mg/L		09/04/24 15:15	09/06/24 10:31	1
Phosphorus as P (EPA 365.1)	<0.024		0.050	0.024	mg/L		08/22/24 14:15	08/23/24 12:14	1
Alkalinity (SM 2320B)	**22**	**B**	5.0	3.7	mg/L			08/29/24 12:54	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**22**	**B**	5.0	3.7	mg/L			08/29/24 12:54	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<3.7		5.0	3.7	mg/L			08/29/24 12:54	1
Salinity (SM 2520B)	**12**		0.33	0.33	psu			09/08/24 13:34	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255332-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-594-329-379-2
Lab Sample ID: 500-255332-3
Date Collected: 08/16/24 20:51
Matrix: Water
Date Received: 08/20/24 09:35

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	10000		100	43	mg/L			08/21/24 02:05	1
Total Suspended Solids (SM 2540D)	9.2		5.0	1.9	mg/L			08/23/24 14:10	1
Sulfide (SM 4500 S2 F)	<0.23		1.0	0.23	mg/L			08/20/24 22:56	1
Total Organic Carbon (SM 5310C)	1.6		1.0	0.47	mg/L			08/26/24 14:37	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon (SM 5310C)	1.7		1.0	0.47	mg/L			08/27/24 07:40	1

Client Sample Results

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255332-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-594-329-379-2 FB
Lab Sample ID: 500-255332-4
Date Collected: 08/16/24 20:51
Matrix: Water
Date Received: 08/20/24 09:35

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			08/23/24 17:20	1

Definitions/Glossary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255332-1
Project/Site: FOTH - White Pines, MI

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Metals

Prep Batch: 2602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255332-1	WP-594-329-379-1	Dissolved	Water	1638	
500-255332-1	WP-594-329-379-1	Total Recoverable	Water	1638	
500-255332-3	WP-594-329-379-2	Dissolved	Water	1638	
500-255332-3	WP-594-329-379-2	Total Recoverable	Water	1638	
MB 350-2602/1-A	Method Blank	Total Recoverable	Water	1638	
LCS 350-2602/2-A	Lab Control Sample	Total Recoverable	Water	1638	
LCSD 350-2602/3-A	Lab Control Sample Dup	Total Recoverable	Water	1638	

Analysis Batch: 2621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255332-1	WP-594-329-379-1	Dissolved	Water	1631E	
500-255332-1	WP-594-329-379-1	Total/NA	Water	1631E	
500-255332-2	WP-594-329-379-1 FB	Total/NA	Water	1631E	
500-255332-3	WP-594-329-379-2	Dissolved	Water	1631E	
500-255332-3	WP-594-329-379-2	Total/NA	Water	1631E	
500-255332-4	WP-594-329-379-2 FB	Total/NA	Water	1631E	
MB 350-2621/29	Method Blank	Total/NA	Water	1631E	
MB 350-2621/30	Method Blank	Total/NA	Water	1631E	
MB 350-2621/31	Method Blank	Total/NA	Water	1631E	
LCS 350-2621/34	Lab Control Sample	Total/NA	Water	1631E	
LCSD 350-2621/35	Lab Control Sample Dup	Total/NA	Water	1631E	

Analysis Batch: 2625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255332-1	WP-594-329-379-1	Dissolved	Water	1638	2602
500-255332-1	WP-594-329-379-1	Total Recoverable	Water	1638	2602
500-255332-3	WP-594-329-379-2	Dissolved	Water	1638	2602
500-255332-3	WP-594-329-379-2	Total Recoverable	Water	1638	2602

Analysis Batch: 2629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 350-2602/1-A	Method Blank	Total Recoverable	Water	1638	2602
LCS 350-2602/2-A	Lab Control Sample	Total Recoverable	Water	1638	2602
LCSD 350-2602/3-A	Lab Control Sample Dup	Total Recoverable	Water	1638	2602

Prep Batch: 2636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255332-1	WP-594-329-379-1	Dissolved	Water	1630	
500-255332-1	WP-594-329-379-1	Total/NA	Water	1630	
500-255332-3	WP-594-329-379-2	Dissolved	Water	1630	
500-255332-3	WP-594-329-379-2	Total/NA	Water	1630	
MB 350-2636/1-A	Method Blank	Total/NA	Water	1630	
MB 350-2636/2-A	Method Blank	Total/NA	Water	1630	
MB 350-2636/3-A	Method Blank	Total/NA	Water	1630	
LCS 350-2636/4-A	Lab Control Sample	Total/NA	Water	1630	
LCSD 350-2636/5-A	Lab Control Sample Dup	Total/NA	Water	1630	

Analysis Batch: 2643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255332-1	WP-594-329-379-1	Dissolved	Water	1630	2636
500-255332-1	WP-594-329-379-1	Total/NA	Water	1630	2636

Metals (Continued)

Analysis Batch: 2643 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255332-3	WP-594-329-379-2	Dissolved	Water	1630	2636
500-255332-3	WP-594-329-379-2	Total/NA	Water	1630	2636
MB 350-2636/1-A	Method Blank	Total/NA	Water	1630	2636
MB 350-2636/2-A	Method Blank	Total/NA	Water	1630	2636
MB 350-2636/3-A	Method Blank	Total/NA	Water	1630	2636
LCS 350-2636/4-A	Lab Control Sample	Total/NA	Water	1630	2636
LCSD 350-2636/5-A	Lab Control Sample Dup	Total/NA	Water	1630	2636

Prep Batch: 782552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255332-1	WP-594-329-379-1	Dissolved	Water	3005A	
500-255332-1	WP-594-329-379-1	Total Recoverable	Water	3005A	
500-255332-3	WP-594-329-379-2	Dissolved	Water	3005A	
500-255332-3	WP-594-329-379-2	Total Recoverable	Water	3005A	
MB 500-782552/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-782552/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 783273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255332-1	WP-594-329-379-1	Dissolved	Water	6020B	782552
500-255332-1	WP-594-329-379-1	Total Recoverable	Water	6020B	782552
500-255332-3	WP-594-329-379-2	Dissolved	Water	6020B	782552
500-255332-3	WP-594-329-379-2	Total Recoverable	Water	6020B	782552
MB 500-782552/1-A	Method Blank	Total Recoverable	Water	6020B	782552
LCS 500-782552/2-A	Lab Control Sample	Total Recoverable	Water	6020B	782552

Analysis Batch: 783299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255332-1	WP-594-329-379-1	Total Recoverable	Water	SM 2340B	782552
500-255332-3	WP-594-329-379-2	Total Recoverable	Water	SM 2340B	782552

Analysis Batch: 783596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255332-1	WP-594-329-379-1	Dissolved	Water	6020B	782552
500-255332-1	WP-594-329-379-1	Dissolved	Water	6020B	782552
500-255332-1	WP-594-329-379-1	Total Recoverable	Water	6020B	782552
500-255332-1	WP-594-329-379-1	Total Recoverable	Water	6020B	782552
500-255332-3	WP-594-329-379-2	Dissolved	Water	6020B	782552
500-255332-3	WP-594-329-379-2	Dissolved	Water	6020B	782552
500-255332-3	WP-594-329-379-2	Total Recoverable	Water	6020B	782552
500-255332-3	WP-594-329-379-2	Total Recoverable	Water	6020B	782552
MB 500-782552/1-A	Method Blank	Total Recoverable	Water	6020B	782552
LCS 500-782552/2-A	Lab Control Sample	Total Recoverable	Water	6020B	782552

Analysis Batch: 783978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255332-1	WP-594-329-379-1	Dissolved	Water	6020B	782552
500-255332-1	WP-594-329-379-1	Total Recoverable	Water	6020B	782552
500-255332-3	WP-594-329-379-2	Dissolved	Water	6020B	782552
500-255332-3	WP-594-329-379-2	Total Recoverable	Water	6020B	782552
MB 500-782552/1-A	Method Blank	Total Recoverable	Water	6020B	782552

Metals (Continued)

Analysis Batch: 783978 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-782552/2-A	Lab Control Sample	Total Recoverable	Water	6020B	782552

General Chemistry

Analysis Batch: 782360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255332-1	WP-594-329-379-1	Total/NA	Water	300.0	
500-255332-3	WP-594-329-379-2	Total/NA	Water	300.0	
MB 500-782360/3	Method Blank	Total/NA	Water	300.0	
LCS 500-782360/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 500-782360/5	Lab Control Sample Dup	Total/NA	Water	300.0	
500-255332-3 MS	WP-594-329-379-2	Total/NA	Water	300.0	
500-255332-3 MSD	WP-594-329-379-2	Total/NA	Water	300.0	

Analysis Batch: 782361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255332-1	WP-594-329-379-1	Total/NA	Water	300.0	
500-255332-3	WP-594-329-379-2	Total/NA	Water	300.0	
MB 500-782361/3	Method Blank	Total/NA	Water	300.0	
LCS 500-782361/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 500-782361/5	Lab Control Sample Dup	Total/NA	Water	300.0	
500-255332-3 MS	WP-594-329-379-2	Total/NA	Water	300.0	
500-255332-3 MSD	WP-594-329-379-2	Total/NA	Water	300.0	

Analysis Batch: 782476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255332-1	WP-594-329-379-1	Total/NA	Water	SM 2540C	
500-255332-3	WP-594-329-379-2	Total/NA	Water	SM 2540C	
MB 500-782476/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-782476/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 782479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255332-1	WP-594-329-379-1	Total/NA	Water	SM 4500 S2 F	
500-255332-3	WP-594-329-379-2	Total/NA	Water	SM 4500 S2 F	
MB 500-782479/1	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 500-782479/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	

Prep Batch: 782788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255332-1	WP-594-329-379-1	Total/NA	Water	Distill/CN	
500-255332-3	WP-594-329-379-2	Total/NA	Water	Distill/CN	
MB 500-782788/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 500-782788/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Prep Batch: 782810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255332-1	WP-594-329-379-1	Total/NA	Water	365.2/365.3/365	
500-255332-3	WP-594-329-379-2	Total/NA	Water	365.2/365.3/365	
MB 500-782810/1-A	Method Blank	Total/NA	Water	365.2/365.3/365	
LCS 500-782810/2-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	

General Chemistry

Analysis Batch: 782997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255332-1	WP-594-329-379-1	Total/NA	Water	365.1	782810
500-255332-3	WP-594-329-379-2	Total/NA	Water	365.1	782810
MB 500-782810/1-A	Method Blank	Total/NA	Water	365.1	782810
LCS 500-782810/2-A	Lab Control Sample	Total/NA	Water	365.1	782810

Analysis Batch: 783011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255332-1	WP-594-329-379-1	Total/NA	Water	SM 2540D	
500-255332-3	WP-594-329-379-2	Total/NA	Water	SM 2540D	
MB 500-783011/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 500-783011/2	Lab Control Sample	Total/NA	Water	SM 2540D	
500-255332-3 MS	WP-594-329-379-2	Total/NA	Water	SM 2540D	

Analysis Batch: 783033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255332-1	WP-594-329-379-1	Total/NA	Water	335.4	782788
500-255332-3	WP-594-329-379-2	Total/NA	Water	335.4	782788
MB 500-782788/1-A	Method Blank	Total/NA	Water	335.4	782788
LCS 500-782788/2-A	Lab Control Sample	Total/NA	Water	335.4	782788

Analysis Batch: 783072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255332-1	WP-594-329-379-1	Total/NA	Water	300.0	
500-255332-1	WP-594-329-379-1	Total/NA	Water	300.0	
500-255332-3	WP-594-329-379-2	Total/NA	Water	300.0	
500-255332-3	WP-594-329-379-2	Total/NA	Water	300.0	
MB 500-783072/33	Method Blank	Total/NA	Water	300.0	
LCS 500-783072/34	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 783350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255332-1	WP-594-329-379-1	Total/NA	Water	SM 5310C	
500-255332-3	WP-594-329-379-2	Total/NA	Water	SM 5310C	
MB 500-783350/7	Method Blank	Total/NA	Water	SM 5310C	
LCS 500-783350/8	Lab Control Sample	Total/NA	Water	SM 5310C	

Analysis Batch: 783381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255332-1	WP-594-329-379-1	Dissolved	Water	SM 5310C	
500-255332-3	WP-594-329-379-2	Dissolved	Water	SM 5310C	
MB 500-783381/7	Method Blank	Dissolved	Water	SM 5310C	
LCS 500-783381/8	Lab Control Sample	Dissolved	Water	SM 5310C	

Analysis Batch: 783995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255332-1	WP-594-329-379-1	Total/NA	Water	SM 2320B	
500-255332-3	WP-594-329-379-2	Total/NA	Water	SM 2320B	
MB 500-783995/3	Method Blank	Total/NA	Water	SM 2320B	
LCS 500-783995/4	Lab Control Sample	Total/NA	Water	SM 2320B	

General Chemistry

Prep Batch: 784489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255332-1	WP-594-329-379-1	Total/NA	Water	Distill/Ammonia	
500-255332-3	WP-594-329-379-2	Total/NA	Water	Distill/Ammonia	
MB 500-784489/1-A	Method Blank	Total/NA	Water	Distill/Ammonia	
LCS 500-784489/2-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	

Analysis Batch: 784892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255332-1	WP-594-329-379-1	Total/NA	Water	350.1	784489
500-255332-3	WP-594-329-379-2	Total/NA	Water	350.1	784489
MB 500-784489/1-A	Method Blank	Total/NA	Water	350.1	784489
LCS 500-784489/2-A	Lab Control Sample	Total/NA	Water	350.1	784489

Analysis Batch: 784974

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-255332-1	WP-594-329-379-1	Total/NA	Water	SM 2520B	
500-255332-3	WP-594-329-379-2	Total/NA	Water	SM 2520B	
500-255332-1 DU	WP-594-329-379-1	Total/NA	Water	SM 2520B	

Method: 1630 - Methyl Mercury

Lab Sample ID: MB 350-2636/1-A
Matrix: Water
Analysis Batch: 2643

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2636

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		08/27/24 11:18	08/27/24 21:04	1

Lab Sample ID: MB 350-2636/2-A
Matrix: Water
Analysis Batch: 2643

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2636

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		08/27/24 11:18	08/27/24 21:15	1

Lab Sample ID: MB 350-2636/3-A
Matrix: Water
Analysis Batch: 2643

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2636

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		08/27/24 11:18	08/27/24 21:27	1

Lab Sample ID: LCS 350-2636/4-A
Matrix: Water
Analysis Batch: 2643

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 2636

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methyl Mercury	1.00	0.764		ng/L		76	65 - 135

Lab Sample ID: LCSD 350-2636/5-A
Matrix: Water
Analysis Batch: 2643

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 2636

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methyl Mercury	1.00	0.967		ng/L		97	65 - 135	23	35

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 350-2621/29
Matrix: Water
Analysis Batch: 2621

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			08/23/24 13:57	1

Lab Sample ID: MB 350-2621/30
Matrix: Water
Analysis Batch: 2621

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			08/23/24 14:01	1

Method: 1631E - Mercury, Low Level (CVAFS) (Continued)

Lab Sample ID: MB 350-2621/31
Matrix: Water
Analysis Batch: 2621

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			08/23/24 14:05	1

Lab Sample ID: LCS 350-2621/34
Matrix: Water
Analysis Batch: 2621

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.49		ng/L		90	77 - 123

Lab Sample ID: LCSD 350-2621/35
Matrix: Water
Analysis Batch: 2621

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	4.48		ng/L		90	77 - 123	0	24

Method: 1638 - Metals (ICP/MS)

Lab Sample ID: MB 350-2602/1-A
Matrix: Water
Analysis Batch: 2629

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 2602

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	0.0111	J	0.030	0.0098	ug/L		08/21/24 15:44	08/22/24 14:26	1

Lab Sample ID: LCS 350-2602/2-A
Matrix: Water
Analysis Batch: 2629

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 2602

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Uranium	25.0	22.7		ug/L		91	85 - 115

Lab Sample ID: LCSD 350-2602/3-A
Matrix: Water
Analysis Batch: 2629

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 2602

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Uranium	25.0	23.2		ug/L		93	85 - 115	2	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 500-782552/1-A
Matrix: Water
Analysis Batch: 783273

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 782552

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		08/21/24 09:01	08/26/24 12:13	1
Antimony	<1.3		3.0	1.3	ug/L		08/21/24 09:01	08/26/24 12:13	1
Arsenic	<0.23		1.0	0.23	ug/L		08/21/24 09:01	08/26/24 12:13	1
Barium	<0.73		2.5	0.73	ug/L		08/21/24 09:01	08/26/24 12:13	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 500-782552/1-A
Matrix: Water
Analysis Batch: 783273

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 782552

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.17		0.50	0.17	ug/L		08/21/24 09:01	08/26/24 12:13	1
Calcium	<44		200	44	ug/L		08/21/24 09:01	08/26/24 12:13	1
Chromium	<1.1		5.0	1.1	ug/L		08/21/24 09:01	08/26/24 12:13	1
Cobalt	<0.40		1.0	0.40	ug/L		08/21/24 09:01	08/26/24 12:13	1
Copper	<0.50		2.0	0.50	ug/L		08/21/24 09:01	08/26/24 12:13	1
Iron	<47		100	47	ug/L		08/21/24 09:01	08/26/24 12:13	1
Lead	<0.19		0.50	0.19	ug/L		08/21/24 09:01	08/26/24 12:13	1
Magnesium	<49		200	49	ug/L		08/21/24 09:01	08/26/24 12:13	1
Manganese	<0.79		2.5	0.79	ug/L		08/21/24 09:01	08/26/24 12:13	1
Molybdenum	<2.5		5.0	2.5	ug/L		08/21/24 09:01	08/26/24 12:13	1
Nickel	<0.63		2.0	0.63	ug/L		08/21/24 09:01	08/26/24 12:13	1
Potassium	<110		500	110	ug/L		08/21/24 09:01	08/26/24 12:13	1
Selenium	<0.98		2.5	0.98	ug/L		08/21/24 09:01	08/26/24 12:13	1
Silver	<0.12		0.50	0.12	ug/L		08/21/24 09:01	08/26/24 12:13	1
Sodium	<77		200	77	ug/L		08/21/24 09:01	08/26/24 12:13	1
Strontium	<0.64		4.0	0.64	ug/L		08/21/24 09:01	08/26/24 12:13	1
Thallium	<0.57		2.0	0.57	ug/L		08/21/24 09:01	08/26/24 12:13	1
Tin	1.85	J	5.0	1.3	ug/L		08/21/24 09:01	08/26/24 12:13	1
Vanadium	<2.2		5.0	2.2	ug/L		08/21/24 09:01	08/26/24 12:13	1
Zinc	<6.9		20	6.9	ug/L		08/21/24 09:01	08/26/24 12:13	1

Lab Sample ID: MB 500-782552/1-A
Matrix: Water
Analysis Batch: 783596

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 782552

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.53		1.0	0.53	ug/L		08/21/24 09:01	08/27/24 13:25	1
Lithium	<2.5		10	2.5	ug/L		08/21/24 09:01	08/27/24 13:25	1

Lab Sample ID: MB 500-782552/1-A
Matrix: Water
Analysis Batch: 783978

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 782552

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<13		50	13	ug/L		08/21/24 09:01	08/29/24 15:08	1

Lab Sample ID: LCS 500-782552/2-A
Matrix: Water
Analysis Batch: 783273

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 782552

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	2000	2000		ug/L		100	80 - 120
Antimony	500	509		ug/L		102	80 - 120
Arsenic	100	99.1		ug/L		99	80 - 120
Barium	500	501		ug/L		100	80 - 120
Cadmium	50.0	52.4		ug/L		105	80 - 120
Calcium	10000	8790		ug/L		88	80 - 120
Chromium	200	212		ug/L		106	80 - 120
Cobalt	500	530		ug/L		106	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 500-782552/2-A
Matrix: Water
Analysis Batch: 783273

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 782552

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	250	267		ug/L		107	80 - 120
Iron	1000	1100		ug/L		110	80 - 120
Lead	100	105		ug/L		105	80 - 120
Magnesium	10000	10900		ug/L		109	80 - 120
Manganese	500	539		ug/L		108	80 - 120
Molybdenum	1000	992		ug/L		99	80 - 120
Nickel	500	532		ug/L		106	80 - 120
Potassium	10000	10600		ug/L		106	80 - 120
Selenium	100	99.6		ug/L		100	80 - 120
Silver	50.0	51.8		ug/L		104	80 - 120
Sodium	10000	10800		ug/L		108	80 - 120
Strontium	1000	956		ug/L		96	80 - 120
Thallium	100	108		ug/L		108	80 - 120
Tin	1000	1010		ug/L		101	80 - 120
Vanadium	500	534		ug/L		107	80 - 120
Zinc	500	521		ug/L		104	80 - 120

Lab Sample ID: LCS 500-782552/2-A
Matrix: Water
Analysis Batch: 783596

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 782552

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	50.0	52.5		ug/L		105	80 - 120
Lithium	100	108		ug/L		108	80 - 120

Lab Sample ID: LCS 500-782552/2-A
Matrix: Water
Analysis Batch: 783978

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 782552

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1020		ug/L		102	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 500-782360/3
Matrix: Water
Analysis Batch: 782360

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.19		1.0	0.19	mg/L			08/20/24 10:39	1
Sulfate	<0.21		1.0	0.21	mg/L			08/20/24 10:39	1

Lab Sample ID: LCS 500-782360/4
Matrix: Water
Analysis Batch: 782360

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	20.0	19.6		mg/L		98	90 - 110
Sulfate	20.0	20.6		mg/L		103	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 500-782360/5
Matrix: Water
Analysis Batch: 782360

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride			20.0	19.5		mg/L		98	90 - 110	0	20
Sulfate			20.0	21.1		mg/L		106	90 - 110	3	20

Lab Sample ID: 500-255332-3 MS
Matrix: Water
Analysis Batch: 782360

Client Sample ID: WP-594-329-379-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.6		10.0	13.3		mg/L		107	80 - 120
Sulfate	4.2	F1	10.0	16.2		mg/L		120	80 - 120

Lab Sample ID: 500-255332-3 MSD
Matrix: Water
Analysis Batch: 782360

Client Sample ID: WP-594-329-379-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	2.6		10.0	13.3		mg/L		108	80 - 120	0	20
Sulfate	4.2	F1	10.0	16.3	F1	mg/L		121	80 - 120	1	20

Lab Sample ID: MB 500-782361/3
Matrix: Water
Analysis Batch: 782361

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.043		1.0	0.043	mg/L			08/20/24 10:39	1
Nitrite as N	<0.070		1.0	0.070	mg/L			08/20/24 10:39	1
Nitrate Nitrite as N	<0.070		1.0	0.070	mg/L			08/20/24 10:39	1

Lab Sample ID: LCS 500-782361/4
Matrix: Water
Analysis Batch: 782361

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N			20.0	20.1		mg/L		101	90 - 110
Nitrite as N			20.0	20.3		mg/L		102	90 - 110

Lab Sample ID: LCSD 500-782361/5
Matrix: Water
Analysis Batch: 782361

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N			20.0	20.3		mg/L		101	90 - 110	1	20
Nitrite as N			20.0	20.4		mg/L		102	90 - 110	0	20

Lab Sample ID: 500-255332-3 MS
Matrix: Water
Analysis Batch: 782361

Client Sample ID: WP-594-329-379-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	<0.043	H F1	10.0	13.9	F1	mg/L		139	80 - 120

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 500-255332-3 MS
Matrix: Water
Analysis Batch: 782361

Client Sample ID: WP-594-329-379-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	<0.070	H F1	10.0	<0.070	F1	mg/L		0	80 - 120

Lab Sample ID: 500-255332-3 MSD
Matrix: Water
Analysis Batch: 782361

Client Sample ID: WP-594-329-379-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	<0.043	H F1	10.0	13.7	F1	mg/L		137	80 - 120	1	20
Nitrite as N	<0.070	H F1	10.0	<0.070	F1	mg/L		0	80 - 120	NC	20

Lab Sample ID: MB 500-783072/33
Matrix: Water
Analysis Batch: 783072

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	<0.18		1.0	0.18	mg/L			08/24/24 19:28	1
Chloride	<0.12		1.0	0.12	mg/L			08/24/24 19:28	1

Lab Sample ID: LCS 500-783072/34
Matrix: Water
Analysis Batch: 783072

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	20.0	20.6		mg/L		103	90 - 110
Chloride	20.0	19.7		mg/L		99	90 - 110

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 500-782788/1-A
Matrix: Water
Analysis Batch: 783033

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 782788

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.0036		0.0050	0.0036	mg/L		08/22/24 12:13	08/23/24 11:15	1

Lab Sample ID: LCS 500-782788/2-A
Matrix: Water
Analysis Batch: 783033

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 782788

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.100	0.0997		mg/L		100	90 - 110

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 500-784489/1-A
Matrix: Water
Analysis Batch: 784892

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 784489

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	<0.10		0.20	0.10	mg/L		09/04/24 15:15	09/06/24 10:27	1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCS 500-784489/2-A
Matrix: Water
Analysis Batch: 784892

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 784489

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	2.00	1.69	*-	mg/L		84	90 - 110

Method: 365.1 - Phosphorus, Total

Lab Sample ID: MB 500-782810/1-A
Matrix: Water
Analysis Batch: 782997

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 782810

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus as P	<0.024		0.050	0.024	mg/L		08/22/24 14:15	08/23/24 12:03	1

Lab Sample ID: LCS 500-782810/2-A
Matrix: Water
Analysis Batch: 782997

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 782810

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phosphorus as P	1.00	0.889		mg/L		89	88 - 123

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 500-783995/3
Matrix: Water
Analysis Batch: 783995

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	4.58	J	5.0	3.7	mg/L			08/29/24 12:33	1
Bicarbonate Alkalinity as CaCO3	4.58	J	5.0	3.7	mg/L			08/29/24 12:33	1
Carbonate Alkalinity as CaCO3	<3.7		5.0	3.7	mg/L			08/29/24 12:33	1

Lab Sample ID: LCS 500-783995/4
Matrix: Water
Analysis Batch: 783995

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	100	102		mg/L		102	95 - 121

Method: SM 2520B - Salinity

Lab Sample ID: 500-255332-1 DU
Matrix: Water
Analysis Batch: 784974

Client Sample ID: WP-594-329-379-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Salinity	7.9		7.92		psu		0	

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 500-782476/1
Matrix: Water
Analysis Batch: 782476

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<4.3		10	4.3	mg/L			08/21/24 01:29	1

Lab Sample ID: LCS 500-782476/2
Matrix: Water
Analysis Batch: 782476

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	250	266		mg/L		106	80 - 120

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 500-783011/1
Matrix: Water
Analysis Batch: 783011

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<1.9		5.0	1.9	mg/L			08/23/24 13:30	1

Lab Sample ID: LCS 500-783011/2
Matrix: Water
Analysis Batch: 783011

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	200	187		mg/L		94	80 - 120

Lab Sample ID: 500-255332-3 MS
Matrix: Water
Analysis Batch: 783011

Client Sample ID: WP-594-329-379-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	9.2		100	104		mg/L		95	75 - 125

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 500-782479/1
Matrix: Water
Analysis Batch: 782479

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<0.23		1.0	0.23	mg/L			08/20/24 22:23	1

Lab Sample ID: LCS 500-782479/2
Matrix: Water
Analysis Batch: 782479

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	3.64	3.33		mg/L		92	85 - 115

Method: SM 5310C - TOC

Lab Sample ID: MB 500-783350/7
Matrix: Water
Analysis Batch: 783350

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<0.47		1.0	0.47	mg/L			08/26/24 13:13	1

Lab Sample ID: LCS 500-783350/8
Matrix: Water
Analysis Batch: 783350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	10.0	10.2		mg/L		102	86 - 116

Method: SM 5310C - Organic Carbon, Dissolved (DOC)

Lab Sample ID: MB 500-783381/7
Matrix: Water
Analysis Batch: 783381

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	<0.47		1.0	0.47	mg/L			08/27/24 07:40	1

Lab Sample ID: LCS 500-783381/8
Matrix: Water
Analysis Batch: 783381

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dissolved Organic Carbon	10.0	10.2		mg/L		102	86 - 116

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-255332-1

Client Sample ID: WP-594-329-379-1

Date Collected: 08/16/24 17:34
Date Received: 08/20/24 09:35

Lab Sample ID: 500-255332-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	1630			2636	AJD	EET SSM	08/27/24 11:18
Dissolved	Analysis	1630		1	2643	CL	EET SSM	08/28/24 02:20
Total/NA	Prep	1630			2636	AJD	EET SSM	08/27/24 11:18
Total/NA	Analysis	1630		1	2643	CL	EET SSM	08/28/24 02:09
Dissolved	Analysis	1631E		1	2621	AJD	EET SSM	08/23/24 17:04
Total/NA	Analysis	1631E		1	2621	AJD	EET SSM	08/23/24 16:51
Dissolved	Prep	1638			2602	V1R	EET SSM	08/21/24 15:44
Dissolved	Analysis	1638		1	2625	CL	EET SSM	08/23/24 20:00
Total Recoverable	Prep	1638			2602	V1R	EET SSM	08/21/24 15:44
Total Recoverable	Analysis	1638		1	2625	CL	EET SSM	08/23/24 20:07
Dissolved	Prep	3005A			782552	BDE	EET CHI	08/21/24 09:01 - 08/21/24 15:01 ¹
Dissolved	Analysis	6020B		1	783273	RN	EET CHI	08/26/24 13:43
Dissolved	Prep	3005A			782552	BDE	EET CHI	08/21/24 09:01 - 08/21/24 15:01 ¹
Dissolved	Analysis	6020B		1	783596	RN	EET CHI	08/27/24 14:56
Dissolved	Prep	3005A			782552	BDE	EET CHI	08/21/24 09:01 - 08/21/24 15:01 ¹
Dissolved	Analysis	6020B		10	783596	RN	EET CHI	08/27/24 15:38
Dissolved	Prep	3005A			782552	BDE	EET CHI	08/21/24 09:01 - 08/21/24 15:01 ¹
Dissolved	Analysis	6020B		1	783978	RN	EET CHI	08/29/24 16:04
Total Recoverable	Prep	3005A			782552	BDE	EET CHI	08/21/24 09:01 - 08/21/24 15:01 ¹
Total Recoverable	Analysis	6020B		1	783273	RN	EET CHI	08/26/24 13:34
Total Recoverable	Prep	3005A			782552	BDE	EET CHI	08/21/24 09:01 - 08/21/24 15:01 ¹
Total Recoverable	Analysis	6020B		1	783596	RN	EET CHI	08/27/24 14:51
Total Recoverable	Prep	3005A			782552	BDE	EET CHI	08/21/24 09:01 - 08/21/24 15:01 ¹
Total Recoverable	Analysis	6020B		10	783596	RN	EET CHI	08/27/24 15:03
Total Recoverable	Prep	3005A			782552	BDE	EET CHI	08/21/24 09:01 - 08/21/24 15:01 ¹
Total Recoverable	Analysis	6020B		1	783978	RN	EET CHI	08/29/24 15:55
Total Recoverable	Prep	3005A			782552	BDE	EET CHI	08/21/24 09:01 - 08/21/24 15:01 ¹
Total Recoverable	Analysis	SM 2340B		1	783299	DAJ	EET CHI	08/26/24 15:25
Total/NA	Analysis	300.0		1	782360	NMB	EET CHI	08/20/24 11:40
Total/NA	Analysis	300.0		1	782361	W1T	EET CHI	08/20/24 11:40
Total/NA	Analysis	300.0		5	783072	W1T	EET CHI	08/25/24 03:18
Total/NA	Analysis	300.0		200	783072	W1T	EET CHI	08/25/24 03:34
Total/NA	Prep	Distill/CN			782788	AC	EET CHI	08/22/24 12:13 - 08/22/24 12:43 ¹
Total/NA	Analysis	335.4		1	783033	AC	EET CHI	08/23/24 11:28
Total/NA	Prep	Distill/Ammonia			784489	EB	EET CHI	09/04/24 15:15 - 09/04/24 16:15 ¹
Total/NA	Analysis	350.1		1	784892	KF	EET CHI	09/06/24 10:31
Total/NA	Prep	365.2/365.3/365			782810	ER	EET CHI	08/22/24 14:15 - 08/22/24 18:15 ¹
Total/NA	Analysis	365.1		1	782997	KF	EET CHI	08/23/24 12:14
Total/NA	Analysis	SM 2320B		1	783995	ER	EET CHI	08/29/24 12:46
Total/NA	Analysis	SM 2520B		1	784974	TR	EET CHI	09/08/24 13:34
Total/NA	Analysis	SM 2540C		1	782476	CLB	EET CHI	08/21/24 02:02
Total/NA	Analysis	SM 2540D		1	783011	SO	EET CHI	08/23/24 14:08 - 08/23/24 14:10 ¹
Total/NA	Analysis	SM 4500 S2 F		1	782479	CLB	EET CHI	08/20/24 22:45 - 08/20/24 22:56 ¹

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-255332-1

Client Sample ID: WP-594-329-379-1

Lab Sample ID: 500-255332-1

Date Collected: 08/16/24 17:34
Matrix: Water
Date Received: 08/20/24 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	SM 5310C		1	783381	TR	EET CHI	08/27/24 07:40
Total/NA	Analysis	SM 5310C		1	783350	TR	EET CHI	08/26/24 14:09

Client Sample ID: WP-594-329-379-1 FB

Lab Sample ID: 500-255332-2

Date Collected: 08/16/24 17:34
Matrix: Water
Date Received: 08/20/24 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	2621	AJD	EET SSM	08/23/24 17:08

Client Sample ID: WP-594-329-379-2

Lab Sample ID: 500-255332-3

Date Collected: 08/16/24 20:51
Matrix: Water
Date Received: 08/20/24 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	1630			2636	AJD	EET SSM	08/27/24 11:18
Dissolved	Analysis	1630		1	2643	CL	EET SSM	08/28/24 02:43
Total/NA	Prep	1630			2636	AJD	EET SSM	08/27/24 11:18
Total/NA	Analysis	1630		1	2643	CL	EET SSM	08/28/24 02:31
Dissolved	Analysis	1631E		1	2621	AJD	EET SSM	08/23/24 17:16
Total/NA	Analysis	1631E		1	2621	AJD	EET SSM	08/23/24 17:12
Dissolved	Prep	1638			2602	V1R	EET SSM	08/21/24 15:44
Dissolved	Analysis	1638		1	2625	CL	EET SSM	08/23/24 20:03
Total Recoverable	Prep	1638			2602	V1R	EET SSM	08/21/24 15:44
Total Recoverable	Analysis	1638		1	2625	CL	EET SSM	08/23/24 20:11
Dissolved	Prep	3005A			782552	BDE	EET CHI	08/21/24 09:01 - 08/21/24 15:01 [1]
Dissolved	Analysis	6020B		1	783273	RN	EET CHI	08/26/24 13:45
Dissolved	Prep	3005A			782552	BDE	EET CHI	08/21/24 09:01 - 08/21/24 15:01 [1]
Dissolved	Analysis	6020B		1	783596	RN	EET CHI	08/27/24 14:58
Dissolved	Prep	3005A			782552	BDE	EET CHI	08/21/24 09:01 - 08/21/24 15:01 [1]
Dissolved	Analysis	6020B		10	783596	RN	EET CHI	08/27/24 15:00
Dissolved	Prep	3005A			782552	BDE	EET CHI	08/21/24 09:01 - 08/21/24 15:01 [1]
Dissolved	Analysis	6020B		1	783978	RN	EET CHI	08/29/24 16:06
Total Recoverable	Prep	3005A			782552	BDE	EET CHI	08/21/24 09:01 - 08/21/24 15:01 [1]
Total Recoverable	Analysis	6020B		1	783273	RN	EET CHI	08/26/24 13:36
Total Recoverable	Prep	3005A			782552	BDE	EET CHI	08/21/24 09:01 - 08/21/24 15:01 [1]
Total Recoverable	Analysis	6020B		1	783596	RN	EET CHI	08/27/24 14:54
Total Recoverable	Prep	3005A			782552	BDE	EET CHI	08/21/24 09:01 - 08/21/24 15:01 [1]
Total Recoverable	Analysis	6020B		10	783596	RN	EET CHI	08/27/24 15:35
Total Recoverable	Prep	3005A			782552	BDE	EET CHI	08/21/24 09:01 - 08/21/24 15:01 [1]
Total Recoverable	Analysis	6020B		1	783978	RN	EET CHI	08/29/24 15:57
Total Recoverable	Prep	3005A			782552	BDE	EET CHI	08/21/24 09:01 - 08/21/24 15:01 [1]
Total Recoverable	Analysis	SM 2340B		1	783299	DAJ	EET CHI	08/26/24 15:25
Total/NA	Analysis	300.0		1	782360	NMB	EET CHI	08/20/24 11:55

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255332-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-594-329-379-2
Lab Sample ID: 500-255332-3
Date Collected: 08/16/24 20:51
Matrix: Water
Date Received: 08/20/24 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	782361	W1T	EET CHI	08/20/24 11:55
Total/NA	Analysis	300.0		5	783072	W1T	EET CHI	08/25/24 03:49
Total/NA	Analysis	300.0		200	783072	W1T	EET CHI	08/25/24 04:04
Total/NA	Prep	Distill/CN			782788	AC	EET CHI	08/22/24 12:13 - 08/22/24 12:43 [1]
Total/NA	Analysis	335.4		1	783033	AC	EET CHI	08/23/24 11:30
Total/NA	Prep	Distill/Ammonia			784489	EB	EET CHI	09/04/24 15:15 - 09/04/24 16:15 [1]
Total/NA	Analysis	350.1		1	784892	KF	EET CHI	09/06/24 10:31
Total/NA	Prep	365.2/365.3/365			782810	ER	EET CHI	08/22/24 14:15 - 08/22/24 18:15 [1]
Total/NA	Analysis	365.1		1	782997	KF	EET CHI	08/23/24 12:14
Total/NA	Analysis	SM 2320B		1	783995	ER	EET CHI	08/29/24 12:54
Total/NA	Analysis	SM 2520B		1	784974	TR	EET CHI	09/08/24 13:34
Total/NA	Analysis	SM 2540C		1	782476	CLB	EET CHI	08/21/24 02:05
Total/NA	Analysis	SM 2540D		1	783011	SO	EET CHI	08/23/24 14:10 - 08/23/24 14:13 [1]
Total/NA	Analysis	SM 4500 S2 F		1	782479	CLB	EET CHI	08/20/24 22:56 - 08/20/24 23:08 [1]
Dissolved	Analysis	SM 5310C		1	783381	TR	EET CHI	08/27/24 07:40
Total/NA	Analysis	SM 5310C		1	783350	TR	EET CHI	08/26/24 14:37

Client Sample ID: WP-594-329-379-2 FB
Lab Sample ID: 500-255332-4
Date Collected: 08/16/24 20:51
Matrix: Water
Date Received: 08/20/24 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	2621	AJD	EET SSM	08/23/24 17:20

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-255332-1
Project/Site: FOTH - White Pines, MI

Laboratory: Eurofins Chicago

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Georgia	State	N/A	05-31-25
Georgia (DW)	State	939	05-31-25
Hawaii	State	NA	05-31-25
Illinois	NELAP	IL00035	05-31-25
Indiana	State	C-IL-02	05-31-25
Iowa	State	082	05-01-26
Kansas	NELAP	E-10161	10-31-24
Kentucky (UST)	State	AI # 108083	05-31-25
Kentucky (WW)	State	KY90023	12-31-24
Louisiana (All)	NELAP	02046	06-30-25
Mississippi	State	NA	05-31-25
North Carolina (WW/SW)	State	291	12-31-24
North Dakota	State	R-194	04-29-24 *
Oklahoma	State	8908	08-31-24 *
South Carolina	State	77001003	04-29-24 *
USDA	US Federal Programs	P330-18-00018	03-30-26
Wisconsin	State	999580010	08-31-25
Wyoming	State	8TMS-Q	05-31-25

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	12-18-24
ANAB	Dept. of Defense ELAP	L2236	01-19-25
ANAB	Dept. of Energy	L2236.01	12-18-24
ANAB	ISO/IEC 17025	L2236	01-19-25
California	State	2954	12-18-24
Florida	NELAP	E87575	12-18-24
Louisiana (All)	NELAP	03073	12-18-24
Maine	State	WA01273	12-18-24
New Jersey	NELAP	WA014	12-18-24
New York	NELAP	11662	12-18-24
Oregon	NELAP	4167-008	07-07-25
US Fish & Wildlife	US Federal Programs	A20571	06-30-25
USDA	US Federal Programs	525-23-4-22573	12-18-24
Washington	State	C788-23a	12-18-24
Wisconsin	State	399133460	12-18-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Chicago
2417 Bond Street
University Park, IL 60484
Phone 708-534-5200 Fax 708-534-5211

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: John Kamps	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-126105-50170 5
Client Contact: Jakob Wartman	Phone: 920-639-5905	E-Mail: Sandra Fredrick@et eurofinsus com	State of Origin: MI	Page: Page 5 of 5
Company: Foth Infrastructure & Environment, LLC	PWSID:			Job #: 500-255332
Address: Missabe Building 227 West 1st Street, Suite 920	Due Date Requested:			
City: Duluth	TAT Requested (days):			
State, Zip: MN, 55802	Compliance Project: Δ Yes Δ No			
Phone: 218-481-6014(Tel)	PO #: Purchase Order not required			
Email: Jakob Wartman@foth com	WO #:			
Project Name: FOTH - White Pines, MI	Project #: 50023463			
Site:	SSOW#:			

Analysis Requested

Preservation Codes: N None; S H2SO4; CB ZnAcetate/NaOH; B - NaOH; D HNO3

500-255332 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1631E - Mercury, Low Level (CVAFS)	1631E - Dissolved Mercury, Low Level (FF)	2320B, 2540C, 2540D, 300.0_28D, 300_48HR, SM2520_B	350.1, 365.1	SM4500_S2_F - Sulfide	335.4 - Cyanide, Total	SM5310_DOC_C - DOC (FF)*	6020B, SM2340B	6020B - Dissolved Metals (ICP/MS) - 27 elements (FF)*	3500_CR_B - Chromium, Hexavalent/Mercury_Method 1630_MS (FF)*	3500_CR_B - Dissolved Chromium, Hexavalent (field f (FF)*	1638 - Uranium only (ICP/MS)	1638 - Dissolved Uranium only (ICP/MS) (FF)*	Total Number of containers TOC	Total # of Coolers	Special Instructions/Note:
	Preservation Code:						N	N	N	S	CB	B	S	D	D	N	N	D	D			
1|2 WP-594-329-379-1 |FB	8/16/24	1734	G	Water	FF	NO	6	2	3	1	1	1	2	1	1	1	1	1	1	1	23	
3|4 WP-594-329-379-2 |FB	8/16/24	2051	G	Water	FF	NO	6	2	3	1	1	1	2	1	1	1	1	1	1	1	23	
				Water																		
				Water																		
				Water																		
				Water																		
				Water																		
				Water																		
				Water																		
				Water																		
				Water																		

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I, II, III, IV, Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by: John Kamps	Date/Time: 8/19/24 1500	Company: FOTH	Received by: Stephanie Hernandez	Date/Time: 8/20/24 0935	Company: EEIA
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks: 2.8+2.7, 1.3+1.2



JUSTIN BROWN
WHITE PINE COPPER
35362 MALL CIRCLE DRIVE

WHITE PINE, MI 49971
UNITED STATES US

ACTWGT: 25.00 LB
CAD: 0780307/CAFE3808

TO SAMPLE RECEIPT
EUROFINS CHICAGO
2417 BOND ST.

UNIVERSITY PARK IL 60484
(708) 534-5200
INV:
PO:
REF:
DEPT:
RMA:

FedEx Express

FedEx
TRK# 0221 4051 7962 3393

TUE - 20 AUG 10:30A
PRIORITY OVERNIGHT

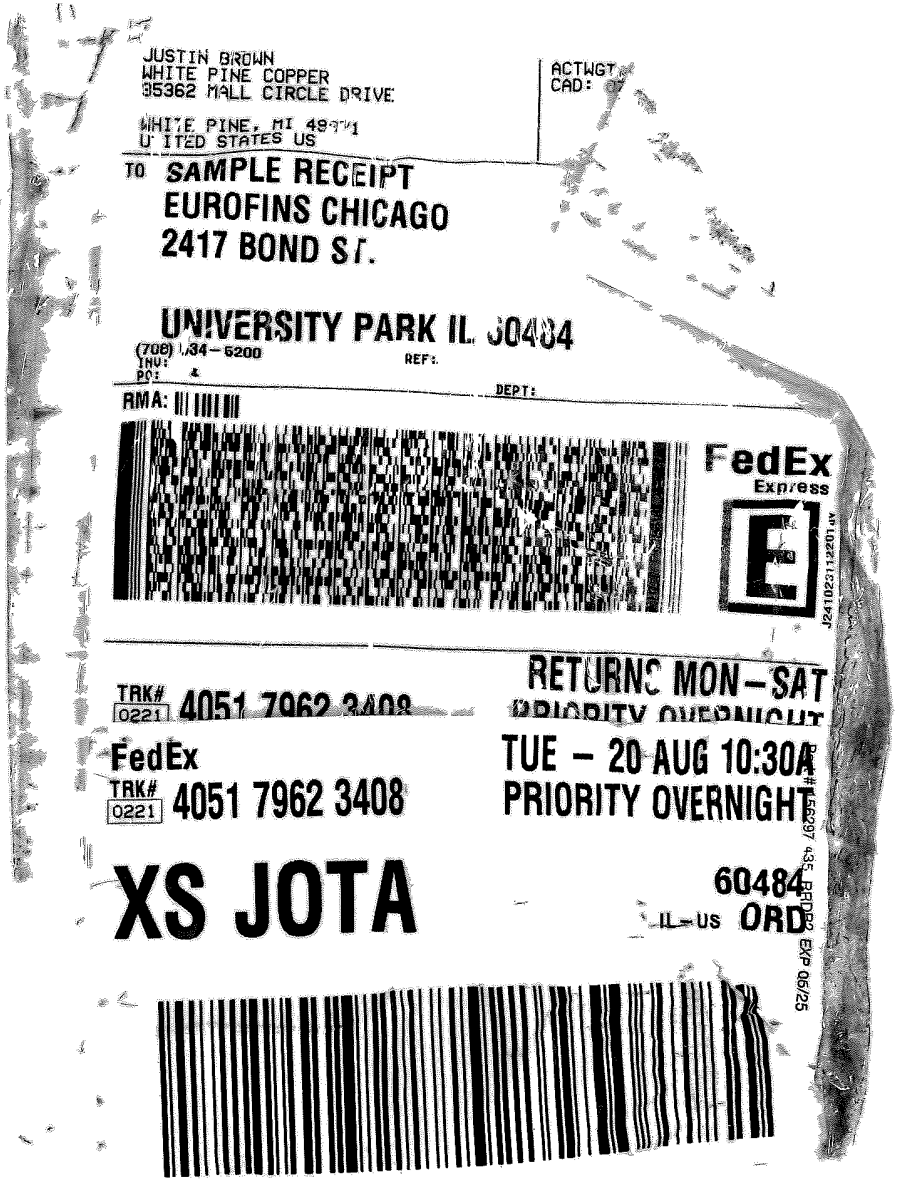
XS JOTA

60484
IL-US ORD

#5115555 08/19 583J6/A12D/9AE3

Part # 163469-434 MTW EXP 0.25

Part # 156297-435 BBDB EXP 05/25



JUSTIN BROWN
WHITE PINE COPPER
35362 MALL CIRCLE DRIVE

WHITE PINE, MI 49971
UNITED STATES US

ACTWGT:
CAD:

TO SAMPLE RECEIPT
EUROFINS CHICAGO
2417 BOND ST.

UNIVERSITY PARK IL 60484
(708) 534-5200
INV:
PO:
REF:
DEPT:
RMA:

FedEx Express

RETURNS MON-SAT
PRIORITY OVERNIGHT

FedEx
TRK# 0221 4051 7962 3408

TUE - 20 AUG 10:30A
PRIORITY OVERNIGHT

XS JOTA

60484
IL-US ORD

Part # 156297-435 BBDB EXP 05/25

Login Sample Receipt Checklist

Client: Foth Infrastructure & Environment, LLC

Job Number: 500-255332-1

Login Number: 255332
List Number: 1
Creator: Hernandez, Stephanie

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.7,1.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	False	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Foth Infrastructure & Environment, LLC

Job Number: 500-255332-1

Login Number: 255332
List Number: 2
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 08/21/24 01:29 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

500-255332 Field Sheet

Date:	8/21/2024
End Time:	13:15
KI Paper Lot:	NO
Analyst:	RL

Preservative ID	Preservative Type	Container ID
A	Bromine Monochloride (0.2N)	15638
ZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ
ZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ
ZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ

Sample ID	Pres. Used (ID)	Oxidized (Y/N)?	Pres. Vol. (mL)/Percent (%)		Comments
500-255332-a-1	A	Y	.8	2	
500-255332-b-1	A	Y	.8	2	
500-255332-c-1	A	Y	.8	2	
500-255332-d-1	A	Y	.8	2	
500-255332-a-2	A	Y	.8	2	
500-255332-b-2	A	Y	.8	2	
500-255332-a-3	A	Y	.8	2	
500-255332-b-3	A	Y	.8	2	
500-255332-c-3	A	Y	.8	2	
500-255332-d-3	A	Y	.8	2	
500-255332-a-4	A	Y	.8	2	
500-255332-b-4	A	Y	.8	2	

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500-255332 Field Sheet

Date:	8/21/2024
End Time:	1346
pH Paper Lot:	hc324723
Analyst:	AD

Preservative ID	Preservative Type	Container ID
A	Hydrochloric Acid	na
ZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ
ZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ
ZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ

Sample ID	Initial pH	Final pH	Preservative ID	Preservative Added (mL)	Comments
500-255332-E-1	<2				
500-255332-F-1	<2				
500-255332-E-3	<2				AD 8/21/24
500-255332-F-3	<2				

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ANALYTICAL REPORT

PREPARED FOR

Attn: Jakob Wartman
Foth Infrastructure & Environment, LLC
Missabe Building
227 West 1st. Street, Suite 920
Duluth, Minnesota 55802

Generated 9/25/2024 8:17:52 PM

JOB DESCRIPTION

FOTH - White Pines, MI

JOB NUMBER

500-256295-1

Eurofins Chicago
2417 Bond Street
University Park IL 60484

See page two for job notes and contact information.

Eurofins Chicago

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

Results relate only to the items tested and the sample(s) as received by the laboratory. The results, detection limits (LOD) and Quantitation Limits (LOQ) have been adjusted for sample dilutions and/or solids content.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Chicago Project Manager.

Compliance Statement

The LOD and LOQ reported are adjusted by the dilution factor when a dilution factor greater than 1 is needed. Additionally, where results are indicated as being reported on a dry weight basis, the LOD and LOQ are adjusted for moisture content as well.

Definitions of Limits
- LOD = Limit of Detection = MDL as defined by 40 CFR part 136 Appendix B
- LOQ = Limit of Quantitation = 3.33 x LOD as defined by Wisconsin
- RL = Report Limit = a concentration supported by a standard in the calibration curves

Authorization



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Authorized for release by
Sandie Fredrick, Senior Project Manager
Sandra.Fredrick@et.eurofinsus.com
(920)261-1660

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Job ID: 500-256295-1 Eurofins Chicago

Job Narrative
500-256295-1

Receipt
The samples were received on 9/7/2024 9:40 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.3º C, 0.5º C, 0.7º C and 1.8º C.

Receipt Exceptions
Received two sets of LL Hg kits with sample ID WP-598-485-535.4-2 Field Blank. One set is written in sharpie the other in pen. Sample #1-all sample labels are written in sharpie and sample #2 field blank is written in pen. Logged the LL Hg written in sharpie as sample #3 and the set written in pen as sample #4 Field Blank.

The following sample(s) was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): Field Blanks for each sample. Samples logged.

The following sample(s) was received with less than 2 days remaining on the holding time or less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: sample #1- sampled 9/5 1115, received 9/7 0940.

Metals
Method 1638: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for the following sample associated with preparation batch 350-2748 and 350-2824 and analytical batch 350-2855 were outside control limits: (500-256295-Q-1-F MS) and (500-256295-Q-1-G MSD). The associated laboratory control sample (LCS) recovery met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 500-784940 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 500-784941 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Methods 300.0, 9056A: The following sample(s) was received with insufficient time remaining to perform the analysis within holding time: WP-598-485-535.4-1 (500-256295-1) and WP-598-485-535.4-2 (500-256295-3).

Method 300.0: Spike compounds were inadvertently omitted during the extraction process for the matrix spike/matrix spike duplicate (MS/MSD); therefore, matrix spike recoveries are unavailable for analytical batch 500-784941. The associated laboratory control sample (LCS) met acceptance criteria.

Method 365.1: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 500-785143 and analytical batch 500-785490 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300.0: The method blank for analytical batch 500-786076 contained Chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-256295-1

Client Sample ID: WP-598-485-535.4-1

Lab Sample ID: 500-256295-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.23	J	0.50	0.20	ng/L	1		1631E	Total/NA
Uranium	0.019	J	0.050	0.0098	ug/L	1		1638	Total Recoverable
Uranium	0.028	J	0.050	0.0098	ug/L	1		1638	Dissolved
Barium	4800		2.5	0.73	ug/L	1		6020B	Total Recoverable
Boron	680	B	50	13	ug/L	1		6020B	Total Recoverable
Calcium	1800000		2000	440	ug/L	10		6020B	Total Recoverable
Copper	1.2	J	2.0	0.50	ug/L	1		6020B	Total Recoverable
Iron	590		100	47	ug/L	1		6020B	Total Recoverable
Lithium	420		10	2.5	ug/L	1		6020B	Total Recoverable
Magnesium	14000		200	49	ug/L	1		6020B	Total Recoverable
Manganese	880		2.5	0.79	ug/L	1		6020B	Total Recoverable
Molybdenum	24		5.0	2.5	ug/L	1		6020B	Total Recoverable
Potassium	4000		500	110	ug/L	1		6020B	Total Recoverable
Sodium	2200000		2000	770	ug/L	10		6020B	Total Recoverable
Strontium	43000		40	6.4	ug/L	10		6020B	Total Recoverable
Tin	2.6	J	5.0	1.3	ug/L	1		6020B	Total Recoverable
Zinc	96		20	6.9	ug/L	1		6020B	Total Recoverable
Aluminum	25	J	100	25	ug/L	1		6020B	Dissolved
Barium	4800		2.5	0.73	ug/L	1		6020B	Dissolved
Boron	640	B	50	13	ug/L	1		6020B	Dissolved
Calcium	1700000		2000	440	ug/L	10		6020B	Dissolved
Copper	2.9		2.0	0.50	ug/L	1		6020B	Dissolved
Iron	150		100	47	ug/L	1		6020B	Dissolved
Lead	17		0.50	0.19	ug/L	1		6020B	Dissolved
Lithium	400		10	2.5	ug/L	1		6020B	Dissolved
Magnesium	13000		200	49	ug/L	1		6020B	Dissolved
Manganese	900		2.5	0.79	ug/L	1		6020B	Dissolved
Molybdenum	22		5.0	2.5	ug/L	1		6020B	Dissolved
Nickel	1.5	J	2.0	0.63	ug/L	1		6020B	Dissolved
Potassium	3900		500	110	ug/L	1		6020B	Dissolved
Sodium	2000000		2000	770	ug/L	10		6020B	Dissolved
Strontium	37000		40	6.4	ug/L	10		6020B	Dissolved
Zinc	110		20	6.9	ug/L	1		6020B	Dissolved
Hardness as calcium carbonate	4500		0.91	0.46	mg/L	1		SM 2340B	Total Recoverable
Bromide	66		5.0	0.90	mg/L	5		300.0	Total/NA
Chloride	5600	B	1000	120	mg/L	1000		300.0	Total/NA
Sulfate	2.8		1.0	0.21	mg/L	1		300.0	Total/NA
Alkalinity	6.9		5.0	3.7	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	6.9		5.0	3.7	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-256295-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-598-485-535.4-1 (Continued)
Lab Sample ID: 500-256295-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Salinity	13		0.33	0.33	psu	1		SM 2520B	Total/NA
Total Dissolved Solids	12000		100	43	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	11		5.0	1.9	mg/L	1		SM 2540D	Total/NA

Client Sample ID: WP-598-485-535.4-1 FB
Lab Sample ID: 500-256295-2

No Detections.

Client Sample ID: WP-598-485-535.4-2
Lab Sample ID: 500-256295-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.20	J	0.50	0.20	ng/L	1		1631E	Dissolved
Uranium	0.012	J	0.050	0.0098	ug/L	1		1638	Total Recoverable
Uranium	0.010	J	0.050	0.0098	ug/L	1		1638	Dissolved
Barium	5000		2.5	0.73	ug/L	1		6020B	Total Recoverable
Boron	690	B	50	13	ug/L	1		6020B	Total Recoverable
Calcium	1800000		2000	440	ug/L	10		6020B	Total Recoverable
Copper	0.68	J	2.0	0.50	ug/L	1		6020B	Total Recoverable
Iron	590		100	47	ug/L	1		6020B	Total Recoverable
Lithium	420		10	2.5	ug/L	1		6020B	Total Recoverable
Magnesium	14000		200	49	ug/L	1		6020B	Total Recoverable
Manganese	940		2.5	0.79	ug/L	1		6020B	Total Recoverable
Molybdenum	25		5.0	2.5	ug/L	1		6020B	Total Recoverable
Potassium	4100		500	110	ug/L	1		6020B	Total Recoverable
Sodium	2100000		2000	770	ug/L	10		6020B	Total Recoverable
Strontium	44000		40	6.4	ug/L	10		6020B	Total Recoverable
Zinc	120		20	6.9	ug/L	1		6020B	Total Recoverable
Barium	5100		2.5	0.73	ug/L	1		6020B	Dissolved
Boron	680	B	50	13	ug/L	1		6020B	Dissolved
Calcium	1700000		2000	440	ug/L	10		6020B	Dissolved
Copper	5.6		2.0	0.50	ug/L	1		6020B	Dissolved
Lead	1.2		0.50	0.19	ug/L	1		6020B	Dissolved
Lithium	410		10	2.5	ug/L	1		6020B	Dissolved
Magnesium	14000		200	49	ug/L	1		6020B	Dissolved
Manganese	940		2.5	0.79	ug/L	1		6020B	Dissolved
Molybdenum	25		5.0	2.5	ug/L	1		6020B	Dissolved
Nickel	0.68	J	2.0	0.63	ug/L	1		6020B	Dissolved
Potassium	4100		500	110	ug/L	1		6020B	Dissolved
Selenium	1.0	J	2.5	0.98	ug/L	1		6020B	Dissolved
Sodium	2100000		2000	770	ug/L	10		6020B	Dissolved
Strontium	39000		40	6.4	ug/L	10		6020B	Dissolved
Zinc	91		20	6.9	ug/L	1		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-256295-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-598-485-535.4-2 (Continued)
Lab Sample ID: 500-256295-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Hardness as calcium carbonate	4600		0.91	0.46	mg/L	1		SM 2340B	Total Recoverable
Bromide	67		5.0	0.90	mg/L	5		300.0	Total/NA
Chloride	5800	B	1000	120	mg/L	1000		300.0	Total/NA
Sulfate	3.5		1.0	0.21	mg/L	1		300.0	Total/NA
Alkalinity	6.4		5.0	3.7	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	6.4		5.0	3.7	mg/L	1		SM 2320B	Total/NA
Salinity	14		0.33	0.33	psu	1		SM 2520B	Total/NA
Total Dissolved Solids	12000		100	43	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	10		5.0	1.9	mg/L	1		SM 2540D	Total/NA

Client Sample ID: WP-598-485-535.4-2 FB
Lab Sample ID: 500-256295-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.25	J	0.50	0.20	ng/L	1		1631E	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-256295-1

Method	Method Description	Protocol	Laboratory
1630	Methyl Mercury	EPA	EET SSM
1631E	Mercury, Low Level (CVAFS)	EPA	EET SSM
1638	Metals (ICP/MS)	EPA	EET SSM
6020B	Metals (ICP/MS)	SW846	EET CHI
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	EET CHI
300.0	Anions, Ion Chromatography	EPA	EET CHI
335.4	Cyanide, Total	EPA	EET CHI
350.1	Nitrogen, Ammonia	EPA	EET CHI
365.1	Phosphorus, Total	EPA	EET CHI
SM 2320B	Alkalinity	SM	EET CHI
SM 2520B	Salinity	SM	EET CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CHI
SM 2540D	Solids, Total Suspended (TSS)	SM	EET CHI
SM 4500 S2 F	Sulfide, Total	SM	EET CHI
SM 5310C	TOC	SM	EET CHI
1630	Distillation, Methyl Mercury	EPA	EET SSM
1638	Preparation, Total Recoverable Metals	EPA	EET SSM
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CHI
365.2/365.3/365	Phosphorus, Total	EPA	EET CHI
Distill/Ammonia	Distillation, Ammonia	None	EET CHI
Distill/CN	Distillation, Cyanide	None	EET CHI
FILTRATION	Sample Filtration	None	EET CHI
Filtration	Sample Filtration	None	EET SSM

Protocol References:

EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200
EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-256295-1
Project/Site: FOTH - White Pines, MI

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-256295-1	WP-598-485-535.4-1	Water	09/05/24 11:15	09/07/24 09:40
500-256295-2	WP-598-485-535.4-1 FB	Water	09/05/24 11:15	09/07/24 09:40
500-256295-3	WP-598-485-535.4-2	Water	09/05/24 13:00	09/07/24 09:40
500-256295-4	WP-598-485-535.4-2 FB	Water	09/05/24 13:00	09/07/24 09:40

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-256295-1

Client Sample ID: WP-598-485-535.4-1

Date Collected: 09/05/24 11:15
Date Received: 09/07/24 09:40

Lab Sample ID: 500-256295-1

Matrix: Water

Method: EPA 1630 - Methyl Mercury

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		09/17/24 11:08	09/17/24 20:38	1

Method: EPA 1630 - Methyl Mercury - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		09/17/24 11:08	09/17/24 20:58	1

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.23**	**J**	0.50	0.20	ng/L			09/16/24 19:29	1

Method: EPA 1631E - Mercury, Low Level (CVAFS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			09/16/24 19:34	1

Method: EPA 1638 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.019**	**J**	0.050	0.0098	ug/L		09/19/24 17:26	09/20/24 18:22	1

Method: EPA 1638 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.028**	**J**	0.050	0.0098	ug/L		09/19/24 17:26	09/20/24 15:31	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		09/23/24 08:55	09/23/24 14:52	1
Antimony	<1.3		3.0	1.3	ug/L		09/23/24 08:55	09/23/24 14:52	1
Arsenic	<0.23		1.0	0.23	ug/L		09/23/24 08:55	09/23/24 14:52	1
Barium	**4800**		2.5	0.73	ug/L		09/23/24 08:55	09/23/24 14:52	1
Beryllium	<0.53		1.0	0.53	ug/L		09/23/24 08:55	09/23/24 14:52	1
Boron	**680**	**B**	50	13	ug/L		09/23/24 08:55	09/23/24 14:52	1
Cadmium	<0.17		0.50	0.17	ug/L		09/23/24 08:55	09/23/24 14:52	1
Calcium	**1800000**		2000	440	ug/L		09/23/24 08:55	09/23/24 14:58	10
Chromium	<1.1		5.0	1.1	ug/L		09/23/24 08:55	09/23/24 14:52	1
Cobalt	<0.40		1.0	0.40	ug/L		09/23/24 08:55	09/23/24 14:52	1
Copper	**1.2**	**J**	2.0	0.50	ug/L		09/23/24 08:55	09/23/24 14:52	1
Iron	**590**		100	47	ug/L		09/23/24 08:55	09/23/24 14:52	1
Lead	<0.19		0.50	0.19	ug/L		09/23/24 08:55	09/23/24 14:52	1
Lithium	**420**		10	2.5	ug/L		09/23/24 08:55	09/23/24 14:52	1
Magnesium	**14000**		200	49	ug/L		09/23/24 08:55	09/23/24 14:52	1
Manganese	**880**		2.5	0.79	ug/L		09/23/24 08:55	09/23/24 14:52	1
Molybdenum	**24**		5.0	2.5	ug/L		09/23/24 08:55	09/23/24 14:52	1
Nickel	<0.63		2.0	0.63	ug/L		09/23/24 08:55	09/23/24 14:52	1
Potassium	**4000**		500	110	ug/L		09/23/24 08:55	09/23/24 14:52	1
Selenium	<0.98		2.5	0.98	ug/L		09/23/24 08:55	09/23/24 14:52	1
Silver	<0.12		0.50	0.12	ug/L		09/23/24 08:55	09/23/24 14:52	1
Sodium	**2200000**		2000	770	ug/L		09/23/24 08:55	09/23/24 16:27	10
Strontium	**43000**		40	6.4	ug/L		09/23/24 08:55	09/23/24 14:58	10
Thallium	<0.57		2.0	0.57	ug/L		09/23/24 08:55	09/23/24 14:52	1
Tin	**2.6**	**J**	5.0	1.3	ug/L		09/23/24 08:55	09/23/24 14:52	1
Vanadium	<2.2		5.0	2.2	ug/L		09/23/24 08:55	09/23/24 14:52	1
Zinc	**96**		20	6.9	ug/L		09/23/24 08:55	09/23/24 14:52	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-256295-1

Client Sample ID: WP-598-485-535.4-1

Date Collected: 09/05/24 11:15
Date Received: 09/07/24 09:40

Lab Sample ID: 500-256295-1

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**25**	**J**	100	25	ug/L		09/23/24 08:55	09/23/24 15:05	1
Antimony	<1.3		3.0	1.3	ug/L		09/23/24 08:55	09/23/24 15:05	1
Arsenic	<0.23		1.0	0.23	ug/L		09/23/24 08:55	09/23/24 15:05	1
Barium	**4800**		2.5	0.73	ug/L		09/23/24 08:55	09/23/24 15:05	1
Beryllium	<0.53		1.0	0.53	ug/L		09/23/24 08:55	09/23/24 15:05	1
Boron	**640**	**B**	50	13	ug/L		09/23/24 08:55	09/23/24 15:05	1
Cadmium	<0.17		0.50	0.17	ug/L		09/23/24 08:55	09/23/24 15:05	1
Calcium	**1700000**		2000	440	ug/L		09/23/24 08:55	09/23/24 16:34	10
Chromium	<1.1		5.0	1.1	ug/L		09/23/24 08:55	09/23/24 15:05	1
Cobalt	<0.40		1.0	0.40	ug/L		09/23/24 08:55	09/23/24 15:05	1
Copper	**2.9**		2.0	0.50	ug/L		09/23/24 08:55	09/23/24 15:05	1
Iron	**150**		100	47	ug/L		09/23/24 08:55	09/23/24 15:05	1
Lead	**17**		0.50	0.19	ug/L		09/23/24 08:55	09/23/24 15:05	1
Lithium	**400**		10	2.5	ug/L		09/23/24 08:55	09/23/24 15:05	1
Magnesium	**13000**		200	49	ug/L		09/23/24 08:55	09/23/24 15:05	1
Manganese	**900**		2.5	0.79	ug/L		09/23/24 08:55	09/23/24 15:05	1
Molybdenum	**22**		5.0	2.5	ug/L		09/23/24 08:55	09/23/24 15:05	1
Nickel	**1.5**	**J**	2.0	0.63	ug/L		09/23/24 08:55	09/23/24 15:05	1
Potassium	**3900**		500	110	ug/L		09/23/24 08:55	09/23/24 15:05	1
Selenium	<0.98		2.5	0.98	ug/L		09/23/24 08:55	09/23/24 15:05	1
Silver	<0.12		0.50	0.12	ug/L		09/23/24 08:55	09/23/24 15:05	1
Sodium	**2000000**		2000	770	ug/L		09/23/24 08:55	09/23/24 16:34	10
Strontium	**37000**		40	6.4	ug/L		09/23/24 08:55	09/23/24 16:34	10
Thallium	<0.57		2.0	0.57	ug/L		09/23/24 08:55	09/23/24 15:05	1
Tin	<1.3		5.0	1.3	ug/L		09/23/24 08:55	09/23/24 15:05	1
Vanadium	<2.2		5.0	2.2	ug/L		09/23/24 08:55	09/23/24 15:05	1
Zinc	**110**		20	6.9	ug/L		09/23/24 08:55	09/23/24 15:05	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**4500**		0.91	0.46	mg/L		09/23/24 08:55	09/23/24 16:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**66**		5.0	0.90	mg/L			09/13/24 05:16	5
Nitrate as N (EPA 300.0)	<0.043	H	1.0	0.043	mg/L			09/07/24 13:30	1
Chloride (EPA 300.0)	**5600**	**B**	1000	120	mg/L			09/14/24 19:32	1000
Nitrite as N (EPA 300.0)	<0.070	H	1.0	0.070	mg/L			09/07/24 13:30	1
Fluoride (EPA 300.0)	<0.19		1.0	0.19	mg/L			09/07/24 13:30	1
Nitrate Nitrite as N (EPA 300.0)	<0.070	H	1.0	0.070	mg/L			09/07/24 13:30	1
Sulfate (EPA 300.0)	**2.8**		1.0	0.21	mg/L			09/07/24 13:30	1
Cyanide, Total (EPA 335.4)	<0.0036		0.0050	0.0036	mg/L		09/12/24 14:23	09/15/24 12:31	1
Ammonia (EPA 350.1)	<0.10		0.20	0.10	mg/L		09/17/24 12:12	09/20/24 15:39	1
Phosphorus as P (EPA 365.1)	<0.024	F1 F2	0.050	0.024	mg/L		09/09/24 09:15	09/09/24 17:09	1
Alkalinity (SM 2320B)	**6.9**		5.0	3.7	mg/L			09/10/24 20:37	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**6.9**		5.0	3.7	mg/L			09/10/24 20:37	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<3.7		5.0	3.7	mg/L			09/10/24 20:37	1
Salinity (SM 2520B)	**13**		0.33	0.33	psu			09/18/24 08:19	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-256295-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-598-485-535.4-1
Lab Sample ID: 500-256295-1
Date Collected: 09/05/24 11:15
Matrix: Water
Date Received: 09/07/24 09:40

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**12000**		100	43	mg/L			09/07/24 22:09	1
Total Suspended Solids (SM 2540D)	**11**		5.0	1.9	mg/L			09/11/24 01:42	1
Sulfide (SM 4500 S2 F)	<0.23		1.0	0.23	mg/L			09/09/24 23:22	1
Total Organic Carbon (SM 5310C)	<0.47		1.0	0.47	mg/L			09/17/24 01:53	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon (SM 5310C)	<0.47		1.0	0.47	mg/L			09/22/24 07:09	1

Client Sample Results

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-256295-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-598-485-535.4-1 FB
Lab Sample ID: 500-256295-2
Date Collected: 09/05/24 11:15
Matrix: Water
Date Received: 09/07/24 09:40

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			09/16/24 19:25	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-256295-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-598-485-535.4-2
Lab Sample ID: 500-256295-3
Date Collected: 09/05/24 13:00
Matrix: Water
Date Received: 09/07/24 09:40

Method: EPA 1630 - Methyl Mercury

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		09/17/24 11:08	09/17/24 20:48	1

Method: EPA 1630 - Methyl Mercury - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		09/17/24 11:08	09/17/24 21:09	1

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			09/16/24 19:21	1

Method: EPA 1631E - Mercury, Low Level (CVAFS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.20**	**J**	0.50	0.20	ng/L			09/16/24 19:38	1

Method: EPA 1638 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.012**	**J**	0.050	0.0098	ug/L		09/19/24 17:26	09/20/24 18:25	1

Method: EPA 1638 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**0.010**	**J**	0.050	0.0098	ug/L		09/19/24 17:26	09/20/24 18:18	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		09/23/24 08:55	09/23/24 14:55	1
Antimony	<1.3		3.0	1.3	ug/L		09/23/24 08:55	09/23/24 14:55	1
Arsenic	<0.23		1.0	0.23	ug/L		09/23/24 08:55	09/23/24 14:55	1
Barium	**5000**		2.5	0.73	ug/L		09/23/24 08:55	09/23/24 14:55	1
Beryllium	<0.53		1.0	0.53	ug/L		09/23/24 08:55	09/23/24 14:55	1
Boron	**690**	**B**	50	13	ug/L		09/23/24 08:55	09/23/24 14:55	1
Cadmium	<0.17		0.50	0.17	ug/L		09/23/24 08:55	09/23/24 14:55	1
Calcium	**1800000**		2000	440	ug/L		09/23/24 08:55	09/23/24 15:01	10
Chromium	<1.1		5.0	1.1	ug/L		09/23/24 08:55	09/23/24 14:55	1
Cobalt	<0.40		1.0	0.40	ug/L		09/23/24 08:55	09/23/24 14:55	1
Copper	**0.68**	**J**	2.0	0.50	ug/L		09/23/24 08:55	09/23/24 14:55	1
Iron	**590**		100	47	ug/L		09/23/24 08:55	09/23/24 14:55	1
Lead	<0.19		0.50	0.19	ug/L		09/23/24 08:55	09/23/24 14:55	1
Lithium	**420**		10	2.5	ug/L		09/23/24 08:55	09/23/24 14:55	1
Magnesium	**14000**		200	49	ug/L		09/23/24 08:55	09/23/24 14:55	1
Manganese	**940**		2.5	0.79	ug/L		09/23/24 08:55	09/23/24 14:55	1
Molybdenum	**25**		5.0	2.5	ug/L		09/23/24 08:55	09/23/24 14:55	1
Nickel	<0.63		2.0	0.63	ug/L		09/23/24 08:55	09/23/24 14:55	1
Potassium	**4100**		500	110	ug/L		09/23/24 08:55	09/23/24 14:55	1
Selenium	<0.98		2.5	0.98	ug/L		09/23/24 08:55	09/23/24 14:55	1
Silver	<0.12		0.50	0.12	ug/L		09/23/24 08:55	09/23/24 14:55	1
Sodium	**2100000**		2000	770	ug/L		09/23/24 08:55	09/23/24 16:29	10
Strontium	**44000**		40	6.4	ug/L		09/23/24 08:55	09/23/24 15:01	10
Thallium	<0.57		2.0	0.57	ug/L		09/23/24 08:55	09/23/24 14:55	1
Tin	<1.3		5.0	1.3	ug/L		09/23/24 08:55	09/23/24 14:55	1
Vanadium	<2.2		5.0	2.2	ug/L		09/23/24 08:55	09/23/24 14:55	1
Zinc	**120**		20	6.9	ug/L		09/23/24 08:55	09/23/24 14:55	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-256295-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-598-485-535.4-2
Lab Sample ID: 500-256295-3
Date Collected: 09/05/24 13:00
Matrix: Water
Date Received: 09/07/24 09:40

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		09/23/24 08:55	09/23/24 15:07	1
Antimony	<1.3		3.0	1.3	ug/L		09/23/24 08:55	09/23/24 15:07	1
Arsenic	<0.23		1.0	0.23	ug/L		09/23/24 08:55	09/23/24 15:07	1
Barium	**5100**		2.5	0.73	ug/L		09/23/24 08:55	09/23/24 15:07	1
Beryllium	<0.53		1.0	0.53	ug/L		09/23/24 08:55	09/23/24 15:07	1
Boron	**680**	**B**	50	13	ug/L		09/23/24 08:55	09/23/24 15:07	1
Cadmium	<0.17		0.50	0.17	ug/L		09/23/24 08:55	09/23/24 15:07	1
Calcium	**1700000**		2000	440	ug/L		09/23/24 08:55	09/23/24 16:36	10
Chromium	<1.1		5.0	1.1	ug/L		09/23/24 08:55	09/23/24 15:07	1
Cobalt	<0.40		1.0	0.40	ug/L		09/23/24 08:55	09/23/24 15:07	1
Copper	**5.6**		2.0	0.50	ug/L		09/23/24 08:55	09/23/24 15:07	1
Iron	<47		100	47	ug/L		09/23/24 08:55	09/23/24 15:07	1
Lead	**1.2**		0.50	0.19	ug/L		09/23/24 08:55	09/23/24 15:07	1
Lithium	**410**		10	2.5	ug/L		09/23/24 08:55	09/23/24 15:07	1
Magnesium	**14000**		200	49	ug/L		09/23/24 08:55	09/23/24 15:07	1
Manganese	**940**		2.5	0.79	ug/L		09/23/24 08:55	09/23/24 15:07	1
Molybdenum	**25**		5.0	2.5	ug/L		09/23/24 08:55	09/23/24 15:07	1
Nickel	**0.68**	**J**	2.0	0.63	ug/L		09/23/24 08:55	09/23/24 15:07	1
Potassium	**4100**		500	110	ug/L		09/23/24 08:55	09/23/24 15:07	1
Selenium	**1.0**	**J**	2.5	0.98	ug/L		09/23/24 08:55	09/23/24 15:07	1
Silver	<0.12		0.50	0.12	ug/L		09/23/24 08:55	09/23/24 15:07	1
Sodium	**2100000**		2000	770	ug/L		09/23/24 08:55	09/23/24 16:36	10
Strontium	**39000**		40	6.4	ug/L		09/23/24 08:55	09/23/24 16:36	10
Thallium	<0.57		2.0	0.57	ug/L		09/23/24 08:55	09/23/24 15:07	1
Tin	<1.3		5.0	1.3	ug/L		09/23/24 08:55	09/23/24 15:07	1
Vanadium	<2.2		5.0	2.2	ug/L		09/23/24 08:55	09/23/24 15:07	1
Zinc	**91**		20	6.9	ug/L		09/23/24 08:55	09/23/24 15:07	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**4600**		0.91	0.46	mg/L		09/23/24 08:55	09/23/24 16:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**67**		5.0	0.90	mg/L			09/13/24 05:46	5
Nitrate as N (EPA 300.0)	<0.043	H	1.0	0.043	mg/L			09/07/24 12:28	1
Chloride (EPA 300.0)	**5800**	**B**	1000	120	mg/L			09/14/24 19:47	1000
Nitrite as N (EPA 300.0)	<0.070	H F1	1.0	0.070	mg/L			09/07/24 12:28	1
Fluoride (EPA 300.0)	<0.19	F1	1.0	0.19	mg/L			09/07/24 12:28	1
Nitrate Nitrite as N (EPA 300.0)	<0.070	H F1	1.0	0.070	mg/L			09/07/24 12:28	1
Sulfate (EPA 300.0)	**3.5**		1.0	0.21	mg/L			09/07/24 12:28	1
Cyanide, Total (EPA 335.4)	<0.0036		0.0050	0.0036	mg/L		09/12/24 14:23	09/15/24 12:33	1
Ammonia (EPA 350.1)	<0.10		0.20	0.10	mg/L		09/17/24 12:12	09/20/24 15:41	1
Phosphorus as P (EPA 365.1)	<0.024		0.050	0.024	mg/L		09/09/24 09:15	09/09/24 17:11	1
Alkalinity (SM 2320B)	**6.4**		5.0	3.7	mg/L			09/10/24 20:42	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**6.4**		5.0	3.7	mg/L			09/10/24 20:42	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<3.7		5.0	3.7	mg/L			09/10/24 20:42	1
Salinity (SM 2520B)	**14**		0.33	0.33	psu			09/18/24 08:19	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-256295-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-598-485-535.4-2
Lab Sample ID: 500-256295-3
Date Collected: 09/05/24 13:00
Matrix: Water
Date Received: 09/07/24 09:40

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**12000**		100	43	mg/L			09/07/24 22:12	1
Total Suspended Solids (SM 2540D)	**10**		5.0	1.9	mg/L			09/11/24 01:48	1
Sulfide (SM 4500 S2 F)	<0.23		1.0	0.23	mg/L			09/12/24 22:45	1
Total Organic Carbon (SM 5310C)	<0.47		1.0	0.47	mg/L			09/17/24 02:21	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon (SM 5310C)	<0.47		1.0	0.47	mg/L			09/22/24 07:09	1

Client Sample Results

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-256295-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-598-485-535.4-2 FB
Lab Sample ID: 500-256295-4
Date Collected: 09/05/24 13:00
Matrix: Water
Date Received: 09/07/24 09:40

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.25	J	0.50	0.20	ng/L			09/16/24 19:09	1

Definitions/Glossary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-256295-1
Project/Site: FOTH - White Pines, MI

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Metals

Filtration Batch: 2745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Dissolved	Water	Filtration	
500-256295-3	WP-598-485-535.4-2	Dissolved	Water	Filtration	
MB 350-2745/1-A	Method Blank	Dissolved	Water	Filtration	

Filtration Batch: 2746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Dissolved	Water	Filtration	
500-256295-3	WP-598-485-535.4-2	Dissolved	Water	Filtration	
MB 350-2746/1-B	Method Blank	Dissolved	Water	Filtration	

Filtration Batch: 2748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Dissolved	Water	Filtration	
500-256295-3	WP-598-485-535.4-2	Dissolved	Water	Filtration	
MB 350-2748/1-B	Method Blank	Dissolved	Water	Filtration	
500-256295-1 MS	WP-598-485-535.4-1	Dissolved	Water	Filtration	
500-256295-1 MSD	WP-598-485-535.4-1	Dissolved	Water	Filtration	

Prep Batch: 2781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Dissolved	Water	1630	2746
500-256295-1	WP-598-485-535.4-1	Total/NA	Water	1630	
500-256295-3	WP-598-485-535.4-2	Dissolved	Water	1630	2746
500-256295-3	WP-598-485-535.4-2	Total/NA	Water	1630	
MB 350-2746/1-B	Method Blank	Dissolved	Water	1630	2746
MB 350-2781/1-A	Method Blank	Total/NA	Water	1630	
MB 350-2781/2-A	Method Blank	Total/NA	Water	1630	
MB 350-2781/3-A	Method Blank	Total/NA	Water	1630	
LCS 350-2781/4-A	Lab Control Sample	Total/NA	Water	1630	
LCSD 350-2781/5-A	Lab Control Sample Dup	Total/NA	Water	1630	

Analysis Batch: 2783

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Dissolved	Water	1631E	2745
500-256295-1	WP-598-485-535.4-1	Total/NA	Water	1631E	
500-256295-2	WP-598-485-535.4-1 FB	Total/NA	Water	1631E	
500-256295-3	WP-598-485-535.4-2	Dissolved	Water	1631E	2745
500-256295-3	WP-598-485-535.4-2	Total/NA	Water	1631E	
500-256295-4	WP-598-485-535.4-2 FB	Total/NA	Water	1631E	
MB 350-2745/1-A	Method Blank	Dissolved	Water	1631E	2745
MB 350-2783/30	Method Blank	Total/NA	Water	1631E	
MB 350-2783/34	Method Blank	Total/NA	Water	1631E	
MB 350-2783/35	Method Blank	Total/NA	Water	1631E	
LCS 350-2783/48	Lab Control Sample	Total/NA	Water	1631E	
LCSD 350-2783/49	Lab Control Sample Dup	Total/NA	Water	1631E	

Analysis Batch: 2796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Dissolved	Water	1630	2781
500-256295-1	WP-598-485-535.4-1	Total/NA	Water	1630	2781
500-256295-3	WP-598-485-535.4-2	Dissolved	Water	1630	2781

Metals (Continued)

Analysis Batch: 2796 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-3	WP-598-485-535.4-2	Total/NA	Water	1630	2781
MB 350-2746/1-B	Method Blank	Dissolved	Water	1630	2781
MB 350-2781/1-A	Method Blank	Total/NA	Water	1630	2781
MB 350-2781/2-A	Method Blank	Total/NA	Water	1630	2781
MB 350-2781/3-A	Method Blank	Total/NA	Water	1630	2781
LCS 350-2781/4-A	Lab Control Sample	Total/NA	Water	1630	2781
LCSD 350-2781/5-A	Lab Control Sample Dup	Total/NA	Water	1630	2781

Prep Batch: 2824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Dissolved	Water	1638	2748
500-256295-1	WP-598-485-535.4-1	Total Recoverable	Water	1638	
500-256295-3	WP-598-485-535.4-2	Dissolved	Water	1638	2748
500-256295-3	WP-598-485-535.4-2	Total Recoverable	Water	1638	
MB 350-2748/1-B	Method Blank	Dissolved	Water	1638	2748
MB 350-2824/1-A	Method Blank	Total Recoverable	Water	1638	
MB 350-2824/2-A	Method Blank	Total Recoverable	Water	1638	
LCS 350-2824/4-A	Lab Control Sample	Total Recoverable	Water	1638	
LCSD 350-2824/5-A	Lab Control Sample Dup	Total Recoverable	Water	1638	
500-256295-1 MS	WP-598-485-535.4-1	Dissolved	Water	1638	2748
500-256295-1 MSD	WP-598-485-535.4-1	Dissolved	Water	1638	2748

Analysis Batch: 2837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Dissolved	Water	1638	2824
500-256295-1	WP-598-485-535.4-1	Total Recoverable	Water	1638	2824
500-256295-3	WP-598-485-535.4-2	Dissolved	Water	1638	2824
500-256295-3	WP-598-485-535.4-2	Total Recoverable	Water	1638	2824
MB 350-2748/1-B	Method Blank	Dissolved	Water	1638	2824
MB 350-2824/1-A	Method Blank	Total Recoverable	Water	1638	2824
MB 350-2824/2-A	Method Blank	Total Recoverable	Water	1638	2824
LCS 350-2824/4-A	Lab Control Sample	Total Recoverable	Water	1638	2824
LCSD 350-2824/5-A	Lab Control Sample Dup	Total Recoverable	Water	1638	2824
500-256295-1 MS	WP-598-485-535.4-1	Dissolved	Water	1638	2824
500-256295-1 MSD	WP-598-485-535.4-1	Dissolved	Water	1638	2824

Filtration Batch: 787134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Dissolved	Water	FILTRATION	
500-256295-3	WP-598-485-535.4-2	Dissolved	Water	FILTRATION	
MB 500-787134/1-B	Method Blank	Dissolved	Water	FILTRATION	

Prep Batch: 787258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Dissolved	Water	3005A	787134
500-256295-1	WP-598-485-535.4-1	Total Recoverable	Water	3005A	
500-256295-3	WP-598-485-535.4-2	Dissolved	Water	3005A	787134
500-256295-3	WP-598-485-535.4-2	Total Recoverable	Water	3005A	
MB 500-787134/1-B	Method Blank	Dissolved	Water	3005A	787134
MB 500-787258/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-787258/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Metals

Analysis Batch: 787347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Dissolved	Water	6020B	787258
500-256295-1	WP-598-485-535.4-1	Total Recoverable	Water	6020B	787258
500-256295-1	WP-598-485-535.4-1	Total Recoverable	Water	6020B	787258
500-256295-3	WP-598-485-535.4-2	Dissolved	Water	6020B	787258
500-256295-3	WP-598-485-535.4-2	Total Recoverable	Water	6020B	787258
500-256295-3	WP-598-485-535.4-2	Total Recoverable	Water	6020B	787258
MB 500-787134/1-B	Method Blank	Dissolved	Water	6020B	787258
MB 500-787258/1-A	Method Blank	Total Recoverable	Water	6020B	787258
LCS 500-787258/2-A	Lab Control Sample	Total Recoverable	Water	6020B	787258

Analysis Batch: 787369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Total Recoverable	Water	SM 2340B	787258
500-256295-3	WP-598-485-535.4-2	Total Recoverable	Water	SM 2340B	787258

Analysis Batch: 787370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Dissolved	Water	6020B	787258
500-256295-1	WP-598-485-535.4-1	Total Recoverable	Water	6020B	787258
500-256295-3	WP-598-485-535.4-2	Dissolved	Water	6020B	787258
500-256295-3	WP-598-485-535.4-2	Total Recoverable	Water	6020B	787258
MB 500-787134/1-B	Method Blank	Dissolved	Water	6020B	787258

General Chemistry

Analysis Batch: 784940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Total/NA	Water	300.0	
500-256295-3	WP-598-485-535.4-2	Total/NA	Water	300.0	
MB 500-784940/3	Method Blank	Total/NA	Water	300.0	
LCS 500-784940/4	Lab Control Sample	Total/NA	Water	300.0	
500-256295-3 MS	WP-598-485-535.4-2	Total/NA	Water	300.0	
500-256295-3 MSD	WP-598-485-535.4-2	Total/NA	Water	300.0	

Analysis Batch: 784941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Total/NA	Water	300.0	
500-256295-3	WP-598-485-535.4-2	Total/NA	Water	300.0	
MB 500-784941/3	Method Blank	Total/NA	Water	300.0	
LCS 500-784941/4	Lab Control Sample	Total/NA	Water	300.0	
500-256295-3 MS	WP-598-485-535.4-2	Total/NA	Water	300.0	
500-256295-3 MSD	WP-598-485-535.4-2	Total/NA	Water	300.0	

Analysis Batch: 784953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Total/NA	Water	SM 2540C	
500-256295-3	WP-598-485-535.4-2	Total/NA	Water	SM 2540C	
MB 500-784953/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-784953/2	Lab Control Sample	Total/NA	Water	SM 2540C	

General Chemistry

Prep Batch: 785143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Total/NA	Water	365.2/365.3/365	
500-256295-3	WP-598-485-535.4-2	Total/NA	Water	365.2/365.3/365	
MB 500-785143/1-A	Method Blank	Total/NA	Water	365.2/365.3/365	
LCS 500-785143/2-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	
500-256295-1 MS	WP-598-485-535.4-1	Total/NA	Water	365.2/365.3/365	
500-256295-1 MSD	WP-598-485-535.4-1	Total/NA	Water	365.2/365.3/365	

Analysis Batch: 785218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Total/NA	Water	SM 4500 S2 F	
MB 500-785218/1	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 500-785218/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 785418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Total/NA	Water	SM 2540D	
500-256295-3	WP-598-485-535.4-2	Total/NA	Water	SM 2540D	
MB 500-785418/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 500-785418/2	Lab Control Sample	Total/NA	Water	SM 2540D	
500-256295-1 DU	WP-598-485-535.4-1	Total/NA	Water	SM 2540D	
500-256295-3 DU	WP-598-485-535.4-2	Total/NA	Water	SM 2540D	

Analysis Batch: 785490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Total/NA	Water	365.1	785143
500-256295-3	WP-598-485-535.4-2	Total/NA	Water	365.1	785143
MB 500-785143/1-A	Method Blank	Total/NA	Water	365.1	785143
LCS 500-785143/2-A	Lab Control Sample	Total/NA	Water	365.1	785143
500-256295-1 MS	WP-598-485-535.4-1	Total/NA	Water	365.1	785143
500-256295-1 MSD	WP-598-485-535.4-1	Total/NA	Water	365.1	785143

Analysis Batch: 785538

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Total/NA	Water	SM 2320B	
500-256295-3	WP-598-485-535.4-2	Total/NA	Water	SM 2320B	
MB 500-785538/28	Method Blank	Total/NA	Water	SM 2320B	
LCS 500-785538/29	Lab Control Sample	Total/NA	Water	SM 2320B	
500-256295-3 DU	WP-598-485-535.4-2	Total/NA	Water	SM 2320B	

Analysis Batch: 785691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Total/NA	Water	300.0	
500-256295-3	WP-598-485-535.4-2	Total/NA	Water	300.0	
MB 500-785691/67	Method Blank	Total/NA	Water	300.0	
LCS 500-785691/68	Lab Control Sample	Total/NA	Water	300.0	

Prep Batch: 785778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Total/NA	Water	Distill/CN	
500-256295-3	WP-598-485-535.4-2	Total/NA	Water	Distill/CN	
MB 500-785778/1-A	Method Blank	Total/NA	Water	Distill/CN	

General Chemistry (Continued)

Prep Batch: 785778 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-785778/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Analysis Batch: 785956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-3	WP-598-485-535.4-2	Total/NA	Water	SM 4500 S2 F	
MB 500-785956/1	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 500-785956/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 786076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Total/NA	Water	300.0	
500-256295-3	WP-598-485-535.4-2	Total/NA	Water	300.0	
MB 500-786076/10	Method Blank	Total/NA	Water	300.0	
LCS 500-786076/11	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 786158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Total/NA	Water	335.4	785778
500-256295-3	WP-598-485-535.4-2	Total/NA	Water	335.4	785778
MB 500-785778/1-A	Method Blank	Total/NA	Water	335.4	785778
LCS 500-785778/2-A	Lab Control Sample	Total/NA	Water	335.4	785778

Prep Batch: 786424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Total/NA	Water	Distill/Ammonia	
500-256295-3	WP-598-485-535.4-2	Total/NA	Water	Distill/Ammonia	
MB 500-786424/1-A	Method Blank	Total/NA	Water	Distill/Ammonia	
LCS 500-786424/2-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	

Analysis Batch: 786462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Total/NA	Water	SM 5310C	
500-256295-3	WP-598-485-535.4-2	Total/NA	Water	SM 5310C	
MB 500-786462/31	Method Blank	Total/NA	Water	SM 5310C	
LCS 500-786462/32	Lab Control Sample	Total/NA	Water	SM 5310C	

Filtration Batch: 786573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Dissolved	Water	FILTRATION	
500-256295-3	WP-598-485-535.4-2	Dissolved	Water	FILTRATION	
MB 500-786573/1-A	Method Blank	Dissolved	Water	FILTRATION	

Analysis Batch: 786582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Total/NA	Water	SM 2520B	
500-256295-3	WP-598-485-535.4-2	Total/NA	Water	SM 2520B	

Analysis Batch: 787118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Total/NA	Water	350.1	786424
500-256295-3	WP-598-485-535.4-2	Total/NA	Water	350.1	786424

General Chemistry (Continued)

Analysis Batch: 787118 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-786424/1-A	Method Blank	Total/NA	Water	350.1	786424
LCS 500-786424/2-A	Lab Control Sample	Total/NA	Water	350.1	786424

Analysis Batch: 787153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-256295-1	WP-598-485-535.4-1	Dissolved	Water	SM 5310C	786573
500-256295-3	WP-598-485-535.4-2	Dissolved	Water	SM 5310C	786573
MB 500-786573/1-A	Method Blank	Dissolved	Water	SM 5310C	786573
MB 500-787153/7	Method Blank	Total/NA	Water	SM 5310C	
LCS 500-787153/8	Lab Control Sample	Total/NA	Water	SM 5310C	

Method: 1630 - Methyl Mercury

Lab Sample ID: MB 350-2781/1-A
Matrix: Water
Analysis Batch: 2796

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2781

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		09/17/24 11:08	09/17/24 16:43	1

Lab Sample ID: MB 350-2781/2-A
Matrix: Water
Analysis Batch: 2796

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2781

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		09/17/24 11:08	09/17/24 16:54	1

Lab Sample ID: MB 350-2781/3-A
Matrix: Water
Analysis Batch: 2796

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2781

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		09/17/24 11:08	09/17/24 17:04	1

Lab Sample ID: LCS 350-2781/4-A
Matrix: Water
Analysis Batch: 2796

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 2781

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methyl Mercury	1.00	0.924		ng/L		92	65 - 135

Lab Sample ID: LCSD 350-2781/5-A
Matrix: Water
Analysis Batch: 2796

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 2781

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methyl Mercury	1.00	0.899		ng/L		90	65 - 135	3	35

Lab Sample ID: MB 350-2746/1-B
Matrix: Water
Analysis Batch: 2796

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 2781

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Mercury	<0.022		0.050	0.022	ng/L		09/17/24 11:08	09/17/24 21:19	1

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 350-2783/30
Matrix: Water
Analysis Batch: 2783

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			09/16/24 15:00	1

Method: 1631E - Mercury, Low Level (CVAFS) (Continued)

Lab Sample ID: MB 350-2783/34
Matrix: Water
Analysis Batch: 2783

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			09/16/24 15:17	1

Lab Sample ID: MB 350-2783/35
Matrix: Water
Analysis Batch: 2783

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			09/16/24 15:21	1

Lab Sample ID: LCS 350-2783/48
Matrix: Water
Analysis Batch: 2783

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.51		ng/L		90	77 - 123

Lab Sample ID: LCSD 350-2783/49
Matrix: Water
Analysis Batch: 2783

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	4.42		ng/L		88	77 - 123	2	24

Lab Sample ID: MB 350-2745/1-A
Matrix: Water
Analysis Batch: 2783

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.50	0.20	ng/L			09/16/24 19:42	1

Method: 1638 - Metals (ICP/MS)

Lab Sample ID: MB 350-2824/1-A
Matrix: Water
Analysis Batch: 2837

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 2824

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	<0.0098		0.050	0.0098	ug/L		09/19/24 17:26	09/20/24 14:00	1

Lab Sample ID: MB 350-2824/2-A
Matrix: Water
Analysis Batch: 2837

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 2824

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	<0.0098		0.050	0.0098	ug/L		09/19/24 17:26	09/20/24 14:04	1

Method: 1638 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 350-2824/4-A
Matrix: Water
Analysis Batch: 2837

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 2824

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Uranium			25.0	25.3		ug/L		101	85 - 115		

Lab Sample ID: LCSD 350-2824/5-A
Matrix: Water
Analysis Batch: 2837

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 2824

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Uranium			25.0	25.3		ug/L		101	85 - 115	0	20

Lab Sample ID: MB 350-2748/1-B
Matrix: Water
Analysis Batch: 2837

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 2824

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	<0.0098		0.050	0.0098	ug/L		09/19/24 17:26	09/20/24 14:08	1

Lab Sample ID: 500-256295-1 MS
Matrix: Water
Analysis Batch: 2837

Client Sample ID: WP-598-485-535.4-1
Prep Type: Dissolved
Prep Batch: 2824

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Uranium	0.028	J	25.0	28.1		ug/L		112	70 - 130		

Lab Sample ID: 500-256295-1 MSD
Matrix: Water
Analysis Batch: 2837

Client Sample ID: WP-598-485-535.4-1
Prep Type: Dissolved
Prep Batch: 2824

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Uranium	0.028	J	25.0	27.5		ug/L		110	70 - 130	2	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 500-787258/1-A
Matrix: Water
Analysis Batch: 787347

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 787258

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		09/23/24 08:55	09/23/24 14:48	1
Antimony	<1.3		3.0	1.3	ug/L		09/23/24 08:55	09/23/24 14:48	1
Arsenic	<0.23		1.0	0.23	ug/L		09/23/24 08:55	09/23/24 14:48	1
Barium	<0.73		2.5	0.73	ug/L		09/23/24 08:55	09/23/24 14:48	1
Beryllium	<0.53		1.0	0.53	ug/L		09/23/24 08:55	09/23/24 14:48	1
Boron	14.1	J	50	13	ug/L		09/23/24 08:55	09/23/24 14:48	1
Cadmium	<0.17		0.50	0.17	ug/L		09/23/24 08:55	09/23/24 14:48	1
Calcium	<44		200	44	ug/L		09/23/24 08:55	09/23/24 14:48	1
Chromium	<1.1		5.0	1.1	ug/L		09/23/24 08:55	09/23/24 14:48	1
Cobalt	<0.40		1.0	0.40	ug/L		09/23/24 08:55	09/23/24 14:48	1
Copper	<0.50		2.0	0.50	ug/L		09/23/24 08:55	09/23/24 14:48	1
Iron	<47		100	47	ug/L		09/23/24 08:55	09/23/24 14:48	1
Lead	<0.19		0.50	0.19	ug/L		09/23/24 08:55	09/23/24 14:48	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 500-787258/1-A
Matrix: Water
Analysis Batch: 787347

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 787258

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<2.5		10	2.5	ug/L		09/23/24 08:55	09/23/24 14:48	1
Magnesium	<49		200	49	ug/L		09/23/24 08:55	09/23/24 14:48	1
Manganese	<0.79		2.5	0.79	ug/L		09/23/24 08:55	09/23/24 14:48	1
Molybdenum	<2.5		5.0	2.5	ug/L		09/23/24 08:55	09/23/24 14:48	1
Nickel	<0.63		2.0	0.63	ug/L		09/23/24 08:55	09/23/24 14:48	1
Potassium	<110		500	110	ug/L		09/23/24 08:55	09/23/24 14:48	1
Selenium	<0.98		2.5	0.98	ug/L		09/23/24 08:55	09/23/24 14:48	1
Silver	<0.12		0.50	0.12	ug/L		09/23/24 08:55	09/23/24 14:48	1
Sodium	184	J	200	77	ug/L		09/23/24 08:55	09/23/24 14:48	1
Strontium	<0.64		4.0	0.64	ug/L		09/23/24 08:55	09/23/24 14:48	1
Thallium	<0.57		2.0	0.57	ug/L		09/23/24 08:55	09/23/24 14:48	1
Tin	<1.3		5.0	1.3	ug/L		09/23/24 08:55	09/23/24 14:48	1
Vanadium	<2.2		5.0	2.2	ug/L		09/23/24 08:55	09/23/24 14:48	1
Zinc	<6.9		20	6.9	ug/L		09/23/24 08:55	09/23/24 14:48	1

Lab Sample ID: LCS 500-787258/2-A
Matrix: Water
Analysis Batch: 787347

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 787258

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	2000	1980		ug/L		99	80 - 120
Antimony	500	514		ug/L		103	80 - 120
Arsenic	100	99.7		ug/L		100	80 - 120
Barium	500	495		ug/L		99	80 - 120
Beryllium	50.0	50.4		ug/L		101	80 - 120
Boron	1000	1030		ug/L		103	80 - 120
Cadmium	50.0	50.2		ug/L		100	80 - 120
Calcium	10000	8600		ug/L		86	80 - 120
Chromium	200	202		ug/L		101	80 - 120
Cobalt	500	520		ug/L		104	80 - 120
Copper	250	252		ug/L		101	80 - 120
Iron	1000	1030		ug/L		103	80 - 120
Lead	100	100		ug/L		100	80 - 120
Lithium	100	102		ug/L		102	80 - 120
Magnesium	10000	10500		ug/L		105	80 - 120
Manganese	500	506		ug/L		101	80 - 120
Molybdenum	1000	972		ug/L		97	80 - 120
Nickel	500	513		ug/L		103	80 - 120
Potassium	10000	10700		ug/L		107	80 - 120
Selenium	100	99.9		ug/L		100	80 - 120
Silver	50.0	50.3		ug/L		101	80 - 120
Sodium	10000	10500		ug/L		105	80 - 120
Strontium	1000	1010		ug/L		101	80 - 120
Thallium	100	103		ug/L		103	80 - 120
Tin	1000	1010		ug/L		101	80 - 120
Vanadium	500	505		ug/L		101	80 - 120
Zinc	500	506		ug/L		101	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 500-787134/1-B
Matrix: Water
Analysis Batch: 787347

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 787258

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		09/23/24 08:55	09/23/24 15:03	1
Antimony	<1.3		3.0	1.3	ug/L		09/23/24 08:55	09/23/24 15:03	1
Arsenic	<0.23		1.0	0.23	ug/L		09/23/24 08:55	09/23/24 15:03	1
Barium	<0.73		2.5	0.73	ug/L		09/23/24 08:55	09/23/24 15:03	1
Beryllium	<0.53		1.0	0.53	ug/L		09/23/24 08:55	09/23/24 15:03	1
Boron	15.9	J	50	13	ug/L		09/23/24 08:55	09/23/24 15:03	1
Cadmium	<0.17		0.50	0.17	ug/L		09/23/24 08:55	09/23/24 15:03	1
Calcium	47.4	J	200	44	ug/L		09/23/24 08:55	09/23/24 15:03	1
Chromium	<1.1		5.0	1.1	ug/L		09/23/24 08:55	09/23/24 15:03	1
Cobalt	<0.40		1.0	0.40	ug/L		09/23/24 08:55	09/23/24 15:03	1
Copper	<0.50		2.0	0.50	ug/L		09/23/24 08:55	09/23/24 15:03	1
Iron	<47		100	47	ug/L		09/23/24 08:55	09/23/24 15:03	1
Lead	<0.19		0.50	0.19	ug/L		09/23/24 08:55	09/23/24 15:03	1
Lithium	<2.5		10	2.5	ug/L		09/23/24 08:55	09/23/24 15:03	1
Magnesium	<49		200	49	ug/L		09/23/24 08:55	09/23/24 15:03	1
Manganese	<0.79		2.5	0.79	ug/L		09/23/24 08:55	09/23/24 15:03	1
Molybdenum	<2.5		5.0	2.5	ug/L		09/23/24 08:55	09/23/24 15:03	1
Nickel	<0.63		2.0	0.63	ug/L		09/23/24 08:55	09/23/24 15:03	1
Potassium	<110		500	110	ug/L		09/23/24 08:55	09/23/24 15:03	1
Selenium	<0.98		2.5	0.98	ug/L		09/23/24 08:55	09/23/24 15:03	1
Silver	<0.12		0.50	0.12	ug/L		09/23/24 08:55	09/23/24 15:03	1
Strontium	0.929	J	4.0	0.64	ug/L		09/23/24 08:55	09/23/24 15:03	1
Thallium	<0.57		2.0	0.57	ug/L		09/23/24 08:55	09/23/24 15:03	1
Tin	<1.3		5.0	1.3	ug/L		09/23/24 08:55	09/23/24 15:03	1
Vanadium	<2.2		5.0	2.2	ug/L		09/23/24 08:55	09/23/24 15:03	1
Zinc	<6.9		20	6.9	ug/L		09/23/24 08:55	09/23/24 15:03	1

Lab Sample ID: MB 500-787134/1-B
Matrix: Water
Analysis Batch: 787370

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 787258

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	<77		200	77	ug/L		09/23/24 08:55	09/23/24 16:31	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 500-784940/3
Matrix: Water
Analysis Batch: 784940

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.19		1.0	0.19	mg/L			09/07/24 11:56	1
Sulfate	<0.21		1.0	0.21	mg/L			09/07/24 11:56	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 500-784940/4
Matrix: Water
Analysis Batch: 784940

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Fluoride			20.0	20.2		mg/L		101	90 - 110		
Sulfate			20.0	20.2		mg/L		101	90 - 110		

Lab Sample ID: 500-256295-3 MS
Matrix: Water
Analysis Batch: 784940

Client Sample ID: WP-598-485-535.4-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Fluoride	<0.19	F1	10.0	5.74	F1	mg/L		57	80 - 120		
Sulfate	3.5		10.0	13.8		mg/L		103	80 - 120		

Lab Sample ID: 500-256295-3 MSD
Matrix: Water
Analysis Batch: 784940

Client Sample ID: WP-598-485-535.4-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	<0.19	F1	10.0	6.22	F1	mg/L		62	80 - 120	8	20
Sulfate	3.5		10.0	13.5		mg/L		100	80 - 120	2	20

Lab Sample ID: MB 500-784941/3
Matrix: Water
Analysis Batch: 784941

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.043		1.0	0.043	mg/L			09/07/24 11:56	1
Nitrite as N	<0.070		1.0	0.070	mg/L			09/07/24 11:56	1
Nitrate Nitrite as N	<0.070		1.0	0.070	mg/L			09/07/24 11:56	1

Lab Sample ID: LCS 500-784941/4
Matrix: Water
Analysis Batch: 784941

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate as N			20.0	19.3		mg/L		97	90 - 110		
Nitrite as N			20.0	21.0		mg/L		105	90 - 110		

Lab Sample ID: 500-256295-3 MS
Matrix: Water
Analysis Batch: 784941

Client Sample ID: WP-598-485-535.4-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate as N	<0.043	H	10.0	10.9		mg/L		109	80 - 120		
Nitrite as N	<0.070	H F1	10.0	<0.070	F1	mg/L		0	80 - 120		

Lab Sample ID: 500-256295-3 MSD
Matrix: Water
Analysis Batch: 784941

Client Sample ID: WP-598-485-535.4-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	<0.043	H	10.0	10.9		mg/L		109	80 - 120	0	20

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 500-256295-3 MSD
Matrix: Water
Analysis Batch: 784941

Client Sample ID: WP-598-485-535.4-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrite as N	<0.070	H F1	10.0	<0.070	F1	mg/L		0	80 - 120	NC	20

Lab Sample ID: MB 500-785691/67
Matrix: Water
Analysis Batch: 785691

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	<0.18		1.0	0.18	mg/L			09/13/24 02:44	1
Chloride	0.230	J	1.0	0.12	mg/L			09/13/24 02:44	1
Fluoride	<0.19		1.0	0.19	mg/L			09/13/24 02:44	1
Sulfate	<0.21		1.0	0.21	mg/L			09/13/24 02:44	1

Lab Sample ID: LCS 500-785691/68
Matrix: Water
Analysis Batch: 785691

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	20.0	18.7		mg/L		93	90 - 110
Chloride	20.0	19.0		mg/L		95	90 - 110
Fluoride	20.0	20.9		mg/L		104	90 - 110
Sulfate	20.0	20.1		mg/L		100	90 - 110

Lab Sample ID: MB 500-786076/10
Matrix: Water
Analysis Batch: 786076

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.222	J	1.0	0.12	mg/L			09/14/24 14:44	1

Lab Sample ID: LCS 500-786076/11
Matrix: Water
Analysis Batch: 786076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	20.0	18.9		mg/L		95	90 - 110

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 500-785778/1-A
Matrix: Water
Analysis Batch: 786158

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 785778

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.0036		0.0050	0.0036	mg/L		09/12/24 14:23	09/15/24 11:59	1

Method: 335.4 - Cyanide, Total (Continued)

Lab Sample ID: LCS 500-785778/2-A
Matrix: Water
Analysis Batch: 786158

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 785778

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.100	0.0918		mg/L		92	90 - 110

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 500-786424/1-A
Matrix: Water
Analysis Batch: 787118

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 786424

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	<0.10		0.20	0.10	mg/L		09/17/24 12:12	09/20/24 15:37	1

Lab Sample ID: LCS 500-786424/2-A
Matrix: Water
Analysis Batch: 787118

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 786424

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	2.00	1.90		mg/L		95	90 - 110

Method: 365.1 - Phosphorus, Total

Lab Sample ID: MB 500-785143/1-A
Matrix: Water
Analysis Batch: 785490

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 785143

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus as P	<0.024		0.050	0.024	mg/L		09/09/24 09:15	09/09/24 17:07	1

Lab Sample ID: LCS 500-785143/2-A
Matrix: Water
Analysis Batch: 785490

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 785143

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phosphorus as P	1.00	0.893		mg/L		89	88 - 123

Lab Sample ID: 500-256295-1 MS
Matrix: Water
Analysis Batch: 785490

Client Sample ID: WP-598-485-535.4-1
Prep Type: Total/NA
Prep Batch: 785143

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Phosphorus as P	<0.024	F1 F2	1.00	0.845		mg/L		85	75 - 125

Lab Sample ID: 500-256295-1 MSD
Matrix: Water
Analysis Batch: 785490

Client Sample ID: WP-598-485-535.4-1
Prep Type: Total/NA
Prep Batch: 785143

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phosphorus as P	<0.024	F1 F2	1.00	0.657	F1 F2	mg/L		66	75 - 125	25	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 500-785538/28
Matrix: Water
Analysis Batch: 785538

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	<3.7		5.0	3.7	mg/L			09/10/24 18:23	1
Bicarbonate Alkalinity as CaCO3	<3.7		5.0	3.7	mg/L			09/10/24 18:23	1
Carbonate Alkalinity as CaCO3	<3.7		5.0	3.7	mg/L			09/10/24 18:23	1

Lab Sample ID: LCS 500-785538/29
Matrix: Water
Analysis Batch: 785538

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	100	98.8		mg/L		99	95 - 121

Lab Sample ID: 500-256295-3 DU
Matrix: Water
Analysis Batch: 785538

Client Sample ID: WP-598-485-535.4-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity	6.4		6.48		mg/L		1	20
Bicarbonate Alkalinity as CaCO3	6.4		6.48		mg/L		1	20
Carbonate Alkalinity as CaCO3	<3.7		<3.7		mg/L		NC	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 500-784953/1
Matrix: Water
Analysis Batch: 784953

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<4.3		10	4.3	mg/L			09/07/24 21:13	1

Lab Sample ID: LCS 500-784953/2
Matrix: Water
Analysis Batch: 784953

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	250	248		mg/L		99	80 - 120

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 500-785418/1
Matrix: Water
Analysis Batch: 785418

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<1.9		5.0	1.9	mg/L			09/11/24 00:48	1

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCS 500-785418/2
Matrix: Water
Analysis Batch: 785418

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			200	178		mg/L		89	80 - 120		

Lab Sample ID: 500-256295-1 DU
Matrix: Water
Analysis Batch: 785418

Client Sample ID: WP-598-485-535.4-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	11			10.8		mg/L				2	5

Lab Sample ID: 500-256295-3 DU
Matrix: Water
Analysis Batch: 785418

Client Sample ID: WP-598-485-535.4-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	10			10.4		mg/L				2	5

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 500-785218/1
Matrix: Water
Analysis Batch: 785218

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<0.23		1.0	0.23	mg/L			09/09/24 22:03	1

Lab Sample ID: LCS 500-785218/2
Matrix: Water
Analysis Batch: 785218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfide			3.64	3.62		mg/L		99	85 - 115		

Lab Sample ID: MB 500-785956/1
Matrix: Water
Analysis Batch: 785956

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<0.23		1.0	0.23	mg/L			09/12/24 22:34	1

Lab Sample ID: LCS 500-785956/2
Matrix: Water
Analysis Batch: 785956

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfide			3.64	3.97		mg/L		109	85 - 115		

Method: SM 5310C - TOC

Lab Sample ID: MB 500-786462/31
Matrix: Water
Analysis Batch: 786462

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<0.47		1.0	0.47	mg/L			09/16/24 23:33	1

Lab Sample ID: LCS 500-786462/32
Matrix: Water
Analysis Batch: 786462

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	10.0	10.6		mg/L		106	86 - 116

Lab Sample ID: MB 500-787153/7
Matrix: Water
Analysis Batch: 787153

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	<0.47		1.0	0.47	mg/L			09/22/24 07:09	1

Lab Sample ID: LCS 500-787153/8
Matrix: Water
Analysis Batch: 787153

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dissolved Organic Carbon	10.0	10.4		mg/L		104	86 - 116

Lab Sample ID: MB 500-786573/1-A
Matrix: Water
Analysis Batch: 787153

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	<0.47		1.0	0.47	mg/L			09/22/24 07:09	1

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-256295-1

Client Sample ID: WP-598-485-535.4-1

Date Collected: 09/05/24 11:15
Date Received: 09/07/24 09:40

Lab Sample ID: 500-256295-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	Filtration			2746	DRM	EET SSM	09/10/24 12:42
Dissolved	Prep	1630			2781	AJD	EET SSM	09/17/24 11:08
Dissolved	Analysis	1630		1	2796	CL	EET SSM	09/17/24 20:58
Total/NA	Prep	1630			2781	AJD	EET SSM	09/17/24 11:08
Total/NA	Analysis	1630		1	2796	CL	EET SSM	09/17/24 20:38
Dissolved	Filtration	Filtration			2745	DRM	EET SSM	09/10/24 12:32
Dissolved	Analysis	1631E		1	2783	CL	EET SSM	09/16/24 19:34
Total/NA	Analysis	1631E		1	2783	CL	EET SSM	09/16/24 19:29
Dissolved	Filtration	Filtration			2748	DRM	EET SSM	09/10/24 12:46
Dissolved	Prep	1638			2824	V1R	EET SSM	09/19/24 17:26
Dissolved	Analysis	1638		1	2837	COW	EET SSM	09/20/24 15:31
Total Recoverable	Prep	1638			2824	V1R	EET SSM	09/19/24 17:26
Total Recoverable	Analysis	1638		1	2837	COW	EET SSM	09/20/24 18:22
Dissolved	Filtration	FILTRATION			787134	S1Z	EET CHI	09/20/24 19:46
Dissolved	Prep	3005A			787258	BDE	EET CHI	09/23/24 08:55 - 09/23/24 14:55 [1]
Dissolved	Analysis	6020B		1	787347	RN	EET CHI	09/23/24 15:05
Dissolved	Filtration	FILTRATION			787134	S1Z	EET CHI	09/20/24 19:46
Dissolved	Prep	3005A			787258	BDE	EET CHI	09/23/24 08:55 - 09/23/24 14:55 [1]
Dissolved	Analysis	6020B		10	787370	RN	EET CHI	09/23/24 16:34
Total Recoverable	Prep	3005A			787258	BDE	EET CHI	09/23/24 08:55 - 09/23/24 14:55 [1]
Total Recoverable	Analysis	6020B		1	787347	RN	EET CHI	09/23/24 14:52
Total Recoverable	Prep	3005A			787258	BDE	EET CHI	09/23/24 08:55 - 09/23/24 14:55 [1]
Total Recoverable	Analysis	6020B		10	787347	RN	EET CHI	09/23/24 14:58
Total Recoverable	Prep	3005A			787258	BDE	EET CHI	09/23/24 08:55 - 09/23/24 14:55 [1]
Total Recoverable	Analysis	6020B		10	787370	RN	EET CHI	09/23/24 16:27
Total Recoverable	Prep	3005A			787258	BDE	EET CHI	09/23/24 08:55 - 09/23/24 14:55 [1]
Total Recoverable	Analysis	SM 2340B		1	787369	DAJ	EET CHI	09/23/24 16:39
Total/NA	Analysis	300.0		5	785691	W1T	EET CHI	09/13/24 05:16
Total/NA	Analysis	300.0		1000	786076	NMB	EET CHI	09/14/24 19:32
Total/NA	Analysis	300.0		1	784940	W1T	EET CHI	09/07/24 13:30
Total/NA	Analysis	300.0		1	784941	W1T	EET CHI	09/07/24 13:30
Total/NA	Prep	Distill/CN			785778	AC	EET CHI	09/12/24 14:23 - 09/12/24 14:53 [1]
Total/NA	Analysis	335.4		1	786158	AC	EET CHI	09/15/24 12:31
Total/NA	Prep	Distill/Ammonia			786424	EB	EET CHI	09/17/24 12:12 - 09/17/24 13:12 [1]
Total/NA	Analysis	350.1		1	787118	KF	EET CHI	09/20/24 15:39
Total/NA	Prep	365.2/365.3/365			785143	ER	EET CHI	09/09/24 09:15 - 09/09/24 13:15 [1]
Total/NA	Analysis	365.1		1	785490	KF	EET CHI	09/09/24 17:09
Total/NA	Analysis	SM 2320B		1	785538	ER	EET CHI	09/10/24 20:37
Total/NA	Analysis	SM 2520B		1	786582	TR	EET CHI	09/18/24 08:19
Total/NA	Analysis	SM 2540C		1	784953	CLB	EET CHI	09/07/24 22:09
Total/NA	Analysis	SM 2540D		1	785418	CLB	EET CHI	09/11/24 01:42 - 09/11/24 01:45 [1]
Total/NA	Analysis	SM 4500 S2 F		1	785218	CLB	EET CHI	09/09/24 23:22 - 09/09/24 23:26 [1]

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Project/Site: FOTH - White Pines, MI

Job ID: 500-256295-1

Client Sample ID: WP-598-485-535.4-1

Lab Sample ID: 500-256295-1

Date Collected: 09/05/24 11:15
Matrix: Water
Date Received: 09/07/24 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	FILTRATION			786573	TR	EET CHI	09/16/24 07:45
Dissolved	Analysis	SM 5310C		1	787153	TR	EET CHI	09/22/24 07:09
Total/NA	Analysis	SM 5310C		1	786462	TR	EET CHI	09/17/24 01:53

Client Sample ID: WP-598-485-535.4-1 FB

Lab Sample ID: 500-256295-2

Date Collected: 09/05/24 11:15
Matrix: Water
Date Received: 09/07/24 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	2783	CL	EET SSM	09/16/24 19:25

Client Sample ID: WP-598-485-535.4-2

Lab Sample ID: 500-256295-3

Date Collected: 09/05/24 13:00
Matrix: Water
Date Received: 09/07/24 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	Filtration			2746	DRM	EET SSM	09/10/24 12:42
Dissolved	Prep	1630			2781	AJD	EET SSM	09/17/24 11:08
Dissolved	Analysis	1630		1	2796	CL	EET SSM	09/17/24 21:09
Total/NA	Prep	1630			2781	AJD	EET SSM	09/17/24 11:08
Total/NA	Analysis	1630		1	2796	CL	EET SSM	09/17/24 20:48
Dissolved	Filtration	Filtration			2745	DRM	EET SSM	09/10/24 12:32
Dissolved	Analysis	1631E		1	2783	CL	EET SSM	09/16/24 19:38
Total/NA	Analysis	1631E		1	2783	CL	EET SSM	09/16/24 19:21
Dissolved	Filtration	Filtration			2748	DRM	EET SSM	09/10/24 12:46
Dissolved	Prep	1638			2824	V1R	EET SSM	09/19/24 17:26
Dissolved	Analysis	1638		1	2837	COW	EET SSM	09/20/24 18:18
Total Recoverable	Prep	1638			2824	V1R	EET SSM	09/19/24 17:26
Total Recoverable	Analysis	1638		1	2837	COW	EET SSM	09/20/24 18:25
Dissolved	Filtration	FILTRATION			787134	S1Z	EET CHI	09/20/24 19:46
Dissolved	Prep	3005A			787258	BDE	EET CHI	09/23/24 08:55 - 09/23/24 14:55 [1]
Dissolved	Analysis	6020B		1	787347	RN	EET CHI	09/23/24 15:07
Dissolved	Filtration	FILTRATION			787134	S1Z	EET CHI	09/20/24 19:46
Dissolved	Prep	3005A			787258	BDE	EET CHI	09/23/24 08:55 - 09/23/24 14:55 [1]
Dissolved	Analysis	6020B		10	787370	RN	EET CHI	09/23/24 16:36
Total Recoverable	Prep	3005A			787258	BDE	EET CHI	09/23/24 08:55 - 09/23/24 14:55 [1]
Total Recoverable	Analysis	6020B		1	787347	RN	EET CHI	09/23/24 14:55
Total Recoverable	Prep	3005A			787258	BDE	EET CHI	09/23/24 08:55 - 09/23/24 14:55 [1]
Total Recoverable	Analysis	6020B		10	787347	RN	EET CHI	09/23/24 15:01
Total Recoverable	Prep	3005A			787258	BDE	EET CHI	09/23/24 08:55 - 09/23/24 14:55 [1]
Total Recoverable	Analysis	6020B		10	787370	RN	EET CHI	09/23/24 16:29
Total Recoverable	Prep	3005A			787258	BDE	EET CHI	09/23/24 08:55 - 09/23/24 14:55 [1]
Total Recoverable	Analysis	SM 2340B		1	787369	DAJ	EET CHI	09/23/24 16:39
Total/NA	Analysis	300.0		5	785691	W1T	EET CHI	09/13/24 05:46
Total/NA	Analysis	300.0		1000	786076	NMB	EET CHI	09/14/24 19:47

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-256295-1
Project/Site: FOTH - White Pines, MI

Client Sample ID: WP-598-485-535.4-2
Lab Sample ID: 500-256295-3
Date Collected: 09/05/24 13:00
Matrix: Water
Date Received: 09/07/24 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	784940	W1T	EET CHI	09/07/24 12:28
Total/NA	Analysis	300.0		1	784941	W1T	EET CHI	09/07/24 12:28
Total/NA	Prep	Distill/CN			785778	AC	EET CHI	09/12/24 14:23 - 09/12/24 14:53 [1]
Total/NA	Analysis	335.4		1	786158	AC	EET CHI	09/15/24 12:33
Total/NA	Prep	Distill/Ammonia			786424	EB	EET CHI	09/17/24 12:12 - 09/17/24 13:12 [1]
Total/NA	Analysis	350.1		1	787118	KF	EET CHI	09/20/24 15:41
Total/NA	Prep	365.2/365.3/365			785143	ER	EET CHI	09/09/24 09:15 - 09/09/24 13:15 [1]
Total/NA	Analysis	365.1		1	785490	KF	EET CHI	09/09/24 17:11
Total/NA	Analysis	SM 2320B		1	785538	ER	EET CHI	09/10/24 20:42
Total/NA	Analysis	SM 2520B		1	786582	TR	EET CHI	09/18/24 08:19
Total/NA	Analysis	SM 2540C		1	784953	CLB	EET CHI	09/07/24 22:12
Total/NA	Analysis	SM 2540D		1	785418	CLB	EET CHI	09/11/24 01:48 - 09/11/24 01:51 [1]
Total/NA	Analysis	SM 4500 S2 F		1	785956	CLB	EET CHI	09/12/24 22:45 - 09/12/24 22:50 [1]
Dissolved	Filtration	FILTRATION			786573	TR	EET CHI	09/16/24 07:45
Dissolved	Analysis	SM 5310C		1	787153	TR	EET CHI	09/22/24 07:09
Total/NA	Analysis	SM 5310C		1	786462	TR	EET CHI	09/17/24 02:21

Client Sample ID: WP-598-485-535.4-2 FB
Lab Sample ID: 500-256295-4
Date Collected: 09/05/24 13:00
Matrix: Water
Date Received: 09/07/24 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	2783	CL	EET SSM	09/16/24 19:09

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 500-256295-1
Project/Site: FOTH - White Pines, MI

Laboratory: Eurofins Chicago

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Georgia	State	N/A	05-31-25
Georgia (DW)	State	939	05-31-25
Hawaii	State	NA	05-31-25
Illinois	NELAP	IL00035	05-31-25
Indiana	State	C-IL-02	05-31-25
Iowa	State	082	05-01-26
Kansas	NELAP	E-10161	10-31-24
Kentucky (UST)	State	AI # 108083	05-31-25
Kentucky (WW)	State	KY90023	12-31-24
Louisiana (All)	NELAP	02046	06-30-25
Mississippi	State	NA	05-31-25
North Carolina (WW/SW)	State	291	12-31-24
North Dakota	State	R-194	04-29-24 *
Oklahoma	State	8908	08-31-24 *
South Carolina	State	77001003	05-31-25
USDA	US Federal Programs	P330-18-00018	03-30-26
Wisconsin	State	999580010	08-31-25
Wyoming	State	8TMS-Q	05-31-25

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	12-18-24
ANAB	Dept. of Defense ELAP	L2236	01-19-25
ANAB	Dept. of Energy	L2236.01	12-18-24
ANAB	ISO/IEC 17025	L2236	01-19-25
California	State	2954	12-18-24
Florida	NELAP	E87575	06-30-25
Louisiana (All)	NELAP	03073	06-30-25
New Jersey	NELAP	WA014	06-30-25
New York	NELAP	11662	04-01-25
Oregon	NELAP	4167-008	07-07-25
US Fish & Wildlife	US Federal Programs	A20571	06-30-25
Washington	State	C788-23a	07-13-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

2417 Bond Street
University Park, IL 60484
Phone (708) 534-5200 Phone (708) 534-5211

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler	Lab PM: Fredrick, Sandie	Carrier Tracking No(s)	COC No: 500-126105-50170 1
Client Contact: Jakob Wartman	Phone	E-Mail: Sandra Fredrick@et.eurofinsus com	State of Origin:	Page: Page 1 of 2
Company: Foth Infrastructure & Environment, LLC	PWSID:			Job #: 500-256295

Address	Due Date Requested	Preservation Codes:
Missabe Building 227 West 1st Street, Suite 920		N - None S - H2SO4 CB - ZnAcetate/NaOH B - NaOH D - HNO3
City: Duluth	TAT Requested (days):	
State, Zip: MN, 55802	Compliance Project Δ Yes Δ No	500-256295 COC
Phone: 218-481-6014(Tel)	PO #: Purchase Order not required	
Email: Jakob Wartman@foth com	WO #:	Other:
Project Name: FOTH - White Pines, MI	Project #: 50023463	
Site:	SSOW#:	

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1631E - Mercury, Low Level (CVAFS)	1631E - Dissolved Mercury, Low Level (FF)	2320B, 2540C, 2540D, 300.0_28D, 300_48HR, SM2520_B	350.1 Ammonia, 365.1 Phosphorus	SM4500_S2_F - Sulfide	335.4 - Cyanide, Total	SM5310_DOC_C - DOC	6020B - Total Metals (27), SM2340B - Hardness	6020B - Dissolved Metals (ICP/MS) - 27 elements	~~3500_CR_B - Chromium, Hexavalent~~ LL Hg field blank	~~3500_CR_B - Dissolved Chromium, Hexavalent (filt 4 TO 0~~	1638 - Uranium only (ICP/MS) Total & Dissolved	163 - Methyl Hg - Total & Dissolved	Total Number of containers	Special Instructions/Note:
			Preservation Code				N	N	N	S	CB	B	S	D	D	N	N	D	D		
112 WP-598-485-535.4-1	9/5/24	1115	G	Water			X		X	X	X	X		X		X	X	X	X		
3A WP-598-485-535 4-2	9/5/24	1300	G	Water			X		X	X	X	X		X		X	X	X	X		
				Water																	
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				Water																	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) standard

Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Mary Wilson	9/6/24 1050	Foth	Stephanie Hernandez	9/7/24 0940	EETA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company

Custody Seals Intact Δ Yes Δ No | Custody Seal No.

Cooler Temperature(s) °C and Other Remarks: 0.8+0.7, 1.9+1.8, 0.6+0.5, 0.4+0.3

9/25/2024

Eurofins Chicago
2417 Bond Street
University Park, IL 60484
Phone 708-534-5200 Fax: 708-534-5211

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: May Willison	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-126232-50200 4
Client Contact: Jakob Wartman	Phone: 608 774 4492	E-Mail: Sandra Fredrick@et.eurofinsus com	State of Origin: MI	Page: Page ~~1 of~~ 2 of 2
Company: Foth Infrastructure & Environment, LLC	PWSID:	Analysis Requested		Job #: 500-256295

Address: Missabe Building 227 West 1st. Street, Suite 920	Due Date Requested: Standard		Preservation Codes: N - None
City: Duluth	TAT Requested (days): Standard		
State, Zip: MN, 55802	Compliance Project: Δ Yes Δ No		
Phone: 218-481-6014(Tel)	PO #: Purchase Order not required		Other:
Email: Jakob Wartman@foth com	WO #:		
Project Name: FOTH - White Pines, MI	Project #: 50023463		
Site:	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	~~1631E - Mercury, Low Level (CVAFS)~~	~~1631E - Dissolved Mercury, Low Level (FE)~~	1L unpreserved for lab filtering	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N			
1 *WP-598-485-535.4-1*	9/5/24	1115	G	Water					X		needs lab filtering*
3 *WP-598-485-535 4-2*	9/5/24	1300	G	Water					X		needs lab filtering*
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I, II, III, IV, Other (specify): Standard

Special Instructions/QC Requirements: extra 1L unpreserved for lab filtering to be analyzed for dissolved samples

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
May Willison	9/6/24 1050	Foth	Stephanie Hernandez	9/7/24 0940	EEA
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks


WHITE PINE COPPER
35362 MALL CIRCLE DRIVE
WHITE PINE, MI 49971
UNITED STATES US
CAD: 0780307/CAFE3808
TO SAMPLE RECEIPT
EUROFINS CHICAGO
2417 BOND ST.
UNIVERSITY PARK IL 60484
(708) 634-5200
REF:
PO:
DEPT:
RMA:
FedEx Express
RETURNS MON-SAT
SATURDAY 12:00P
PRIORITY OVERNIGHT
FedEx
TRK# 0221 4051 7962 8123
XØ JOTA
60484
IL-US
ORD
5025547 06Sep2024 CMXA 581G2/4EF9/C0B8


WHITE PINE COPPER
35362 MALL CIRCLE DRIVE
WHITE PINE, MI 49971
UNITED STATES US
CAD: 0780307/CAFE3808
TO SAMPLE RECEIPT
EUROFINS CHICAGO
2417 BOND ST.
UNIVERSITY PARK IL 60484
(708) 634-5200
REF:
PO:
DEPT:
RMA:
FedEx Express
SATURDAY 12:00P
PRIORITY OVERNIGHT
FedEx
TRK# 0221 4051 7962 8101
XØ JOTA
60484
IL-US
ORD
5025547 06Sep2024 CMXA 581G2/4EF9/C0B8


JUSTIN BROWN (PUTM)
WHITE PINE COPPER
35362 MALL CIRCLE DRIVE

WHITE PINE, MI 49971
UNITED STATES US

ACTWGT: 25.00 LB MAN
CAD: 0780307/CAFE3808

TO SAMPLE RECEIPT
EUROFINS CHICAGO
2417 BOND ST.

UNIVERSITY PARK IL 60484
(708) 534-6200

INV:
PO:
REF:
DEPT:

RMA

FedEx Express

FedEx
TRK# 0221 4051 7962 8097

SATURDAY 12:00P
PRIORITY OVERNIGHT

X0 JOTA

60484
IL-US
ORD

5025547 06Sep2024 CMXA 581G2/4EF9/C0B8


WHITE PINE COPPER
35362 MALL CIRCLE DRIVE

WHITE PINE, MI 49971
UNITED STATES US

ACTWGT: 25.00 LB MAN
CAD: 0780307/CAFE3808

SAMPLE RECEIPT
EUROFINS CHICAGO
2417 BOND ST.

UNIVERSITY PARK IL 60484
(708) 534-6200

REF:
DEPT:

RMA

FedEx Express

FedEx
TRK# 0221 4051 7962 8112

SATURDAY 12:00P
PRIORITY OVERNIGHT

X0 JOTA

604

5025547 06Sep2024 CMXA 581G2/4EF9/C0B8

Eurofins Chicago
2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler	Lab PM: Fredrick, Sandie	Carrier Tracking No(s)	COC No: 500-192380.1
Client Contact: Shipping/Receiving	Phone	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest,		Accreditations Required (See note)		Job #: 500-256295-1
Address: 5755 8th Street East, ,	Due Date Requested: 9/23/2024			Preservation Codes: -
City: Tacoma	TAT Requested (days):			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #			
Email	WO #			
Project Name: FOTH - White Pines, MI	Project #: 50023463			
Site	SSOW#			Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1638/1638_Prep_W Uranium only (ICP/MS)	1630_ME/1630_Dist_PFP Methyl Mercury	1631E/ Mercury, Low Level (CVAFS)	1638/Filtration_ME Dissolved Uranium only (ICP/MS) (lab fil	1630_ME/Filtration_ME Dissolved Methyl Mercury (lab filtered)	1631E/Filtration_ME Dissolved Mercury, Low Level (Lab Filter	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
WP-598-485-535.4-1 (500-256295-1)	9/5/24	11:15 Eastern	G	Water			X	X	X	X	X	X	6	
WP-598-485-535.4-1 FB (500-256295-2)	9/5/24	11:15 Eastern	G	Water					X				2	
WP-598-485-535.4-2 (500-256295-3)	9/5/24	13:00 Eastern	G	Water			X	X	X	X	X	X	6	
WP-598-485-535.4-2 FB (500-256295-4)	9/5/24	13:00 Eastern	G	Water					X				2	

Note: Since laboratory accreditations are subject to change, Eurofins Chicago places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded u... accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Chicago laboratory or other instructions will be provided. Any changes to accrec... immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Chicago.

Therm. ID: SC03 Cust. Seal: (Y) / N
Uncorr./Corr. Temp: 6.3 / 6.3 °C
Delivery: UPS / FedEx / Other
Ice Type: Blue / Dry / Wet / None
Label Ver.: V2 Packing: D

Possible Hazard Identification: Unconfirmed 7051 7620 8406	Sample Disposal (A fee may be assessed if samp... ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ...
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Laurel Kuennen	9/9/24 14:30	EET		9/10/24 9:30	EET
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks

Ver: 05/06/2024

Login Sample Receipt Checklist

Client: Foth Infrastructure & Environment, LLC

Job Number: 500-256295-1

Login Number: 256295
List Number: 1
Creator: Hernandez, Stephanie

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.7,1.8,0.5,0.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	False	Refer to Job Narrative for details.
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Foth Infrastructure & Environment, LLC

Job Number: 500-256295-1

Login Number: 256295
List Number: 2
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 09/10/24 02:04 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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500-256295 Field Sheet

Date:	9/10/2024
End Time:	13:30
KI Paper Lot:	na
Analyst:	

Preservative ID	Preservative Type	Container ID
A	Bromine Monochloride (0.2N)	24911
zzzzzzzzzzzzzzzz	zzzzzzzzzzzzzzzzzzzzzzzz	zzzzzzzzzz
zzzzzzzzzzzzzzzz	zzzzzzzzzzzzzzzzzzzzzzzz	zzzzzzzzzz
zzzzzzzzzzzzzzzz	zzzzzzzzzzzzzzzzzzzzzzzz	zzzzzzzzzz

Sample ID	Pres. Used (ID)	Oxidized (Y/N)?	Pres. Vol. (mL)/Percent (%)	Comments
500-256295-A-1	A	Y	.8 2	
500-256295-B-1	A	Y	.8 2	
500-256295-A-2	A	Y	.8 2	
500-256295-B-2	A	Y	.8 2	
500-256295-A-3	A	Y	.8 2	
500-256295-B-3	A	Y	.8 2	
500-256295-A-4	A	Y	.8 2	
500-256295-B-4	A	Y	.8 2	

9/10/24

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500-256295 Field Sheet

Date:	9/10/2024
End Time:	13:30
pH Paper Lot:	hc324723
Analyst:	VR

Preservative ID	Preservative Type	Container ID
A	Nitric Acid	na
A	Hydrochloric Acid	na
ZZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ
ZZZZZZZZZZZZZZZZ	ZZZZZZZZZZZZZZZZZZZZZZZZ	ZZZZZZZZZZ

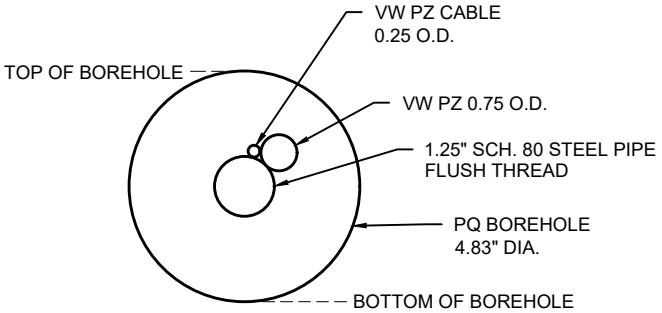
Sample ID	Initial pH	Final pH	Preservative ID	Preservative Added (mL)	Comments
500-256295-H-1	<2				
500-256295-H-3	<2			VR 9/10/24	
500-256295-C-1	<2				
500-256295-C-3	<2				

Appendix E

Vibrating Wire Piezometer Data

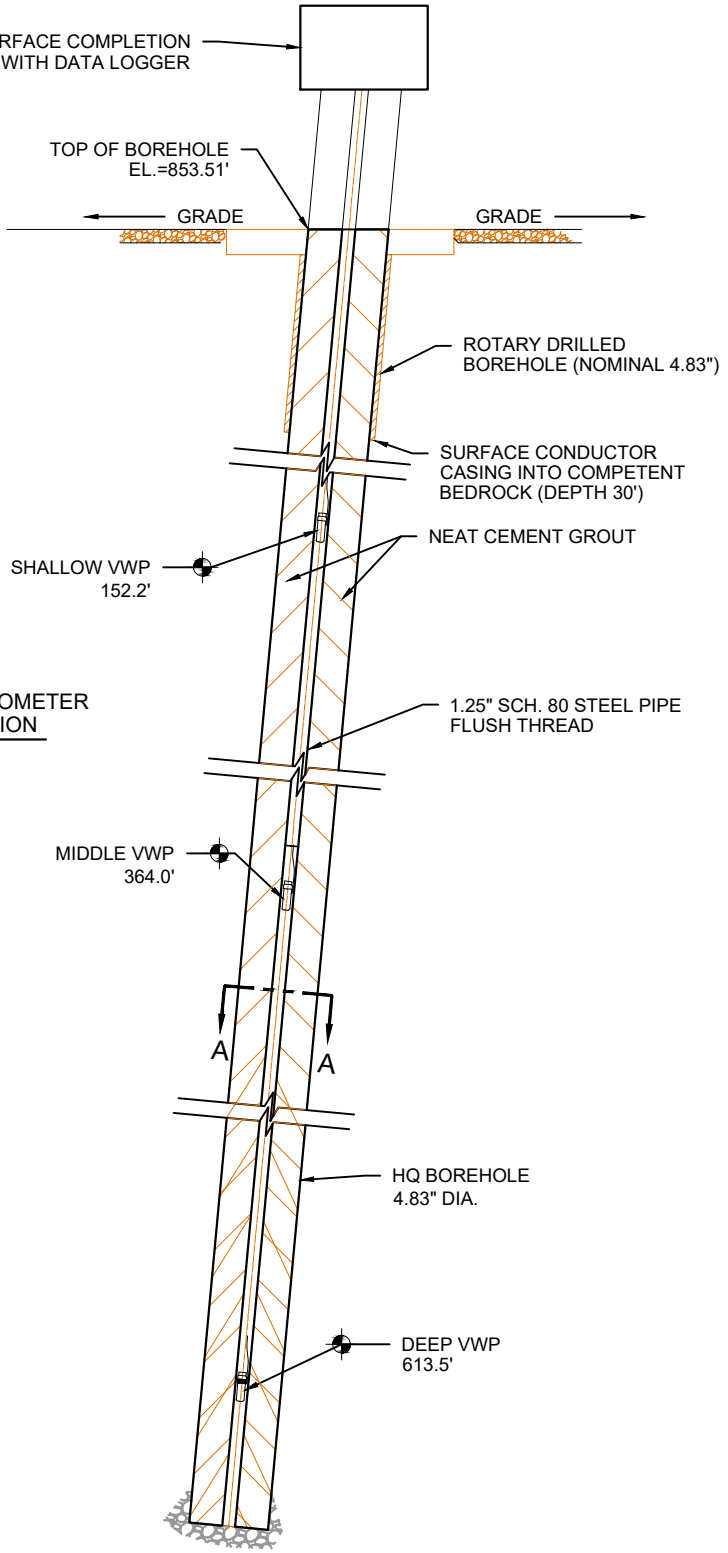
Vibrating Wire Piezometer Construction Diagrams
Vibrating Wire Piezometer Head Profiles and Vertical Gradients

Vibrating Wire Piezometer Construction Diagrams



VIBRATING WIRE PIEZOMETER
TYPICAL BOREHOLE SECTION A - A

0 0.5" 1" 1.5" 2"



VIBRATING WIRE PIEZOMETER
BOREHOLE SECTION
1 1
NOT TO SCALE

NOTES:

1. ANGLE OF BOREHOLE - 84.7°.
2. OPEN BOREHOLE CEMENTED FROM 1683' (TD) TO 712'.
3. AMBIENT WATER LEVEL IS 3.83' BELOW TOP OF CASING (BTOC).
4. ALL VWP DEPTHS ARE REPORTED AS BELOW GROUND SURFACE, MEASURED ALONG THE BOREHOLE.

Foth Environment Solutions			
REVISED	DATE	BY	DESCRIPTION
1			
2			
3			
PREPARED BY:	MJW4	DATE:	FEB. '25
REVIEWED BY:	MJW4	DATE:	FEB. '25
APPROVED BY:	JCB1	DATE:	FEB. '25

WHITE PINE COPPER LLC

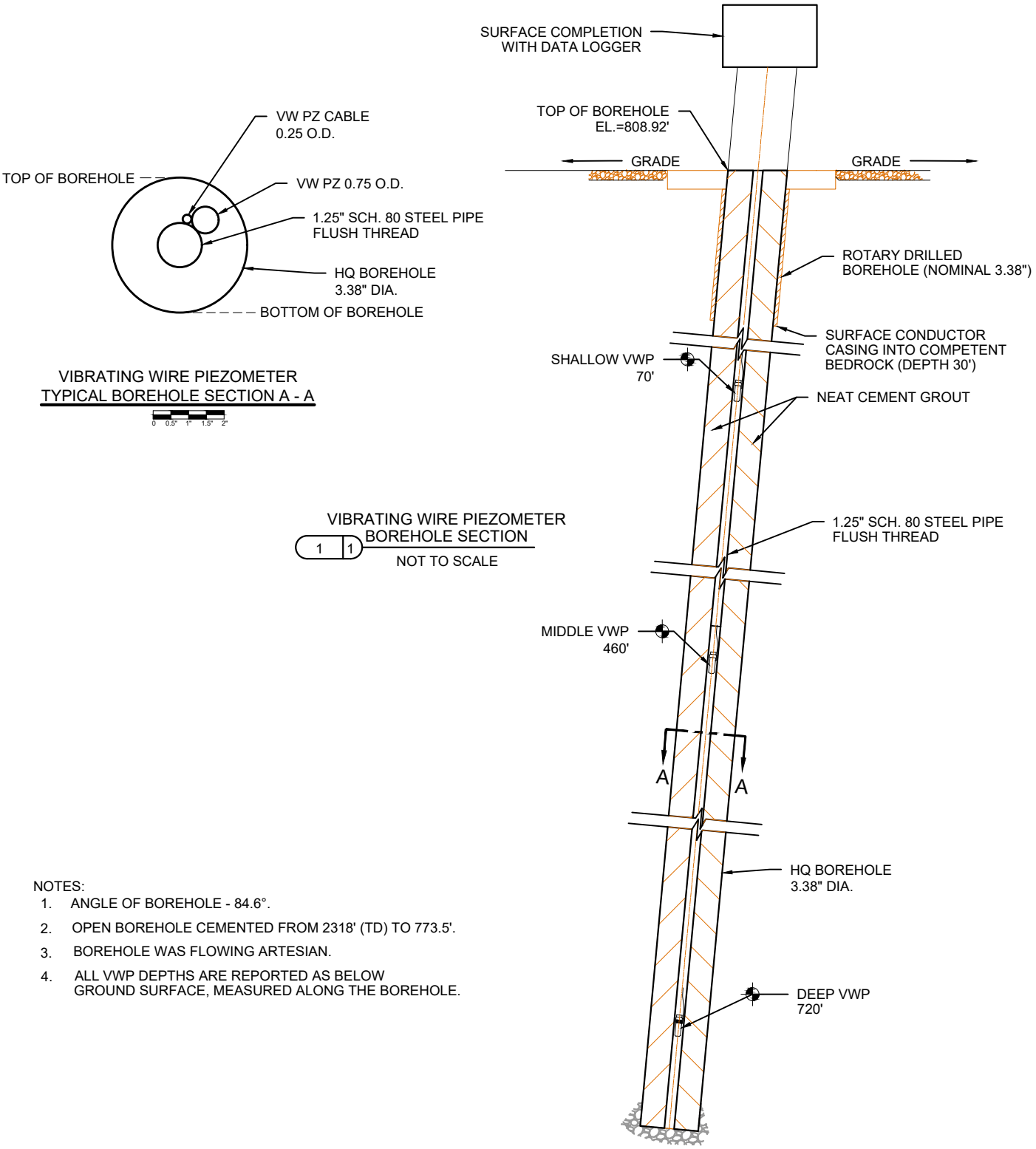
FIGURE 1

WP-584
VWP AS-BUILT

Scale:	NOT TO SCALE	Date:	FEB. 2025
Drawn By:	JOW	Project No:	23W200

Foth

Thursday, March 06, 2025 10:58:13 AM
DWG Filename: wp-584_585_598.dwg Layout: wp-584
DWG Folder Location: White Pine Copper\23W200\CAD\Figures\VWP Asbuilts



NOTES:

1. ANGLE OF BOREHOLE - 84.6°.
2. OPEN BOREHOLE CEMENTED FROM 2318' (TD) TO 773.5'.
3. BOREHOLE WAS FLOWING ARTESIAN.
4. ALL VWP DEPTHS ARE REPORTED AS BELOW GROUND SURFACE, MEASURED ALONG THE BOREHOLE.

Foth Environment Solutions			
REVISED	DATE	BY	DESCRIPTION
1			
2			
3			
PREPARED BY:	MJW4	DATE:	FEB. '25
REVIEWED BY:	MJW4	DATE:	FEB. '25
APPROVED BY:	JCB1	DATE:	FEB. '25

WHITE PINE COPPER LLC

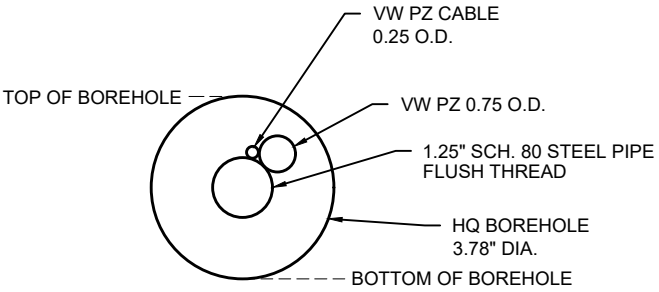
FIGURE 1

WP-585
VWP AS-BUILT

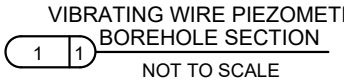
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Drawn By:	JOW	Project No:	23W200

Foth

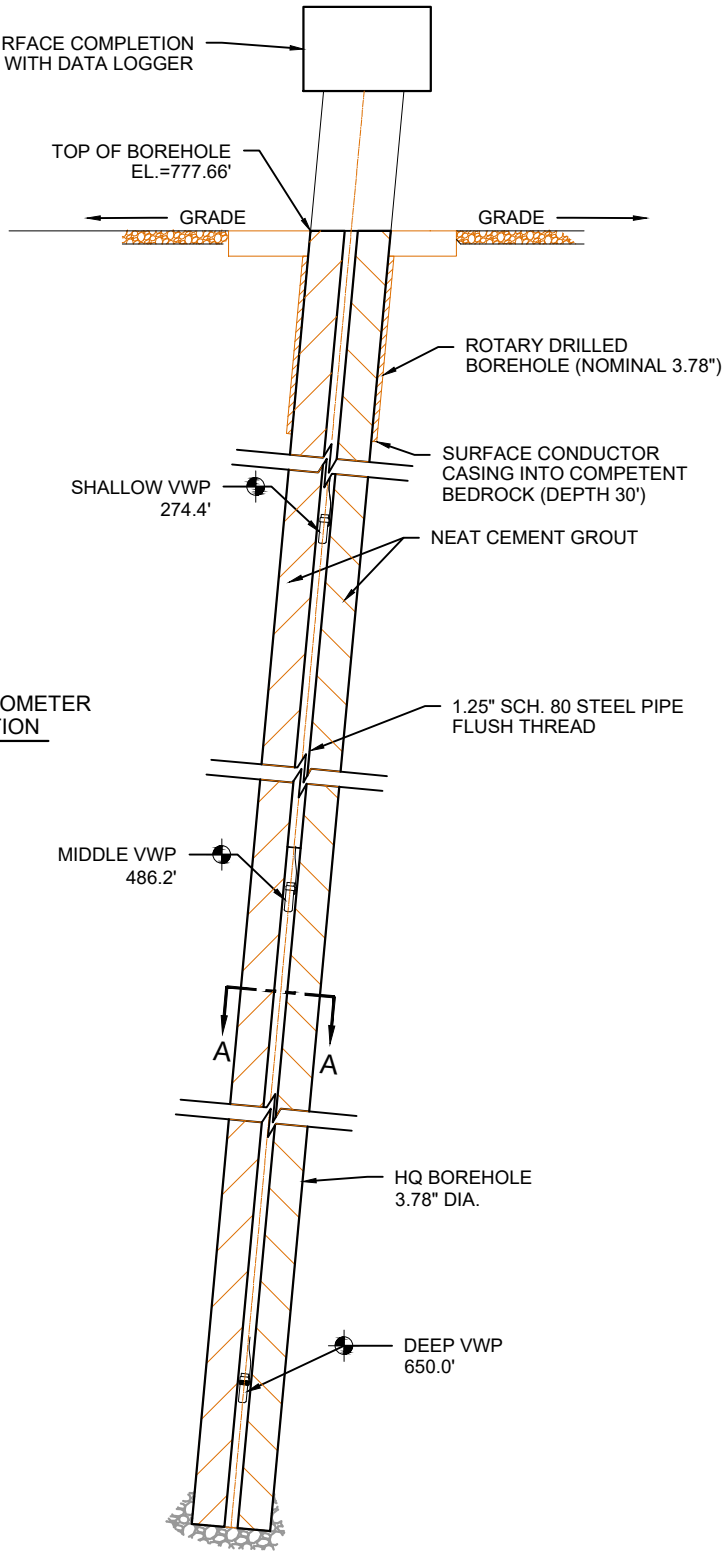
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VIBRATING WIRE PIEZOMETER
TYPICAL BOREHOLE SECTION A - A



VIBRATING WIRE PIEZOMETER
BOREHOLE SECTION
NOT TO SCALE



NOTES:

1. ANGLE OF BOREHOLE - 75.0°.
2. OPEN BOREHOLE CEMENTED FROM 3008.5' (TD) TO 701.25'.
3. BOREHOLE WAS FLOWING ARTESIAN.
4. ALL VWP DEPTHS ARE REPORTED AS BELOW GROUND SURFACE, MEASURED ALONG THE BOREHOLE.

Foth Environment Solutions			
REVISED	DATE	BY	DESCRIPTION
1			
2			
3			
PREPARED BY:	MJW4	DATE:	FEB. '25
REVIEWED BY:	MJW4	DATE:	FEB. '25
APPROVED BY:	JCB1	DATE:	FEB. '25

WHITE PINE COPPER LLC

FIGURE 1

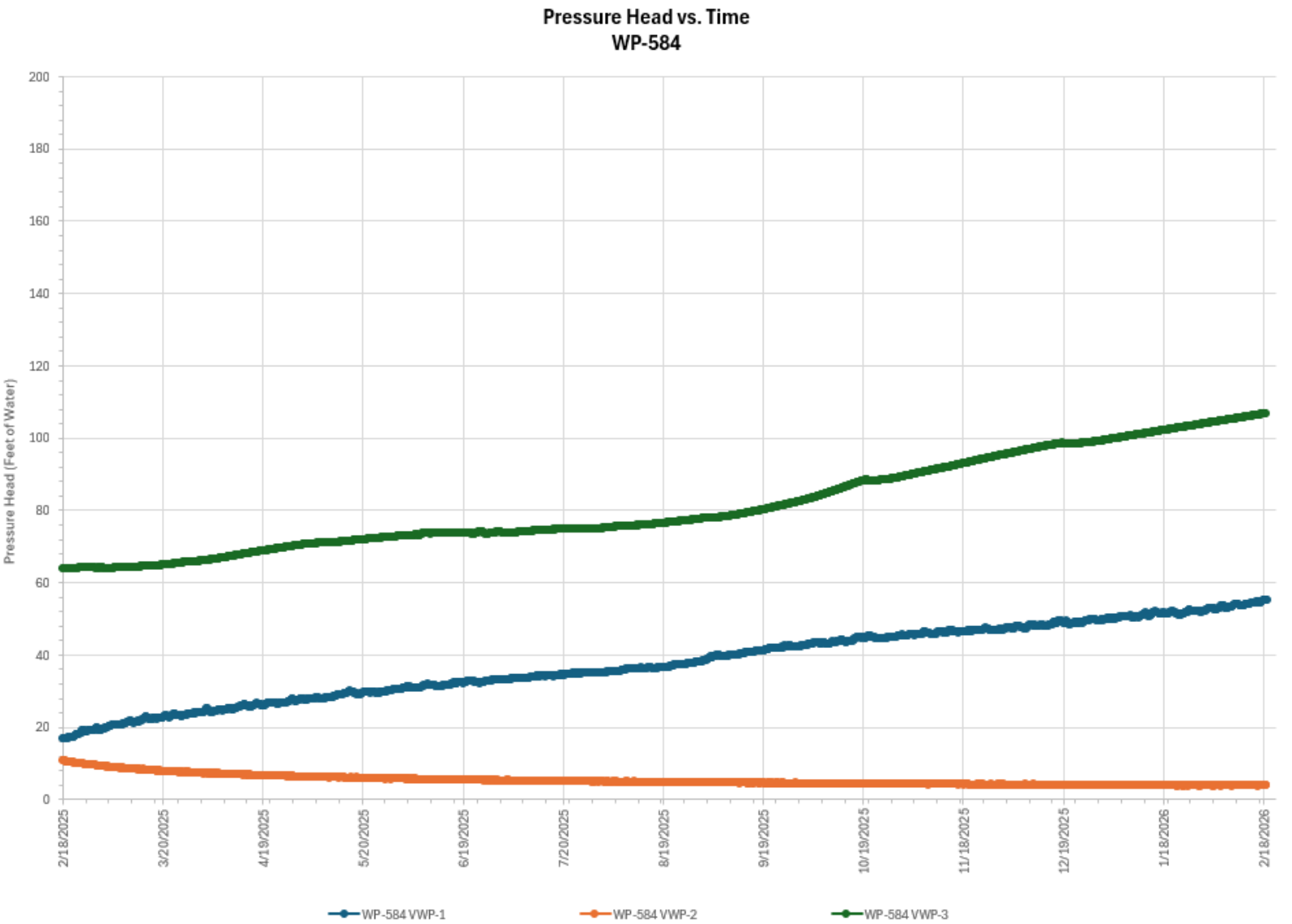
WP-598
VWP AS-BUILT

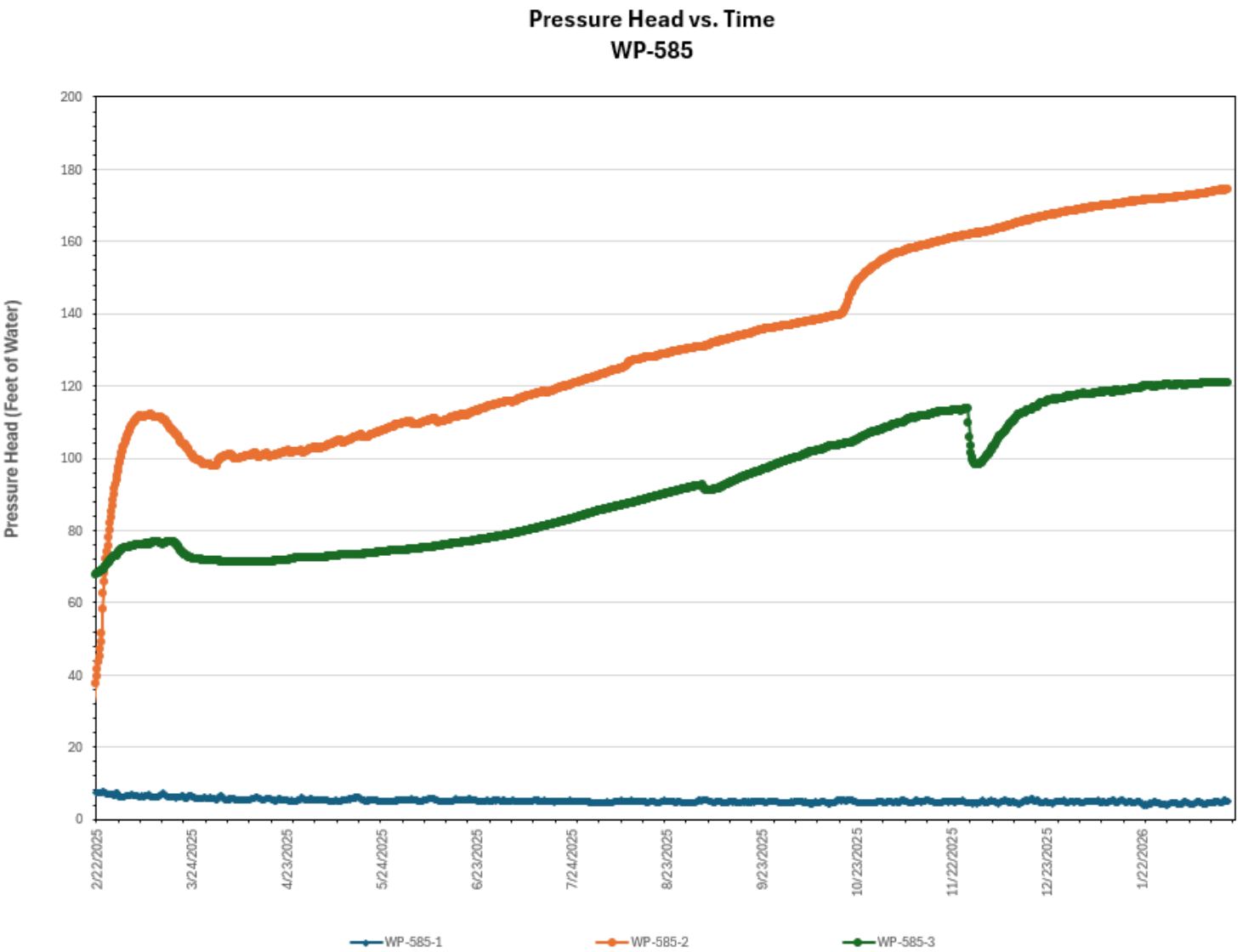
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Drawn By:	JOW	Project No:	23W200

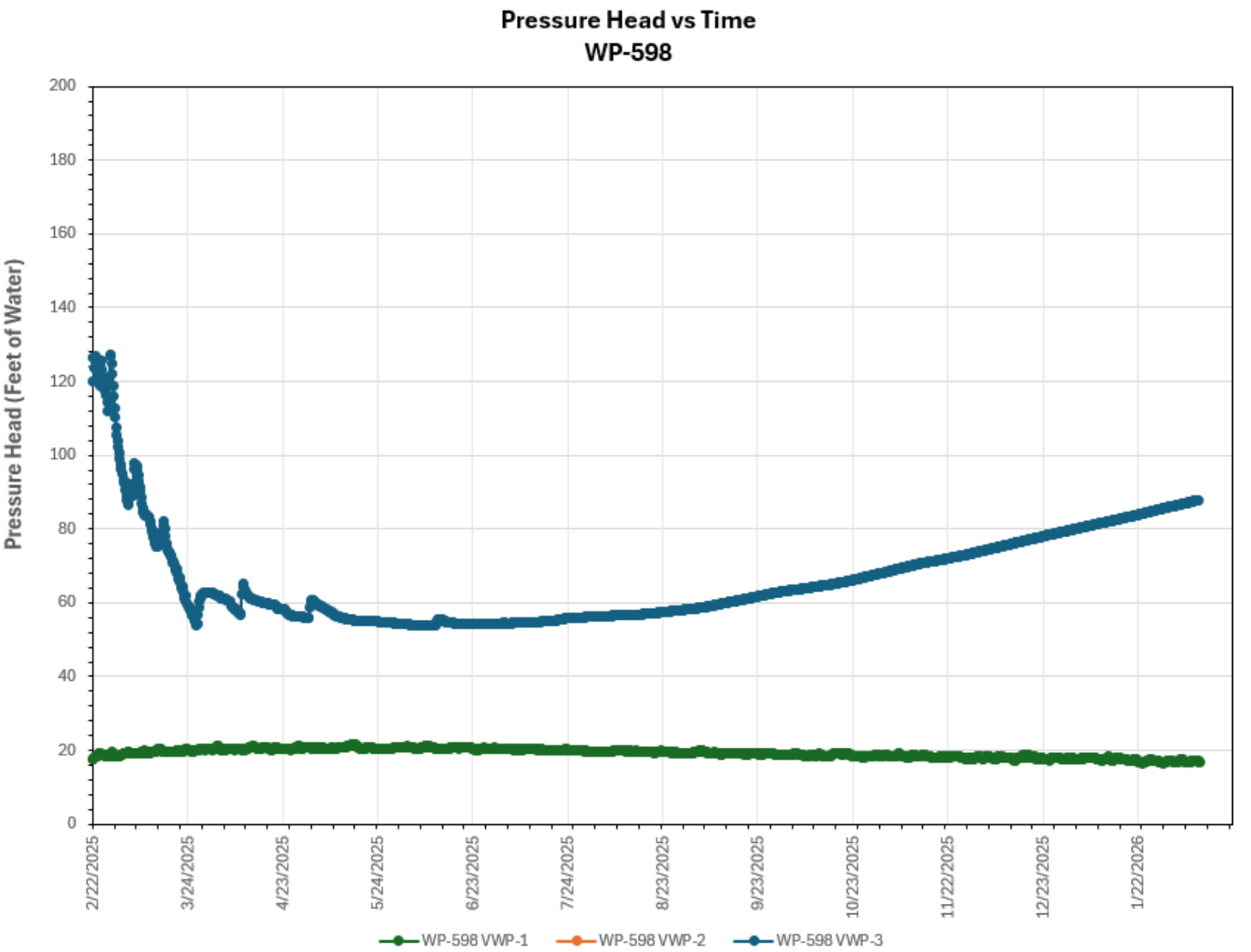
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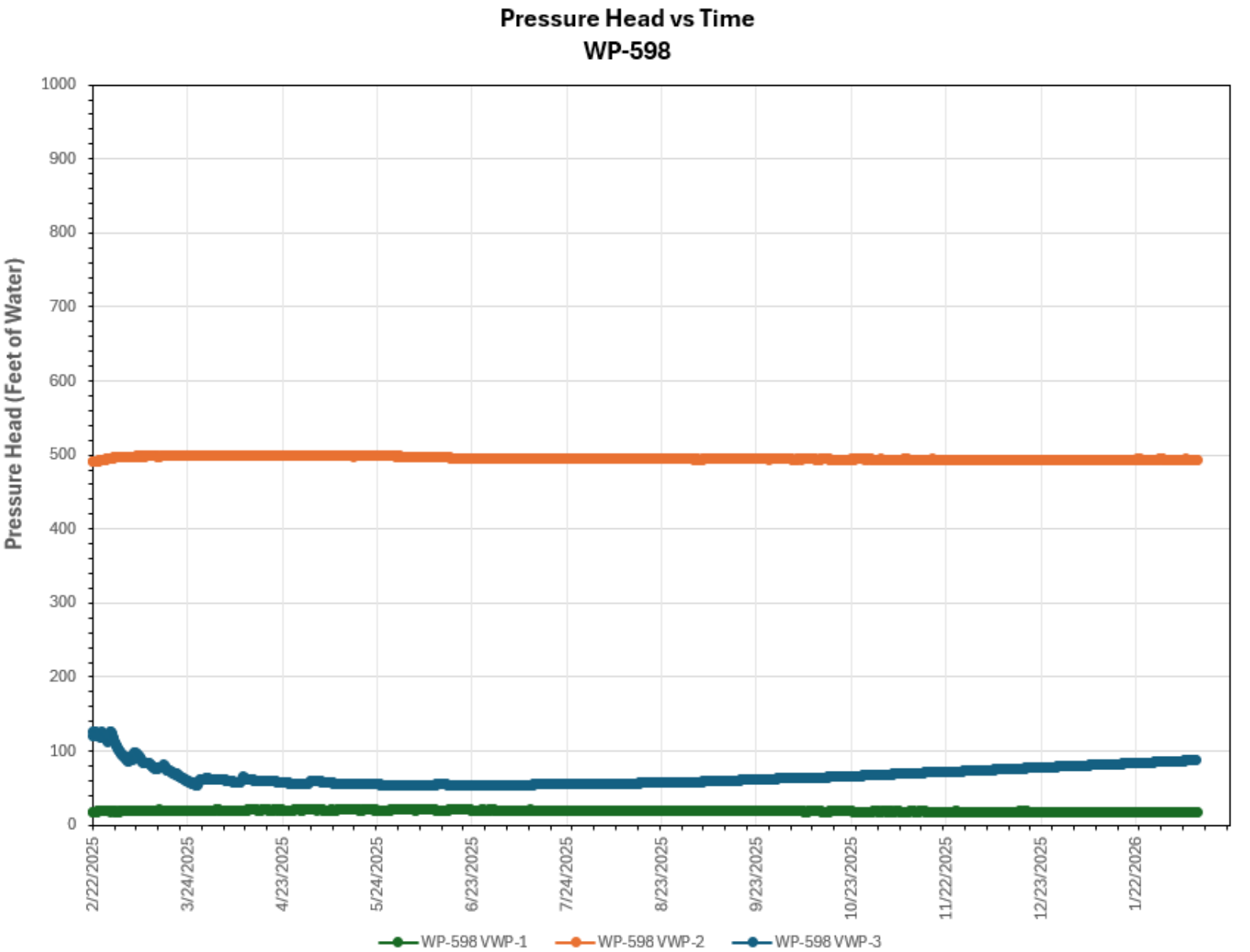
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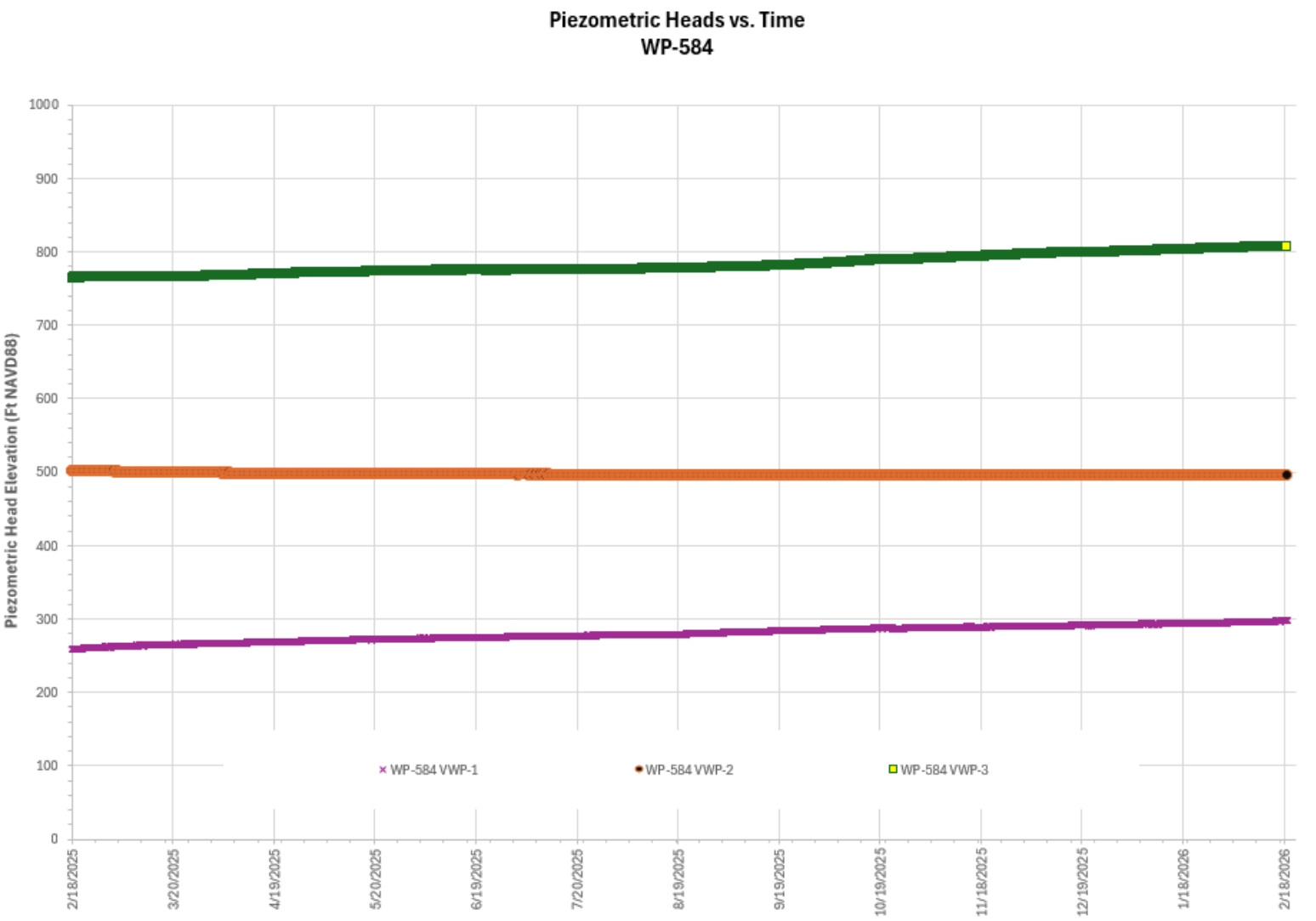
Vibrating Wire Piezometer Head Profiles and Vertical Gradients

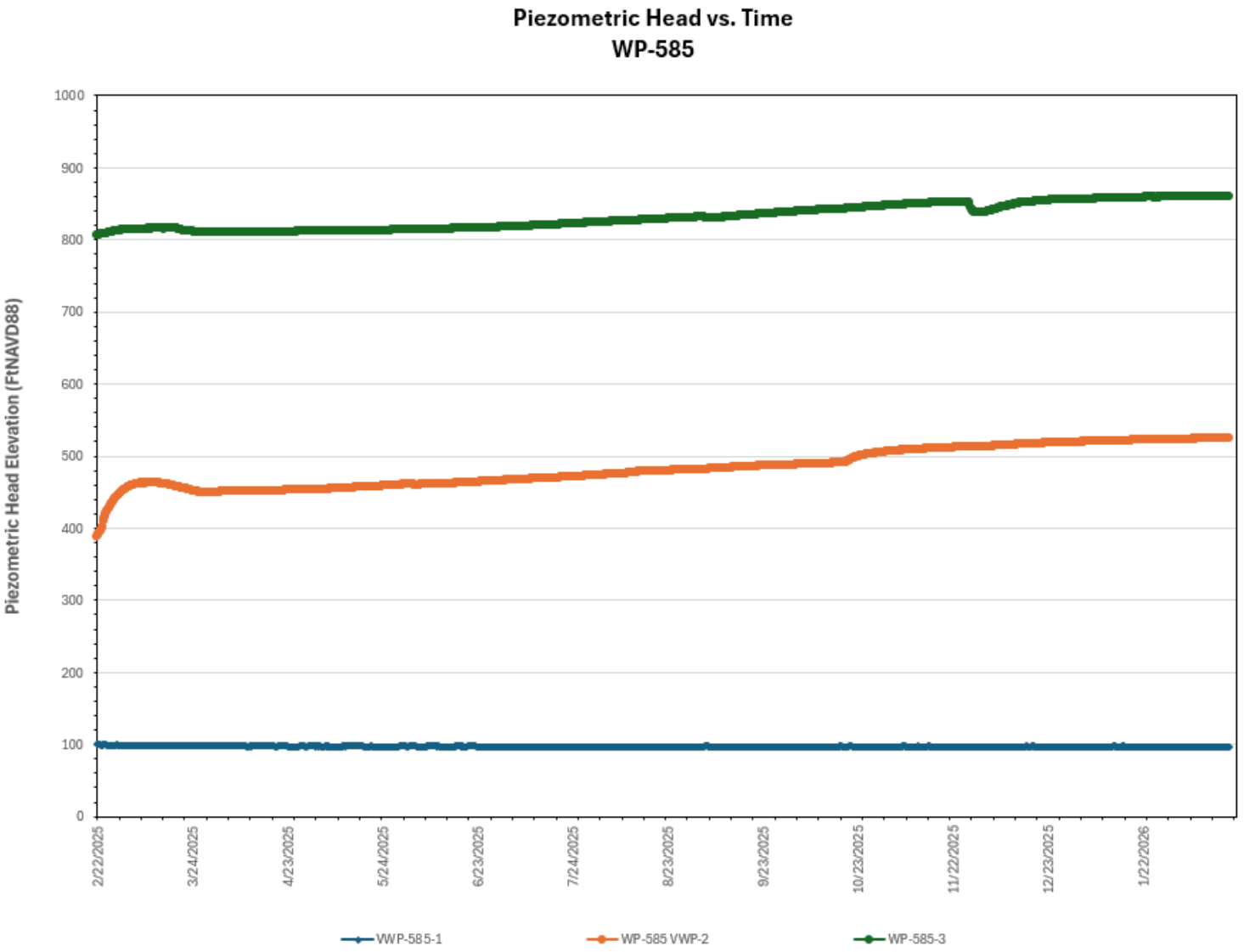

Pressure Head vs. Time
WP-584
Pressure Head (Feet of Water)
200
180
160
140
120
100
80
60
40
20
0
2/18/2025
3/20/2025
4/19/2025
5/20/2025
6/19/2025
7/20/2025
8/19/2025
9/19/2025
10/19/2025
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WP-584 VWP-2
WP-584 VWP-3

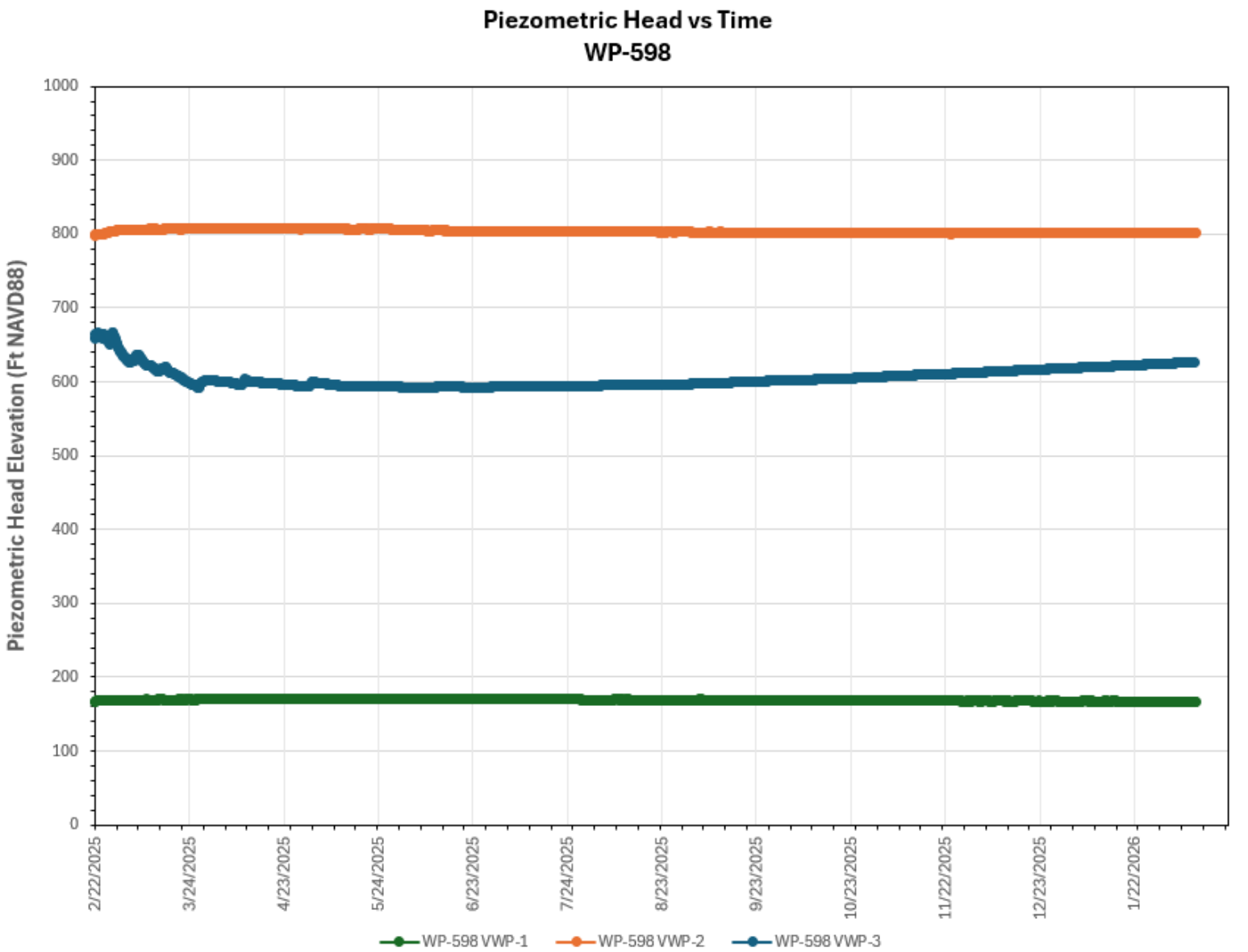

Pressure Head vs. Time
WP-585
Pressure Head (Feet of Water)
200
180
160
140
120
100
80
60
40
20
0
2/22/2025
3/24/2025
4/23/2025
5/24/2025
6/23/2025
7/24/2025
8/23/2025
9/23/2025
10/23/2025
11/22/2025
12/23/2025
1/22/2026
WP-585-1
WP-585-2
WP-585-3


Pressure Head vs Time
WP-598
Pressure Head (Feet of Water)
200
180
160
140
120
100
80
60
40
20
0
2/22/2025
3/24/2025
4/23/2025
5/24/2025
6/23/2025
7/24/2025
8/23/2025
9/23/2025
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WP-598 VWP-2
WP-598 VWP-3

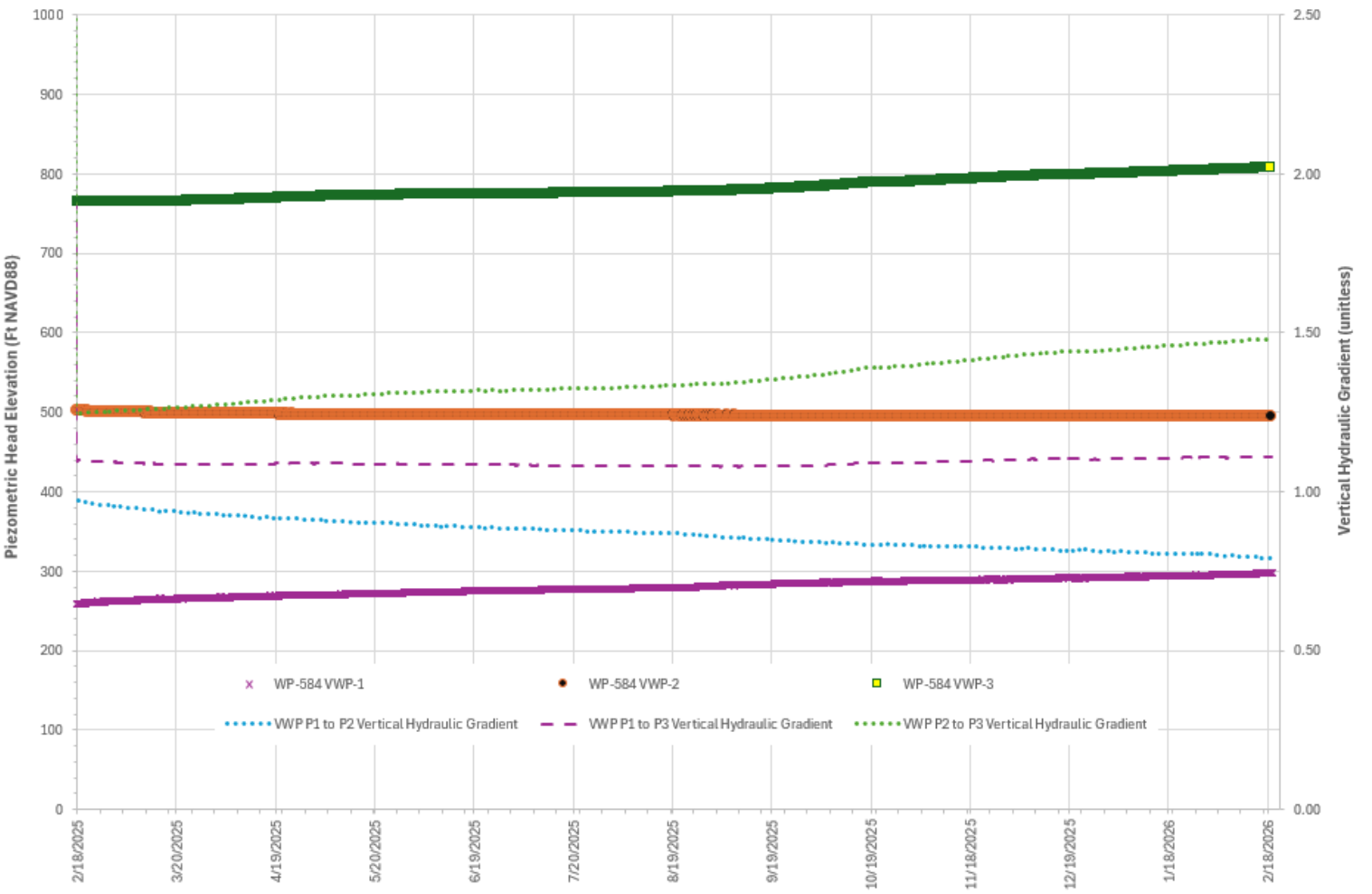

Pressure Head vs Time
WP-598
Pressure Head (Feet of Water)
1000
900
800
700
600
500
400
300
200
100
0
2/22/2025
3/24/2025
4/23/2025
5/24/2025
6/23/2025
7/24/2025
8/23/2025
9/23/2025
10/23/2025
11/22/2025
12/23/2025
1/22/2026
WP-598 VWP-1
WP-598 VWP-2
WP-598 VWP-3

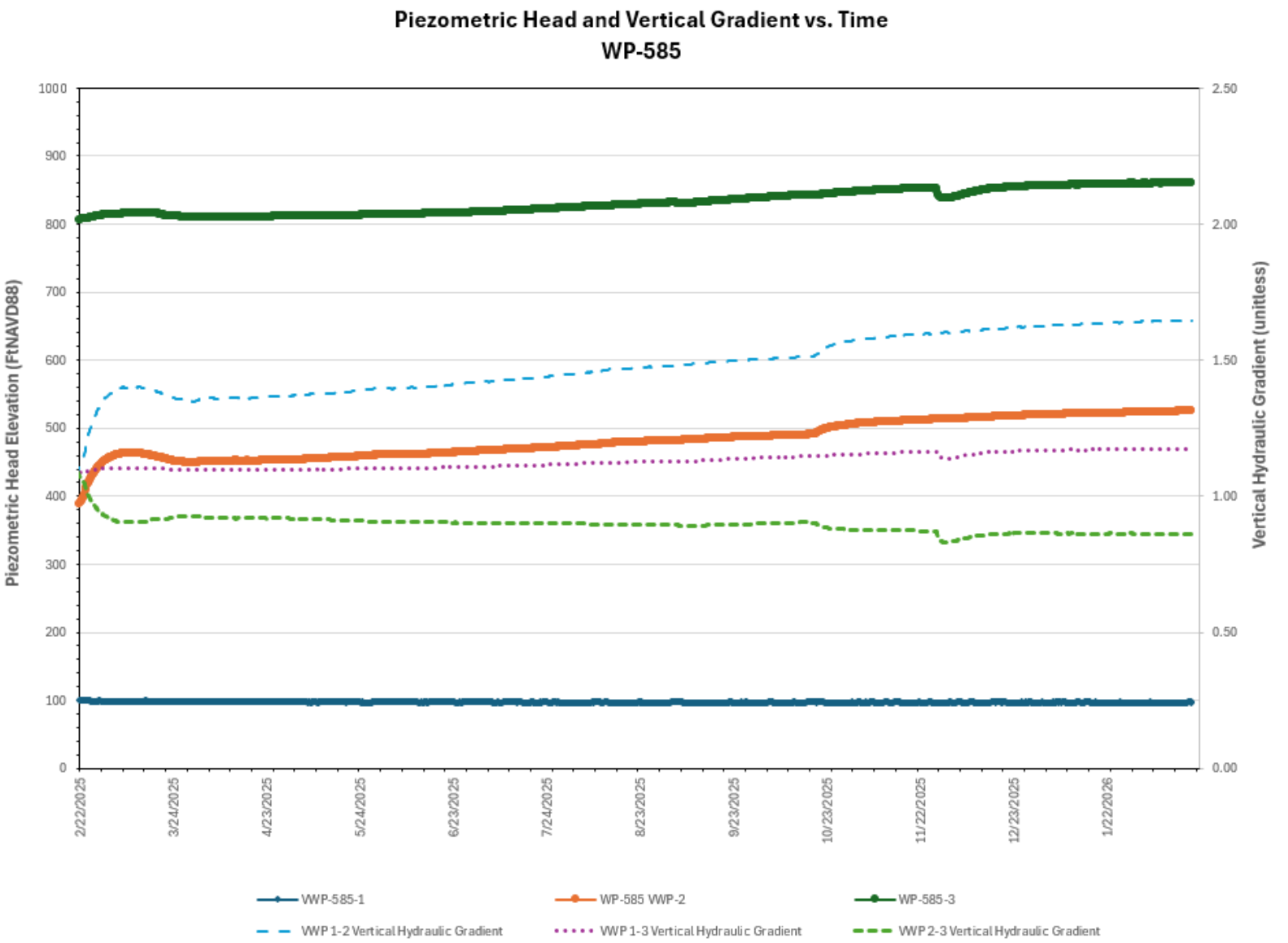

Piezometric Heads vs. Time
WP-584
Piezometric Head Elevation (Ft NAVD88)
1000
900
800
700
600
500
400
300
200
100
0
WP-584 VWP-1
WP-584 VWP-2
WP-584 VWP-3
2/18/2025
3/20/2025
4/19/2025
5/20/2025
6/19/2025
7/20/2025
8/19/2025
9/19/2025
10/19/2025
11/18/2025
12/19/2025
1/18/2026
2/18/2026

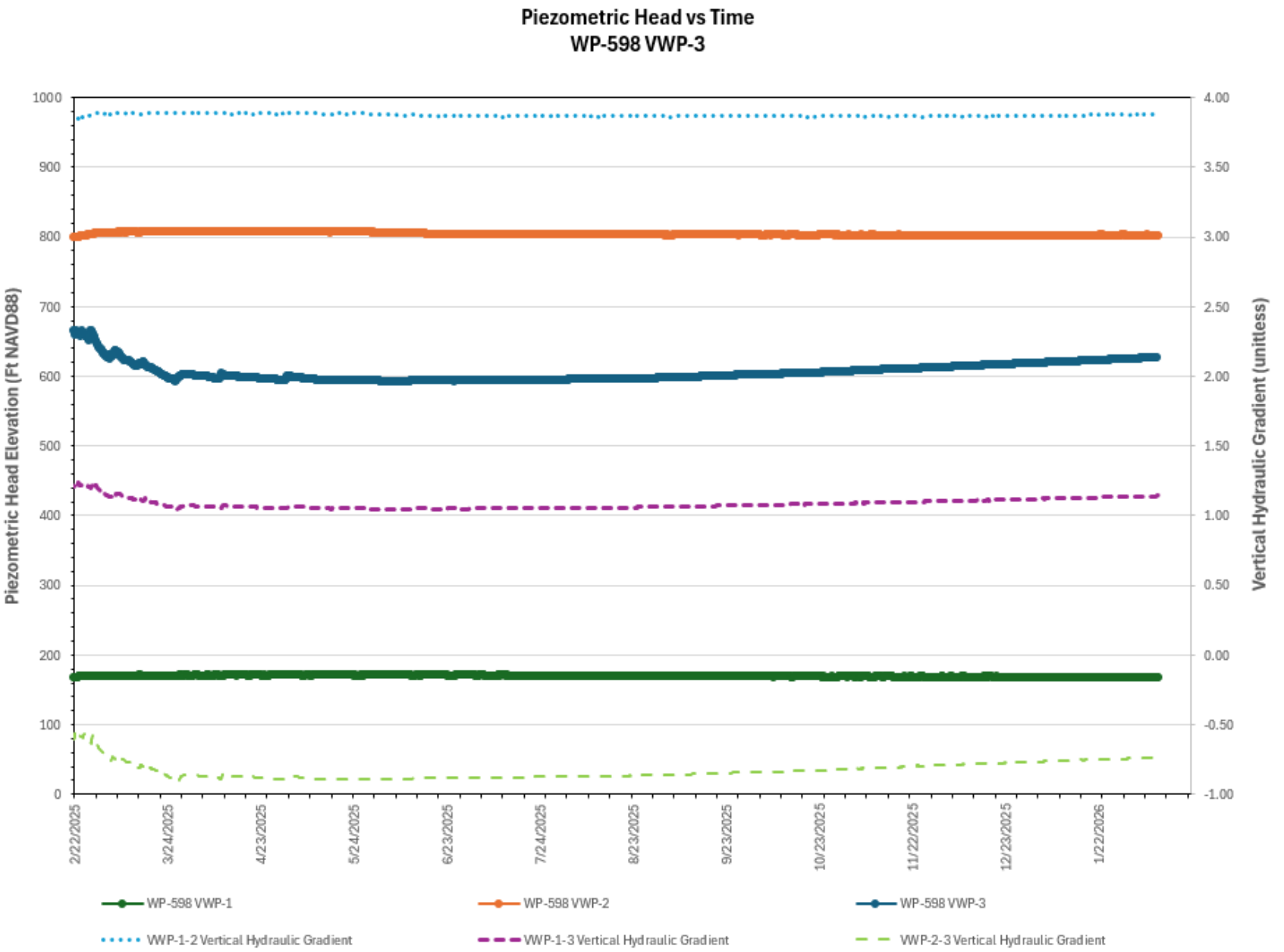

Piezometric Head vs. Time
WP-585
Piezometric Head Elevation (FtNAVD88)
1000
900
800
700
600
500
400
300
200
100
0
2/2/2025
3/24/2025
4/23/2025
5/24/2025
6/23/2025
7/24/2025
8/23/2025
9/23/2025
10/23/2025
11/22/2025
12/23/2025
1/22/2026
VWP-585-1
WP-585 VWP-2
WP-585-3


Piezometric Head vs Time
WP-598
Piezometric Head Elevation (Ft NAVD88)
1000
900
800
700
600
500
400
300
200
100
0
2/22/2025
3/24/2025
4/23/2025
5/24/2025
6/23/2025
7/24/2025
8/23/2025
9/23/2025
10/23/2025
11/22/2025
12/23/2025
1/22/2026
WP-598 VWP-1
WP-598 VWP-2
WP-598 VWP-3

Piezometric Heads and Vertical Gradients vs. Time
WP-584




Piezometric Head and Vertical Gradient vs. Time
WP-585
Piezometric Head Elevation (FtNAVD88)
Vertical Hydraulic Gradient (unitless)
1000
900
800
700
600
500
400
300
200
100
0
2.50
2.00
1.50
1.00
0.50
0.00
2/22/2025
3/24/2025
4/23/2025
5/24/2025
6/23/2025
7/24/2025
8/23/2025
9/23/2025
10/23/2025
11/22/2025
12/23/2025
1/22/2026
VWP-585-1
WP-585 VWP-2
WP-585-3
VWP 1-2 Vertical Hydraulic Gradient
VWP 1-3 Vertical Hydraulic Gradient
VWP 2-3 Vertical Hydraulic Gradient


Piezometric Head vs Time
WP-598 VWP-3
Piezometric Head Elevation (Ft NAVD88)
Vertical Hydraulic Gradient (unitless)
1000
900
800
700
600
500
400
300
200
100
0
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
-0.50
-1.00
2/22/2025
3/24/2025
4/23/2025
5/24/2025
6/23/2025
7/24/2025
8/23/2025
9/23/2025
10/23/2025
11/22/2025
12/23/2025
1/22/2026
WP-598 VWP-1
WP-598 VWP-2
WP-598 VWP-3
VWP-1-2 Vertical Hydraulic Gradient
VWP-1-3 Vertical Hydraulic Gradient
VWP-2-3 Vertical Hydraulic Gradient