

November 10, 2023

Ms. Greta White  
Project Manager, Remedial Bureau C  
Division of Environmental Remediation  
New York State Department of Environmental Conservation (NYSDEC)  
625 Broadway  
Albany, NY 12233-7014

Re: NYSDEC Site No. 360174; BCP C361074  
October - November 2023 Monthly Progress Report  
Westchester County Airport  
240 Airport Road  
Harrison, New York 10604

Dear Ms. White:

### **Actions Taken/Accomplishments (October to November 2023)**

A schedule of completed and projected activities is included as Appendix A.

1. On October 10, 2023, Triumph mobilized to Airport Road to initiate the construction of the backflow preventer vault and building associated with the recently installed water main pipeline. On October 10, 18, 19, 20, and 23 excavation activities associated with preparing the vault foundation were conducted. The construction and dewatering associated with the vault completion is expected to continue through mid- to late-November.
2. First Environment, Inc. (First Environment) conducted air monitoring for total organic vapors and air particulates during the intrusive activities as required under the Brownfield Clean up Program's (BCP) Community Air Monitoring Plan (CAMP). Dust monitors and a photoionizer detector (PID) were used to monitor the work area air quality for airborne particulate and volatile organic compounds (VOCs) according to the CAMP guidelines. No elevated levels of airborne particulates or VOCs were identified. The data collection tables, hydrographs, and air monitoring results are included in Appendix B.
3. As of September 30, waterline installation has been completed from B0+00 to B40+14, as well as C10+61 to C01+00. The backflow preventer vault area remains under construction and is highlighted in red on Figure 1. A photolog is included in Appendix C illustrating the backflow preventer vault.

4. Triumph installed two dewatering pumps in the vault excavation area which have been running continuously since October 18, 2023. As of October 31, 2023, approximately 38,000 gallons have been treated by the GWTT treatment system and discharged to the designated sanitary sewer at 17 gallons per minute (gpm) per Westchester Department of Environment Facilities (DEF) remediation discharge permit requirements. Groundwater that had been dewatered but not yet discharged totaled approximately 26,000 gallons as of October 31. The total amount of generated groundwater is estimated to be 64,000 gallons.
5. In addition to the GWTT treatment system, First Environment initiated the pilot test treatment system to reduce per- and polyfluoroalkyl substance (PFAS) concentrations discharging to Outfall 7 (OF-7). The purpose of the system is to evaluate the treatment system performance as well as the effectiveness of the treatment system to reduce PFAS concentrations downgradient of the treatment system to Rye Lake.
6. The week of July 3, 2023, First Environment installed a continuous-duty submersible pump at manhole 7006. The pilot system was installed from July 10 through July 13, 2023. The water collected from manhole 7006 is pumped through three exterior bag filters to remove sediment before entering an equalization tank maintaining a treatment flow rate of between 8 and 12 gpm. Dedicated pumps provide up to a 6-gpm flow rate from the equalization tank to separate treatment lines (trains): one using granular activated carbon (GAC) and the other ion exchange resin (IX resin) as the treatment media. The treated water is immediately discharged downstream of the water intake leading to OF-7.
7. On October 4, 2023, First Environment installed a sand filtration system between the bag filters and the equalization tank to reduce bioaccumulation and siltation prior to filtration by the cartridge filters to reduce treatment system maintenance. Sand filtration has reduced the frequency of cartridge filter changeouts from 1 to 2 days to 3 to 4 days and cleaning of the expansion tank is no longer necessary.
8. On October 5, 2023, the carbon in the lead vessel was replaced with new activated carbon and the carbon in the lag vessel was replaced with IX resin to capture any PFAS breakthrough. The treatment through this treatment train ranged from 4 to 5 gpm. Additionally, the lead IX resin vessel in the 2<sup>nd</sup> treatment train was taken off-line due to fouling and the IX resin train has been operating using only the lag IX resin vessel. The flow through the IX treatment train is 2 to 3 gpm. The total treatment system flow varies from 6 to 8 gpm. Once stormwater is treated it is returned to the stormwater system where the treated water leaves the Airport.
9. On October 17, 2023, treatment system samples were collected for perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS)

laboratory analysis from the GAC and IX treatment train. The GAC indicated PFOA and PFOS concentrations at inlet sample point (102) of 408 and 1,670 parts per trillion (ppt), respectively. At midpoint sample point (103), concentrations were 74.8 ppt and 23.7 ppt, respectively. At effluent sample point (104), concentrations were 72.8 ppt and 23.8 ppt respectively. Results of samples collected from the IX resin treatment train at the effluent sample point (204) indicated PFOA and PFOS concentration of 15.9 ppt and 1.89 ppt, respectively. Midpoint samples (203) were not collected since the lead IX resin vessel is off-line.

10. As of October 30, 2023, approximately 297,000 gallons of stormwater have been treated by the pilot test system. As of November 7, 2023, a total of approximately 328,000 gallons of stormwater have been treated. The treated water was returned to the storm sewer system.
11. On November 1, 2023, First Environment mobilized to the site to conduct the 3<sup>rd</sup> round of groundwater performance monitoring following the injection of the permeable reactive barrier of activated carbon associated with the FMW-13R Pilot Test. Water levels were collected from all five wells and the four piezometers. The groundwater samples were submitted to York Labs for PFAS analysis using EPA method 1633. The laboratory analytical results from this sample event will be provided in next month's progress report.
12. On November 7, 2023, First Environment measured manholes, in the Building 10 area at locations where surface water was leaking, at the request of the County. Those measurement dimensions were provided to the County and Don LeBlanc, PE of DL VEWS to further assess injection sealing at leak locations where the pipeline enters the concrete vaults and at the surface manhole to vault structures.
13. Continue the update of Electronic Data Deliverables (EDDs) sample locations.

## **November to December Planned Activities**

1. First Environment will continue to provide Continuous Air Monitoring during waterline intrusive construction activities as described in First Environment's CAMP submittal to the NYSDEC/ NYSDOH.
2. Planned activity for November includes installation of the footing and foundation walls for the backflow preventer building on Airport Road. A second backflow preventer building near the south end of the Airport adjacent to Purchase Street is expected to be excavated in mid-November. Triumph will continue dewatering the excavation area and treating the groundwater through the GWTT treatment system. Treated water will be discharged at 17 gpm, as required by the DEF Remediation/Discharge Permit, to the designated sanitary sewer location.

3. In mid-November, First Environment plans to further evaluate the treatment system's effectiveness and whether PFOS and PFOA concentrations have been reduced downgradient of OF-7. Additional samples will be obtained from the GAC and IX treatment trains, as well as surface water samples downgradient of OF-7. These samples will be analyzed for PFOS and PFOA.

The stormwater pilot test will conclude in mid- to late-November. First Environment will coordinate with ECT2 to mobilize equipment off the Airport and begin to evaluate the pilot test results. Once the evaluation is completed those findings will be shared with the County, Airport, and NYSDEC.

4. First Environment will provide Regenesis permeable reactive barrier wall performance monitoring sampling results for the FMW-13R pilot test.
5. First Environment will continue to work with the NYSDEC to address and respond to RIWP comments.
6. Continue to submit monthly progress reports in an ADA format to Westchester County.
7. As per DEF permit requirements, First Environment will continue to collect influent and effluent samples from the water line treatment system associated with dewatering activities, evaluate water quality data, and record water flow leaving the treatment system. Triumph, the waterline installation contractor, is responsible for the treatment system operation and maintenance.
8. Prepare Interim Site Management Plan.
9. Revisions of the EDDs will continue for submittal to the NYSDEC.

If you have any questions, please do not hesitate to call.

Regards,

FIRST ENVIRONMENT, INC.



Scott R. Green, P.G.  
Director, Insurance Consulting  
Service Group



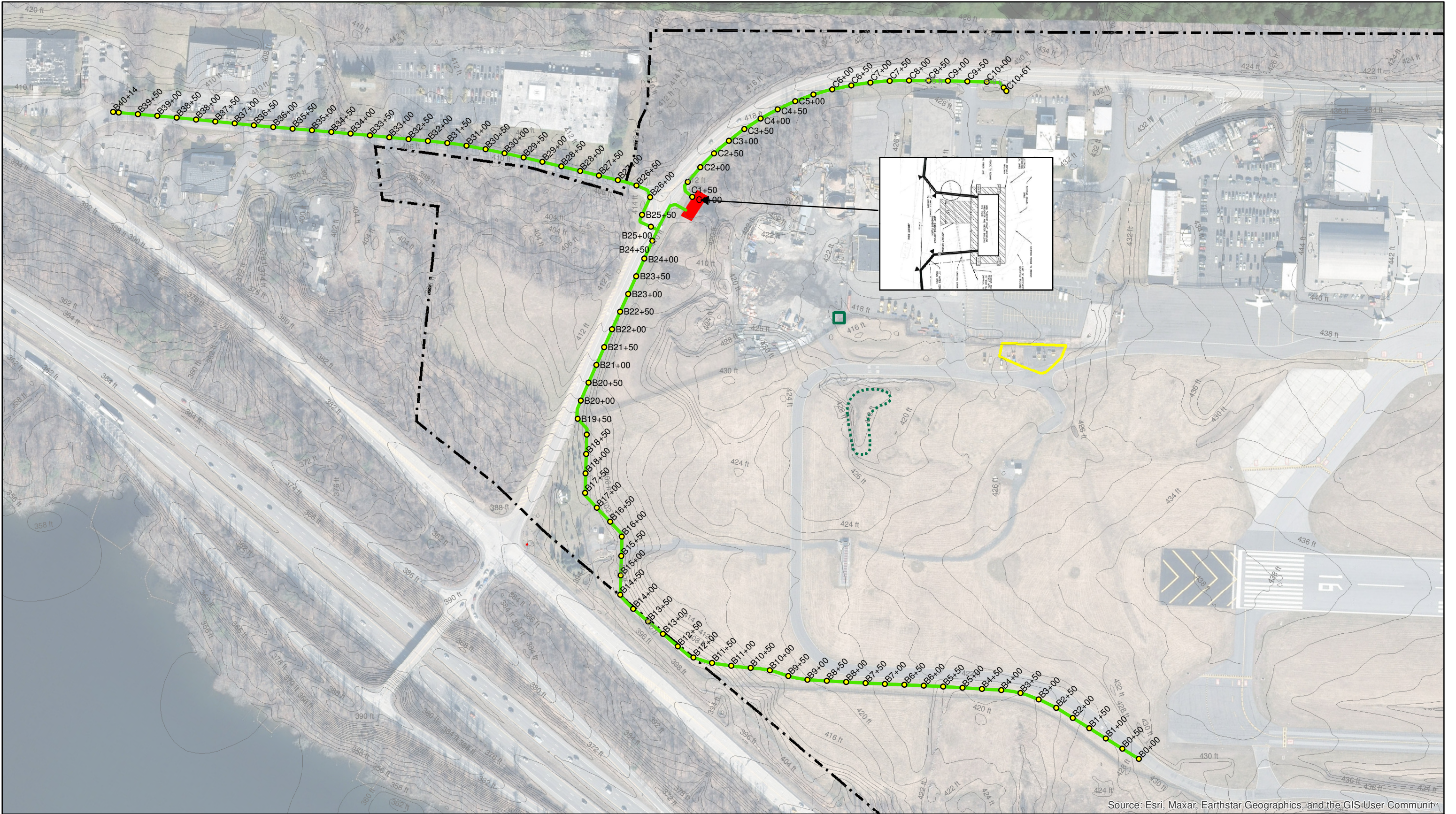
David Luer  
Project Manager/Field Team Leader

Att.

c: B. Tod Delaney, Ph.D., P.E., BCEE - First Environment, Inc.  
Arthur Clarke, J.D. - First Environment, Inc.  
Hugh Greechan, Jr. P.E. - Westchester County Public Works & Transportation  
John Nonna - Westchester County Attorney  
April Gasparri – Westchester County Executive Director of Aviation  
Francisco Tejada – Airport Manager  
John Inserra - Westchester County Airport Environmental  
Loren Zeitler - Westchester County  
John Benvegna - WSP  
K. Thompson - NYSDEC  
M. Murphy - NYSDEC  
D. Bendell/D. Pollock - NYSDEC  
M. Doroski – NYSDOH  
K. Kulow – NYSDOH

## FIGURES

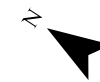
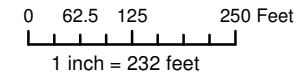




Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

**Legend**

- Station
- Water Line Completed
- Elevation Contour Lines
- ▭ Former AFFF Burn Pit
- ▭ Vault
- ▭ Subsurface Catch Basin
- ⋯ Open Catch Area
- ⋯ Property Boundary



	NYSDEC SITE NO. 360174 WESTCHESTER COUNTY AIRPORT White Plains, Westchester County, New York <b>FIGURE 1</b> WATER LINE CONSTRUCTION PROGRESS			
	10 Park Place, Bldg 1A, Suite 504 Butler, NJ 07405	Revised	Drawn LS	Checked DL
		Date	11/9/2023	



## **APPENDIX A**



**APPENDIX A**  
**Work Activity Schedule**  
**2022-2024**

Milestone	Estimated Completion Date	Estimated Completion Percentage
OF-7 Storm Sewer Installation	May 2022	100%
OF-7 Performance Monitoring	3 <sup>rd</sup> Quarter 2023	95%
OF-7 Pilot Test Treatment System	October 2023	95%
New King Street Workplan – Phase 1	January 2022	100%
New King Street Workplan – Phase 2	April 2022	100%
Waterline Workplan	April 2022	100%
Waterline Trench & Installation	November 2023	95%
OF-4 IRM Pilot Test <sup>1</sup>	Winter 2023	55%
Remedial Investigation Workplan Submittal	July 2022	100%
GW Pilot Test Scope of Work <sup>2</sup>	Summer 2022	100%
GW Pilot Test	Winter 2022	100%
GW Pilot Test Performance Monitoring	Winter 2023	85%
Execution of RI workplan <sup>3</sup>	Spring 2024	0%
Remedial Investigation Report	Summer 2024	0%
Remedial Action Alternatives Evaluation	2023-2024	0%
Remedial Action Selection Report	TBD	0%
Remedial Action Workplan	TBD	0%
Certificate of Completion	TBD	0%

Estimated task durations and completions are tentative and are subject to modification based on site work, progress, weather delays, and other considerations such as contractor availability or Airport access.

<sup>1</sup> Pilot test CETCO Fluorsorb at OF-7 and/or treatment system after pilot test conducted at OF-7.

<sup>2</sup> Scope-of-work submitted to the County approved September 2022.

<sup>3</sup> Start date dependent upon workplan approval.

## **APPENDIX B**

Appendix B  
 Table 1 - Flow Data Collection Table  
 Westchester County Airport

Date	Trib 1 (gpm)	Trib 2 (gpm)	OF-7 (gpm)	E-10 (gpm)	E-10 Stream Gauge	Rain Gauge (in)	Rain Bucket (in)
10/4/2023	0.25	8.00	23.90	123.10	0.48	2.7**	5.5**
10/5/2023	0.25	8.00	11.70	110.70	0.46	0.10	0.00
10/6/2023	0.50	8.00	25.70	130.80	0.48	0.00	0.00
10/9/2023	0.00	12.00	34.20	200-250*	0.54	1.10	2.25
10/10/2023	0.00	10.00	24.40	146.90	0.49	0.10	0.00
10/11/2023	0.00	8.00	24.30	104.50	0.47	0.00	0.00
10/12/2023	0.00	6.00	19.20	88.80	0.45	0.00	0.00
10/13/2023	0.00	6.00	17.60	75.50	0.43	0.00	0.00
10/16/2023	0.00	6.00	19.40	88.50	0.46	0.15	0.63
10/17/2023	0.00	6.00	14.90	74.30	0.42	0.00	0.00
10/18/2023	0.00	5.00	9.80	74.90	0.42	0.00	0.00
10/19/2023	0.00	4.00	12.80	69.30	0.40	0.00	0.00
10/20/2023	20.00	40.00	300-400*	500-700*	1.00	0.10	0.06
10/23/2023	0.00	6.00	14.90	78.90	0.44	0.40	0.50
10/24/2023	0.00	5.00	14.10	75.20	0.42	0.00	0.00
10/25/2023	0.00	4.00	12.20	72.10	0.41	0.00	0.00
10/26/2023	0.00	4.00	2-3*	63.80	0.40	0.00	0.00
10/27/2023	0.00	4.00	10.40	61.10	0.40	0.00	0.00
10/30/2023	0.00	40-50*	30-40*	300-400*	0.70	0.50	1.25
10/31/2023	0.00	10.00	15-20*	127.40	0.48	0.10	0.00

\*Indicates an estimate when a measurement is unable to be taken; \*\*Rain gauges had not been checked since 9/26/23



Appendix B  
Table 2 - ECT2 Totalizer Data  
Westchester County Airport

Date/Time	ECT2 Totalizer Reading (gal)	Total Gallons Treated (gal)	Net Treatment Rate (gpm)	Net Treatment Rate Since Last Reading (gpm)
10/6/23 12:50	549858	0	0	0
10/6/23 14:05	550256	398	5.31	5.31
10/9/23 8:10	557913	8055	1.99	1.93
10/9/23 13:05	559723	9865	2.28	6.14
10/10/23 6:20	565255	15397	2.87	5.34
10/10/23 14:25	567887	18029	3.08	5.43
10/11/23 7:40	572739	22881	3.32	4.69
10/11/23 13:45	574647	24789	3.42	5.23
10/12/23 9:45	579948	30090	3.56	4.42
10/12/23 14:26	581518	31660	3.62	5.59
10/13/23 8:10	586176	36318	3.71	4.38
10/13/23 14:00	587969	38111	3.75	5.12
10/16/23 7:15	598080	48222	3.43	2.58
10/16/23 11:50	599341	49483	3.45	4.59
10/17/23 9:55	603675	53817	3.44	3.27
10/17/23 15:35	605598	55740	3.48	5.66
10/18/23 8:40	609616	59758	3.51	3.92
10/18/23 14:10	611905	62047	3.57	6.94
10/19/23 9:25	615150	65292	3.53	2.81
10/19/23 15:15	617598	67740	3.59	6.99
10/20/23 8:55	622171	72313	3.63	4.31
10/20/23 14:25	624067	74209	3.66	5.75
10/23/23 8:20	630269	80411	3.32	1.57
10/23/23 14:30	631934	82076	3.34	4.50
10/24/23 9:26	636506	86648	3.37	4.02
10/24/23 13:36	637897	88039	3.39	5.56
10/25/23 12:30	644575	94717	3.46	4.86
10/25/23 13:40	645047	95189	3.47	6.74
10/26/23 10:00	651971	102113	3.57	5.68
10/26/23 14:30	653522	103664	3.59	5.74
10/27/23 9:45	659175	109317	3.64	4.89
10/27/23 12:10	660422	110564	3.66	8.60
10/30/23 9:30	673715	123857	3.60	3.20
10/30/23 13:15	674996	125138	3.62	5.69
10/31/23 9:35	679176	129318	3.61	3.43
10/31/23 13:05	680481	130623	3.63	6.21

Appendix B  
Table 3 - GWTT Totalizer Data  
Westchester County Airport

<b>Date/Time</b>	<b>GWTT Totalizer Reading</b>	<b>Total Gallons Discharged (gal)</b>
10/11/23 9:00	18886	0
10/18/23 12:40	23870	4984
10/18/23 14:20	24988	6102
10/19/23 15:20	30180	11294
10/20/23 14:50	30180	11294
10/23/23 14:35	32096	13210
10/24/23 13:58	35884	16998
10/25/23 13:50	40550	21664
10/26/23 15:00	48928	30042
10/27/23 10:53	48928	30042
10/30/23 12:27	52745	33859
10/31/23 10:35	57271	38385





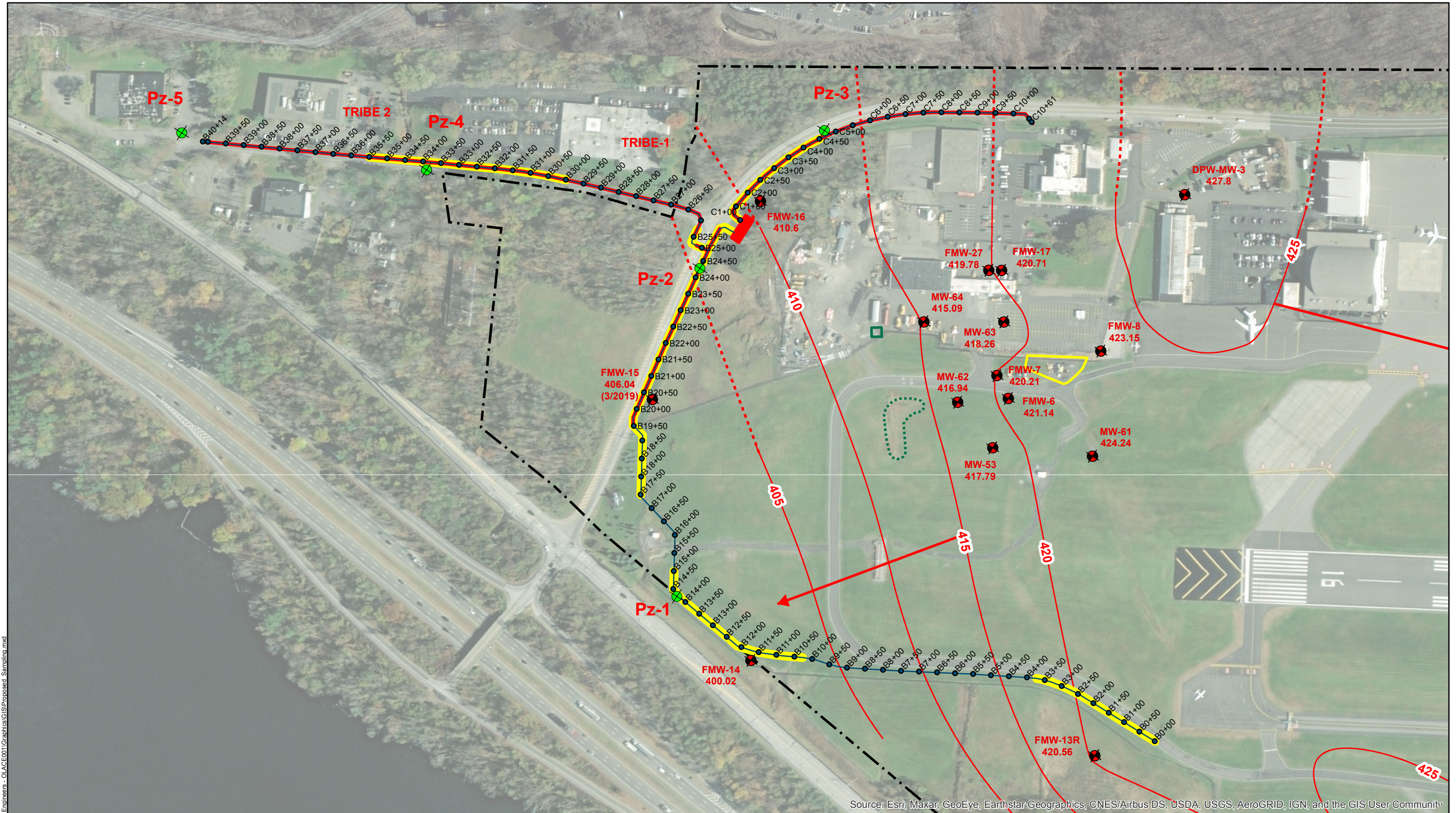




Appendix B  
CAMP Air Monitoring Data  
Westchester County Airport

Oct 19 2023 2:35:00 PM	0.026	0.024
Oct 19 2023 2:36:00 PM	0.021	0.023
Oct 19 2023 2:37:00 PM	0.019	0.052
Oct 19 2023 2:38:00 PM	0.019	0.058
Oct 19 2023 2:39:00 PM	0.019	0.032
Oct 19 2023 2:40:00 PM	0.02	0.026
Oct 19 2023 2:41:00 PM	0.019	0.025
Oct 19 2023 2:42:00 PM	0.019	0.026
Oct 19 2023 2:43:00 PM	0.02	0.027
Oct 19 2023 2:44:00 PM	0.02	0.046
Oct 19 2023 2:45:00 PM	0.02	0.032
Oct 19 2023 2:46:00 PM	0.02	0.037
Oct 19 2023 2:47:00 PM	0.019	0.024
Oct 19 2023 2:48:00 PM	0.019	0.032
Oct 19 2023 2:49:00 PM	0.019	0.025
Oct 19 2023 2:50:00 PM	0.021	0.032
Oct 19 2023 2:51:00 PM	0.075	0.029
Oct 19 2023 2:52:00 PM	0.188	0.026
Oct 19 2023 2:53:00 PM	0.07	0.042
Oct 19 2023 2:54:00 PM	0.022	0.028
Oct 19 2023 2:55:00 PM	0.02	0.024
Oct 19 2023 2:56:00 PM	0.027	0.027
Oct 19 2023 2:57:00 PM	0.02	0.025
Oct 19 2023 2:58:00 PM	0.02	0.028
Oct 19 2023 2:59:00 PM	0.027	0.024
Oct 19 2023 3:00:00 PM	0.022	0.027
Oct 19 2023 3:01:00 PM	0.022	0.026
Oct 19 2023 3:02:00 PM	0.025	0.025
Oct 19 2023 3:03:00 PM	0.022	0.025
Oct 19 2023 3:04:00 PM	0.023	0.024
Oct 19 2023 3:05:00 PM	0.021	0.025

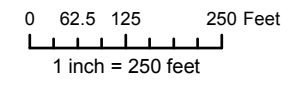




Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

**Legend**  
 Unconsolidated Groundwater Flow Direction  
 Unconsolidated Groundwater Elevation Contour (feet) as of 5/20/2020  
 Inferred Unconsolidated Groundwater Elevation Contour (feet)  
 Unconsolidated Monitoring Well  
 Proposed Temp Well  
 Station  
 Water Line  
 Excavation Requiring Removal  
 Area Requiring Dewatering & Treatment of Water  
 411.82 Unconsolidated Groundwater Elevation (feet) as of 5/20/2020

Former AFFF Burn Pit  
 Subsurface Catch Basin  
 Open Catch Area  
 Property Boundary

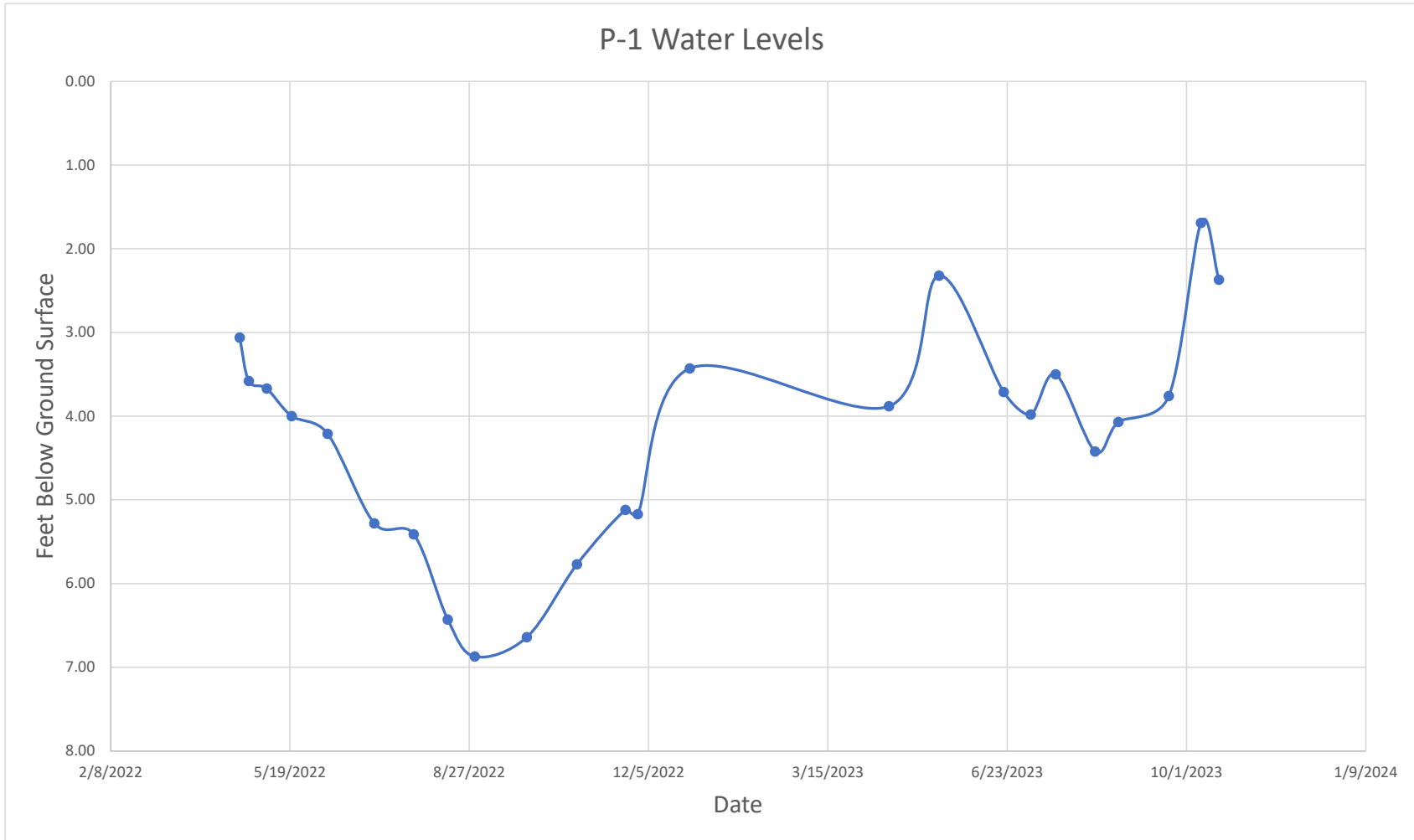


	NYSDC SITE NO. 360174 WESTCHESTER COUNTY AIRPORT! White Plains, Westchester County, New York <b>FIGURE 2</b> GROUNDWATER WELL LOCATIONS					
	10 Park Place, Bldg 1A, Suite 504 Butler, NJ 07405	Revised	Drawn LS	Checked DL	Approved SG	Date 1/28/2022

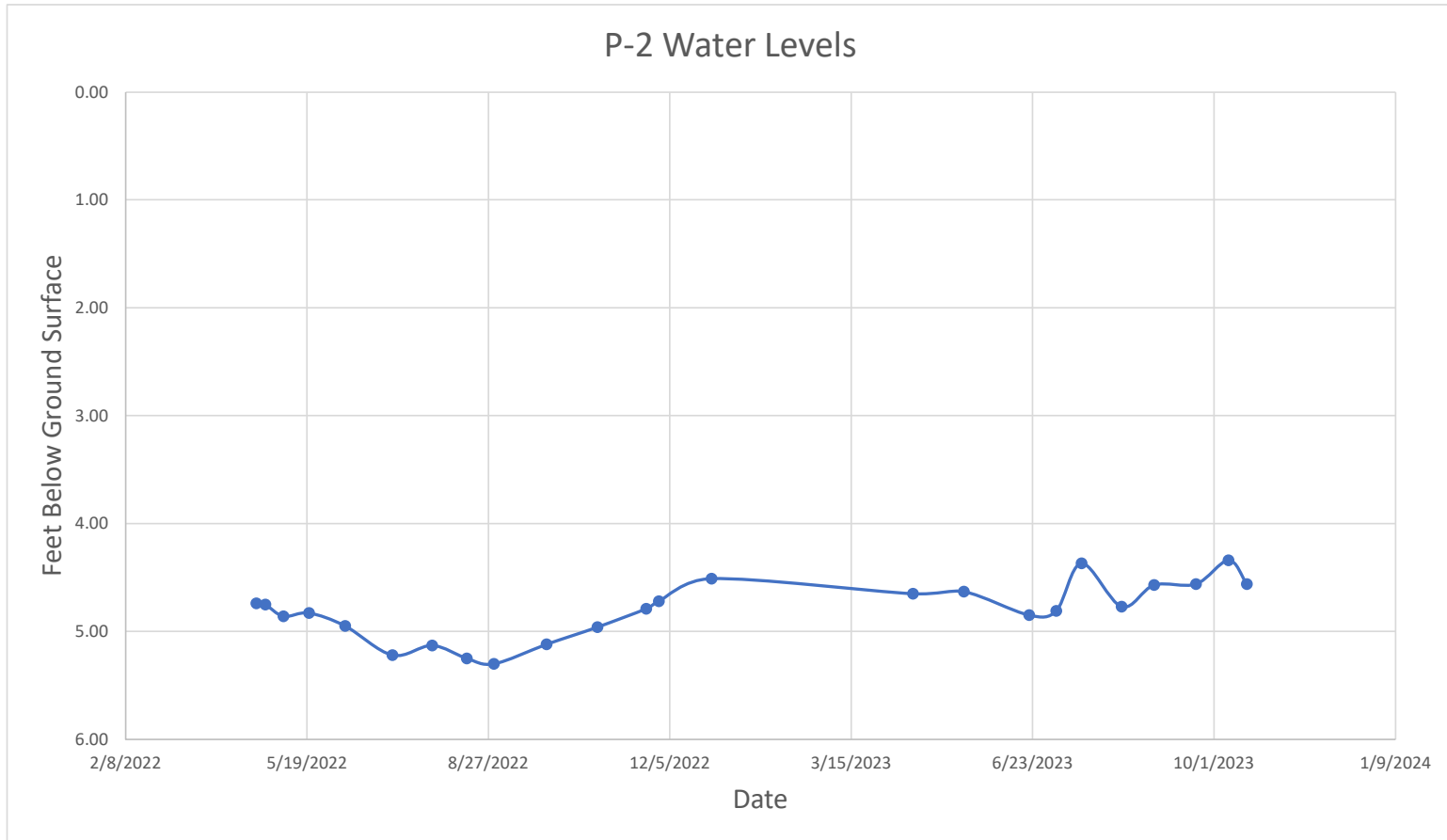
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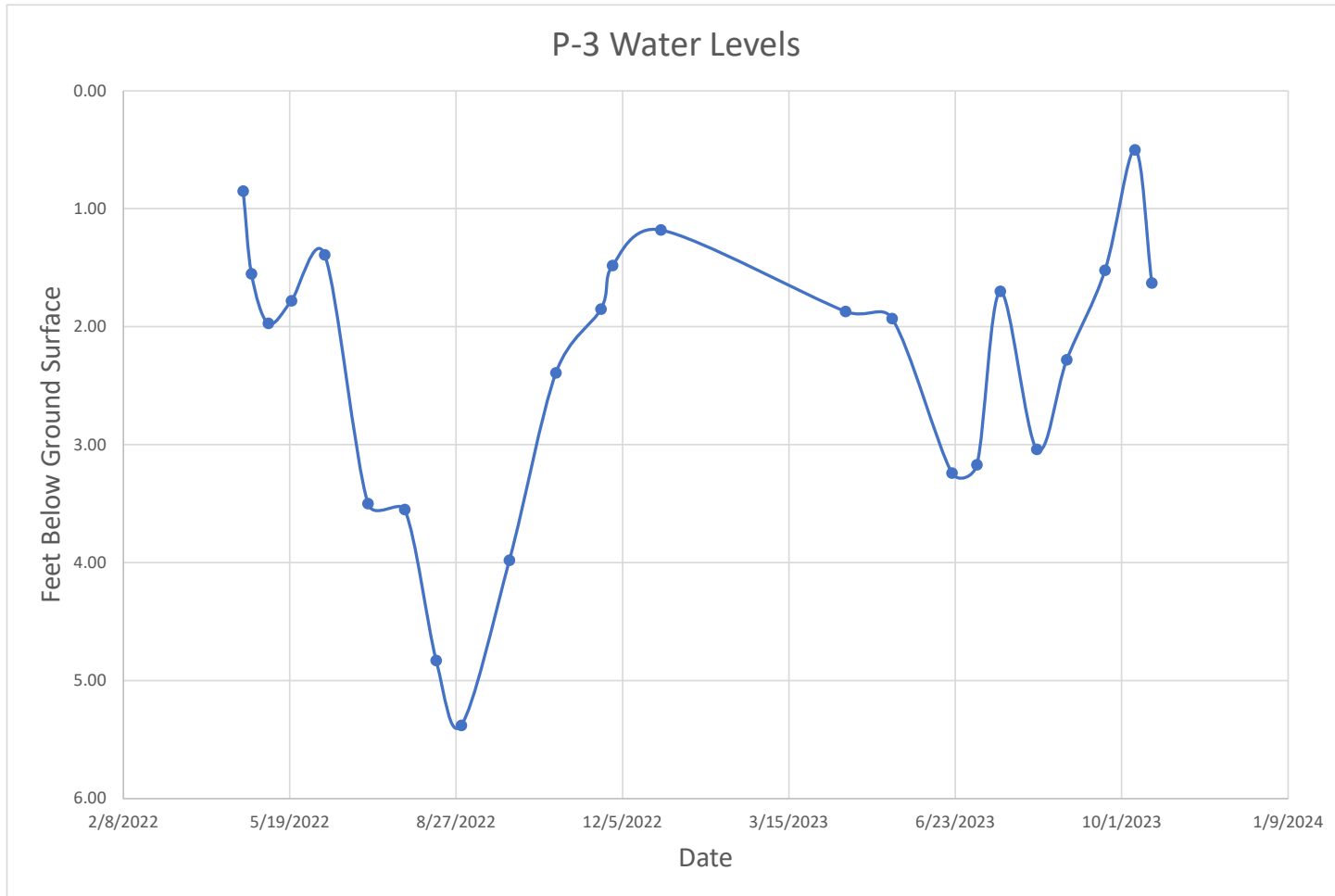


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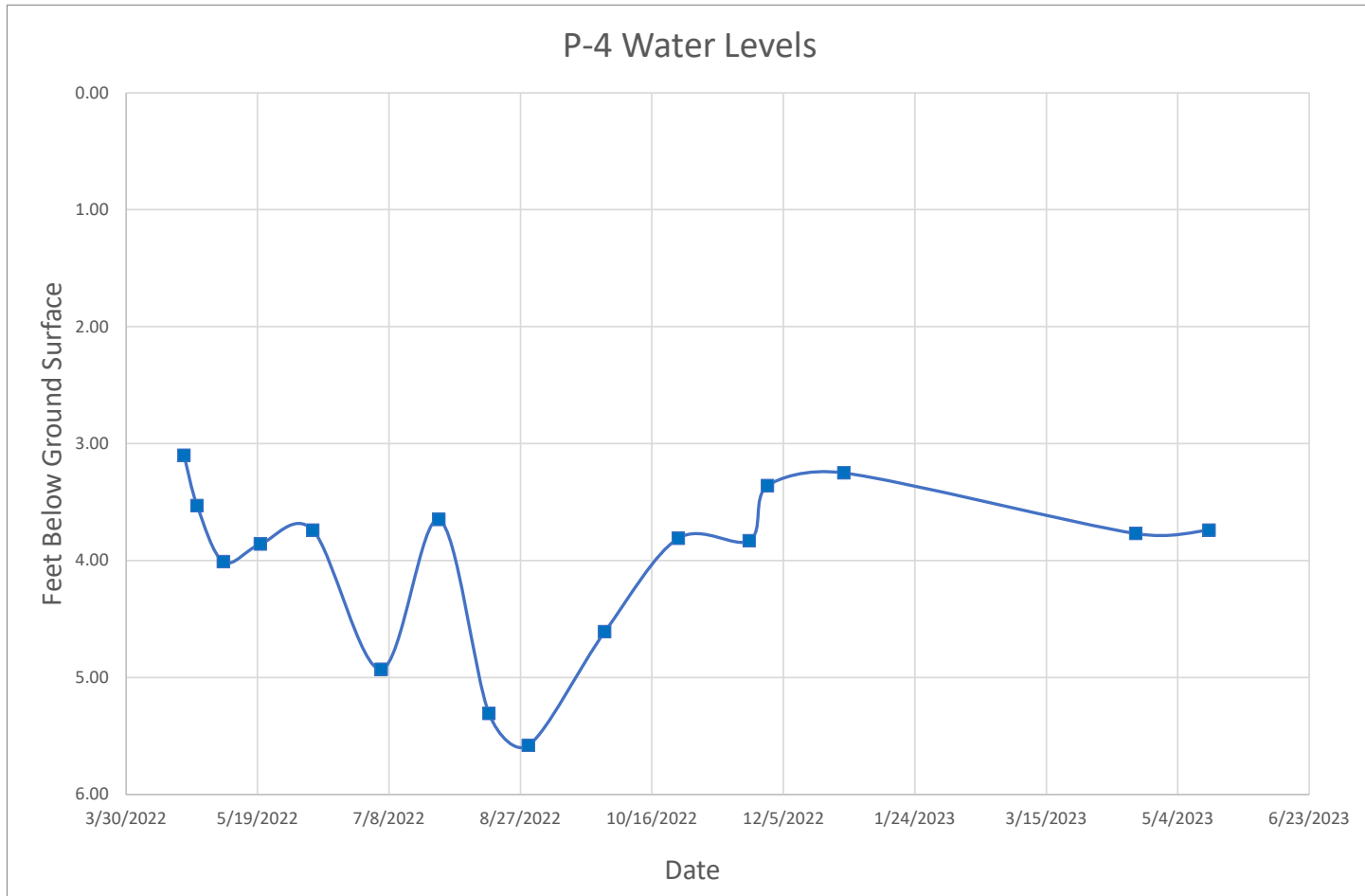




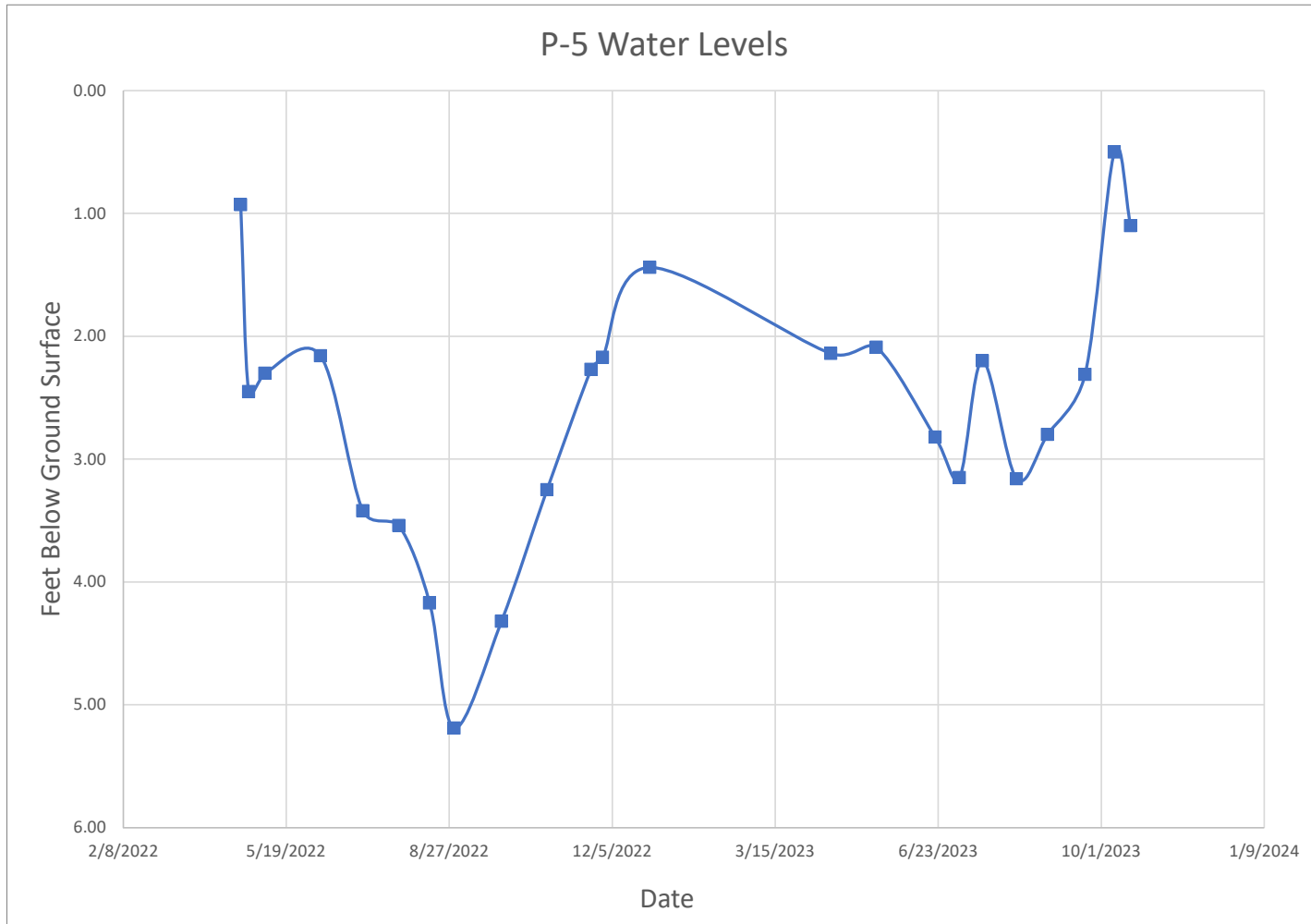
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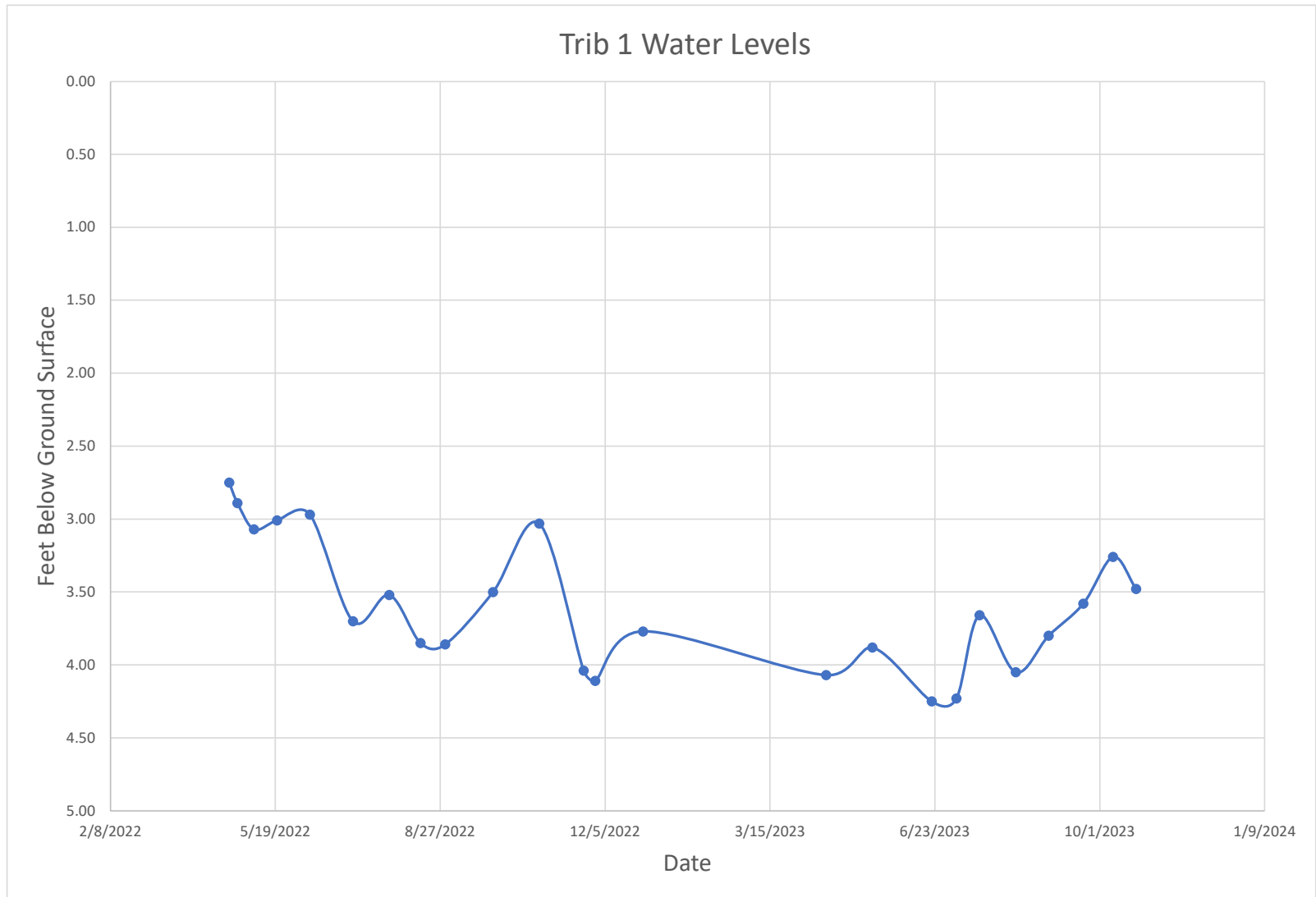
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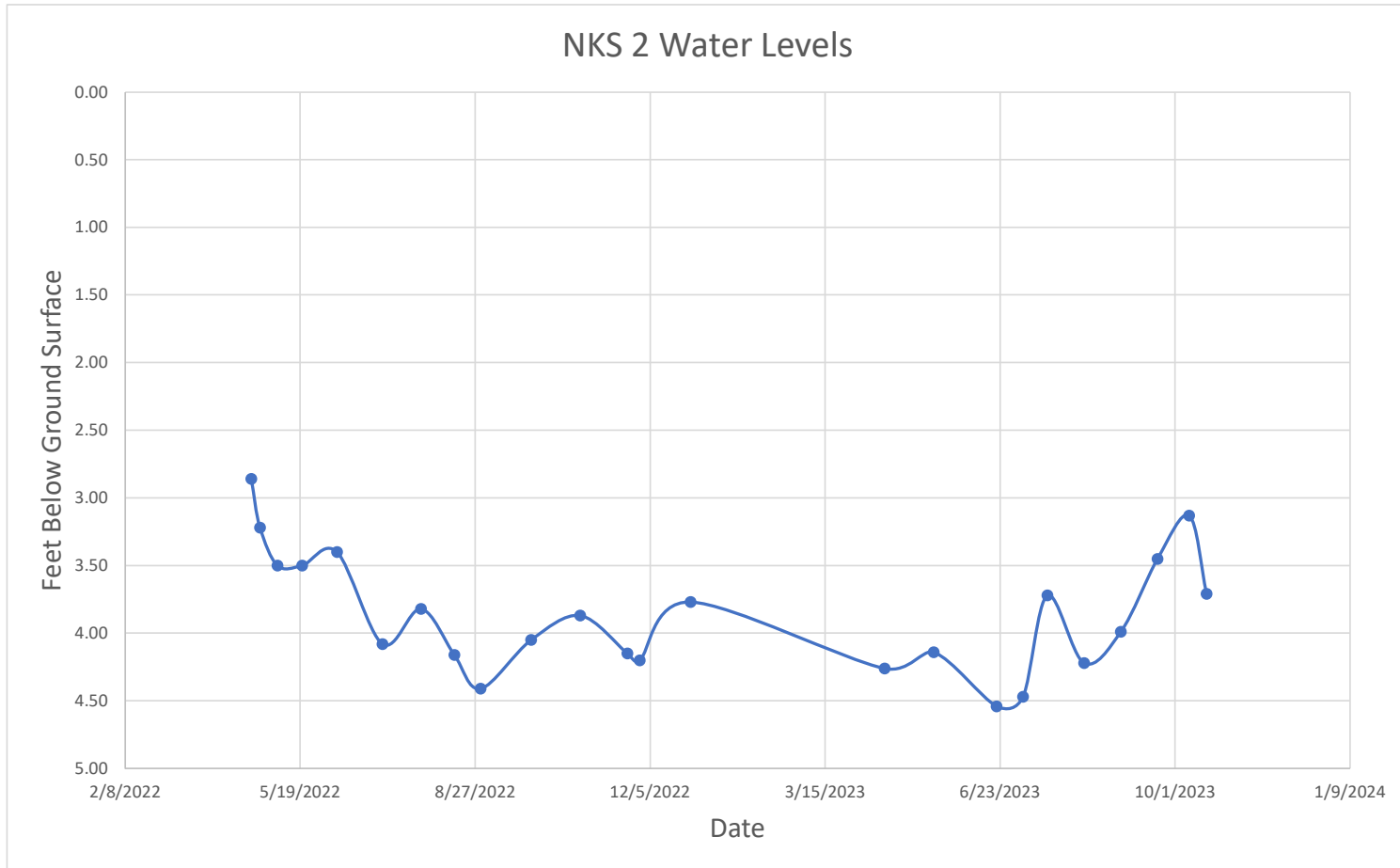


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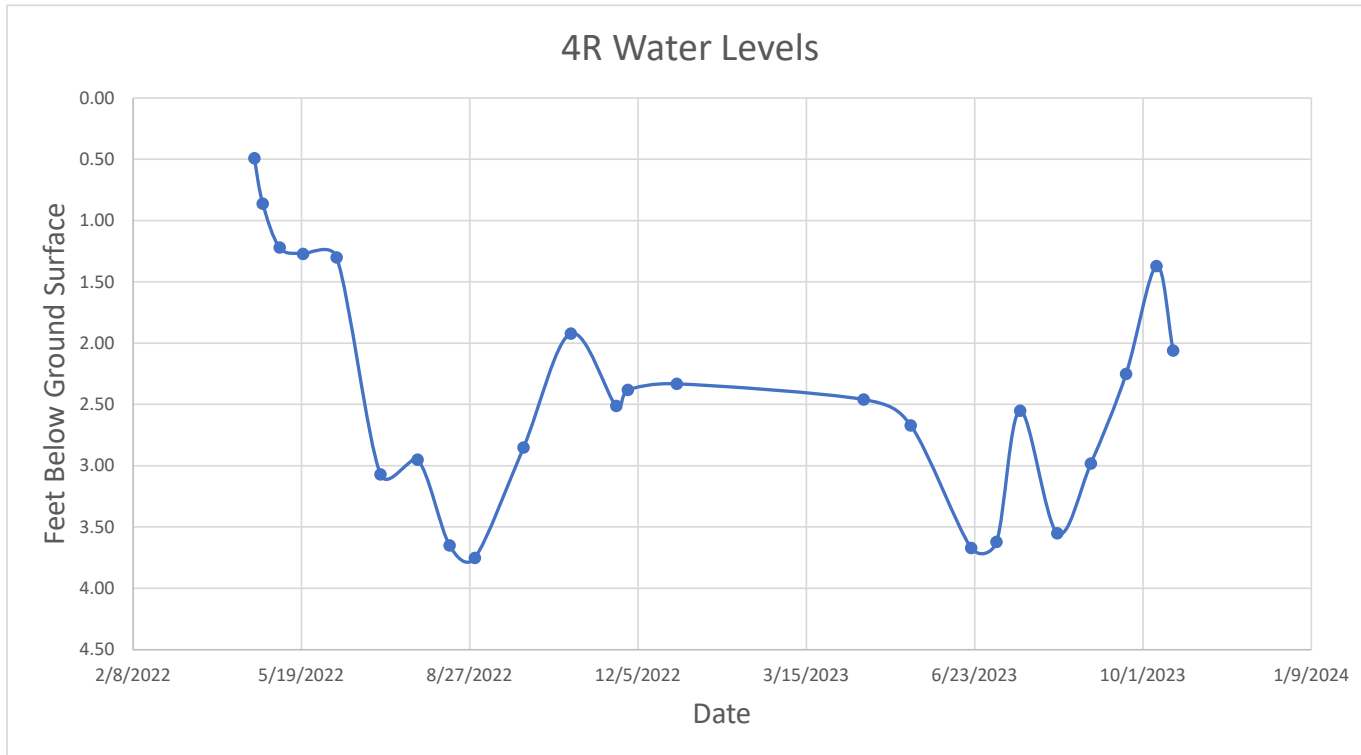
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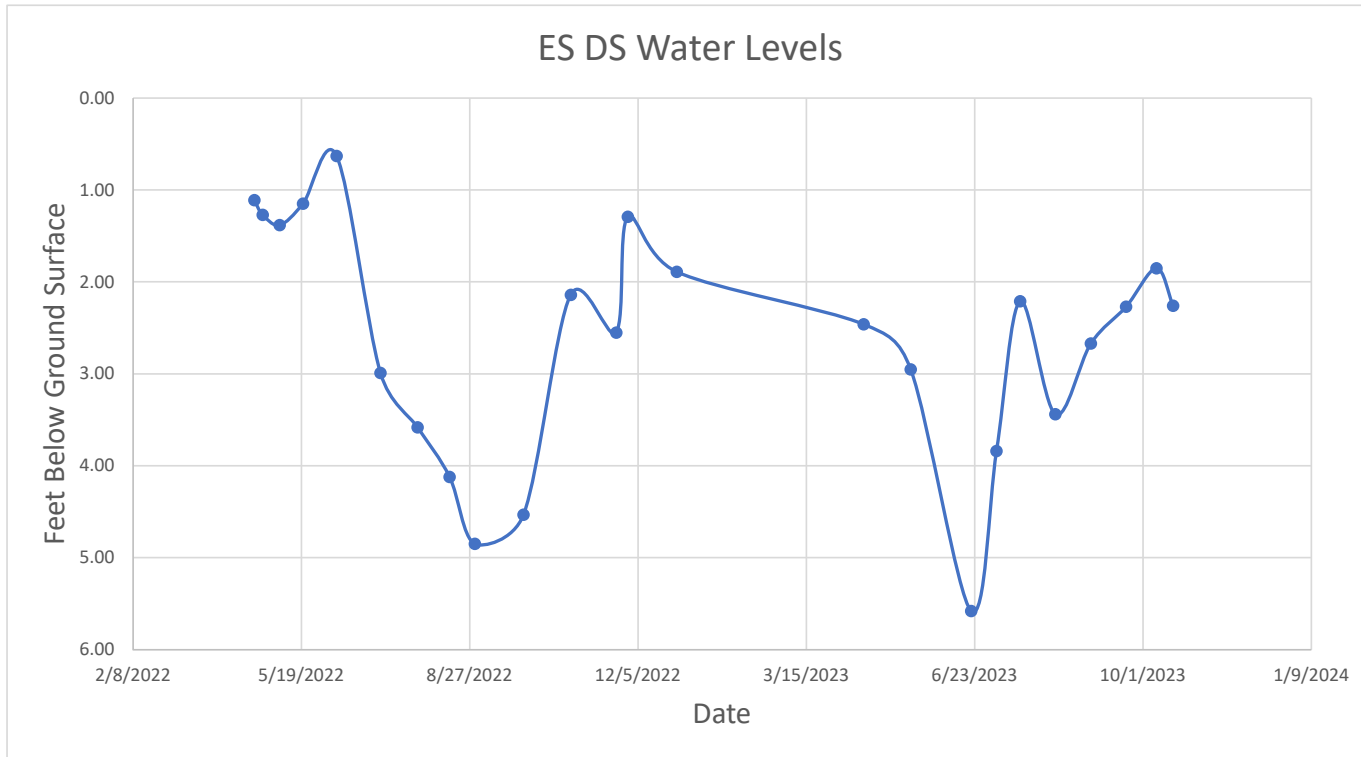
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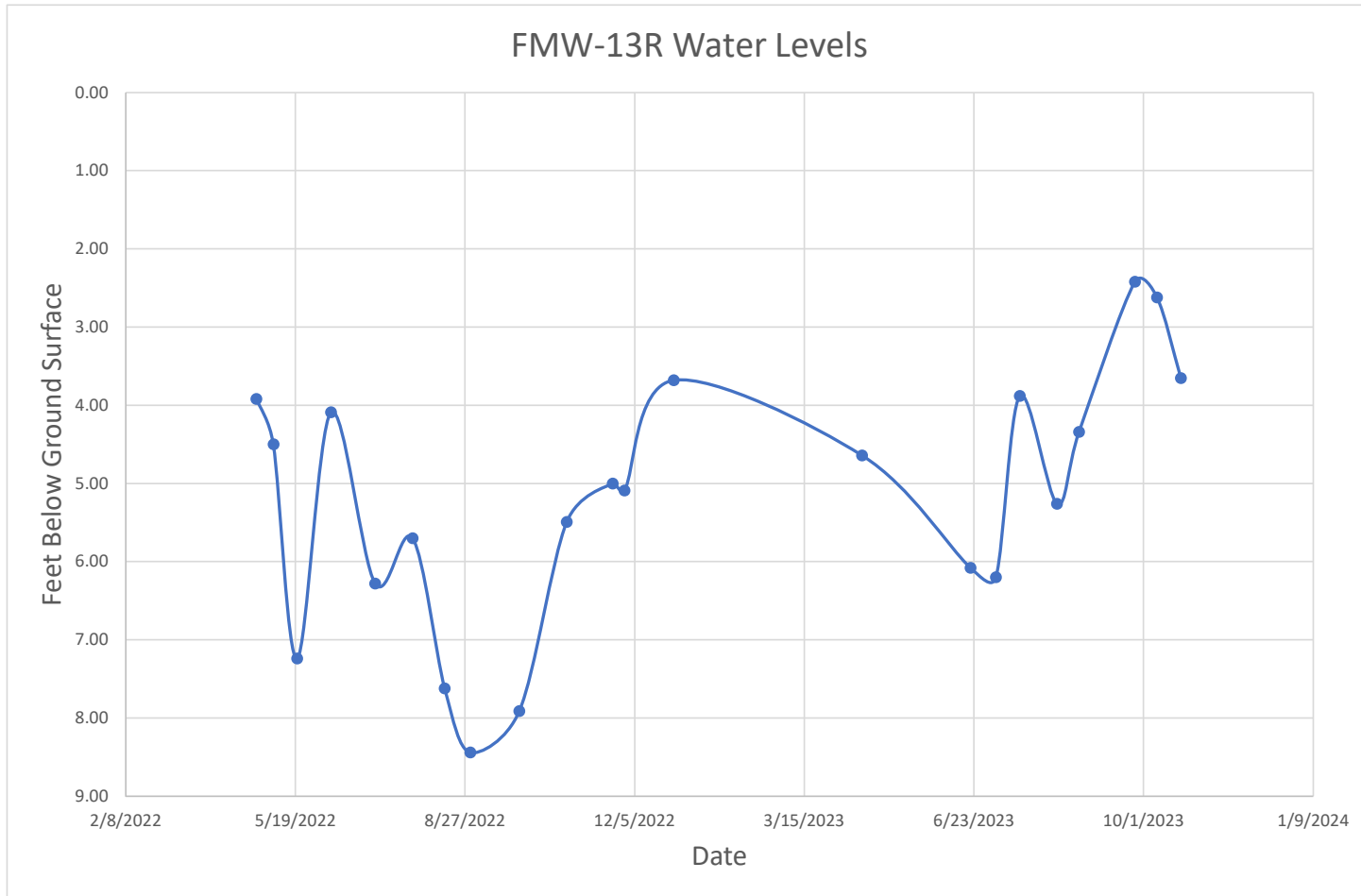
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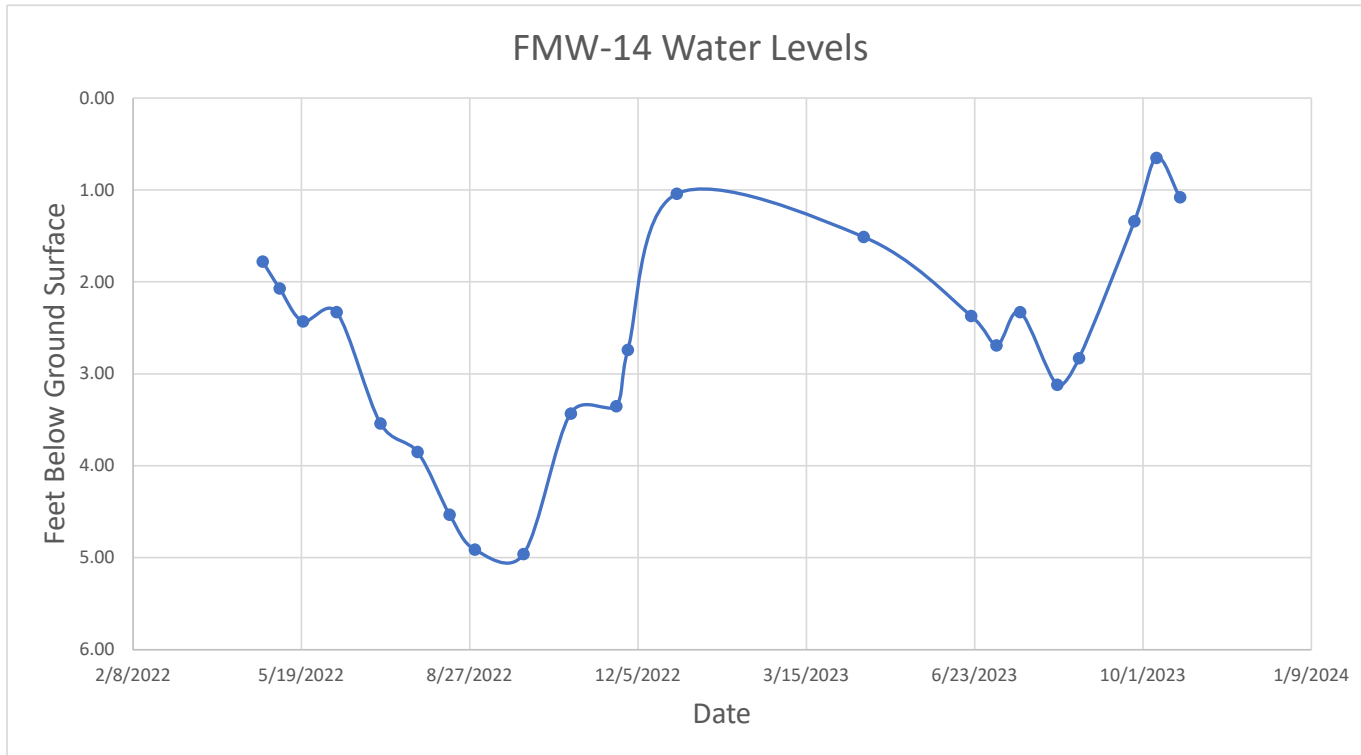


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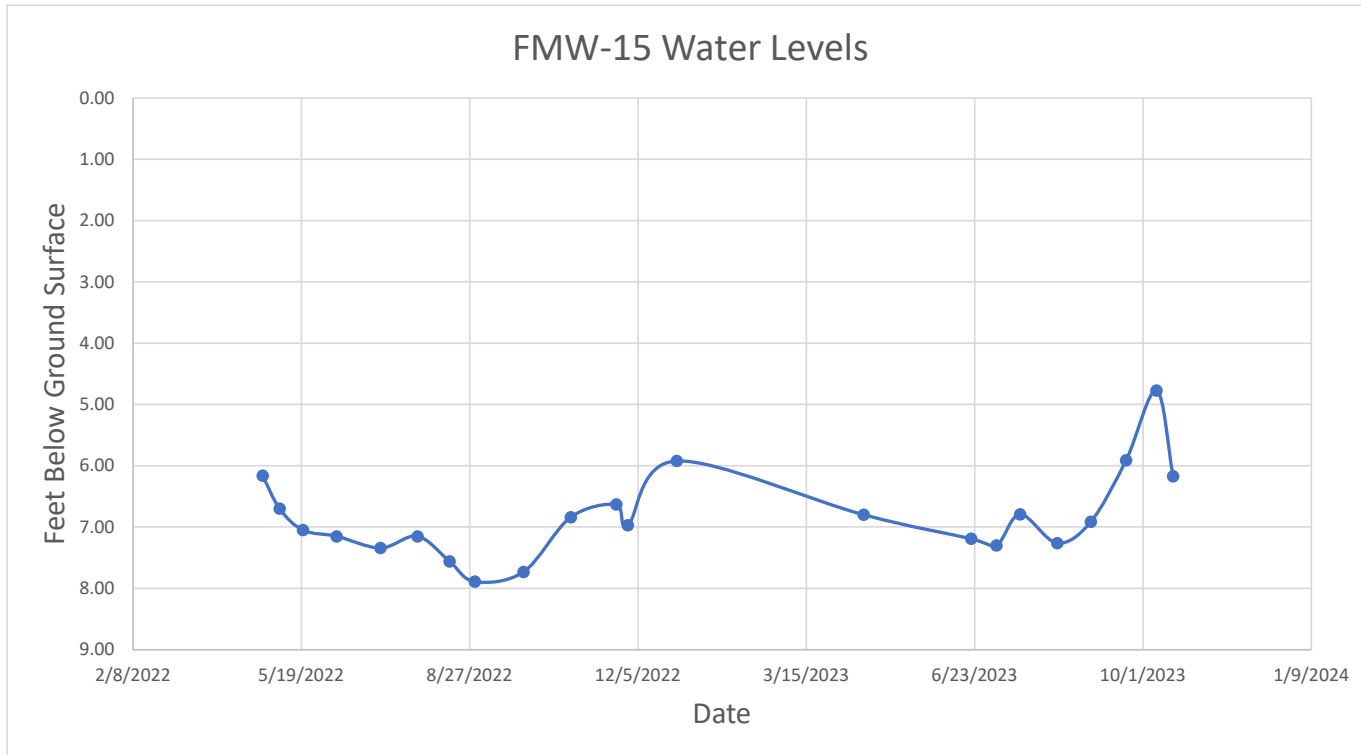




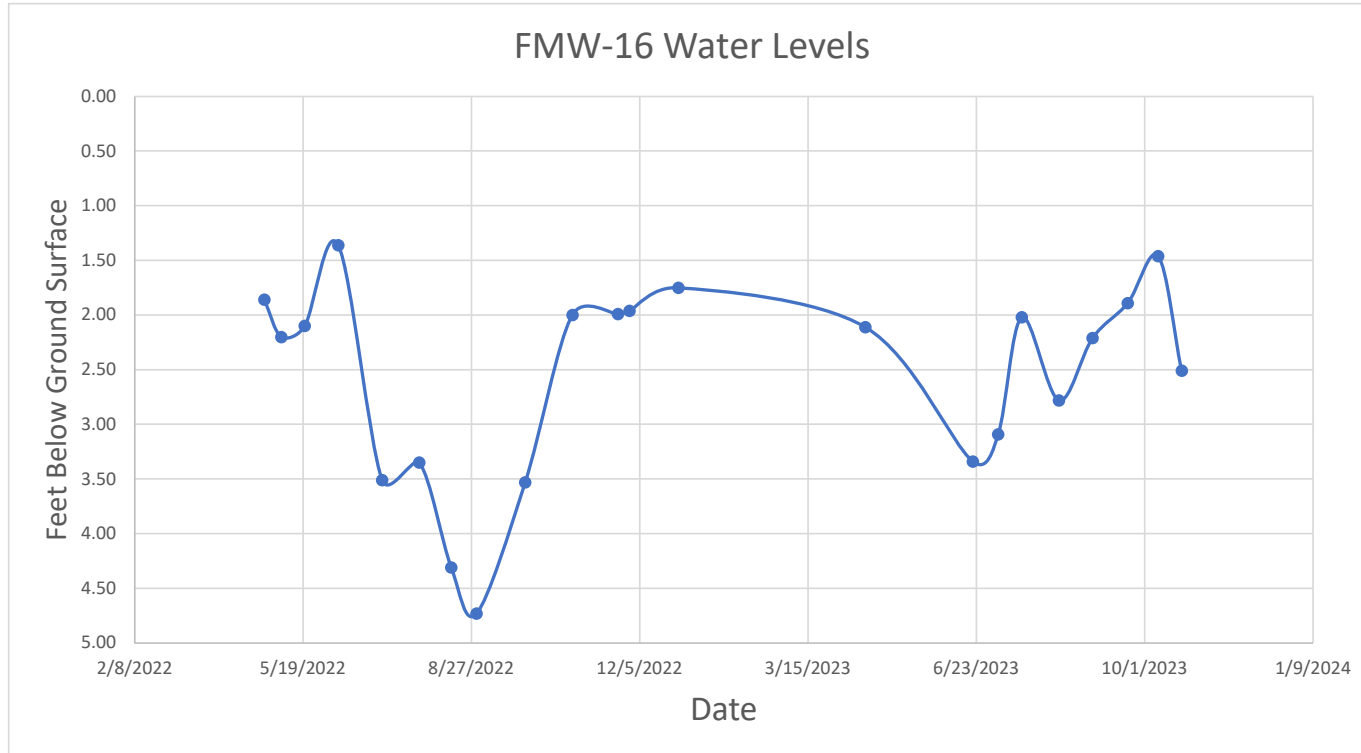
APPENDIX B



APPENDIX B



APPENDIX B



## **APPENDIX C**



Appendix C  
Vault Foundation Photo Log  
Westchester County Airport



Photo 1 – Progress made as of 11/1/23.  
The photo shows the forms for the footing and rebar being installed.



Photo 2 – Taken 11/1/23. Surrounding area around the vault.



Appendix C  
Vault Foundation Photo Log  
Westchester County Airport



Photo 3 – Taken 11/1/23. Shows the surrounding area of the vault and location on Airport Rd.