



April 26, 2021

Ms. Katie Haley
Town Manager
Town of Fryeburg
16 Lovewell Pond Road
Fryeburg, Maine 04037

RE: Q1 2021 Reporting – Rainmaker Spring Site (on behalf of Poland Spring)

INTRODUCTION

Luetje Geological Services (LGS), an independent hydrogeologic consulting firm, has been contracted by Poland Spring to collect and compile the monitoring data from the Rainmaker Spring site. This quarterly report (Q1 – January - March 2021) presents monitoring results for the Rainmaker Spring site and satisfies the requirements under local Town Ordinance 17G: *Groundwater and/or Spring Water Extraction*, the Approved Land Use Authorization. Monitoring activities include the following:

- Weekly depth to water measurements in five monitoring wells and four piezometers;
- Weekly monitoring of surface water elevation on Wards Pond at Route 113 and west of the site proximate to Spring 2, when possible;
- Weekly flow measurements from Spring 1 and 2, when possible;
- Record of groundwater withdrawal (gallons pumped); and
- Precipitation tracking (Fryeburg Eastern Slopes Airport (ICAO Station KIZG, Northeast Regional Climate Center)).

Figure 1 (Site Map) is provided at the end of this letter report and shows all monitoring locations.

GROUNDWATER

Groundwater levels are measured in five monitoring wells at locations shown in Figure 1. All monitoring data is tabulated and located in Table 1. A graphical representation of groundwater elevations, and weekly precipitation, is provided in Figure 2.

During Q1 2021, groundwater levels remained relatively stable from the beginning of Q1 to mid-February. From mid-February to mid-March, groundwater levels declined slightly (approximately ¼ foot), representing a typical winter trend. From mid-March to the end of Q1 2021, groundwater levels show a rising trend representing the beginning of the spring seasonal groundwater recharge phase.

SURFACE WATER

Surface water monitoring is conducted at two locations. SG-1 is located in Wards Pond west of Spring-2. WPMP-1 is located on the upstream side of Route 113 in Wards Pond (see Figure 1). A graphical representation of surface water elevations is shown in Figure 3.

During Q1 2021, only two measurements were made at SG-1 before the location became iced in. Ice conditions persisted until the last monitoring event of the quarter, at which time the gauge was submerged.

Surface water elevations at WPMP-1 were approximately 397.5 feet NAVD88 during the month January 2021. From the 2/4/2021 to the 3/3/2021 monitoring events, ice conditions were recorded at WPMP-1. From the 3/10/2021 monitoring event to the end of Q1 2021, surface water elevations at WPMP-1 rose by approximately $\frac{3}{4}$ feet in response to spring melt.

PIEZOMETER WATER LEVELS

Water levels are measured at two piezometers located adjacent to each spring. PZ-21D and PZ-21S are located near Spring 1 and P-1 and P-2 are located near Spring 2 (see Figure 1). A graphical representation of piezometer water elevations is shown in Figure 3.

Please note that PZ-21S was vandalized sometime between the 12/4 and 12/13/2020 monitoring events as mentioned in the Q4 2020 report. LGS replaced PZ-21S on 3/10/2021. Due to its weak connection to the underlying aquifer, the first measurement was made at PZ-21S during the 3/15/2021 monitoring event.

During Q1 2021, and as shown on Figure 3, water levels in all piezometers remained relatively stable from the beginning of Q1 2021 to mid-March. From mid-March to the end of Q1 2021, water levels rose in response to spring melt.

SPRING FLOW

During Q1 2021, flow measurements were able to be made at Spring-1 during all but four monitoring events. Flow from Spring-1 ranged from 2.86 – 6.00 liters per minute during Q1 2021. Flow measurements at Spring-2 were only made during one monitoring event over Q1 2021. No flow or ice conditions were otherwise observed. Flow measurement data is presented in Table 1.

PRECIPITATION

Precipitation data has been obtained from the Fryeburg Eastern Slopes Airport (ICAO Station KIZG, Northeast Regional Climate Center), located approximately two miles to the south of the site. Missing data from the airport station are supplemented with data collected from an on-site rain gauge located at the Evergreen Spring load station. During Q1 2021 (between the dates 12/31/2020 – 3/30/2021), KIZG recorded 6.84 inches of precipitation (Figure 2 and Figure 3).

WITHDRAWALS

Poland Spring did not withdraw any water from the Rainmaker Spring site production well during Q1 2021.

CONCLUSIONS

Groundwater levels (including piezometer water levels) and surface water levels showed typical seasonal trends during Q1 2021. Groundwater levels remained relatively stable until mid-March 2021, and then showed a rising trend from mid-March to the end of Q1 2021. Surface water levels at WPMP-1 showed a similar trend.

During Q1 2021 (between the dates 12/30/2020 – 3/30/2021), KIZG recorded 6.84 inches of precipitation. Of the flow measurements made at Spring 1 during Q1 2021, flow ranged from 2.86 – 6.00 liters per minute. Only one flow measurement was conducted at Spring-2 during Q1 2021. No withdrawal from the production well occurred during Q1 2021.

If you have any questions regarding the data included in this report, please do not hesitate to contact me at (207) 415-9898.

Sincerely,
Luetje Geological Services, LLC



Ed Luetje C.G.

cc: Poland Spring (Mr. Mark Dubois, Mr. Joshua Bowe)
Town of Fryeburg, CEO ()

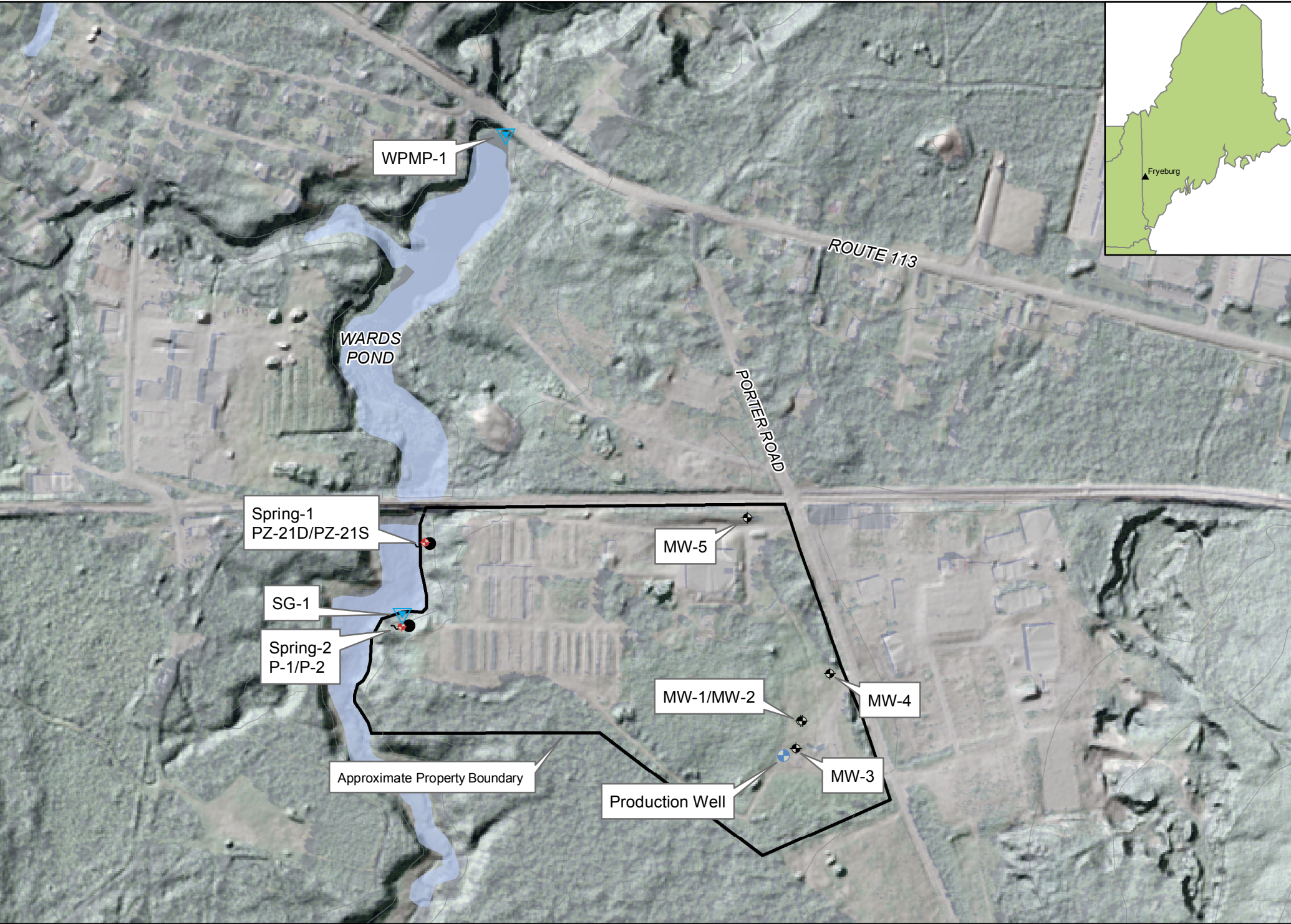


FIGURE 1
RAINMAKER SPRING SITE MAP
FRYEBURG, MAINE



FIGURE 2
GROUNDWATER ELEVATION DATA - WEEKLY PRECIPITATION

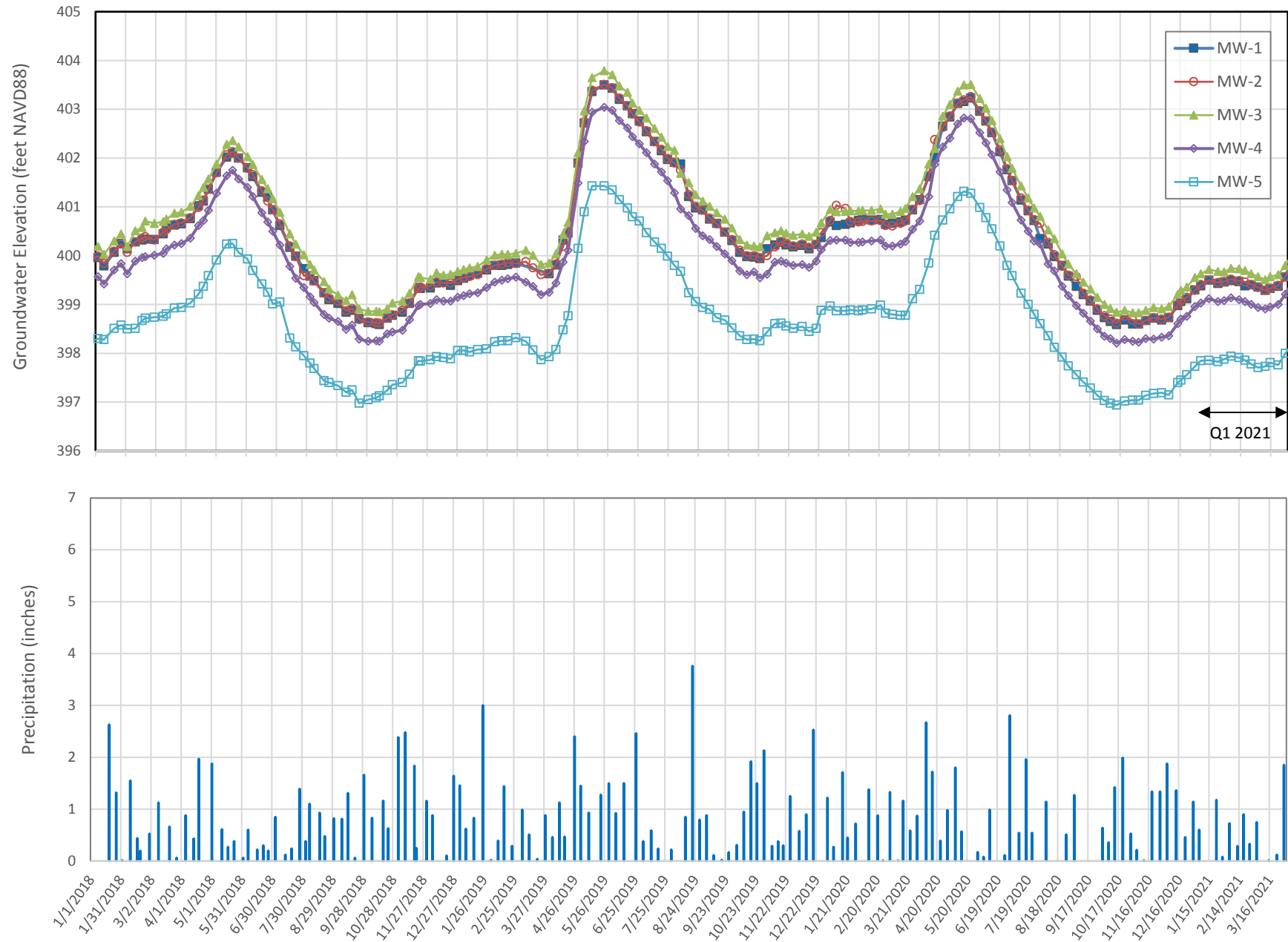


FIGURE 3
SURFACE WATER and PIEZOMETER ELEVATION DATA - WEEKLY PRECIPITATION

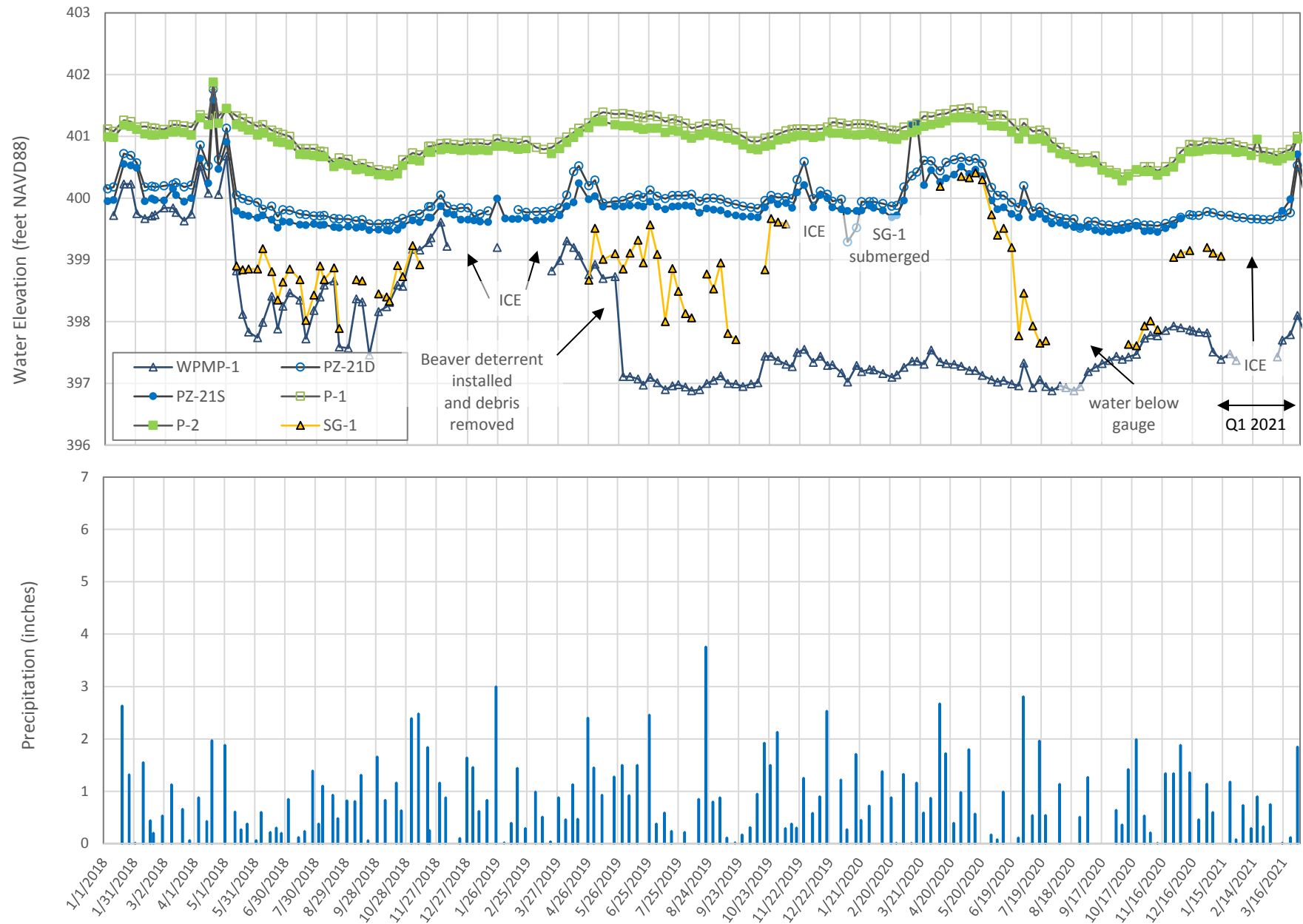


TABLE 1
MONITORING DATA
RAINMAKER SPRING SITE
FRYEBURG, MAINE

	GROUNDWATER ELEVATION (feet NAVD88)										PIEZOMETERS @ SPRING 1 (feet NAVD88)				PIEZOMETERS @ SPRING 2 (feet NAVD88)				SURFACE WATER				SPRING FLOW (lt/min)		PRECIPITATION EASTERN SLOPES AIRPORT	
	MW-1		MW-2		MW-3		MW-4		MW-5		PZ-21D		PZ-21S		P-1		P-2		WPMP-1		SG-1		Spring-1	Spring-2		KIZG
New Measuring Point (MP)Elevation (feet NAVD88)		418.75		419.59		421.26		419.75		423.11		403.99		405.40		406.03		404.35			SG-1 (2019)	400.08				
Old Measuring Point (MP)Elevation		418.27		419.10		420.79		419.30		422.53		403.27		404.76		405.35		403.67		401.22		SG-1A (2019)	399.49			
Date	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation			Inches	
7/5/2017																									5.12	
7/12/2017																									0.62	
7/19/2017																									1.24	
7/26/2017																									0.34	
8/2/2017																									0.13	
8/9/2017																									0.67	
8/16/2017																									0.04	
8/23/2017	18.56	400.19	19.31	400.28	20.88	400.38	19.88	399.87	24.39	398.72	3.85	400.14	5.45	399.95	5.04	400.99	3.44	400.91	1.44	399.78				UW	1.25	1.15
9/1/2017	18.72	400.03	19.56	400.03	21.04	400.22	20.06	399.69	24.55	398.56	3.98	400.01	5.58	399.82	5.06	400.97	3.48	400.87	NM	NM			UW	0.66	0.00	
9/7/2017	18.79	399.96	19.61	399.98	21.10	400.16	20.12	399.63	24.61	398.50	3.30	400.69	5.00	400.40	4.65	401.38	2.99	401.36	1.41	399.81			UW	1.32	5.78	
9/14/2017	18.88	399.87	19.70	399.89	21.18	400.08	20.22	399.53	24.75	398.36	3.95	400.04	5.55	399.85	5.02	401.01	3.42	400.93	1.43	399.79			UW	1.25	0.03	
9/20/2017	18.89	399.86	19.79	399.80	21.26	400.00	20.30	399.45	24.81	398.30	3.90	400.09	5.58	399.82	5.06	400.97	3.48	400.87	1.46	399.76			UW	1.00	0.45	
9/27/2017	18.98	399.77	20.03	399.56	21.35	399.91	20.39	399.36	24.86	398.25	3.85	400.14	5.61	399.79	5.10	400.93	3.50	400.85	1.51	399.71			UW	0.55	0.00	
10/6/2017	19.28	399.47	20.11	399.48	21.60	399.66	20.80	398.95	25.06	398.05	3.77	400.22	5.55	399.85	5.11	400.92	3.54	400.81	1.55	399.67			UW	0.52	0.01	
10/12/2017	19.46	399.29	20.30	399.29	21.80	399.46	20.78	398.97	25.23	397.88	3.60	400.39	5.18	400.22	5.08	400.95	3.49	400.86	NM	NM	1.56	400.14	UW	0.65	0.84	
10/18/2017	19.50	399.25	20.34	399.25	21.81	399.45	20.84	398.91	25.28	397.83	3.59	400.40	5.16	400.24	5.11	400.92	3.50	400.85	1.15	400.07	1.54	400.16	UW	0.65	0.01	
10/25/2017	19.30	399.45	20.15	399.44	21.63	399.63	20.74	399.01	25.16	397.95	1.95	402.04	3.74	401.66	NM	NM	NM	NM	UW	UW	uw		UW	2.90		
11/1/2017	19.38	399.37	20.20	399.39	21.68	399.58	20.70	399.05	25.25	397.86	1.45	402.54	2.98	402.42	NM	NM	NM	NM	UW	UW	uw		UW	4.94		
11/8/2017	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM			NM	NM	0.75
11/14/2017	18.86	399.89	19.71	399.88	21.13	400.13	20.21	399.54	24.72	398.39	3.57	400.42	5.17	400.23	4.83	401.20	3.25	401.10	NM	NM	ice		UW	1.20	0.17	
11/20/2017	18.83	399.92	19.65	399.94	21.12	400.14	20.17	399.58	24.68	398.43	3.17	400.82	4.89	400.51	4.75	401.28	3.12	401.23	0.65	400.57	ice		UW	UW	1.22	
11/29/2017	18.85	399.90	19.66	399.93	21.14	400.12	20.21	399.54	24.79	398.32	3.70	400.29	5.27	400.13	4.87	401.16	3.30	401.05	1.33	399.89	uw		UW	UW	0.28	
12/6/2017	18.79	399.96	19.63	399.96	21.08	400.18	20.18	399.57	24.86	398.25	3.41	400.58	5.12	400.28	4.81	401.22	3.21	401.14	0.81	400.41	uw		UW	UW	1.24	
12/15/2017	18.90	399.85	19.68	399.91	21.17	400.09	20.23	399.52	24.97	398.14	3.63	400.36	5.22	400.18	4.90	401.13	3.31	401.04	1.30	399.92	ice		UW	UW	0.86	
12/21/2017	18.87	399.88	19.68	399.91	21.13	400.13	20.26	399.49	24.98	398.13	3.75	400.24	5.38	400.02	4.91	401.12	3.34	401.01	1.42	399.80	ice		UW	UW	0.88	
12/29/2017	18.80	399.95	19.64	399.95	21.06	400.20	20.19	399.56	24.85	398.26	3.72	400.27	5.35	400.05	4.90	401.13	3.33	401.02	1.41	399.81	ice		UW	0.85	1.12	
1/3/2018	18.79	399.96	19.60	399.99	21.07	400.19	20.18	399.57	24.81	398.30	3.84	400.15	5.45	399.95	4.91	401.12	3.36	400.99	ice	ice	ice		ice	0.83	0.00	
1/9/2018	18.96	399.79	19.75	399.84	21.23	400.03	20.33	399.42	24.83	398.28	3.81	400.18	5.43	399.97	4.95	401.08	3.37	400.98	1.50	399.72	ice		ice	0.81	0.00	
1/19/2018	18.68	400.07	19.50	400.09	20.96	400.30	20.04	399.71	24.60	398.51	3.27	400.72	4.85	400.55	4.77	401.26	3.17	401.18	0.99	400.23	ice		ice	ice	2.63	
1/26/2018	18.50	400.25	19.35	400.24	20.81	400.45	19.91	399.84	24.53	398.58	3.30	400.69	4.87	400.53	4.79	401.24	3.19	401.16	0.99	400.23	ice		ice	ice	1.32	
2/1/2018	18.61	400.14	19.52	400.07	21.07	400.19	20.12	399.63	24.61	398.50	3.42	400.57	4.91	400.49	4.88	401.15	3.24	401.11	1.47	399.75	ice		ice	ice	0.01	
2/9/2018	18.47	400.28	19.31	400.28	20.75	400.51	19.86	399.89	24.60	398.51	3.81	400.18	5.45	399.95	4.87	401.16	3.31	401.04	1.55	399.67	ice		NM	ice	1.55	
2/16/2018	18.43	400.32	19.23	400.36	20.68	400.58	19.79	399.96	24.44	398.67	3.80	400.19	5.41	399.99	4.89	401.14	3.33	401.02	1.51	399.71	ice		NM	ice	0.44	
2/19/2018	18.41	400.34	19.20	400.39	20.55	400.71	19.77	399.98	24.39	398.72	3.81	400.18	5.43	399.97	4.90	401.13	3.33	401.02	1.49	399.73	ice		NM	ice	0.20	
2/28/2018	18.42	400.33	19.27	400.32	20.60	400.66	19.74	400.01	24.37	398.74	3.79	400.20	5.44	399.96	4.92	401.13	3.32	401.03	1.38	399.84	ice		uw	NM	0.53	
3/9/2018	18.30	400.45	19.11	400.48	20.56	400.70	19.70	400.05	24.35	398.76	3.77	400.22	5.25	400.15	4.84	401.19	3.28	401.07	1.38	399.84	ice		uw	NM	1.13	
3/12/2018	18.17	400.58	19.06	400.53	20.51	400.75	19.61	400.14	24.30	398.81	3.74	400.25	5.35	400.05	4.84	401.19	3.27	401.08	1.45	399.77	ice		uw	NM	0.00	
3/20/2018	18.12	400.63	18.95	400.64	20.39	400.87	19.53	400.22	24.18	398.93	3.81	400.18	5.46	399.94	4.86	401.17	3.29	401.06	1.59	399.63	ice		uw	NM	0.66	
3/27/2018	18.10	400.65	18.92	400.67	20.37	400.89	19.50	400.25	24.17	398.94	3.78	400.21	5.40	400.00	4.88	401.15	3.33	401.02	1.48	399.74	ice		uw	NM	0.06	
4/5/2018	17.99	400.76	18.81	400.78	20.25	401.01	19.39	400.36	24.08	399.03	3.13	400.86	4.76	400.64	4.68	401.35	3.05	401.30	0.70	400.52	uw		UW	UW	0.88	
4/13/2018	17.73	401.02	18.60	400.99																						

TABLE 1
MONITORING DATA
RAINMAKER SPRING SITE
FRYEBURG, MAINE

TABLE 1 CONT.	GROUNDWATER ELEVATION (feet NAVD88)										PIEZOMETERS @ SPRING 1 (feet NAVD88)				PIEZOMETERS @ SPRING 2 (feet NAVD88)				SURFACE WATER				SPRING FLOW (lt/min)		PRECIPITATION EASTERN SLOPES AIRPORT	
	MW-1		MW-2		MW-3		MW-4		MW-5		PZ-21D		PZ-21S		P-1		P-2		WPMP-1		SG-1		Spring-1	Spring-2		KIZG
New Measuring Point (MP) Elevations (feet NAVD88)		418.75		419.59		421.26		419.75		423.11		403.99		405.40		406.03		404.35				SG-1 (2019)	400.08			
Old Measuring Point (MP) Elevations																						SG-1A (2019)	399.49			
(MP) Elevations		418.27		419.10		420.79		419.30		422.53		403.27		404.76		405.35		403.67		401.22						
Date	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation			Inches	
10/7/2018	20.14	398.61	20.96	398.63	22.40	398.86	21.49	398.26	26.02	397.09	4.40	399.59	5.92	399.48	5.59	400.44	3.97	400.38	2.98	398.24	1.70	398.40	5.45	2.48	0.83	
10/10/2018	20.16	398.59	20.97	398.62	22.41	398.85	21.50	398.25	25.98	397.13	4.40	399.59	5.93	399.47	5.60	400.43	3.99	400.36	2.91	398.31	1.77	398.33	4.29	1.50	0.00	
10/18/2018	20.03	398.72	20.87	398.72	22.35	398.91	21.35	398.40	25.87	397.24	4.37	399.62	5.91	399.49	5.56	400.47	3.96	400.39	2.63	398.59	1.19	398.91	4.29	3.75	1.16	
10/23/2018	19.97	398.78	20.80	398.79	22.23	399.03	21.31	398.44	25.75	397.36	4.32	399.67	5.84	399.56	5.41	400.62	3.82	400.53	2.65	398.57	1.09	398.73	3.75	2.14	0.63	
11/2/2018	19.91	398.84	20.71	398.88	22.19	399.07	21.28	398.47	25.71	397.40	4.26	399.73	5.76	399.64	5.30	400.73	3.73	400.62	2.05	399.17	0.59	399.23	UW	UW	2.39	
11/9/2018	19.73	399.02	20.56	399.03	22.03	399.23	21.06	398.69	25.54	397.57	4.25	399.74	5.79	399.61	5.33	400.70	3.75	400.60	2.06	399.16	0.90	398.92	UW	1.33	2.48	
11/18/2018	19.40	399.35	20.26	399.33	21.69	399.57	20.77	398.98	25.26	397.85	4.13	399.86	5.71	399.69	5.19	400.84	3.60	400.75	1.94	399.28	ice	ice	UW	UW	1.84	
11/20/2018	19.42	399.33	20.23	399.36	21.71	399.55	20.75	399.00	25.27	397.84	4.13	399.86	5.72	399.68	5.19	400.84	3.61	400.74	1.86	399.36	ice	ice	UW	UW	0.25	
11/30/2018	19.41	399.34	20.21	399.38	21.74	399.52	20.73	399.02	25.24	397.87	4.14	399.86	5.73	399.87	5.15	400.88	3.57	400.78	1.61	399.61	ice	ice	ice	ice	1.16	
12/6/2018	19.31	399.44	20.13	399.46	21.61	399.65	20.65	399.10	25.18	397.93	4.12	399.87	5.65	399.75	5.14	400.89	3.55	400.80	2.00	399.22	ice	ice	ice	ice	0.88	
12/13/2018	19.29	399.46	20.15	399.44	21.66	399.60	20.68	399.07	25.20	397.91	4.17	399.82	5.67	399.73	5.16	400.87	3.56	400.79	ice	ice	ice	ice	ice	ice	0.00	
12/20/2018	19.36	399.39	20.15	399.44	21.64	399.62	20.68	399.07	25.22	397.89	4.15	399.84	5.75	399.65	5.17	400.86	3.58	400.77	ice	ice	ice	ice	ice	ice	0.10	
12/27/2018	19.26	399.49	20.07	399.52	21.58	399.68	20.60	399.15	25.05	398.06	4.15	399.84	5.75	399.65	5.14	400.89	3.57	400.78	ice	ice	ice	ice	ice	ice	1.64	
1/2/2019	19.21	399.54	20.04	399.55	21.54	399.72	20.57	399.18	25.05	398.06	4.29	399.70	5.76	399.64	5.14	400.89	3.58	400.77	ice	ice	ice	ice	ice	ice	1.46	
1/8/2019	19.15	399.60	20.02	399.57	21.51	399.75	20.53	399.22	25.08	398.03	4.25	399.74	5.78	399.62	5.14	400.89	3.57	400.78	ice	ice	ice	ice	ice	ice	0.62	
1/16/2019	19.11	399.64	19.98	399.61	21.48	399.78	20.51	399.24	25.03	398.08	4.20	399.79	5.79	399.61	5.16	400.87	3.58	400.77	ice	ice	ice	ice	ice	ice	0.83	
1/25/2019	19.04	399.71	19.86	399.73	21.35	399.91	20.40	399.35	25.02	398.09	ice	ice	5.41	399.99	5.07	400.96	3.51	400.84	2.02	399.20	ice	ice	ice	ice	3.00	
2/2/2019	18.95	399.80	19.79	399.80	21.25	400.01	20.29	399.46	24.87	398.24	ice	ice	5.73	399.67	5.12	400.91	3.51	400.84	ice	ice	ice	ice	ice	ice	0.02	
2/9/2019	18.95	399.80	19.76	399.83	21.23	400.03	20.25	399.50	24.85	398.26	ice	ice	5.74	399.66	5.13	400.90	3.53	400.82	ice	ice	ice	ice	ice	ice	0.39	
2/15/2019	18.93	399.82	19.73	399.86	21.23	400.03	20.22	399.53	24.85	398.26	4.18	399.81	5.74	399.66	5.14	400.89	3.56	400.79	ice	ice	ice	ice	ice	ice	1.44	
2/23/2019	18.90	399.85	19.75	399.84	21.21	400.05	20.19	399.56	24.79	398.32	4.22	399.77	5.72	399.68	5.10	400.93	3.55	400.80	ice	ice	ice	ice	ice	ice	0.29	
3/5/2019	could not locate		19.71	399.88	21.15	400.11	20.29	399.46	24.86	398.25	4.21	399.78	5.76	399.64	5.21	400.82	ice	ice	ice	ice	ice	ice	ice	ice	0.99	
3/12/2019	could not locate		19.84	399.75	21.25	400.01	20.38	399.37	25.04	398.07	4.21	399.78	5.75	399.65	5.24	400.79	ice	ice	ice	ice	ice	ice	ice	ice	0.51	
3/20/2019	could not locate		19.98	399.61	21.44	399.82	20.55	399.20	25.24	397.87	4.19	399.80	5.73	399.67	5.21	400.82	3.63	400.72	2.40	398.82	ice	ice	ice	ice	0.04	
3/28/2019	19.12	399.63	19.95	399.64	21.41	399.85	20.50	399.25	25.18	397.93	4.15	399.84	5.68	399.72	5.12	400.91	3.55	400.80	2.23	398.99	ice	ice	ice	ice	0.88	
4/4/2019	18.94	399.81	19.76	399.83	21.22	400.04	20.31	399.44	25.03	398.08	3.94	400.05	5.53	399.87	5.04	400.99	3.45	400.90	1.91	399.31	ice	ice	uw	uw	0.46	
4/11/2019	18.43	400.32	19.40	400.19	20.82	400.44	19.88	399.87	24.63	398.48	3.56	400.43	5.47	399.93	4.97	401.06	3.37	400.98	2.02	399.20	uw	uw	uw	uw	1.13	
4/16/2019	18.29	400.46	19.11	400.48	20.58	400.68	19.64	400.11	24.34	398.77	3.47	400.52	5.16	400.24	4.90	401.13	3.29	401.06	2.15	399.07	uw	uw	uw	uw	0.47	
4/26/2019	16.85	401.90	17.70	401.89	19.15	402.11	18.26	401.49	22.96	400.15	3.79	400.20	5.42	399.98	4.81	401.22	3.21	401.14	2.46	398.76	-0.82	398.67	10.00	2.50	2.40	
5/2/2019	16.03	402.72	16.85	402.74	18.29	402.97	17.41	402.34	22.21	400.90	3.70	400.29	5.37	400.03	4.70	401.33	3.11	401.24	2.29	398.93	0.02	399.51	uw	5.00	1.45	
5/10/2019	15.39	403.36	16.20	403.39	17.61	403.65	16.81	402.94	21.68	401.43	4.07	399.92	5.54	399.86	4.64	401.39	3.11	401.24	2.52	398.70	-0.48	399.01	uw	8.00	0.93	
5/22/2019	15.25	403.50	16.08	403.51	17.47	403.79	16.71	403.04	21.68	401.43	4.04	399.95	5.53	399.87	4.67	401.36	3.16	401.19	2.49	398.73	-0.39	399.10	17.22	4.29	1.28	
5/30/2019	15.32	403.43	16.15	403.44	17.55	403.71	16.77	402.98	21.76	401.35	4.03	399.96	5.54	399.86	4.66	401.37	3.18	401.17	4.11	397.11	-0.64	398.85	15.00	3.00	1.50	
6/6/2019	15.55	403.20	16.36	403.23	17.78	403.48	16.98	402.77	21.96	401.15	3.98	400.01	5.52	399.88	4.68	401.35	3.18	401.17	4.11	397.11	-0.38	399.11	16.67	4.41	0.92	
6/14/2019	15.68	403.07	16.52	403.07	17.91	403.35	17.13	402.62	22.13	400.98	3.94	400.05	5.52	399.88	4.71	401.32	3.21	401.14	4.15	397.07	-0.76	399.32	10.71	2.31	1.50	
6/19/2019	15.84	402.91	16.69	402.90	18.13	403.13	17.31	402.44	22.31	400.80	3.98	400.01	5.54	399.86	4.73	401.30										

TABLE 1
MONITORING DATA
RAINMAKER SPRING SITE
FRYEBURG, MAINE

TABLE 1 CONT.		GROUNDWATER ELEVATION (feet NAVD88)								PIEZOMETERS @ SPRING 1 (feet NAVD88)				PIEZOMETERS @ SPRING 2 (feet NAVD88)				SURFACE WATER				SPRING FLOW (lt/min)		PRECIPITATION EASTERN SLOPES AIRPORT		
		MW-1		MW-2		MW-3		MW-4		MW-5		PZ-21D		PZ-21S		P-1		P-2		WPMP-1		SG-1		Spring-1	Spring-2	KI2G
New Measuring Point (MP)Elevations (feet NAVD88)		418.75		419.59		421.26		419.75		423.11		403.99		405.40		406.03		404.35				SG-1 (2020)	400.25			
Old Measuring Point (MP)Elevation		418.27		419.10		420.79		419.30		422.53		403.27		404.76		405.35		403.67		401.22		SG-1A (2020)	398.75			
Date	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation	Depth to Water below mp (ft)	Water Elevation			Inches	
1/2/2020	18.06	400.69	18.87	400.72	20.31	400.95	19.44	400.31	24.14	398.97	4.01	399.98	5.58	399.82	4.82	401.21	3.30	401.05	4.05	397.17	ice		uw	uw	1.22	
1/8/2020	18.13	400.62	18.56	401.03	20.36	400.90	19.43	400.32	24.24	398.87	4.70	399.29	5.61	399.79	4.85	401.18	3.32	401.03	4.20	397.02	ice		11.11	uw	0.27	
1/17/2020	18.11	400.64	18.62	400.97	20.35	400.91	19.43	400.32	24.24	398.87	4.47	399.52	5.61	399.79	4.83	401.20	3.33	401.02	3.93	397.29	ice		12.00	uw	1.71	
1/22/2020	18.08	400.67	18.89	400.70	20.34	400.92	19.48	400.27	24.22	398.89	4.05	399.94	5.60	399.80	4.83	401.20	3.32	401.03	4.03	397.19	ice		12.00	uw	0.45	
1/30/2020	18.03	400.72	18.90	400.69	20.34	400.92	19.48	400.27	24.24	398.87	4.05	399.94	5.52	399.88	4.84	401.19	3.31	401.04	3.99	397.23	ice		12.00	uw	0.72	
2/3/2020	18.00	400.75	18.89	400.70	20.33	400.93	19.47	400.28	24.22	398.89	4.05	399.94	5.56	399.84	4.86	401.17	3.33	401.02	4.00	397.22	ice		10.91	uw	0.00	
2/12/2020	18.02	400.73	18.88	400.71	20.33	400.93	19.45	400.30	24.20	398.91	4.08	399.91	5.60	399.80	4.89	401.14	3.36	400.99	4.06	397.16	ice		10.91	uw	1.38	
2/21/2020	18.01	400.74	18.87	400.72	20.30	400.96	19.43	400.32	24.12	398.99	4.12	399.87	5.71	399.69	4.93	401.10	3.39	400.96	4.12	397.10	ice		10.91	uw	0.88	
2/26/2020	18.11	400.64	18.97	400.62	20.41	400.85	19.55	400.20	24.29	398.82	4.11	399.88	5.68	399.72	4.94	401.09	3.40	400.95	4.08	397.14	ice		15.00	uw	0.01	
3/4/2020	18.09	400.66	18.98	400.61	20.41	400.85	19.55	400.20	24.31	398.80	3.81	400.18	5.44	399.96	4.88	401.15	3.34	401.01	3.96	397.26	uw		uw	uw	1.33	
3/12/2020	18.06	400.69	18.93	400.66	20.35	400.91	19.51	400.24	24.33	398.78	3.63	400.36	4.21	401.19	4.85	401.18	3.29	401.06	3.86	397.36	uw		uw	uw	0.01	
3/17/2020	18.02	400.73	18.88	400.71	20.29	400.97	19.46	400.29	24.33	398.78	3.57	400.42	4.18	401.22	4.82	401.21	3.25	401.10	3.86	397.36	uw		uw	uw	1.16	
3/24/2020	17.81	400.94	18.64	400.95	20.05	401.21	19.21	400.54	23.99	399.12	3.38	400.61	5.19	400.21	4.70	401.33	3.19	401.16	3.91	397.31	uw		uw	uw	0.59	
3/31/2020	17.60	401.15	18.46	401.13	19.89	401.37	19.04	400.71	23.80	399.31	3.39	400.60	4.95	400.45	4.71	401.32	3.16	401.19	3.68	397.54	uw		uw	uw	0.87	
4/9/2020	17.13	401.62	17.95	401.64	19.38	401.88	18.54	401.21	23.26	399.85	3.55	400.44	5.14	400.26	4.67	401.36	3.14	401.21	3.87	397.35	-0.06	400.19	uw	uw	2.67	
4/15/2020	16.74	402.01	17.21	402.38	19.06	402.20	17.88	401.87	22.69	400.42	3.41	400.58	5.08	400.32	4.66	401.37	3.10	401.25	3.90	397.32	uw		uw	uw	1.72	
4/23/2020	16.10	402.65	16.96	402.63	18.40	402.86	17.52	402.23	22.38	400.73	3.37	400.62	5.02	400.38	4.60	401.43	3.05	401.30	3.91	397.31	uw		uw	uw	0.39	
4/30/2020	15.91	402.84	16.73	402.86	18.16	403.10	17.34	403.01	22.15	400.96	3.33	400.66	4.89	400.51	4.59	401.44	3.05	401.30	3.94	397.28	0.10	400.35	uw	uw	0.98	
5/8/2020	15.63	403.12	16.46	403.13	17.89	403.37	17.05	402.70	21.90	401.21	3.39	400.60	5.01	400.39	4.57	401.46	3.05	401.30	4.01	397.21	0.08	400.33	uw	uw	1.80	
5/14/2020	15.59	403.16	16.40	403.19	17.76	403.50	16.93	402.82	21.79	401.32	3.35	400.64	4.94	400.46	4.68	401.35	3.05	401.30	4.01	397.21	0.16	400.41	uw	uw	0.57	
5/21/2020	15.52	403.23	16.33	403.26	17.75	403.51	16.94	402.81	21.83	401.28	3.43	400.56	5.05	400.35	4.62	401.41	3.09	401.26	4.09	397.13	0.05	400.30	uw	uw	0.00	
5/30/2020	15.79	402.96	16.62	402.97	18.04	403.22	17.23	402.52	22.12	400.99	3.82	400.17	5.44	399.96	4.70	401.33	3.18	401.17	4.16	397.06	-0.52	399.73	uw	1.81	0.17	
6/5/2020	15.99	402.76	16.83	402.76	18.24	403.02	17.44	402.31	22.33	400.78	3.95	400.04	5.58	399.82	4.68	401.35	3.18	401.17	4.20	397.02	-0.85	399.40	12.00	1.50	0.08	
6/11/2020	16.23	402.52	17.06	402.53	18.49	402.77	17.68	402.07	22.56	400.55	3.95	400.04	5.55	399.85	4.69	401.34	3.19	401.16	4.17	397.05	-0.74	399.51	uw	1.50	0.99	
6/19/2020	16.62	402.13	17.42	402.17	18.86	402.40	18.03	401.72	22.91	400.20	4.06	399.93	5.66	399.74	4.82	401.21	3.28	401.07	4.23	396.99	-1.05	399.20	12.00	1.50	0.00	
6/26/2020	16.99	401.76	17.81	401.78	19.23	402.03	18.40	401.35	23.31	399.80	4.14	399.85	5.71	399.69	4.93	401.10	3.39	400.96	4.26	396.96	-0.94	397.77	25.00	1.58	0.11	
7/1/2020	17.21	401.54	18.05	401.54	19.47	401.79	18.66	401.09	23.52	399.59	3.79	400.20	5.48	399.92	4.81	401.22	3.28	401.07	3.89	397.33	-0.25	398.46	uw	1.71	2.81	
7/10/2020	17.61	401.14	18.41	401.18	19.83	401.43	19.02	400.73	23.88	399.23	4.20	399.79	5.71	399.69	4.95	401.08	3.40	400.95	4.29	396.93	-0.78	397.93	10.00	1.71	0.54	
7/17/2020	17.83	400.92	18.66	400.93	20.08	401.18	19.25	400.50	24.11	399.00	4.14	399.85	5.66	399.74	4.93	401.10	3.39	400.96	4.16	397.06	-1.06	397.65	10.00	1.58	1.96	
7/23/2020	18.03	400.72	18.85	400.74	20.28	400.98	19.45	400.30	24.31	398.80	4.22	399.77	5.74	399.66	4.97	401.06	3.43	400.92	4.27	396.95	-1.02	397.69	10.00	5.00	0.54	
7/29/2020	18.40	400.35	18.93	400.66	20.45	400.81	19.51	400.24	24.50	398.61	4.27	399.72	5.81	399.59	5.12	400.91	3.54	400.81	4.34	396.88	dry	dry	10.00	2.00	0.00	
8/6/2020	18.51	400.24	19.32	400.27	20.73	400.53	19.92	399.83	24.75	398.36	4.31	399.68	5.80	399.60	5.21	400.82	3.63	400.72	4.26	396.96	dry	dry	10.00	1.67	1.14	
8/12/2020	18.77	399.98	19.57	400.02	20.91	400.35	20.06	399.69	24.99	398.12	4.33	399.66	5.84	399.56	5.28	400.75	3.65	400.70	4.29	396.93	dry	dry	10.00	2.00	0.00	
8/20/2020	18.95	399.80	19.81	399.78	21.22	400.04	20.38	399.37	25.19	397.92	4.33	399.66	5.87	399.53	5.32	400.71	3.71	400.64	4.34	396.88	dry	dry	10.00	3.75	0.00	
8/26/2020	19.17	399.58	19.99	399.60	21.43	399.83	20.57	399.18	25.37	397.74	4.48	399.51	5.87	399.53	5.38	400.65	3.77	400.58	4.27	396.95	dry	dry	4.29	2.40	0.51	
9/3/2020	19.38	399.37	20.02	399.57	21.63	399.63	20.77	398.98	25.55	397.56	4.37	399.62	5.87	399.53	5.38	400.65	3.76	400.59	4.03	397.19	dry	dry	4.00	2.00	1.27	
9/10/2020	19.55	399.20	20.36	399.23	21.80	399.46	20.93	398.82	25.70	397.41	4.37	399.62	5.92	399.48	5.35	400.68	3.78	400.57	3.96	397.26	dry	dry	5.00	2.00	0.00	

TABLE 1
MONITORING DATA
RAINMAKER SPRING SITE
FRYEBURG, MAINE

TABLE 1 CONT.	GROUNDWATER ELEVATION (feet NAVD88)										PIEZOMETERS @ SPRING 1 (feet NAVD88)				PIEZOMETERS @ SPRING 2 (feet NAVD88)				SURFACE WATER				SPRING FLOW (lt/min)		PRECIPITATION EASTERN SLOPES AIRPORT
	MW-1		MW-2		MW-3		MW-4		MW-5		PZ-21D		PZ-21S		P-1		P-2		WPMP-1		SG-1		Spring-1	Spring-2	K12G
Measuring Point (MP) Elevations (feet NAVD88)		418.75		419.59		421.26		419.75		423.11		403.99		404.32		406.03		404.35			SG-1 (2020)	400.25			
																					SG-1 (2020)	401.14			
Date	Depth to Water below msp (ft)	Water Elevation	Depth to Water below msp (ft)	Water Elevation	Depth to Water below msp (ft)	Water Elevation	Depth to Water below msp (ft)	Water Elevation	Depth to Water below msp (ft)	Water Elevation	Depth to Water below msp (ft)	Water Elevation	Depth to Water below msp (ft)	Water Elevation	Depth to Water below msp (ft)	Water Elevation	Depth to Water below msp (ft)	Water Elevation	Depth to Water below msp (ft)	Water Elevation	Depth to Water below msp (ft)	Water Elevation			Inches
1/5/2021	19.37	399.38	20.18	399.41	21.63	399.63	20.72	399.03	25.26	397.85	4.23	399.76			5.13	400.90	3.56	400.79	3.71	397.51	-1.14	399.11	6.00	uw	0.60
1/13/2021	19.25	399.50	20.09	399.50	21.54	399.72	20.63	399.12	25.25	397.86	4.27	399.72			5.15	400.88	3.57	400.78	3.83	397.39	-1.19	399.06	5.45	2.00	0.00
1/22/2021	19.32	399.43	20.14	399.45	21.58	399.68	20.69	399.06	25.28	397.83	4.27	399.72			5.13	400.90	3.57	400.78	3.74	397.48	ice		ice	ice	1.18
1/28/2021	19.29	399.46	20.12	399.47	21.59	399.67	20.67	399.08	25.23	397.88	4.30	399.69			5.17	400.86	3.61	400.74	3.85	397.37	ice		ice	ice	0.08
2/4/2021	19.26	399.49	20.07	399.52	21.52	399.74	20.61	399.14	25.17	397.94	4.31	399.68			5.20	400.83	3.60	400.75	ice	ice	ice		ice	ice	0.73
2/12/2021	19.28	399.47	20.10	399.49	21.53	399.73	20.65	399.10	25.20	397.91	4.33	399.66			5.23	400.80	3.66	400.69	ice	ice			ice	ice	0.29
2/18/2021	19.37	399.38	20.13	399.46	21.56	399.70	20.69	399.06	25.25	397.86	4.33	399.66			5.28	400.75	3.40	400.95	ice	ice			ice	ice	0.90
2/24/2021	19.35	399.40	20.18	399.41	21.63	399.63	20.75	399.00	25.33	397.78	4.34	399.65			5.28	400.75	3.70	400.65	ice	ice			ice	ice	0.33
3/3/2021	19.39	399.36	20.24	399.35	21.69	399.57	20.81	398.94	25.40	397.71	4.34	399.65			5.30	400.73	3.72	400.63	ice	ice			ice	ice	0.75
3/10/2021	19.46	399.29	20.30	399.29	21.75	399.51	20.84	398.91	25.38	397.73	4.29	399.70			5.34	400.69	3.75	400.60	3.79	ice			ice	ice	0.00
3/15/2021	19.42	399.33	20.26	399.33	21.69	399.57	20.80	398.95	25.30	397.81	4.29	399.70	4.53	399.79	5.29	400.74	3.71	400.64	3.52	ice			ice	ice	0.01
3/23/2021	19.38	399.37	20.20	399.39	21.65	399.61	20.75	399.00	25.35	397.76	4.23	399.76	4.34	399.98	5.24	400.79	3.67	400.68	3.43	ice			ice	ice	0.12
3/30/2021	19.19	399.56	20.02	399.57	21.46	399.80	20.54	399.21	25.11	398.00	3.46	400.53	3.61	400.71	5.03	401.00	3.39	400.96	3.12	398.10	flooded		flooded	flooded	1.85