Seep and Surface Water Sampling

Photo A-39 Seep LF-DS-SEEP-01 (August 29, 2025) – Seepage sampling at the Landfill Facility.

Photo A-40: Seep LF-DS-SEEP-02 (August 29, 2025) – Seep was dry. Some stagnant water observed 4 metres from the 2024 seep location.

Photo A-41: LF-US-POND-01 (August 29, 2025) - Surface Water sampling along the Landfill Facility limits.

Photo A-42: MS-MRY-13A (August 29, 2025) – Dry location.

Photo A-43: MS-MRY-13B (August 29, 2025) – Surface Water sampling near Sheardown Lake.

Photo A-44: MS-MRY-13C (August 29, 2025) – Surface Water sampling near Sheardown Lake.

Single Well Response Testing

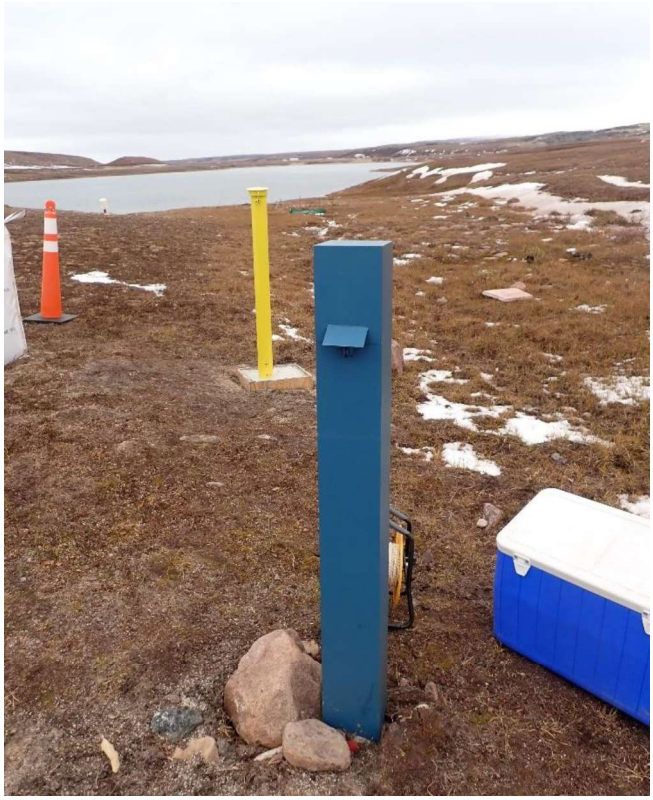


Photo A-45: Standpipe well LF-KP23-04 (September 3, 2025) – Slug test was completed at the well location.

Photo A-46: Standpipe well MS-HWB-25-03 (September 4, 2025) – Slug test was completed at the well location.

Maintenance and Other Activities

Well Development

Photo A-47: Well development at MS-HWB-25-01 (August 29, 2025) – A) Standpipe well MS-HWB-25-01, B) Water clarity after 2 well volumes, C) Water clarity after 10 well volumes.

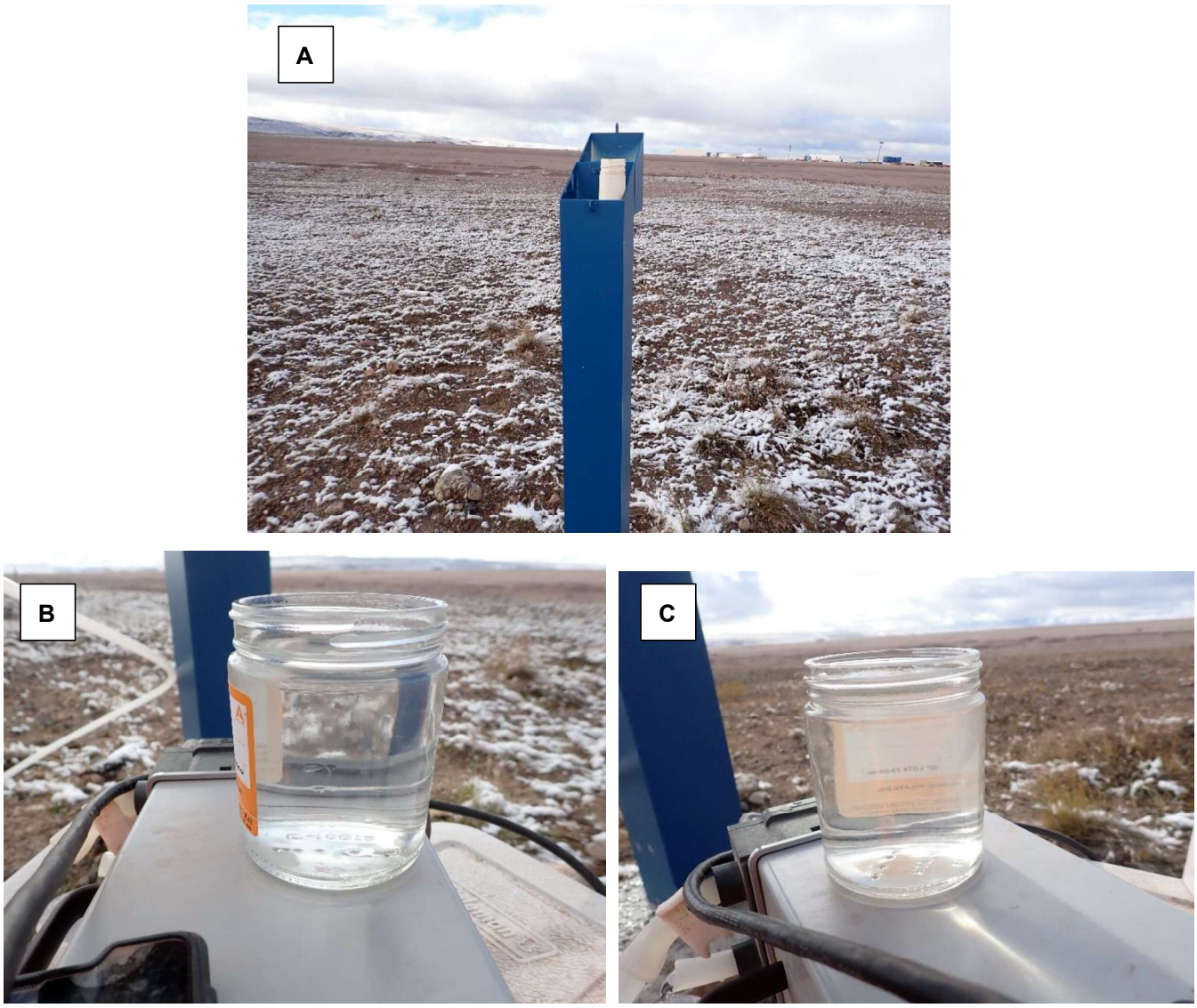


Photo A-48: Well development at MS-HWB-25-03 (August 29, 2025) – A) Standpipe well MS-HWB-25-03, B) Water clarity after 5 well volumes, C) Water clarity after 10 well volumes.

Camera Survey

Photo A-49: A) Standpipe well MS-LF-25-01 (September 4, 2025), B) Blockage investigation using a Milwaukee Downhole Camera. Ice was observed during the survey.

APPENDIX B

Daily Field Summaries

2025 Baffinland Daily Groundwater Summary

25-Aug-2025	Weather: 9-6ºC, overcast, windy, and started raining during second well visit.
	Field Crew: Liam Guenther, Alicia Guay
	Two locations sampled: LF-KP-23-09 and LF-KP23-08 Observations: - LF-KP23-08 initial purge was opaque and yellow with no odor. It took 20L of purging to reach stable YSI conditions.  

26-Aug-2025	Weather: 1-2ºC, mostly cloudy, strong S. wind.
	Field Crew: Liam Guenther, Jason Manella
	Five locations sampled: LF-KP22-05, LF-KP23-01, LF-KP23-06, LF-KP23-07, and LF-KP23-11. One Dry locations: LF-KP23-10 Observations: - Many well sites have required significantly more than 3 well volumes of purging to reach stable YSI conditions e.g., LF-KP23-07 and LF-KP23-05 required 8 volumes, LF-KP23-11 required 9 well volumes.

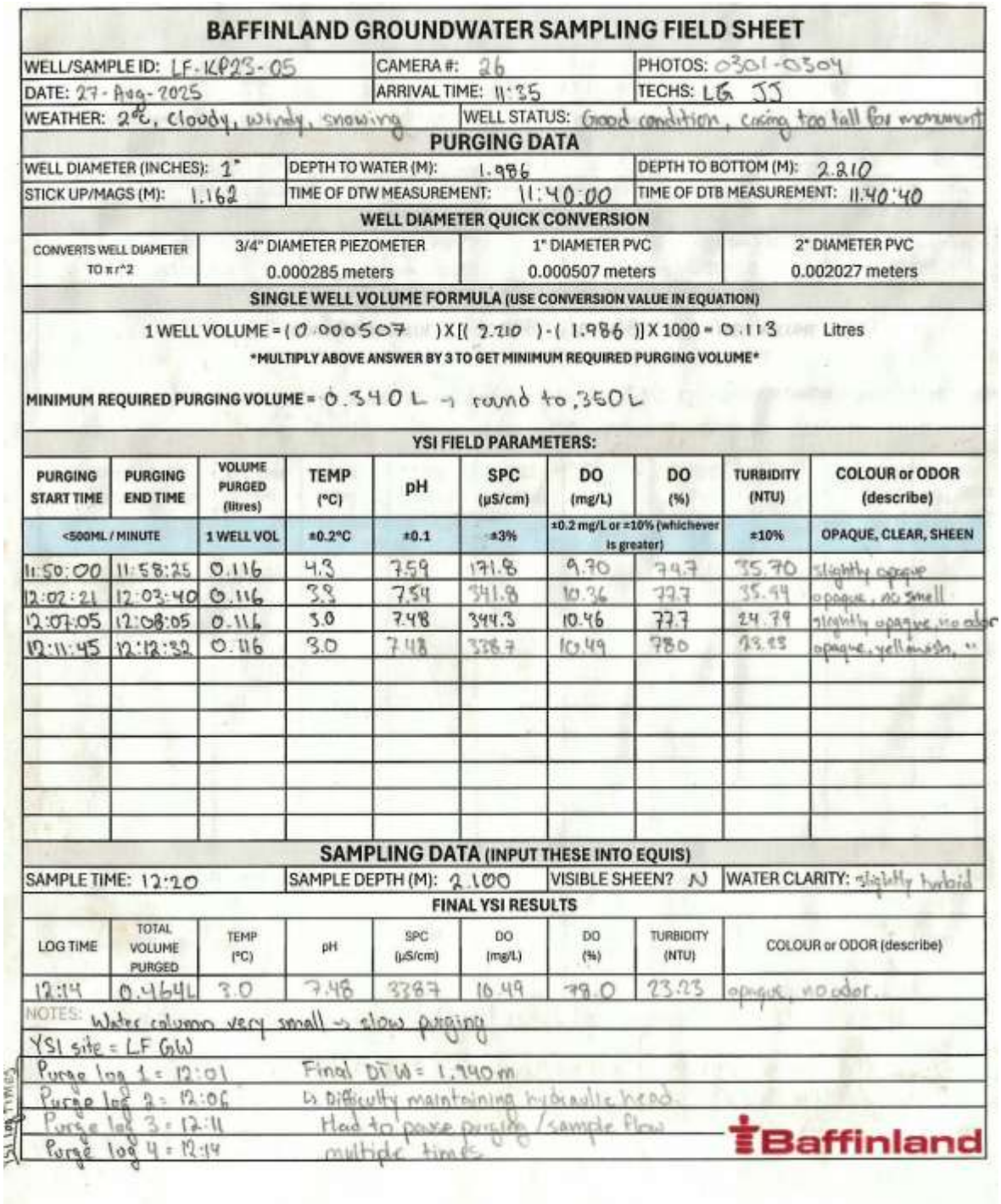
- LF-KP22-05: located adjacent to the landfill had a strong sewage smell, and a yellow/opaque colour.
- Water smell and colour improved by final purge but never reached clear conditions.

LF-KP22-05 well casing and monument.

Water from LF-KP22-05 after initial purge.

27-Aug-2025	Weather: 0-1°C, windy, rain and snow.
	Field Crew: Liam Guenther, Justin James
	Three locations sampled: LF-KP22-03 (plus trip blank), LF-KP23-05, MS-LF-GW3 One dry location: MS-LF-GW-REF-2 Observations: - Well purging appeared to be more consistent today. Average purge requirement ranged form 4-5 well volumes for stable YSI parameters. - MS-LF-GW-REF-2 is a background drivepoint that was sampled last year. This year, the water column was measured as being only 6.7cm, and thus, was considered to be a dry location.  Circled is the location sampled as MS-LF-GW-REF-2 in 2024. Next to it, is a flagged drivepoint with LDPE tubing stuck inside. No sample could be collected at this location in 2025.

Below is a scan of the current Baffinland Groundwater Field sheet used up until today. Edits will be made to add a “Water Level” column for future well sites.
Sites sampled prior to August 27th will not have consistent water level readings during sampling.



BAFFINLAND GROUNDWATER SAMPLING FIELD SHEET

WELL/SAMPLE ID: LF-KP23-05	CAMERA #: 26	PHOTOS: 0301-0304
DATE: 27-Aug-2025	ARRIVAL TIME: 11:35	TECHS: LG JJ
WEATHER: 2°C, cloudy, windy, snowing	WELL STATUS: Good condition, casing too tall for monument	

PURGING DATA

WELL DIAMETER (INCHES): 1"	DEPTH TO WATER (M): 1.986	DEPTH TO BOTTOM (M): 2.210
STICK UP/MAGS (M): 1.162	TIME OF DTW MEASUREMENT: 11:40:00	TIME OF DTB MEASUREMENT: 11:40:40

WELL DIAMETER QUICK CONVERSION

CONVERTS WELL DIAMETER TO πr^2	3/4" DIAMETER PIEZOMETER	1" DIAMETER PVC	2" DIAMETER PVC
	0.000285 meters	0.000507 meters	0.002027 meters

SINGLE WELL VOLUME FORMULA (USE CONVERSION VALUE IN EQUATION)

1 WELL VOLUME = (0.000507) X [(2.210) - (1.986)] X 1000 = 0.113 Litres

MULTIPLY ABOVE ANSWER BY 3 TO GET MINIMUM REQUIRED PURGING VOLUME

MINIMUM REQUIRED PURGING VOLUME = 0.340 L → round to .350 L

YSI FIELD PARAMETERS:

PURGING START TIME	PURGING END TIME	VOLUME PURGED (litres)	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)
<500ML / MINUTE		1 WELL VOL	±0.2°C	±0.1	±3%	±0.2 mg/L or ±10% (whichever is greater)		±10%	OPAQUE, CLEAR, SHEEN
11:50:00	11:58:25	0.116	4.3	7.59	171.8	9.70	74.7	35.70	slightly opaque
12:02:21	12:03:40	0.116	3.8	7.54	341.8	10.36	77.7	35.94	opaque, no smell
12:07:05	12:08:05	0.116	3.0	7.48	344.3	10.46	77.7	24.79	slightly opaque, no odor
12:11:45	12:12:32	0.116	3.0	7.48	338.7	10.49	78.0	23.23	opaque, yellowish, "

SAMPLING DATA (INPUT THESE INTO EQUIS)

SAMPLE TIME: 12:20	SAMPLE DEPTH (M): 2.100	VISIBLE SHEEN? N	WATER CLARITY: slightly turbid

FINAL YSI RESULTS

LOG TIME	TOTAL VOLUME PURGED	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)
12:14	0.464L	3.0	7.48	338.7	10.49	78.0	23.23	opaque, no odor

NOTES: Water column very small → slow purging
YSI site = LF (GW)
Purge log 1 = 12:01 Final DTW = 1.940 m
Purge log 2 = 12:06 ↳ difficulty maintaining hydraulic head
Purge log 3 = 12:11 Had to pause purging / sample flow multiple times
Purge log 4 = 12:14

Baffinland

28-Aug-2025	Weather: 1-5°C, partly cloudy, sunny in the afternoon
	Field Crew: Liam Guenther, Justin James
	Three locations sampled: LF-KP23-13, MS-LF-GW1, LF-KP22-01 (plus field duplicate) One dry location: LF-KP23-03 One location unable to be sampled: MS-LF-GW-REF1 Observations: - Updated field sheets were used today and include purging water drawdown during sample collection. Some wells (drivepoints and 1" wells) could not accommodate the dip tape being used. Extra care was taken at these locations to ensure low-flow with the peristaltic pump. - Waterra tubing was stuck inside MS-LF-GW-REF1. No sample could be collected.  - We continue to have difficulty obtaining stable YSI parameters while purging. Wells that required the most purging were LF-KP23-13 (8 well volumes) and MS-LF-GW1 (12 well volumes). - Going forward, we will cease purging after 5 well volumes, unless specified otherwise by WSP. - We recognized an error in our dip tape measurements today. Well depths measured from the three previous days are all short by 8cm. Meaning, every well volume was underestimated. However, every well had to be purged >3 well volumes to reach stable YSI parameters. Therefore, the data should still be valid for all samples collected prior to today's discovery. - The well progress spreadsheet has the updated well depths, and all field sheets from August 25th – 27th will be updated.

29-Aug-2025	Weather: -5 – +3°C, strong wind, on and off snow throughout the day. The forecast is not looking much warmer over the next week and there is potential for an increase in dry/frozen well locations compared to last year.
	Field Crew: Liam Guenther, Alicia Guay, Justin James, Erin Franchville
	Two locations sampled at the landfill: MS-LF-GW2 and LF-KP23-04 One dry/frozen drivepoint: MS-LF-GW5 Two locations that could not be sampled: LF-KP23-02 and MS-LF-GW4 Two new wells developed: MS-HWB-25-01 and MS-HWB-25-03 Landfill seep investigation locations sampled: MS-MRY-13B, MS-MRY-13C, LF-DS-SEEP-01, and LF-US-POND-01 - Two of the locations associated with this sampling group were dry – LF-DS-SEEP-02 and MS-MRY-13A. Observations: Of the newly installed wells, 4/6 locations were dry/frozen. - **MS-HWB-25-02 and MS-LF-25-02** were completely dry and unobstructed, resulting in no well development. - **MS-LF-25-01** was also dry at the time of the visit and was found to be obstructed. - **MS-HWB-25-01 and MS-HWB-25-03** were active and successfully developed by the crew. These two wells will be ready for sampling in a few days. Below is a breakdown of what was encountered at each well. **MS-HWB-25-01** • Purged 10 well volumes • No water quality concerns • No drawdown concerns **MS-HWB-25-02** • Dry and unobstructed • Depth from ground surface to the bottom of the well: 3.25 meters (0.02 meters off design) • Likely dry due to the well screen being fully embedded in permafrost **MS-HWB-25-03** • Purged 10 well volumes • No water quality concerns • No drawdown concerns **MS-LF-25-01** • Dry and obstructed • Depth from ground surface to the bottom of the well: 1.386 meters

- Cause of obstruction is unknown; potential causes include frozen conditions or casing damage

MS-LF-25-02

- Dry and unobstructed
- Depth from ground surface to the bottom of the well: 3.23 meters (0.04 meters off design)
- Likely dry due to the well screen being fully embedded in permafrost

We have downloaded thermistor data from the landfill and HWB areas and observed steady temperature decreases over the last four days at the surface, 1.5m, and 3.0m below the surface.

<u>MS-LF-TH-01 Data</u>

Date	Surface	1.5m	3.0m
2025-08-25T02:00:00-04:00	7.491	0.911	-0.406
2025-08-25T08:00:00-04:00	7.354	0.919	-0.404
2025-08-25T14:00:00-04:00	9.408	0.927	-0.402
2025-08-25T20:00:00-04:00	5.473	0.923	-0.402
2025-08-26T02:00:00-04:00	3.159	0.94	-0.4
2025-08-26T08:00:00-04:00	2.543	0.953	-0.398
2025-08-26T14:00:00-04:00	4.508	0.968	-0.396
2025-08-26T20:00:00-04:00	5.294	0.968	-0.394
2025-08-27T02:00:00-04:00	2.652	0.957	-0.392
2025-08-27T08:00:00-04:00	1.578	0.942	-0.39
2025-08-27T14:00:00-04:00	2.428	0.919	-0.39
2025-08-27T20:00:00-04:00	2.82	0.868	-0.387
2025-08-28T02:00:00-04:00	2.389	0.839	-0.387
2025-08-28T08:00:00-04:00	0.785	0.82	-0.385
2025-08-28T14:00:00-04:00	4.669	0.799	-0.383
2025-08-28T20:00:00-04:00	3.785	0.776	-0.383
2025-08-29T02:00:00-04:00	1.191	0.749	-0.381
2025-08-29T08:00:00-04:00	0.459	0.724	-0.381

Dry MS-LF-25-02 on 29-Aug-25

Unlike last year, one of the seep locations (LF-DS-SEEP-02) was completely dry.

LF-DS-SEEP-02 in 2025.

Some stagnant water 4m from 2024 seep location. This water was not sampled.

LF-DS-SEEP-02 in 2024.

Significant water originating from the landfill road/berm.

30-Aug-2025

Weather: -2 – 0°C, windy, partly cloudy, some snow in the early morning.

Field Crew: Liam Guenther, Alicia Guay, Justin James, Jeremy Arch-Kelly

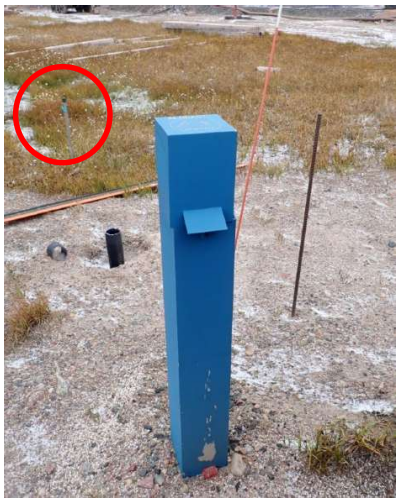
Ten locations sampled: HWB-KP23-01, HWB-KP23-02 (plus field dupe), HWB-KP23-03, HWB-KP22-01, HWB-KP22-03, HWB-KP22-04, HWB-KP22,05, MS-HWB-GW5, MS-HWB-GW-REF1, and MS-HWB-GW-REF3.

One dry location: MS-HWB-GW-REF2

Two broken drivepoints: MS-HWB-GW4 and MS-HWB-GW3

Observations:

- HWB-KP22-01, located next to HWB7, had black sediment/particles in the water and a strong sulfur odor.



- Interestingly, MS-HWB-GW-REF2, located ~ 2.5m from HWB-KP22-01 (circled in red), was dry.

Site name:	MAGs	DTW	DTB
HWB-KP22-01	1.28	1.394	2.431
MS-HWB-GW-REF2	0.619	Dry	1.742

Two drivepoints that were sampled in 2024, could not be sampled this year. They were likely both broken in the winter/spring during seacan staging around the Hazardous Waste Berms.

MS-HWB-GW3 – located on the W. side of HWB7 was completely bent and obstructed.

MS-HWB-GW4 – located on the W. side of HWB4 was also completely bent and obstructed.

Remaining locations to be sampled will be sampled in conjunction with the newly installed and recently developed 2025 wells.

- MS-HWB-25-01 & MS-HWB-GW6
- MS-HWB-25.03 & HWB-KP22-06

	Weather: -1 – 0°C, windy, overcast, fog. A large snowstorm began while performing the slug test at the landfill.
	Field Crew: Liam Guenther, Justin James, Alicia Guay
31-Aug-2025	One location slug tested: LF-KP23-11 Observations: - Due to weather constraints, slug testing could only be performed at one landfill location, upgradient of the landfill cell. Below are the field notes used and a snip of the data from the levelogger software. - The sampling rate on the Barologger and Levelogger were set to 0.125s.

BAFFINLAND SLUG TESTING FIELD SHEET

WELL/SAMPLE ID: LF-KP23-11	CAMERA #: 26	PHOTOS: 0490 - 0	
DATE: 31-Aug-2025	ARRIVAL TIME: 13:15	TECHS: LG JJ AG	
WEATHER: 0°C, windy, overcast, fog	WELL STATUS: Good condition		
WELL DIAMETER (INCHES): 1"	DEPTH TO WATER (M): 1.751	DEPTH TO BOTTOM (M): 2.828	
STICK UP/MAGS (M): 1.194	TIME OF DTW MEASUREMENT: 13:18:30	TIME OF DTB MEASUREMENT: 13:19:25	

DATALOGGER INFORMATION

LOGGER SAMPLING RATE (SECONDS): 0.125 seconds	TARGET LOGGER DEPTH: 2.728m	DTW AFTER LOGGER ADDED: 1.743	TIME OF DTW: 13:45:47
LOGGER SERIAL NUMBER: 002-2204461	DATA SAVED AND DELETED FROM LOGGER POST SAMPLE?		
BAROLOGGER START TIME: 13:39	LEVELOGGER START TIME: 13:41		

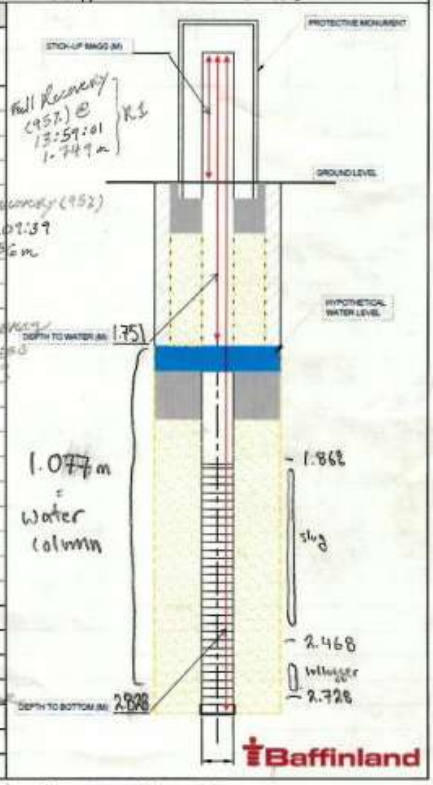
SLUG INFORMATION

SLUG TYPE: Solid	SLUG LENGTH: 0.60 m	SLUG DIAMETER: 0.04m	TARGET SLUG DEPTH: 2.468

FALLING HEAD AND RISING HEAD TEST

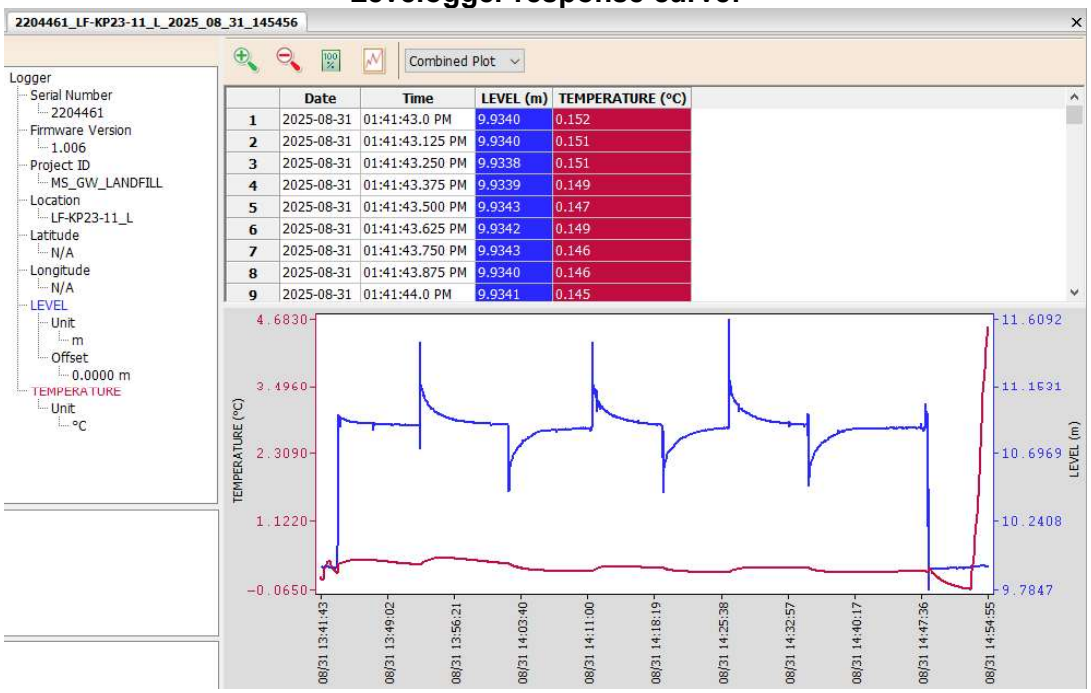
TEST TYPE (RISING OR FALLING)	SLUG INSERTION / REMOVAL TIME	ELAPSED TIME	WATER DEPTH (M TO TOP)	
Falling 1	13:51:53		1.465	
		13:52:99	1.649	
		13:53:40	1.710	
		13:57:10	1.770	
Rising 1	14:01:15		1.993	Full Recovery (95%) @ 14:09:39 1.755m
		14:02:55	1.845	
		14:04:52	1.787	
		14:07:27	1.761	
Falling 2	14:10:15		1.490	
		14:12:49	1.692	Full Recovery @ 14:16:53 1.737
		14:14:44	1.726	
		14:16:56	1.739	
Rising 2	14:18:10		2.009	
		14:20:06	1.827	
		14:22:46	1.773	
		14:24:55	1.759	
Falling 3	14:25:22		1.471	1.471
		14:28:10	1.712	
		14:31:10	1.741	
		14:33:90	1.743	
Rising 3	14:34:40		2.022	
		14:35:10	1.846	

NOTES:
- Project ID: MS-GW-LANDFILL
- Time of logger insertion 13:42
- Full DTW Recovery after the logger insertion @ 13:50:00
- Ice forming in the well casing

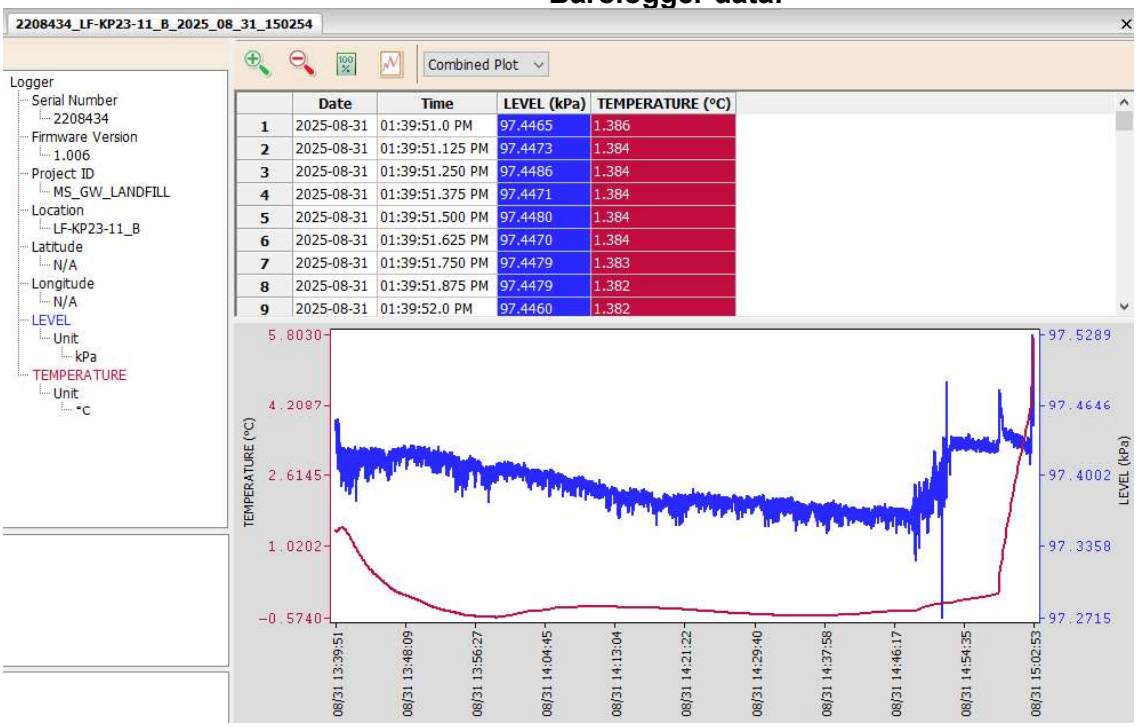


Rising 3 Continued		14:39:50	1.783	Logger Stop Time: 14:53:55
		14:40:10	1.765	
		14:41:13	1.755	Test Stop Time: 14:46:45
		14:46:32	1.752	

Levelogger response curve:



Barologger data:



	Weather: -1 – 0°C, sunny for the morning, windy all day.
	Field Crew: Liam Guenther, Justin James, Eric Thomson
02-Sept-2025	Three locations sampled: MS-HWB-25-01, MS-HWB-25-03, and HWB-KP22-06 Two dry/frozen locations: MS-HWB-GW6, and MS-LF-GW-REF3 One location slug tested: HWB-KP22-05 Observations: - Both of the 2025 wells were sampled today. Only one location/reference point could be sampled as the other (MS-HWB-GW6) was dry/frozen.

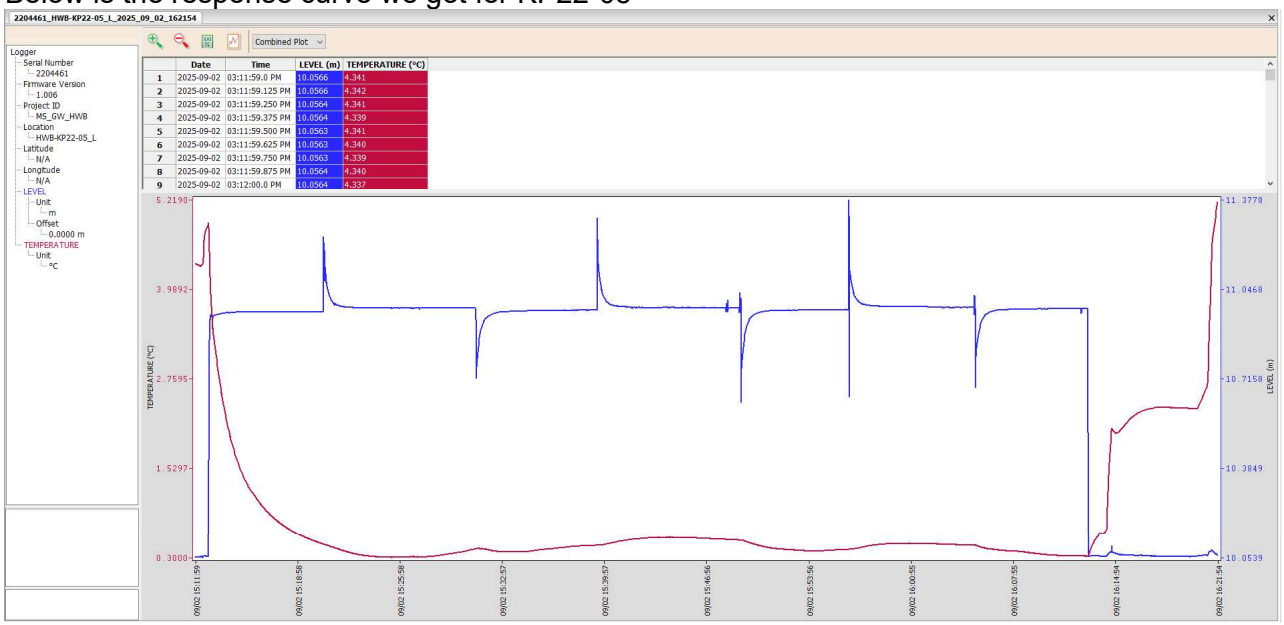
MS-HWB-GW6 (circled in red) was also dry/frozen in 2024

LF-KP22-06 (foreground) and MS-HWB-25-03 (background) were sampled in back-to-back.

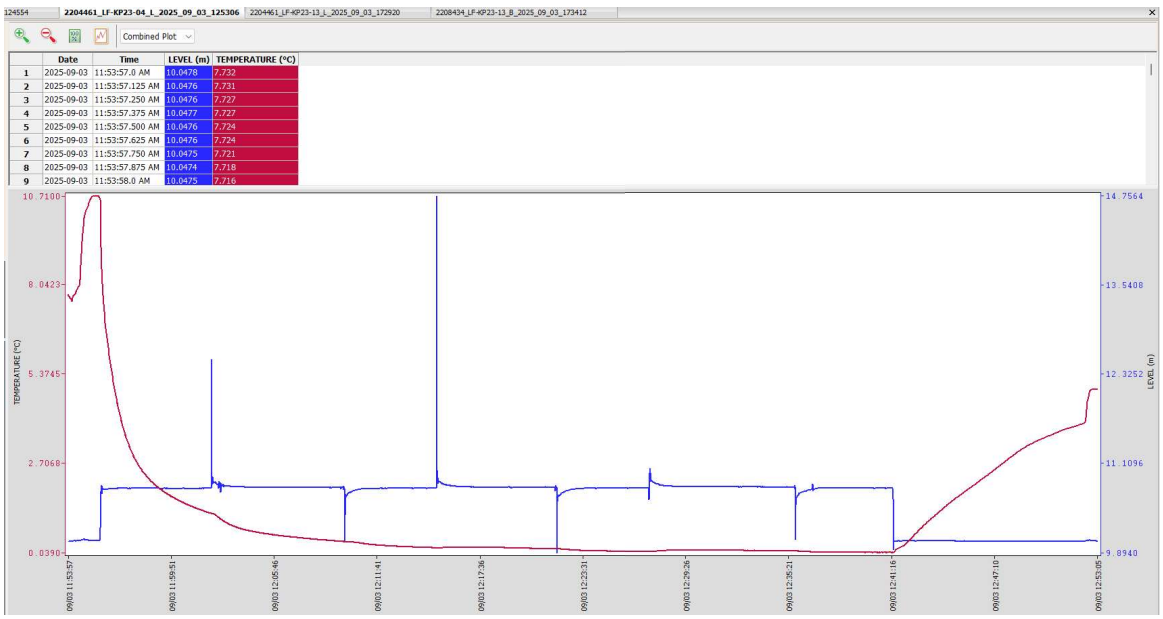
- MS-LF-GW-REF3 at the landfill (circled in red) could not be sampled. An attempt was made, but after five minutes of constant purging, the drivepoint was drained and would not recharge.

- We might encounter an issue when performing further slug testing on the remaining 2" wells.
- The largest slugs that we have are 1.57 inches in diameter. Today, at KP22-05, we noticed a maximum displacement of 10-12cm from static water level. I have given Justin a couple suggestions for how we can increase the diameter of the slugs we have, however, it might not be sufficient to see the 20-30cm of displacement you are looking for.

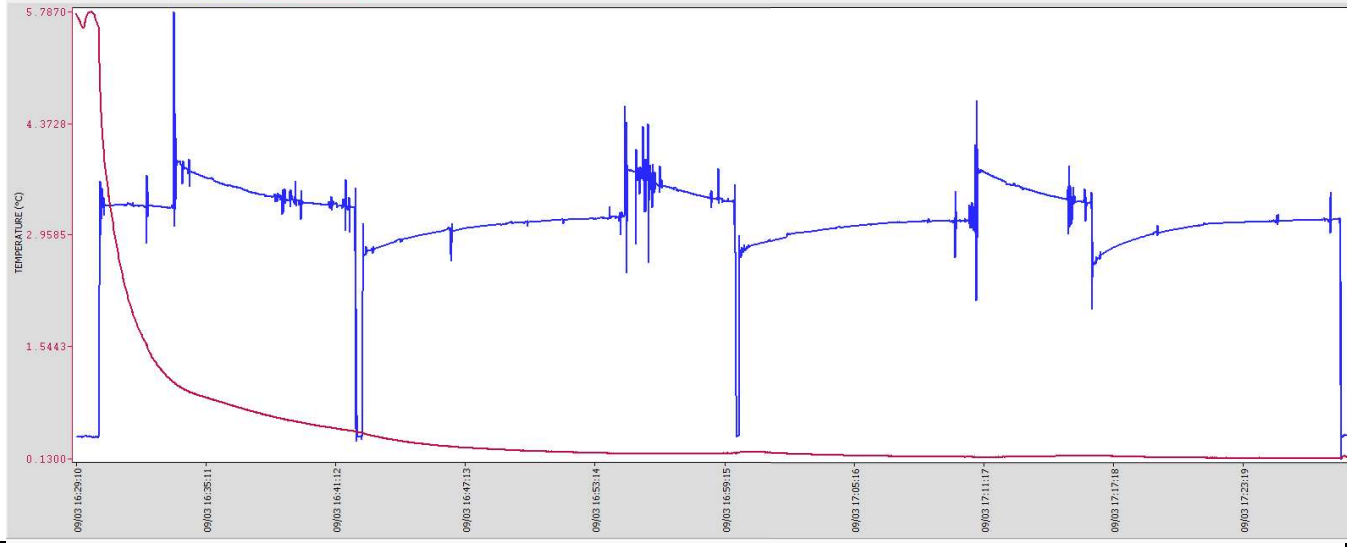
Below is the response curve we got for KP22-05



Weather: 0ºC, sunny, light wind

	Field Crew: Justin James, Alicia Guay
03-Sept-2025	Two locations slug tested: LF-KP-23-04, and LF-KP23-13 Two locations unable to test: LF-KP22-05, and MS-HWB-25-01 **Details of the Slug Testing** **LF-KP23-04** • No issues encountered during slug testing. **LF-KP23-13** • Water column height: 0.634 meters • Our standard slug setup height (using 10 cm spacing, a 14 cm logger, and a 31.2 cm slug) was 0.652 meters. We had to adjust the setup by reducing the spacing from the logger to the bottom to 5 cm, and the spacing between the slug and the logger to 5 cm, resulting in a setup height of 0.552 meters. • Some issues were encountered with the logger line becoming tangled with the slug during the Rising 1 and 2 phases of the test. **LF-KP22-05** • Water column height: 0.402 meters • Slug testing was not possible due to the insufficient water column. **MS-HWB-25-01** • Water column height: 0.490 meters • Slug testing was not possible due to the insufficient water column. Below is the response curve we got for LF-KP23-04  Below is the response curve we got for LF-KP23-13

	Date	Time	LEVEL (m)	TEMPERATURE (°C)
1	2025-09-03	04:29:10.0 PM	10.0587	5.763
2	2025-09-03	04:29:10.125 PM	10.0587	5.762
3	2025-09-03	04:29:10.250 PM	10.0586	5.761
4	2025-09-03	04:29:10.375 PM	10.0585	5.760
5	2025-09-03	04:29:10.500 PM	10.0586	5.759
6	2025-09-03	04:29:10.625 PM	10.0586	5.757
7	2025-09-03	04:29:10.750 PM	10.0586	5.758
8	2025-09-03	04:29:10.875 PM	10.0585	5.757
9	2025-09-03	04:29:11.0 PM	10.0585	5.755



04-Sept-2025

Weather: -3°C, Overcast, light snow

Field Crew: Justin James, Eric Thomson

Two locations slug tested: MS-HWB-25-03, and HWB-KP22-06

Inspected Location for obstruction: MS-LF-25-01

MS-LF-25-01

- Obstructed at 2.80 Meters
- Appears to be an ice blockage

MS-HWB-25-03

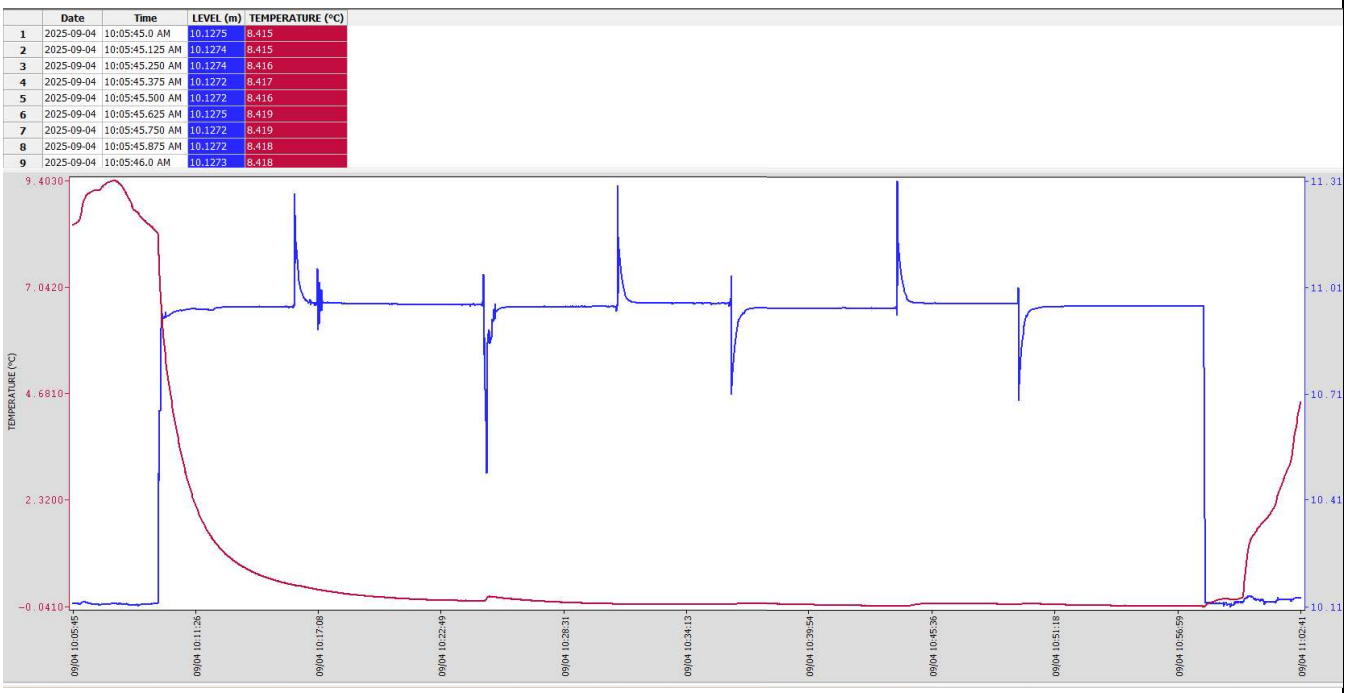
- No issues encountered during slug testing.

HWB-KP22-06

- Water column height: 0.78 meters
- Our standard slug setup height (using 10 cm spacing, a 14 cm logger, and a 0.42 cm slug) was 0.76 meters. We had to adjust the setup by reducing the spacing from the logger to the bottom to 8 cm, and the spacing between the slug and the logger to 8 cm, resulting in a setup height of 0.72 meters.

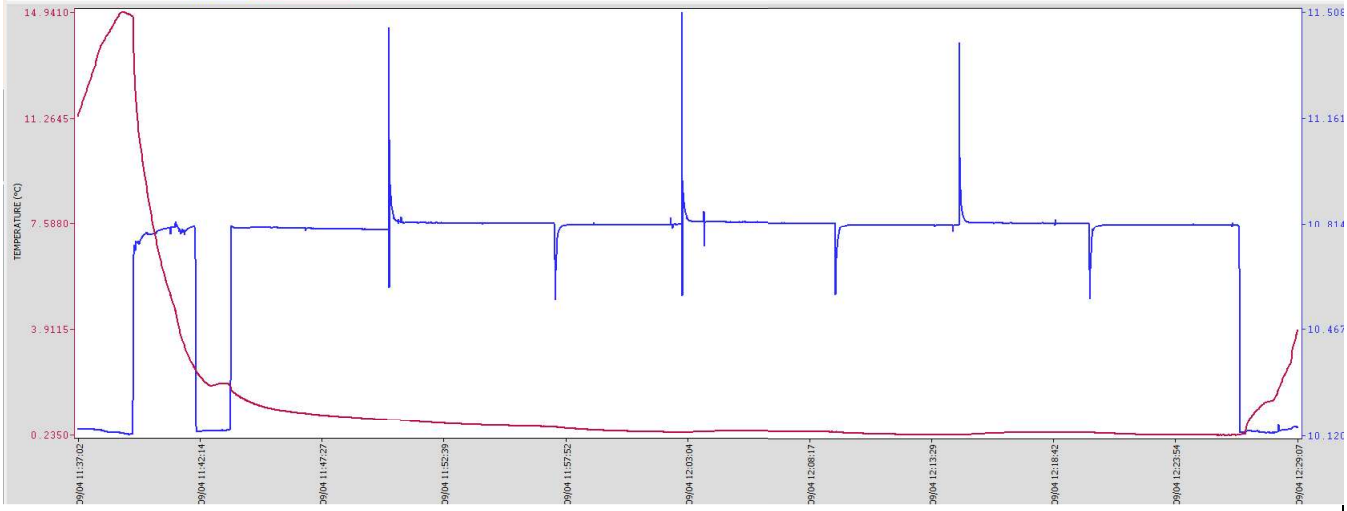
Below is the response curve we got for MS-HWB-25-03

	Date	Time	LEVEL (m)	TEMPERATURE (°C)
1	2025-09-04	10:05:45.0 AM	10.1275	8.415
2	2025-09-04	10:05:45.125 AM	10.1274	8.415
3	2025-09-04	10:05:45.250 AM	10.1274	8.416
4	2025-09-04	10:05:45.375 AM	10.1272	8.417
5	2025-09-04	10:05:45.500 AM	10.1272	8.416
6	2025-09-04	10:05:45.625 AM	10.1275	8.419
7	2025-09-04	10:05:45.750 AM	10.1272	8.419
8	2025-09-04	10:05:45.875 AM	10.1272	8.418
9	2025-09-04	10:05:46.0 AM	10.1273	8.418



Below is the response curve we got for HWB-KP22-06

	Date	Time	LEVEL (m)	TEMPERATURE (°C)
1	2025-09-04	11:37:02.0 AM	10.1396	11.338
2	2025-09-04	11:37:02.125 AM	10.1395	11.345
3	2025-09-04	11:37:02.250 AM	10.1395	11.351
4	2025-09-04	11:37:02.375 AM	10.1394	11.356
5	2025-09-04	11:37:02.500 AM	10.1394	11.362
6	2025-09-04	11:37:02.625 AM	10.1393	11.367
7	2025-09-04	11:37:02.750 AM	10.1393	11.370
8	2025-09-04	11:37:02.875 AM	10.1392	11.378
9	2025-09-04	11:37:03.0 AM	10.1392	11.383



Weather: -2°C, Overcast, light snow

Field Crew: Justin James, Alicia Guay

05-Sept-2025

Four locations slug tested: HWB-KP22-03, HWB-KP23-02, LF-KP23-06, LF-KP23-09

Location not slug tested: LF-KP23-05

HWB-KP22-03

- No issues encountered during slug testing.

HWB-KP23-02

- No issues encountered during slug testing.

LF-KP23-06

- Potential slush at top of water column

LF-KP23-09

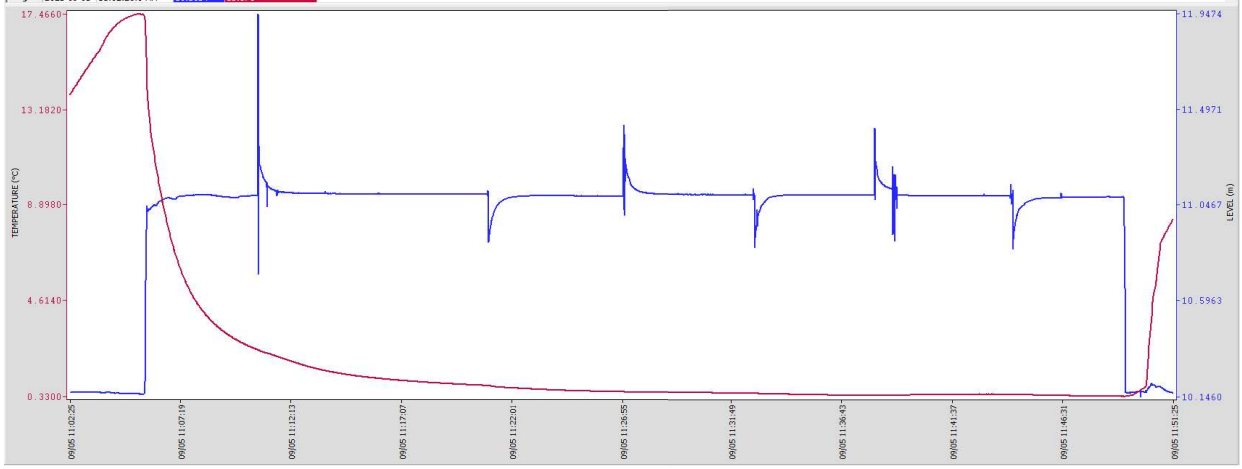
- Issues attaching the slug to momentum for the initial test.

LF-KP23-05

- Water Column Height was 0.256 meters.
- Our set-up length was long to run the slug test.

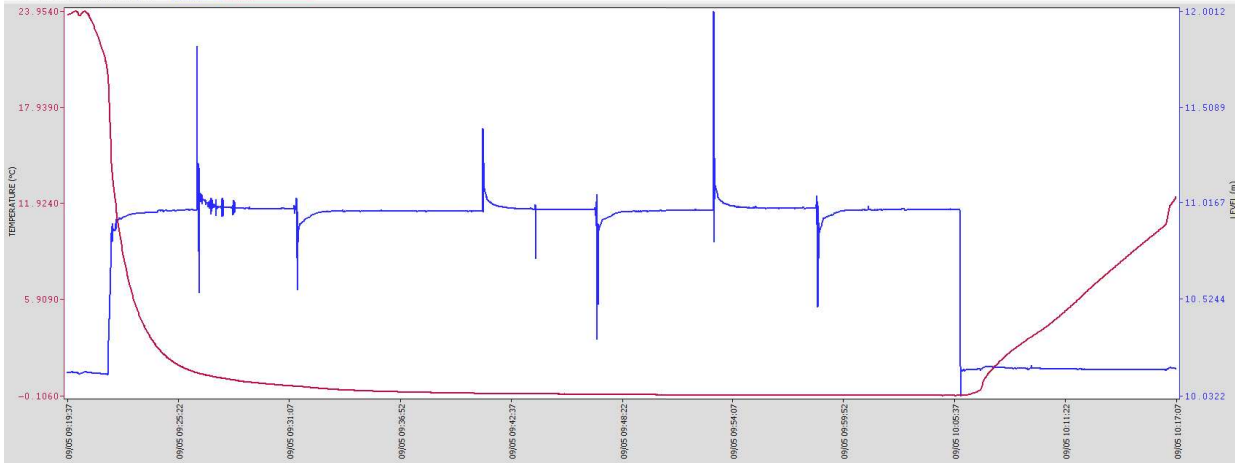
Below is the response curve we got for HWB-KP22-03

	Date	Time	LEVEL (m)	TEMPERATURE (°C)
1	2025-09-05	11:02:25.0 AM	10.1654	13.851
2	2025-09-05	11:02:25.125 AM	10.1652	13.855
3	2025-09-05	11:02:25.250 AM	10.1655	13.858
4	2025-09-05	11:02:25.375 AM	10.1656	13.861
5	2025-09-05	11:02:25.500 AM	10.1653	13.863
6	2025-09-05	11:02:25.625 AM	10.1654	13.869
7	2025-09-05	11:02:25.750 AM	10.1657	13.871
8	2025-09-05	11:02:25.875 AM	10.1655	13.874
9	2025-09-05	11:02:26.0 AM	10.1654	13.876



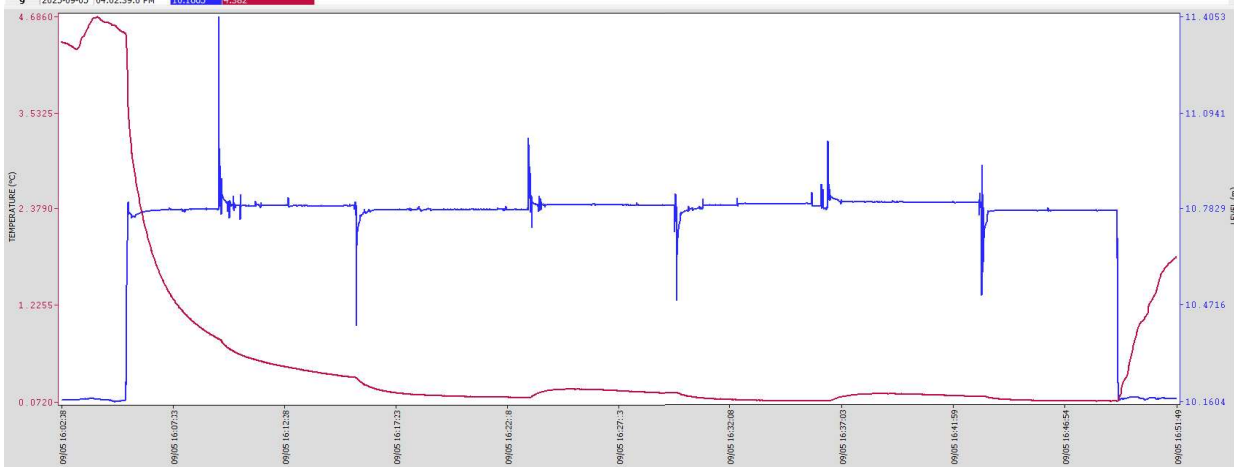
Below is the response curve we got for HWB-KP23-02

	Date	Time	LEVEL (m)	TEMPERATURE (°C)
1	2025-09-05	09:19:37.0 AM	10.1516	23.686
2	2025-09-05	09:19:37.125 AM	10.1516	23.690
3	2025-09-05	09:19:37.250 AM	10.1515	23.688
4	2025-09-05	09:19:37.375 AM	10.1514	23.691
5	2025-09-05	09:19:37.500 AM	10.1516	23.694
6	2025-09-05	09:19:37.625 AM	10.1514	23.695
7	2025-09-05	09:19:37.750 AM	10.1515	23.696
8	2025-09-05	09:19:37.875 AM	10.1514	23.696
9	2025-09-05	09:19:38.0 AM	10.1514	23.699



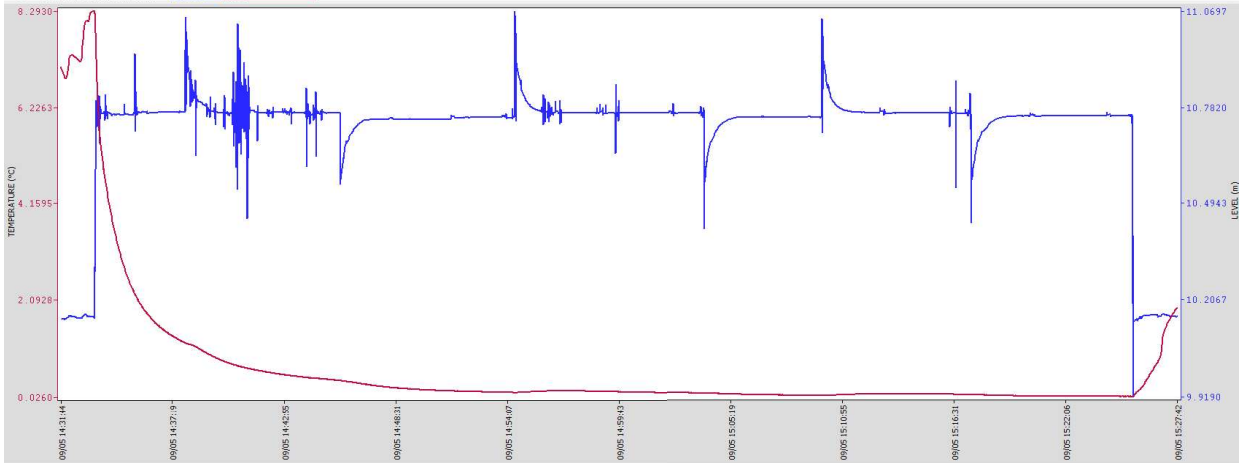
Below is the response curve we got for LF-KP23-06

	Date	Time	LEVEL (m)	TEMPERATURE (°C)
1	2025-09-05	04:02:38.0 PM	10.1663	4.384
2	2025-09-05	04:02:38.125 PM	10.1663	4.384
3	2025-09-05	04:02:38.250 PM	10.1666	4.384
4	2025-09-05	04:02:38.375 PM	10.1665	4.384
5	2025-09-05	04:02:38.500 PM	10.1663	4.384
6	2025-09-05	04:02:38.625 PM	10.1666	4.383
7	2025-09-05	04:02:38.750 PM	10.1666	4.382
8	2025-09-05	04:02:38.875 PM	10.1666	4.384
9	2025-09-05	04:02:39.0 PM	10.1665	4.382



Below is the response curve we got for LF-KP23-09

	Date	Time	LEVEL (m)	TEMPERATURE (°C)
1	2025-09-05	02:31:44.0 PM	10.1504	7.105
2	2025-09-05	02:31:44.125 PM	10.1503	7.102
3	2025-09-05	02:31:44.250 PM	10.1503	7.099
4	2025-09-05	02:31:44.375 PM	10.1502	7.097
5	2025-09-05	02:31:44.500 PM	10.1502	7.095
6	2025-09-05	02:31:44.625 PM	10.1504	7.092
7	2025-09-05	02:31:44.750 PM	10.1502	7.093
8	2025-09-05	02:31:44.875 PM	10.1501	7.088
9	2025-09-05	02:31:45.0 PM	10.1501	7.086



APPENDIX C

Drive Point Piezometer and Standpipe Well Information Summary Table

Station	Easting (X) - NAD83 UTM 17N[a]	Northing (Y) - NAD93 UTM 17N[a]	Year Installed	Distance Qualifier[b]	Well Type	Active/Inactive	PVC pipe Diameter (inch)	2025 Observations
Landfill Facility								
LF-KP23-01	560679	7912605	2023	Downgradient	Standpipe well (no bentonite seal)	Active	1	Well casing and monument in good condition. Cap present but was not inside well casing upon arrival. Appendix A Photo A-9.
LF-KP23-02	560747	7912597	2023	-	Standpipe well (no bentonite seal)	Inactive	1	Well was never installed. Appendix A Photo A-14.
LF-KP23-03	560689	7912421	2023	Downgradient	Standpipe well (no bentonite seal)	Active	1	Dry location (same as in 2024). Appendix A Photo A-10.
LF-KP23-04	560778	7912472	2023	Downgradient	Standpipe well (no bentonite seal)	Active	1	Well casing and monument in good condition. Well is close in proximity to MS-LF-25-02. Purging had to be paused frequently to maintain drawdown requirement. Hydraullic head was maintained throughout sample. Appendix A Photo A-15.
LF-KP23-05	560864	7912403	2023	Proximal	Standpipe well (no bentonite seal)	Active	1	Well casing and monument in good condition. PVC sticking out of well monument. Had difficulty maintaining hydraulic head/tubing charge. Had to pause purging/sample flow multiple times. Appendix A Photo A-6.
LF-KP23-06	560968	7912334	2023	Background	Standpipe well (no bentonite seal)	Active	1	Well casing and monument in good condition. Water cleared by final purge, no odor.
LF-KP23-07	561037	7912313	2023	Background	Standpipe well (no bentonite seal)	Active	1	Well casing and monument in good condition. Clear water, no odor.
LF-KP23-08	561122	7912257	2023	Background	Standpipe well (no bentonite seal)	Active	1	Well casing and monument in good condition. Stick-up slightly tilted. Clear water, no odor. Appendix A Photo A-1.
LF-KP23-09	561131	7912363	2023	Background	Standpipe well (no bentonite seal)	Active	1	Purge volume miscalculated resulting in an increased well volume purge. Stable YSI parameters were met after 20L of purging. Appendix A Photo A-2.
LF-KP23-10	561024	7912440	2023	Background	Standpipe well (no bentonite seal)	Active	1	Dry location.
LF-KP23-11	560978	7912544	2023	Proximal	Standpipe well (no bentonite seal)	Active	1	Well casing was loose and could be moved vertically and twisted in a circle. Potential well sand inside of well casing.
LF-KP23-13	560817	7912639	2023	Source	Standpipe well (no bentonite seal)	Active	1	Well casing and monument in good condition. Small casing burried in ground 1.5 ft from KP23-13 monument. Encountered difficulty preventing drawdown <0.100m. Purged well on slowest pump setting possible. Appendix A Photo A-11.
LF-KP22-01	560813	7912592	2022	Source	Standpipe well (no bentonite seal)	Active	2	Water was clear, but smelled like sewage. Appendix A Photo A-9.
LF-KP22-03	560831	7912463	2022	Source	Standpipe well (no bentonite seal)	Active	2	Some sediment noticed in initial purge, water cleared up after first purge. Appendix A Photo A-5.
LF-KP22-05	560953	7912604	2022	Proximal	Standpipe well (no bentonite seal)	Active	2	Well is in good condition, well cap had to be hammered off to remove. Water was opaque, yellowish, and smelled like sewage. Brown sediment with apparent oil slick noticed at bottom of LDPE tubing upon removal. Appendix A Photos A-3 & A-4.
MS-LF-GW1	560816	7912599	2017	Source	Drive point piezometer	Still active, but replaced by LF-KP22-01	0.75	2 drive point piezometers in one area. 1 drive point piezometer is in good condition for sampling. Appendix A Photo A-12.
MS-LF-GW2	560812	7912487	2017	Proximal	Drive point piezometer	Active	0.75	Nearby drive point piezometers. 1 drive point piezometer is in good condition for sampling. Appendix A Photo A-16.
MS-LF-GW3	560821	7912460	2017	Source	Drive point piezometer	Still active, but replaced by LF-KP22-03	0.75	Three drive point piezometers in 5m radius. Only 1 could be sampled due to waterra tubing stuck in others. Appendix A Photo A-7.
MS-LF-GW4	560752	7912493	2020	Downgradient	Drive point piezometer	Partially active	0.75	This location is a PVC pipe adjacent to two drive point piezometers that have waterra tubing stuck (frozen). Appendix A Photo A-18.
MS-LF-GW5	560715	7912484	2020	Downgradient	Drive point piezometer	Partially active	0.75	This location is a PVC pipe adjacent to two dry drive point piezometers. Appendix A Photo A-19.
MS-LF-GW-REF1	560817	7912598	2018	Source	Drive point piezometer	Partially active	0.75	Waterra tubing stuck in drive point piezometer. Appendix A Photo A-13.
MS-LF-GW-REF2	560877	7912409	2017	Proximal	Drive point piezometer	Active	0.75	Insufficient water to collect sample. Appendix A Photo A-8.
MS-LF-GW-REF3	560951	7912606	2020	Proximal	Drive point piezometer	Still active, but replaced by LF-KP22-05	0.75	Drive point piezometer partially obstructed. Well was purged dry, no recharge occurred. Appendix A Photo A-38.
MS-LF-25-01	560696	7912543	2025	Downgradient	Standpipe well (with bentonite seal)	Active	2	Well is dry or frozen. Well screen potentially below permafrost level. Appendix A Photo A-49.
MS-LF-25-02	560775	7912474	2025	Downgradient	Standpipe well (with bentonite seal)	Active	2	Well is dry or frozen. Well screen potentially below permafrost level. Appendix A Photo A-17.
Hazardous Waste Berm Facility								
HWB-KP23-01	558155	7914590	2023	Source	Standpipe well (no bentonite seal)	Active	1	Clear water and no odour. Appendix A Photo A-25.
HWB-KP23-02	558215	7914563	2023	Source	Standpipe well (no bentonite seal)	Active	1	Water was clear but had a slight odor throughout purging. Appendix A Photo A-26.
HWB-KP23-03	558220	7914540	2023	Proximal	Standpipe well (no bentonite seal)	Active	1	Monument was damaged (same as in 2024). Water was clear and had a slight odor. Appendix A Photo A-27.
HWB-KP22-01	558365	7914484	2022	Background	Standpipe well (no bentonite seal)	Active	2	Well casing and monument in good condition. Sediment/black particles in the first purge and a mild sulphur smell. Black sediment decreased by the last purge, but smell/odour continued. Appendix A Photo A-20.
HWB-KP22-03	558303	7914516	2022	Source	Standpipe well (no bentonite seal)	Active	2	Well casing and monument in good condition. Black sediment in water. Appendix A Photo A-21.
HWB-KP22-04	558253	7914452	2022	Proximal	Standpipe well (no bentonite seal)	Active	2	Well casing and monument in good condition. Brown sediment in suspension present during the first purge. The sediments cleared up by the third purge. There were totes labelled "oily water" right next to the well. Appendix A Photos A-22 & A-23.
HWB-KP22-05	558176	7914524	2022	Proximal	Standpipe well (no bentonite seal)	Active	2	Large puddle around well base. Appendix A Photo A-24.
HWB-KP22-06	558472	7914597	2022	Background	Standpipe well (no bentonite seal)	Active	2	Well is in good condition, no PVC stick-up. Appendix A Photo A-34.
MS-HWB-GW1	558489	7914483	unknown	Background	Drive point piezometer	No longer exists	0.75	-
MS-HWB-GW2	558487	7914459	unknown	Background	Drive point piezometer	No longer exists	0.75	-
MS-HWB-GW3	558258	7914467	2021	Proximal	Drive point piezometer	Damaged, but replaced by HWB-KP22-04	0.75	Drive point piezometer is bent and broken. Unable to collect any data from this location. Appendix A Photo A-28.
MS-HWB-GW4	558262	7914546	2021	Source	Drive point piezometer	No longer exists	0.75	Seacan was placed on top of drive point piezometer. Drive point piezometer is bent and compromized. No data could be collected from this location. Appendix A Photo A-29.
MS-HWB-GW5	558156	7914589	2021	Source	Drive point piezometer	Active	0.75	Sample taken, water slightly opaque and turbid. Appendix A Photo A-30.
MS-HWB-GW6	558058	7914430	2021	Downgradient	Drive point piezometer	Active	0.75	Dry location. Appendix A Photo A-37.
MS-HWB-GW7	558198	7914533	2021	Proximal	Drive point piezometer	No longer exists	0.75	-
MS-HWB-GW8	558303	7914524	2022[b]	Source	Drive point piezometer	No longer exists	0.75	-
MS-HWB-GW9	558471	7914608	2022[b]	Background	Drive point piezometer	No longer exists	0.75	-
MS-HWB-GW-REF1	558543	7914697	2021	Background	Drive point piezometer	Active	0.75	Drive point piezometer is partially obstructed. Puddle of stagnant water is located adjacent to drive point piezometer. Appendix A Photo A-31.
MS-HWB-GW-REF2	558362	7914482	2021	Background	Drive point piezometer	Active	0.75	Drive point piezometer is dry. Drive point piezometer approximately 2.5m from HWB-KP22-01 near HWB7. Appendix A Photo A-32.
MS-HWB-GW-REF3	558315	7914418	2021	Background	Drive point piezometer	Active	0.75	Drive point piezometer partially obstructed. Waterra tubing had to be inserted into the drive point piezometer before DTW and DTB were measured. Appendix A Photo A-33.
MS-HWB-25-01	558053	7914431	2025	Downgradient	Standpipe well (with bentonite seal)	Active	2	Well casing and monument in good condition. Well was developed on August 28th, 2025. Appendix A Photo A-35.
MS-HWB-25-02	558174	7914526	2025	Proximal	Standpipe well (with bentonite seal)	Active	2	Well was dry. Could not be developed.
MS-HWB-25-03	558468	7914598	2025	Background	Standpipe well (with bentonite seal)	Active	2	PVC stick-up slanted/tilted inside monument. Well was developed on August 28th, 2025. No drawdown concern. Appendix A Photo A-36.

(a) Stations were surveyed in November 2025, with the exception of LF-KP22-05, LF-KP23-06, LF-KP23-07, LF-KP23-08 and LF-KP23-09.

(b) Distance from Landfill Facility Qualifiers are defined as: Source = Station is located within active cells (Cells 1, 2) in the landfill, Proximal= Station is within 20 metres from landfill limits, Downgradient = Station is located more than 20 m downgradient from the landfill's limits towards Sheardown Lake, Background = Station is located in the inactive cells (Cells 3, 4, 5) of the landfill or upgradient of the landfill. Distances from HWB Facility Qualifiers are defined as: Source = Station is located within HWB Facility limits or less than 20 m from the HWB Facility limits, Proximal =Station is located more than 20 metres from HWB Facility limits, Downgradient = Station is located more than 20 m downgradient from the HWB Facility towards Camp Lake , Background = Station is located upgradient or more than 20 m from HWB Facility limits.

(c) Year installed assumed based on first year the station was monitored.

DTW: Depth to water; DTB: Depth to well bottom

LF-KP22-01 Station was sampled in 2025

LF-KP22-01 Water level measured in 2025

APPENDIX D

Fieldsheets

APPENDIX D-1

Sampling Fieldsheets

GROUNDWATER SAMPLING FIELD SHEET

WELL ID: LF-KP23-09	SAMPLE ID:	
DATE: 25-Aug-2025	TIME: 14:05	TECHS: LG, AG
WEATHER: (temp, rain, etc) 9°C, windy	WELL STATUS: (damage, etc) casing & monument in good condition	

PURGING DATA

WELL DIAMETER (INCHES): 1.0"	DEPTH TO WATER (METERS): 1.445m	DEPTH TO BOTTOM (METERS): 2.223m (corrected depth = 2.303)
STICK UP/MAGS (METERS): 0.911m	WELL RADIUS (METERS): 0.0127	

DIFFERENT BAFFINLAND WELL RADII: 0.009525m (3/4" diameter), 0.0127m (1" diameter), 0.0254m (2" diameter)

WELL VOLUME PURGE: 1 WELL VOLUME = (π r^2 [(DEPTH TO BOTTOM - DEPTH TO WATER)]) X 1000

π = 3.14159

Well radius = 0.0127 meters

Depth to bottom = 2.223 meters

Depth to water = 1.445 meters

overestimated due to sig fig error.

= (3.14159 (0.0127 meters)^2 x [(2.223 meters) - (1.445 meters)]) x 1000 = 3.94 Liters x3 = 11.83 TOTL

0.000506907

Multiply final answer by three (3) to calculate total volume to be purged

YSI FIELD PARAMETERS:

PURGING INITIATED AT (time): 13:29:50	PURGING ENDED AT (time): 13:57	TOTAL VOLUME PURGED (litres): 20L

TIME	VOLUME PURGED (litres)	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)		COLOUR or ODOR (describe)
13:38	4L	2.0	6.90	305.8	5.65	40.9	134.19	Yellow	Opaque no odor
13:43	4L	1.8	6.92	301.2	5.35	38.5	40.85	Opaque	no odor
13:48	4L	2.0	6.90	299.0	5.21	37.7	19.04	Clear	no odor
13:53	4L	1.8	6.92	303.5	4.94	35.6	17.53	clear	no odor
13:57	4L	1.8	6.91	304.2	4.83	34.8	16.60	Clear	no odor

SAMPLING DATA

FINAL YSI RESULTS (INPUT THESE INTO EQUIS)

TIME	VOLUME PURGED	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)
13:57	20L	1.8	6.91	304.2	4.83	34.8	16.60	clear no odor

KEY STABILIZATION CRITERIA: Temperature: ±0.2°C, **pH:** ±0.1, **Specfic Conductivity:** ±3%, **Dissolved Oxygen:** ±0.2 mg/L or ±10% (whichever is greater), **Turbidity:** ±10%

NOTES:
- Rounded 3.94L volume to 4L → 12L = 3 well volumes
- Water colour started off very yellow, no smell
  - ↳ started to clear up after 2nd well volume purge
- Rain started during sample collection

GROUNDWATER SAMPLING FIELD SHEET

WELL ID: LF-KP23-08	SAMPLE ID: LF-KP23-08	
DATE: 25-Aug-2025	TIME: 15:15	TECHS: LG AG
WEATHER: (temp, rain, etc.) 6°C, Windy, Raining	WELL STATUS: (dry, damaged, etc) Good condition	

PURGING DATA

WELL DIAMETER (INCHES): 1"	DEPTH TO WATER (METERS): 1.760	DEPTH TO BOTTOM (METERS): 2.230 (corrected depth = 2.310m)
STICK UP/MAGS (METERS): 0.962m	WELL RADIUS (METERS): 0.0127m	

DIFFERENT BAFFINLAND WELL RADII: 0.009525m (3/4" diameter), 0.0127m (1" diameter), 0.0254m (2" diameter)

WELL VOLUME PURGE: 1 WELL VOLUME = (π r^2 [(DEPTH TO BOTTOM - DEPTH TO WATER)]) X 1000

π = 3.14159

Well radius = 0.0127 meters

Depth to bottom = 2.230 meters

Depth to water = 1.760 meters

= (3.14159 (0.0127 meters)^2 x [(2.230 meters) - (1.760 meters)]) x 1000 = 0.238 Liters x 3 = 0.714L (0.47)

Multiply final answer by three (3) to calculate total volume to be purged

YSI FIELD PARAMETERS:

PURGING INITIATED AT (time): 14:45:10

PURGING ENDED AT (time): 15:08

TOTAL VOLUME PURGED (litres): 1.75L

TIME	VOLUME PURGED (litres)	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)		COLOUR or ODOR (describe)
14:52	0.250	2.8	7.81	276.9	12.65	93.6	112.26	Yellow	Opaque no odor
14:55	0.250	3.7	7.81	270.8	12.66	95.9	81.02	Opaque	no odor
14:58	0.250	3.4	7.81	271.5	12.62	94.7	55.74	Opaque	no odor
15:02	0.250	3.3	7.81	270.3	12.61	94.6	45.34	clearer	than previous
15:04	0.250	3.4	7.80	271.2	12.52	94.2	31.99	"	"
15:07	0.250	3.1	7.80	271.6	12.54	93.5	25.38	"	"
15:08	0.250	2.9	7.80	271.5	12.59	93.3	23.91	clear	

SAMPLING DATA

FINAL YSI RESULTS (INPUT THESE INTO EQUIS)

TIME	VOLUME PURGED	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)
15:08	1.75L	2.9	7.80	271.5	12.59	93.3	23.91	clear

KEY STABILIZATION CRITERIA: Temperature: ±0.2°C, **pH:** ±0.1, **Specfic Conductivity:** ±3%, **Dissolved Oxygen:** ±0.2 mg/L or ±10% (whichever is greater), **Turbidity:** ±10%

NOTES:
- 0.714L rounded to 1L → measurements taken every 0.250L
- Colour changed after 4th purge

BAFFINLAND GROUNDWATER SAMPLING FIELD SHEET

WELL/SAMPLE ID: HWB-KP22-01	CAMERA #: 26	PHOTOS: 0454-0458
DATE:	ARRIVAL TIME: 10:00	TECHS: LG AG
WEATHER: -2°C, cloudy, windy	WELL STATUS: Good condition	

PURGING DATA

WELL DIAMETER (INCHES): 2"	DEPTH TO WATER (M): 1.394	DEPTH TO BOTTOM (M): 2.431
STICK UP/MAGS (M): 1.280	TIME OF DTW MEASUREMENT: 10:02:40	TIME OF DTB MEASUREMENT: 10:03:15

WELL DIAMETER QUICK CONVERSION

CONVERTS WELL DIAMETER TO π r^2	3/4" DIAMETER PIEZOMETER	1" DIAMETER PVC	(2") DIAMETER PVC
	0.000285 meters	0.000507 meters	0.002027 meters

SINGLE WELL VOLUME FORMULA (USE CONVERSION VALUE IN EQUATION)

1 WELL VOLUME = (0.002027) X [(2.431) - (1.394)] X 1000 = 2.10 Litres

MULTIPLY ABOVE ANSWER BY 3 TO GET MINIMUM REQUIRED PURGING VOLUME

MINIMUM REQUIRED PURGING VOLUME = 6.3 -> rounded to 6.45L or 2.15L per purge

YSI FIELD PARAMETERS:

PURGING START TIME	PURGING END TIME	PURGING WATER DRAWDOWN	VOLUME PURGED (litres)	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)
<500ML / MINUTE		±0.1M	1 WELL VOL	±0.2°C	±0.1	±3%	±0.2 mg/L or ±10% (whichever is greater)		±10%	OPAQUE, CLEAR, SHEEN
10:12:30	10:23:03	<1.494	2.15	1.0	6.82	957	1.45	10.2	4.18	black sediment, mild sulfur smell
10:24:58	10:32:20	<1.494	2.15	0.9	6.86	964	0.97	6.8	3.11	black sediment, stronger odor
10:34:58	10:38:55	<1.494	2.15	1.0	6.89	967	0.56	3.9	3.06	" " , strong odor
10:41:55	10:45:38	<1.494	2.15	1.0	6.90	969	0.48	3.4	15.34	black sed. strong sulfur odor
	Max drawdown during purge = 1.445m									

SAMPLING DATA (INPUT THESE INTO EQUIS)

SAMPLE TIME: 10:50	SAMPLE DEPTH (M): 2.100	VISIBLE SHEEN? N	WATER CLARITY: slightly turbid

FINAL YSI RESULTS

LOG TIME	TOTAL VOLUME PURGED	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)
10:47	8.6	1.0	6.90	969	0.48	3.4	15.34	Yellowish, some black sed & sulfur odor

NOTES: Black PVC pipe inserted in ground 1.5m from standpipe well -> both close to HWB7
- Sediment / black particles in first purge -> mild sulfur smell (see photo 0458)
  - ↳ black sed. decreased by last purge, but smell/odor continued. Turb increased on final purge.

DTW Post Sample = 1.407

Baffinland

YSI log times:
- Purge log 1 = 10:24
- Purge log 2 = 10:33
- Purge log 3 = 10:41
- Purge log 4 = 10:47

BAFFINLAND GROUNDWATER SAMPLING FIELD SHEET

WELL/SAMPLE ID: HWB-KP22-03	CAMERA #: 26	PHOTOS: 0462 - 0465
DATE: 30-Aug-25	ARRIVAL TIME: 11:35	TECHS: LG & AG
WEATHER: Windy, overcast, -2°C	WELL STATUS: Good conditions	

PURGING DATA

WELL DIAMETER (INCHES): 2"	DEPTH TO WATER (M): 1.501	DEPTH TO BOTTOM (M): 2.549
STICK UP/MAGS (M): 1.051	TIME OF DTW MEASUREMENT: 11:38	TIME OF DTB MEASUREMENT: 11:39

WELL DIAMETER QUICK CONVERSION

CONVERTS WELL DIAMETER TO π r^2	3/4" DIAMETER PIEZOMETER	1" DIAMETER PVC	(2") DIAMETER PVC
	0.000285 meters	0.000507 meters	0.002027 meters

SINGLE WELL VOLUME FORMULA (USE CONVERSION VALUE IN EQUATION)

1 WELL VOLUME = (0.002027) X [(2.549) - (1.501)] X 1000 = 2.124 Litres
1.048

MULTIPLY ABOVE ANSWER BY 3 TO GET MINIMUM REQUIRED PURGING VOLUME !-> Round Up to 2.15 L

MINIMUM REQUIRED PURGING VOLUME = 6.37 L --> Round Up to 6.45 L

YSI FIELD PARAMETERS:

PURGING START TIME	PURGING END TIME	PURGING WATER DRAWDOWN	VOLUME PURGED (litres)	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)
<500ML / MINUTE		±0.1M	1 WELL VOL	±0.2°C	±0.1	±3%	±0.2 mg/L or ±10% (whichever is greater)		±10%	OPAQUE, CLEAR, SHEEN
11:48:35	11:54:13	1.532	2.15	1.7	7.17	503	1.53	11.0	3.37	Black sediment, mild sulphur odor
11:56:01	12:00:49	1.535	2.15	1.4	7.08	525	1.16	8.3	2.81	Black Sediment, Soft odor, mildly opaque
12:02:47	12:07:22	1.543	2.15	1.4	7.08	543	0.91	6.5	2.48	Less black sediment & smell is clearing up
12:09:23	12:14:04	1.519	2.15	1.4	7.09	557	0.86	6.1	2.42	↓ "Sediment" & ↓ smell

SAMPLING DATA (INPUT THESE INTO EQUIS)

SAMPLE TIME: 12:20	SAMPLE DEPTH (M): 1.200	VISIBLE SHEEN? N	WATER CLARITY: Yellow tint (muddy)

FINAL YSI RESULTS

LOG TIME	TOTAL VOLUME PURGED	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)
12:12	8.60	1.4	7.09	557	0.86	6.1	2.42	Less black sediment & minor odor

NOTES:
- Black sediment in water
- DTW post sample 1.515
- Under calculated DTB by 8 cm. Actual DTB is 2.629 L. Corrected WELL VOLUME is 2.286 L for a minimum purging requirements of 6.85 L
- Less black sediments & odor as more water was purged.

Baffinland

YSI Log Times
1 Purge @ 11:56
2 Purge @ 12:03
3 Purge @ 12:09
4 Purge: 12:16

BAFFINLAND GROUNDWATER SAMPLING FIELD SHEET

WELL/SAMPLE ID: HWB-KP22-04	CAMERA #: 26	PHOTOS: 0471 - 0474 & 0475
DATE: 30-Aug-2025	ARRIVAL TIME: 14:10	TECHS: LG AG
WEATHER: Windy, Sun & Clouds, 0 °C	WELL STATUS: Good condition - Dehiwater present - well clearly visible	

PURGING DATA --> +8 cm

WELL DIAMETER (INCHES): 2"	DEPTH TO WATER (M): 1.345	DEPTH TO BOTTOM (M): 2.508
STICK UP/MAGS (M): 0.998	TIME OF DTW MEASUREMENT: 14:18:10	TIME OF DTB MEASUREMENT: 14:19:30

WELL DIAMETER QUICK CONVERSION

CONVERTS WELL DIAMETER TO π r^2	3/4" DIAMETER PIEZOMETER	1" DIAMETER PVC	(2)" DIAMETER PVC
	0.000285 meters	0.000507 meters	0.002027 meters

SINGLE WELL VOLUME FORMULA (USE CONVERSION VALUE IN EQUATION)

1 WELL VOLUME = (0.002027) X [(2.508) - (1.345)] X 1000 = 2.356 Litres --> Rounded Up to 2.4L

1163

MULTIPLY ABOVE ANSWER BY 3 TO GET MINIMUM REQUIRED PURGING VOLUME

MINIMUM REQUIRED PURGING VOLUME = 7.07 L Rounded Up to 7.2L

YSI FIELD PARAMETERS:

PURGING START TIME	PURGING END TIME	PURGING WATER DRAWDOWN	VOLUME PURGED (litres)	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)
<500ML / MINUTE		±0.1M	1 WELL VOL	±0.2°C	±0.1	±3%	±0.2 mg/L or ±10% (whichever is greater)		±10%	OPAQUE, CLEAR, SHEEN
14:27:27	14:35:18	1.358	2.4	0.9	7.32	473.1	1.44	10.2	2.15	Lots of sediment in suspension, no odor
14:37:54	14:43:37	1.375	2.4	0.9	7.25	461.6	1.09	7.7	1.95	Less sediment, no odor
14:45:59	14:51:49	1.391	2.4	0.9	7.25	462.0	0.9	6.3	2.15	minimal sediment present, clear, no odor

SAMPLING DATA (INPUT THESE INTO EQUIS)

SAMPLE TIME: 14:55	SAMPLE DEPTH (M): 2.200	VISIBLE SHEEN? N	WATER CLARITY: Clear, no odor

FINAL YSI RESULTS

LOG TIME	TOTAL VOLUME PURGED	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)
14:54	7.2	0.9	7.25	462.0	0.9	6.3	2.15	Clear, no odor

NOTES:
- "Oily water" totes stored right next to the well
- Sediments present in the 1st purge - Brown sediments in suspension.
- Clearing up during the second purge
- Pretty much all cleared up of sediments by the 3rd purge

Baffinland

YSI Log Times
1 Purge @ 14:37
2 Purge @ 14:46
3 purge @ 14:54

- DTW post sampling 1.346

BAFFINLAND GROUNDWATER SAMPLING FIELD SHEET

WELL/SAMPLE ID: HWB-KP22-05	CAMERA #: 33	PHOTOS: 382 - 385	
DATE: 30 Aug 2025	ARRIVAL TIME: 1550	TECHS: JAK JJ	
WEATHER: -2 Wind / Snow	WELL STATUS: Active		

PURGING DATA

WELL DIAMETER (INCHES): 2	DEPTH TO WATER (M): 1.498	DEPTH TO BOTTOM (M): 2.666
STICK UP/MAGS (M): 0.937	TIME OF DTW MEASUREMENT: 15:58	TIME OF DTB MEASUREMENT: 15:59

WELL DIAMETER QUICK CONVERSION

CONVERTS WELL DIAMETER TO π r^2	3/4" DIAMETER PIEZOMETER	1" DIAMETER PVC	2" DIAMETER PVC
	0.000285 meters	0.000507 meters	0.002027 meters

SINGLE WELL VOLUME FORMULA (USE CONVERSION VALUE IN EQUATION)

1 WELL VOLUME = (0.002027) X [(2.666) - (1.498)] X 1000 = 2.369 Litres

MULTIPLY ABOVE ANSWER BY 3 TO GET MINIMUM REQUIRED PURGING VOLUME 2.4

MINIMUM REQUIRED PURGING VOLUME = 7.2

YSI FIELD PARAMETERS:

PURGING START TIME	PURGING END TIME	PURGING WATER DRAWDOWN	VOLUME PURGED (litres)	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)
<500ML / MINUTE		±0.1M	1 WELL VOL	±0.2°C	±0.1	±3%	±0.2 mg/L or ±10% (whichever is greater)		±10%	OPAQUE, CLEAR, SHEEN
16:07:31	16:12:01	1.55	2.4	2.1	6.89	1933	3.57	26.0	153.31	Brown water
16:18:54	16:23:14	1.55	2.4	1.8	6.96	1909	3.33	23.9	37.41	Opaque
16:29:53	16:30:54	1.55	2.4	1.9	6.97	1881	3.00	21.7	8.93	Clear
16:40:11	16:45:14	1.55	2.4	2.2	6.97	1891	2.60	19.0	3.64	Clear
16:53:29	16:58:39	1.55	2.4	2.2	7.00	1890	3.02	22.1	2.44	Clear

SAMPLING DATA (INPUT THESE INTO EQUIS)

SAMPLE TIME: 17:00	SAMPLE DEPTH (M): ~~1.490~~ 2.36	VISIBLE SHEEN? N	WATER CLARITY: Clear

FINAL YSI RESULTS

LOG TIME	TOTAL VOLUME PURGED	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)
17:05	12	2.2	7.00	1890	3.02	22.1	2.44	Clear

NOTES: Logtime #1 - 16:17
#2 - 16:26
#3 - 16:39
#4 - 16:53
#5 - 17:05

- Large puddle around well base.

Post DTW 1.490

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BAFFINLAND GROUNDWATER SAMPLING FIELD SHEET

WELL/SAMPLE ID: HWB-KP22-06	CAMERA #: 27	PHOTOS: 0607 - 0609
DATE: 02-Sept-2025	ARRIVAL TIME: 10:40	TECHS: LG ET
WEATHER: -1°C, Sunny, windy	WELL STATUS: Good condition, no stake for mags	

PURGING DATA

WELL DIAMETER (INCHES): 2"	DEPTH TO WATER (M): 1.929	DEPTH TO BOTTOM (M): 2.753
STICK UP/MAGS (M): 1.118	TIME OF DTW MEASUREMENT: 10:45:38	TIME OF DTB MEASUREMENT: 10:46:05

WELL DIAMETER QUICK CONVERSION

CONVERTS WELL DIAMETER TO πr^2	3/4" DIAMETER PIEZOMETER	1" DIAMETER PVC	(2") DIAMETER PVC
	0.000285 meters	0.000507 meters	0.002027 meters

SINGLE WELL VOLUME FORMULA (USE CONVERSION VALUE IN EQUATION)

1 WELL VOLUME = (0.002027) X [(2.753) - (1.929)] X 1000 = 1.67 Litres

MULTIPLY ABOVE ANSWER BY 3 TO GET MINIMUM REQUIRED PURGING VOLUME

MINIMUM REQUIRED PURGING VOLUME = 5.01L → round to 5.10L or 1.7L per purge

YSI FIELD PARAMETERS:

PURGING START TIME	PURGING END TIME	PURGING WATER DRAWDOWN	VOLUME PURGED (litres)	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)
<500ML / MINUTE		±0.1M	1 WELL VOL	±0.2°C	±0.1	±3%	±0.2 mg/L or ±10% (whichever is greater)		±10%	OPAQUE, CLEAR, SHEEN
10:55:00	10:58:49	1.949	1.7	1.1	7.78	321.4	8.68	61.4	5.48	clear, no odor
11:01:25	11:04:48	1.948	1.7	1.7	7.63	326.1	8.29	59.6	4.08	" "
11:09:12	11:12:35	1.946	1.9	1.5	7.68	319.8	8.37	59.7	3.15	" "

SAMPLING DATA (INPUT THESE INTO EQUIS) YSI #4

SAMPLE TIME: 11:20	SAMPLE DEPTH (M): 2.450	VISIBLE SHEEN? N	WATER CLARITY: clear

FINAL YSI RESULTS

LOG TIME	TOTAL VOLUME PURGED	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)
11:16	5.3	1.5	7.68	319.8	8.37	59.7	3.15	no odor, clear water

NOTES:
- No stake in ground @ this site. Front of well monument marked for future visits.
- YSI site name : GW HWB
- Flow cylinder accidentally removed during 3rd YSI reading → extra 200mL purged to get YSI reading

DTW post sample: 1.938m @ 11:34:42

Baffinland

YSI log times:
- Purge log 1 = 11:00
- Purge log 2 = 11:08
- Purge log 3 = 11:16

BAFFINLAND GROUNDWATER SAMPLING FIELD SHEET

WELL/SAMPLE ID: HWB-KPB-01	CAMERA #: 33	PHOTOS: 370 372	
DATE: August 30, 2025	ARRIVAL TIME: 840	TECHS: JAK JJ	
WEATHER: -2 Wind / light Snow	WELL STATUS: Active		

PURGING DATA

WELL DIAMETER (INCHES): 1	DEPTH TO WATER (M): 1.600	DEPTH TO BOTTOM (M): 2.560
STICK UP/MAGS (M): 1.165	TIME OF DTW MEASUREMENT: 843	TIME OF DTB MEASUREMENT: 844

WELL DIAMETER QUICK CONVERSION

CONVERTS WELL DIAMETER TO π r^2	3/4" DIAMETER PIEZOMETER	1" DIAMETER PVC	2" DIAMETER PVC
	0.000285 meters	0.000507 meters	0.002027 meters

SINGLE WELL VOLUME FORMULA (USE CONVERSION VALUE IN EQUATION)

1 WELL VOLUME = (0.000507) X [(2.56) - (1.60)] X 1000 = 0.487 Litres

MULTIPLY ABOVE ANSWER BY 3 TO GET MINIMUM REQUIRED PURGING VOLUME 0.500

MINIMUM REQUIRED PURGING VOLUME = 1.5 Litres

YSI FIELD PARAMETERS:

PURGING START TIME	PURGING END TIME	PURGING WATER DRAWDOWN	VOLUME PURGED (litres)	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)
<500ML / MINUTE		±0.1M	1 WELL VOL	±0.2°C	±0.1	±3%	±0.2 mg/L or ±10% (whichever is greater)		±10%	OPAQUE, CLEAR, SHEEN
9:10:31	9:12:05	1.17	0.5	2.0	7.42	426.1	5.63	40.7	14.48	Clear
9:21:24	9:22:26	"	"	0.5	7.40	534	5.56	38.5	17.17	Clear
9:30:49	9:31:40	"	"	0.5	7.39	555	5.52	38.2	7.90	Clear
9:38:20	9:39:20	"	"	0.6	7.38	553	5.64	39.3	5.73	Clear
9:46:30	9:47:25	"	"	0.7	7.38	566	5.61	39.2	4.07	Clear

SAMPLING DATA (INPUT THESE INTO EQUIS)

SAMPLE TIME: 10:00	SAMPLE DEPTH (M): 2.26	VISIBLE SHEEN?	WATER CLARITY: Clear

FINAL YSI RESULTS

LOG TIME	TOTAL VOLUME PURGED	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)
9:58	2.5	0.7	7.38	566	5.61	39.2	4.07	Clear

NOTES:

MW-02 YSI Log time - 9:20

#2 - 9:29

#3 - 9:37

#4 - 9:45

#5 - 9:58

Post Sampling DTW 1.602

Baffinland

BAFFINLAND GROUNDWATER SAMPLING FIELD SHEET

WELL/SAMPLE ID:	HWB-KP23-02	CAMERA #:	33	PHOTOS:	376-378
DATE:	Aug 30 2023	ARRIVAL TIME:	1245	TECHS:	JAK, JT
WEATHER:	-2 Wind / light snow	WELL STATUS:	Active		

PURGING DATA

WELL DIAMETER (INCHES):	1	DEPTH TO WATER (M):	1.724	DEPTH TO BOTTOM (M):	2.633
STICK UP/MAGS (M):	1.1845	TIME OF DTW MEASUREMENT:	~~1214~~ 1245	TIME OF DTB MEASUREMENT:	1248

WELL DIAMETER QUICK CONVERSION

CONVERTS WELL DIAMETER TO π r^2	3/4" DIAMETER PIEZOMETER	1" DIAMETER PVC	2" DIAMETER PVC
	0.000285 meters	0.000507 meters	0.002027 meters

SINGLE WELL VOLUME FORMULA (USE CONVERSION VALUE IN EQUATION)

1 WELL VOLUME = (0.000507) X [(2.633) - (1.724)] X 1000 = 0.461 Litres

MULTIPLY ABOVE ANSWER BY 3 TO GET MINIMUM REQUIRED PURGING VOLUME 0.46 m(

MINIMUM REQUIRED PURGING VOLUME = 1.38

YSI FIELD PARAMETERS:

PURGING START TIME	PURGING END TIME	PURGING WATER DRAWDOWN	VOLUME PURGED (litres)	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)
<500ML / MINUTE		±0.1M	1 WELL VOL	±0.2°C	±0.1	±3%	±0.2 mg/L or ±10% (whichever is greater)		±10%	OPAQUE, CLEAR, SHEEN
12:57:30	13:00:15	1.824	0.46	1.8	7.26	710	8.46	61.0	3.24	Clear
13:10:20	13:12:12	"	"	1.8	7.20	652	6.37	45.9	1.20	Clear, slight odor
13:22:34	13:23:10	"	"	1.5	7.15	722	5.19	37.0	1.38	Clear, slight odor
13:29:27	13:30:28	"	"	1.4	7.17	733	5.60	40.0	2.54	Clear, slight odor
13:38:58	13:31:44	"	"	1.3	7.14	751	4.95	35.2	1.04	Clear, slight odor

SAMPLING DATA (INPUT THESE INTO EQUIS)

SAMPLE TIME:	1345	SAMPLE DEPTH (M):	~~1.724~~ 1.733	VISIBLE SHEEN?	N
WATER CLARITY:	Clear				

FINAL YSI RESULTS

LOG TIME	TOTAL VOLUME PURGED	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)
13:46	2.3	1.3	7.14	751	4.95	35.2	1.04	Clear, slight odor.

NOTES: Logtime #1 - 1308
#2 - 13:21
#3 - 13:28
#4 - 13:38
#5 - 13:46

Post Sampling DTW 1.731

Baffinland

BAFFINLAND GROUNDWATER SAMPLING FIELD SHEET

WELL/SAMPLE ID: HWB-1KP23-03	CAMERA #: 33	PHOTOS: 0379 - 381
DATE: 30-Aug-2025	ARRIVAL TIME: 1480	TECHS: JAK JJ
WEATHER: -2 Wind / Snow	WELL STATUS: Active	

PURGING DATA

WELL DIAMETER (INCHES):	DEPTH TO WATER (M): 1.565	DEPTH TO BOTTOM (M): 2.649
STICK UP/MAGS (M): 1.199	TIME OF DTW MEASUREMENT: 1422	TIME OF DTB MEASUREMENT: 1425

WELL DIAMETER QUICK CONVERSION

CONVERTS WELL DIAMETER TO πr^2	3/4" DIAMETER PIEZOMETER	1" DIAMETER PVC	2" DIAMETER PVC
	0.000285 meters	0.000507 meters	0.002027 meters

SINGLE WELL VOLUME FORMULA (USE CONVERSION VALUE IN EQUATION)

1 WELL VOLUME = (0.000507) X [(2.649) - (1.565)] X 1000 = 0.550 Litres

MULTIPLY ABOVE ANSWER BY 3 TO GET MINIMUM REQUIRED PURGING VOLUME

MINIMUM REQUIRED PURGING VOLUME = 1.65

YSI FIELD PARAMETERS:

PURGING START TIME	PURGING END TIME	PURGING WATER DRAWDOWN	VOLUME PURGED (litres)	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)
<500ML / MINUTE		±0.1M	1 WELL VOL	±0.2°C	±0.1	±3%	±0.2 mg/L or ±10% (whichever is greater)		±10%	OPAQUE, CLEAR, SHEEN
14:35:33	14:39:30	~~1.565~~	0.550	1.9	7.51	599	9.28	87	5.75	Clear, Slight odor
14:49:05	14:50:27	"	0.550	1.4	7.16	661	3.01	31.5	3.56	Clear, Slight odor
15:03:08	15:03:57	"	"	1.1	7.14	657	2.27	16.0	1.64	Clear, Slight odor
15:13:28	15:14:34	"	"	1.1	7.13	660	2.75	19.4	1.70	Clear, Slight odor
15:22:10	15:23:08	"	"	1.3	7.14	655	2.94	20.9	2.07	Clear, Slight odor

SAMPLING DATA (INPUT THESE INTO EQUIS)

SAMPLE TIME: 1530	SAMPLE DEPTH (M): 2.35	VISIBLE SHEEN? N	WATER CLARITY: Clear

FINAL YSI RESULTS

LOG TIME	TOTAL VOLUME PURGED	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)
15:31	2.75	1.3	7.14	655	2.94	20.9	2.07	Clear, Slight odor

NOTES: Damage to Monument

Logtime #1 - 14:48

#2 - 15:01

#3 - 15:17

#4 - 15:21

#5 15:31

Post Sampling DTW 1.579

Baffinland

BAFFINLAND GROUNDWATER SAMPLING FIELD SHEET

WELL/SAMPLE ID: LF-GW-REF3	CAMERA #: 27	PHOTOS: 0622-0623
DATE: 02-Sept-2025	ARRIVAL TIME: 14:00	TECHS: LG JJ ET
WEATHER: 1°C, Overcast, windy	WELL STATUS: Drivepoint partially obstructed	

PURGING DATA

WELL DIAMETER (INCHES): 3/4	DEPTH TO WATER (M): 1.341	DEPTH TO BOTTOM (M): 1.823
STICK UP/MAGS (M): 0.874	TIME OF DTW MEASUREMENT: 14:09:30	TIME OF DTB MEASUREMENT: 14:10:00

WELL DIAMETER QUICK CONVERSION

CONVERTS WELL DIAMETER TO π r^2	3/4" DIAMETER PIEZOMETER	1" DIAMETER PVC	2" DIAMETER PVC
	0.000285 meters	0.000507 meters	0.002027 meters

SINGLE WELL VOLUME FORMULA (USE CONVERSION VALUE IN EQUATION)

1 WELL VOLUME = (0.000285) X [(1.823) - (1.341)] X 1000 = 0.137 Litres

MULTIPLY ABOVE ANSWER BY 3 TO GET MINIMUM REQUIRED PURGING VOLUME

MINIMUM REQUIRED PURGING VOLUME = 0.412 L → round to 0.42 L or 0.14 L per purge.

YSI FIELD PARAMETERS:

PURGING START TIME	PURGING END TIME	PURGING WATER DRAWDOWN	VOLUME PURGED (litres)	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)
<500ML / MINUTE		±0.1M	1 WELL VOL	±0.2°C	±0.1	±3%	±0.2 mg/L or ±10% (whichever is greater)		±10%	OPAQUE, CLEAR, SHEEN
14:19:00	14:24:30									

SAMPLING DATA (INPUT THESE INTO EQUIS)

SAMPLE TIME: 14:25	SAMPLE DEPTH (M): 1.70	VISIBLE SHEEN? N	WATER CLARITY: N/A

FINAL YSI RESULTS

LOG TIME	TOTAL VOLUME PURGED	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)

NOTES:
- Could not raise tubing 0.3m above bottom.
  - ↳ after 5min of pumping drivepoint went dry. Waited 10min & no recharge occurred
  - could not collect enough water for YSI parameters or sample.
  - Drivepoint considered frozen / dry. NST

Baffinland

BAFFINLAND GROUNDWATER SAMPLING FIELD SHEET

WELL/SAMPLE ID: LF-KP22-01	CAMERA #: 26	PHOTOS: 0339-0342
DATE: 28-Aug-2025	ARRIVAL TIME: 14:20	TECHS: LG JJ
WEATHER: 5°C, Sunny, Windy	WELL STATUS: Good condition, stake present	

PURGING DATA

WELL DIAMETER (INCHES): 2"	DEPTH TO WATER (M): 1.939	DEPTH TO BOTTOM (M): 3.168
STICK UP/MAGS (M): 0.747	TIME OF DTW MEASUREMENT: 14:23:30	TIME OF DTB MEASUREMENT: 14:24:45

WELL DIAMETER QUICK CONVERSION

CONVERTS WELL DIAMETER TO π r^2	3/4" DIAMETER PIEZOMETER	1" DIAMETER PVC	(2") DIAMETER PVC
	0.000285 meters	0.000507 meters	0.002027 meters

SINGLE WELL VOLUME FORMULA (USE CONVERSION VALUE IN EQUATION)

1 WELL VOLUME = (0.002027) X [(3.168) - (1.939)] X 1000 = 2.49 Litres

MULTIPLY ABOVE ANSWER BY 3 TO GET MINIMUM REQUIRED PURGING VOLUME

MINIMUM REQUIRED PURGING VOLUME = 7.5L

YSI FIELD PARAMETERS:

PURGING START TIME	PURGING END TIME	PURGING WATER DRAWDOWN	VOLUME PURGED (litres)	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)
<500ML / MINUTE		±0.1M	1 WELL VOL	±0.2°C	±0.1	±3%	±0.2 mg/L or ±10% (whichever is greater)		±10%	OPAQUE, CLEAR, SHEEN
14:38:08	14:42:40	1.965	2.5	1.8	7.06	2445	0.73	5.3	2.04	clear, no odor
14:46:25	14:50:38	1.945	2.5	1.9	7.07	2455	0.38	2.8	1.31	clear, mild sewage odor
14:54:36	14:58:20	1.970	2.5	1.8	7.07	2441	0.23	1.6	1.44	" "
15:02:03	15:06:08	1.970	2.5	1.9	7.06	2445	0.19	1.4	1.59	" "
15:12:28	15:17:17	1.975	2.5	1.9	7.06	2440	0.11	0.8	1.65	" "
					DO stabilization could not be reached.					
					Sample collected after 5 well vol purges.					

SAMPLING DATA (INPUT THESE INTO EQUIS)

SAMPLE TIME: 15:25	SAMPLE DEPTH (M): 3.120	VISIBLE SHEEN? N	WATER CLARITY:

FINAL YSI RESULTS

LOG TIME	TOTAL VOLUME PURGED	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)
15:21	12.5	1.9	7.06	2440	0.11	0.8	1.65	clear, water has a mild sewage smell.

NOTES: 2" well sufficient size for drawdown measurement.

YSI log times:
Purge log 1 = 14:44
Purge log 2 = 14:53
Purge log 3 = 15:00
Purge log 4 = 15:10
Purge log 5 = 15:21

* Field Dupe Taken *

Baffinland

GROUNDWATER SAMPLING FIELD SHEET

WELL/SAMPLE ID: LF-KP22-05	CAMERA #: 26	PHOTOS: 0286 - 0290, 0295, 0297
DATE: 26-Aug-2025	ARRIVAL TIME: 14:20	TECHS: LG JM
WEATHER: 2°C, windy, mostly cloudy	WELL STATUS: Good condition, cap had to be hammered off to remove	

PURGING DATA

WELL DIAMETER (INCHES): 2"	DEPTH TO WATER (M): 1.656	DEPTH TO BOTTOM (M): 2.141 (corrected depth = 2.221m)
STICK UP/MAGS (M): 1.160	TIME OF DTW MEASUREMENT: 14:29:08	TIME OF DTB MEASUREMENT: 14:29:50

WELL DIAMETER QUICK CONVERSION

CONVERTS WELL DIAMETER TO πr^2	3/4" DIAMETER PIEZOMETER	1" DIAMETER PVC	2" DIAMETER PVC
	0.000285 meters	0.000507 meters	0.002027 meters

SINGLE WELL VOLUME FORMULA (USE CONVERSION VALUE IN EQUATION)

1 WELL VOLUME = (0.002027) X [(2.141) - (1.656)] X 1000 = 0.993 Litres

MULTIPLY ABOVE ANSWER BY 3 TO GET MINIMUM REQUIRED PURGING VOLUME

MINIMUM REQUIRED PURGING VOLUME = 2.97L → rounded to 3L

YSI FIELD PARAMETERS:

PURGING START TIME	PURGING END TIME	VOLUME PURGED (litres)	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)
<500ML / MINUTE		1 WELL VOL	±0.2°C	±0.1	±3%	±0.2 mg/L or ±10% (whichever is greater)		±10%	OPAQUE, CLEAR, SHEEN
14:39:40	14:24:24	1.0	3.8	6.96	517.0	8.37	63.6	752.48	Yellow, opaque, sewage smell
14:48:35	14:51:20	1.0	3.7	6.91	582.0	2.44	18.5	106.55	" " "
14:54:50	14:57:45	1.0	3.7	6.94	580.0	6.41	48.8	77.25	clearer, yellowish, opaque
15:00:15	15:03:35	1.0	3.4	6.99	600.0	8.08	60.9	72.04	Still has a mild sewage smell
15:06:35	15:09:59	1.0	3.5	6.96	587.0	5.23	39.5	38.42	opaque, yellowish, sewage smell
15:16:45	15:19:35	1.0	3.0	6.93	589.0	2.47	18.3	17.09	Improving colour & clarity
15:26:05	15:28:16	1.0	3.2	6.93	585.0	2.15	16.0	19.80	yellowish, clearer, mild smell
15:38:15	15:40:30	1.0	3.0	6.95	587.0	2.01	15.0	18.50	yellowish, mild smell

SAMPLING DATA (INPUT THESE INTO EQUIS)

SAMPLE TIME: 15:45	SAMPLE DEPTH (M): 2.00 m	VISIBLE SHEEN? N	WATER CLARITY: slightly turbid

FINAL YSI RESULTS

LOG TIME	TOTAL VOLUME PURGED	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)
15:41	8L	3.0	6.95	587	2.01	15.0	18.50	mild sewage smell, yellowish & slightly opaque

NOTES: Well cap was stuck on casing → had to be hammered off → no damage to well casing. Purging had to be paused occasionally due to low water level.

Purge log 1 = 14:46
Purge log 2 = 14:54
Purge log 3 = 14:59
Purge log 4 = 15:06
Purge log 5 = 15:13
Purge log 6 = 15:22
Purge log 7 = 15:31
Purge log 8 15:41

* Brown sediment with apparent oil slick noticed @ bottom of LDPE tubing upon removal see photo 0297 *

YSI site name = LF GW

GROUNDWATER SAMPLING FIELD SHEET

WELL/SAMPLE ID: LF-KP23-01	CAMERA #: 26	PHOTOS: 0298-0300
DATE: 26-Aug-2025	ARRIVAL TIME: 16:10	TECHS: LG
WEATHER: 2°C, Mostly cloudy, Windy	WELL STATUS: cap not placed in well casing	

PURGING DATA

WELL DIAMETER (INCHES): 1"	DEPTH TO WATER (M): 1.576	DEPTH TO BOTTOM (M): 2.495 (corrected depth = 2.575)
STICK UP/MAGS (M): 1.093	TIME OF DTW MEASUREMENT: 16:22:00	TIME OF DTB MEASUREMENT: 16:22:45

WELL DIAMETER QUICK CONVERSION

CONVERTS WELL DIAMETER TO πr^2	3/4" DIAMETER PIEZOMETER	1" DIAMETER PVC	2" DIAMETER PVC
	0.000285 meters	0.000507 meters	0.002027 meters

SINGLE WELL VOLUME FORMULA (USE CONVERSION VALUE IN EQUATION)

1 WELL VOLUME = (0.000507) X [(2.495) - (1.576)] X 1000 = 0.465 Litres

MULTIPLY ABOVE ANSWER BY 3 TO GET MINIMUM REQUIRED PURGING VOLUME

MINIMUM REQUIRED PURGING VOLUME = 1.39 L → rounded to 1.5 L

YSI FIELD PARAMETERS:

PURGING START TIME	PURGING END TIME	VOLUME PURGED (litres)	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)
<500ML / MINUTE		1 WELL VOL	±0.2°C	±0.1	±3%	±0.2 mg/L or ±10% (whichever is greater)		±10%	OPAQUE, CLEAR, SHEEN
16:36:55	16:39:10	0.5	2.7	6.85	476.2	4.07	30.1	7.45	clear, no smell
16:41:45	16:43:10	0.5	2.1	6.94	458.2	8.00	58.6	21.71	slightly more turbid/opaque
16:46:00	16:47:32	0.5	2.1	6.96	441.8	8.75	63.4	8.97	yellowish, mild opaque
16:48:58	16:50:40	0.5	2.0	6.99	435.2	9.42	68.0	5.48	clearer, slightly opaque
16:52:38	16:54:22	0.5	2.1	7.02	431.0	9.85	71.5	3.62	slightly opaque, no odor
16:56:15	16:57:45	0.5	2.2	7.02	430.6	9.92	72.1	3.49	clear, no odor

SAMPLING DATA (INPUT THESE INTO EQUIS)

SAMPLE TIME: 17:00	SAMPLE DEPTH (M): 2.100	VISIBLE SHEEN? N	WATER CLARITY:

FINAL YSI RESULTS

LOG TIME	TOTAL VOLUME PURGED	TEMP (°C)	pH	SPC (µS/cm)	DO (mg/L)	DO (%)	TURBIDITY (NTU)	COLOUR or ODOR (describe)
16:58	3.0L	2.2	7.02	430.6	9.92	72.1	3.49	clear, no odor

NOTES:

YSI Log times

Purge log 1 = 16:40
Purge log 2 = 16:45
Purge log 3 = 16:48
Purge log 4 = 16:52
Purge log 5 = 16:55
Purge log 6 = 16:58