

Appendix 25

Whale Tail 2021 Thermal Report



WHALE TAIL PIT PROJECT

Thermal Monitoring Report 2021

In Accordance with
Project Certificate No. 008, T&C 14

Prepared by:
Agnico Eagle Mines Limited – Meadowbank Division

March 2022

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APPENDIX A: WHALE TAIL THERMAL MONITORING DATA

1 INTRODUCTION

Agnico Eagle Mines Limited – Meadowbank Division (Agnico Eagle) is developing the Whale Tail Pit Project (Project), a satellite deposit located on the Amaruq property, to continue mine operations and milling at Meadowbank Mine.

This document presents the Thermal Monitoring Report including the following mine facilities and natural locations as described in the Thermal Monitoring Plan:

- Whale Tail Waste rock storage facility (WRSF)
- Water management facilities including Whale Tail Dike, Mammoth Dike, IVR Dike, WRSF Dike, and the Whale Tail and IVR Attenuation Ponds
- Whale Tail Pit

The Thermal Monitoring Report provides the instrumentation data and their interpretation. Refer to the Thermal Monitoring Plan for a general description of the different facilities, the anticipated impact of operation of the facilities on the permafrost, and the general guidelines that are used to define instrumentation needs for each facility.

2 AVAILABLE DATA

There are currently 71 active thermistors at the Whale Tail Site project area.

The location, installation summary, and status of all the thermistors installed within the Whale Tail Project site are presented in the table in Appendix A. Figure 1 shows locations of active thermistors. Data are collected from the thermistors by data loggers every three hours or by using manual readout units.

Results of active thermistors are presented in Appendix A.

3 THERMAL MONITORING RESULT

This section presents a summary of the expected thermal effects as well as interpretation of the instrumentation data gathered for the reporting period.

3.1 WASTE ROCK STORAGE FACILITY

3.1.1 Expected Thermal Effects on Permafrost

Construction of the WRSF on the permafrost is expected to result in aggradation of permafrost into the pile. The permafrost under the pile would remain, but temperatures in the upper permafrost zone are expected to increase gradually until a thermal equilibrium is established with the active zone and zero-amplitude zone moving upward and being located within the waste rock pile. Convective cooling conditions often occur in waste piles and would potentially offset some of the temperature increase in the permafrost.

The waste rock pile itself is expected to freeze back with time and have an active layer formed on the upper portion (Okane 2019b). Climate change in the long term is expected to extend the depth of the active layer in the pile, but the thick waste rock pile will constitute a protection to the underlying permafrost. If heat generation occurs associated with the oxidation of sulphide-bearing minerals within the pile, the process of freeze-back would be delayed and, depending on the location of the heat generation source, the upper portion of the permafrost foundation could be impacted.

3.1.2 Thermal Monitoring Results

For the thermistors installed in the foundation of the WT WRSF, the instrumentation data is showing thermal behaviour along the expected trend (permafrost aggradation).

The instruments installed at mid-elevation in the PAG of the first bench are now covered in waste rock and lots of beads have been lost especially in the NAG. The available data indicate that the active layer did not reach the PAG waste rock.

For the instruments located in the second instrumented cross section installed at 40 m above the ground elevation on top of the second bench, less than a year of data has been collected so its not possible to assess the extent of the active layer.

3.2 WATER MANAGEMENT FACILITIES

3.2.1 Expected Thermal Effects on Permafrost

The Whale Tail Dike is constructed within the lake where talik is anticipated to exist. The construction of the Whale Tail Dike is expected to have a cooling effect on the lake ground underneath the dike due to exposure to lower dike temperature than lake water. Minimal effects to the permafrost at the abutment areas are expected.

Following lake dewatering and the beginning of operations, areas downstream of the Whale Tail Dike are expected to freeze back progressively, and the upstream area of the dike is expected to remain unfrozen.

After the dike is breached in the final stages of closure, the Whale Tail Lake will be restored, causing frozen zones located downstream of the dike to thaw, progressively restoring the original lake talik.

The other dewatering dike areas are expected to have similar thermal impacts on the permafrost associated with construction, operation, and closure of the dikes.

The WRSF Dike will periodically contain a pond formed from water flowing out of the waste rock facility. Depending on pond depth and operational conditions there would be an impact with possible thawing of a shallow upper permafrost zone underlying the pond. However, due to the operational pond level that is normally maintained low to reduce the hydraulic gradient, this issue is unlikely.

The talik zone under the Whale Tail Attenuation Pond would remain, but the depth of the talik could be reduced as the Attenuation Pond is shallower than the existing lake at that location. The surrounding areas to the pond would freeze back progressively after dewatering but would restore to talik condition after breaching of the dewatering dikes and flooding of the area.

As for the IVR Attenuation Pond, with the maximum water elevation of the pond above the former lake elevation, some minor localized thawing of the permafrost is expected to occur in areas never exposed to water before outside of the dike footprint.

3.2.2 Thermal Monitoring Results

Mammoth Dike

The instrumentation data are showing thermal behaviour along the expected trend at Mammoth Dike with an active layer contained in the rockfill shell and the foundation and key trench are in permafrost condition.

WRSF Dike

A degradation of the thermal condition in the key trench of WRSF Dike was observed in the summer of 2019 leading to seepage. In 2021, the instruments show that the foundation and key trench remained frozen all year long with sign of permafrost aggradation which indicate that the mitigation measures implemented in 2020 were successful. The active layer is contained within the rockfill or upper portion of the key trench at most.

Whale Tail Dike

The trend of permafrost degradation at the abutments did not continue in 2021. No new zone of permafrost degradation were observed in the instruments, while the trends observed in 2020 remained similar which could signify that the thermal regime following the dike construction and the South Whale Tail Channel commissioning has reached a steady state.

The thermistors show that limited freeze back is happening in deep bedrock in some areas (0+142, 0+260, 0+360, 0+407, 0+500, 0+520, 0+530, 0+607, 0+618).

IVR Dike D-1

The thermistors installed in IVR Dike D-1 show that there is a 2m active layer contained within the rockfill portion or in the overburden, while the key trench, filters system, and bedrock remained in permafrost for the entire 2021 period.

3.3 OPEN PIT

3.3.1 Expected Effects on Permafrost

Whale Tail Pit will be excavated through an upper closed talik zone and underlying permafrost. During operations of the pit the talik zone is expected to freeze back progressively and the lower permafrost zone surrounding the pit walls will, in general, experience a reduction in temperature other than at a shallow active zone adjacent to the pit walls subjected to seasonal thawing during summer.

Upon closure and subsequent flooding of the Whale Tail Pit, permafrost areas underneath the pit lake are expected to gradually thaw. Thermal assessments have indicated this process would take hundreds of years (Golder, 2018). The pit lake would eventually reduce the permafrost depth in the pit surrounding ground, but this process could take significantly longer time (in the order of 10,000 years) to complete.

IVR Pit is excavated through permafrost and as a result the mining activities are not expected to impact the thermal regime of that area.

3.3.2 Thermal Monitoring Results

Thermistors have been installed in 2020 in the talik zone near the south wall of the Whale Tail Pit. Through the year 2021 until their dismantling in August it was possible to observe a freezing of the upper bedrock area.

The previous thermistors installed in the IVR area are no longer functioning due to mining activity in the sector but were showing permafrost until they stopped working. A deep thermistor has been installed in 2020 in that area (IVR long TH) and shows permafrost conditions down to 500 m below ground surface, to El. 9600 m (mining datum).

APPENDIX A – WHALE TAIL THERMAL MONITORING DATA

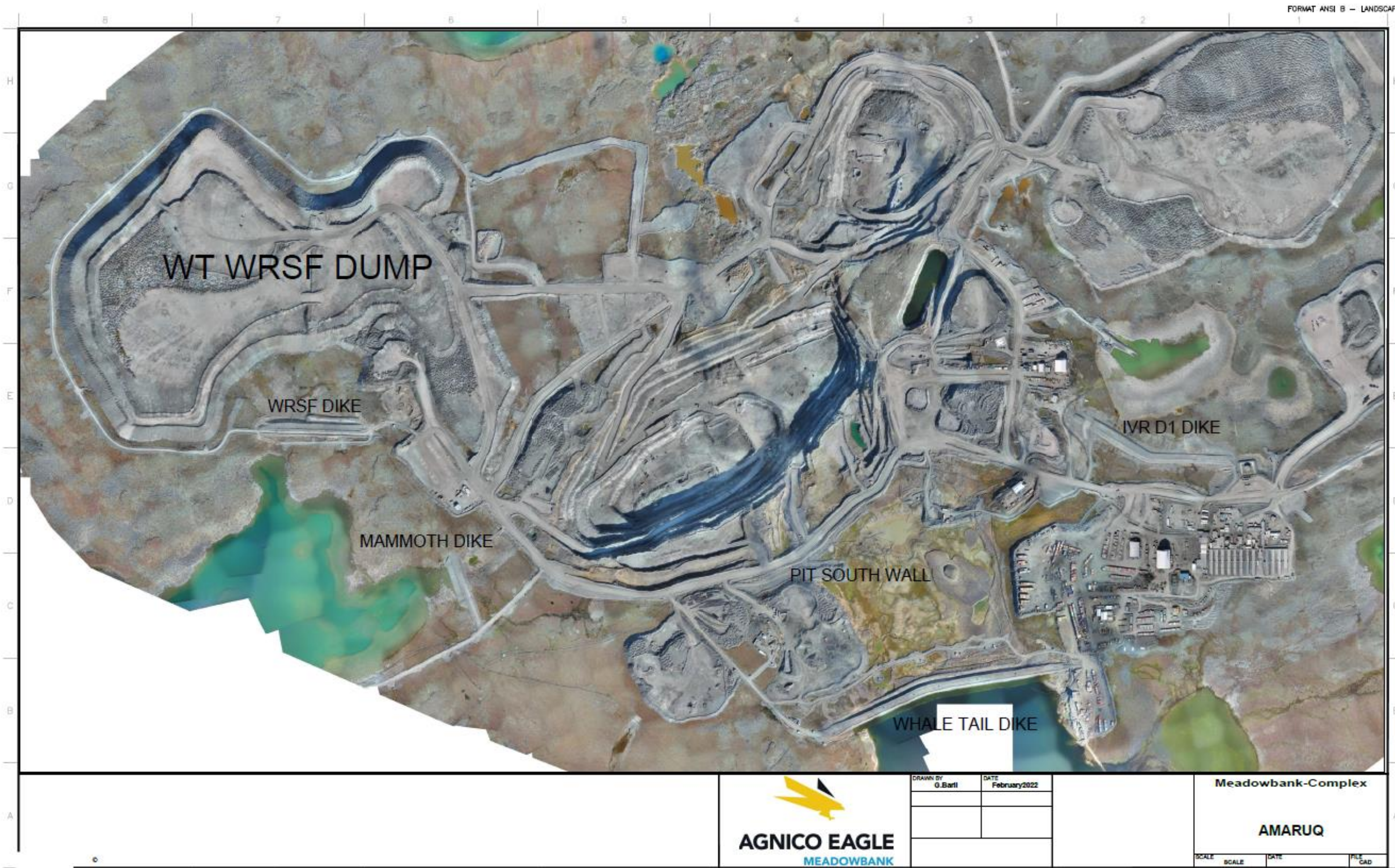


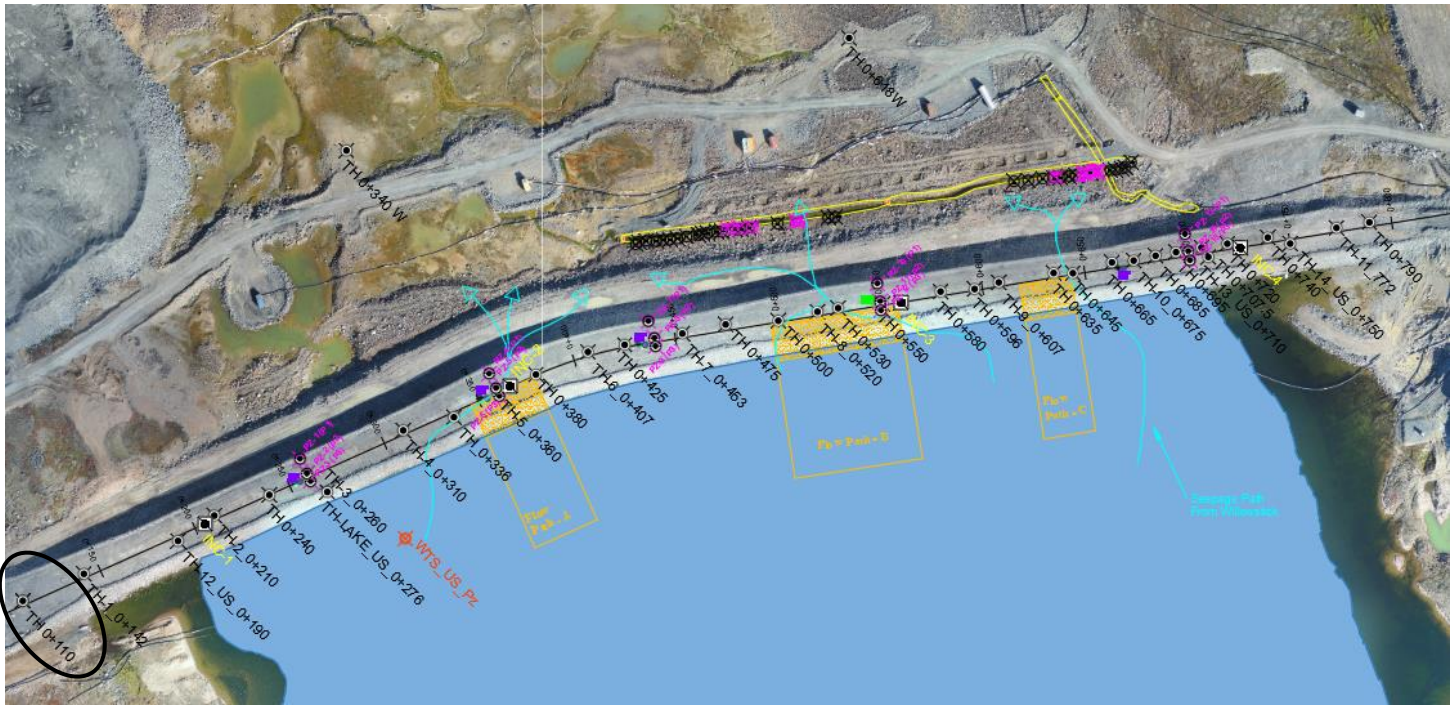
TABLE 1: Instruments Coordinates

<i>Line #</i>	<i>Name</i>	<i>Area</i>	<i>Easting (X)</i>	<i>Northing (Y)</i>	<i>Elevation (Z)</i>	<i>Azimuth</i>	<i>Dip</i>	<i>Installed</i>	<i>Active (Y) or (N)</i>
1	WTD 0+110	WTD	607090.500	7254625.000	156.40		-90	2020	Y (13/16) beads)
2	WTD 0+142	WTD	607119.94	7254637.98	156.75		-90	2018	Y
3	WTD 0+190 U/S	WTD	607165.34	7254653.83	157.42		-90	2018	Y (10/16) beads)
4	WTD 0+210	WTD	607182.85	7254666.19	157		-90	2018	Y
5	WTD 0+240	WTD	607209.40	7254676.80	158.1		-90	2020	Y
6	WTD 0+260	WTD	607227.51	7254686.28	157		-90	2018	Y
7	WTD 0+276 U/S	WTD	607237.2	7254677.3	157		-90	2018	Y
8	WTD 0+310	WTD	607237.98	7254707.09	157		-90	2018	Y
9	WTD 0+336 U/S	WTD	607298.44	7254713.45	157		-90	2018	Y
10	WTD 0+340 DS West	WTD	607246.597	7254841.993	149.6		-90	2020	Y
11	WTD 0+360	WTD	607318.81	7254727.15	157		-90	2018	Y
12	WTD-0+380	WTD	607338.0	7254734.4	157.1		-90	2020	Y
13	WTD 0+407	WTD	607363.08	7254744.86	157		-90	2018	Y
14	WTD-0+425	WTD	607380.8	7254380.8	158.5		-90	2020	Y
15	WTD 0+453	WTD	607408.60	7254753.72	157		-90	2018	Y
16	WTD 0+475	WTD	607429.5	7254758.2	161		-90	2020	Y
17	WTD 0+500	WTD	607454.9	7254759.9	157.1		-90	2020	Y
18	WTD 0+520	WTD	607473.78	7254764.22	157		-90	2018	Y
19	WTD 0+530	WTD	607483.77	7254766.00	159		-90	2020	Y
20	WTD 0+550	WTD	607505.20	7254768.00	157.9		-90	2020	Y
21	WTD 0+580	WTD	607533.163	7254773.95	158		-90	2020	Y
22	WTD 0+596	WTD	607549.60	7254775.20	157.8		-90	2020	Y
23	WTD 0+607	WTD	607561.24	7254778.35	157		-90	2018	Y
24	WTD 0+618 DS East	WTD	607548.9	7254905.6	152.1		-90	2020	Y
25	WTD 0+635	WTD	607587.7	7254782.9	158.3		-90	2020	Y
26	WTD 0+645	WTD	607597.30	7254782.8	158.6		-90	2020	Y
27	WTD 0+665	WTD	607617.0	7254788.0	158.3		-90	2020	Y
28	WTD 0+675	WTD	607262.31	7254788.86	157		-90	2018	Y
29	WTD 0+685	WTD	607636.9	7254791.2	160.5		-90	2020	Y
30	WTD 0+695	WTD	607646.7	7254792.9	157.5		-90	2020	Y
31	WTD 0+707.5	WTD	607659.0	7254795.1	158		-90	2020	Y
32	WTD 0+710 U/S	WTD	607662.32	7254790.63	157		-90	2018	Y
33	WTD 0+720	WTD	607671.5	7254797.1	160		-90	2020	Y
34	WTD 0+740	WTD	607691.0	7254800.0	160		-90	2020	Y
35	WTD 0+750	WTD	607701.81	7254797.04	157		-90	2018	Y
36	WTD 0+772 U/S	WTD	607724.15	7254804.63	157		-90	2018	Y
37	WTD 0+790	WTD	607740.0	7254807.3	157.2		-90	2020	Y

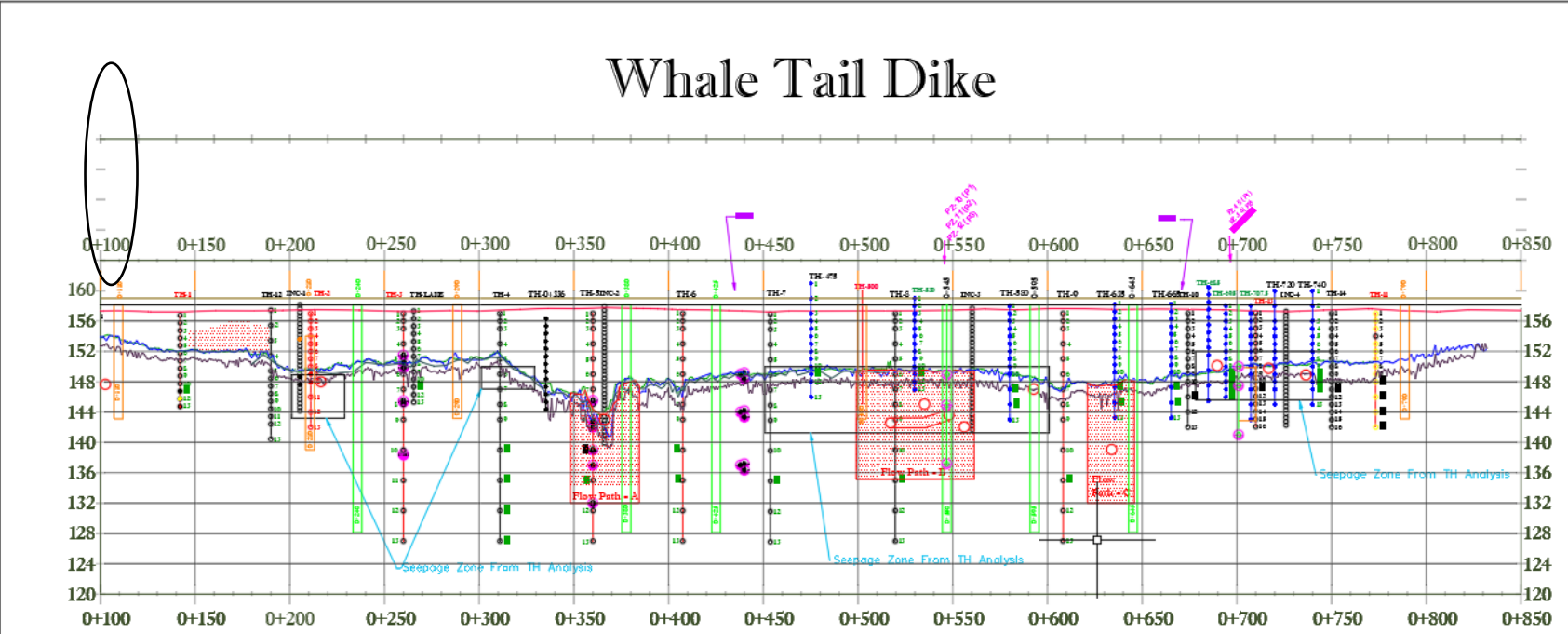
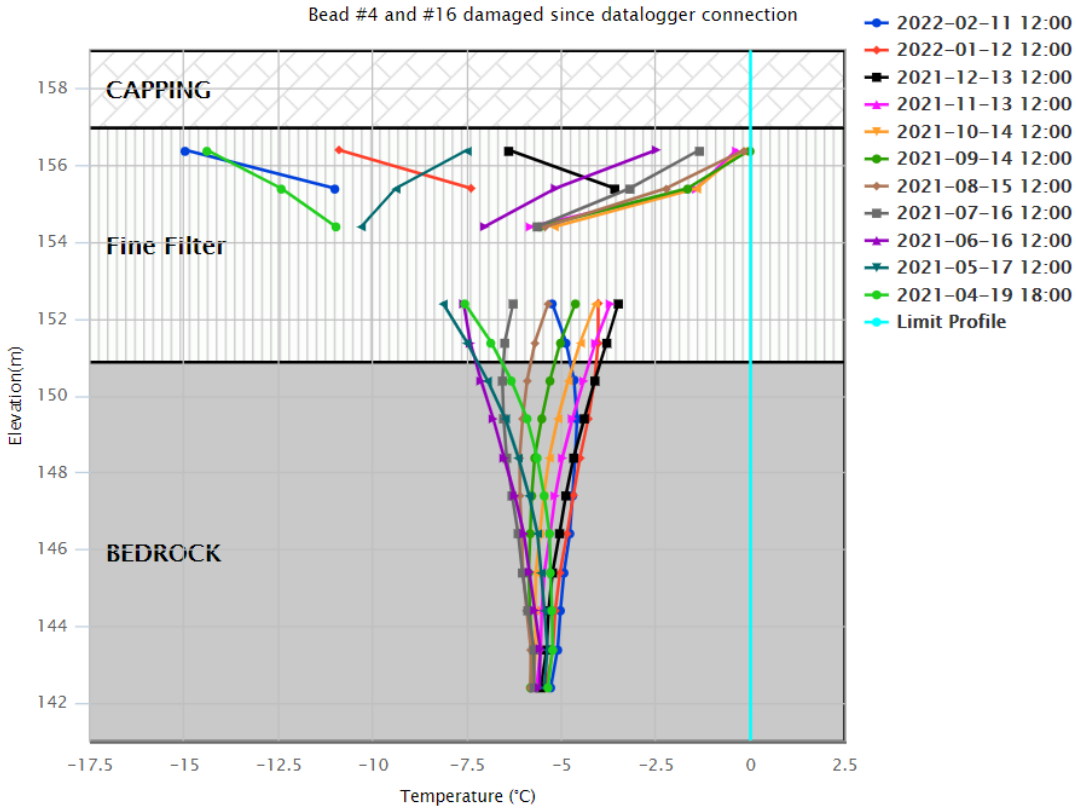
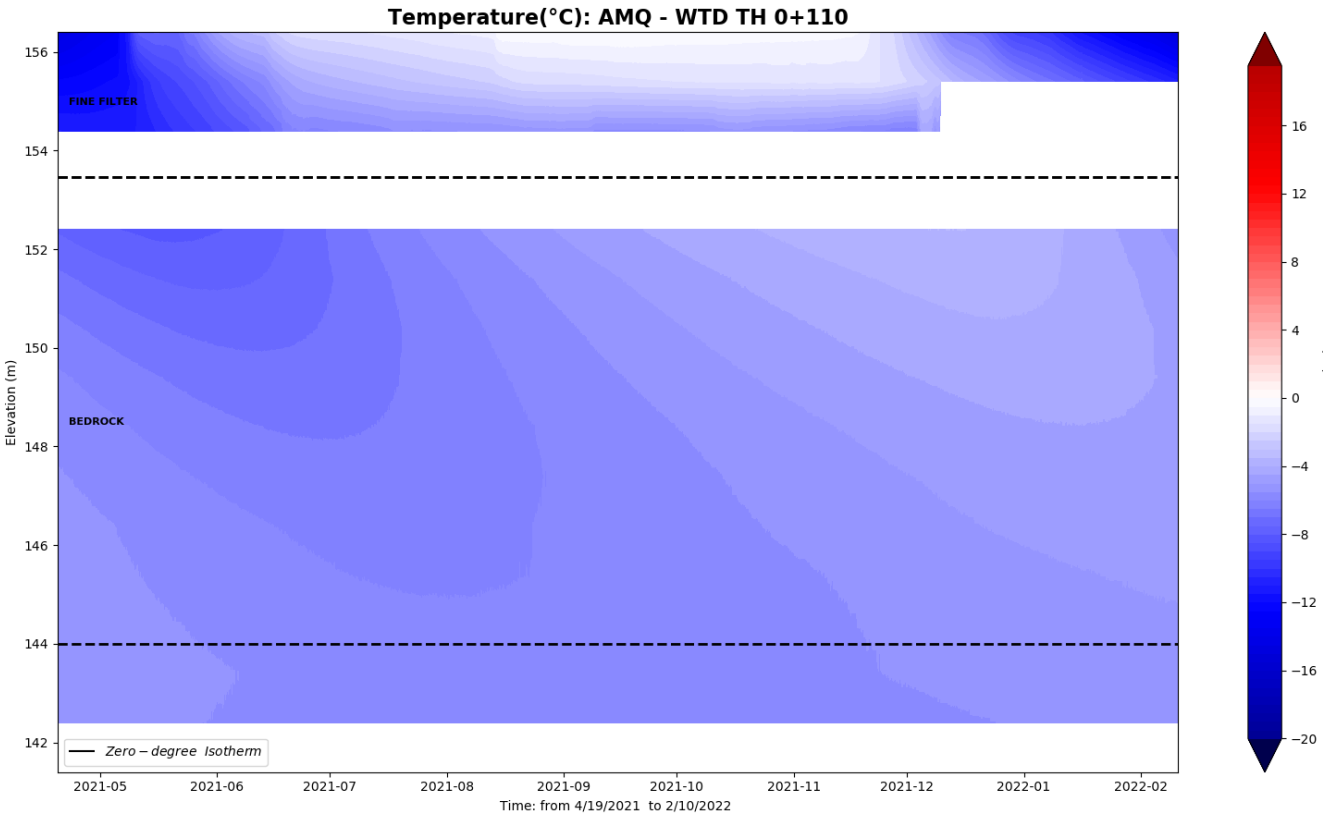
38	WT WRSF TH01	WRSF	615797.25	7238129.77	161.546		-90	2019	Y
39	WT WRSF TH02	WRSF	615861.49	7238133.24	162.053		-90	2019	N (since 2020)
40	WT WRSF TH03	WRSF	615814.31 to 615799.6	7238118.6 to 7238117	162.744 to 162.042		0	2019	Y (9/16) beads)
41	WT WRSF TH04	WRSF	615813.38 to 615797.7	7238134.1to 7238132.8	162.138 to 161.619		0	2019	Y (8/16) beads)
42	WT WRSF TH05	WRSF	615860.9 to 615800.3	71238133.3 to 7238126	162.202		0	2019	Y (9/16) beads)
43	WT WRSF TH06	WRSF	-	-	-		-	2021	NOT INSTALLED
44	WT WRSF TH07	WRSF	14041.823/822.075(AMQ)	14051.510/8232.486(AMQ)	199.6		0	2021	Y
45	WT WRSF TH08	WRSF	14029.392/14039.081(AMQ)	8227.543/8238.974(AMQ)	199.7		0	2021	Y
46	WT WRSF TH09	WRSF	14035.675/14189.86(AMQ)	8224.663/8407.910 (AMQ)	200.2		0	2021	Y
47	WT WRSF TH10	WRSF	14259.183 (AMQ)	8479.248 (AMQ)	199.484-195.386		-37	2021	Y
48	WT WRSF TH11	WRSF	14259.183	8479.249	198.637-168.637		0	2021	Y
49	WT WRSF TH12	WRSF	14241.323/14231.698 (AMQ)	8481.427/8469.988 (AMQ)	200.2		0	2021	Y
50	WT WRSF TH13	WRSF	14521.240/14241.576 (AMQ)	8471.614/8460.159 (AMQ)	200.1		-90	2021	Y
51	WT WRSF TH14	WRSF	14245.84/14101.278	8476.032/8304.453	200.2		0	2021	Y
52	WT WRSF TH15	WRSF	14254.017/14248.950	8481.414/8477.225	200.2		-37	2021	Y
53	WT WRSF TH16	WRSF	14259.183	8479.248	167.637-152.637		-90	2021	Y
54	MD-TH01	MD	Slope	Slope	-		Slope	2019	Y
55	MD-TH02	MD	605926.19	7255102.52	154.9		-90	2019	Y
56	MD-TH03	MD	605926.74	7255102.6	154.9		-90	2019	Y
57	WRSF TH01	WRSF Dike	Slope	Slope	-		Slope	2019	Y
58	WRSF TH02	WRSF Dike	605416.44	7255526.7	159.07		-90	2019	Y
59	WRSF TH03	WRSF Dike	605414.98	7255545.01	155.29		-90	2019	Y
60	WRSF TH04	WRSF Dike	605387.14	7255524.47	158.15		-90	2019	Y
61	WRSF TH05	WRSF Dike	605428.59	7255566.21	153.63		-90	2019	Y
62	WRSF TH06	WRSF Dike	605435.56	7255544.29	155.35		-90	2019	Y
63	WRSF TH07	WRSF Dike	605466.94	7255541.78	155.13		-90	2019	Y
64	WRSF TH08	WRSF Dike	605384.991	7255544.818	159.886		-90	2019	Y
65	WRSF TH09	WRSF Dike	605425.1	7255546.038	160.037		-90	2019	Y
66	PSW DH2 TH	Pit South Wall	606998.837	7255127.783	149.02		-90	2020	N
67	PSW DH3 TH	Pit South Wall	607016.336	7255140.383	148.041		-90	2020	N
68	PSW DH6 TH	Pit South Wall	607058.391	7255184.293	148.181		-90	2020	N
69	PSW DH7 TH	Pit South Wall	607070.111	7255198.772	148.734		-90	2020	N
70	PSW DH10 TH	Pit South Wall	607142.218	7255272.101	150.109		-90	2020	N
71	PSW DH11 TH	Pit South Wall	607155.955	7255287.46	151.241		-50	2020	N
72	PSW DH12 TH	Pit South Wall	607168.065	7255293.87	151.934		-50	2020	N

73	PSW DH13 TH	Pit South Wall	606980.7	7255276.8	145.398		-90	2020	N
74	PSW DH14 Th	Pit South Wall	606937.5	7255411.5	130.761		-90	2020	N
75	AMQ15-324	WT PIT	606496.8	7254995.2	161.79	323.41	-55.46	2015	N
76	AMQ17-1233	IVR	606778.0	7256254.0	162.0	252.71	-59.06	2017	N
77	AMQ17-1337	IVR	607078.0	7256522.0	x				
78	V651A	IVR	607624.208	7256122.348	10163.28		-69	2019	Y
79	BH-T2	IVR	607850.8	7255563.9	164.303		-90	2019	N
80	BH-4	IVR	608048	7255442	163.982		-90	2019	N
81	IVR D1 TH1	IVR D1	607909.036	7255508.205	164.486		Liner	2021	Y
82	IVR D1 TH2	IVR D1	607908.144	7255506.309	164.895		-90	2021	Y
83	IVR D1 TH3	IVR D1	607912.603	7255515.354	165.1		90	2021	Y
84	IVR D1 TH4	IVR D1	607906.637	7255503.624	165.76		90	2021	Y
85	IVR D1 TH5	IVR D1	607899.06	7255512.94	159.666		Key Trench	2021	Y
86	IVR D1 TH6	IVR D1	607923.8	7255480.4	162.08		90	2021	Y
87	IVR D1 TH7	IVR D1	607930.032	7255525.355	162.12		90	2021	Y

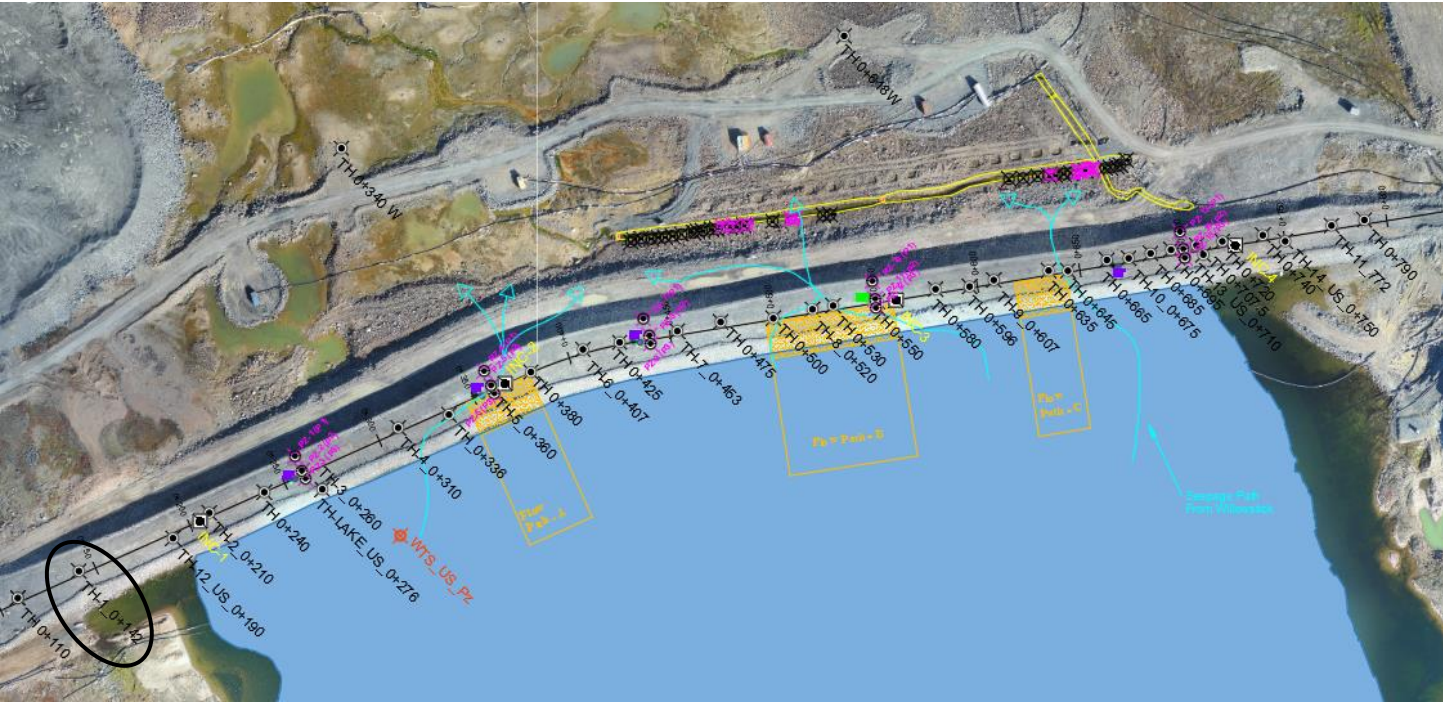
WTD-TH 0+110



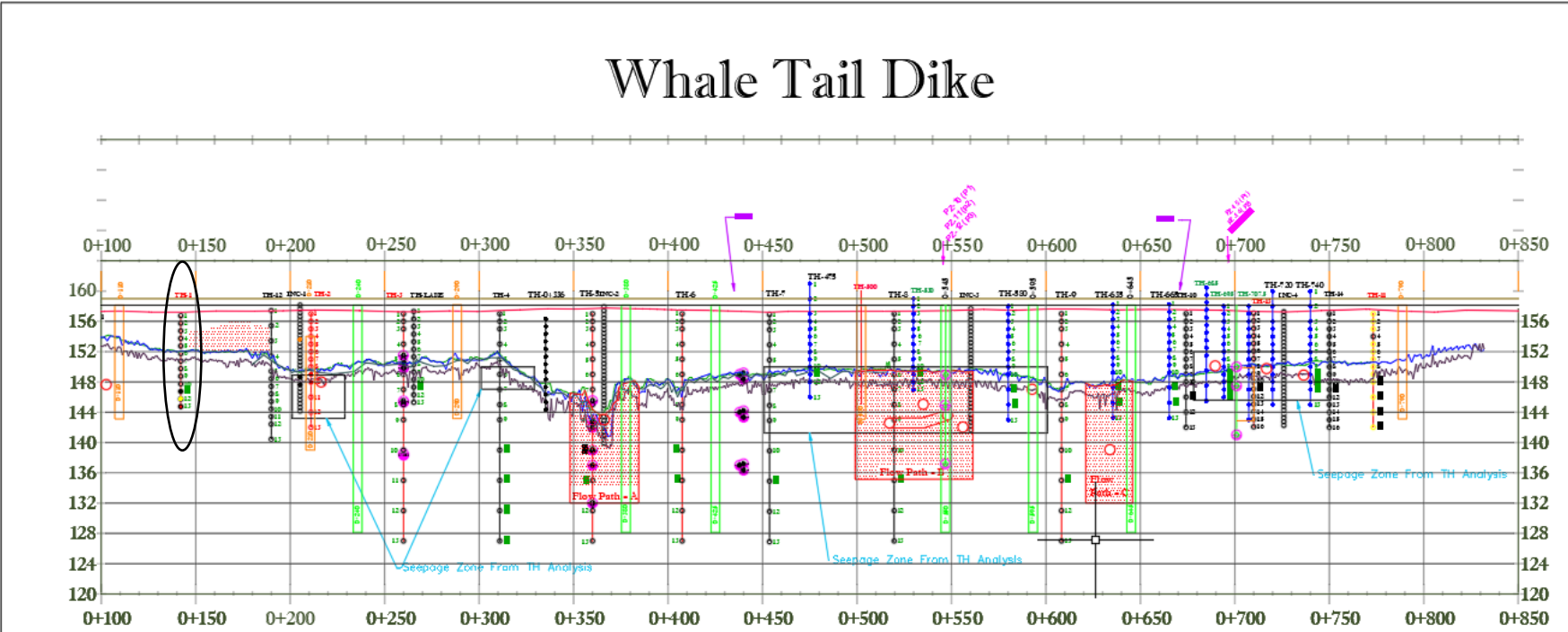
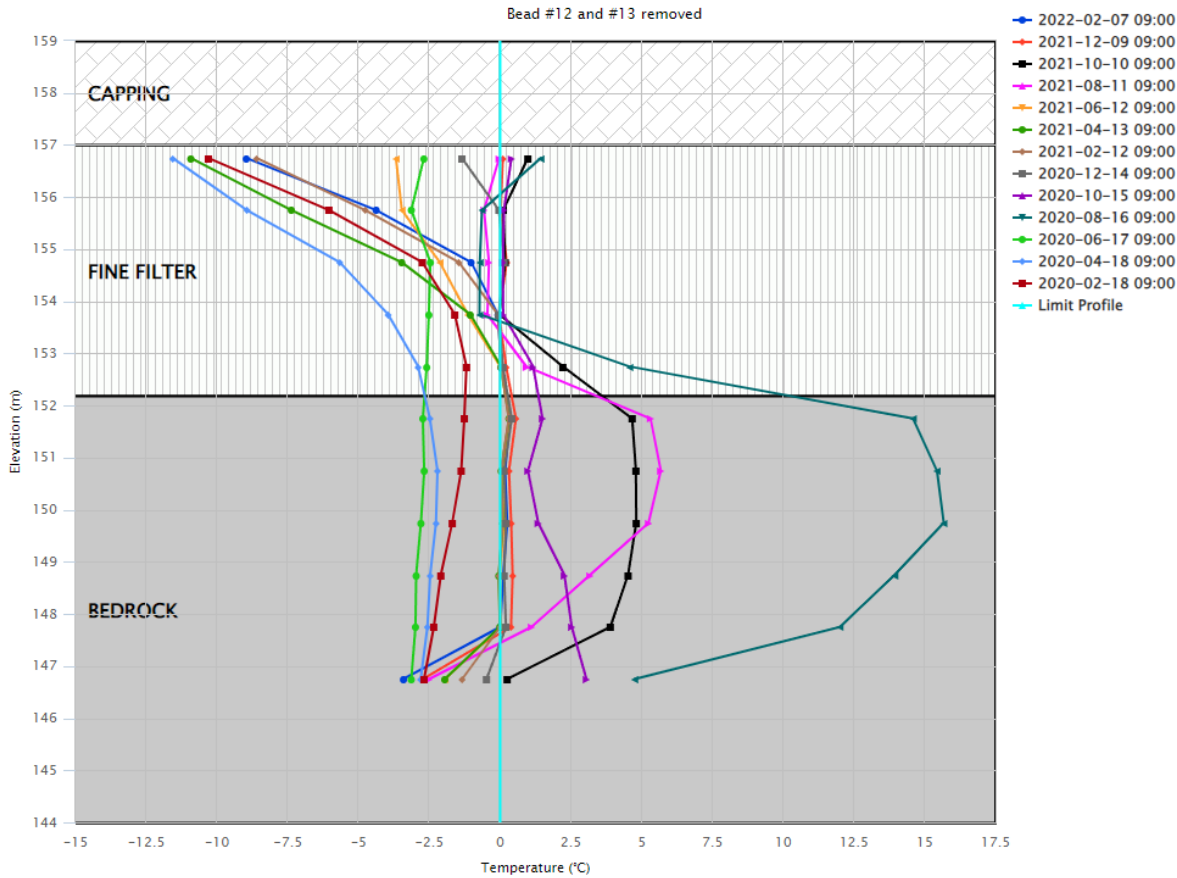
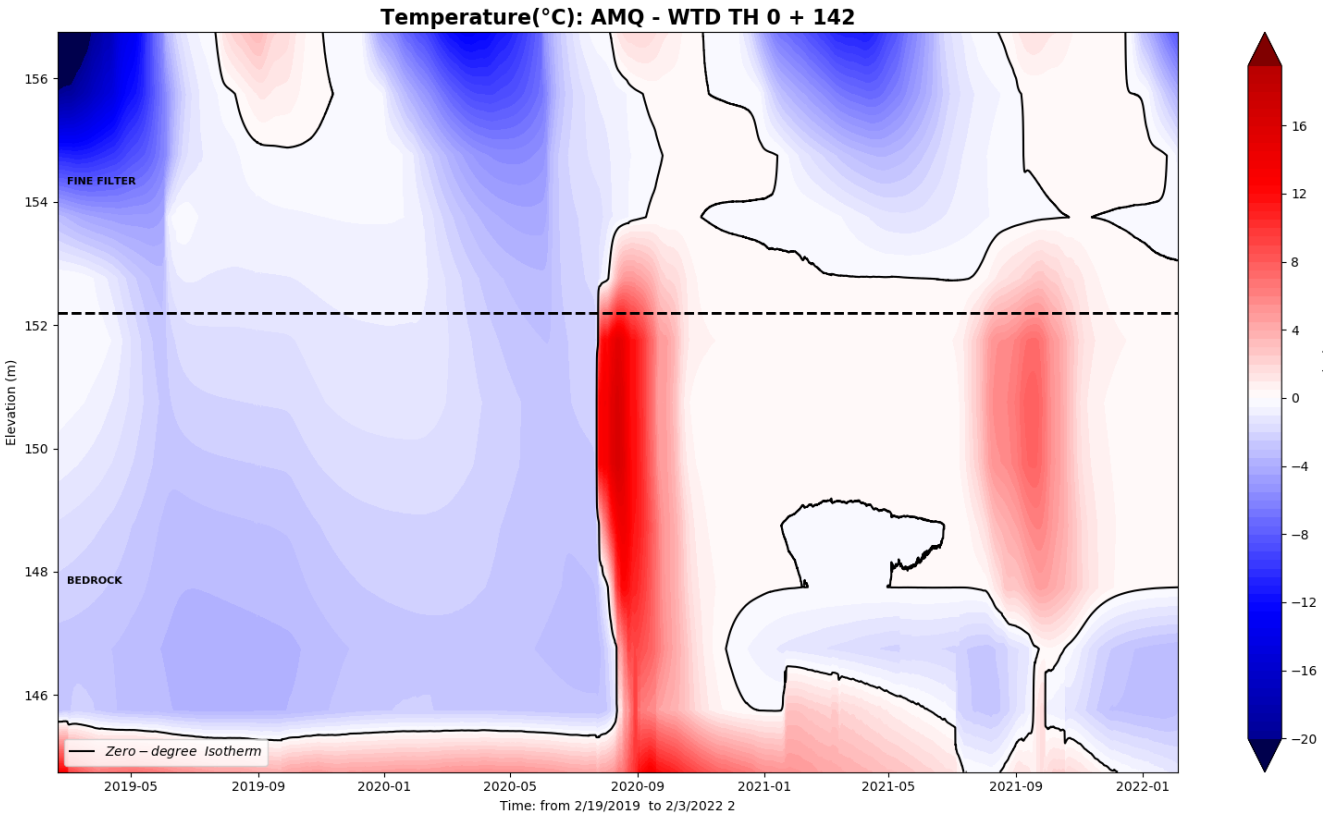
AMQ - WTD TH: 0+110



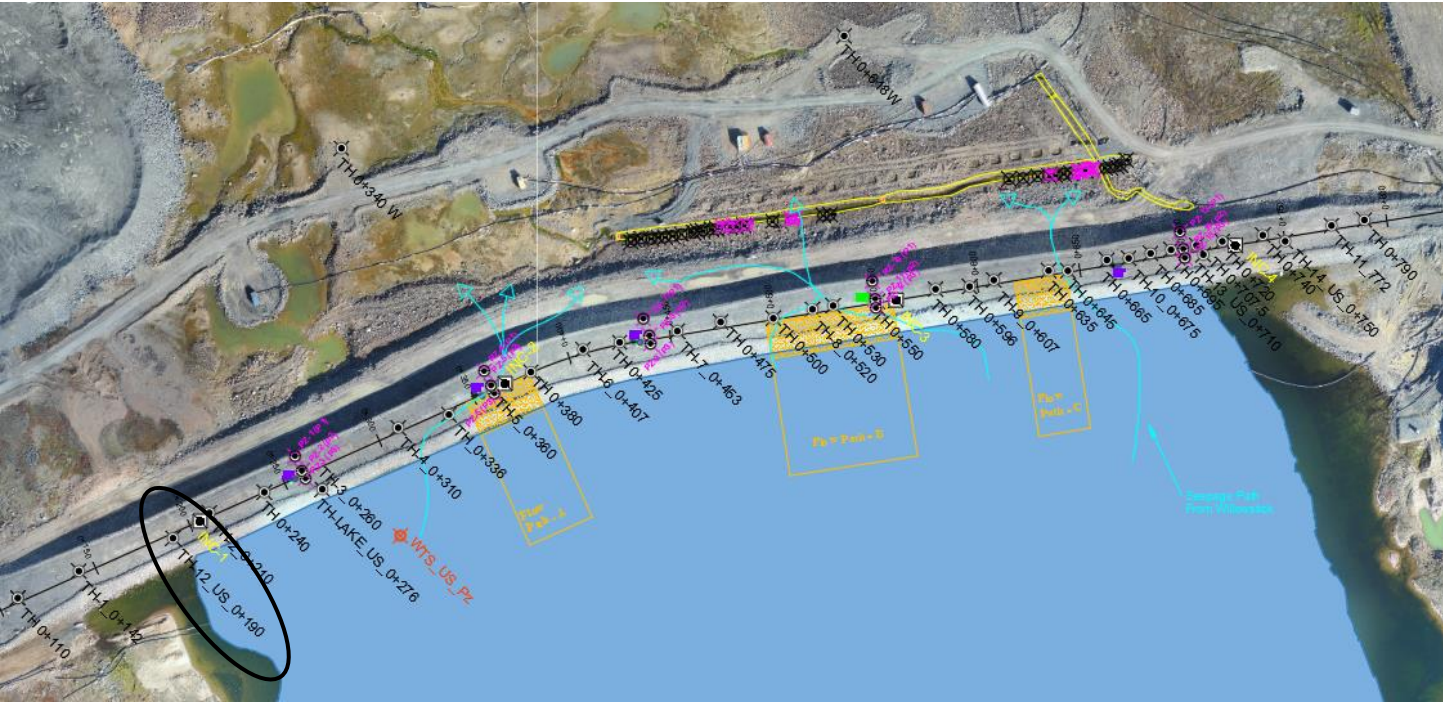
WTD-TH 0+142



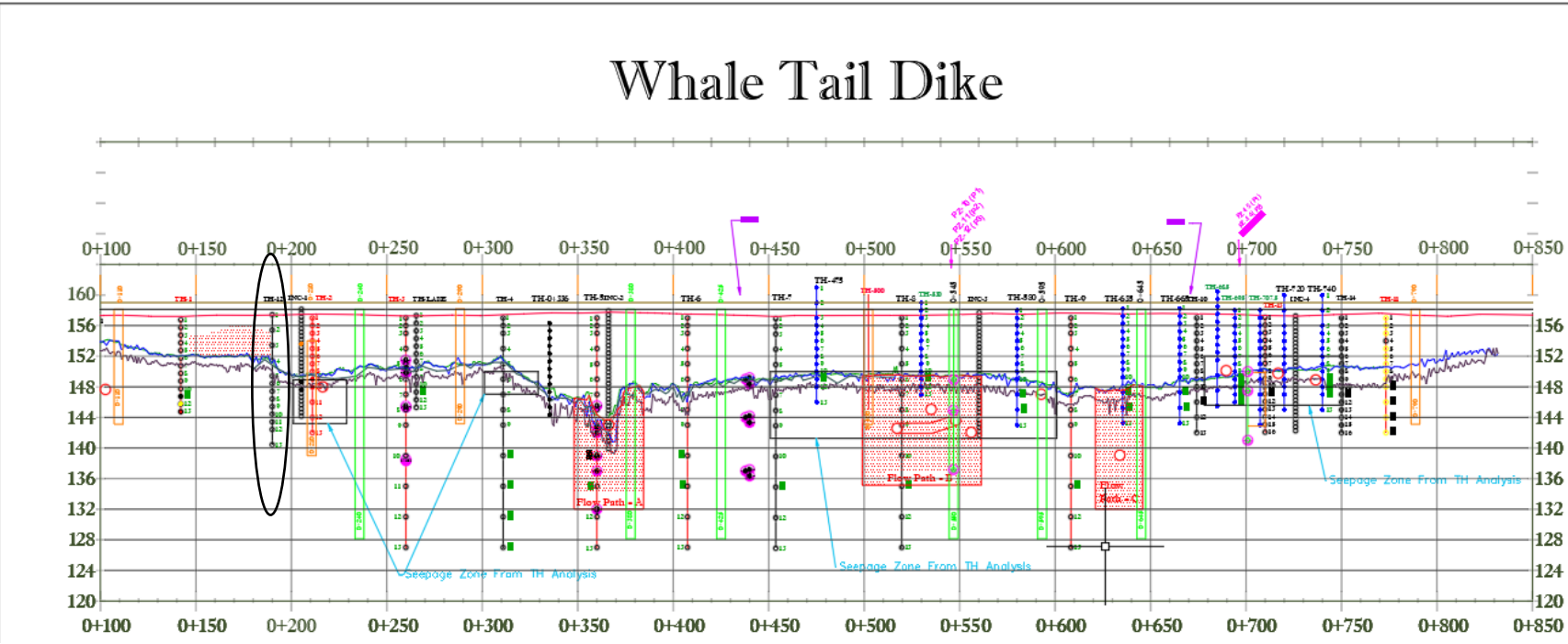
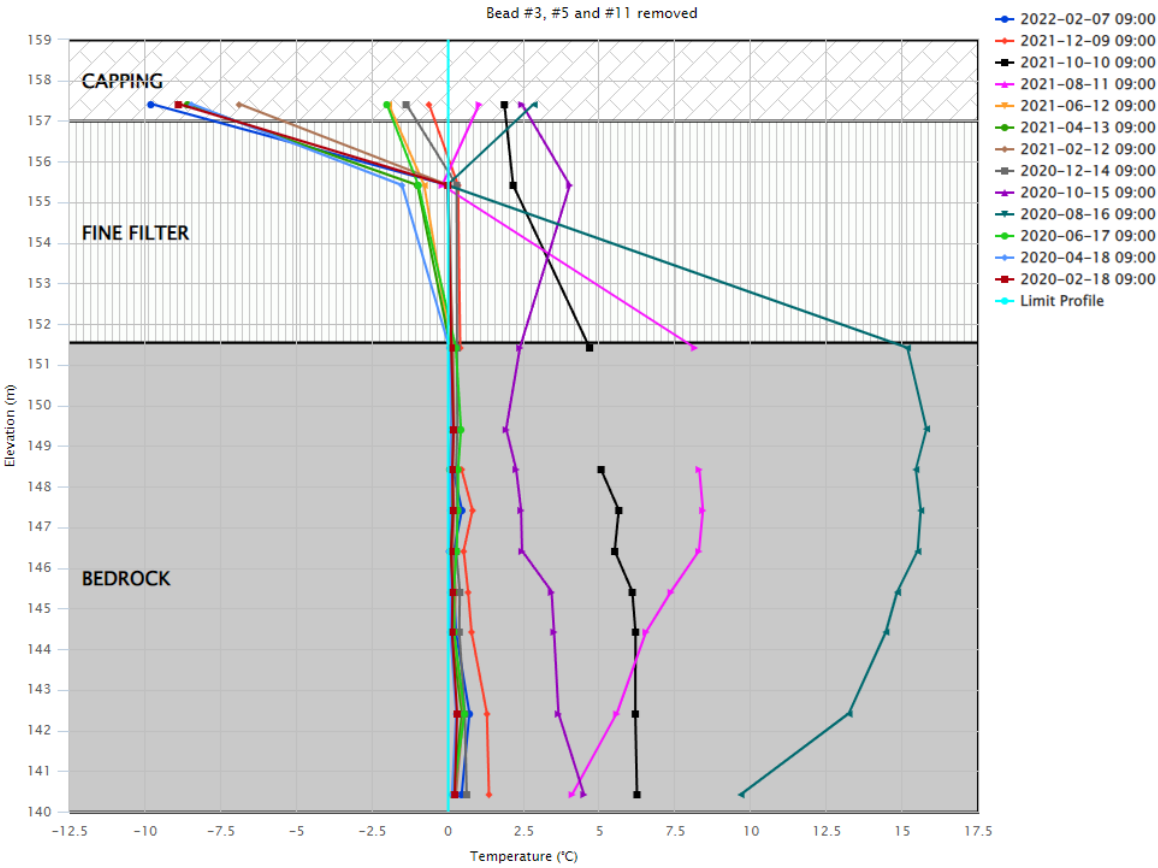
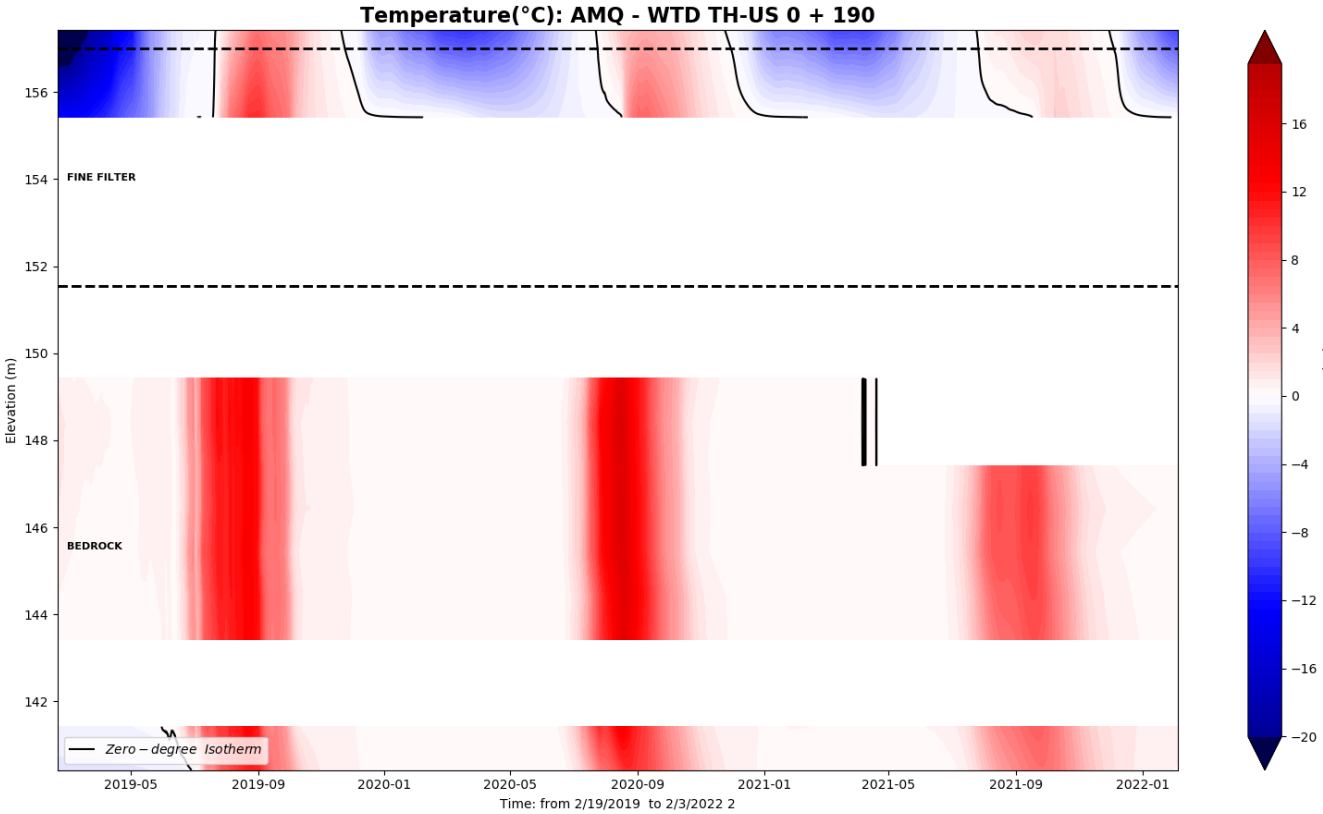
AMQ - WTD TH: 0+142



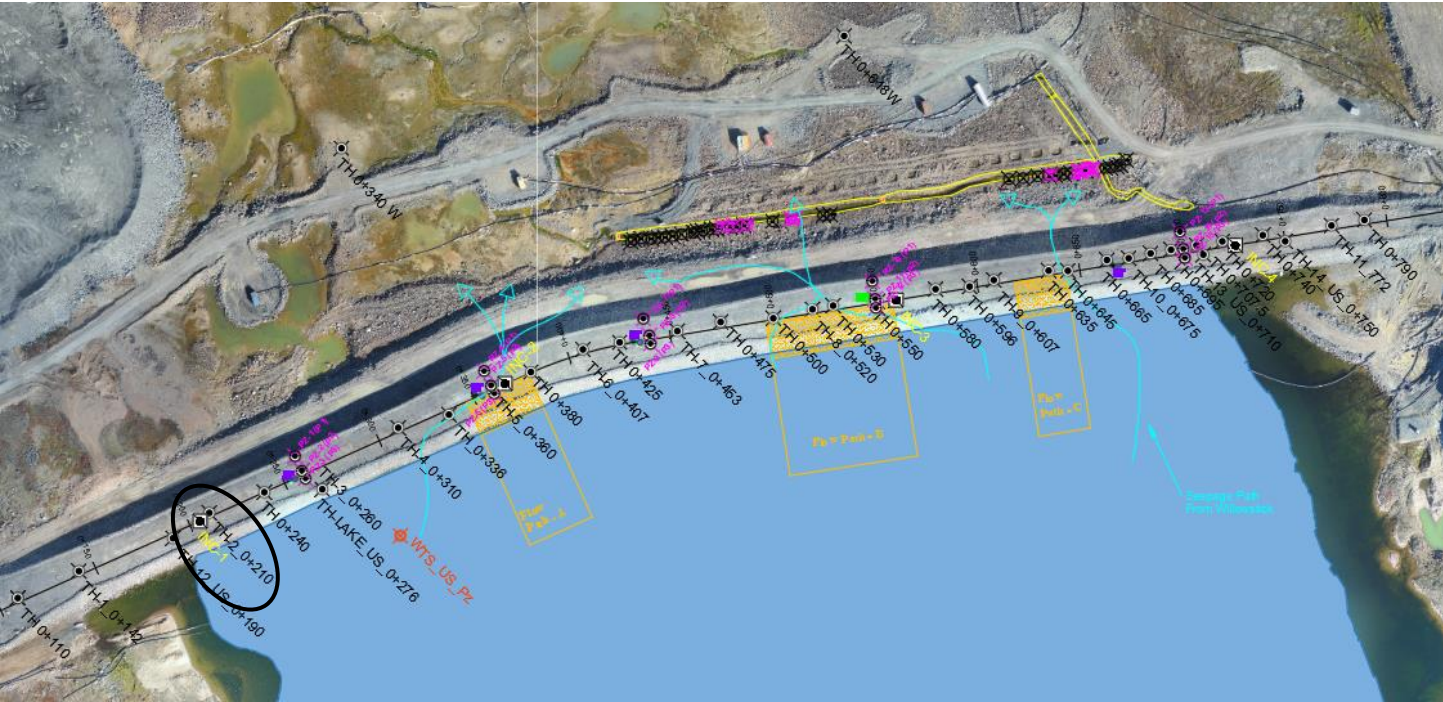
WTD-TH 0+190 U/S



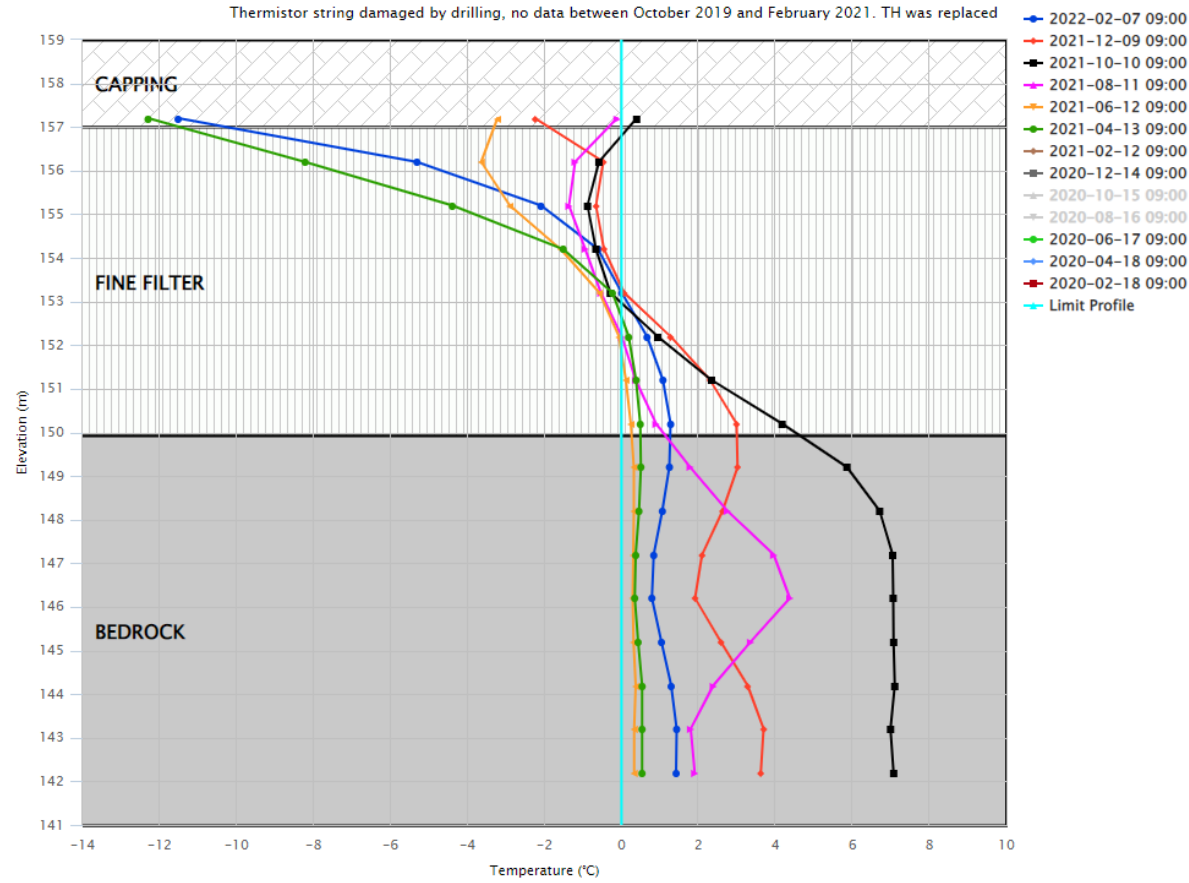
AMQ - WTD TH-US: 0+190



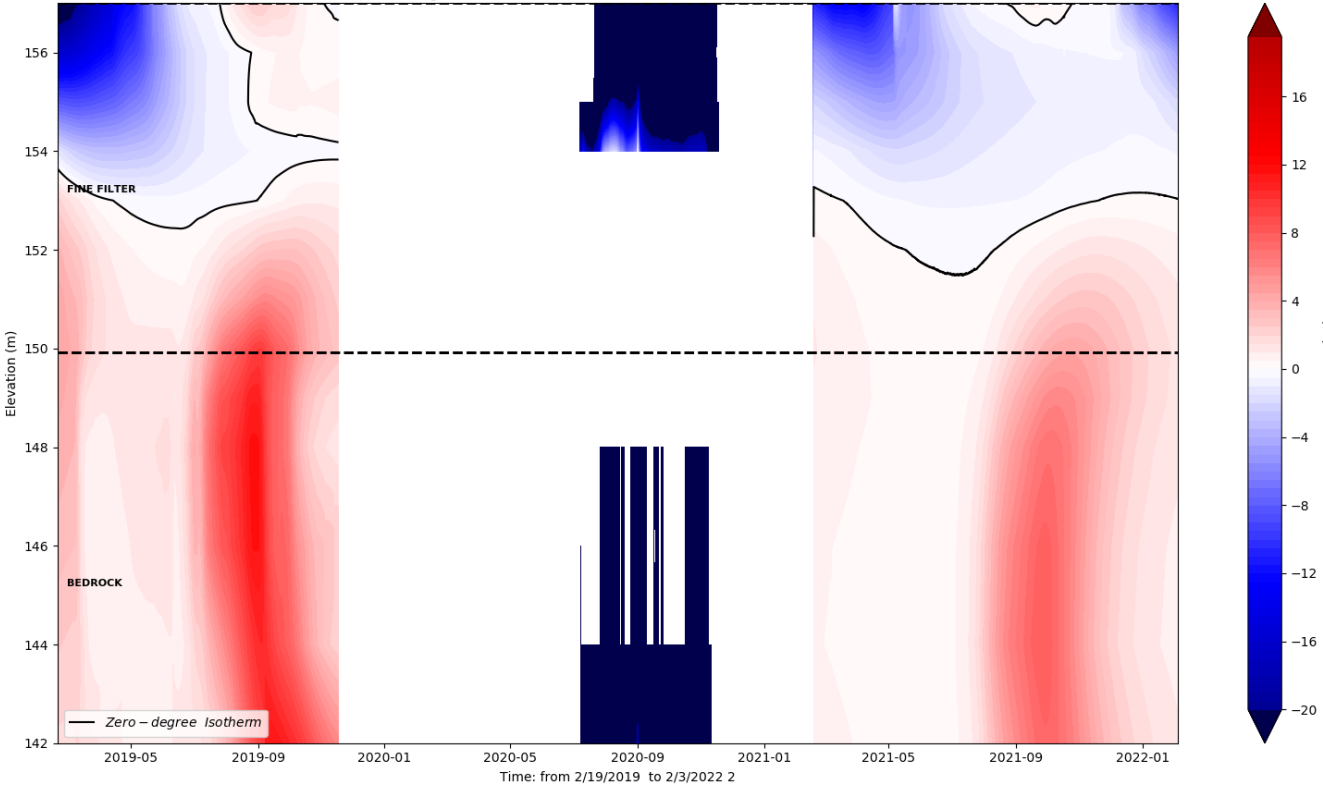
WTD-TH 0+210



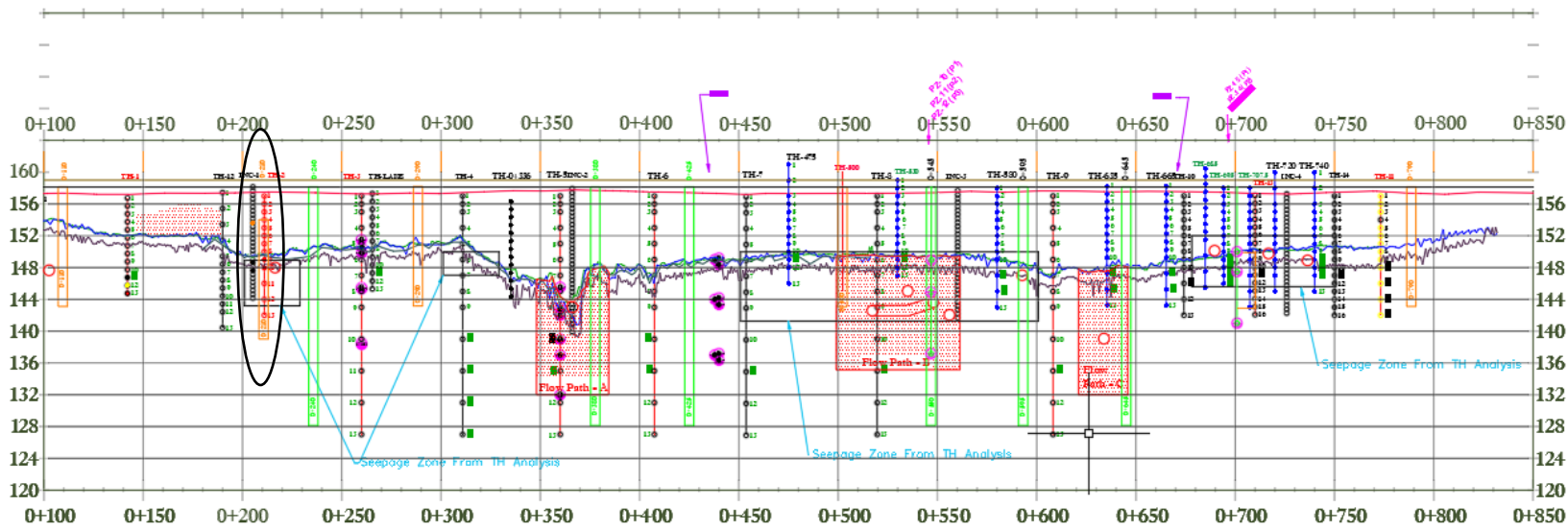
AMQ - WTD TH: 0+210



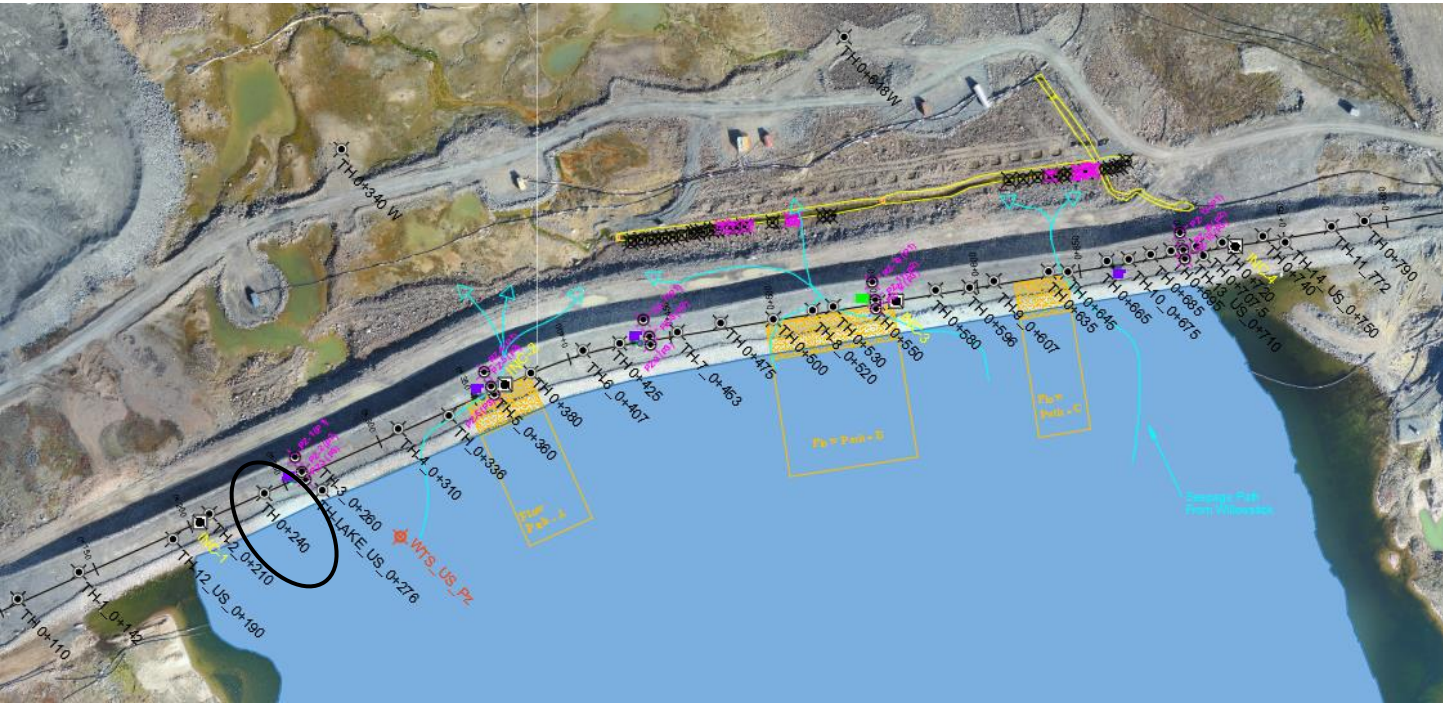
Temperature(°C): AMQ - WTD TH 0 + 210



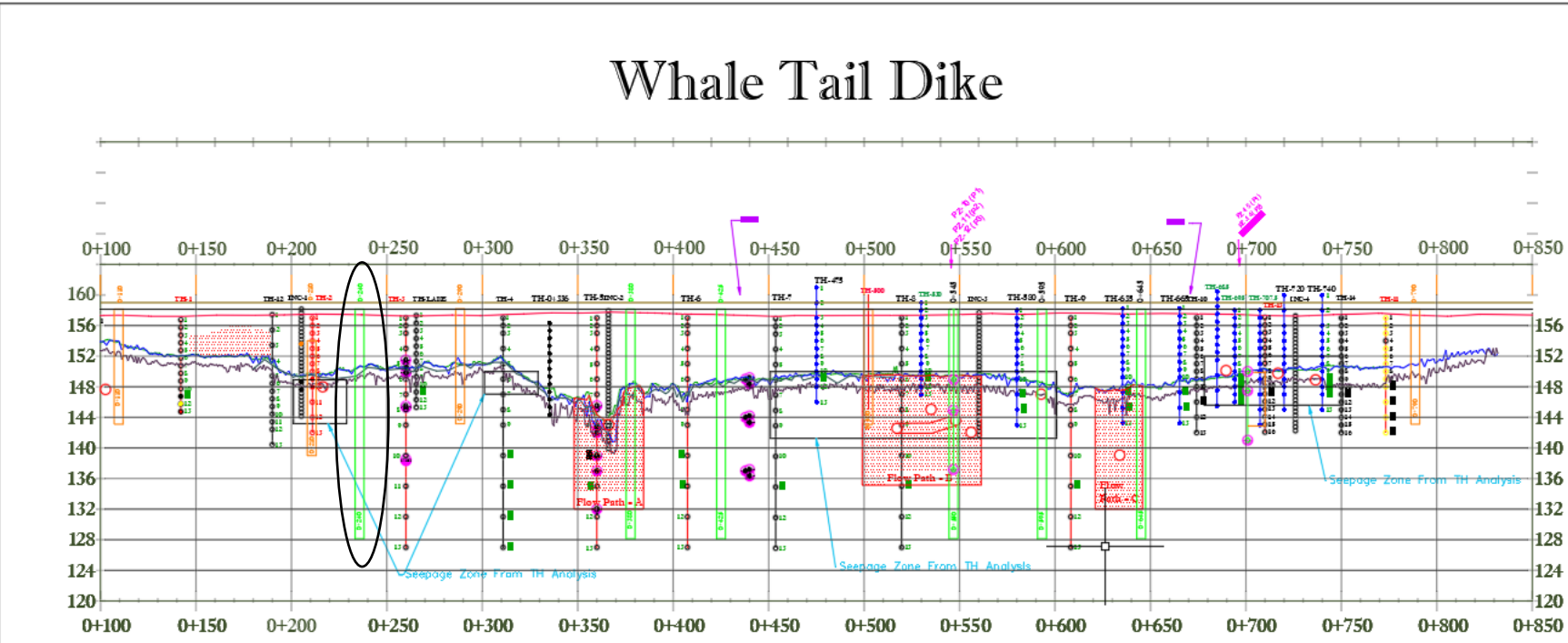
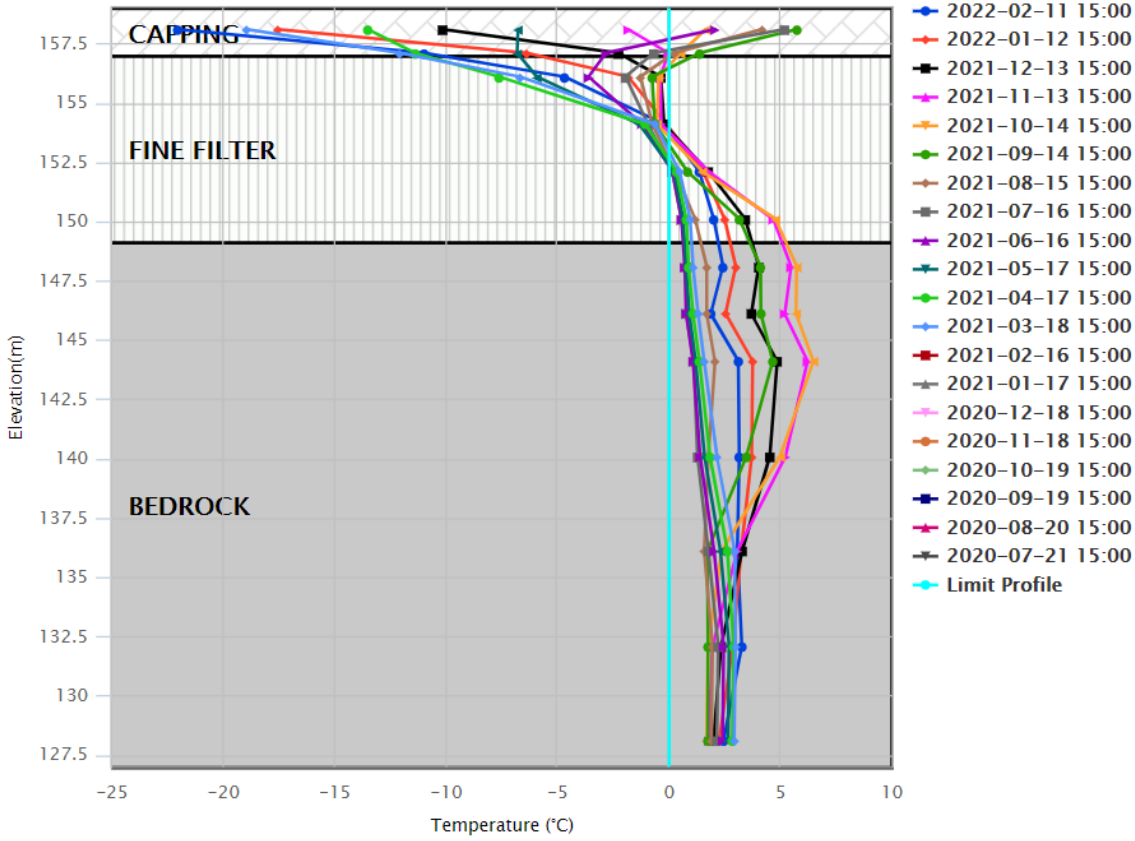
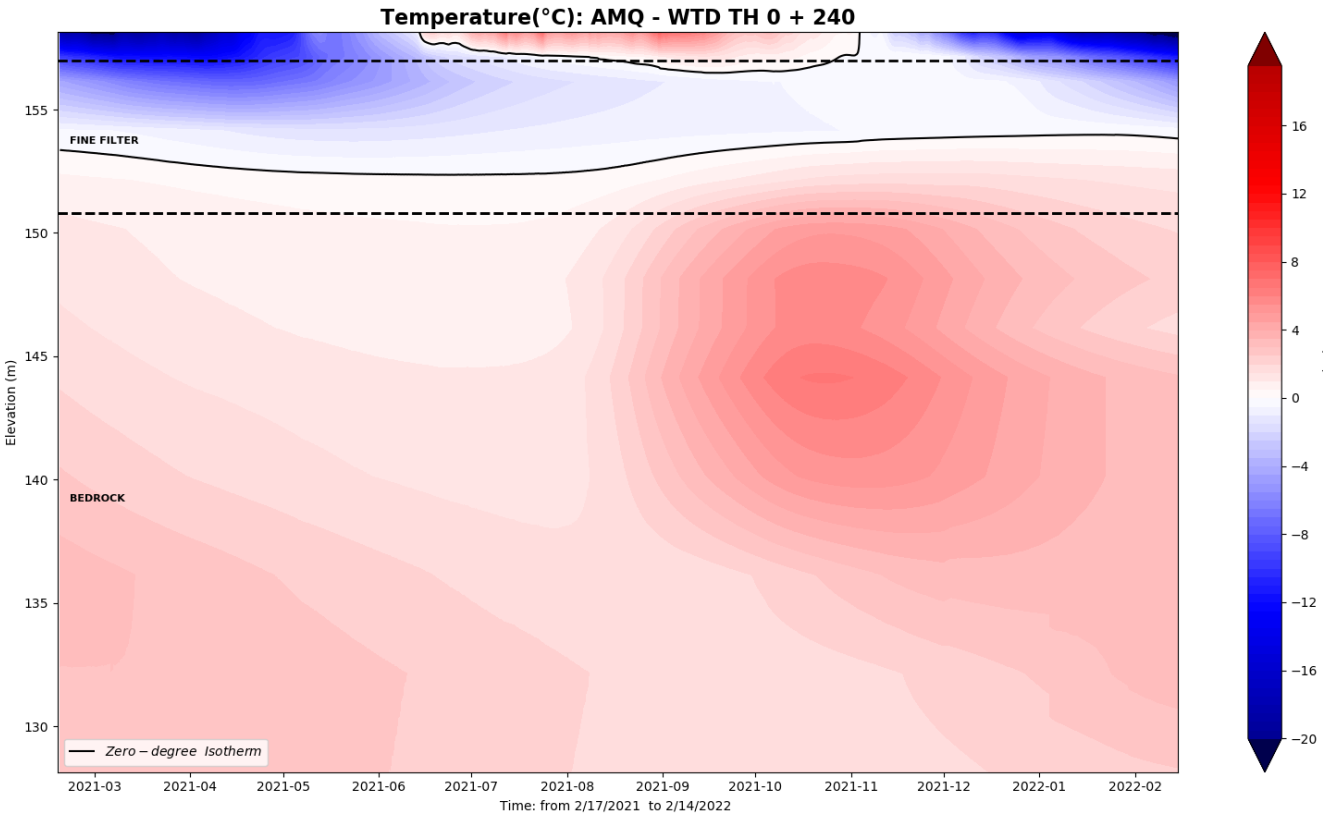
Whale Tail Dike



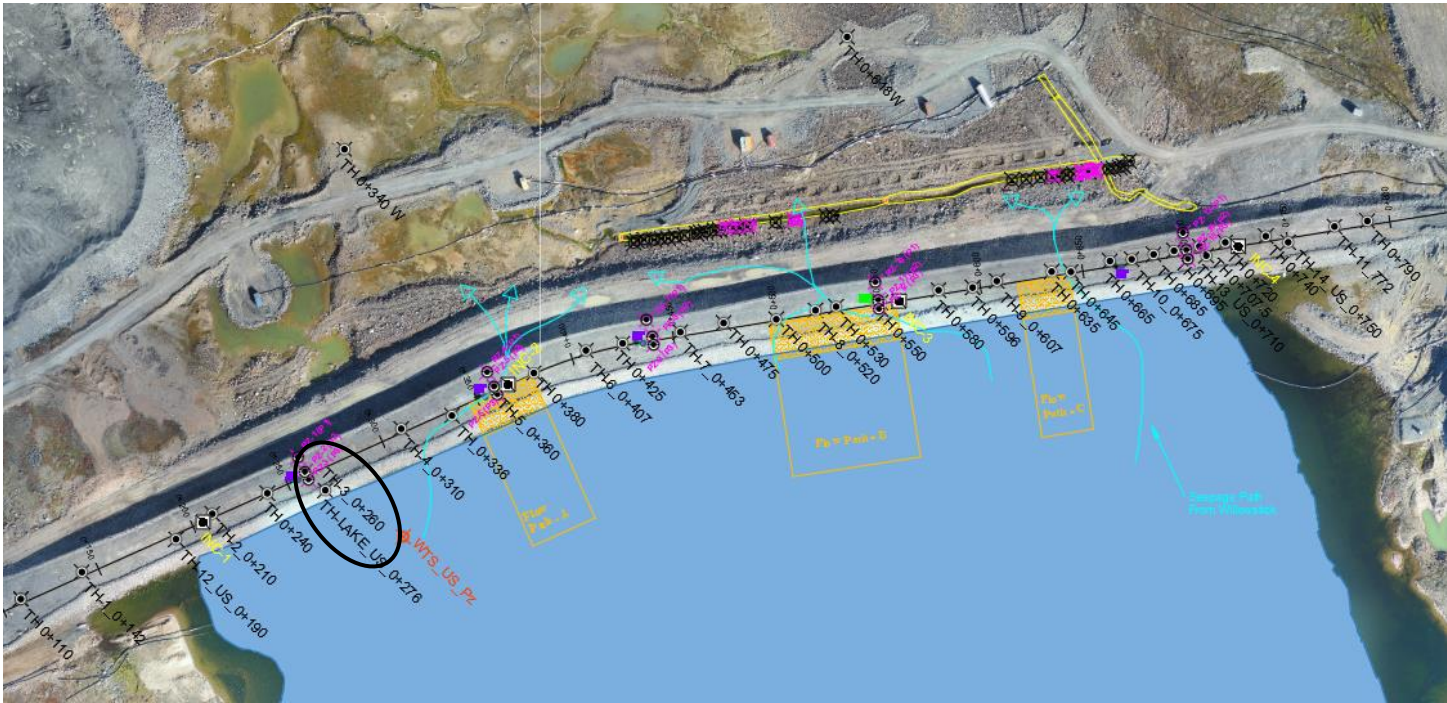
WTD-TH 0+240



AMQ - WTD TH: 0+240

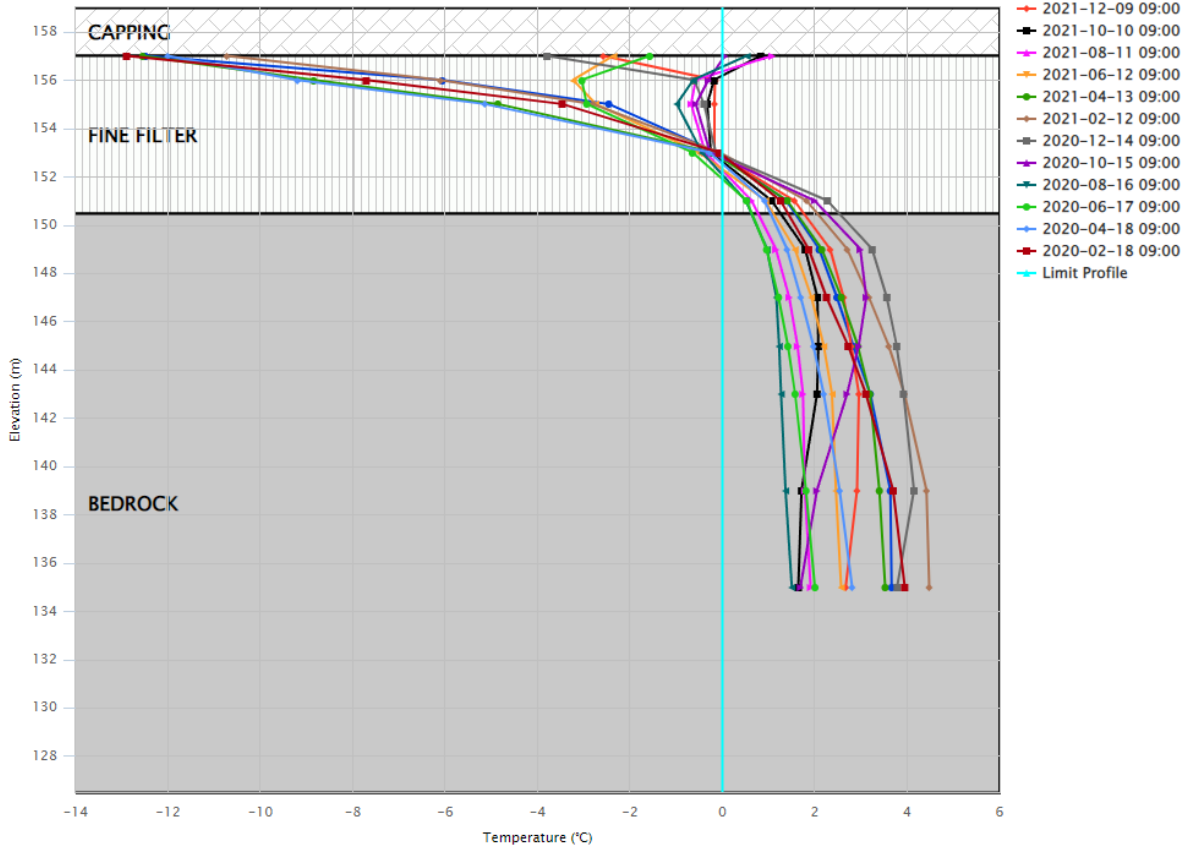


WTD-TH 0+260

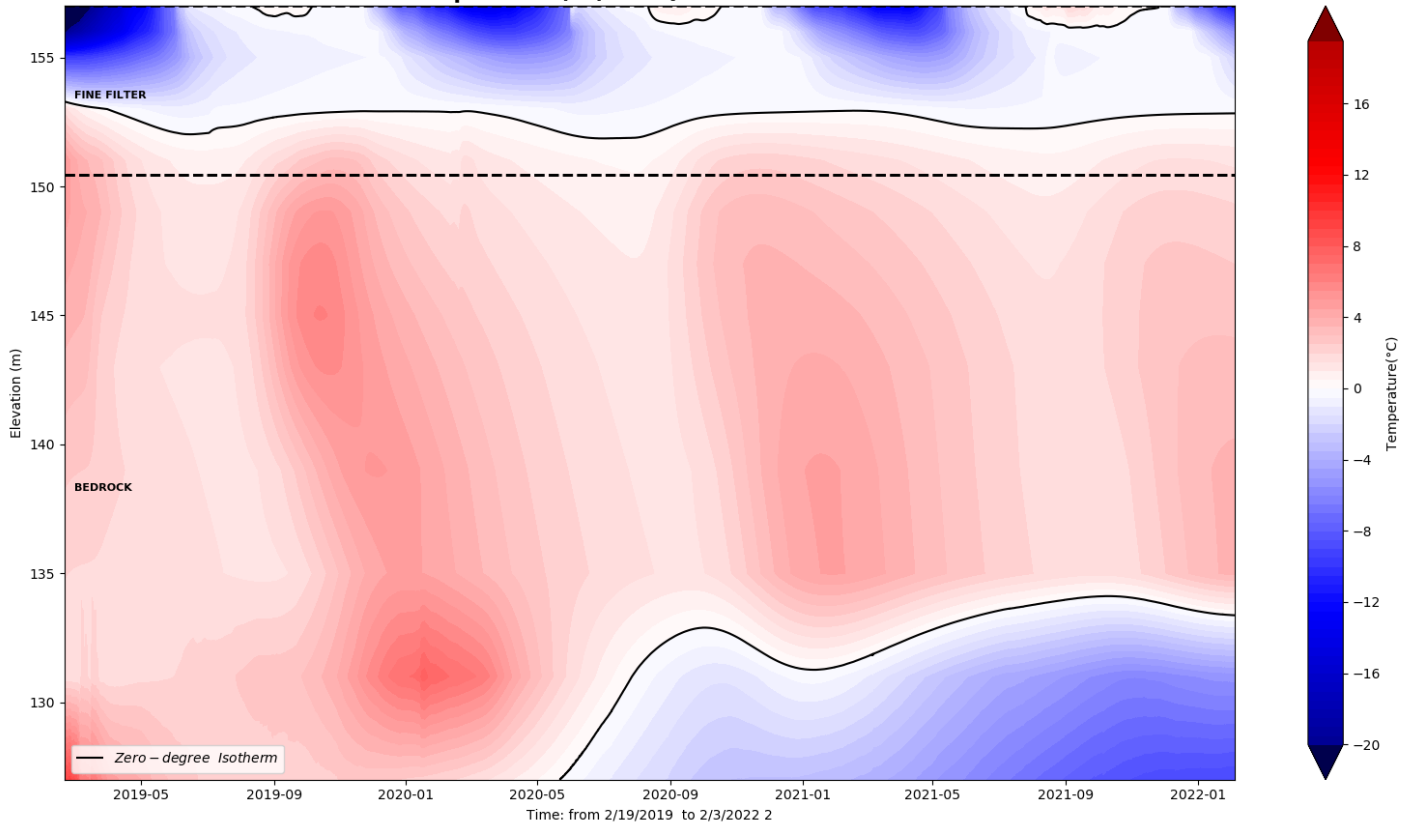


AMQ - WTD TH: 0+260

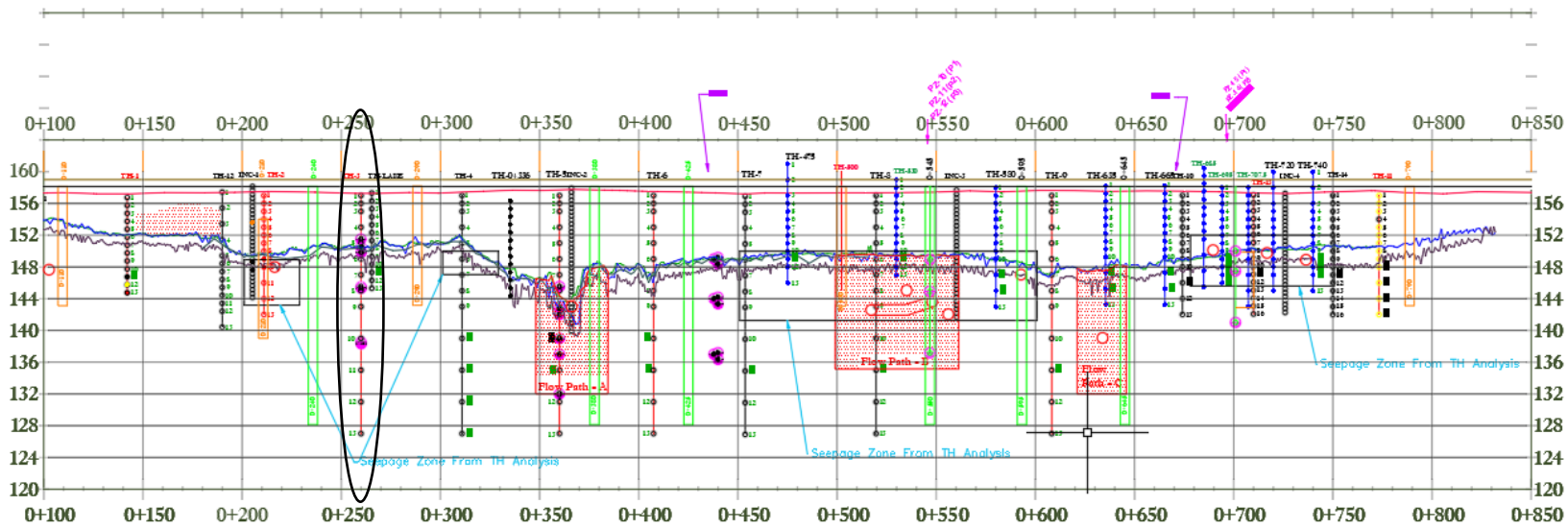
Bead #12 and #13 removed



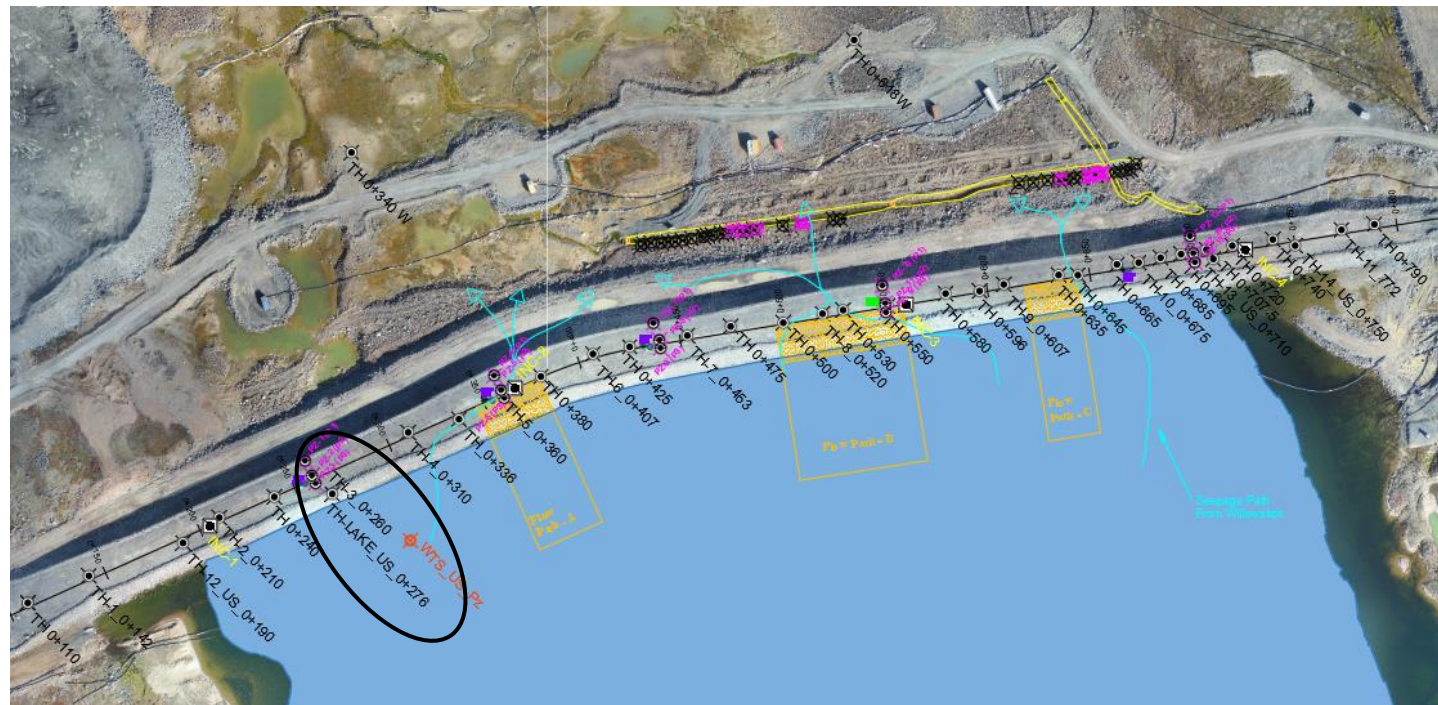
Temperature(°C): AMQ - WTD TH 0 + 260



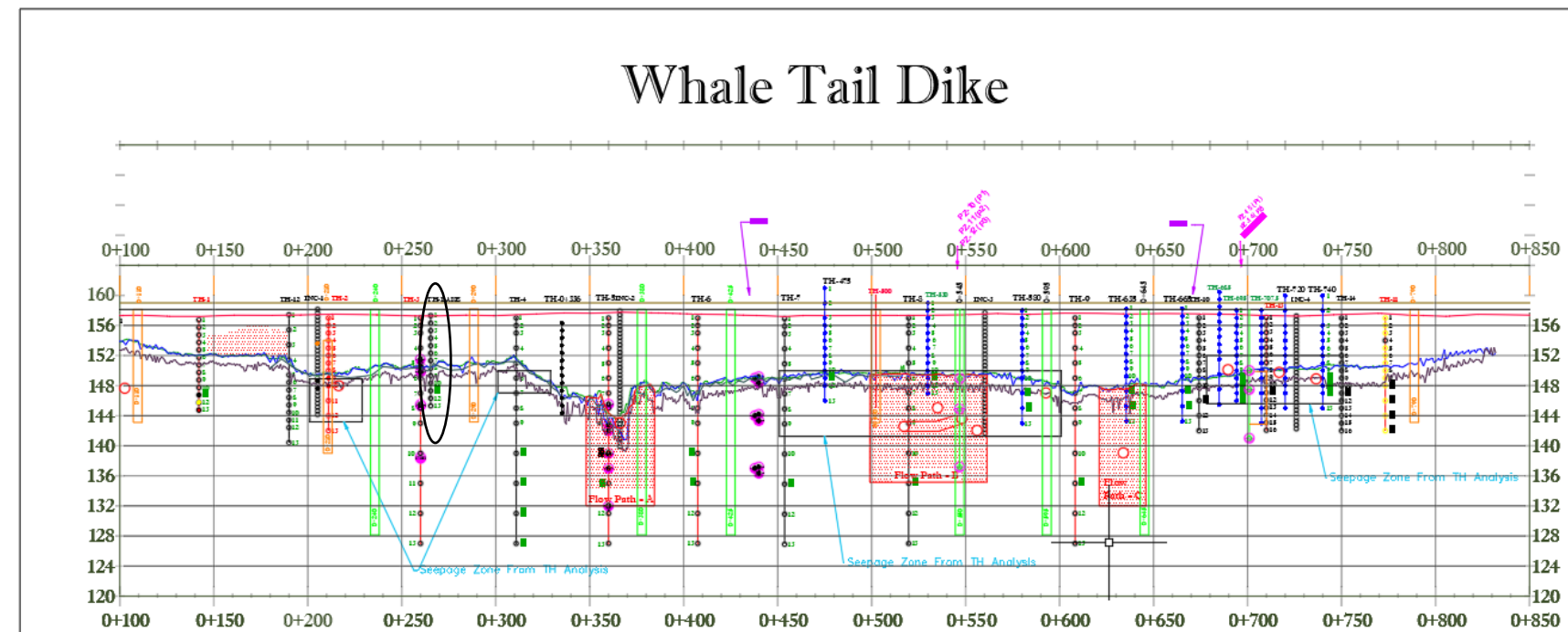
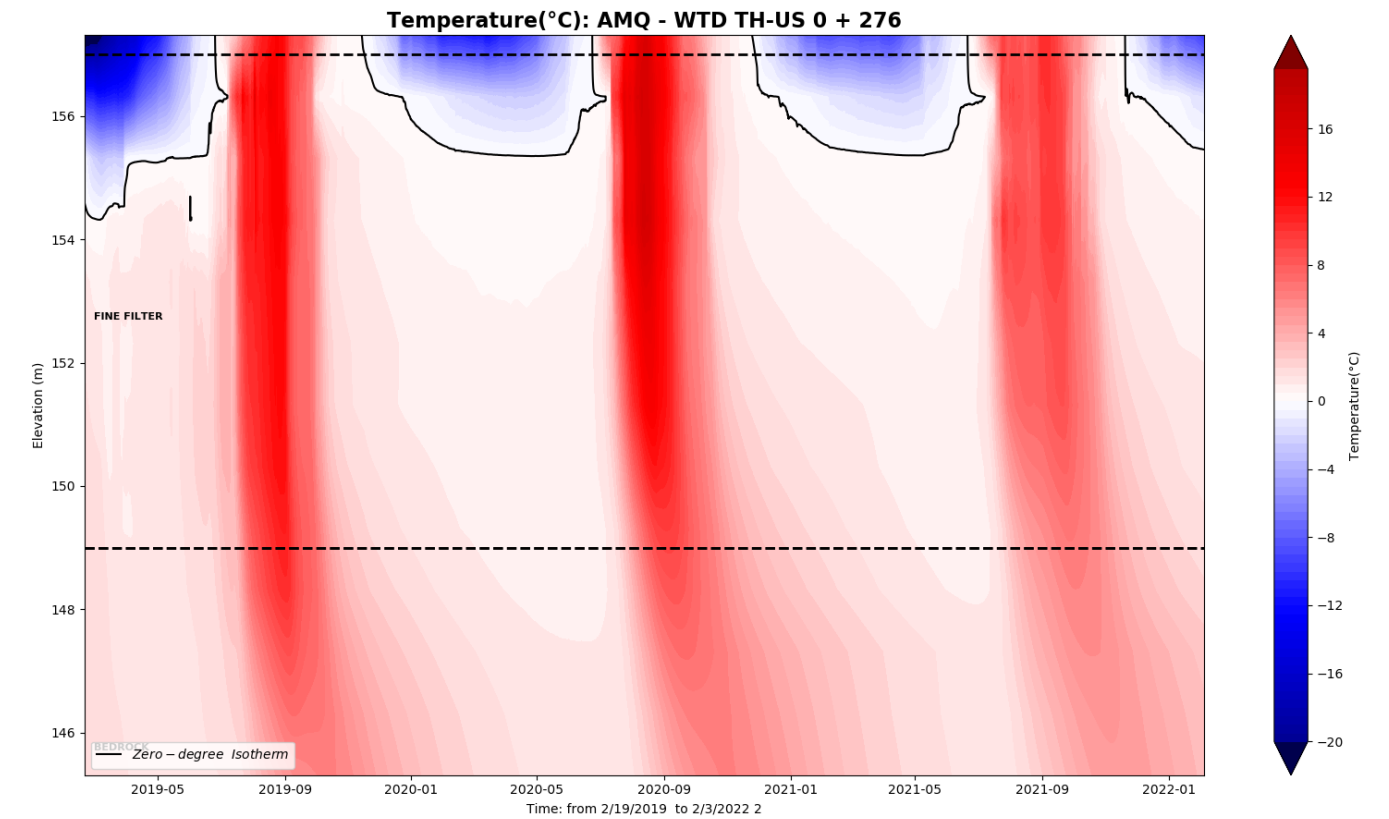
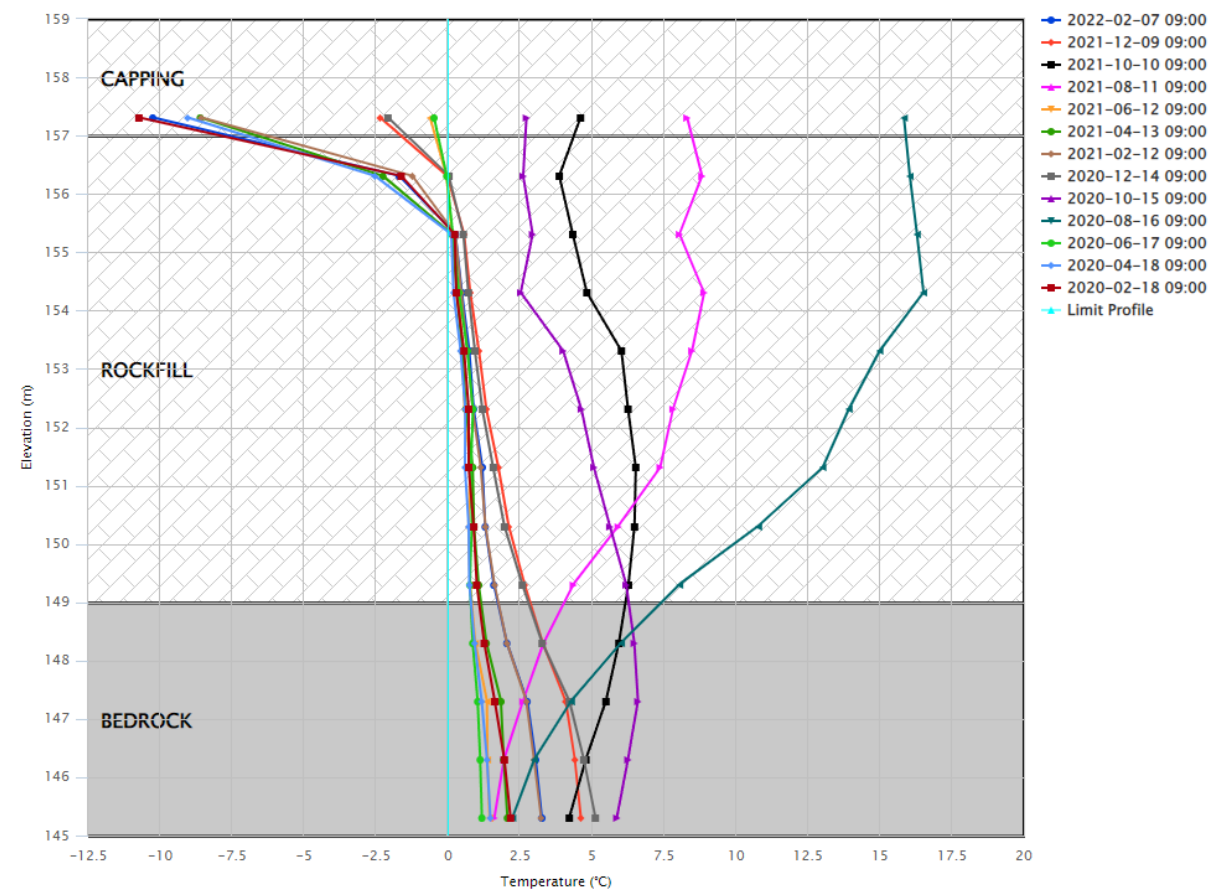
Whale Tail Dike



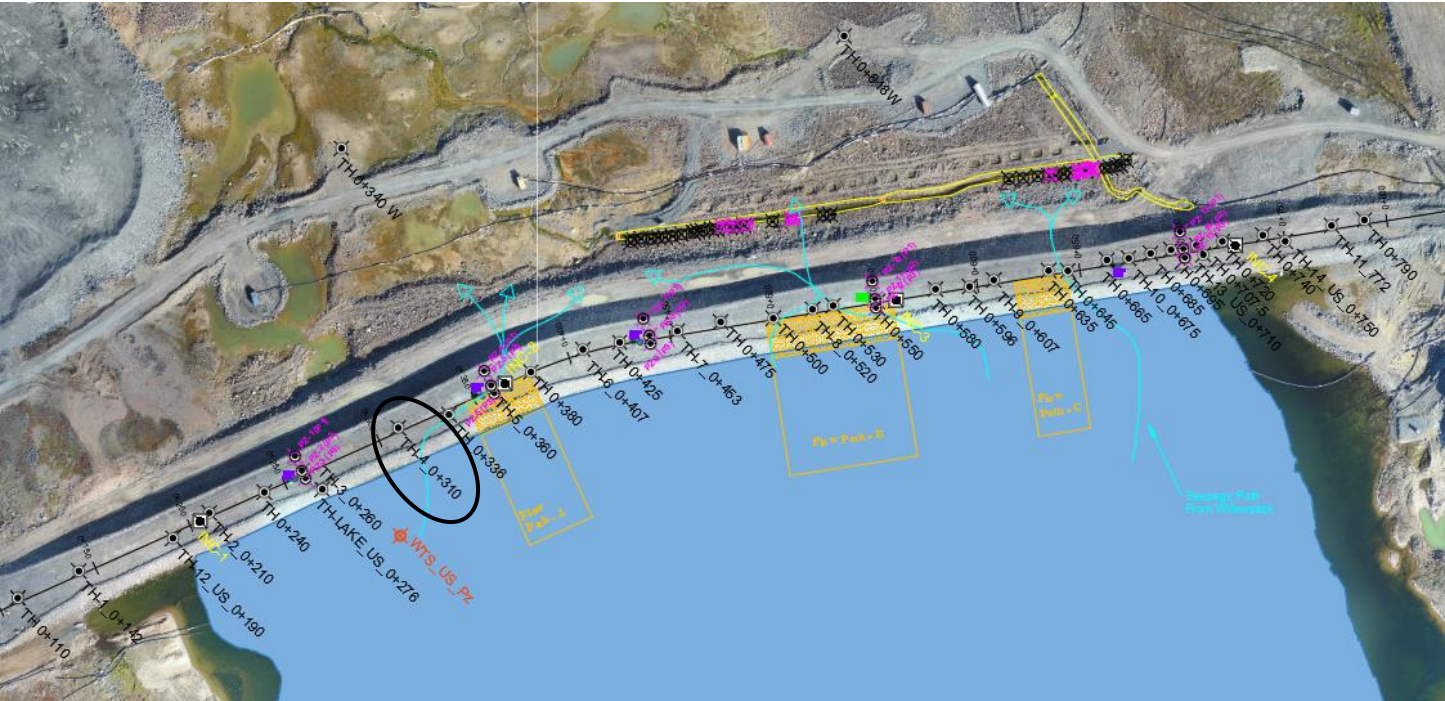
WTD-TH 0+276 U/S



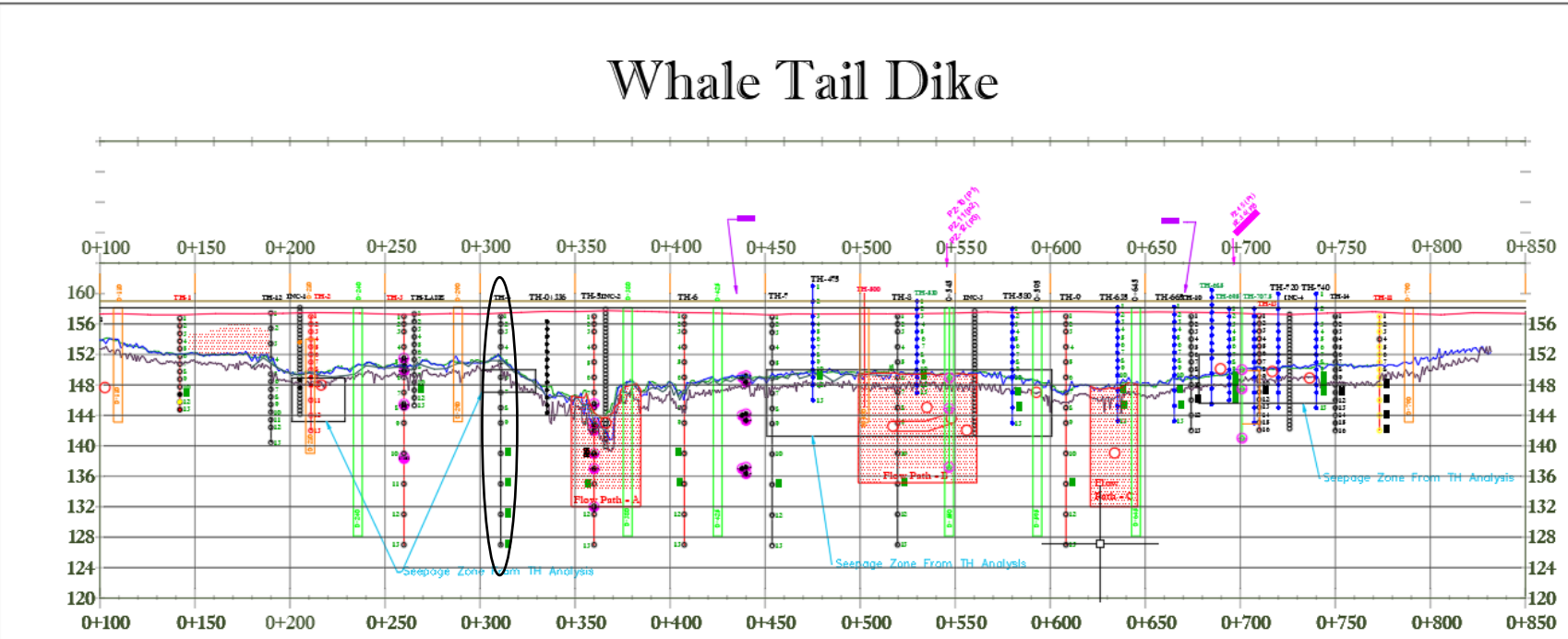
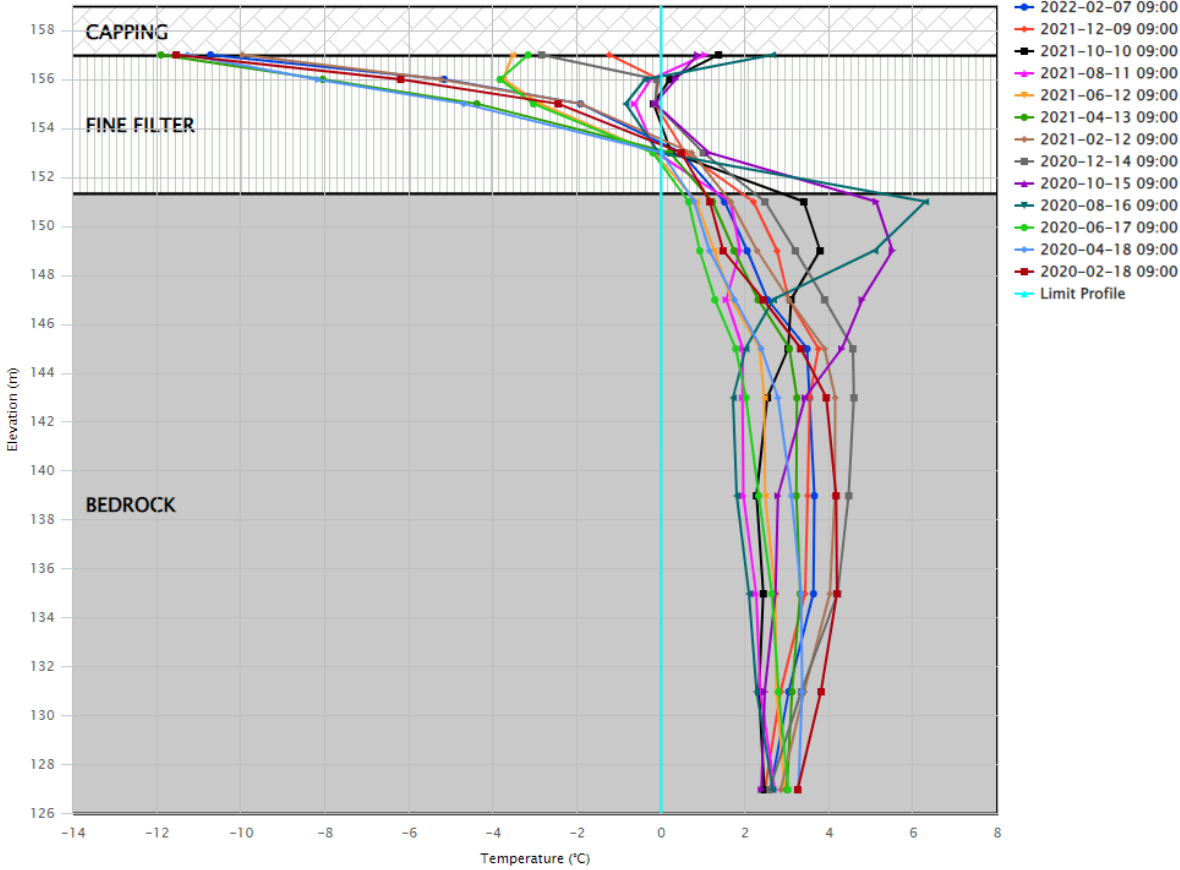
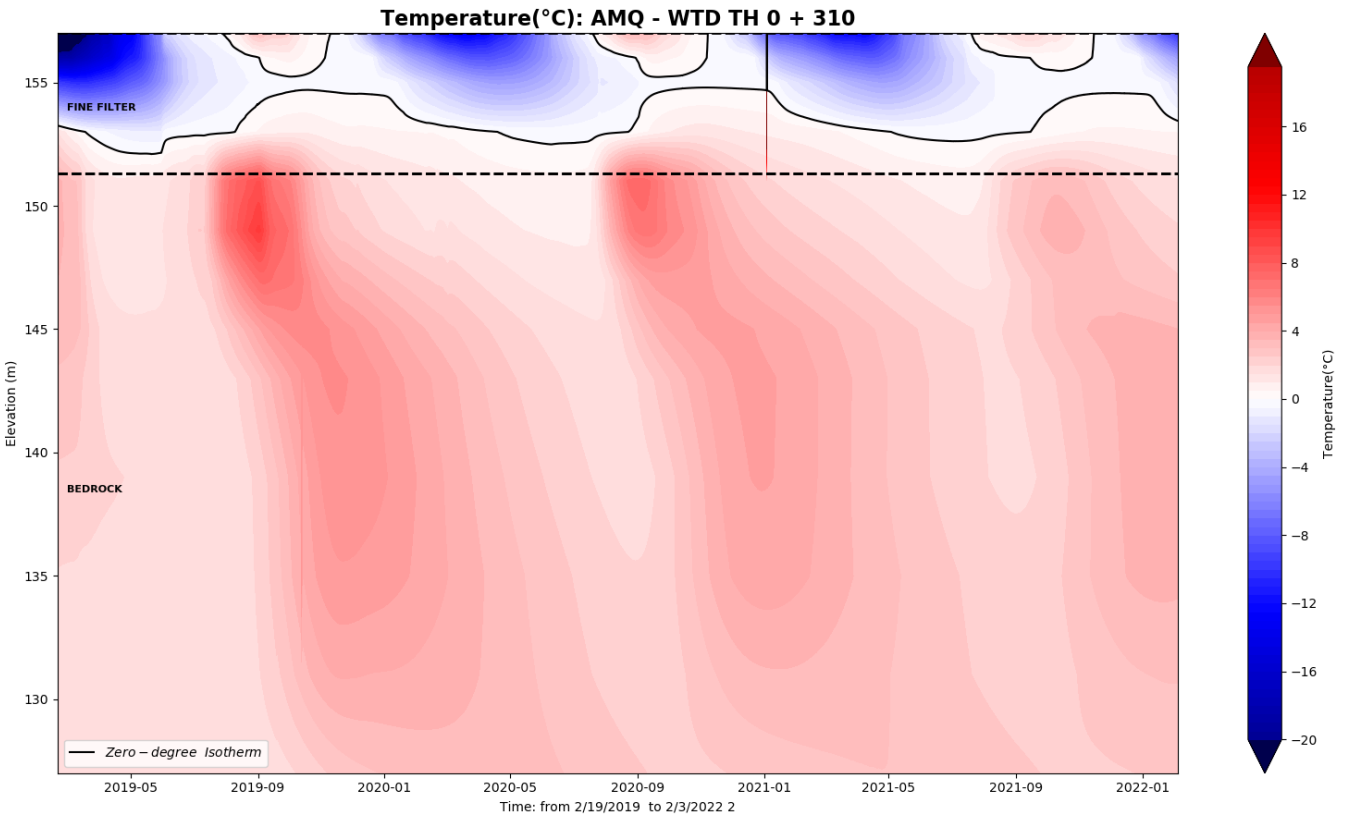
AMQ - WTD TH_US: 0+276



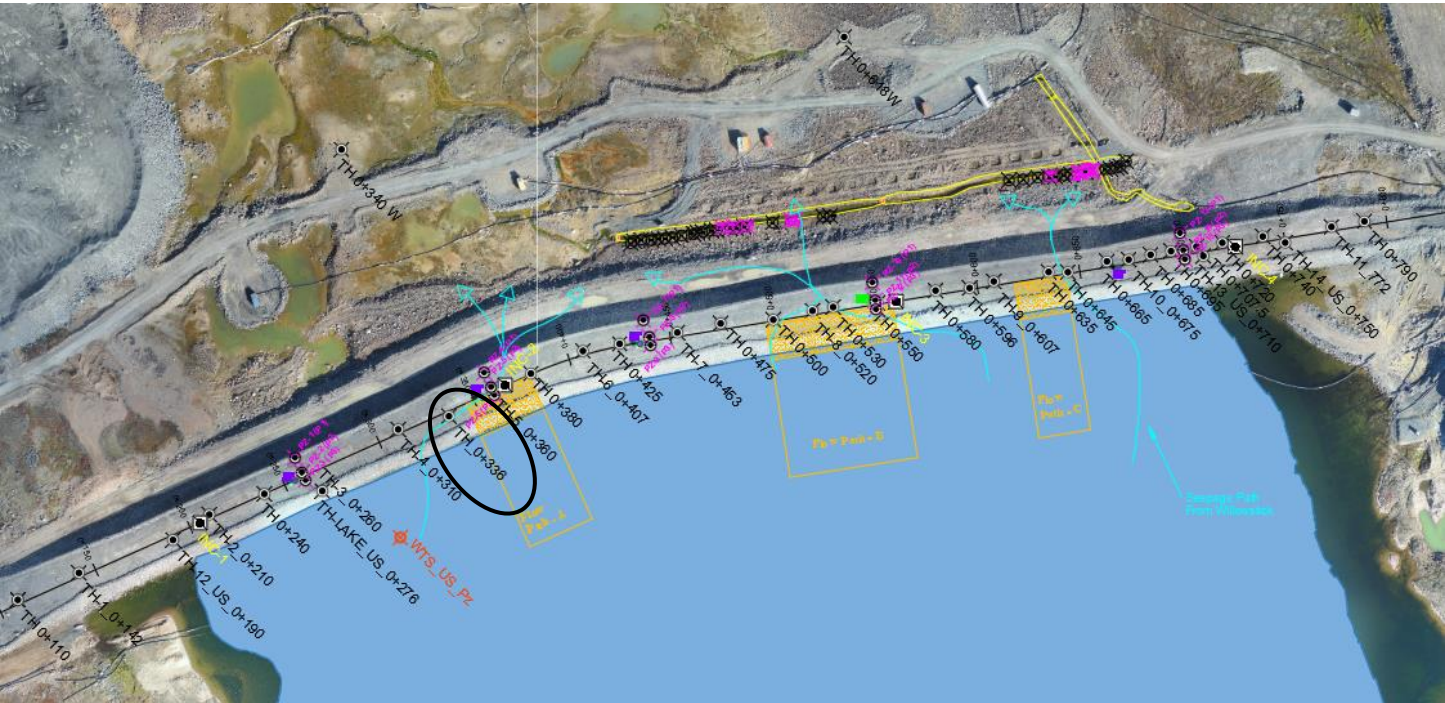
WTD-TH 0+310



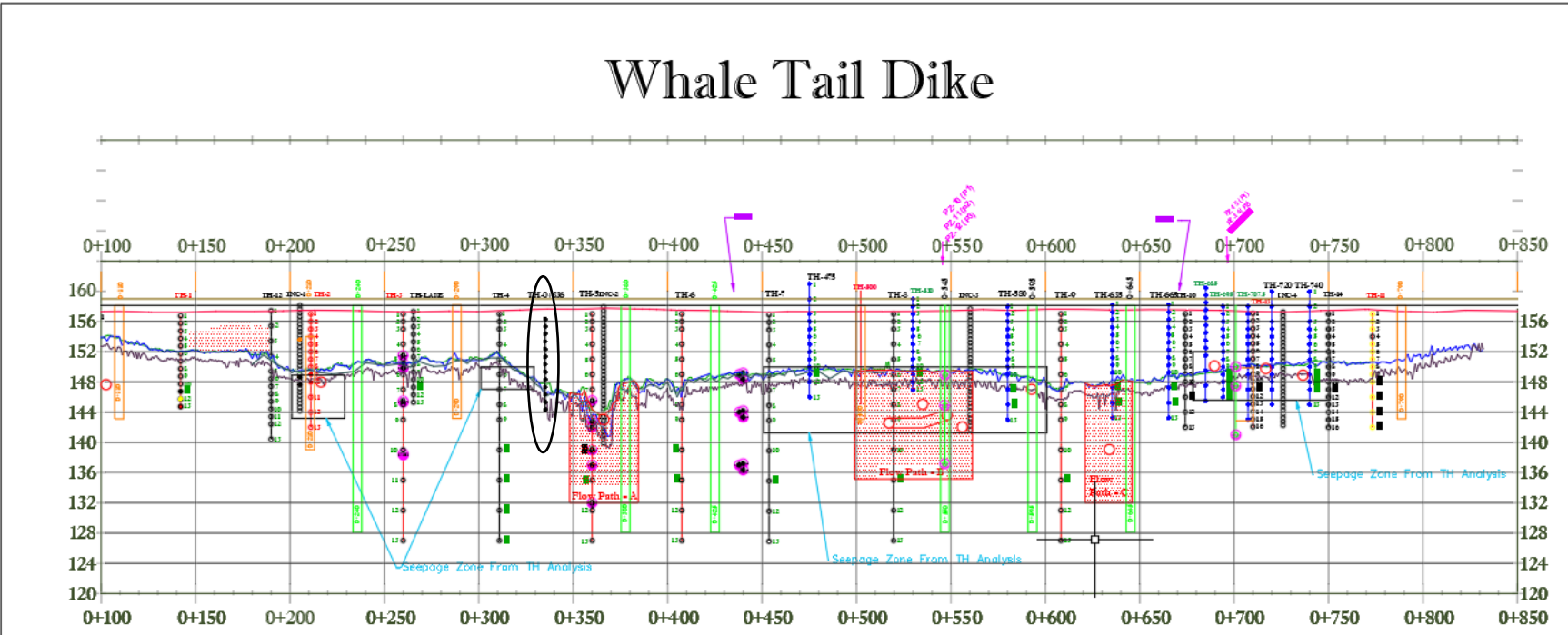
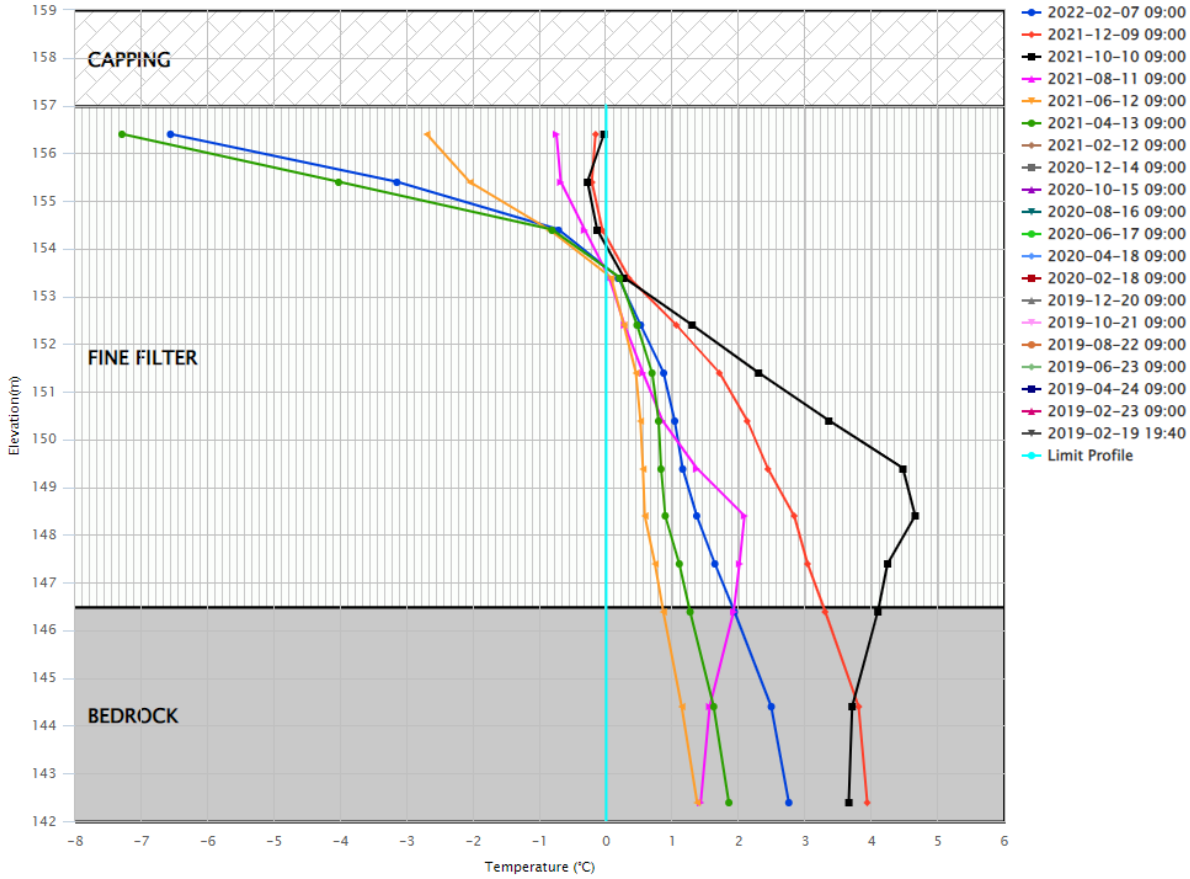
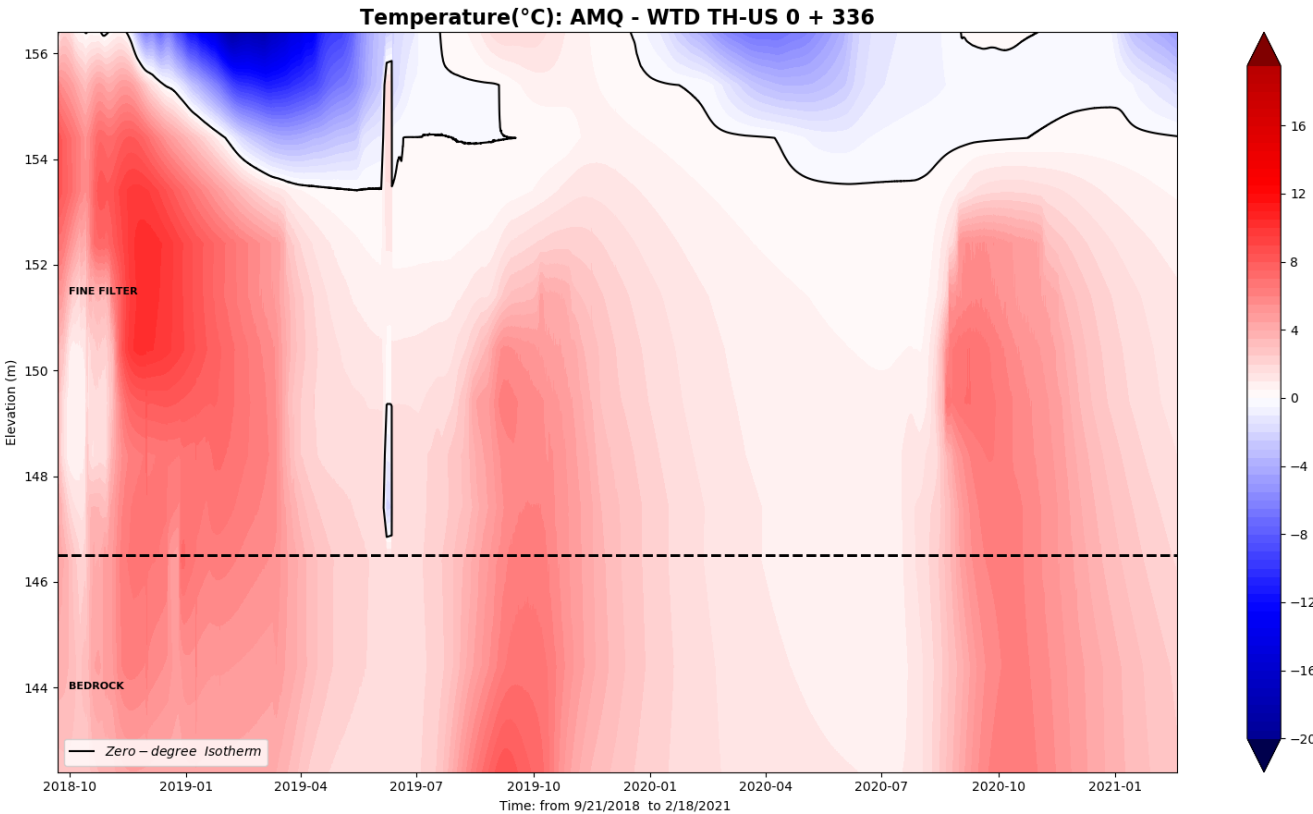
AMQ - WTD TH: 0+310



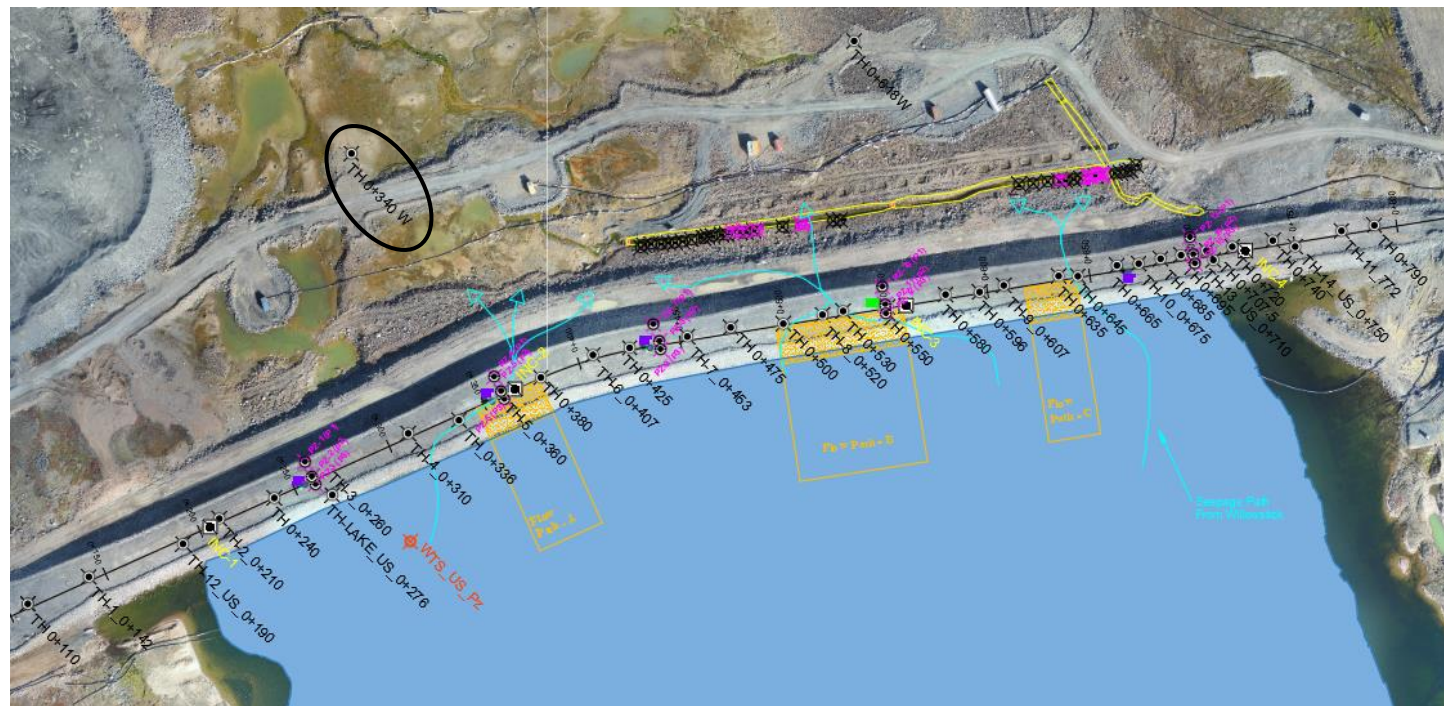
WTD-TH 0+336 U/S



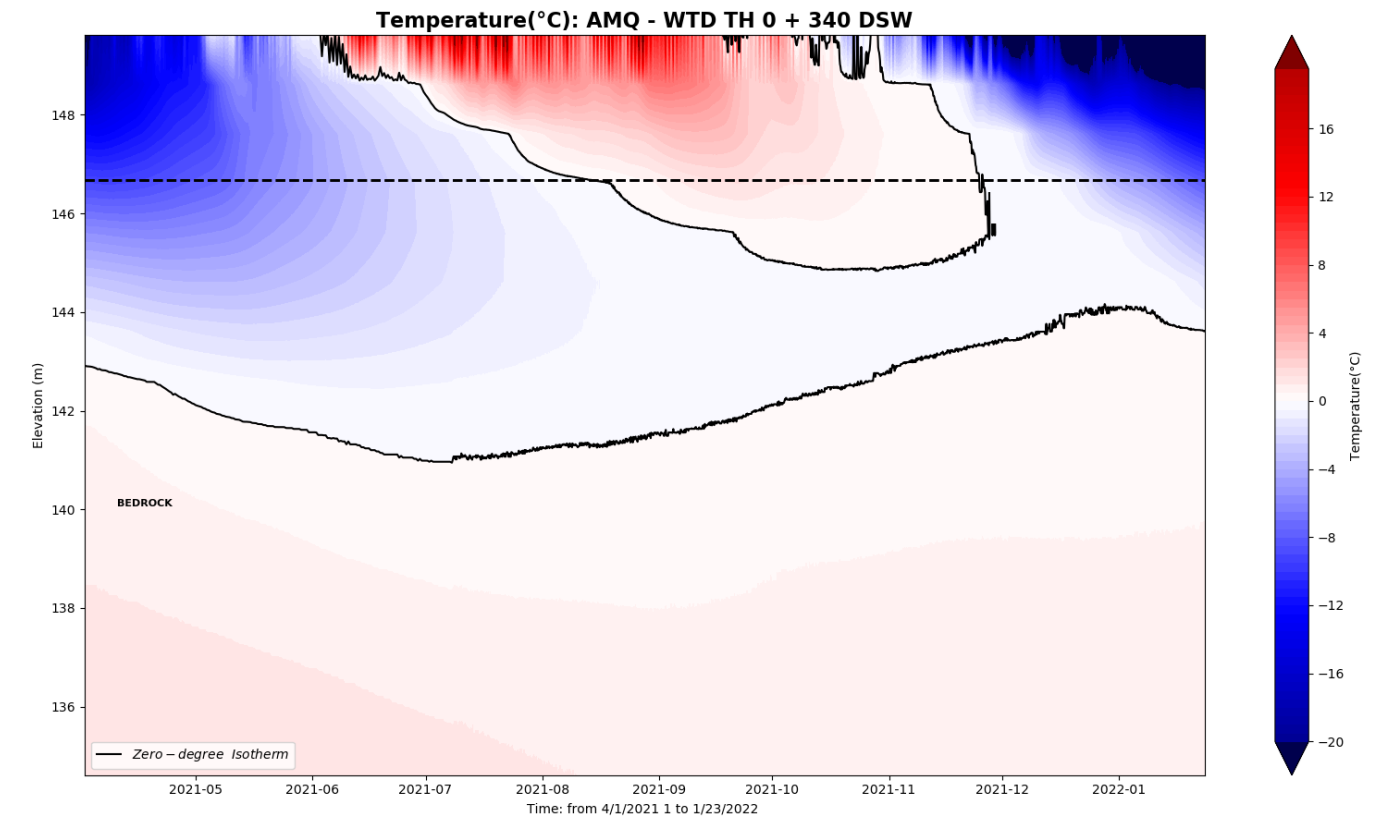
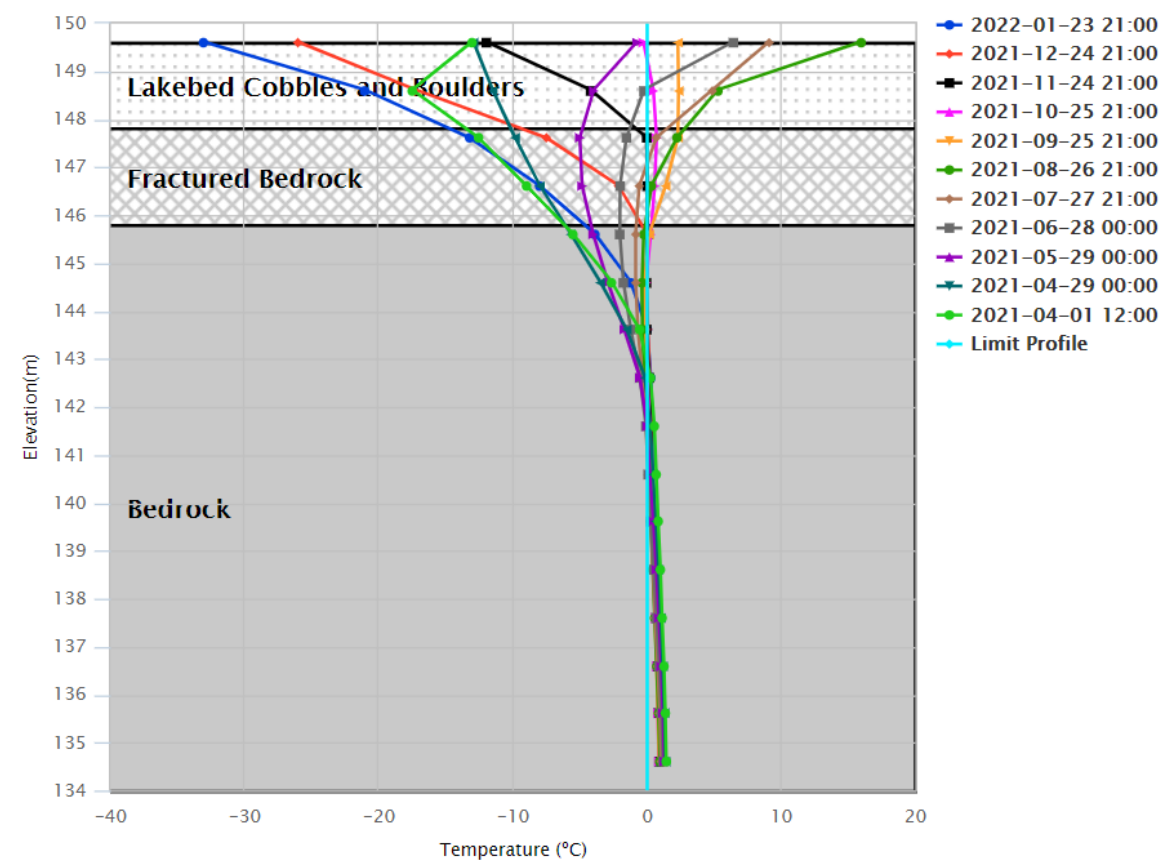
AMQ - WTD TH_US: 0+336



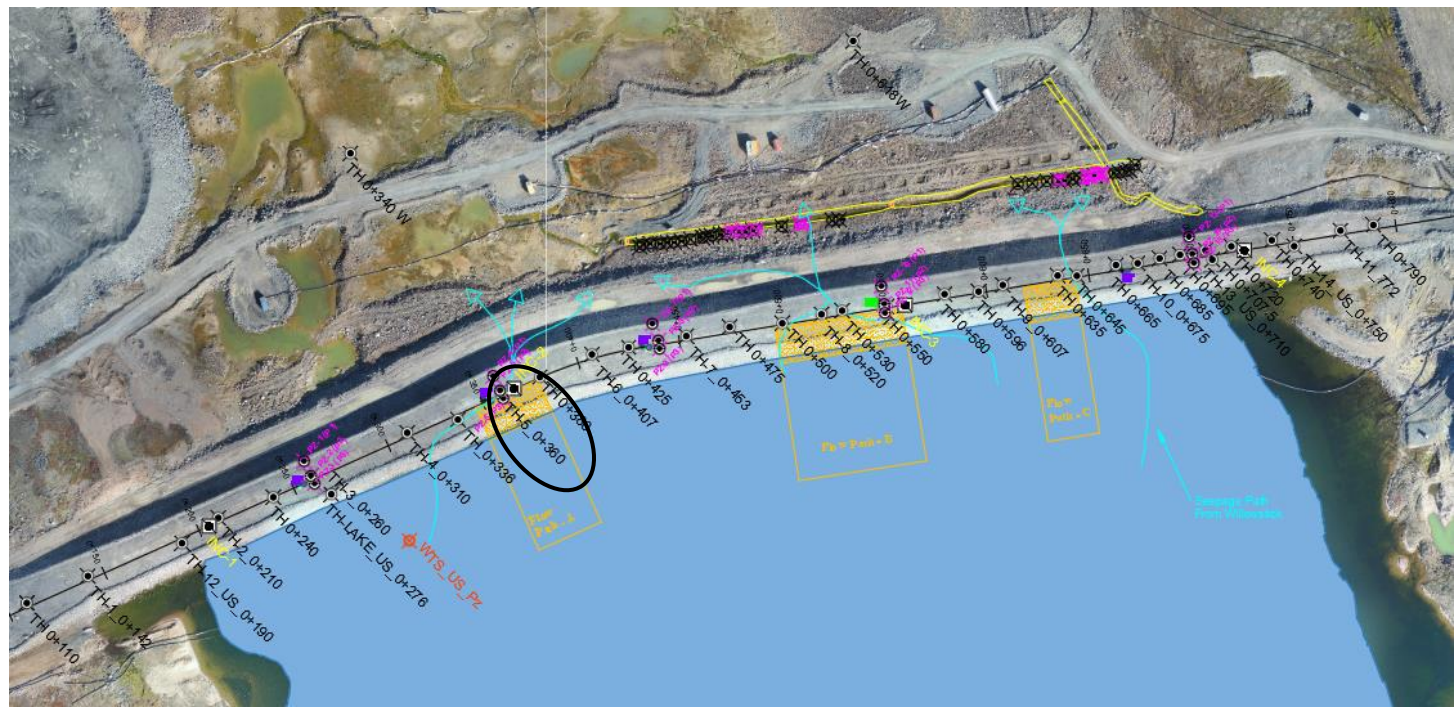
WTD-TH 0+340 DSW



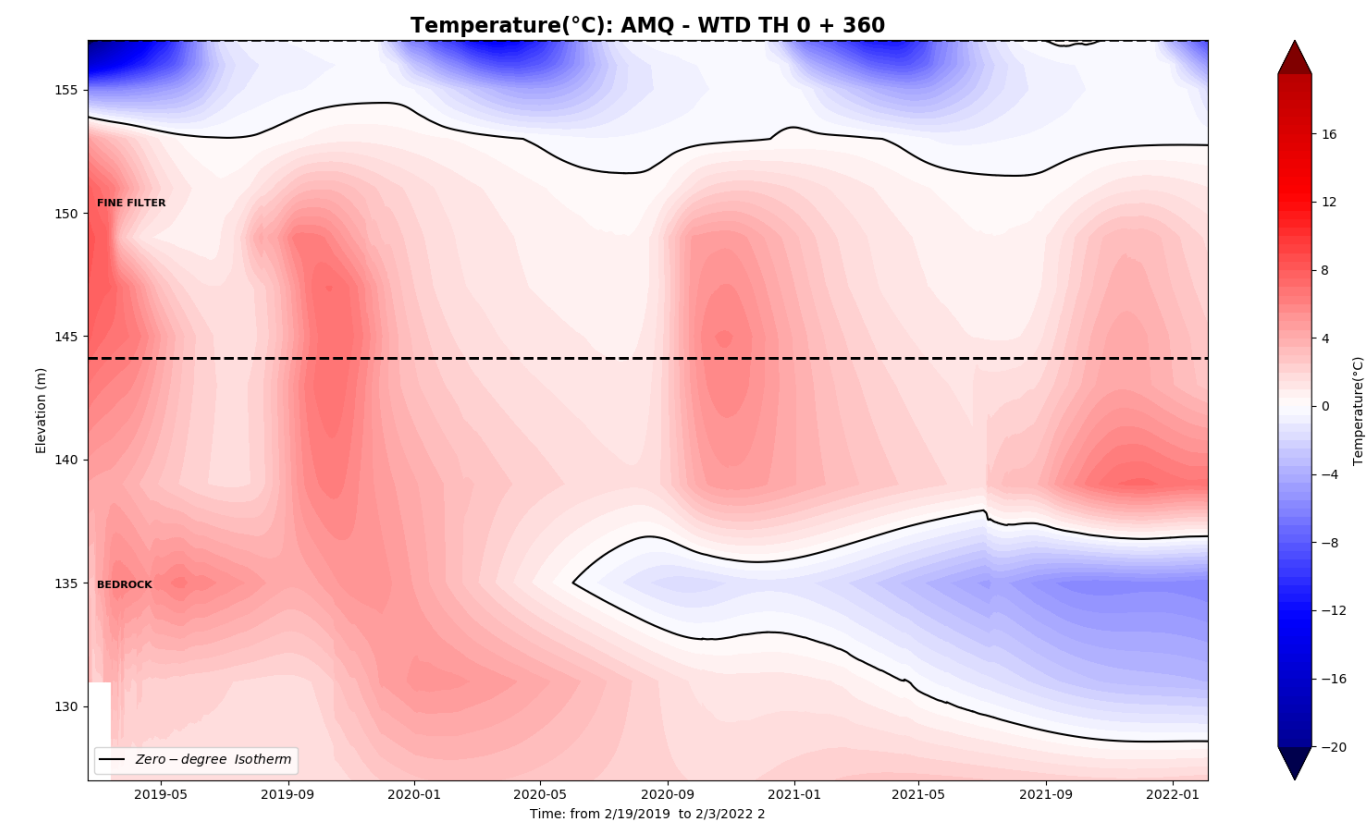
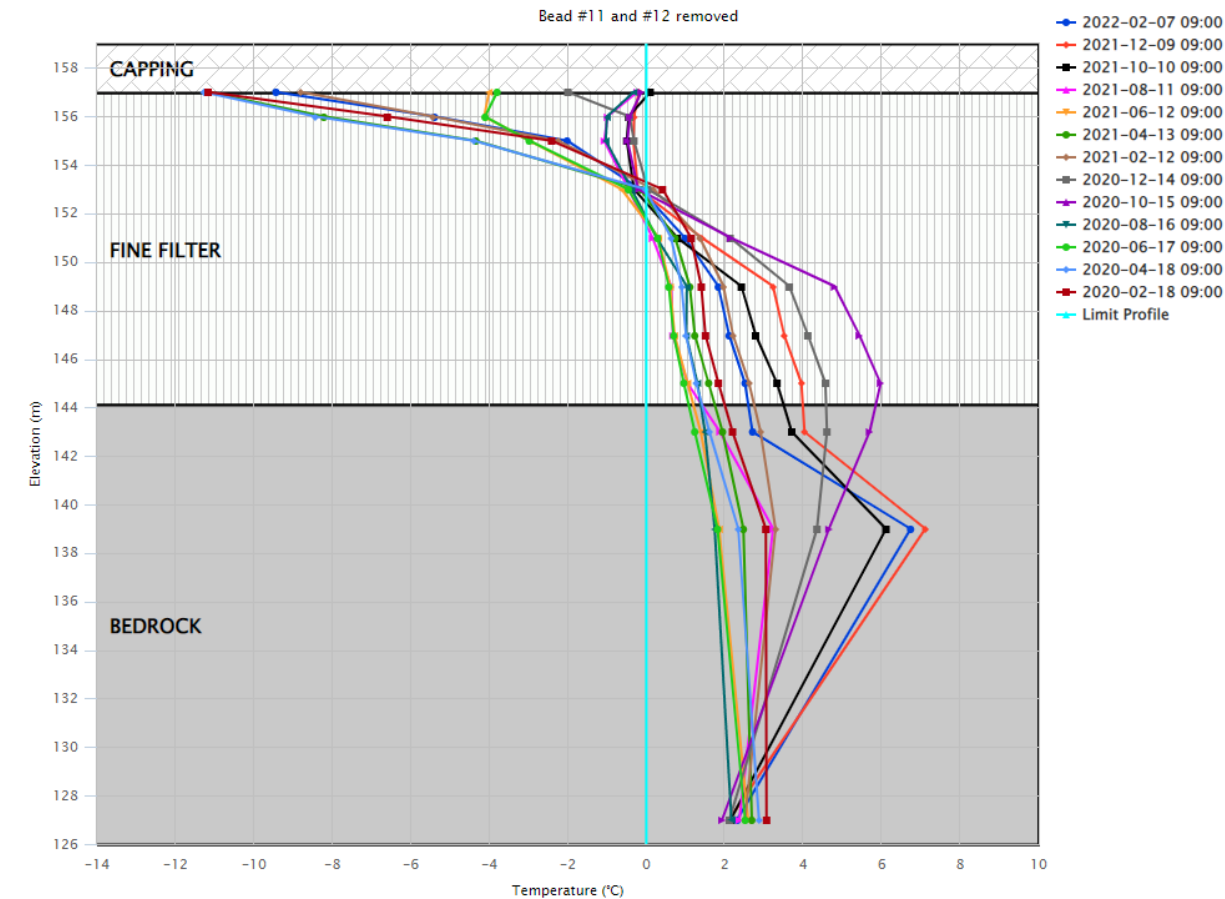
AMQ – WTD TH: D/S_West



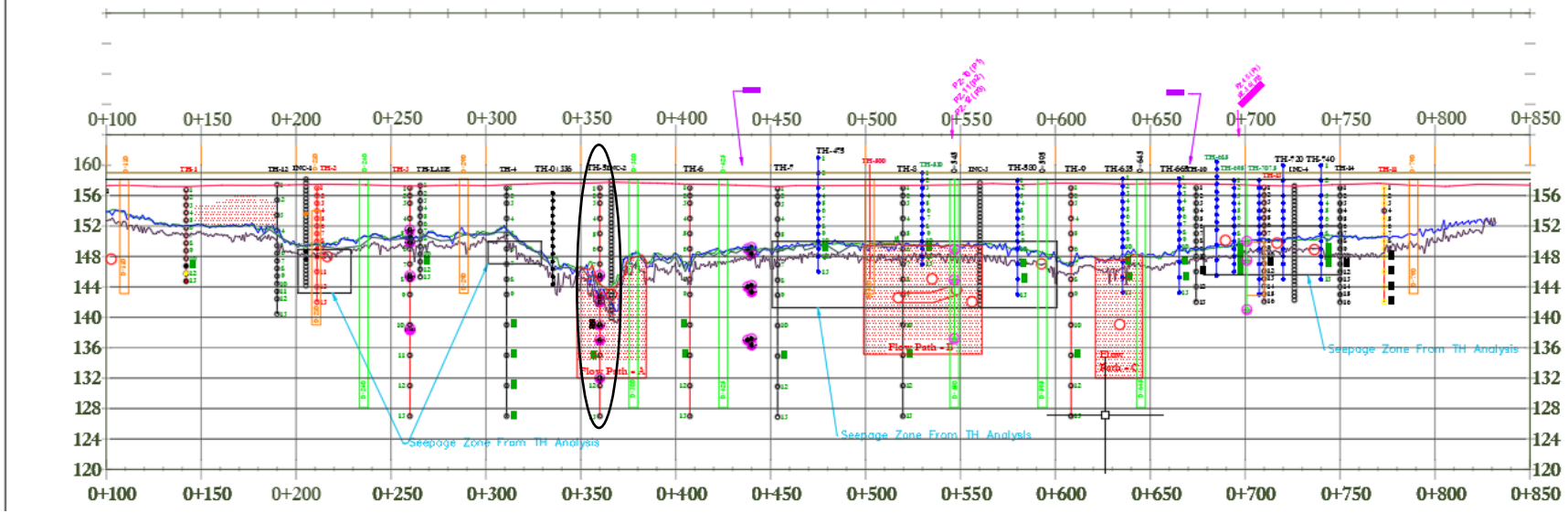
WTD-TH 0+360



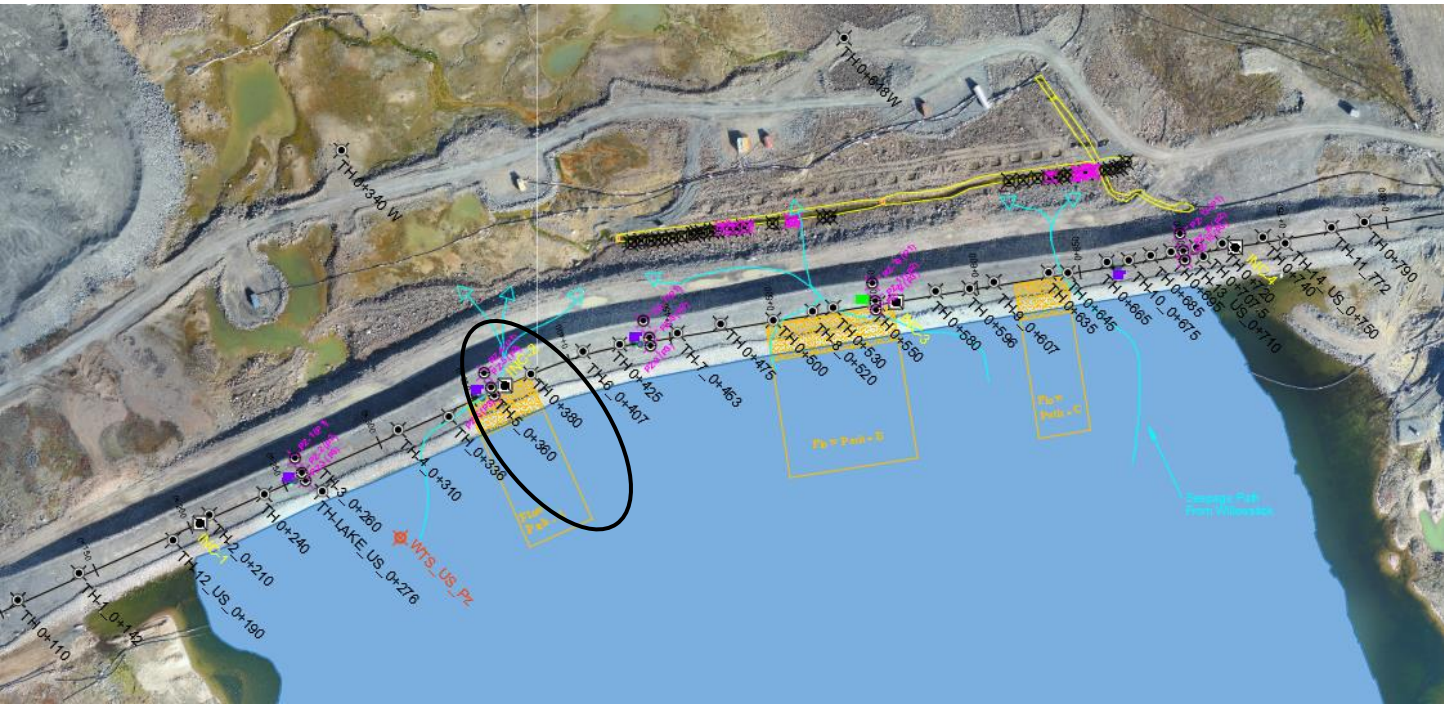
AMQ - WTD TH: 0+360



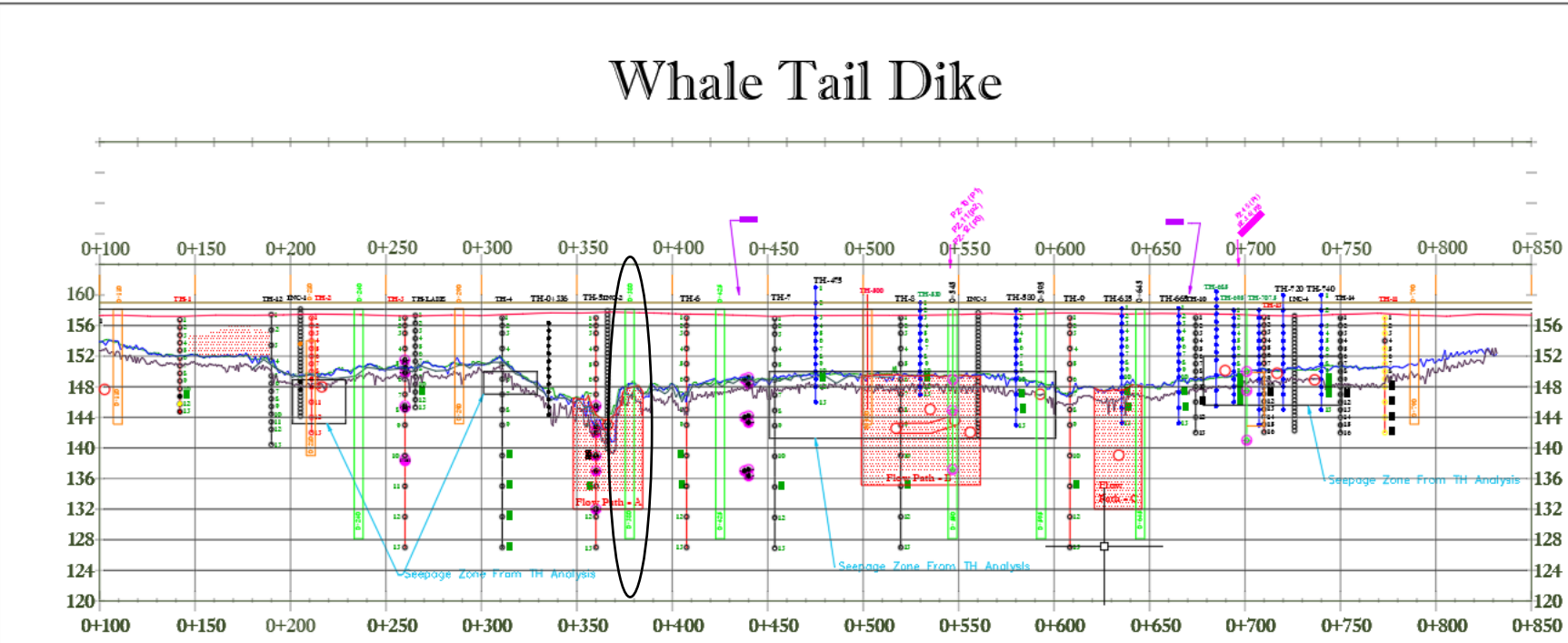
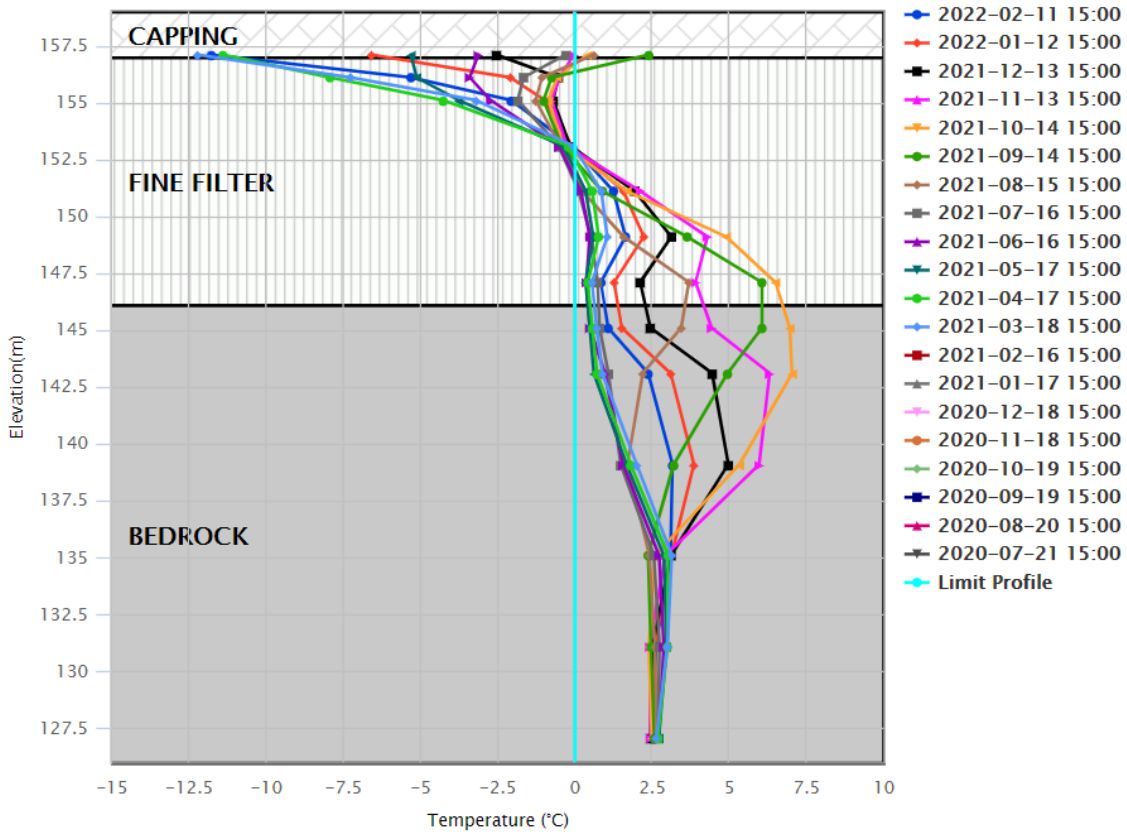
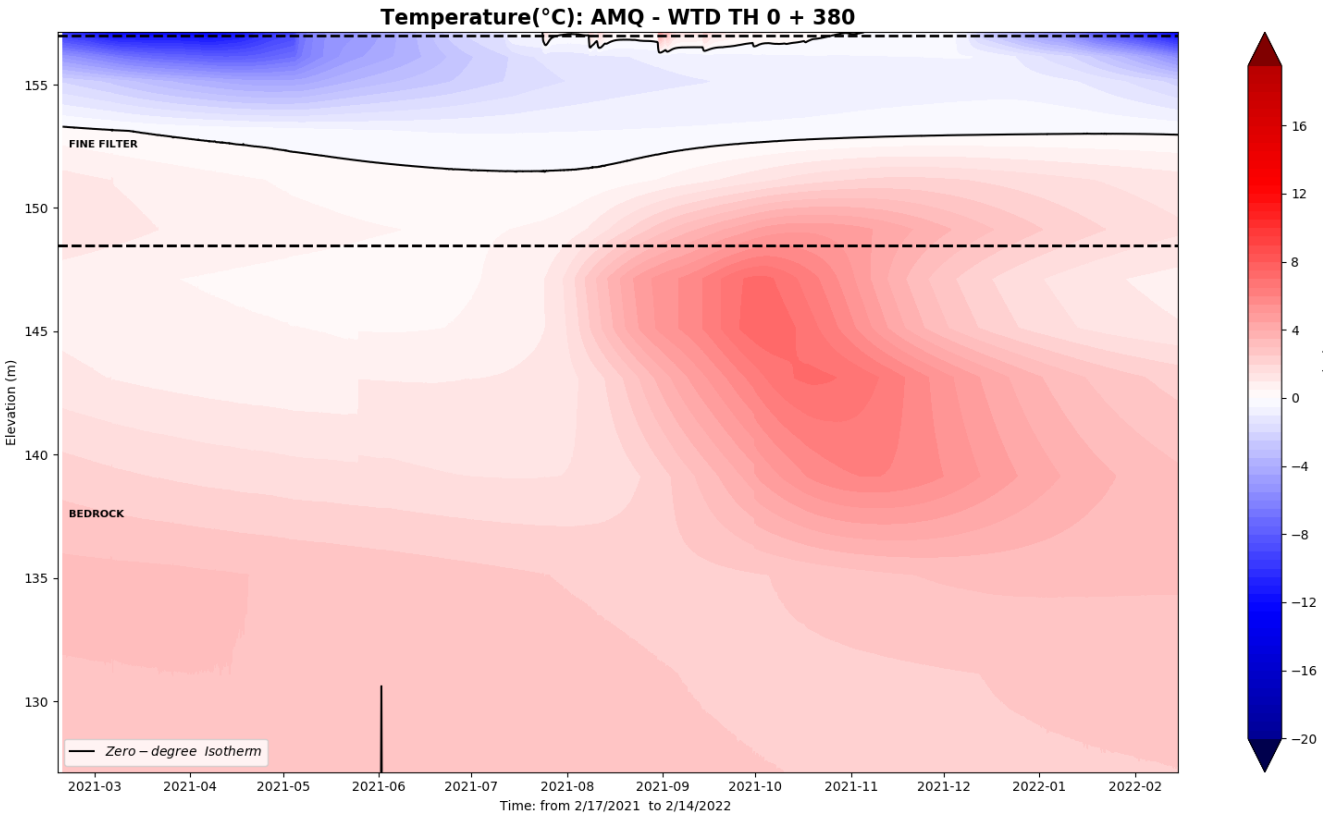
Whale Tail Dike



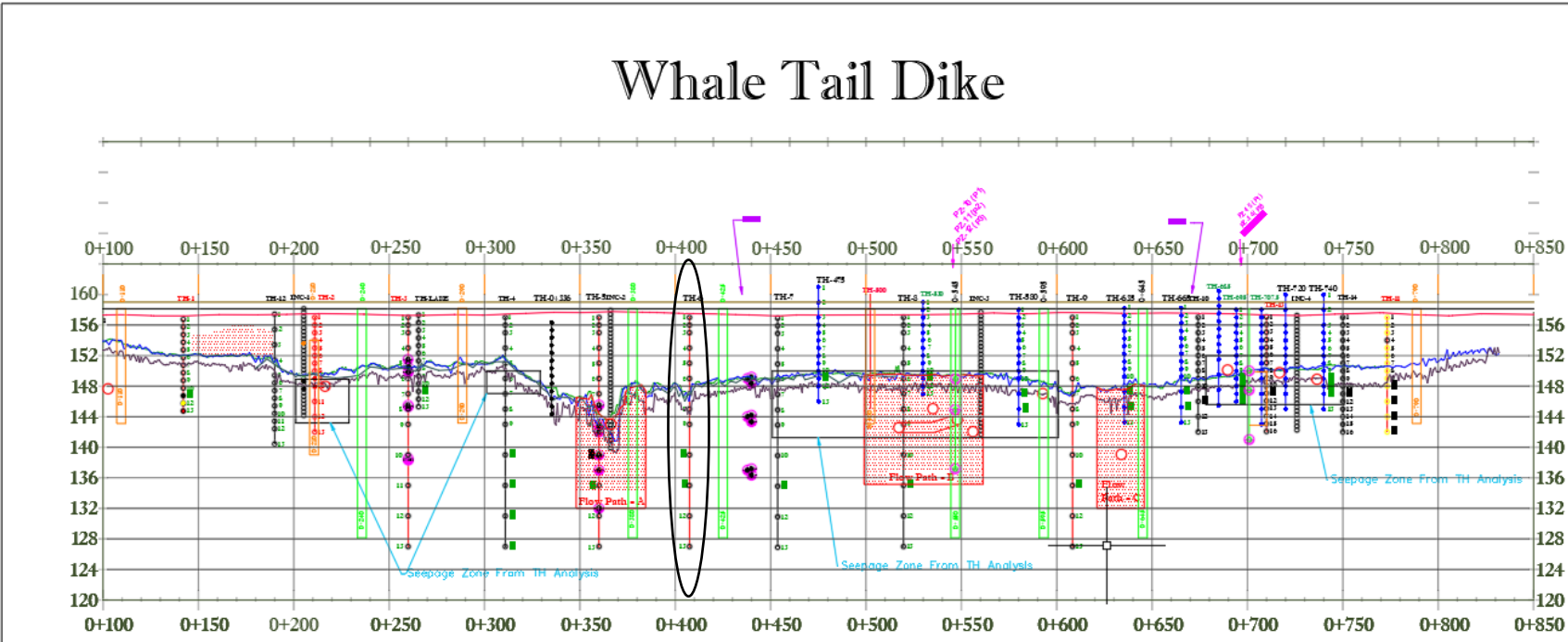
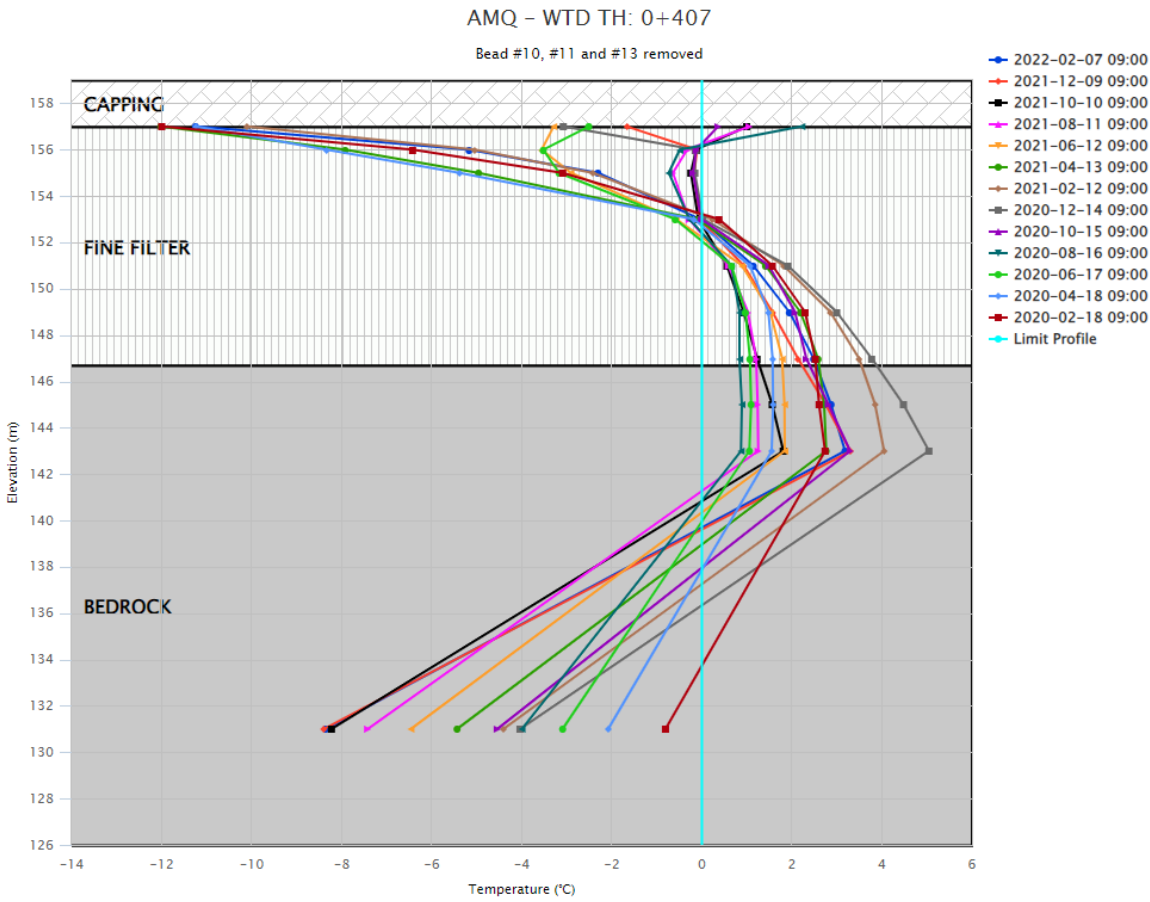
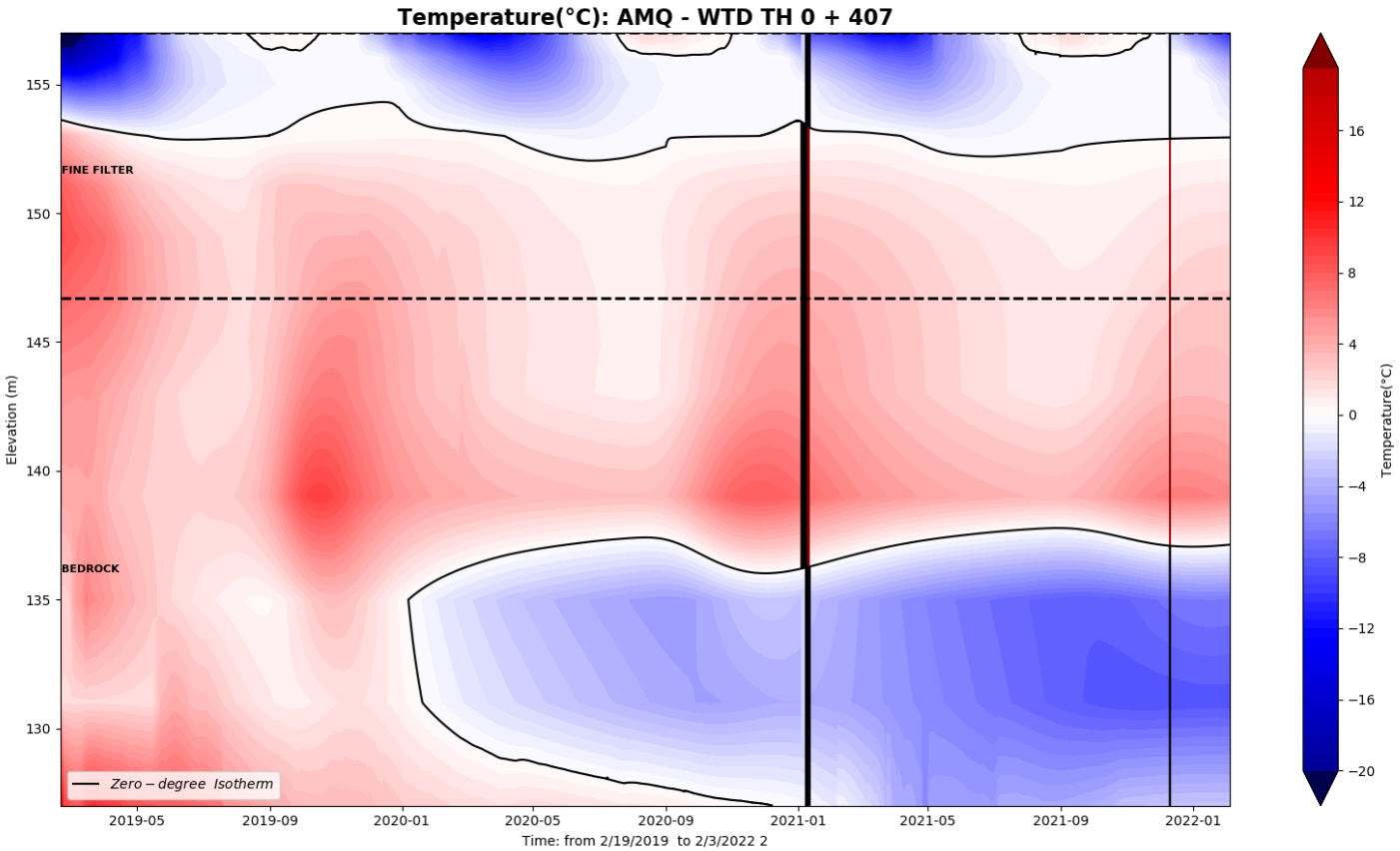
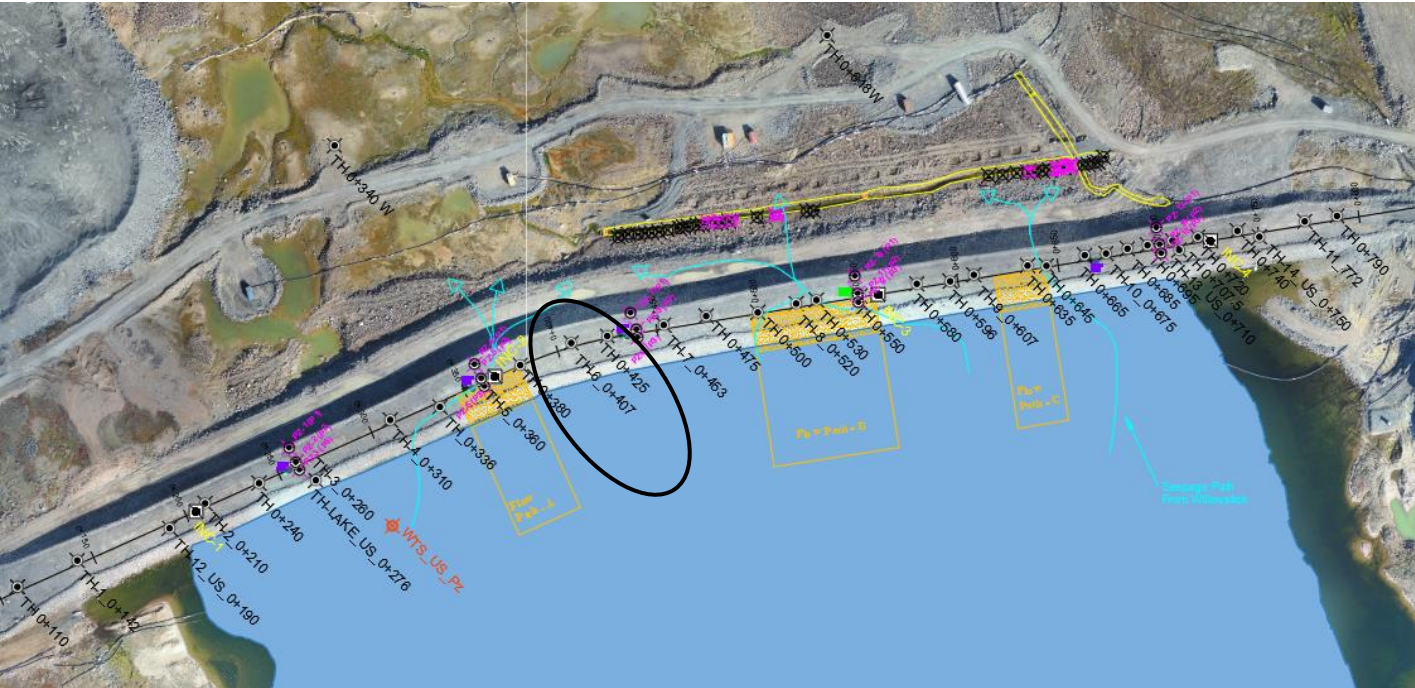
WTD-TH 0+380



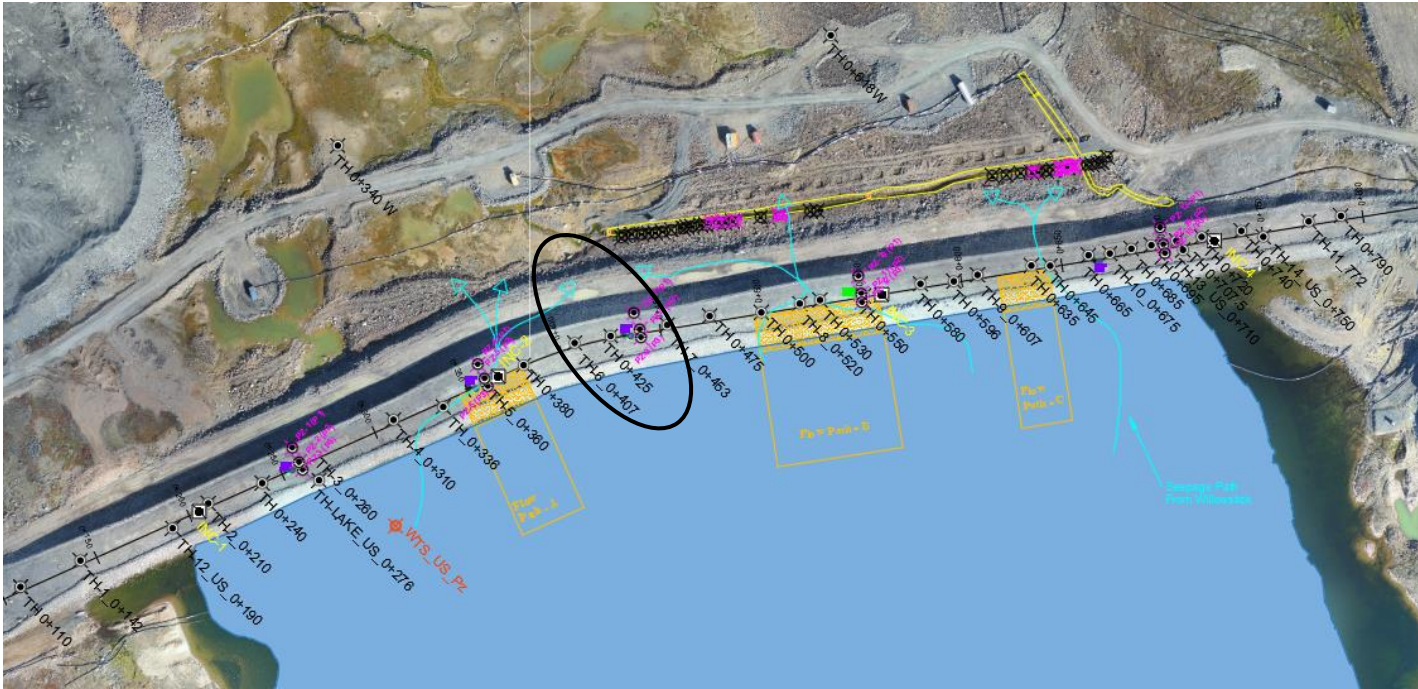
AMQ – WTD TH: 0+380



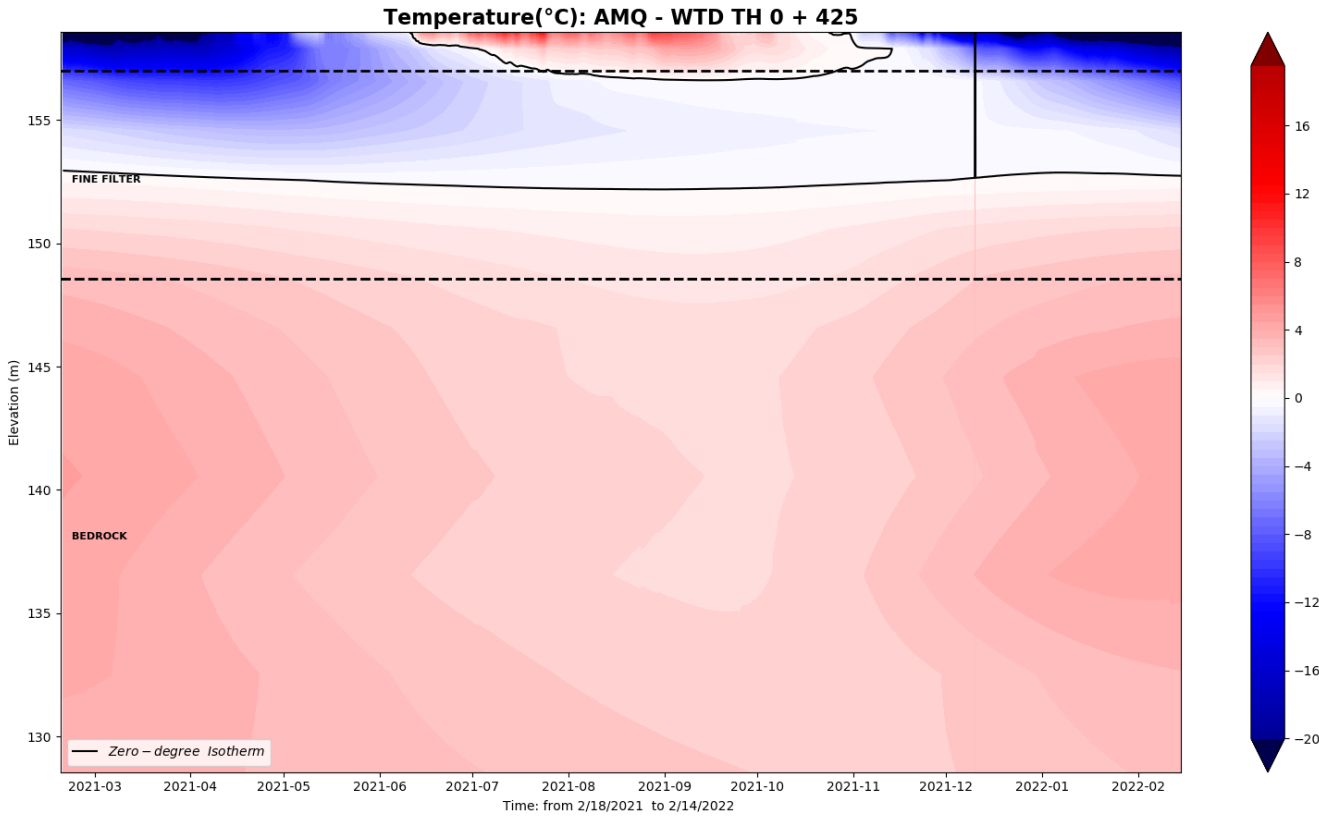
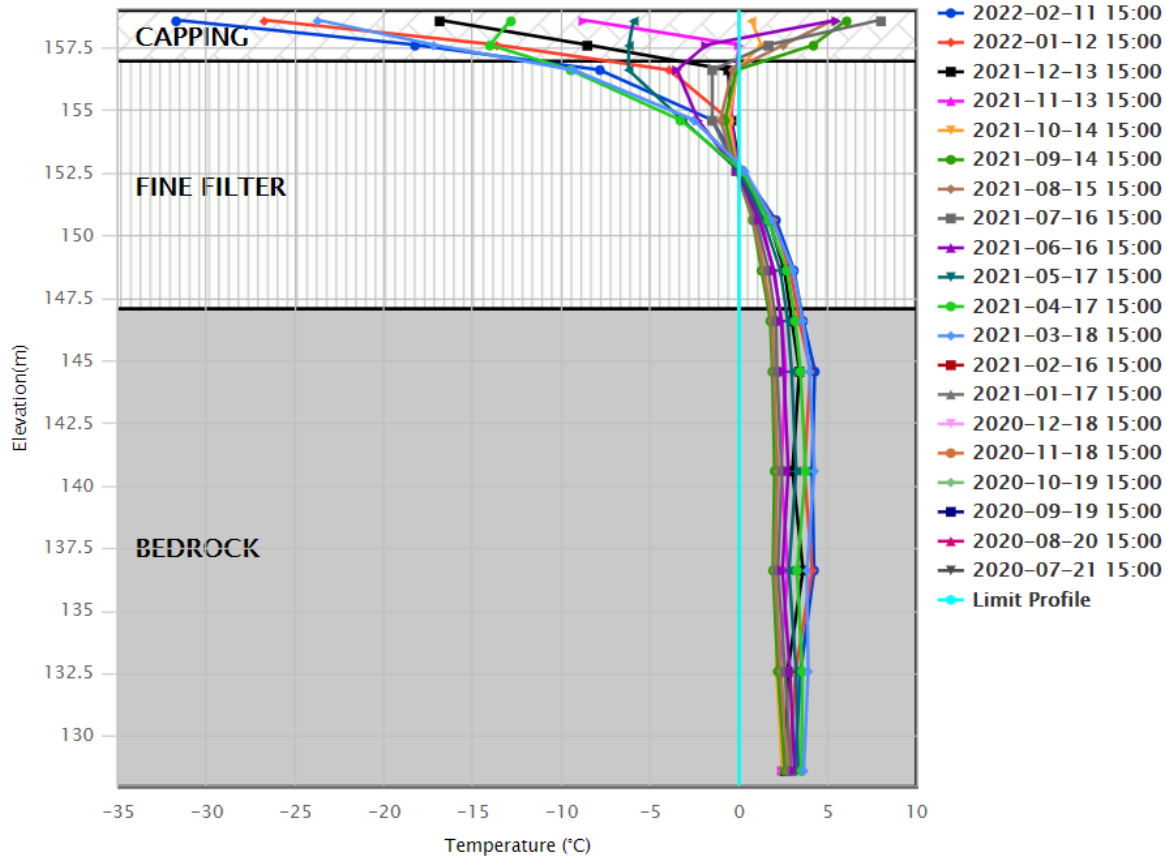
WTD-TH 0+407



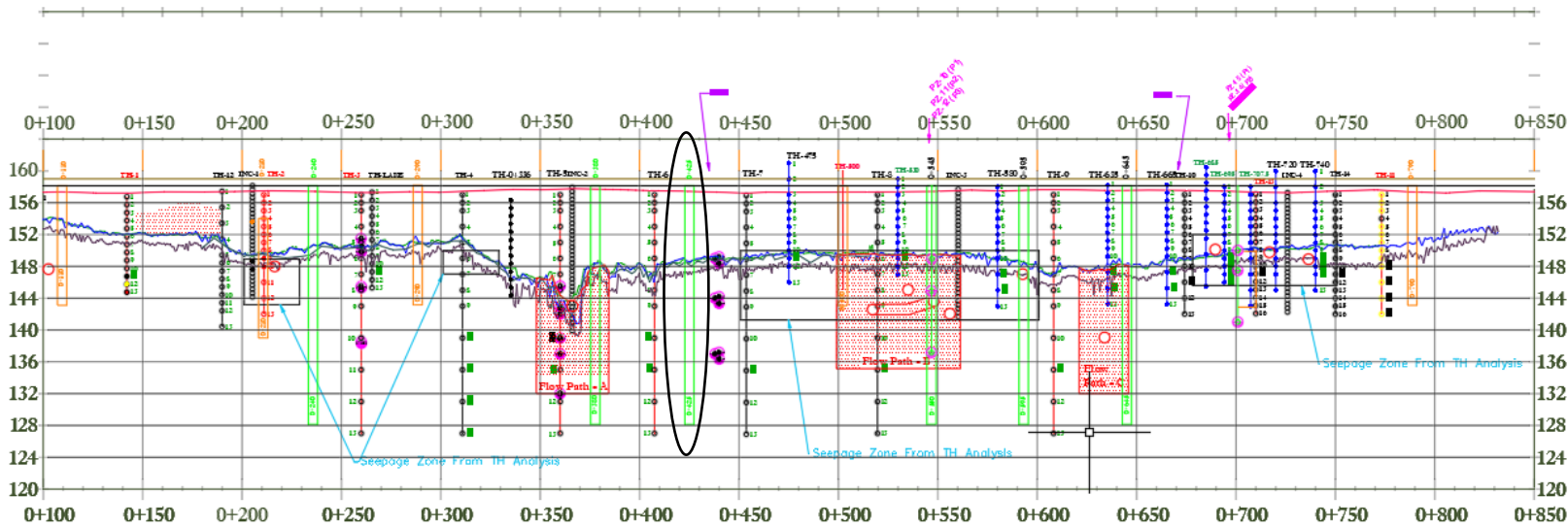
WTD-TH 0+425



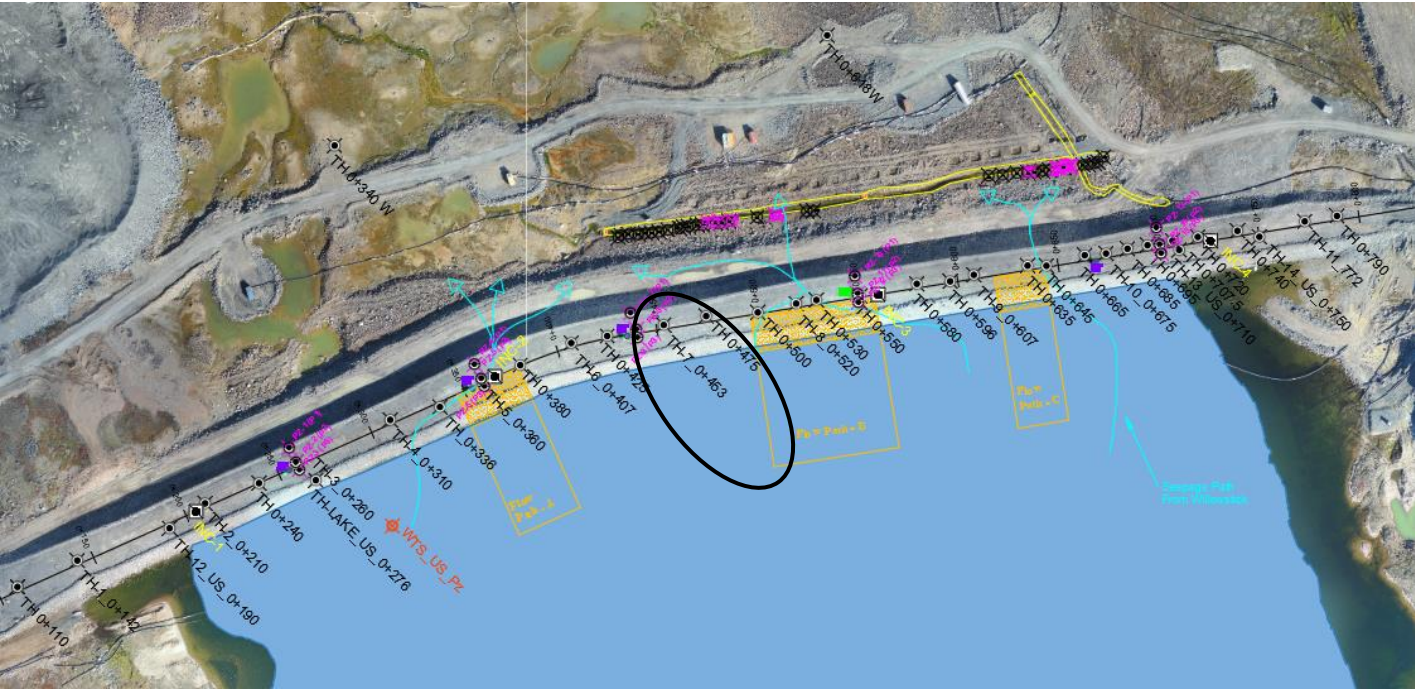
AMQ – WTD TH: 0+425



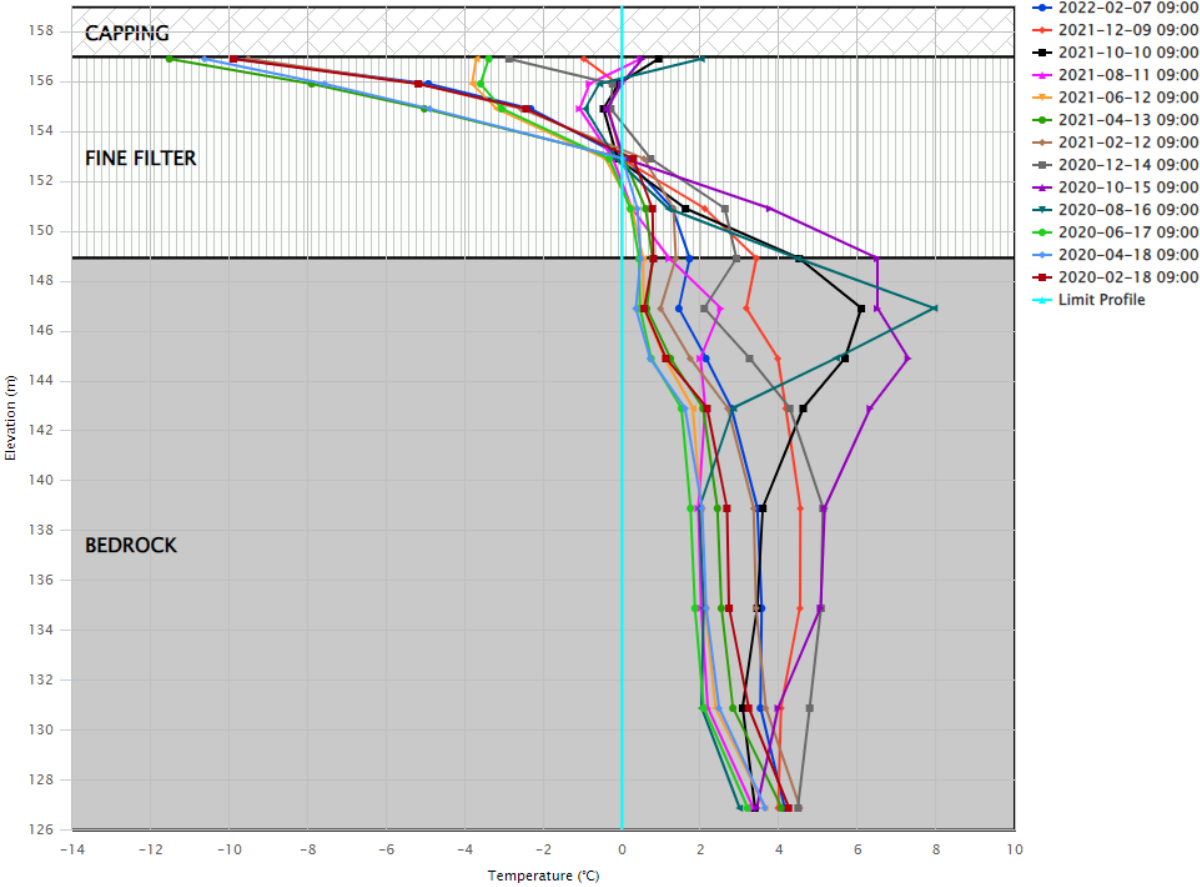
Whale Tail Dike



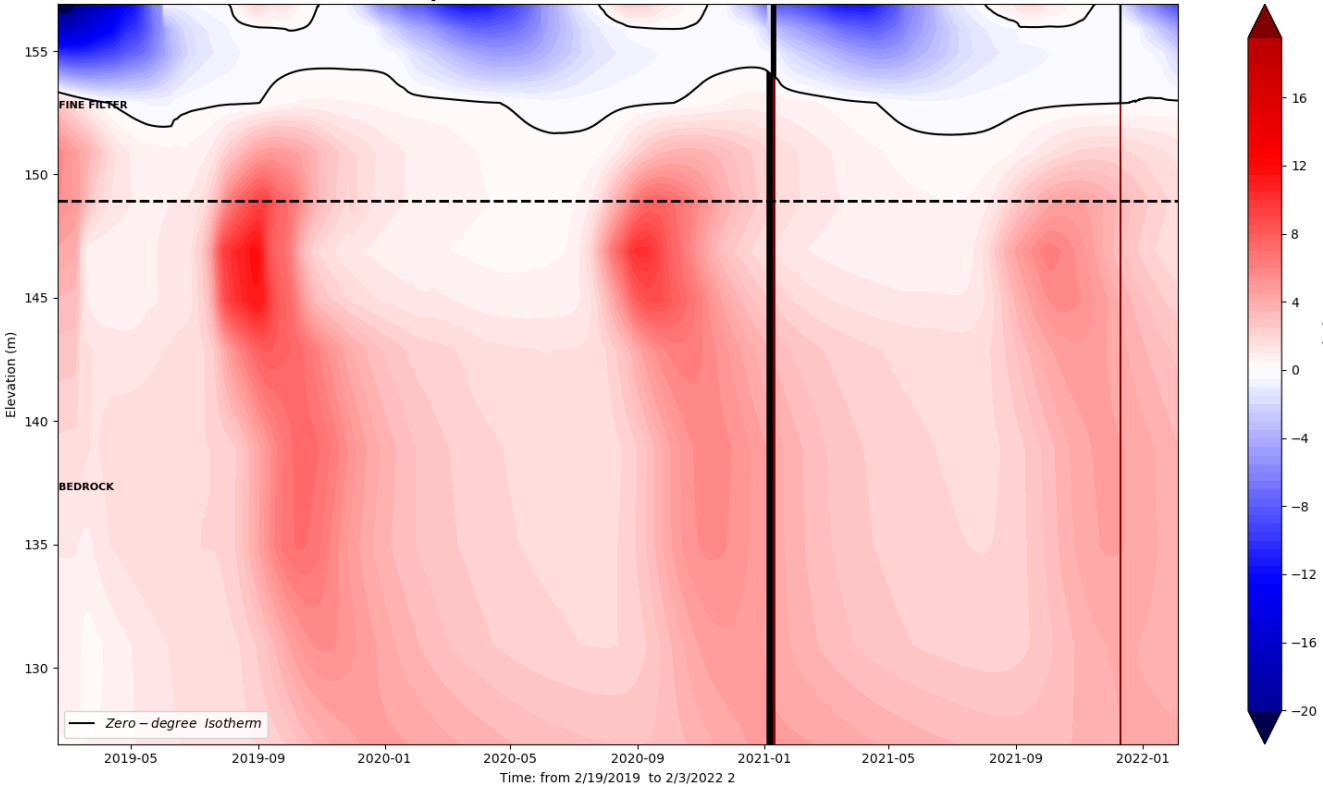
WTD-TH 0+453



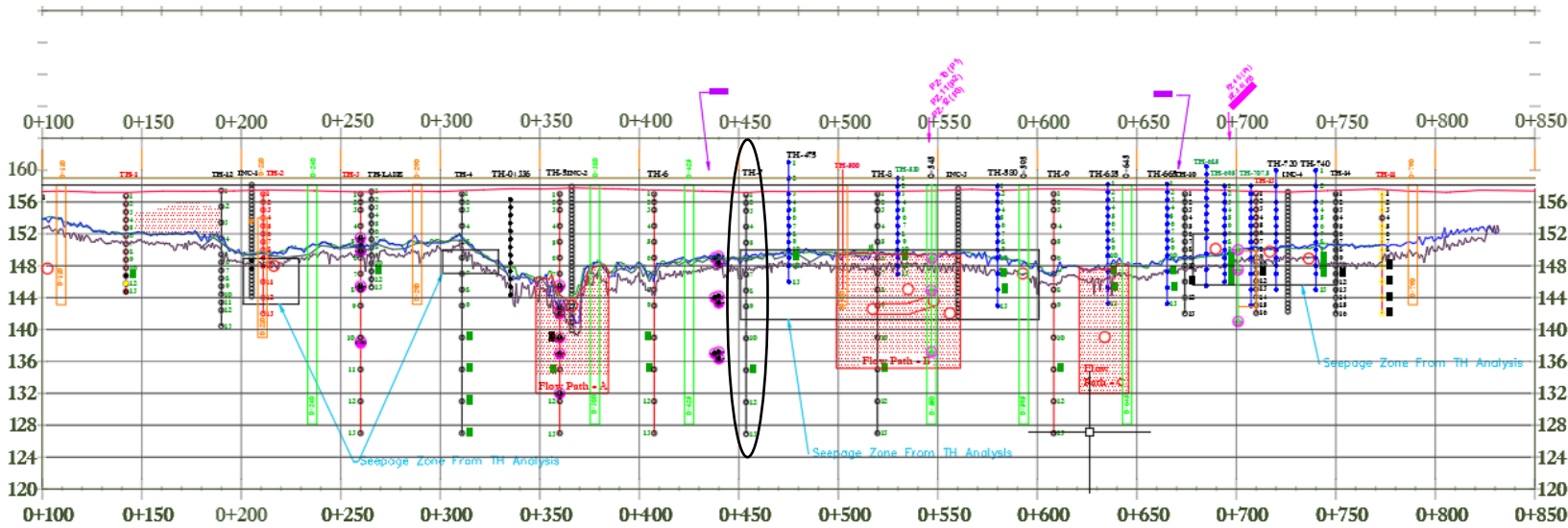
AMQ - WTD TH: 0+453



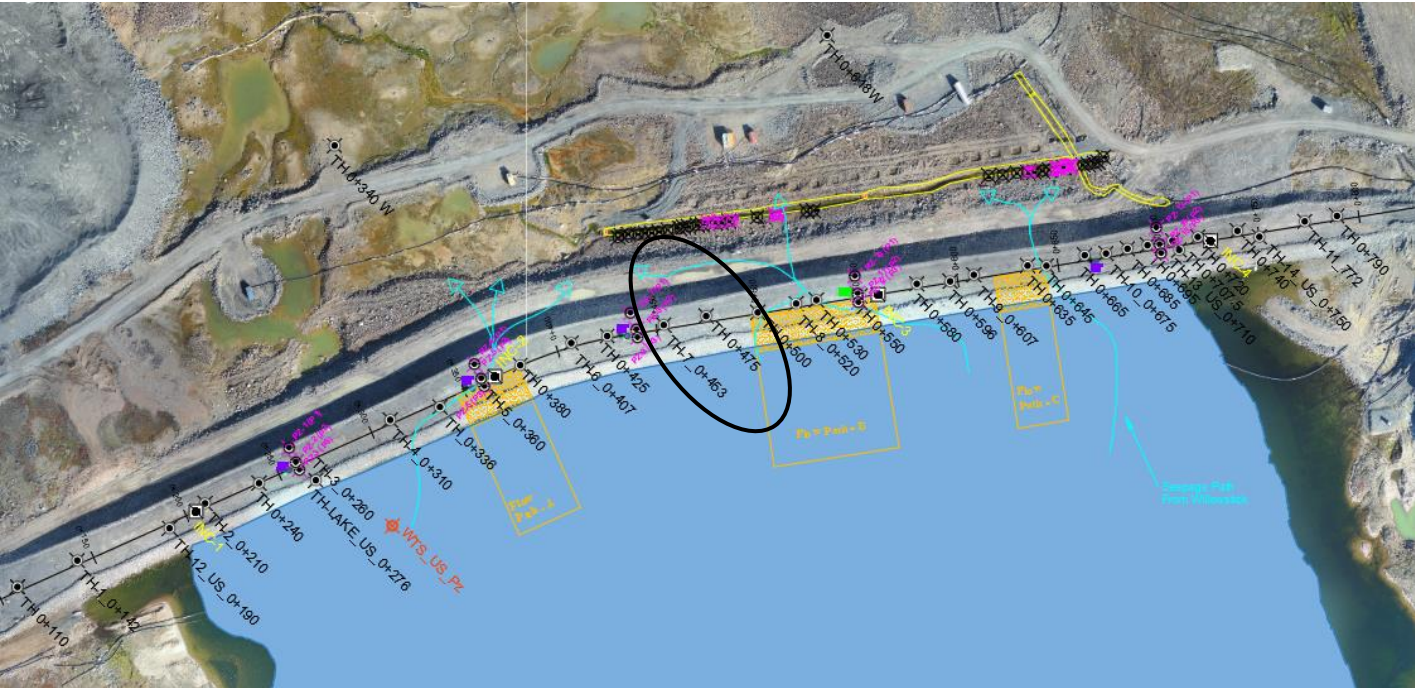
Temperature(°C): AMQ - WTD TH 0 + 453



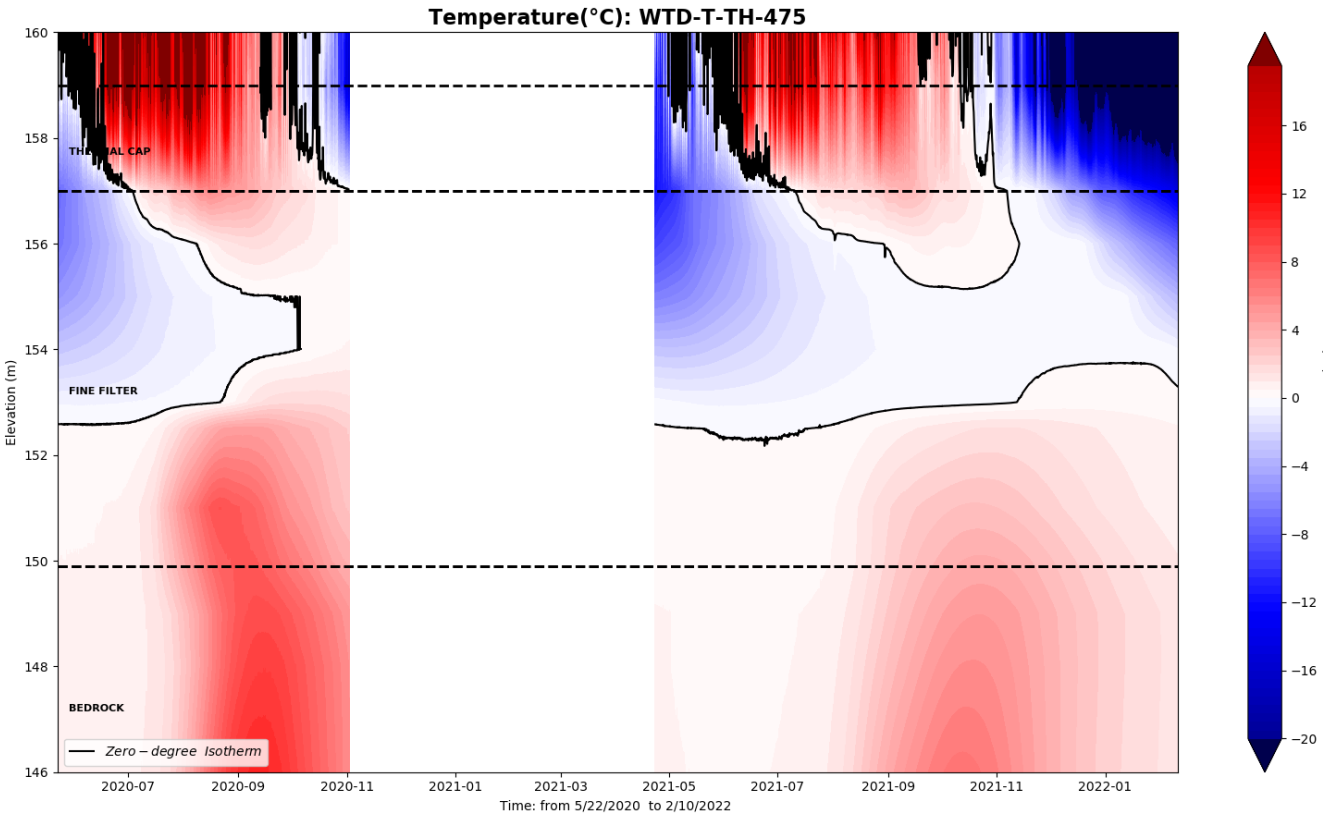
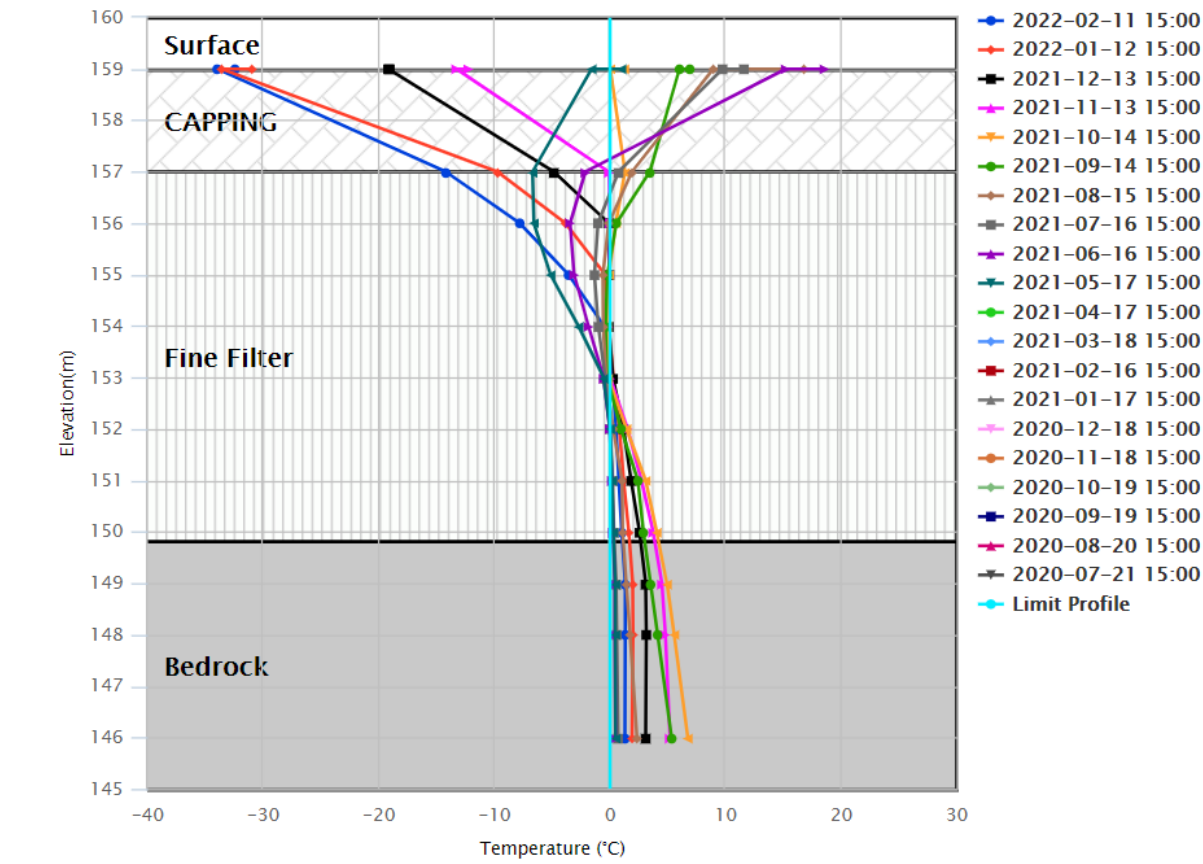
Whale Tail Dike



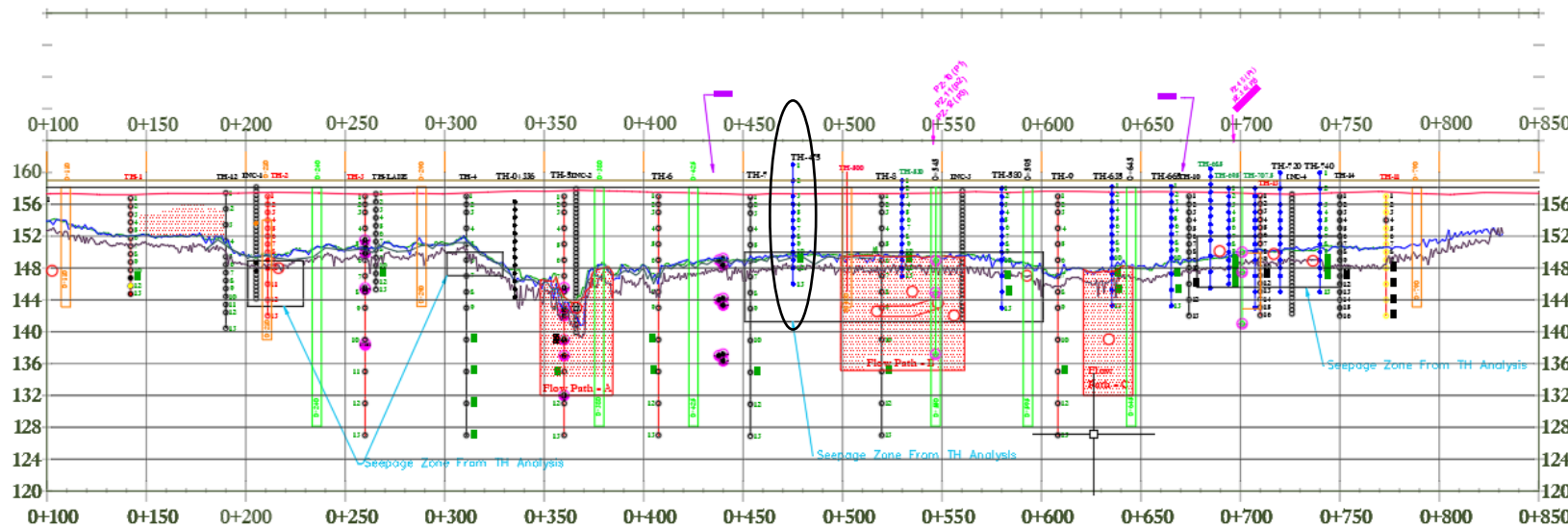
WTD-TH 0+475



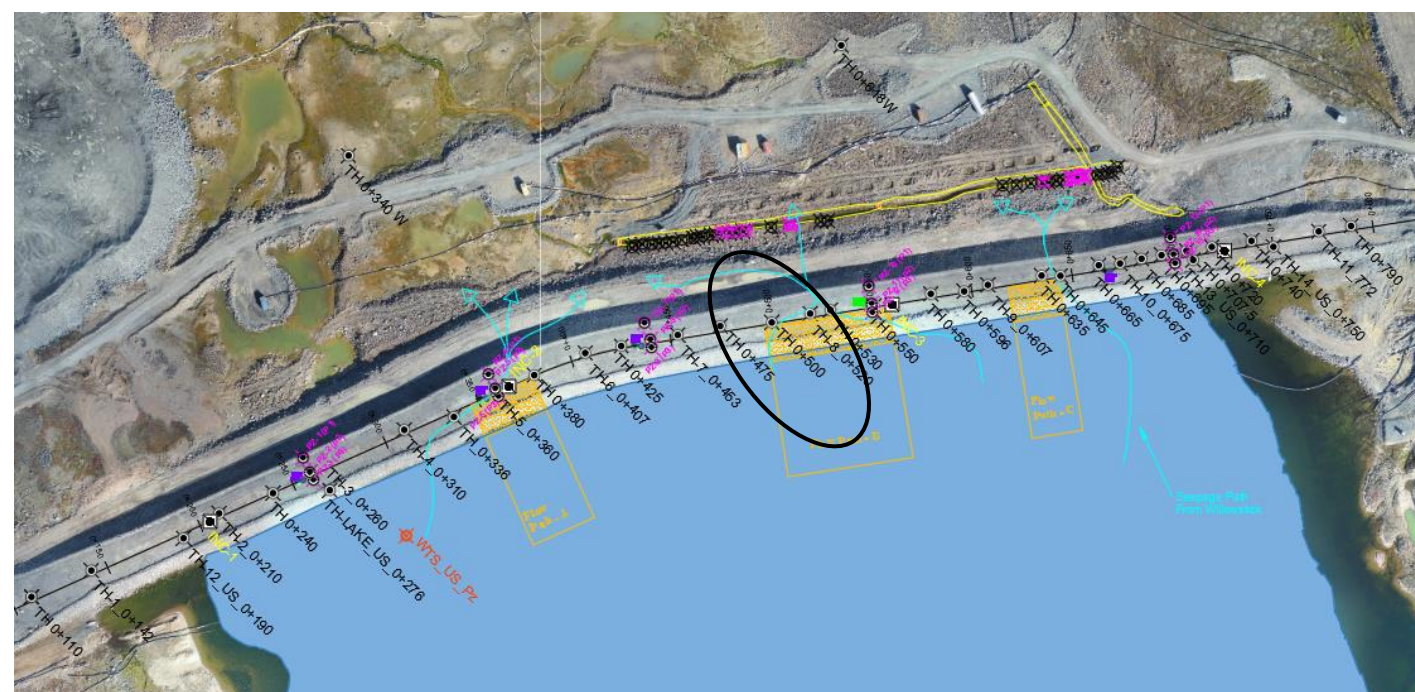
AMQ – WTD TH: 0+475_T



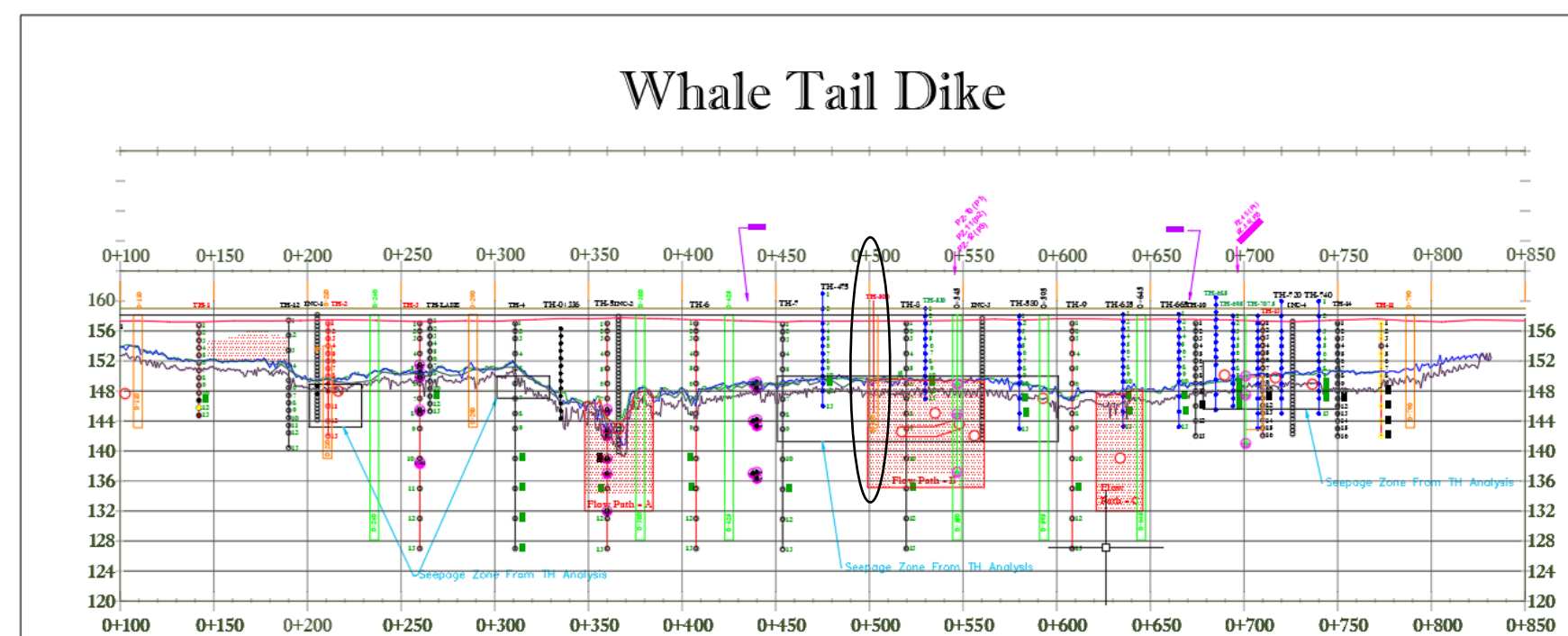
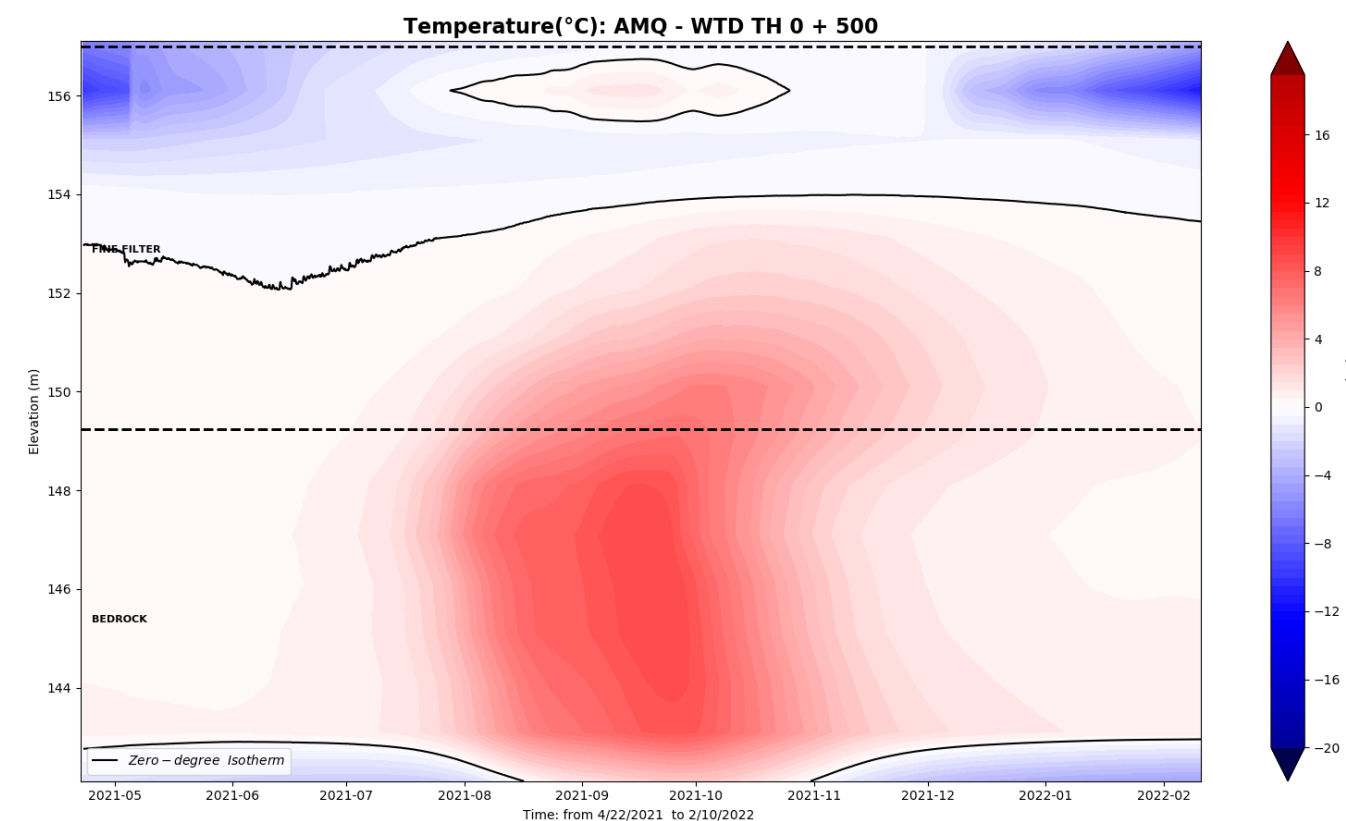
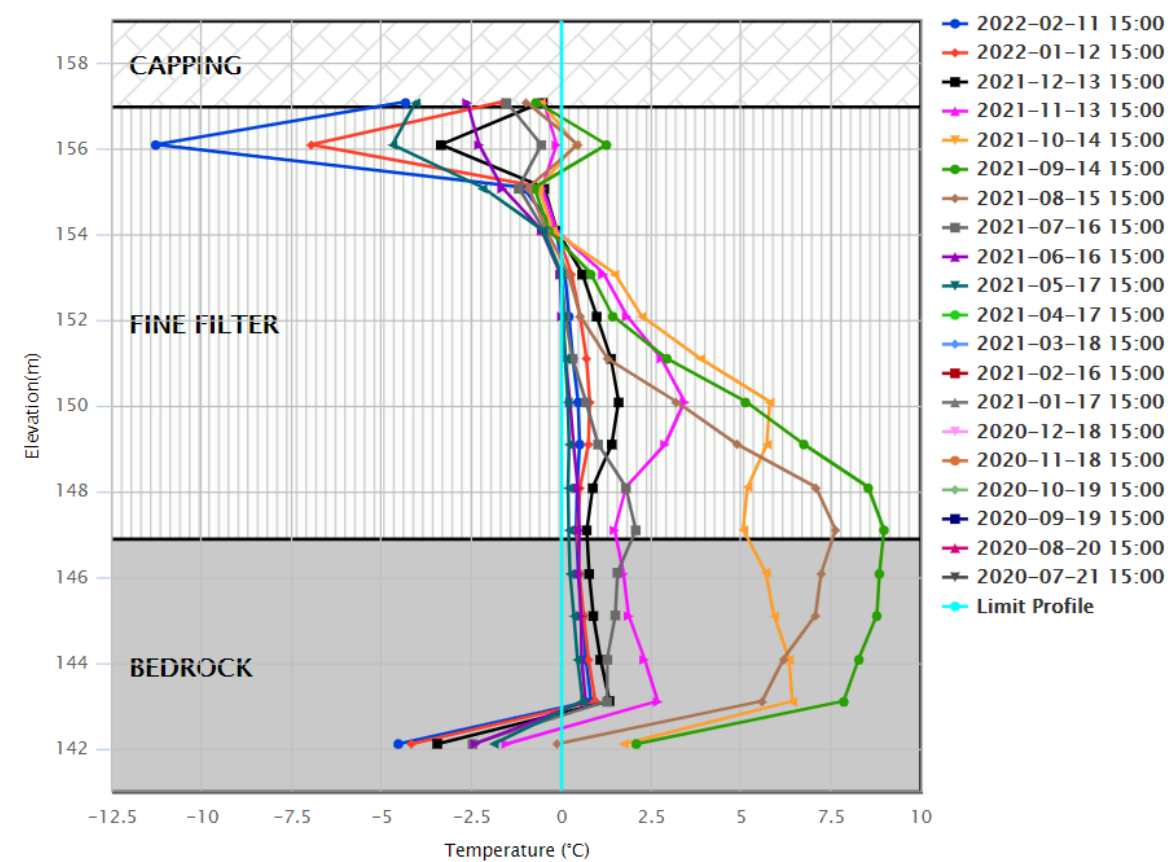
Whale Tail Dike



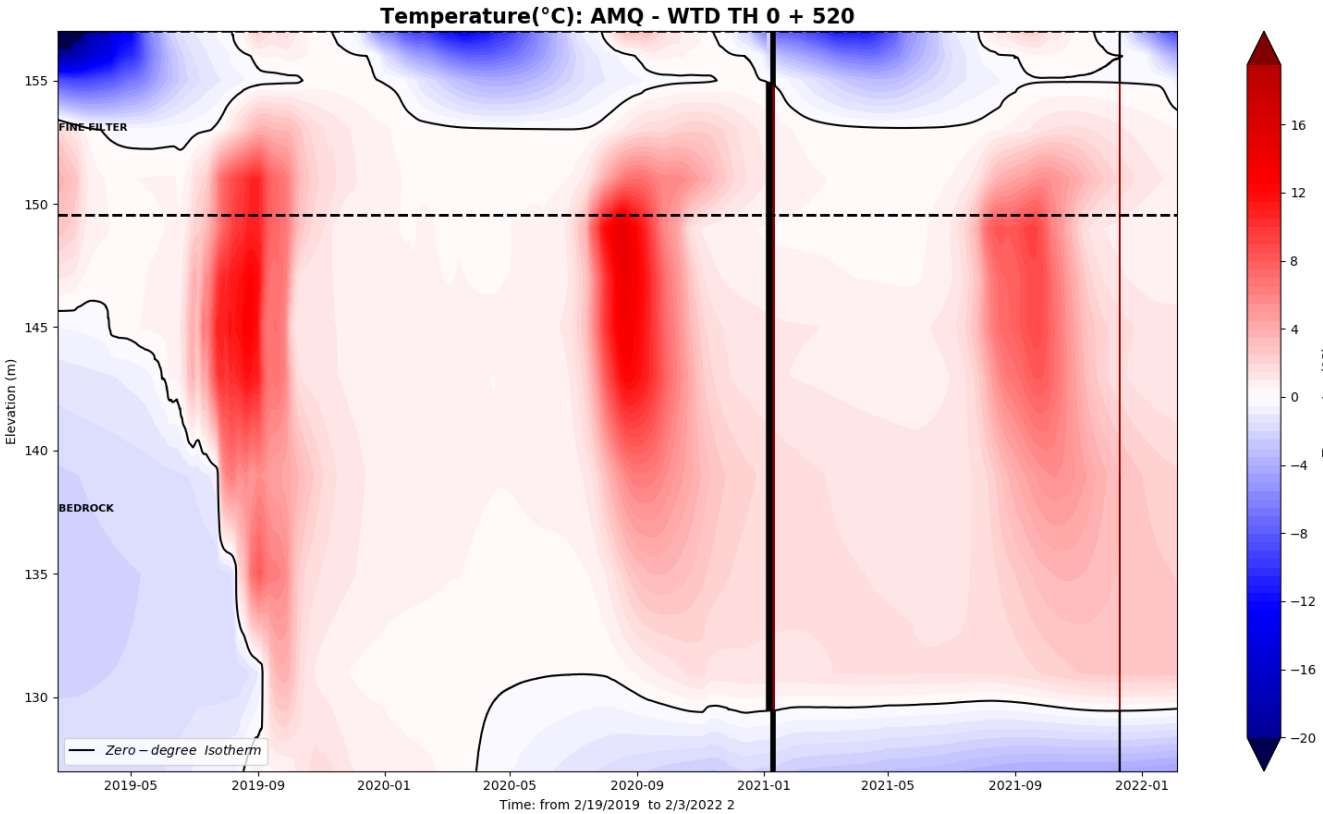
WTD-TH 0+500



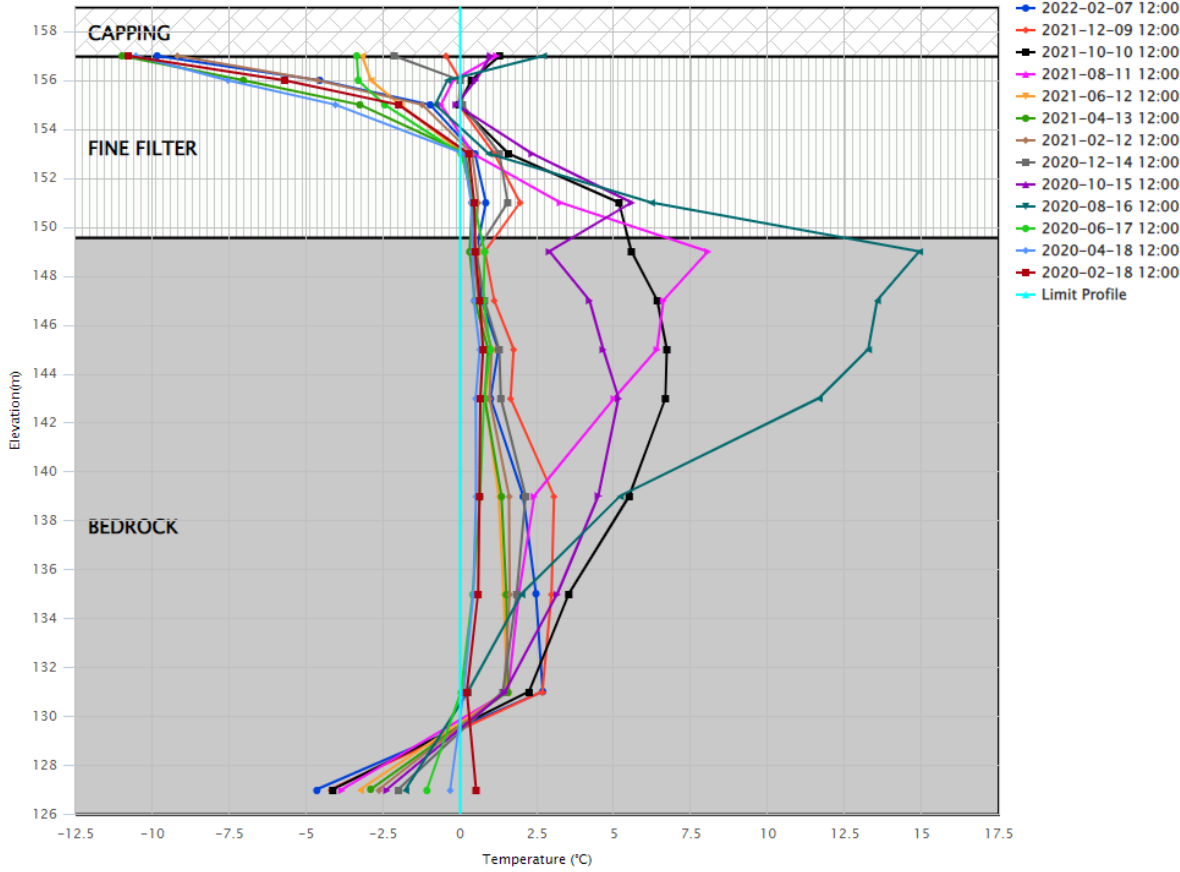
AMQ – WTD TH: 0+500



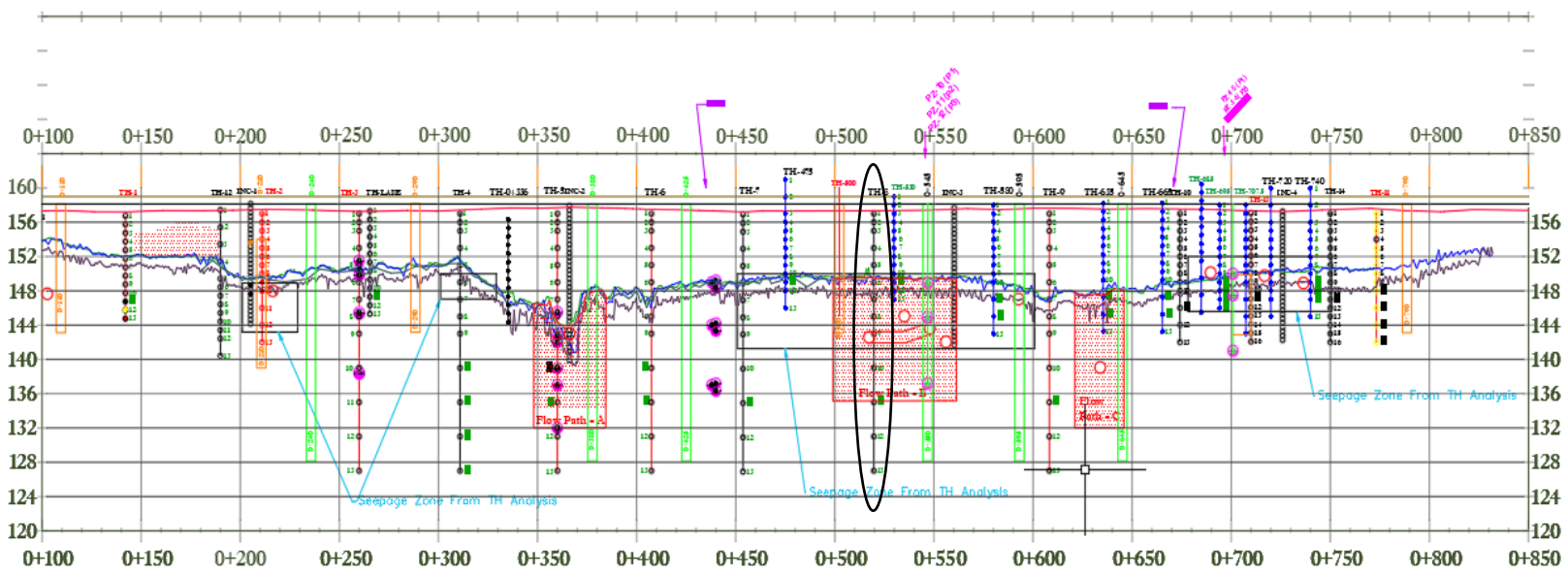
WTD-TH 0+520



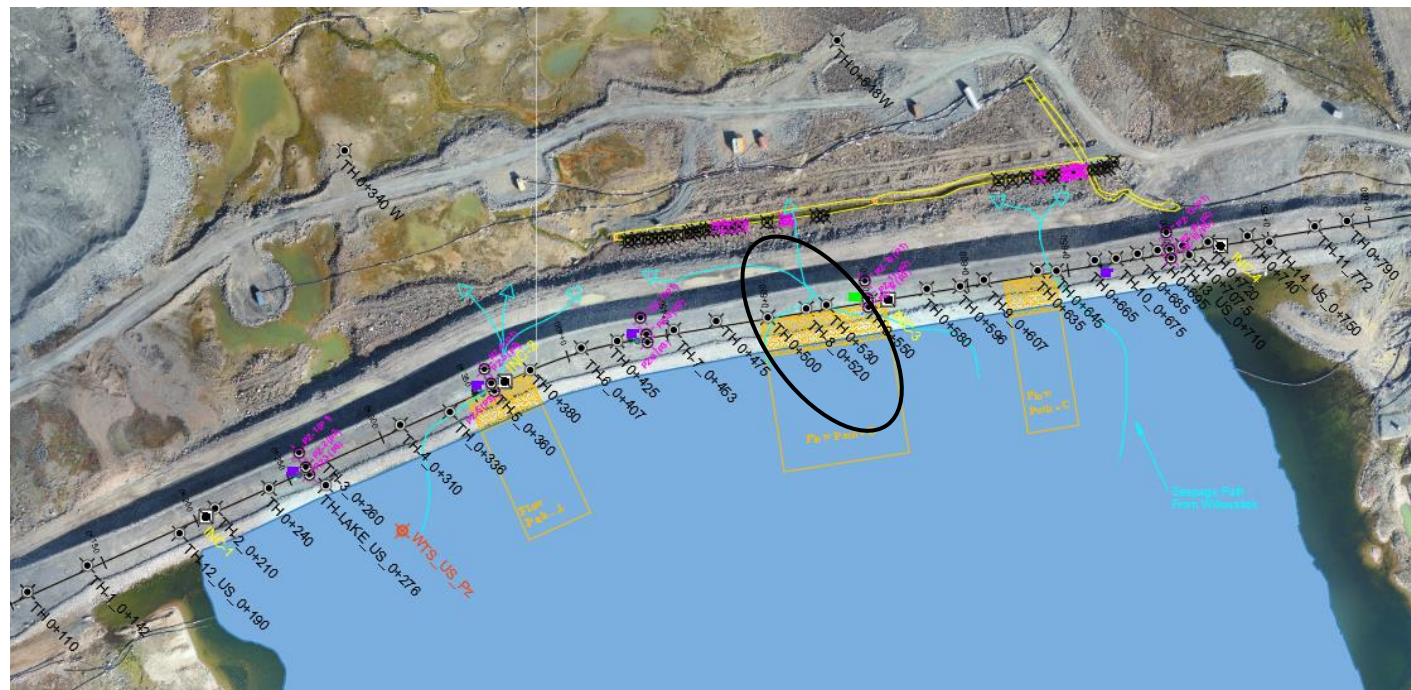
AMQ - WTD TH: 0+520



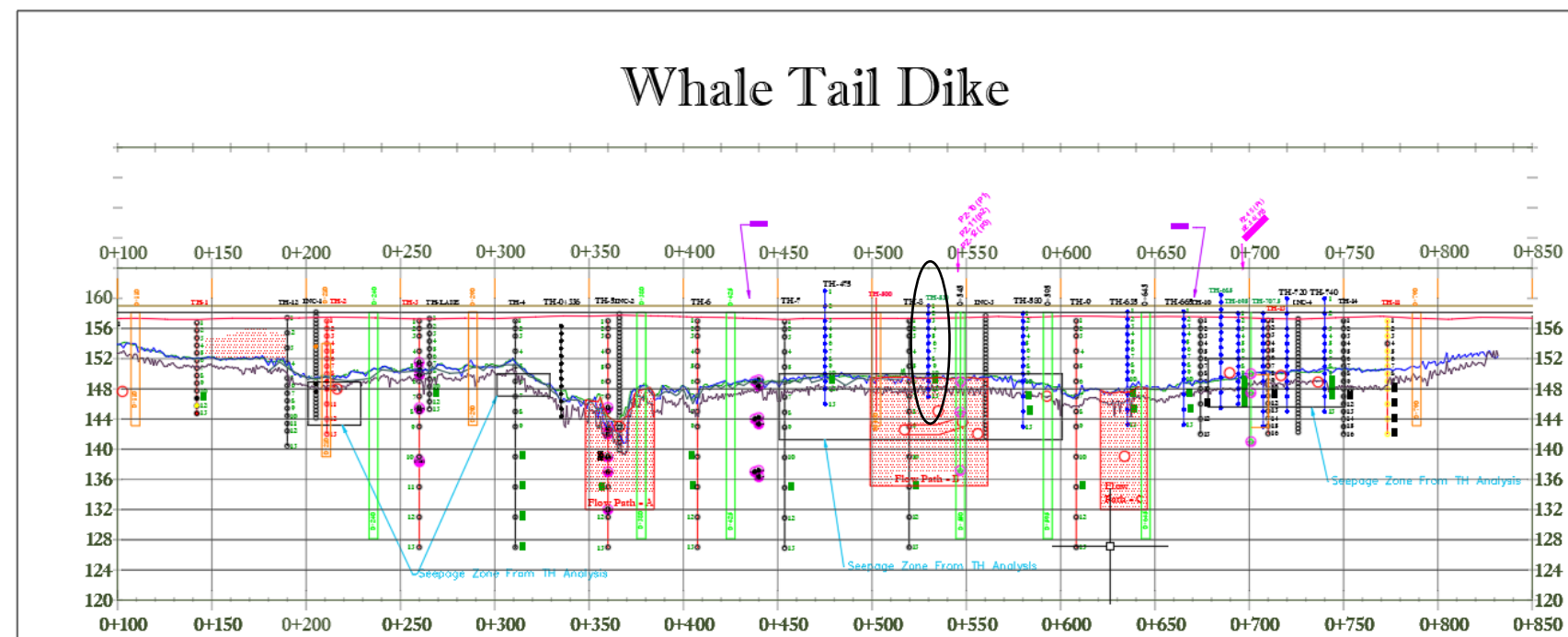
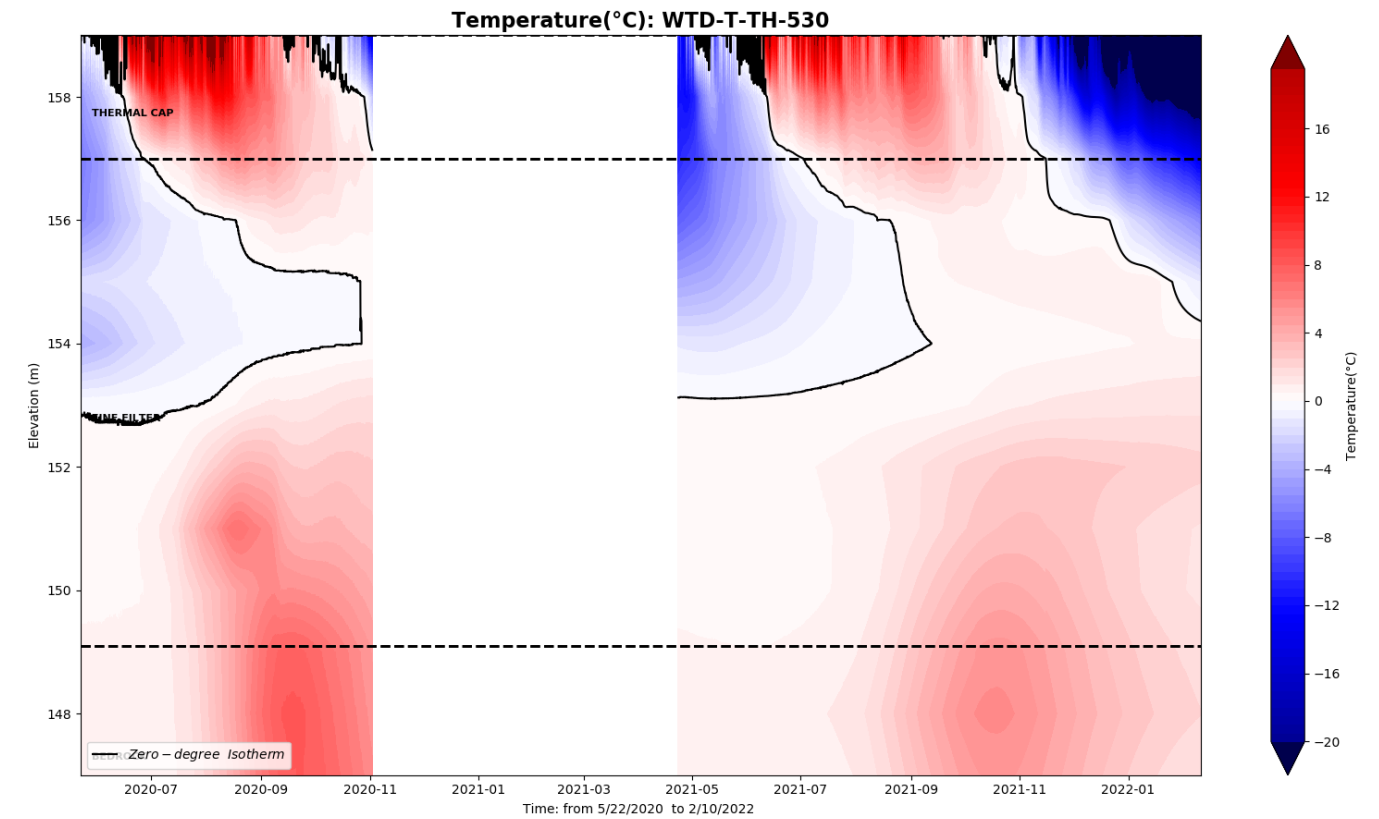
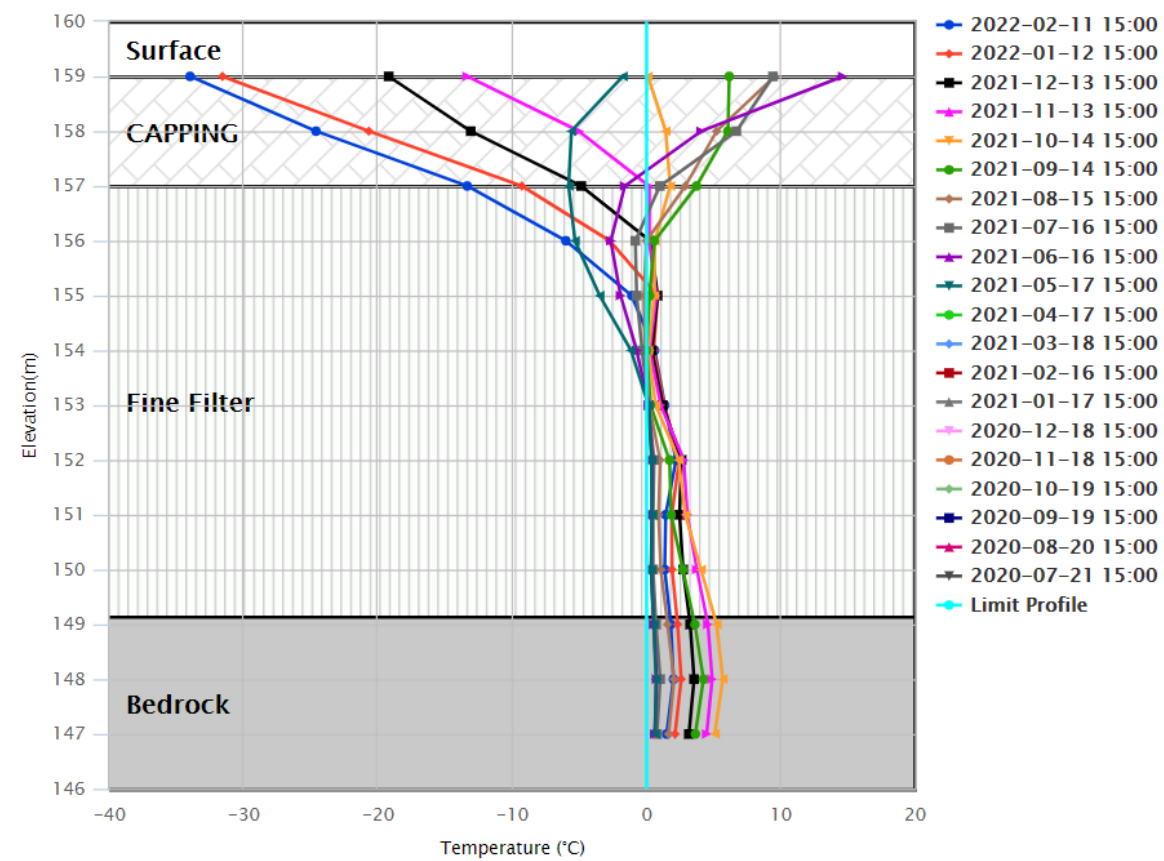
Whale Tail Dike



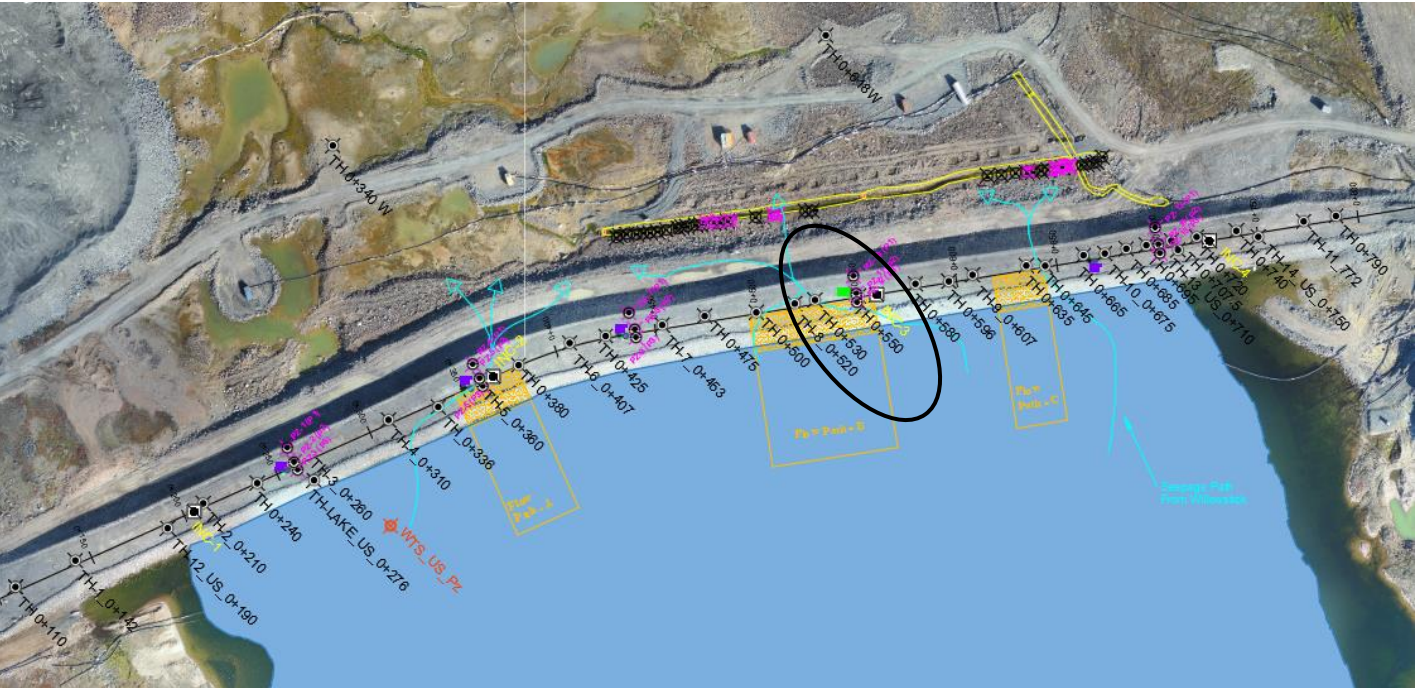
WTD-TH 0+530



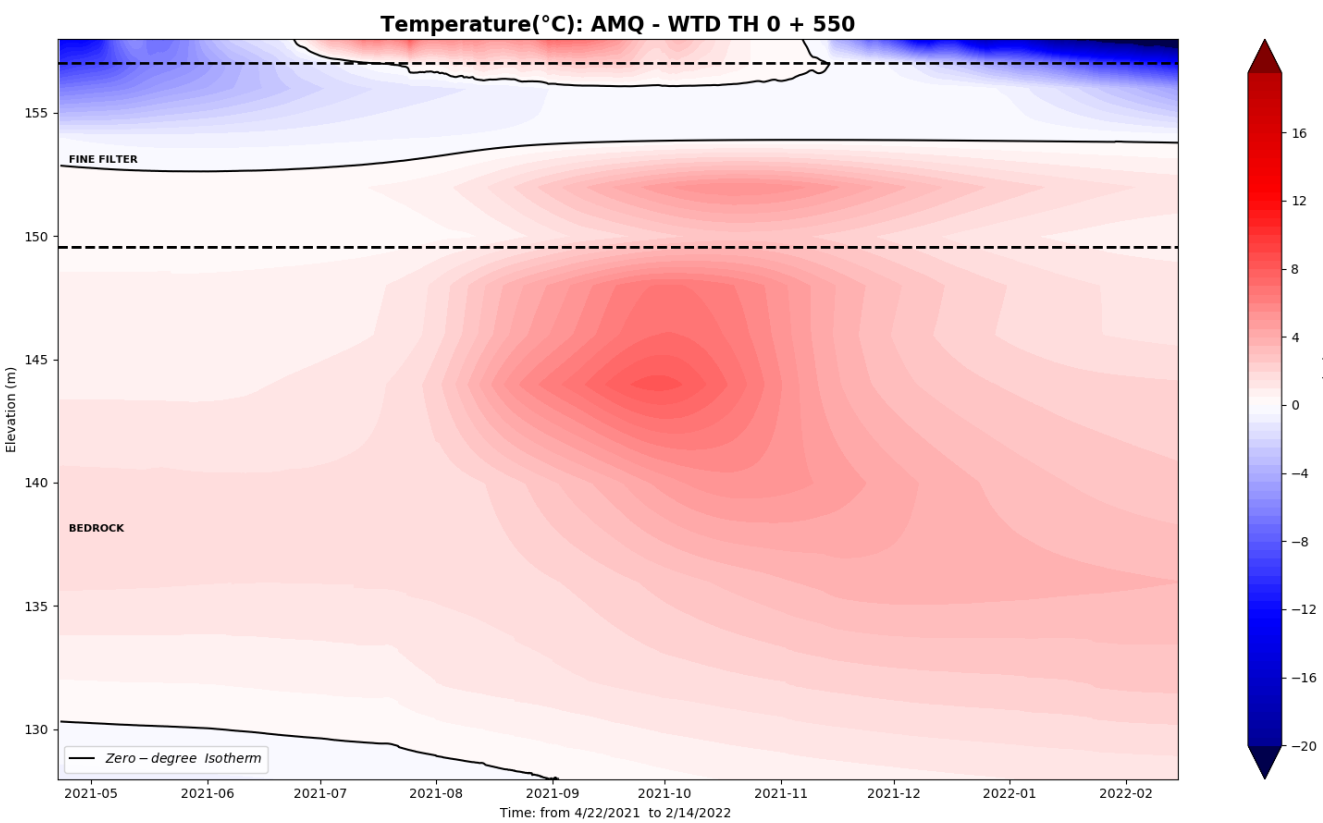
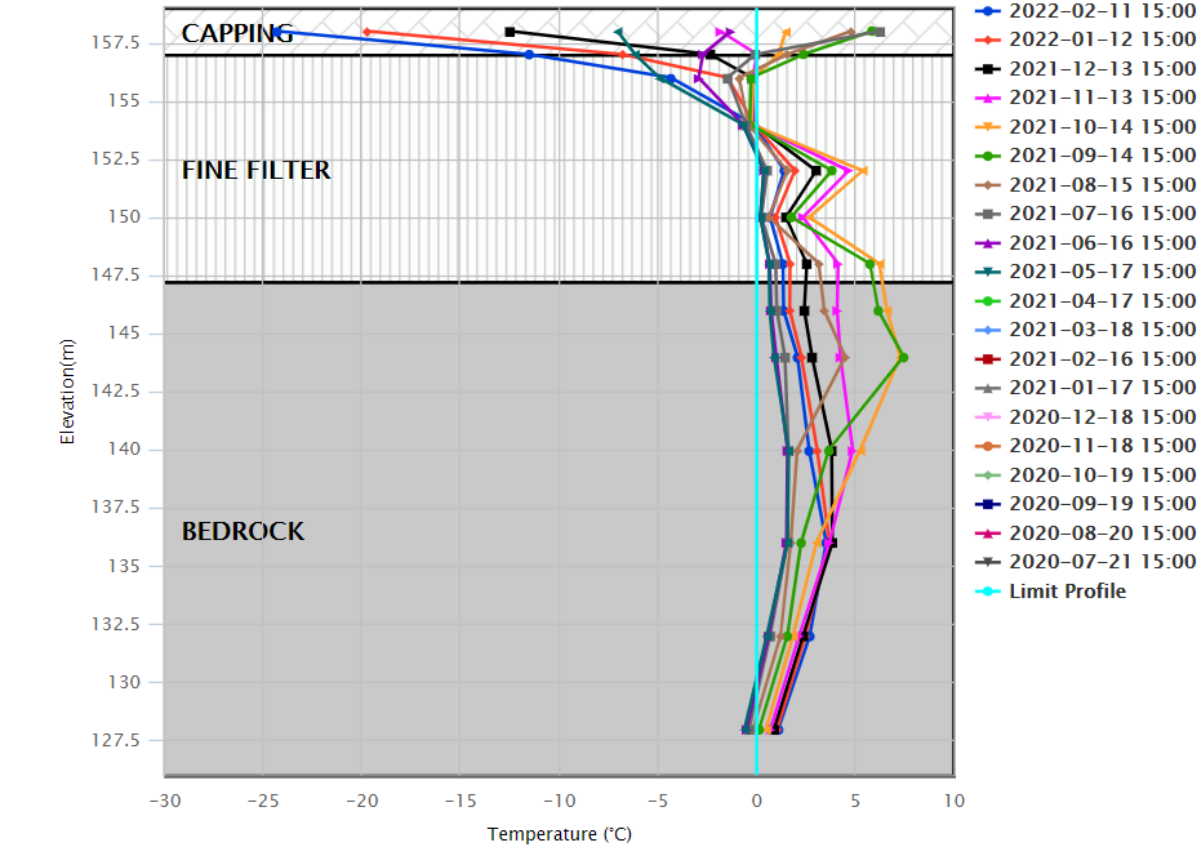
AMQ - WTD TH: 0+530_T



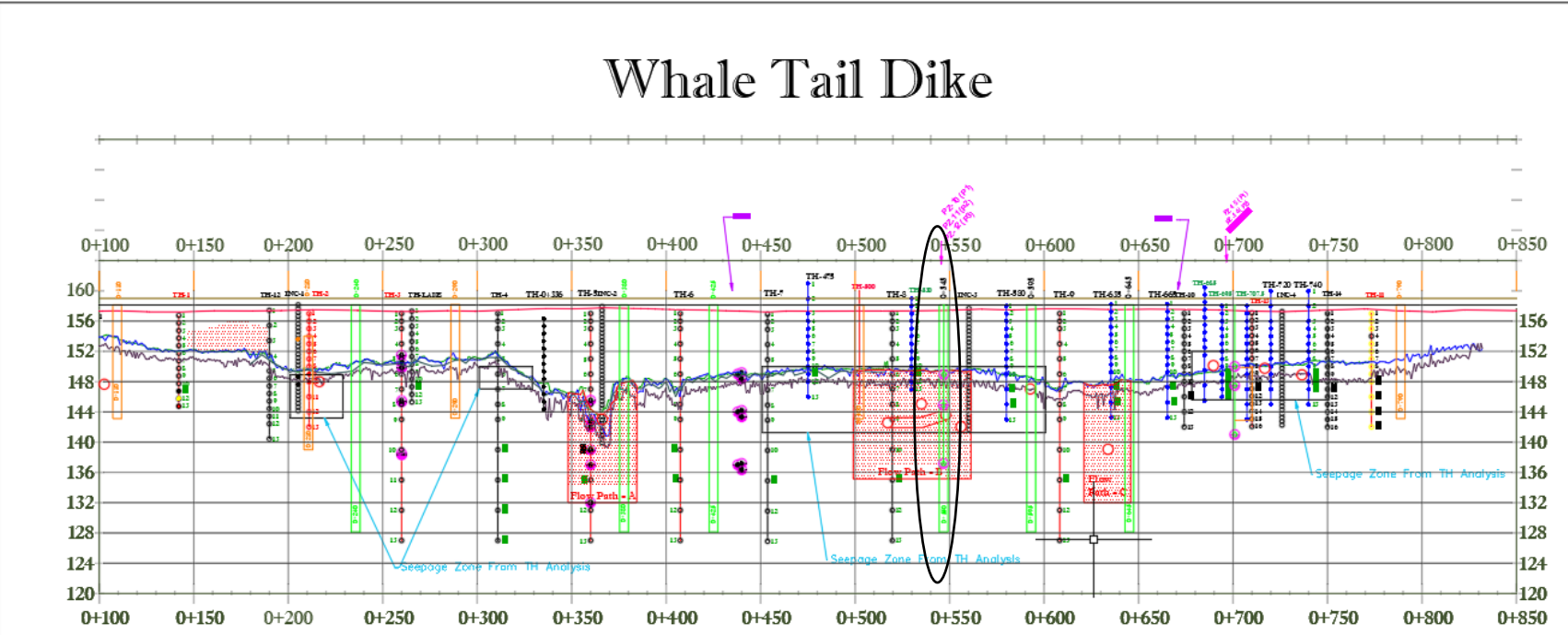
WTD-TH 0+550

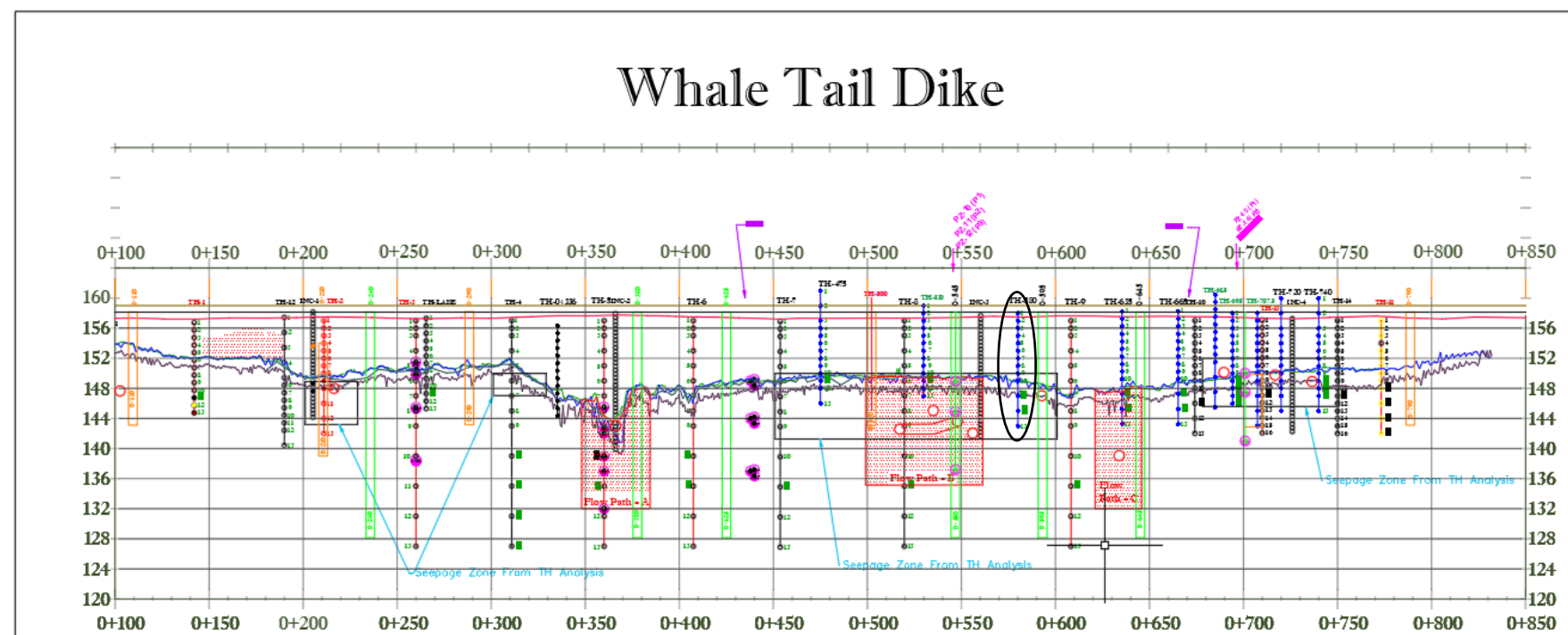


AMQ – WTD TH: 0+550



Whale Tail Dike

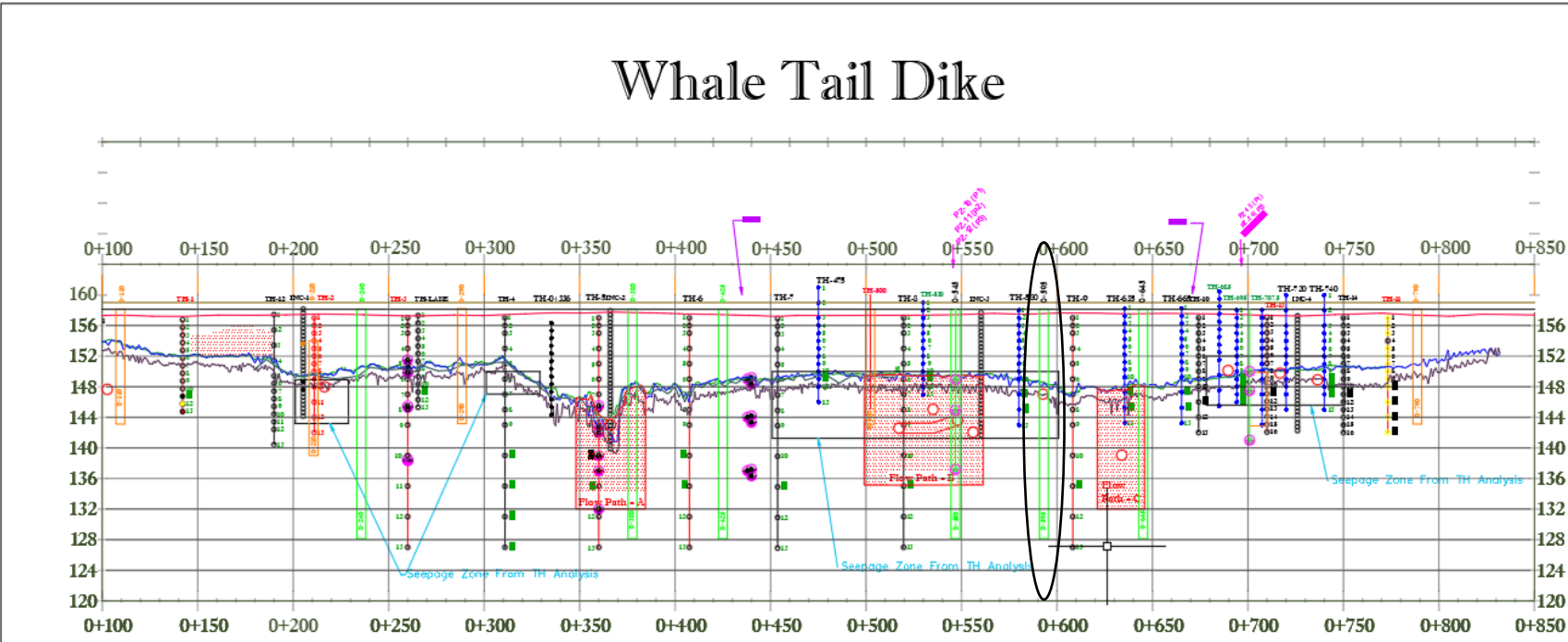
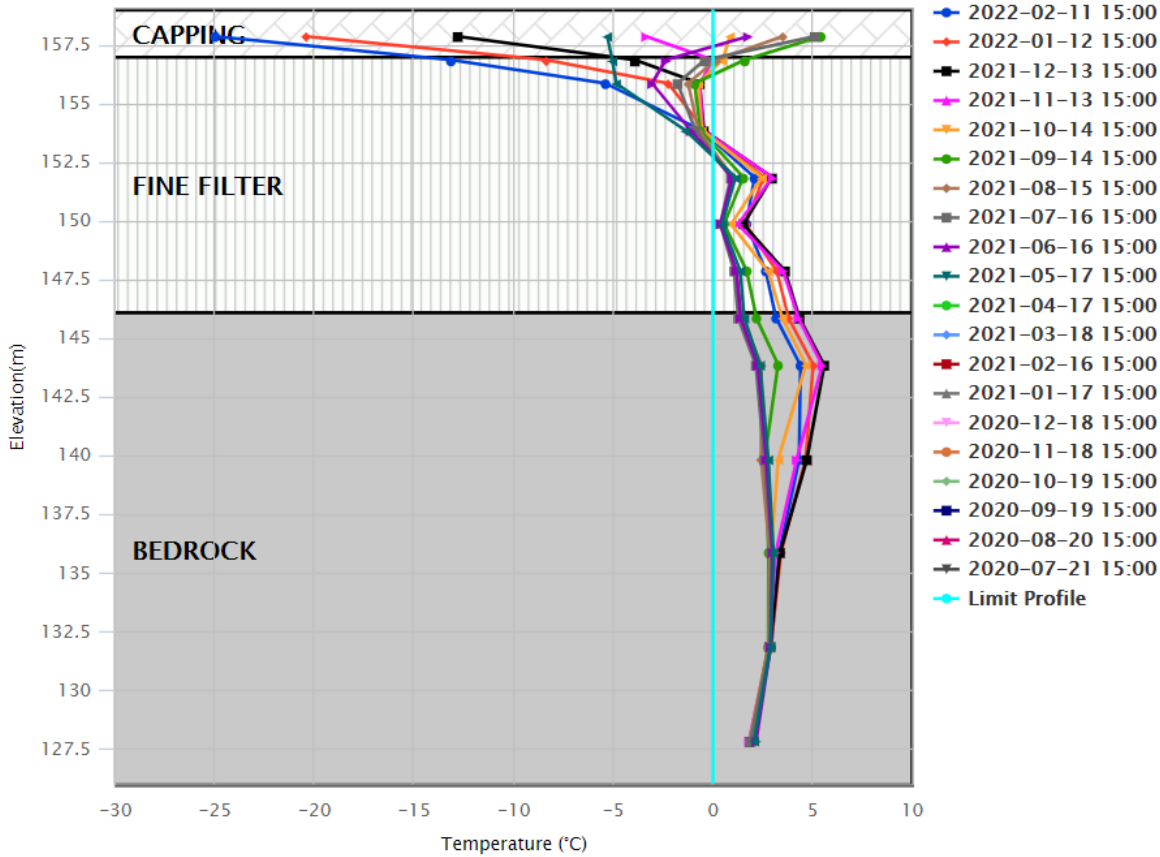
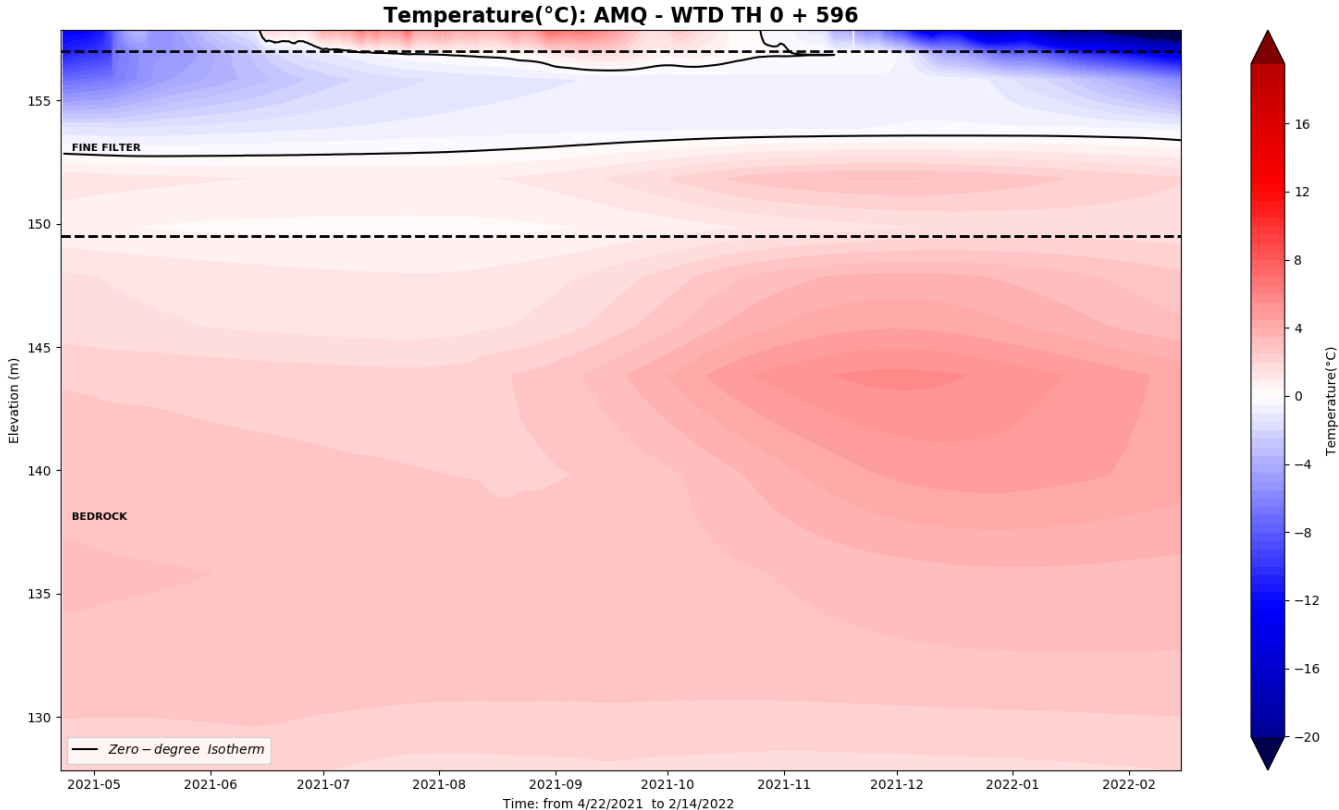




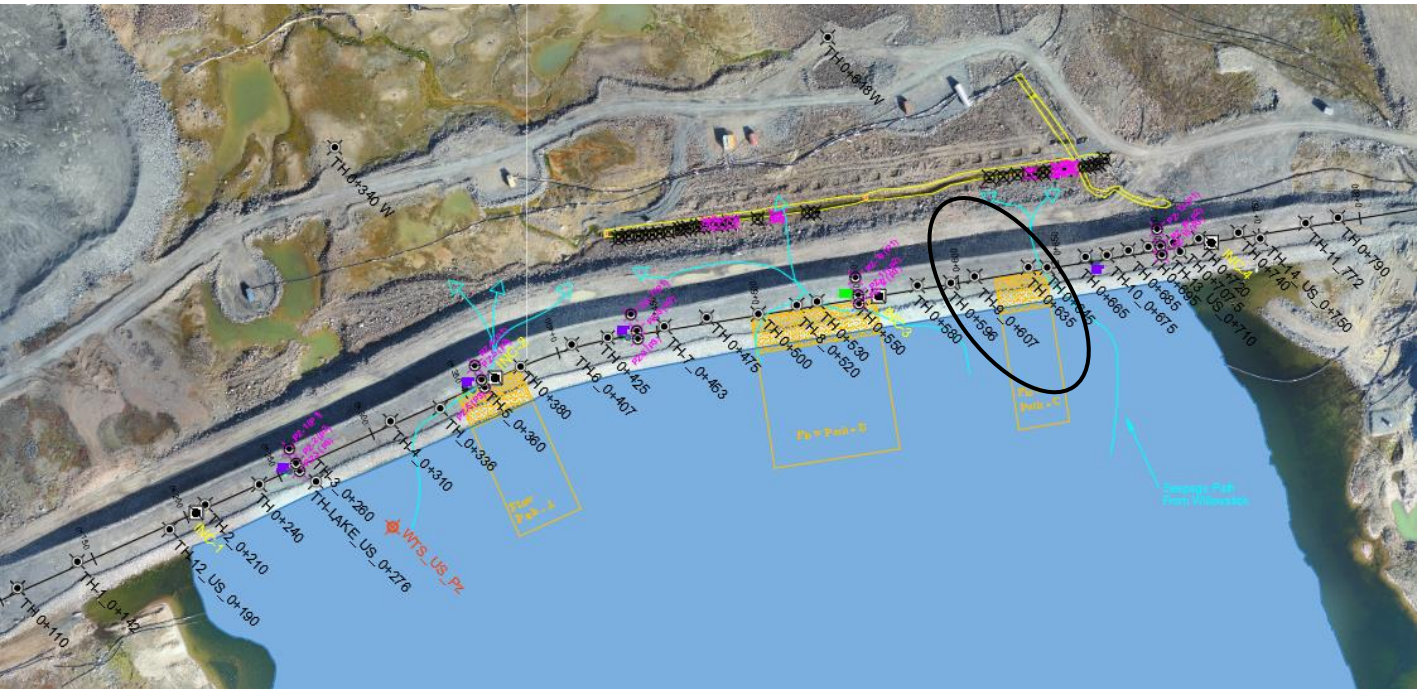
WTD-TH 0+596



AMQ - WTD TH: 0+596

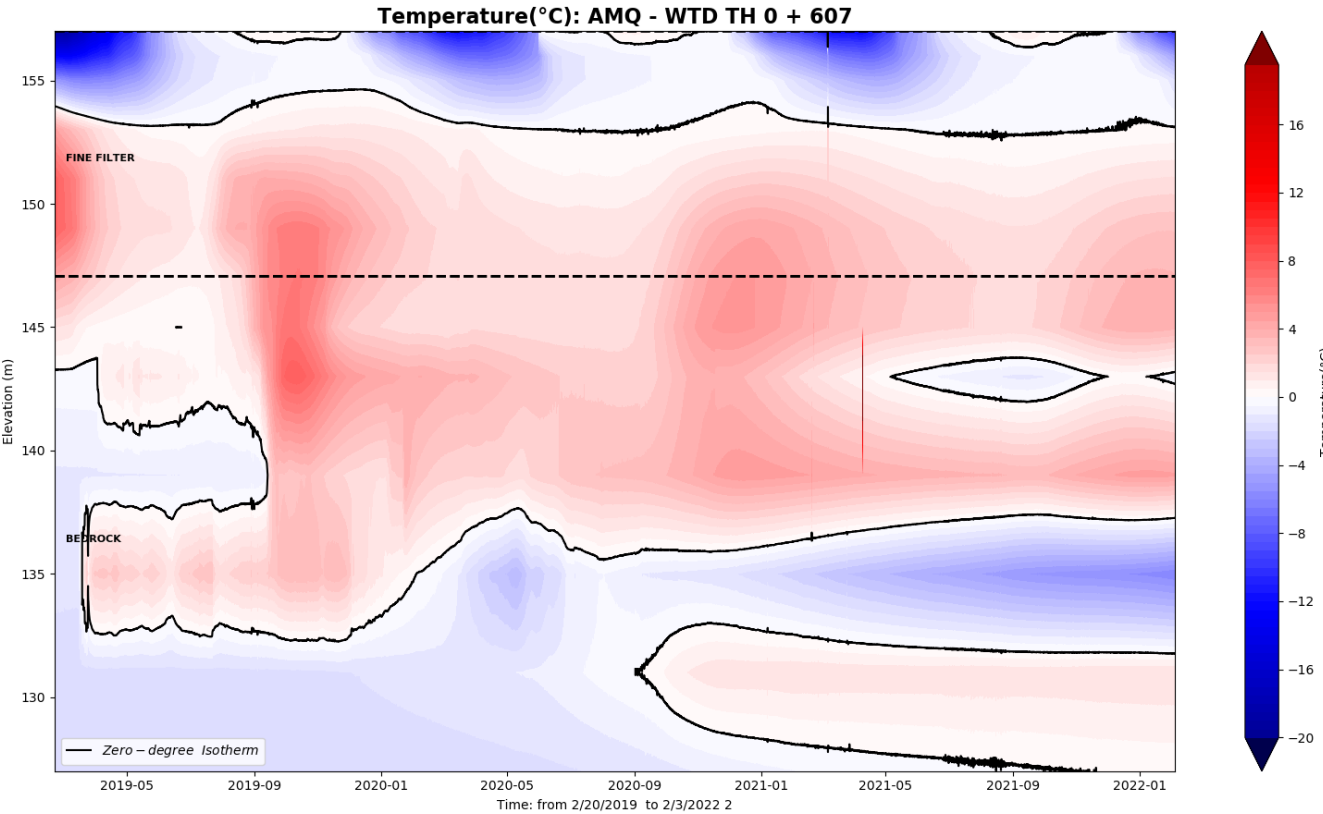
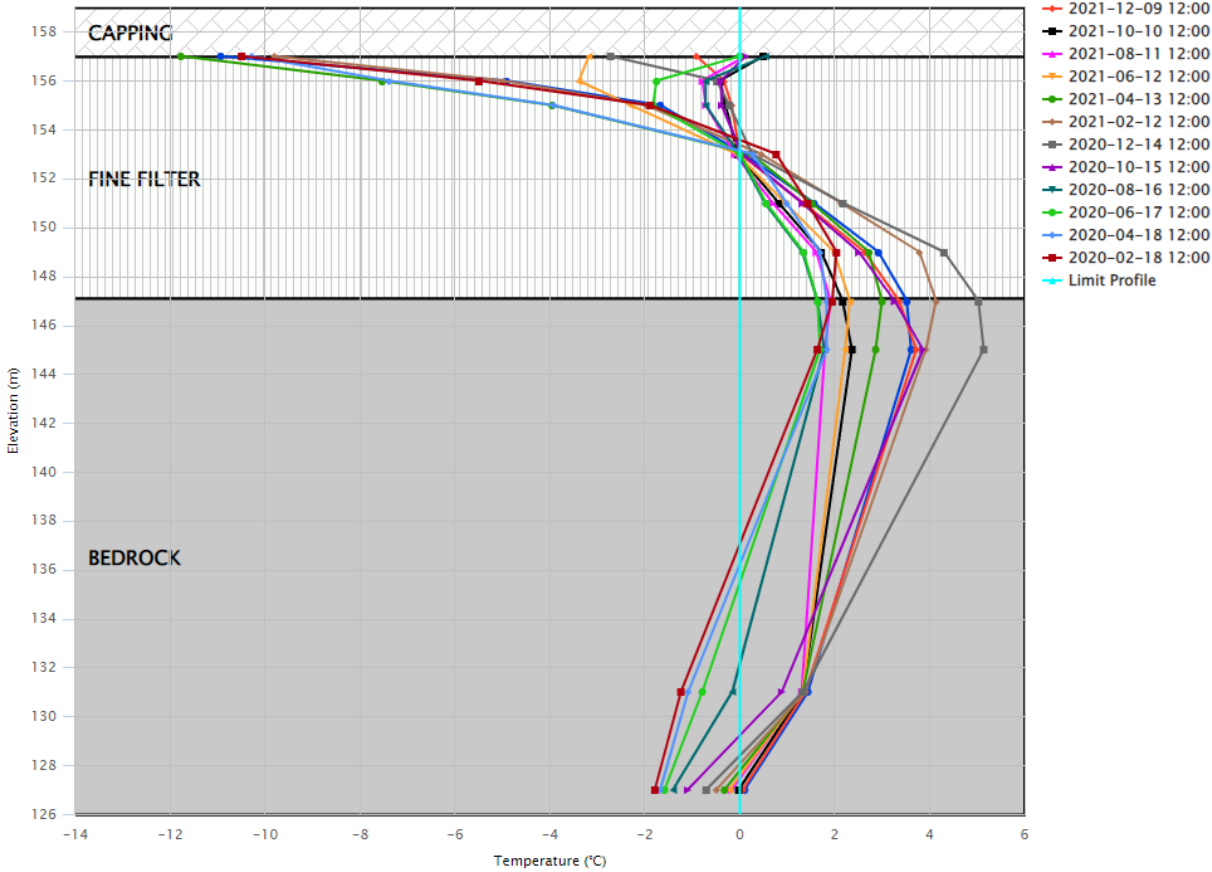


WTD-TH 0+607

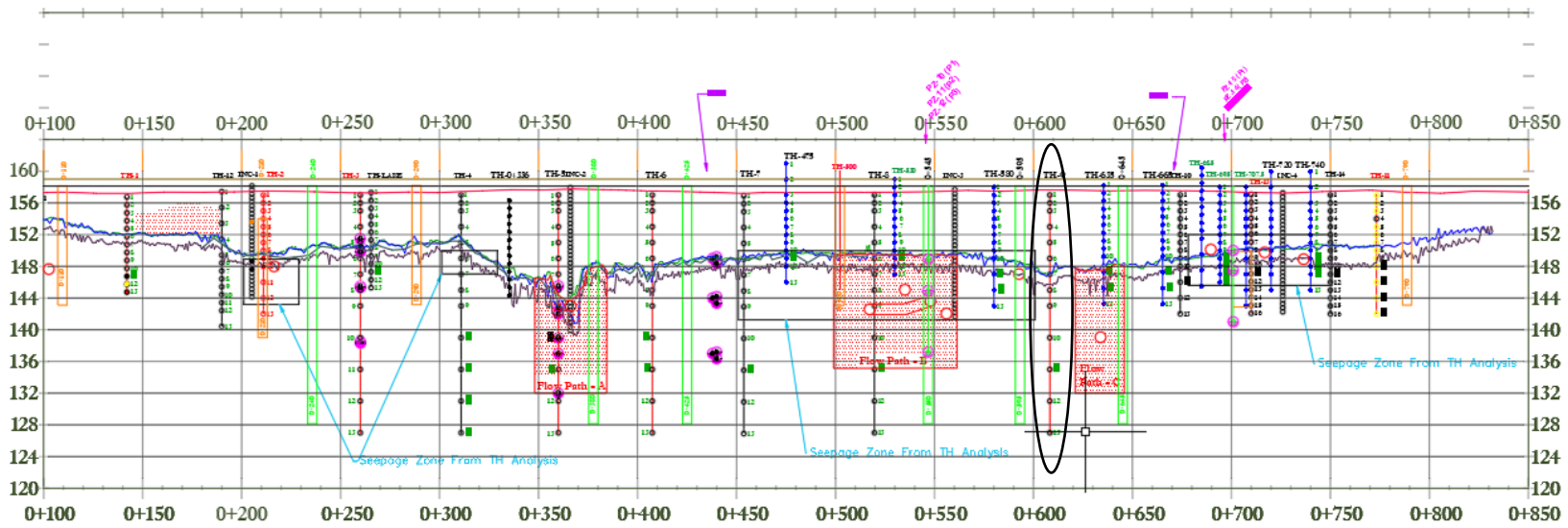


AMQ - WTD TH: 0+607

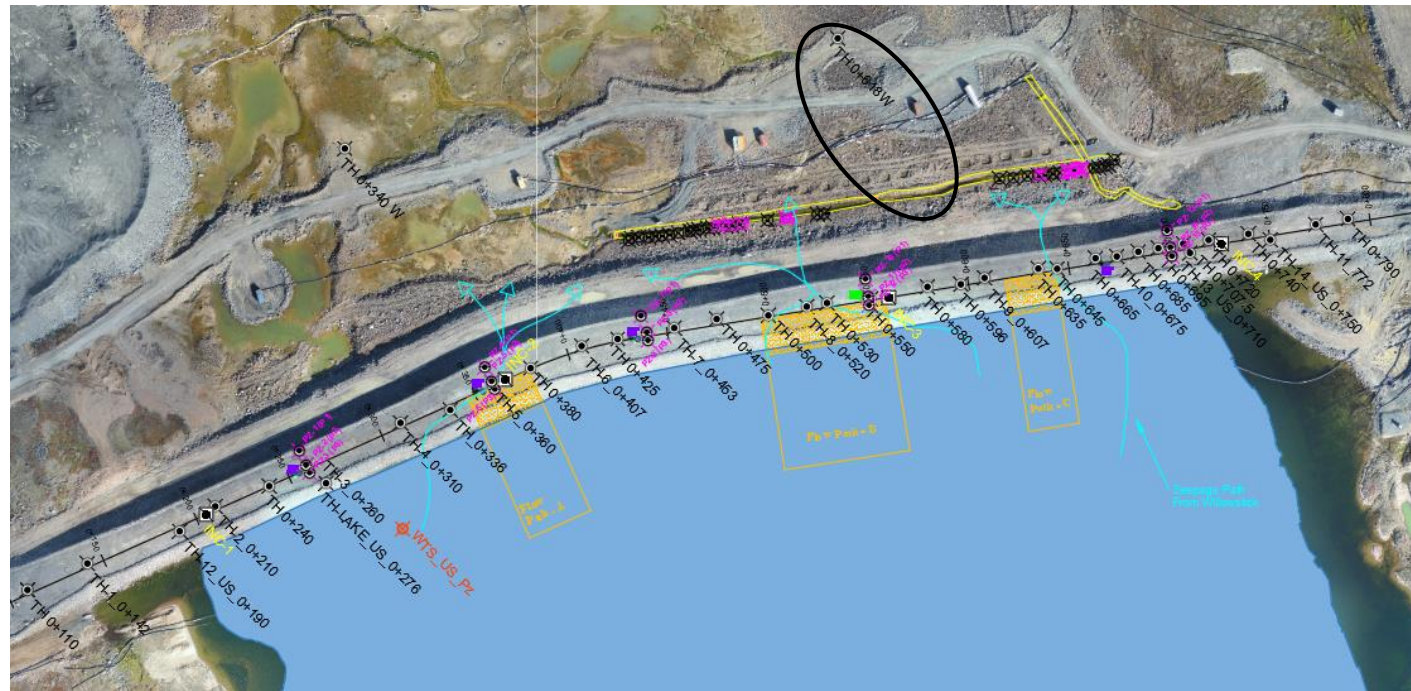
Beads # 9,10 and #11 removed.



Whale Tail Dike

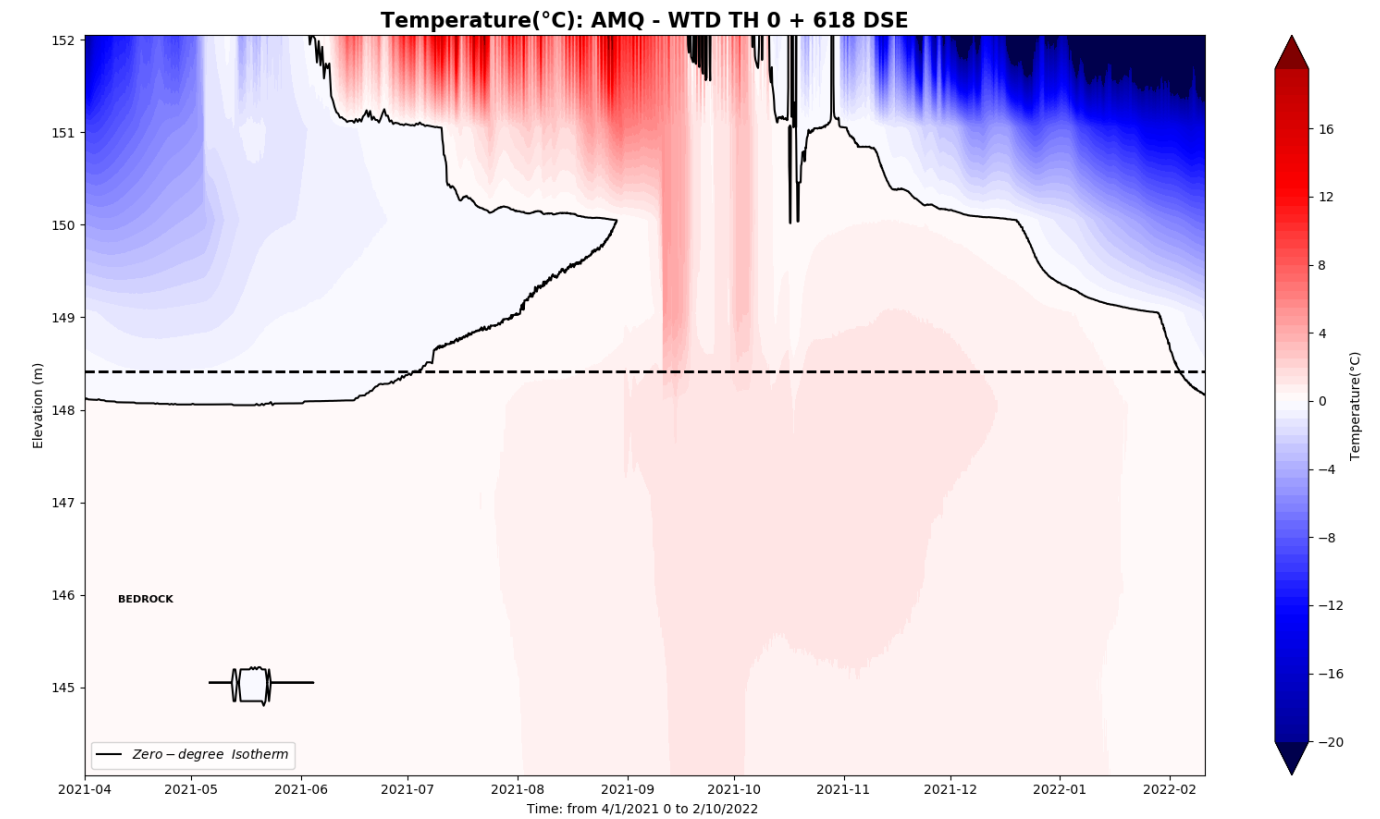
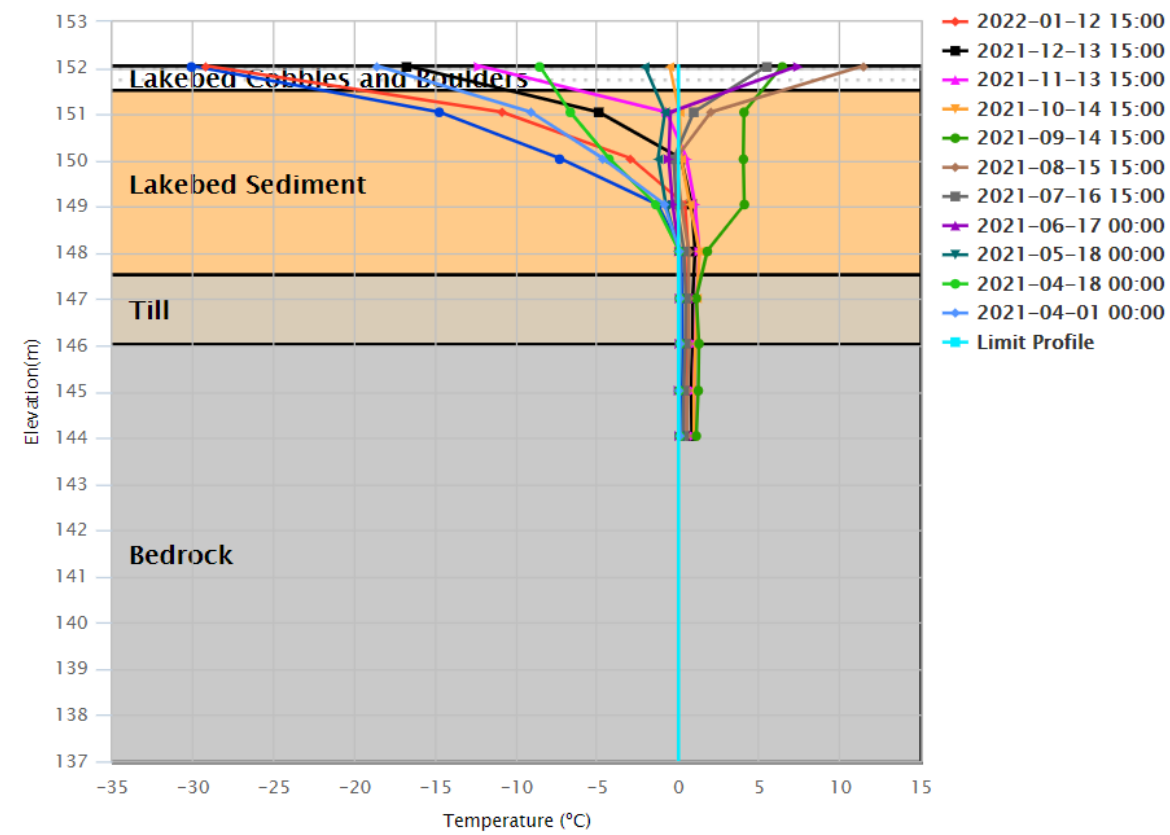


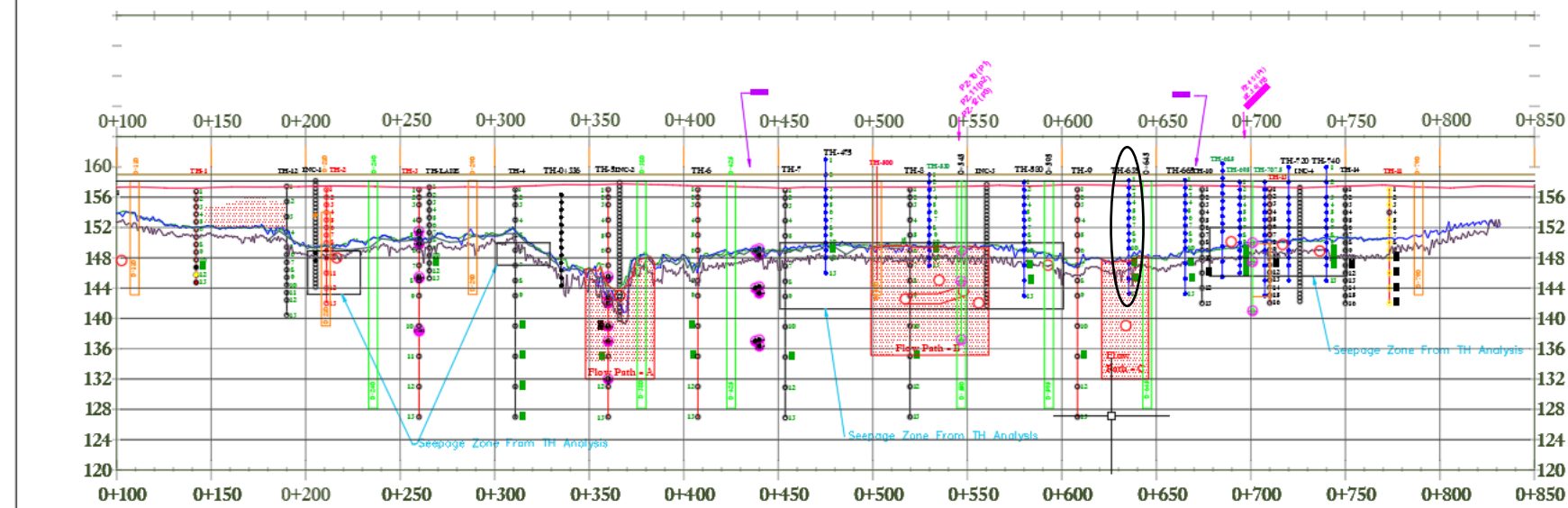
WTD-TH 0+618 DSE



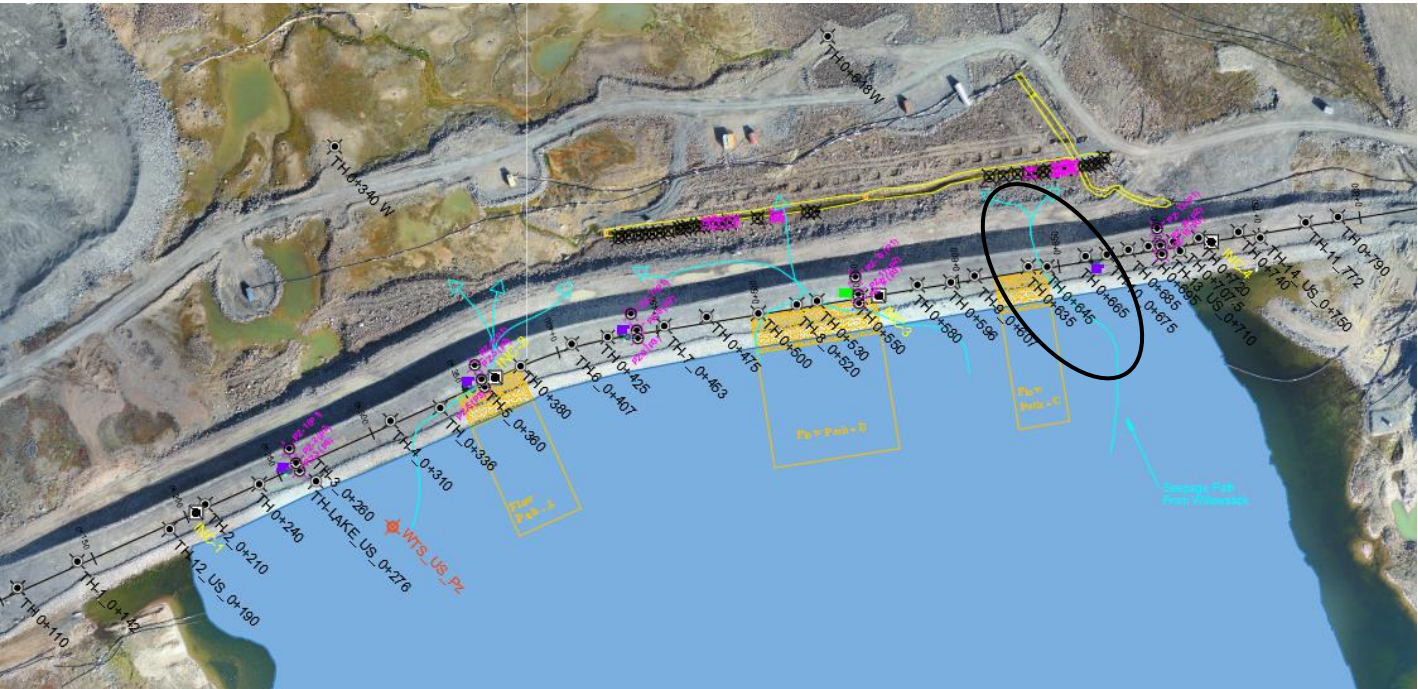
AMQ – WTD TH: D/S_East

Beads #10 to #16 are damaged.

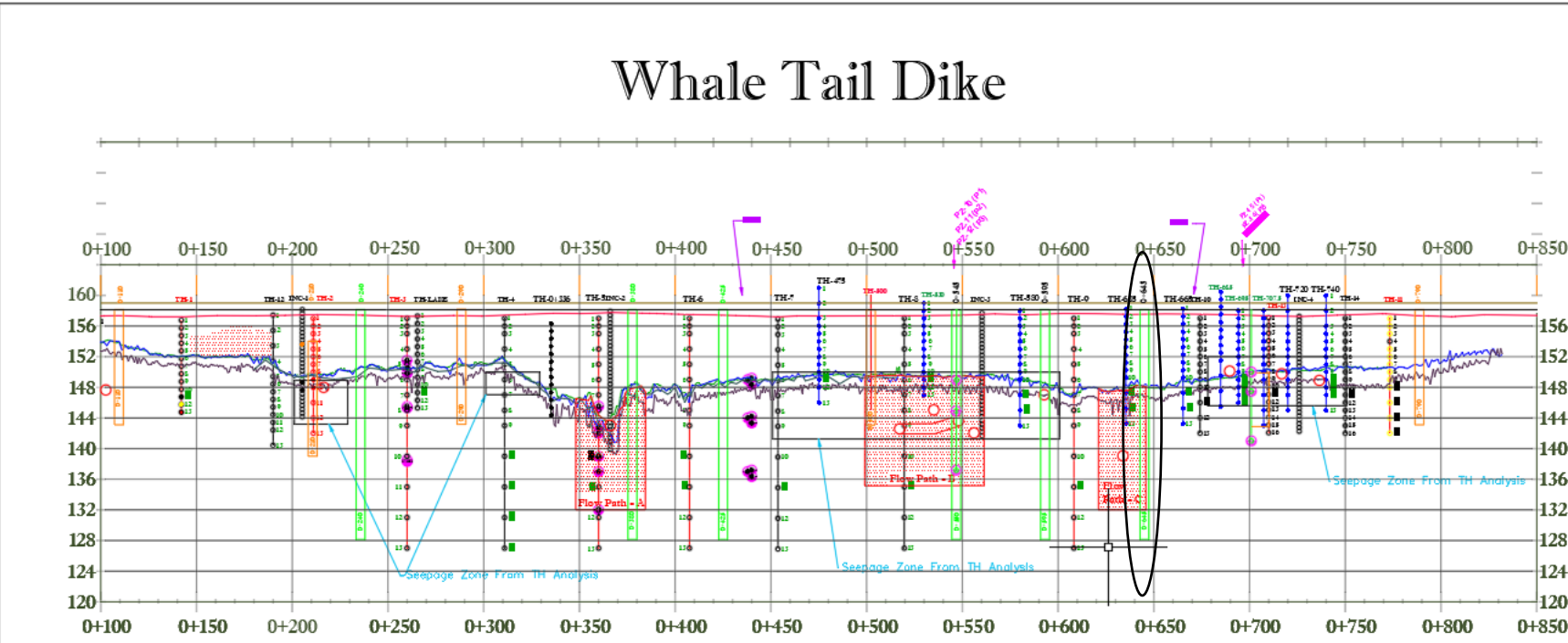
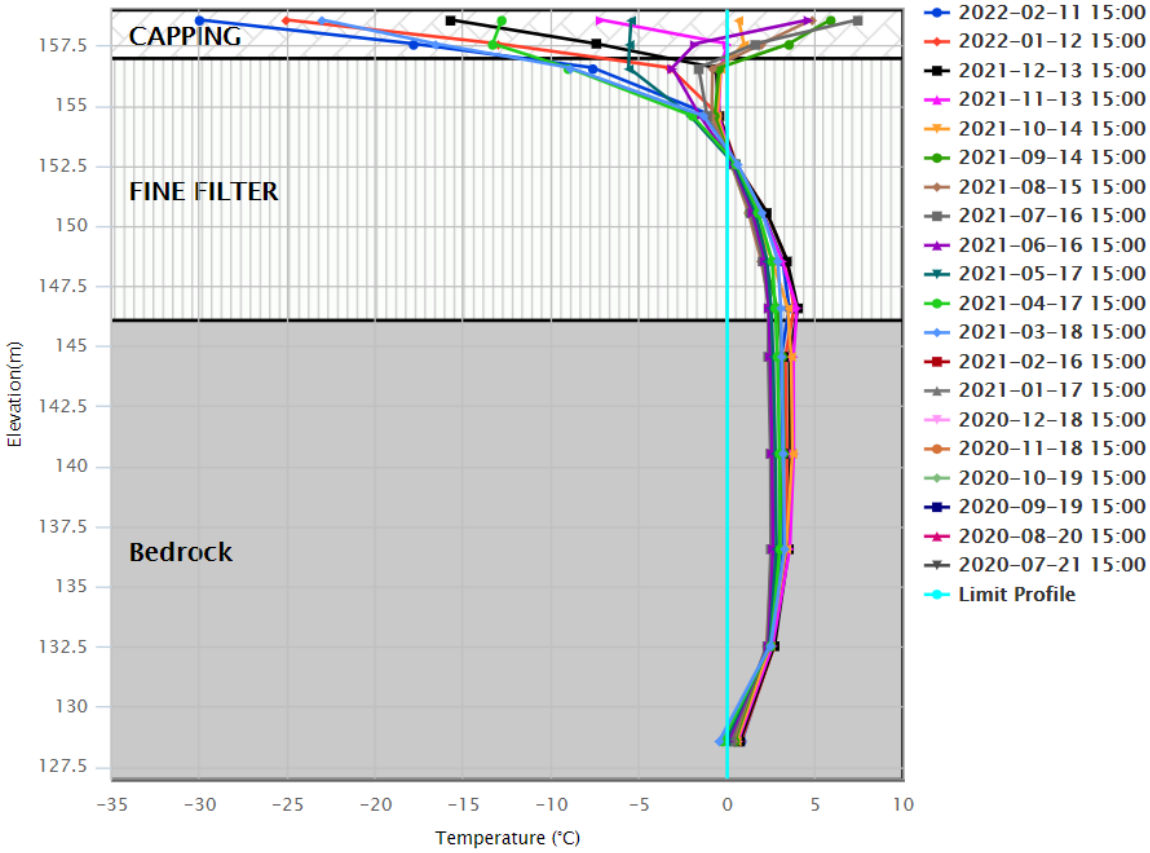
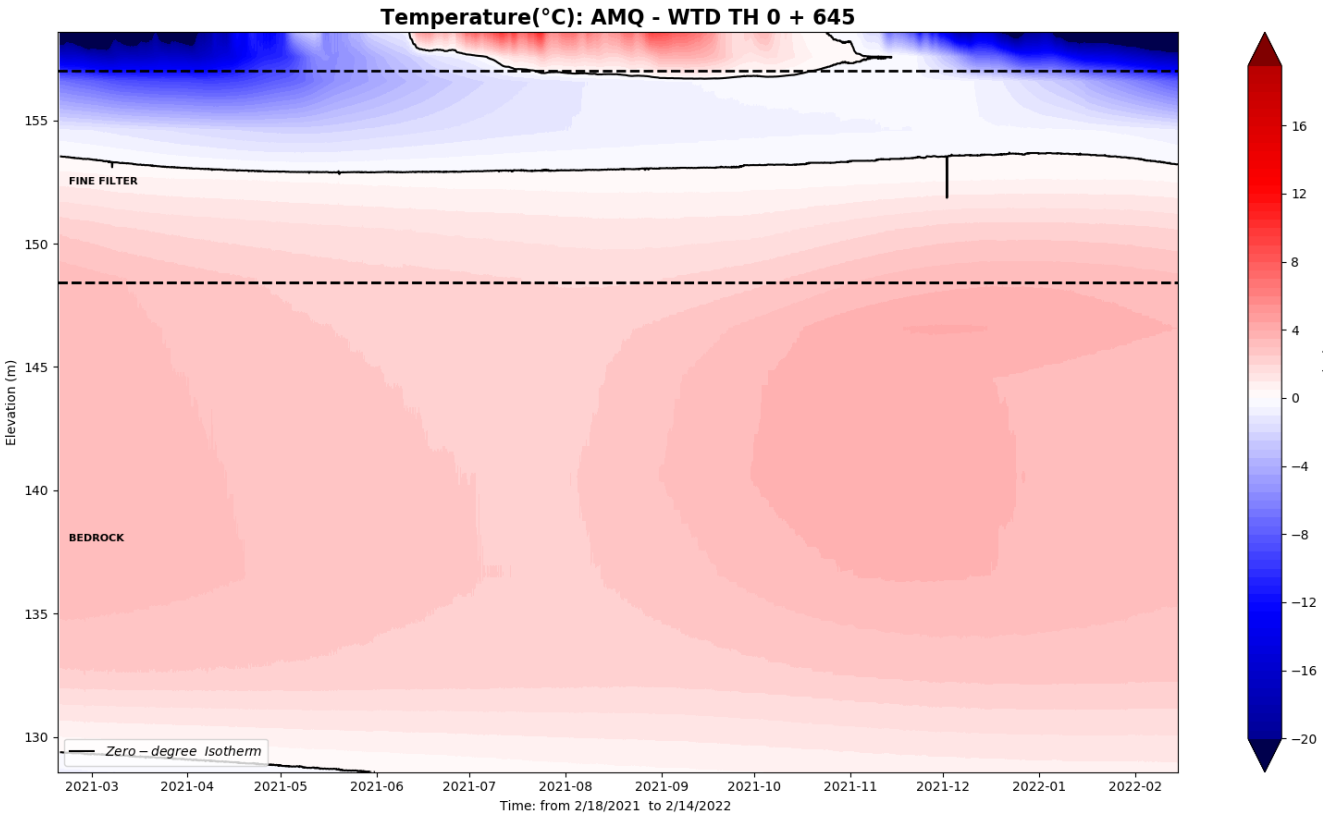




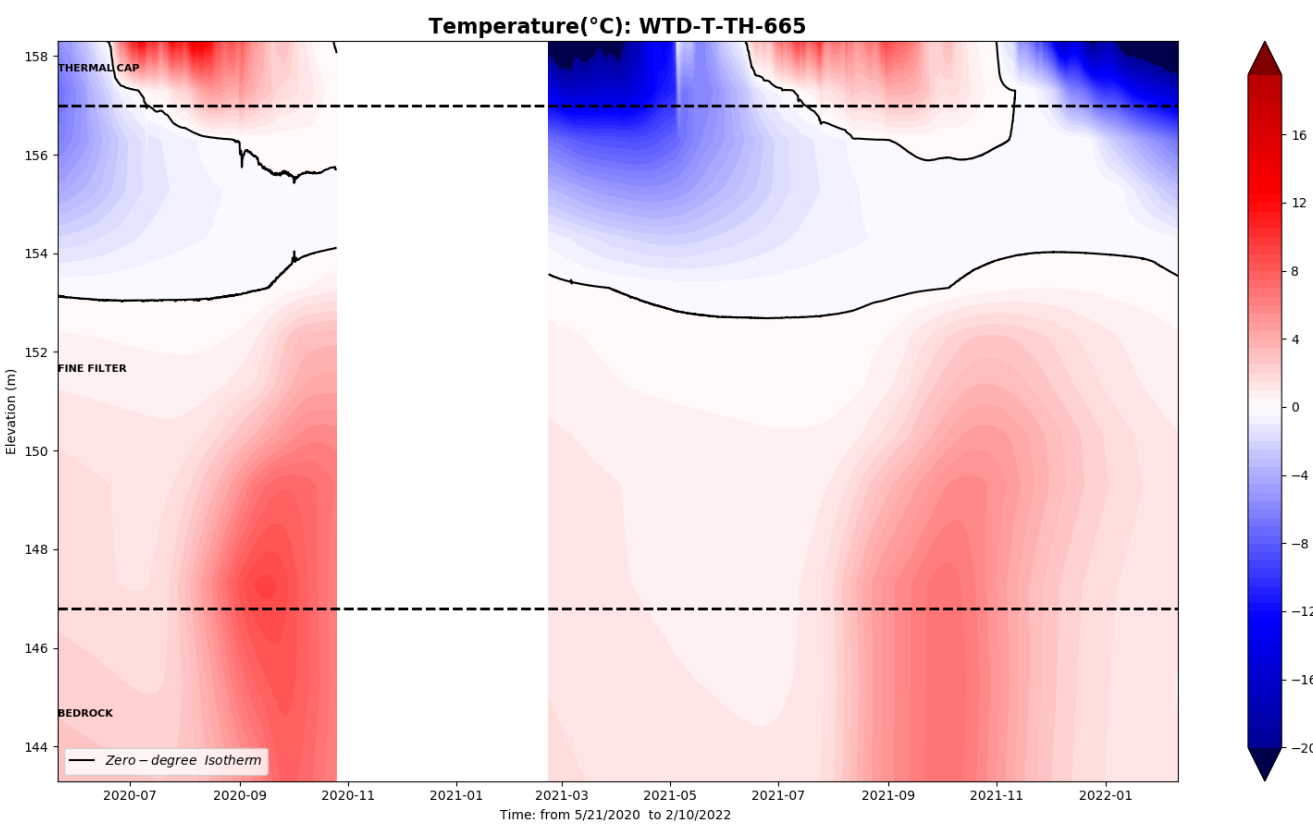
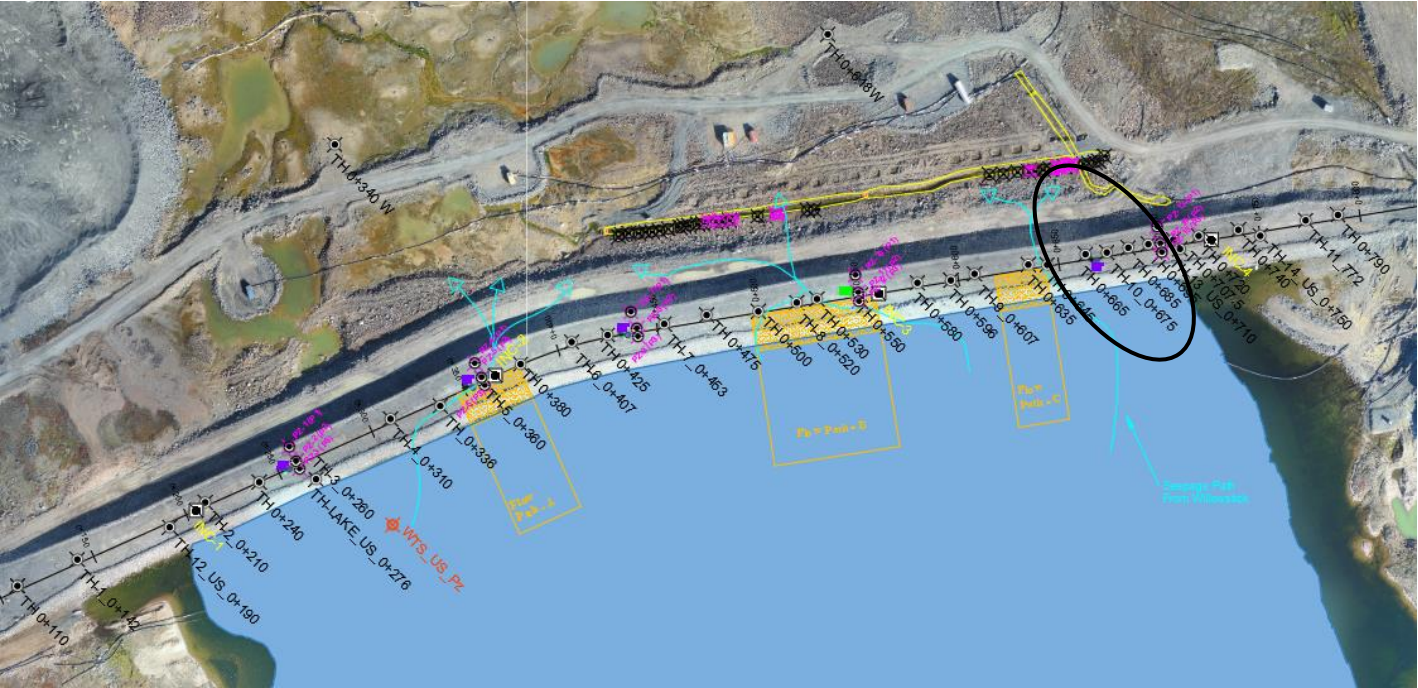
WTD-TH 0+645



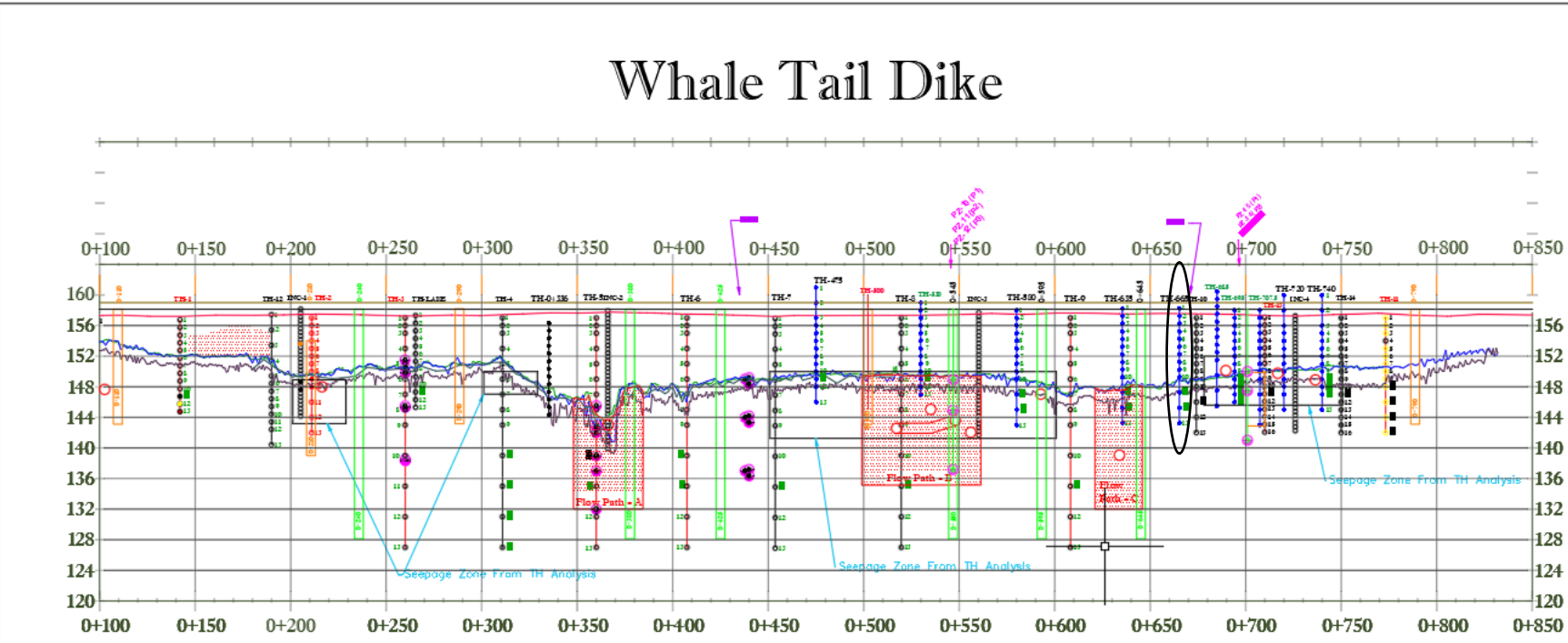
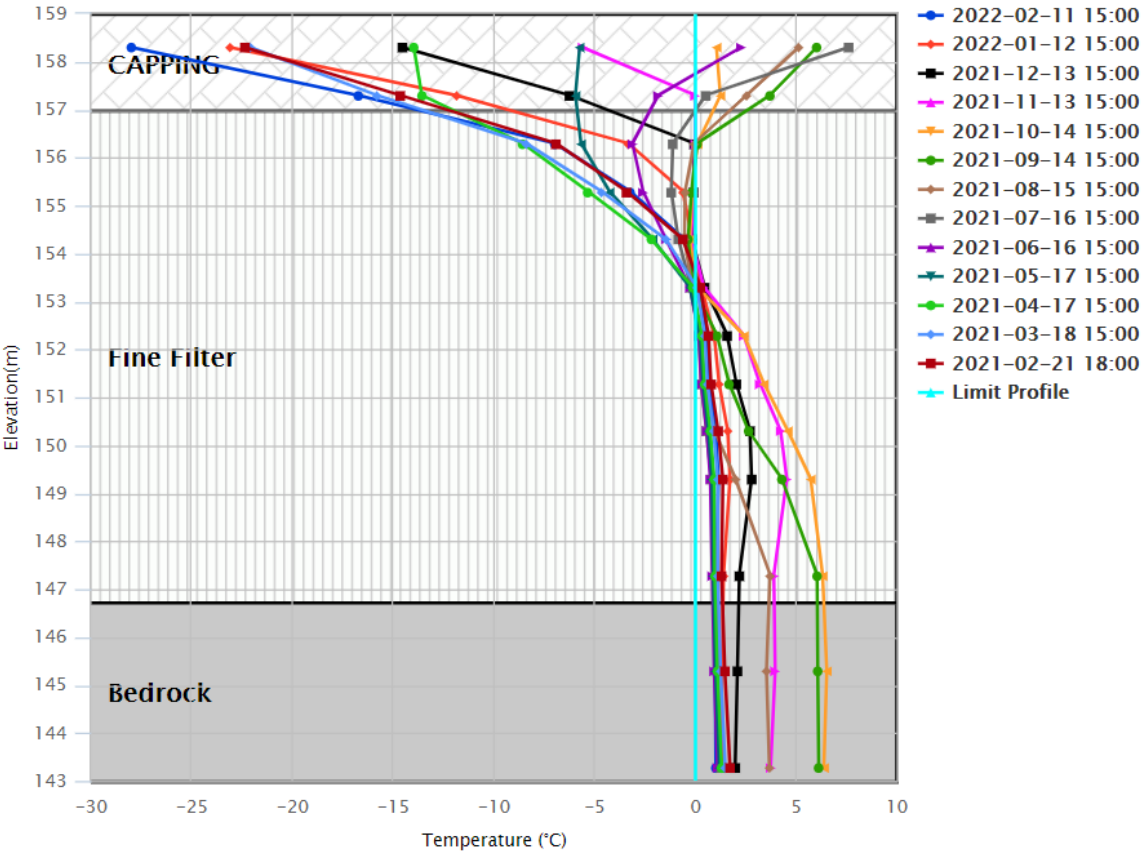
AMQ – WTD TH: 0+645



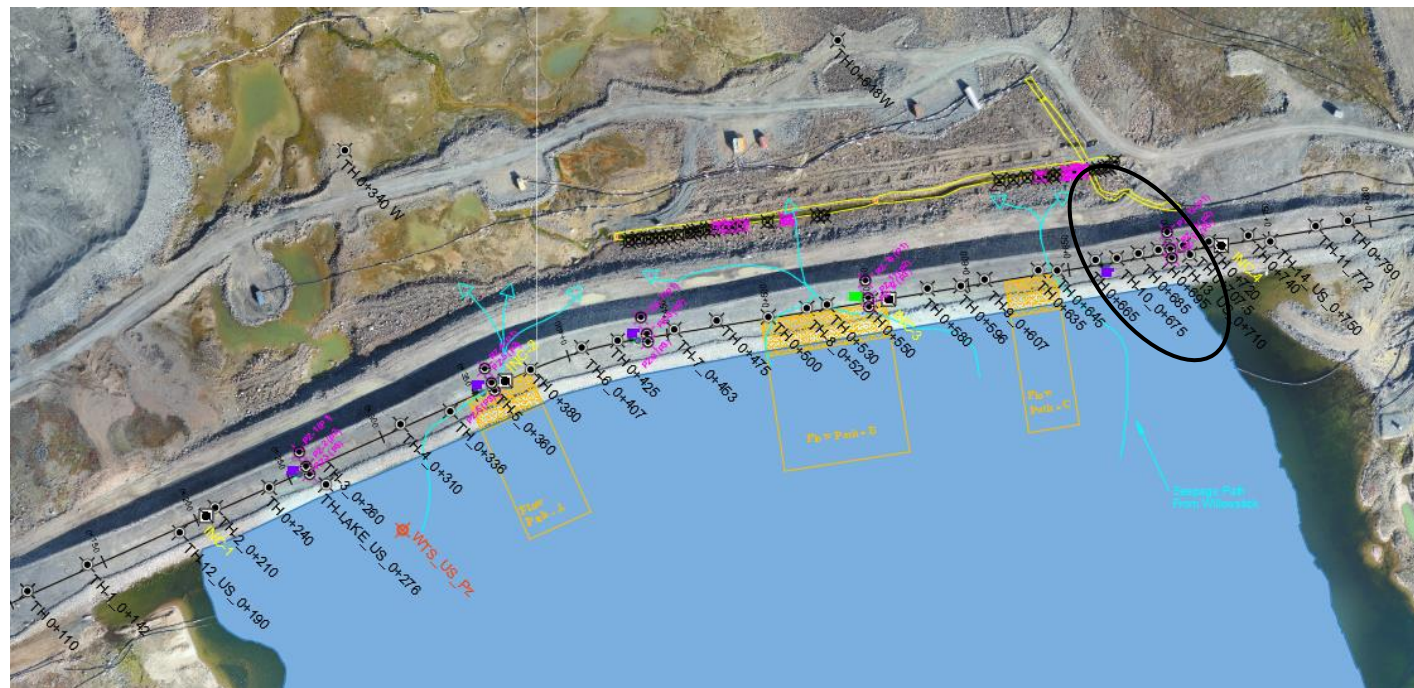
WTD-TH 0+665



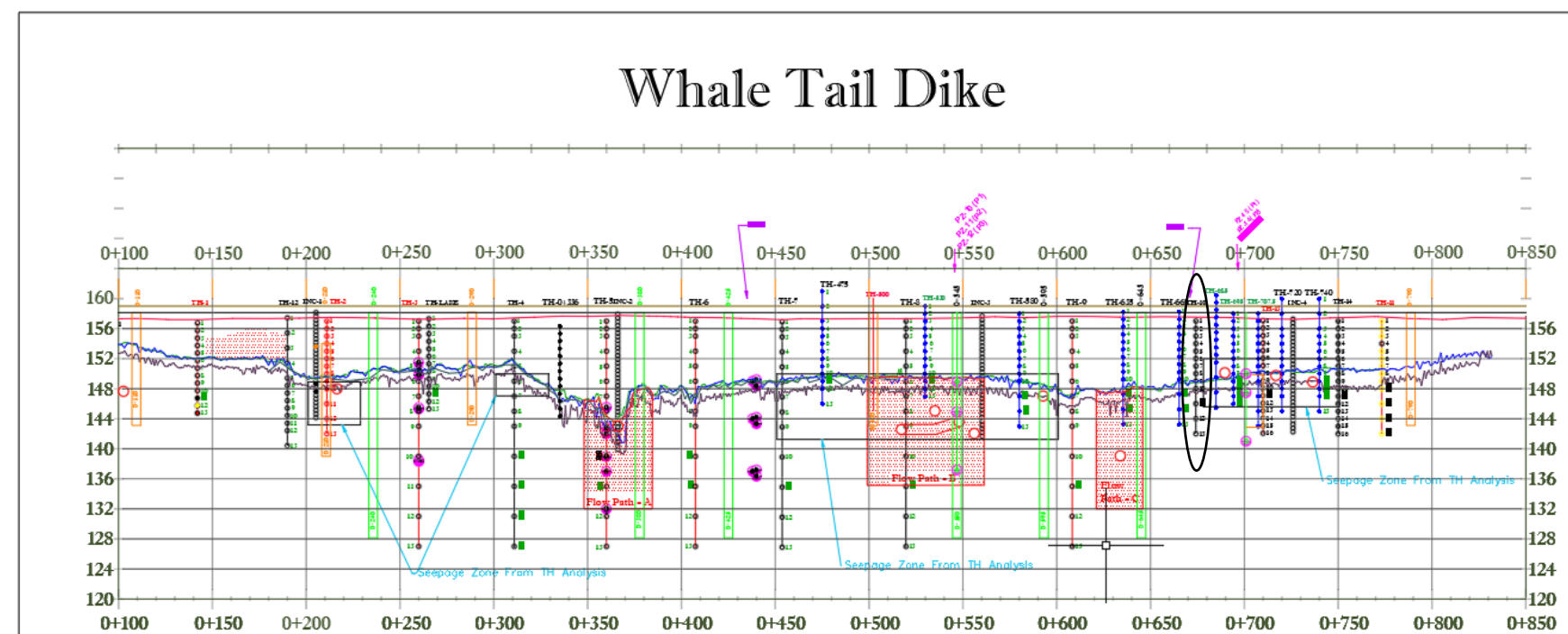
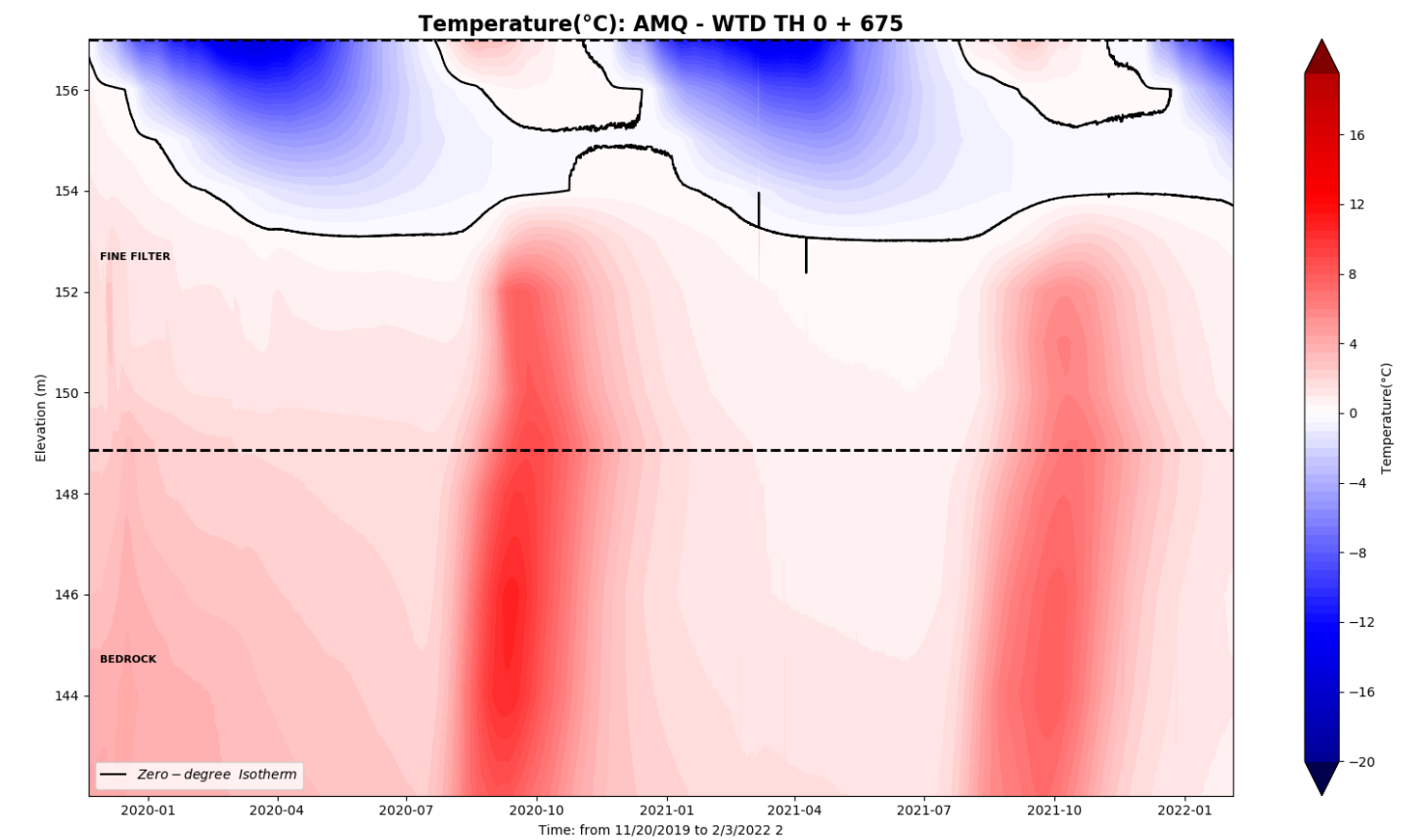
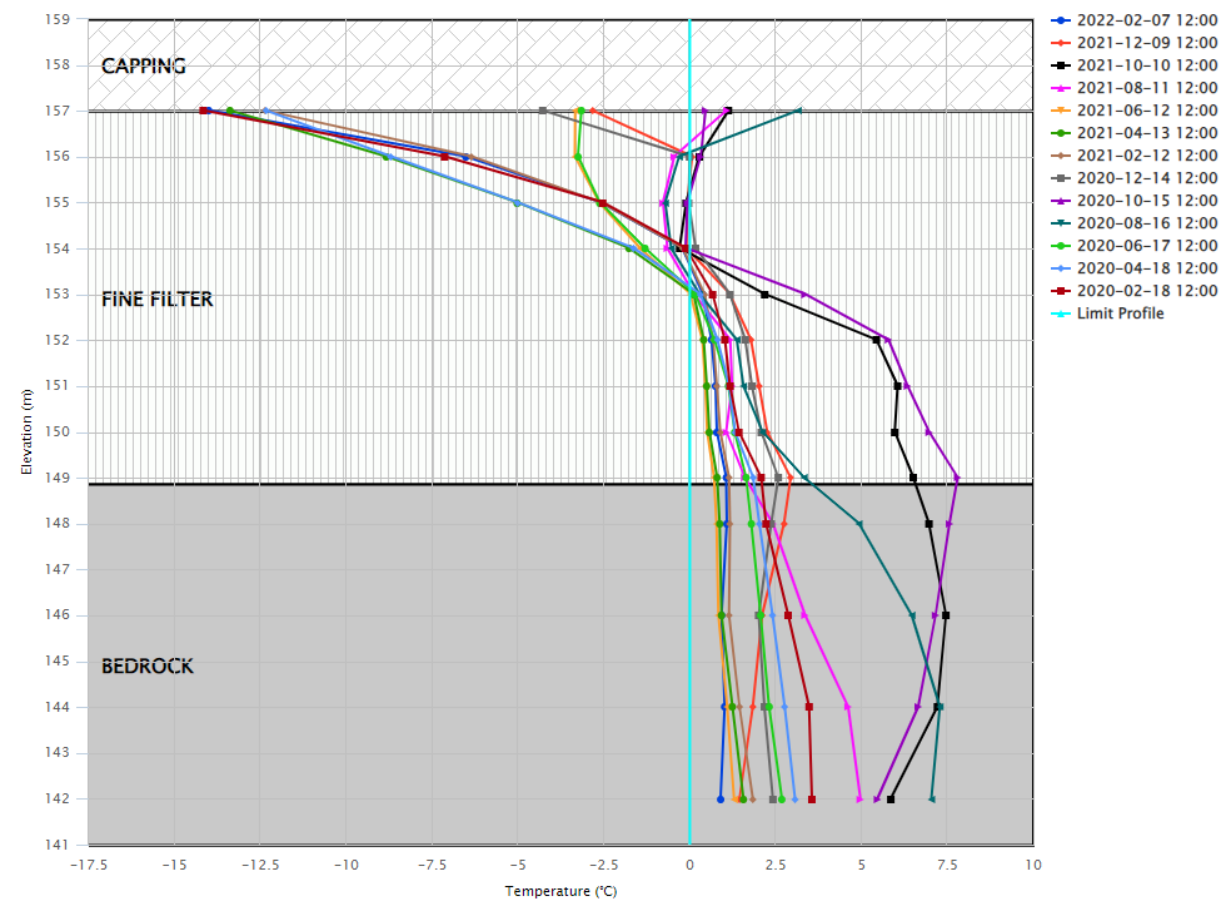
AMQ – WTD TH: 0+665_T



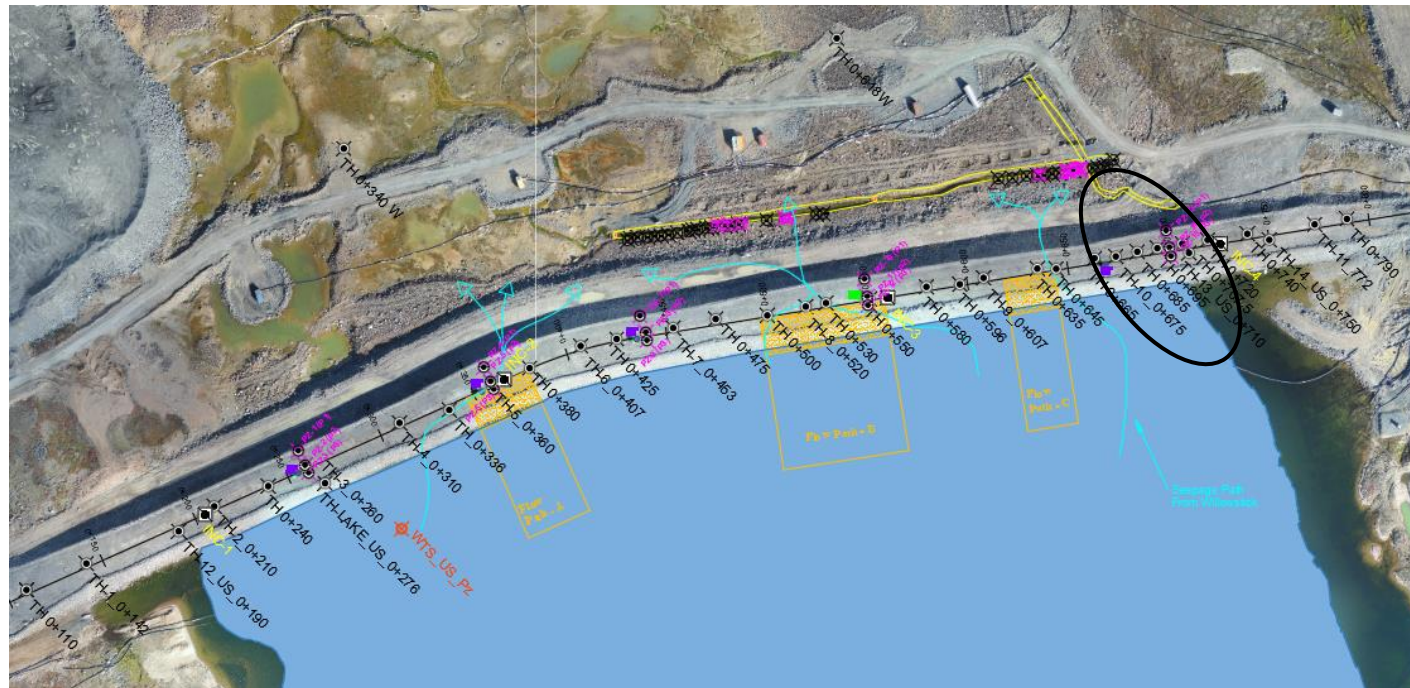
WTD-TH 0+675



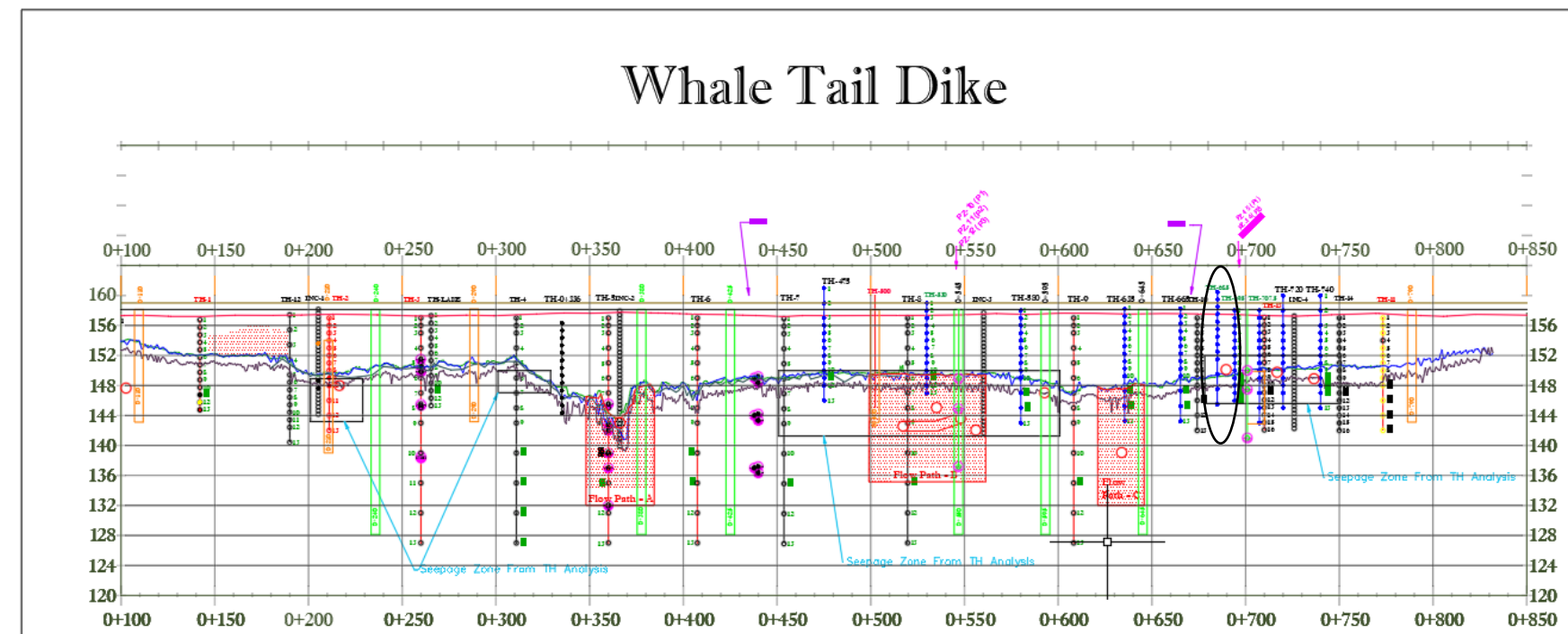
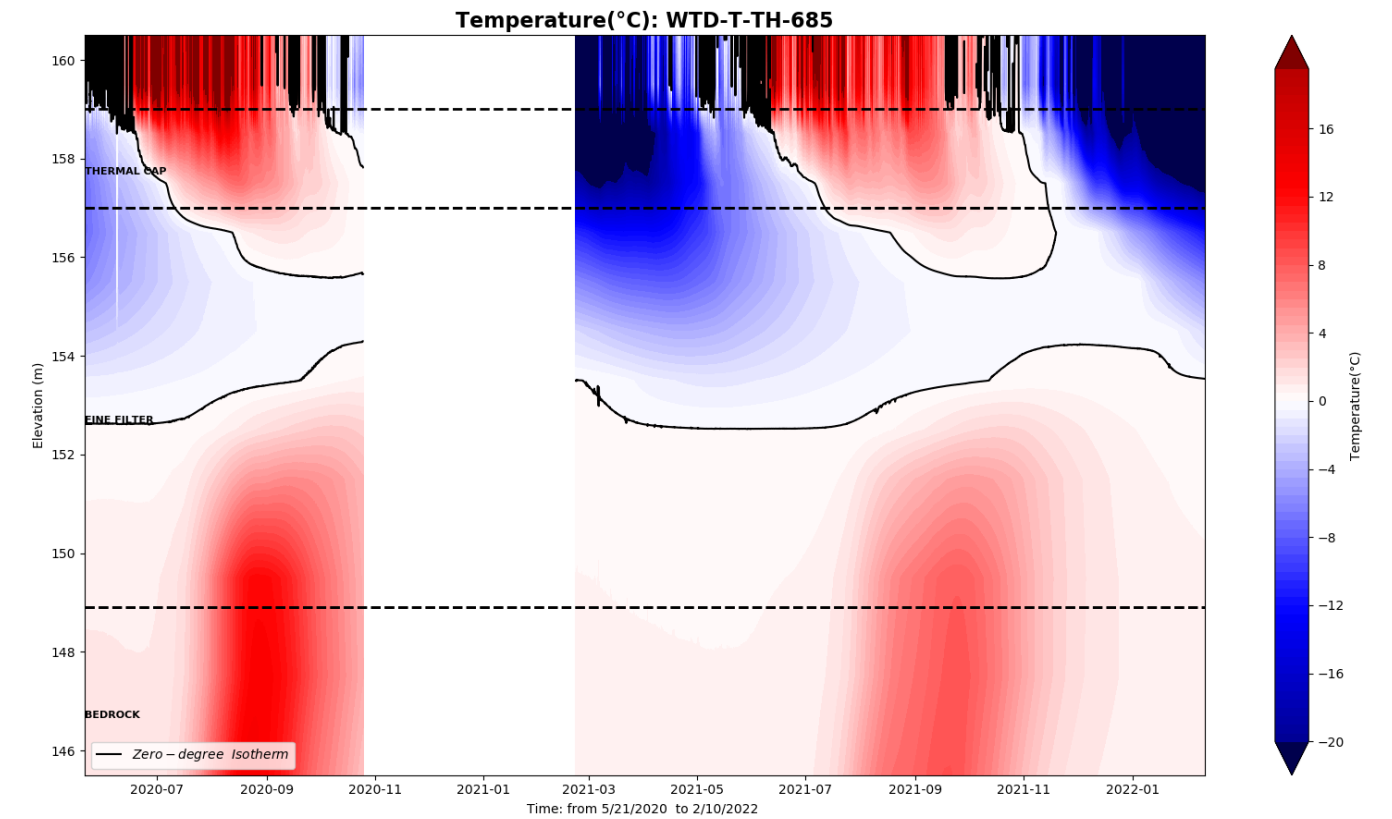
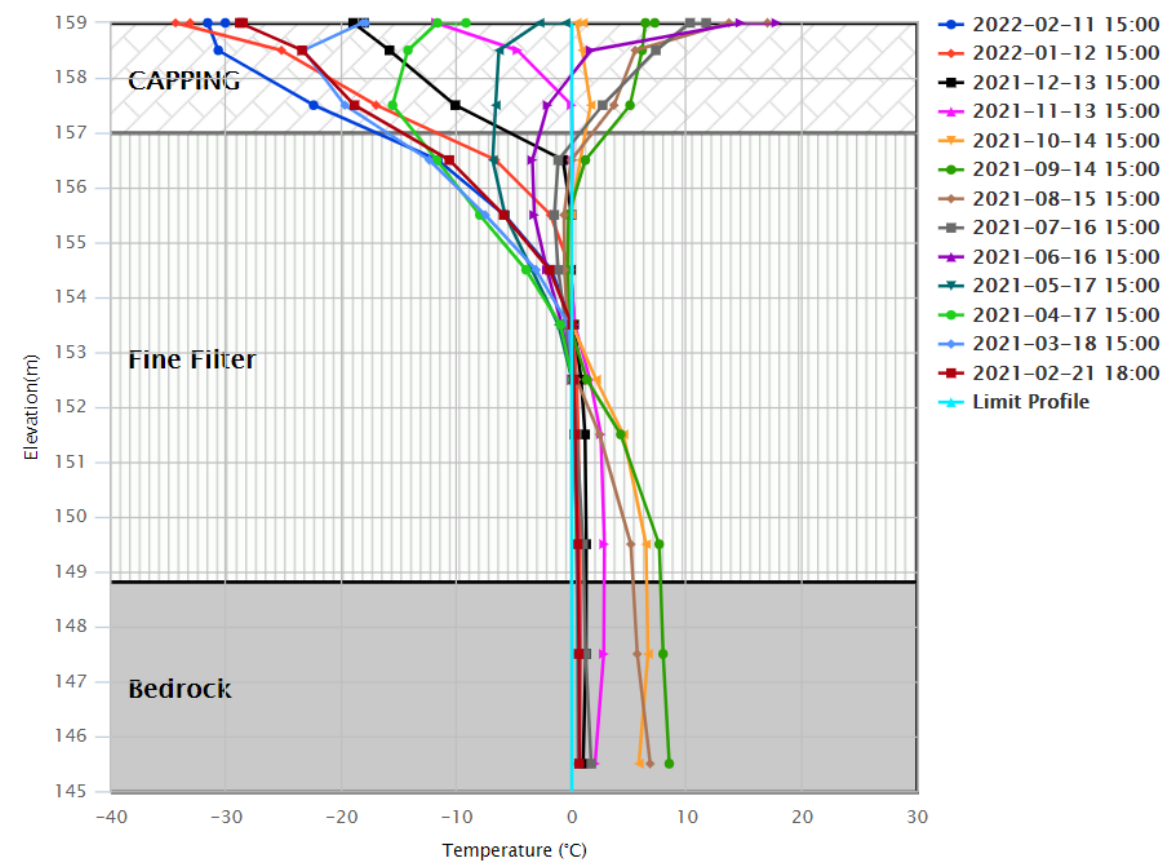
AMQ - WTD TH: 0+675



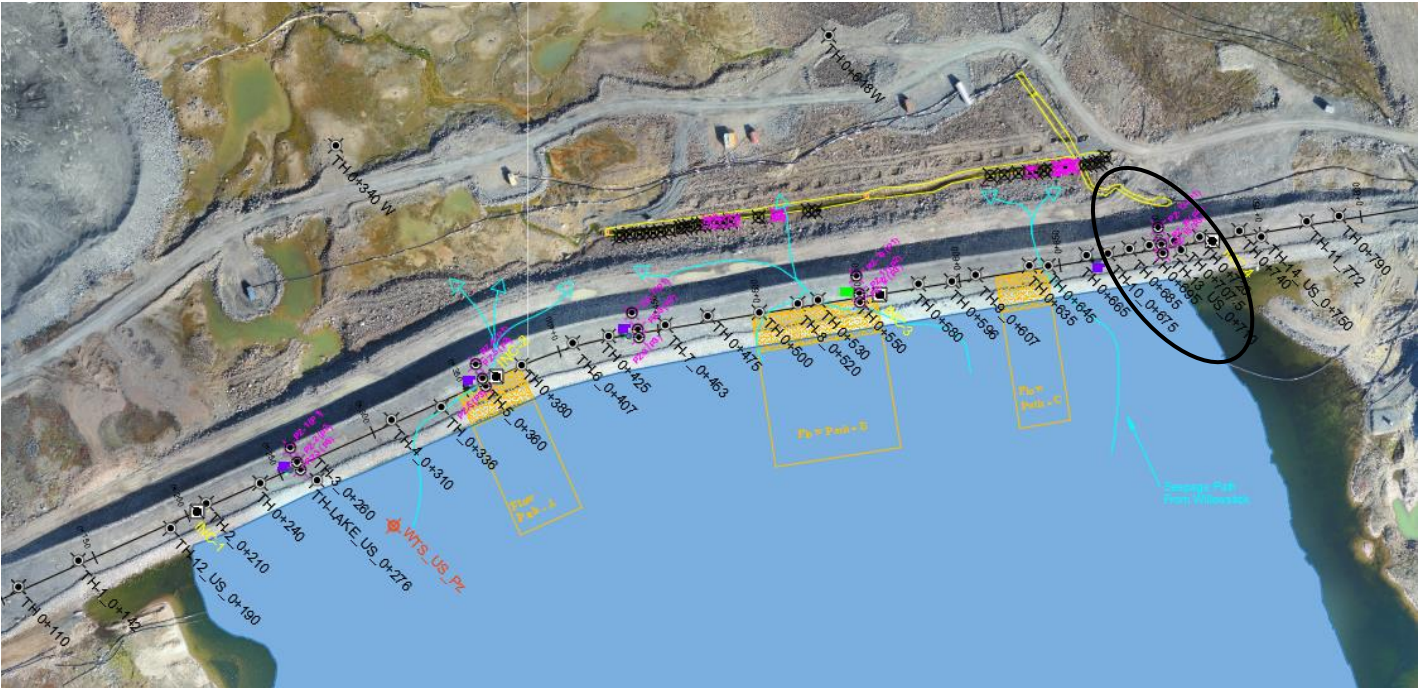
WTD-TH 0+685



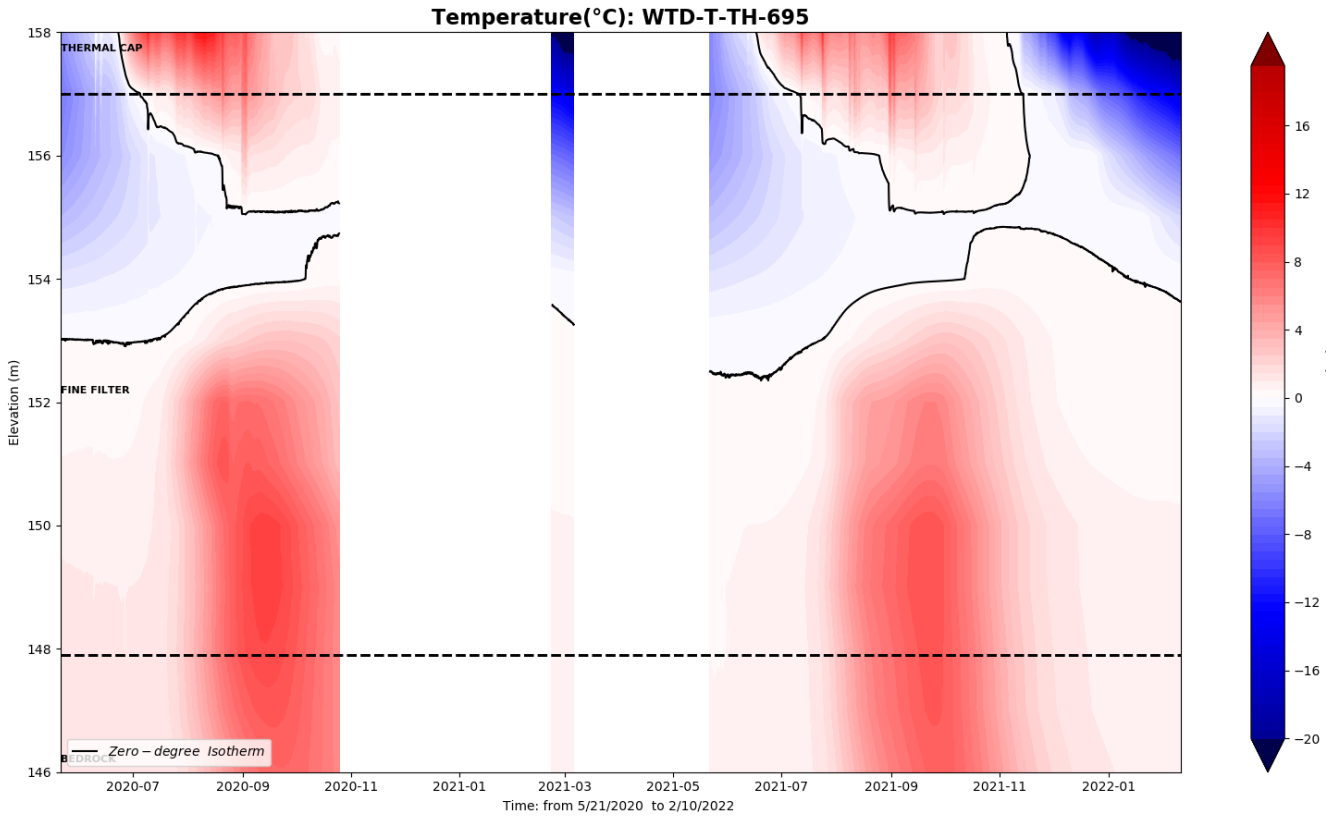
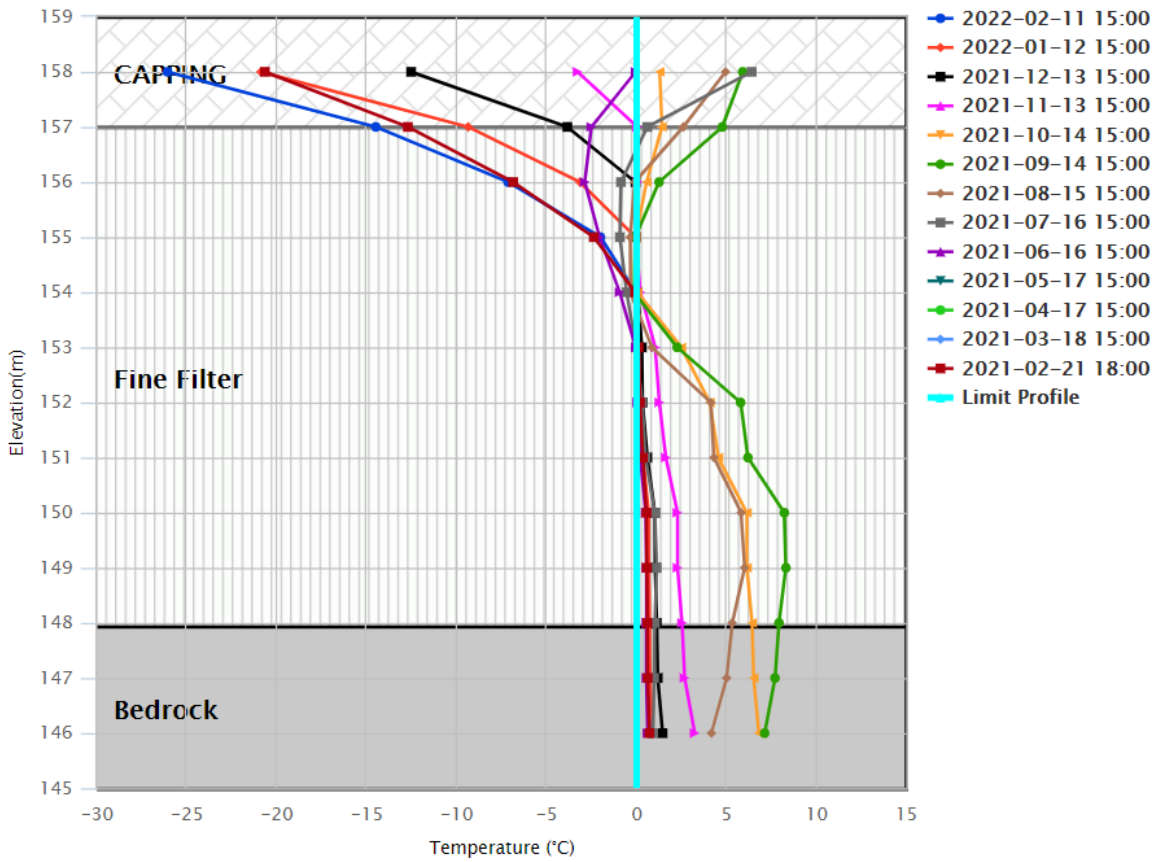
AMQ - WTD TH: 0+685_T



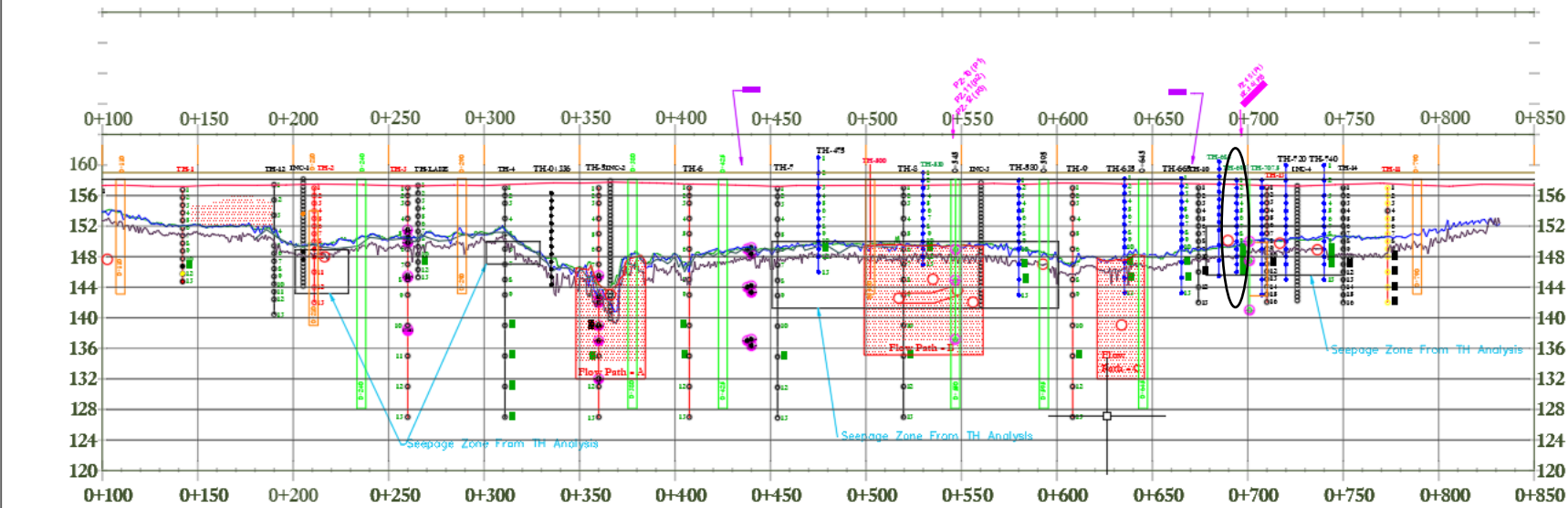
WTD-TH 0+695



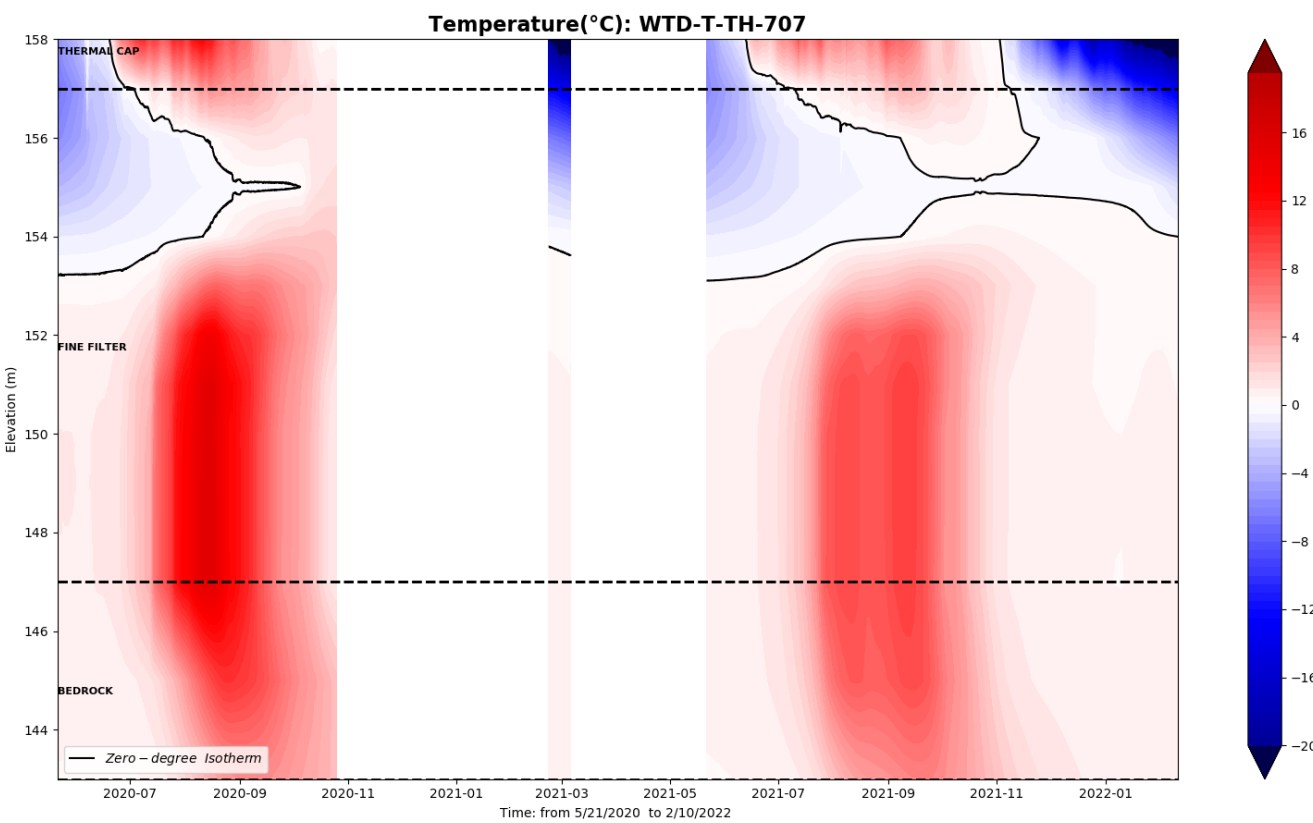
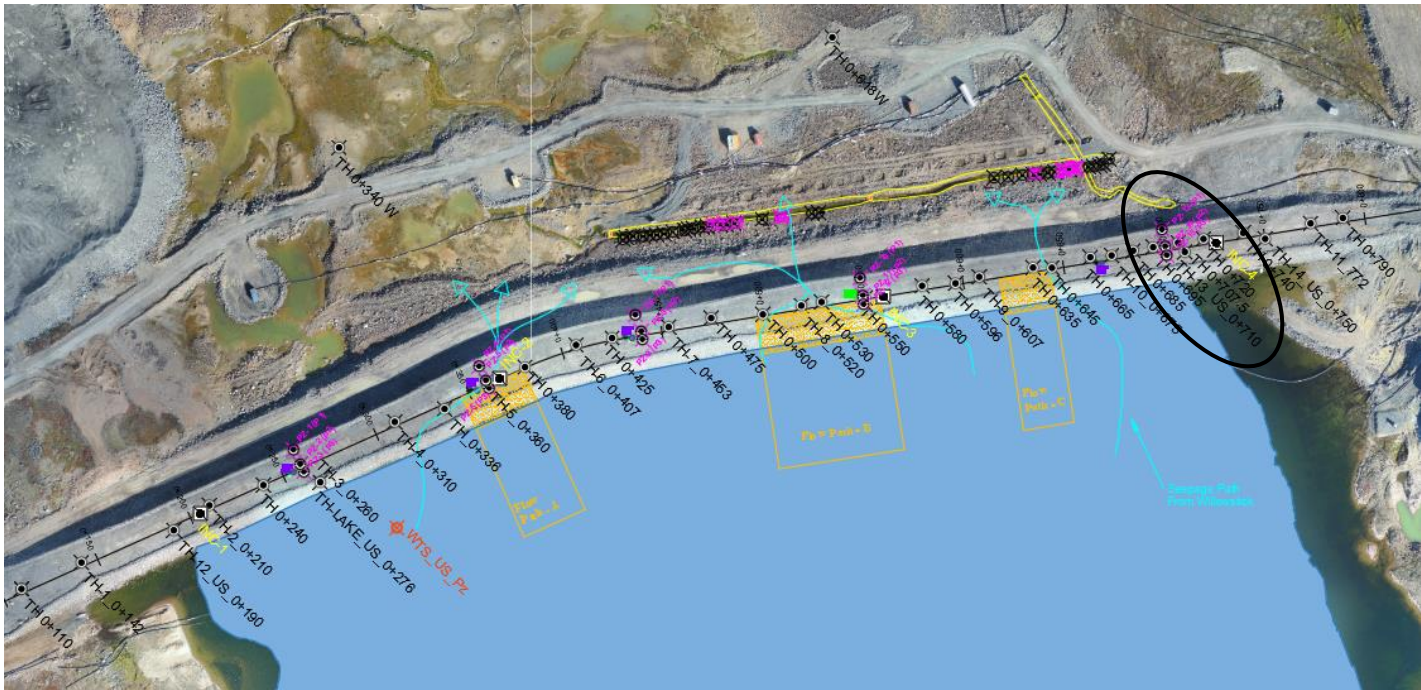
AMQ – WTD TH: 0+695_T



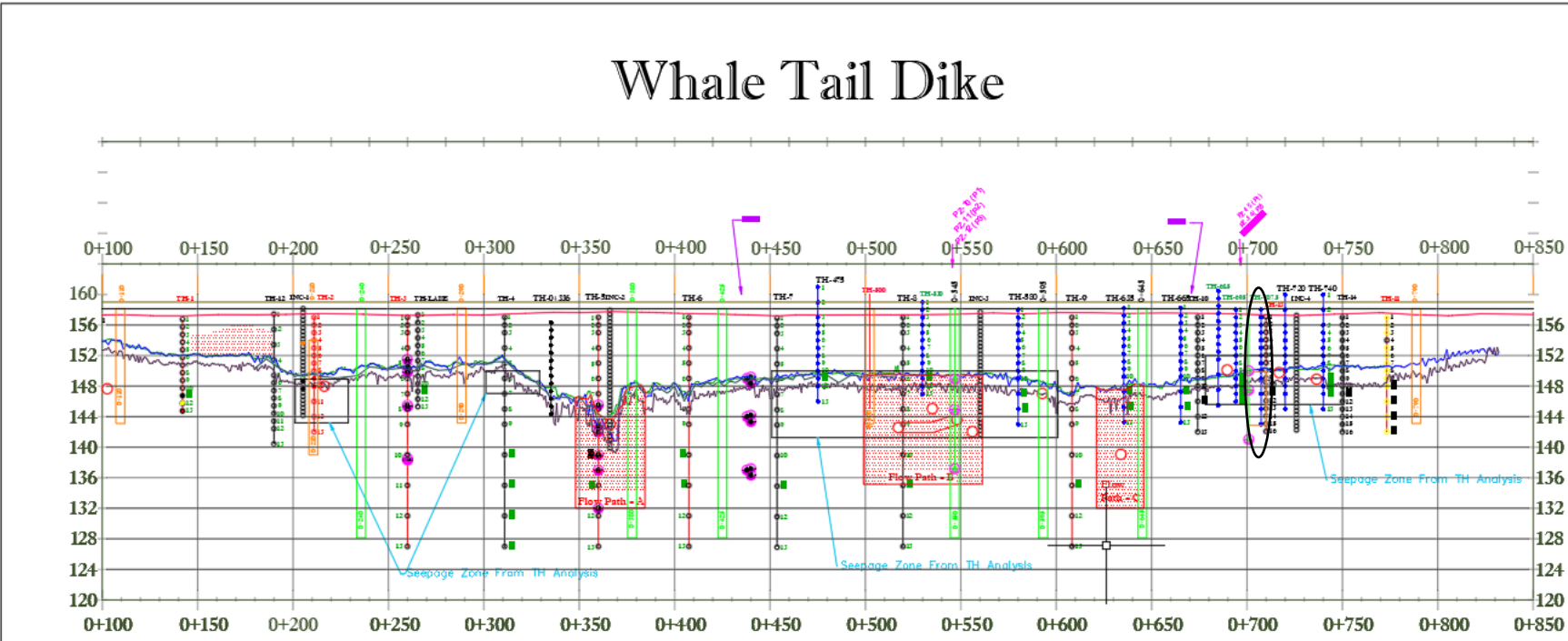
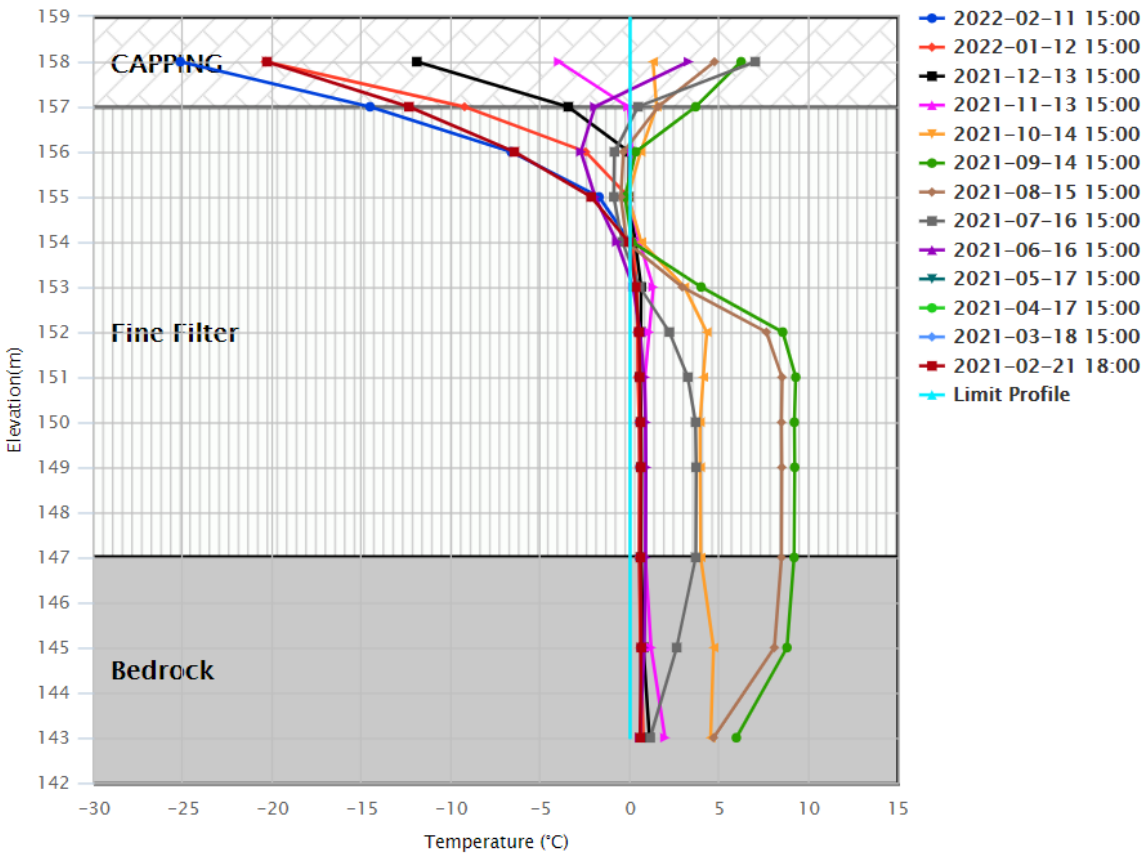
Whale Tail Dike



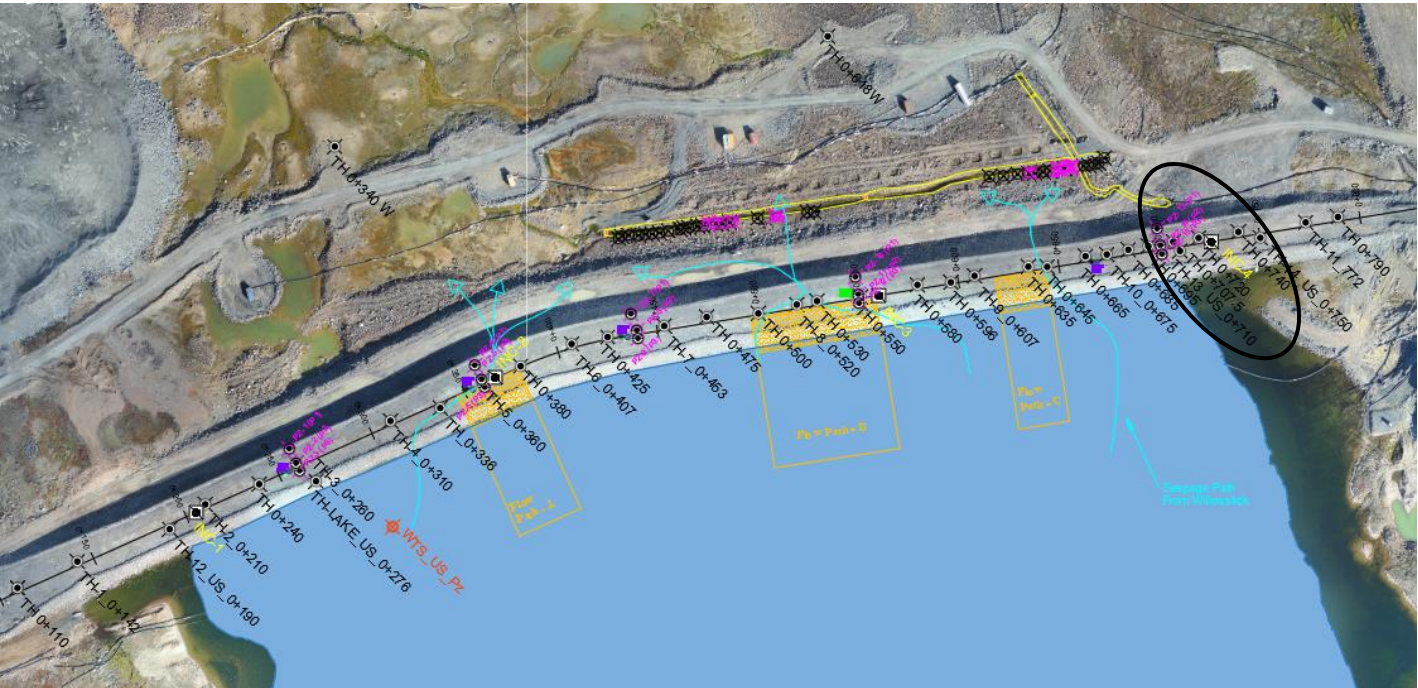
WTD-TH 0+707



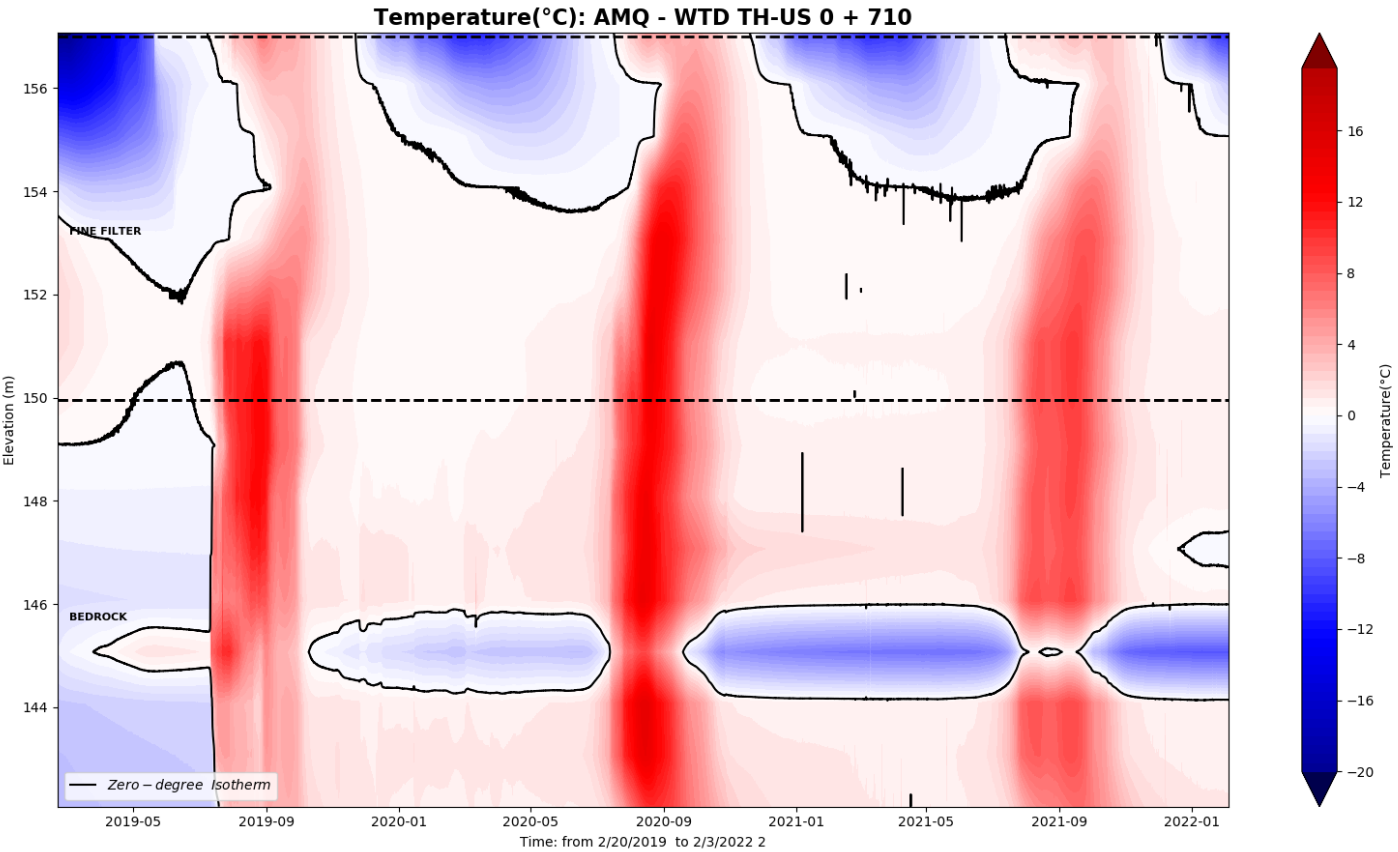
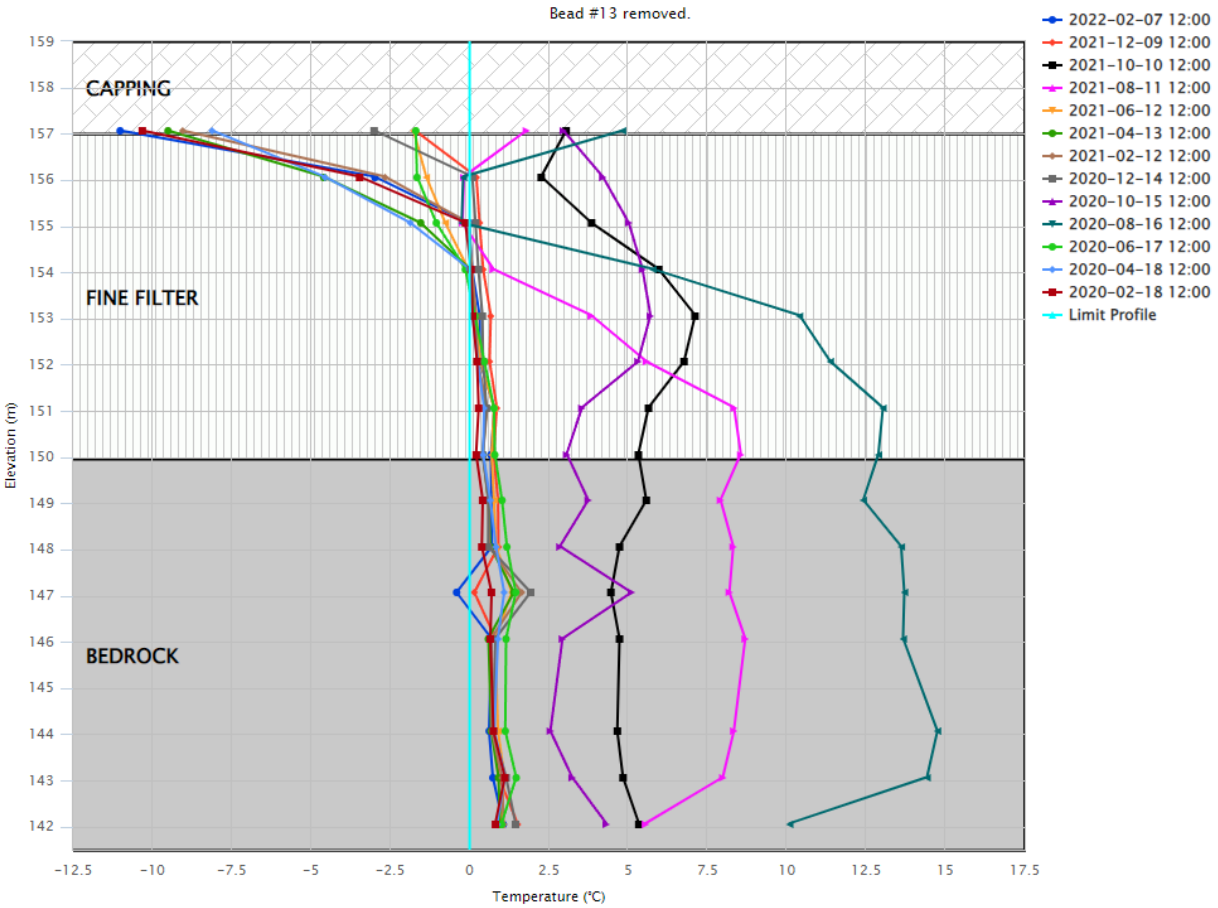
AMQ – WTD TH: 0+707_T



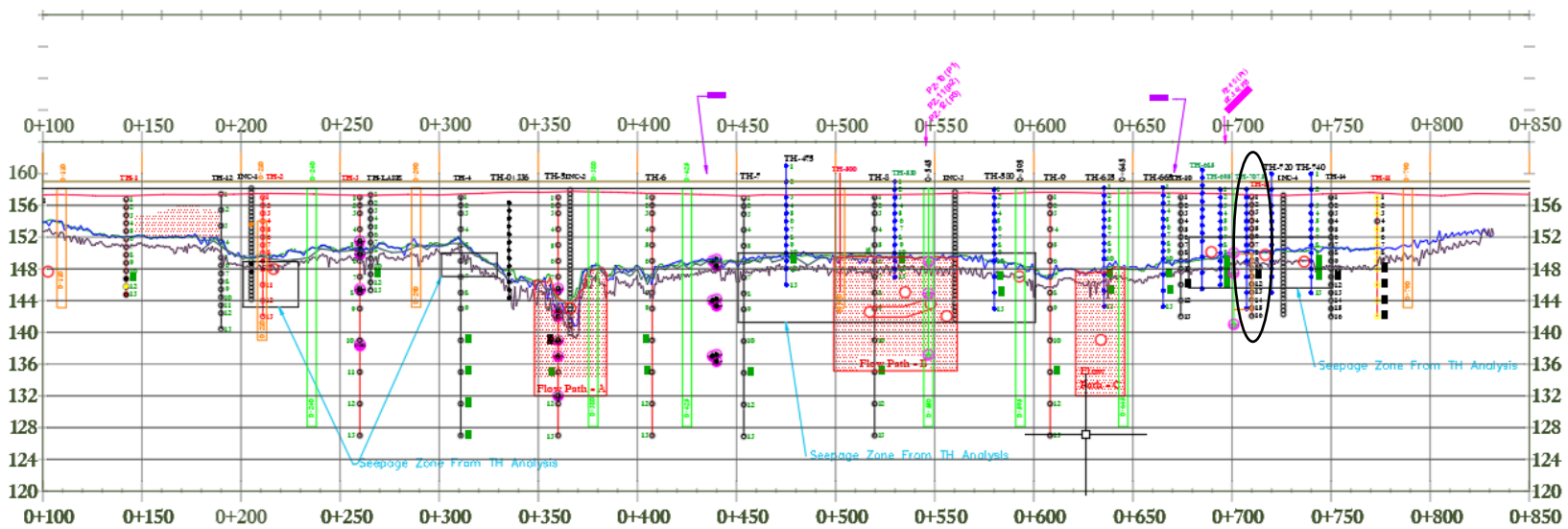
WTD-TH 0+710 U/S



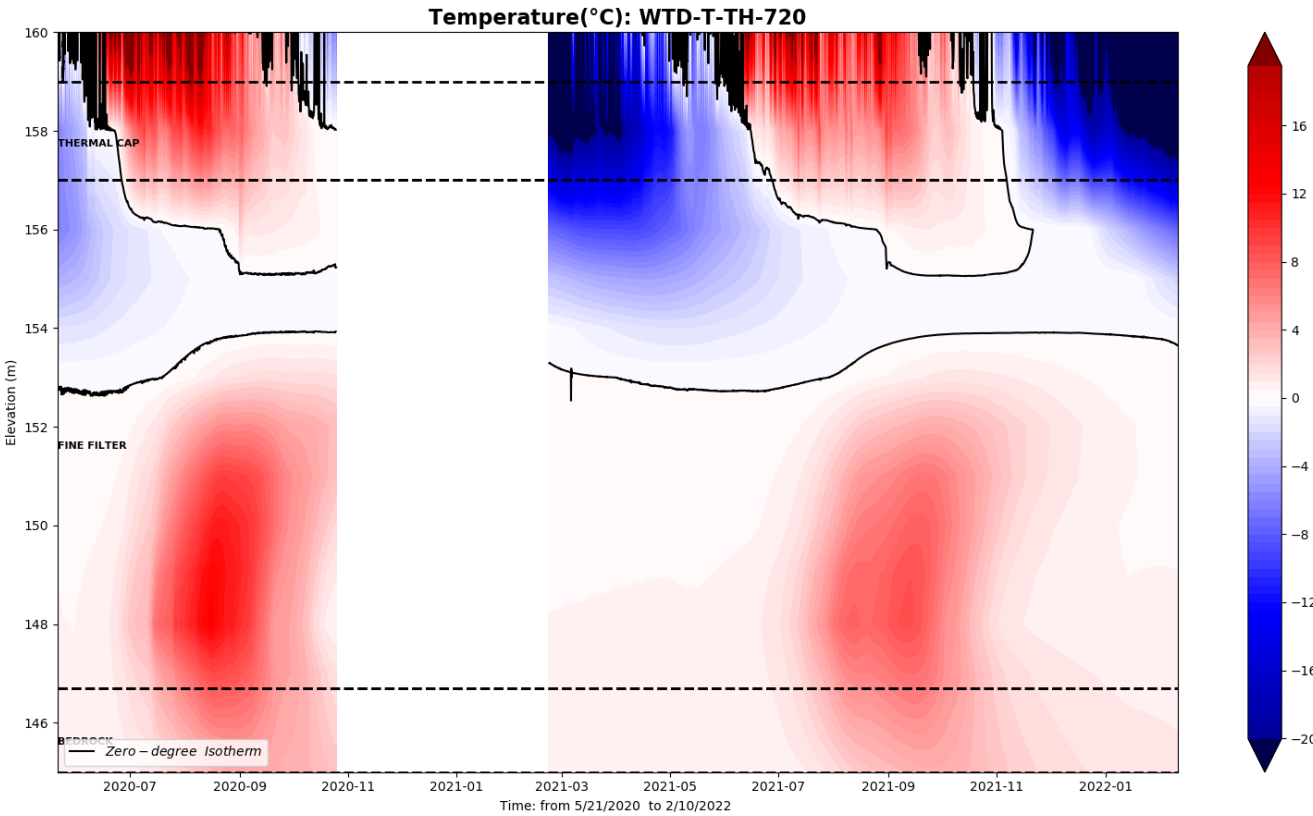
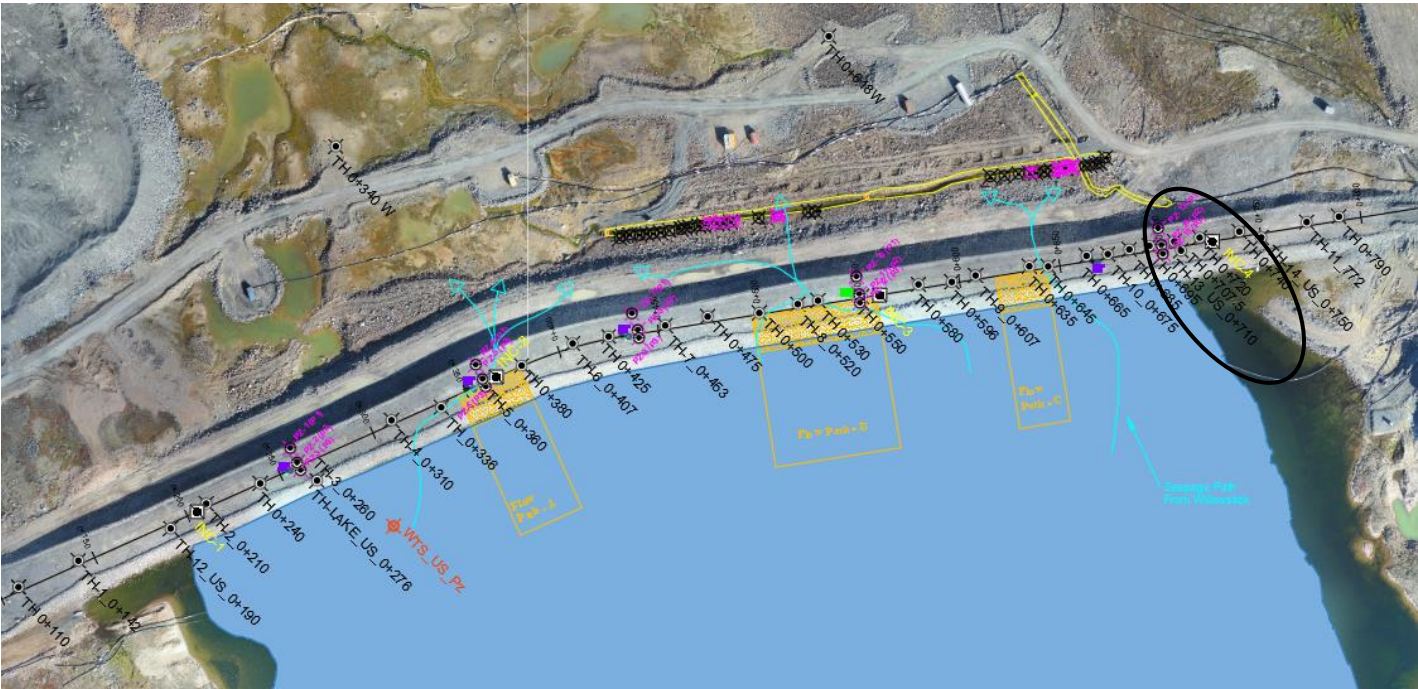
AMQ - WTD TH-US: 0+710



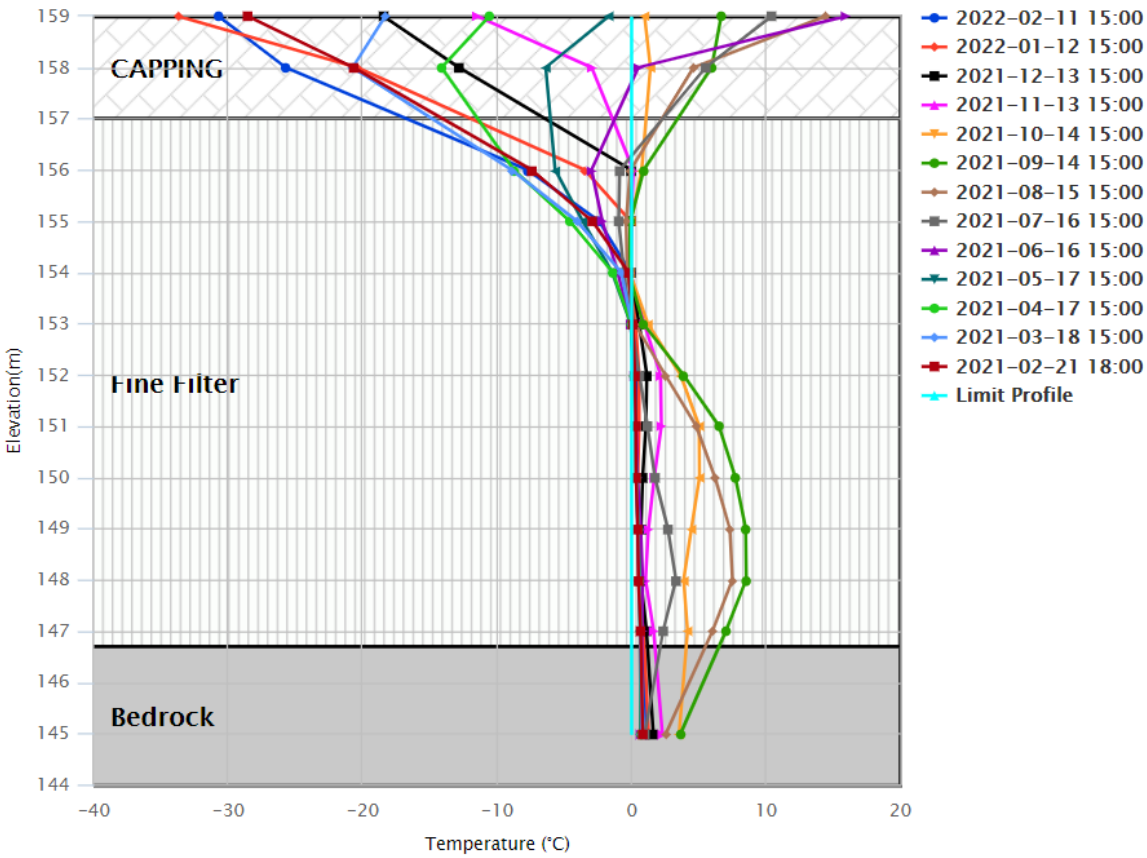
Whale Tail Dike



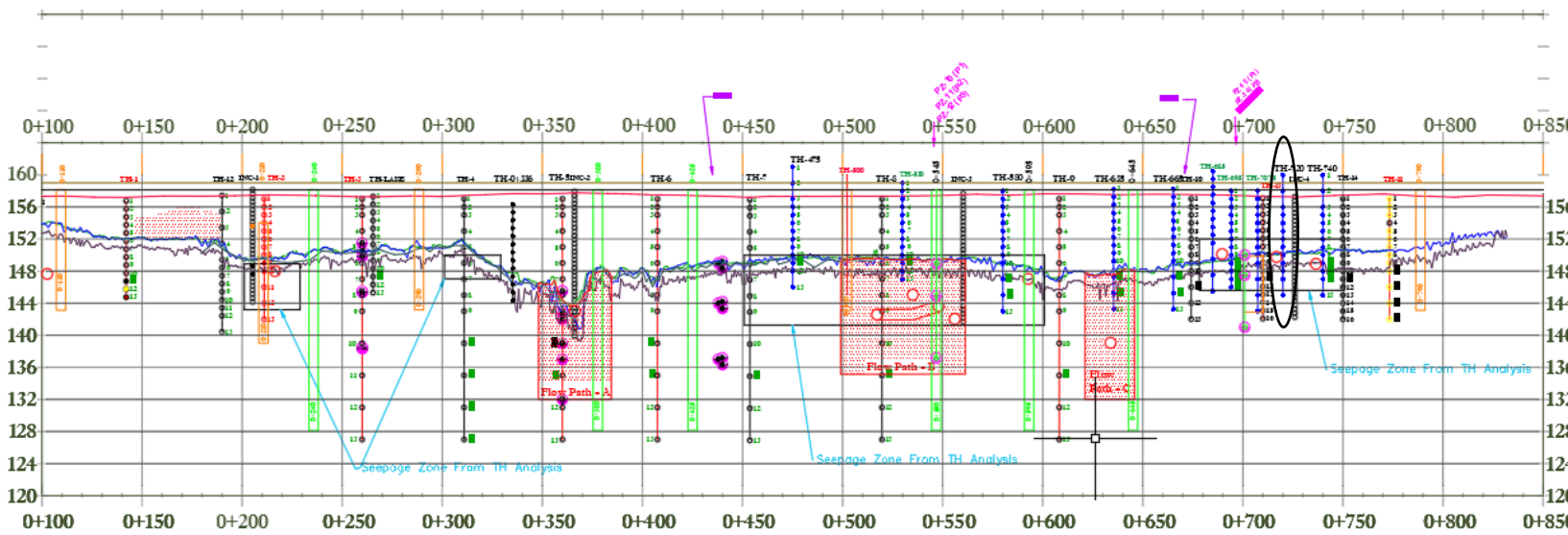
WTD-TH 0+720



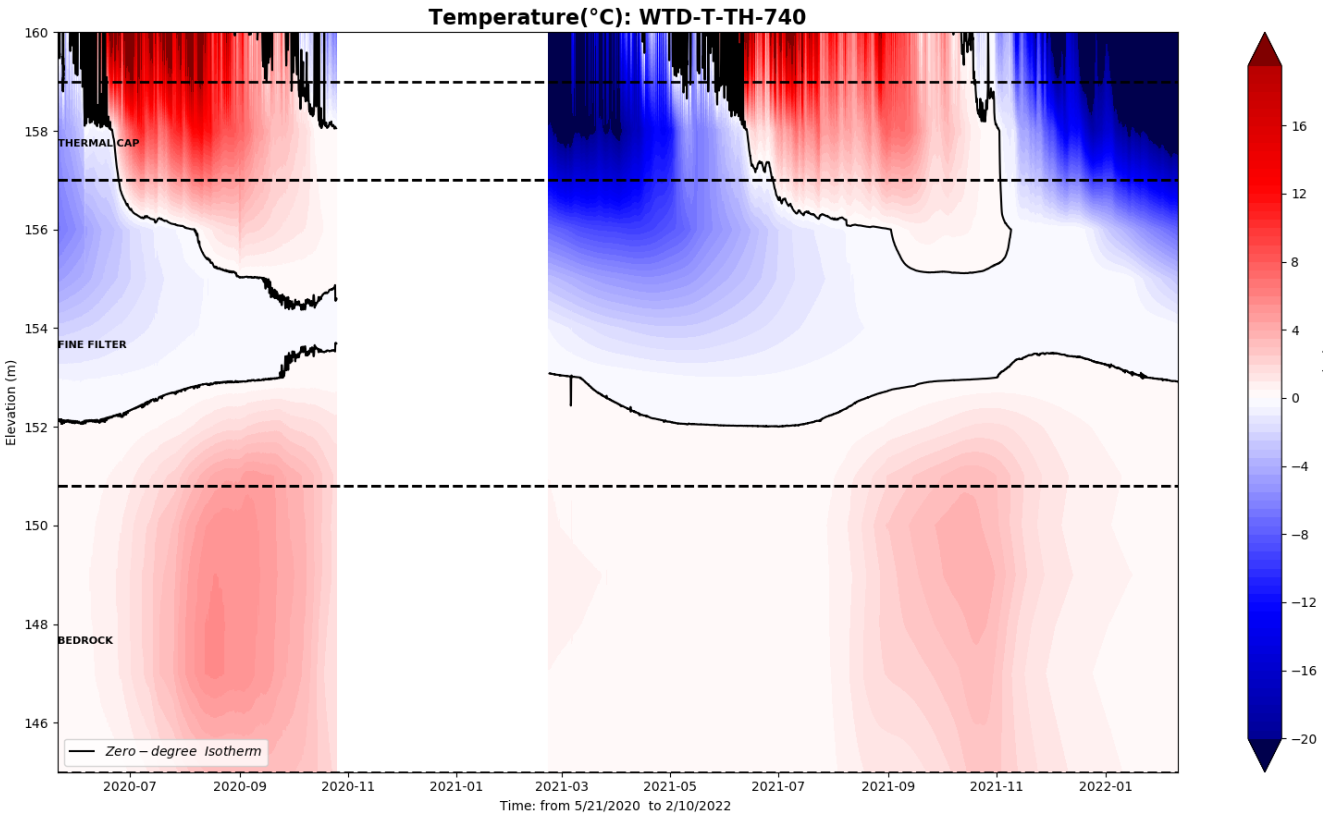
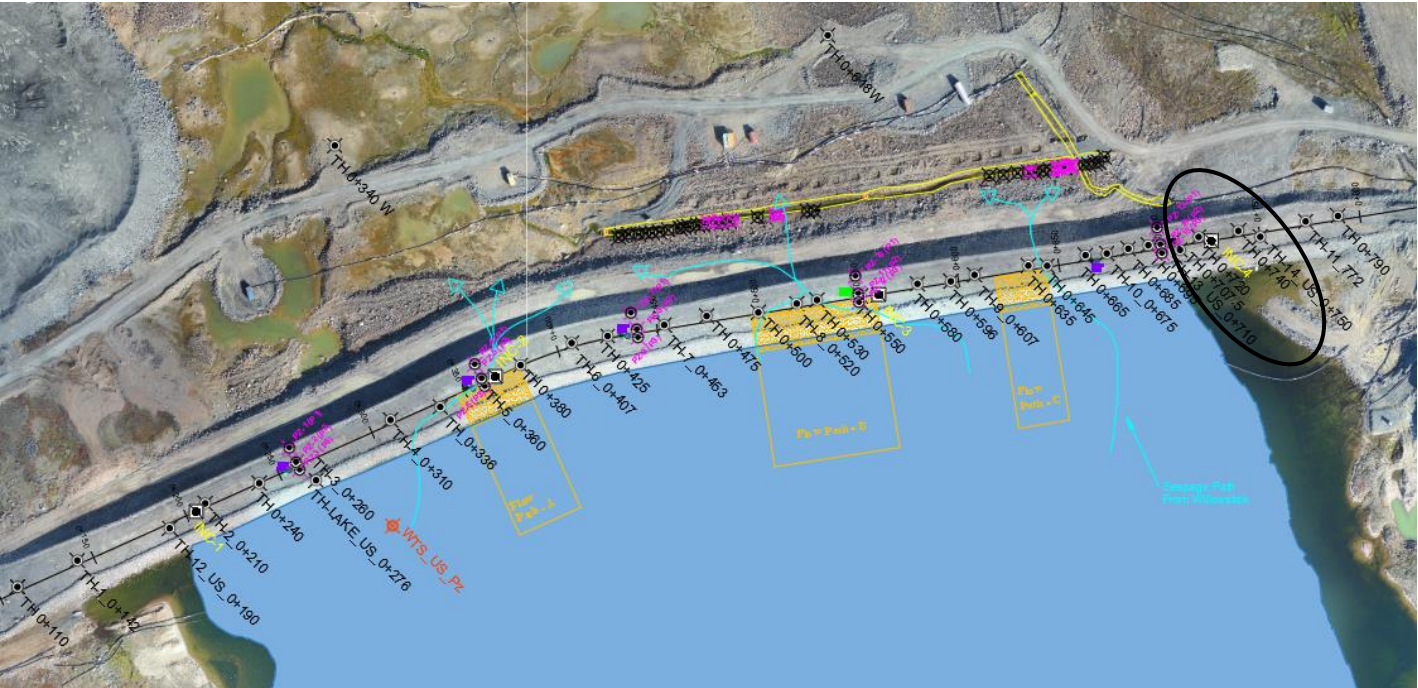
AMQ – WTD TH: 0+720_T



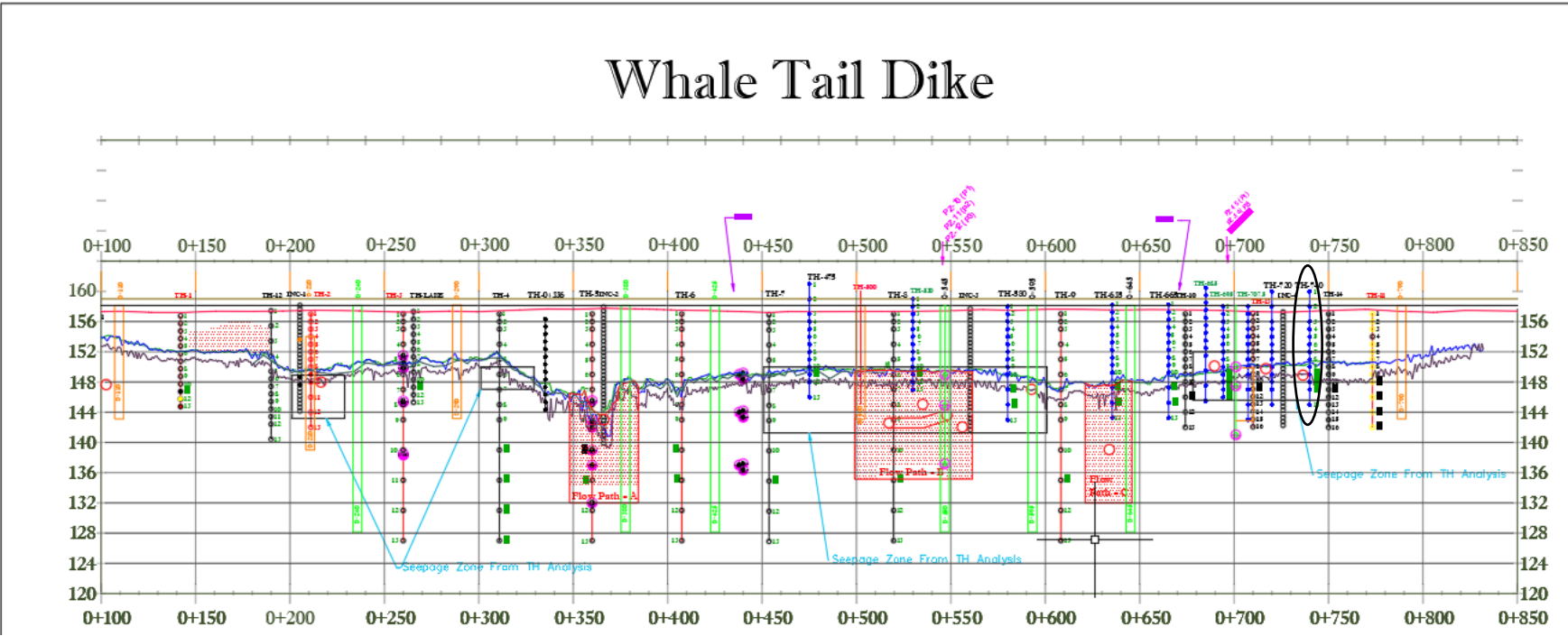
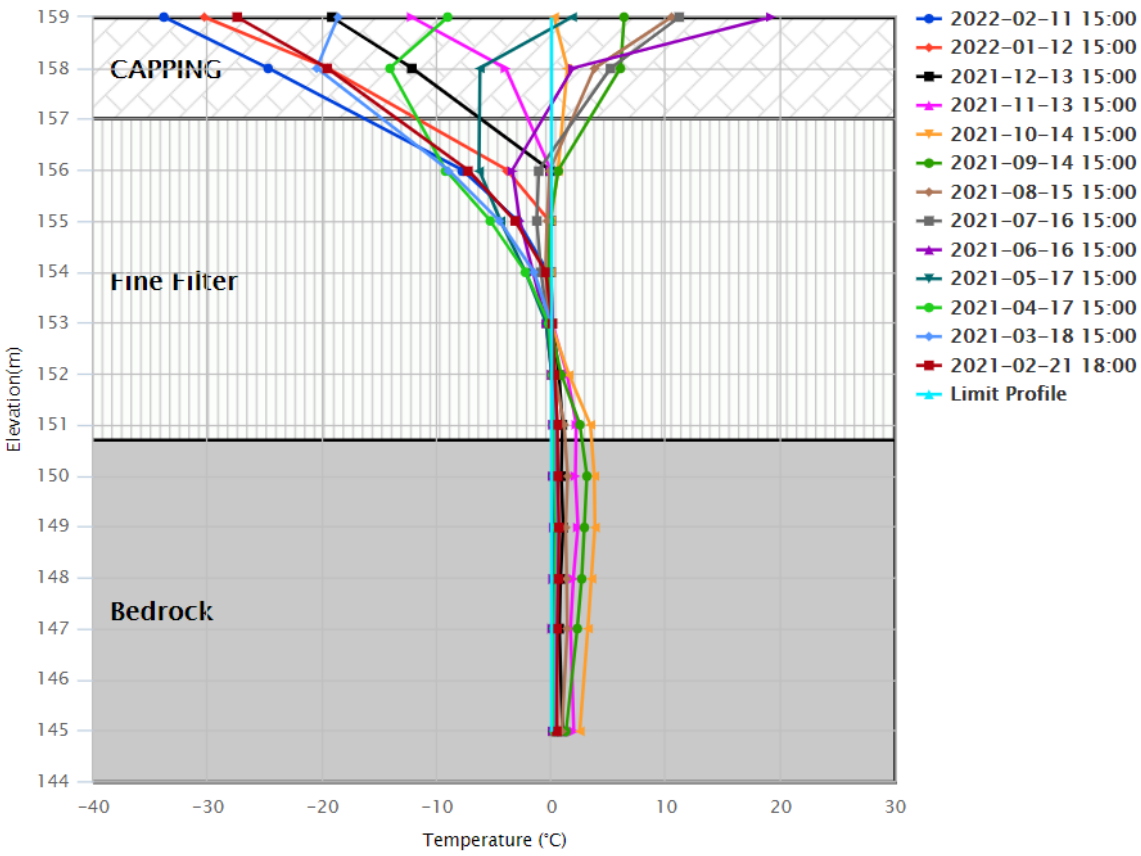
Whale Tail Dike

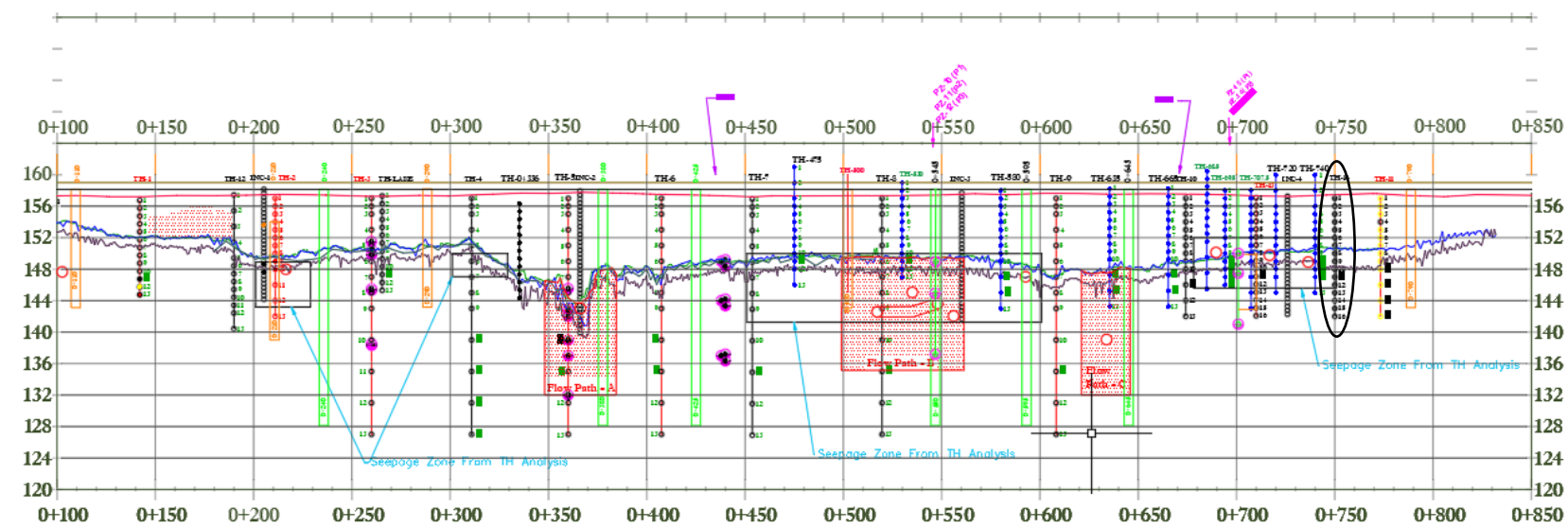


WTD-TH 0+740

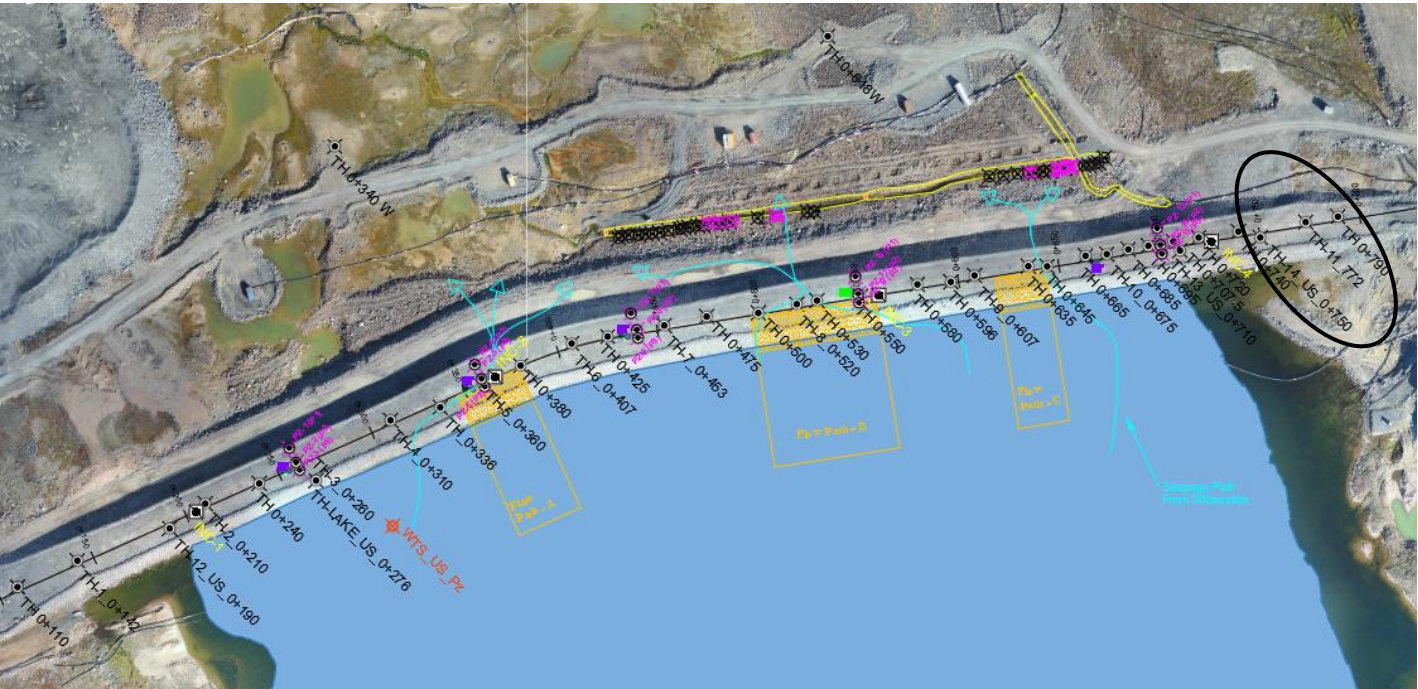


AMQ – WTD TH: 0+740_T

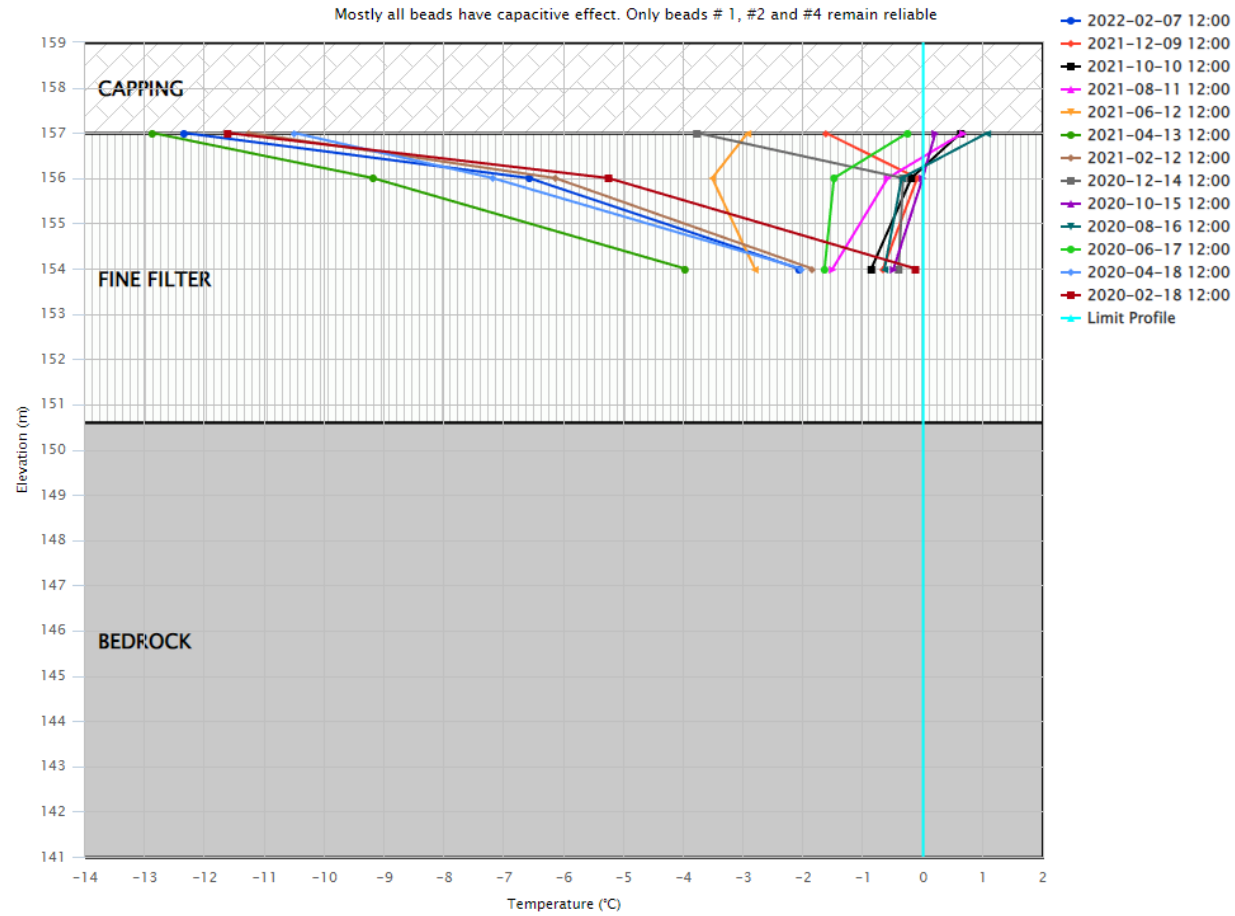




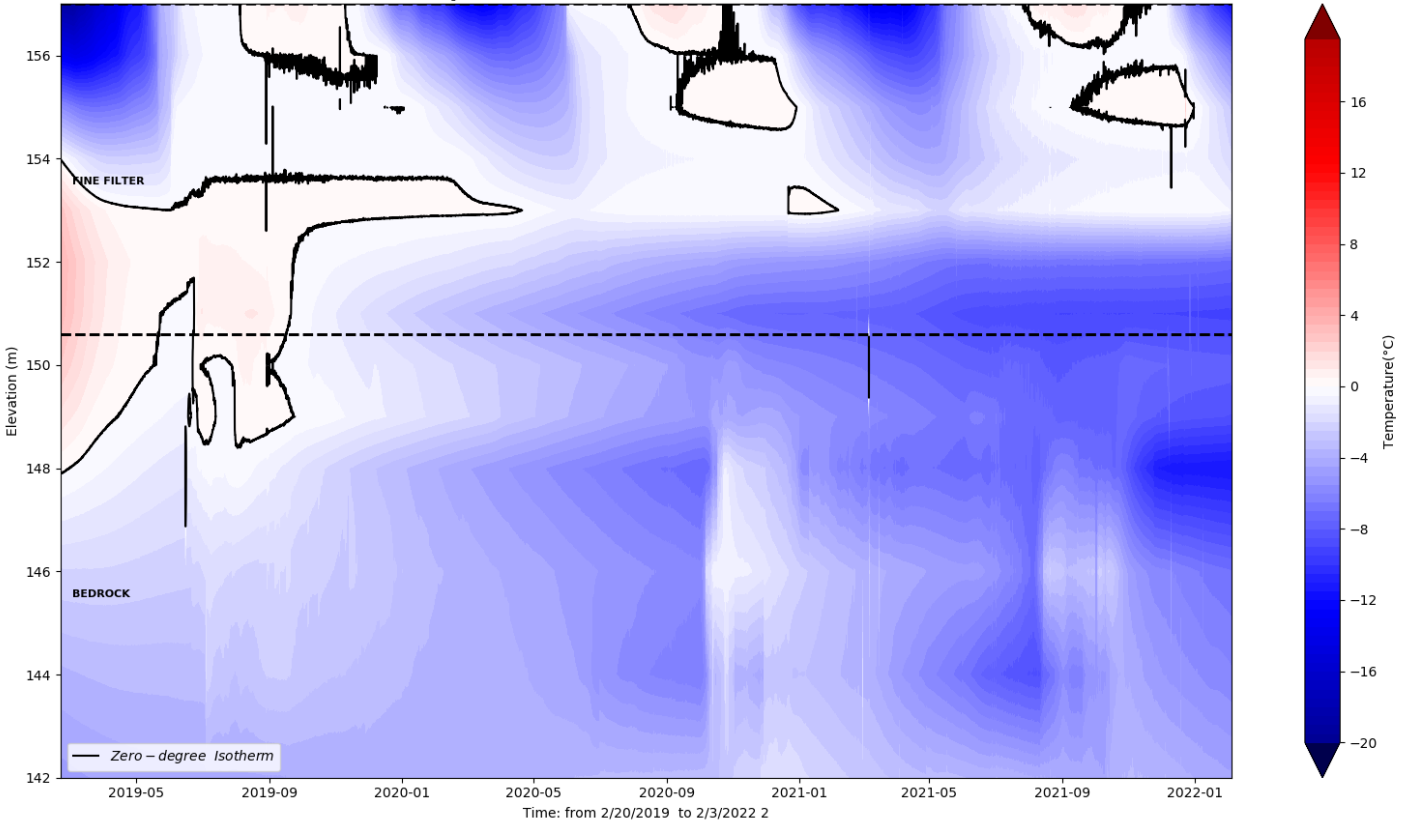
WTD-TH 0+772 U/S



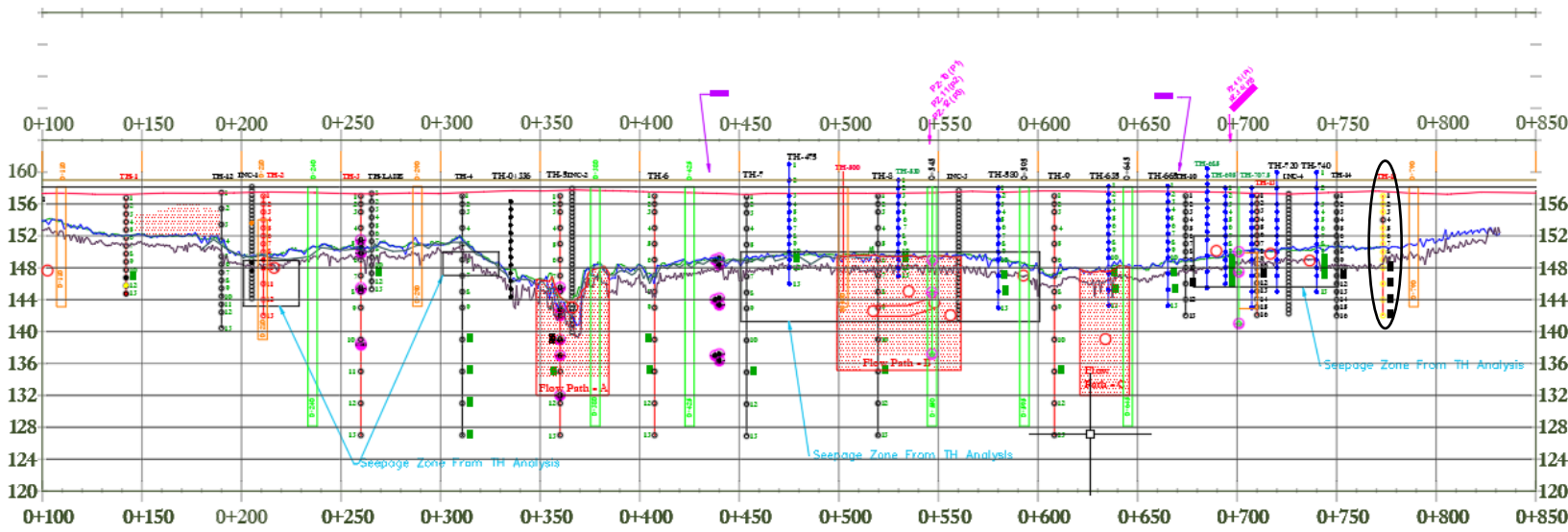
AMQ – WTD TH: 0+772



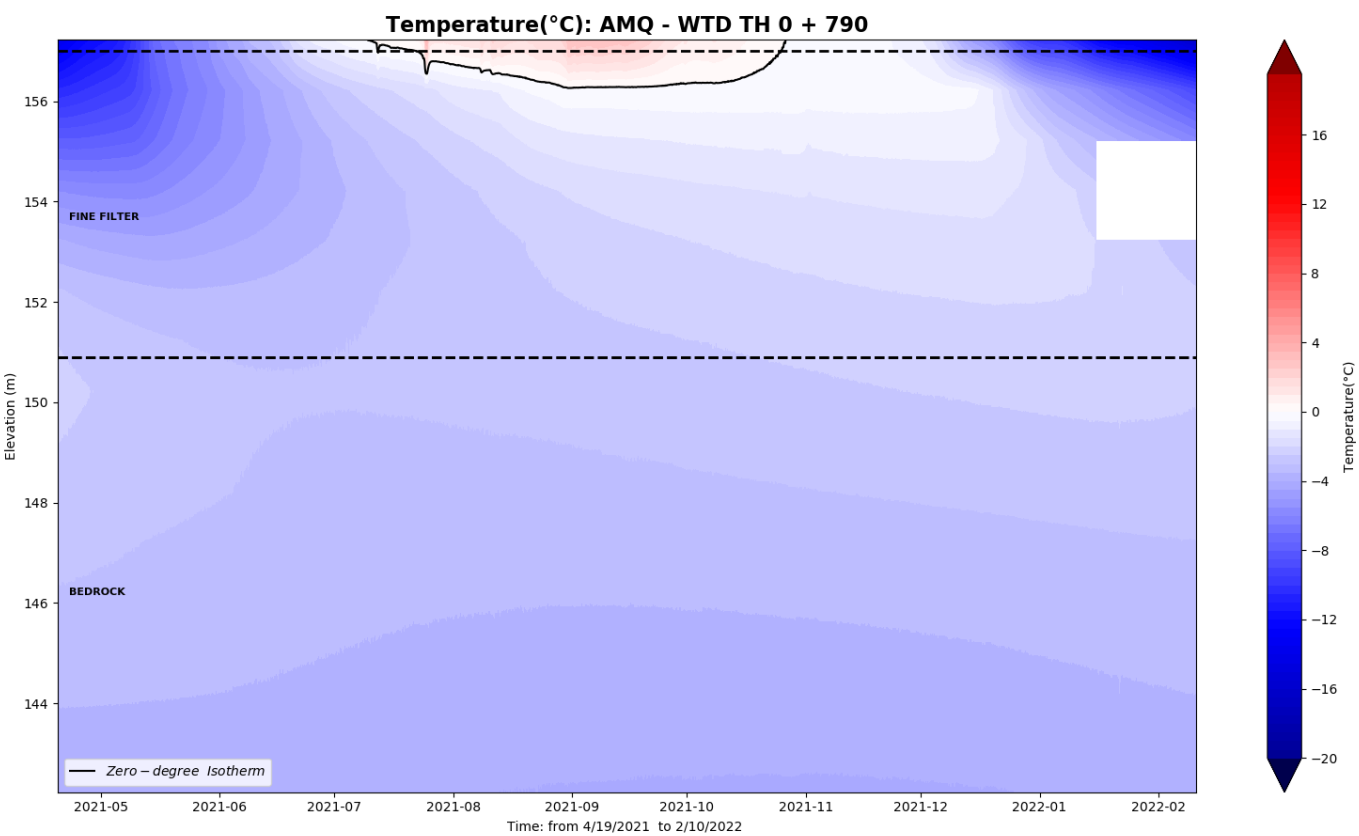
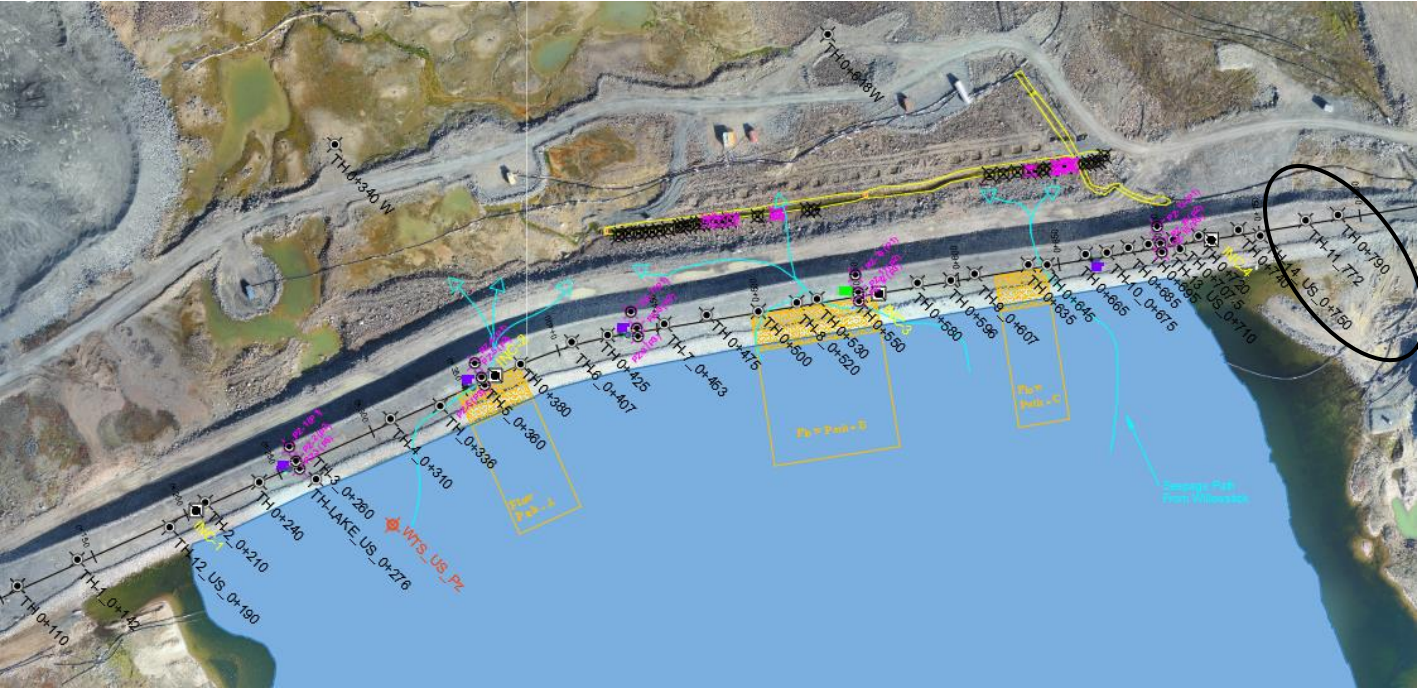
Temperature(°C): AMQ - WTD TH 0 + 772



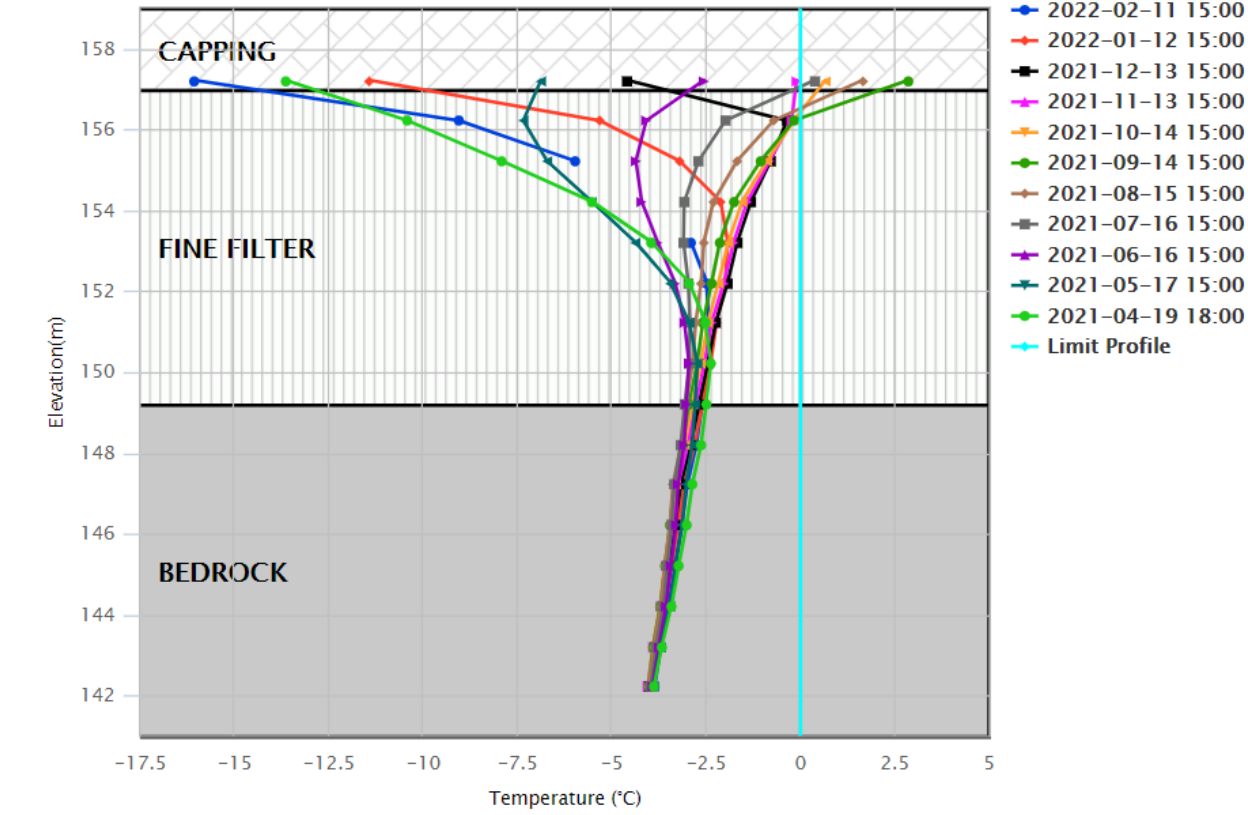
Whale Tail Dike



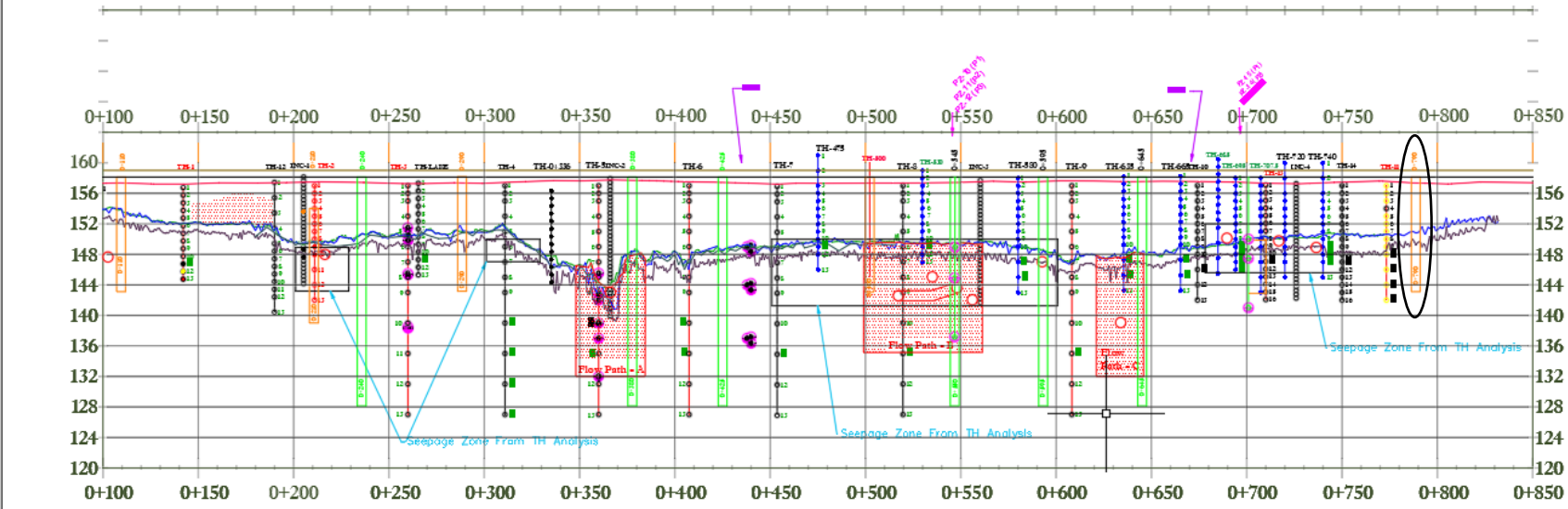
WTD-TH 0+790



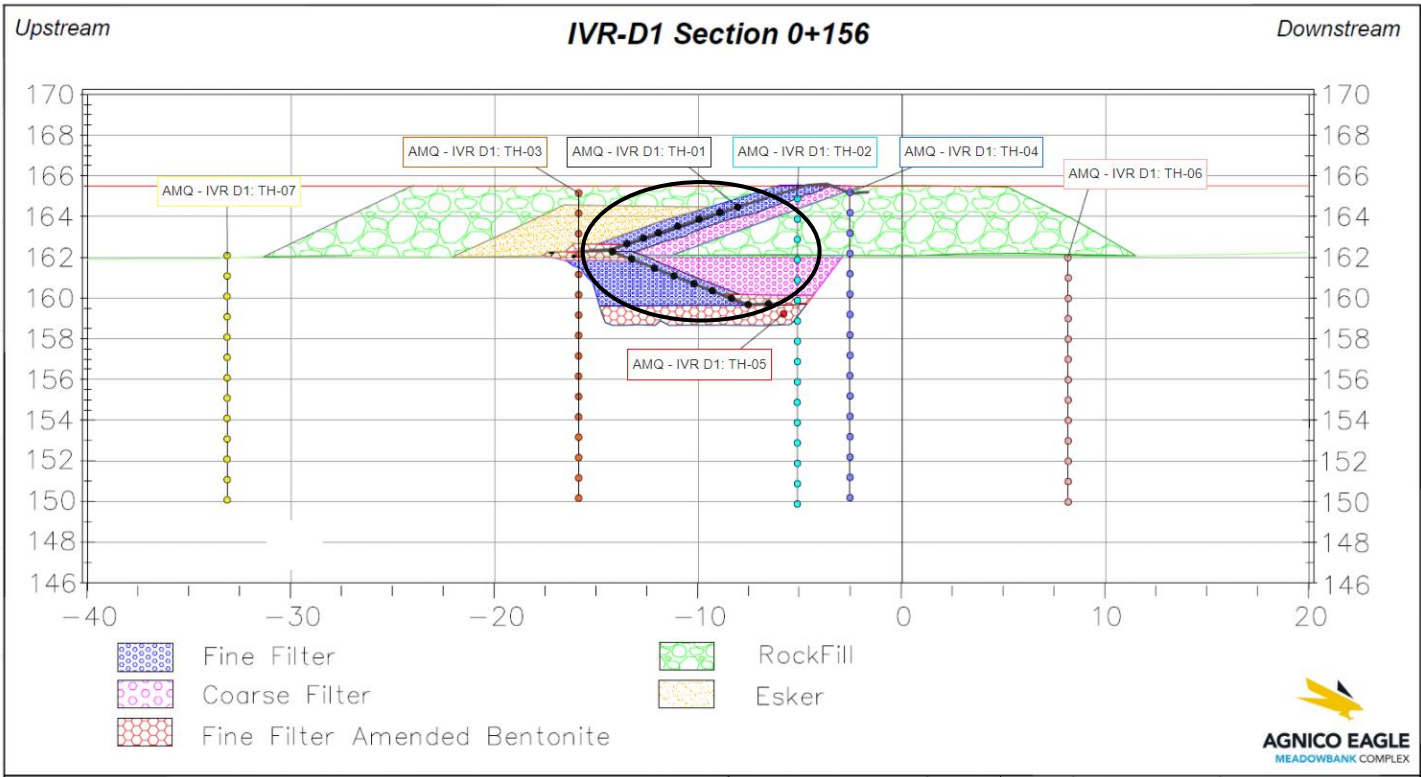
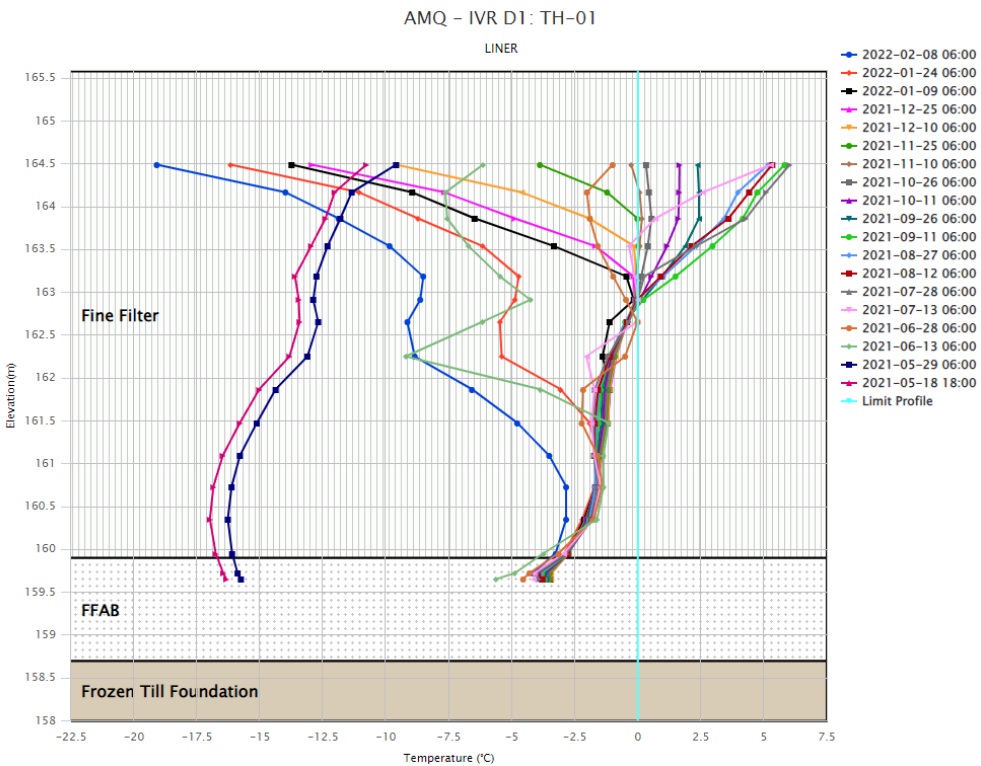
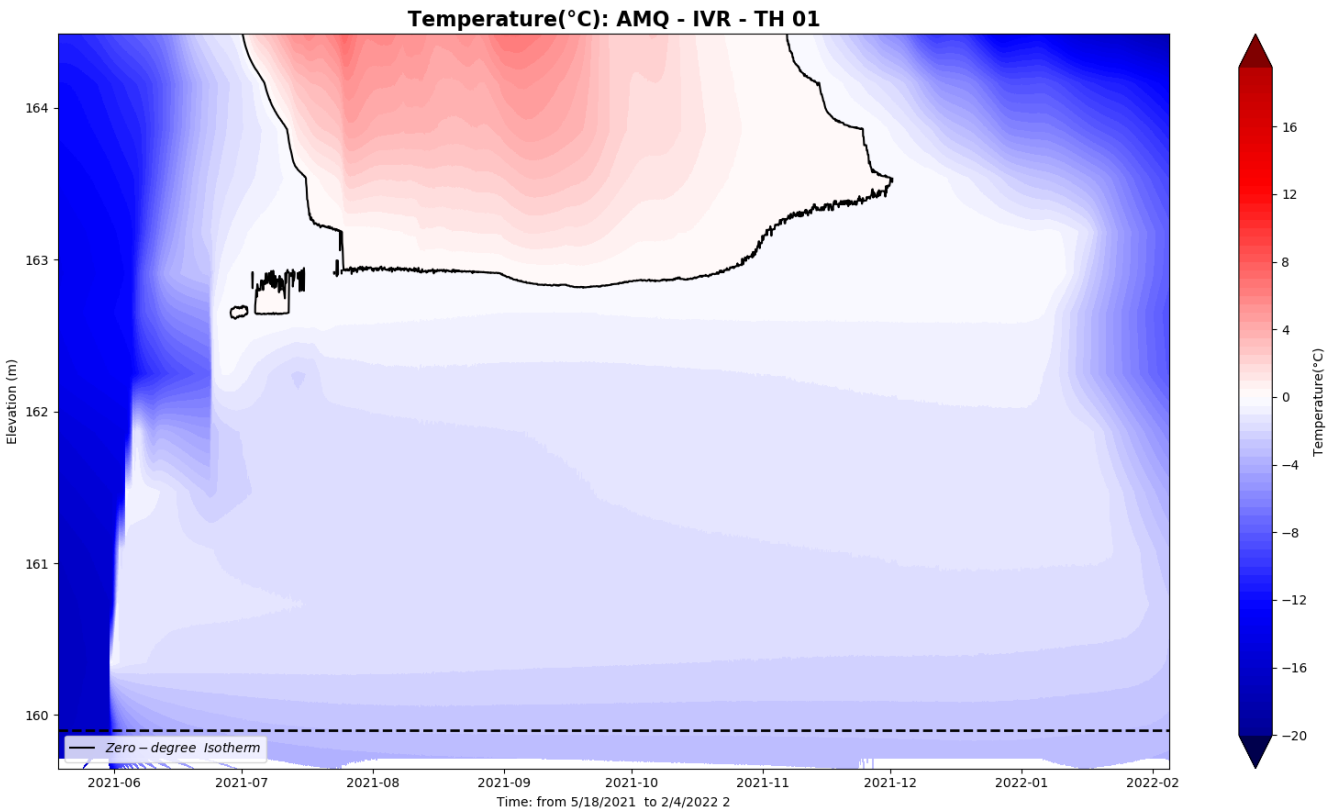
AMQ - WTD TH: 0+790



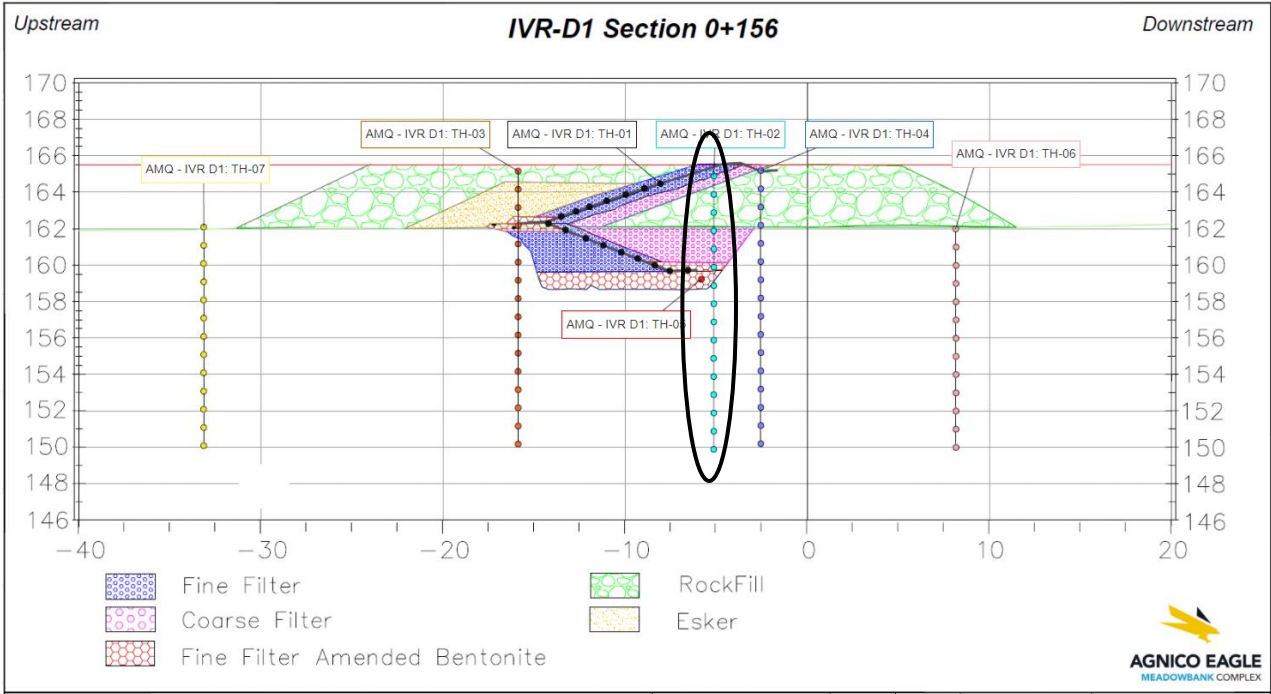
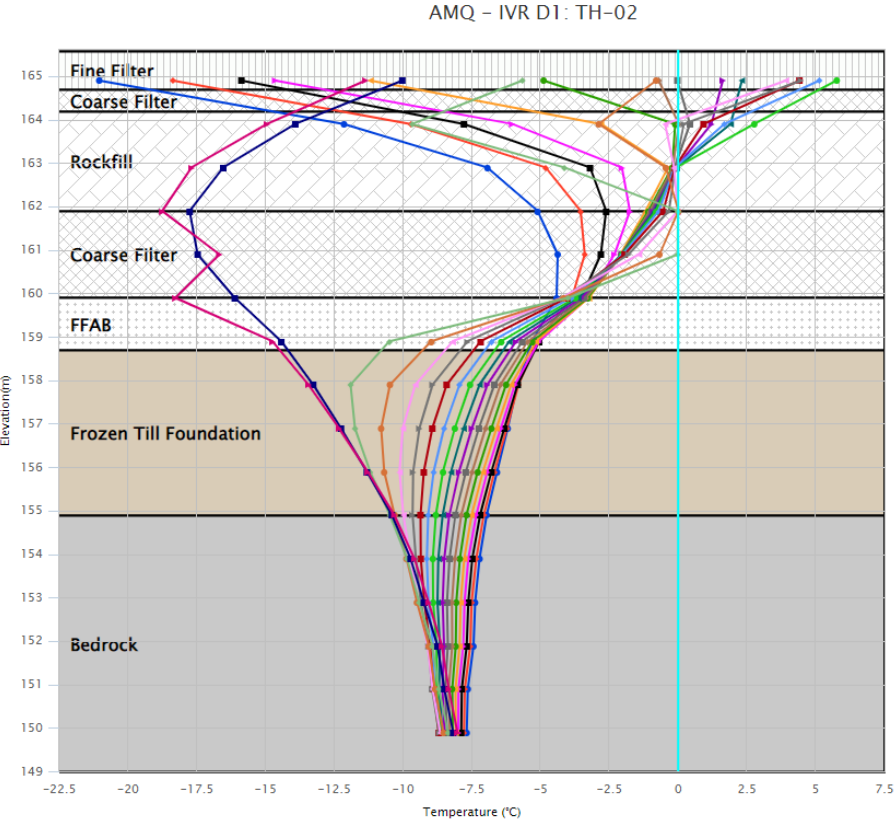
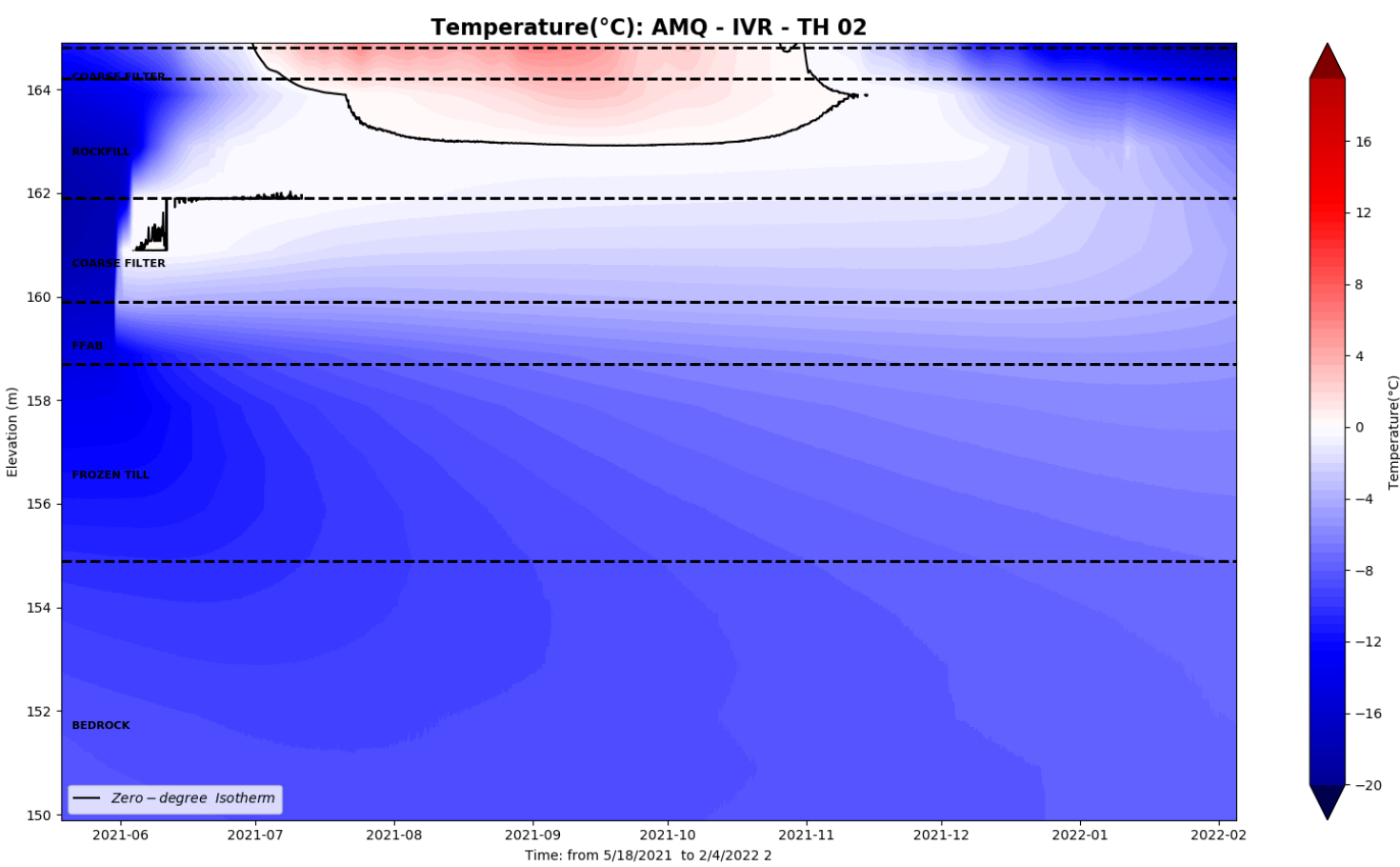
Whale Tail Dike



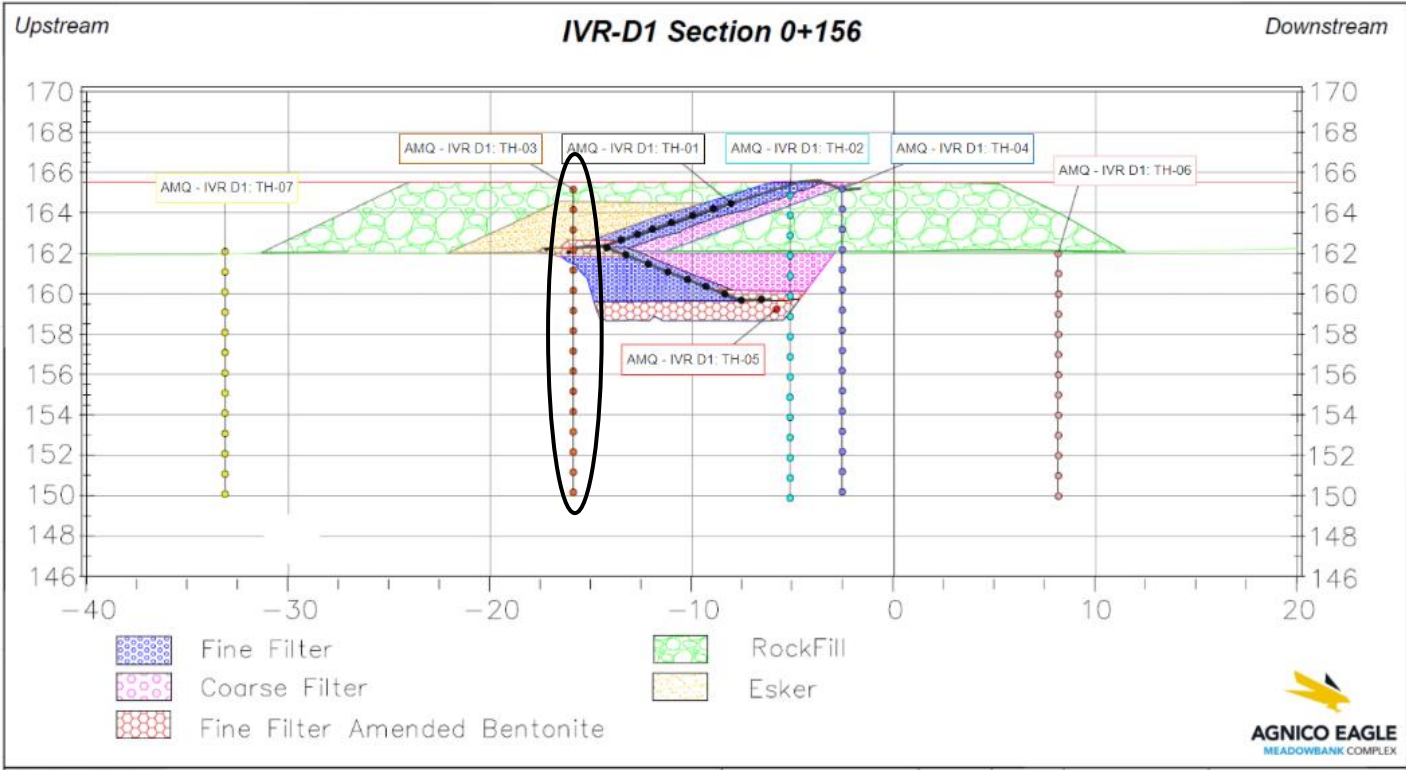
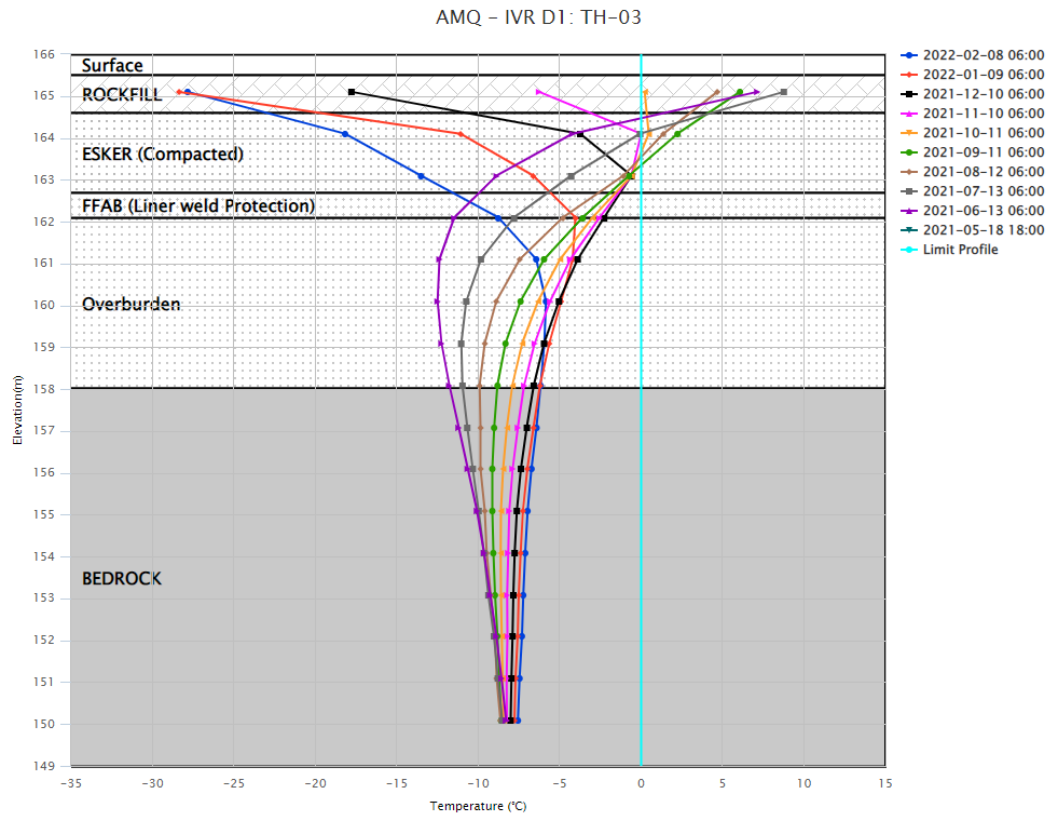
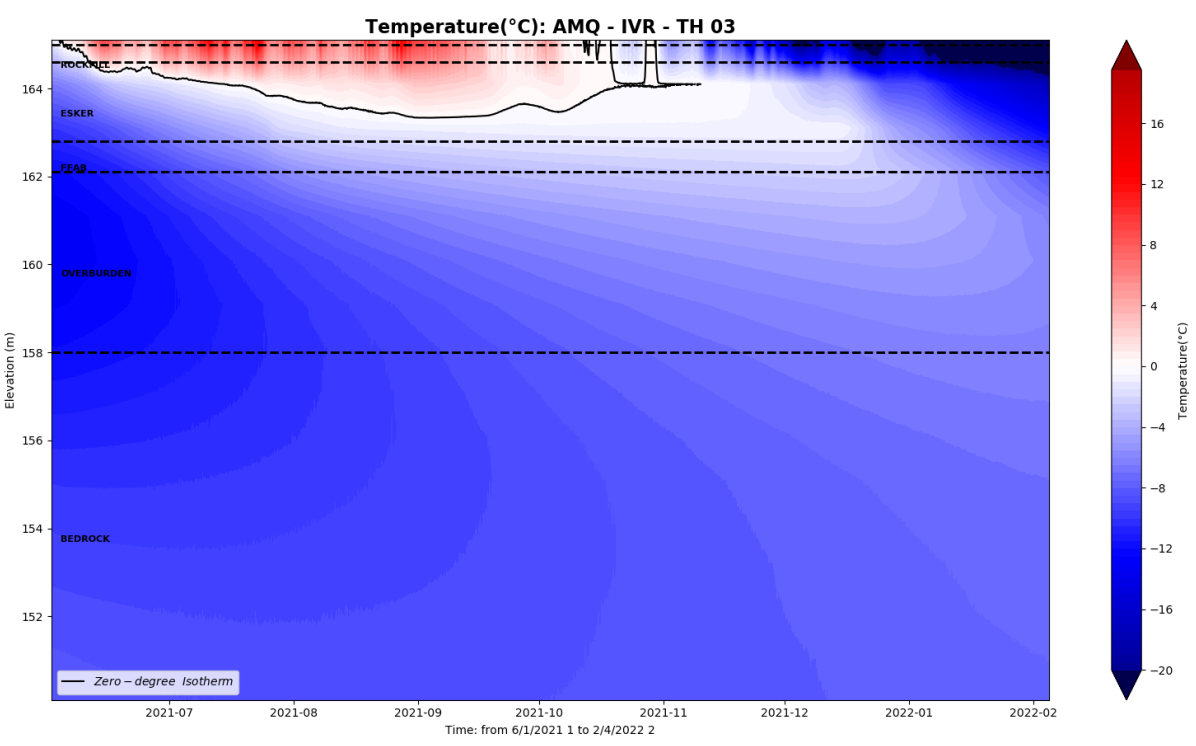
IVR-D1-TH1



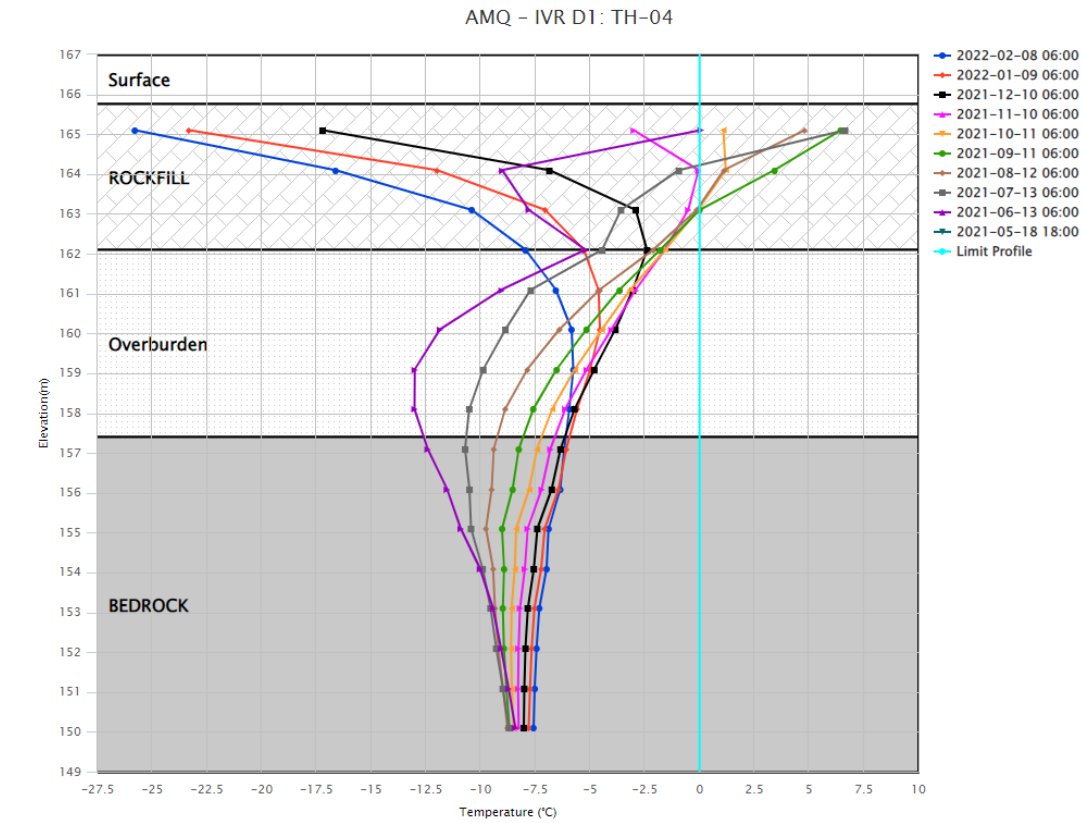
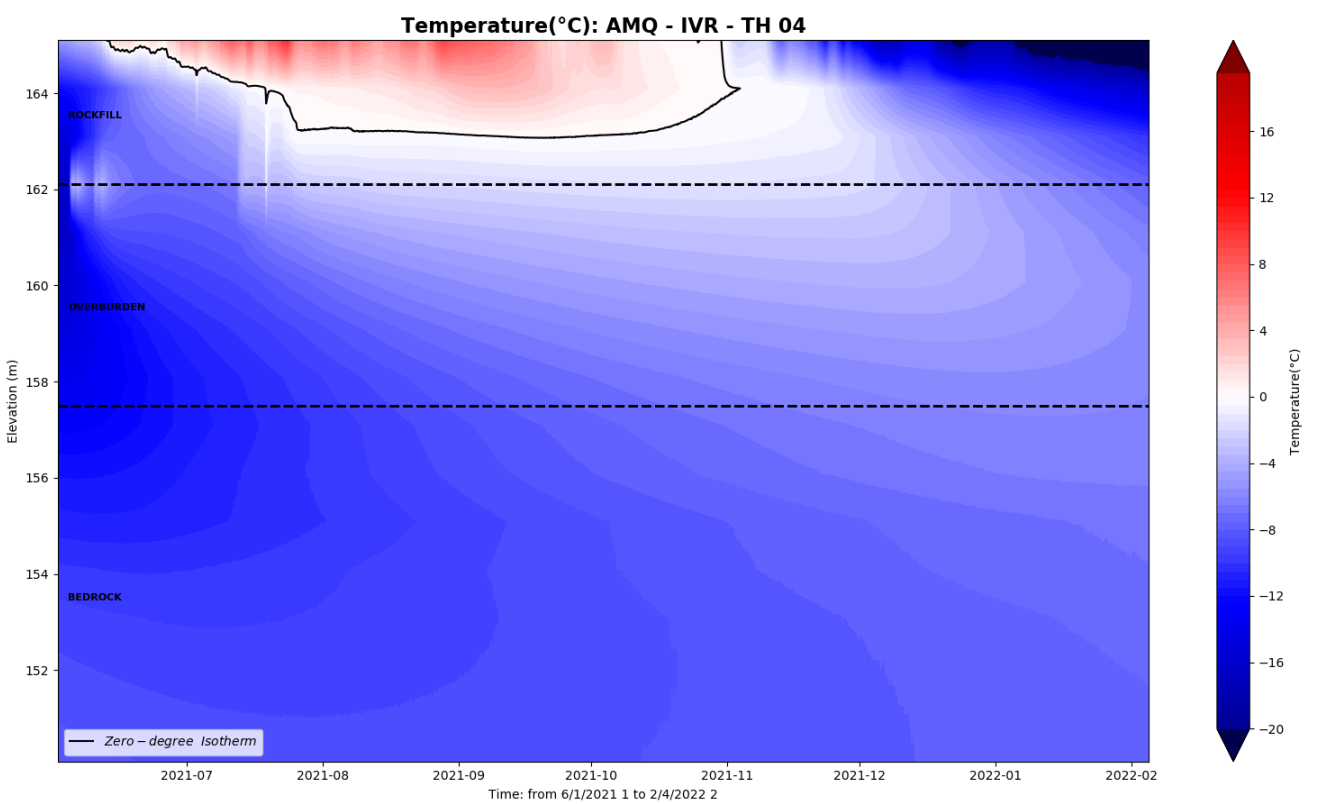
IVR-D1-TH2



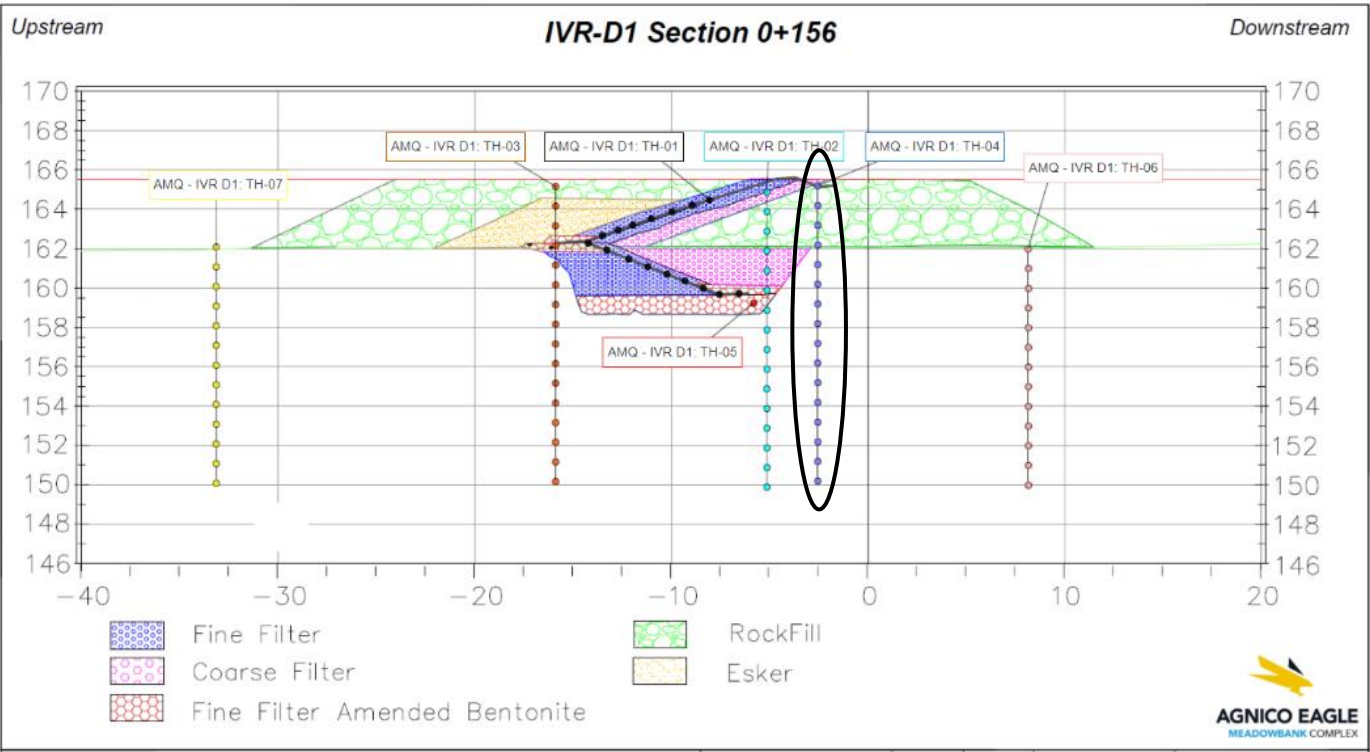
IVR-D1-TH3

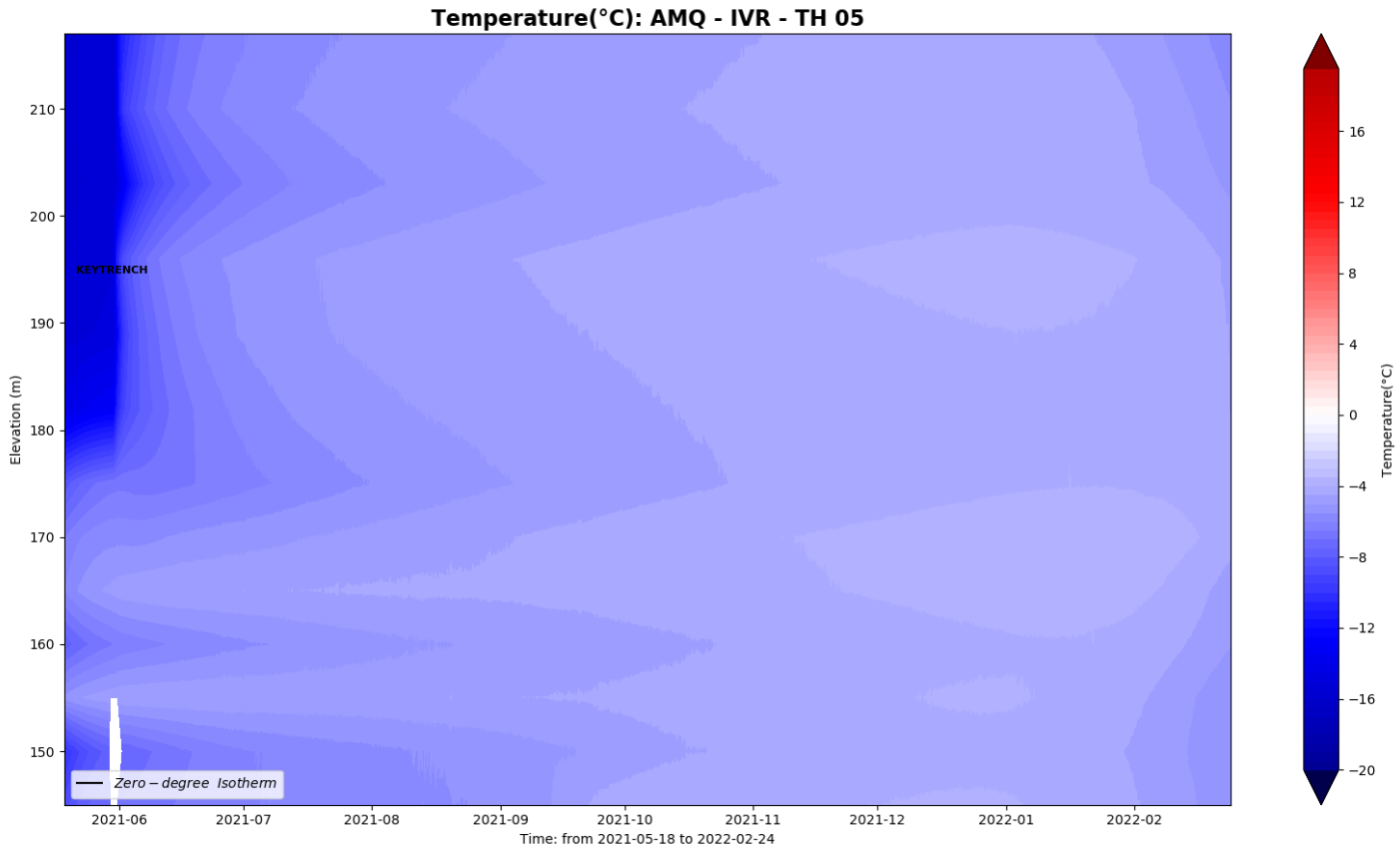


IVR-D1-TH4

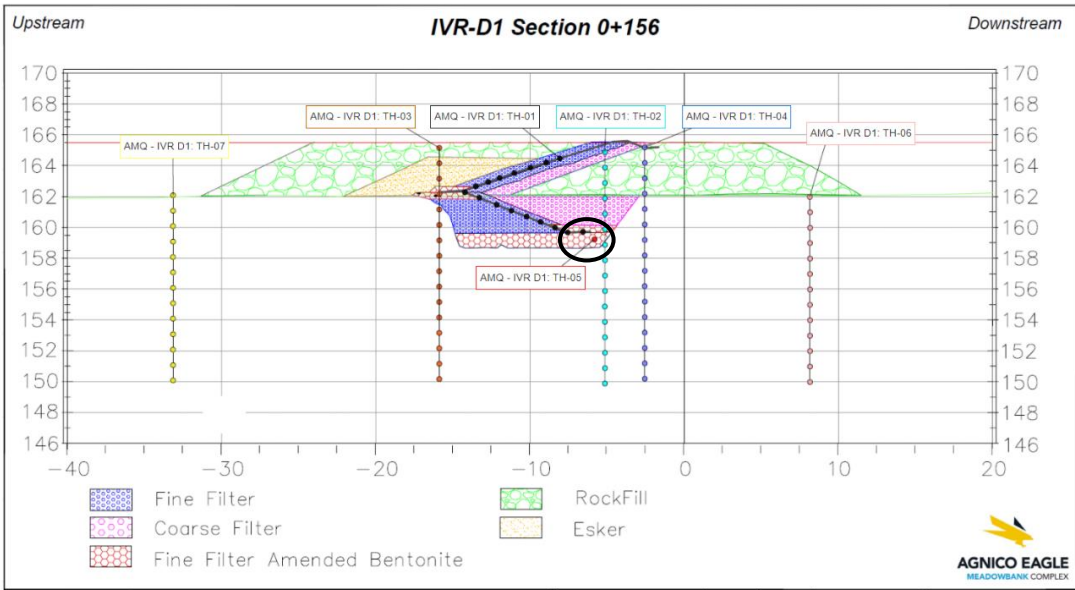
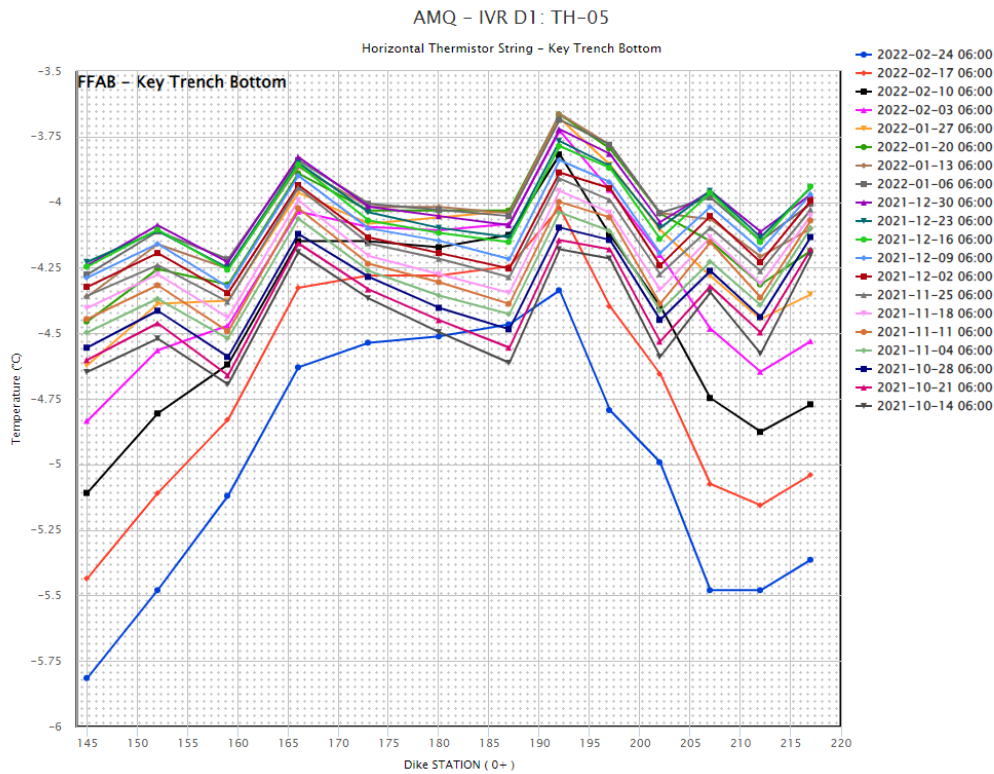


IVR-D1-TH5





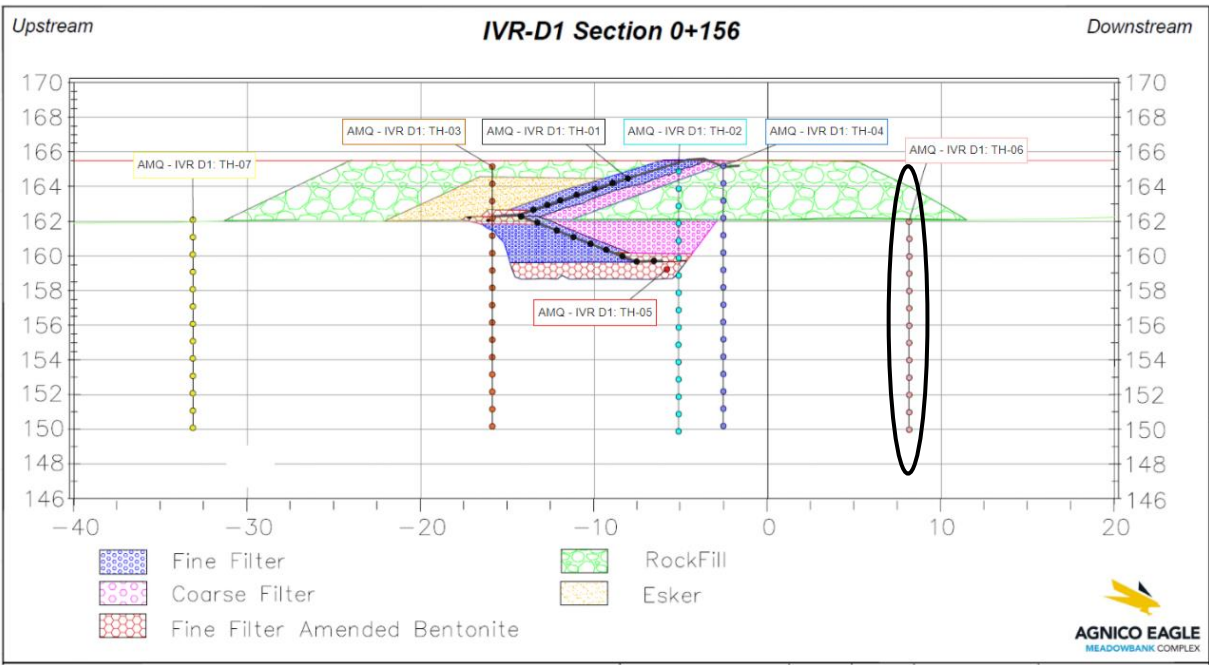
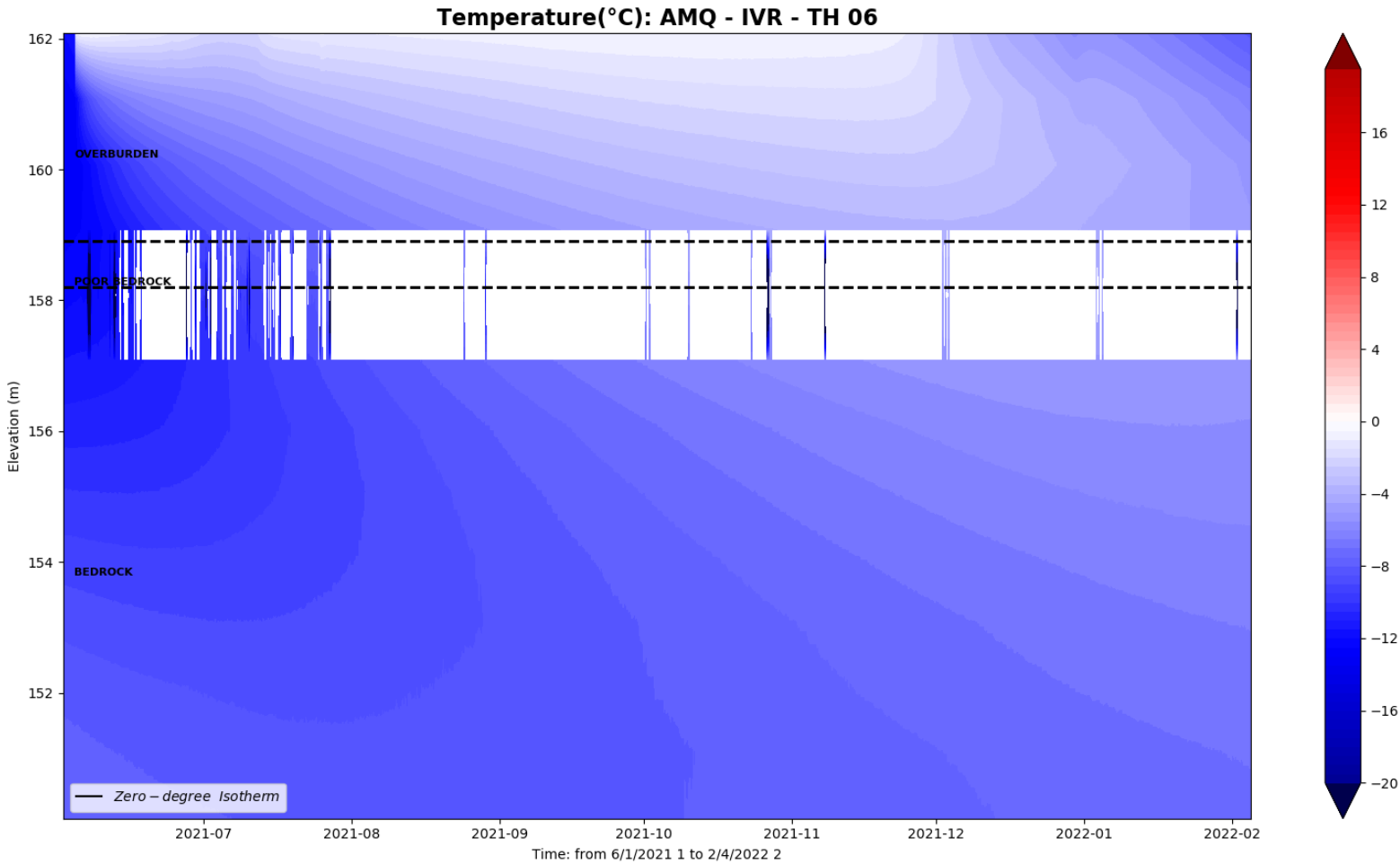
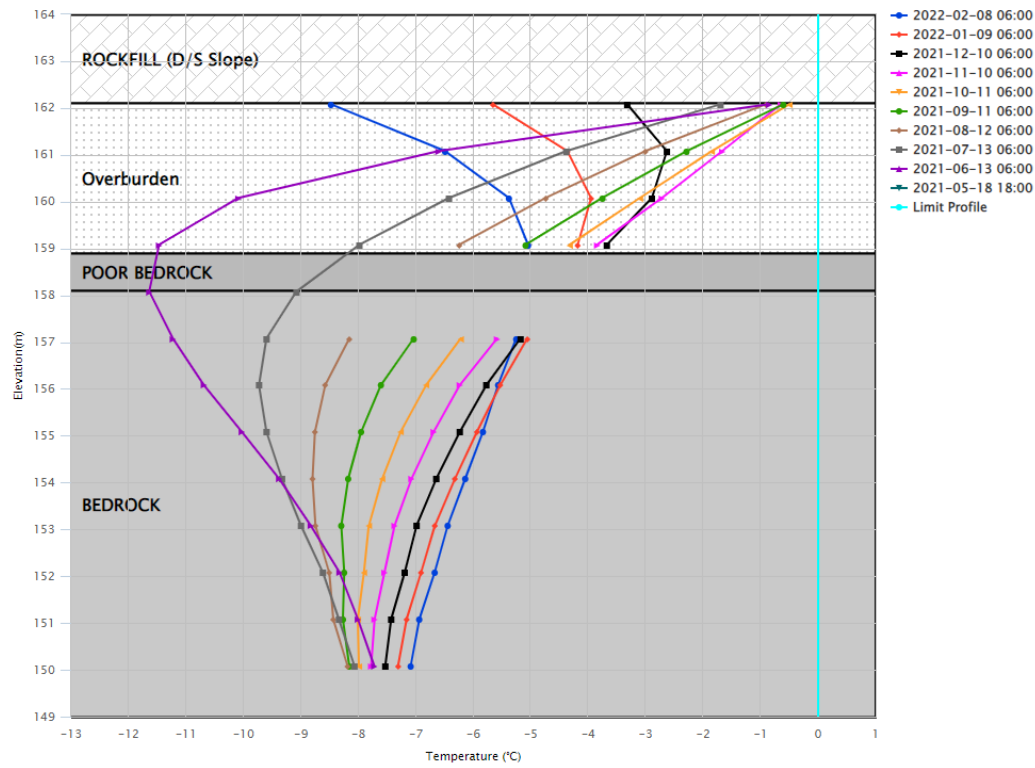
NOTE: This TH is horizontal and in Keytrench and must be reflected this way when reading the thermal graph



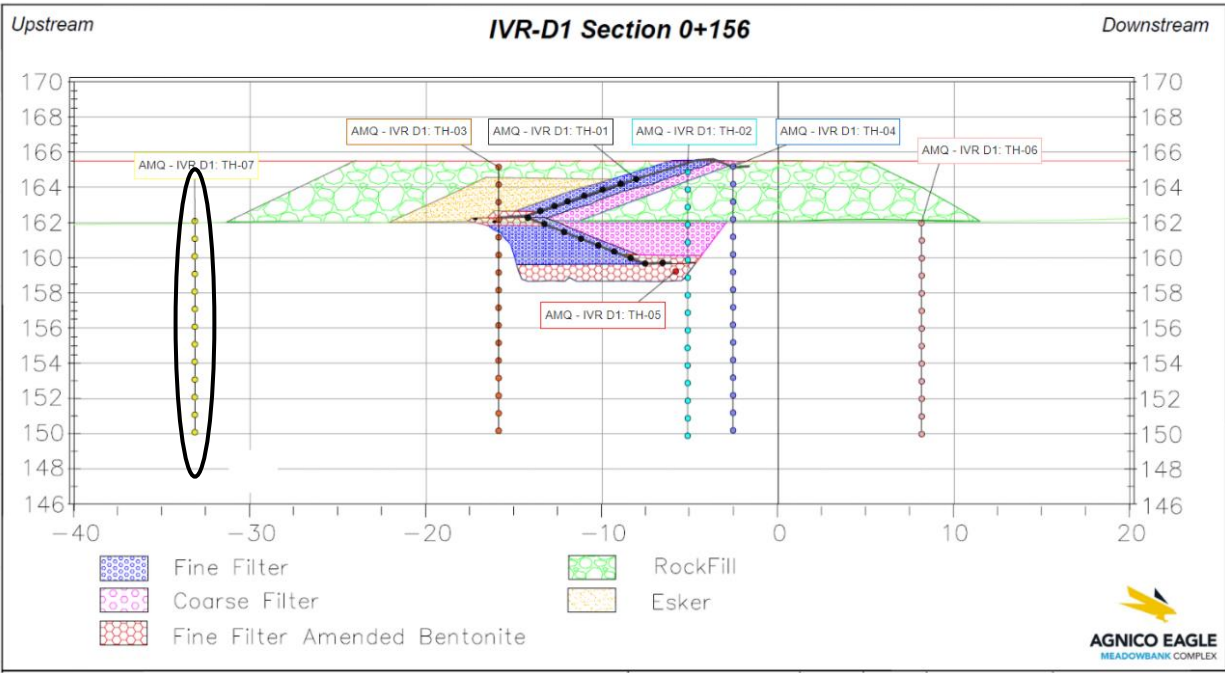
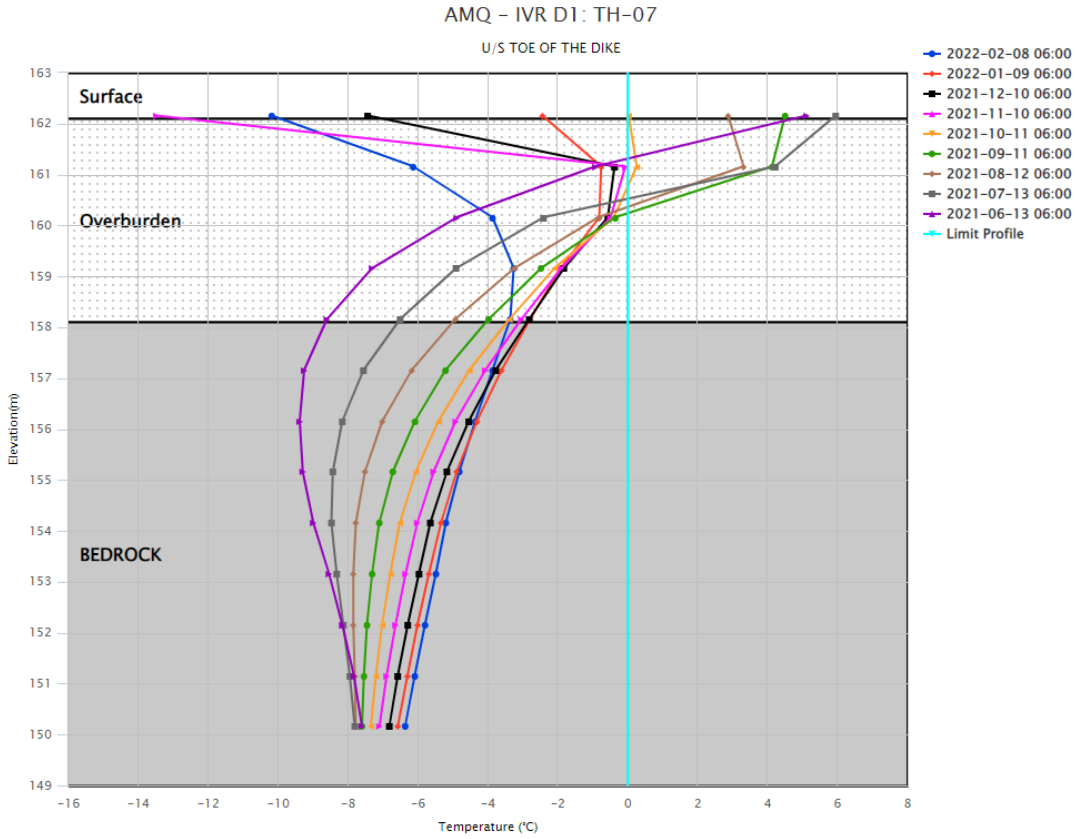
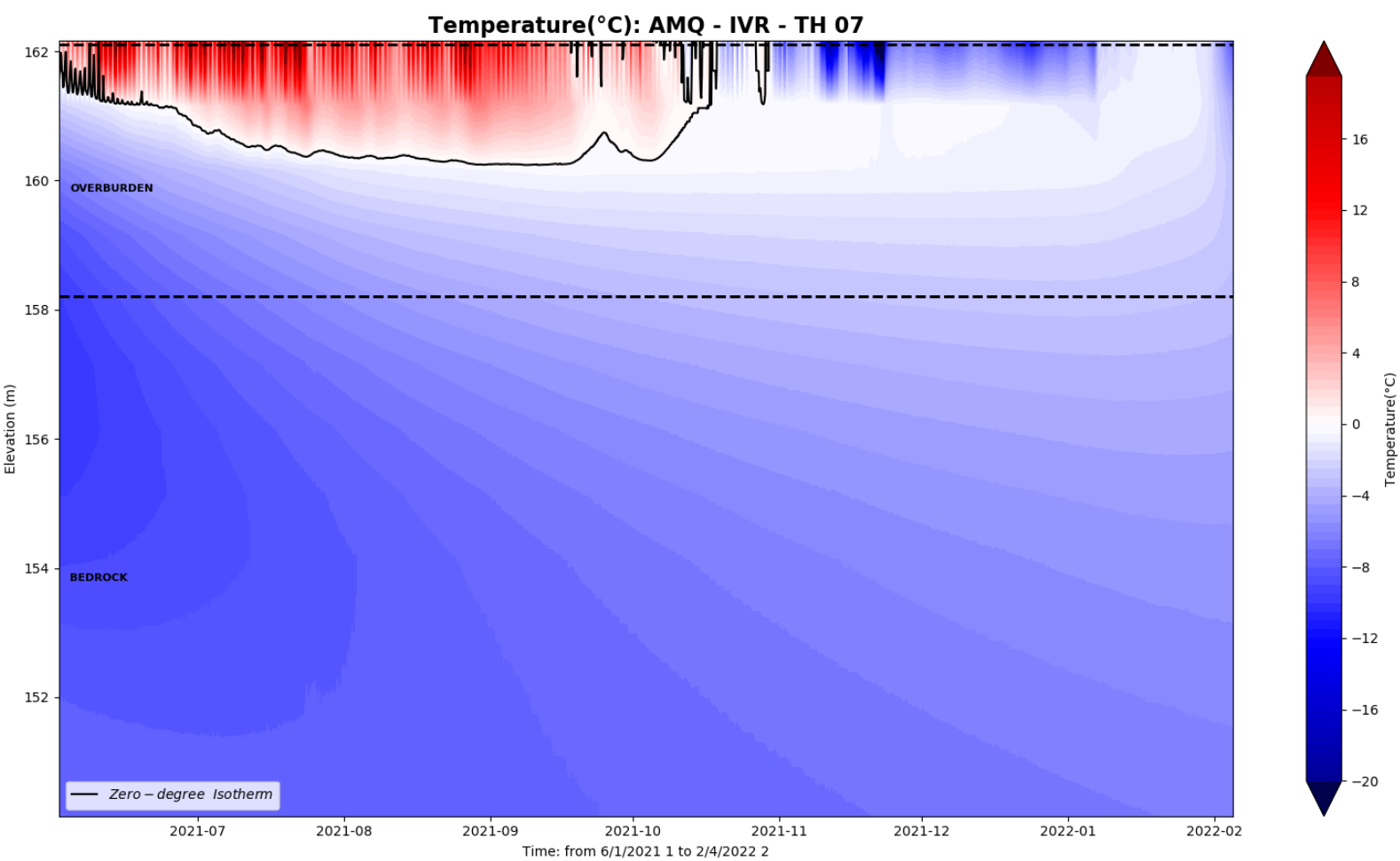
IVR-D1-TH6



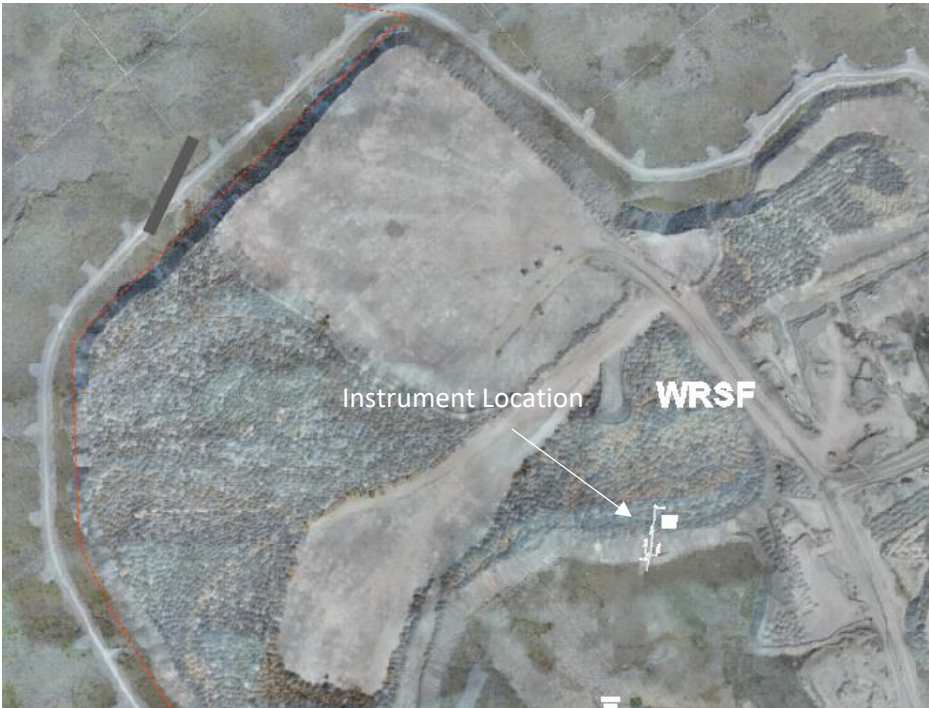
AMQ - IVR D1: TH-06



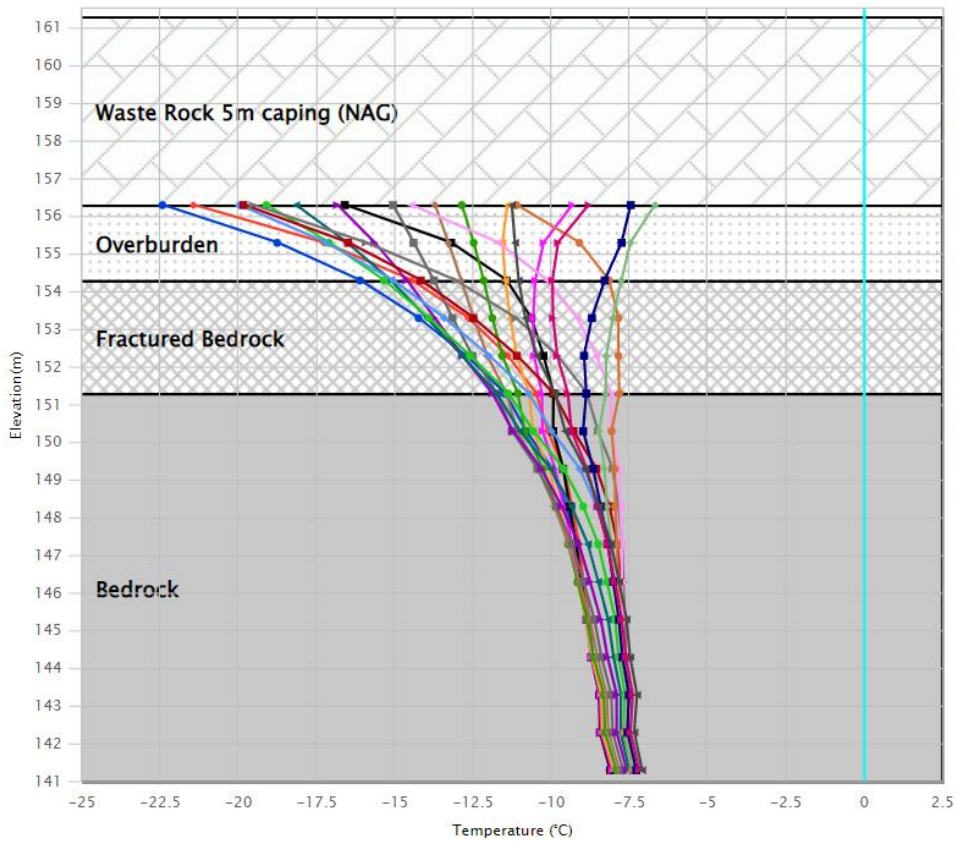
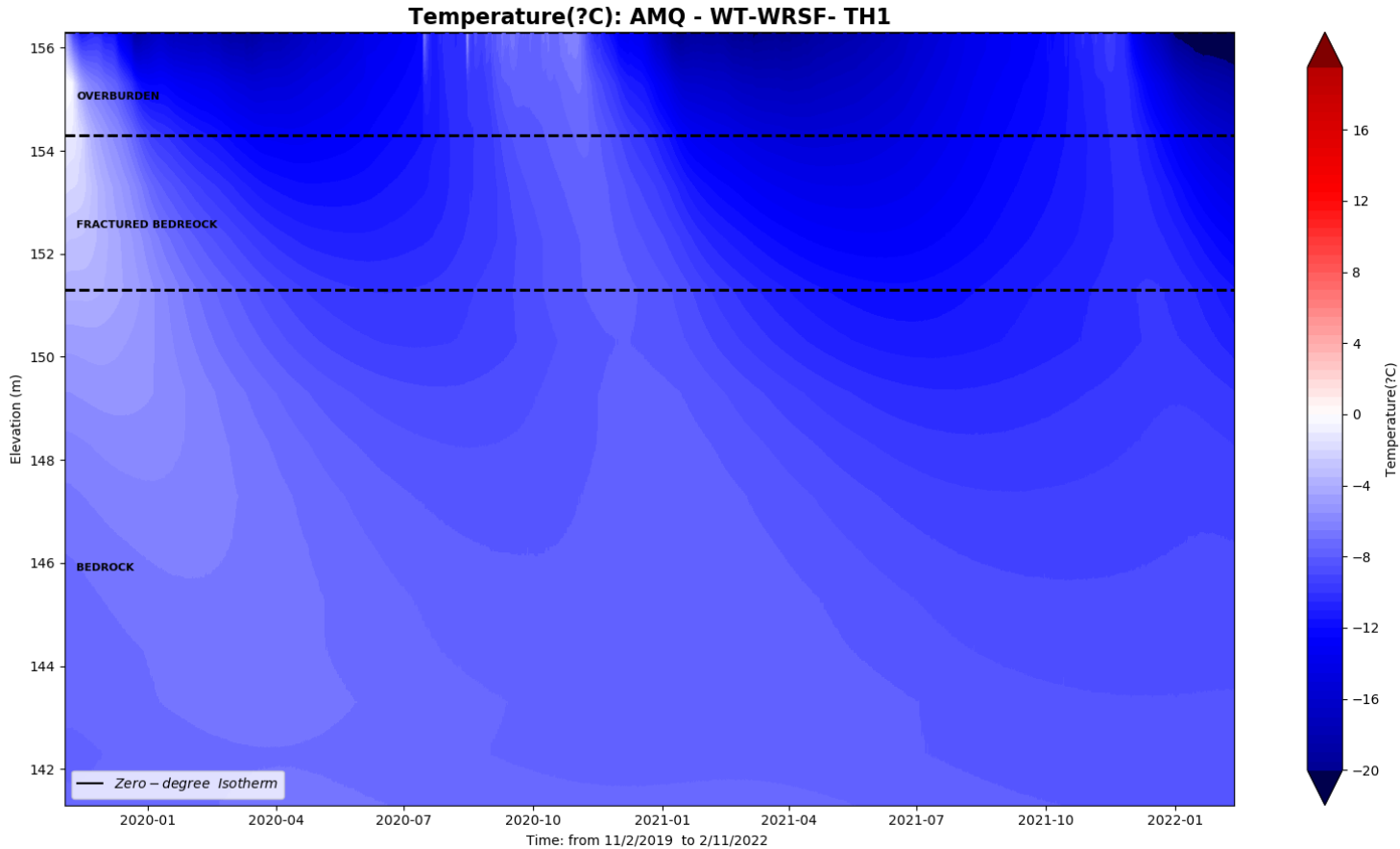
IVR-D1-TH7



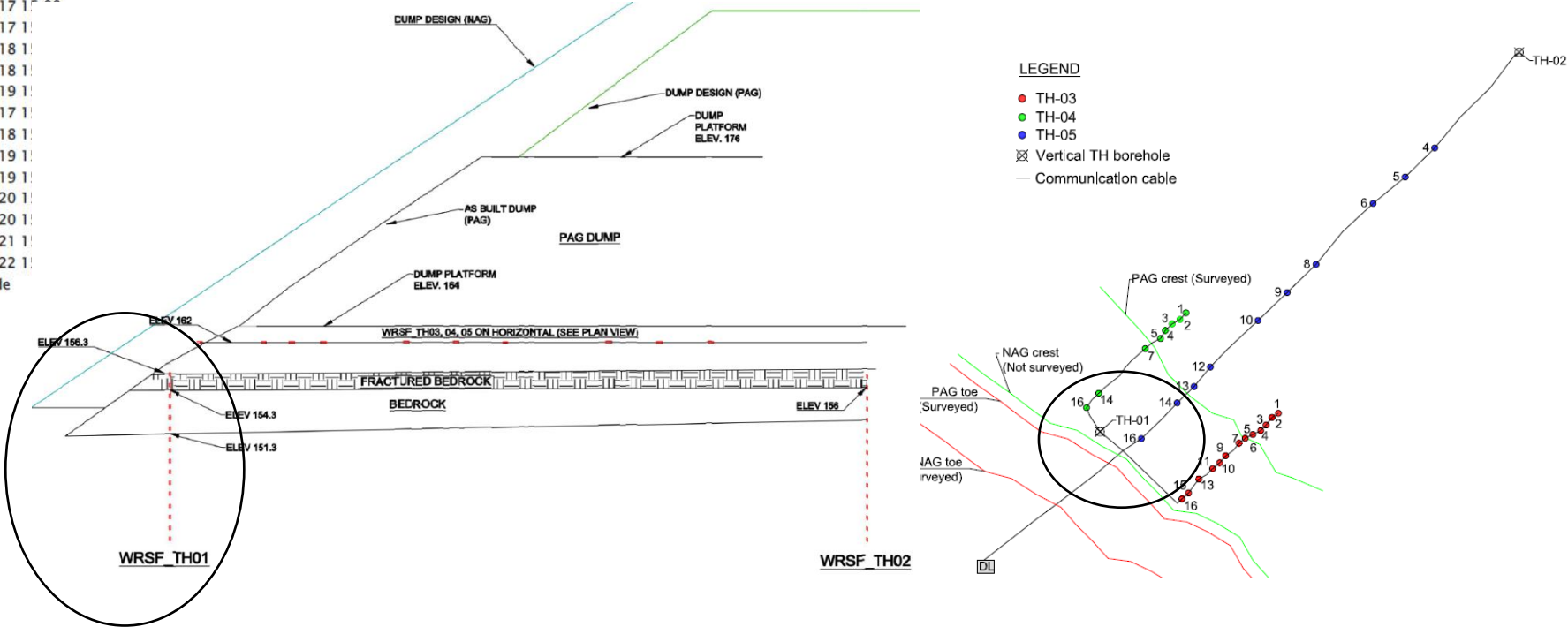
WT WRSF TH1



AMQ – WRSF – WT Dump TH_01



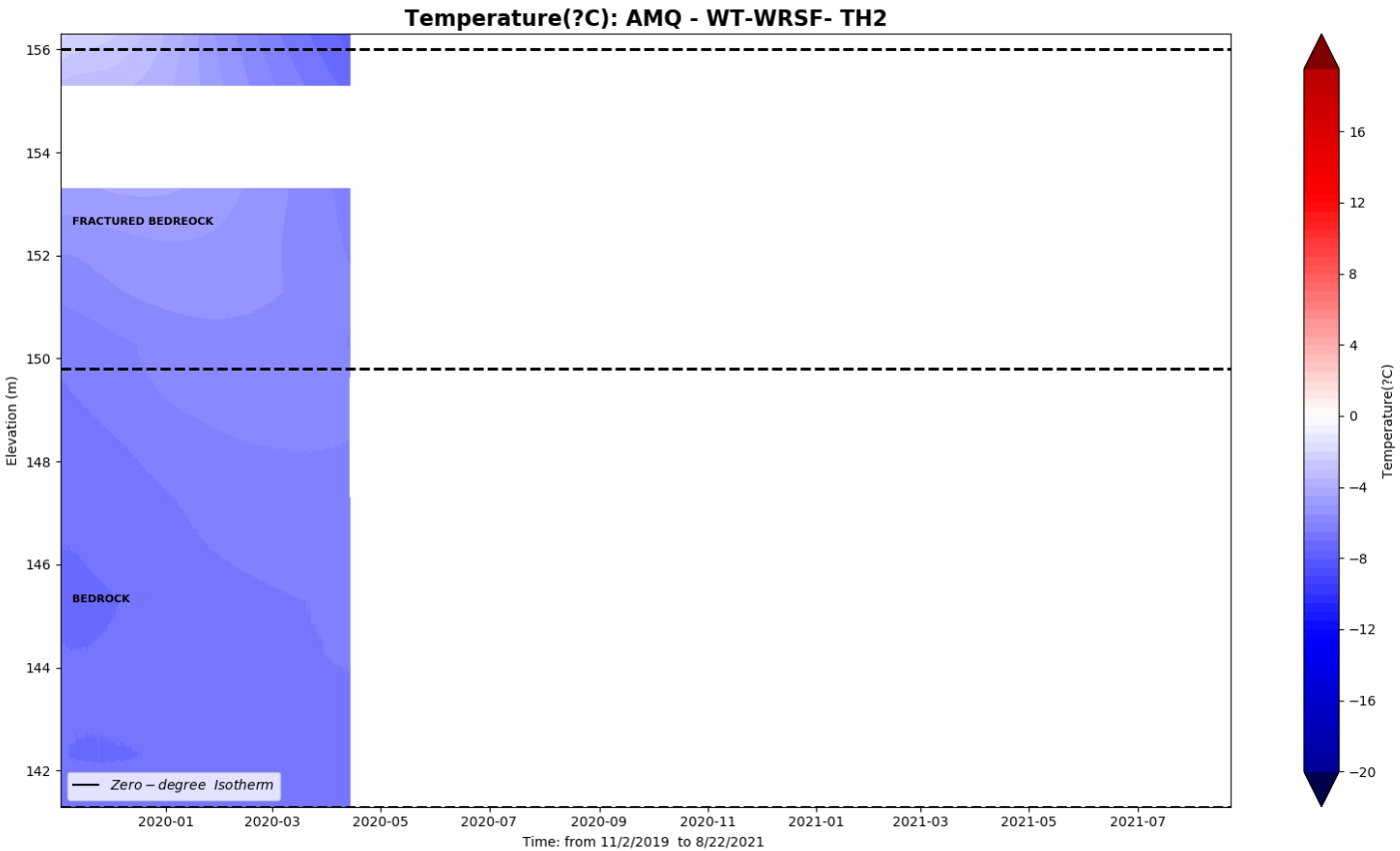
- 2022-02-12 15:00
- 2022-01-13 15:00
- 2021-12-14 15:00
- 2021-11-14 15:00
- 2021-10-15 15:00
- 2021-09-15 15:00
- 2021-08-16 15:00
- 2021-07-17 15:00
- 2021-06-17 15:00
- 2021-05-18 15:00
- 2021-04-18 15:00
- 2021-03-19 15:00
- 2021-02-17 15:00
- 2021-01-18 15:00
- 2020-12-19 15:00
- 2020-11-19 15:00
- 2020-10-20 15:00
- 2020-09-20 15:00
- 2020-08-21 15:00
- 2020-07-22 15:00
- Limit Profile



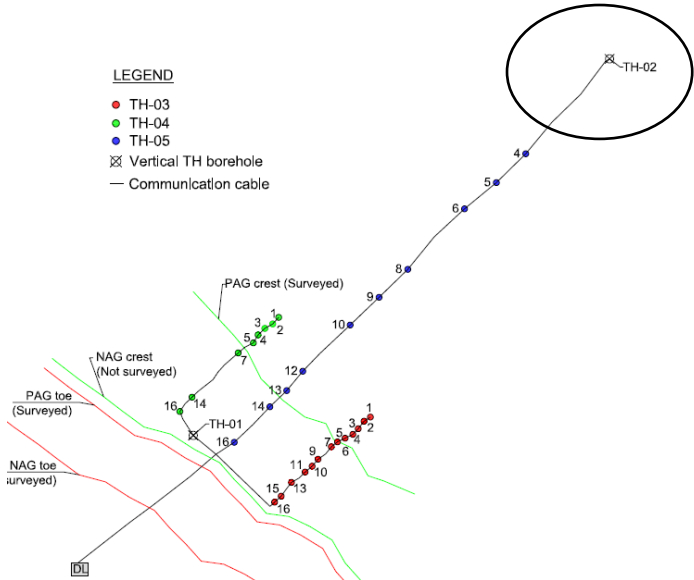
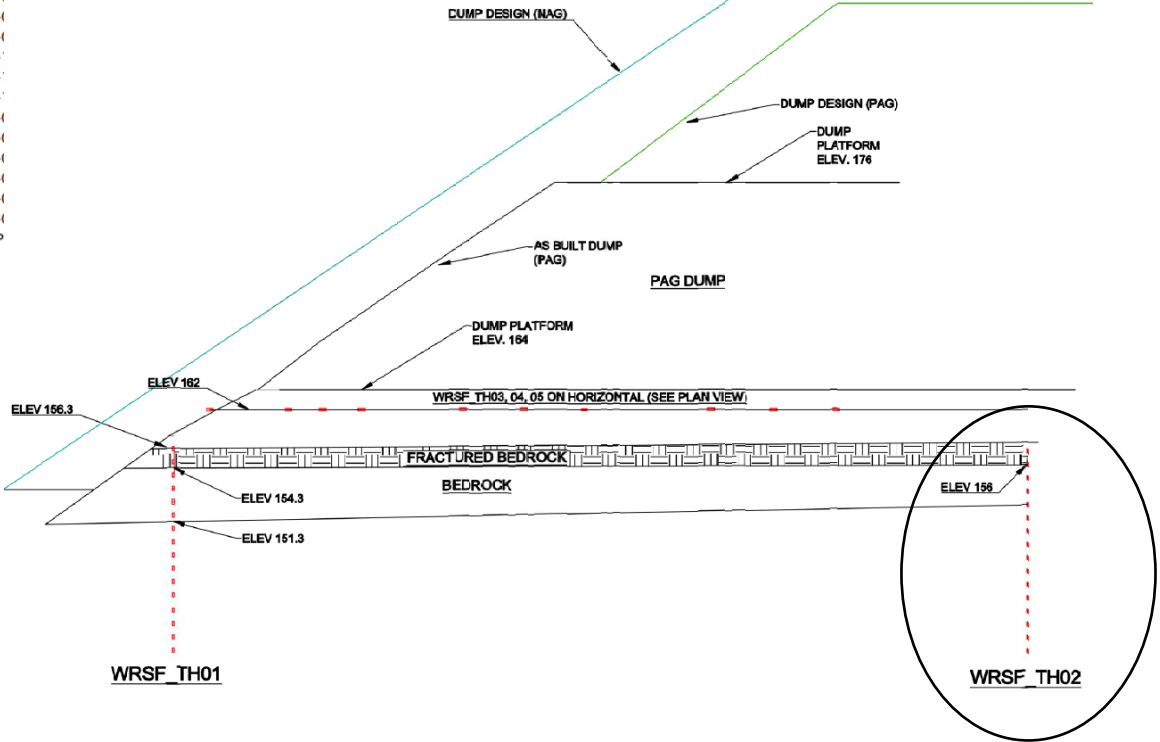
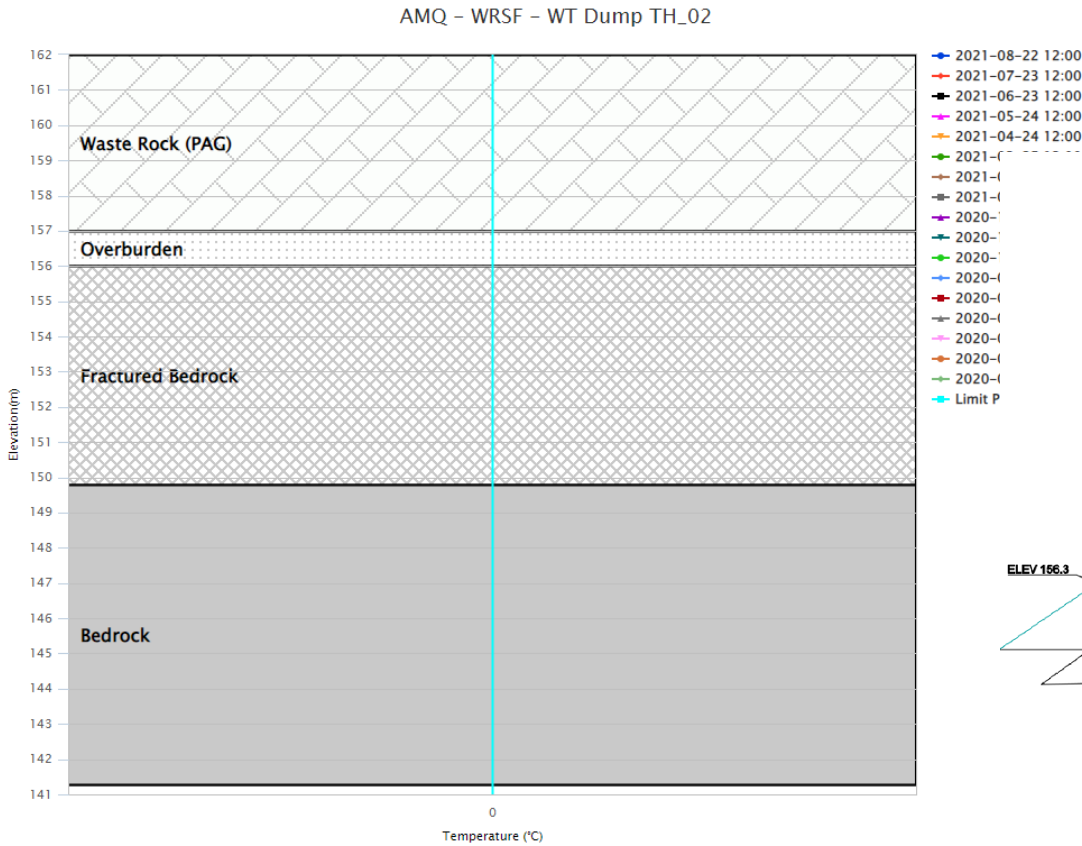
WT WRSF TH2



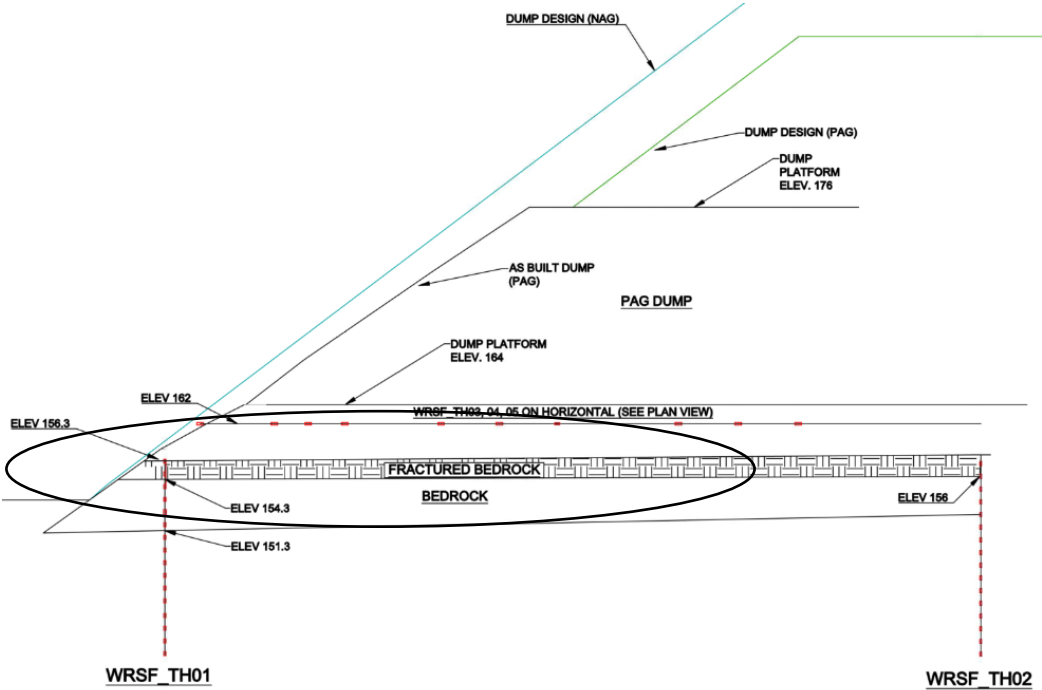
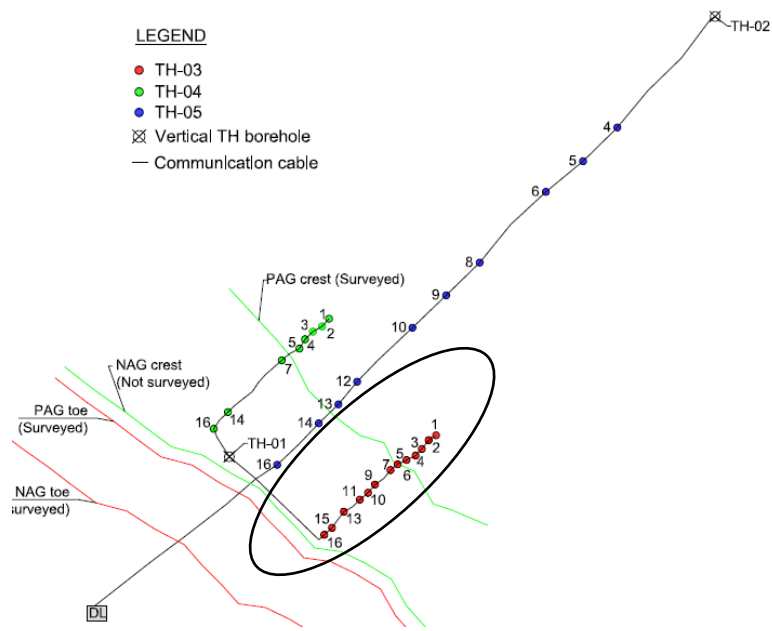
Last data May 2020



Last data May 2020

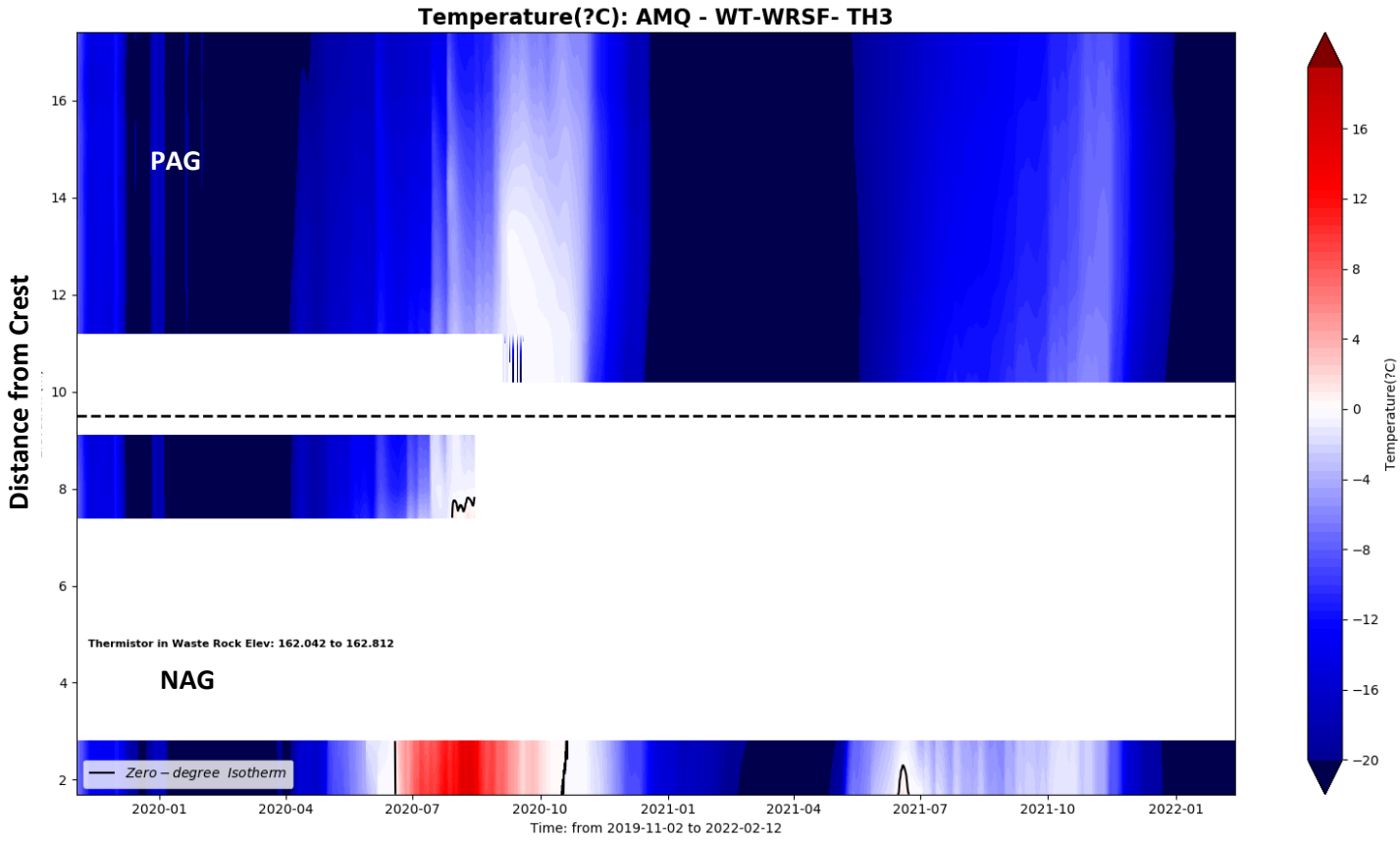
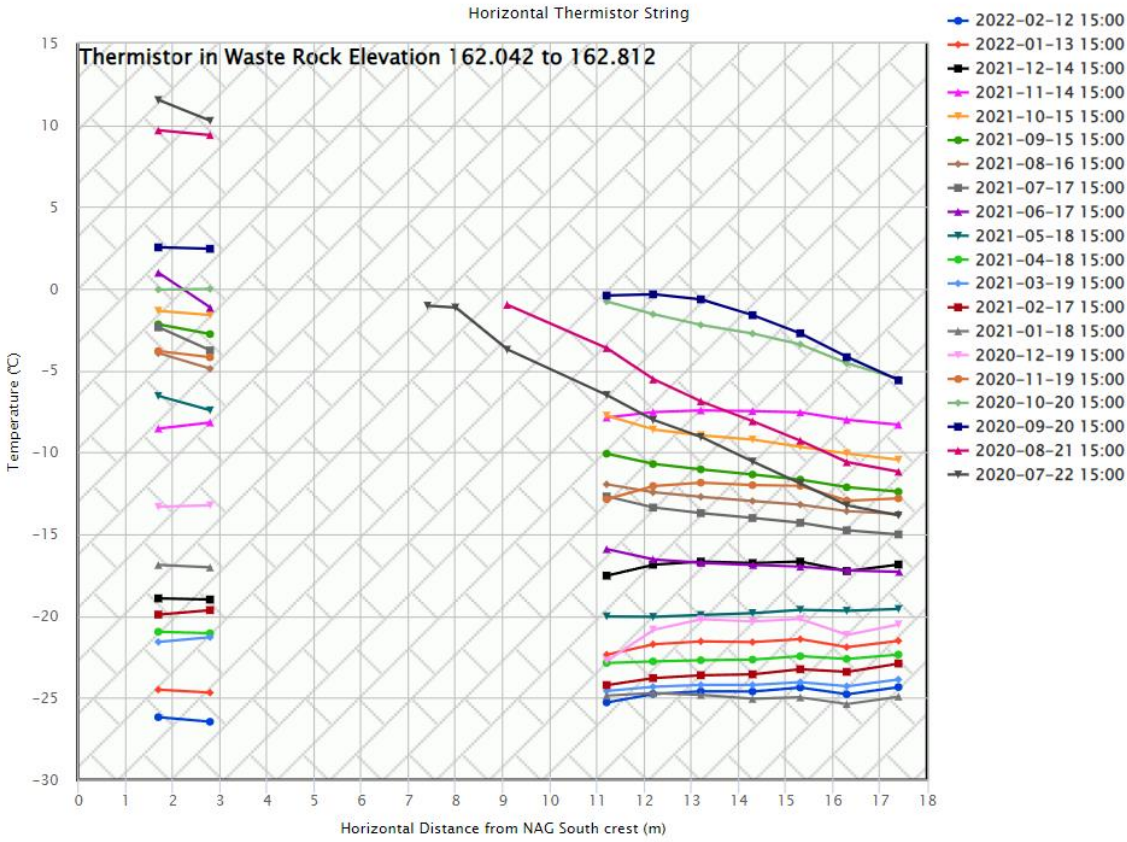


WT WRSF TH3



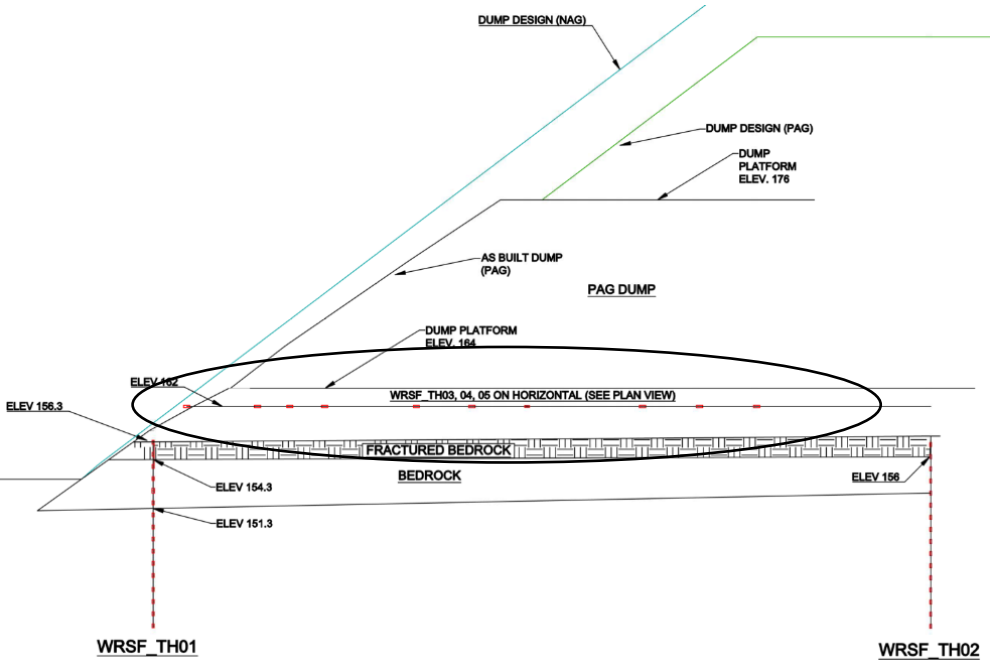
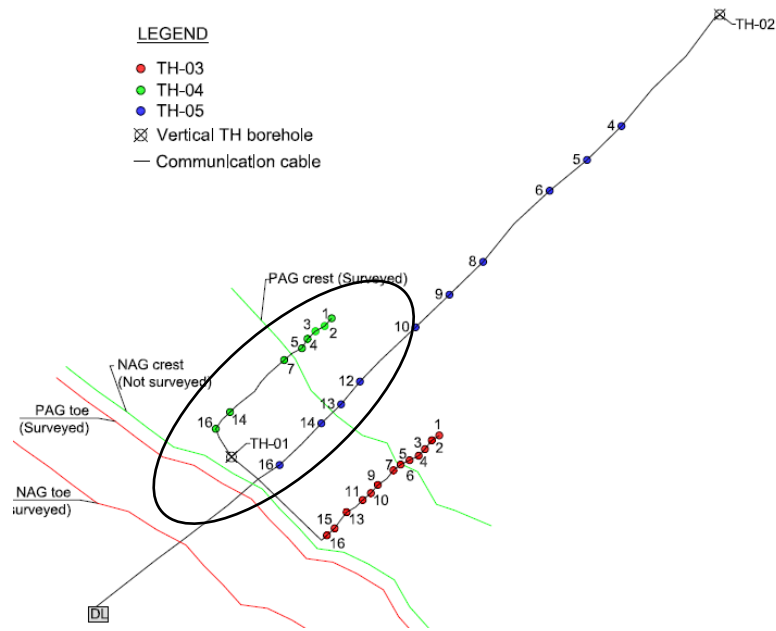
Thermistor in Waste Rock Elevation 162.042 to 162.812.

AMQ – WRSF – WT Dump TH_03

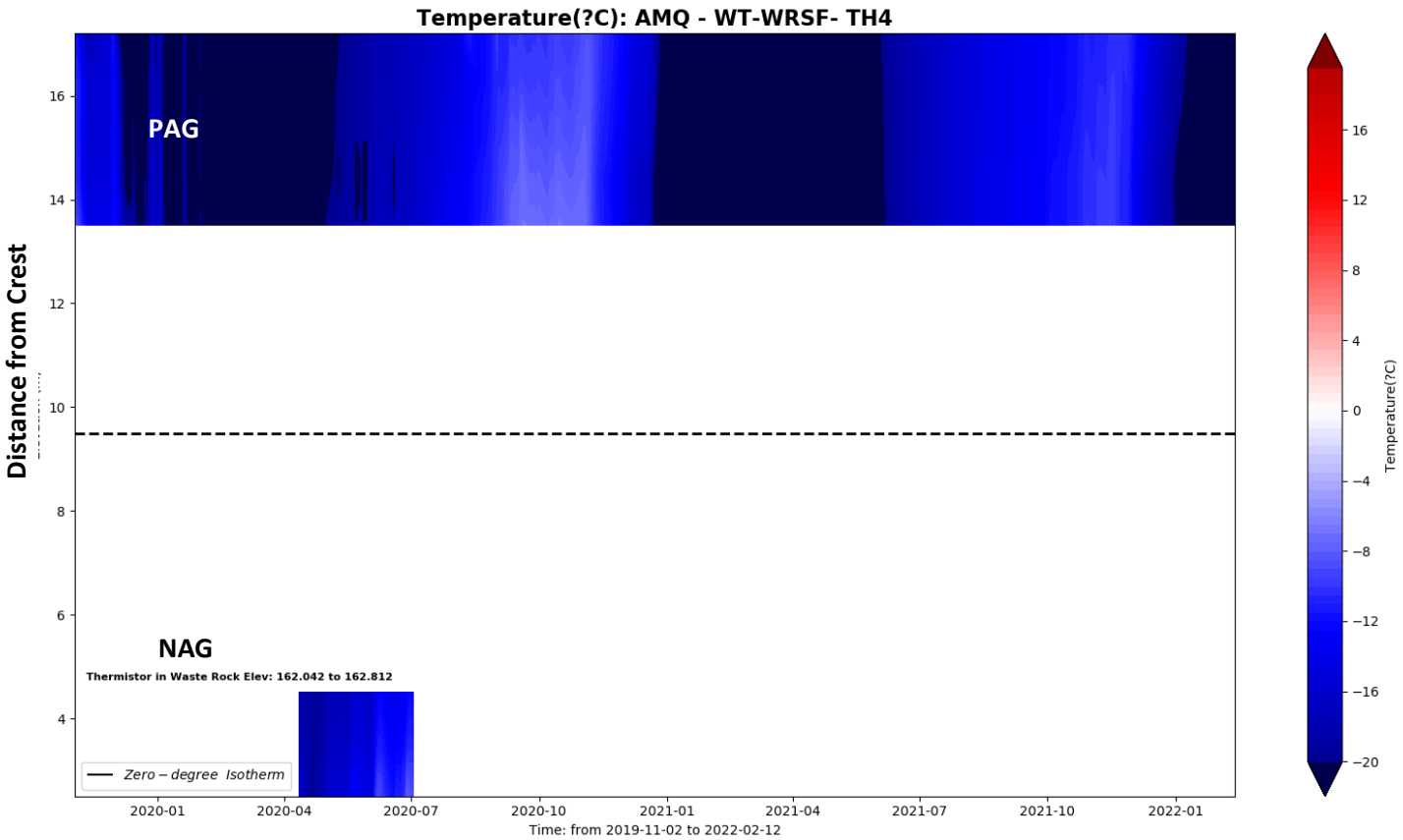
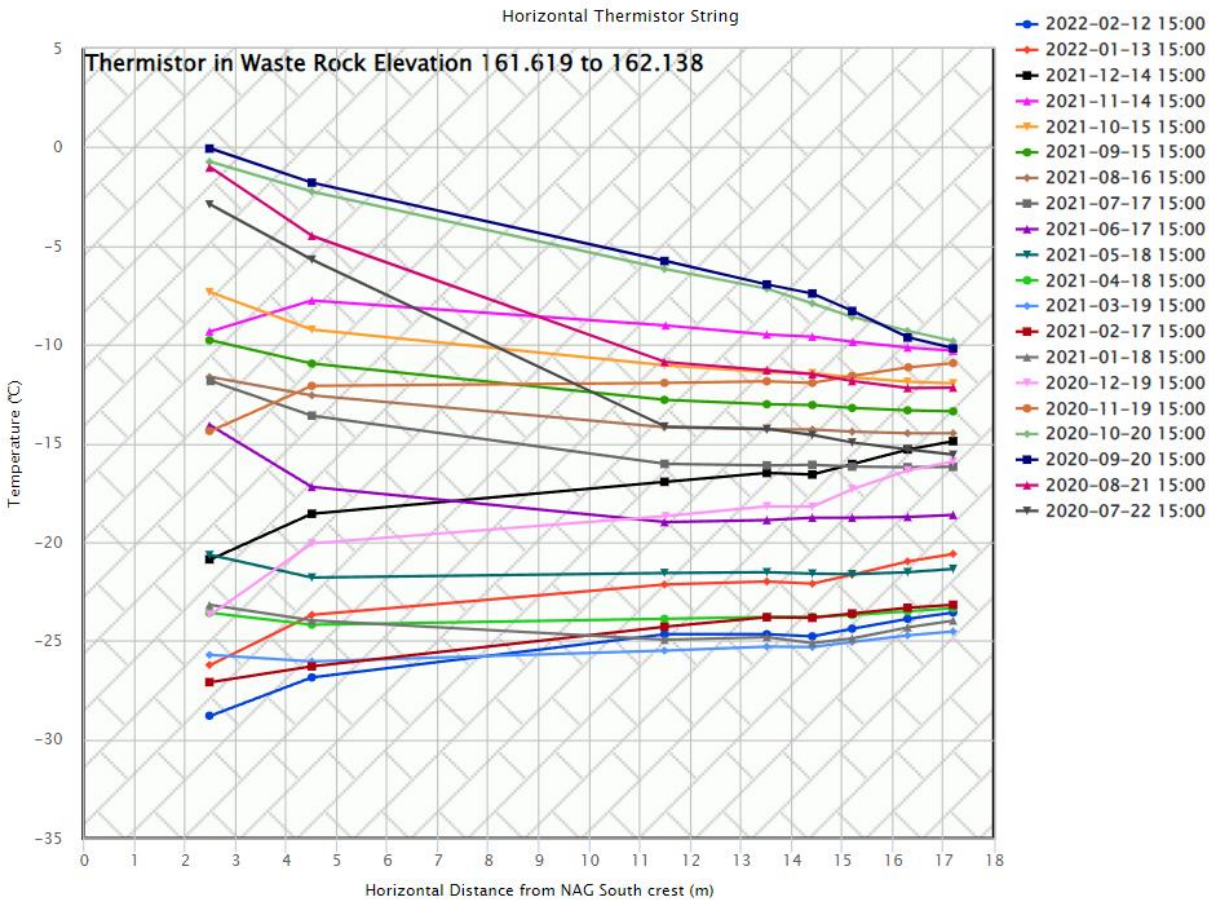


This instrument is installed horizontally and chart needs to be read accordingly
Beads 3 to 10 are not working

WT WRSF TH4



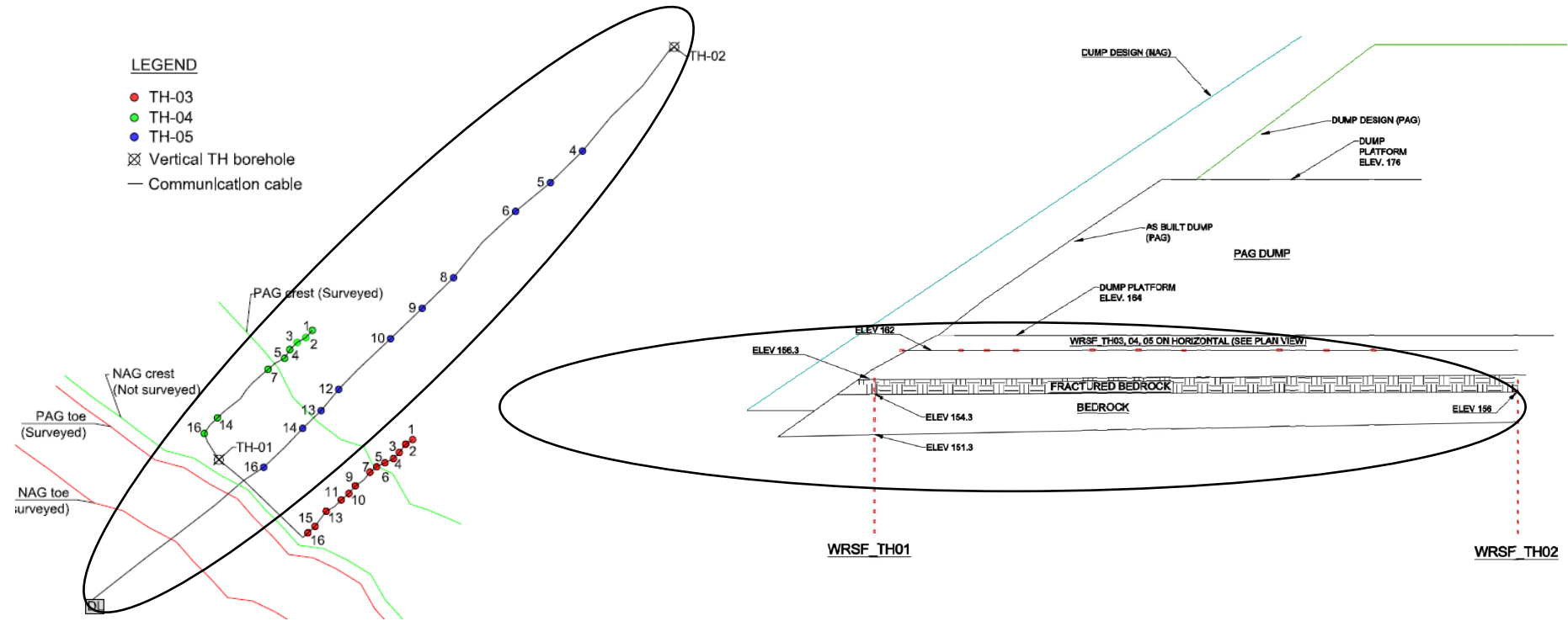
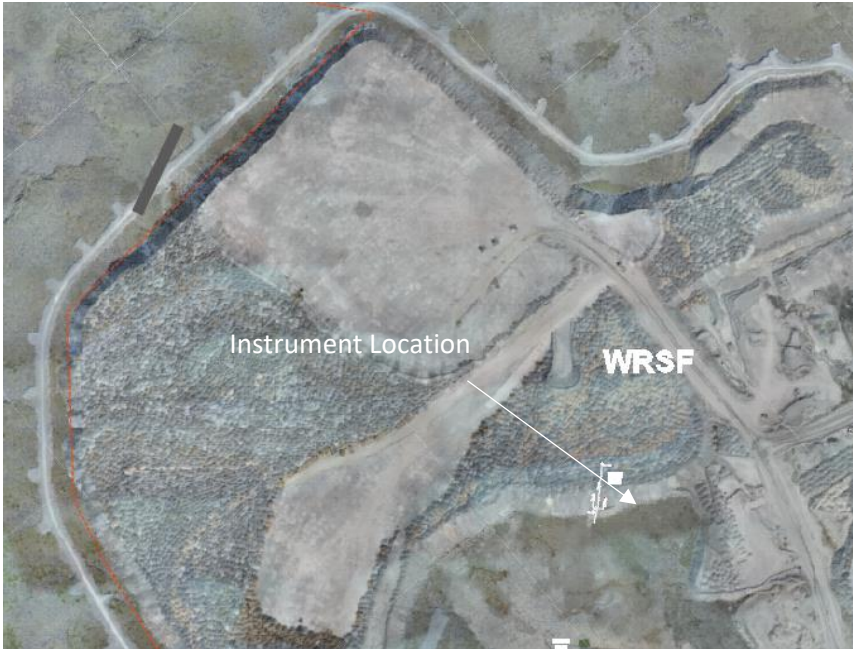
AMQ – WRSF – WT Dump TH_04



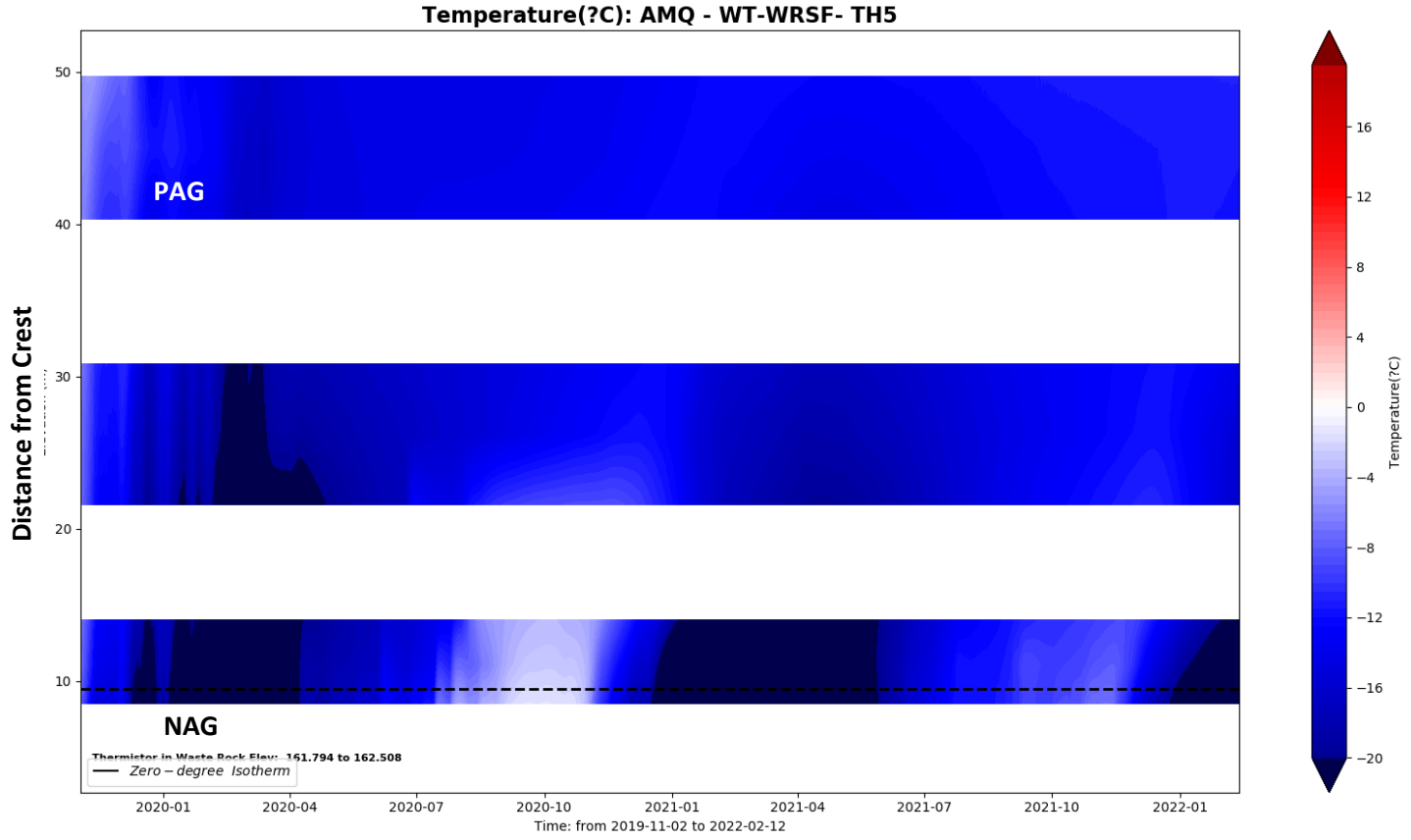
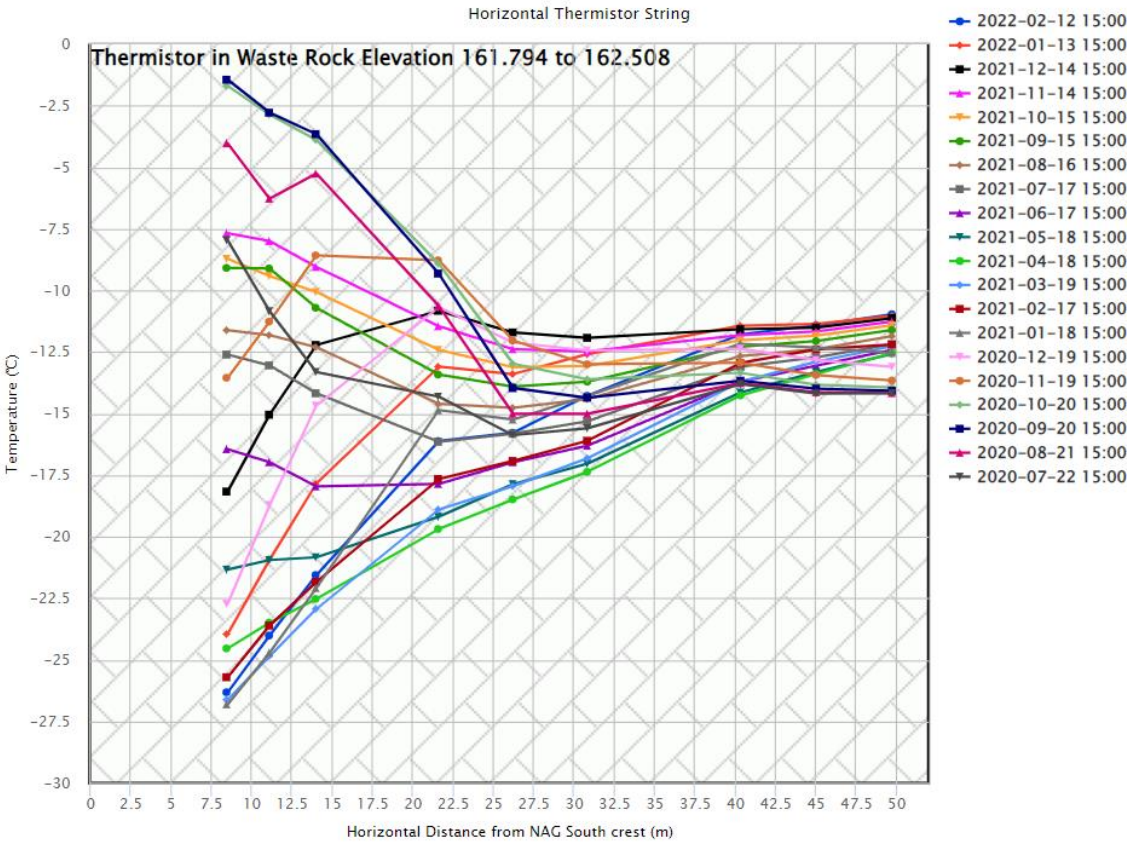
This instrument is installed horizontally and chart needs to be read accordingly

Beads 3 to 10 are not working

WT WRSF TH5

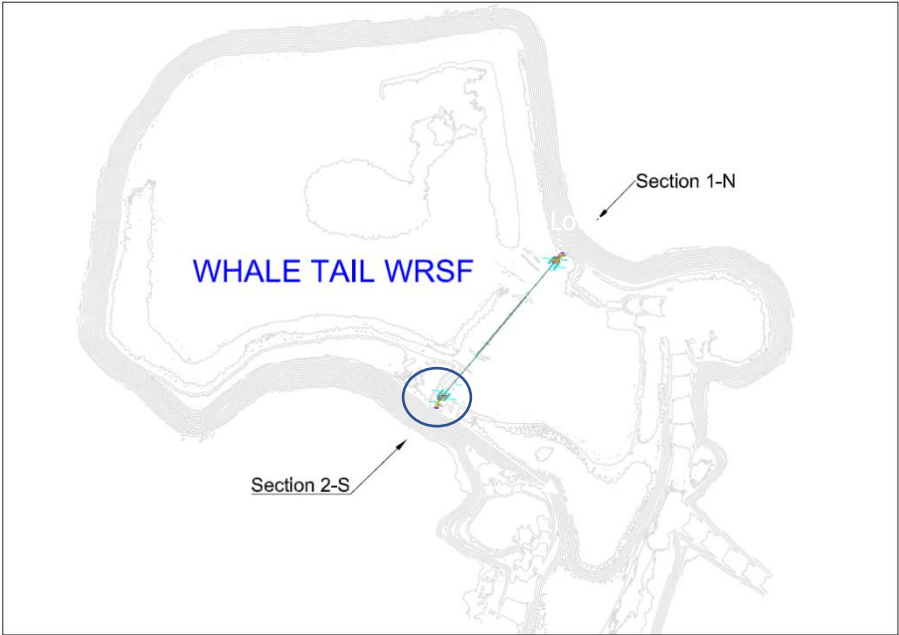


AMQ – WRSF – WT Dump TH_05

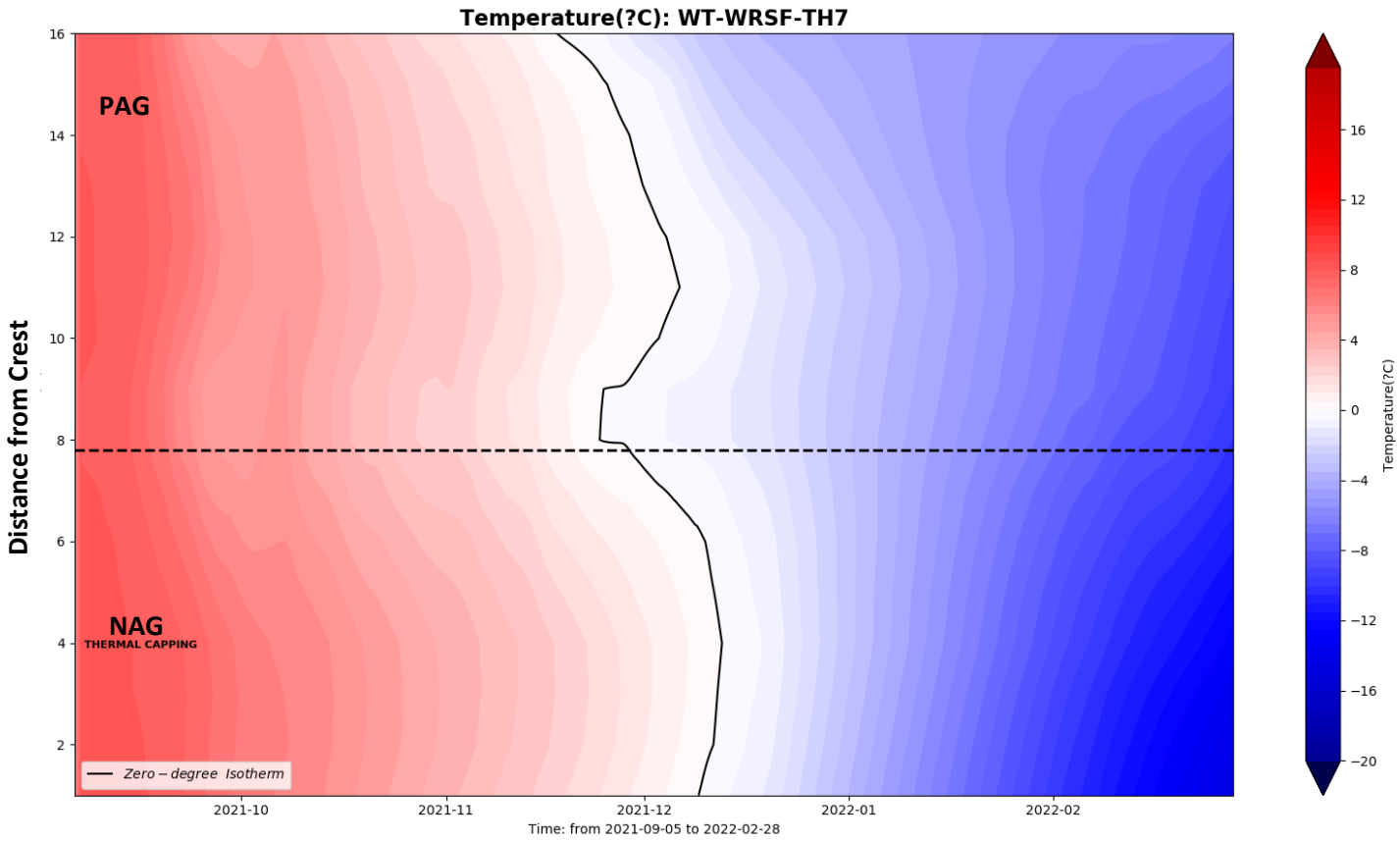
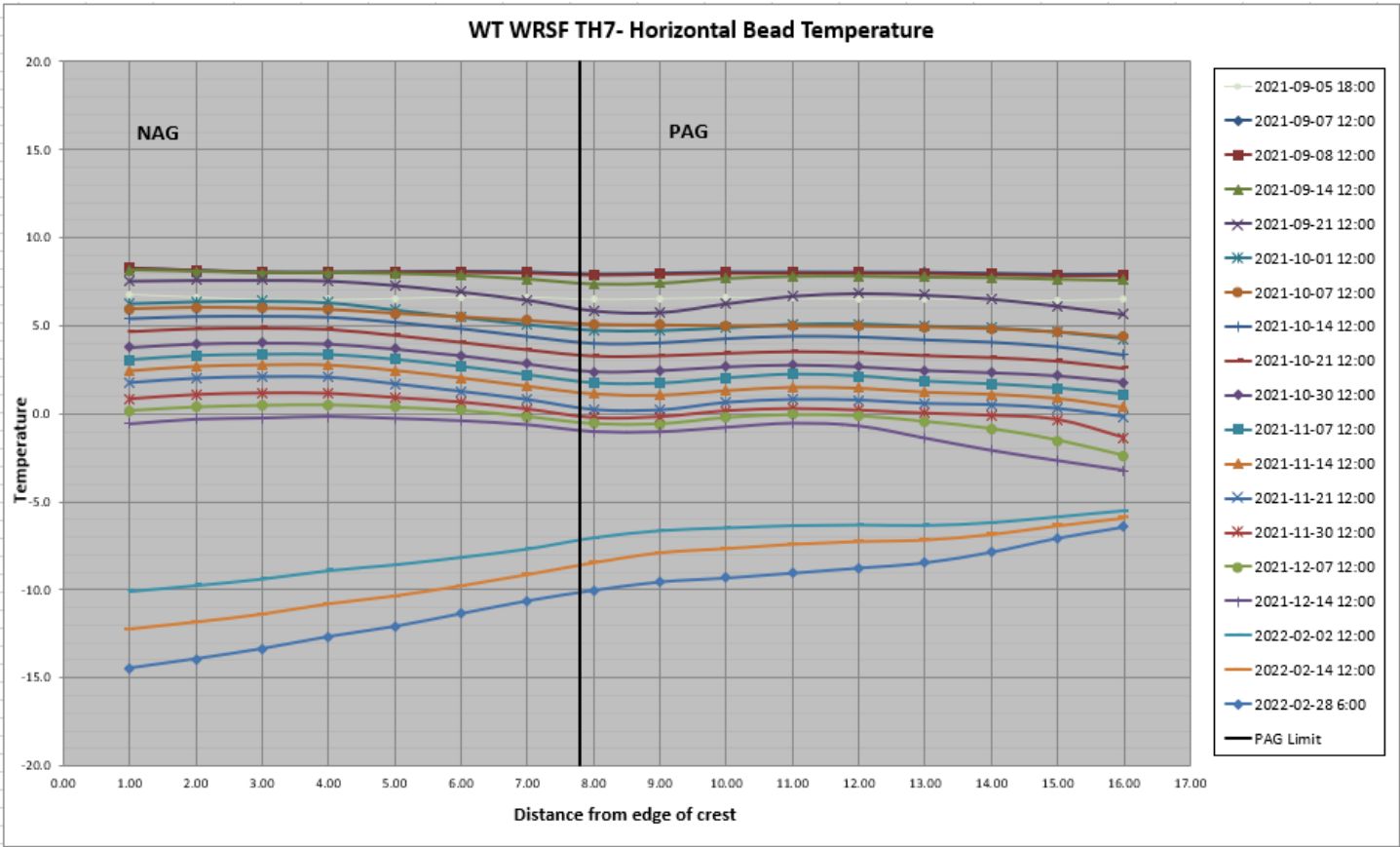
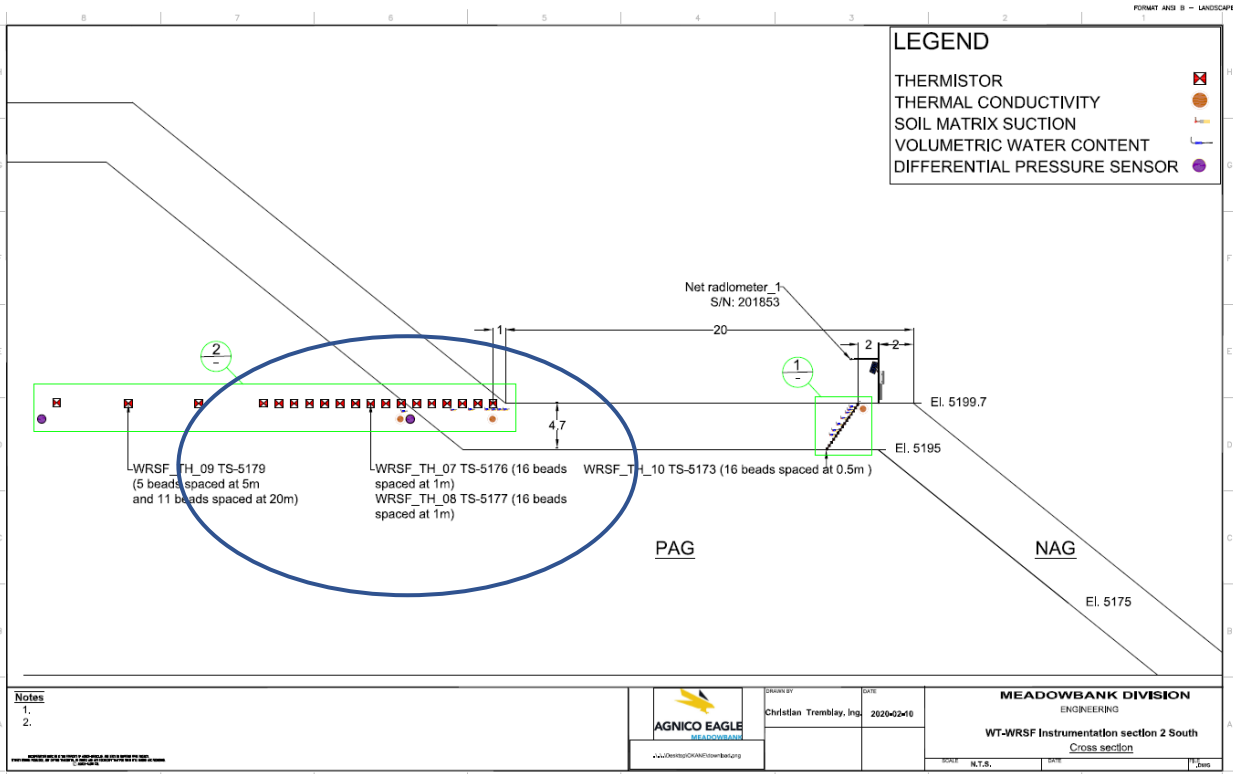


This instrument is installed horizontally and chart needs to be read accordingly

WT WRSF TH07

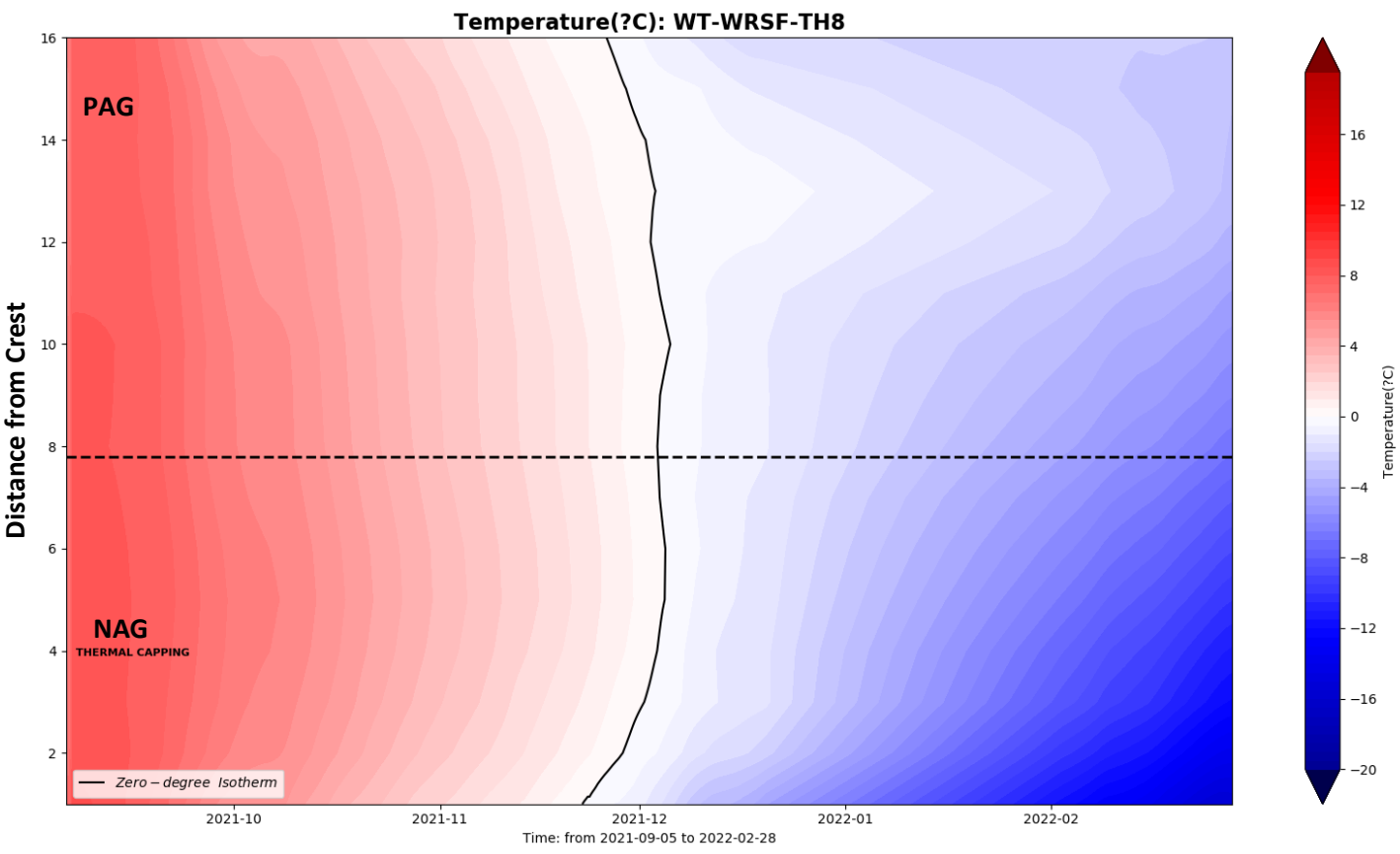
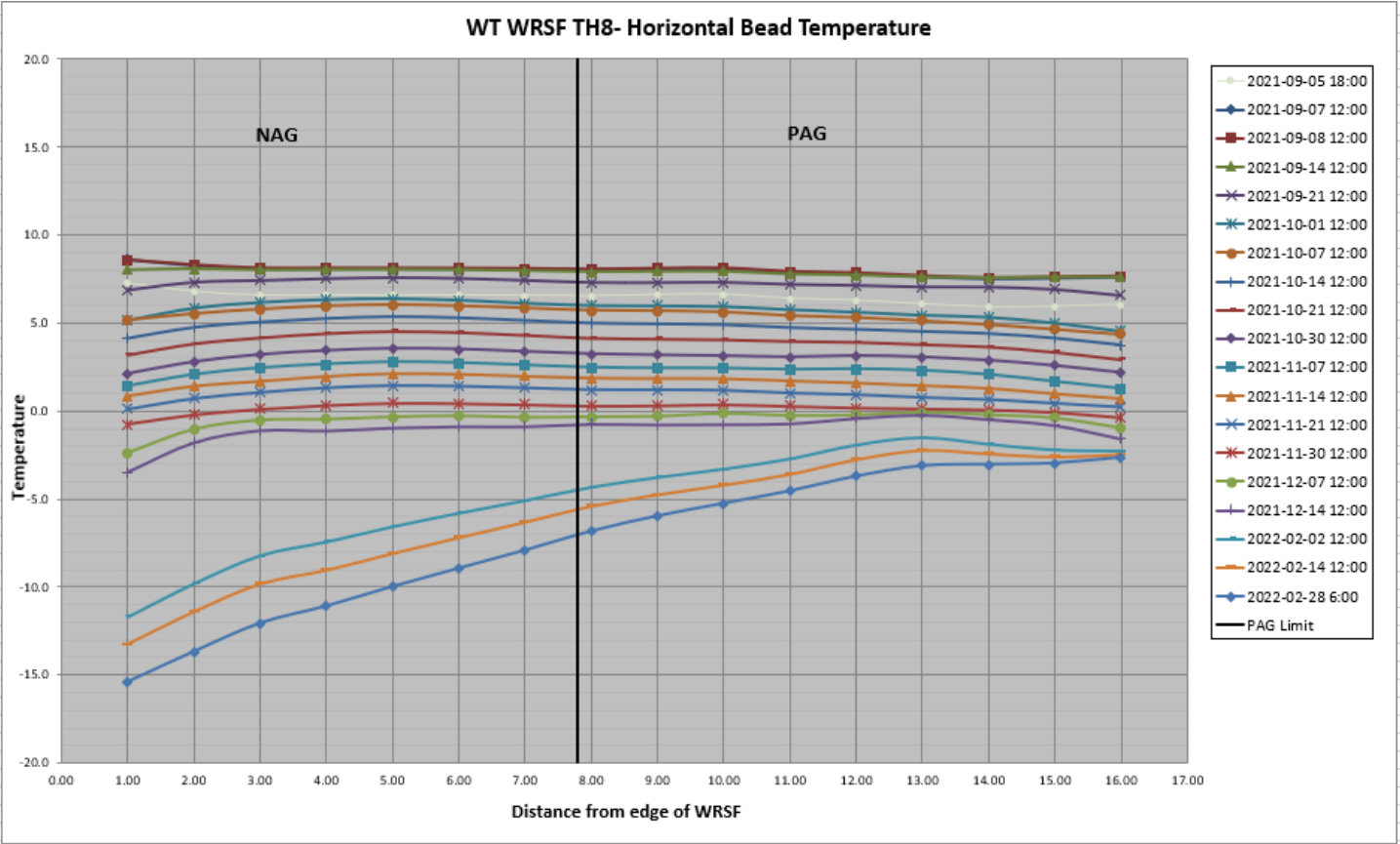
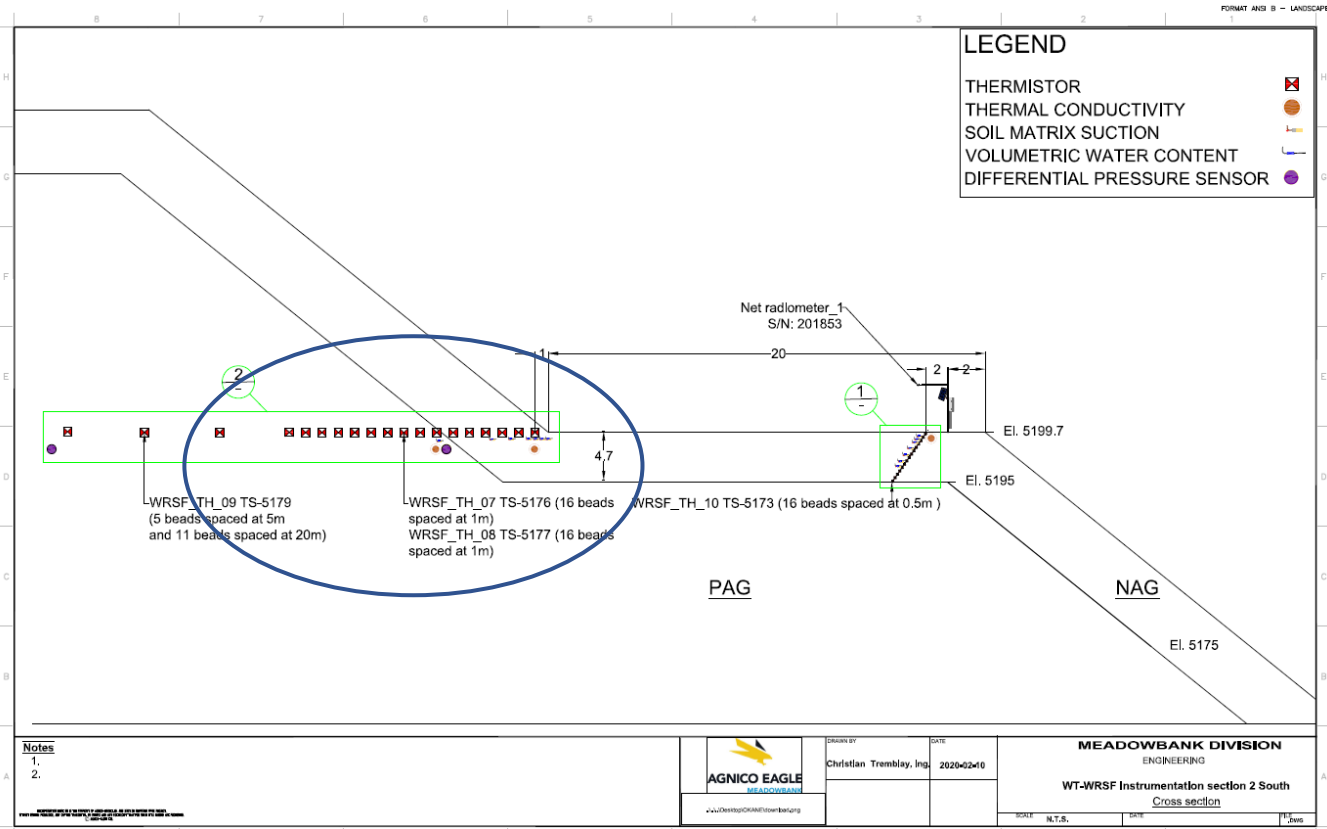
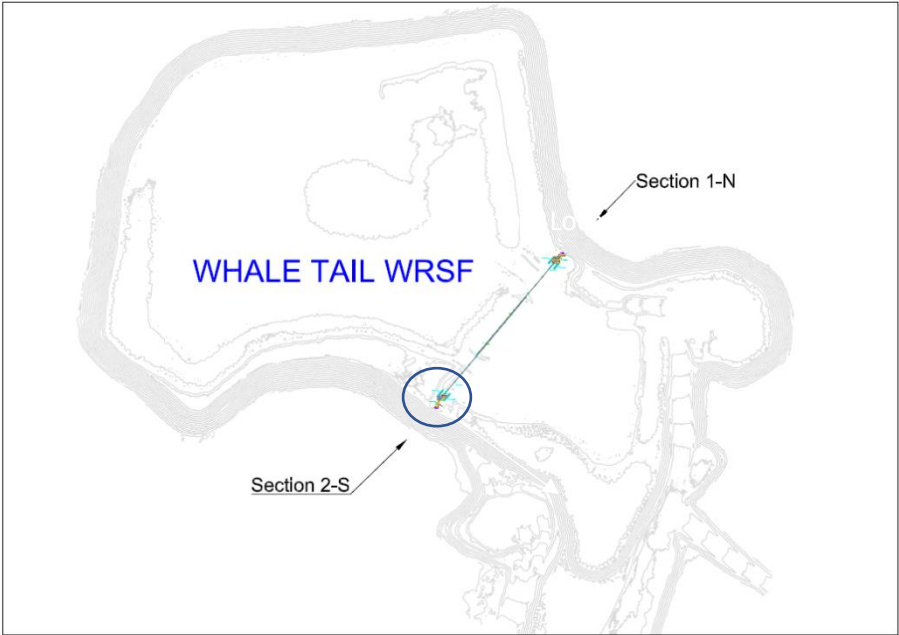


There was no data from Dec 20 to Feb 2 due to loss of battery power in the instrument.



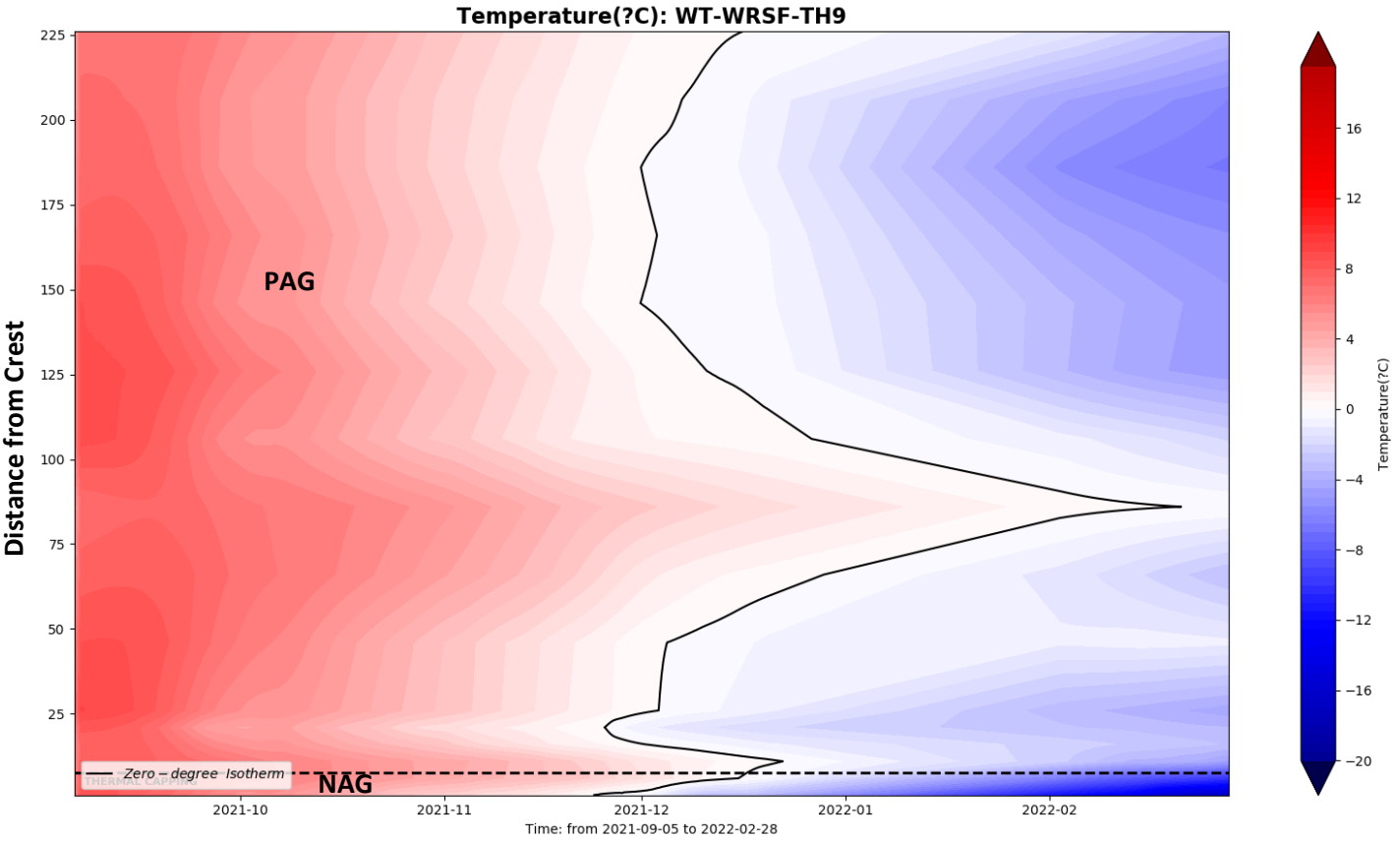
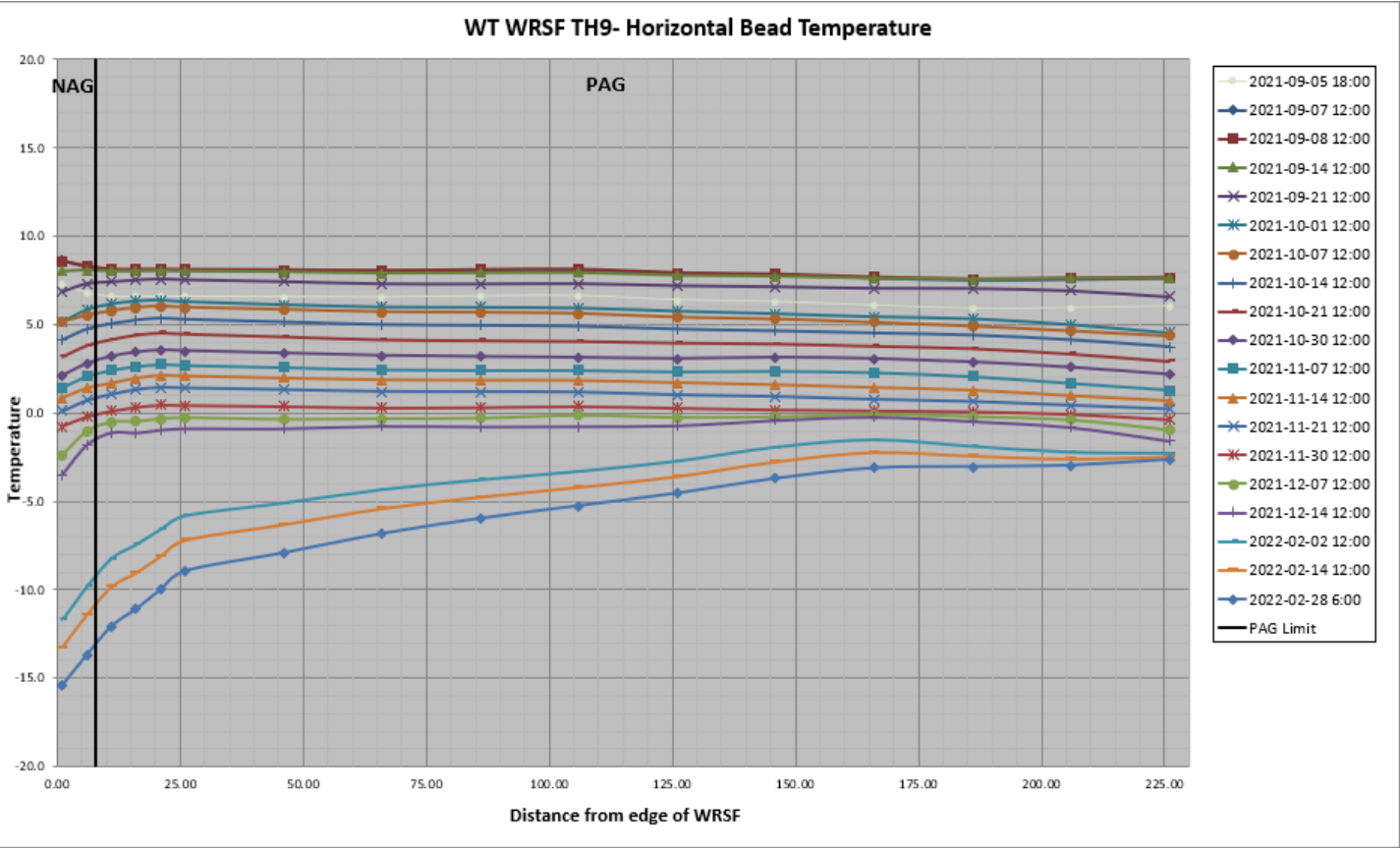
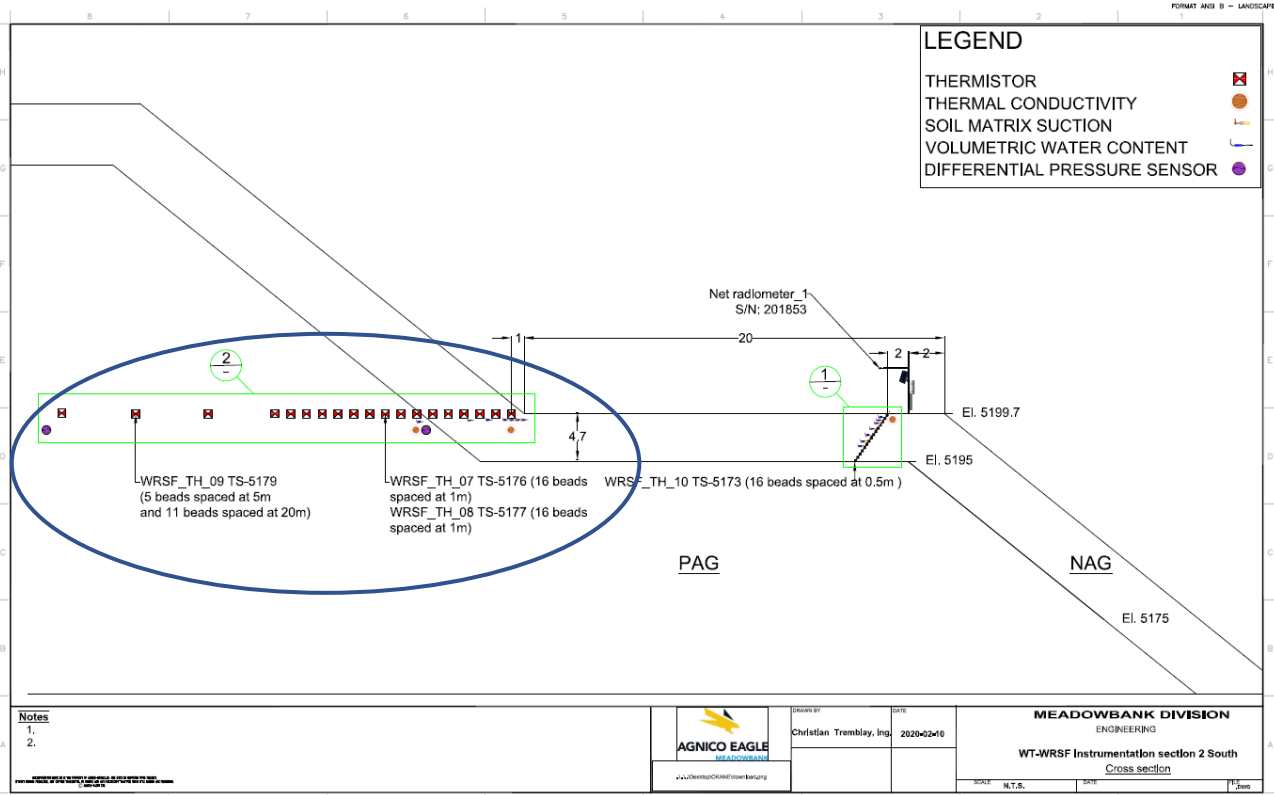
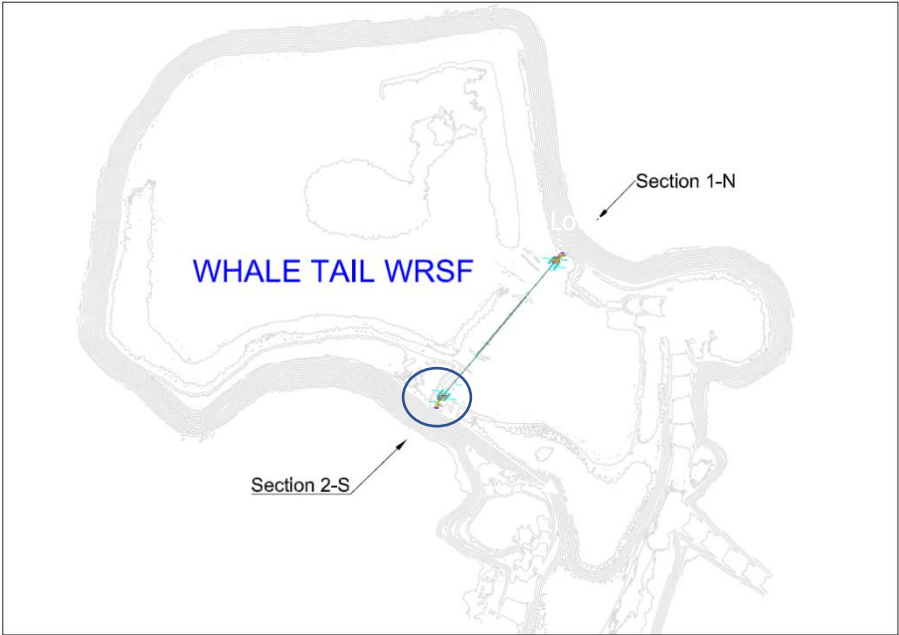
This instrument is installed horizontally and chart needs to be read accordingly

WT WRSF TH08



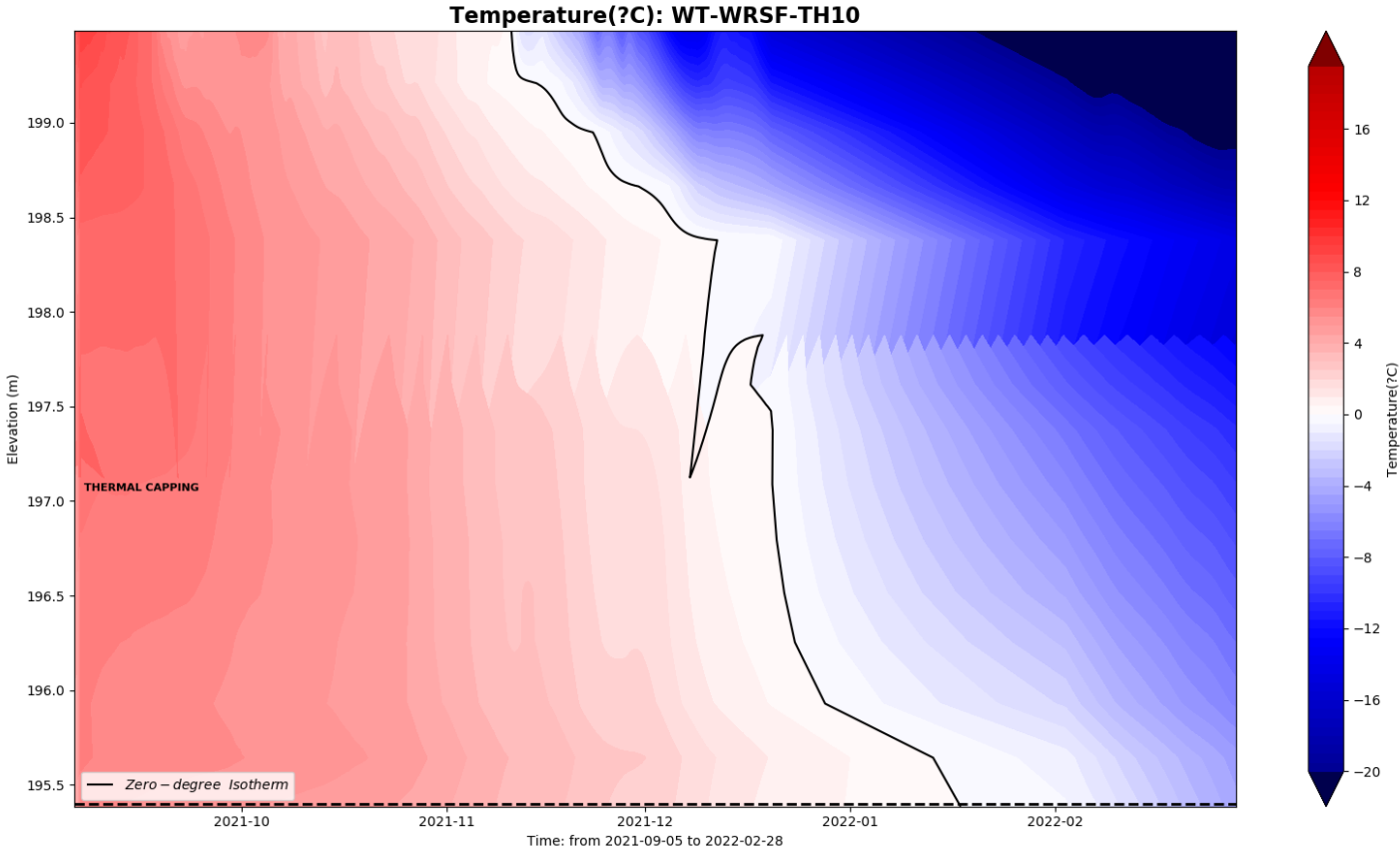
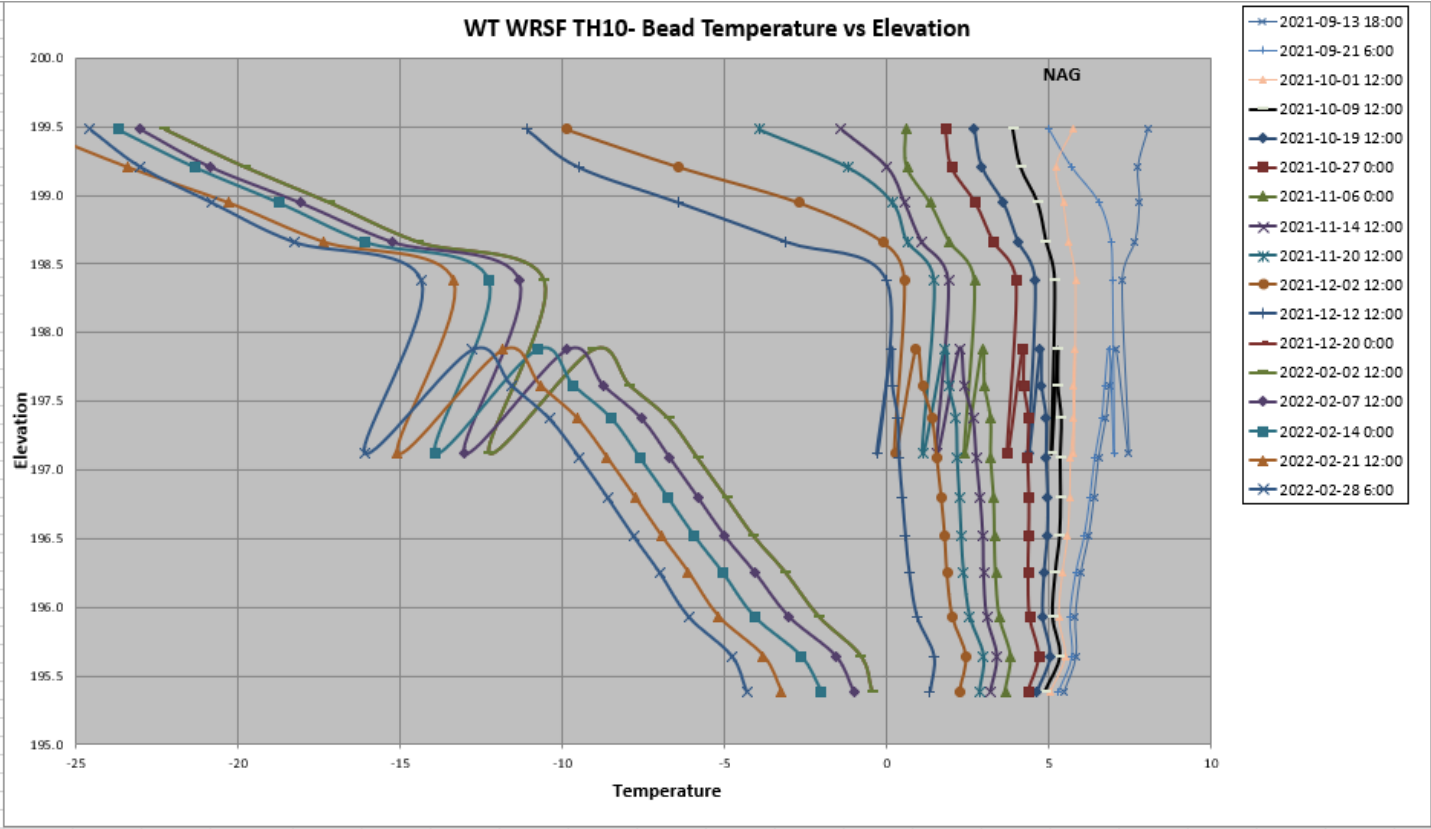
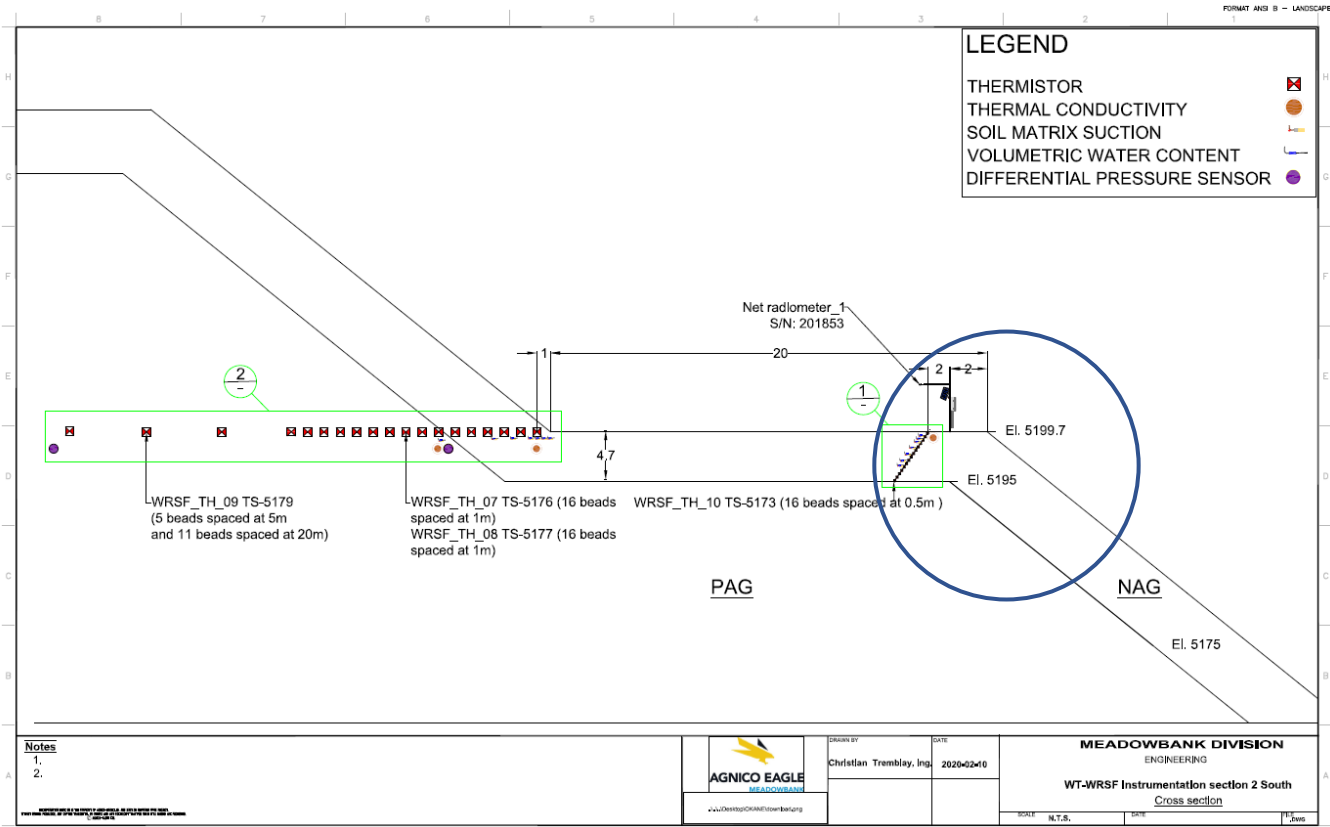
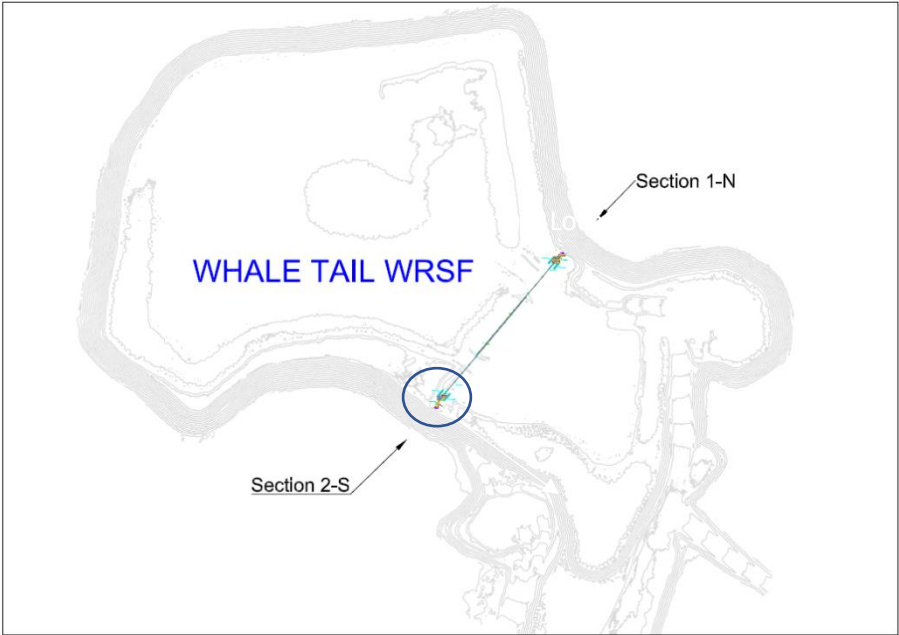
This instrument is installed horizontally and chart needs to be read accordingly

WT WRSF TH09

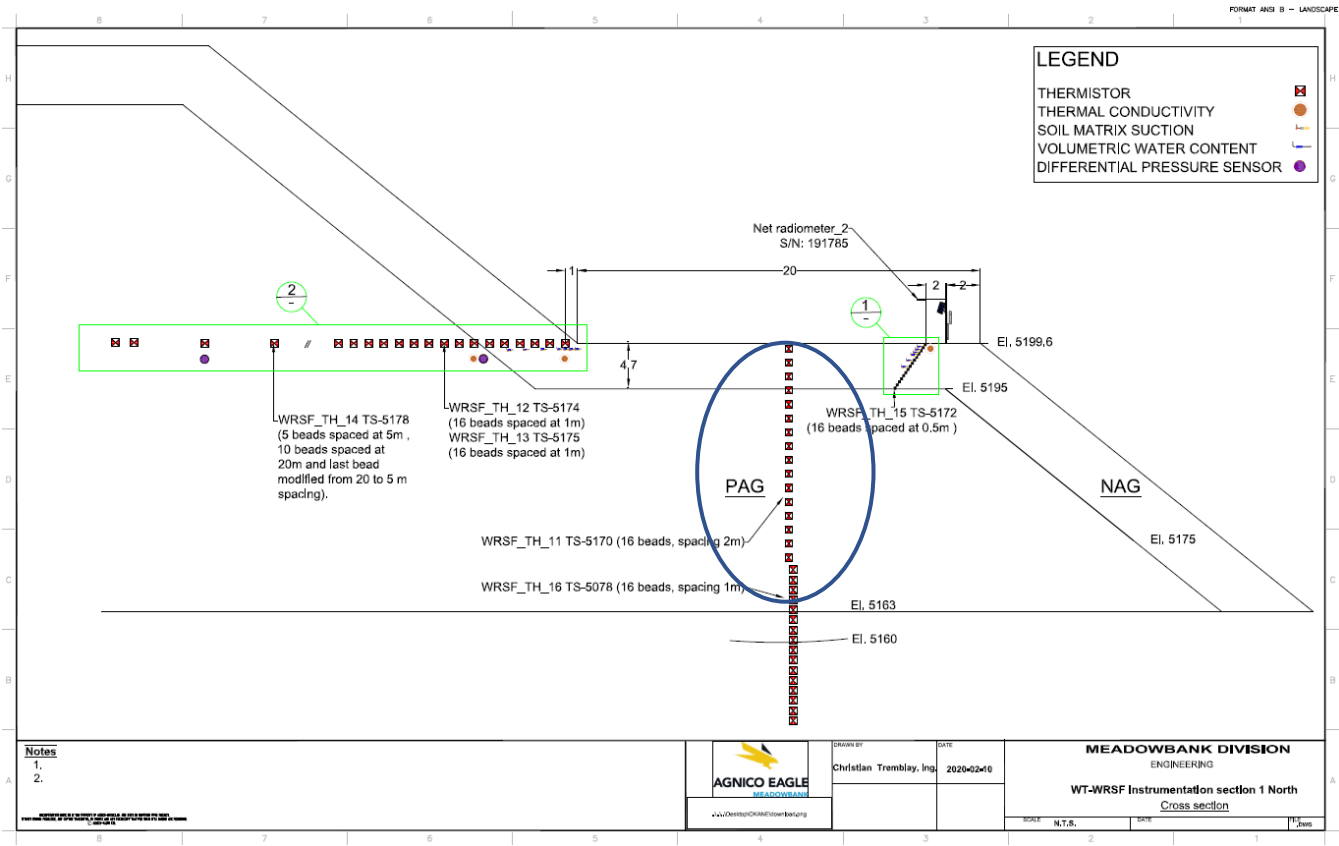
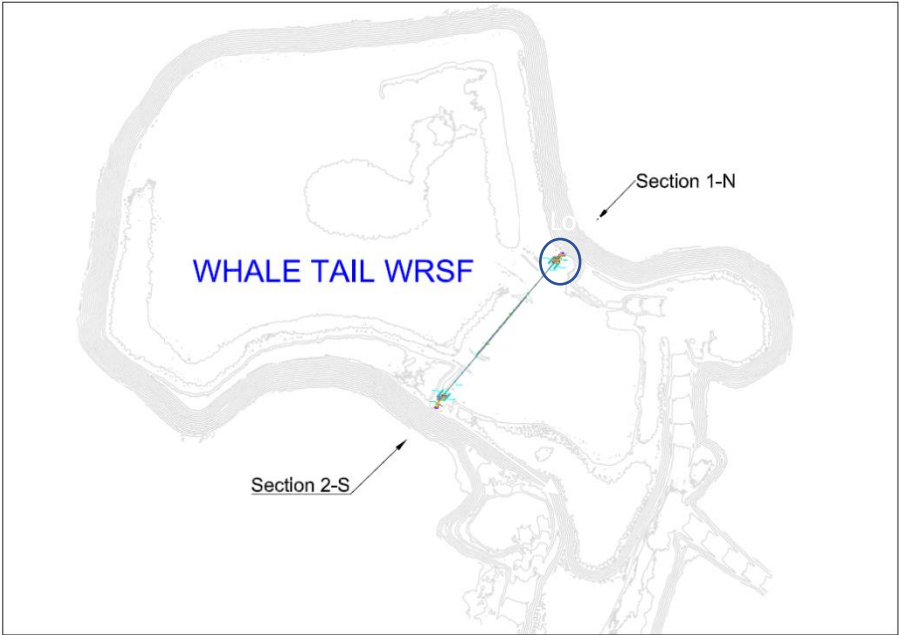


This instrument is installed horizontally and chart needs to be read accordingly

WT WRSF TH10



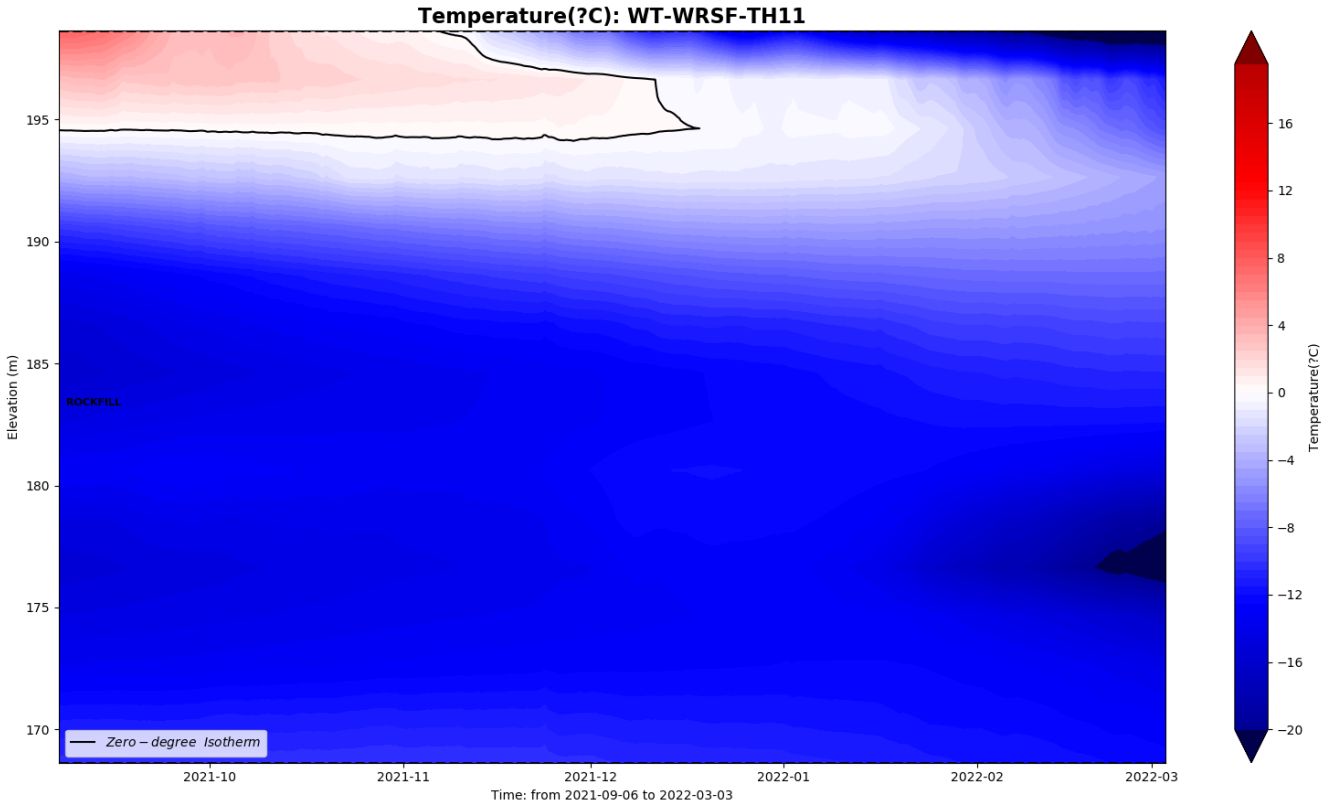
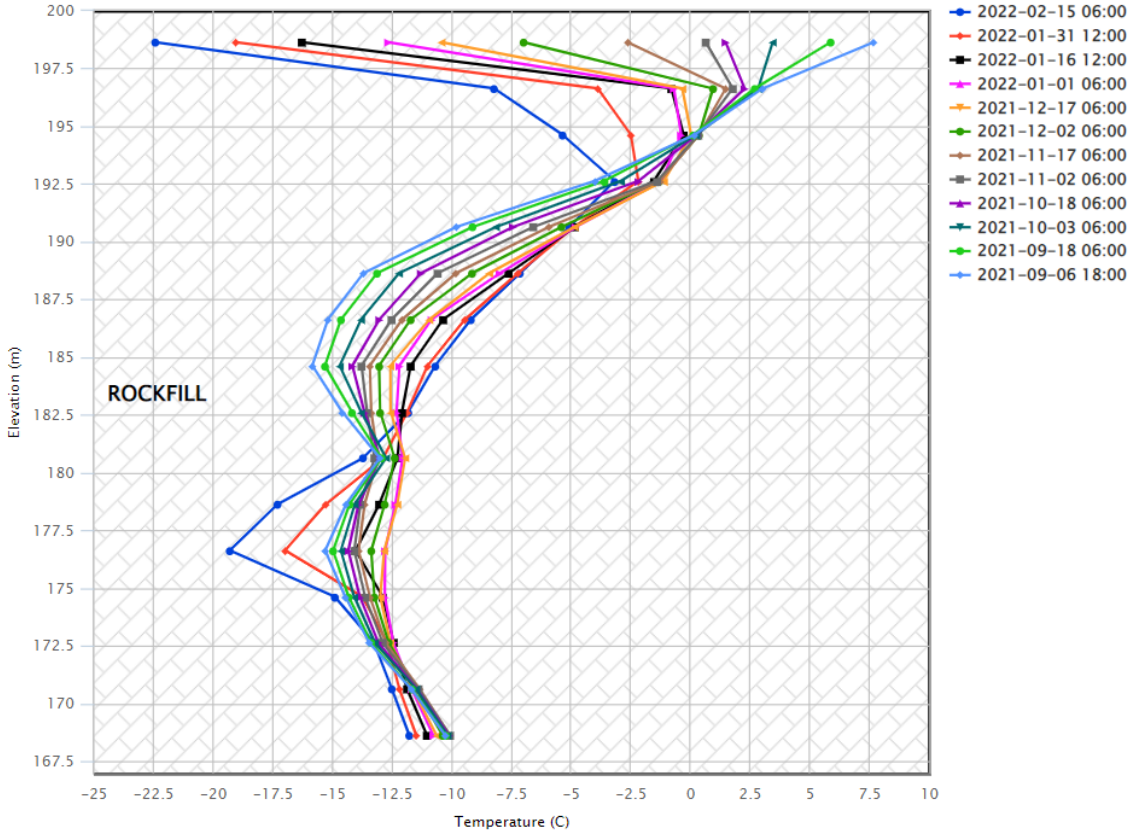
WT WRSF TH11



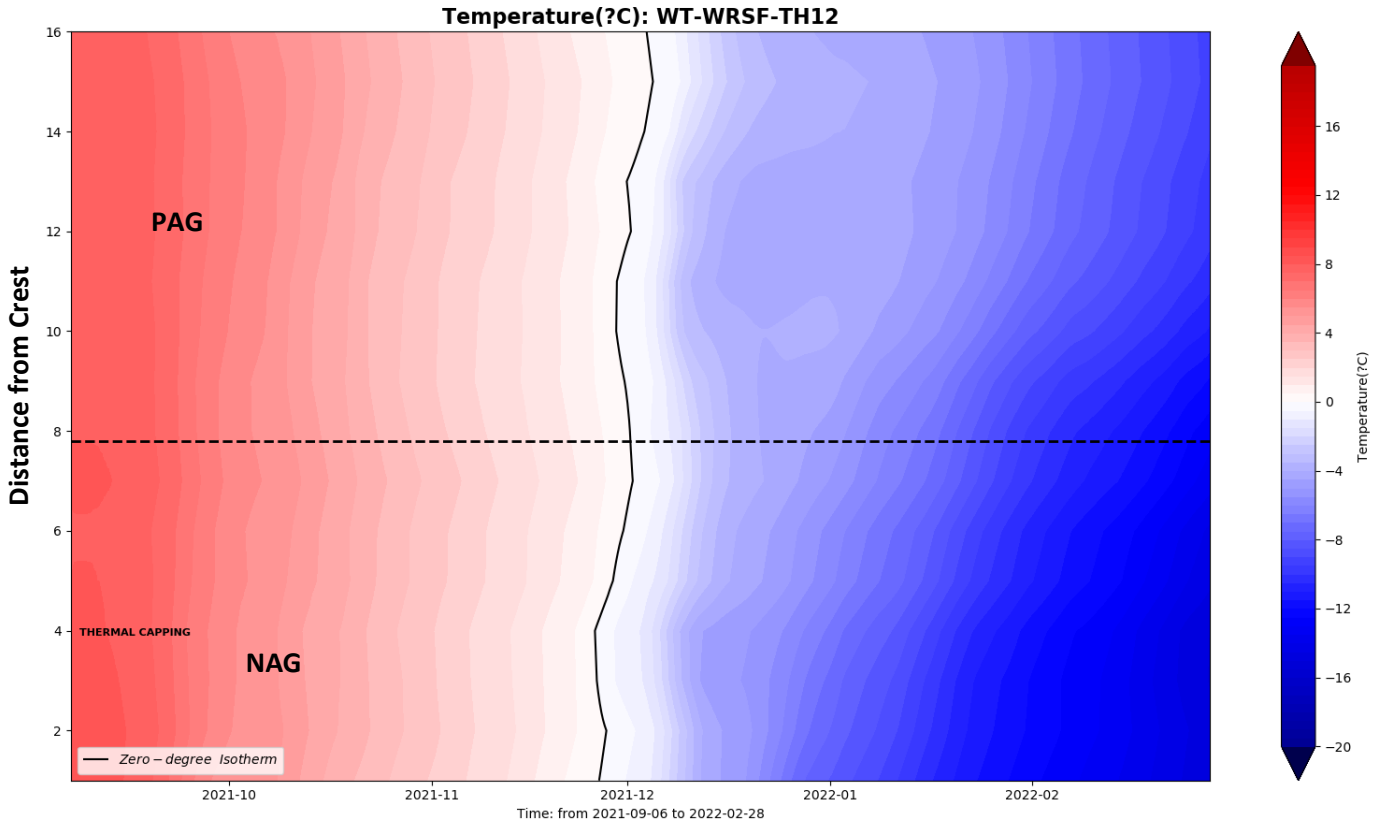
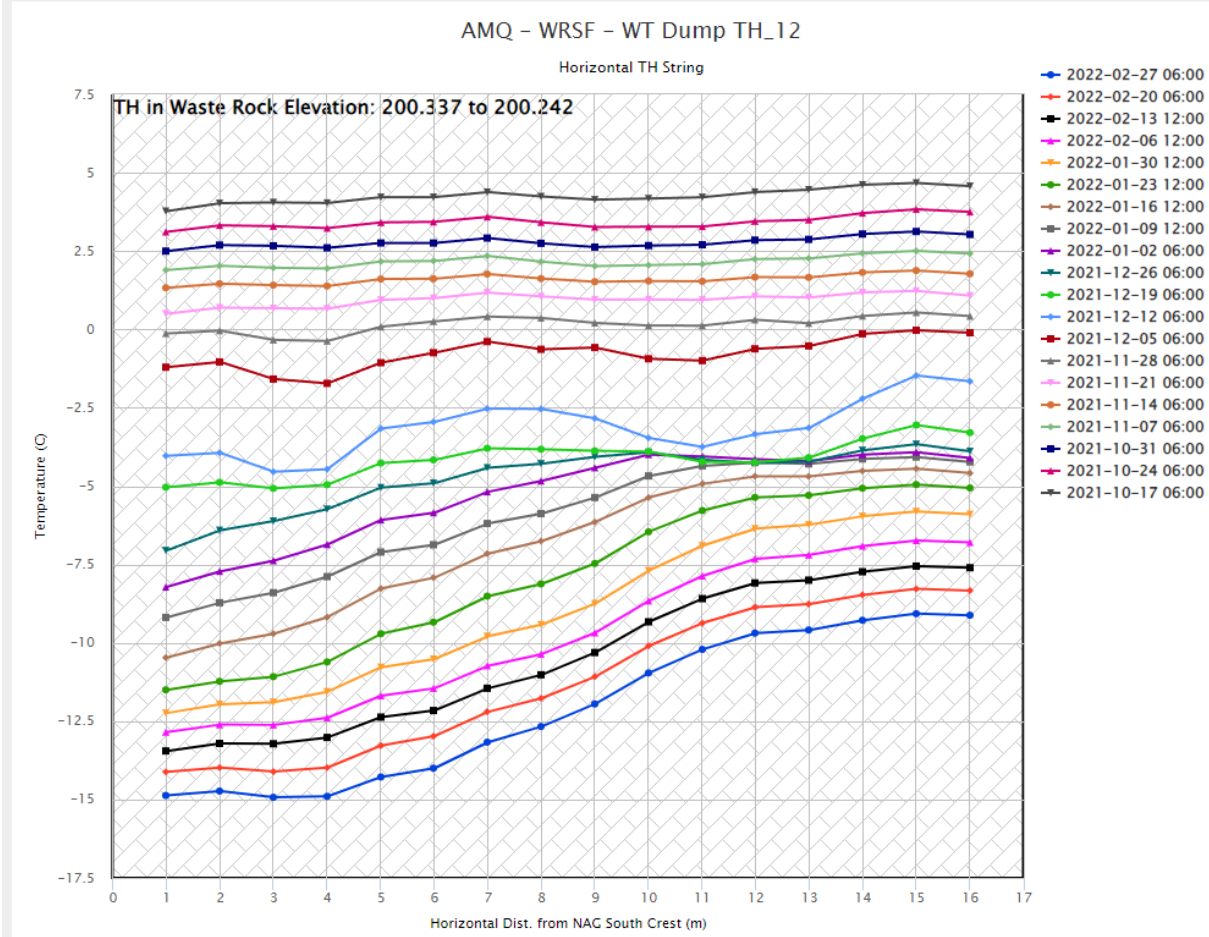
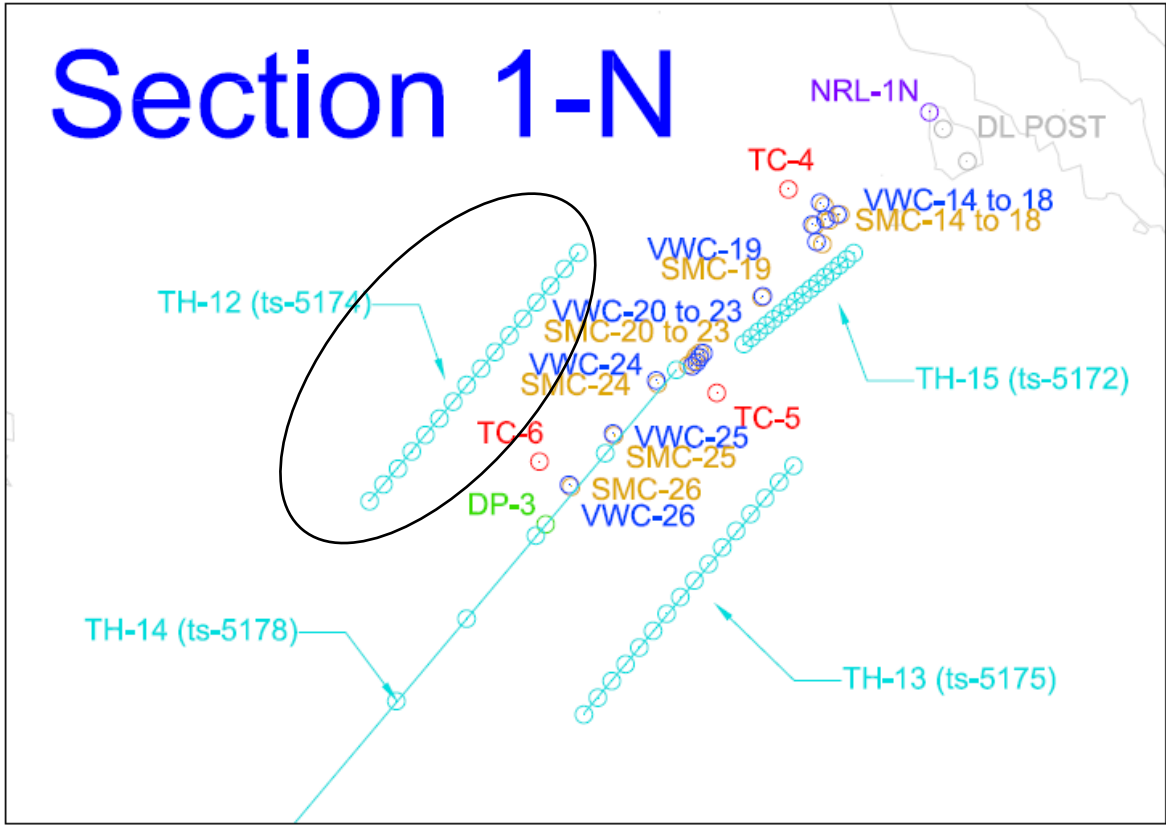
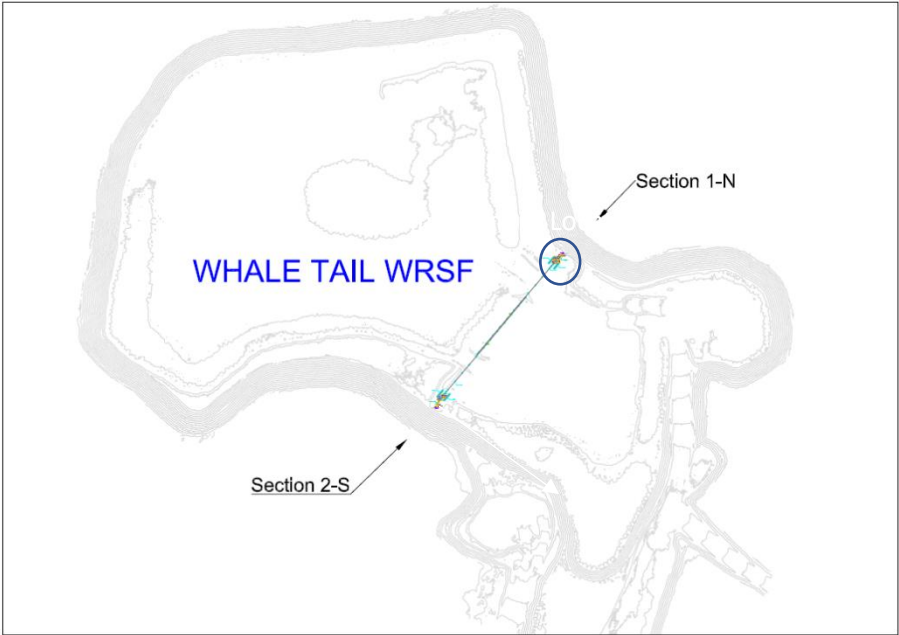
TH-11 & TH-16	
String # :	RST 5170 & 5078
Drill Hole Coordinates	
Northing	8479.2480
Easting	14259.1830
Elevation	5199.637

DEPTH	ELEVATION	
M	MASL	
0	5199.637	Top of the platform
1	5198.637	
2	5196.637	
3	5194.637	
4	5192.637	
5	5190.637	
6	5188.637	
7	5186.637	
8	5184.637	
9	5182.637	
10	5180.637	
11	5178.637	
12	5176.637	
13	5174.637	
14	5172.637	
15	5170.637	
16	5168.637	
17	5166.037	
18	5164.037	
19	5162.037	
20	5160.037	
21	5158.037	
22	5156.037	
23	5154.037	
24	5152.037	
25	5150.037	
26	5147.637	
27	5145.637	
28	5143.637	
29	5141.637	
30	5139.637	
31	5137.637	
32	5135.637	
33	5133.637	
34	5131.637	
35	5129.637	
36	5127.637	
37	5125.637	
38	5123.637	
39	5121.637	
40	5119.637	
41	5117.637	
42	5115.637	
43	5113.637	
44	5111.637	
45	5109.637	
46	5107.637	
47	5105.637	
48	5103.637	
49	5101.637	
50	5099.637	
51	5097.637	
52	5095.637	

AMQ - WRSF - WT Dump TH_11

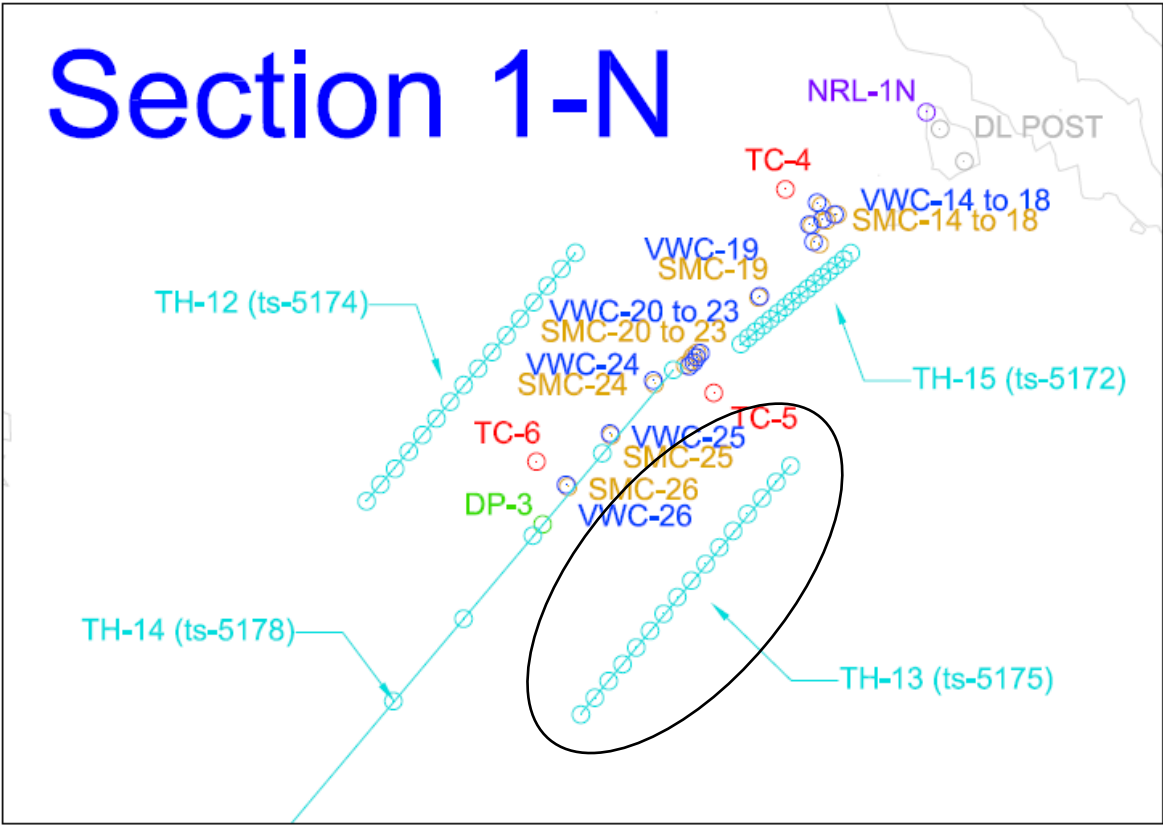
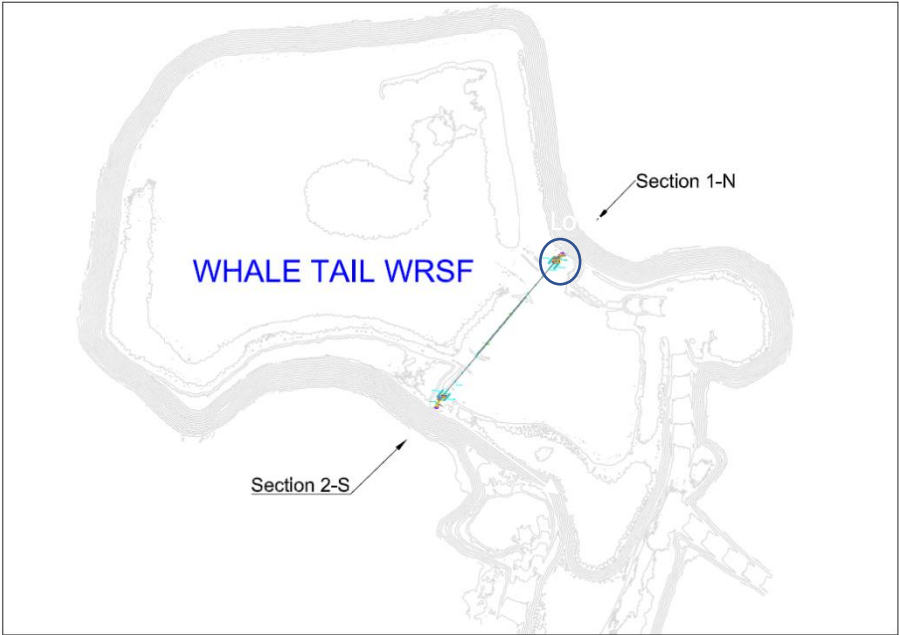


WT WRSF TH12

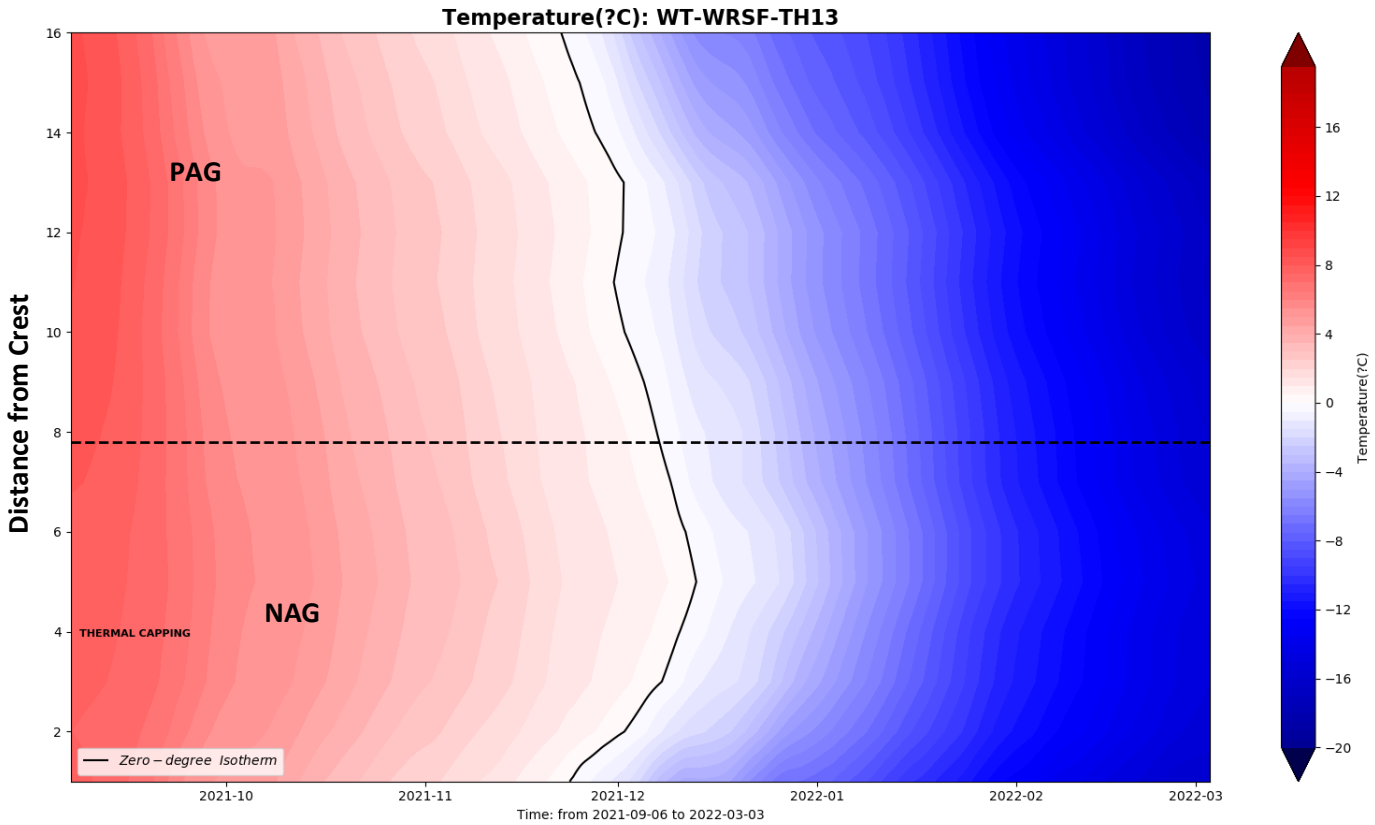
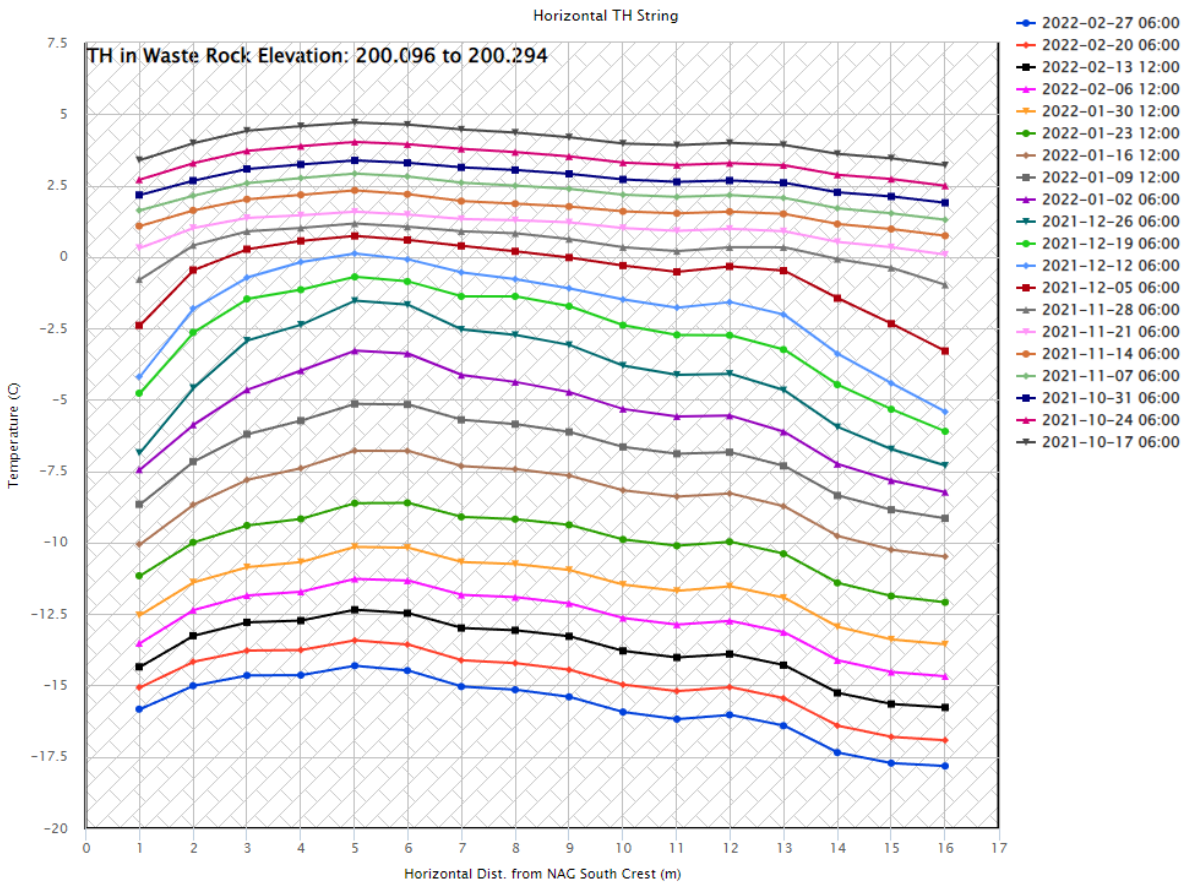


This instrument is installed horizontally and chart needs to be read accordingly

WT WRSF TH13

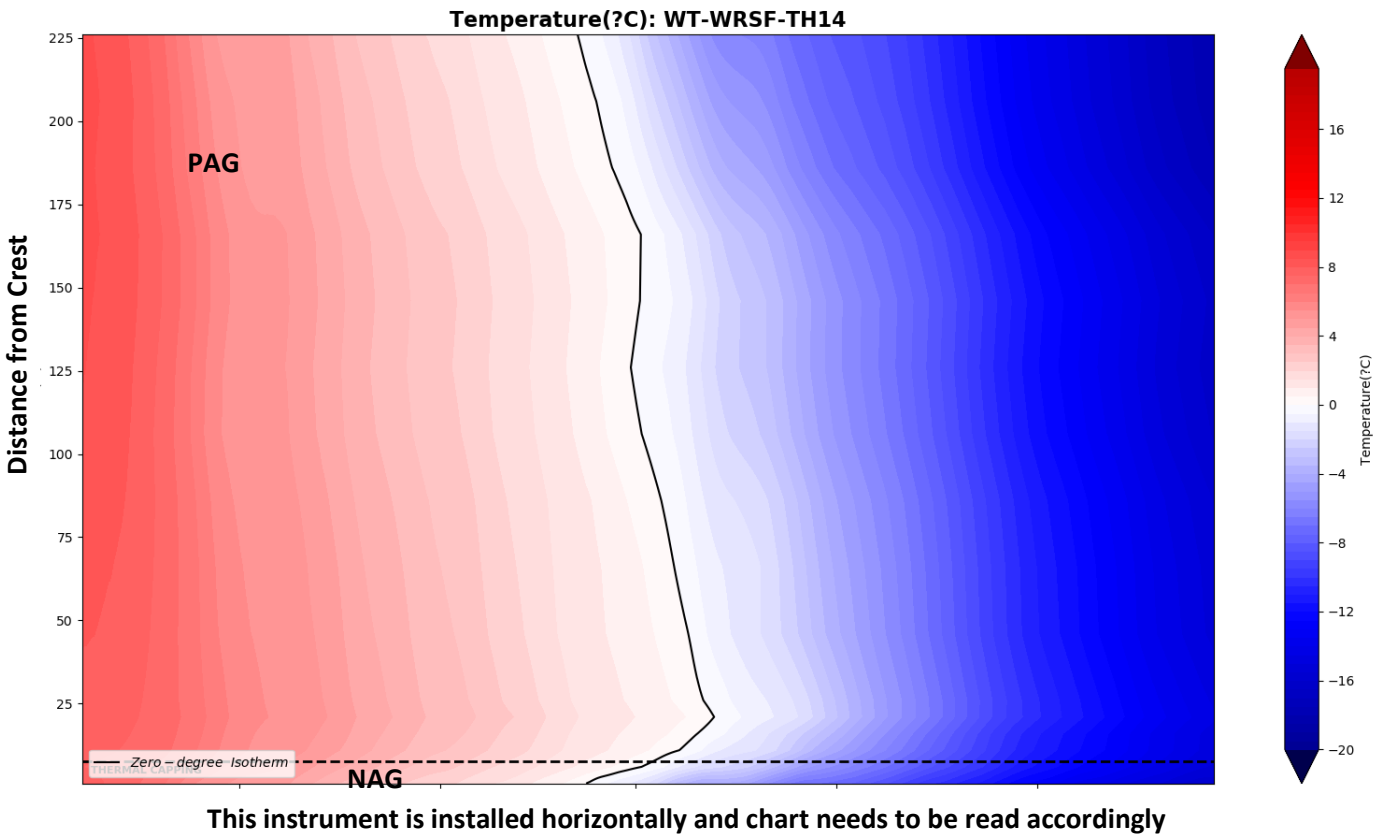
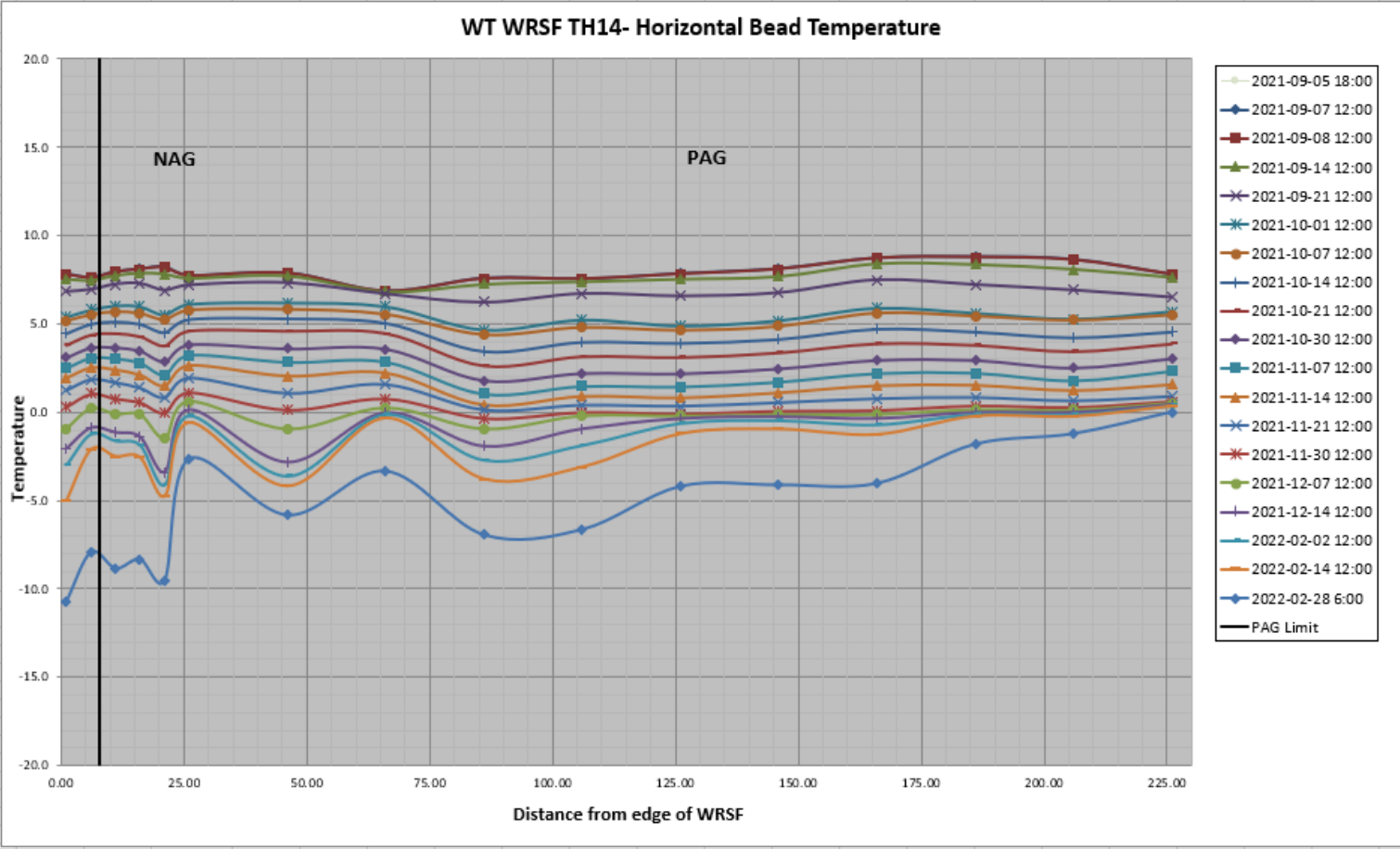
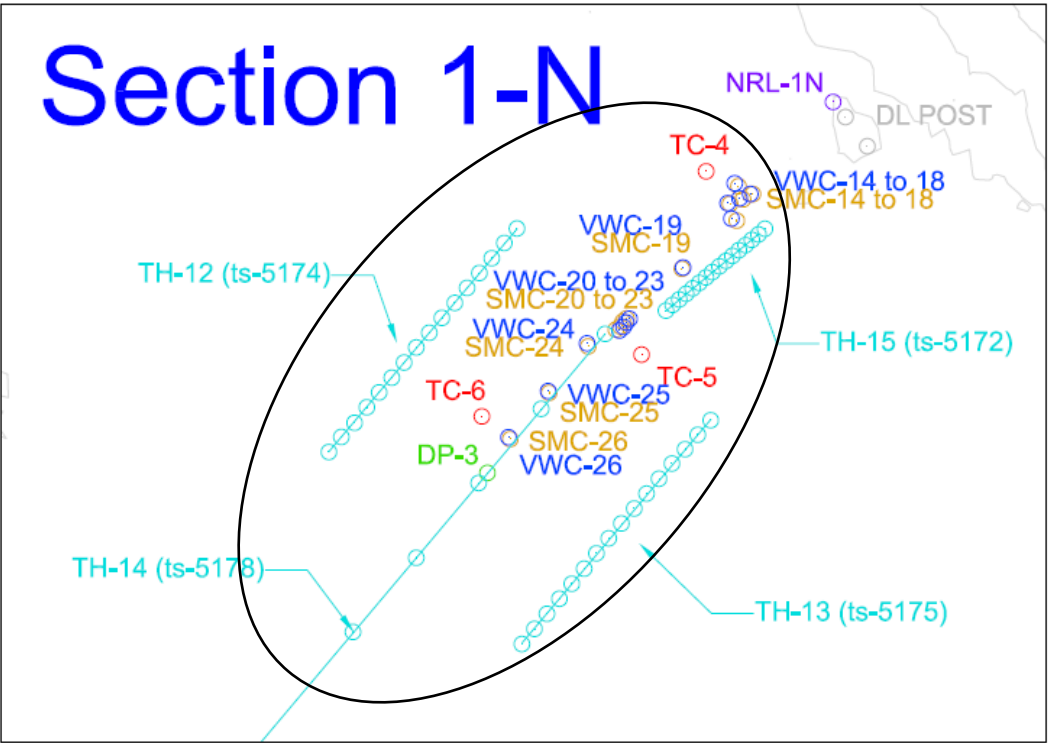
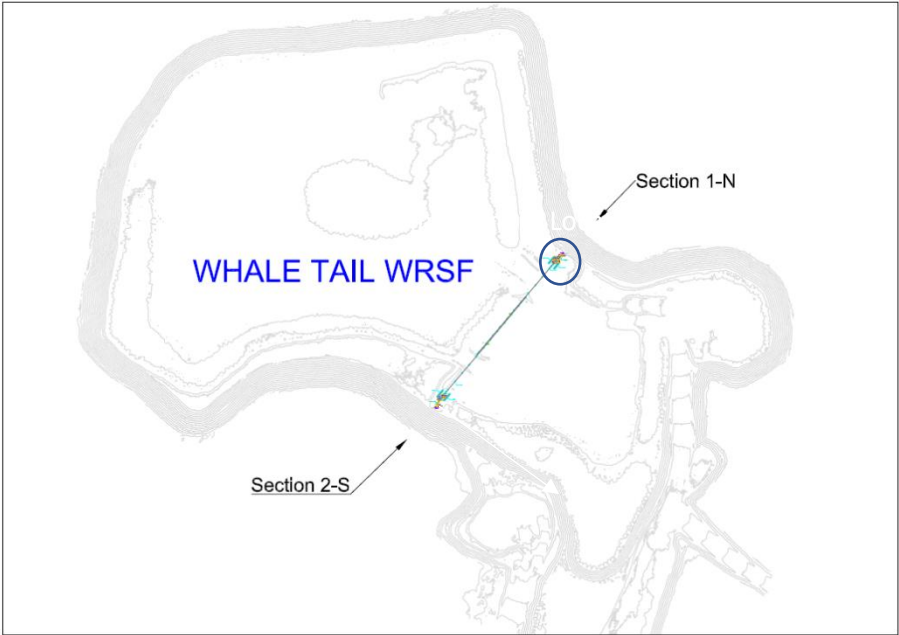


AMQ – WRSF – WT Dump TH_13

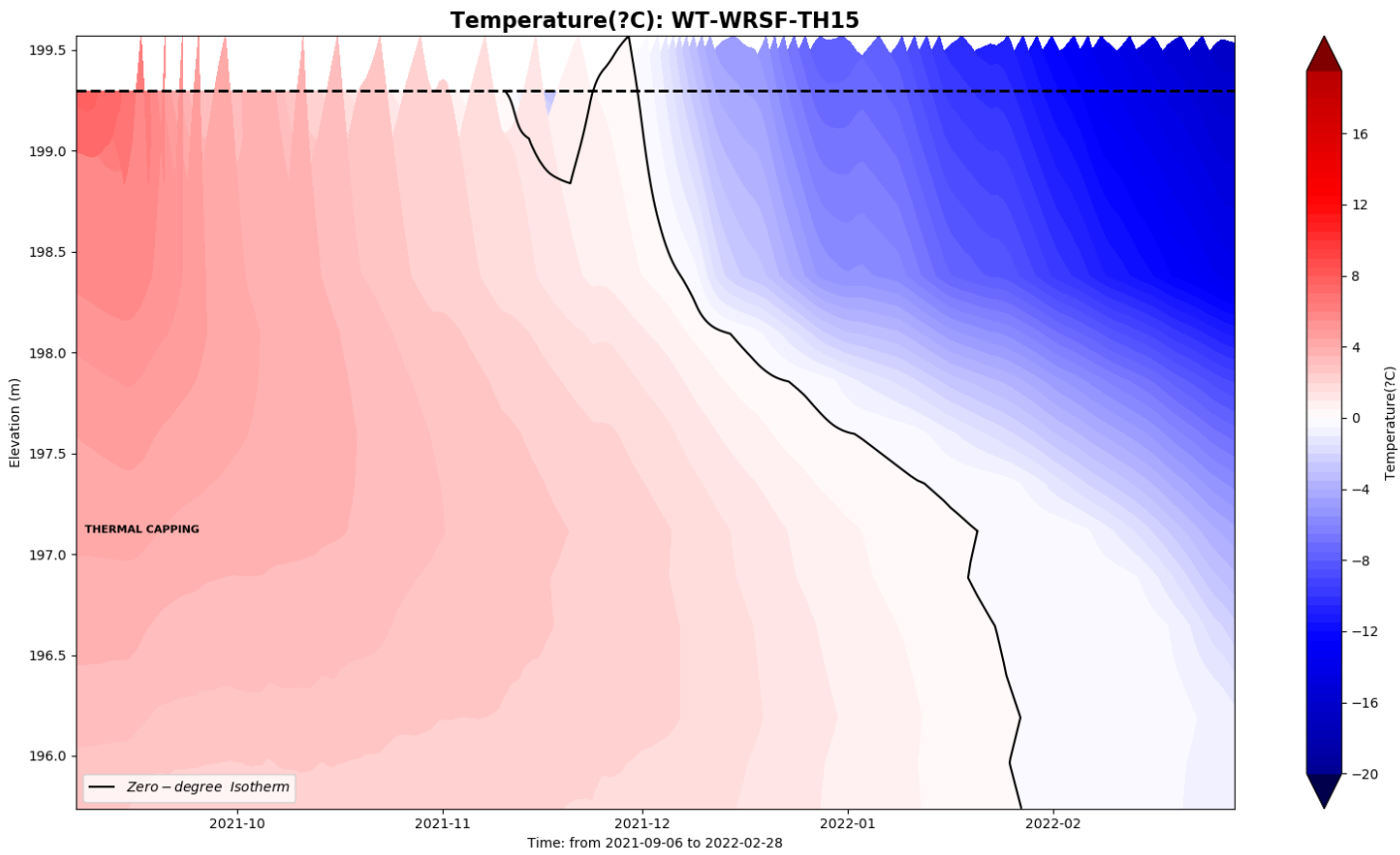
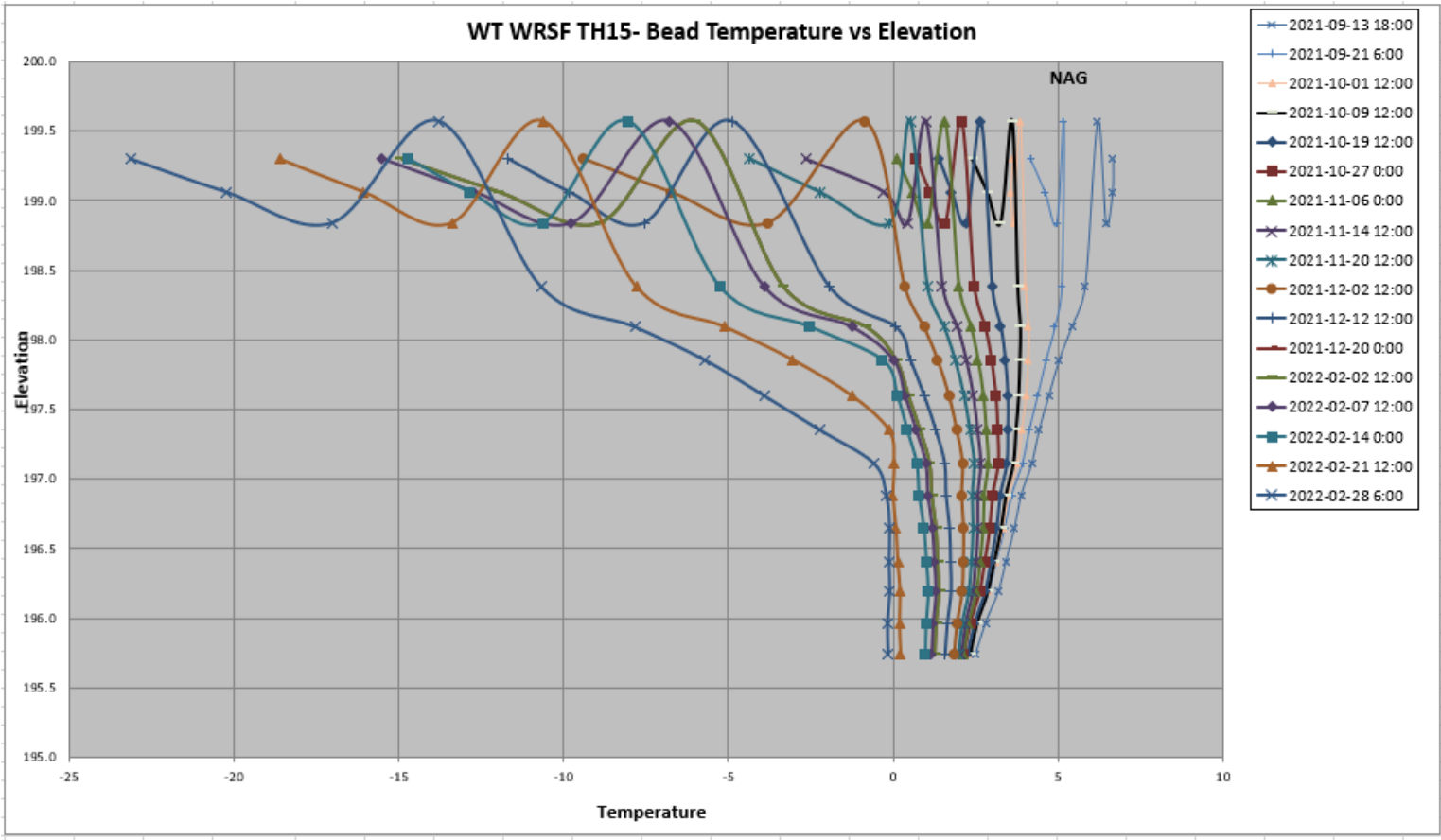
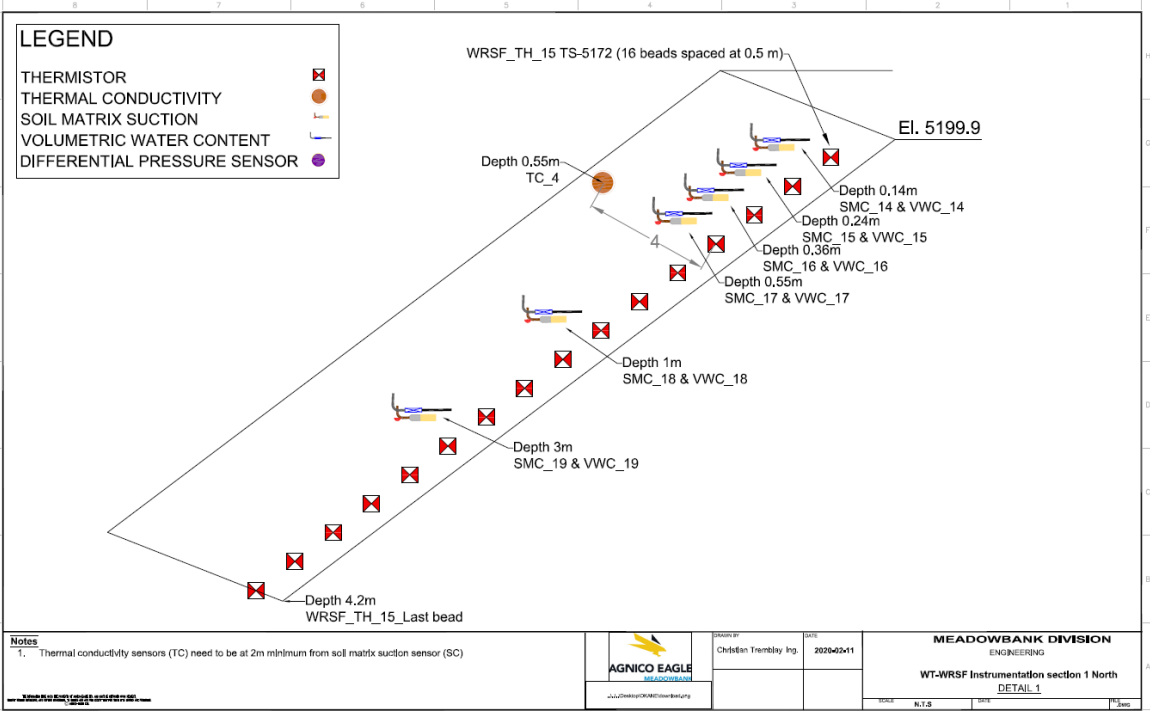
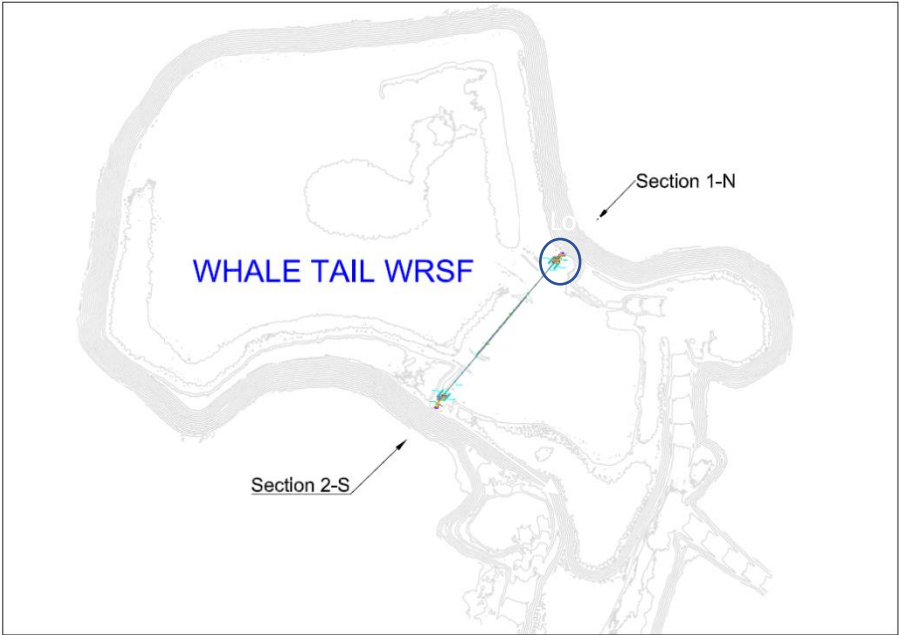


This instrument is installed horizontally and chart needs to be read accordingly

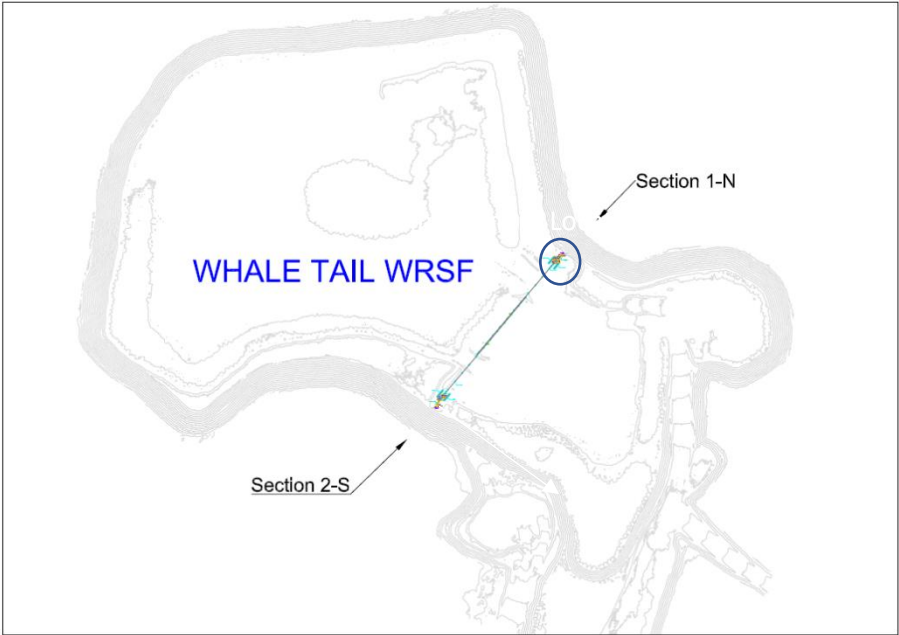
WT WRSF TH14



WT WRSF TH15

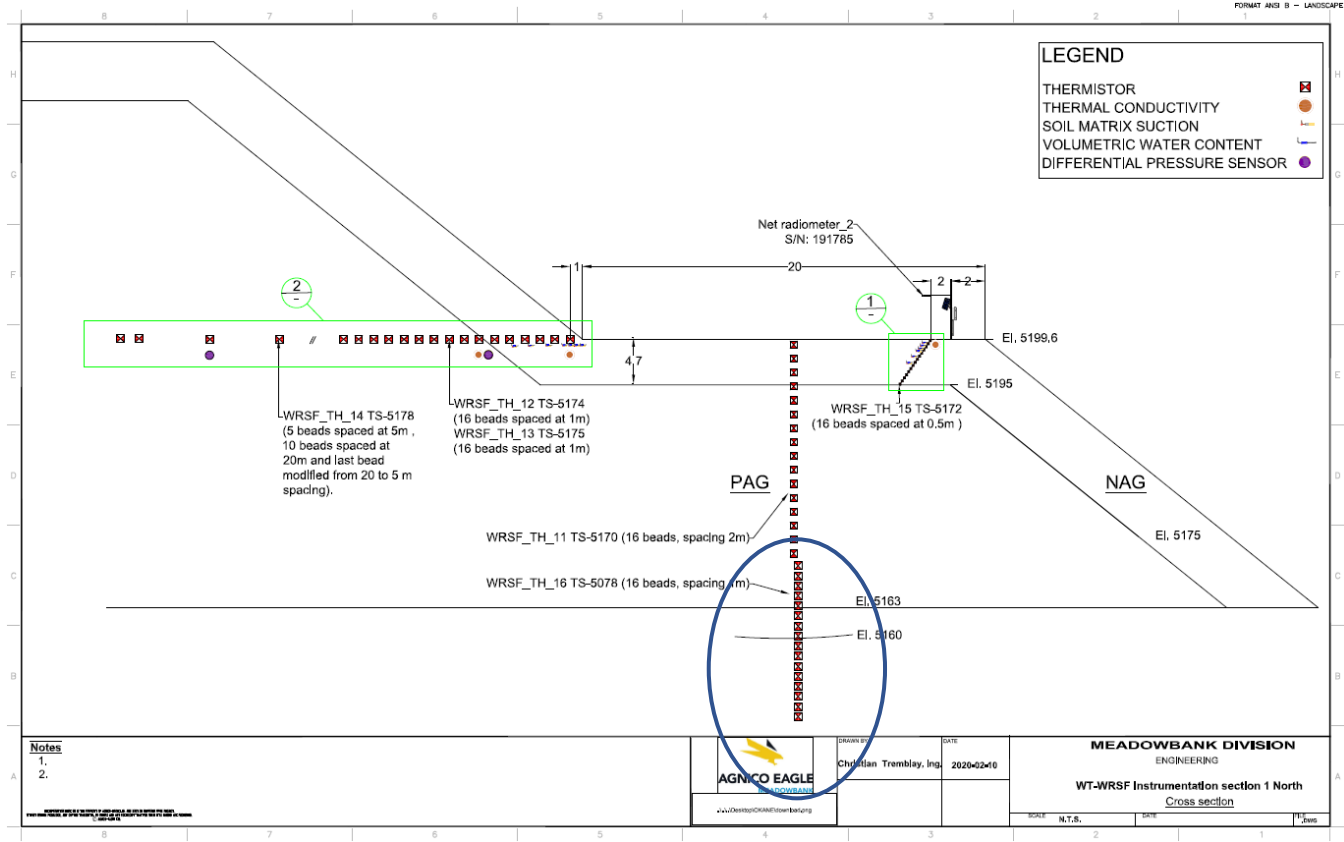
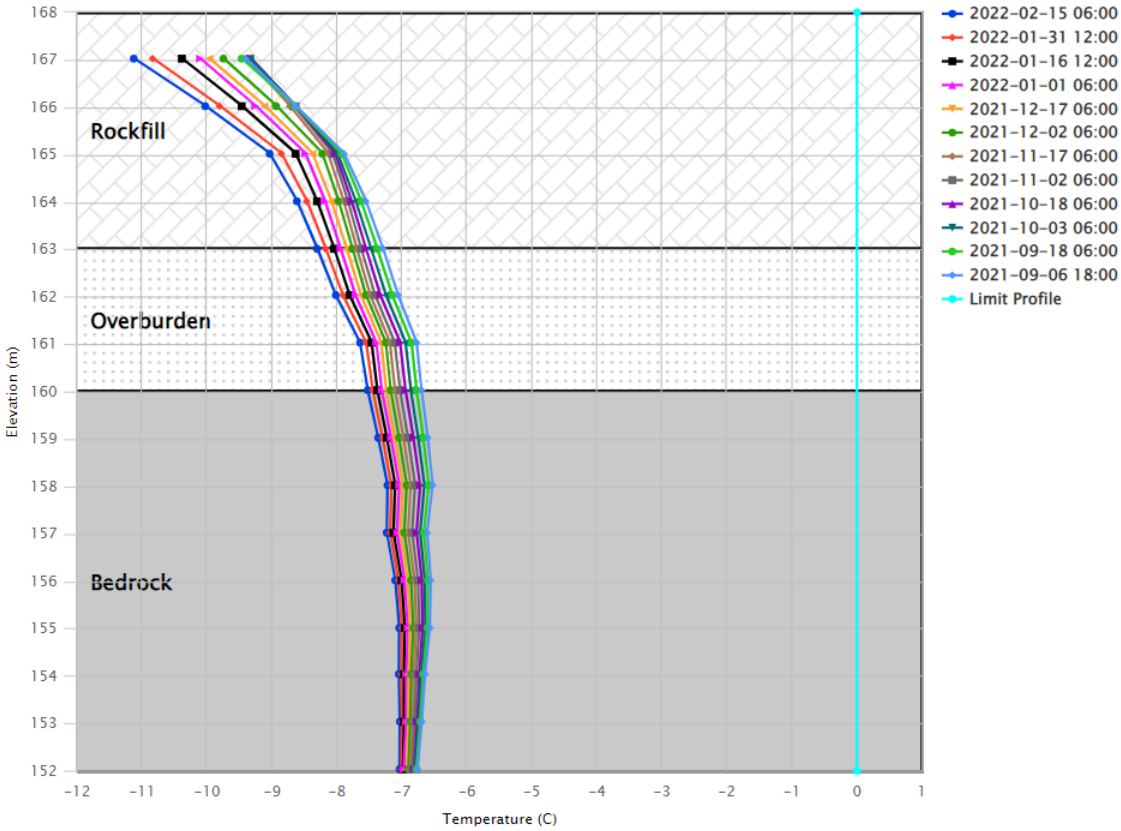


WT WRSF TH16



There was no data from Dec 20 to Feb 2 due to loss of battery power in the instrument.

AMQ - WRSF - WT Dump TH_16



TH-11 & TH-16

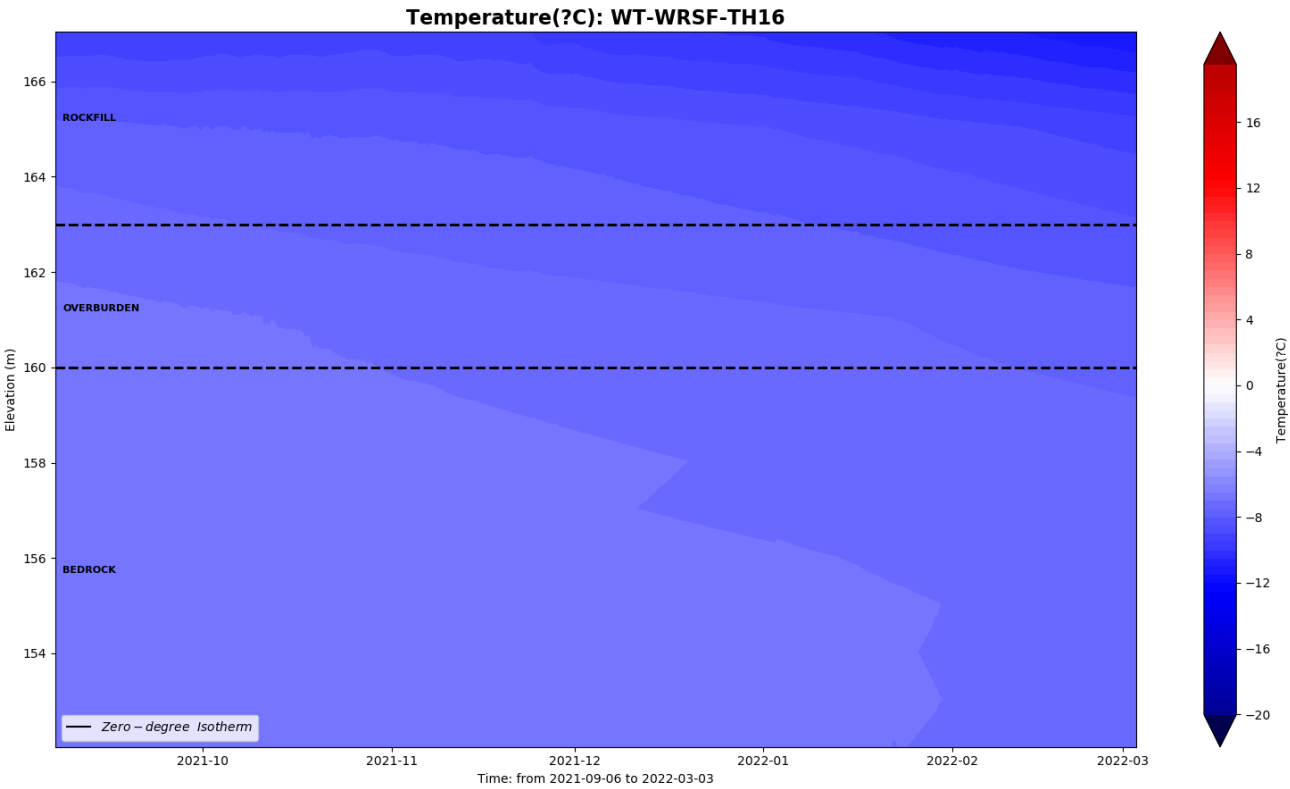
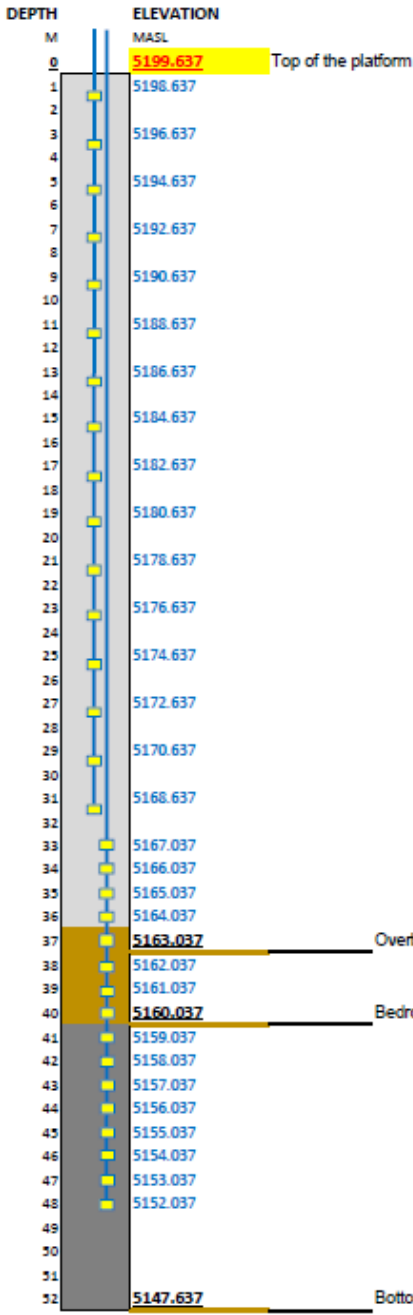
String #: RST 5170 & 5078

Drill Hole Coordinates

Northing 8479.2480

Easting 14259.1830

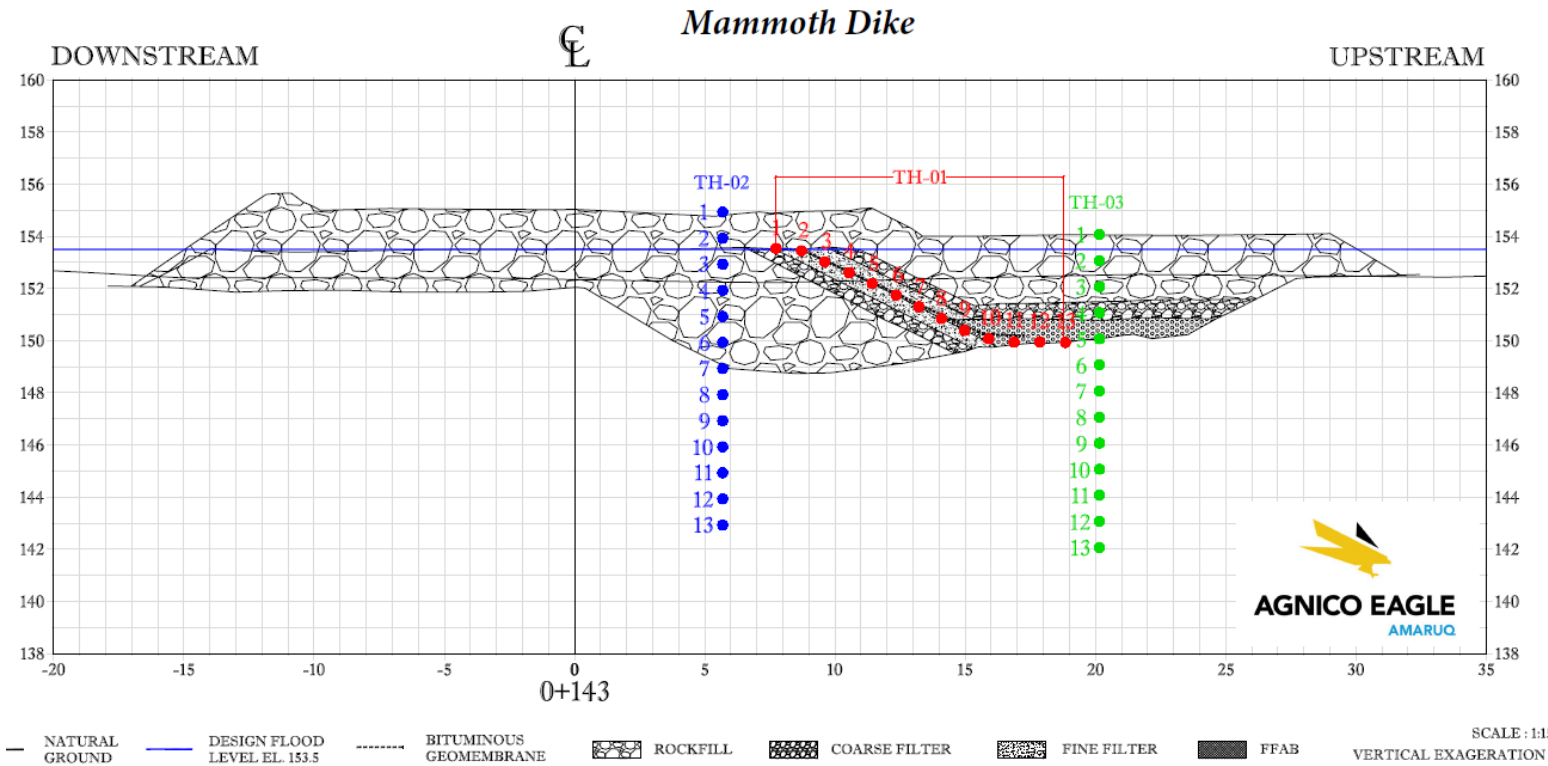
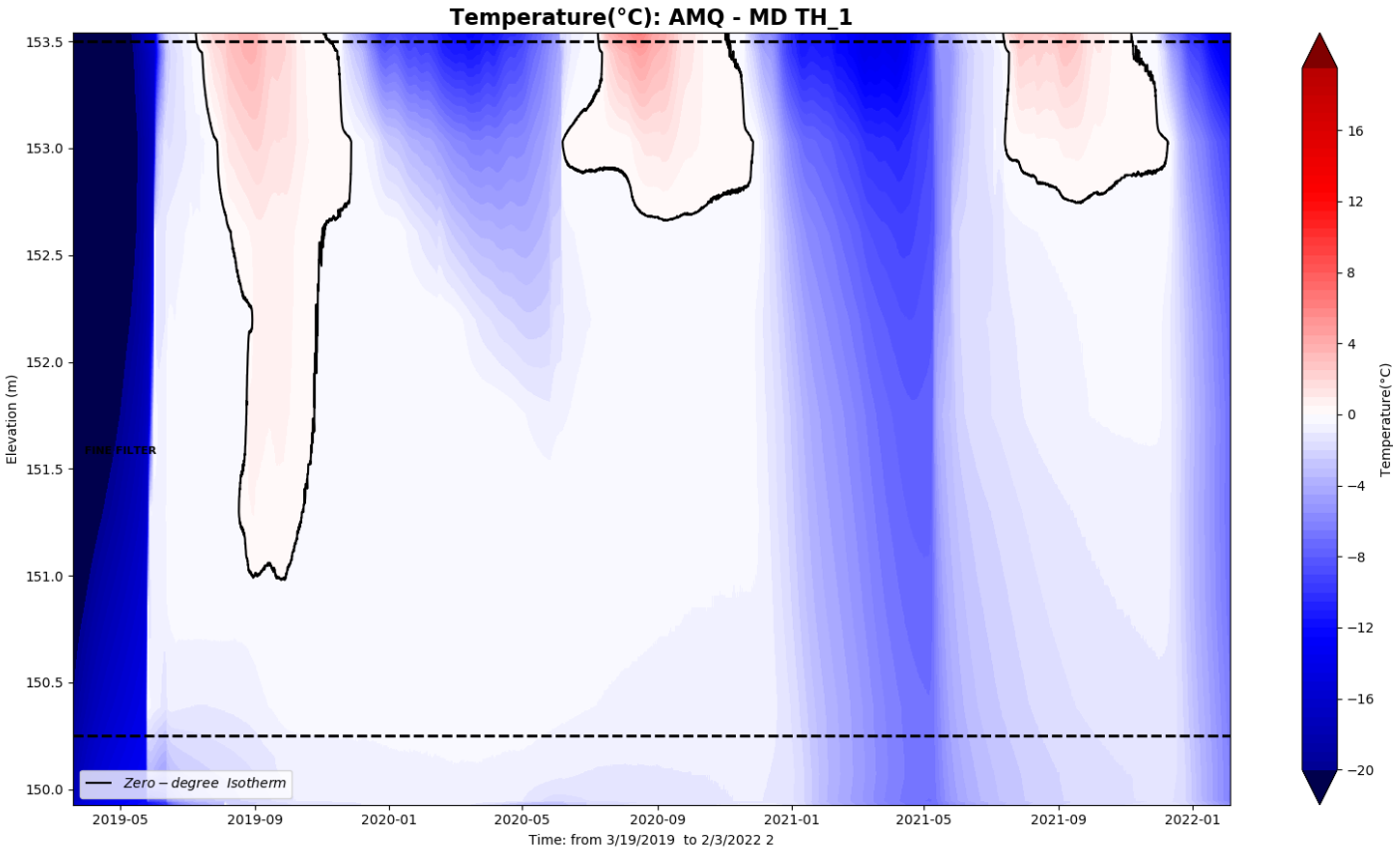
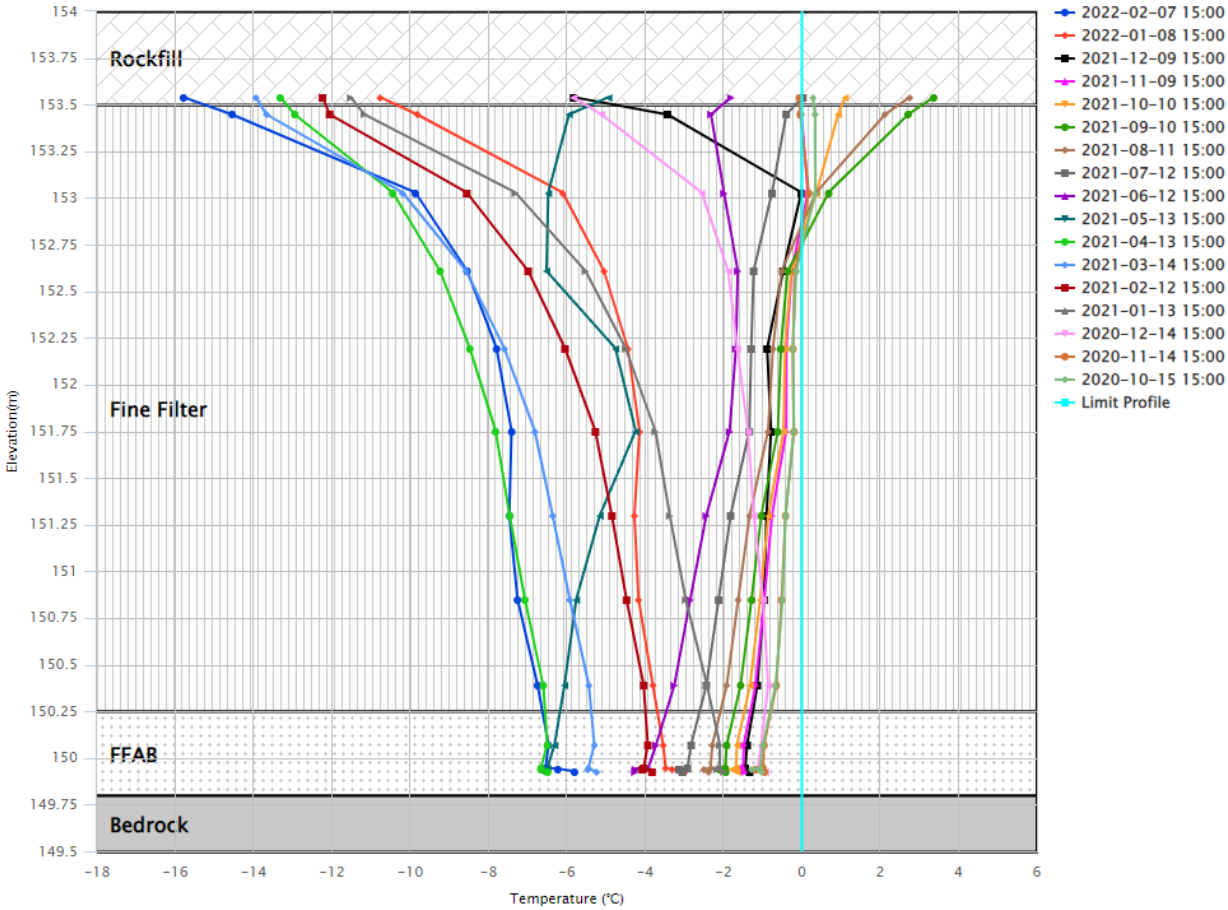
Elevation 5199.637



MD TH01



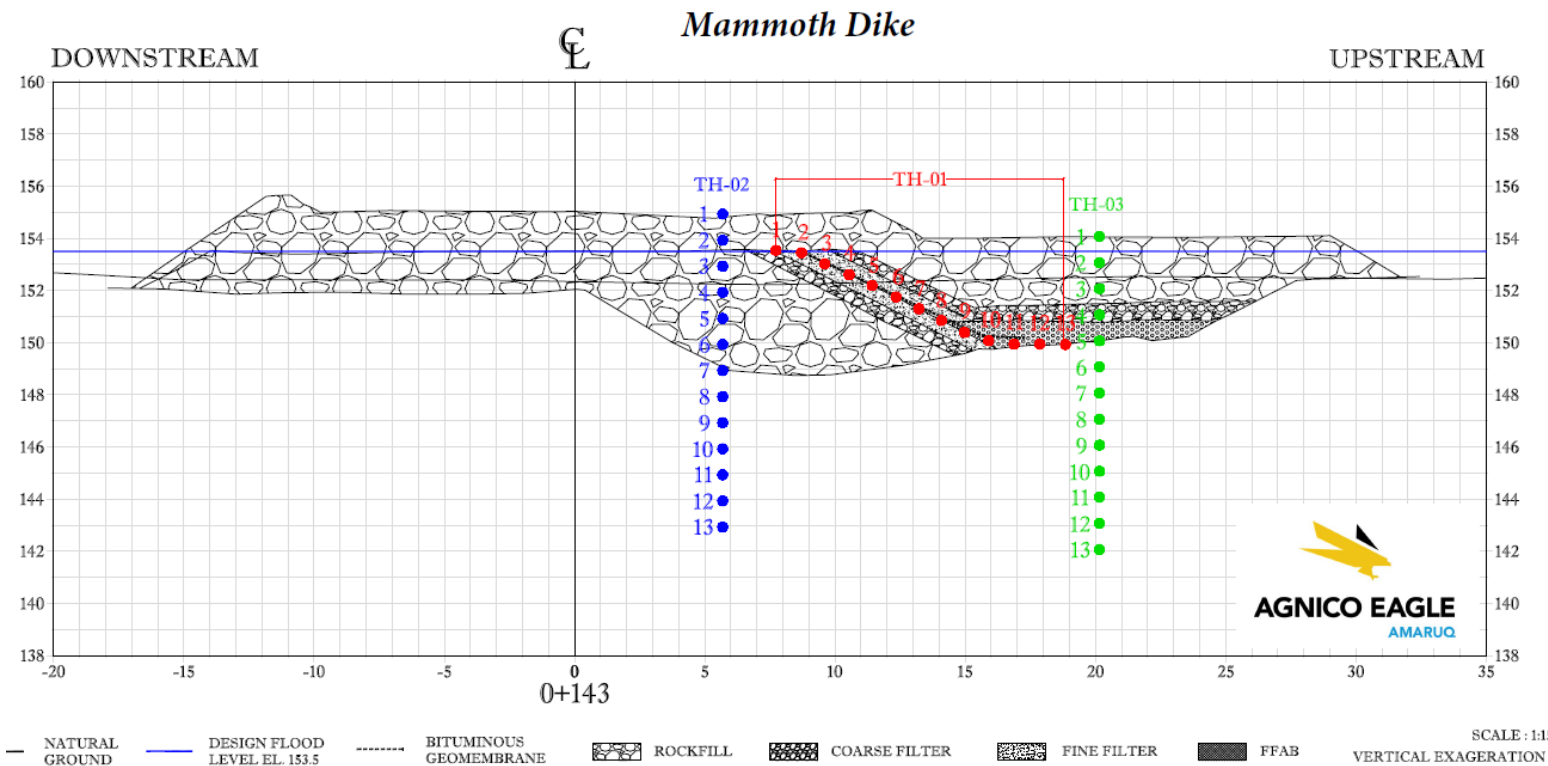
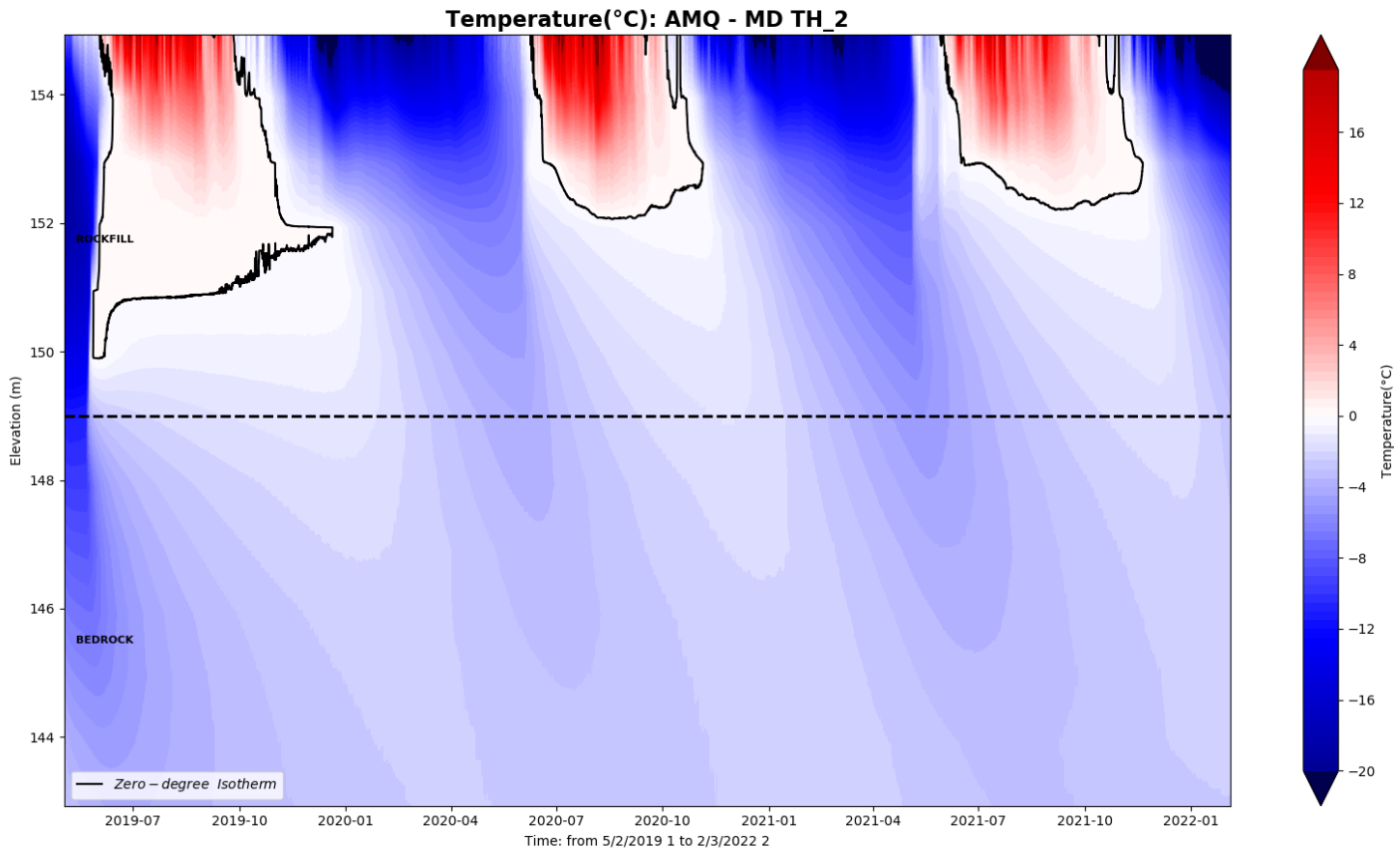
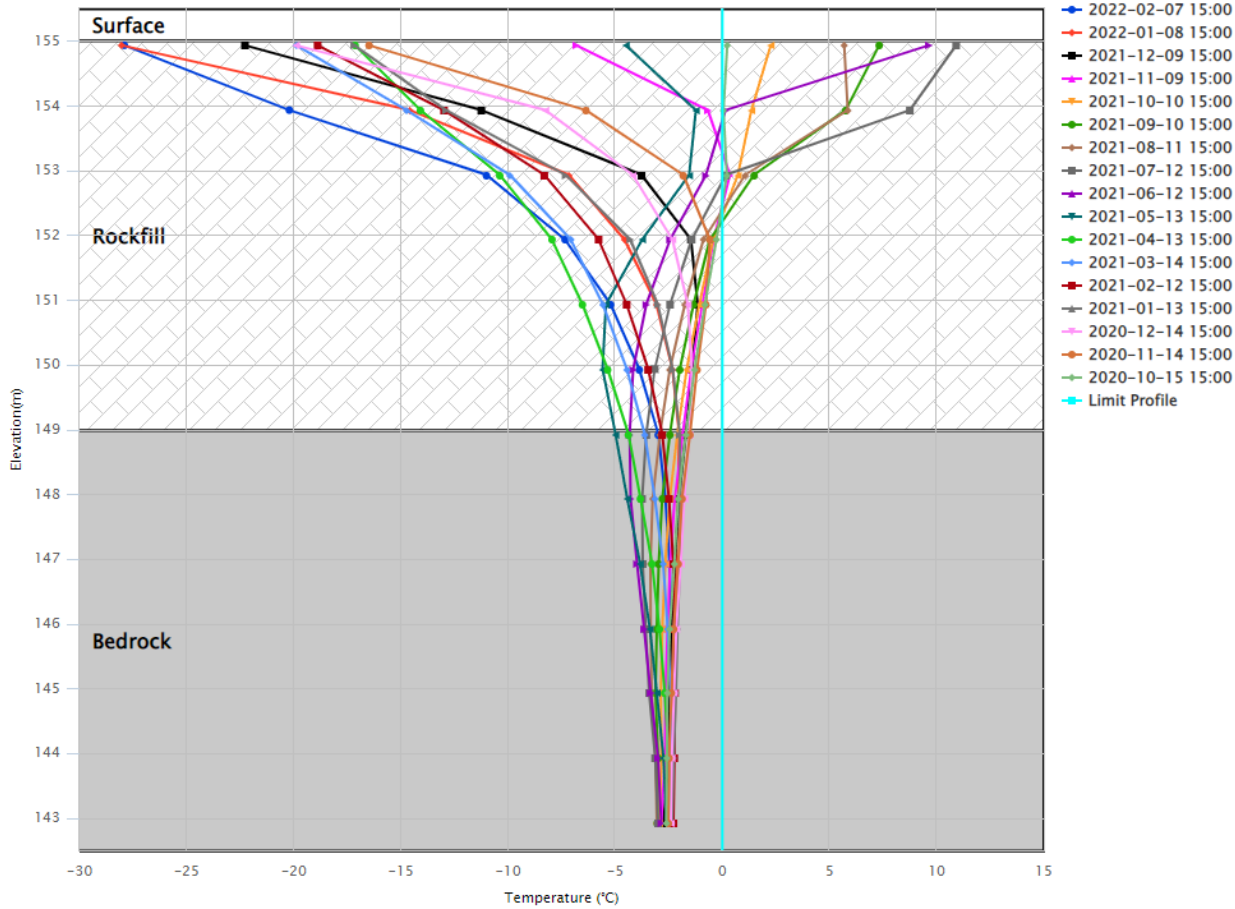
AMQ - MD TH_01



MD TH02



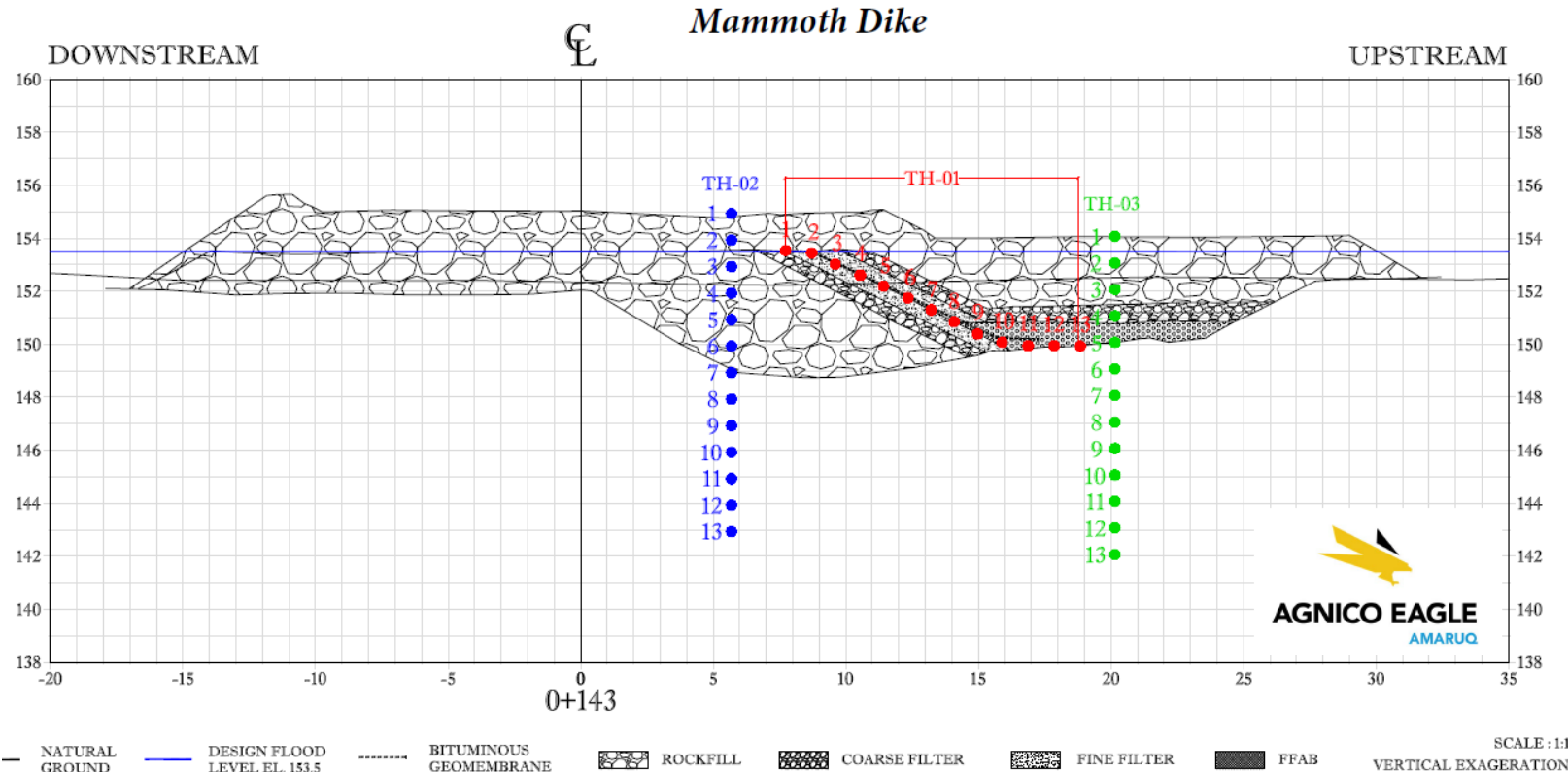
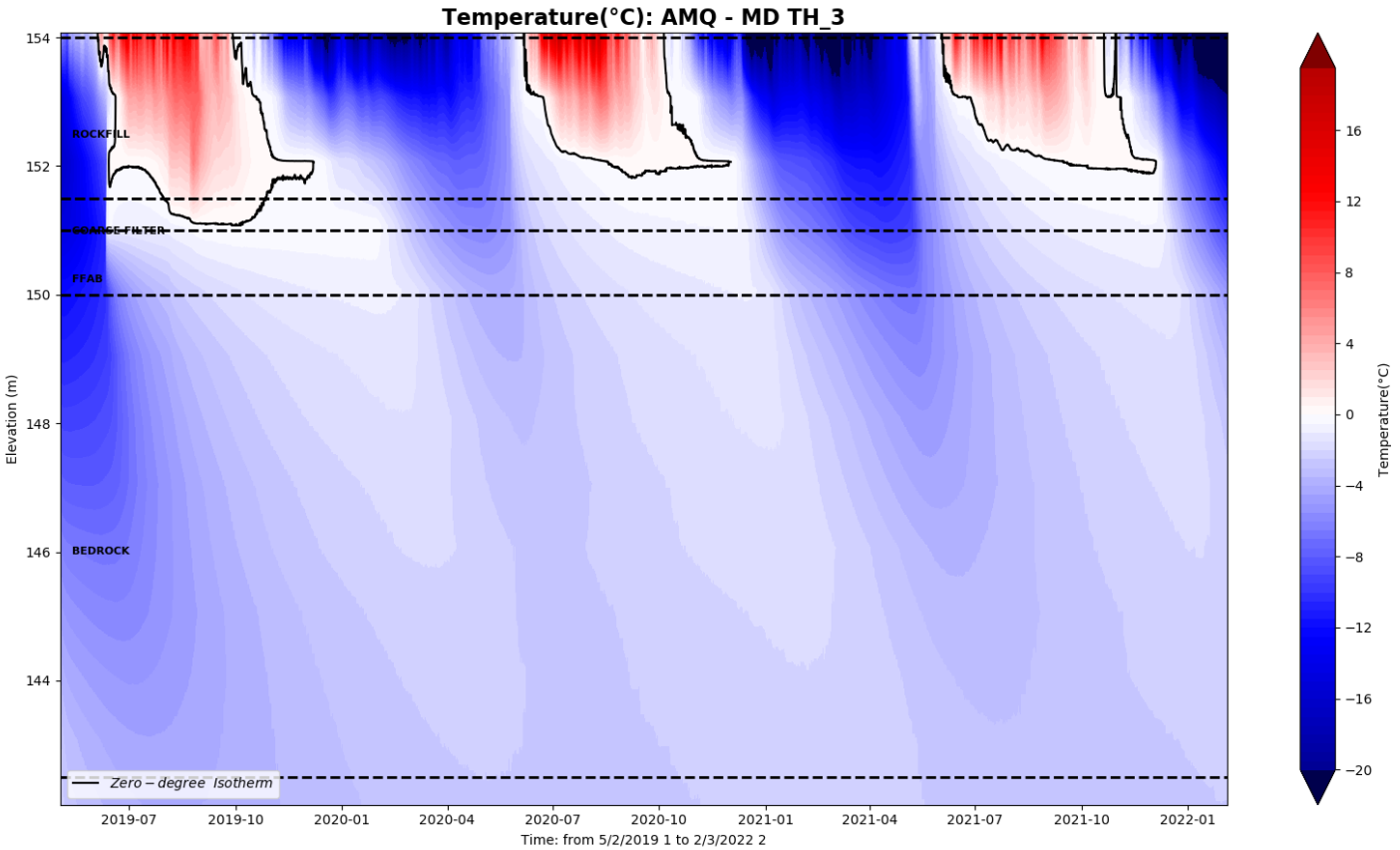
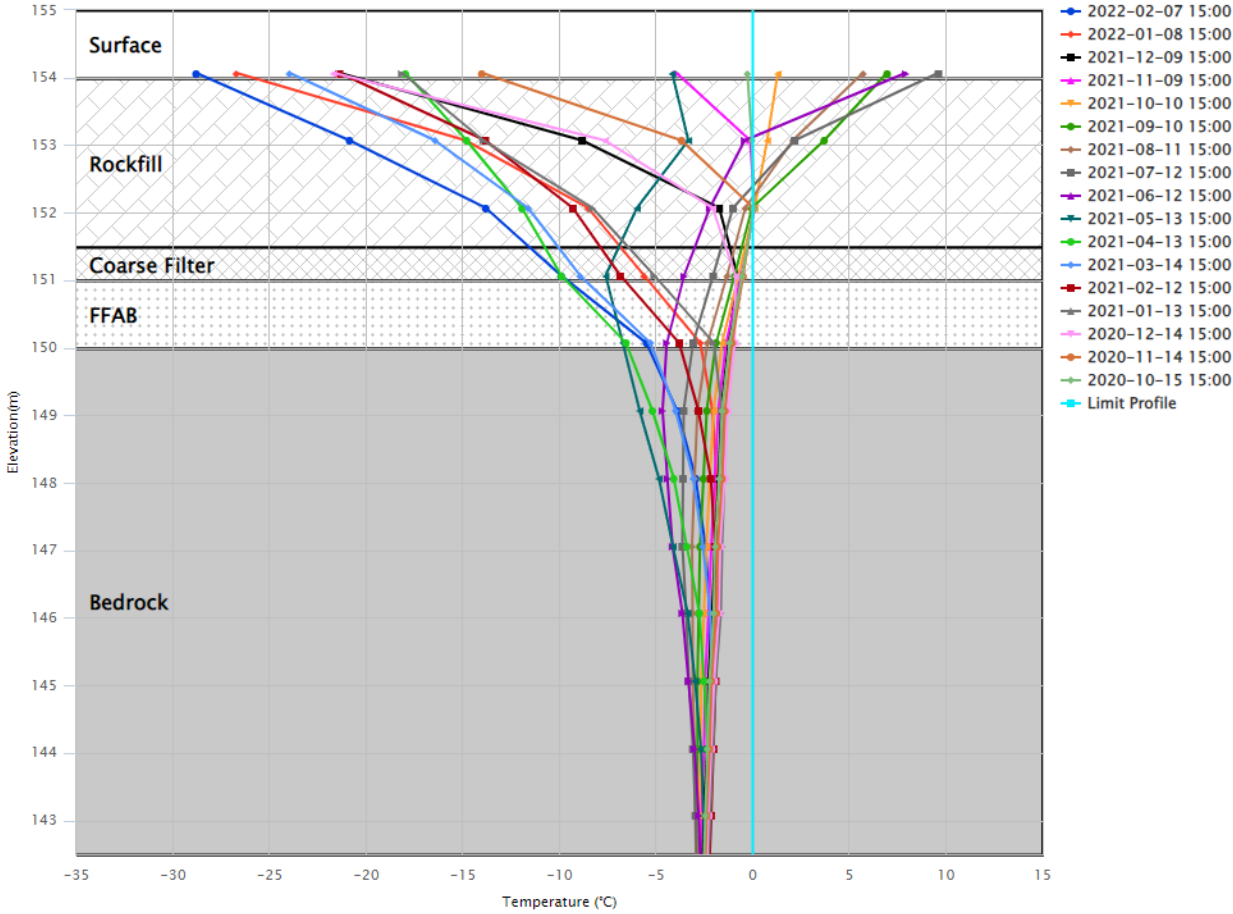
AMQ - MD TH_02



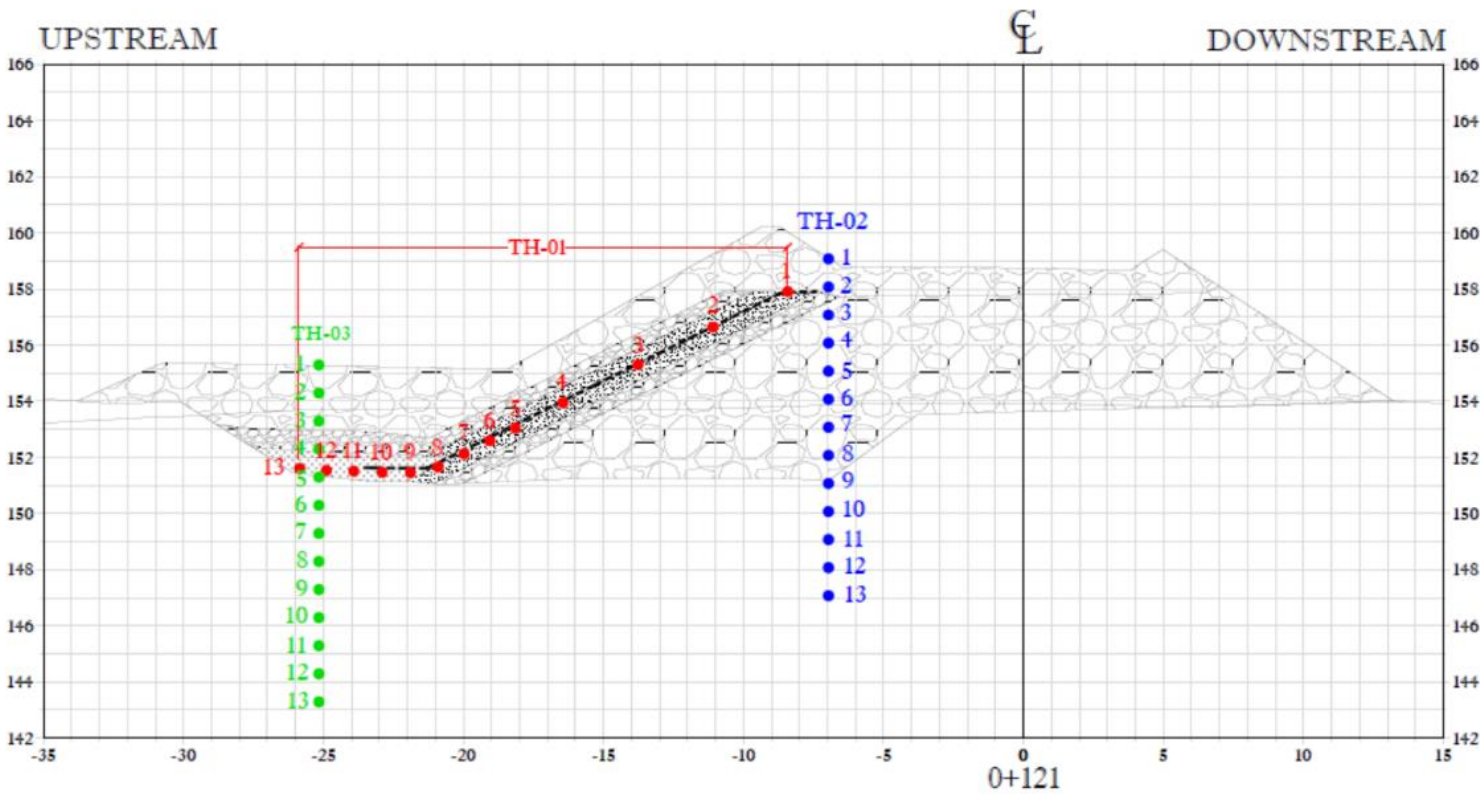
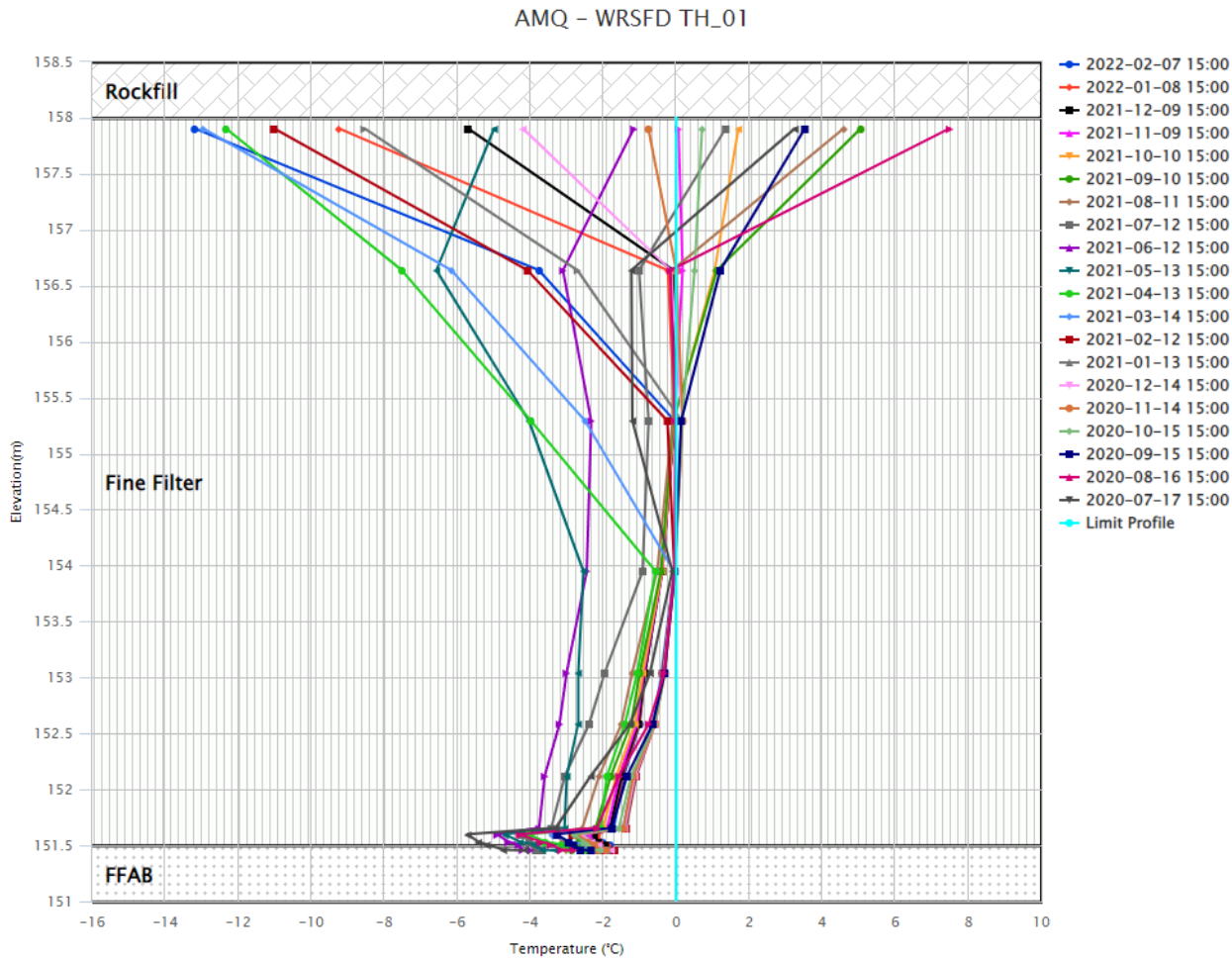
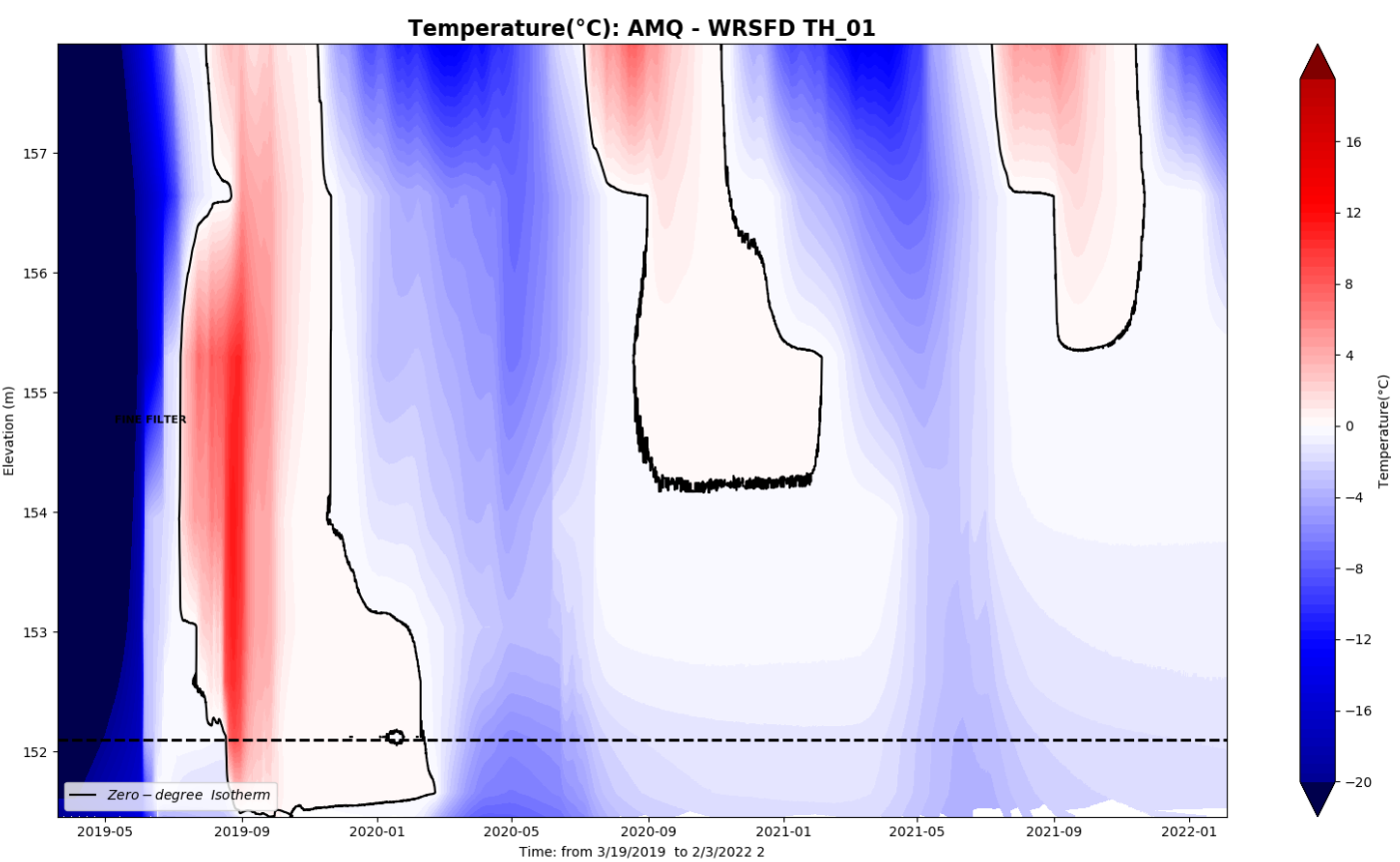
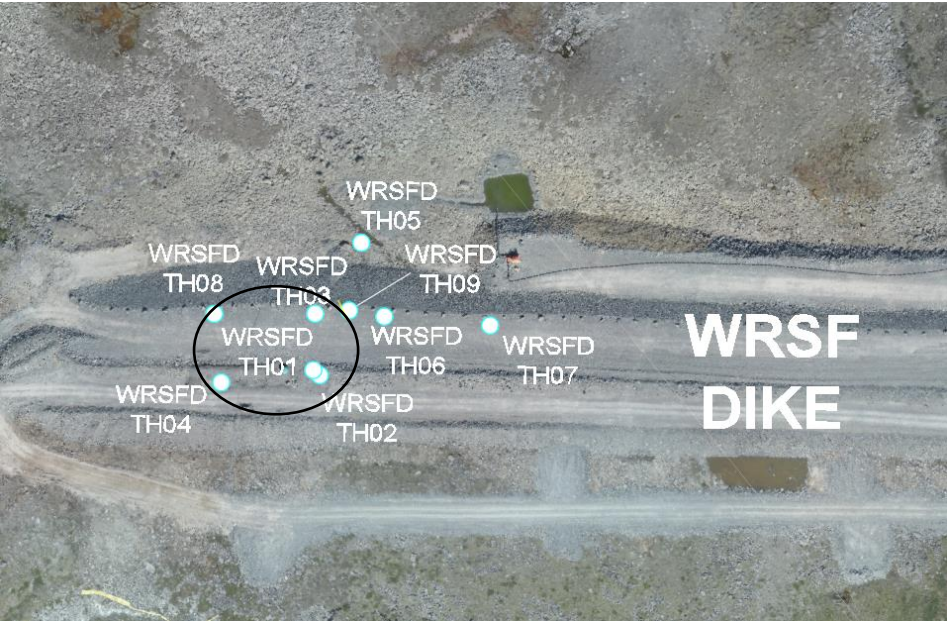
MD TH03



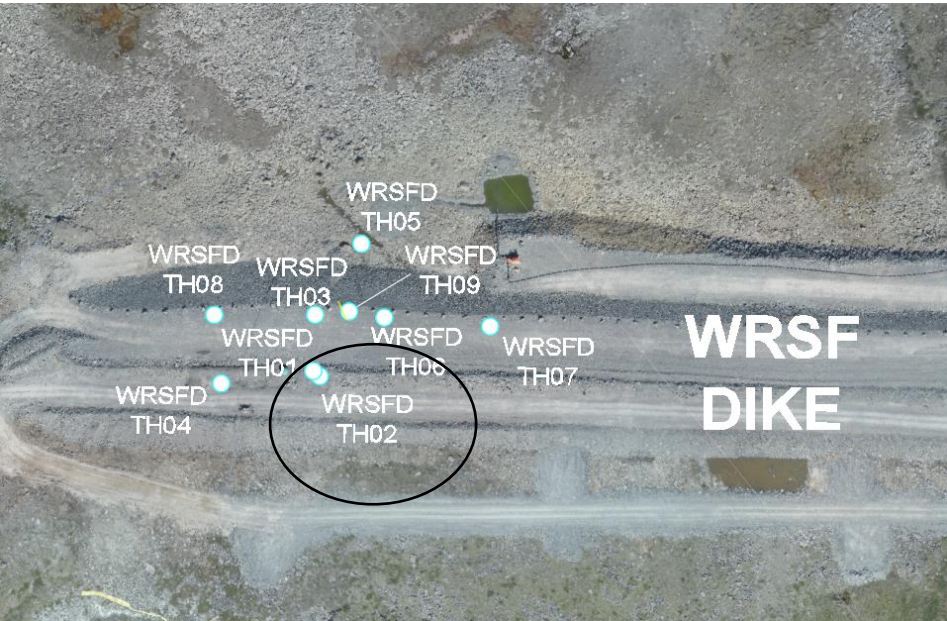
AMQ – MD TH_03



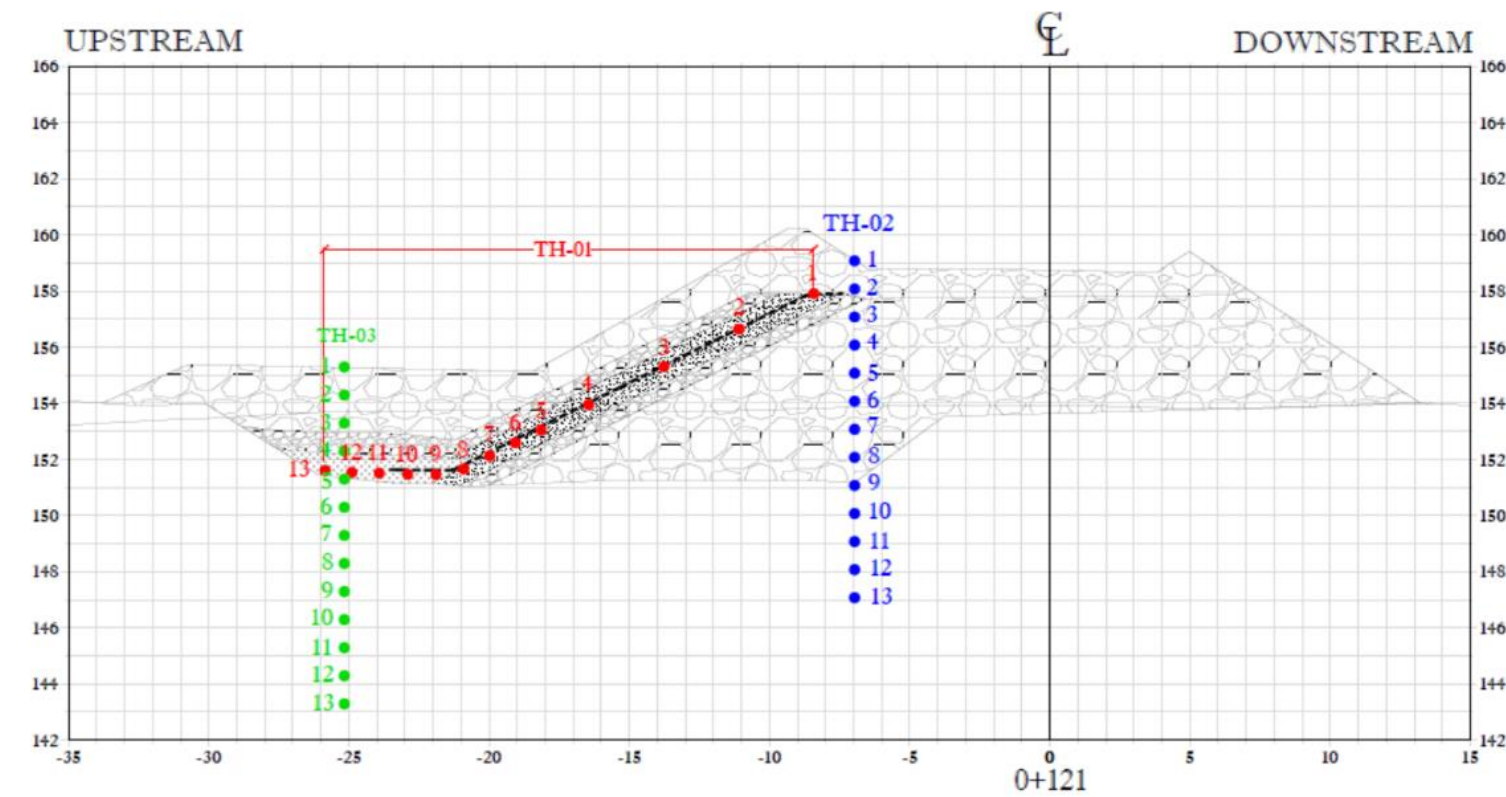
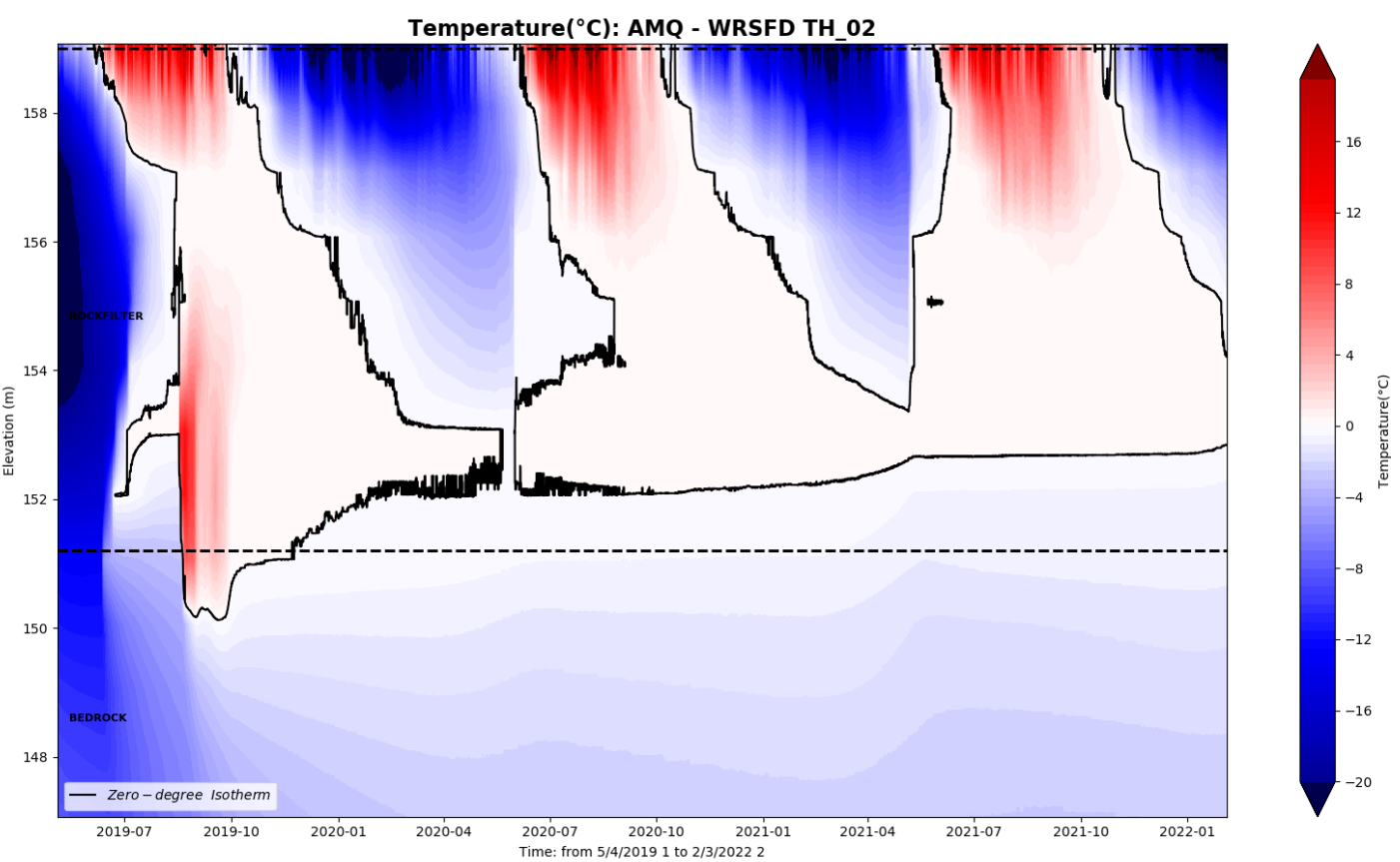
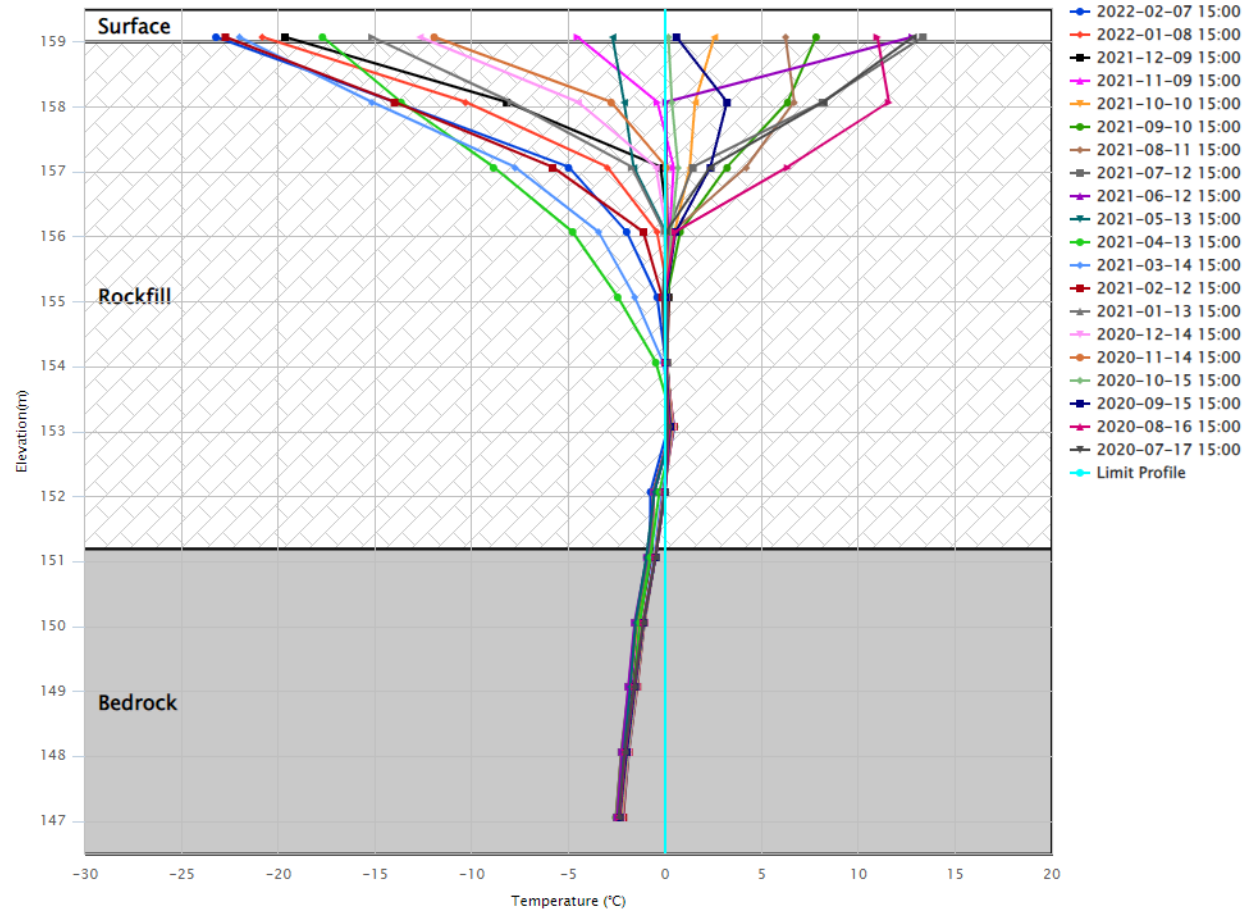
WRSFD TH01



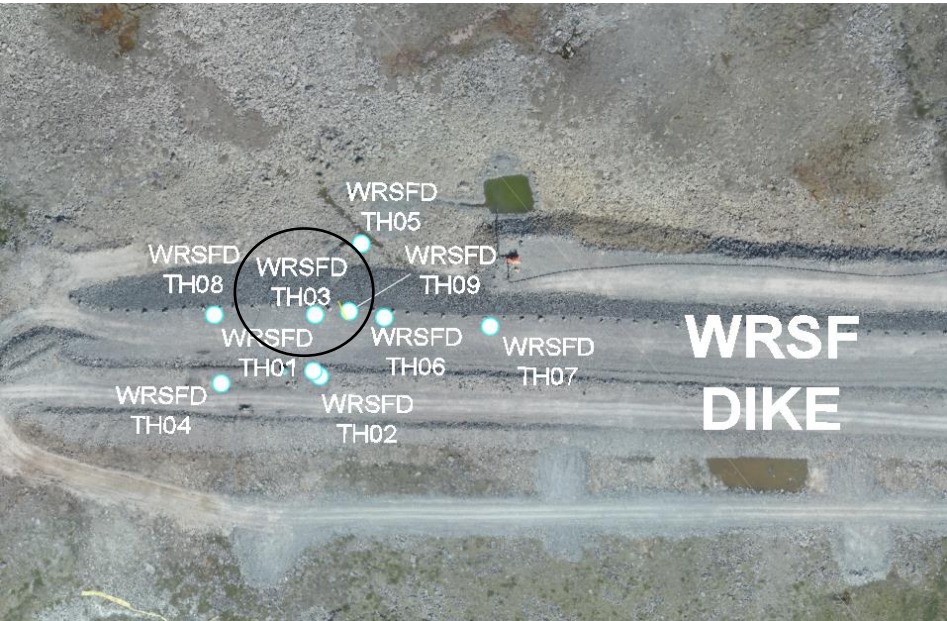
WRSFD TH02



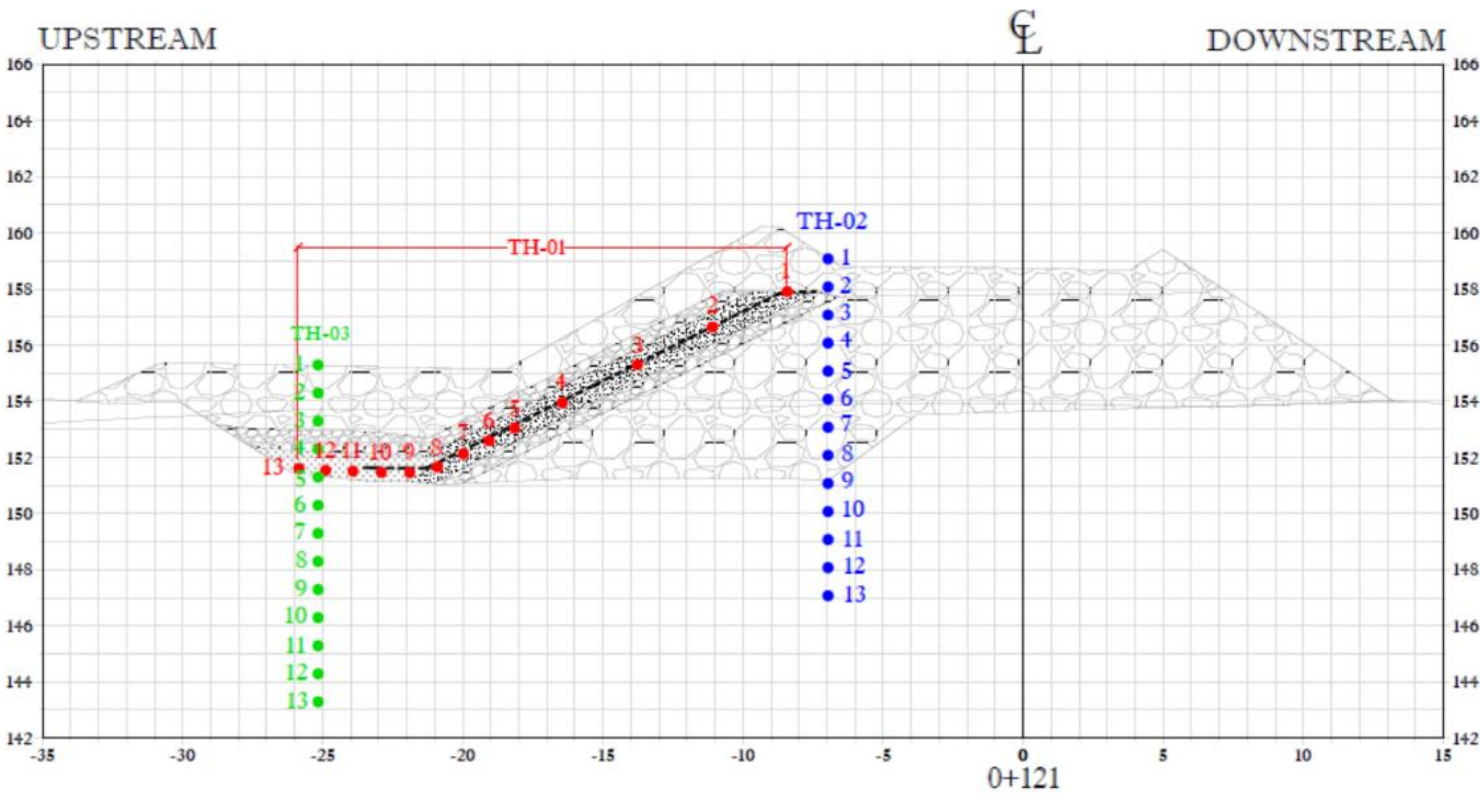
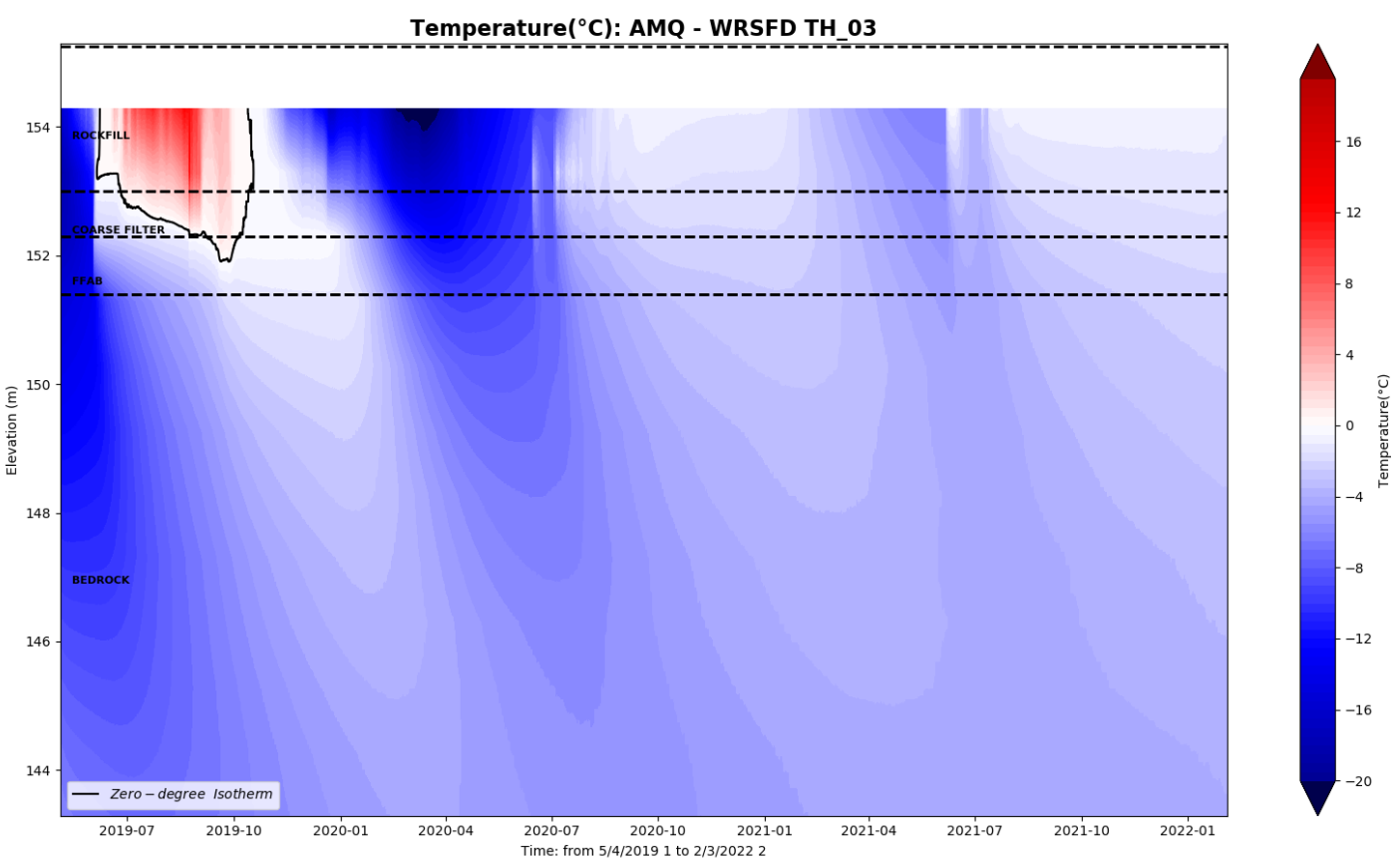
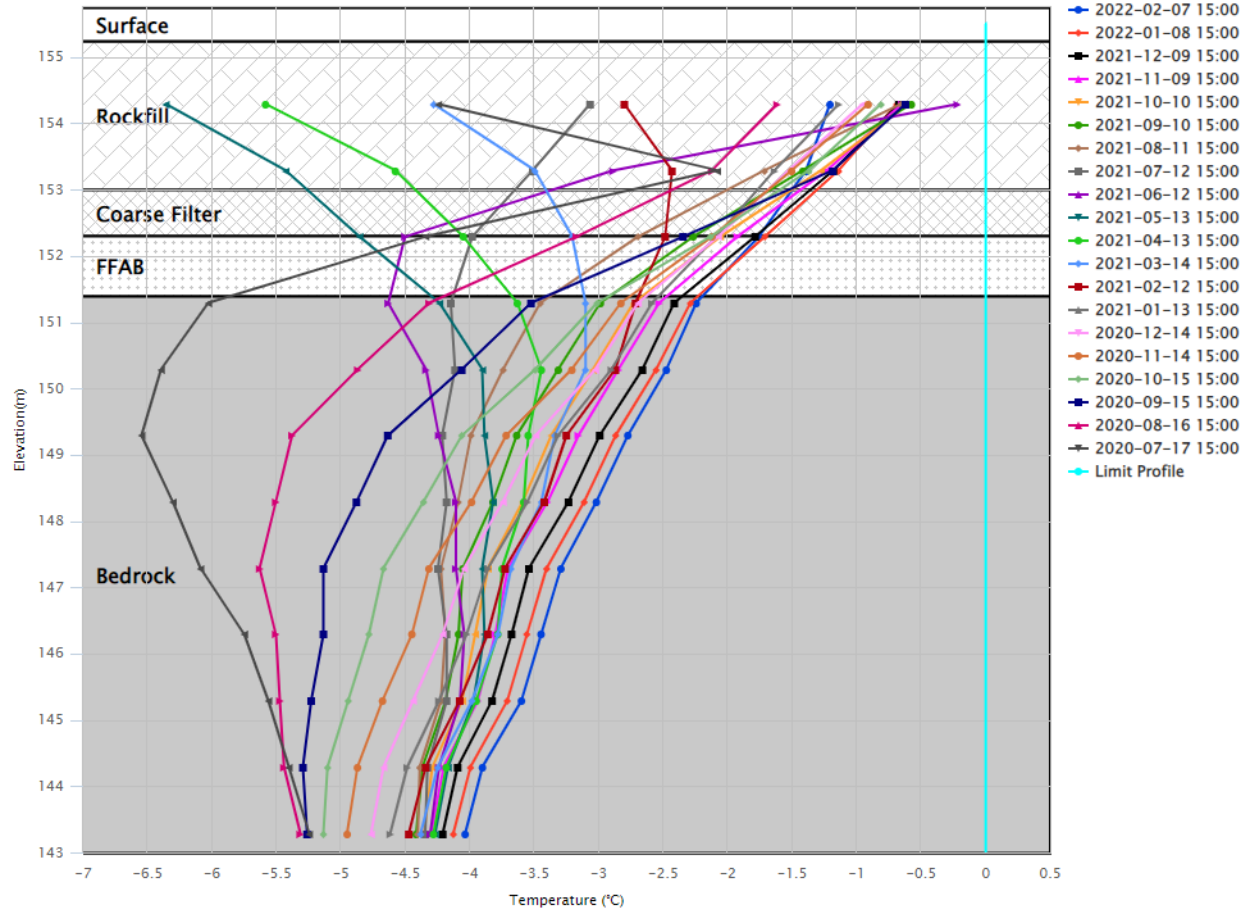
AMQ – WRSFD TH_02



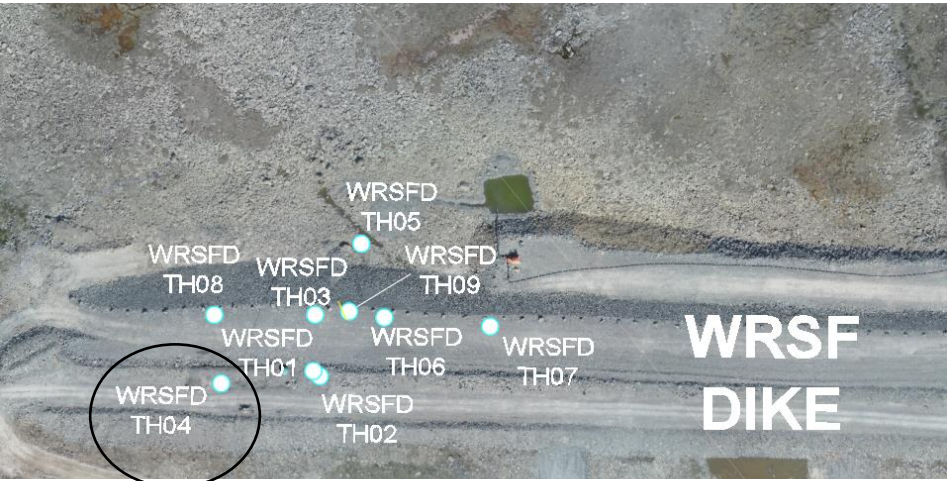
WRSFD TH03



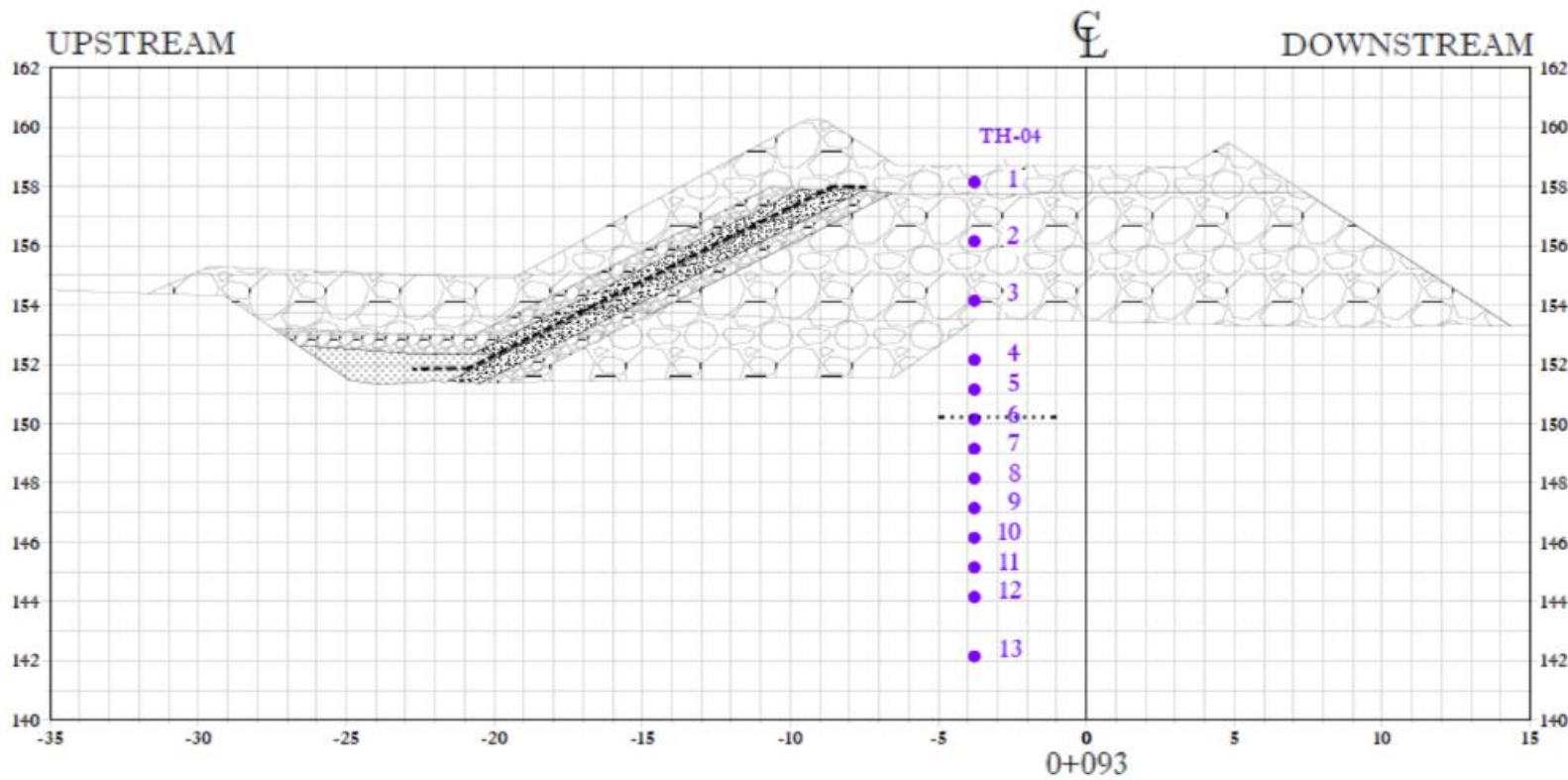
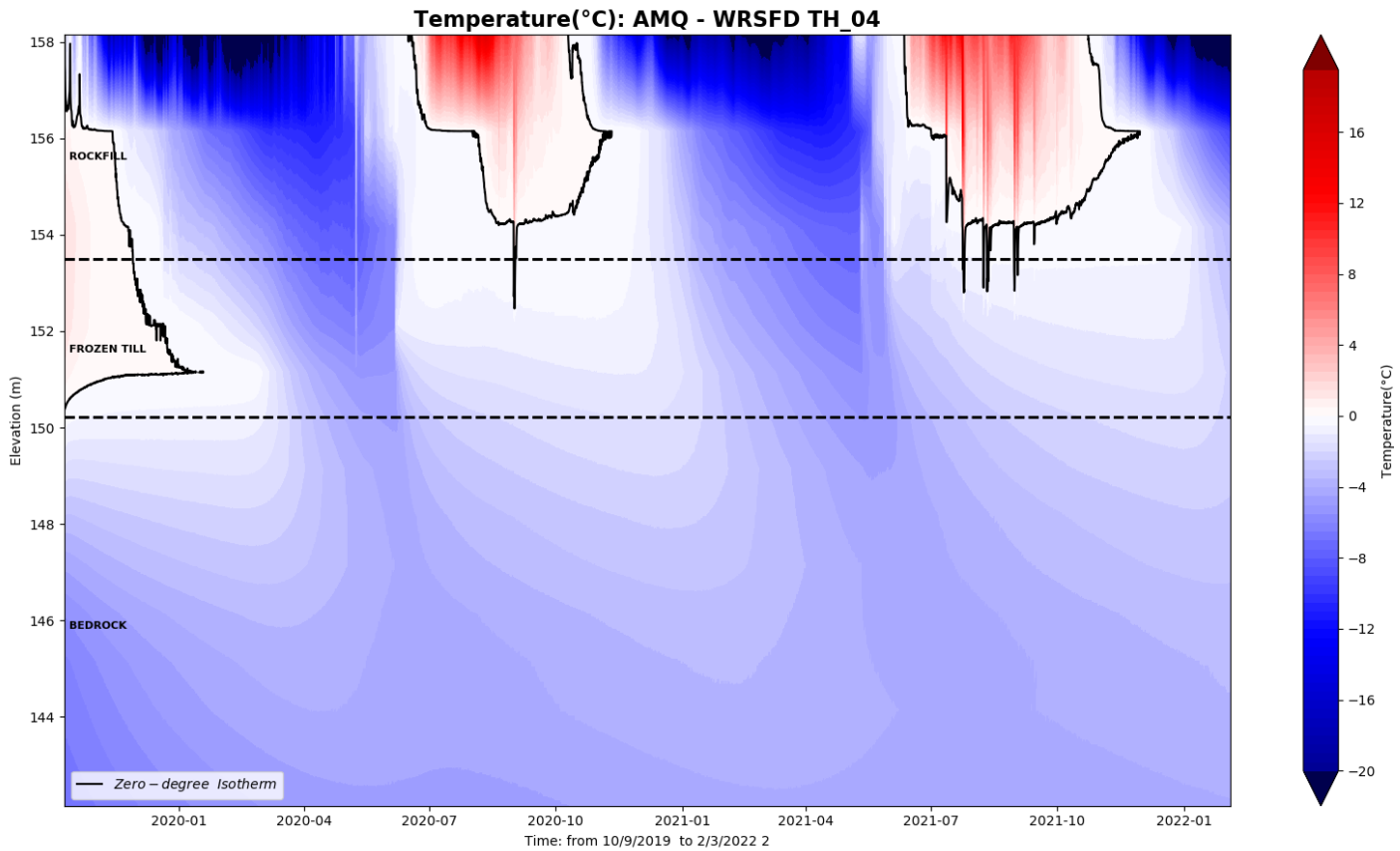
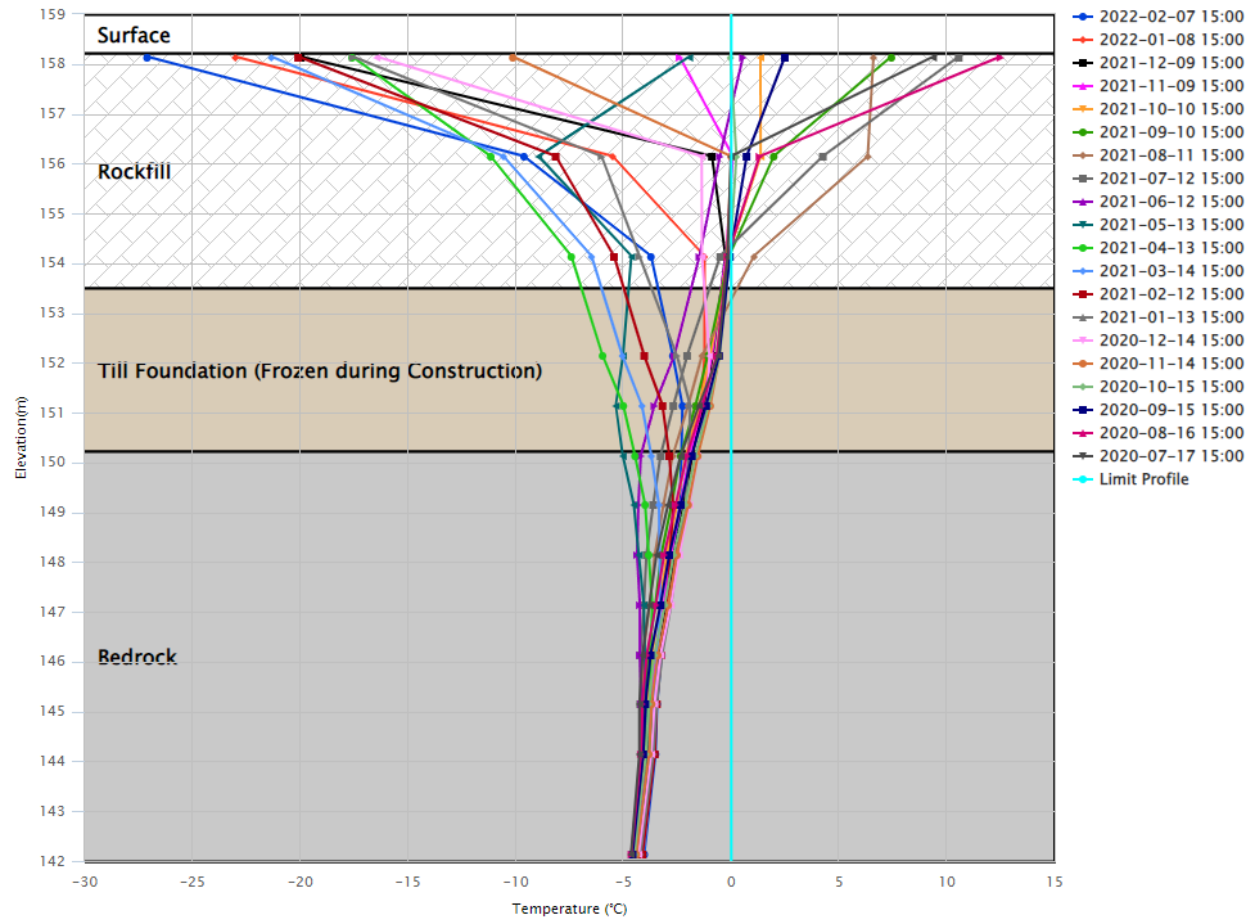
AMQ - WRSFD TH_03



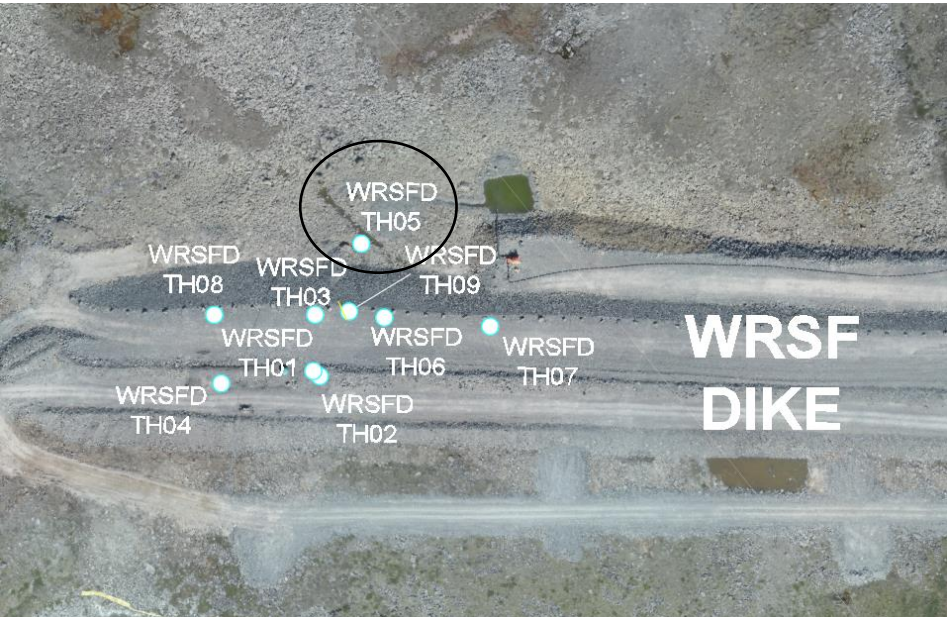
WRSFD TH04



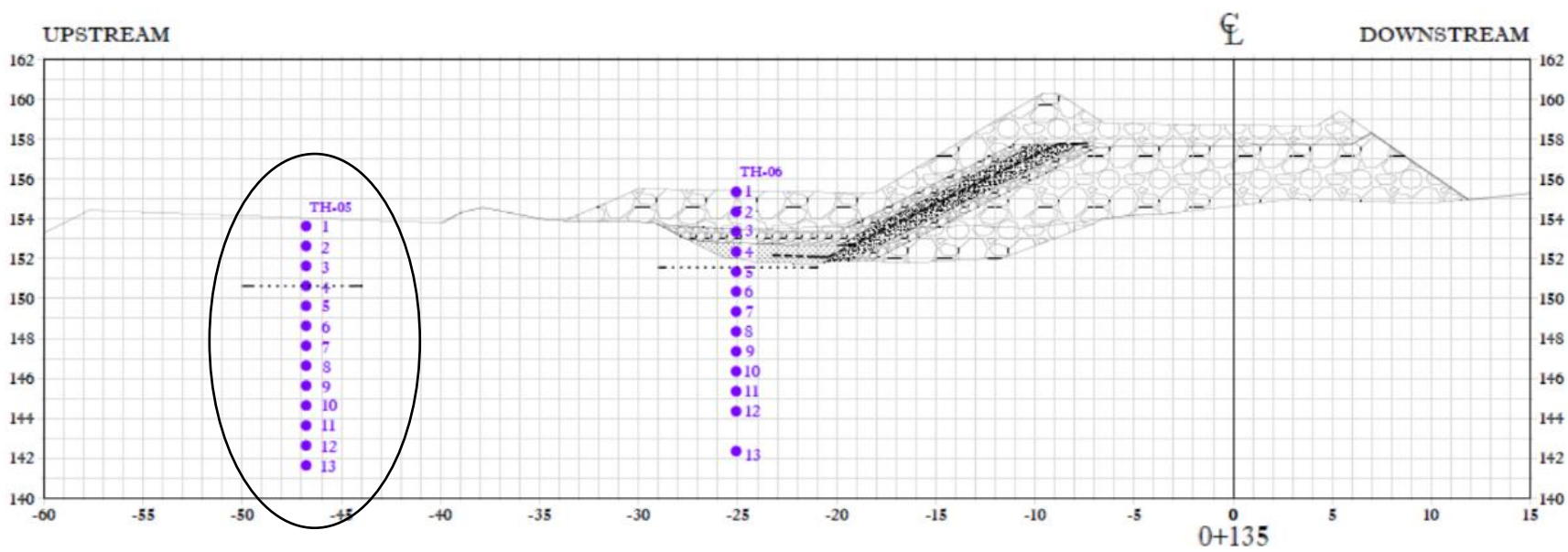
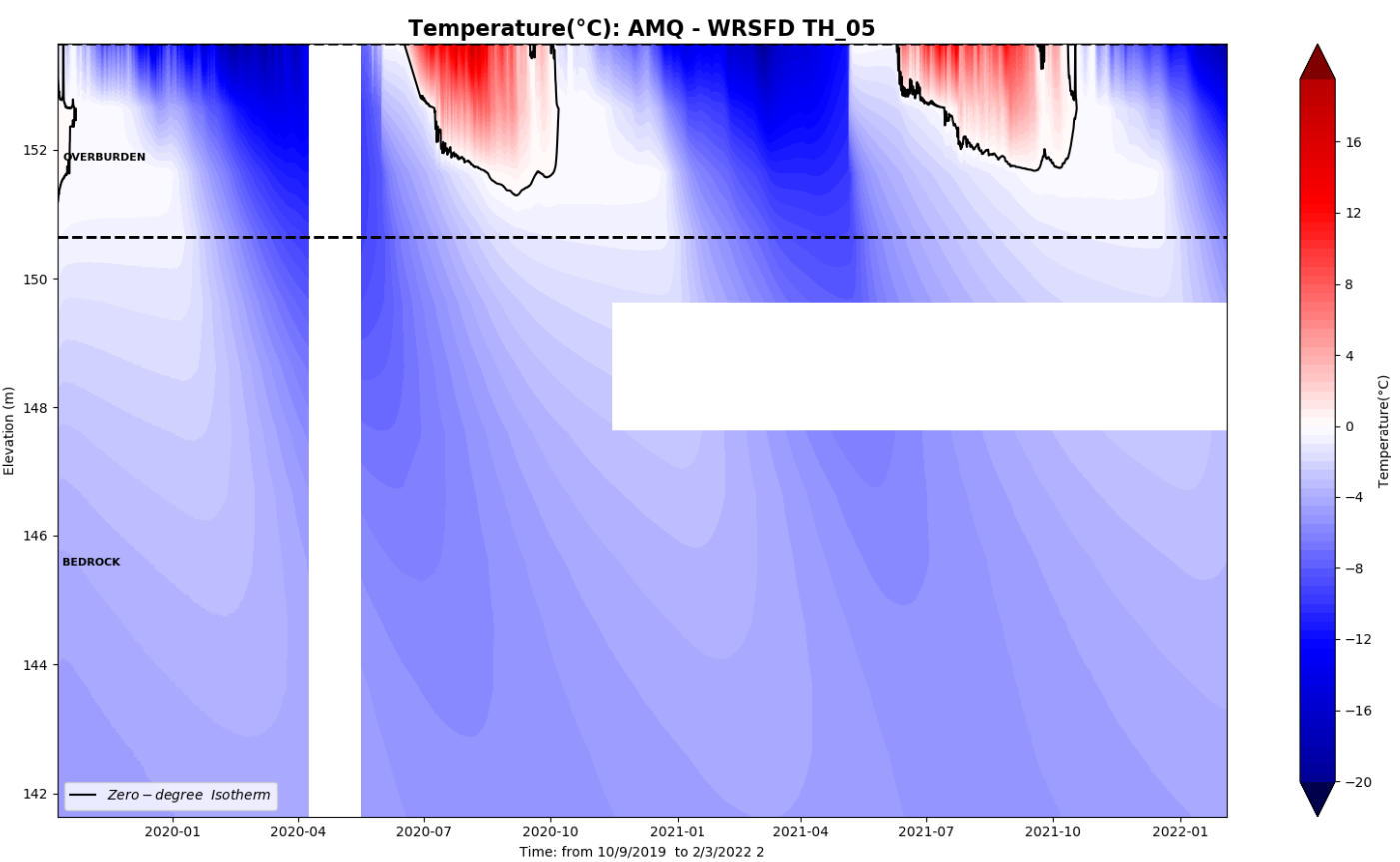
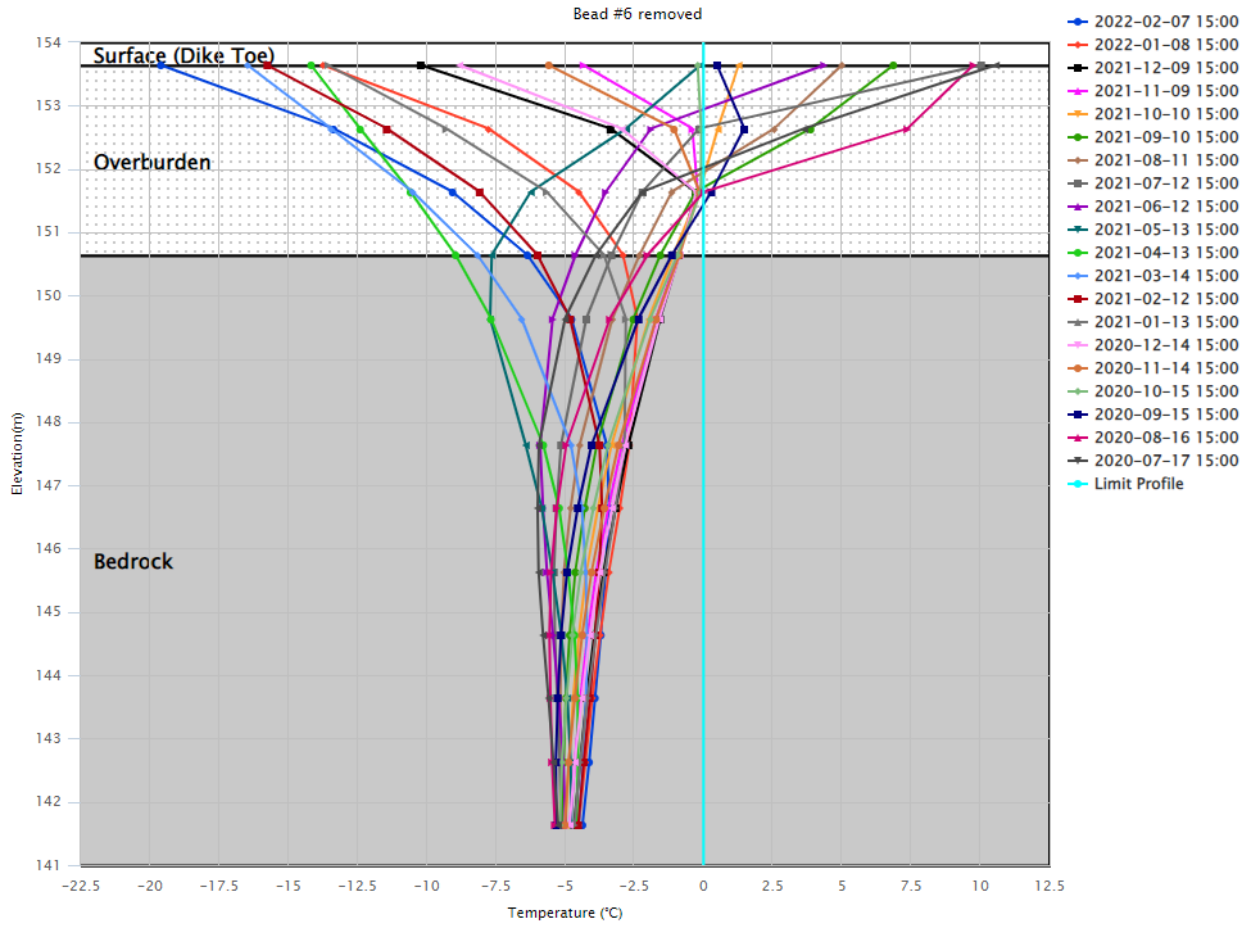
AMQ - WRSFD TH_04



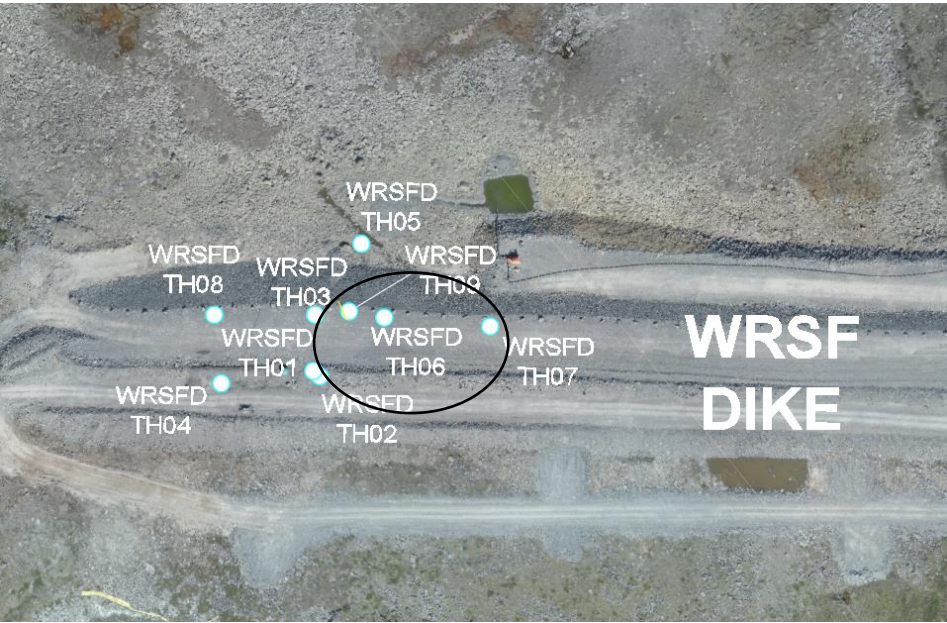
WRSFD TH05



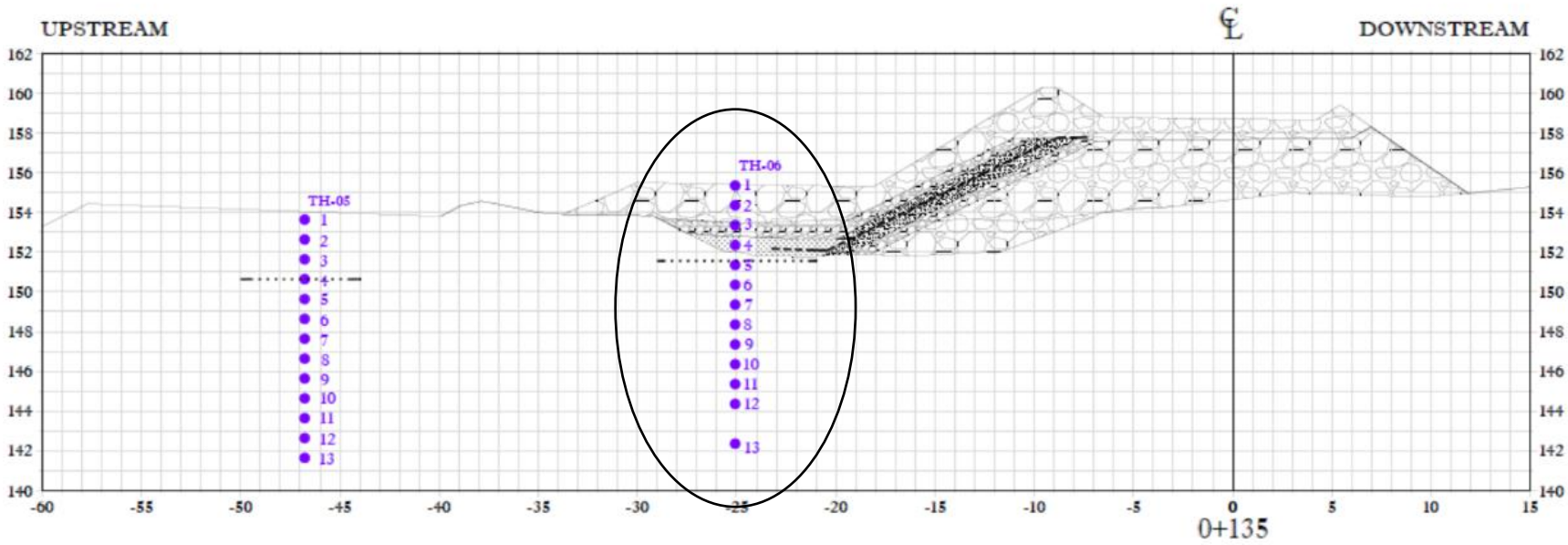
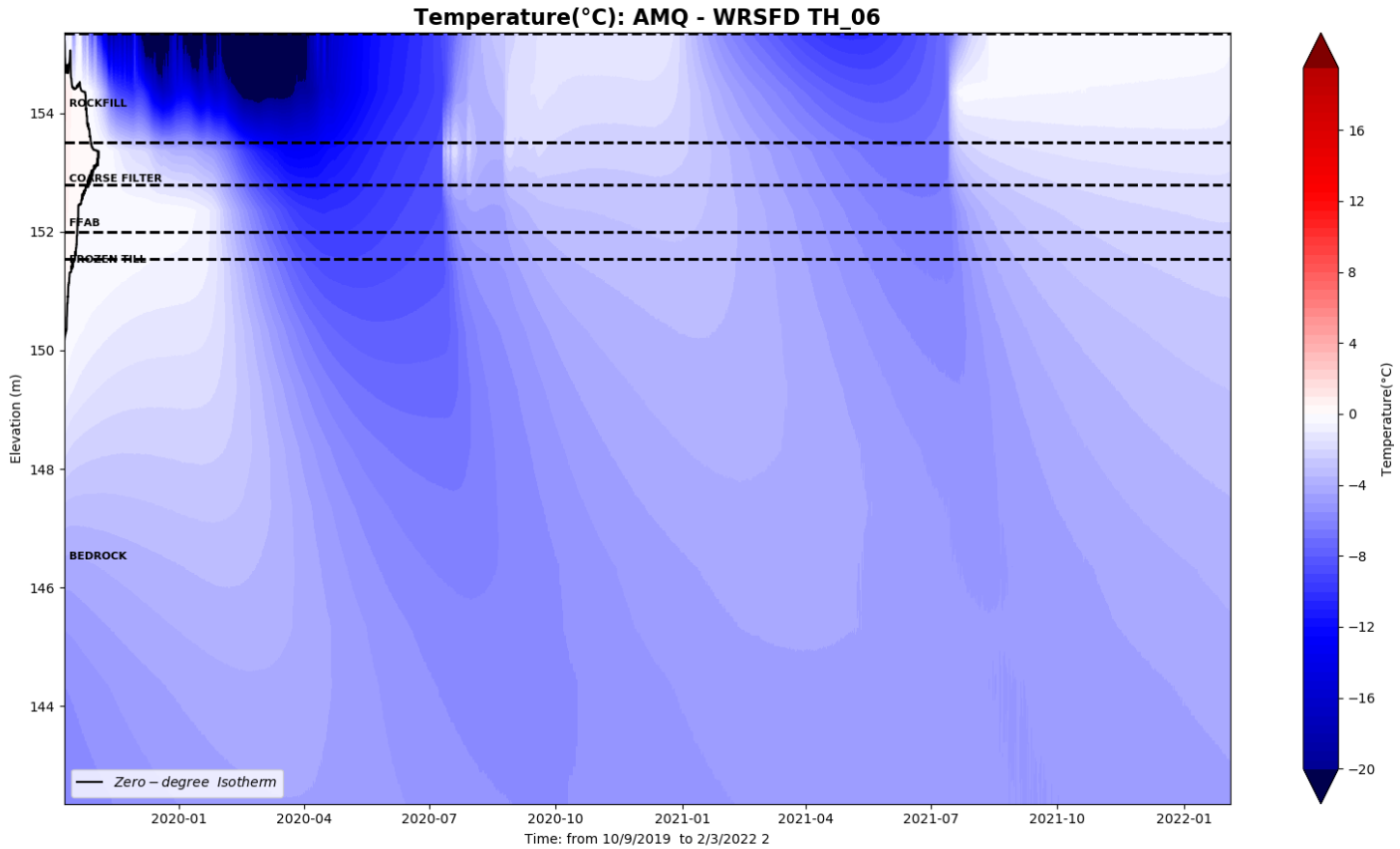
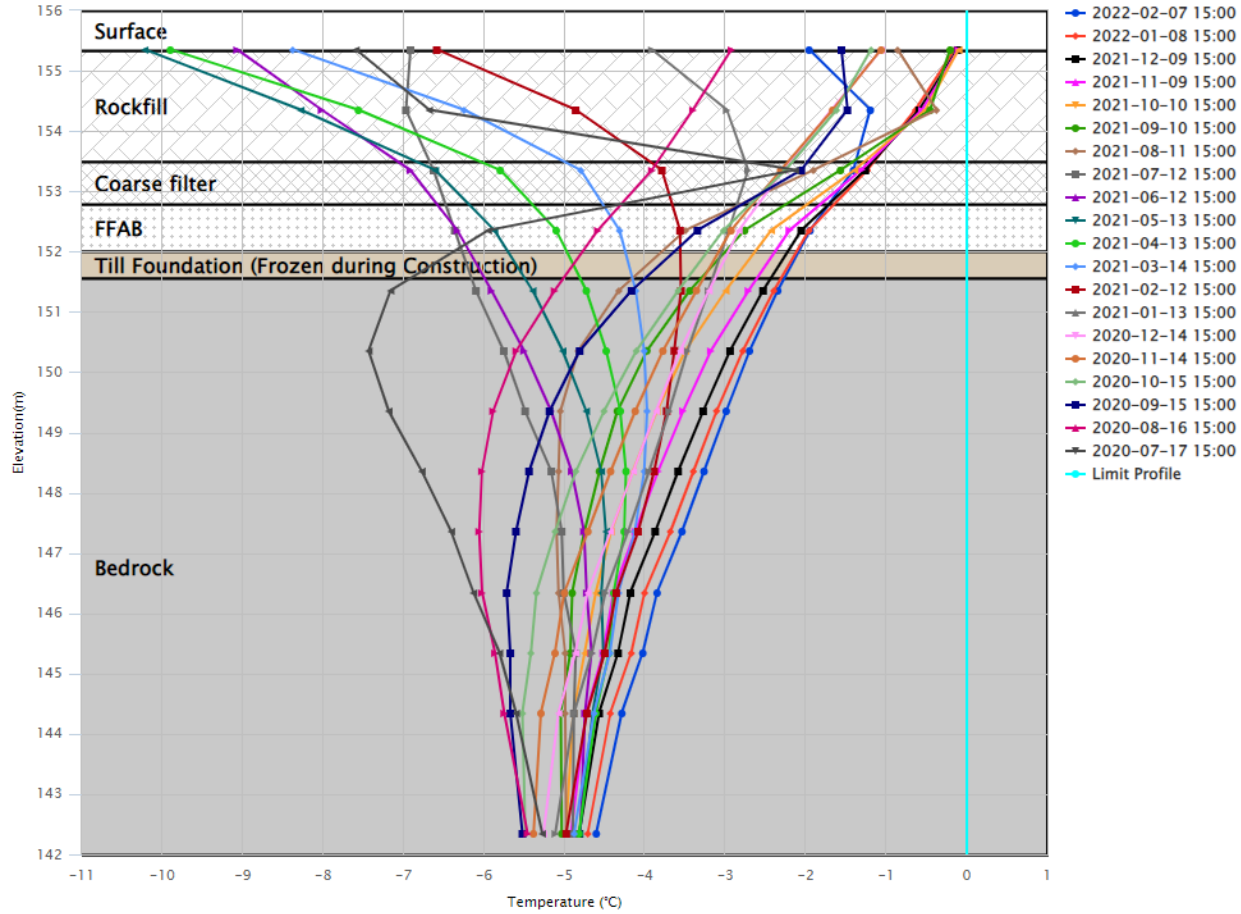
AMQ - WRSFD TH_05



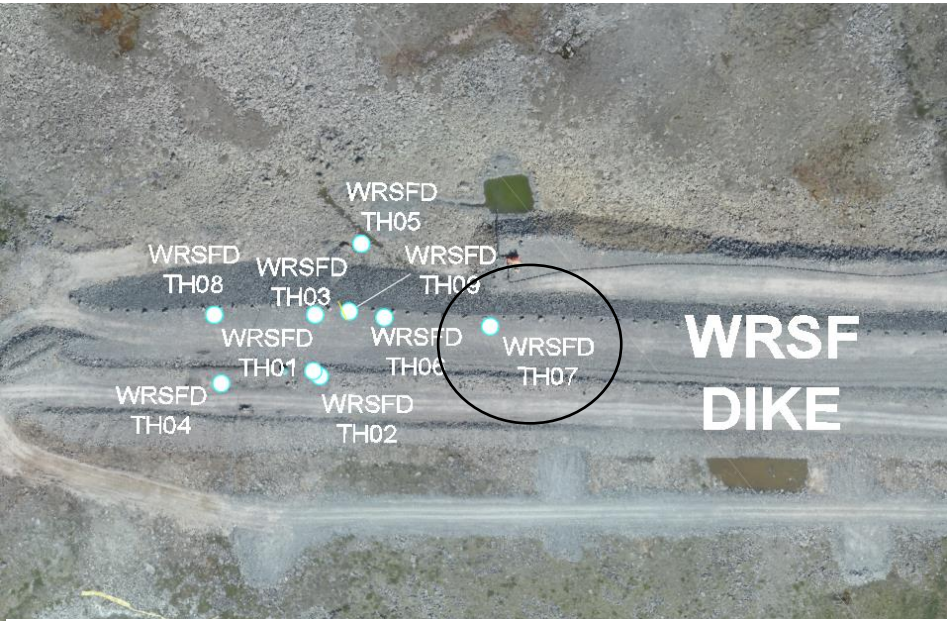
WRSFD TH06



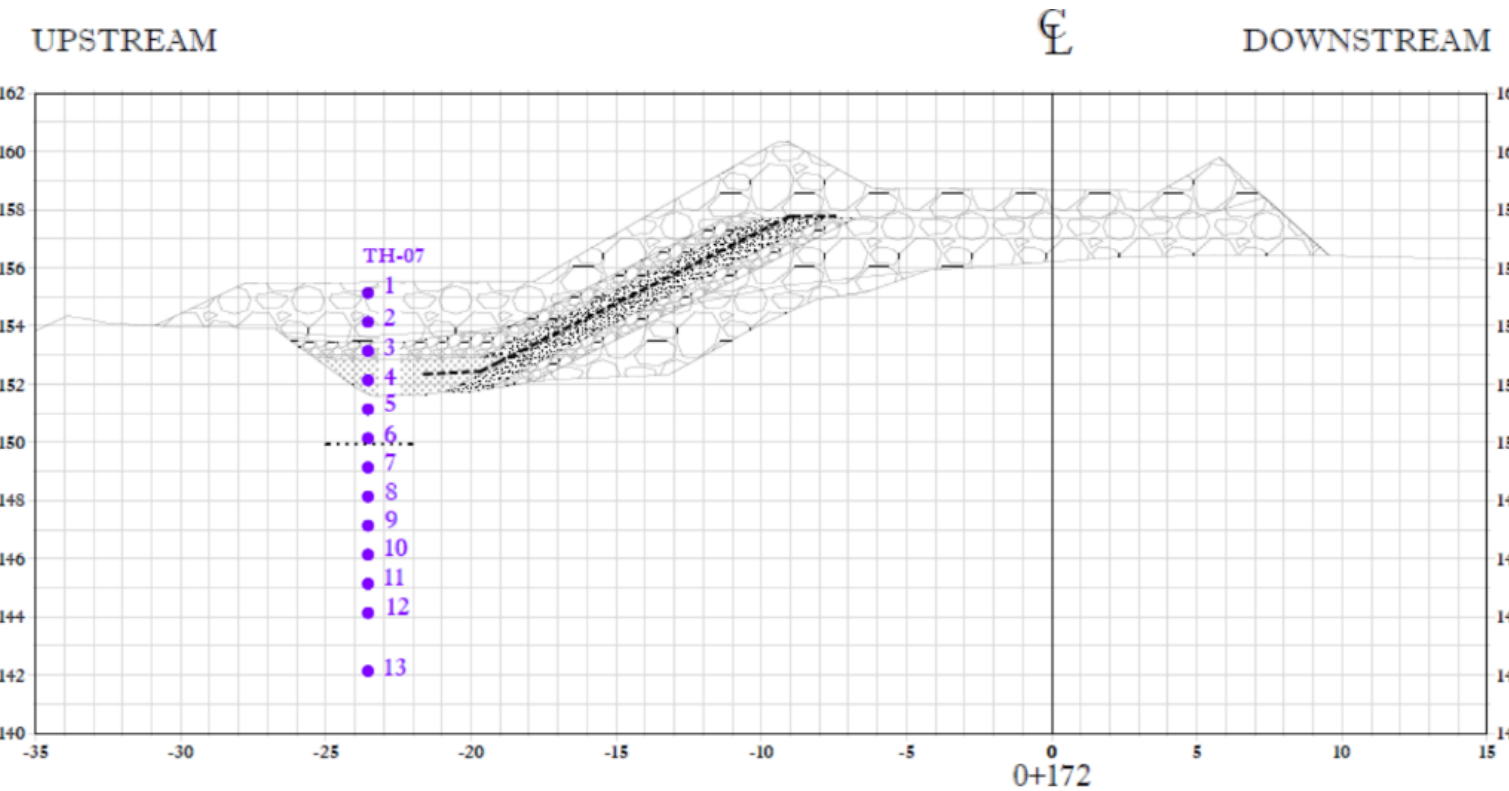
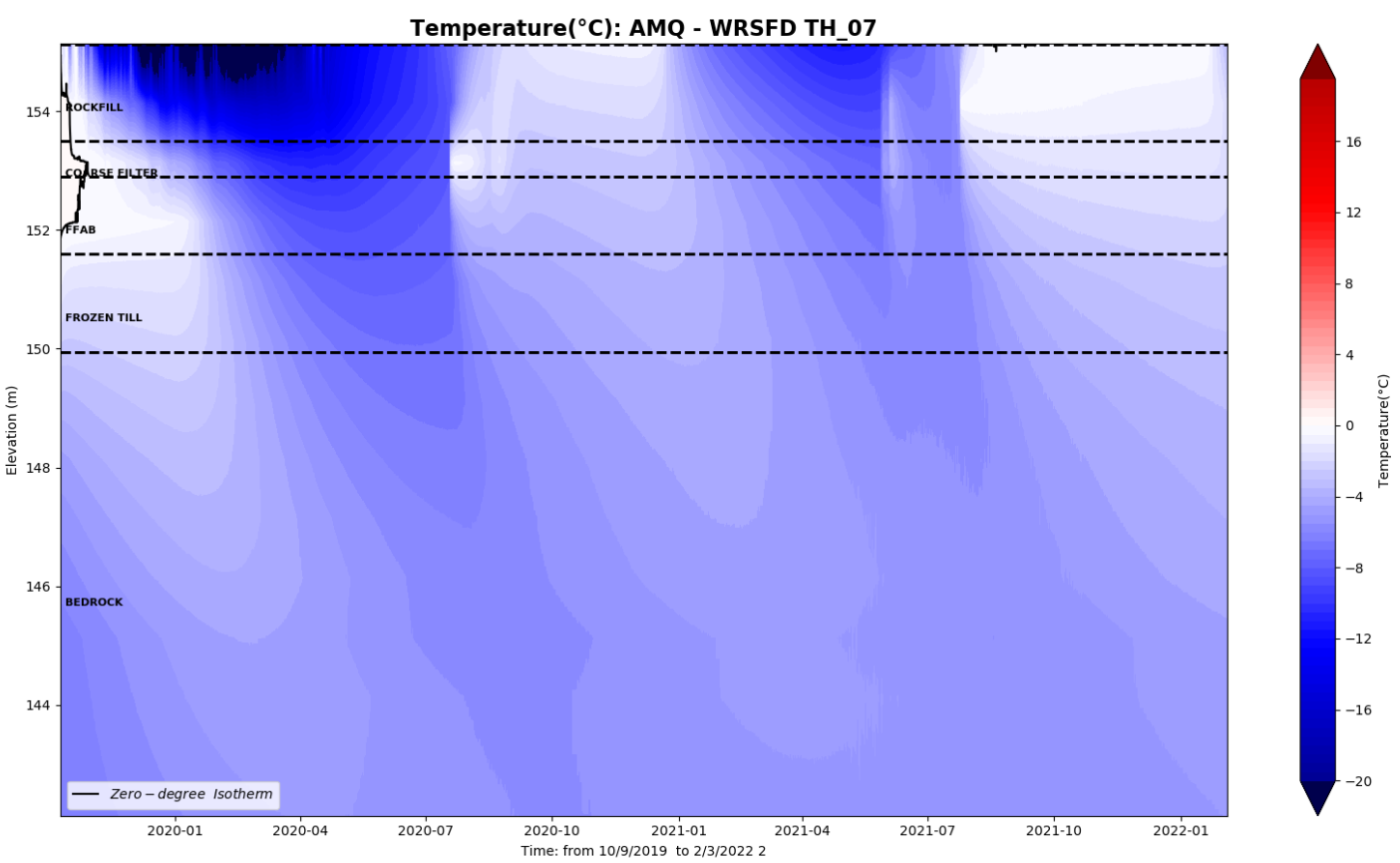
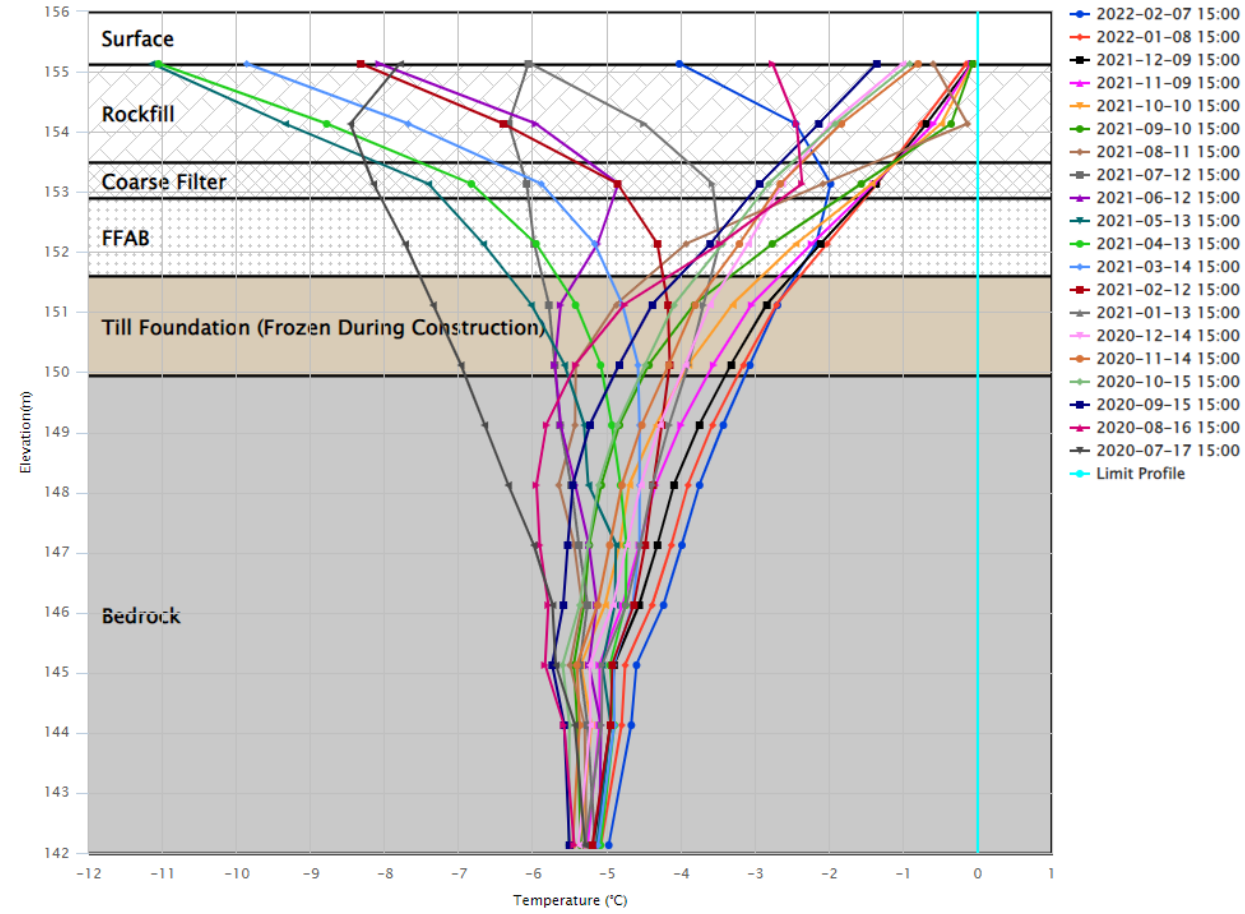
AMQ - WRSFD TH_06



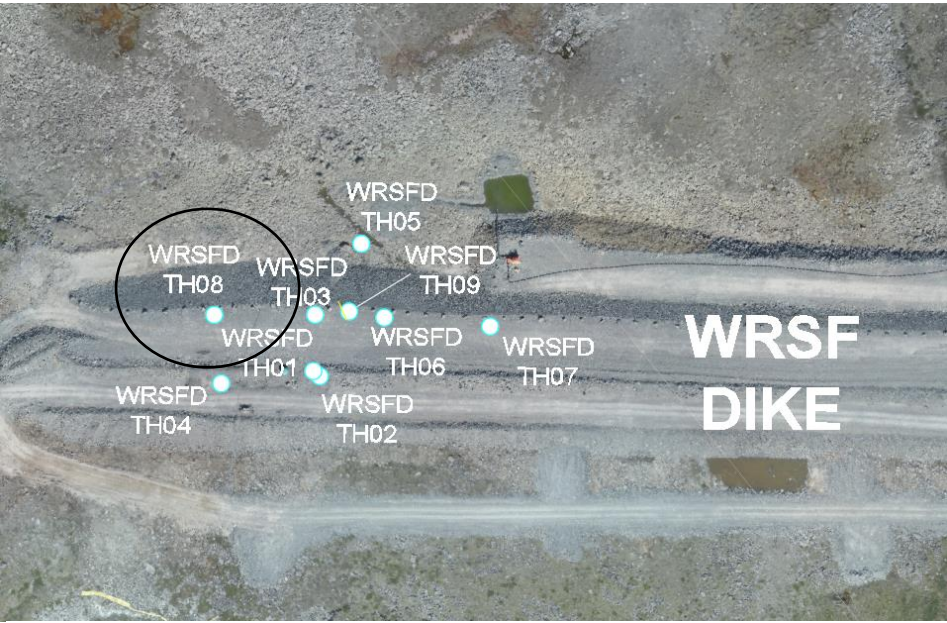
WRSFD TH07



AMQ – WRSFD TH_07

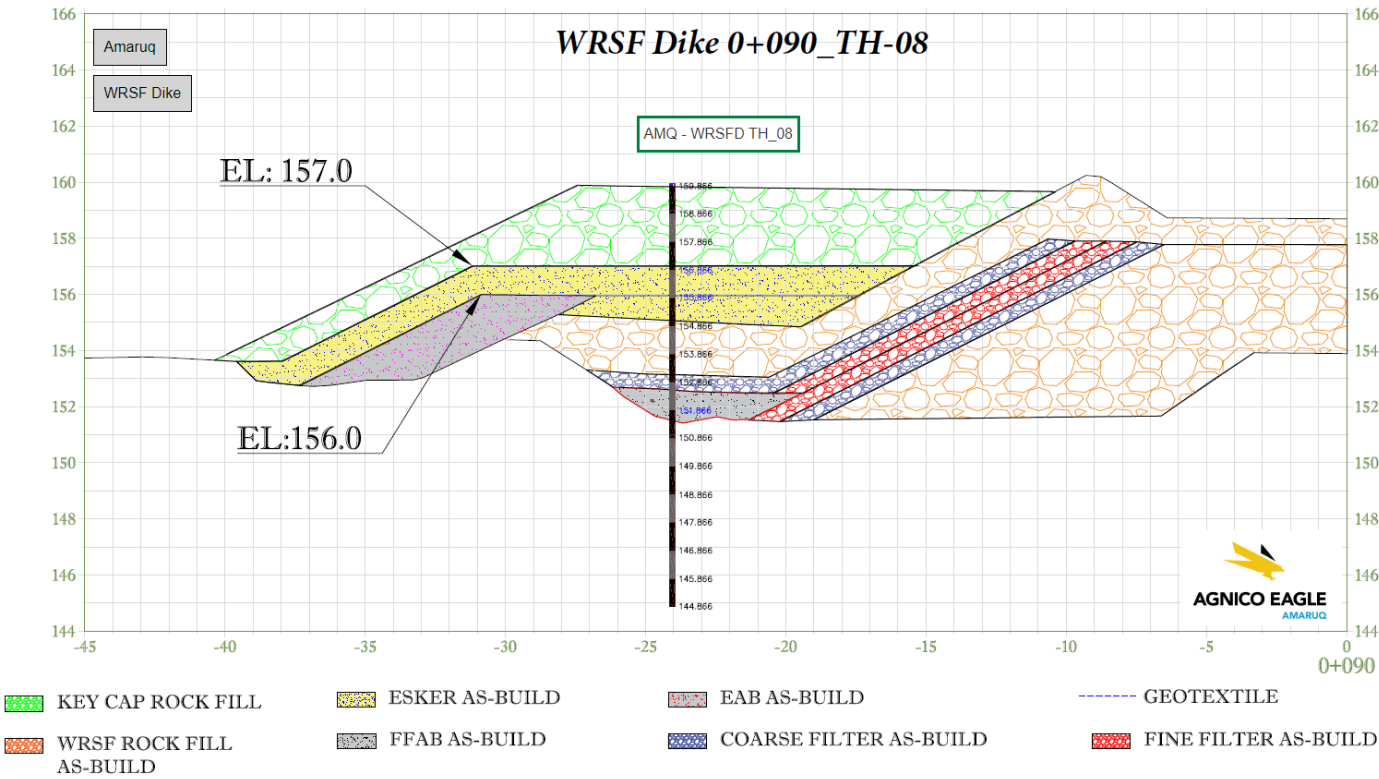
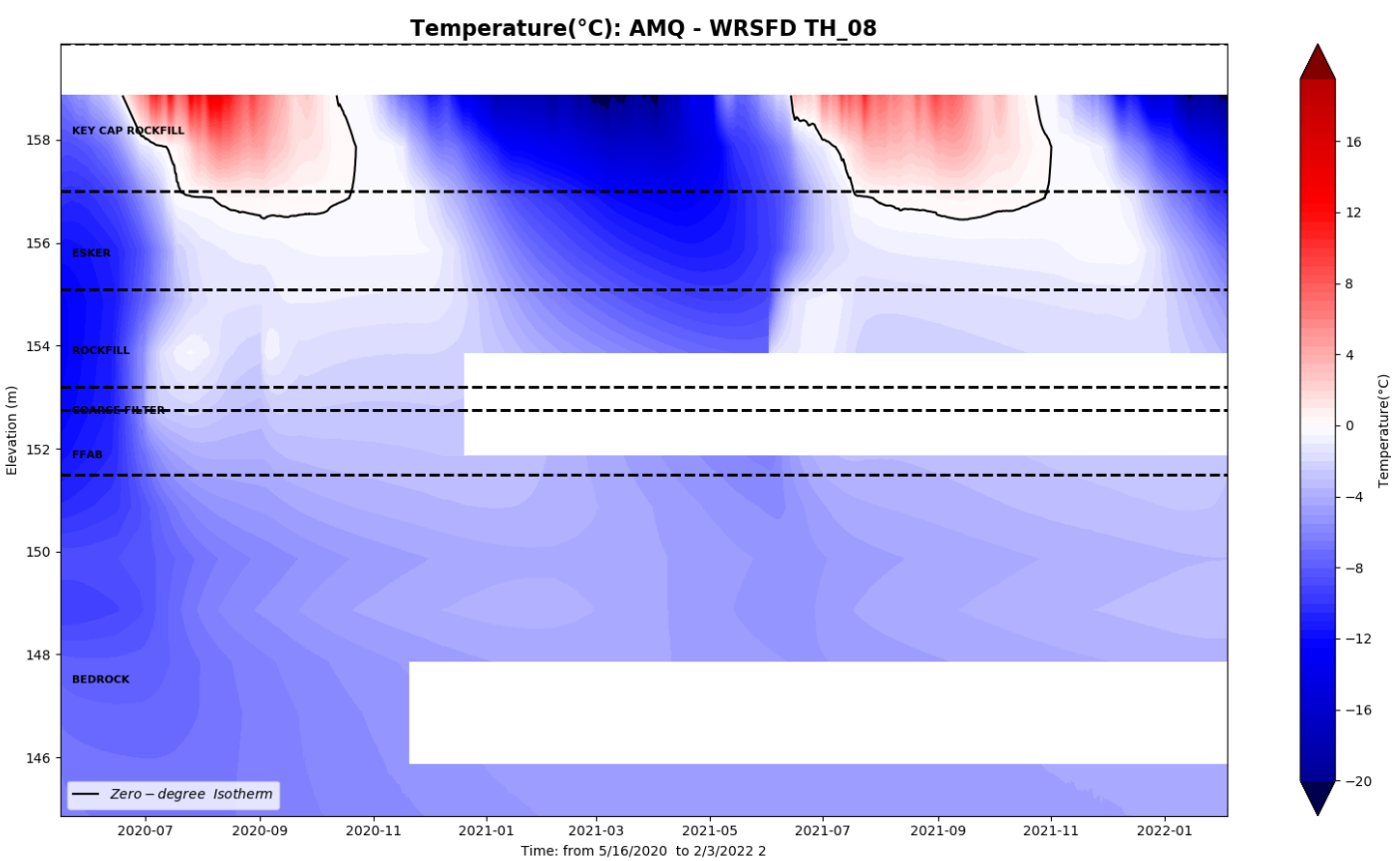
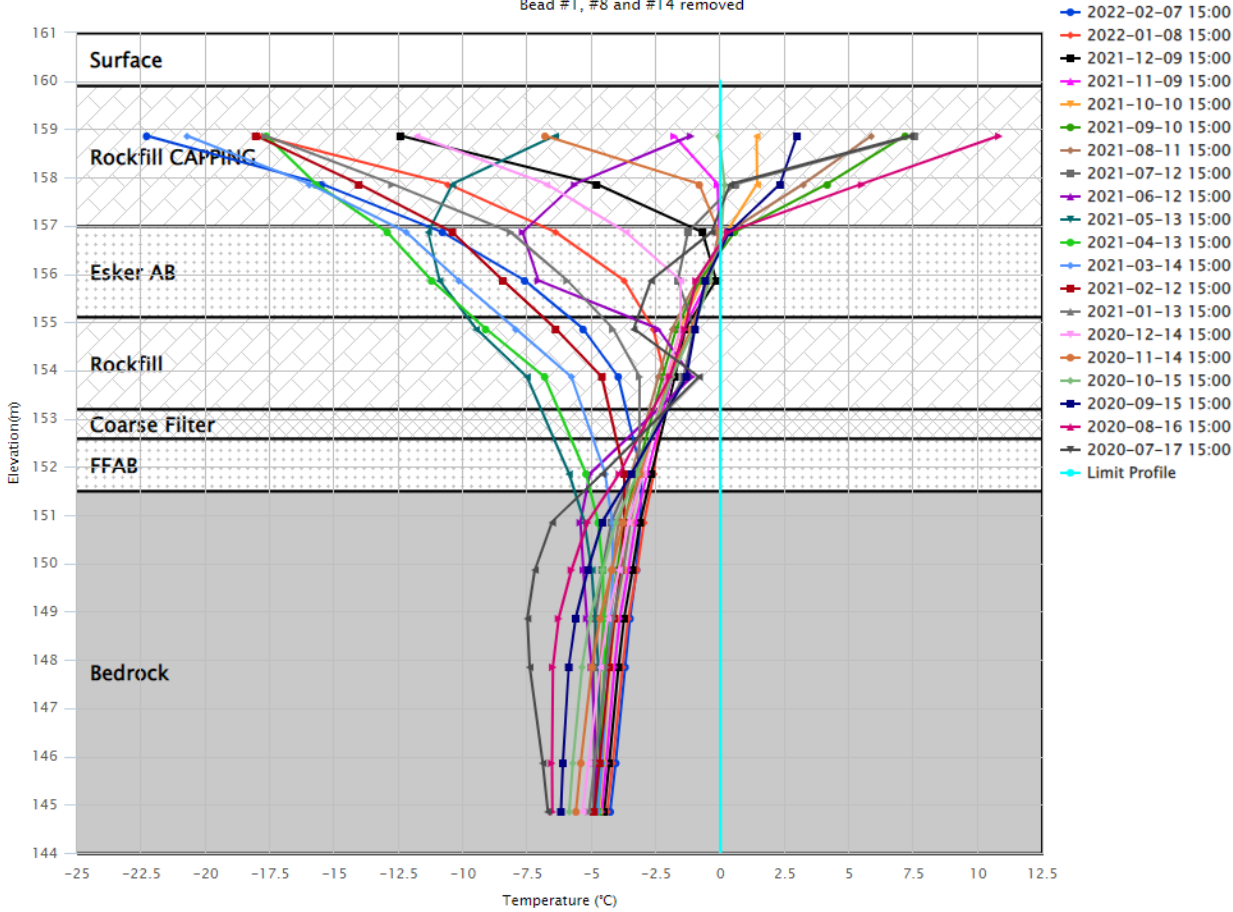


WRSFD TH08

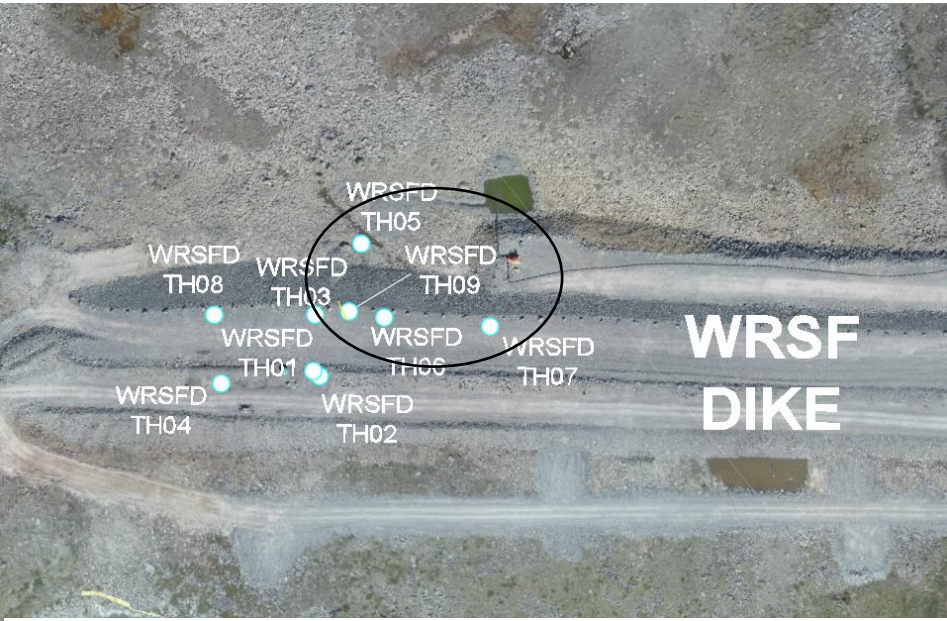


AMQ – WRSFD TH_08

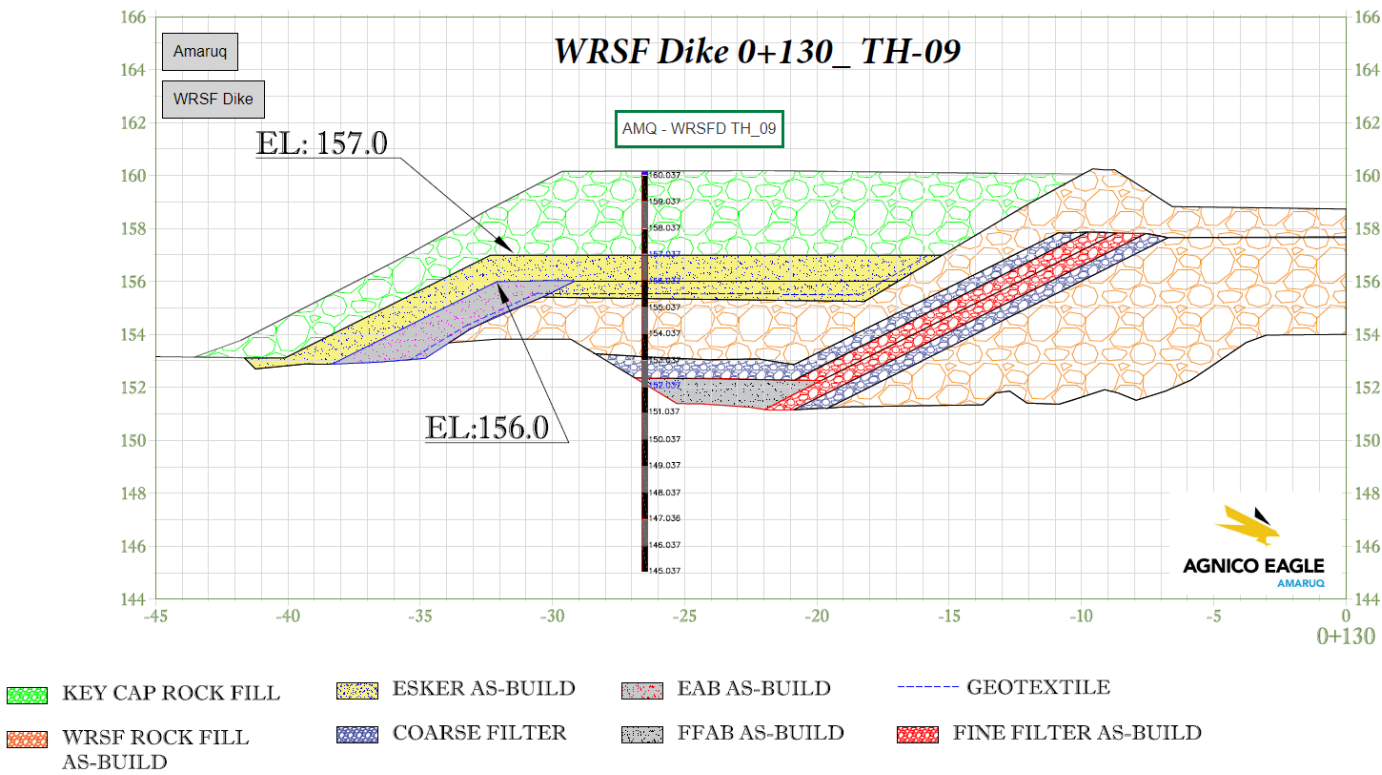
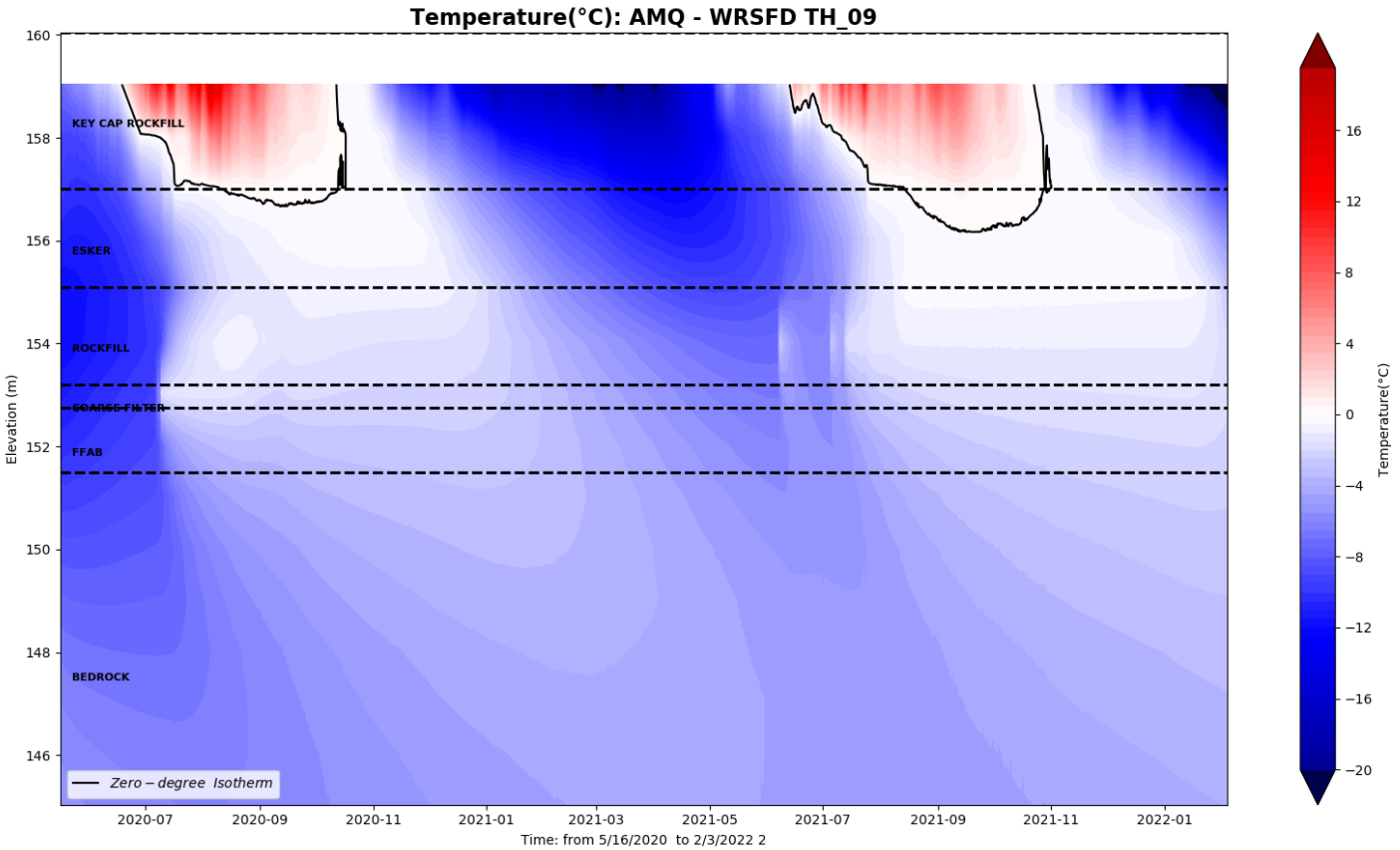
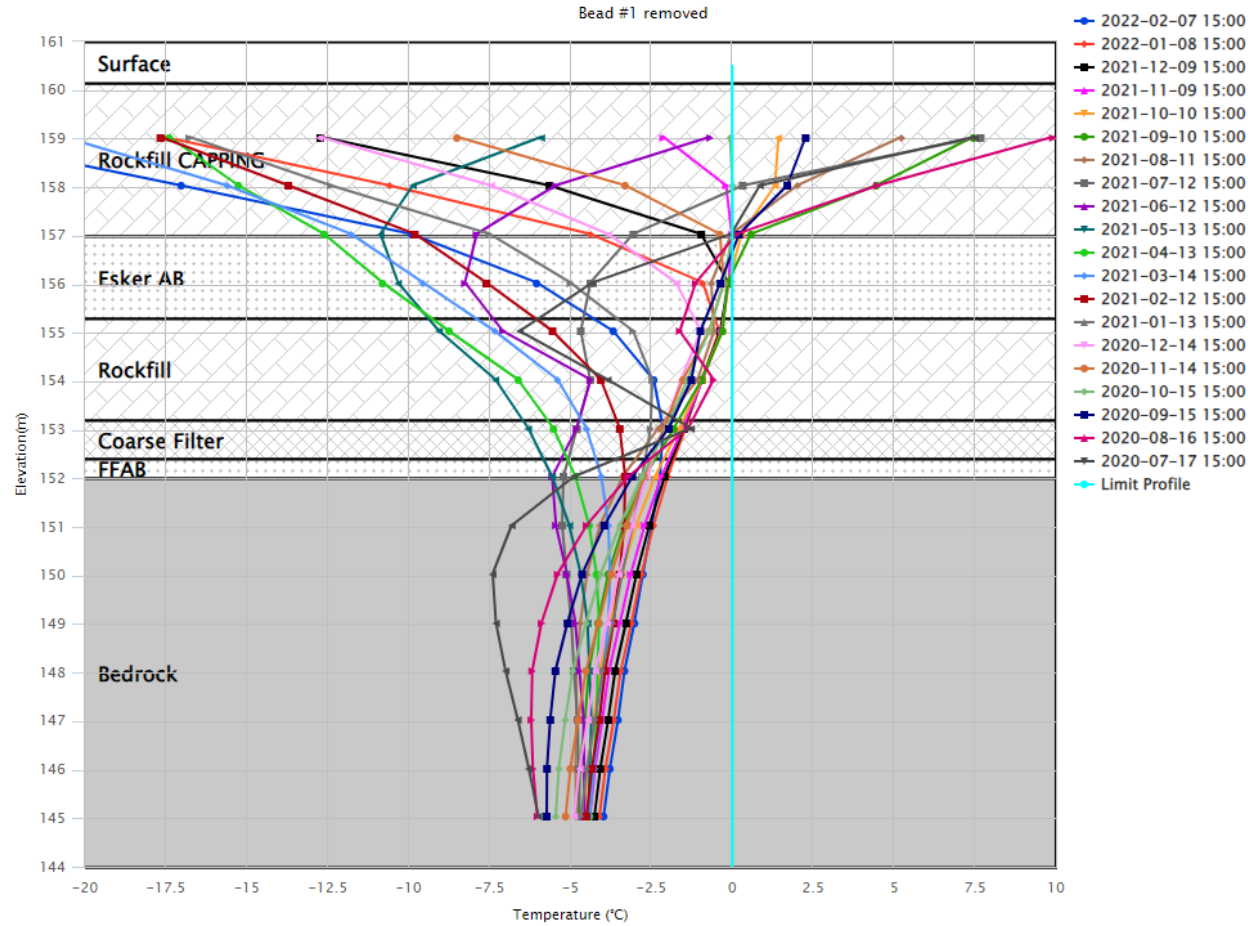
Bead #1, #8 and #14 removed



WRSFD TH09



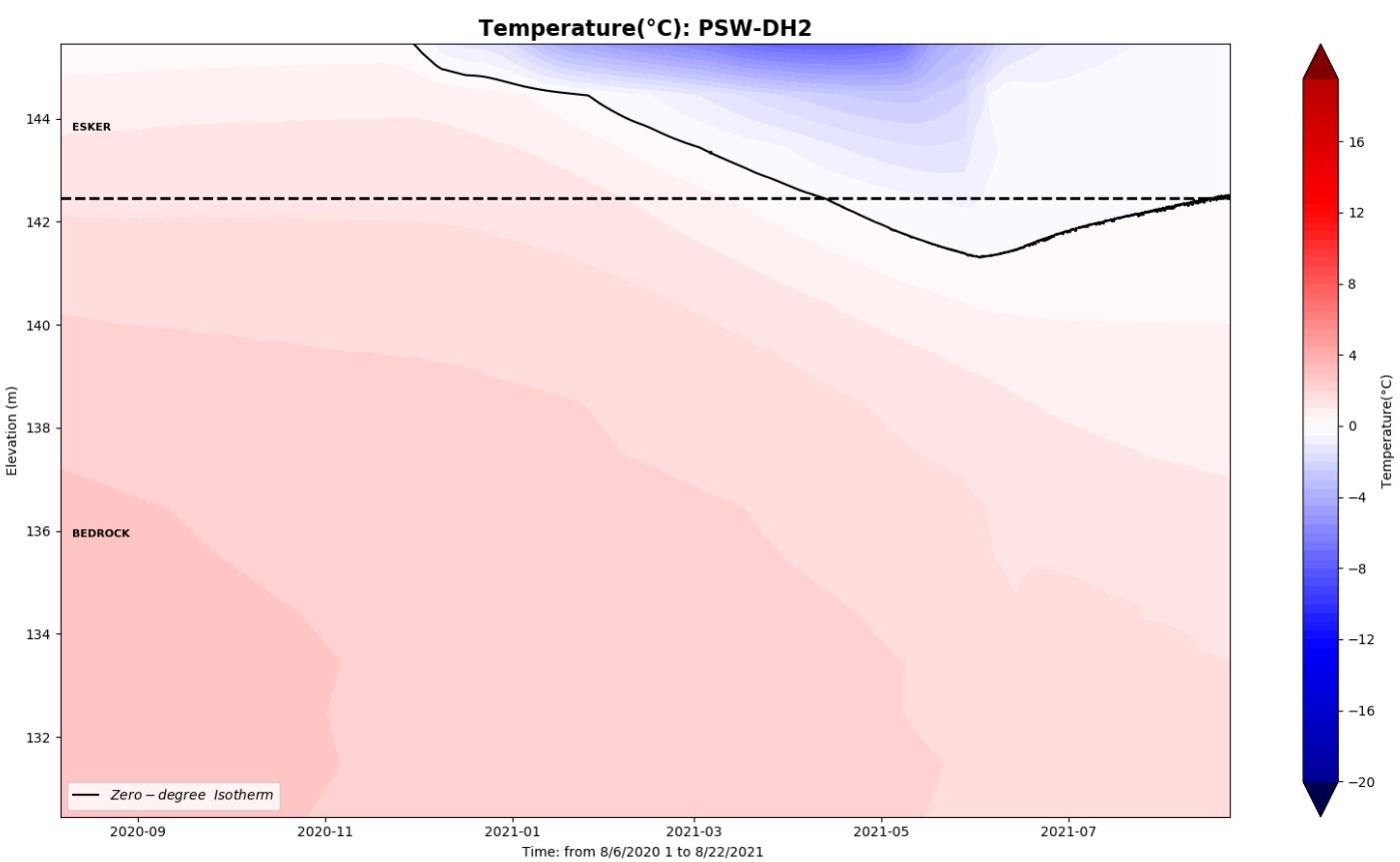
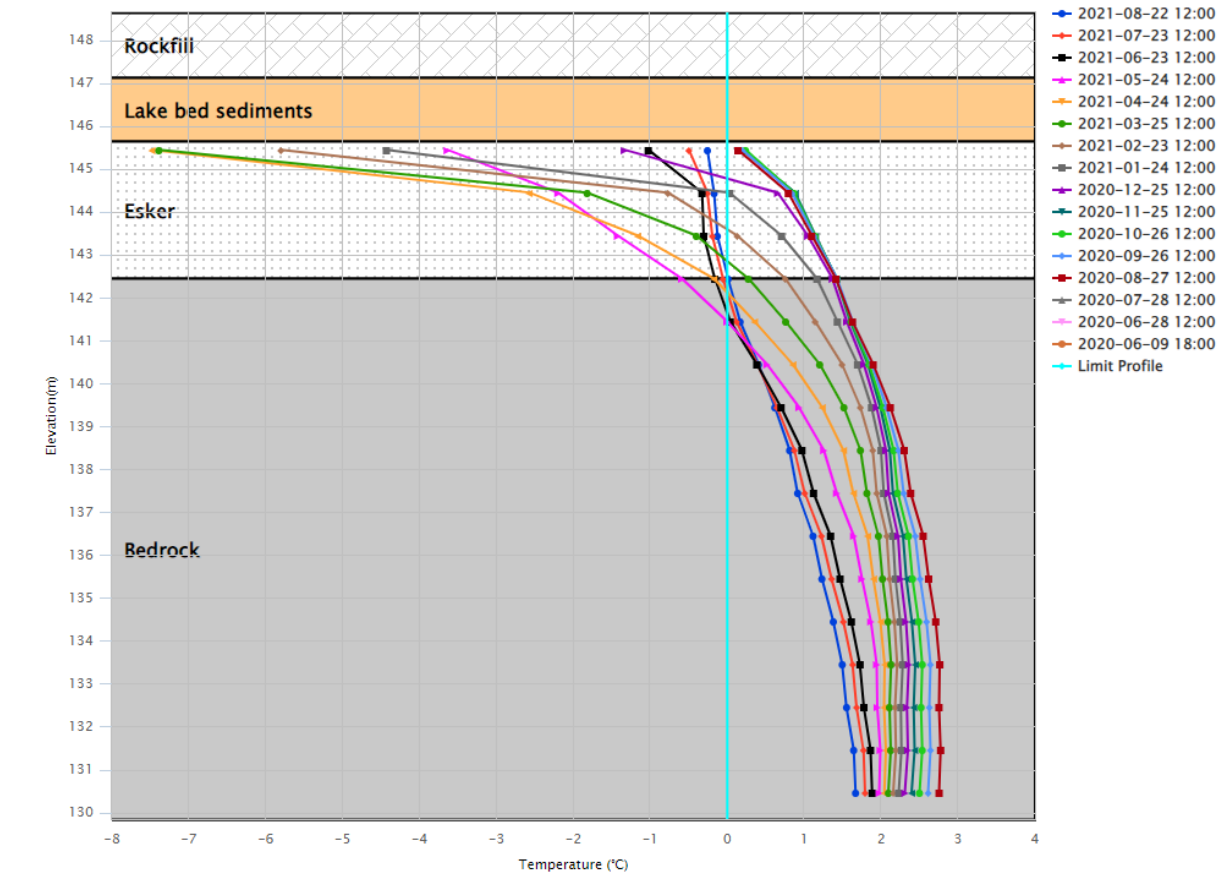
AMQ – WRSFD TH_09



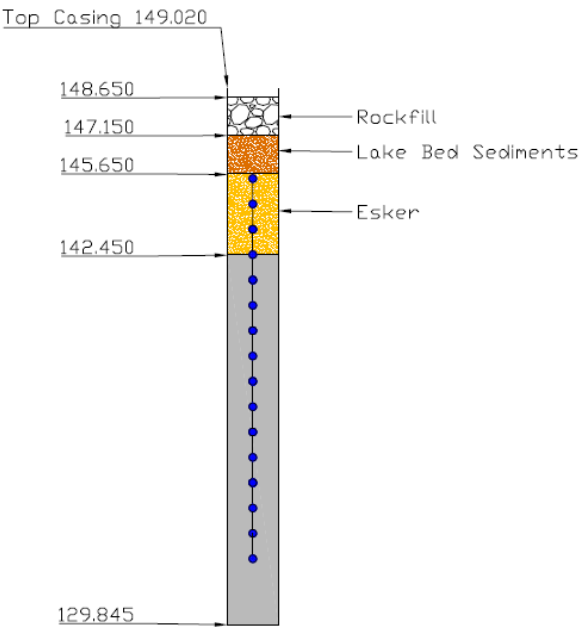
PSW – DH 2 TH



AMQ – PSW – DH02_TH



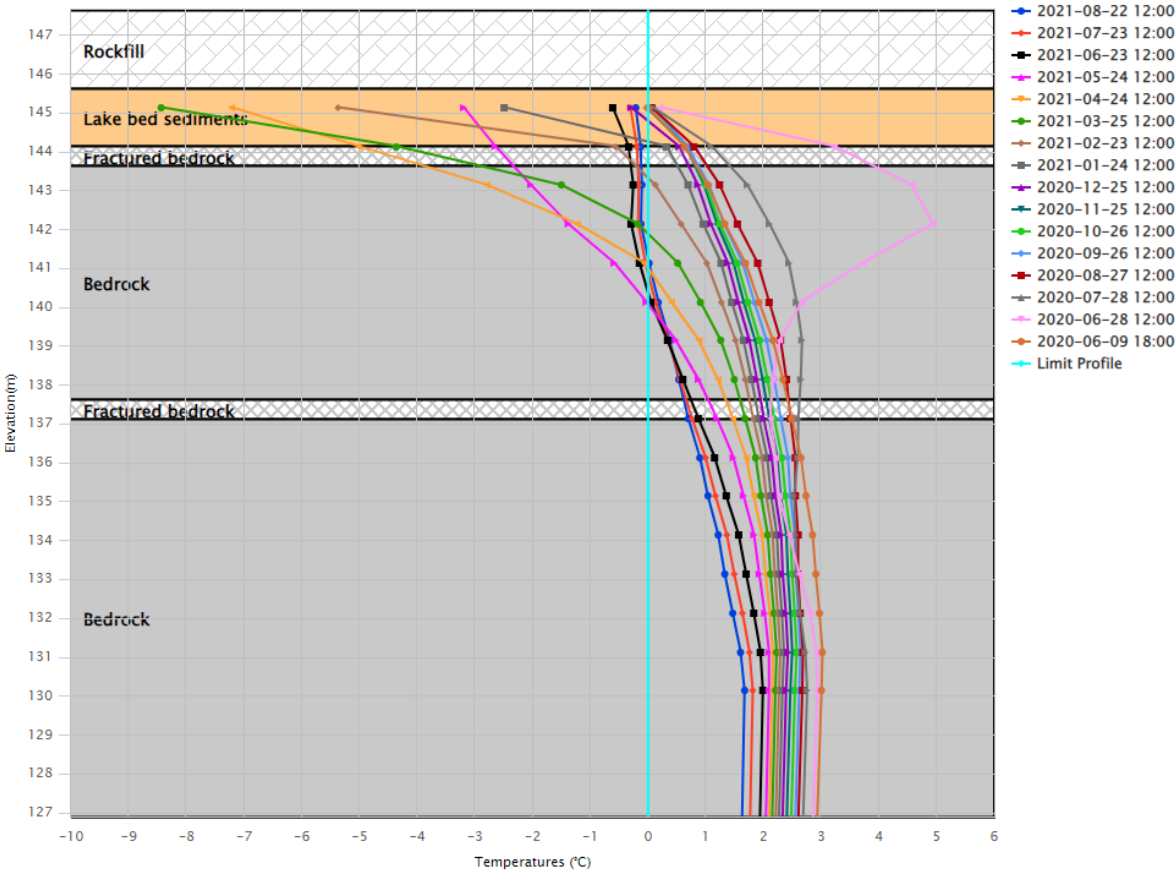
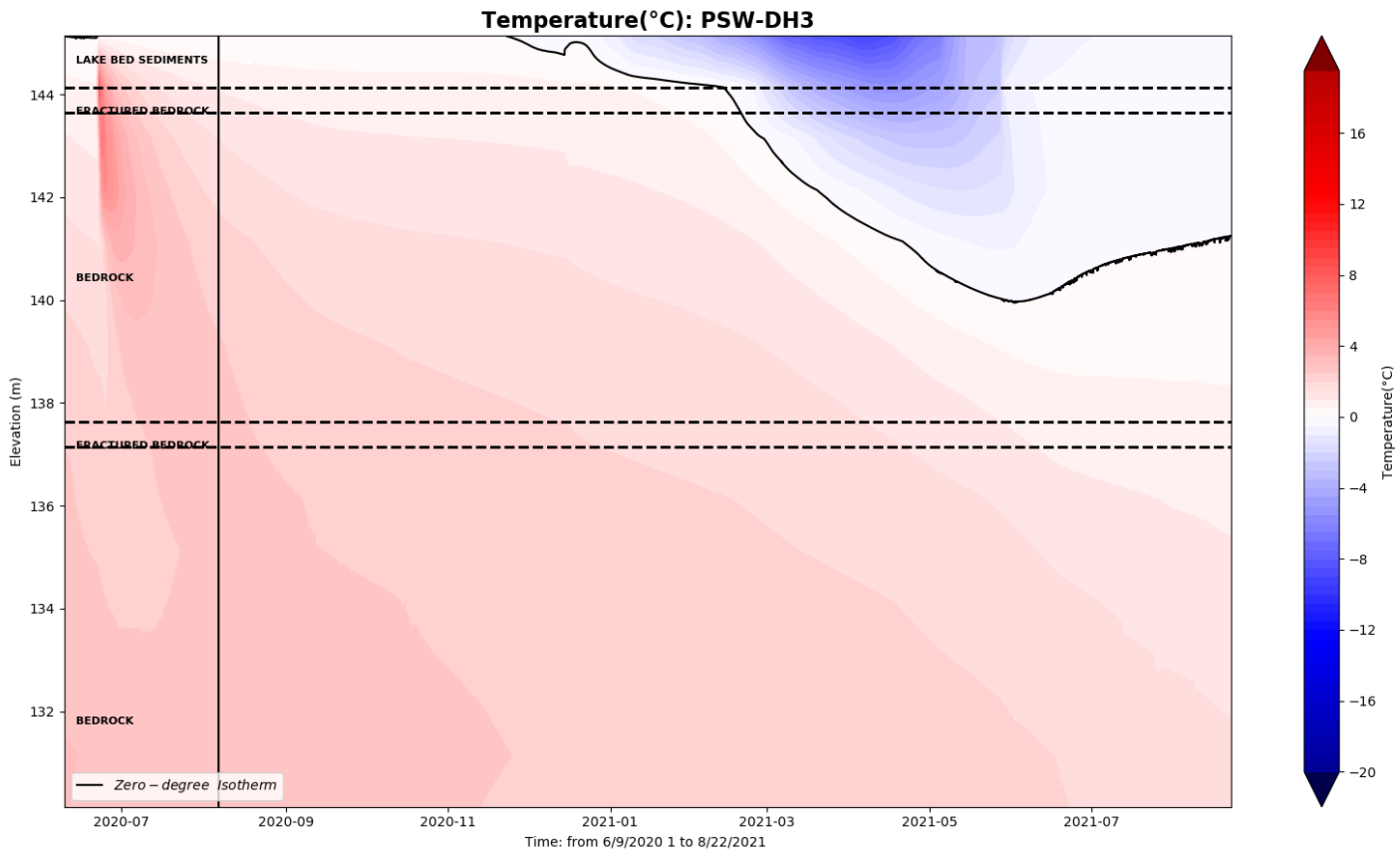
DH-2



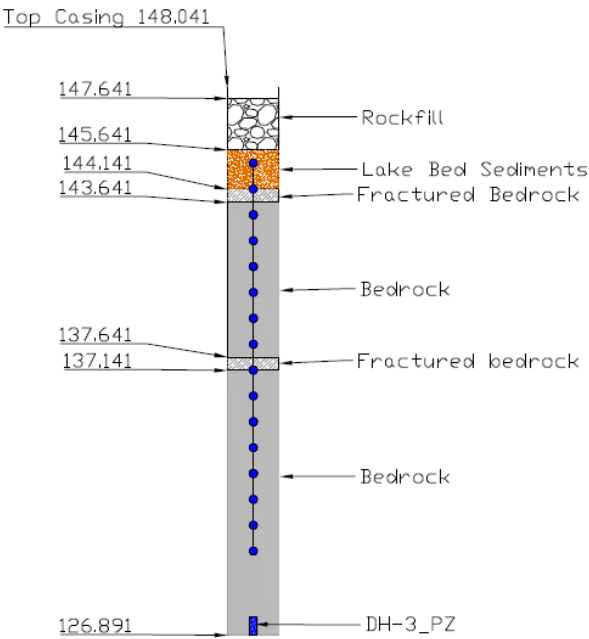
PSW – DH 3 TH



AMQ – PSW – DH03_TH



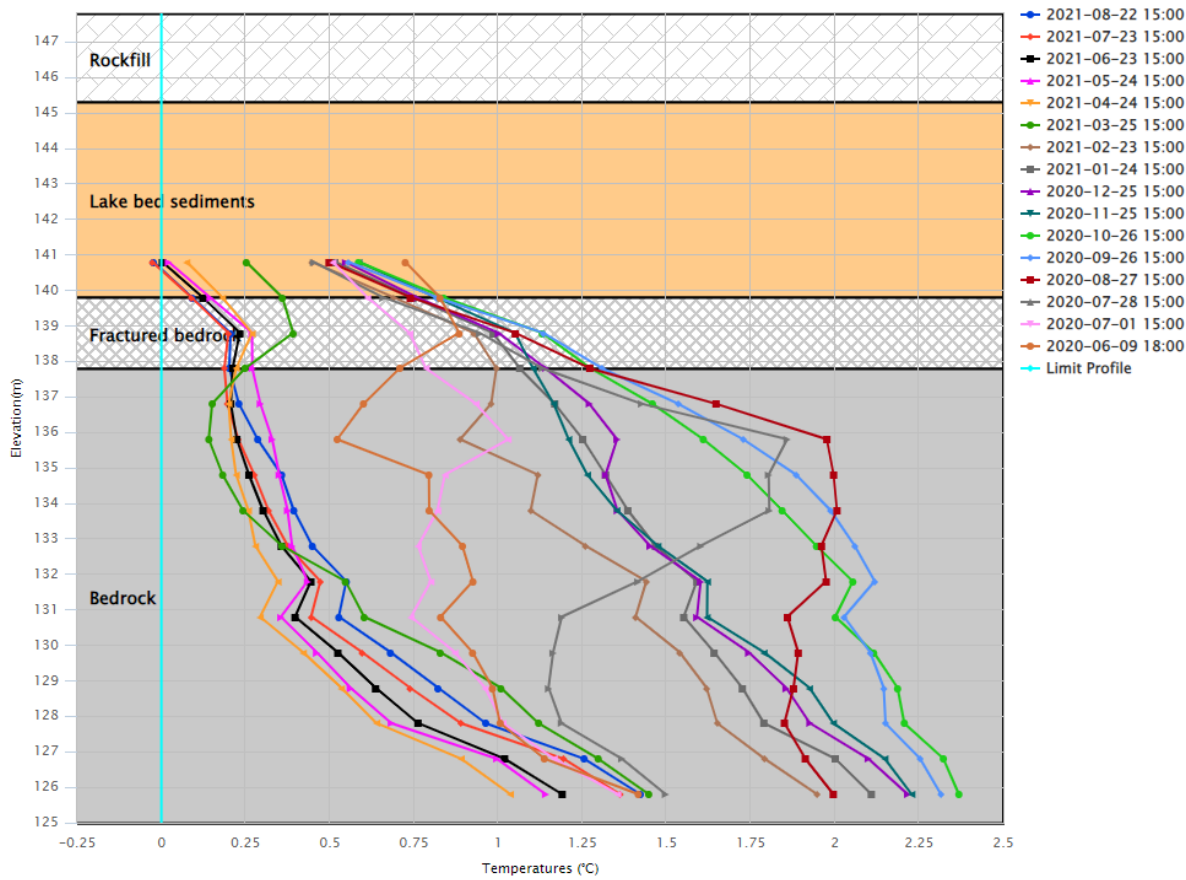
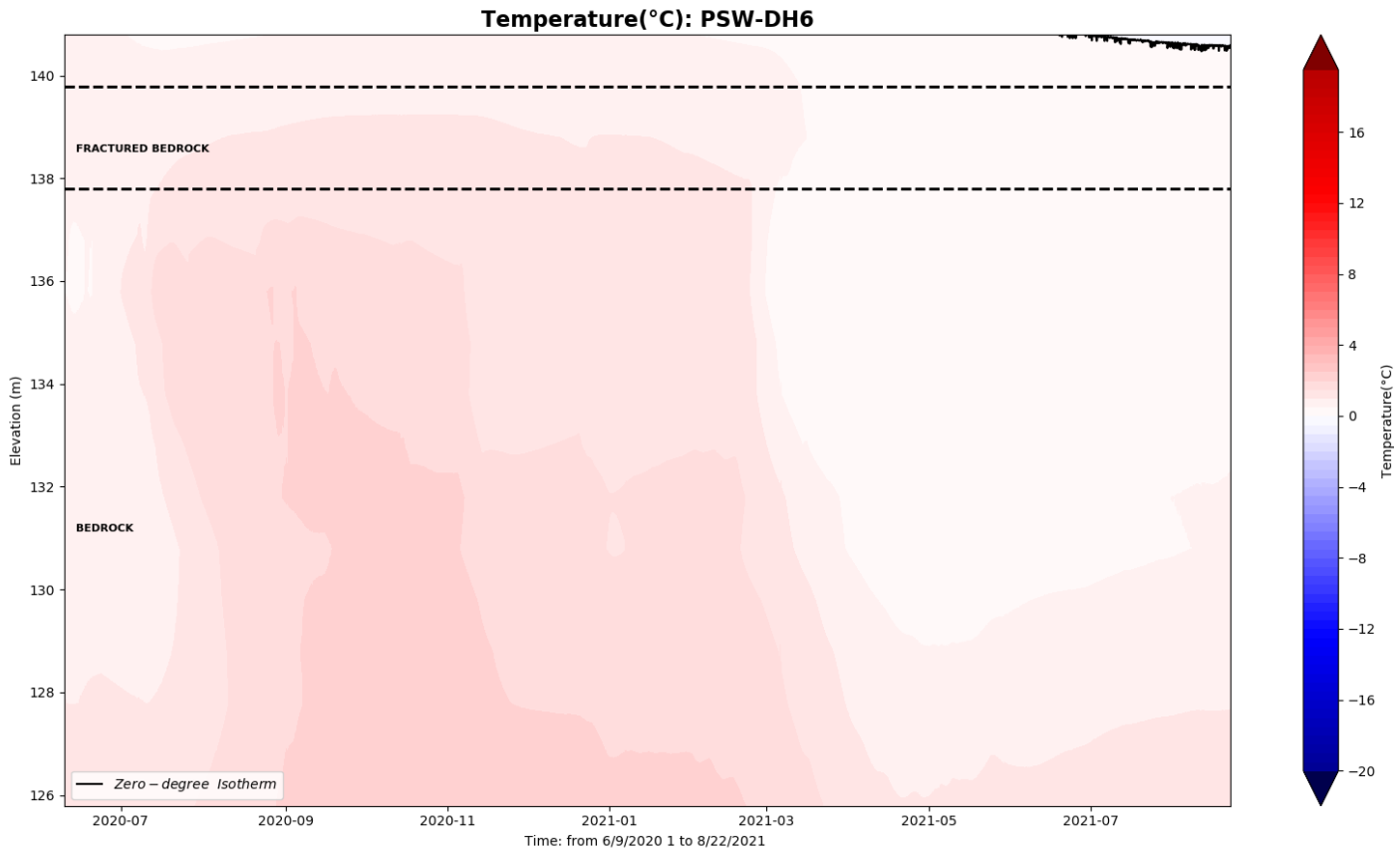
DH-3



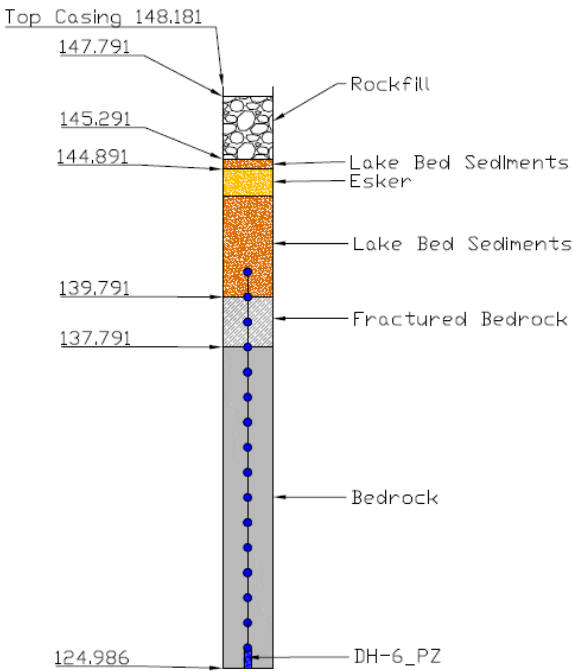
PSW – DH 6 TH



AMQ – PSW – DH06_TH



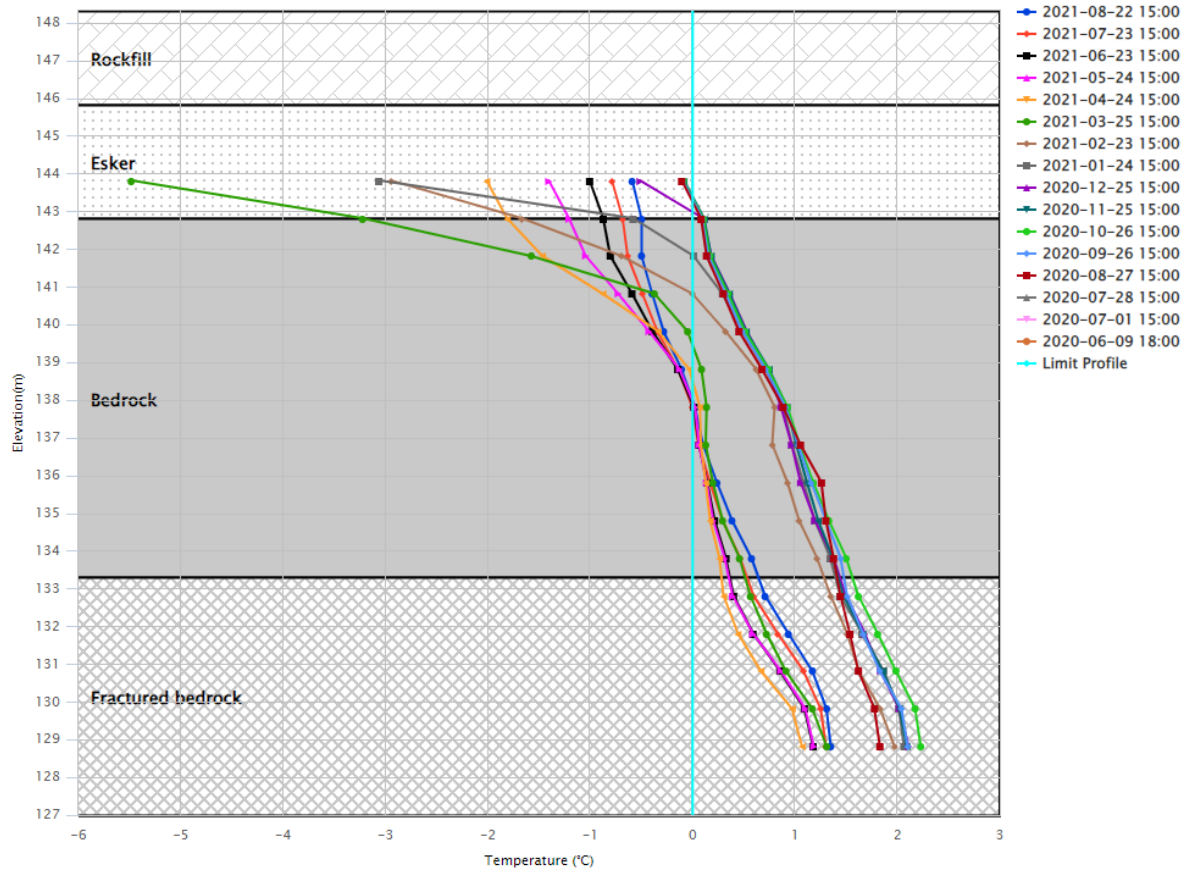
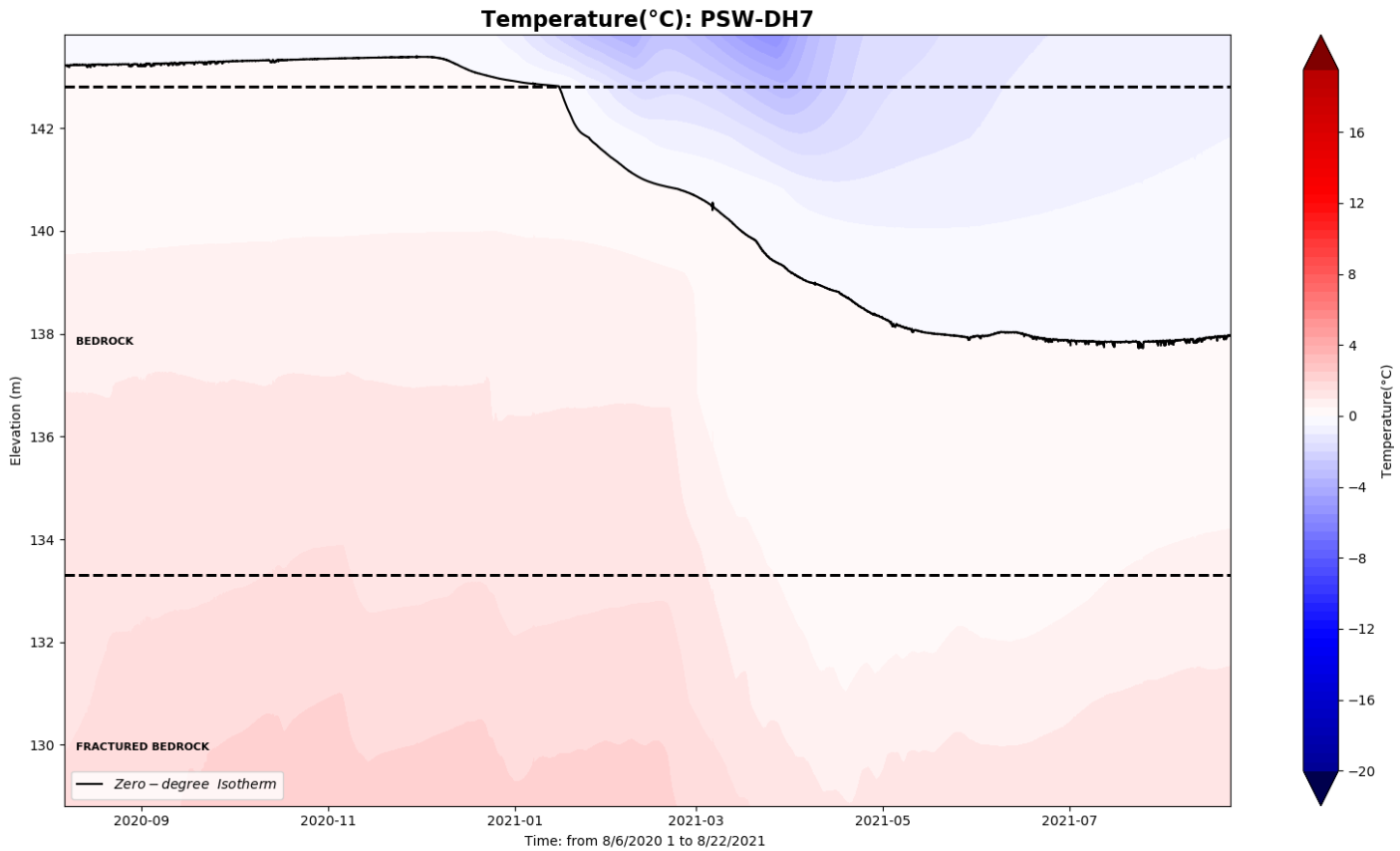
DH-6



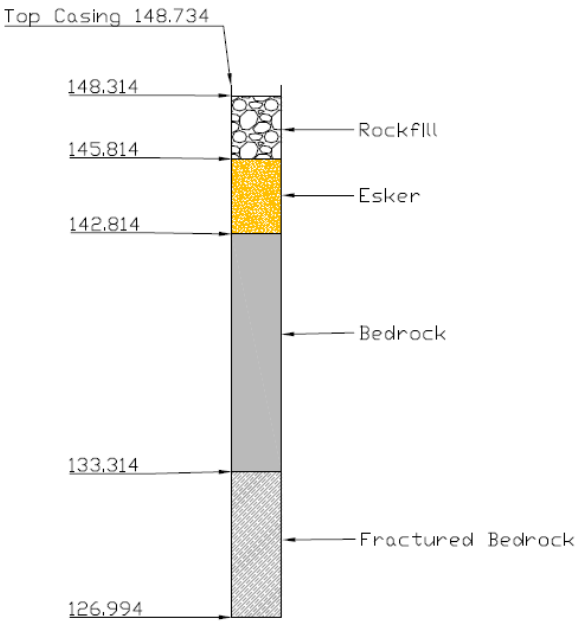
PSW – DH 7 TH



AMQ – PSW – DH07_TH



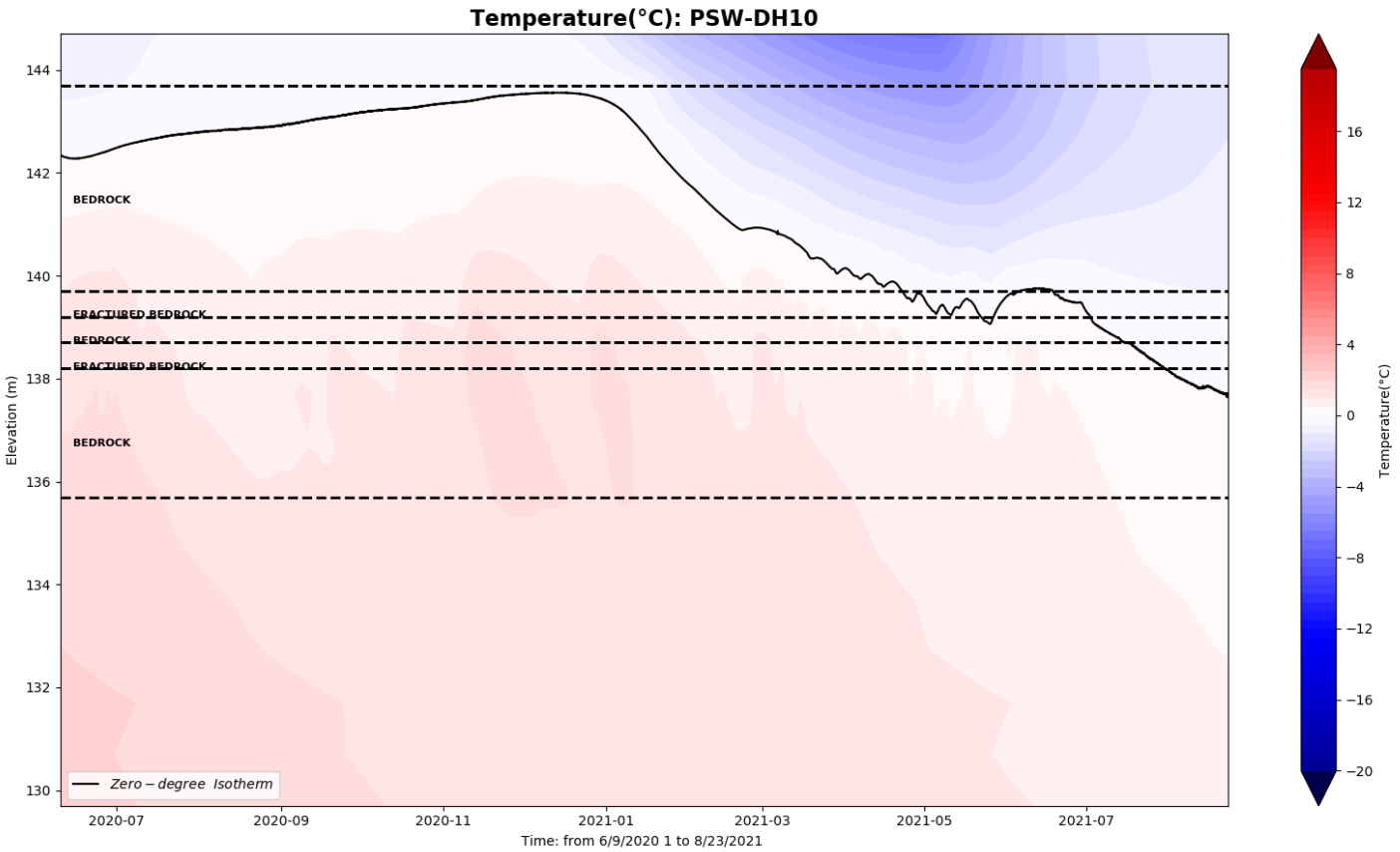
DH-7



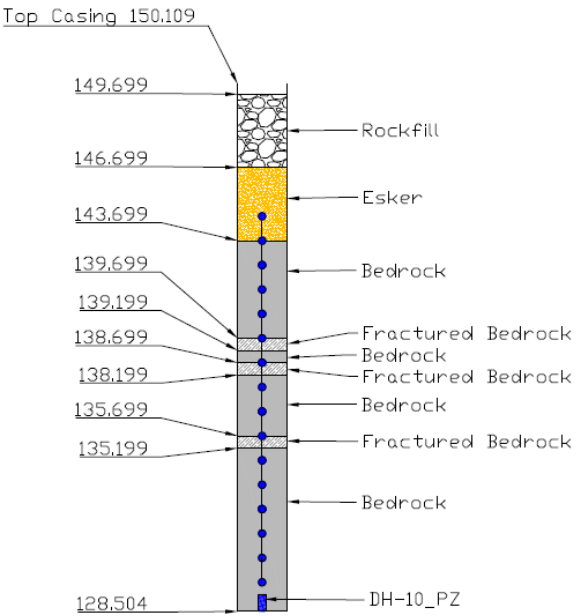
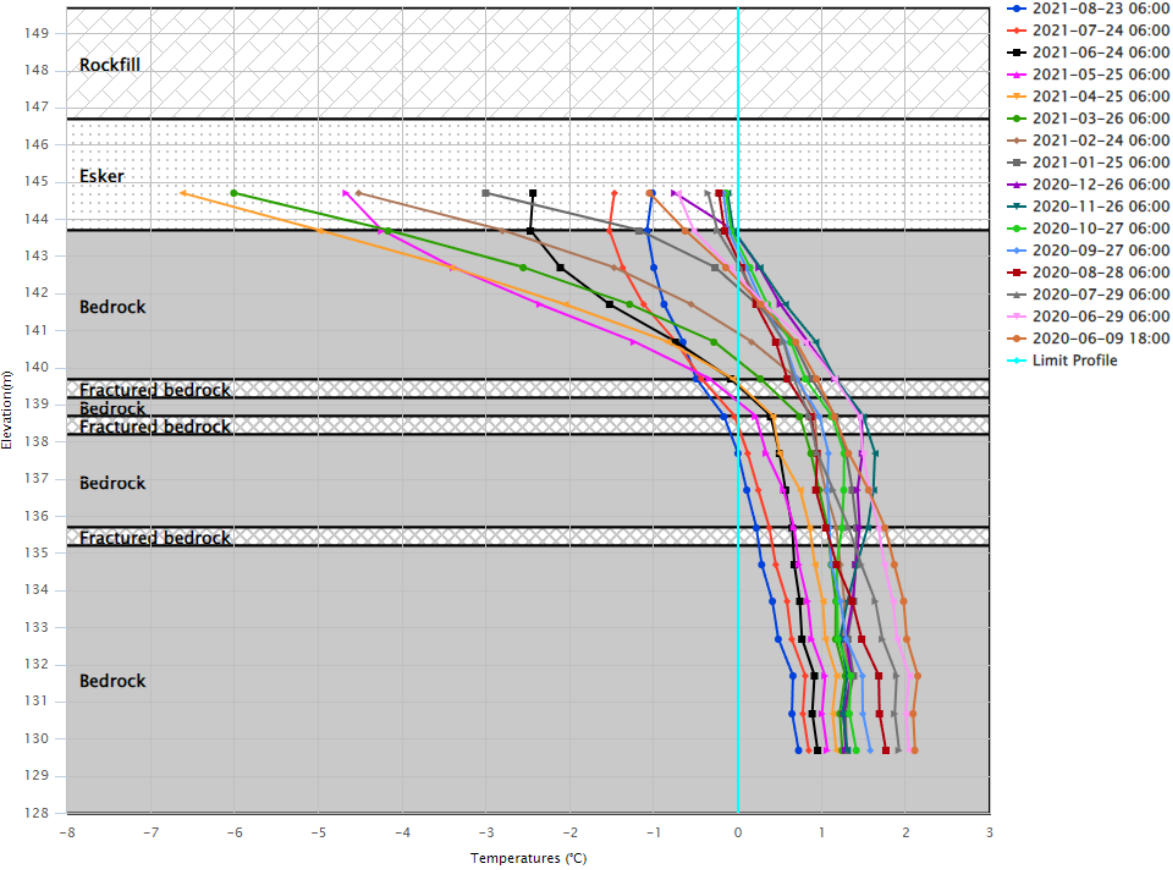
PSW – DH 10 TH



AMQ – PSW – DH10_TH



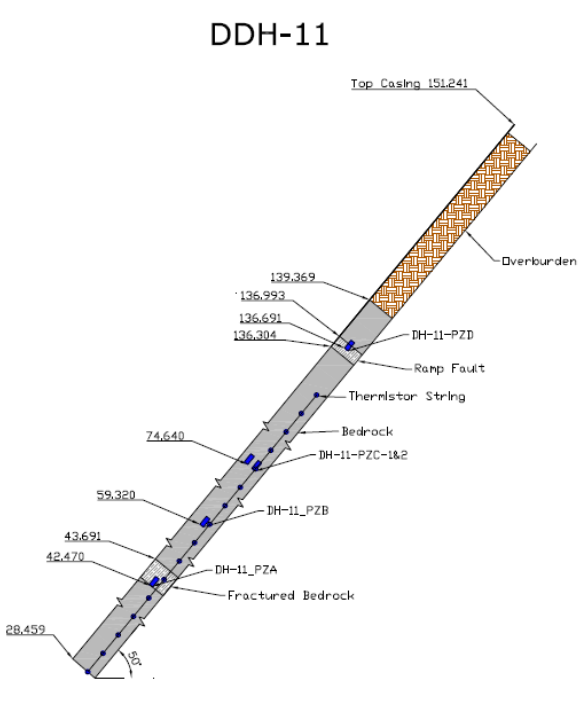
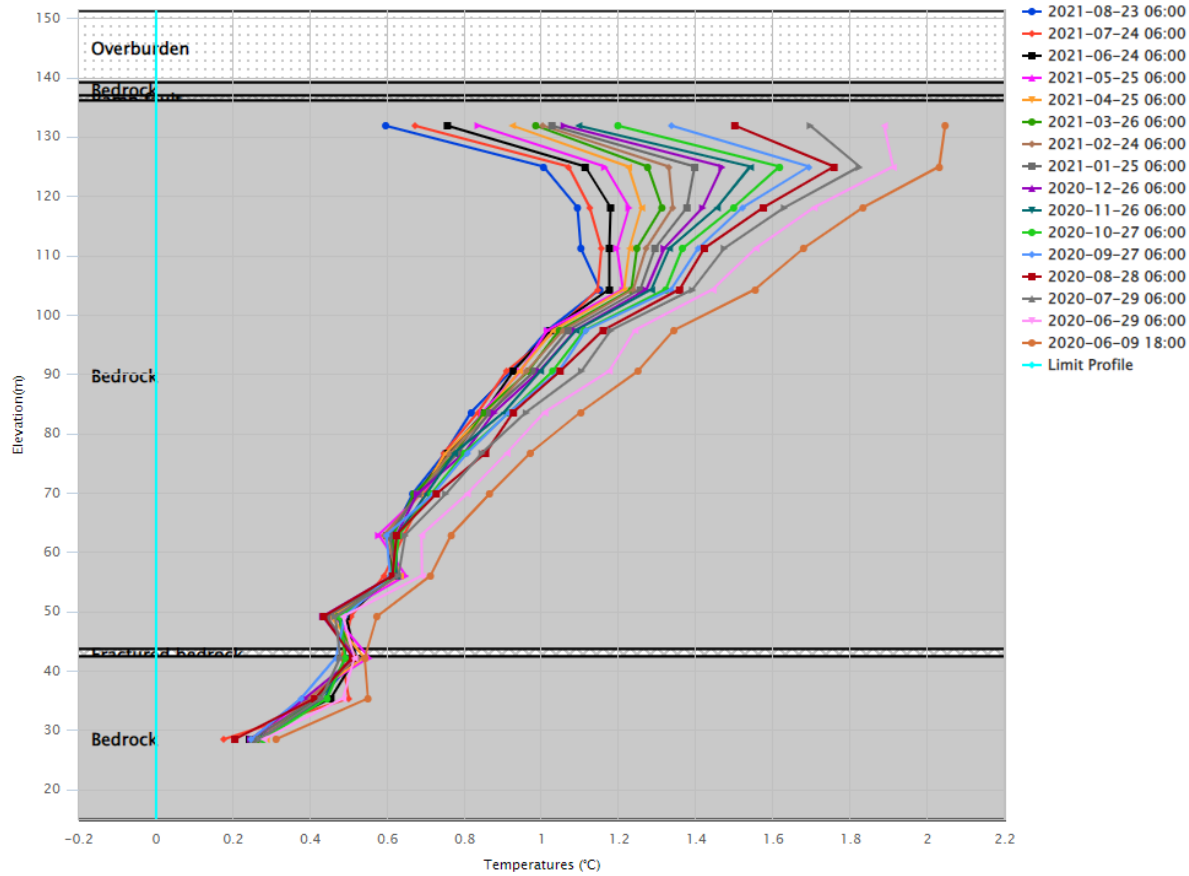
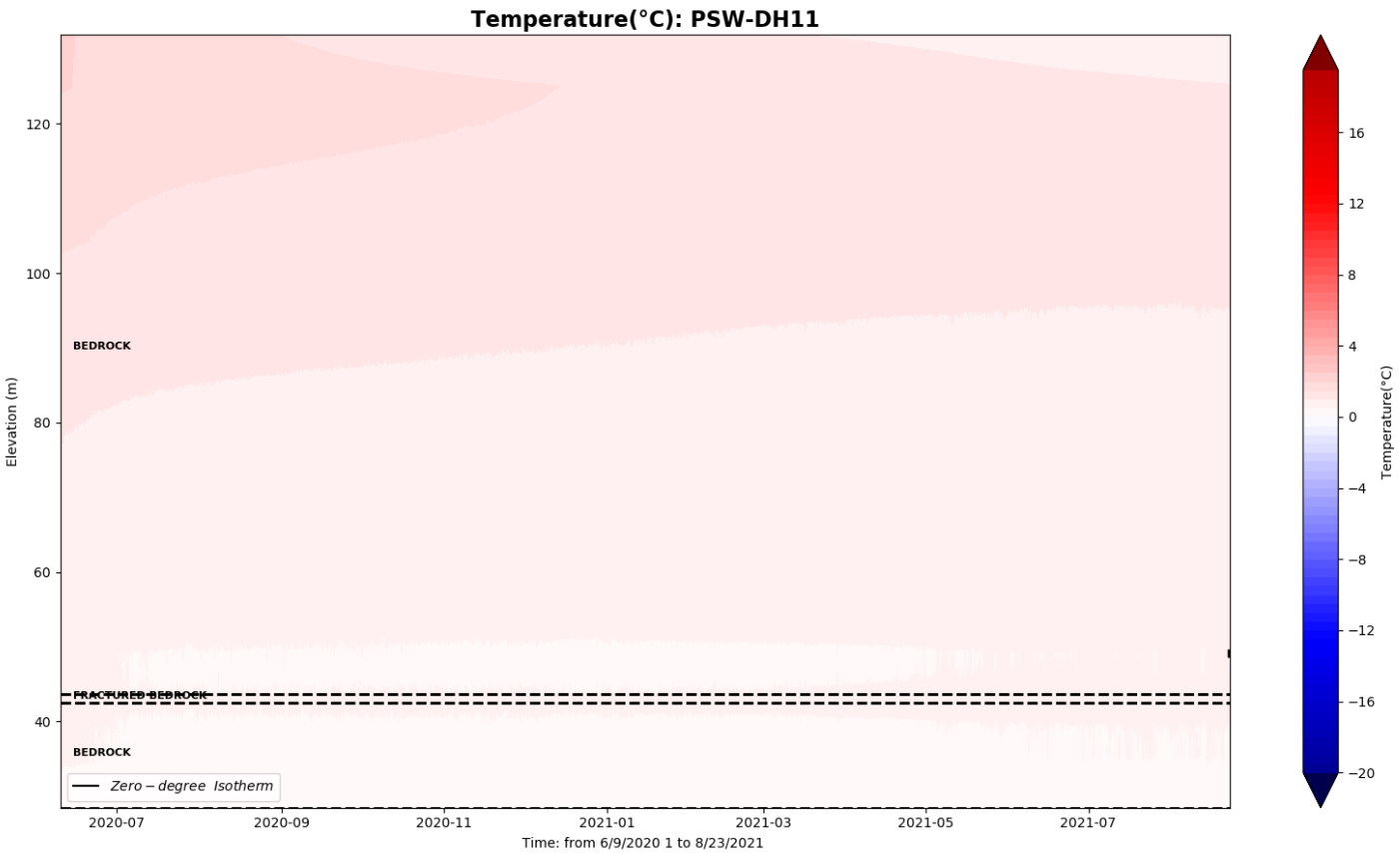
DH-10



PSW – DH 11 TH



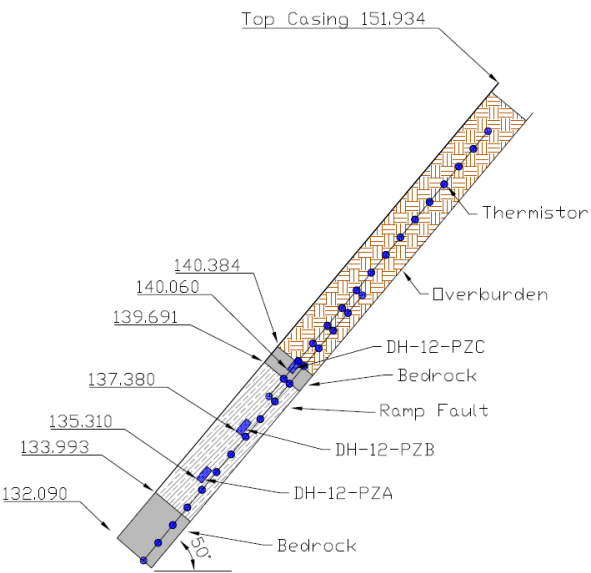
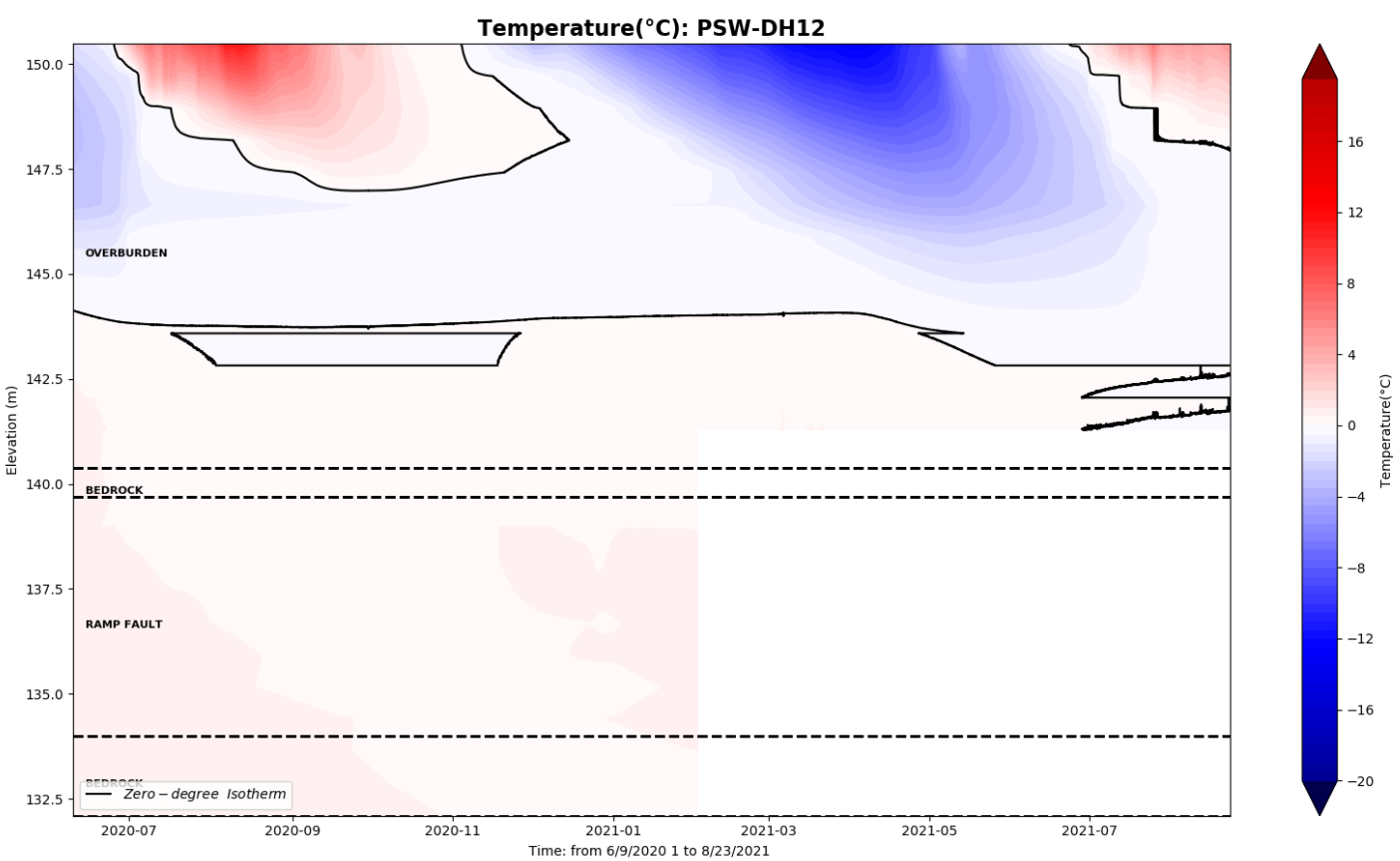
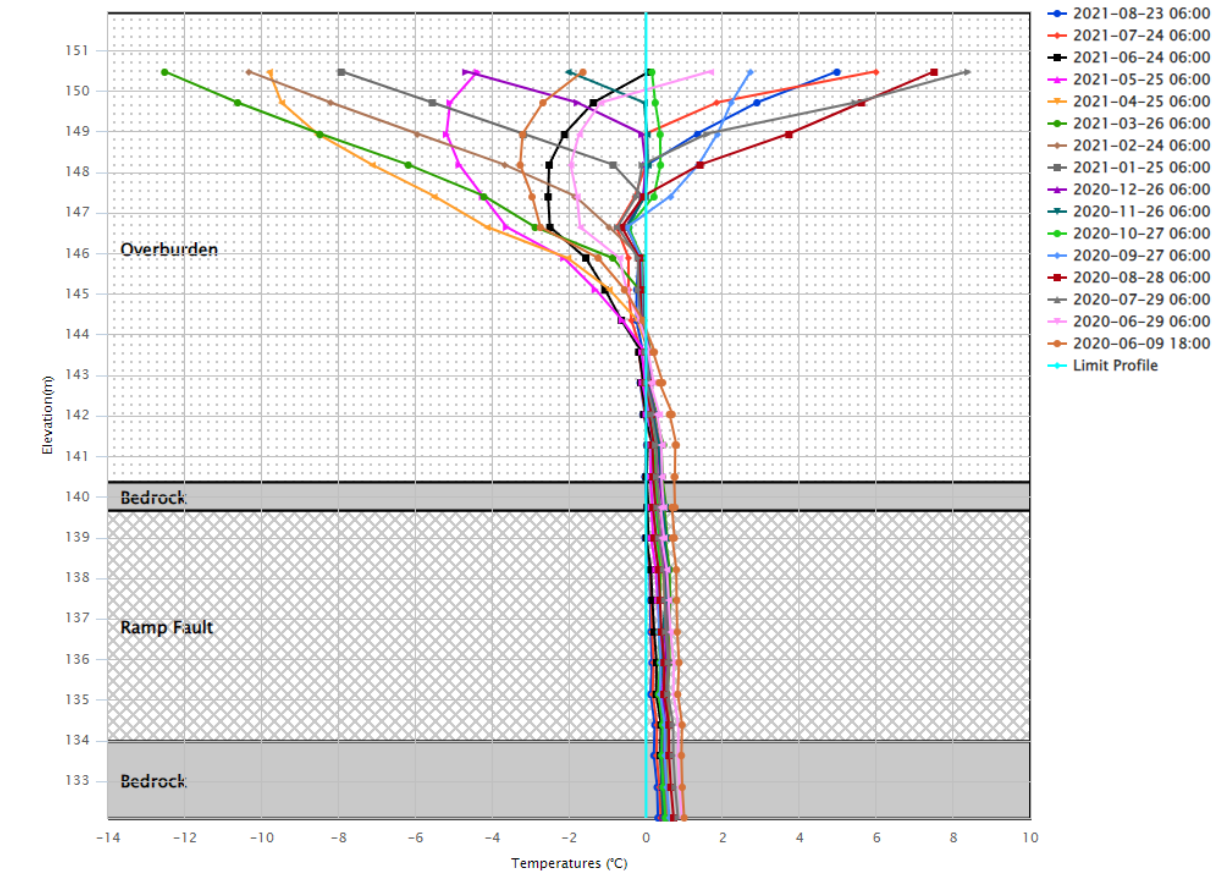
AMQ – PSW – DH11_TH



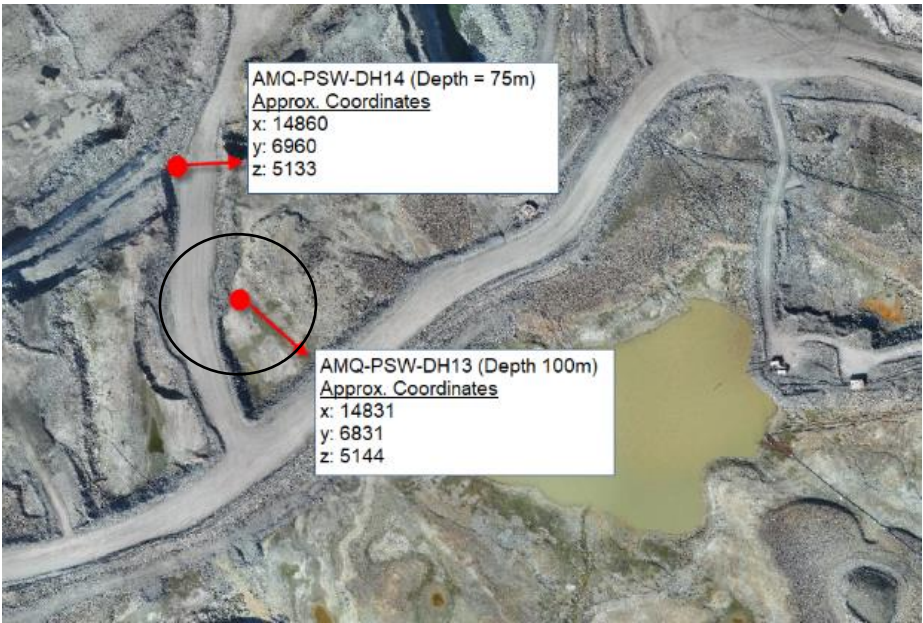
PSW – DH 12 TH



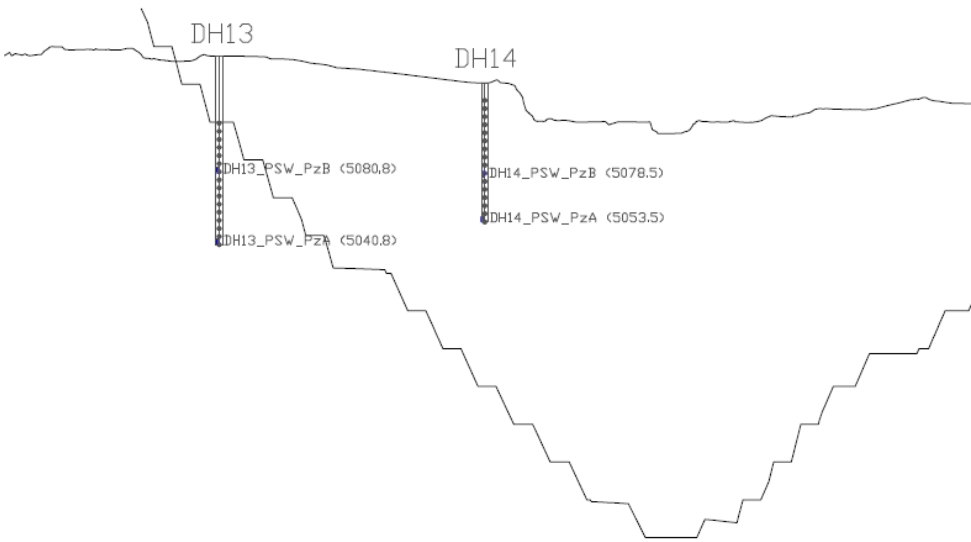
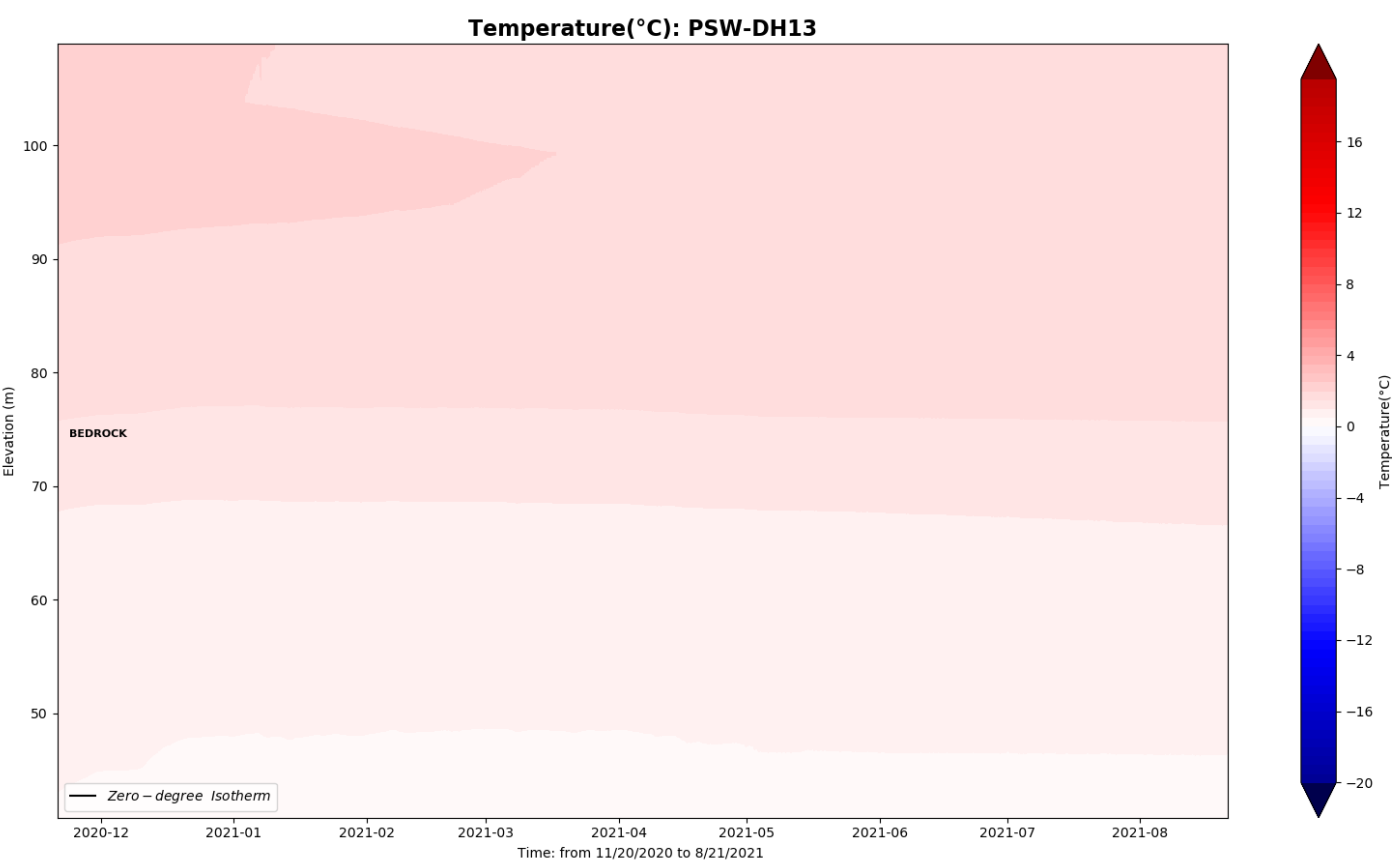
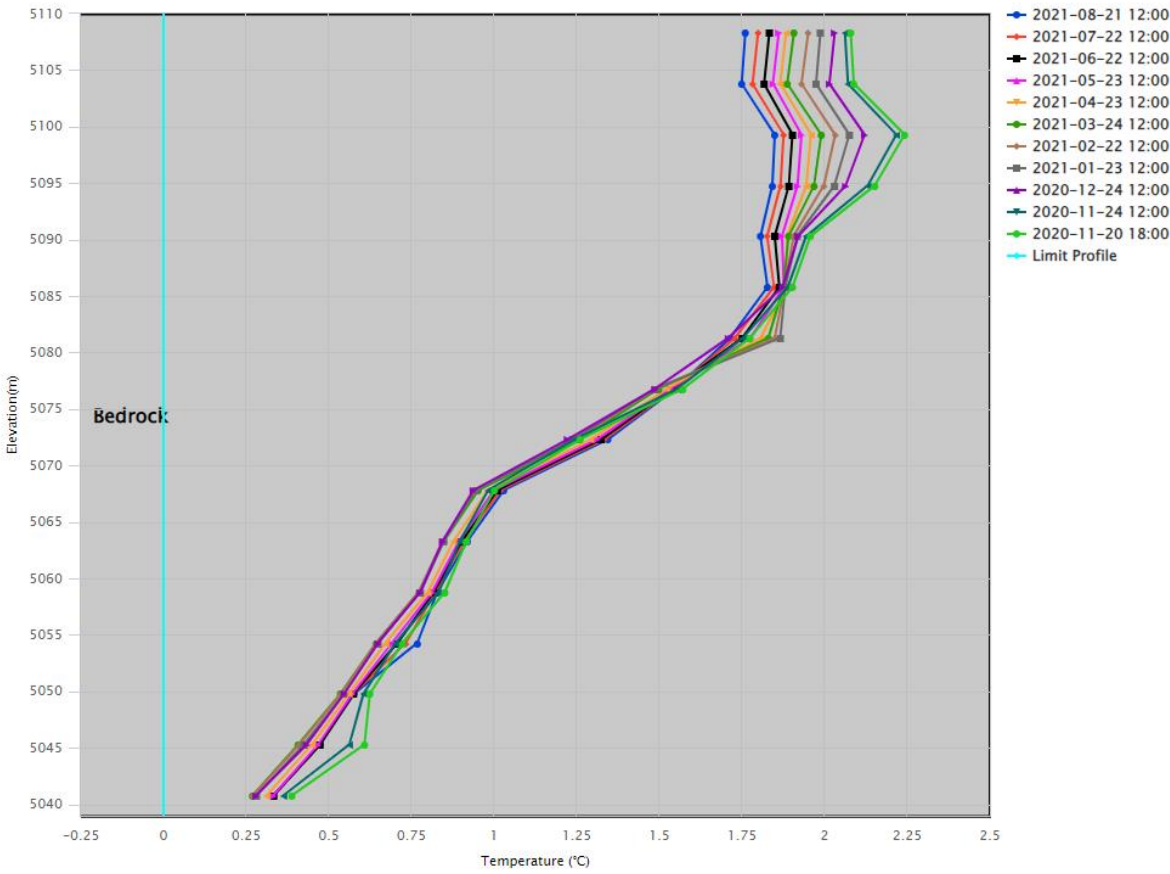
AMQ – PSW – DH12_TH



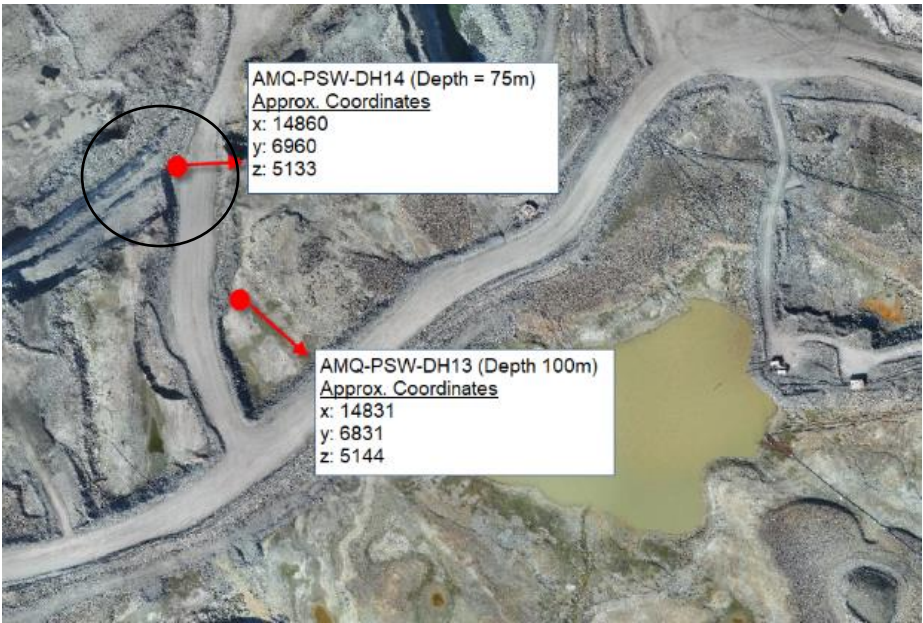
PSW – DH 13 TH



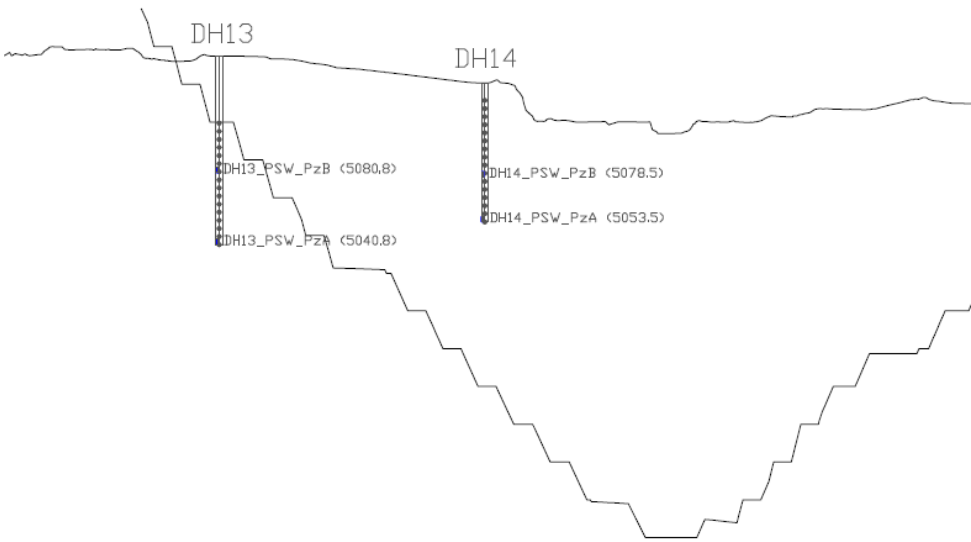
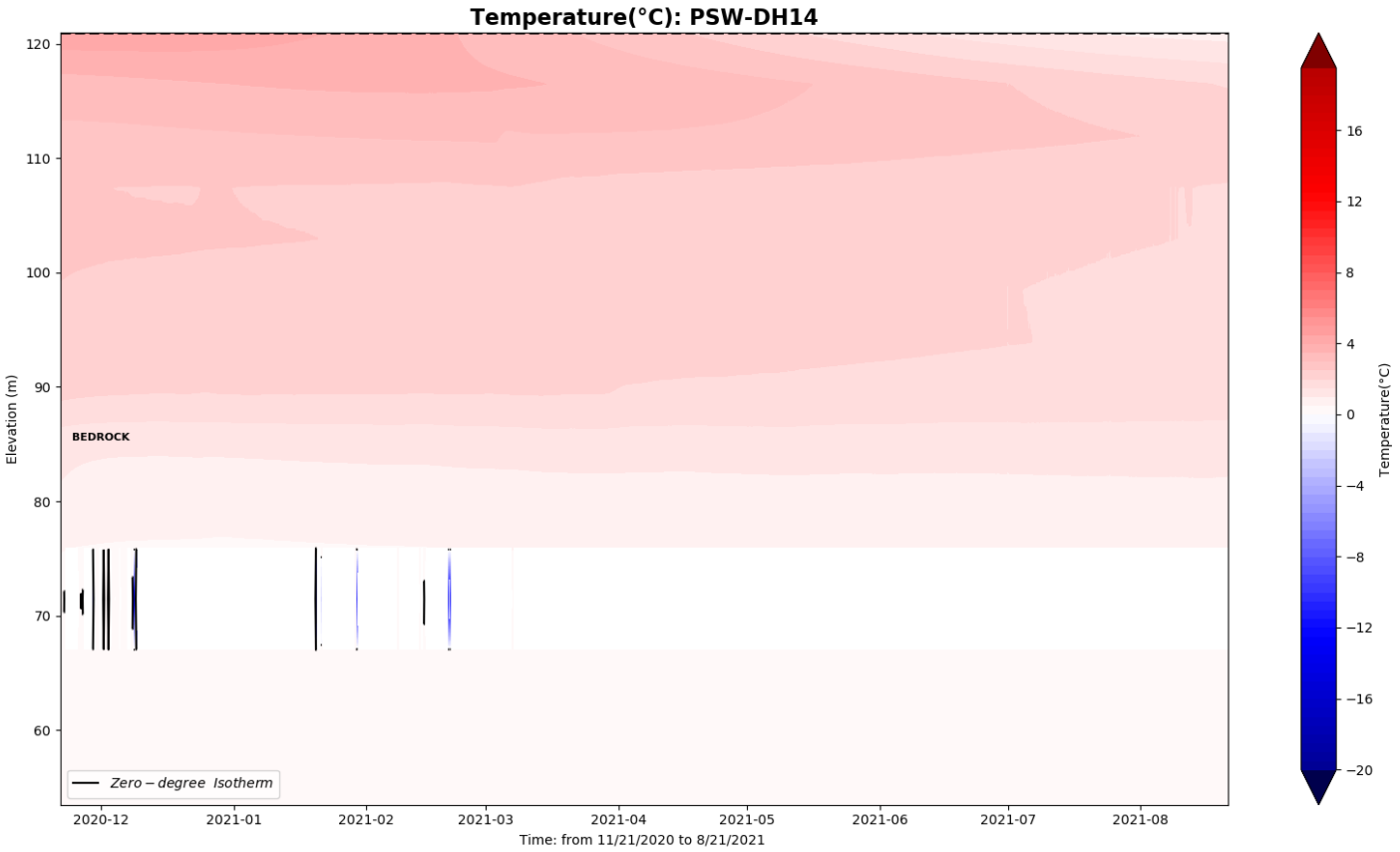
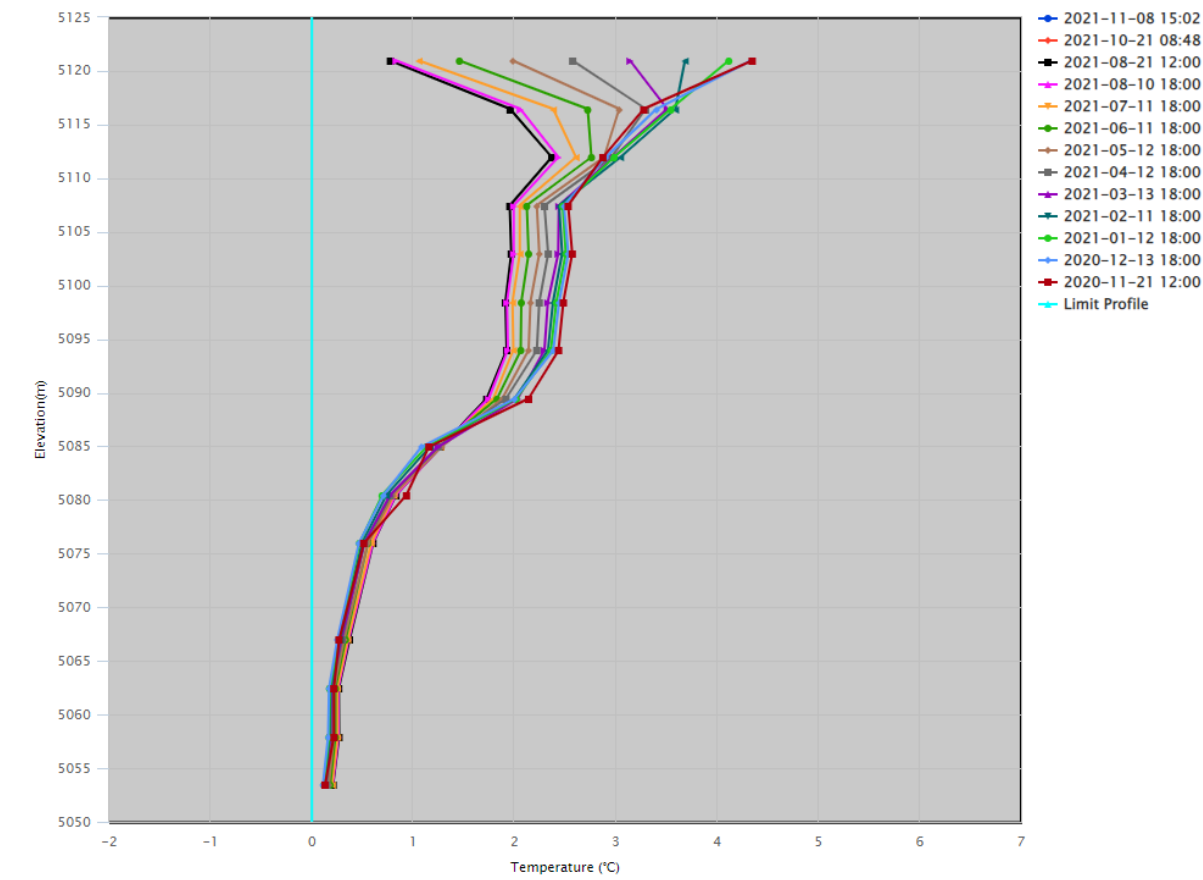
AMQ – PSW – DH13_TH



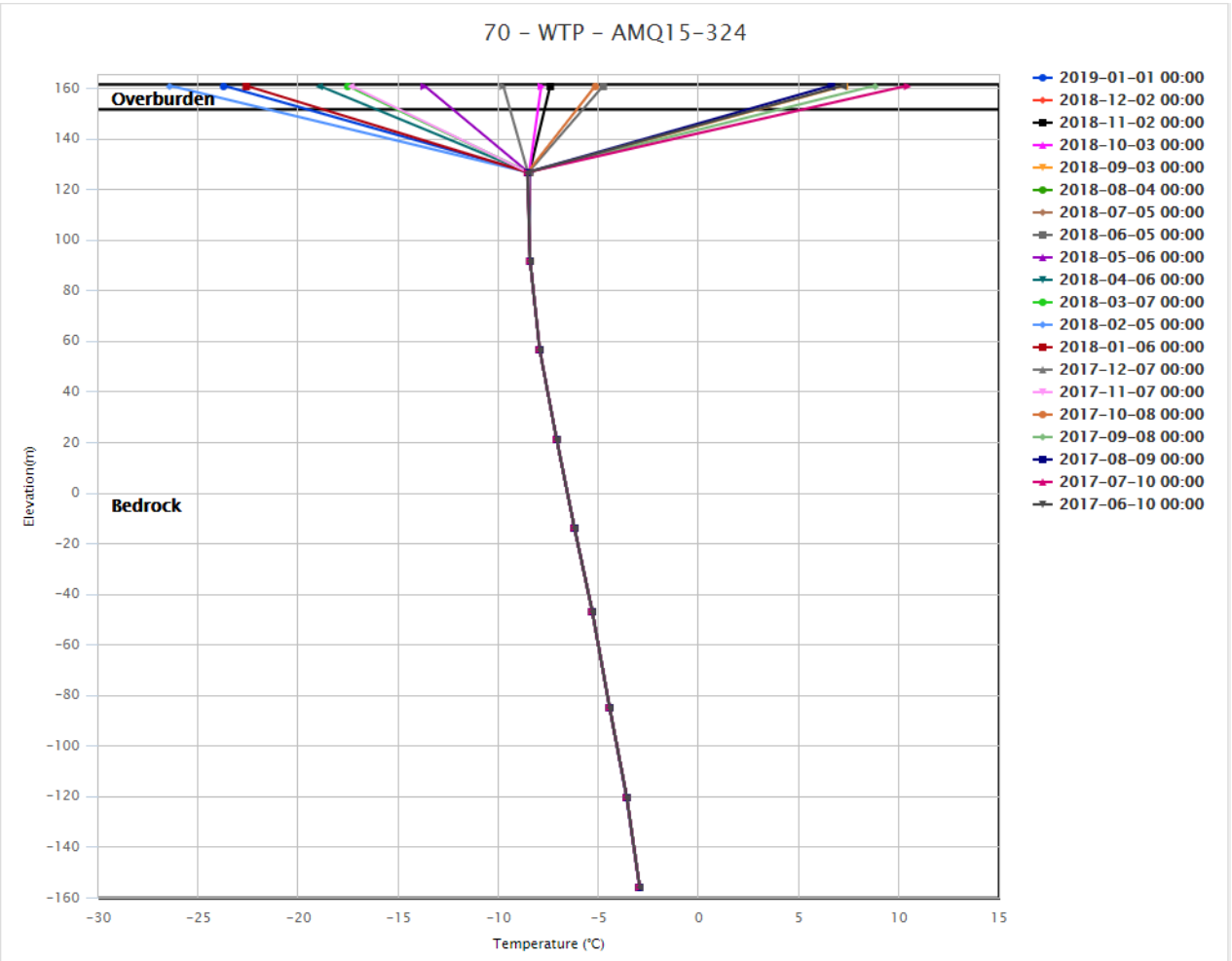
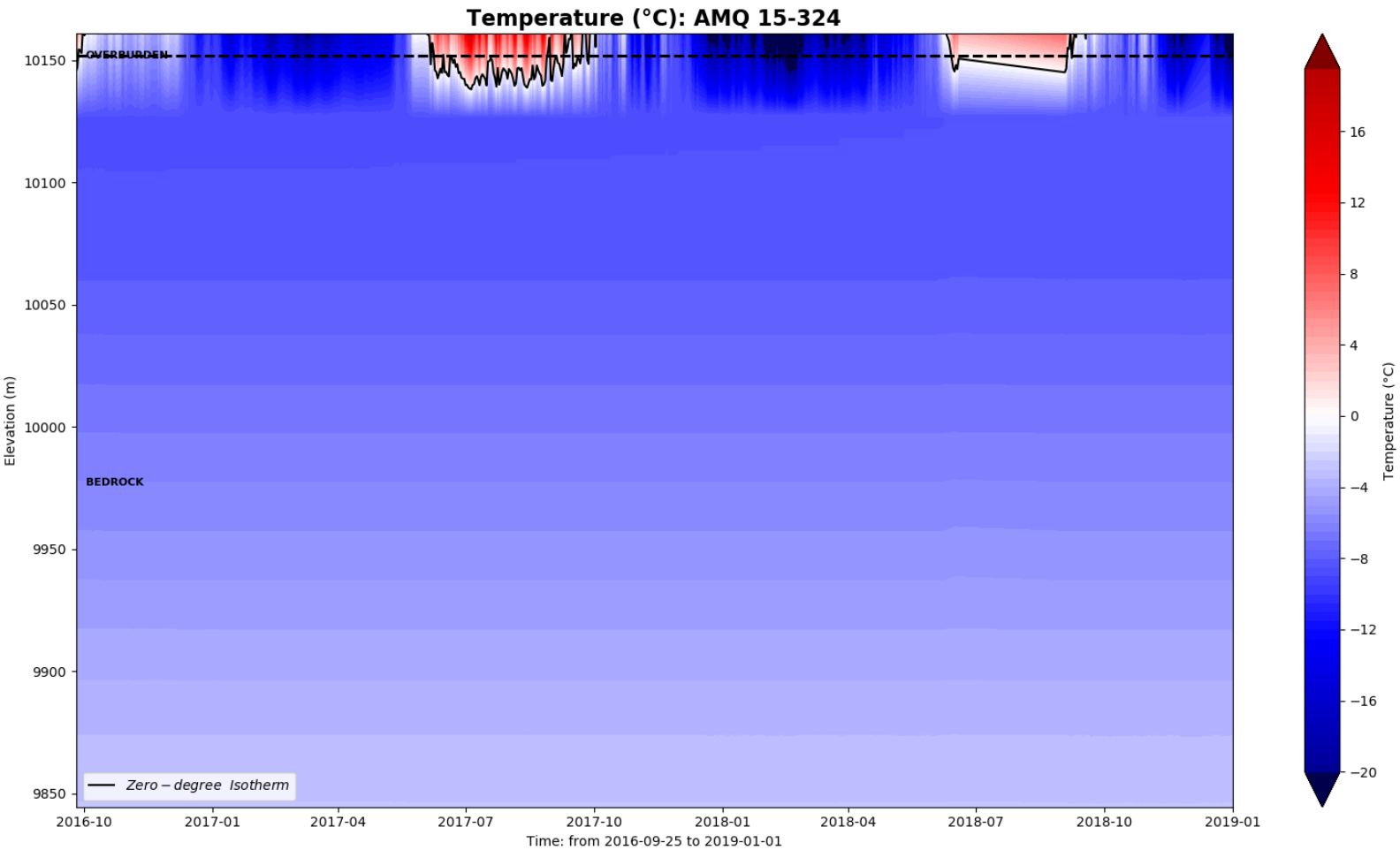
PSW – DH 14 TH



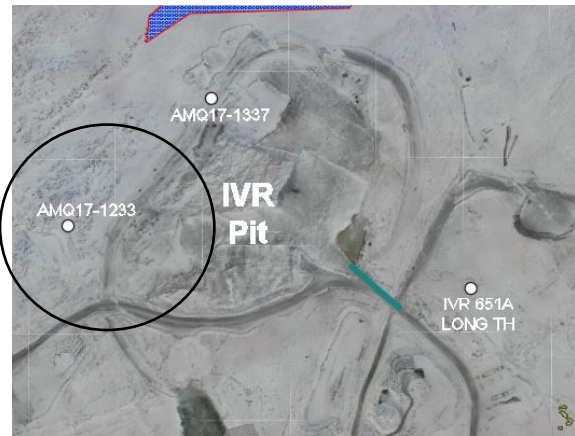
AMQ – PSW – DH14_TH



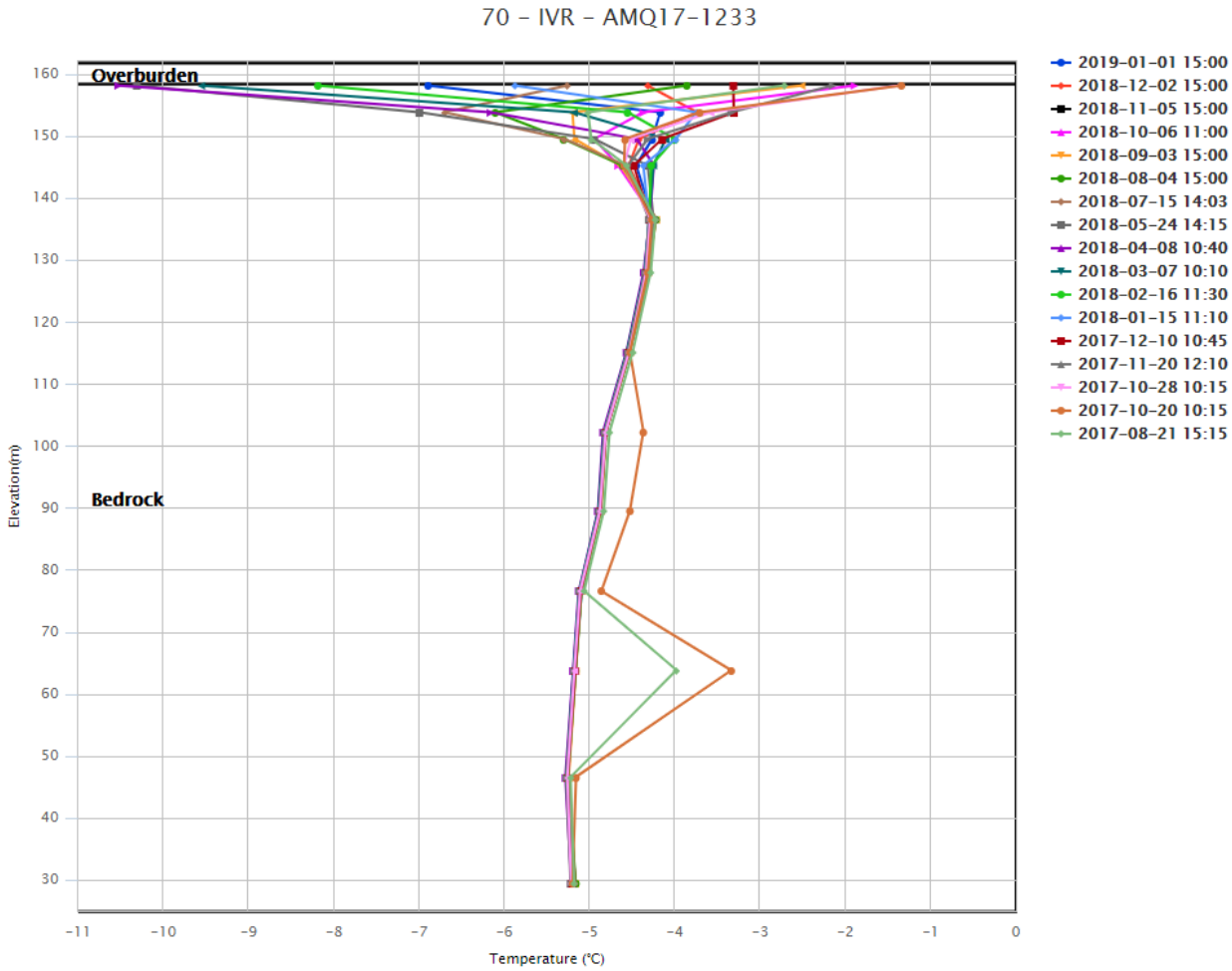
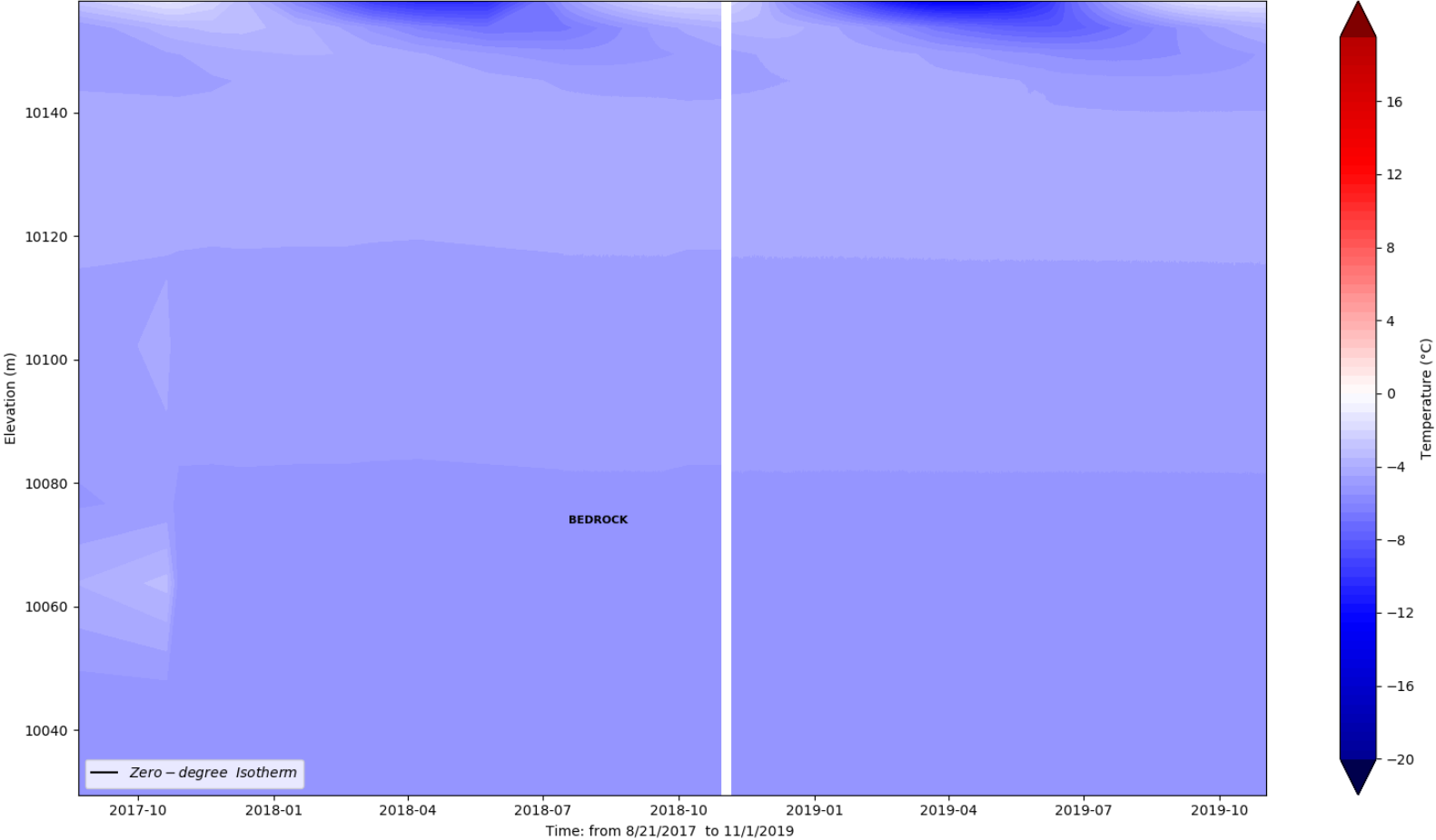
AMQ 15-324



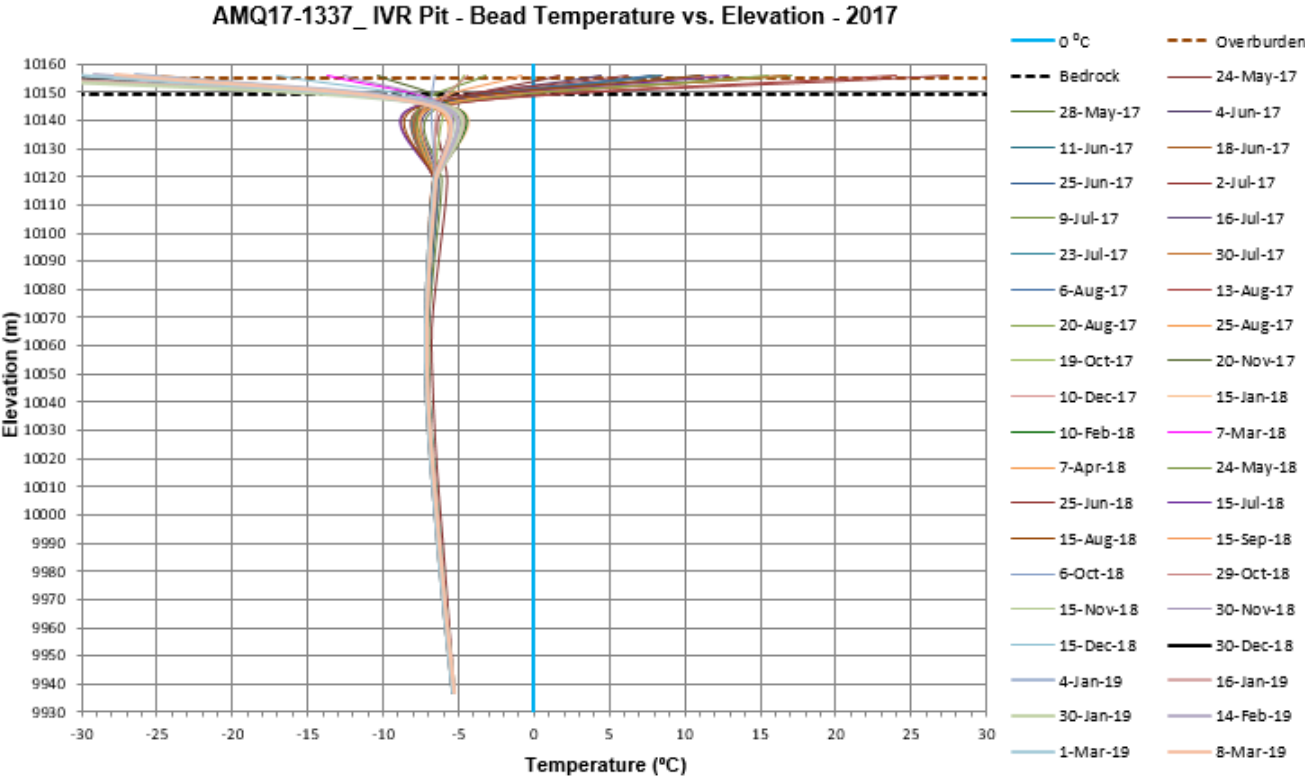
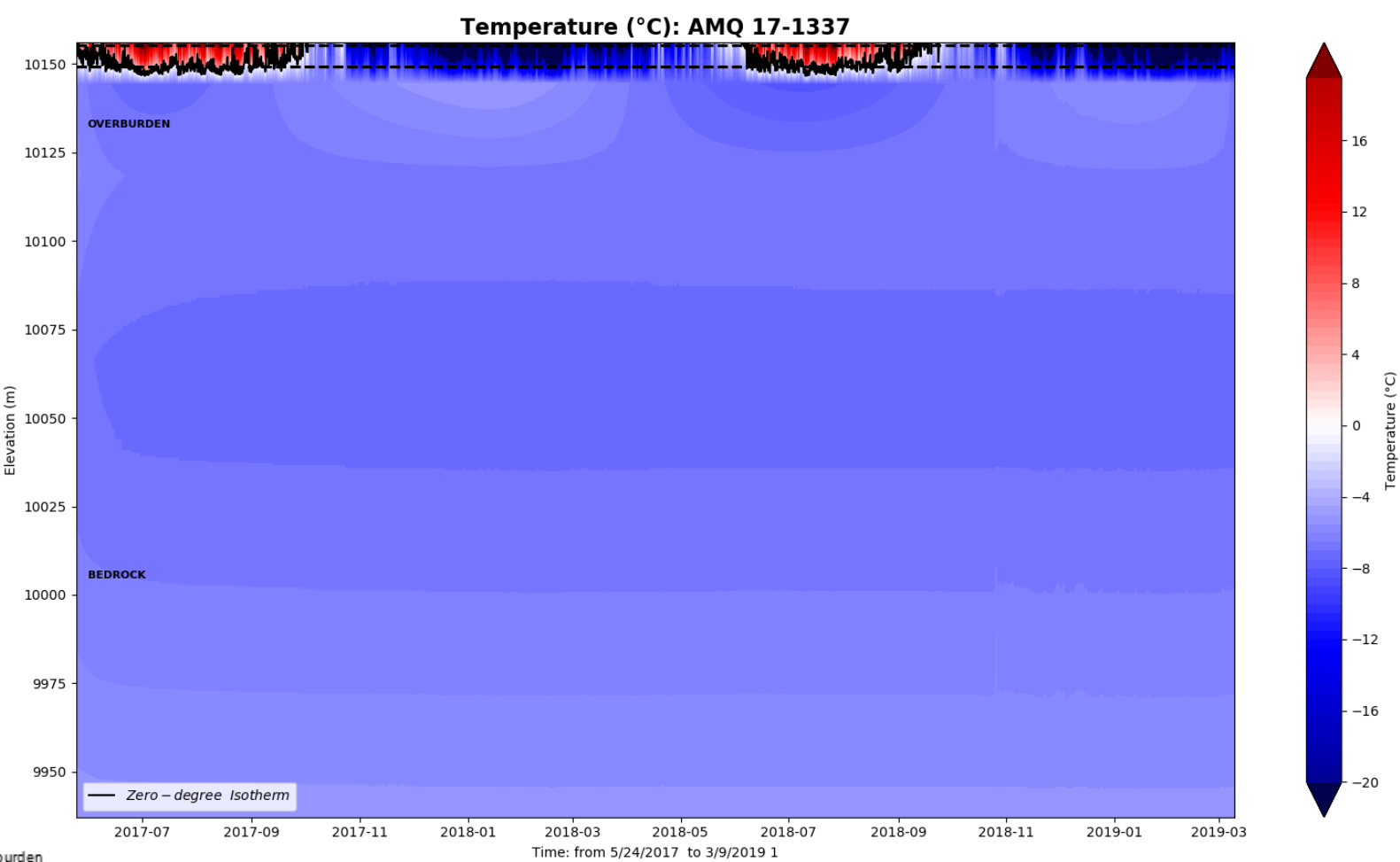
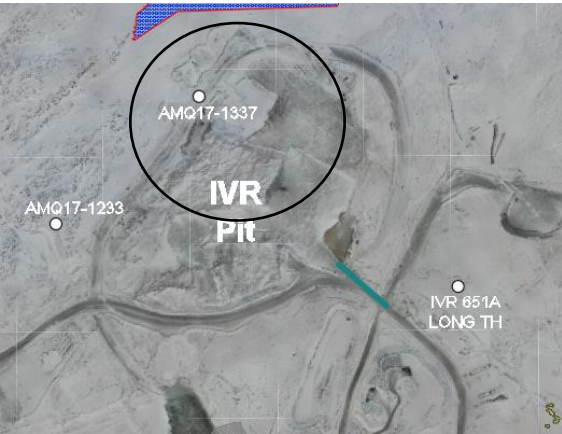
AMQ 17-1233



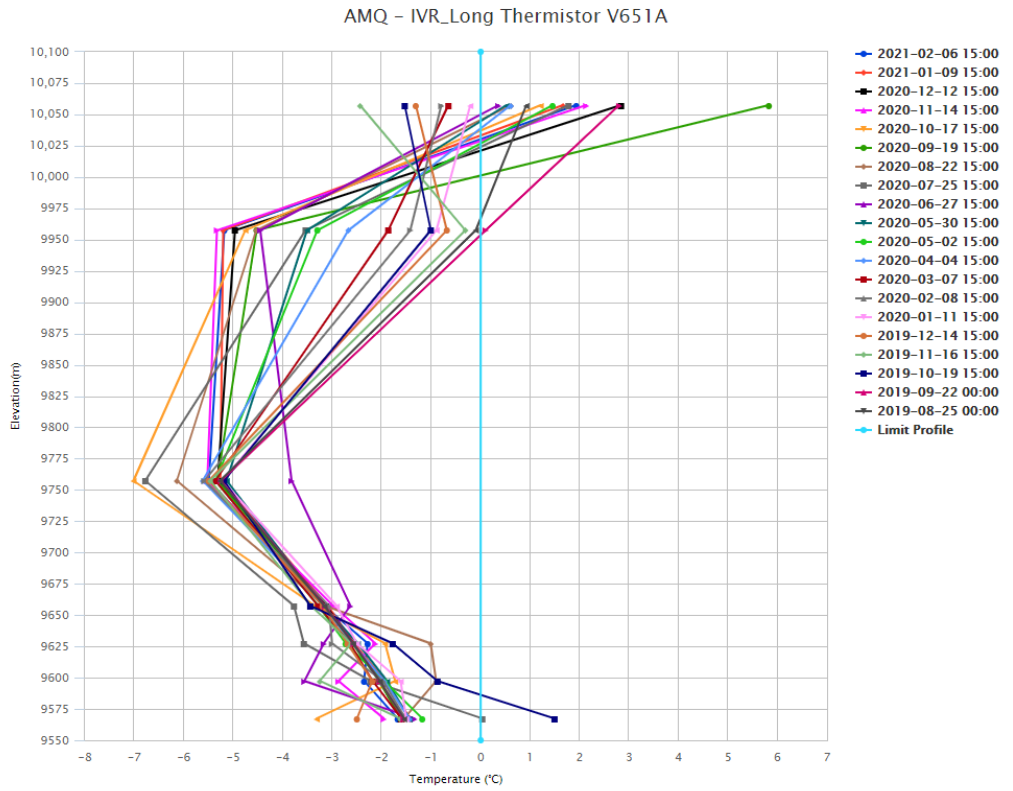
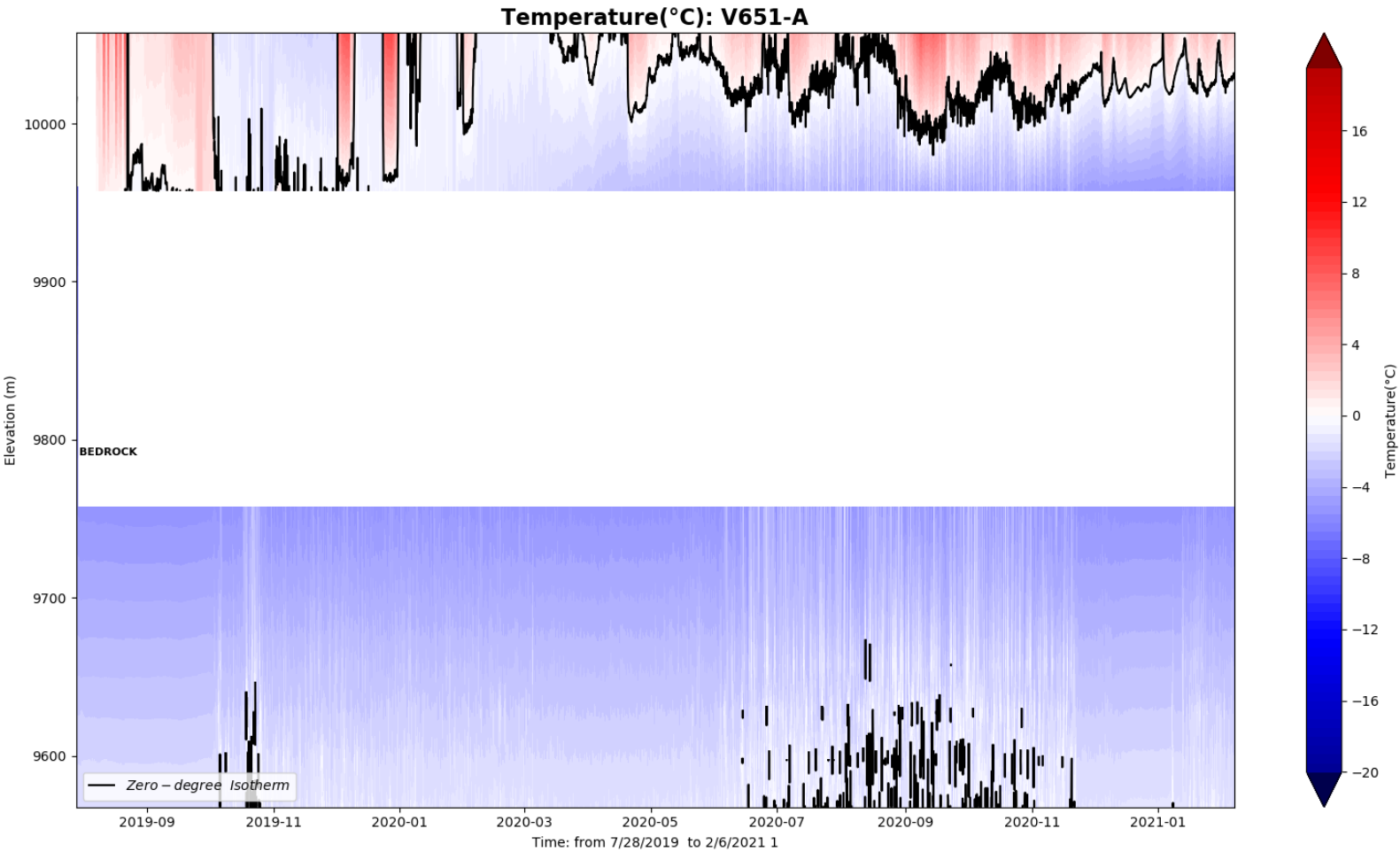
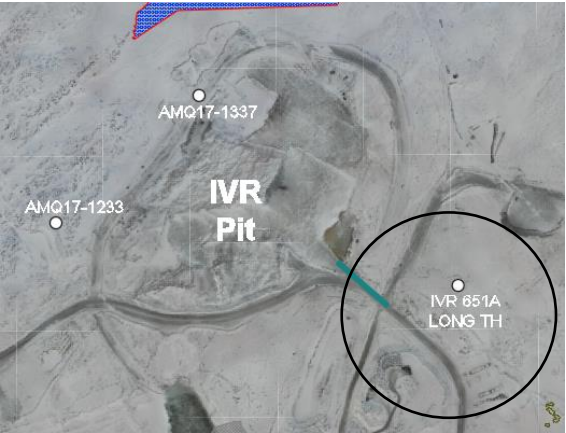
Temperature (°C): AMQ 17-1233



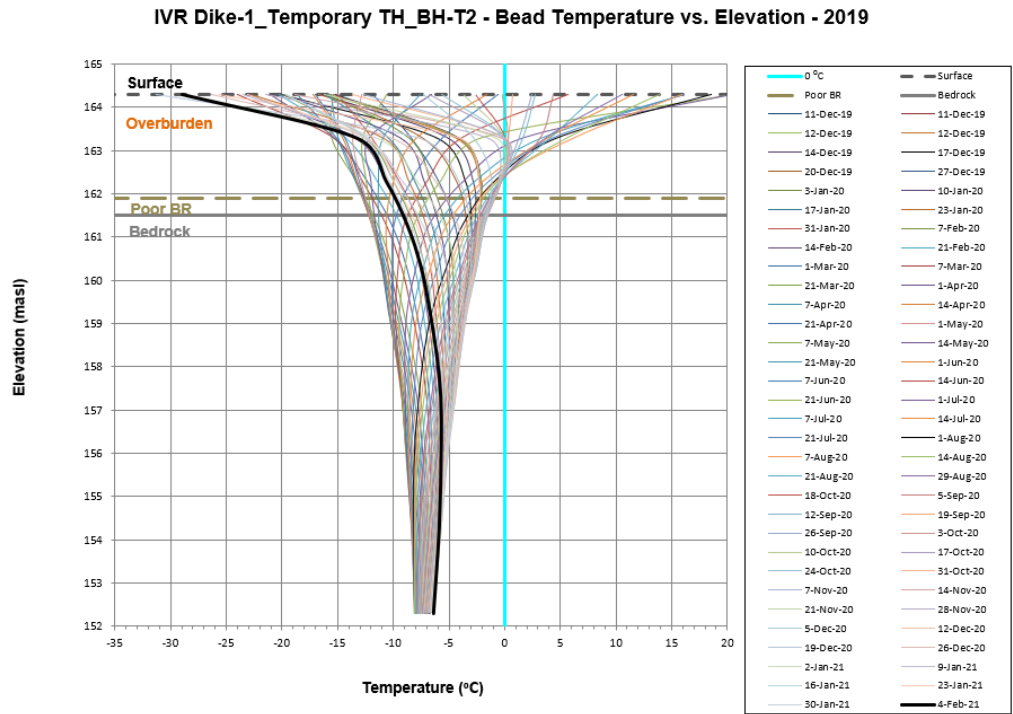
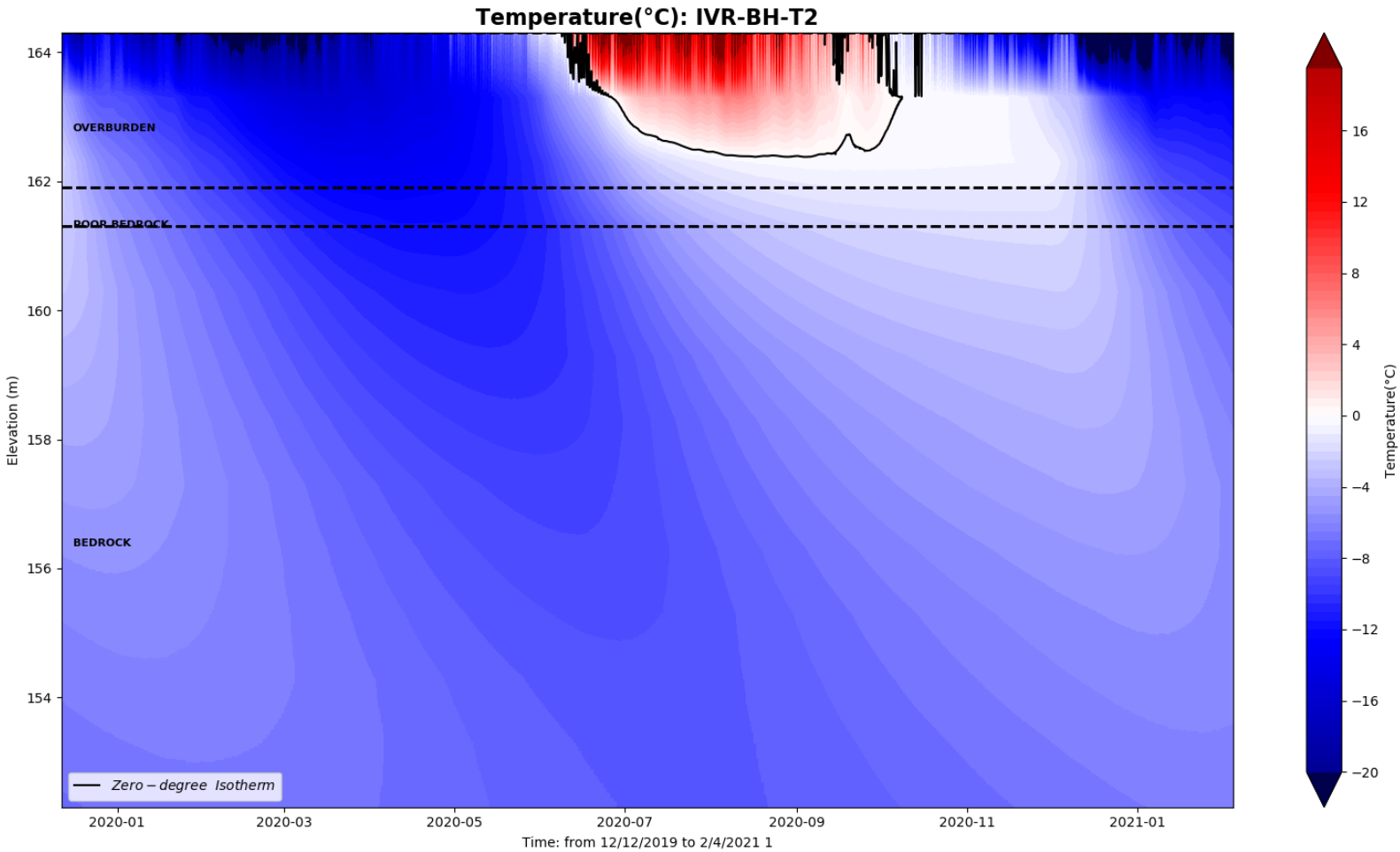
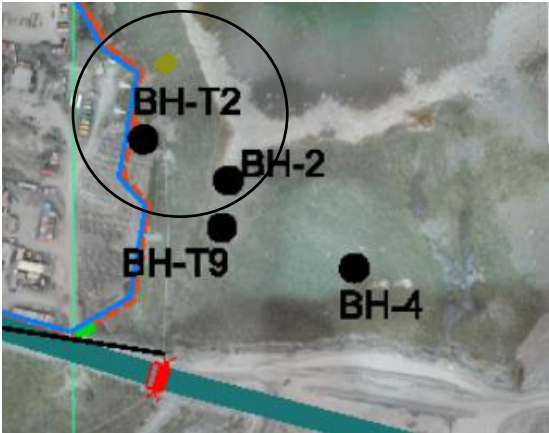
AMQ 17-1337



V651A Long TH



IVR-BH-T2



IVR-BH-4

