



## Real-Time Water Quality Monitoring Network Calibration and Maintenance Schedule Canada Fluorspar Inc.

The water quality probe is periodically removed to undergo necessary maintenance and calibration. Some of these removals are necessary to perform scheduled maintenance while others may be done in response to sudden fouling of the sensors or loss of calibration.

The maintenance/calibration process involves removing the water quality probe (sonde) from the water body for cleaning, replacement of sensors and fluids, calibration and testing in a temperature-controlled laboratory. This usually takes place over a period of two days but may take longer for specific sites or to address unique problems.

### **NF02ZG0012 – John Fitzpatrick Pond**

Item #	Date and time instrument was removed (mm/dd/yy)		Date and time instrument was reinstalled (mm/dd/yy)		Reason	Remarks
1			05/25/2022	11:48	Initial Install for the 2022 Season	Sonde was deployed in a new location due to changes on CFI Site
2	06/20/2022	14:48	06/20/2022	15:20	Routine Deployment	The sonde was logging internally throughout the summer as there was no hut present at this time.
3	08/03/2022	14:05	08/03/2022	14:20	Routine Deployment	
4	08/29/2022	12:45	08/29/2022	13:15	Routine Deployment	
5	09/27/2022	14:00	09/27/2022	14:15	Routine Deployment	
6	10/24/2022	14:15	10/24/2022	14:30	Routine Deployment	Mine site under 'cold idle'
7	11/22/2022	12:00	11/22/2022	12:15	Routine Deployment	Mine site under 'cold idle'
8	01/17/2023	18:54				Station offline due to potential power issues Jan 16, 2023. Sonde removed Jan 17, 2023 It was decided to remove sonde for winter season
9			05/09/2023	12:26	Installation	Initial install for the 2023 season
10	06/14/2023	14:51	06/14/2023	15:11	Routine switch out of instrument	Station stopped transmitting data on 06/09/2023 due to potential issues with the datalogger. New sonde still deployed to log internally.
11	07/18/2023	14:45	07/18/2023	14:57	Switch out of instrument	Maintenance completed on signal output adapter and

						antenna. Station back online. Routine sonde switch-out.
12	08/22/2023	12:05	08/22/2023	12:10	Routine switch out of instrument	
13	09/21/2023	15:05	09/21/2023	12:10	Routine switch out of instrument	
14	10/24/2023	16:10	10/24/2023	16:15	Routine switch out of instrument	
15	12/11/2023	15:20	12/11/2023	15:25	Routine switch out of instrument	
16	01/24/2024	11:45				Sonde removed for the winter season.
17			05/08/2024	15:15	Initial deployment for 2024 season	Routine deployment

### **NF02ZG0028 – Outflow Grebes Nest Pond**

#### **Decommissioned June 2022**

<b>Item #</b>	<b>Date and time instrument was removed (mm/dd/yy)</b>		<b>Date and time instrument was reinstalled (mm/dd/yy)</b>		<b>Reason</b>	<b>Remarks</b>
1			11/16/16	14:30	Initial Installation	
2	01/25/17	09:55			Instrument removed for Winter Season	Instrument removed for extended period due to ice buildup
3			05/10/2017	10:30	Maintenance/Calibration	Initial Install for the year
4	06/20/2017	15:41	06/21/2017	10:00	Maintenance/Calibration	
5	07/24/2017	14:08	07/25/2017	9:35	Maintenance/Calibration	
6	09/05/2017	14:15	09/06/2017	9:45	Maintenance/Calibration	
7	10/16/2017	13:25	10/17/2017	8:40	Maintenance/Calibration	
8	11/27/2017	12:40	11/28/2017	10:05	Maintenance/Calibration	
9	01/08/2018	14:05			Removed for Winter Season	Instrument removed for extended period due to ice
10			05/15/2018	15:03	Installation	Initial install for the year
11	06/18/2018	14:03	06/19/2018	9:00	Maintenance/Calibration	
12	07/17/2018	12:30	07/18/2018	11:00	Maintenance/Calibration	
13	08/14/2018	16:30	08/15/2018	9:00	Maintenance/Calibration	
14	09/26/2018	14:58	09/27/2018	10:00	Maintenance/Calibration	
15	11/21/2018	14:15	11/21/2018	14:57	Maintenance/Calibration	
16	01/08/2019	15:39			Instrument removed for Winter Season	Instrument removed for extended period due to ice
17			05/09/2019	15:20	Installation	Initial install for the year
18	07/11/2019	10:40	07/11/2019	10:50	Maintenance/Calibration	
19	08/20/2019	14:18	08/20/2019	14:28	Maintenance/Calibration	
20	10/17/2019	14:08	10/17/2019	14:18	Maintenance/Calibration	
21	12/11/2019	13:15			Removed for Winter Season	due to ice conditions
22			05/13/2020	12:38	Install to start new season	

23	07/02/ 2020	14:00	07/02/2020	14:28	Calibration & Maintenance	
24	08/05/2020	14:15	08/05/2020	14:33	Calibration & Maintenance	
25	12/21/2020	14:30			Removed for winter season	Due to ice conditions
26			04/14/2021	14:12	Install for new 2021 season	Very turbid brook
27	05/18/2021	14:15	05/15/2021	14:38	Switch out of new equipment	
28	06/15/2021	3:00	06/15/2021	3:21	Switch out of New Sondes	
29	07/27/2021	2:30	07/27/2021	2:45	Switch out of sondes	
30	08/23/2021	16:15	08/23/2021	16:30	Switch out of sonde	
31	09/28/2021	15:20	09/28/2021	15:40	Switch out of sonde	
32	11/23/2021	15:45	11/23/2021	16:00	Routine switch out of sonde	
33	01/06/2022	10:00			Instruments were removed by CFI staff due to covid restrictions and ice conditions	
34			05/25/2022	11:48	Installation	Initial install for the year 2022
This station was decommissioned due to changes onsite at CFI. The station hut was moved to a new location on John Fitzpatrick pond.						

## **NF02ZG0029 – Outflow of Unnamed Pond south of Long Pond**

<b>Item #</b>	<b>Date and time instrument was removed (mm/dd/yy)</b>		<b>Date and time instrument was reinstalled (mm/dd/yy)</b>		<b>Reason</b>	<b>Remarks</b>
1			12/06/17	14:21	Initial Installation	
2	01/25/17	08:35			Maintenance/Calibration	Instrument removed for extended period due to ice buildup
3			05/10/2017	10:45	Maintenance/Calibration	Initial install for the year
4	06/20/2017	14:57	06/21/2017	11:20	Maintenance/Calibration	
5	07/24/2017	13:06	07/24/2017	13:25	Maintenance/Calibration	Switch out with MAE EXO2
6	09/05/2017	13:30	09/06/2017	9:06	Maintenance/Calibration	
7	10/16/2017	14:10	10/17/2017	9:30	Maintenance/Calibration	
8	11/27/2017	12:00	11/28/2017	9:08	Maintenance/Calibration	
9	01/08/2018	16:15			Removed for winter season	Instrument removed for extended period due to ice
10			05/15/2018	15:20	Installation	Initial install for the year
11	06/18/2018	13:20	06/18/2018	13:50	Maintenance/Calibration	
12	07/17/2018	13:30	07/18/2018	09:30	Maintenance/Calibration	
13	08/14/2018	14:15	08/14/2018	15:45	Maintenance/Calibration	
14	09/26/2018	14:31	09/27/2018	09:30	Maintenance/Calibration	
15	11/21/2018	14:00	11/21/2018	14:15	Maintenance/Calibration	
16	01/08/2019	14:31			Removed for winter season	Instrument removed for extended period due to ice
17			05/09/2019	14:09	Installation	Initial install for the year
18	07/11/2019	12:00	07/11/2019	12:10	Maintenance/Calibration	
19	08/20/2019	13:20	08/20/2019	13:30	Maintenance/Calibration	
20	10/17/2019	13:07	10/17/2019	13:17	Maintenance/Calibration	
21	12/11/2019	13:50			Instrument removed for Winter Season	Instrument removed for extended period due to ice
22			05/13/2020	11:38	Deployed for new season	
23	07/02/2020	13:43	07/02/2020	13:36	Calibration & Maintenance	
24	08/05/2020	13:18	08/05/2020	13:27	Calibration & Maintenance	
25	12/21/2020	13:44			Removed for winter season	Due to ice conditions
26			04/14/2021	13:30	Install for 2021 field season	Very turbid water
27	05/18/2021	16:15	05/18/2021	16:20	Switch out to new equipment	Very turbid water/pump stopped working
28	06/16/2021	2:30	06/16/2021	2:39	Switch out to new sondes	
29	07/27/2021	3:22	07/27/2021	3:45	Switch out new sondes	
30	08/23/2021	15:06	08/23/2021	15:38	Switch out of new equipment	
31	09/28/2021	14:30	09/28/2021	15:08	Switch out of new sondes	
32	11/23/2021	15:09	11/23/2021	15:09	Routine switch out	
33	01/06/2022	12:24			Sonde removed by CFI staff due to covid restrictions and ice	

					conditions
34			05/25/2022	10:01	Installation – first install for the year 2022
35	06/20/2022	13:30	06/20/2022	14:05	Routine Calibration/Maintenance
36	08/03/2022	13:11	08/03/2022	13:11	Routine Calibration/Maintenance
37	08/29/2022	13:30	08/29/2022	13:30	Routine/calibration maintenance
38	09/27/2022	13:00	09/27/2022	13:20	Routine/calibration Maintenance
39	10/24/2022	13:15	10/24/22	13:35	Routine/calibration Maintenance on site.
40	11/22/2022	13:00	11/22/2022	13:13	Routine switch out of sonde
41	01/17/2023	12:22			Sonde was removed due to ice conditions and the winter season.
42			05/10/2023	13:30	Installation: Initial install for the 2023 field season
43	06/14/2023	13:50	06/14/2023	14:25	Routine switch out of sonde
44	07/18/2023	16:34	07/18/2023	16:45	Routine switch out of sonde
45	08/22/2023	11:30	08/22/2023	11:45	Routine switch out of sonde
46	09/21/2023	16:10	09/21/2023	16:15	Routine switch out of sonde
47	10/24/2023	14:40	10/24/2023	14:45	Routine switch out of sonde
48	12/11/2023	14:30	12/11/2023	14:35	Routine switch out of sonde
49	01/24/2024	10:45			Sonde removed for the winter season.
50			05/08/2024	10:18	Initial deployment of sonde for 2024 season.

