

# QC Review

**Organization Name**

Jan 19, 2023

Prepared by: \_\_\_\_\_

QAPP version: \_\_\_\_\_

## Data Quality Objectives

Parameter	Frequency %					% Completeness
	Field Duplicate	Lab Duplicate	Field Blank	Lab Blank	Spike/Check Accuracy	
Ammonia	10	5	10	5	5	90
DO	10	-	-	-	-	90
E.coli	10	5	10	5	-	90
Nitrate	10	5	10	5	5	90
pH	10	10	-	-	10	90
Sp Conductance	10	10	-	10	10	90
TP	10	5	10	5	5	90
Water Temp	10	10	-	-	10	90

Parameter	uom	MDL	UQL	Value Range	Field Duplicate	Lab Duplicate	Field Blank	Lab Blank	Spike/Check Accuracy
Ammonia	mg/l	0.1	-	all	< 30%	< 20%	BDL	BDL	<= 15%
DO	mg/l	-	-	< 4	< 20%	-	-	-	-
DO	mg/l	-	-	>= 4	< 10%	-	-	-	-
E.coli	MPN/100ml	1	-	<50	< log30%	< log30%	BDL	BDL	-
E.coli	MPN/100ml	1	-	>=50	< log20%	< log20%	BDL	BDL	-
Nitrate	mg/l	0.05	-	all	< 20%	< 20%	BDL	BDL	<= 15%
pH	-	-	-	all	<= 0.5	<= 0.5	-	-	<= 0.2
Sp Conductance	uS/cm	-	-	< 250	< 30%	< 30%	-	<= 50	<= 50
Sp Conductance	uS/cm	-	10000	>= 250	< 20%	< 20%	-	<= 50	<= 50
TP	mg/l	0.01	-	< 0.05	<= 0.01	<= 0.01	BDL	BDL	<= 0.01
TP	mg/l	0.01	-	>= 0.05	< 30%	< 20%	BDL	BDL	<= 15%
Water Temp	deg C	-	-	all	<= 1.0	<= 1.0	-	-	<= 1.0

Notes:

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## QC Frequencies for 5/15/2022 to 9/11/2022

Parameter	Field Duplicate	Lab Duplicate	Field Blank	Lab Blank	Spike/Check Accuracy
Ammonia	9%	23%	16%	16%	21%
DO	22%	-	-	-	-
E.coli	17%	33%	33%	0%	-
Nitrate	10%	50%	35%	25%	50%
pH	22%	35%	-	-	41%
Sp Conductance	22%	35%	-	43%	43%
TP	10%	33%	23%	10%	31%
Water Temp	22%	35%	-	-	39%

Type	Parameter	Number of Data Records	Number of Dups/Blanks/Spikes	Frequency %	Hit/Miss
Field Duplicates					
	Ammonia	43	4	9%	MISS
	DO	49	11	22%	
	E.coli	12	2	17%	
	Nitrate	20	2	10%	
	pH	49	11	22%	
	Sp Conductance	49	11	22%	
	TP	48	5	10%	
	Water Temp	49	11	22%	
Lab Duplicates					
	Ammonia	43	10	23%	
	E.coli	12	4	33%	
	Nitrate	20	10	50%	
	pH	49	17	35%	
	Sp Conductance	49	17	35%	
	TP	48	16	33%	
	Water Temp	49	17	35%	
Field Blanks					
	Ammonia	43	7	16%	
	E.coli	12	4	33%	
	Nitrate	20	7	35%	
	TP	48	11	23%	
Lab Blanks					
	Ammonia	43	7	16%	
	E.coli	12	0	0%	MISS
	Nitrate	20	5	25%	
	Sp Conductance	49	21	43%	
	TP	48	5	10%	
Lab Spikes / Instrument Checks					

Type	Parameter	Number of Data Records	Number of Dups/Blanks/Spikes	Frequency %	Hit/Miss
	Ammonia	43	9	21%	
	Nitrate	20	10	50%	
	pH	49	20	41%	
	Sp Conductance	49	21	43%	
	TP	48	15	31%	
	Water Temp	49	19	39%	

Notes:

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## QC Accuracy Summary for 5/15/2022 to 9/11/2022

Parameter	Field Duplicate	Lab Duplicate	Field Blank	Lab Blank	Spike/Check Accuracy
Ammonia	75%	100%	100%	86%	100%
DO	100%	-	-	-	-
E.coli	100%	100%	100%	-	-
Nitrate	100%	100%	100%	100%	90%
pH	100%	94%	-	-	95%
Sp Conductance	100%	100%	-	95%	100%
TP	80%	100%	91%	100%	100%
Water Temp	100%	100%	-	-	95%

Type	Parameter	Number of QC Checks	Number of Misses	% Acceptance
<b>Field Duplicates</b>				
	Ammonia	4	1	75 %
	DO	11	0	100 %
	E.coli	2	0	100 %
	Nitrate	2	0	100 %
	pH	11	0	100 %
	Sp Conductance	11	0	100 %
	TP	5	1	80 %
	Water Temp	11	0	100 %
<b>Lab Duplicates</b>				
	Ammonia	10	0	100 %
	E.coli	4	0	100 %
	Nitrate	10	0	100 %
	pH	17	1	94 %
	Sp Conductance	17	0	100 %
	TP	16	0	100 %
	Water Temp	17	0	100 %
<b>Field Blanks</b>				
	Ammonia	7	0	100 %
	E.coli	4	0	100 %
	Nitrate	7	0	100 %
	TP	11	1	91 %
<b>Lab Blanks</b>				
	Ammonia	7	1	86 %
	E.coli	0	-	-
	Nitrate	5	0	100 %
	Sp Conductance	21	1	95 %
	TP	5	0	100 %
<b>Lab Spikes / Instrument Checks</b>				
	Ammonia	9	0	100 %

Type	Parameter	Number of QC Checks	Number of Misses	% Acceptance
	Nitrate	10	1	90 %
	pH	20	1	95 %
	Sp Conductance	21	0	100 %
	TP	15	0	100 %
	Water Temp	19	1	95 %

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**Data Completeness for 5/15/2022 to 9/11/2022**

Parameter	Number of Data Records	Number of Qualified Records	% Completeness	Hit/ Miss	Number of Censored Records	Notes
Ammonia	43	0	100%			
DO	49	0	100%			
E.coli	12	0	100%			
Nitrate	20	0	100%			
pH	49	0	100%			
Sp Conductance	49	0	100%			
TP	48	5	90%	MISS		
Water Temp	49	0	100%			

Notes:

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## QC Raw Data for 5/15/2022 to 9/11/2022

### Field Duplicates

Parameter	Date	Site	Initial Result	Dup. Result	Diff./RPD	Hit/Miss
Ammonia						
	2022-05-15	ABT-312	BDL	BDL	0% RPD	
	2022-05-15	DAN-013	BDL	BDL	0% RPD	
	2022-06-12	ABT-301	BDL	0.2 mg/l	67% RPD	MISS
	2022-09-11	ABT-301	BDL	BDL	0% RPD	
DO						
	2022-05-15	ABT-026	7.58 mg/l	7.6 mg/l	0% RPD	
	2022-05-15	ELZ-004	5.81 mg/l	5.94 mg/l	2% RPD	
	2022-05-15	NSH-002	8.32 mg/l	8.33 mg/l	0% RPD	
	2022-06-12	ABT-062	8.56 mg/l	8.56 mg/l	0% RPD	
	2022-06-12	ABT-237	7.81 mg/l	8.1 mg/l	4% RPD	
	2022-06-12	HOP-011	7.8 mg/l	7.79 mg/l	0% RPD	
	2022-07-17	ABT-062	7.59 mg/l	7.59 mg/l	0% RPD	
	2022-07-17	ABT-237	5.92 mg/l	5.92 mg/l	0% RPD	
	2022-08-14	ABT-237	5.89 mg/l	5.9 mg/l	0% RPD	
	2022-09-11	ABT-026	7.7 mg/l	7.7 mg/l	0% RPD	
	2022-09-11	HOP-011	8.36 mg/l	8.35 mg/l	0% RPD	
E.coli						
	2022-07-18	ABT-162	276 MPN/100ml	276 MPN/100ml	0% logRPD	
	2022-08-15	ABT-077	231 MPN/100ml	276 MPN/100ml	3% logRPD	
Nitrate						
	2022-06-12	ABT-301	3.65 mg/l	3.35 mg/l	9% RPD	
	2022-07-17	ABT-077	0.72 mg/l	0.73 mg/l	1% RPD	
pH						
	2022-05-15	ABT-026	7.19 s.u.	7.2 s.u.	0.01 s.u.	
	2022-05-15	ELZ-004	6.95 s.u.	7.08 s.u.	0.13 s.u.	
	2022-05-15	NSH-002	7.23 s.u.	7.25 s.u.	0.02 s.u.	
	2022-06-12	ABT-062	7.26 s.u.	7.26 s.u.	0 s.u.	
	2022-06-12	ABT-237	7.1 s.u.	7.11 s.u.	0.01 s.u.	
	2022-06-12	HOP-011	6.86 s.u.	6.82 s.u.	0.04 s.u.	
	2022-07-17	ABT-062	8.02 s.u.	8.01 s.u.	0.01 s.u.	
	2022-07-17	ABT-237	7.28 s.u.	7.28 s.u.	0 s.u.	
	2022-08-14	ABT-237	7.28 s.u.	7.28 s.u.	0 s.u.	
	2022-09-11	ABT-026	7.13 s.u.	7.14 s.u.	0.01 s.u.	
	2022-09-11	HOP-011	6.92 s.u.	6.84 s.u.	0.08 s.u.	
Sp Conductance						
	2022-05-15	ABT-026	585 uS/cm	586 uS/cm	0% RPD	
	2022-05-15	ELZ-004	375 uS/cm	375 uS/cm	0% RPD	
	2022-05-15	NSH-002	524 uS/cm	525 uS/cm	0% RPD	

Parameter	Date	Site	Initial Result	Dup. Result	Diff./RPD	Hit/Miss
	2022-06-12	ABT-062	579 uS/cm	579 uS/cm	0% RPD	
	2022-06-12	ABT-237	740 uS/cm	740 uS/cm	0% RPD	
	2022-06-12	HOP-011	731 uS/cm	731 uS/cm	0% RPD	
	2022-07-17	ABT-062	831 uS/cm	831 uS/cm	0% RPD	
	2022-07-17	ABT-237	1222 uS/cm	1221 uS/cm	0% RPD	
	2022-08-14	ABT-237	1497 uS/cm	1489 uS/cm	1% RPD	
	2022-09-11	ABT-026	738 uS/cm	675 uS/cm	9% RPD	
	2022-09-11	HOP-011	865 uS/cm	865 uS/cm	0% RPD	
TP						
	2022-05-15	ABT-312	0.03 mg/l	0.03 mg/l	0 mg/l	
	2022-05-15	DAN-013	0.04 mg/l	0.04 mg/l	0 mg/l	
	2022-06-12	ABT-301	0.03 mg/l	0.03 mg/l	0 mg/l	
	2022-07-17	ABT-077	0.04 mg/l	0.02 mg/l	0.02 mg/l	MISS
	2022-09-11	ABT-301	0.03 mg/l	0.03 mg/l	0 mg/l	
Water Temp						
	2022-05-15	ABT-026	22.4 deg C	22.4 deg C	0 deg C	
	2022-05-15	ELZ-004	22.2 deg C	22.2 deg C	0 deg C	
	2022-05-15	NSH-002	23.3 deg C	23.3 deg C	0 deg C	
	2022-06-12	ABT-062	21.1 deg C	21.1 deg C	0 deg C	
	2022-06-12	ABT-237	18.7 deg C	18.7 deg C	0 deg C	
	2022-06-12	HOP-011	18.4 deg C	18.4 deg C	0 deg C	
	2022-07-17	ABT-062	25.6 deg C	25.6 deg C	0 deg C	
	2022-07-17	ABT-237	20.8 deg C	20.8 deg C	0 deg C	
	2022-08-14	ABT-237	18.8 deg C	18.8 deg C	0 deg C	
	2022-09-11	ABT-026	20.5 deg C	20.5 deg C	0 deg C	
	2022-09-11	HOP-011	19.3 deg C	19.3 deg C	0 deg C	

Notes:

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### Lab Duplicates

Parameter	Date	Sample ID	Initial Result	Dup. Result	Diff./RPD	Hit/Miss
Ammonia						
	2022-05-15		0.21 mg/l	0.21 mg/l	0% RPD	
	2022-05-15		BDL	BDL	0% RPD	
	2022-06-12		0.1 mg/l	0.1 mg/l	0% RPD	
	2022-06-12		0.19 mg/l	0.19 mg/l	0% RPD	
	2022-07-17		BDL	BDL	0% RPD	
	2022-07-17		BDL	BDL	0% RPD	
	2022-08-14		BDL	BDL	0% RPD	



Parameter	Date	Sample ID	Initial Result	Dup. Result	Diff./RPD	Hit/Miss
	2022-08-14		BDL	BDL	0% RPD	
	2022-09-11		BDL	BDL	0% RPD	
	2022-09-11		BDL	BDL	0% RPD	
E.coli						
	2022-06-13		547.5 MPN/100ml	579.4 MPN/100ml	1% logRPD	
	2022-07-18		88 MPN/100ml	167 MPN/100ml	13% logRPD	
	2022-08-01		114.5 MPN/100ml	160.7 MPN/100ml	7% logRPD	
	2022-08-29		42.8 MPN/100ml	40.4 MPN/100ml	2% logRPD	
Nitrate						
	2022-05-15		0.37 mg/l	0.38 mg/l	3% RPD	
	2022-06-12		0.17 mg/l	0.17 mg/l	0% RPD	
	2022-06-12		3.65 mg/l	3.63 mg/l	1% RPD	
	2022-06-12		BDL	BDL	0% RPD	
	2022-07-17		1.29 mg/l	1.29 mg/l	0% RPD	
	2022-07-17		BDL	BDL	0% RPD	
	2022-07-17		BDL	BDL	0% RPD	
	2022-08-14		2.69 mg/l	2.69 mg/l	0% RPD	
	2022-08-14		5.22 mg/l	5.24 mg/l	0% RPD	
	2022-09-11		1.51 mg/l	1.5 mg/l	1% RPD	
pH						
	2022-05-15		7.11 s.u.	7.09 s.u.	0.02 s.u.	
	2022-05-15		7.18 s.u.	7.09 s.u.	0.09 s.u.	
	2022-05-15		7.19 s.u.	7.09 s.u.	0.1 s.u.	
	2022-06-12		7.12 s.u.	7.19 s.u.	0.07 s.u.	
	2022-06-12		7.13 s.u.	7.19 s.u.	0.06 s.u.	
	2022-06-12		7.21 s.u.	7.19 s.u.	0.02 s.u.	
	2022-06-12		7.27 s.u.	7.19 s.u.	0.08 s.u.	
	2022-07-17		7.48 s.u.	7.37 s.u.	0.11 s.u.	
	2022-07-17		7.54 s.u.	7.37 s.u.	0.17 s.u.	
	2022-07-17		7.54 s.u.	7.37 s.u.	0.17 s.u.	
	2022-07-17		7.54 s.u.	7.37 s.u.	0.17 s.u.	
	2022-08-14		7.64 s.u.	7.32 s.u.	0.32 s.u.	
	2022-08-14		7.65 s.u.	7.32 s.u.	0.33 s.u.	
	2022-08-14		7.68 s.u.	7.32 s.u.	0.36 s.u.	
	2022-09-11		7.07 s.u.	6.74 s.u.	0.33 s.u.	
	2022-09-11		7.16 s.u.	6.74 s.u.	0.42 s.u.	
	2022-09-11		7.34 s.u.	6.74 s.u.	0.6 s.u.	MISS
Sp Conductance						
	2022-05-15		599 uS/cm	609 uS/cm	2% RPD	
	2022-05-15		605 uS/cm	609 uS/cm	1% RPD	

Parameter	Date	Sample ID	Initial Result	Dup. Result	Diff./RPD	Hit/Miss
	2022-05-15		606 uS/cm	609 uS/cm	0% RPD	
	2022-06-12		600 uS/cm	608 uS/cm	1% RPD	
	2022-06-12		602 uS/cm	608 uS/cm	1% RPD	
	2022-06-12		606 uS/cm	608 uS/cm	0% RPD	
	2022-07-17		793 uS/cm	802 uS/cm	1% RPD	
	2022-07-17		900 uS/cm	802 uS/cm	12% RPD	
	2022-07-17		796 uS/cm	802 uS/cm	1% RPD	
	2022-07-17		801 uS/cm	802 uS/cm	0% RPD	
	2022-08-14		1062 uS/cm	1066 uS/cm	0% RPD	
	2022-08-14		1062 uS/cm	1066 uS/cm	0% RPD	
	2022-08-14		1063 uS/cm	1066 uS/cm	0% RPD	
	2022-08-14		1065 uS/cm	1066 uS/cm	0% RPD	
	2022-09-11		761 uS/cm	766 uS/cm	1% RPD	
	2022-09-11		765 uS/cm	766 uS/cm	0% RPD	
	2022-09-11		774 uS/cm	766 uS/cm	1% RPD	
TP						
	2022-05-15		0.01 mg/l	0.01 mg/l	0 mg/l	
	2022-05-15		0.03 mg/l	0.02 mg/l	0.01 mg/l	
	2022-05-15		0.06 mg/l	0.06 mg/l	0% RPD	
	2022-06-12		0.04 mg/l	0.04 mg/l	0 mg/l	
	2022-06-12		0.04 mg/l	0.04 mg/l	0 mg/l	
	2022-06-12		0.06 mg/l	0.06 mg/l	0% RPD	
	2022-06-12		BDL	BDL	0 mg/l	
	2022-07-17		0.04 mg/l	0.04 mg/l	0 mg/l	
	2022-07-17		0.05 mg/l	0.05 mg/l	0% RPD	
	2022-07-17		BDL	BDL	0 mg/l	
	2022-08-14		0.03 mg/l	0.03 mg/l	0 mg/l	
	2022-08-14		0.05 mg/l	0.05 mg/l	0% RPD	
	2022-08-14		0.09 mg/l	0.09 mg/l	0% RPD	
	2022-09-11		0.04 mg/l	0.04 mg/l	0 mg/l	
	2022-09-11		0.04 mg/l	0.04 mg/l	0 mg/l	
	2022-09-11		0.05 mg/l	0.05 mg/l	0% RPD	
Water Temp						
	2022-05-15		21.7 deg C	21.8 deg C	0.1 deg C	
	2022-05-15		21.8 deg C	21.8 deg C	0 deg C	
	2022-05-15		21.8 deg C	21.8 deg C	0 deg C	
	2022-06-12		20.2 deg C	20.2 deg C	0 deg C	
	2022-06-12		20.2 deg C	20.2 deg C	0 deg C	
	2022-06-12		20.3 deg C	20.2 deg C	0.1 deg C	
	2022-06-12		20.3 deg C	20.2 deg C	0.1 deg C	
	2022-07-17		23 deg C	22.9 deg C	0.1 deg C	
	2022-07-17		23 deg C	22.9 deg C	0.1 deg C	

Parameter	Date	Sample ID	Initial Result	Dup. Result	Diff./RPD	Hit/Miss
	2022-07-17		23.1 deg C	22.9 deg C	0.2 deg C	
	2022-08-14		20.8 deg C	20.7 deg C	0.1 deg C	
	2022-08-14		20.8 deg C	20.7 deg C	0.1 deg C	
	2022-08-14		20.9 deg C	20.7 deg C	0.2 deg C	
	2022-08-14		20.9 deg C	20.7 deg C	0.2 deg C	
	2022-09-11		20.6 deg C	20.5 deg C	0.1 deg C	
	2022-09-11		20.7 deg C	20.5 deg C	0.2 deg C	
	2022-09-11		20.7 deg C	20.5 deg C	0.2 deg C	

Notes:

### Field Blanks

Parameter	Date	Site	Result	Threshold	Hit/Miss
Ammonia					
	2022-05-15		BDL	0.1 mg/l	
	2022-06-12		BDL	0.1 mg/l	
	2022-07-17		BDL	0.1 mg/l	
	2022-07-17		BDL	0.1 mg/l	
	2022-08-14		BDL	0.1 mg/l	
	2022-08-14		BDL	0.1 mg/l	
	2022-09-11		BDL	0.1 mg/l	
E.coli					
	2022-06-13		BDL	1 MPN/100ml	
	2022-07-18		BDL	1 MPN/100ml	
	2022-08-01		BDL	1 MPN/100ml	
	2022-08-29		BDL	1 MPN/100ml	
Nitrate					
	2022-05-15		BDL	0.05 mg/l	
	2022-06-12		BDL	0.05 mg/l	
	2022-06-12		BDL	0.05 mg/l	
	2022-07-17		BDL	0.05 mg/l	
	2022-07-17		BDL	0.05 mg/l	
	2022-08-14		BDL	0.05 mg/l	
	2022-09-11		BDL	0.05 mg/l	
TP					
	2022-05-15		BDL	0.01 mg/l	
	2022-05-15		BDL	0.01 mg/l	
	2022-06-12		BDL	0.01 mg/l	
	2022-06-12		BDL	0.01 mg/l	

Parameter	Date	Site	Result	Threshold	Hit/Miss
	2022-07-17		BDL	0.01 mg/l	
	2022-07-17		BDL	0.01 mg/l	
	2022-07-17		0.01 mg/l	0.01 mg/l	MISS
	2022-08-14		BDL	0.01 mg/l	
	2022-08-14		BDL	0.01 mg/l	
	2022-09-11		BDL	0.01 mg/l	
	2022-09-11		BDL	0.01 mg/l	

Notes:

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### Lab Blanks

Parameter	Date	Sample ID	Result	Threshold	Hit/Miss
Ammonia					
	2022-05-15		BDL	0.1 mg/l	
	2022-06-12		BDL	0.1 mg/l	
	2022-07-17		BDL	0.1 mg/l	
	2022-07-17		0.1 mg/l	0.1 mg/l	MISS
	2022-08-14		BDL	0.1 mg/l	
	2022-08-14		BDL	0.1 mg/l	
	2022-09-11		BDL	0.1 mg/l	
Nitrate					
	2022-05-15		BDL	0.05 mg/l	
	2022-06-12		BDL	0.05 mg/l	
	2022-07-17		BDL	0.05 mg/l	
	2022-08-14		BDL	0.05 mg/l	
	2022-09-11		BDL	0.05 mg/l	
Sp Conductance					
	2022-05-15		7 uS/cm	50 uS/cm	
	2022-05-15		7.4 uS/cm	50 uS/cm	
	2022-05-15		7.7 uS/cm	50 uS/cm	
	2022-05-15		8.6 uS/cm	50 uS/cm	
	2022-06-12		8.9 uS/cm	50 uS/cm	
	2022-06-12		9 uS/cm	50 uS/cm	
	2022-06-12		10.1 uS/cm	50 uS/cm	
	2022-06-12		10.9 uS/cm	50 uS/cm	
	2022-06-12		13 uS/cm	50 uS/cm	
	2022-07-17		4 uS/cm	50 uS/cm	
	2022-07-17		4 uS/cm	50 uS/cm	
	2022-07-17		5.8 uS/cm	50 uS/cm	

Parameter	Date	Sample ID	Result	Threshold	Hit/Miss
	2022-07-17		6 uS/cm	50 uS/cm	
	2022-08-14		2.5 uS/cm	50 uS/cm	
	2022-08-14		3 uS/cm	50 uS/cm	
	2022-08-14		80 uS/cm	50 uS/cm	MISS
	2022-08-14		3.9 uS/cm	50 uS/cm	
	2022-09-11		4 uS/cm	50 uS/cm	
	2022-09-11		4.1 uS/cm	50 uS/cm	
	2022-09-11		4.7 uS/cm	50 uS/cm	
	2022-09-11		5.9 uS/cm	50 uS/cm	
TP					
	2022-05-15		BDL	0.01 mg/l	
	2022-06-12		BDL	0.01 mg/l	
	2022-07-17		BDL	0.01 mg/l	
	2022-08-14		BDL	0.01 mg/l	
	2022-09-11		BDL	0.01 mg/l	

Notes:

### Lab Spikes / Instrument Checks

Parameter	Date	Sample ID	Spike/Standard	Result	Diff./Accuracy	Hit/Miss
Ammonia						
	2022-05-15		100 % recovery	86 % recovery	86%	
	2022-06-12		100 % recovery	94 % recovery	94%	
	2022-06-12		100 % recovery	106 % recovery	106%	
	2022-07-17		100 % recovery	92 % recovery	92%	
	2022-07-17		100 % recovery	108 % recovery	108%	
	2022-08-14		100 % recovery	96 % recovery	96%	
	2022-08-14		100 % recovery	102 % recovery	102%	
	2022-09-11		100 % recovery	88 % recovery	88%	
	2022-09-11		100 % recovery	89 % recovery	89%	
Nitrate						
	2022-05-15		100 % recovery	99 % recovery	99%	
	2022-06-12		100 % recovery	95 % recovery	95%	
	2022-06-12		100 % recovery	97 % recovery	97%	
	2022-06-12		100 % recovery	105 % recovery	105%	
	2022-07-17		100 % recovery	99 % recovery	99%	
	2022-07-17		100 % recovery	101 % recovery	101%	
	2022-07-17		100 % recovery	125 % recovery	125%	MISS
	2022-08-14		100 % recovery	103 % recovery	103%	

Parameter	Date	Sample ID	Spike/Standard	Result	Diff./Accuracy	Hit/Miss
	2022-08-14		100 % recovery	109 % recovery	109%	
	2022-09-11		100 % recovery	101 % recovery	101%	
pH						
	2022-05-15		7.02 s.u.	7 s.u.	-0.02 s.u.	
	2022-05-15		7.02 s.u.	7.03 s.u.	+0.01 s.u.	
	2022-05-15		7.02 s.u.	7.09 s.u.	+0.07 s.u.	
	2022-05-15		7.02 s.u.	7.11 s.u.	+0.09 s.u.	
	2022-06-12		7 s.u.	7.01 s.u.	+0.01 s.u.	
	2022-06-12		7 s.u.	7.05 s.u.	+0.05 s.u.	
	2022-06-12		7 s.u.	7.06 s.u.	+0.06 s.u.	
	2022-06-12		7 s.u.	7.06 s.u.	+0.06 s.u.	
	2022-06-12		7 s.u.	7.07 s.u.	+0.07 s.u.	
	2022-07-17		7 s.u.	7.05 s.u.	+0.05 s.u.	
	2022-07-17		7 s.u.	7.06 s.u.	+0.06 s.u.	
	2022-07-17		7 s.u.	7.06 s.u.	+0.06 s.u.	
	2022-07-17		7 s.u.	7.06 s.u.	+0.06 s.u.	
	2022-07-17		7 s.u.	7.4 s.u.	+0.4 s.u.	MISS
	2022-08-14		7 s.u.	6.99 s.u.	-0.01 s.u.	
	2022-08-14		7 s.u.	7.07 s.u.	+0.07 s.u.	
	2022-08-14		7 s.u.	7.09 s.u.	+0.09 s.u.	
	2022-09-11		7 s.u.	7.01 s.u.	+0.01 s.u.	
	2022-09-11		7 s.u.	7.06 s.u.	+0.06 s.u.	
	2022-09-11		7 s.u.	7.06 s.u.	+0.06 s.u.	
Sp Conductance						
	2022-05-15		1000 uS/cm	975 uS/cm	-25 uS/cm	
	2022-05-15		1000 uS/cm	977 uS/cm	-23 uS/cm	
	2022-05-15		1000 uS/cm	985 uS/cm	-15 uS/cm	
	2022-05-15		1000 uS/cm	991 uS/cm	-9 uS/cm	
	2022-06-12		1000 uS/cm	978 uS/cm	-22 uS/cm	
	2022-06-12		1000 uS/cm	979 uS/cm	-21 uS/cm	
	2022-06-12		1000 uS/cm	979 uS/cm	-21 uS/cm	
	2022-06-12		1000 uS/cm	983 uS/cm	-17 uS/cm	
	2022-06-12		1000 uS/cm	987 uS/cm	-13 uS/cm	
	2022-07-17		1000 uS/cm	984 uS/cm	-16 uS/cm	
	2022-07-17		1000 uS/cm	988 uS/cm	-12 uS/cm	
	2022-07-17		1000 uS/cm	997 uS/cm	-3 uS/cm	
	2022-08-14		1000 uS/cm	991 uS/cm	-9 uS/cm	
	2022-08-14		1000 uS/cm	991 uS/cm	-9 uS/cm	
	2022-08-14		1000 uS/cm	992 uS/cm	-8 uS/cm	
	2022-08-14		1000 uS/cm	992 uS/cm	-8 uS/cm	
	2022-08-14		1000 uS/cm	996 uS/cm	-4 uS/cm	
	2022-09-11		1000 uS/cm	986 uS/cm	-14 uS/cm	

Parameter	Date	Sample ID	Spike/Standard	Result	Diff./Accuracy	Hit/Miss
	2022-09-11		1000 uS/cm	989 uS/cm	-11 uS/cm	
	2022-09-11		1000 uS/cm	990 uS/cm	-10 uS/cm	
	2022-09-11		1000 uS/cm	993 uS/cm	-7 uS/cm	
TP						
	2022-05-15		100 % recovery	100 % recovery	100%	
	2022-05-15		100 % recovery	101 % recovery	101%	
	2022-05-15		100 % recovery	103 % recovery	103%	
	2022-06-12		100 % recovery	100 % recovery	100%	
	2022-06-12		100 % recovery	104 % recovery	104%	
	2022-06-12		100 % recovery	104 % recovery	104%	
	2022-07-17		100 % recovery	105 % recovery	105%	
	2022-07-17		100 % recovery	105 % recovery	105%	
	2022-07-17		100 % recovery	110 % recovery	110%	
	2022-08-14		100 % recovery	99 % recovery	99%	
	2022-08-14		100 % recovery	99 % recovery	99%	
	2022-08-14		100 % recovery	101 % recovery	101%	
	2022-09-11		100 % recovery	97 % recovery	97%	
	2022-09-11		100 % recovery	99 % recovery	99%	
	2022-09-11		100 % recovery	99 % recovery	99%	
Water Temp						
	2022-05-15		21.8 deg C	21.8 deg C	+0 deg C	
	2022-05-15		21.8 deg C	21.8 deg C	+0 deg C	
	2022-05-15		21.8 deg C	21.9 deg C	+0.1 deg C	
	2022-05-15		21.8 deg C	21.9 deg C	+0.1 deg C	
	2022-06-12		22.5 deg C	22.6 deg C	+0.1 deg C	
	2022-06-12		22.5 deg C	22.6 deg C	+0.1 deg C	
	2022-06-12		22.5 deg C	22.7 deg C	+0.2 deg C	
	2022-07-17		22.7 deg C	22.6 deg C	-0.1 deg C	
	2022-07-17		22.7 deg C	22.7 deg C	+0 deg C	
	2022-07-17		22.7 deg C	22.7 deg C	+0 deg C	
	2022-07-17		22.7 deg C	25 deg C	+2.3 deg C	MISS
	2022-07-17		22.7 deg C	22.9 deg C	+0.2 deg C	
	2022-08-14		23.1 deg C	23.1 deg C	+0 deg C	
	2022-08-14		23.1 deg C	23.4 deg C	+0.3 deg C	
	2022-08-14		23.1 deg C	23.4 deg C	+0.3 deg C	
	2022-09-11		22.8 deg C	22.8 deg C	+0 deg C	
	2022-09-11		22.8 deg C	22.8 deg C	+0 deg C	
	2022-09-11		22.8 deg C	22.9 deg C	+0.1 deg C	
	2022-09-11		22.8 deg C	23 deg C	+0.2 deg C	

Notes:

