

Appendix H-2

Calibration Data

EUREKA MANTA II-I-DO,STRD-100		Sample Date	1/6/2019	2/3/2019	3/4/2019	3/31/2019	4/23/2019	5/19/2019	5/20/2019	5/22/2019	5/27/2019	5/29/2019	5/30/2019	6/1/2019	6/2/2019	6/3/2019	6/4/2019
Parameter	Unit	TEST_TYPE															
Dissolved Oxygen, field measured	mg/L	I	99.4	101.3	101.4	97	97	95.7	112.9	102.9	95.4	112.8	102.5	107.7	97.7	98.7	104.4
Dissolved Oxygen, field measured	mg/L	F	100	100.5	100.5	100.2	100	100	100	99.3	100	99	99.9	99.2	100.2	99.9	100

EUREKA MANTA II-I-DO,STRD-100		Sample Date	6/5/2019	6/6/2019	6/7/2019	6/8/2019	6/9/2019	6/10/2019	6/11/2019	6/17/2019	6/24/2019	7/6/2019	7/30/2019	8/1/2019	8/3/2019	9/6/2019	9/10/2019
Parameter	Unit	TEST_TYPE															
Dissolved Oxygen, field measured	mg/L	I	92.3	99.9	100.4	100.3	98.4	101.8	99.9	99.8	95.09	98.8	105.09	102.19	102.8	97.69	100.19
Dissolved Oxygen, field measured	mg/L	F	100	99.9	99.9	99.9	100	99.9	100.8	100	100	99.8	104	99.9	99.8	100	100

EUREKA-F-PH,STRD-4		Sample Date	2/3/2019	3/4/2019	3/31/2019	4/23/2019	5/10/2019	5/19/2019	5/20/2019	5/22/2019	5/27/2019	5/29/2019	5/30/2019	6/1/2019	6/2/2019	6/3/2019	6/4/2019
Parameter	Unit	TEST_TYPE															
pH, field measured	pH units	I	4.05	3.97	3.95	4.19	3.91	4.01	3.88	4.4	3.98	4	3.94	4.09	3.87	4.21	4.11
pH, field measured	pH units	F	4.01	4	4.01	4.02	3.99	4	4	4	4	4	3.78	4.01	4.18	4.14	4.23

EUREKA-F-PH,STRD-4		Sample Date	6/5/2019	6/6/2019	6/7/2019	6/8/2019	6/9/2019	6/10/2019	6/11/2019	6/17/2019	6/24/2019	7/6/2019	7/30/2019	8/1/2019	8/3/2019	9/6/2019	9/10/2019
Parameter	Unit	TEST_TYPE															
pH, field measured	pH units	I	4.23	4.21	4.21	3.9	4.22	4.24	3.96	4.13	3.94	3.86	2.91	3.77	3.99	3.89	3.86
pH, field measured	pH units	F	4	4.02	4.05	4	4.16	3.98	3.99	4	4	3.97	3.56	4.02	4.02	4	4

EUREKA-F-PH,STRD-7		Sample Date	2/3/2019	3/4/2019	4/23/2019	5/10/2019	5/19/2019	5/20/2019	5/27/2019	5/29/2019	5/30/2019	6/1/2019	6/2/2019	6/3/2019	6/4/2019	6/5/2019	6/6/2019
Parameter	Unit	TEST_TYPE															
pH, field measured	pH units	I	6.96	6.98	7.23	6.99	6.92	6.94	7.26	6.96	7.13	6.88	6.77	7.68	7.64	6.98	7.13
pH, field measured	pH units	F	7	7	6.99	7.01	7	7	7	7	7	7	7.09	7.12	7.63	7.03	6.98

EUREKA-F-PH,STRD-7		Sample Date	6/7/2019	6/8/2019	6/9/2019	6/10/2019	6/11/2019	6/17/2019	6/24/2019	7/6/2019	7/30/2019	8/1/2019	8/3/2019	9/6/2019	9/10/2019
Parameter	Unit	TEST_TYPE													
pH, field measured	pH units	I	7.03	7.08	7	7.15	6.97	7.13	6.98	6.77	5.9	6.98	6.96	6.92	7.03
pH, field measured	pH units	F	7.1	7.04	6.99	6.99	6.99	7	7	6.97	7.01	7.03	7.03	7	7

EUREKA-I-PH,STRD-10		Sample Date	2/3/2019	3/31/2019	4/23/2019	5/10/2019	5/19/2019	5/22/2019	5/29/2019	6/2/2019	6/3/2019	6/4/2019	6/5/2019	6/6/2019	6/7/2019	6/8/2019	6/9/2019
Parameter	Unit	TEST_TYPE															
pH, field measured	pH units	I	9.95	9.59	10.17	10.09	10.02	9.43	9.68	9.91	10.2	10.49	10.54	10.02	9.82	10.26	9.82
pH, field measured	pH units	F	10	10	10.03	10.01	10	9.98	10.01	9.94	9.7	10	10	9.99	10	10	9.86

EUREKA-I-PH,STRD-10		Sample Date	6/10/2019	6/11/2019	6/17/2019	7/6/2019	7/30/2019	8/1/2019	8/3/2019	9/6/2019	9/10/2019
Parameter	Unit	TEST_TYPE									
pH, field measured	pH units	I	10.06	10.04	9.96	9.97	9.31	9.77	9.86	9.68	9.85
pH, field measured	pH units	F	9.99	9.99	10	10	10	10	9.99	10	10

EUREKA-I-COND,STRD-1413		Sample Date	5/10/2019	5/20/2019	5/22/2019	5/27/2019	5/29/2019	5/30/2019	6/1/2019	6/2/2019	6/3/2019	6/4/2019	6/5/2019	6/6/2019	6/7/2019	6/8/2019	6/9/2019
Parameter	Unit	TEST_TYPE															
Conductivity, field measured	uS/cm	I	1392	1419	1418	1419	1426	1931	1007	1413	1586	1971	1325	1401	1356	1405	996.2
Conductivity, field measured	uS/cm	F	1413	1413	1414	1413	1415	1413	1413	1413	1410	1412	1413	1413	1413	1413	1413

EUREKA-I-COND,STRD-1413		Sample Date	6/10/2019	6/11/2019	6/17/2019	6/24/2019	7/6/2019	7/30/2019	8/1/2019	8/3/2019	9/6/2019
Parameter	Unit	TEST_TYPE									
Conductivity, field measured	uS/cm	I	1407	1001	1414	1990	1465	3319	815.79	1423	1395
Conductivity, field measured	uS/cm	F	1412	1414	1413	1413	1413	1413	1412	1413	1413

EUREKA-I-COND,STRD-447		Sample Date	1/6/2019
Parameter	Unit	TEST_TYPE	
Conductivity, field measured	uS/cm	I	350
Conductivity, field measured	uS/cm	F	447

MANTA 30+ DO Standard 100		Sample Date	5/20/2019	5/22/2019	5/27/2019	7/30/2019	9/14/2019
Parameter	Unit	TEST_TYPE					
Dissolved Oxygen, field measured	%	I	98.5	97.7	98.19	102.9	105.09
Dissolved Oxygen, field measured	%	F	100	100	100	99.9	100

MANTA 30+ Conductivity Standard 1413		Sample Date	5/20/2019	5/22/2019	5/27/2019	7/30/2019	9/14/2019
Parameter	Unit	TEST_TYPE					
Conductivity, field measured	uS/cm	I	1463	1408	1384	1432	1424
Conductivity, field measured	uS/cm	F	1413	1413	1413	1413	1413

MANTA 30+ pH Standard 7		Sample Date	5/20/2019	5/22/2019	5/27/2019	7/30/2019	9/14/2019
Parameter	Unit	TEST_TYPE					
pH, field measured	pH units	I	7.09	6.91	7.03	7.09	6.96
pH, field measured	pH units	F	7	7	7	6.99	7

MANTA 30+ pH Standard 4		Sample Date	5/20/2019	5/22/2019	5/27/2019	7/30/2019	9/14/2019
Parameter	Unit	TEST_TYPE					
pH, field measured	pH units	I	4.01	3.94	4	4.05	4.01
pH, field measured	pH units	F	4	4	3.98	4.05	4

MANTA 30+ pH Standard 10		Sample Date	7/30/2019	9/14/2019
Parameter	Unit	TEST_TYPE		
pH, field measured	pH units	I	9.96	10.06
pH, field measured	pH units	F	10	10

MANTA 30+ Conductivity 1413		Sample Date	9/14/2019
Parameter	Unit	TEST_TYPE	
Conductivity, field measured	uS/cm	I	1424
Conductivity, field measured	uS/cm	F	1413

MANTA 30+ pH Standard 7		Sample Date	9/14/2019
Parameter	Unit	TEST_TYPE	
pH, field measured	pH units	I	6.96
pH, field measured	pH units	F	7

MANTA 30+ pH Standard 4		Sample Date	9/14/2019
Parameter	Unit	TEST_TYPE	
pH, field measured	pH units	I	4.01
pH, field measured	pH units	F	4

MANTA 30+ pH Standard 10		Sample Date	9/14/2019
Parameter	Unit	TEST_TYPE	
pH, field measured	pH units	I	10.06
pH, field measured	pH units	F	10

MANTA 30+ DO Standard 100		Sample Date	9/14/2019
Parameter	Unit	TEST_TYPE	
Dissolved Oxygen, field measured	%	I	105.09
Dissolved Oxygen, field measured	%	F	100

TDS METER Turbidity Standard 100		Sample Date	6/20/2019	6/21/2019	7/17/2019
Parameter	Unit	TEST_TYPE			
Turbidity, field measured	NTU	I	99.1	87.1	101
Turbidity, field measured	NTU	F	102	96.3	100

TDS METER Turbidity Standard 20		Sample Date	6/20/2019	6/21/2019	7/17/2019
Parameter	Unit	TEST_TYPE			
Turbidity, field measured	NTU	I	14.4	20.6	20.2
Turbidity, field measured	NTU	F	23.1	20.4	20

TDS METER Turbidity Standard 800		Sample Date	6/20/2019	6/21/2019	7/17/2019
Parameter	Unit	TEST_TYPE			
Turbidity, field measured	NTU	I	787	740	794
Turbidity, field measured	NTU	F	812	821	800

YSI 1 Conductivity Standard 1413	Sample Date	Sample Date	6/30/2019	7/1/2019	7/2/2019	7/5/2019	7/7/2019	7/9/2019	7/23/2019	7/27/2019	7/28/2019	7/29/2019	8/4/2019	8/4/2019	8/20/2019	8/21/2019	8/22/2019
Parameter	Unit	TEST_TYPE															
Conductivity, field measured	uS/cm	I	1415	1471	1413	1303	1471	1415	1395	1475	1407	1413	1414	1412	1421	1407	1399
Conductivity, field measured	uS/cm	F	1414	1413	1413	1415	1414	1413	1414	1413	1413	1413	1414	1413	1413	1413	1413

YSI 1 Conductivity Standard 1413	Sample Date	Sample Date	9/1/2019	9/17/2019	9/18/2019	9/23/2019	9/25/2019	9/26/2019	9/27/2019	9/30/2019	9/30/2019	10/3/2019	10/6/2019	10/14/2019	11/4/2019	12/2/2019
Parameter	Unit	TEST_TYPE														
Conductivity, field measured	uS/cm	I	1440	1426	1353	1412	1411	1410	1434	1396	1371	1374	1434	1419	1491	1398
Conductivity, field measured	uS/cm	F	1413	1413	1413	1415	1415	1413	1414	1413	1411	1415	1414	1414	1413	1413

YSI 1 Dissolved Oxygen Standard 100		Sample Date	6/30/2019	7/1/2019	7/2/2019	7/5/2019	7/7/2019	7/9/2019	7/23/2019	7/27/2019	7/28/2019	7/29/2019	8/4/2019	8/4/2019	8/20/2019	8/21/2019	8/22/2019
Parameter	Unit	TEST_TYPE															
Dissolved Oxygen, field measured	%	I	123	101	96.1	97.5	99.9	100.4	96.6	100.9	101.5	98.2	94.7	99.8	90	97.7	99.6
Dissolved Oxygen, field measured	%	F	96.9	97.4	98.3	99.1	98.5	98.4	98.8	100.3	98	98.8	98.3	98.3	100	100.2	99.9

YSI 1 Dissolved Oxygen Standard 100		Sample Date	9/1/2019	9/17/2019	9/18/2019	9/23/2019	9/25/2019	9/26/2019	9/27/2019	9/30/2019	9/30/2019	10/3/2019	10/6/2019	10/14/2019	11/4/2019	12/2/2019
Parameter	Unit	TEST_TYPE														
Dissolved Oxygen, field measured	%	I	99	99.5	99.6	96.1	97	94.3	101	101	97.3	96.1	96	105.5	100.4	95.3
Dissolved Oxygen, field measured	%	F	98.3	98.7	99.7	97	99.9	99.7	96.6	97.8	99.8	99.5	97.6	99.6	99.2	98.6

YSI 1 pH Standard 4		Sample Date	6/30/2019	7/1/2019	7/2/2019	7/5/2019	7/7/2019	7/9/2019	7/23/2019	7/27/2019	7/28/2019	7/29/2019	8/4/2019	8/4/2019	8/20/2019	8/21/2019	8/22/2019
Parameter	Unit	TEST_TYPE															
pH, field measured	pH units	I	3.93	3.99	4	3.99	3.99	4.02	3.97	3.98	4.02	3.98	3.85	4.04	3.91	4.05	4.03
pH, field measured	pH units	F	3.9	4	4	4.1	4	4	4	4.01	4	3.99	4	3.98	4	4	3.95

YSI 1 pH Standard 4		Sample Date	9/1/2019	9/17/2019	9/18/2019	9/23/2019	9/25/2019	9/26/2019	9/27/2019	9/30/2019	9/30/2019	10/3/2019	10/6/2019	10/14/2019	11/4/2019	12/2/2019
Parameter	Unit	TEST_TYPE														
pH, field measured	pH units	I	4	3.99	3.93	3.98	3.97	4.01	4.04	4.05	4.02	4.05	3.91	4.02	4.04	3.96
pH, field measured	pH units	F	4	4	4	4	4.01	3.99	4	3.99	4.01	4	4.03	4	4	4.01

YSI 1 pH Standard 7		Sample Date	6/30/2019	7/1/2019	7/2/2019	7/5/2019	7/7/2019	7/9/2019	7/23/2019	7/27/2019	7/28/2019	7/29/2019	8/4/2019	8/4/2019	8/20/2019	8/21/2019	8/22/2019
Parameter	Unit	TEST_TYPE															
pH, field measured	pH units	I	6.56	7.09	7.1	7.13	7.04	7.16	7.05	7.04	7.05	7.05	7.18	7.02	7.03	7.05	7.02
pH, field measured	pH units	F	7.08	7.1	7.01	7.2	7.1	7.1	7	7.02	7.06	7.02	7	7.04	7	7.02	7.05

YSI 1 pH Standard 7		Sample Date	9/1/2019	9/17/2019	9/18/2019	9/23/2019	9/25/2019	9/26/2019	9/27/2019	9/30/2019	9/30/2019	10/3/2019	10/6/2019	10/14/2019	11/4/2019	12/2/2019
Parameter	Unit	TEST_TYPE														
pH, field measured	pH units	I	7.05	7.05	7.08	7.09	7.07	7.02	7.15	7.12	7.08	7.09	7.1	7.02	7.12	7.1
pH, field measured	pH units	F	7.02	7	7.01	7.01	7	6.98	7.02	7.03	7	7.02	7.05	7	7	7.02

YSI 1 pH Standard 10		Sample Date	6/30/2019	7/1/2019	7/2/2019	7/5/2019	7/7/2019	7/9/2019	7/23/2019	7/27/2019	7/28/2019	7/29/2019	8/4/2019	8/4/2019	8/20/2019	8/21/2019	8/22/2019
Parameter	Unit	TEST_TYPE															
pH, field measured	pH units	I	9.96	10	10	10.24	9.86	10.04	10.08	10.05	10.03	10.04	10.45	10.04	10.08	9.98	10.02
pH, field measured	pH units	F	10	10	10	10.2	10	9.99	10	10.03	10.05	10	10.04	10.02	10	10.03	10.03

YSI 1 pH Standard 10		Sample Date	9/1/2019	9/17/2019	9/18/2019	9/23/2019	9/25/2019	9/26/2019	9/27/2019	9/30/2019	9/30/2019	10/3/2019	10/6/2019	10/14/2019	11/4/2019	12/2/2019
Parameter	Unit	TEST_TYPE														
pH, field measured	pH units	I	10.01	10.02	10.03	9.92	9.95	10.01	10.15	10.12	10.09	10.05	10.22	9.99	10.02	9.88
pH, field measured	pH units	F	10.02	10	9.97	10.05	10.02	10.01	9.99	9.99	9.97	10.02	9.99	10	9.98	9.96

YSI 2 Conductivity Standard 1413		Sample Date	6/30/2019	7/1/2019	7/5/2019	7/7/2019	7/9/2019	7/22/2019	7/24/2019	7/30/2019	7/31/2019	8/2/2019	8/4/2019	8/24/2019	8/26/2019	8/27/2019
Parameter	Unit	TEST_TYPE														
Conductivity, field measured	uS/cm	I	1506	1413	1406	1365	1411	12849	1455	1432	1397	1415	1421	1384	1409	1409
Conductivity, field measured	uS/cm	F	1413	1413	1413	1413	1413	12882	1413	1413	1413	1413	1413	1413	1413	1413

YSI 2 Conductivity Standard 1413		Sample Date	8/28/2019	8/29/2019	9/1/2019	9/3/2019	9/4/2019	9/6/2019	9/7/2019	9/9/2019	9/10/2019	9/12/2019	9/13/2019	9/17/2019	9/30/2019	10/21/2019
Parameter	Unit	TEST_TYPE														
Conductivity, field measured	uS/cm	I	1457	1403	1416	1402	1414	1292	1403	1395	1402	1482	1405	1532	1308	1369
Conductivity, field measured	uS/cm	F	1413	1413	1413	1413	1413	1407	1403	1413	1414	1413	1405	1413	1412	1414

YSI 2 Dissolved Oxygen Standard 100		Sample Date	6/30/2019	7/1/2019	7/5/2019	7/7/2019	7/9/2019	7/22/2019	7/24/2019	7/31/2019	8/2/2019	8/4/2019	8/24/2019	8/26/2019	8/27/2019	8/28/2019
Parameter	Unit	TEST_TYPE														
Dissolved Oxygen, field measured	%	I	90.1	102.1	103.3	96.7	98.2	100.3	105	103.2	99.5	99.5	94.4	98	98.1	102.3
Dissolved Oxygen, field measured	%	F	98.5	97.8	99.6	96.9	98.9	99.9	99.1	98.7	100	100	99.6	99.2	99.6	98.3

YSI 2 Dissolved Oxygen Standard 100		Sample Date	8/29/2019	9/1/2019	9/3/2019	9/4/2019	9/6/2019	9/7/2019	9/9/2019	9/10/2019	9/12/2019	9/13/2019	9/17/2019	9/30/2019	10/21/2019
Parameter	Unit	TEST_TYPE													
Dissolved Oxygen, field measured	%	I	97	97.1	98.3	99.8	100.3	101.7	94.8	84.3	120.3	100.3	95.7	94.3	88.3
Dissolved Oxygen, field measured	%	F	97.2	98.2	98.7	98.8	100	100	100.3	99.5	100	100.1	99.1	99.8	99.6

YSI 2 pH Standard 7		Sample Date	6/30/2019	7/1/2019	7/5/2019	7/7/2019	7/9/2019	7/22/2019	7/24/2019	7/28/2019	7/30/2019	7/31/2019	8/2/2019	8/4/2019	8/24/2019	8/26/2019	8/27/2019
Parameter	Unit	TEST_TYPE															
pH, field measured	pH units	I	7.09	7.08	7.11	7.1	7.08	6.99	7	7.03	7.02	7.05	7.01	7.15	7.04	7.05	7.07
pH, field measured	pH units	F	7.1	7.11	7.1	7.08	7.06	7	7.02	7.05	7.07	7	7.05	7.02	7.03	7.04	7.02

YSI 2 pH Standard 7		Sample Date	8/28/2019	8/29/2019	9/1/2019	9/3/2019	9/4/2019	9/6/2019	9/7/2019	9/9/2019	9/10/2019	9/12/2019	9/13/2019	9/17/2019	9/30/2019	10/21/2019
Parameter	Unit	TEST_TYPE														
pH, field measured	pH units	I	6.99	7.05	7.07	7.03	7.03	7.03	7.06	7.09	7.07	7.08	7.03	7.17	6.78	7.01
pH, field measured	pH units	F	7.02	7.02	7.05	7.03	7.03	7.02	7.02	7.03	7.03	7	7.02	7.1	7.04	7.01

YSI 2 pH Standard 4		Sample Date	6/30/2019	7/1/2019	7/5/2019	7/7/2019	7/9/2019	7/24/2019	7/28/2019	7/30/2019	7/31/2019	8/2/2019	8/4/2019	8/24/2019	8/26/2019	8/27/2019
Parameter	Unit	TEST_TYPE														
pH, field measured	pH units	I	4.02	3.99	3.98	3.96	3.96	3.99	4	4.04	3.99	3.95	4.07	3.99	4.02	4.01
pH, field measured	pH units	F	4.01	3.99	3.96	3.97	4	4	4	4.02	3.95	4	3.95	4.01	4	4

YSI 2 pH Standard 4		Sample Date	8/28/2019	8/29/2019	9/1/2019	9/3/2019	9/4/2019	9/6/2019	9/7/2019	9/9/2019	9/10/2019	9/12/2019	9/13/2019	9/17/2019	9/30/2019	10/21/2019
Parameter	Unit	TEST_TYPE														
pH, field measured	pH units	I	3.94	4.01	4.02	3.95	3.96	3.97	3.88	3.99	3.97	3.94	3.96	4.08	4.38	4.01
pH, field measured	pH units	F	4	4.01	4	4.01	4	4	4	4.01	4.01	4	4	4.05	4.01	4

YSI 2 pH Standard 10		Sample Date	6/30/2019	7/1/2019	7/5/2019	7/7/2019	7/9/2019	7/22/2019	7/24/2019	7/28/2019	7/30/2019	7/31/2019	8/2/2019	8/4/2019	8/24/2019	8/26/2019	8/27/2019
Parameter	Unit	TEST_TYPE															
pH, field measured	pH units	I	9.97	9.99	9.99	10.4	10.01	10.02	9.97	10	10.02	10.01	9.95	10.1	10.03	10	10.05
pH, field measured	pH units	F	10	10	10	10	10	10	10.02	10.03	10	9.98	10.02	9.99	9.99	10.03	10

YSI 2 pH Standard 10		Sample Date	8/28/2019	8/29/2019	9/1/2019	9/3/2019	9/4/2019	9/6/2019	9/7/2019	9/9/2019	9/10/2019	9/12/2019	9/13/2019	9/17/2019	9/30/2019	10/21/2019
Parameter	Unit	TEST_TYPE														
pH, field measured	pH units	I	9.95	10	9.99	9.98	9.98	10.01	10	10	9.97	10.15	9.96	9.98	10.11	9.96
pH, field measured	pH units	F	9.99	9.99	10.02	9.99	9.99	10.04	10.04	9.98	10.01	10	10.04	9.97	10	10.04

OAKTON PCS 2 Conductivity Standard 1413		Sample Date	4/7/2019
Parameter	Unit	TEST_TYPE	
Conductivity, field measured	uS/cm	I	1431
Conductivity, field measured	uS/cm	F	1411

OAKTON PCS 2 pH Standard 7		Sample Date	4/7/2019
Parameter	Unit	TEST_TYPE	
pH, field measured	pH units	I	6.87
pH, field measured	pH units	F	7

OAKTON PCS 2 pH Standard 4		Sample Date	4/7/2019
Parameter	Unit	TEST_TYPE	
pH, field measured	pH units	I	4.25
pH, field measured	pH units	F	4

OAKTON PCS 2 pH Standard 10		Sample Date	4/7/2019
Parameter	Unit	TEST_TYPE	
pH, field measured	pH units	I	10.05
pH, field measured	pH units	F	10.07

OAKTON PCS 3 Conductivity Standard 1413		Sample Date	4/28/2019
Parameter	Unit	TEST_TYPE	
Conductivity, field measured	uS/cm	I	1218
Conductivity, field measured	uS/cm	F	1413

OAKTON PCS 3 pH Standard 7		Sample Date	4/28/2019
Parameter	Unit	TEST_TYPE	
pH, field measured	pH units	I	6.78
pH, field measured	pH units	F	7

OAKTON PCS 3 pH Standard 4		Sample Date	4/28/2019
Parameter	Unit	TEST_TYPE	
pH, field measured	pH units	I	4.45
pH, field measured	pH units	F	3.99

OAKTON PCS 3 pH Standard 10		Sample Date	4/28/2019
Parameter	Unit	TEST_TYPE	
pH, field measured	pH units	I	9.78
pH, field measured	pH units	F	10.06

OAKTON PCS 4 Conductivity Standard 1413		Sample Date	3/2/2019	3/26/2019	4/1/2019	4/28/2019	5/19/2019	6/2/2019	6/3/2019	6/4/2019	6/5/2019	6/6/2019	6/7/2019	6/8/2019	6/9/2019	6/10/2019	6/11/2019	6/12/2019	6/16/2019
Parameter	Unit	TEST_TYPE																	
Conductivity, field measured	uS/cm	I	1450	1403	1330	1533	1439	1277	1459	1527	1290	1411	1349	1405	1415	1418	1501	1459	1471
Conductivity, field measured	uS/cm	F	1421	1413	1425	1413	1414	1413	1413	1413	1413	1413	1414	1415	1413	1414	1414	1413	1445

OAKTON PCS 4 Conductivity Standard 1413		Sample Date	6/19/2019	6/21/2019	6/23/2019	6/25/2019	6/26/2019	6/28/2019	6/30/2019	7/1/2019	7/1/2019	7/5/2019	7/9/2019	7/20/2019	7/23/2019	7/28/2019	11/10/2019	12/8/2019
Parameter	Unit	TEST_TYPE																
Conductivity, field measured	uS/cm	I	1454	1403	1417	1414	1417	1415	1311	1408	1636	1271	1395	1457	1433	1318	1705	1740
Conductivity, field measured	uS/cm	F	1413	1413	1413	1412	1410	1413	1413	1412	1487	1414	1413	1412	1417	1408	1413	1412

OAKTON PCS 4-I-COND,STRD-447		Sample Date	3/10/2019	3/17/2019	3/20/2019
Parameter	Unit	TEST_TYPE			
Conductivity, field measured	uS/cm	I	552	450	306
Conductivity, field measured	uS/cm	F	446	443	447

OAKTON PCS 4 pH Standard 7		Sample Date	2/3/2019	3/2/2019	3/10/2019	3/17/2019	3/20/2019	3/26/2019	4/1/2019	4/28/2019	5/19/2019	6/2/2019	6/3/2019	6/4/2019	6/5/2019	6/6/2019	6/7/2019	6/8/2019	6/9/2019	6/10/2019	6/11/2019
Parameter	Unit	TEST_TYPE																			
pH, field measured	pH units	I	6.95	6.87	7.02	6.97	6.97	7.07	6.49	6.91	7.53	7.05	7	7.02	6.99	7	7.01	7	7.03	7.01	7.01
pH, field measured	pH units	F	7.02	7.03	7.03	7	7.02	7.02	7.02	7.02	7.02	7.01	7.02	7.01	7.02	7.02	7.02	7.02	7.02	7.01	7.02

OAKTON PCS 4 pH Standard 7		Sample Date	6/12/2019	6/16/2019	6/19/2019	6/21/2019	6/23/2019	6/25/2019	6/26/2019	6/28/2019	6/30/2019	7/1/2019	7/1/2019	7/5/2019	7/9/2019	7/20/2019	7/23/2019	7/28/2019	11/10/2019	12/8/2019
Parameter	Unit	TEST_TYPE																		
pH, field measured	pH units	I	7.04	7.06	7.02	7	7.01	7	7	7	7.29	7.3	7.25	7.15	7.31	7.02	7.12	7.11	7.02	7.02
pH, field measured	pH units	F	7	7.04	7.02	7.02	7.02	7.02	7.02	7.02	7.01	7.01	7	7.01	7.02	7.02	7.11	7.09	7.01	7.02

OAKTON PCS 4 pH Standard 4		Sample Date	2/3/2019	3/2/2019	3/10/2019	3/17/2019	3/20/2019	3/26/2019	4/1/2019	4/28/2019	5/19/2019	6/2/2019	6/3/2019	6/4/2019	6/5/2019	6/6/2019	6/7/2019	6/8/2019	6/9/2019	6/10/2019
Parameter	Unit	TEST_TYPE																		
pH, field measured	pH units	I	4.37	3.95	3.96	3.95	4.08	4.05	4	4.53	4	3.98	4.06	4.03	4.02	4.03	4.03	4.05	4	4.19
pH, field measured	pH units	F	4	4.01	3.99	3.99	3.99	4	3.95	3.99	4.58	4.05	4	4	4	4	4	4	4	4

OAKTON PCS 4 pH Standard 4		Sample Date	6/11/2019	6/12/2019	6/16/2019	6/19/2019	6/21/2019	6/23/2019	6/25/2019	6/26/2019	6/28/2019	6/30/2019	7/1/2019	7/5/2019	7/9/2019	7/20/2019	7/23/2019	7/28/2019	11/10/2019	12/8/2019
Parameter	Unit	TEST_TYPE																		
pH, field measured	pH units	I	4.01	3.99	4.04	3.99	4.06	3.99	4.02	4	4.01	3.74	3.75	4.28	3.74	4.03	4.08	4.17	4.99	4.16
pH, field measured	pH units	F	4	4.01	4.02	4	4	4	4	4	4	4	4	4	4	4.02	4.04	4.05	3.99	4

OAKTON PCS 4 pH Standard 10		Sample Date	2/3/2019	3/2/2019	3/10/2019	3/17/2019	3/20/2019	3/26/2019	4/1/2019	4/28/2019	5/19/2019	6/2/2019	6/3/2019	6/4/2019	6/5/2019	6/6/2019	6/7/2019	6/8/2019	6/9/2019	6/10/2019	6/11/2019
Parameter	Unit	TEST_TYPE																			
pH, field measured	pH units	I	10.06	10.19	10.04	10	9.72	9.72	9.96	9.77	10.43	9.93	9.78	9.75	9.94	9.89	9.87	9.87	9.89	9.84	9.83
pH, field measured	pH units	F	10.04	10.07	10.02	10.02	10.05	10.07	10.05	10.06	10.05	10.05	10.05	10.05	10.05	10.05	10.05	10.05	10.05	10.05	10.06

OAKTON PCS 4 pH Standard 10		Sample Date	6/12/2019	6/16/2019	6/19/2019	6/21/2019	6/23/2019	6/25/2019	6/26/2019	6/28/2019	6/30/2019	7/1/2019	7/1/2019	7/5/2019	7/9/2019	7/20/2019	7/23/2019	7/28/2019	11/10/2019	12/8/2019
Parameter	Unit	TEST_TYPE																		
pH, field measured	pH units	I	10.18	10.1	9.89	9.91	9.9	9.89	9.88	9.87	10.04	10.05	10.41	10.13	10.03	10.03	10.08	10.03	9.68	10.17
pH, field measured	pH units	F	10.02	10.07	10.06	10.05	10.05	10.05	10.05	10.04	10.05	10.03	10.05	10.05	10.05	10.05	10.06	10.06	10.06	10.07

