July 30, 2018 Service Request No:R1806421

Jen Epstein
Riverkeepers, Inc
20 Secor Road
Ossining, NY 10562

Laboratory Results for: PEERS - Riverkeeper

Dear Jen,

Enclosed are the results of the sample(s) submitted to our laboratory July 12, 2018
For your reference, these analyses have been assigned our service request number **R1806421.**

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Janice Jaeger
Project Manager

CC: Alene Onion

ADDRESS 1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
PHONE +1 585 288 5380 | FAX +1 585 288 8475
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Environmental

Client: Riverkeepers, Inc
Project: PEERS - Riverkeeper
Sample Matrix: Water

Service Request: R1806421
Date Received: 07/11/2018 - 07/12/2018

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV, validation deliverables including all summary forms and associated raw data. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Any parameters that are not included in the lab's NELAC accreditation are identified on a "Non-Certified Analytes" report in the Miscellaneous Forms Section of this report. Individual analytical results requiring further explanation are flagged with qualifiers and/or discussed below. The flags are explained in the Report Qualifiers and Definitions page in the Miscellaneous Forms section of this report.

Sample Receipt:

Eleven water samples were received for analysis at ALS Environmental on 07/11/2018 - 07/12/2018. Any discrepancies noted upon initial sample inspection are noted on the cooler receipt and preservation form included in this data package. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at 6°C upon receipt at the lab except for aqueous samples designated for metals analyses, which are stored at room temperature.

General Chemistry:

No significant anomalies were noted with this analysis.

Approved by _____ Date 07/30/2018

SAMPLE DETECTION SUMMARY

CLIENT ID: 13-RIOG-T1-0.8-07102018-W			Lab ID: R1806421-001			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Ammonia as Nitrogen, undistilled	0.0425		0.0008	0.0050	mg/L	ASTM D6919-09
Nitrate as Nitrogen	0.563			0.0100	mg/L	Calculation
Nitrate+Nitrite as Nitrogen	0.563		0.0007	0.0020	mg/L	353.2
Nitrogen, Total as Nitrogen	1.19			0.1	mg/L	Calculation
Nitrogen, Total Kjeldahl (TKN)	0.62		0.08	0.10	mg/L	351.2
Phosphorus, Total	0.159		0.010	0.025	mg/L	365.1
Turbidity	2.42		0.06	0.10	NTU	180.1

CLIENT ID: 13-POCH-2.6-07102018-W			Lab ID: R1806421-002			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Ammonia as Nitrogen, undistilled	0.0221		0.0008	0.0050	mg/L	ASTM D6919-09
Nitrate as Nitrogen	0.385			0.0100	mg/L	Calculation
Nitrate+Nitrite as Nitrogen	0.385		0.0007	0.0020	mg/L	353.2
Nitrogen, Total as Nitrogen	0.92			0.1	mg/L	Calculation
Nitrogen, Total Kjeldahl (TKN)	0.54		0.08	0.10	mg/L	351.2
Phosphorus, Total	0.0963		0.0020	0.0050	mg/L	365.1
Turbidity	4.14		0.06	0.10	NTU	180.1

CLIENT ID: 13-RUTG-9.3-07102018-W			Lab ID: R1806421-003			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Ammonia as Nitrogen, undistilled	0.0471		0.0008	0.0050	mg/L	ASTM D6919-09
Nitrate as Nitrogen	1.03			0.0100	mg/L	Calculation
Nitrate+Nitrite as Nitrogen	1.05		0.0007	0.0020	mg/L	353.2
Nitrite as Nitrogen	0.018		0.007	0.010	mg/L	353.2
Nitrogen, Total as Nitrogen	1.49			0.1	mg/L	Calculation
Nitrogen, Total Kjeldahl (TKN)	0.44		0.08	0.10	mg/L	351.2
Phosphorus, Total	0.0486		0.0020	0.0050	mg/L	365.1
Turbidity	2.60		0.06	0.10	NTU	180.1

CLIENT ID: 13-RUTG-9.3-07102018-W EB			Lab ID: R1806421-004			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Nitrate+Nitrite as Nitrogen	0.0022		0.0007	0.0020	mg/L	353.2
Turbidity	0.36		0.06	0.10	NTU	180.1

CLIENT ID: 13-MASO-2.8-07102018-W			Lab ID: R1806421-005			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Ammonia as Nitrogen, undistilled	0.0153		0.0008	0.0050	mg/L	ASTM D6919-09
Nitrate as Nitrogen	0.381			0.0100	mg/L	Calculation
Nitrate+Nitrite as Nitrogen	0.381		0.0007	0.0020	mg/L	353.2
Nitrogen, Total as Nitrogen	0.97			0.1	mg/L	Calculation
Nitrogen, Total Kjeldahl (TKN)	0.59		0.08	0.10	mg/L	351.2
Phosphorus, Total	0.0634		0.0020	0.0050	mg/L	365.1
Turbidity	2.62		0.06	0.10	NTU	180.1

SAMPLE DETECTION SUMMARY

CLIENT ID: 13-TINW-4.5-07112018-W			Lab ID: R1806421-006			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Ammonia as Nitrogen, undistilled	0.0287		0.0008	0.0050	mg/L	ASTM D6919-09
Nitrate as Nitrogen	0.909			0.0100	mg/L	Calculation
Nitrate+Nitrite as Nitrogen	0.922		0.0007	0.0020	mg/L	353.2
Nitrite as Nitrogen	0.013		0.007	0.010	mg/L	353.2
Nitrogen, Total as Nitrogen	1.42			0.1	mg/L	Calculation
Nitrogen, Total Kjeldahl (TKN)	0.49		0.08	0.10	mg/L	351.2
Phosphorus, Total	0.0848		0.0020	0.0050	mg/L	365.1
Turbidity	3.08		0.06	0.10	NTU	180.1

CLIENT ID: 13-TINW-T3.2.1-07112018-W			Lab ID: R1806421-007			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Ammonia as Nitrogen, undistilled	0.0409		0.0008	0.0050	mg/L	ASTM D6919-09
Nitrate as Nitrogen	0.033			0.0100	mg/L	Calculation
Nitrate+Nitrite as Nitrogen	0.0335		0.0007	0.0020	mg/L	353.2
Nitrogen, Total as Nitrogen	1.38			0.1	mg/L	Calculation
Nitrogen, Total Kjeldahl (TKN)	1.35		0.08	0.10	mg/L	351.2
Phosphorus, Total	0.289		0.020	0.050	mg/L	365.1
Turbidity	21.7		0.06	0.10	NTU	180.1

CLIENT ID: 13-PKIL-5.7-07112018-W			Lab ID: R1806421-008			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Ammonia as Nitrogen, undistilled	0.0226		0.0008	0.0050	mg/L	ASTM D6919-09
Nitrate as Nitrogen	0.576			0.0100	mg/L	Calculation
Nitrate+Nitrite as Nitrogen	0.576		0.0007	0.0020	mg/L	353.2
Nitrogen, Total as Nitrogen	0.87			0.1	mg/L	Calculation
Nitrogen, Total Kjeldahl (TKN)	0.30		0.08	0.10	mg/L	351.2
Phosphorus, Total	0.0423		0.0020	0.0050	mg/L	365.1
Turbidity	2.14		0.06	0.10	NTU	180.1

CLIENT ID: 13-WALK-T15-0.1-07112018-W			Lab ID: R1806421-009			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Ammonia as Nitrogen, undistilled	0.0132		0.0008	0.0050	mg/L	ASTM D6919-09
Nitrate as Nitrogen	0.555			0.0100	mg/L	Calculation
Nitrate+Nitrite as Nitrogen	0.555		0.0007	0.0020	mg/L	353.2
Nitrogen, Total as Nitrogen	1.04			0.1	mg/L	Calculation
Nitrogen, Total Kjeldahl (TKN)	0.49		0.08	0.10	mg/L	351.2
Phosphorus, Total	0.0660		0.0020	0.0050	mg/L	365.1
Turbidity	4.72		0.06	0.10	NTU	180.1

CLIENT ID: 13-WALK-T15-0.1-07112018-W-DUP			Lab ID: R1806421-010			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Ammonia as Nitrogen, undistilled	0.0120		0.0008	0.0050	mg/L	ASTM D6919-09
Nitrate as Nitrogen	0.555			0.0100	mg/L	Calculation

SAMPLE DETECTION SUMMARY

CLIENT ID: 13-WALK-T15-0.1-07112018-W-DUP			Lab ID: R1806421-010			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Nitrate+Nitrite as Nitrogen	0.555		0.0007	0.0020	mg/L	353.2
Nitrogen, Total as Nitrogen	0.95			0.1	mg/L	Calculation
Nitrogen, Total Kjeldahl (TKN)	0.40		0.08	0.10	mg/L	351.2
Phosphorus, Total	0.0659		0.0020	0.0050	mg/L	365.1
Turbidity	4.75		0.06	0.10	NTU	180.1

CLIENT ID: 13-WALK-T13-0.7-07112018-W			Lab ID: R1806421-011			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Ammonia as Nitrogen, undistilled	0.0672		0.0008	0.0050	mg/L	ASTM D6919-09
Nitrate as Nitrogen	0.204			0.0100	mg/L	Calculation
Nitrate+Nitrite as Nitrogen	0.204		0.0007	0.0020	mg/L	353.2
Nitrogen, Total as Nitrogen	0.82			0.1	mg/L	Calculation
Nitrogen, Total Kjeldahl (TKN)	0.62		0.08	0.10	mg/L	351.2
Phosphorus, Total	0.108		0.010	0.025	mg/L	365.1
Turbidity	99.6		0.06	0.10	NTU	180.1

Sample Receipt Information

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: Riverkeepers, Inc **Service Request:**R1806421
Project: PEERS - Riverkeeper

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R1806421-001	13-RIOG-T1-0.8-07102018-W	7/10/2018	1015
R1806421-002	13-POCH-2.6-07102018-W	7/10/2018	1145
R1806421-003	13-RUTG-9.3-07102018-W	7/10/2018	1325
R1806421-004	13-RUTG-9.3-07102018-W EB	7/10/2018	1400
R1806421-005	13-MASO-2.8-07102018-W	7/10/2018	1500
R1806421-006	13-TINW-4.5-07112018-W	7/11/2018	0945
R1806421-007	13-TINW-T3.2.1-07112018-W	7/11/2018	1100
R1806421-008	13-PKIL-5.7-07112018-W	7/11/2018	1210
R1806421-009	13-WALK-T15-0.1-07112018-W	7/11/2018	1315
R1806421-010	13-WALK-T15-0.1-07112018-W-DUP	7/11/2018	1315
R1806421-011	13-WALK-T13-0.7-07112018-W	7/11/2018	1430

CHAIN OF CUSTODY

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Division of Water

Project Name: **PEERS-Riverkeeper**	Case Code:	SDG: **070918**
Contract No.:	Sampler Collector: DAN SHAPLEY SEBASTIAN PILLITERI	Sampler Phone No.: 845 717 2158
Project Manager: Jen Epstein	☑ Report to Project Manager Report to: Alene Onion Both	☐ Bill to Project Manager Bill to: Jennifer Epstein
Address: 20 Secor Road Ossining NY 10562	Address: 625 Broadway Albany, NY 12233	Address: 20 Secor Road Ossining NY 10562
Phone: 914 478 4501	Phone: 518 402 8166	Phone: 914 478 4501
Email: jepstein@riverkeeper.org	Email:alene.onion@dec.ny.gov	Email: jepstein@riverkeeper.org

Matrix Codes:
WW = Wastewater
GW = Groundwater
W = Ambient Water
SE = Sediment
SL = Sludge
T = Tissue
O = Other DI WATER

Analyses Ordered (list)

Preservative Codes:
(Please include in ( ) on "Analyses Ordered" line):
1 = Cool to < 6°C
2 = 0.008% $Na_2S_2O_3$
3 = H_2SO_4 to pH < 2
4 = HNO_3 to pH < 2
5 = NaOH to pH > 12
6 = 5 mL/L 12N HCl
7 = 5 mL/L BrCl
8 = HCl to pH < 2
9 = H_3PO_4 to pH < 2
10 = Protect from light
11 = Freeze to < -10°C
12 = Other

SITE ID	Collection Date	Matrix Code	Equip. Blank (EB) Field Blank (FB)	Duplicate (QC)	Matrix Spike (MS)	Collection Time	No. of Containers	PEERS Riverkeeper					Location Info/ NYSDEC Notes	Lab Sample ID/ Lab Notes
13-RIDG-T1.0.8-0710-18W	7-10-18	W				10:15	3	X						
13-POCH-2.6-0710.18W	7-10-18	W				11:45	3	X						
13-RUTG-9.3-0710-18W	7-10-18	W				13:25	3	X						
13-RUTG-9.3-0710-18W-EB	7-10-18	W				14:00	3	X					EQUIPMENT BLANK	
13-MASO-2.8-0710 18W	7-10-18	W				15:00	3	X						

Special Analysis Instructions:

Special Reporting Instructions: Sample ID to be reported as: SITE ID- Date-Matrix Code- (Equip Blank or Quality Control Code if noted)

Relinquished by Sampler:	Date:	Time:	Received by:	Date:	Time:	Laboratory Receipt Notes:
DAN SHAPLEY	7/10/18	15:50				
Relinquished by:	Date:	Time:	Received by:	Date:	Time:	Sample Temp.: ____°C Properly Preserved: Y / N Samples Intact: Y / N

Alec Moses 7/11/18 9:20

Cooler Receipt and Preservation Check Form

Project/Client RIBS / DEL Folder Number

Cooler received on 7/11/18 by: AM

COURIER: ALS UPS (FEDEX) VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	(Y) N	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	Y N (NA)
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	(ALS/ROC) CLIENT
4	Circle: **Wet Ice** **Dry Ice** **Gel packs** present?	(Y) N	7	Soil VOA received as: Bulk Encore 5035set	(NA)

8. Temperature Readings Date: 7/11 Time: 9:55 ID: (IR#7) IR#9 From: (Temp Blank) Sample Bottle

Observed Temp (°C)	5.6						
Correction Factor (°C)	+1.0						
Corrected Temp (°C)	6.6						
Temp from:Type of bottle	Cent Tube						
Within 0-6°C? *	Y (N)	Y N	Y N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed (described below) Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

* All samples held in storage location: R-002 by AM on 7/11 at 10:00
5035 samples placed in storage location: _____ by _____ on _____ at _____

Cooler Breakdown/Preservation Check**: Date: 7/11/18 Time: 1455 by: [illegible]

9. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
10. Did all bottle labels and tags agree with custody papers? (YES) NO
11. Were correct containers used for the tests indicated? (YES) NO
12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO (N/A)
13. Air Samples: Cassettes / Tubes Intact with MS? Canisters Pressurized Tedlar® Bags Inflated (N/A)

pH	Lot of test paper	Reagent	Preserved? Yes	Preserved? No	Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
≥12		NaOH								
≤2		HNO_3								
≤2	24518	H_2SO_4	✓		190642					
<4		$NaHSO_4$								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add $Na_2S_2O_3$ (625, 608, CN), ascorbic (phenol).					
		$Na_2S_2O_3$								
		ZnAcetate	-	-			**VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).			
		HCl	**	**						

Bottle lot numbers: 04/1618-JAN20,

Explain all Discrepancies/ Other Comments:

Poorly Packed

CLRES	BULK
DO	FLDT
HPROD	HGFB
HTR	LL3541
PH	SUB
SO3	MARRS
ALS	REV

Labels secondary reviewed by: (JM)

PC Secondary Review: JMA 7/12/18

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

CHAIN OF CUSTODY

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Division of Water

Project Name: **PEERS-Riverkeeper**	Case Code:	SDG: **070918 C01W**
Contract No.:	Sampler Collector:	Sampler Phone No.:
Project Manager: Jen Epstein	☑ Report to Project Manager Report to: Alene Onion] Both	☐ Bill to Project Manager Bill to: Jennifer Epstein
Address: 20 Secor Road Ossining NY 10562	**Address:** 625 Broadway Albany, NY 12233	**Address:** 20 Secor Road Ossining NY 10562
Phone: 914 478 4501	**Phone:** 518 402 8166	**Phone:** 914 478 4501
Email: jepstein@riverkeeper.org	**Email:** alene.onion@dec.ny.gov	**Email:** jepstein@riverkeeper.org

Matrix Codes:
WW = Wastewater
GW = Groundwater
W = Ambient Water
SE = Sediment
SL = Sludge
T = Tissue
O = Other DI WATER

Preservative Codes:
(Please include in ( ) on "Analyses Ordered" line):
1 = Cool to < 6°C
2 = 0.008% $Na_2S_2O_3$
3 = H_2SO_4 to pH < 2
4 = HNO_3 to pH < 2
5 = NaOH to pH > 12
6 = 5 mL/L 12N HCl
7 = 5 mL/L BrCl
8 = HCl to pH < 2
9 = H_3PO_4 to pH < 2
10 = Protect from light
11 = Freeze to < -10°C
12 = Other

SITE ID	Collection Date	Matrix Code	Equip. Blank (EB) Field Blank (FB)	Duplicate (QC)	Matrix Spike (MS)	Collection Time	No. of Containers	Analyses Ordered (list): PEERS Riverkeeper					Location Info/ NYSDEC Notes	Lab Sample ID/ Lab Notes
13TINW-4.5 0711 18W	07/11/18	W				0945	3	X						
13TINW-T3.21 0711 18W	07/11/18	W				1100	3	X						
13PKIL-5.7-0711 18W	07/11/18	W				1210	3	X						
13-WALK-T15-0.1 0711 18W	07/11/18	W				1315	3	X					Duplicate, Matrix Spike	
13-WALK-T13-0.7 0711 18W	07/11/18	W				1430	3	X						

Special Analysis Instructions:

Special Reporting Instructions: Sample ID to be reported as: SITE ID- Date-Matrix Code- (Equip Blank or Quality Control Code if noted)

Relinquished by Sampler: DAN STAPLEY	Date: 7/11			Time: [redacted]		Received by:	Date: 7/12/18	Time: 09:20	Laboratory Receipt Notes:
Relinquished by:	Date:			Time: 15:15		Received by:	Date:	Time:	Sample Temp.: ____ °C Properly Preserved: Y / N Samples Intact: Y / N

R1806421 5
Riverkeepers, Inc
PEERS - Riverkeeper

Cooler Receipt and Preservation Check Form

R1806421 5
Riverkeepers, Inc
PEERS - Riverkeeper

Project/Client NYSDEC-PEERS Folder Number

Cooler received on 7-12-18 by: [illegible]

COURIER: ALS UPS (FEDEX) VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	(Y)	N
2	**Custody papers** properly completed (ink, signed)?	(Y)	N
3	Did all bottles arrive in good **condition** (unbroken)?	(Y)	N
4	Circle: **Wet Ice** **Dry Ice** **Gel packs** present?	(Y)	N

5a	**Perchlorate** samples have required headspace?	Y	N	(NA)
5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	Y	N	(NA)
6	Where did the bottles originate?	(ALS/ROC)	CLIENT	
7	Soil VOA received as: Bulk Encore 5035set			(NA)

8. Temperature Readings Date: 7-12-18 Time: 09:45 ID: (IR#7) IR#9 From: Temp Blank (Sample Bottle)

Observed Temp (°C)	12.0						
Correction Factor (°C)	0						
Corrected Temp (°C)	12.0						
Temp from:Type of bottle	—						
Within 0-6°C?	Y (N)	Y N	Y N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: Ice melted (Poorly Packed (described below)) * Same Day Rule

&Client Approval to Run Samples: Standing Approval Client aware at drop-off Client notified by:

All samples held in storage location: R-002 by [illegible] on 7-12-18 at 09:47
5035 samples placed in storage location: by on at

Cooler Breakdown/Preservation Check**: Date: 7/12/18 Time: 1845 by: SW

9.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	(YES)	NO
10.	Did all bottle labels and tags agree with custody papers?	SR 7/12/18 ~~YES~~	(NO) **
11.	Were correct containers used for the tests indicated?	(YES)	NO
12.	Were 5035 vials acceptable (no extra labels, not leaking)?	YES	NO (N/A)
13.	Air Samples: Cassettes / Tubes Intact with MS? Canisters Pressurized	Tedlar® Bags Inflated	(N/A)

pH	Lot of test paper	Reagent	Preserved? Yes	Preserved? No	Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
≥12		NaOH			SR 7/12/18					
≤2		HNO_3								
≤2	204518	H_2SO_4	✓		~~H2SO4~~ 190642	6/19				
<4		$NaHSO_4$								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add $Na_2S_2O_3$ (625, 608, CN), ascorbic (phenol).					
		$Na_2S_2O_3$								
		ZnAcetate	-	-						
		HCl	**	**						

**VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).

Bottle lot numbers: 041618-ZAAC, 012219-ZAAW

Explain all Discrepancies/ Other Comments:

* Gel Packs thawed.

** The sample time did not match up w/ the C.O.C for the samples, was able to label as per sample ID's.

CLRES	BULK
DO	FLDT
HPROD	HGFB
HTR	LL3541
PH	SUB
SO3	MARRS
ALS	REV

Labels secondary reviewed by: SR

PC Secondary Review: MS 7/17/18

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

Miscellaneous Forms

ALS Environmental—Rochester Laboratory
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Phone (585) 288-5380 Fax (585) 288-8475
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REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
E	Organics- Concentration has exceeded the calibration range for that specific analysis.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the ñNotesò column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
H	Analysis was performed out of hold time for tests that have an ñimmediateò hold time criteria.
#	Spike was diluted out.
+	Correlation coefficient for MSA is <0.995.
N	Inorganics- Matrix spike recovery was outside laboratory limits.
N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
S	Concentration has been determined using Method of Standard Additions (MSA).
W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
P	Concentration >40% difference between the two GC columns.
C	Confirmed by GC/MS
Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (Ó100% Difference between two GC columns).
X	See Case Narrative for discussion.
MRL LOQ	Method Reporting Limit. Also known as: Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Certifications[1]

Connecticut ID # PH0556	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Delaware Approved	New Jersey ID # NY004	
DoD ELAP #65817	New York ID # 10145	Pennsylvania ID# 68-786
Florida ID # E87674	North Carolina #676	Rhode Island ID # 158
		Virginia #460167

[1] Analyses were performed according to our laboratoryôs NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory or go to https://www.alsglobal.com/locations/americas/north-america/usa/new-york/rochester-environmental

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Riverkeepers, Inc **Service Request:** R1806421
Project: PEERS - Riverkeeper

Sample Name: 13-RIOG-T1-0.8-07102018-W **Date Collected:** 07/10/18
Lab Code: R1806421-001 **Date Received:** 07/11/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
180.1		SCYMBAL
351.2	NSMITH	GNITAJOUPPI
353.2		KMENGS
353.2		MROGERSON
365.1	MROGERSON	MROGERSON
ASTM D6919-09		AMOSES
Calculation		CWOODS

Sample Name: 13-POCH-2.6-07102018-W **Date Collected:** 07/10/18
Lab Code: R1806421-002 **Date Received:** 07/11/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
180.1		SCYMBAL
351.2	NSMITH	GNITAJOUPPI
353.2		KMENGS
353.2		MROGERSON
365.1	MROGERSON	MROGERSON
ASTM D6919-09		AMOSES
Calculation		CWOODS

Sample Name: 13-RUTG-9.3-07102018-W **Date Collected:** 07/10/18
Lab Code: R1806421-003 **Date Received:** 07/11/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
180.1		SCYMBAL
351.2	NSMITH	GNITAJOUPPI
353.2		KMENGS
353.2		MROGERSON
365.1	MROGERSON	MROGERSON
ASTM D6919-09		AMOSES

Client:	Riverkeepers, Inc	**Service Request:**	R1806421
Project:	PEERS - Riverkeeper		

Sample Name:	13-RUTG-9.3-07102018-W	**Date Collected:**	07/10/18
Lab Code:	R1806421-003	**Date Received:**	07/11/18
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
Calculation		CWOODS

Sample Name:	13-RUTG-9.3-07102018-W EB	**Date Collected:**	07/10/18
Lab Code:	R1806421-004	**Date Received:**	07/11/18
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
180.1		SCYMBAL
351.2	NSMITH	GNITAJOUPPI
353.2		KMENGS
353.2		MROGERSON
365.1	MROGERSON	MROGERSON
ASTM D6919-09		AMOSES
Calculation		CWOODS

Sample Name:	13-MASO-2.8-07102018-W	**Date Collected:**	07/10/18
Lab Code:	R1806421-005	**Date Received:**	07/11/18
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
180.1		SCYMBAL
351.2	NSMITH	GNITAJOUPPI
353.2		KMENGS
353.2		MROGERSON
365.1	MROGERSON	MROGERSON
ASTM D6919-09		AMOSES
Calculation		CWOODS

Client: Riverkeepers, Inc **Service Request:** R1806421
Project: PEERS - Riverkeeper

Sample Name: 13-TINW-4.5-07112018-W **Date Collected:** 07/11/18
Lab Code: R1806421-006 **Date Received:** 07/12/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
180.1		SCYMBAL
351.2	NSMITH	GNITAJOUPPI
353.2		KMENGS
353.2		MROGERSON
365.1	KMENGS	NMANSEN
ASTM D6919-09		AMOSES
Calculation		CWOODS
Calculation		NA

Sample Name: 13-TINW-T3.2.1-07112018-W **Date Collected:** 07/11/18
Lab Code: R1806421-007 **Date Received:** 07/12/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
180.1		SCYMBAL
351.2	NSMITH	GNITAJOUPPI
353.2		KMENGS
353.2		MROGERSON
365.1	KMENGS	NMANSEN
ASTM D6919-09		AMOSES
Calculation		CWOODS
Calculation		NA

Sample Name: 13-PKIL-5.7-07112018-W **Date Collected:** 07/11/18
Lab Code: R1806421-008 **Date Received:** 07/12/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
180.1		SCYMBAL
351.2	NSMITH	GNITAJOUPPI
353.2		KMENGS
353.2		MROGERSON

Client: Riverkeepers, Inc **Service Request:** R1806421
Project: PEERS - Riverkeeper

Sample Name: 13-PKIL-5.7-07112018-W **Date Collected:** 07/11/18
Lab Code: R1806421-008 **Date Received:** 07/12/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
365.1	KMENGS	NMANSEN
ASTM D6919-09		AMOSES
Calculation		CWOODS
Calculation		NA

Sample Name: 13-WALK-T15-0.1-07112018-W **Date Collected:** 07/11/18
Lab Code: R1806421-009 **Date Received:** 07/12/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
180.1		SCYMBAL
351.2	NSMITH	GNITAJOUPPI
353.2		KMENGS
353.2		MROGERSON
365.1	KMENGS	NMANSEN
ASTM D6919-09		AMOSES
Calculation		CWOODS
Calculation		NA

Sample Name: 13-WALK-T15-0.1-07112018-W-DUP **Date Collected:** 07/11/18
Lab Code: R1806421-010 **Date Received:** 07/12/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
180.1		SCYMBAL
351.2	NSMITH	GNITAJOUPPI
353.2		KMENGS
353.2		MROGERSON
365.1	KMENGS	NMANSEN
ASTM D6919-09		AMOSES
Calculation		CWOODS
Calculation		NA

Client:	Riverkeepers, Inc	**Service Request:**	R1806421
Project:	PEERS - Riverkeeper		

Sample Name:	13-WALK-T13-0.7-07112018-W	**Date Collected:**	07/11/18
Lab Code:	R1806421-011	**Date Received:**	07/12/18
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
180.1		SCYMBAL
351.2	NSMITH	GNITAJOUPPI
353.2		KMENGS
353.2		MROGERSON
365.1	KMENGS	NMANSEN
ASTM D6919-09		AMOSES
Calculation		CWOODS
Calculation		NA

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C	3005A/3010A
6020A	ILM05.3
9014 Cyanide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Acid Soluble	9030B
9056A Bomb (Halogens)	5050A
9066 Manual Distillation	9065
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3005A/3010A
6010 SPLP (1312) extract	3005A/3010A
7196A	3060A
7199	3060A
9056A Halogens/Halides	5050
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction

For analytical methods not listed, the preparation method is the same as the analytical method reference.

Sample Results

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General Chemistry

ALS Environmental—Rochester Laboratory
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Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client:	Riverkeepers, Inc	**Service Request:**	R1806421
Project:	PEERS - Riverkeeper	**Date Collected:**	07/10/18 10:15
Sample Matrix:	Water	**Date Received:**	07/11/18 09:20
Sample Name:	13-RIOG-T1-0.8-07102018-W	**Basis:**	NA
Lab Code:	R1806421-001		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	**0.0425**	mg/L	0.0050	1	07/18/18 17:42	NA	
Nitrate as Nitrogen	Calculation	**0.563**	mg/L	0.0100	1	NA	NA	
Nitrate+Nitrite as Nitrogen	353.2	**0.563**	mg/L	0.0020	1	07/18/18 09:17	NA	
Nitrite as Nitrogen	353.2	ND U	mg/L	0.010	1	07/11/18 16:23	NA	
Nitrogen, Total as Nitrogen	Calculation	**1.19**	mg/L	0.1	1	NA	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	**0.62**	mg/L	0.10	1	07/13/18 12:15	07/12/18	
Phosphorus, Total	365.1	**0.159**	mg/L	0.025	5	07/17/18 15:43	07/13/18	
Turbidity	180.1	**2.42**	NTU	0.10	1	07/12/18 08:55	NA	

Client:	Riverkeepers, Inc	**Service Request:**	R1806421
Project:	PEERS - Riverkeeper	**Date Collected:**	07/10/18 11:45
Sample Matrix:	Water	**Date Received:**	07/11/18 09:20
Sample Name:	13-POCH-2.6-07102018-W	**Basis:**	NA
Lab Code:	R1806421-002		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	**0.0221**	mg/L	0.0050	1	07/11/18 22:46	NA	
Nitrate as Nitrogen	Calculation	**0.385**	mg/L	0.0100	1	NA	NA	
Nitrate+Nitrite as Nitrogen	353.2	**0.385**	mg/L	0.0020	1	07/18/18 09:18	NA	
Nitrite as Nitrogen	353.2	ND U	mg/L	0.010	1	07/11/18 16:23	NA	
Nitrogen, Total as Nitrogen	Calculation	**0.92**	mg/L	0.1	1	NA	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	**0.54**	mg/L	0.10	1	07/13/18 12:17	07/12/18	
Phosphorus, Total	365.1	**0.0963**	mg/L	0.0050	1	07/17/18 14:59	07/13/18	
Turbidity	180.1	**4.14**	NTU	0.10	1	07/12/18 08:55	NA	

Client:	Riverkeepers, Inc	**Service Request:**	R1806421
Project:	PEERS - Riverkeeper	**Date Collected:**	07/10/18 13:25
Sample Matrix:	Water	**Date Received:**	07/11/18 09:20
Sample Name:	13-RUTG-9.3-07102018-W	**Basis:**	NA
Lab Code:	R1806421-003		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	**0.0471**	mg/L	0.0050	1	07/11/18 23:02	NA	
Nitrate as Nitrogen	Calculation	**1.03**	mg/L	0.0100	1	NA	NA	
Nitrate+Nitrite as Nitrogen	353.2	**1.05**	mg/L	0.0020	1	07/18/18 09:22	NA	
Nitrite as Nitrogen	353.2	**0.018**	mg/L	0.010	1	07/11/18 16:24	NA	
Nitrogen, Total as Nitrogen	Calculation	**1.49**	mg/L	0.1	1	NA	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	**0.44**	mg/L	0.10	1	07/13/18 12:43	07/12/18	
Phosphorus, Total	365.1	**0.0486**	mg/L	0.0050	1	07/17/18 15:00	07/13/18	
Turbidity	180.1	**2.60**	NTU	0.10	1	07/12/18 08:55	NA	

Client:	Riverkeepers, Inc	**Service Request:**	R1806421
Project:	PEERS - Riverkeeper	**Date Collected:**	07/10/18 14:00
Sample Matrix:	Water	**Date Received:**	07/11/18 09:20
Sample Name:	13-RUTG-9.3-07102018-W EB	**Basis:**	NA
Lab Code:	R1806421-004		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	ND U	mg/L	0.0050	1	07/11/18 23:18	NA	
Nitrate as Nitrogen	Calculation	ND U	mg/L	0.0100	1	NA	NA	
Nitrate+Nitrite as Nitrogen	353.2	**0.0022**	mg/L	0.0020	1	07/18/18 09:24	NA	
Nitrite as Nitrogen	353.2	ND U	mg/L	0.010	1	07/11/18 16:24	NA	
Nitrogen, Total as Nitrogen	Calculation	ND U	mg/L	0.1	1	NA	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	ND U	mg/L	0.10	1	07/13/18 12:20	07/12/18	
Phosphorus, Total	365.1	ND U	mg/L	0.0050	1	07/17/18 15:03	07/13/18	
Turbidity	180.1	**0.36**	NTU	0.10	1	07/12/18 08:55	NA	

Client:	Riverkeepers, Inc	**Service Request:**	R1806421
Project:	PEERS - Riverkeeper	**Date Collected:**	07/10/18 15:00
Sample Matrix:	Water	**Date Received:**	07/11/18 09:20
Sample Name:	13-MASO-2.8-07102018-W	**Basis:**	NA
Lab Code:	R1806421-005		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	**0.0153**	mg/L	0.0050	1	07/11/18 23:34	NA	
Nitrate as Nitrogen	Calculation	**0.381**	mg/L	0.0100	1	NA	NA	
Nitrate+Nitrite as Nitrogen	353.2	**0.381**	mg/L	0.0020	1	07/18/18 09:25	NA	
Nitrite as Nitrogen	353.2	ND U	mg/L	0.010	1	07/11/18 16:25	NA	
Nitrogen, Total as Nitrogen	Calculation	**0.97**	mg/L	0.1	1	NA	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	**0.59**	mg/L	0.10	1	07/13/18 12:21	07/12/18	
Phosphorus, Total	365.1	**0.0634**	mg/L	0.0050	1	07/17/18 15:04	07/13/18	
Turbidity	180.1	**2.62**	NTU	0.10	1	07/12/18 08:55	NA	

Client:	Riverkeepers, Inc	**Service Request:**	R1806421
Project:	PEERS - Riverkeeper	**Date Collected:**	07/11/18 09:45
Sample Matrix:	Water	**Date Received:**	07/12/18 09:20
Sample Name:	13-TINW-4.5-07112018-W	**Basis:**	NA
Lab Code:	R1806421-006		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	**0.0287**	mg/L	0.0050	1	07/18/18 17:58	NA	
Nitrate as Nitrogen	Calculation	**0.909**	mg/L	0.0100	1	NA	NA	
Nitrate+Nitrite as Nitrogen	353.2	**0.922**	mg/L	0.0020	1	07/18/18 09:26	NA	
Nitrite as Nitrogen	353.2	**0.013**	mg/L	0.010	1	07/12/18 14:11	NA	
Nitrogen, Total as Nitrogen	Calculation	**1.42**	mg/L	0.1	1	NA	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	**0.49**	mg/L	0.10	1	07/20/18 11:26	07/19/18	
Phosphorus, Total	365.1	**0.0848**	mg/L	0.0050	1	07/25/18 18:14	07/20/18	
Turbidity	180.1	**3.08**	NTU	0.10	1	07/12/18 12:25	NA	

Client:	Riverkeepers, Inc	**Service Request:**	R1806421
Project:	PEERS - Riverkeeper	**Date Collected:**	07/11/18 11:00
Sample Matrix:	Water	**Date Received:**	07/12/18 09:20
Sample Name:	13-TINW-T3.2.1-07112018-W	**Basis:**	NA
Lab Code:	R1806421-007		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	**0.0409**	mg/L	0.0050	1	07/18/18 18:14	NA	
Nitrate as Nitrogen	Calculation	**0.033**	mg/L	0.0100	1	NA	NA	
Nitrate+Nitrite as Nitrogen	353.2	**0.0335**	mg/L	0.0020	1	07/18/18 09:28	NA	
Nitrite as Nitrogen	353.2	ND U	mg/L	0.010	1	07/12/18 14:11	NA	
Nitrogen, Total as Nitrogen	Calculation	**1.38**	mg/L	0.1	1	NA	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	**1.35**	mg/L	0.10	1	07/20/18 11:27	07/19/18	
Phosphorus, Total	365.1	**0.289**	mg/L	0.050	10	07/25/18 20:00	07/20/18	
Turbidity	180.1	**21.7**	NTU	0.10	1	07/12/18 12:25	NA	

Client:	Riverkeepers, Inc	**Service Request:**	R1806421
Project:	PEERS - Riverkeeper	**Date Collected:**	07/11/18 12:10
Sample Matrix:	Water	**Date Received:**	07/12/18 09:20
Sample Name:	13-PKIL-5.7-07112018-W	**Basis:**	NA
Lab Code:	R1806421-008		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	**0.0226**	mg/L	0.0050	1	07/18/18 18:30	NA	
Nitrate as Nitrogen	Calculation	**0.576**	mg/L	0.0100	1	NA	NA	
Nitrate+Nitrite as Nitrogen	353.2	**0.576**	mg/L	0.0020	1	07/18/18 09:29	NA	
Nitrite as Nitrogen	353.2	ND U	mg/L	0.010	1	07/12/18 14:12	NA	
Nitrogen, Total as Nitrogen	Calculation	**0.87**	mg/L	0.1	1	NA	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	**0.30**	mg/L	0.10	1	07/20/18 11:27	07/19/18	
Phosphorus, Total	365.1	**0.0423**	mg/L	0.0050	1	07/25/18 18:16	07/20/18	
Turbidity	180.1	**2.14**	NTU	0.10	1	07/12/18 12:25	NA	

Analytical Report

Client:	Riverkeepers, Inc	**Service Request:**	R1806421
Project:	PEERS - Riverkeeper	**Date Collected:**	07/11/18 13:15
Sample Matrix:	Water	**Date Received:**	07/12/18 09:20
Sample Name:	13-WALK-T15-0.1-07112018-W	**Basis:**	NA
Lab Code:	R1806421-009		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	**0.0132**	mg/L	0.0050	1	07/18/18 18:46	NA	
Nitrate as Nitrogen	Calculation	**0.555**	mg/L	0.0100	1	NA	NA	
Nitrate+Nitrite as Nitrogen	353.2	**0.555**	mg/L	0.0020	1	07/18/18 09:30	NA	
Nitrite as Nitrogen	353.2	ND U	mg/L	0.010	1	07/12/18 14:12	NA	
Nitrogen, Total as Nitrogen	Calculation	**1.04**	mg/L	0.1	1	NA	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	**0.49**	mg/L	0.10	1	07/20/18 12:47	07/19/18	
Phosphorus, Total	365.1	**0.0660**	mg/L	0.0050	1	07/25/18 18:17	07/20/18	
Turbidity	180.1	**4.72**	NTU	0.10	1	07/12/18 12:25	NA	

Client:	Riverkeepers, Inc	**Service Request:**	R1806421
Project:	PEERS - Riverkeeper	**Date Collected:**	07/11/18 13:15
Sample Matrix:	Water	**Date Received:**	07/12/18 09:20
Sample Name:	13-WALK-T15-0.1-07112018-W-DUP	**Basis:**	NA
Lab Code:	R1806421-010		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	**0.0120**	mg/L	0.0050	1	07/18/18 19:35	NA	
Nitrate as Nitrogen	Calculation	**0.555**	mg/L	0.0100	1	NA	NA	
Nitrate+Nitrite as Nitrogen	353.2	**0.555**	mg/L	0.0020	1	07/18/18 09:35	NA	
Nitrite as Nitrogen	353.2	ND U	mg/L	0.010	1	07/12/18 14:14	NA	
Nitrogen, Total as Nitrogen	Calculation	**0.95**	mg/L	0.1	1	NA	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	**0.40**	mg/L	0.10	1	07/20/18 11:32	07/19/18	
Phosphorus, Total	365.1	**0.0659**	mg/L	0.0050	1	07/25/18 18:23	07/20/18	
Turbidity	180.1	**4.75**	NTU	0.10	1	07/12/18 12:25	NA	

Client:	Riverkeepers, Inc	**Service Request:**	R1806421
Project:	PEERS - Riverkeeper	**Date Collected:**	07/11/18 14:30
Sample Matrix:	Water	**Date Received:**	07/12/18 09:20
Sample Name:	13-WALK-T13-0.7-07112018-W	**Basis:**	NA
Lab Code:	R1806421-011		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	**0.0672**	mg/L	0.0050	1	07/18/18 22:31	NA	
Nitrate as Nitrogen	Calculation	**0.204**	mg/L	0.0100	1	NA	NA	
Nitrate+Nitrite as Nitrogen	353.2	**0.204**	mg/L	0.0020	1	07/18/18 09:47	NA	
Nitrite as Nitrogen	353.2	ND U	mg/L	0.010	1	07/12/18 14:14	NA	
Nitrogen, Total as Nitrogen	Calculation	**0.82**	mg/L	0.1	1	NA	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	**0.62**	mg/L	0.10	1	07/20/18 11:32	07/19/18	
Phosphorus, Total	365.1	**0.108**	mg/L	0.025	5	07/25/18 20:01	07/20/18	
Turbidity	180.1	**99.6**	NTU	0.10	1	07/12/18 12:25	NA	

QC Summary Forms

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General Chemistry

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Analytical Report

Client:	Riverkeepers, Inc	**Service Request:**	R1806421
Project:	PEERS - Riverkeeper	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R1806421-MB1		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	ND	U	mg/L	0.0050	1	07/11/18 18:46	NA	
Nitrate+Nitrite as Nitrogen	353.2	ND	U	mg/L	0.0020	1	07/18/18 09:04	NA	
Nitrite as Nitrogen	353.2	ND	U	mg/L	0.010	1	07/11/18 16:15	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	ND	U	mg/L	0.10	1	07/13/18 12:07	07/12/18	
Phosphorus, Total	365.1	ND	U	mg/L	0.0050	1	07/17/18 14:50	07/13/18	
Turbidity	180.1	ND	U	NTU	0.10	1	07/12/18 08:55	NA	

Analytical Report

Client:	Riverkeepers, Inc	**Service Request:**	R1806421
Project:	PEERS - Riverkeeper	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R1806421-MB2		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	ND	U	mg/L	0.0050	1	07/18/18 14:14	NA	
Nitrate+Nitrite as Nitrogen	353.2	ND	U	mg/L	0.0020	1	07/18/18 09:37	NA	
Nitrite as Nitrogen	353.2	ND	U	mg/L	0.010	1	07/12/18 13:52	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	ND	U	mg/L	0.10	1	07/20/18 11:23	07/19/18	
Phosphorus, Total	365.1	ND	U	mg/L	0.0050	1	07/25/18 17:17	07/20/18	

Analytical Report

Client:	Riverkeepers, Inc	**Service Request:**	R1806421
Project:	PEERS - Riverkeeper	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R1806421-MB3		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	ND U	mg/L	0.0050	1	07/18/18 20:39	

Client:	Riverkeepers, Inc	**Service Request:**	R1806421
Project:	PEERS - Riverkeeper	**Date Collected:**	07/10/18
Sample Matrix:	Water	**Date Received:**	07/11/18
		Date Analyzed:	07/13/18
		Date Extracted:	07/12/18

Duplicate Matrix Spike Summary
Nitrogen, Total Kjeldahl (TKN)

Sample Name:	13-RIOG-T1-0.8-07102018-W	**Units:**	mg/L
Lab Code:	R1806421-001	**Basis:**	NA
Analysis Method:	351.2		
Prep Method:	Method		

		Matrix Spike R1806421-001MS			Duplicate Matrix Spike R1806421-001DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Nitrogen, Total Kjeldahl (TKN)	0.62	3.00	2.50	95	2.96	2.50	93	75-125	1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Riverkeepers, Inc
Project: PEERS - Riverkeeper
Sample Matrix: Water

Service Request:R1806421
Date Collected:07/11/18
Date Received:07/12/18
Date Analyzed:07/12/18 - 07/25/18

Duplicate Matrix Spike Summary
General Chemistry Parameters

Sample Name: 13-WALK-T15-0.1-07112018-W
Lab Code: R1806421-009

Units:mg/L
Basis:NA

			Matrix Spike			Duplicate Matrix Spike					
			R1806421-009MS			R1806421-009DMS					
Analyte Name	**Method**	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0132	0.538	0.500	105	0.540	0.500	105	75-125	<1	20
Nitrite as Nitrogen	353.2	ND U	0.249	0.250	100	0.250	0.250	100	75-125	<1	20
Nitrate+Nitrite as Nitrogen	353.2	0.555	0.913	0.500	72 *	1.00	0.500	89	75-125	9	20
Nitrogen, Total Kjeldahl (TKN)	351.2	0.49	2.64	2.50	86	2.66	2.50	87	75-125	<1	20
Phosphorus, Total	365.1	0.0660	0.0915	0.0250	102	0.0915	0.0250	102	75-125	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Riverkeepers, Inc	**Service Request:**	R1806421
Project	PEERS - Riverkeeper	**Date Collected:**	07/11/18
Sample Matrix:	Water	**Date Received:**	07/12/18
		Date Analyzed:	07/12/18

Replicate Sample Summary
General Chemistry Parameters

Sample Name: 13-WALK-T15-0.1-07112018-W **Units:** NTU
Lab Code: R1806421-009 **Basis:** NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample R1806421-009DUP Result	Average	RPD	RPD Limit
Turbidity	180.1	0.10	4.72	4.73	4.73	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Riverkeepers, Inc
Project: PEERS - Riverkeeper
Sample Matrix: Water

Service Request: R1806421
Date Analyzed: 07/11/18 - 07/18/18

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R1806421-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.500	0.500	100	70-130
Nitrate+Nitrite as Nitrogen	353.2	0.492	0.500	98	70-130
Nitrite as Nitrogen	353.2	0.257	0.250	103	70-130
Nitrogen, Total Kjeldahl (TKN)	351.2	2.43	2.50	97	70-130
Phosphorus, Total	365.1	0.0224	0.0250	90	70-130

Client: Riverkeepers, Inc
Project: PEERS - Riverkeeper
Sample Matrix: Water

Service Request: R1806421
Date Analyzed: 07/12/18 - 07/25/18

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R1806421-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.497	0.500	99	70-130
Nitrate+Nitrite as Nitrogen	353.2	0.493	0.500	99	70-130
Nitrite as Nitrogen	353.2	0.237	0.250	95	70-130
Nitrogen, Total Kjeldahl (TKN)	351.2	2.34	2.50	94	70-130
Phosphorus, Total	365.1	0.0235	0.0250	94	70-130

Client: Riverkeepers, Inc
Project: PEERS - Riverkeeper
Sample Matrix: Water

Service Request: R1806421
Date Analyzed: 07/18/18

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R1806421-LCS3

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.489	0.500	98	70-130