



April 11, 2017

ATC Group Services
Attn: Mr. Robert Smith
46555 Humboldt, Suite 100
Novi, MI 48377

Project: School Drinking Water Testing

Dear Mr. Robert Smith,

Enclosed is a copy of the laboratory report for the following work order(s) received by Pace Analytical:

Work Order	Received	Description
1703423	03/23/2017	Breithaupt

This report relates only to the sample(s) as received. Test results are in compliance with the requirements of the National Environmental Laboratory Accreditation Program (NELAP) and/or one of the following certification programs:

ANAB DoD-ELAP/ISO17025 (#ADE-1542); Arkansas DEP (#88-0730/13-049-0); Georgia EPD (#026-999-161/1023062); Illinois DEP (#200026/003329); Kentucky DEP (AL123065/#0021); Michigan DPH (#0034); Minnesota DPH (#026-999-161/1023062); New York ELAP (#11776/53116); North Carolina DNRE (#659); Virginia DCLS (#460153/7952); Wisconsin DNR (#999472650); USDA Soil Import Permit (#P330-14-00305).

Any qualification or narration of results, including sample acceptance requirements and test exceptions to the above referenced programs, is presented in the Statement of Data Qualifications and Project Technical Narrative sections of this report. Estimates of analytical uncertainties and certification documents for the test results contained within this report are available upon request.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read "Gary L. Wood", written over a light blue rectangular background.

Gary L. Wood
Client Services Manager



PROJECT TECHNICAL NARRATIVE(s)

No Project Narrative is associated with this report.



STATEMENT OF DATA QUALIFICATIONS

All analyses have been validated and comply with our Quality Control Program.
No Qualification is required.



ANALYTICAL REPORT

Client: **ATC Group Services**
Project: School Drinking Water Testing
Client Sample ID: **KS-P-B-RM 100 E. Side (R)**
Lab Sample ID: **1703423-01**
Matrix: Drinking Water

Work Order: **1703423**
Description: Breithaupt
Sampled: 03/23/17 06:30
Sampled By: ATC
Received: 03/23/17 17:00

Metals in Drinking Water by EPA 200 Series Methods

Analyte	Analytical Result	RL	Action Limit	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Copper	0.14	0.0050	1.3	mg/L	5	USEPA-200.8 Rev. 5.4	04/05/17 13:51	KLV	1702811
Lead	0.0057	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	04/05/17 11:11	KLV	1702811



ANALYTICAL REPORT

Client: **ATC Group Services**
Project: School Drinking Water Testing
Client Sample ID: **KS-F-B-RM 100 E. Side (R)**
Lab Sample ID: **1703423-02**
Matrix: Drinking Water

Work Order: **1703423**
Description: Breithaupt
Sampled: 03/23/17 06:31
Sampled By: ATC
Received: 03/23/17 17:00

Metals in Drinking Water by EPA 200 Series Methods

Analyte	Analytical Result	RL	Action Limit	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Copper	0.044	0.0010	1.3	mg/L	1	USEPA-200.8 Rev. 5.4	04/05/17 11:14	KLV	1702811
Lead	<0.0010	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	04/05/17 11:14	KLV	1702811



ANALYTICAL REPORT

Client: **ATC Group Services**
Project: School Drinking Water Testing
Client Sample ID: **DWF-P-B-RM 103**
Lab Sample ID: **1703423-03**
Matrix: Drinking Water

Work Order: **1703423**
Description: Breithaupt
Sampled: 03/23/17 06:34
Sampled By: ATC
Received: 03/23/17 17:00

Metals in Drinking Water by EPA 200 Series Methods

Analyte	Analytical Result	RL	Action Limit	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Copper	0.18	0.0050	1.3	mg/L	5	USEPA-200.8 Rev. 5.4	04/05/17 13:54	KLV	1702811
Lead	0.0049	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	04/05/17 11:16	KLV	1702811



ANALYTICAL REPORT

Client: **ATC Group Services**
Project: School Drinking Water Testing
Client Sample ID: **DWF-F-B-RM 103**
Lab Sample ID: **1703423-04**
Matrix: Drinking Water

Work Order: **1703423**
Description: Breithaupt
Sampled: 03/23/17 06:35
Sampled By: ATC
Received: 03/23/17 17:00

Metals in Drinking Water by EPA 200 Series Methods

Analyte	Analytical Result	RL	Action Limit	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Copper	0.082	0.0050	1.3	mg/L	5	USEPA-200.8 Rev. 5.4	04/07/17 08:47	KLV	1702814
Lead	0.0010	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	04/06/17 10:44	KLV	1702814



ANALYTICAL REPORT

Client: **ATC Group Services** Work Order: **1703423**
Project: School Drinking Water Testing Description: Breithaupt
Client Sample ID: **KS-P-B-RM 103 S. Side West Sink** Sampled: 03/23/17 06:38
Lab Sample ID: **1703423-05** Sampled By: ATC
Matrix: Drinking Water Received: 03/23/17 17:00

Metals in Drinking Water by EPA 200 Series Methods

Analyte	Analytical Result	RL	Action Limit	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Copper	0.13	0.0050	1.3	mg/L	5	USEPA-200.8 Rev. 5.4	04/07/17 08:57	KLV	1702814
Lead	0.0016	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	04/06/17 10:54	KLV	1702814



ANALYTICAL REPORT

Client: **ATC Group Services** Work Order: **1703423**
Project: School Drinking Water Testing Description: Breithaupt
Client Sample ID: **KS-F-B-RM 103 S. Side West Sink** Sampled: 03/23/17 06:39
Lab Sample ID: **1703423-06** Sampled By: ATC
Matrix: Drinking Water Received: 03/23/17 17:00

Metals in Drinking Water by EPA 200 Series Methods

Analyte	Analytical Result	RL	Action Limit	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Copper	0.025	0.0010	1.3	mg/L	1	USEPA-200.8 Rev. 5.4	04/06/17 11:02	KLV	1702814
Lead	<0.0010	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	04/06/17 11:02	KLV	1702814



ANALYTICAL REPORT

Client: **ATC Group Services**
Project: School Drinking Water Testing
Client Sample ID: **DWF-P-B-RM 107**
Lab Sample ID: **1703423-07**
Matrix: Drinking Water

Work Order: **1703423**
Description: Breithaupt
Sampled: 03/23/17 06:40
Sampled By: ATC
Received: 03/23/17 17:00

Metals in Drinking Water by EPA 200 Series Methods

Analyte	Analytical Result	RL	Action Limit	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Copper	0.19	0.0050	1.3	mg/L	5	USEPA-200.8 Rev. 5.4	04/07/17 09:00	KLV	1702814
Lead	0.014	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	04/06/17 11:05	KLV	1702814



ANALYTICAL REPORT

Client: **ATC Group Services**
Project: School Drinking Water Testing
Client Sample ID: **DWF-F-B-RM 107**
Lab Sample ID: **1703423-08**
Matrix: Drinking Water

Work Order: **1703423**
Description: Breithaupt
Sampled: 03/23/17 06:41
Sampled By: ATC
Received: 03/23/17 17:00

Metals in Drinking Water by EPA 200 Series Methods

Analyte	Analytical Result	RL	Action Limit	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Copper	0.065	0.0010	1.3	mg/L	1	USEPA-200.8 Rev. 5.4	04/06/17 11:07	KLV	1702814
Lead	0.0014	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	04/06/17 11:07	KLV	1702814



ANALYTICAL REPORT

Client: **ATC Group Services**
Project: School Drinking Water Testing
Client Sample ID: **KS-P-B-RM 117**
Lab Sample ID: **1703423-09**
Matrix: Drinking Water

Work Order: **1703423**
Description: Breithaupt
Sampled: 03/23/17 06:43
Sampled By: ATC
Received: 03/23/17 17:00

Metals in Drinking Water by EPA 200 Series Methods

Analyte	Analytical Result	RL	Action Limit	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Copper	0.57	0.010	1.3	mg/L	10	USEPA-200.8 Rev. 5.4	04/05/17 13:57	KLV	1702811
Lead	0.066	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	04/05/17 11:25	KLV	1702811



ANALYTICAL REPORT

Client: **ATC Group Services**
Project: School Drinking Water Testing
Client Sample ID: **KS-F-B-RM 117**
Lab Sample ID: **1703423-10**
Matrix: Drinking Water

Work Order: **1703423**
Description: Breithaupt
Sampled: 03/23/17 06:44
Sampled By: ATC
Received: 03/23/17 17:00

Metals in Drinking Water by EPA 200 Series Methods

Analyte	Analytical Result	RL	Action Limit	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Copper	0.19	0.0050	1.3	mg/L	5	USEPA-200.8 Rev. 5.4	04/07/17 09:07	KLV	1702814
Lead	0.0040	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	04/06/17 11:10	KLV	1702814



ANALYTICAL REPORT

Client: **ATC Group Services**
Project: School Drinking Water Testing
Client Sample ID: **DWF-P-B-RM 109**
Lab Sample ID: **1703423-11**
Matrix: Drinking Water

Work Order: **1703423**
Description: Breithaupt
Sampled: 03/23/17 06:45
Sampled By: ATC
Received: 03/23/17 17:00

Metals in Drinking Water by EPA 200 Series Methods

Analyte	Analytical Result	RL	Action Limit	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Copper	0.30	0.010	1.3	mg/L	10	USEPA-200.8 Rev. 5.4	04/05/17 13:59	KLV	1702811
Lead	0.0066	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	04/05/17 11:27	KLV	1702811



ANALYTICAL REPORT

Client: **ATC Group Services**
Project: School Drinking Water Testing
Client Sample ID: **DWF-F-B-RM 109**
Lab Sample ID: **1703423-12**
Matrix: Drinking Water

Work Order: **1703423**
Description: Breithaupt
Sampled: 03/23/17 06:46
Sampled By: ATC
Received: 03/23/17 17:00

Metals in Drinking Water by EPA 200 Series Methods

Analyte	Analytical Result	RL	Action Limit	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Copper	0.041	0.0010	1.3	mg/L	1	USEPA-200.8 Rev. 5.4	04/06/17 11:12	KLV	1702814
Lead	<0.0010	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	04/06/17 11:12	KLV	1702814



ANALYTICAL REPORT

Client: **ATC Group Services**
Project: School Drinking Water Testing
Client Sample ID: **DWC-P-B-Hall @ RM 106**
Lab Sample ID: **1703423-13**
Matrix: Drinking Water

Work Order: **1703423**
Description: Breithaupt
Sampled: 03/23/17 06:48
Sampled By: ATC
Received: 03/23/17 17:00

Metals in Drinking Water by EPA 200 Series Methods

Analyte	Analytical Result	RL	Action Limit	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Copper	0.055	0.0010	1.3	mg/L	1	USEPA-200.8 Rev. 5.4	04/06/17 11:20	KLV	1702814
Lead	<0.0010	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	04/06/17 11:20	KLV	1702814



ANALYTICAL REPORT

Client: **ATC Group Services**
Project: School Drinking Water Testing
Client Sample ID: **DWC-F-B-Hall @ RM 106**
Lab Sample ID: **1703423-14**
Matrix: Drinking Water

Work Order: **1703423**
Description: Breithaupt
Sampled: 03/23/17 06:49
Sampled By: ATC
Received: 03/23/17 17:00

Metals in Drinking Water by EPA 200 Series Methods

Analyte	Analytical Result	RL	Action Limit	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Copper	0.071	0.0010	1.3	mg/L	1	USEPA-200.8 Rev. 5.4	04/06/17 11:22	KLV	1702815
Lead	<0.0010	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	04/06/17 11:22	KLV	1702815



ANALYTICAL REPORT

Client: **ATC Group Services**
Project: School Drinking Water Testing
Client Sample ID: **DWF-P-B-Hall @ RM 117 (R)**
Lab Sample ID: **1703423-15**
Matrix: Drinking Water

Work Order: **1703423**
Description: Breithaupt
Sampled: 03/23/17 06:57
Sampled By: ATC
Received: 03/23/17 17:00

Metals in Drinking Water by EPA 200 Series Methods

Analyte	Analytical Result	RL	Action Limit	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Copper	0.24	0.0050	1.3	mg/L	5	USEPA-200.8 Rev. 5.4	04/07/17 09:10	KLV	1702815
Lead	0.0053	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	04/06/17 11:37	KLV	1702815



ANALYTICAL REPORT

Client: **ATC Group Services**
Project: School Drinking Water Testing
Client Sample ID: **DWF-F-B-Hall @ RM 117 (R)**
Lab Sample ID: **1703423-16**
Matrix: Drinking Water

Work Order: **1703423**
Description: Breithaupt
Sampled: 03/23/17 06:58
Sampled By: ATC
Received: 03/23/17 17:00

Metals in Drinking Water by EPA 200 Series Methods

Analyte	Analytical Result	RL	Action Limit	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Copper	0.018	0.0010	1.3	mg/L	1	USEPA-200.8 Rev. 5.4	04/06/17 11:40	KLV	1702815
Lead	<0.0010	0.0010	0.015	mg/L	1	USEPA-200.8 Rev. 5.4	04/06/17 11:40	KLV	1702815

QUALITY CONTROL REPORT

Metals in Drinking Water by EPA 200 Series Methods

QC Type	Sample Conc.	Spike Qty.	Result	Unit	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
Analyte: Copper/USEPA-200.8 Rev. 5.4									
QC Batch: 1702811 (200.2 Digestion)						Analyzed: 04/05/2017		By: KLV	
Method Blank			<0.0010	mg/L					0.0010
Laboratory Control Sample		0.0500	0.0517	mg/L	103	85-115			0.0010
QC Batch: 1702814 (Metals Direct Analysis)						Analyzed: 04/06/2017		By: KLV	
Method Blank			<0.0010	mg/L					0.0010
Laboratory Control Sample		0.0400	0.0395	mg/L	99	85-115			0.0010
QC Batch: 1702815 (Metals Direct Analysis)						Analyzed: 04/06/2017		By: KLV	
Method Blank			<0.0010	mg/L					0.0010
Laboratory Control Sample		0.0400	0.0395	mg/L	99	85-115			0.0010
1703423-14 [DWC-F-B-Hall @ RM 106]									
Matrix Spike	0.0711	0.0200	0.0910	mg/L	99	70-130			0.0010
Matrix Spike Duplicate	0.0711	0.0200	0.0923	mg/L	106	70-130	1	20	0.0010
QC Batch: 1702814 (Metals Direct Analysis)						Analyzed: 04/07/2017		By: KLV	
1703423-04 [DWF-F-B-RM 103]									
Matrix Spike	0.0822	0.100	0.180	mg/L	98	70-130			0.0050
Matrix Spike Duplicate	0.0822	0.100	0.177	mg/L	94	70-130	2	20	0.0050
Analyte: Lead/USEPA-200.8 Rev. 5.4									
QC Batch: 1702811 (200.2 Digestion)						Analyzed: 04/05/2017		By: KLV	
Method Blank			<0.0010	mg/L					0.0010
Laboratory Control Sample		0.0500	0.0486	mg/L	97	85-115			0.0010
QC Batch: 1702814 (Metals Direct Analysis)						Analyzed: 04/06/2017		By: KLV	
Method Blank			<0.0010	mg/L					0.0010
Laboratory Control Sample		0.0400	0.0391	mg/L	98	85-115			0.0010
1703423-04 [DWF-F-B-RM 103]									
Matrix Spike	0.00100	0.0200	0.0200	mg/L	95	70-130			0.0010
Matrix Spike Duplicate	0.00100	0.0200	0.0203	mg/L	97	70-130	2	20	0.0010
QC Batch: 1702815 (Metals Direct Analysis)						Analyzed: 04/06/2017		By: KLV	
Method Blank			<0.0010	mg/L					0.0010

Continued on next page

QUALITY CONTROL REPORT

Metals in Drinking Water by EPA 200 Series Methods (Continued)

QC Type	Sample Conc.	Spike Qty.	Result	Unit	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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Analyte: Lead/USEPA-200.8 Rev. 5.4 (Continued)

QC Batch: 1702815 (Continued) (Metals Direct Analysis)

Analyzed: 04/06/2017 By: KLV

Laboratory Control Sample		0.0400	0.0391	mg/L	98	85-115			0.0010
1703423-14 [DWC-F-B-Hall @ RM 106]									
Matrix Spike	0.000444	0.0200	0.0197	mg/L	96	70-130			0.0010
Matrix Spike Duplicate	0.000444	0.0200	0.0196	mg/L	96	70-130	0.4	20	0.0010



PRETREATMENT SUMMARY PAGE

Client: **ATC Group Services**
Project: **School Drinking Water Testing**

Pretreatment	Lab Sample ID	Batch	By	Date & Time Prepared
USEPA-200.2 Metals Digestion	1703423-01	1702811	JBA	03/31/17 13:00
	1703423-02	1702811	JBA	03/31/17 13:00
	1703423-03	1702811	JBA	03/31/17 13:00
	1703423-09	1702811	JBA	03/31/17 13:00
	1703423-11	1702811	JBA	03/31/17 13:00
USEPA 600/R-94/173	1703423-04	1702814	JBA	03/30/17 16:51
	1703423-05	1702814	JBA	03/30/17 16:51
	1703423-06	1702814	JBA	03/30/17 16:51
	1703423-07	1702814	JBA	03/30/17 16:51
	1703423-08	1702814	JBA	03/30/17 16:51
	1703423-10	1702814	JBA	03/30/17 16:51
	1703423-12	1702814	JBA	03/30/17 16:51
	1703423-13	1702814	JBA	03/30/17 16:51
	1703423-14	1702815	JBA	03/30/17 16:52
	1703423-15	1702815	JBA	03/30/17 16:52
	1703423-16	1702815	JBA	03/30/17 16:52

E 1703423

CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information: Company: ATC GROUP SERVICES Address: 4855 HUMBERT DRIVE Suite 100 Email To: Robert.Smith@atcassociates.com Phone: 248-449-5140 Fax: 248-449-5147 Requested Due Date/TAT:		Section B Required Project Information: Report To: Robert Smith Copy To: Purchase Order No.: Project Name: Project Number:		Section C Invoice Information: Attention: Robert Smith Company Name: ATC GROUP SERVICES Address: 4855 HUMBERT DRIVE City/State/Zip: Reference: Pace Project Manager: Pace Profile #:		Page: 1 of 2 2159574 REGULATORY AGENCY <input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input checked="" type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER Site Location STATE:	
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Section D Required Client Information		Matrix Codes MATRIX / CODE		COLLECTED		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE		TIME		DATE	
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ADDITIONAL COMMENTS BREITHAUPT		RELINQUISHED BY / AFFILIATION Kimberly Johnson / ATC		DATE 3/23/17		TIME 9:05		ACCEPTED BY / AFFILIATION Dime		DATE 3/23/17		TIME 1:20		SAMPLE CONDITIONS Temp in °C Received on Ice (Y/N) Custody Sealed Cooler (Y/N) Samples Intact (Y/N)	
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ORIGINAL

SAMPLER NAME AND SIGNATURE
 PRINT Name of SAMPLER: **Kimberly Johnson**
 SIGNATURE of SAMPLER: *Kimberly Johnson* DATE Signed (MM/DD/YY): **3/23/17**

DATE
 3/23/17

Page
 3/23/17 1700

Page
 3/23/17 1700

E-17032423

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A

Required Client Information:

Section B

Required Project Information:

Section C

Invoice Information:

Company: ATC GROUP SERVICES	Report To: ROBERT SMITH	Company Name: ATC GROUP SERVICES	REGULATORY AGENCY
Address: 4655 HUMBOLDT DRIVE	Copy To: ROBERT SMITH	Address: 4655 HUMBOLDT DRIVE	NPDES <input type="checkbox"/> GROUND WATER <input checked="" type="checkbox"/> DRINKING WATER <input type="checkbox"/>
SUITE 100	Purchase Order No.: 248-64A-5147	Reference: 248-64A-5147	UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER <input type="checkbox"/>
Project Name: Robert Smith Data Associates	Project Number: 248-64A-5147	Page Project Manager: Robert Smith	Site Location STATE: CA
Requested Due Date/AT: 248-64A-5147		Page Profile #: 248-64A-5147	

Page: **2** of **2**
2159573

ITEM #	Section D Required Client Information SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	Matrix Codes Drinking Water Waste Water WWT Product Soil/Solid Oil Wipe Air Tissue Other	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	Preservatives							Analysis Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
					DATE	TIME				DATE	TIME	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃				
1	DNC-F-B-HALL @ RM 106		DN G		3/23/17	6:48		1	X											
2	DNC-F-B-HALL @ RM 104					6:49														
3	DNF-F-B-HALL @ RM 117 (R)					6:57														
4	DWF-F-B-HALL @ RM 117 (R)					6:58														
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

ORIGINAL

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER: Kimberly Johnson	DATE Signed: 3/23/17
SIGNATURE of SAMPLER: Kimberly Johnson	DATE Signed: 3/23/17

Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

SAMPLE RECEIVING / LOG-IN CHECKLIST

Pace Analytical

Client: <u>CTC</u>	Work Order #: <u>1703423</u>
Receipt Record Page/Line #: <u>1/2-33</u>	Project/Chemist: <u>[Signature]</u> Sample #: <u> </u>

Recorded by (Initials/date): <u>JN 3-23-17</u>	<input checked="" type="checkbox"/> Cooler <input type="checkbox"/> Box <input type="checkbox"/> Other	Qty Received: <u>1</u>	Thermometer Used: <input type="checkbox"/> IR Gun (#202) <input type="checkbox"/> Digital Thermometer (#54) <input type="checkbox"/> Other (# <u> </u>)	<input type="checkbox"/> See Additional Cooler Information Form
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Cooler #	Time	Cooler #	Time	Cooler #	Time
<u>1718842009</u>					
Custody Seals: <input checked="" type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact		Custody Seals: <input type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact		Custody Seals: <input type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact	
Coolant Type: <input type="checkbox"/> Loose Ice <input type="checkbox"/> Bagged Ice <input type="checkbox"/> Blue Ice <input checked="" type="checkbox"/> None		Coolant Type: <input type="checkbox"/> Loose Ice <input type="checkbox"/> Bagged Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None		Coolant Type: <input type="checkbox"/> Loose Ice <input type="checkbox"/> Bagged Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None	
Coolant Location: Dispersed / Top / Middle / Bottom Temp Blank Present: <input type="checkbox"/> Yes <input type="checkbox"/> No If Present, Temperature Blank Location is: <input type="checkbox"/> Representative <input type="checkbox"/> Not Representative		Coolant Location: Dispersed / Top / Middle / Bottom Temp Blank Present: <input type="checkbox"/> Yes <input type="checkbox"/> No If Present, Temperature Blank Location is: <input type="checkbox"/> Representative <input type="checkbox"/> Not Representative		Coolant Location: Dispersed / Top / Middle / Bottom Temp Blank Present: <input type="checkbox"/> Yes <input type="checkbox"/> No If Present, Temperature Blank Location is: <input type="checkbox"/> Representative <input type="checkbox"/> Not Representative	
Observed °C	Correction Factor °C	Actual °C	Observed °C	Correction Factor °C	Actual °C
Temp Blank:			Temp Blank:		
Sample 1: <u>15.7</u>	<u>0</u>	<u>15.7</u>	Sample 1:		
Sample 2: <u>17.8</u>	<u>0</u>	<u>17.8</u>	Sample 2:		
Sample 3: <u>17.1</u>	<u>0</u>	<u>17.1</u>	Sample 3:		
3 Sample Average °C: <u>16.9</u>			3 Sample Average °C: <u> </u>		
<input type="checkbox"/> Cooler ID on COC? <input type="checkbox"/> VOC Trip Blank received?			<input type="checkbox"/> Cooler ID on COC? <input type="checkbox"/> VOC Trip Blank received?		

If any shaded areas checked, complete Sample Receiving Non-Conformance and/or Inventory Form

Paperwork Received Yes No <input checked="" type="checkbox"/> Chain of Custody record(s)? If No, Initiated By: <u> </u> <input checked="" type="checkbox"/> Received for Lab Signed/Date/Time? <input type="checkbox"/> Shipping document? <input type="checkbox"/> Other: <u> </u> COC Information <input checked="" type="checkbox"/> Pace COC <input type="checkbox"/> Other: <u> </u> COC ID Numbers: <u>2159574</u> <u>2159573</u> Check COC for Accuracy Yes No <input checked="" type="checkbox"/> Analysis Requested? <input checked="" type="checkbox"/> Sample ID matches COC? <input checked="" type="checkbox"/> Sample Date and Time matches COC? <input type="checkbox"/> Container type completed on COC? <input type="checkbox"/> All container types indicated are received?	Check Sample Preservation N/A Yes No <input type="checkbox"/> <input checked="" type="checkbox"/> Temperature Blank OR average sample temperature, ≥6° C? <input type="checkbox"/> If either is ≥6° C, was thermal preservation required? If "Yes", Project Chemist Approval Initials: <u> </u> If "Yes" Completed Non Con Cooler - Cont Inventory Form? <input type="checkbox"/> Completed Sample Preservation Verification Form? <input checked="" type="checkbox"/> Samples chemically preserved correctly? If "No", added orange tag? <input checked="" type="checkbox"/> Received pre-preserved VOC soils? <input type="checkbox"/> MeOH <input type="checkbox"/> Na ₂ SO ₄						
Sample Condition Summary N/A Yes No <input checked="" type="checkbox"/> Broken containers/lids? <input checked="" type="checkbox"/> Missing or incomplete labels? <input checked="" type="checkbox"/> Illegible information on labels? <input checked="" type="checkbox"/> Low volume received? <input checked="" type="checkbox"/> Inappropriate or non-Pace containers received? <input type="checkbox"/> VOC vials / TOX containers have headspace? <input type="checkbox"/> Extra sample locations / containers not listed on COC?	Check for Short Hold-Time Prep/Analyses <input type="checkbox"/> Bacteriological <input type="checkbox"/> Air Bags <input type="checkbox"/> EnCores / Methanol Pre-Preserved <input type="checkbox"/> Formaldehyde/Aldehyde <input type="checkbox"/> Green-tagged containers <input type="checkbox"/> Yellow/White-tagged 1 L ambers (SV Prep-Lab) <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> AFTER HOURS ONLY: COPIES OF COC TO LAB AREA(S) <input checked="" type="checkbox"/> NONE RECEIVED <input type="checkbox"/> RECEIVED, COCs TO LAB(S) </div>						
Notes <div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> Trip Blank received <input type="checkbox"/> Trip Blank not listed on COC </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 33%;">Cooler Received (Date/Time)</th> <th style="width: 33%;">Paperwork Delivered (Date/Time)</th> <th style="width: 33%;">≤1 Hour Goal Met?</th> </tr> <tr> <td><u>JN 3/23/17</u></td> <td><u>3/23/17</u></td> <td>Yes / No</td> </tr> </table>		Cooler Received (Date/Time)	Paperwork Delivered (Date/Time)	≤1 Hour Goal Met?	<u>JN 3/23/17</u>	<u>3/23/17</u>	Yes / No
Cooler Received (Date/Time)	Paperwork Delivered (Date/Time)	≤1 Hour Goal Met?					
<u>JN 3/23/17</u>	<u>3/23/17</u>	Yes / No					

SAMPLE PRESERVATION VERIFICATION FORM

page 1 of 1

Client <u>ATC</u>	Work Order # <u>1703423</u>
Receipt Log # <u>42-33</u>	Completed By (initials/date) <u>[Signature] 3-23-17</u>
Project Chemist <u>[Signature]</u>	

COC ID # <u>2159574</u>				Adjusted by: _____ Date: _____				DO NOT ADJUST pH FOR THESE CONTAINER TYPES			
Container Type	5 / 23	4	13	6	15						
Tag Color	Lt. Blue	Blue	Brown	Red	Red Stripe						
Preservative	NaOH	H ₂ SO ₄	H ₂ SO ₄	HNO ₃	HNO ₃						
Expected pH	>12	<2	<2	<2	<2						
COC Line #1				✓							
COC Line #2				✓							
COC Line #3				✓							
COC Line #4				✓							
COC Line #5				✓							
COC Line #6				✓							
COC Line #7				✓							
COC Line #8				✓							
COC Line #9				✓							
COC Line #10				✓							
Comments: <u>LINE 11</u>				✓							
Comments: <u>LINE 12</u>				✓							

pH Strip Reagent # / Lot #	
<input checked="" type="checkbox"/>	7021862 / HC693124
<input type="checkbox"/>	Other _____

Aqueous Samples: For each sample and container type, check the box if pH is acceptable. If pH is not acceptable for any sample container, record pH in box, and note on Sample Receiving Checklist and on Sample Receiving Non-Conformance Form. If approved by Project Chemist, add acid or base to the sample to achieve the correct pH. Add up to, but do not exceed 2x the volume initially added at container prep (see table below for initial volumes used). Add orange pH tag to sample container and record information requested. Record adjusted pH on this form. Do not adjust pH for container types 6 and 15.

COC ID # <u>2159573</u>				Adjusted by: _____ Date: _____				DO NOT ADJUST pH FOR THESE CONTAINER TYPES			
Container Type	5 / 23	4	13	6	15						
Tag Color	Lt. Blue	Blue	Brown	Red	Red Stripe						
Preservative	NaOH	H ₂ SO ₄	H ₂ SO ₄	HNO ₃	HNO ₃						
Expected pH	>12	<2	<2	<2	<2						
COC Line #1				✓							
COC Line #2				✓							
COC Line #3				✓							
COC Line #4				✓							
COC Line #5											
COC Line #6											
COC Line #7											
COC Line #8											
COC Line #9											
COC Line #10											
Comments											

Container Size (mL)	Original Vol. of Preservative (mL)
Container Type 5	NaOH
500	2.5
1000	5.0
Container Type 4	H ₂ SO ₄
125	0.5
250	1.0
500	2.0
1000	4.0
Container Type 13	H ₂ SO ₄
500	2.5