

12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Mr. Jon Babcock Haley & Aldrich 200 Town Centre Dr., Ste. 2 Rochester, NY 14623

# Report Summary

Monday June 18, 2012

Report Number: L580453
Samples Received: 06/15/12
Client Project: 33123-021

Description: Tioga

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Leslie Newton , ESC Representative

## Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

 $\overline{\text{Note}}\colon \text{The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.}$ 

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REPORT OF ANALYSIS

Mr. Jon Babcock Haley & Aldrich 200 Town Centre Dr., Ste. 2 Rochester, NY 14623

June 18, 2012

ESC Sample # : L580453-01

Date Received : June 15, 2012 Description : Tioga BCP

Site ID :

Sample ID : 3215-061412-WWTP2A

Project #: 33123-021

Collected By : M. Kozlowski Collection Date : 06/14/12 14:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics 1,1,1-Trichloroethane	BDL	1.0	uq/l	8260B	06/16/12	1
Surrogate Recovery	ВОП	1.0	ug/1	0200B	00/10/12	1
Toluene-d8	101.		% Rec.	8260B	06/16/12	1
Dibromofluoromethane	98.2		% Rec.	8260B	06/16/12	1
4-Bromofluorobenzene	99.2		% Rec.	8260B	06/16/12	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:

The reported analytical results relate only to the sample submitted. This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 06/18/12 10:52 Printed: 06/18/12 13:59



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YOUR LAB OF CHOICE

REPORT OF ANALYSIS

Mr. Jon Babcock Haley & Aldrich 200 Town Centre Dr., Ste. 2 Rochester, NY 14623

June 18, 2012

ESC Sample # : L580453-02

Date Received : June 15, 2012 Description : Tioga BCP

Site ID :

Sample ID : 3215-061412-WWTP2

Project #: 33123-021

Collected By : M. Kozlowski Collection Date : 06/14/12 14:10

Parameter	Result	Det. Limit	Units	Method	Date	Dil.	
Arsenic	0.0011	0.0010	mg/l	6020	06/17/12	1	-
Lead	0.0020	0.0010	mg/l	6020	06/17/12	1	

BDL - Below Detection Limit Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted. This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 06/18/12 10:52 Printed: 06/18/12 13:59

# Summary of Remarks For Samples Printed 06/18/12 at 13:59:23

TSR Signing Reports: 044 R2 - Rush: Next Day

Ship to site per M. Kozloski. ln 6/14/12

Sample: L580453-01 Account: HALALDRNY Received: 06/15/12 09:00 Due Date: 06/18/12 00:00 RPT Date: 06/18/12 10:52

Sample: L580453-02 Account: HALALDRNY Received: 06/15/12 09:00 Due Date: 06/18/12 00:00 RPT Date: 06/18/12 10:52



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Quality Assurance Report Level II

L580453

June 18, 2012

		I	aborator	ry Blank	2						
Analyte	Result		Units		Rec		Limit		Batch	Date	Analyzed
1,1,1-Trichloroethane	< .001		mg/l						WG598064	06/16	5/12 02:2
4-Bromofluorobenzene	001		% Rec.	1.0	0.8		82-120				5/12 02:2
Dibromofluoromethane			% Rec.		98.58		82-126				5/12 02:2
Toluene-d8			% Rec.		0.6		92-112				5/12 02:2
Arsenic	< .001		mg/l							,	7/12 21:4
<u>Lead</u>	< .001		mg/l						WG598239	06/17	7/12 21:4
			Dupli	cate							
Analyte	Units	Resul		plicate	e RP	D	Limit		Ref Sam	ıp	Batch
Arsenic	mg/l	0	0		0		20		L580514	-05	WG59823
Lead	mg/l	0	0		0		20		L580514	-05	WG59823
		Labor	atory Co	ntrol C	Sample						
Analyte	Units		m Val		Result		% Rec		Limit		Batch
1,1,1-Trichloroethane	mg/l	.025		0	.0220		87.9		71-126		WG59806
4-Bromofluorobenzene	mg/ I	.025	,	0.	.0220		104.3		82-120		WG59806
Dibromofluoromethane							98.30		82-126		WG59806
Toluene-d8							101.7		92-112		WG59806
TOTAGINE AU							2021,		72 112		
Arsenic	mg/l	.056			0549		96.8		85-115		WG59823
Lead	mg/l	.056	57	0.	.0547		96.5		85-115		WG59823
	т	Laboratory	. Control	Sample	Dunli	cate					
Analyte		Result	Ref	_	Rec		Limit	RPD	Li	.mit	Batch
1 1 1 moduli 1		0 0000	0 0000				71-126	0 020	0 20		Maeoooc
1,1,1-Trichloroethane 4-Bromofluorobenzene	mg/l	0.0220	0.0220		3.0 )1.8		82-120	0.030	10 20		WG59806 WG59806
Dibromofluoromethane					96.37		82-120				WG59806 WG59806
Toluene-d8					01.7		92-112				WG59806
TOTUELIE-US				10	)1./		92-112				WG39800
			Matrix								
Analyte	Units	MS Res	Ref F	Res I	ľV	% Rec	Limit		Ref Samp	)	Batch
1,1,1-Trichloroethane	mq/l	0.0284	0.007	730 C	)25	84.4	58-137		L580170-	.01	WG59806
4-Bromofluorobenzene	111971	0.0201	0.007	30 .0		101.6	82-120		1300170	01	WG59806
Dibromofluoromethane						97.20	82-126				WG59806
Toluene-d8						99.87	92-112				WG59806
Arsenic	mg/l	0.0542	0			95.6	75-125		L580514-	05	WG59823
Lead	mg/l	0.0544	0	.0	)567	95.9	75-125		L580514-	05	WG59823
		Mata	ix Spike	Duplic	rato						
Analyte	Units	MSD	Ref	%Rec		Limit	RPD	Limit	Ref Samp	)	Batch
1,1,1-Trichloroethane	mg/l	0.0293	0.0284	87.8		58-137	2.96	20	L580170-	.01	WG59806
4-Bromofluorobenzene	1119/1	0.0293	0.0204	102.7		82-120	2.30	20	проот/0-	OI	WG59806
Dibromofluoromethane				97.49		82-126					WG59806
Toluene-d8				100.3		92-112					WG59806
TOTACHE GO				100.3		72 IIZ					MGSSOUG
Arsenic	mg/l	0.0545	0.0542	96.1		75-125	0.552	20	L580514-	05	WG59823
Lead	mg/l	0.0528	0.0544	93.1		75-125	2.99	20	L580514-	05	WG59823

<sup>\*</sup> Performance of this Analyte is outside of established criteria. For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Quality Assurance Report Level II

June 18, 2012 L580453

Batch number /Run number / Sample number cross reference

WG598064: R2213914: L580453-01 WG598239: R2214734: L580453-02

<sup>\* \*</sup> Calculations are performed prior to rounding of reported values. \* Performance of this Analyte is outside of established criteria. For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Quality Assurance Report Level II

L580453

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June 18, 2012

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate — is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.



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Mr. Jon Babcock Haley & Aldrich 200 Town Centre Dr., Ste. 2 Rochester, NY 14623

# Report Summary

Tuesday June 26, 2012

Report Number: L581469
Samples Received: 06/21/12
Client Project: 33123-021

Description: Tioga

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Leslie Newton , ESC Representative

### Laboratory Certification Numbers

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YOUR LAB OF CHOICE

REPORT OF ANALYSIS

June 26, 2012

Mr. Jon Babcock Haley & Aldrich 200 Town Centre Dr., Ste. 2 Rochester, NY 14623

ESC Sample # : L581469-01

Date Received : June 21, 2012 Description : Tioga BCP

Site ID :

Sample ID : 3215-062012-WWTP3A

Project #: 33123-021

Collected By : M. Kozlowski Collection Date : 06/20/81 11:40

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
1,1,1-Trichloroethane	0.016	0.0010	mg/1	8260B	06/23/12	1
Surrogate Recovery						
Toluene-d8	104.		% Rec.	8260B	06/23/12	1
Dibromofluoromethane	103.		% Rec.	8260B	06/23/12	1
a,a,a-Trifluorotoluene	105.		% Rec.	8260B	06/23/12	1
4-Bromofluorobenzene	105.		% Rec.	8260B	06/23/12	1

BDL - Below Detection Limit Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted. This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 06/26/12 12:39 Printed: 06/26/12 12:56



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YOUR LAB OF CHOICE

REPORT OF ANALYSIS

Mr. Jon Babcock Haley & Aldrich 200 Town Centre Dr., Ste. 2 Rochester, NY 14623

Date Received : June 21, 2012 Description : Tioga BCP

Description

Sample ID 3215-062012-WWTP3 :

Collected By : M. Kozlowski Collection Date : 06/20/81 11:30

ESC Sample # : L581469-02

Project #: 33123-021

June 26, 2012

Site ID :

Result Det. Limit Units Method Dil. Parameter Date 06/25/12 06/25/12 0.0010 mg/16020 Arsenic BDL 1 0.0010  ${\it mg/l}$ 6020 1 Lead BDL

BDL - Below Detection Limit Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 06/26/12 12:39 Printed: 06/26/12 12:56

# Summary of Remarks For Samples Printed 06/26/12 at 12:56:32

TSR Signing Reports: 044 R5 - Desired TAT

Ship to site per M. Kozloski. ln 6/14/12

Sample: L581469-01 Account: HALALDRNY Received: 06/21/12 09:00 Due Date: 06/28/12 00:00 RPT Date: 06/26/12 12:39

Sample: L581469-02 Account: HALALDRNY Received: 06/21/12 09:00 Due Date: 06/28/12 00:00 RPT Date: 06/26/12 12:39



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Quality Assurance Report Level II

L581469

June 26, 2012

Analyte	Result		Jaboratory Units	r Blank % Rec	1	Limit		Batch	Dato	Analyzed
Analyce	Kesuit	-	UIIICS	* Kec	•	шинс		Batti	Date	Allalyzed
1,1,1-Trichloroethane	< .001	L	mg/l					WG599370	06/23	3/12 00:23
4-Bromofluorobenzene			% Rec.	105.3		82-120		WG599370	06/23	3/12 00:23
Dibromofluoromethane			% Rec.	103.7		82-126		WG599370	06/23	3/12 00:23
Toluene-d8			% Rec.	103.5		92-112		WG599370	06/23	3/12 00:23
a,a,a-Trifluorotoluene			% Rec.	104.6		90-116		WG599370	06/23	3/12 00:23
Arsenic	< .001		mq/l					WCE00247	06/25	5/12 16:47
Lead	< .001		mg/l							$\frac{5}{12}$ $\frac{16:47}{16:47}$
			Duplio	rate						
Analyte	Units	Resul		licate	RPD	Limit		Ref Sam	p	Batch
Arsenic	mg/l	0.0210	0.0	172	18.9	20		L581328	-18	WG599247
Lead	mg/l	0	0		0	20		L581328	-18	WG599247
		Labor	atory Cor	ntrol Samp	le.					
Analyte	Units		m Val	_	ult	% Rec		Limit		Batch
1,1,1-Trichloroethane	mq/l	.025	5	0.024	:5	98.2		71-126		WG599370
4-Bromofluorobenzene	9/ =	.025		0.021		104.3		82-120		WG599370
Dibromofluoromethane						102.3		82-126		WG599370
Toluene-d8						101.8		92-112		WG599370
a,a,a-Trifluorotoluene						103.4		90-116		WG599370
a,a,a-iiiiiuoiotoiuelle						103.4		90-110		WG399370
Arsenic	mg/l	.056		0.049		87.5		85-115		WG599247
Lead	mg/l	.056	57	0.050	7	89.4		85-115		WG599247
		Laboratory	Control	Sample Du	plicate					
Analyte	Units	Result	Ref	%Rec		Limit	RPD	Li	mit	Batch
1,1,1-Trichloroethane	mq/l	0.0240	0.0245	96.0		71-126	2.41	20		WG599370
4-Bromofluorobenzene	9/ =	0.0210	0.0215	104.4		82-120	2.11	20		WG599370
Dibromofluoromethane				104.4		82-126				WG599370
Toluene-d8				102.1		92-112				WG599370
a,a,a-Trifluorotoluene				102.1		90-116				WG599370 WG599370
			Matrix S	nike.						<u></u>
Analyte	Units	MS Res	Ref Re		% Rec	Limit		Ref Samp		Batch
1 1 1 mui phlamachhair	me /1	0.0400	0.0166		105	F0 725	,	T F 0 1 4 C 0	0.1	MGECOSES
1,1,1-Trichloroethane 4-Bromofluorobenzene	mg/l	0.0422	0.0160	.025	105.	58-137		L581469-	UI	WG599370
					105.5	82-120				WG599370
Dibromofluoromethane					103.8	82-126				WG599370
Toluene-d8					102.5	92-112				WG599370
a,a,a-Trifluorotoluene					105.7	90-116	5			WG599370
Arsenic	mg/l	0.0714	0.0172			75-125		L581328-		WG599247
Lead	mg/l	0.0468	0	.0567	82.5	75-125	5	L581328-	18	WG599247
		Matr	ix Spike	Duplicate	:					
Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	1	Batch
1,1,1-Trichloroethane	mg/l	0.0405	0.0422	98.2	58-137	3.89	20	L581469-	01	WG599370
4-Bromofluorobenzene	_			104.6	82-120					WG599370
Dibromofluoromethane				103.0	82-126					WG599370
Toluene-d8				103.3	92-112					WG599370
a,a,a-Trifluorotoluene				105.7	90-116					WG599370

<sup>\*</sup> Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Quality Assurance Report Level II

L581469

June 26, 2012

		Mat	rıx Spike	Duplicate					
Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Arsenic	mg/l	0.0711	0.0714	95.1	75-125	0.421	20	L581328-18	WG599247
Lead	mg/l	0.0463	0.0468	81.6	75-125	1.07	20	L581328-18	WG599247

Batch number /Run number / Sample number cross reference

WG599370: R2224474: L581469-01 WG599247: R2227253: L581469-02

<sup>\* \*</sup> Calculations are performed prior to rounding of reported values. \* Performance of this Analyte is outside of established criteria. For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Quality Assurance Report Level II

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The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

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Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate — is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

		<u> =-0</u>	20117			Q.						
Haley & Aldrich	•	Billing Informa					nalysi	s/Contain	er/Preserv	ative		Chair at O
200 Town Centre	e Dr.	Accounts 1 70 Blanch Burlington	Payable ard Rd., Ste 4 , MA 01803-5	430 5100		17/2	171WU3					Chain of Custody Page of
Rochester, NY 1	4623	Report to:				at Apple	HOPE				L-A-B S-C-	I-E-N-C-E-S
		Email to:	J. Babc bcock@haley			2	J <sub>m</sub>				12065 Leb Mt Juliet,	ahon Road TN 37122
	a BCP	City/Sate Collected	Cornin		7111	77.5	1200	7			Phone: (80)	
Phone: 585-362-6666 FAX:	Client Project #: 33123-021	ESC Ke	/: HALALDF	RNY60412	28	Yhan	t 07.00				Phone: (61) Fax: (61)	5) 758-5858 5) 758-5859
Collected by:M. Kozlowski	Site/Facility ID#:	P.O.#:				10%	ı				l10	5
Collected by (signature):  Immediately Packed on Ice N Y X	Rush? (Lab MUST I Same Day Next Day Two Day Three Day	200%	Date Results 5 GGM Email?No	<u>TPT</u> o <u>√</u> Yes	No.		INDIC, UND				CoCode Template/Prelogin	(lab use only)
Sample ID	Comp/Grat Matrix	Depth	Date		Cntrs	-1 6					Shipped Via: C	581469
3215-062012-WWTP3a	Grab WW	-	6/20/12/	140	2	X	7					Sample # (lab only)
3215-062012-WWTP3	Comp WW		10/20/12 1		1	X					Halay+Aldrich Standard delive	LSK 01 ablis or
	Survivors Laboratory and Control of Control	·										
								+		-		
	TO ALL LAW AND											
*Matrix: SS - Soil/Solid GW - Grou	ndwater WW - WasteWa	ter DW - Drini	king Water OT	- Other			_ 1	11.22	02.0	pH _	Ten	np
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Mr. Jon Babcock Haley & Aldrich 200 Town Centre Dr., Ste. 2 Rochester, NY 14623

# Report Summary

Friday July 06, 2012

Report Number: L582652 Samples Received: 06/28/12 Client Project: 33123-123

Description: Tioga

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Leslie Newton , ESC Representative

### Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

 $\overline{\text{Note}}\colon \text{The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.}$ 

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YOUR LAB OF CHOICE

REPORT OF ANALYSIS

Mr. Jon Babcock Haley & Aldrich 200 Town Centre Dr., Ste. 2 Rochester, NY 14623 July 06, 2012

ESC Sample # : L582652-01 Date Received : June Description : Tioga 28, 2012

Site ID : Sample ID : 3215-062712-WWTP4A

Project #: 33123-123

Collected By : M. Kozlowski Collection Date : 06/27/12 14:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
1,1,1-Trichloroethane	BDL	0.0010	mg/l	8260B	06/29/12	1
Surrogate Recovery						
Toluene-d8	99.6		% Rec.	8260B	06/29/12	1
Dibromofluoromethane	96.0		% Rec.	8260B	06/29/12	1
a,a,a-Trifluorotoluene	109.		% Rec.	8260B	06/29/12	1
4-Bromofluorobenzene	103.		% Rec.	8260B	06/29/12	1

BDL - Below Detection Limit Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted. This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 07/06/12 10:34 Printed: 07/06/12 10:53



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Site ID :

YOUR LAB OF CHOICE

REPORT OF ANALYSIS

Mr. Jon Babcock Haley & Aldrich 200 Town Centre Dr., Ste. 2 Rochester, NY 14623 July 06, 2012

Date Received : June : Tioga ESC Sample # : L582652-02 28, 2012

Description

Sample ID : 3215-062712-WWTP4

Project #: 33123-123

Collected By : M. Kozlowski Collection Date : 06/27/12 13:50

Result Det. Limit Units Method Dil. Parameter Date 07/04/12 07/04/12 0.0012 0.0010 mg/16020 Arsenic 1 0.0021 0.0010  ${\it mg/l}$ 6020 1 Lead

BDL - Below Detection Limit Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 07/06/12 10:34 Printed: 07/06/12 10:53



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Quality Assurance Report Level II

L582652

July 06, 2012

			13020	752						
			Laboratory			-1.1.				
Analyte	Result		Units	% Rec	!	Limit		Batch	Date	Analyzed
1,1,1-Trichloroethane	< .001		mg/l					WG600396	06/2	8/12 21:15
4-Bromofluorobenzene			% Rec.	105.3		82-120		WG600396	06/2	8/12 21:15
Dibromofluoromethane			% Rec.	100.5		82-126		WG600396	06/2	8/12 21:15
Toluene-d8			% Rec.	97.8	6	92-112		WG600396	06/2	8/12 21:15
a,a,a-Trifluorotoluene			% Rec.	103.9		90-116		WG600396	06/2	8/12 21:15
Arsenic	< .001		mg/l							4/12 16:15
Lead	< .001		mg/l					WG600743	07/0	<u>4/12</u> 16:15
			Duplic	cate						
Analyte	Units	Resu	lt Dup	olicate	RPD	Limit		Ref Samp	9	Batch
Arsenic	mg/l	0.0013	0.0	0120	10.3	20		L582652-	-02	WG600743
Lead	mg/l	0.0021	0.0	00210	0.948	20		L582652-	-02	WG600743
		Labo	ratory Con	ntrol Samp	le					
Analyte	Units		wn Val	Res		% Rec		Limit		Batch
1,1,1-Trichloroethane	mg/l	.02	5	0.021	1	84.5		71-126		WG600396
4-Bromofluorobenzene	1119/1	.02	5	0.021	1	102.2		82-120		WG600396
Dibromofluoromethane						94.22		82-126		WG600396
Toluene-d8						100.1		92-112		WG600396
a,a,a-Trifluorotoluene						107.2		90-116		WG600396
						107.2		JU 110		WGGGGGGG
Arsenic	mg/1	.05		0.056		100.		85-115		WG600743
Lead	mg/l	.05	6 /	0.057	4	101.		85-115		WG600743
			y Control	_	_					
Analyte	Units	Result	Ref	%Rec		Limit	RPD	Lin	nit	Batch
1,1,1-Trichloroethane	mg/l	0.0221	0.0211	88.0		71-126	4.54	20		WG600396
4-Bromofluorobenzene				104.5		82-120				WG600396
Dibromofluoromethane				95.4	9	82-126				WG600396
Toluene-d8				100.1		92-112				WG600396
a,a,a-Trifluorotoluene				106.8		90-116				WG600396
			Matrix S	Spike						
Analyte	Units	MS Res	Ref Re	es TV	% Rec	Limit		Ref Samp		Batch
1,1,1-Trichloroethane	mg/l	0.0255	0	.025	102.	58-137		L582364-3	31	WG600396
4-Bromofluorobenzene	5				104.3	82-120				WG600396
Dibromofluoromethane					95.82	82-126				WG600396
Toluene-d8					84.86*	92-112				WG600396
a,a,a-Trifluorotoluene					98.81	90-116				WG600396
Arsenic	mg/l	0.0607	0.0012	20 .0567	105.	75-125		L582652-0	02	WG600743
Lead	mg/l	0.0587	0.0021			75-125		L582652-0		WG600743
Arsenic	mg/l	0.0687	0.0034			75-125		L582499-0		WG600743
Lead	mg/l	0.0578	0	.0567		75-125		L582499-0		WG600743
		Mat	rix Spike	Dunlicate						
Analyte	Units	MSD	Ref	%Rec	Limit	RPD	<u>Limi</u> t	Ref Samp		Batch
		0.0056	0 0255	100	FO 135	0.560	20		2.1	
1,1,1-Trichloroethane 4-Bromofluorobenzene	mg/l	0.0256	0.0255	102. 104.7	58-137 82-120	0.560	20	L582364-3	ΣI	WG600396 WG600396
4-Bromofluoropenzene Dibromofluoromethane				98.05	82-120 82-126					WG600396
ATDINOTINOTONIECHIANE				20.05	07-170					WG000396

 $<sup>\</sup>mbox{\scriptsize *}$  Performance of this Analyte is outside of established criteria. For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Quality Assurance Report Level II

L582652

July 06, 2012

		Mat	rix Spike	e Duplicate					
Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Toluene-d8				99.53	92-112				
a,a,a-Trifluorotoluene				107.3	90-116				
Arsenic	mg/l	0.0603	0.0607	104.	75-125	0.661	20	L582652-02	WG60074
Lead	mg/l	0.0578	0.0587	98.2	75-125	1.55	20	L582652-02	WG60074
Arsenic	mg/l	0.0679	0.0687	114.	75-125	1.17	20	L582499-02	WG60074
Lead	mg/l	0.0572	0.0578	101.	75-125	1.04	20	L582499-02	WG60074

Batch number /Run number / Sample number cross reference

WG600396: R2232633: L582652-01 WG600743: R2241875: L582652-02

<sup>\* \*</sup> Calculations are performed prior to rounding of reported values.
\* Performance of this Analyte is outside of established criteria. For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



Haley & Aldrich Mr. Jon Babcock 200 Town Centre Dr., Ste. 2

Rochester, NY 14623

Quality Assurance Report Level II

L582652

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July 06, 2012

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate — is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

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Rochester, NY 14623			B	orlingt	en,MA	01803 - 3	5100	Amb/HCL	-HN03				E-A-B S-C	SC I-E-N-C-E-S
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Mr. Jon Babcock Haley & Aldrich 200 Town Centre Dr., Ste. 2 Rochester, NY 14623

# Report Summary

Wednesday June 13, 2012

Report Number: L579680 Samples Received: 06/12/12 Client Project: 33123-021

Description: Tioga

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Leslie Newton , ESC Representative

### Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979

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 $\overline{\text{Note}}\colon \text{The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.}$ 

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YOUR LAB OF CHOICE

REPORT OF ANALYSIS

Mr. Jon Babcock Haley & Aldrich 200 Town Centre Dr., Ste. 2 Rochester, NY 14623

June 13, 2012

ESC Sample # : L579680-01

Date Received : June 12, 2012 Description : Tioga

Site ID :

Sample ID : 0842-060912-WWTP1

Project #: 33123-021

Collected By : Jon Babcock Collection Date : 06/09/12 11:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Arsenic	0.0021	0.0010	mg/l	6020	06/12/12	1
Lead	0.0017	0.0010	mg/l	6020	06/12/12	1

BDL - Below Detection Limit Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted. This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 06/13/12 07:14 Printed: 06/13/12 07:14

# Summary of Remarks For Samples Printed 06/13/12 at 07:14:49

TSR Signing Reports: 044 R2 - Rush: Next Day

Removed city/state from Account name per Haley & Aldrich accounting. ln 11/4/09

Sample: L579680-01 Account: HALALDRNY Received: 06/12/12 09:00 Due Date: 06/13/12 00:00 RPT Date: 06/13/12 07:14 NY ASP Cat. B Deliverable



Haley & Aldrich Mr. Jon Babcock 200 Town Centre Dr., Ste. 2

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Quality Assurance Report Level II

L579680

June 13, 2012

Laboratory Blank											
Analyte	Result		Units	왕	Rec		Limit		Batch	Date	Analyzed
	0.01		/3							0.00(1)	0 /10 10 .00
Arsenic	< .001		mg/l								2/12 19:09
Lead	< .001		mg/l						WG597433	3 06/13	<u>2/12</u> 19:09
Duplicate											
Analyte	Units	Resu	lt D	uplicate	e F	RPD	Limit		Ref Sar	mp	Batch
-											
Arsenic	mg/l	0.0018				8.2 20			L579680-01		WG597433
Lead	mg/l	0.0018	0 0	.00170	7.91		20		L579680-01		WG597433
Laboratory Control Sample											
Analyte	Units		wn Val		Resul		% Rec		Limit		Batch
-											
Arsenic	mg/l	.05	.0567 0.		0533	94.0			85-115		WG597433
Lead	mg/1	.05	.0567 0.		0545	5 96.1			85-115		WG597433
Matrix Spike											
To a land a	******	MG D			77.7	0 D	+ 2 2		D - F G		Date als
Analyte	Units	MS Res	Ref	Res 1	ľV	% Rec	Limit		Ref Samp	0	Batch
Arsenic	mg/l	0.0579	9 0.00210 .0		)567	98.4	75-125		L579680-	-01	WG597433
Lead	mg/l	0.0546	0.00	170 .0	)567	93.3	75-125		L579680-	-01	WG597433
Matrix Spike Duplicate											
Analyte	Units	MSD	Ref	%Rec		Limit	RPD	Limit	Ref Sam	o	Batch
-											
Arsenic	mg/l	0.0572	0.0579	97.2		75-125	1.22	20	L579680-		WG597433
Lead	mg/1	0.0541	0.0546	92.4		75-125	0.920	20	L579680-	-01	WG597433

Batch number /Run number / Sample number cross reference

WG597433: R2207693: L579680-01

<sup>\* \*</sup> Calculations are performed prior to rounding of reported values.
\* Performance of this Analyte is outside of established criteria. For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



Haley & Aldrich Mr. Jon Babcock 200 Town Centre Dr., Ste. 2

Rochester, NY 14623

Quality Assurance Report Level II

L579680

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June 13, 2012

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate — is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.



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Est. 1970

Mr. Jon Babcock Haley & Aldrich 200 Town Centre Dr., Ste. 2 Rochester, NY 14623

## Report Summary

Monday June 11, 2012

Report Number: L579522 Samples Received: 06/09/12 Client Project: 33123-021

Description: Tioga

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Leslie Newton , ESC Representative

### Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979

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 $\overline{\text{Note}}\colon \text{The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.}$ 

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REPORT OF ANALYSIS

June 11,2012

Mr. Jon Babcock Haley & Aldrich 200 Town Centre Dr., Ste. 2 Rochester, NY 14623

ESC Sample # : L579522-01

Date Received : June 09, 2012 Description : Tioga BCP Description

Site ID : Sample ID : 3215-060812-WWTP1A

Project #: 33123-021

Collected By : M. Kozolowki Collection Date : 06/08/12 14:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics 1,1,1-Trichloroethane	BDL	1.0	ug/l	8260B	06/10/12	1
Surrogate Recovery	222	2.0	wg, 1	02002	00/10/12	_
Toluene-d8	102.		% Rec.	8260B	06/10/12	1
Dibromofluoromethane	104.		% Rec.	8260B	06/10/12	1
4-Bromofluorobenzene	102.		% Rec.	8260B	06/10/12	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:

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Reported: 06/11/12 14:34 Printed: 06/11/12 15:23

# Summary of Remarks For Samples Printed 06/11/12 at 15:23:42

TSR Signing Reports: 044 R2 - Rush: Next Day

Removed city/state from Account name per Haley & Aldrich accounting. ln 11/4/09

Sample: L579522-01 Account: HALALDRNY Received: 06/09/12 09:00 Due Date: 06/12/12 00:00 RPT Date: 06/11/12 14:34 target is 1,1,1-Trichloroethane



Haley & Aldrich Mr. Jon Babcock 200 Town Centre Dr., Ste. 2

Rochester, NY 14623

12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Quality Assurance Report Level II

June 11, 2012 L579522

Laboratory Blank									
Analyte	Result		Units	% Rec		Limit		Batch I	ate Analyzed
1,1,1-Trichloroethane	< .001		mq/l					WCE07092 (	06/10/12 15:35
4-Bromofluorobenzene	.001		% Rec.	100.3		82-120			06/10/12 15:35
Dibromofluoromethane			% Rec.	100.3		82-126			06/10/12 15:35
Toluene-d8			% Rec.	101.7		92-112			06/10/12 15:35
						-			
Laboratory Control Sample									
Analyte	Units	Kno	wn Val	Resul	.t	% Rec		Limit	Batch
1,1,1-Trichloroethane	mq/l	.02	5	0.0258		103.		71-126	WG597082
4-Bromofluorobenzene	5.					97.45		82-120	WG597082
Dibromofluoromethane						103.2		82-126	WG597082
Toluene-d8						103.2		92-112	WG597082
_			-	l Sample Dupl	icate				_
Analyte	Units	Result	Ref	%Rec		Limit	RPD	Limi	t Batch
1,1,1-Trichloroethane	mq/l	0.0266	0.0258	3 106.		71-126	3.17	20	WG597082
4-Bromofluorobenzene	5.			99.07		82-120			WG597082
Dibromofluoromethane				103.2		82-126			WG597082
Toluene-d8				103.6		92-112			WG597082
Matrix Spike									
Analyte	Units	MS Res	Matrix Ref F	-	% Rec	Limit		Ref Samp	Batch
Analyte	UIIICS	MS Kes	Kel i	(es IV	* KEC	DIMIC		Ker Samp	Batten
1,1,1-Trichloroethane	mq/l	0.0236	0	.025	94.4	58-137		L579495-02	wG597082
4-Bromofluorobenzene	5, =				101.0	82-120			WG597082
Dibromofluoromethane					102.3	82-126			WG597082
Toluene-d8					104.3	92-112			WG597082
			11						
Anna lasta	Units	Mat MSD	rix Spike Ref	Duplicate %Rec	Limit	RPD	T 2 2 to	Ref Samp	Batch
Analyte	Units	MSD	кет	*KEC	TIMIT	RPD	TIMIT	. Rel Samp	Baten
1,1,1-Trichloroethane	mq/l	0.0132	0.0236	52.8*	58-137	56.5*	20	L579495-02	wg597082
4-Bromofluorobenzene	5, -			96.68	82-120				WG597082
Dibromofluoromethane				104.4	82-126				WG597082
Toluene-d8				101.2	92-112				WG597082

Batch number /Run number / Sample number cross reference

WG597082: R2204454: L579522-01

<sup>\* \*</sup> Calculations are performed prior to rounding of reported values. \* Performance of this Analyte is outside of established criteria. For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate — is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.