

Results Report

Order ID: 6113336

Keating Environmental Management, Inc.

835 Springdale Drive, Suite 200

Exton, PA 19341

Project: RUSH-Philly SD Project

Attn: Chris Orzechowski Regulatory ID:

Sample Number: 6113336-01 Site: 1020-01-KS-101 Sample ID:

Collector: CO Collect Date: 11/18/2016 9:20 am Sample Type: Grab

Department / Test / Parameter	Result	Units	Wethou	K.L.	DF	Prep Date	Бу	Allalysis Date	Бу
Inorganics Turbidity (T)	< 0.50	NTU	EPA 180.1	0.50	1	11/18/16	RPV	11/18/16 18:10	RPV
raiblanty (1)	0.00	11.0	2177 100.1	0.00	·	11/10/10	•	11/10/10 10:10	
<u>Metals</u>									
Iron	0.119	mg/L	EPA 200.7	0.050	1	11/21/16	ADR	11/22/16 14:06	ADR

Sample Number: 6113336-02 Site: 1020-03-WC-102 Sample ID:

Collector: CO Collect Date: 11/18/2016 9:27 am Sample Type: Grab

Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву
<u>Inorganics</u>									
Turbidity (T)	1.10	NTU	EPA 180.1	0.50	1	11/18/16	RPV	11/18/16 18:10	RPV
<u>Metals</u>									
Iron	0.097	mg/L	EPA 200.7	0.050	1	11/21/16	ADR	11/22/16 14:35	ADR

Sample Number: 6113336-03 Site: 1020-03-WC-103 Sample ID:

Collector: CO Collect Date: 11/18/2016 9:31 am Sample Type: Grab

Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву
Inorganics									
Turbidity (T)	1.98	NTU	EPA 180.1	0.50	1	11/18/16	RPV	11/18/16 18:10	RPV
<u>Metals</u>									
Iron	0.389	mg/L	EPA 200.7	0.050	1	11/21/16	ADR	11/22/16 14:40	ADR

Sample Number: 6113336-04 Site: 1020-03-WC-104 Sample ID:

Collector: CO Collect Date: 11/18/2016 9:35 am Sample Type: Grab

Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву
<u>Inorganics</u>									
Turbidity (T)	5.30	NTU	EPA 180.1	0.50	1	11/18/16	RPV	11/18/16 18:10	RPV
<u>Metals</u>									
Iron	0.846	ma/L	EPA 200.7	0.050	1	11/21/16	ADR	11/22/16 14:45	ADR

Report Generated On: 11/23/2016 2:26 pm 6113336

Effective: 07/09/2014 STL_Results Revision #1.6







Sample Number: 6113336-05 Site: 1020-02-WC-105 Sample ID: Collector: CO Collect Date: 11/18/2016 9:40 am Sample Type: Grab Analysis Date Department / Test / Parameter Units Method Prep Date Ву Result R.L. Βv **Inorganics** Turbidity (T) 1.20 NTU EPA 180.1 0.50 11/18/16 **RPV** 11/18/16 18:10 RPV **Metals** Iron 0.200 mg/L EPA 200.7 0.050 11/21/16 ADR 11/22/16 14:49 ADR Sample Number: 6113336-06 Site: 1020-02-WC-106 Sample ID: Collector: CO Collect Date: 11/18/2016 9:45 am Sample Type: Grab Department / Test / Parameter Result Units Method R.L. Prep Date Ву **Analysis Date** Ву DF Inorganics Turbidity (T) NTU EPA 180.1 2.11 0.50 11/18/16 **RPV** 11/18/16 18:10 RPV **Metals** 0.122 EPA 200.7 0.050 11/21/16 ADR Iron mg/L 11/22/16 14:54 ADR Sample Number: 6113336-07 Site: 1020-02-WC-107 Sample ID: Collector: CO Collect Date: 11/18/2016 9:50 am Sample Type: Grab Department / Test / Parameter Units **Analysis Date** Result Method R.L. DF Prep Date Βy Βv **Inorganics** Turbidity (T) 2.58 NTU EPA 180.1 0.50 11/18/16 **RPV** 11/18/16 18:10 RPV <u>Metals</u> Iron 0.608 mg/L EPA 200.7 0.050 11/21/16 **ADR** 11/22/16 14:58 ADR Site: 1020-01-WC-108 Sample ID: Sample Number: 6113336-08 Collector: CO Collect Date: 11/18/2016 9:57 am Sample Type: Grab Department / Test / Parameter Units Method R.L. Ву **Analysis Date** Ву Result DF **Prep Date Inorganics** 2.08 Turbidity (T) NTU EPA 180.1 0.50 11/18/16 **RPV** 11/18/16 18:10 RPV Metals Iron 0.284 mg/L EPA 200.7 0.050 11/21/16 **ADR** 11/22/16 15:03 ADR Sample Number: 6113336-09 Site: 1020-01-WC-109 Sample ID: Collector: CO Collect Date: 11/18/2016 10:01 am Sample Type: Grab Department / Test / Parameter Result Units Method R.L. DF **Prep Date** Ву **Analysis Date** Ву **Inorganics** Turbidity (T) 1 17 NTU EPA 180.1 0.50 11/18/16 **RPV** 11/18/16 18:10 RPV Metals

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STL Results Revision #1.6 Effective: 07/09/2014







Sample Number: 6113336-09 Site: 1020-01-WC-109 Sample ID:

Collector: CO	Collec	Collect Date: 11/18/2016 10:01 am				ype: Grab						
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву			
Metals (Continued)												
Iron	0.154	mg/L	EPA 200.7	0.050	1	11/21/16	ADR	11/22/16 15:07	ADR			
Sample Number: 6113336-10	Site:	1020-01-WC-110		Sa	ample II	D:						
Collector: CO	Collec	t Date: 11/18/20	16 10:06 am	Sample Type: Grab								
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву			
Inorganics												
Turbidity (T)	0.80	NTU	EPA 180.1	0.50	1	11/18/16	RPV	11/18/16 18:10	RPV			
<u>Metals</u>												
Iron	0.086	mg/L	EPA 200.7	0.050	1	11/21/16	ADR	11/22/16 13:57	ADR			
Sample Number: 6113336-11	Site:	1020-01-WC-111		Sa	ample II	D:						
Collector: CO	Collec	t Date: 11/18/20	16 10:12 am	Sample Type: Grab								
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву			
Inorganics												
Turbidity (T)	0.59	NTU	EPA 180.1	0.50	1	11/18/16	RPV	11/18/16 18:10	RPV			
<u>Metals</u>												
Iron	0.100	mg/L	EPA 200.7	0.050	1	11/21/16	ADR	11/22/16 15:12	ADR			
Sample Number: 6113336-12	Site:	1020-01-WC-112		Sample ID:								
Collector: CO	Collec	t Date: 11/18/20	16 10:14 am	Sample Type: Grab								
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву			
<u>Inorganics</u>												
Turbidity (T)	1.76	NTU	EPA 180.1	0.50	1	11/18/16	RPV	11/18/16 18:10	RPV			
<u>Metals</u>												
Iron	0.134	mg/L	EPA 200.7	0.050	1	11/21/16	ADR	11/22/16 15:31	ADR			
Sample Number: 6113336-13	Site:	1020-01-WC-113		Sa	ample II	D:						
Collector: CO	Collec	Collect Date: 11/18/2016 10:22 am				ype: Grab						
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву			
Inorganics												
Turbidity (T)	19.4	NTU	EPA 180.1	0.50	1	11/18/16	RPV	11/18/16 18:10	RPV			
<u>Metals</u>												
Iron	2.33	mg/L	EPA 200.7	0.050	1	11/21/16	ADR	11/22/16 15:35	ADR			

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STL_Results Revision #1.6 Effective: 07/09/2014







Sample Number: 6113336-14 Site: 1020-01-WC-114 Sample ID: Collector: CO Collect Date: 11/18/2016 10:28 am Sample Type: Grab Analysis Date Department / Test / Parameter Units Method Prep Date Ву Result R.L. Βv **Inorganics** Turbidity (T) 0.95 NTU EPA 180.1 0.50 11/18/16 **RPV** 11/18/16 18:10 RPV **Metals** Iron 0.133 mg/L EPA 200.7 0.050 11/21/16 ADR 11/22/16 15:40 ADR Sample Number: 6113336-15 Site: 1020-01-NS-115 Sample ID: Collector: CO Collect Date: 11/18/2016 10:37 am Sample Type: Grab Department / Test / Parameter Result Units Method R.L. Prep Date Ву **Analysis Date** Ву DF Inorganics Turbidity (T) NTU EPA 180.1 1.58 0.50 11/18/16 **RPV** 11/18/16 18:10 RPV **Metals** 0.194 EPA 200.7 0.050 11/21/16 ADR Iron mg/L 11/22/16 15:44 ADR Sample Number: 6113336-16 Site: 1020-01-WC-116 Sample ID: Collector: CO Collect Date: 11/18/2016 10:44 am Sample Type: Grab Department / Test / Parameter Units **Analysis Date** Ву Result Method R.L. DF Prep Date Βy **Inorganics** Turbidity (T) 0.82 NTU EPA 180.1 0.50 11/18/16 **RPV** 11/18/16 18:10 RPV <u>Metals</u> Iron 0.107 mg/L EPA 200.7 0.050 11/21/16 **ADR** 11/22/16 15:49 ADR Site: 1020-01-WC-117 Sample ID: Sample Number: 6113336-17 Collector: CO Collect Date: 11/18/2016 10:48 am Sample Type: Grab Department / Test / Parameter Units Method R.L. Ву **Analysis Date** Ву Result DF **Prep Date Inorganics** Turbidity (T) 0.56 NTU EPA 180.1 0.50 11/18/16 **RPV** 11/18/16 18:10 RPV Metals Iron 0.102 mg/L EPA 200.7 0.050 11/21/16 **ADR** 11/22/16 15:54 ADR Sample Number: 6113336-18 Site: 1020-01-WC-118 Sample ID: Collector: CO Collect Date: 11/18/2016 10:53 am Sample Type: Grab Department / Test / Parameter Result Units Method R.L. DF **Prep Date** Ву **Analysis Date** Ву <u>Inorganics</u> Turbidity (T) 1.00 NTU EPA 180.1 0.50 11/18/16 **RPV** 11/18/16 18:10 RPV Metals

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STL Results Revision #1.6 Effective: 07/09/2014







Sample Number: 6113336-18

Collector: CO

Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву
Metals (Continued)									
Iron	0.122	mg/L	EPA 200.7	0.050	1	11/21/16	ADR	11/22/16 15:58	ADF
Sample Number: 6113336-19	Site:	1020-01-PS-119		Sa					
Collector: CO	Collec	t Date: 11/18/20	16 11:33 am	Sa	ample T	ype: Grab			
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву
norganics									
Turbidity (T)	4.20	NTU	EPA 180.1	0.50	1	11/18/16	RPV	11/18/16 18:10	RPV
<u>Metals</u>									
Iron	0.151	mg/L	EPA 200.7	0.050	1	11/21/16	ADR	11/22/16 16:03	ADF
Sample Number: 6113336-20	Site:	1020-01-WC-120		Sa	ample II	D:			
Collector: CO	Collec	t Date: 11/18/20	16 11:36 am	Sa	ample T	ype: Grab			
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву

Collector: CO	Collect Date: 11/18/2016 11:43 am	Sample Tyr

1.69

0.267

Result

Site: 1020-01-WC-121 Sample Type: Grab Collect Date: 11/18/2016 11:43 am

NTU

mg/L

Units

Site: 1020-01-WC-118

Collect Date: 11/18/2016 10:53 am

Inorganics Turbidity (T)	0.96	NTU	EPA 180.1	0.50	1	11/18/16	RPV	11/18/16 18:10	RPV
Metals Iron	0.095	mg/L	EPA 200.7	0.050	1	11/21/16	ADR	11/22/16 17:04	ADR

EPA 180.1

EPA 200.7

Method

0.50

0.050

R.L.

Sample ID:

11/18/16

11/21/16

Prep Date

RPV

ADR

Ву

11/18/16 18:10 RPV

11/22/16 16:07 ADR

Ву

Analysis Date

Data Qualifiers:

Turbidity (T)

Metals

Iron

Sample Receipt Conditions:

Sample Number: 6113336-21

Department / Test / Parameter

Sample(s) received outside of the acceptable temperature limits for one or more analyses. Affected analyses are reported with the (T) qualifier.

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> STL_Results Revision #1.6 Effective: 07/09/2014



Sample ID:

Sample Type: Grab



^{**} This report has been Amended (Rev1) and replaces all previous reports for this order ID **



All results meet the requirements of STL's TNI (NELAC) Accredited Quality System unless otherwise noted. If your results contain any data qualifiers or comments, you should evaluate useability relative to your needs.

Will With of.

If collectors initials include "STL", samples have been collected in accordance with STL SOP SL0015.

All results reported on an As Received (Wet Weight) basis unless otherwise noted.

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Results are considered Preliminary unless report is signed by authorized representative of STL.

Reviewed and Released By:

William Smith Technical Director

> 6113336 Report Generated On: 11/23/2016 2:26 pm

Effective: 07/09/2014 STL_Results Revision #1.6







TAT(Check One):□Standard □24hr □48hr ☒72hr □Other
(Additional charges may apply for rush TAT. If not specified, standard TAT will apply)
MARKET MARKET TO THE PROPERTY OF THE PROPERTY

			6113336								Olderiba								
	_{ame:} Keating Environmental M		Ala	na Kopi	cz					۱a	me: W. P	hilade	lphia	High F	otal	ole	Wate	ər	
Address	835 Springdale Dr. Suite 2	00			PI	none: _	484.	876.2200	_ Add	dress:	4901 Ch	estnut	t Stre	et					
	Exton, PA 19341					Fax:					Philadelphia, PA 19139								
Contact	Name: Keith Choper		kahana w@kamana dana						Payment / P.O. Info:										
Comme																			
ple			3	oallipled	npled							antity		See Co					
SWTL Sample Number	ample Description / Site ID:	٠.	3	Date Sall	Time Sampled	Samplers	Initials	Test(s) Requested:				Bottle Quantity	Matrix	Sample	Bottle Type		Preservative	Comments /	Field
	020-01-KS-101		11-1	8-16	09:20	СО		Total Iron &	Turbid	ity		2	Aq		-	,	H	PH<2	
1	020-03-WC-102		1		09:27				†			1					1	1	
1	020-03-WC-103				09:31														
1	020-03-WC -104				09:35						7 A A A A A								
1	020-02-WC-105		N. O. L. C.		09:40														
1	020-02-WC -106				09:45														
1	020-02-WC -107				09:50														
1	020-01-WC -108			Y	09:57	7	7					-	4	14	1	*	V		
Relinquishe	ad Rv. A Da			4			V									I	V		
	/(040 "	 -/8 -/6:4	-16 13				Sub	Sample Conditions mitted with COC? / N	'	= Raw Slu	Matrix Key table Water udge, Dewatere		il, etc.	P = Plast G = Glas	C S	y	_	Reporting Option WA Reporting	ıs
Received B	Dat Dat				emp ºC:		Nun mat	nber of containers ch number on COC? ()/ N		Potable V	d as mg/kg) Vater (not for SI			O = Othe		ey	PWSIE Fax		
Relinquishe					cceptable: Y / N		All c	containers in tact?		A = Safe [mple Typ	Orinking Water A e Key SD	Act Potable WA Sample			sulfate		□Ema		
	Time:				emp °C:			ts within holding	G = 6	Grab		Distribution Entry Point		A = Asco H = HNO C = HCI	3	1	☐Oth	er urn a copy of this fo	orm with
Received in	n Lab By: Dat	te:// . //	8.11		71	***************************************	time	es (Y)/ N	8HC =	= 8 Hr. Compos	R=I	Raw Check		S = H ₂ SC OH = Na	A DH		Rep		

40 mL VOA vials free of headspace?

Signing this form indicates your agreement with SWTL's Standard Terms and Conditions unless otherwise specified in writing. SLF059 Rev. 1.4 Effective November 12, 2014 Shaded areas are for SWTL use only.

PHV CRAIVIS

M=Maximum Residence NA = None Required

24HC = 24 Hr. Composite





TAT(Check One):□Standard □24hr □48hr ☒72hr □Other
(Additional charges may apply for rush TAT. If not specified, standard TAT will apply)
0.45-15

				3336								Order	iu.	
Client	Name: Keating Environment	al Mgt. Ir	ገር Alar	na Kopicz			- гојести	ame: W. Philac	dephia	High P	otable	Water	Samplir	ng
Addre	ss: 835 Springdale Dr. Suit	e 200		F	hone: 484	.876.2200		Address: 4901 Chestnut Street						
	Exton, PA 19341				 ax:			Philadlephia, PA 19139						
Conta	_{oct Name:} Keith Choper			E	Email: kchope	er@kempartners.com	Payment	Payment / P.O. Info:						
Comr													w	
			p	P.					ξį		See Cod	des Belo	T	
mple			Sampled	Time Sampled	ll S				Bottle Quantity			ype	Preservative	
SWTL Sample Number			Date S	me S	Samplers Initials				ottle (Matrix	Sample	Bottle Type	esen	Comments / Field
	Sample Description / Site ID:			<u> </u>		Test(s) Requested:			ļ	Σ	s ←	ļ	<u> </u>	Data:
	1020-01-WC-109		11-18-1	6 10:01	СО	Total Iron &	Turbidity	/	2	Aq.	Grab	Р	H	pH<2
	1020-01-WC-110		1	10:06			ŀ					1		
	1020-01-WC-111			10:12						J				
	1020-01-WC-112			10:14							CONTRACTOR			
	1020-01-WC-113			10:22										
	1020-01-WC-114			10:28										
	1020-01-NS-115			10:37					1					
	1020-01-WC-116		V	10:44	V				1	4	4	1	1	
Dalinar	Nead Duy	Dete				N N						1		
Kellinda	Tshed By:	Date: // ~ /			Sul	Sample Conditions bmitted with COC?	NPW = Non-l	Matrix Key Potable Water			P = Plastic		₩ SD	Reporting Options WA Reporting
Receive	ay By.	Time! 6 2 C	12		Nic	mber of containors		Sludge, Dewatered slu rted as mg/kg)	udge, soil		G = Glass O = Other		PWSI	D:
		Time:		Temp °C:	– ma	tch number on COC?		e Water (not for SDW) e Drinking Water Act F			Preserva	Ī	Fax	
Relinqu	ished By:	Date:		Temp °C:	All	containers in tact?	Sample Ty		Sample 3	Types	N = Sodiu Thios A = Ascor	ulfate oic Acid	□Em	
		Time:		Acceptable: Y /		sts within holding	G = Grab	D=Distr E=Entr	y Point		H = HNO ₃ C = HCI		Ref	turn a copy of this form with
Receive	ed in Lab By:	Date: [] . 16	. 1/	- 2	<i>i</i>	U / IV	8HC = 8 Hr. Comp	osite R=Raw			S = H ₂ SO. OH = NaC	I)H	Ke	JOIL

40 mL VOA vials free of

headspace?

Time: 16 43 Signing this form indicates your agreement with SWTL's Standard Terms and Conditions unless otherwise specified in writing. SLF059 Rev. 1.4 Effective November 12, 2014 Shaded areas are for SWTL use only.

Acceptable: Y/N

24HC = 24 Hr.

Composite

O = Other NA = None

Required

S=Special

M=Maximum

Residence





6113336 Alana Konic

TAT(Check One): ☐Standard ☐24hr ☐48hr ☒72hr ☐Other (Additional charges may apply for rush TAT. If not specified, standard TAT will apply)
Order ID:

Client Name: Keating Environmental Mgt. Inc.								ne: W. Philadelphia High Potable Water						
Address: 835 Springdale Dr. Suite 200				Phone: 484.876.2200 Add			4901 Chestnut Street							
Exton, PA 19341			F	ax:			Philadelphia, PA 19139							
Contact Name: Keith Choper				mail: kchope	er@kempartners.com	Payment	/ P.O. Info:							
Comments:														
SWTL Sample Number	Sample Description / Site ID:	Date Sampled	Time Sampled	Samplers Initials	Test(s) Requested:			Bottle Quantity	Matrix	Sample a 30 Type	-jbe	Preservative	Comments / Field Data:	
1	020-01-WC-117	11-18-16	10:48	СО	Total Iron & T	urbidity		2	Aq.	Grab	Р	Н	pH<2	
1	020-01-WC-118		10:53	1	1			$\dagger T$			1		PA	
1	020-01-PS-119		11:33						$\top t$					
1	020-01-WC -120		11:36		·									
1	020-01-WC-121	V	11:43	1	1		,	1	V	1	V	V		
Relinquished By: Date: , , C, , / , Sample Conditions Matrix Key Bottle Type Key Reporting Options														
	TEDEL	Date: 11-18-16 Time: 6:43		Sub	Sample Conditions mitted with COC? Y / N	Solid = Raw S	Matrix Key Potable Water Sludge, Dewatered sl	ludge, soil,	etc	Bottle Ty P = Plastic G = Glass O = Other		⊠ SD\	Reporting Options NA Reporting	
Received	By:	Date:	Temp °C:	mate	nber of containers ch number on COC? Y / N	PW = Potable	ted as mg/kg) ∍ Water (not for SDW ∍ Drinking Water Act		nce)	Preserva: N = Sodiur		□Fax		
Relinquish	ned By:	Date:	Temp °C:	All c	ts within holding	Sample Ty G = Grab	rpe Key SDWA D=Dist E=Enti	Sample T tribution ry Point	ypes	Thiosu A = Ascorb H = HNO ₃ C = HCl	lfate iic Acid		er urn a copy of this form with	
Received	in Lab By:	Date: // / 8 · (6	Temp °C: 2/	NO 1	nL VOA vials free of dspace? Y / N	8HC = 8 Hr, Compo 24HC = 24 Hi Comp	S=Spe r. M=Ma	eck		S = H ₂ SO ₄ OH = NaO O = Other NA = None Requ	H	Rep		

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