

WECK LABORATORIES, INC.

# Certificate of Analysis

FINAL REPORT

**Work Orders:** 7B09018

**Report Date:** 2/23/2017

**Project:** Arsenic Removal

**Received Date:** 2/9/2017

**Turnaround Time:** Normal

**Phones:**

**Fax:**

**P.O. #:**

**Billing Code:**

**Attn:** Truyet Mai Thanh

**Client:** Truyet Mai Thanh

Houston, TX

ELAP-CA #1132 • EPA-UCMR #CA00211 • LACSD #10143 • NJ-DEP #CA015 • NV-DEP #NAC 445A

*This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.*

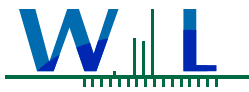
Dear Truyet Mai Thanh,

Enclosed are the results of analyses for samples received 2/09/17 with the Chain-of-Custody document. The samples were received in good condition, at 18.6 °C. All analyses met the method criteria except as noted in the case narrative or in the report with data qualifiers.

**Reviewed by:**

Valerie Rejuso  
Project Manager





WECK LABORATORIES, INC.

Truyet Mai Thanh

Houston, TX

# Certificate of Analysis

FINAL REPORT

**Project Number:** Arsenic Removal

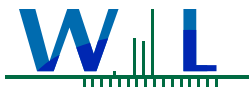
**Project Manager:** Tuyet Mai Thanh

**Reported:**

02/23/2017 10:58

## Sample Summary

Sample ID	Sampled By	Lab ID	Matrix	Sampled	Qualifiers
As 100 ppb Standard	Truyet Mai	7B09018-01	Water	02/06/17 08:00	
Steris Vittata	Truyet Mai	7B09018-02	Water	02/06/17 10:00	
Water Hyacinth	Truyet Mai	7B09018-03	Water	02/06/17 12:00	
Water Lily	Truyet Mai	7B09018-04	Water	02/06/17 14:00	
Duck Weed	Truyet Mai	7B09018-05	Water	02/06/17 16:00	



WECK LABORATORIES, INC.

Truyet Mai Thanh

Houston, TX

# Certificate of Analysis

FINAL REPORT

**Project Number:** Arsenic Removal

**Project Manager:** Truyet Mai Thanh

**Reported:**

02/23/2017 10:58

## Sample Results

Sample: As 100 ppb Standard  
7B09018-01 (Water) Sampled: 02/06/17 8:00 by Truyet Mai

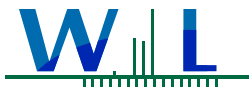
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
---------	--------	-----	-------	-----	----------	-----------

### Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

<b>Method:</b> SM 4500H+-B	<b>Batch ID:</b> W7B0661	<b>Prepared:</b> 02/09/17 18:37	<b>Analyst:</b> dmn
<b>pH</b> .....	<b>8.31</b>	0.10 Units	1 02/09/17 21:38 *

### Metals by EPA 200 Series Methods

<b>Method:</b> EPA 200.8	<b>Batch ID:</b> W7B1269	<b>Prepared:</b> 02/21/17 18:38	<b>Analyst:</b> rrl
<b>Arsenic, Total</b> .....	<b>89</b>	0.80 ug/l	2 02/22/17 17:56



WECK LABORATORIES, INC.

Truyet Mai Thanh

Houston, TX

# Certificate of Analysis

FINAL REPORT

**Project Number:** Arsenic Removal

**Project Manager:** Truyet Mai Thanh

**Reported:**  
02/23/2017 10:58

## Sample Results

(Continued)

Sample: Steris Vittata  
7B09018-02 (Water) Sampled: 02/06/17 10:00 by Truyet Mai

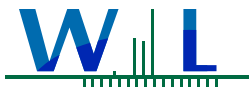
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
---------	--------	-----	-------	-----	----------	-----------

### Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

<b>Method:</b> SM 4500H+-B	<b>Batch ID:</b> W7B0661	<b>Prepared:</b> 02/09/17 18:37	<b>Analyst:</b> dmn
<b>pH</b> .....	<b>8.11</b>	0.10 Units	1 02/09/17 21:38 *

### Metals by EPA 200 Series Methods

<b>Method:</b> EPA 200.8	<b>Batch ID:</b> W7B1269	<b>Prepared:</b> 02/21/17 18:38	<b>Analyst:</b> rrl
<b>Arsenic, Total</b> .....	<b>3.1</b>	0.40 ug/l	1 02/22/17 18:05



WECK LABORATORIES, INC.

Truyet Mai Thanh

Houston, TX

# Certificate of Analysis

FINAL REPORT

**Project Number:** Arsenic Removal

**Project Manager:** Truyet Mai Thanh

**Reported:**  
02/23/2017 10:58

## Sample Results

(Continued)

Sample: Water Hyacinth  
7B09018-03 (Water) Sampled: 02/06/17 12:00 by Truyet Mai

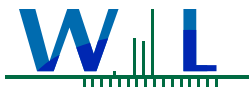
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
---------	--------	-----	-------	-----	----------	-----------

### Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

<b>Method:</b> SM 4500H+-B	<b>Batch ID:</b> W7B0661	<b>Prepared:</b> 02/09/17 18:37	<b>Analyst:</b> dmn
<b>pH</b> .....	<b>8.36</b>	0.10 Units	1 02/09/17 21:38 *

### Metals by EPA 200 Series Methods

<b>Method:</b> EPA 200.8	<b>Batch ID:</b> W7B1269	<b>Prepared:</b> 02/21/17 18:38	<b>Analyst:</b> rrl
<b>Arsenic, Total</b> .....	<b>3.2</b>	0.40 ug/l	1 02/22/17 18:09



WECK LABORATORIES, INC.

Truyet Mai Thanh

Houston, TX

# Certificate of Analysis

FINAL REPORT

**Project Number:** Arsenic Removal

**Project Manager:** Truyet Mai Thanh

**Reported:**  
02/23/2017 10:58

## Sample Results

(Continued)

Sample: Water Lily  
7B09018-04 (Water) Sampled: 02/06/17 14:00 by Truyet Mai

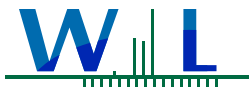
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
---------	--------	-----	-------	-----	----------	-----------

### Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

<b>Method:</b> SM 4500H+-B	<b>Batch ID:</b> W7B0661	<b>Prepared:</b> 02/09/17 18:37	<b>Analyst:</b> dmn			
pH	7.95	0.10	Units	1	02/09/17 21:38	*

### Metals by EPA 200 Series Methods

<b>Method:</b> EPA 200.8	<b>Batch ID:</b> W7B1269	<b>Prepared:</b> 02/21/17 18:38	<b>Analyst:</b> rrl			
Arsenic, Total	3.4	0.40	ug/l	1	02/22/17 18:13	



WECK LABORATORIES, INC.

Truyet Mai Thanh

Houston, TX

# Certificate of Analysis

FINAL REPORT

**Project Number:** Arsenic Removal

**Project Manager:** Tuyet Mai Thanh

**Reported:**  
02/23/2017 10:58

## Sample Results

(Continued)

Sample: Duck Weed  
7B09018-05 (Water) Sampled: 02/06/17 16:00 by Tuyet Mai

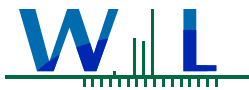
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
---------	--------	-----	-------	-----	----------	-----------

### Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

<b>Method:</b> SM 4500H+-B	<b>Batch ID:</b> W7B0661	<b>Prepared:</b> 02/09/17 18:37	<b>Analyst:</b> dmn
<b>pH</b> .....	<b>7.94</b>	0.10 Units	1 02/09/17 21:38 *

### Metals by EPA 200 Series Methods

<b>Method:</b> EPA 200.8	<b>Batch ID:</b> W7B1269	<b>Prepared:</b> 02/21/17 18:38	<b>Analyst:</b> rrl
<b>Arsenic, Total</b> .....	<b>3.1</b>	0.40 ug/l	1 02/22/17 18:17



WECK LABORATORIES, INC.

Truyet Mai Thanh

Houston, TX

# Certificate of Analysis

FINAL REPORT

**Project Number:** Arsenic Removal

**Project Manager:** Truyet Mai Thanh

**Reported:**

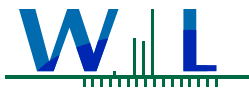
02/23/2017 10:58

## Quality Control Results

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
<b>Batch: W7B0661 - SM 4500H+-B</b>										
<b>LCS (W7B0661-BS1)</b>										
pH	7.47	0.10	Units	7.41		101	98.8-101			
<b>Duplicate (W7B0661-DUP1)</b>										
<b>Source: 7B09073-03</b>										
pH	7.97	0.10	Units					0.7	3.1	





WECK LABORATORIES, INC.

Truyet Mai Thanh

Houston, TX

# Certificate of Analysis

FINAL REPORT

**Project Number:** Arsenic Removal

**Project Manager:** Truyet Mai Thanh

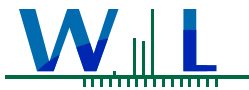
**Reported:**  
02/23/2017 10:58

## Quality Control Results

(Continued)

Metals by EPA 200 Series Methods

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Qualifier
<b>Batch: W7B1269 - EPA 200.8</b>										
<b>Blank (W7B1269-BLK1)</b>										
<b>Prepared: 02/21/17 Analyzed: 02/22/17</b>										
Arsenic, Total	ND	0.40	ug/l							
<b>LCS (W7B1269-BS1)</b>										
<b>Prepared: 02/21/17 Analyzed: 02/22/17</b>										
Arsenic, Total	46.8	0.40	ug/l	50.0		94	85-115			
<b>Matrix Spike (W7B1269-MS1)</b>										
<b>Source: 7B09016-01 Prepared: 02/21/17 Analyzed: 02/22/17</b>										
Arsenic, Total	48.8	0.40	ug/l	50.0	1.34	95	70-130			
<b>Matrix Spike Dup (W7B1269-MSD1)</b>										
<b>Source: 7B09016-01 Prepared: 02/21/17 Analyzed: 02/22/17</b>										
Arsenic, Total	50.3	0.40	ug/l	50.0	1.34	98	70-130	3	30	



WECK LABORATORIES, INC.

# Certificate of Analysis

FINAL REPORT

Truyet Mai Thanh

**Project Number:** Arsenic Removal

**Reported:**

02/23/2017 10:58

Houston, TX

**Project Manager:** Truyet Mai Thanh

## Notes and Definitions

Item	Definition
*	The recommended holding time for this analysis is only 15 minutes. The sample was analyzed as soon as it was possible but it was received and analyzed past holding time.
ND	NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or above the MDL.
Dil	Dilution
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
% Rec	Percent Recovery
Source	Sample that was matrix spiked or duplicated.
MDL	Method Detection Limit
MRL	The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. The MRL is also known as Limit of Quantitation (LOQ) and Detection Limit for Reporting (DLR)
MDA	Minimum Detectable Activity
NR	Not Reportable
TIC	Tentatively Identified Compound (TIC) using mass spectrometry. The reported concentration is relative concentration based on the nearest internal standard. If the library search produces no matches at, or above 85%, the compound is reported as unknown.

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

An Absence of Total Coliform meets the drinking water standards as established by the California State Water Resources Control Board (SWRCB)

All results are expressed on wet weight basis unless otherwise specified.

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS 002.