Mahaffey Laboratory LTD.

551 State Street
Curwensville, PA 16833

Phone: 1-814-236-3540
Fax: 1-877-267-4152

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Certificate of Analysis

Donna
Patton, Borough of

Project water checks
Description Raw Water

Lab Sample No. 1702319-001
Client Sample ID Raw Water well#2
Matrix Drinking Water
Date Received 02/22/17 14:10
Date Sampled 02/22/2017 07:30
Date Reported 3/6/2017

Test	Method	Result	Reporting Limit	Units	Analyst	Prep Date	Test Date	Qlf.
.Main Analytical								
pH	SM 4500-H+B	8.5		pH Units	BC	Not Required	2/24/2017	pH1
Alkalinity	SM 2320B	175		mg CaCO3/L, End Pt. 4.5	BC	Not Required	2/24/2017	
Total Dissolved Solids - DW	SM 2540C	345	5.0	mg/L	JL	Not Required	2/28/2017	

Test	Method	Result	Reporting Limit	Units	Analyst	Prep Date	Test Date	Qlf.
.Wet Chemistry								
Carbonate as (CaCO3)	CALC	5		mg CaCO3/L	JL	Not Required	3/2/2017	

Test	Method	Result	Reporting Limit	Units	Analyst	Prep Date	Test Date	Qlf.
Langlier Index								
Langlier Saturation Index	HACH 8073	0.02		n/a	JL	Not Required	3/2/2017	

Test	Method	Result	Reporting Limit	Units	Analyst	Prep Date	Test Date	Qlf.
Metals ICP 200.7								
Total Hardness	SM 2340B-97 / Calculation	1.3	0.1	gpg	DW	Not Required	2/24/2017	
Aluminum	EPA 200.7	<0.05	0.05	mg/L	DW	Not Required	2/24/2017	
Calcium	EPA 200.7	6.76	0.1	mg/L	DW	Not Required	2/24/2017	
Iron	EPA 200.7	<0.05	0.05	mg/L	DW	Not Required	2/24/2017	
Magnesium	EPA 200.7	1.39	0.1	mg/L	DW	Not Required	2/24/2017	
Manganese	EPA 200.7	<0.02	0.02	mg/L	DW	Not Required	2/24/2017	

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Certificate of Analysis

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Patton, Borough of

Project	water checks
Description	Raw Water

Lab Sample No.	1702319-001
Client Sample ID	Raw Water well#2
Matrix	Drinking Water
Date Received	02/22/17 14:10
Date Sampled	02/22/2017 07:30
Date Reported	3/6/2017

Qualifiers

pH1 = Analyzed past hold time of 15 minutes.

Approved By Carlton R. McCracken, Jr.

Carlton R. McCracken, Jr. Chemist

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Certificate of Analysis

Donna
Patton, Borough of

Project water checks
Description Raw Water

Lab Sample No. 1702319-002
Client Sample ID Raw Water well #3
Matrix Drinking Water
Date Received 02/22/17 14:10
Date Sampled 02/22/2017 07:30
Date Reported 3/6/2017

Test	Method	Result	Reporting Limit	Units	Analyst	Prep Date	Test Date	Qlf.
.Main Analytical								
pH	SM 4500-H+B	8.2		pH Units	BC	Not Required	2/24/2017	pH1
Alkalinity	SM 2320B	130		mg CaCO3/L, End Pt. 4.5	BC	Not Required	2/24/2017	
Total Dissolved Solids - DW	SM 2540C	174	5.0	mg/L	JL	Not Required	2/28/2017	

Test	Method	Result	Reporting Limit	Units	Analyst	Prep Date	Test Date	Qlf.
.Wet Chemistry								
Carbonate as (CaCO3)	CALC	2		mg CaCO3/L	JL	Not Required	3/2/2017	

Test	Method	Result	Reporting Limit	Units	Analyst	Prep Date	Test Date	Qlf.
Langlier Index								
Langlier Saturation Index	HACH 8073	0.18		n/a	JL	Not Required	3/2/2017	

Test	Method	Result	Reporting Limit	Units	Analyst	Prep Date	Test Date	Qlf.
Metals ICP 200.7								
Total Hardness	SM 2340B-97 / Calculation	4.7	0.1	gpg	DW	Not Required	2/24/2017	
Aluminum	EPA 200.7	<0.05	0.05	mg/L	DW	Not Required	2/24/2017	
Calcium	EPA 200.7	23.63	0.1	mg/L	DW	Not Required	2/24/2017	
Iron	EPA 200.7	0.10	0.05	mg/L	DW	Not Required	2/24/2017	
Magnesium	EPA 200.7	5.07	0.1	mg/L	DW	Not Required	2/24/2017	
Manganese	EPA 200.7	0.04	0.02	mg/L	DW	Not Required	2/24/2017	

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Donna
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Project	water checks
Description	Raw Water

Lab Sample No.	1702319-002
Client Sample ID	Raw Water well #3
Matrix	Drinking Water
Date Received	02/22/17 14:10
Date Sampled	02/22/2017 07:30
Date Reported	3/6/2017

Qualifiers

pH1 = Analyzed past hold time of 15 minutes.

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Certificate of Analysis

Donna
Patton, Borough of

Project water checks
Description Well #2 & #3

Lab Sample No. 1702319-003
Client Sample ID Finished Combo
Matrix Drinking Water
Date Received 02/22/17 14:10
Date Sampled 02/22/2017 07:30
Date Reported 3/6/2017

Test	Method	Result	Reporting Limit	Units	Analyst	Prep Date	Test Date	Qlf.
.Main Analytical								
pH	SM 4500-H+B	8.5		pH Units	BC	Not Required	2/24/2017	pH1
Alkalinity	SM 2320B	150		mg CaCO3/L, End Pt. 4.5	BC	Not Required	2/24/2017	
Total Dissolved Solids - DW	SM 2540C	240	5.0	mg/L	JL	Not Required	2/28/2017	

Test	Method	Result	Reporting Limit	Units	Analyst	Prep Date	Test Date	Qlf.
.Wet Chemistry								
Carbonate as (CaCO3)	CALC	4		mg CaCO3/L	JL	Not Required	3/2/2017	

Test	Method	Result	Reporting Limit	Units	Analyst	Prep Date	Test Date	Qlf.
Langlier Index								
Langlier Saturation Index	HACH 8073	0.33		n/a	JL	Not Required	3/2/2017	

Test	Method	Result	Reporting Limit	Units	Analyst	Prep Date	Test Date	Qlf.
Metals ICP 200.7								
Total Hardness	SM 2340B-97 / Calculation	3.1	0.1	gpg	DW	Not Required	2/24/2017	
Aluminum	EPA 200.7	<0.05	0.05	mg/L	DW	Not Required	2/24/2017	
Calcium	EPA 200.7	15.67	0.1	mg/L	DW	Not Required	2/24/2017	
Iron	EPA 200.7	0.30	0.05	mg/L	DW	Not Required	2/24/2017	
Magnesium	EPA 200.7	3.34	0.1	mg/L	DW	Not Required	2/24/2017	
Manganese	EPA 200.7	0.11	0.02	mg/L	DW	Not Required	2/24/2017	

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Project	water checks
Description	Well #2 & #3

Lab Sample No.	1702319-003
Client Sample ID	Finished Combo
Matrix	Drinking Water
Date Received	02/22/17 14:10
Date Sampled	02/22/2017 07:30
Date Reported	3/6/2017

Qualifiers

pH1 = Analyzed past hold time of 15 minutes.

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Donna
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Project water checks
Description

Lab Sample No. 1702319-004
Client Sample ID Old Treatment Plant
Matrix Drinking Water
Date Received 02/22/17 14:10
Date Sampled 02/22/2017 07:45
Date Reported 3/6/2017

Test	Method	Result	Reporting Limit	Units	Analyst	Prep Date	Test Date	Qlf.
.Main Analytical								
pH	SM 4500-H+B	8.5		pH Units	BC	Not Required	2/24/2017	pH1
Alkalinity	SM 2320B	150		mg CaCO3/L, End Pt. 4.5	BC	Not Required	2/24/2017	
Total Dissolved Solids - DW	SM 2540C	234	5.0	mg/L	JL	Not Required	2/28/2017	

Test	Method	Result	Reporting Limit	Units	Analyst	Prep Date	Test Date	Qlf.
.Wet Chemistry								
Carbonate as (CaCO3)	CALC	4		mg CaCO3/L	JL	Not Required	3/2/2017	

Test	Method	Result	Reporting Limit	Units	Analyst	Prep Date	Test Date	Qlf.
Langlier Index								
Langlier Saturation Index	HACH 8073	0.33		n/a	JL	Not Required	3/2/2017	

Test	Method	Result	Reporting Limit	Units	Analyst	Prep Date	Test Date	Qlf.
Metals ICP 200.7								
Total Hardness	SM 2340B-97 / Calculation	3.1	0.1	gpg	DW	Not Required	2/24/2017	
Aluminum	EPA 200.7	<0.05	0.05	mg/L	DW	Not Required	2/24/2017	
Calcium	EPA 200.7	15.55	0.1	mg/L	DW	Not Required	2/24/2017	
Iron	EPA 200.7	0.06	0.05	mg/L	DW	Not Required	2/24/2017	
Magnesium	EPA 200.7	3.45	0.1	mg/L	DW	Not Required	2/24/2017	
Manganese	EPA 200.7	0.02	0.02	mg/L	DW	Not Required	2/24/2017	

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Project	water checks
Description	

Lab Sample No.	1702319-004
Client Sample ID	Old Treatment Plant
Matrix	Drinking Water
Date Received	02/22/17 14:10
Date Sampled	02/22/2017 07:45
Date Reported	3/6/2017

Qualifiers

pH1 = Analyzed past hold time of 15 minutes.

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Project water checks
Description

Lab Sample No. 1702319-005
Client Sample ID
Matrix Drinking Water
Date Received 02/22/17 14:10
Date Sampled 02/22/2017 07:00
Date Reported 3/6/2017

Test	Method	Result	Reporting Limit	Units	Analyst	Prep Date	Test Date	Qlf.
.Main Analytical								
pH	SM 4500-H+B	8.5		pH Units	BC	Not Required	2/24/2017	pH1
Alkalinity	SM 2320B	149		mg CaCO3/L, End Pt. 4.5	BC	Not Required	2/24/2017	
Total Dissolved Solids - DW	SM 2540C	244	5.0	mg/L	JL	Not Required	2/28/2017	

Test	Method	Result	Reporting Limit	Units	Analyst	Prep Date	Test Date	Qlf.
.Wet Chemistry								
Carbonate as (CaCO3)	CALC	4		mg CaCO3/L	JL	Not Required	3/2/2017	

Test	Method	Result	Reporting Limit	Units	Analyst	Prep Date	Test Date	Qlf.
Langlier Index								
Langlier Saturation Index	HACH 8073	0.34		n/a	JL	Not Required	3/2/2017	

Test	Method	Result	Reporting Limit	Units	Analyst	Prep Date	Test Date	Qlf.
Metals ICP 200.7								
Total Hardness	SM 2340B-97 / Calculation	3.2	0.1	gpg	DW	Not Required	2/24/2017	
Aluminum	EPA 200.7	<0.05	0.05	mg/L	DW	Not Required	2/24/2017	
Calcium	EPA 200.7	15.92	0.1	mg/L	DW	Not Required	2/24/2017	
Iron	EPA 200.7	0.05	0.05	mg/L	DW	Not Required	2/24/2017	
Magnesium	EPA 200.7	3.53	0.1	mg/L	DW	Not Required	2/24/2017	
Manganese	EPA 200.7	0.02	0.02	mg/L	DW	Not Required	2/24/2017	

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Project	water checks
Description	

Lab Sample No.	1702319-005
Client Sample ID	
Matrix	Drinking Water
Date Received	02/22/17 14:10
Date Sampled	02/22/2017 07:00
Date Reported	3/6/2017

Qualifiers

pH1 = Analyzed past hold time of 15 minutes.

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Project water checks
Description

Lab Sample No. 1702319-006
Client Sample ID
Matrix Drinking Water
Date Received 02/22/17 14:10
Date Sampled 02/22/2017 07:00
Date Reported 3/6/2017

Test	Method	Result	Reporting Limit	Units	Analyst	Prep Date	Test Date	Qlf.
.Main Analytical								
pH	SM 4500-H+B	8.5		pH Units	BC	Not Required	2/24/2017	pH1
Alkalinity	SM 2320B	152		mg CaCO3/L, End Pt. 4.5	BC	Not Required	2/24/2017	
Total Dissolved Solids - DW	SM 2540C	242	5.0	mg/L	JL	Not Required	2/28/2017	

Test	Method	Result	Reporting Limit	Units	Analyst	Prep Date	Test Date	Qlf.
.Wet Chemistry								
Carbonate as (CaCO3)	CALC	4		mg CaCO3/L	JL	Not Required	3/2/2017	

Test	Method	Result	Reporting Limit	Units	Analyst	Prep Date	Test Date	Qlf.
Langlier Index								
Langlier Saturation Index	HACH 8073	0.35		n/a	JL	Not Required	3/2/2017	

Test	Method	Result	Reporting Limit	Units	Analyst	Prep Date	Test Date	Qlf.
Metals ICP 200.7								
Total Hardness	SM 2340B-97 / Calculation	3.2	0.1	gpg	DW	Not Required	2/24/2017	
Aluminum	EPA 200.7	<0.05	0.05	mg/L	DW	Not Required	2/24/2017	
Calcium	EPA 200.7	16.12	0.1	mg/L	DW	Not Required	2/24/2017	
Iron	EPA 200.7	<0.05	0.05	mg/L	DW	Not Required	2/24/2017	
Magnesium	EPA 200.7	3.41	0.1	mg/L	DW	Not Required	2/24/2017	
Manganese	EPA 200.7	<0.02	0.02	mg/L	DW	Not Required	2/24/2017	

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Donna
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Project Description: water checks

Lab Sample No.	1702319-006
Client Sample ID	
Matrix	Drinking Water
Date Received	02/22/17 14:10
Date Sampled	02/22/2017 07:00
Date Reported	3/6/2017

Qualifiers

pH1 = Analyzed past hold time of 15 minutes.

Approved By Carlton R. McCracken, Jr. Chemist

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Certificate of Analysis

Donna
Patton, Borough of

Project	water checks
Description	

Lab Sample No.	1702319-007
Client Sample ID	
Matrix	Drinking Water
Date Received	02/22/17 14:10
Date Sampled	02/22/2017 07:00
Date Reported	3/6/2017

Qualifiers

pH1 = Analyzed past hold time of 15 minutes.

Approved By Carlton R. McCracken, Jr. Chemist