



9/7/2016

**Work Order: 16H1615**

**American Fork City  
Attn: Jay Brems  
270 East 200 North  
American Fork, UT 84003**

**Client Service Contact: 801.262.7299**

The analyses presented on this report were performed in accordance with the National Environmental Laboratory Accreditation Program (NELAP) unless noted in the comments, flags or case narrative. If the report is to be used for regulatory compliance, it should be presented in its entirety, and not be altered.



Approved By:

Dave Gayer, Laboratory Director



## Certificate of Analysis

**Lab Sample No.: 16H1615-01**

<b>Name:</b> American Fork City	<b>Sample Date:</b> 8/30/2016 9:00 AM
<b>Sample Site:</b> Timp Cave Spring	<b>Receipt Date:</b> 8/30/2016 10:35 AM
<b>Comments:</b>	<b>Sampler:</b> Jay Brems
<b>Sample Matrix:</b> Water	<b>Project:</b>
<b>PO Number:</b>	<b>System No.:</b> UTAH25008
<b>Source Code:</b>	<b>Report to State:</b>
<b>Sample Point:</b>	

Parameter	Sample Result	EPA Max Contaminant Level (MCL)	Minimum Reporting Limit	Units	Analytical Method	Preparation Date/Time	Analysis Date/Time	Flag
<b>Inorganic</b>								
Turbidity	0.13	5	0.02	NTU	EPA 180.1	08/30/2016 17:01	8/30/2016 17:05	
<b>Metals</b>								
Antimony, Total	ND	0.006	0.0005	mg/L	EPA 200.8	08/31/2016 10:26	9/2/2016 13:55	
Arsenic, Total	0.0005	0.01	0.0005	mg/L	EPA 200.8	08/31/2016 10:26	9/2/2016 13:55	
Barium, Total	0.047	2	0.005	mg/L	EPA 200.7	09/01/2016 11:12	9/3/2016 13:30	
Beryllium, Total	0.001	0.004	0.001	mg/L	EPA 200.7	09/06/2016 11:19	9/6/2016 14:17	
Calcium, Total	70.3		0.2	mg/L	EPA 200.7	09/06/2016 11:19	9/6/2016 14:17	
Cadmium, Total	ND	0.005	0.0002	mg/L	EPA 200.8	08/31/2016 10:26	9/2/2016 13:55	
Chromium, Total	0.0017	0.1	0.0005	mg/L	EPA 200.8	08/31/2016 10:26	9/2/2016 13:55	
Copper, Total	ND	1.3	0.0010	mg/L	EPA 200.8	08/31/2016 10:26	9/2/2016 13:55	
Iron, Total	ND	0.3	0.02	mg/L	EPA 200.7	09/01/2016 11:12	9/3/2016 13:30	
Lead, Total	ND	0.015	0.0005	mg/L	EPA 200.8	08/31/2016 10:26	9/2/2016 13:55	
Mercury, Total	ND	0.002	0.0002	mg/L	EPA 200.8	08/31/2016 10:26	9/2/2016 13:55	
Magnesium, Total	20.2		0.2	mg/L	EPA 200.7	09/01/2016 11:12	9/1/2016 19:38	
Manganese, Total	ND	0.05	0.005	mg/L	EPA 200.7	09/01/2016 11:12	9/1/2016 19:38	
Molybdenum, Total	0.0013		0.0005	mg/L	EPA 200.8	08/31/2016 10:26	9/2/2016 13:55	
Nickel, Total	0.0070	0.1	0.0005	mg/L	EPA 200.8	08/31/2016 10:26	9/2/2016 13:55	
Potassium, Total	0.7		0.5	mg/L	EPA 200.7	09/01/2016 11:12	9/1/2016 19:38	
Selenium, Total	0.0010	0.05	0.0005	mg/L	EPA 200.8	08/31/2016 10:26	9/2/2016 13:55	
Silver, Total	ND	0.1	0.0005	mg/L	EPA 200.8	08/31/2016 10:26	9/2/2016 13:55	
Sodium, Total	6.2		0.5	mg/L	EPA 200.7	09/01/2016 11:12	9/1/2016 19:38	
Thallium, Total	ND	0.002	0.0002	mg/L	EPA 200.8	08/31/2016 10:26	9/2/2016 13:55	
Zinc, Total	ND	5	0.01	mg/L	EPA 200.7	09/01/2016 11:12	9/3/2016 13:30	



## Certificate of Analysis

**Lab Sample No.: 16H1615-02**

<b>Name:</b> American Fork City	<b>Sample Date:</b> 8/30/2016 9:15 AM
<b>Sample Site:</b> Power House Spring	<b>Receipt Date:</b> 8/30/2016 10:35 AM
<b>Comments:</b>	<b>Sampler:</b> Jay Brems
<b>Sample Matrix:</b> Water	<b>Project:</b>
<b>PO Number:</b>	<b>System No.:</b> UTAH25008
<b>Source Code:</b>	<b>Report to State:</b>
<b>Sample Point:</b>	

Parameter	Sample Result	EPA Max Contaminant Level (MCL)	Minimum Reporting Limit	Units	Analytical Method	Preparation Date/Time	Analysis Date/Time	Flag
<b>Metals</b>								
Antimony, Total	ND	0.006	0.0005	mg/L	EPA 200.8	08/31/2016 10:26	9/2/2016 13:59	
Arsenic, Total	0.0005	0.01	0.0005	mg/L	EPA 200.8	08/31/2016 10:26	9/2/2016 13:59	
Barium, Total	0.045	2	0.005	mg/L	EPA 200.7	09/01/2016 11:12	9/3/2016 13:42	
Beryllium, Total	ND	0.004	0.001	mg/L	EPA 200.7	09/06/2016 11:19	9/6/2016 14:28	
Calcium, Total	68.7		0.2	mg/L	EPA 200.7	09/06/2016 11:19	9/6/2016 14:28	
Cadmium, Total	ND	0.005	0.0002	mg/L	EPA 200.8	08/31/2016 10:26	9/2/2016 13:59	
Chromium, Total	0.0043	0.1	0.0005	mg/L	EPA 200.8	08/31/2016 10:26	9/2/2016 13:59	
Copper, Total	0.0043	1.3	0.0010	mg/L	EPA 200.8	08/31/2016 10:26	9/2/2016 13:59	
Iron, Total	0.03	0.3	0.02	mg/L	EPA 200.7	09/01/2016 11:12	9/3/2016 13:42	
Lead, Total	0.0007	0.015	0.0005	mg/L	EPA 200.8	08/31/2016 10:26	9/2/2016 13:59	
Mercury, Total	ND	0.002	0.0002	mg/L	EPA 200.8	08/31/2016 10:26	9/2/2016 13:59	
Magnesium, Total	22.0		0.2	mg/L	EPA 200.7	09/01/2016 11:12	9/1/2016 19:50	
Manganese, Total	ND	0.05	0.005	mg/L	EPA 200.7	09/01/2016 11:12	9/1/2016 19:50	
Molybdenum, Total	0.0011		0.0005	mg/L	EPA 200.8	08/31/2016 10:26	9/2/2016 13:59	
Nickel, Total	0.0066	0.1	0.0005	mg/L	EPA 200.8	08/31/2016 10:26	9/2/2016 13:59	
Potassium, Total	0.8		0.5	mg/L	EPA 200.7	09/01/2016 11:12	9/1/2016 19:50	
Selenium, Total	0.0006	0.05	0.0005	mg/L	EPA 200.8	08/31/2016 10:26	9/2/2016 13:59	
Silver, Total	ND	0.1	0.0005	mg/L	EPA 200.8	08/31/2016 10:26	9/2/2016 13:59	
Sodium, Total	10.0		0.5	mg/L	EPA 200.7	09/01/2016 11:12	9/1/2016 19:50	
Thallium, Total	ND	0.002	0.0002	mg/L	EPA 200.8	08/31/2016 10:26	9/2/2016 13:59	
Zinc, Total	ND	5	0.01	mg/L	EPA 200.7	09/01/2016 11:12	9/3/2016 13:42	



## Certificate of Analysis

**Lab Sample No.: 16H1615-03**

<b>Name:</b> American Fork City	<b>Sample Date:</b> 8/30/2016 9:05 AM
<b>Sample Site:</b> River	<b>Receipt Date:</b> 8/30/2016 10:35 AM
<b>Comments:</b>	<b>Sampler:</b> Jay Brems
<b>Sample Matrix:</b> Water	<b>Project:</b>
<b>PO Number:</b>	<b>System No.:</b> UTAH25008
<b>Source Code:</b>	<b>Report to State:</b>
<b>Sample Point:</b>	

Parameter	Sample Result	EPA Max Contaminant Level (MCL)	Minimum Reporting Limit	Units	Analytical Method	Preparation Date/Time	Analysis Date/Time	Flag
<b>Inorganic</b>								
Turbidity	<b>130</b>	5	0.02	NTU	EPA 180.1	08/30/2016 17:01	8/30/2016 17:05	
<b>Metals</b>								
Antimony, Total	0.0010	0.006	0.0005	mg/L	EPA 200.8	08/31/2016 12:08	9/6/2016 15:52	
Arsenic, Total	0.0041	0.01	0.0005	mg/L	EPA 200.8	08/31/2016 12:08	9/6/2016 15:52	
Barium, Total	0.075	2	0.005	mg/L	EPA 200.7	08/31/2016 12:03	9/3/2016 14:05	
Beryllium, Total	ND	0.004	0.001	mg/L	EPA 200.7	08/31/2016 12:03	9/3/2016 14:05	
Calcium, Total	80.4		0.2	mg/L	EPA 200.7	08/31/2016 12:03	9/3/2016 14:05	
Cadmium, Total	0.0005	0.005	0.0002	mg/L	EPA 200.8	08/31/2016 12:08	9/6/2016 15:52	
Chromium, Total	0.0019	0.1	0.0005	mg/L	EPA 200.8	08/31/2016 12:08	9/6/2016 15:52	
Copper, Total	0.0057	1.3	0.0010	mg/L	EPA 200.8	08/31/2016 12:08	9/6/2016 15:52	
Iron, Total	<b>2.72</b>	0.3	0.02	mg/L	EPA 200.7	08/31/2016 12:03	9/3/2016 14:05	
Lead, Total	<b>0.0338</b>	0.015	0.0005	mg/L	EPA 200.8	08/31/2016 12:08	9/6/2016 15:52	
Mercury, Total	ND	0.002	0.0002	mg/L	EPA 245.1	09/06/2016 14:00	9/6/2016 18:11	
Magnesium, Total	22.4		0.2	mg/L	EPA 200.7	08/31/2016 12:03	9/1/2016 20:13	
Manganese, Total	<b>0.100</b>	0.05	0.005	mg/L	EPA 200.7	08/31/2016 12:03	9/1/2016 20:13	
Molybdenum, Total	0.0015		0.0005	mg/L	EPA 200.8	08/31/2016 12:08	9/6/2016 15:52	
Nickel, Total	0.0082	0.1	0.0005	mg/L	EPA 200.8	08/31/2016 12:08	9/6/2016 15:52	
Potassium, Total	1.0		0.5	mg/L	EPA 200.7	08/31/2016 12:03	9/1/2016 20:13	
Selenium, Total	0.0007	0.05	0.0005	mg/L	EPA 200.8	08/31/2016 12:08	9/6/2016 15:52	
Silver, Total	ND	0.1	0.0005	mg/L	EPA 200.8	08/31/2016 12:08	9/6/2016 15:52	
Sodium, Total	4.8		0.5	mg/L	EPA 200.7	08/31/2016 12:03	9/1/2016 20:13	
Thallium, Total	ND	0.002	0.0002	mg/L	EPA 200.8	08/31/2016 12:08	9/6/2016 15:52	
Zinc, Total	0.08	5	0.01	mg/L	EPA 200.7	08/31/2016 12:03	9/3/2016 14:05	



## Certificate of Analysis

**Lab Sample No.: 16H1615-04**

<b>Name:</b> American Fork City	<b>Sample Date:</b> 8/30/2016 9:45 AM
<b>Sample Site:</b> Upper P.I. Pond	<b>Receipt Date:</b> 8/30/2016 10:35 AM
<b>Comments:</b>	<b>Sampler:</b> Jay Brems
<b>Sample Matrix:</b> Water	<b>Project:</b>
<b>PO Number:</b>	<b>System No.:</b> UTAH25008
<b>Source Code:</b>	<b>Report to State:</b>
<b>Sample Point:</b>	

Parameter	Sample Result	EPA Max Contaminant Level (MCL)	Minimum Reporting Limit	Units	Analytical Method	Preparation Date/Time	Analysis Date/Time	Flag
<b>Inorganic</b>								
Turbidity	<b>36</b>	5	0.02	NTU	EPA 180.1	08/30/2016 17:01	8/30/2016 17:05	
<b>Metals</b>								
Antimony, Total	0.0010	0.006	0.0005	mg/L	EPA 200.8	08/31/2016 12:08	9/6/2016 16:00	
Arsenic, Total	0.0037	0.01	0.0005	mg/L	EPA 200.8	08/31/2016 12:08	9/6/2016 16:00	
Barium, Total	0.071	2	0.005	mg/L	EPA 200.7	08/31/2016 12:03	9/3/2016 14:09	
Beryllium, Total	ND	0.004	0.001	mg/L	EPA 200.7	08/31/2016 12:03	9/3/2016 14:09	
Calcium, Total	73.7		0.2	mg/L	EPA 200.7	08/31/2016 12:03	9/3/2016 14:09	
Cadmium, Total	0.0005	0.005	0.0002	mg/L	EPA 200.8	08/31/2016 12:08	9/6/2016 16:00	
Chromium, Total	0.0016	0.1	0.0005	mg/L	EPA 200.8	08/31/2016 12:08	9/6/2016 16:00	
Copper, Total	0.0051	1.3	0.0010	mg/L	EPA 200.8	08/31/2016 12:08	9/6/2016 16:00	
Iron, Total	<b>1.96</b>	0.3	0.02	mg/L	EPA 200.7	08/31/2016 12:03	9/3/2016 14:09	
Lead, Total	<b>0.0297</b>	0.015	0.0005	mg/L	EPA 200.8	08/31/2016 12:08	9/6/2016 16:00	
Mercury, Total	ND	0.002	0.0002	mg/L	EPA 245.1	09/06/2016 14:00	9/6/2016 18:11	
Magnesium, Total	20.8		0.2	mg/L	EPA 200.7	08/31/2016 12:03	9/1/2016 20:17	
Manganese, Total	<b>0.066</b>	0.05	0.005	mg/L	EPA 200.7	08/31/2016 12:03	9/1/2016 20:17	
Molybdenum, Total	0.0016		0.0005	mg/L	EPA 200.8	08/31/2016 12:08	9/6/2016 16:00	
Nickel, Total	0.0082	0.1	0.0005	mg/L	EPA 200.8	08/31/2016 12:08	9/6/2016 16:00	
Potassium, Total	0.9		0.5	mg/L	EPA 200.7	08/31/2016 12:03	9/1/2016 20:17	
Selenium, Total	ND	0.05	0.0005	mg/L	EPA 200.8	08/31/2016 12:08	9/6/2016 16:00	
Silver, Total	ND	0.1	0.0005	mg/L	EPA 200.8	08/31/2016 12:08	9/6/2016 16:00	
Sodium, Total	4.8		0.5	mg/L	EPA 200.7	08/31/2016 12:03	9/1/2016 20:17	
Thallium, Total	ND	0.002	0.0002	mg/L	EPA 200.8	08/31/2016 12:08	9/6/2016 16:00	
Zinc, Total	0.04	5	0.01	mg/L	EPA 200.7	08/31/2016 12:03	9/3/2016 14:09	



# DRINKING WATER SAMPLES ONLY

## CHEMTECH - FORD ANALYTICAL LABORATORY

## CHAIN OF CUSTODY

COMPANY: American Fork City  
 ADDRESS: 270 E. 200 N.  
 CITY/STATE/ZIP: American Fork UT 84003  
 PHONE #: 801-404-6129 FAX: \_\_\_\_\_  
 CONTACT: Jay Brauns PROJECT: \_\_\_\_\_  
 EMAIL: jbraun@afcity.net

BILLING ADDRESS: \_\_\_\_\_  
 BILLING CITY/STATE/ZIP: \_\_\_\_\_  
 PURCHASE ORDER #: \_\_\_\_\_



CHEMTECH-FORD  
LABORATORIES

TURNAROUND REQUIRED:\* \_\_\_\_\_  
\* Expedited turnaround subject to additional charge

STATE SYSTEM #  
25008

SEND TO STATE?  
 YES  NO

TESTS REQUESTED										Bacteria	
<div style="background-color: orange; color: white; padding: 10px; border-radius: 10px; display: inline-block;">                     3 DAY 9/2/16  <h1 style="margin: 0;">RUSH</h1>                      S-8194, ULINE, 800-295-5510                 </div>										R = Routine I = Investigative TR = Trigger Source	
Total Coliform + E. coli (Enumerated) Total Coliform + E. coli (Enumerated) HPC (Plate Count)										REPEAT OR = Original Location UP = Upstream DN = Downstream	
										LAB FAIL Ref #	

Lab Use Only	CLIENT SAMPLE INFORMATION					
	LOCATION	DATE	TIME	FACILITY ID (source code)	POINT CODE (DBP)	Field: Residual Chlorine
H1615						
01	1. <u>Time Cave Spring</u>	<u>8/30/16</u>	<u>9:00</u>			X
↓	2. <u>Time Cave Spring</u>	↓	<u>9:00</u>			X
02	3. <u>Power House Spring</u>	↓	<u>9:15</u>			X
03	4. <u>River</u>	↓	<u>9:05</u>			X
↓	5. <u>River</u>	↓	<u>9:05</u>			X
04	6. <u>Upper P.I. Pond</u>	↓	<u>9:45</u>			X
↓	7. <u>Upper P.I. Pond</u>	↓	<u>9:45</u>			X
	8.					
	9.					
	10.					

Sampled by: [print] Jay Brauns      Sampled by: [signature] [Signature]  
 Special Instructions: \_\_\_\_\_

ON ICE       NOT ON ICE      Temp (C°): 9.2  
 Samples received outside the EPA recommended temperature range of 0-6 C° may be rejected.

Relinquished by: [signature] <u>[Signature]</u>	Date/Time <u>8/30/16 10:35</u>	Received by: [signature] <u>[Signature]</u>	Date/Time <u>8/30/16 1035</u>
Relinquished by: [signature]	Date/Time	Received by: [signature]	Date/Time
Relinquished by: [signature]	Date/Time	Received by: [signature]	Date/Time

CHEMTECH-FORD      801.262.7299 PHONE  
 9632 South 500 West      866.792.0093 FAX  
 Sandy, UT 84070      www.chemtechford.com

Payment Terms are net 30 days OAC. 1.5% interest charge per month (18% per annum).  
 Client agrees to pay collection costs and attorney's fees.

Work Order # H1615

CHEMTECH FORD LABORATORIES

Sample Receipt



CHEMTECH-FORD LABORATORIES

Delivery Method:

- UPS  USPS
- FedEx  Chemtech Courier
- Walk-in  Customer Courier

Receiving Temperature 9.2 °C

Sample #	Container	Chemtech Lot # or Preservative	Number of Subsamples	Preserved by Client/Third Party	Preserved in Receiving/Laboratory	Filtered in Field by Client	Misc Volume (oz/mL)	Comments
01	AP							
	M	289						
02	M	297						
03,04	AP							
	M	297 291						

Sample Condition (check if yes)

- Custody Seals
- Containers Intact
- COC/Labels Agree
- Preservation Confirmed
- Received on Ice
- Correct Containers(s)
- Sufficient Sample Volume
- Headspace Present (VOC)
- Temperature Blank
- Received within Holding Time

Plastic Containers

- A- Plastic Unpreserved
- B- Miscellaneous Plastic
- C- Cyanide Qt (NaOH)
- E- Coliform/Ecoli/HPC
- F- Sulfide Qt (Zn Acetate)
- L- Mercury 1631
- M- Metals Pint (HNO3)
- N- Nutrient Pint (H2SO4)
- R- Radiological (HNO3)
- S- Sludge Cups/Tubs
- Q- Plastic Bag

Glass Containers

- D- 625 (Na2S2O3)
- G- Glass Unpreserved
- H- HAAs (NH4Cl)
- J- 508/515/525 (Na2SO3)
- K- 515.3 Herbicides
- O- Oil & Grease (HCl)
- P- Phenols (H2SO4)
- T- TOC/TOX (H3PO4)
- U- 531 (MCAA, Na2S2O3)
- V- 524/THMs (Ascorbic Acid)
- W- 8260 VOC (1:1 HCl)
- X- Vial Unpreserved
- Y- 624/504 (Na2S2O3)
- Z- Miscellaneous Glass



## Certificate of Analysis

### Report Footnotes

#### Abbreviations

ND = Not detected at the corresponding Minimum Reporting Limit.  
1 mg/L = one milligram per liter or 1 mg/Kg = one milligram per kilogram = 1 part per million.  
1 ug/L = one microgram per liter or 1 ug/Kg = one microgram per kilogram = 1 part per billion.  
1 ng/L = one nanogram per liter or 1 ng/Kg = one nanogram per kilogram = 1 part per trillion.

#### Flag Descriptions

NR = No analyte requiring this QC element is included in this analytical bracket.

HB = Recovery for this parameter exceeded the upper acceptance limit. Associated sample(s) were all non-detect and therefore accepted and reported for this parameter.

#### Data Comparisons

Values reported in **RED** exceed Primary Drinking Water standards.  
Values reported in **BLUE** exceed Secondary Drinking Water standards.  
**BLANK** values in the MCL column indicate no standard.