

Tibble Fork Project Samples

8/30/16



CHEMTECH-FORD
LABORATORIES

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

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

Parameter	Sample Result	EPA Max Contaminant Level (MCL)	Minimum Reporting Limit	Units	Analytical Method	Preparation Date/Time	Analysis Date/Time	Flag
Inorganic								
Turbidity	0.13	5	0.02	NTU	EPA 180.1	08/30/2016 17:01	8/30/2016 17:05	
Metals								
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

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

Parameter	Sample Result	EPA Max Contaminant Level (MCL)	Minimum Reporting Limit	Units	Analytical Method	Preparation Date/Time	Analysis Date/Time	Flag
Metals								
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

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

Parameter	Sample Result	EPA Max Contaminant Level (MCL)	Minimum Reporting Limit	Units	Analytical Method	Preparation Date/Time	Analysis Date/Time	Flag
Inorganic								
Turbidity	130	5	0.02	NTU	EPA 180.1	08/30/2016 17:01	8/30/2016 17:05	
Metals								
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	2.72	0.3	0.02	mg/L	EPA 200.7	08/31/2016 12:03	9/3/2016 14:05	
Lead, Total	0.0338	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	0.100	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

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

Parameter	Sample Result	EPA Max Contaminant Level (MCL)	Minimum Reporting Limit	Units	Analytical Method	Preparation Date/Time	Analysis Date/Time	Flag
Inorganic								
Turbidity	36	5	0.02	NTU	EPA 180.1	08/30/2016 17:01	8/30/2016 17:05	
Metals								
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	1.96	0.3	0.02	mg/L	EPA 200.7	08/31/2016 12:03	9/3/2016 14:09	
Lead, Total	0.0297	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	0.066	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 #: _____ FAX: _____
 CONTACT: Jay Brans PROJECT: _____
 EMAIL: jbrans@afcity.net

BILLING ADDRESS: _____
 BILLING CITY/STATE/ZIP: _____
 PURCHASE ORDER #: _____



TURNAROUND REQUIRED: * _____
 * Expedited turnaround subject to additional charge

STATE SYSTEM #
25008

SEND TO STATE?
 YES NO

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

TESTS REQUESTED										Bacteria	
										R = Routine	
										I = Investigative	
										TR = Trigger Source	
										REPEAT	
										OR = Original Location	
										UP = Upstream	
										DN = Downstream	
										LAB FAIL Ref #	

3 DAY 9/2/16
RUSH
 S-8194, ULINE, 800-295-5310

All Metals Turbidity

Sampled by: [print] Jay Brans Sampled by: [signature] Jay Brans **ON ICE** NOT ON ICE Temp (C°): 9.2

Special Instructions: _____ 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	Preservation Status			Misc Volume (oz/mL)	Comments
				Preserved by Client/Third Party	Preserved in Receiving/Laboratory	Filtered in Field by Client		
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



CHEMTECH-FORD
LABORATORIES

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.



Chemtech-Ford, Inc

9632 South 500 West
 Sandy, UT 84070
 801.262.7299 (O)
 866.792.0093 (F)

INVOICE

Invoice Number: **16H1615**
 Invoice Date: 09/07/2016
 Invoice Due 10/07/2016

Invoice To:
Shauna American Fork City 270 East 200 North American Fork, UT 84003

Remit To:
Accounts Receivable Chemtech-Ford Laboratories 9632 South 500 West Sandy, UT 84070

Project:	PO Number:	Received:	Terms:
[none]		08/30/2016	NET 30

Quantity	Analysis/Description	Matrix	Unit Cost	Extended Cost
4	ICP & ICP-MS (Investigative) AP	Water	\$245.00	\$980.00
2	Mercury (T) 245.1	Water	\$0.00	\$0.00
3	Turbidity	Water	\$13.00	\$39.00

Invoice Total:	\$1,019.00
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Samples Included On This Invoice

Work	Sampl	SampleName	Submission Date
16H1615	01	Timp Cave Spring	08/30/2016
16H1615	02	Power House Spring	08/30/2016
16H1615	03	River	08/30/2016
16H1615	04	Upper P.I. Pond	08/30/2016

Project Manager: Jay Brems