107720 - R8 FRED

PRE WY - 22981 1.2

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 Wynkoop Street
DENVER, CO 80202-1129
Phone 800-227-8917
http://www.epa.gov/region08

RECEIVED
MAR 13 2014
Wastewater Unit

Ref: 8P-W-WW

January 8, 2014

MEMORANDUM

SUBJECT: 2013 Annual Report

FROM: Al Garcia, Pretreatment Coordinator

TO: Approved Pretreatment Programs

Please find attached the 2013 Annual Report for Pretreatment Program Implementation. The attached report fulfills the pretreatment annual report requirements in your National Pollutant Discharge Elimination System (NPDES) permit and 40 CFR 403.12(i). **The due date for these reports is March 28, 2013.**

Please use **blue or red ink** to fill out/update the information.

Please mail the completed annual report to

COLORADO PUBLICLY OWNED TREATMENT WORKS (POTWs)

Original Reports to:	Copies to:
Al Garcia Pretreatment Coordinator (8P-W-WW) EPA Region 8 1595 Wynkoop Denver, Colorado 80202-1129	Lisa Knerr Environmental Protection Specialist Water Quality Control Division Colorado Department of Public Health And Environment 4300 Cherry Creek Drive South Denver, Colorado 80246-1530

WYOMING POTWs

Original Reports to:	Copies to:
Al Garcia Pretreatment Coordinator (8P-W-WW) EPA Region 8 1595 Wynkoop Denver, Colorado 80202-1129	Leah Coleman Permits Program Supervisor WYDEQ/Water Quality Division Herschler Building 4th Floor West 122 West 25th Street Cheyenne, WY 82002

MONTANA POTWs

Original Reports to:	Copies to:
EPA Region 8, Montana Operations Office NPDES Program Federal Building 10 West 15th Street Helena, Montana 59626	Al Garcia Pretreatment Coordinator (8P-W-WW) EPA Region 8 1595 Wynkoop Denver, Colorado 80202-1129
	Water Protection Bureau Department of Environmental Quality 1520 E. 6th Ave. P.O. Box 200901 Helena, MT 59620-0901

If you have any questions, please do not hesitate to contact me at (303) 312-6382 or garcia.al@epa.gov

RECEIVED
MAR 27 2014
Wastewater Unit

Industrial Pretreatment Program
Annual Report on POTW Implementation

Reporting Period: January 1, 2013 to December 31, 2013

(PSSD) (PSED)

CHEYENNE - CROW CREEK	WY	22381

NPDES Permit Exp. Date: 10/31/2013

City of Cheyenne, Board of Public Utilities
P.O. Box 1469
Cheyenne W 82003

Pretreatment Contact: ~~Phil Clark~~ Nathan Kie
Pretreatment Coordinator

NPDES Permit Signator Jim Hughes
Plant Manager

Phone: 307-635-3163
FAX: 307-635-6833
E:MAIL: ~~aclark~~@cheyennebopu.org
nKie

Site Address of POTW: (If different from above) 4403 Livingston St, Cheyenne, WY 82007

I. POTW and NPDES Information

Did your POTW have a WET failure this reporting year? ___ YES X NO

What species (Ceriodaphnia, minnow, etc)? _____

Did your POTW have NPDES effluent violations this year? X YES ___ NO

What Parameter(s): 15 May, 2013 & 18 September, 2013 - E.coli

Sludge Disposal Method(s) PUMPED TO DRY CREEK

Treatment Level (Primary, Secondary, Advanced) Enter Highest Level: SECONDARY

Treatment Types (Enter "YES" for all that apply) or show any corrections to the information listed below:

Primary Clarification	Y	Rotating Biological Contacts	
Secondary Clarification	Y	Lagoon	
Activated Sludge		Anaerobic Digestion	
Trickling Filter		Aerobic Digestion	
Oxidation Ditch		Chlorination	
Biotowers		Dechlorination	
		UV Disinfection	Y

Other (Specify): MOVING BED BIOFILM REACT

POTW Design Flow 6.5 MGD

Total SIU Flow: ~~0.627~~ 0.674 MGD

Actual POTW Flow ~~3.122~~ 3.371 MGD

% Industrial Flow: 20

POTW Organic (BOD) Design Capacity 9340 lbs/day

POTW TSS Design Capacity 9340 lbs/day

POTW Ammonia (NH3) Design Capacity 1370 lbs/day

Actual or Estimated total Flow for Commercial (Non-SIU) Dischargers 0.44 MGD

= Total Commercial Non-SIU Flow - (Domestic Only Flow + SIU Flow)

Please Update all Information on this Page

II. Program Implementation

1. # of Permitted Industrial Users as of December 31:	CIUs:	2	(CIUs)
	SIUs:	6	(SIUs)
	# of Other Permitted IUs:	Ø	
	Number of Zero-Discharging CIUs	Ø	
	Number of Permitted Zero-Discharging CIUs	Ø	

2. # of SIUs with no permit or expired permit as of December 31 (if greater than 0, then complete Attachment A).	Ø	(NOCM)
3. # of SIUs with permits that have been administratively extended greater than 180 days in the past year	1	(NOCM)

4. # of SIUs in significant noncompliance (SNC) as of December 31

	# of CIUs	# of Non Categorical SIUs	Total SIUs
Self-Monitoring 403.8(f)(2)(vii)(F):	Ø	Ø	Ø (MSNC)
Reporting 403.8(f)(2)(vii)(G):	Ø	Ø	Ø (RSNC)
Pretreatment Standards (Categorical, Local Limits, BMPs, General and Specific Prohibitions) 403.8(f)(2)(vii)(A or B):	Ø	3	3 (SNPS)
General and Specific Prohibitions) 403.5(b)	Ø	Ø	Ø
Pretreatment Compliance Schedule (Imposed as a permit requirement or Enforcement Order) 403.8(f)(2)(vii)(E):	Ø	1	1 (SSNC)
Pass Through, Interference or Imminent Endangerment 403.8(f)(2)(vii)(C or D):	Ø	Ø	Ø
Other Violations Designated SNC by the POTW 403.8(f)(2)(vii)(H):	Ø	Ø	Ø

5. # of SIUs in SNC anytime during the reporting year: 3 (CISN)

6. # of non-SIUs in SNC anytime during the reporting year: Ø

II. Program Implementation

	Permitted non-SIUs	SIUs
7. # of SIUs and other permitted non-SIUs with unknown compliance status as of December 31:	Ø	Ø

	# of CIUs	# of Non Categorical SIUs	Total SIUs
8. # of SIUs on compliance schedules as of December 31	Ø	1	1 (COMP)

III. Enforcement Actions

	Non-SIUs	(SIUs)
1. Number of formal enforcement actions against IUs during the reporting year. Formal actions include Administrative Orders, show cause hearings, out-of-court settlements that are formal settlements, termination of service, formal compliance schedules, penalty actions EXCEPT civil or criminal suits.	Ø	18 (FENF)
Number of different IUs with formal enforcement actions taken during the reporting year.	Ø	4 (NENF)

A formal enforcement action is one that specifically requires an IU to take actions to achieve compliance, specifies a compliance timetable, contains consequences for noncompliance that are independently enforceable without having to provie the original violations, and subjects the violators to adverse legal consequences for noncompliance. A formal action may have penalties included.

	Civil		Criminal		Total
2. Number of suits filed against SIUs in the reporting year	Ø (CIVL)	+	Ø (CRIM)	=	Ø (JUDI)

	Non-SIUs	SIUs
3. Number of different IUs from whom penalties were collected during the reporting years as a result of a formal enforcement action.	Ø (IUPN)	4 (IUPN)
Total penalties collected:	Ø (PAMT)	62,500 (PAMT)

Penalties do not include liquidated damages, reimbursement for cost and attorney's fees, surcharges, etc.

4. Number of IUs published as being in SNC during the reporting year: 3 (SVPU)

IV. Compliance Monitoring

	Non-SIUs	SIUs
1. # of Inspections during the reporting year:	81	7
2. # of SIUs not inspected during the reporting year:		2 (NOIN)
3. # of SIUs not sampled during the reporting year:		Ø (NOIN)
4. SIUs in SNC with self-monitoring requirements during the reporting year that were not inspected and/or sampled during the reporting year.		Ø (SNIN)

V. Program Implementation

1. Number of FTE's (# of employees) that are committed to running your pretreatment program during the calander year (include sampling personnel, inspectors, administrative, legal, etc). Sum all partial FTEs to get total. — 2.987 (FTEs)

2. Number of Jurisdictions covered by the pretreatment program as of December 31. This includes any sewer districts, cities, etc., that discharge to your program, whether they have any industrial users present or not. Count yourself as 1. — 2 (PTJU)

3. Have there been any significant changes (+/- 20%) to the POTW's Pretreatment Program budget or staffing levels during this reporting period as compared to the previous year? — NO

4. Total Pretreatment Program budget for the current reporting year. Note: if the Pretreatment Budget is not a separate line item in the operating budget, calculate the Pretreatment Program staffing and operating costs. Do not enter the entire wastewater treatment plant OM costs or budget. — $ 186,085 (BUDG)

5. Does the POTW receive any discharges of (Check all that apply):

Groundwater from hydrocarbon cleanup site	☒	Landfill leachate	☐
Hauled Septage (domestic only)	☐	CERCLA cleanup wastes	☐
Hauled waste from Industrial sources	☒		
Hauled waste from commercial sources	☐	Hazardous (RCRA) waste as defined at 40 CFR Part 261and delivered by truck, rail or dedicated pipeline (for other RCRA wastes see question V.10.	☐ (RCRA)
Hauled categorical waste	☐		
Hauled Grease Interceptor/Trap waste	☒		
Other Unique Waste (Specify):			

These discharges are accepted into drying beds, not to the headworks.

V. Program Implementation (continued)

6. If you accept any trucked or hauled waste, check all of the following that apply to your POTW:

- [x] Legal Authority is in-place to control trucked and hauled waste
- [ ] The POTW issues permits for trucked and hauled wastes
- [x] The POTW has a designated disposal site for trucked and hauled wastes
- [x] The POTW controls access at the designated disposal station
- [x] The POTW uses a manifest system to track and/or control hauled wastes
- [ ] The POTW believes that illegal dumping may be occurring in its jurisdiction

7. What parameters, if any, do you surcharge?

- [x] BOD
- [x] TSS
- [ ] Oil and Grease
- [ ] Flow
- [ ] Ammonia
- [ ] COD
- [ ] TKN
- [ ] Other (Specify): _____

8. Were there any instances of Interference at the POTW during the reporting period? (Y/N) NO (INTF)

9. Were there any instances of Pass Through at the POTW during the reporting period? (Y/N) NO (PASS)

10. Did the POTW receive notification of the discharge of any hazardous waste pursuant to 40 CFR 403.12(p)? NO

If so, provide the names of the IU(s) reporting:

_____
_____
_____
_____
_____

VI. Signatory Certification Page for Annual Report

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Jim Hughes 3-25-14

Authorized Signatory Official Date

Jim Hughes, Water Reclamation Manager

Print or type name and title

Note: The Signatory Official is the person authorized by the POTW to sign the Annual Report (see 40 CFR Section 403.12(m)).

ATTACHMENT A

SIUs with no permit or an expired permit anytime during the reporting year, including permits that have been administratively extended.

SIU NAME	Permit Status Explanation
APW Wyott	This business will be closed in June, 2014. Permit expired 12-31-13, and has been extended.
Union Pacific Railroad	Permit Expired 3-31-12. Meeting scheduled for 3-25-14 to discuss changes to UPRR pretreatment facility and to prepare to renew permit.

ATTACHMENT B

Provide a copy of the newpaper notice identifying all IUs which were in SNC during the reporting period. The notice must show the name of the paper and the date of publication.

Please see note on attached public notice of SNC.

PUBLIC NOTICE OF ENVIRONMENTAL NONCOMPLIANCE:

In accordance with 40 CFR 403.8(f)(2)(vii), the following industrial waste dischargers permitted by the City of Cheyenne Board of Public Utilities were in significant noncompliance during 2013: Walmart Distribution Center was in technical review criteria significant noncompliance for copper, zinc, total suspended solids, ammonia and biochemical oxygen demand, and in chronic significant noncompliance for biochemical oxygen demand and ammonia effluent violations. Frontier Refining LLC was in technical review criteria significant noncompliance for benzene effluent violation during 2013. LT Environmental (WY Forestry Division, facility ID #73) was in technical review criteria significant noncompliance for copper, and chronic significant noncompliance for copper and zinc effluent violations during 2013.

Public Notice of SNC has been prepared and submitted to be published, however it may not be published in time to mail out report. As per my conversation with Al Garcia on 3-25-14, I will send a PDF of the newspaper clipping as soon as it is published.

- Nate Kie

ATTACHMENT C

Provide a description of each incidence of Pass Through or Interference at the wastewater treatment plant or collection system during the year, the cause if determined, and any actions taken by the POTW in response to the Pass Through or Interference.

None

ATTACHMENT D

An explanation of any significant decrease (20% or greater) in pretreatment funding or staffing of the POTW's Pretreatment Program

None

ATTACHMENT D: CROW CREEK 2013

Although there has not been an actual decrease in pretreatment funding or staffing, a significant amount of industrial development is occurring within our service area. A permanent full-time Industrial Pretreatment Program Assistant was proposed in the upcoming fiscal year's budget however, and the proposed staffing addition is awaiting approval by the board.

ATTACHMENT E

1. Update the following page(s). Include all of the following:

   A. All permitted SIUs
   B. All permitted zero discharging CIUs - None
   C. All non-permitted (if any) zero discharging CIUs - None
   D. All non-permitted SIUs (if any) - None.

2. If there are any changes to the listing of IUs on the following pages(s), please show these changes directly on the page(s). Please use RED or BLUE ink.

3. Please ensure that the following information is included for each IU:

   Industrial User Name (correct name)
   SIC Code(s)
   Categorical Standard # (if applicable)
   Short description of the IU
   SNC Status during the reporting period
   Jurisdiction that the IU is located (City, etc.)

4. Average Process flow (gpd) and average Total Flow (gpd) as appropriate. Some facilities are regulated for total flow and this is the only number applicable whereas others are regulated for process flow and total flow.

CIUs/SIUs CHEYENNE - CROW CREEK *08-Jan-14*

Significant Industrial User	Jurisdiction	SIC CODES	Categorical Standard Number	Total Average Process Flow (gpd)	Total Average Facility Flow (gpd)	Description	Was the SIU in SNC during this reporting year?
APW WYOTT	CITY	3479	433	~~4743~~ 5,751		METAL FINISHER	☐
FRONTIER REFINING	CITY	2911	419	~~299540~~ 311,583		SUBPART B. PETROLEUM REFINING	☐
LT ENVIRO/FLYING J	CITY	4952		~~537~~ 620		GROUNDWATER CLEANUP	☐
LT FORESTRY	CITY	4952		~~1503~~ 1,830		GROUNDWATER CLEANUP	☐
LT TOTAL FACILITY	CITY	4952		~~3238~~ 2,715			☐
UNION PACIFIC RAILROAD	CITY	4011		~~19415~~ 10,862		RAILROAD AND WASTEWATER TREATMENT PLANT	☐

Significant Industrial User	Jurisdiction	SIC CODES	Categorical Standard Number	Total Average Process Flow (gpd)	Total Average Facility Flow (gpd)	Description	Was the SIU in SNC during this reporting year?
Walmart Distribution Center	City	5141		~~39314~~ 25,332		Warehouse/distribution	☐
WARREN AFB	CITY	9711		~~304886~~ 270,233		AIR FORCE BASE	☐

ATTACHMENT F

Provide a printout or listing of all permitted non-SIUs

N/A

ATTACHMENT G

For those IUs in SNC during the Reporting Period

IU Name	Date of Enf Action	Type of Enf Action	Parameter(s) Violated	Date in Compliance	Quarters in SNC
Frontier Refinery	June 19, 2013	NOV / Penalty Fine	Benzene (TRC)	4-8-2013	1 (1st Qtr)
LTE, WY Forestry	August 22, 2013 Feb 6, 2014	8-22-13 → NOV 2-6-14 → ACO	Copper (Chronic & TRC) Zinc (Chronic)	7-29-13	1 (2nd Qtr)
Wal Mart Distribution Center	October 1, 2013 March 20, 2014	NOV / Penalty Fine	Zinc (TRC)	In and out of compliance	2 (3rd & 4th Qtr)
	March 20, 2014	NOV / Penalty Fine	BOD (Chronic & TRC)	In and out of compliance	1 (4th Qtr)
			TSS (TRC)	1-8-2014	1 (4th Qtr)
			Ammonia (Chronic & TRC)	1-8-2014	1 (4th Qtr)
Wal Mart Distribution Center			Copper (TRC)	12-10-2013 (in & out of compliance)	1 (4th Qtr)

Walmart DC is under an administrative Compliance Schedule to install a comprehensive pretreatment facility, issued May 31, 2013.

ATTACHMENT H

The NPDES permit issued to your POTW by your State permitting authority requires POTW influent and effluent monitoring. There are separate monitoring requirements for metals (40 CFR Part 122, Appendix D, Table III), toxic organics (Table II), and other pollutants expected to be present (Table V). This monitoring is the monitoring required under the PRETREATMENT SECTION of your permit or as a part of your Pretreatment Requirements.

From your NPDES permit (Pretreatment Section or Pretreatment Requirements of your State issued permit) and monitoring records, enter the number of times per year you are required to monitor and actually monitored the following pollutants:

	Table III	Table II	If Suspected Present Table V
From your NPDES Permit: required influent monitoring frequency	4	1	
Actual influent monitoring performed during the reporting year	4	4	
From your NPDES Permit: pretreatment required effluent monitoring frequency	4	1	
Actual effluent monitoring performed during the reporting year	4	4	

Were Biosolids (Sludge) disposed of by any disposal option, during the reporting period?

- [x] Yes
- [ ] No

Actual Biosolids monitoring performed during the reporting year (40 CFR Part 122, Appendix D) Please See Dry Creek WRF Report.

CHEYENNE - CROW CREEK

ATTACHMENT I - Metals

	Date Approved	Local Limit		mg/l lbs/d	Type	Local Limit	mg/l lbs/d	Type	MACL	MAIL	MAHL
Arsenic	5/14/07	0.423		mg/l	D		mg/l	M		4.29	8.722
Cadmium	5/14/07	0.013		mg/l	D		mg/l	M		0.127	0.376
Chromium - T	5/14/07	5.129		mg/l	D		mg/l	M		52.023	104.25
Chromium (III)				mg/l	D		mg/l	M			
Chromium (VI)	5/14/07	1.34		lbs/d	D		mg/l	M		1.727	1.932
Copper	5/14/07	0.19		mg/l	D		mg/l	M		1.923	3.876
Lead	5/14/07	0.18		mg/l	D		mg/l	M		1.826	3.994
Mercury	5/14/07	0.012		mg/l	D		mg/l	M		0.121	0.243
Molybdenum	5/14/07	0.638		mg/l	D		mg/l	M		6.471	13.031
Nickel	5/14/07	0.336		mg/l	D		mg/l	M		3.406	5.908
Selenium	5/14/07	0.583		lbs/d	D		mg/l	M		0.561	0.753
Silver	5/14/07	0.161		mg/l	D		mg/l	M		1.636	1.923
Zinc	5/14/07	1.339		mg/l	D		mg/l	M		13.579	18.44

This is the most recent local limits information that we have entered for your POTW. Please make any corrections (in RED or BLUE ink). If the information is correct please write "NO CHANGES" on the page.

No Changes

CHEYENNE - CROW CREEK

ATTACHMENT J - OTHER LOCAL LIMITS

	Date Approved	Local Limit	mg/l lbs/d	Type	Local Limit	mg/l lbs/d	Type	MACL	MAIL	MAHL
BOD	5/14/07	350	MG/L	D					3390	9340
TSS	5/14/07	700	MG/L	D					4453	9440
Ammonia	5/14/07	60	mg/L	D					630	1370
Oil Grease	5/14/2007	100	MG/L	D						
Pet Oil/Grease	5/14/07	50	mg/l	d						
Benzene	1/29/96	0.05	MG/L	D						
BTEX	1/29/96	0.75	MG/L	D						
PCE										
TKN	5/14/07	70	MG/L	D					805	1710

This is the most recent local limits information that we have entered for your POTW. Please make any corrections (in RED or BLUE ink). If the information is correct please write "NO CHANGES" on the page.

No Changes

ATTACHMENT K

Influent and Biosolids Monitoring

Use all data generated for the Influent or final Biosolids to disposal. For Influent and Biosolids data, the data may have been generated by the POTW for other than Pretreatment requirements as specified in your State issued NPDES permit.

NOTE: If there is no data for a pollutant, leave the space blank. If the data was all below detection, Enter "0" (zero) or "BLD" in the space.

Please record the highest Influent Annual Data (lbs/day) and Biosolids (mg/kg dry weight) for those pollutants listed, plus any others for which you have local limits. The calculate the Highest Influent loading, use the following formula:

For each influent sampling event, for each pollutant:

Pollutant Conc. in mg/l	X	Flow (mgd) of POTW on that date	X	8.34	=	_____ lbs/day

For example, Cd was measured at 0.003, 0.01, and 0.009 mg/l. The POTW flows for those days was 3.6, 2.9, 3.3 mgd. Using the above formula:

0.003 mg/l	X	3.6 mgd	X	8.34	=	0.09 lbs/day
0.01 mg/l	X	2.9 mgd	X	8.34	=	0.24 lbs/day
0.009 mg/l	X	3.4 mgd	X	8.34	=	0.26 lbs/day

You would report the 0.26 lbs/day as the highest influent loading.

ATTACHMENT K

Influent and Biosolids Monitoring

Please See Dry Creek Report.

Pollutant	Highest Influent Annual Data IN LBS/DAY	Average Influent Annual Data in Lbs/Day	Biosolids mg/kg DW	Approved MAHL lbs/day	Is the Highest Influent Annual Data for this pollutant greater than the MAHL?
Arsenic	Ø	Ø		8.722	NO
Cadmium	Ø	Ø		0.376	NO
Chromium - T	Ø	Ø		104.25	NO
Chromium (III)					
Chromium (VI)	0.54	0.135		1.932	NO
Copper	2.409	1.94		3.876	NO
Lead	0.214	0.127		3.994	NO
Mercury	0.003	0.001		0.243	NO
Molybdenum	0.179	0.11		13.031	NO
Nickel	0.15	0.073		5.908	NO
Selenium	0.262	0.189		0.753	NO
Silver	Ø	Ø		1.923	NO
Zinc	3.25	2.53		18.44	NO
BOD	5271	4349		9340	NO
TSS	5772	5394		9440	NO
Ammonia	665.6	565		1370	NO
Oil and Grease	572.4	506			
Pet Oil/Grease	Ø	Ø			
Antimony	Ø	Ø			
Berillium	Ø	Ø			
Thallium	0.62	0.155			
Cyanide	0.135	0.102			
Phenols	1.311	0.821			

NOTE: If there is no data for a pollutant, leave the space blank. If the data was all below detection, Enter "0" (zero) or "BLD" in the space.

ATTACHMENT K

If you indicated that the highest influent data exceeded the approved MAHL then complete the requirements below:

1. Provide a written explanation of what you believe is the cause of the exceedence, if known, for each pollutant(s) exceeding the MAHL.

2. Re-evaluate whether the approved MAHL, MAIL, and local limit for the pollutant(s) is still valid. If not, recalculate the local limit and submit for approval by May 1 of this reporting year.

3. Where the POTW does not have sufficient data to recalculate the local limit, or where the POTW believes that the data for the pollutant was not representative of what is actually occurring, or that the data was suspected to be some type of lab or sampling error, the POTW shall:

   A. Develop a sampling plan designed to identify sources of the pollutant(s) and to provide information on whether it is a continuing problem . The sampling plan shall contain adequate sampling sites and monitoring frequencies to allow the POTW to identify sources (domestic, commercial, industrial, etc.) of the pollutant(s).

   B. The sampling plan shall be implemented no later than April 1 of this reporting year.

   C. The POTW shall report to the Approval Authority, it's completed source identification study by August 1 of this reporting year. This shall include all data, identified sources, and a summary of all actions taken by the POTW to control the pollutant(s). The POTW shall submit for approval, a recalculated local limit, where necessary. If the POTW plans to implement additional controls to reduce the pollutant(s) that extend beyond August 1 of this reporting year, the POTW shall summarize these projected activities and completion dates.

NOTE: Exceeding a MAHL is of significant concern. This is the point at which some impact to the environment is predicted. The POTW should always treat this as a priority activity to address with expediency.

CHEYENNE - CROW CREEK

ATTACHMENT L - Modification History. Substantial and Non-Substantial.

Type of Modification		Date of PN	Approva
PROGRAM APPROVAL			03/28/86
Substantial	Local Limit for Selenium	09/29/05	11/10/05

-Updated City Ordinance (Title 13) → Effective October 31, 2013.

-Updated Local Limits → Pending final issuance of N.P.D.E.S. Permit.

Modifications Expected this Calendar Year

Modification Description	Substantial or Non-Sub	Quarter Anticipated
Update Enforement Response Plan	Substantial	4th

ATTACHMENT M

Influent/Effluent and Biosolids Monitoring For NPDES Pretreatment Required Monitoring

Influent Monitoring

Please attach the results of all influent monitoring results that were performed as required in the Pretreatment section of your state issued NPDES permit. The results must include the name of the pollutant, measured concentration, analytical method used, detection limit, date sample collected and date sample analyzed.

Effluent Monitoring

Please attach the results of all effluent monitoring results from the monitoring required by the Pretreatment section of your state issued NPDES permit. Provide monitoring results for those pollutants that were reported above the detection limit. The results must include the name of the pollutant, measured concentration, analytical method used, detection limit, date sample collected and date sample analyzed.

Sludge (Biosolids) Monitoring

Please attach the results of all monitoring results for biosolids monitoring for any pollutants listed in 40 CFR Part 122, Appendix D, Table II, III, and V. This is for final sludge to disposal only. This monitoring may have been required by your state issued NPDES permit, or a Biosolids specific permit.

ANALYTICAL RESULTS

DRY CREEK WWTP LABORATORY

Cheyenne BOPU
8911 Campstool Road
Cheyenne, Wyoming 82007
Phone: 307-635-3163
Fax: 307-635-6833

✓ posted 4-19-13 NBD

Date Sampled: 03-19-13 Sampled By: KS
Date Received: 03-19-13 Date Reported: 04-09-13
Sample Location: Crow Creek Influent Qterly #1 Sample Matrix: Wastewater

Analyses	*Result*	*Units*	*Qual*	*RL*	*Method*	*Analysis Date/ By*
NONMETALS						
Ammonia as N	23.3	mg/l		0.1	SM 4500 NH_3-D	03/20/13 / mw
BOD_5 (Total)	142	mg/l		2.0	SM 5210 B	03/20/13 / ms
Hexavalent Chrome	ND	mg/l		0.013	SM 3500-Cr D	03/20/13 / kl
Oil & Grease (HEM)	24.0	mg/l		5.0	EPA 1664A	03/20/13 / mw
pH	7.5	P.U.		NA	SM 4500H^+ B	On-site/ks
TPH (SGT-HEM)	ND	mg/l		5.0	EPA 1664A	03/20/13 / mw
Total Phosphorus	2.1	mg/l		0.1	EPA 365.1	03/22/13 / kl
TDS	623	mg/l		NA	SM 2520 B	03/19/13 / mw
TSS	242	mg/l		3.0	SM 2540-D	03-20-13/ mw
METALS - TOTAL						
Ag, Silver	ND	mg/l		0.005	EPA 200.7	04-05-13/ kl
As, Arsenic	ND	mg/l		0.010	EPA 200.7	04-05-13/ kl
Be, Beryllium	ND	mg/l		0.005	EPA 200.7	04-05-13/ kl
Cd, Cadmium	ND	mg/l		0.005	EPA 200.7	04-05-13/ kl
Cr, Chromium	ND	mg/l		0.005	EPA 200.7	04-05-13/ kl
Cu, Copper	0.089	mg/l		0.010	EPA 200.7	04-05-13/ kl
Mo, Molybdenum	0.006	mg/l		0.005	EPA 200.7	04-05-13/ kl
Ni, Nickel	0.006	mg/l		0.005	EPA 200.7	04-05-13/ kl
Pb, Lead	0.009	mg/l		0.005	EPA 200.7	04-05-13/ kl
Sb, Antimony	ND	mg/l		0.010	EPA 200.7	04-05-13/ kl
Selenium, Se	0.011	mg/l		0.003	EPA 200.7	04-05-13/ kl
Tl, Thallium	0.026	mg/l	1	0.025	EPA 200.7	04-05-13/ kl
Zinc, Zn	0.086	mg/l		0.005	EPA 200.7	04-05-13/ kl

Comments: 1 Contamination in the blank @ 25 ppb of Tl.
Report Definitions: ND – Not detected at the reporting limit. NA: Not Analyzed QA/QC: Available in Dry Creek laboratory.

Kent Loader, Laboratory Supervisor 4-9-13 *Date:*

Detection Summary

Client: Cheyenne Board of Public Utilities
Project/Site: 1st Quarter 2013 - Crow Creek Influent

TestAmerica Job ID: 280-40078-1

Client Sample ID: CROW CREEK INFLUENT — Lab Sample ID: 280-40078-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	3.9	J	5.0	1.1	ug/L	1		624	Total/NA
Methylene Chloride	2.1	J	5.0	2.0	ug/L	1		624	Total/NA
Trichloroethene	1.2	J	5.0	0.95	ug/L	1		624	Total/NA
Hg	18		2.5	1.0	ng/L	1		1631E	Total/NA
Chloride	140		15	1.3	mg/L	5		300.0	Total/NA
Sulfate	56		25	1.2	mg/L	5		300.0	Total/NA
Phenols, Total	0.055		0.0070	0.0020	mg/L	1		420.1	Total/NA
Cyanide, Total	0.0057	J B	0.010	0.0020	mg/L	1		SM 4500 CN E	Total/NA
Total Sulfide	0.60	J	1.0	0.50	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: CROW CREEK INFLUENT FIELD BLANK — Lab Sample ID: 280-40078-2

No Detections.

Client Sample ID: TRIP BLANK — Lab Sample ID: 280-40078-3

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Cheyenne Board of Public Utilities
Project/Site: 1st Quarter 2013 - Crow Creek Influent

TestAmerica Job ID: 280-40078-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Client Sample ID: CROW CREEK INFLUENT
Date Collected: 03/18/13 09:52
Date Received: 03/20/13 10:00

Lab Sample ID: 280-40078-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			03/21/13 09:24	1
Acrylonitrile	ND		100	17	ug/L			03/21/13 09:24	1
Benzene	ND		5.0	1.8	ug/L			03/21/13 09:24	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			03/21/13 09:24	1
Chlorobenzene	ND		5.0	2.3	ug/L			03/21/13 09:24	1
~~Chloroform~~ OK	3.9	J	5.0	1.1	ug/L			03/21/13 09:24	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			03/21/13 09:24	1
Chloroethane	ND		10	2.0	ug/L			03/21/13 09:24	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			03/21/13 09:24	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			03/21/13 09:24	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			03/21/13 09:24	1
1,2-Dichloroethane	ND		5.0	1.3	ug/L			03/21/13 09:24	1
Chloromethane	ND		10	0.89	ug/L			03/21/13 09:24	1
Bromoform	ND		5.0	0.48	ug/L			03/21/13 09:24	1
Bromomethane	ND		10	1.5	ug/L			03/21/13 09:24	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			03/21/13 09:24	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			03/21/13 09:24	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			03/21/13 09:24	1
Ethylbenzene	ND		5.0	2.2	ug/L			03/21/13 09:24	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			03/21/13 09:24	1
Methylene Chloride	2.1	J	5.0	2.0	ug/L			03/21/13 09:24	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			03/21/13 09:24	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			03/21/13 09:24	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			03/21/13 09:24	1
Tetrachloroethene	ND		5.0	2.7	ug/L			03/21/13 09:24	1
Toluene	ND		5.0	2.2	ug/L			03/21/13 09:24	1
Trichloroethene	1.2	J	5.0	0.95	ug/L			03/21/13 09:24	1
Vinyl chloride	ND		10	1.3	ug/L			03/21/13 09:24	1
Xylenes, Total	ND		10	1.1	ug/L			03/21/13 09:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*73 - 122*		*03/21/13 09:24*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*03/21/13 09:24*	*1*
4-Bromofluorobenzene (Surr)	*94*		*79 - 119*		*03/21/13 09:24*	*1*

Client Sample ID: TRIP BLANK
Date Collected: 03/18/13 09:52
Date Received: 03/20/13 10:00

Lab Sample ID: 280-40078-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			03/21/13 10:43	1
Acrylonitrile	ND		100	17	ug/L			03/21/13 10:43	1
Benzene	ND		5.0	1.8	ug/L			03/21/13 10:43	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			03/21/13 10:43	1
Chlorobenzene	ND		5.0	2.3	ug/L			03/21/13 10:43	1
Chloroform	ND		5.0	1.1	ug/L			03/21/13 10:43	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			03/21/13 10:43	1
Chloroethane	ND		10	2.0	ug/L			03/21/13 10:43	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			03/21/13 10:43	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			03/21/13 10:43	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			03/21/13 10:43	1

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: TRIP BLANK — **Lab Sample ID: 280-40078-3**
Date Collected: 03/18/13 09:52 — **Matrix: Water**
Date Received: 03/20/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		5.0	1.3	ug/L			03/21/13 10:43	1
Chloromethane	ND		10	0.89	ug/L			03/21/13 10:43	1
Bromoform	ND		5.0	0.48	ug/L			03/21/13 10:43	1
Bromomethane	ND		10	1.5	ug/L			03/21/13 10:43	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			03/21/13 10:43	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			03/21/13 10:43	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			03/21/13 10:43	1
Ethylbenzene	ND		5.0	2.2	ug/L			03/21/13 10:43	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			03/21/13 10:43	1
Methylene Chloride	ND		5.0	2.0	ug/L			03/21/13 10:43	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			03/21/13 10:43	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			03/21/13 10:43	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			03/21/13 10:43	1
Tetrachloroethene	ND		5.0	2.7	ug/L			03/21/13 10:43	1
Toluene	ND		5.0	2.2	ug/L			03/21/13 10:43	1
Trichloroethene	ND		5.0	0.95	ug/L			03/21/13 10:43	1
Vinyl chloride	ND		10	1.3	ug/L			03/21/13 10:43	1
Xylenes, Total	ND		10	1.1	ug/L			03/21/13 10:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*73 - 122*		*03/21/13 10:43*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*03/21/13 10:43*	*1*
4-Bromofluorobenzene (Surr)	*92*		*79 - 119*		*03/21/13 10:43*	*1*

Method: 625 - PPL SVOC

Client Sample ID: CROW CREEK INFLUENT — **Lab Sample ID: 280-40078-1**
Date Collected: 03/18/13 09:52 — **Matrix: Water**
Date Received: 03/20/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		220	6.0	ug/L		03/21/13 13:09	03/26/13 01:38	20
Benzidine	ND		3200	1100	ug/L		03/21/13 13:09	03/26/13 01:38	20
1,2,4-Trichlorobenzene	ND		220	6.0	ug/L		03/21/13 13:09	03/26/13 01:38	20
Hexachlorobenzene	ND		220	14	ug/L		03/21/13 13:09	03/26/13 01:38	20
Bis(2-chloroethyl)ether	ND		220	8.8	ug/L		03/21/13 13:09	03/26/13 01:38	20
2-Chloronaphthalene	ND		220	5.6	ug/L		03/21/13 13:09	03/26/13 01:38	20
2-Chlorophenol	ND		220	43	ug/L		03/21/13 13:09	03/26/13 01:38	20
2,4,6-Trichlorophenol	ND		430	6.3	ug/L		03/21/13 13:09	03/26/13 01:38	20
3,3'-Dichlorobenzidine	ND		1100	43	ug/L		03/21/13 13:09	03/26/13 01:38	20
Hexachloroethane	ND		220	45	ug/L		03/21/13 13:09	03/26/13 01:38	20
2,4-Dichlorophenol	ND		220	14	ug/L		03/21/13 13:09	03/26/13 01:38	20
2,4-Dimethylphenol	ND		220	13	ug/L		03/21/13 13:09	03/26/13 01:38	20
2,4-Dinitrotoluene	ND		220	36	ug/L		03/21/13 13:09	03/26/13 01:38	20
2,6-Dinitrotoluene	ND		220	41	ug/L		03/21/13 13:09	03/26/13 01:38	20
1,2-Diphenylhydrazine(as Azobenzene)	ND		220	5.0	ug/L		03/21/13 13:09	03/26/13 01:38	20
Fluoranthene	ND		220	4.3	ug/L		03/21/13 13:09	03/26/13 01:38	20
4-Bromophenyl phenyl ether	ND		220	9.3	ug/L		03/21/13 13:09	03/26/13 01:38	20
4-Chlorophenyl phenyl ether	ND		220	36	ug/L		03/21/13 13:09	03/26/13 01:38	20
bis (2-chloroisopropyl) ether	ND		220	6.0	ug/L		03/21/13 13:09	03/26/13 01:38	20
Bis(2-chloroethoxy)methane	ND		220	21	ug/L		03/21/13 13:09	03/26/13 01:38	20

Method: 625 - PPL SVOC (Continued)

Client Sample ID: CROW CREEK INFLUENT
Date Collected: 03/18/13 09:52
Date Received: 03/20/13 10:00

Lab Sample ID: 280-40078-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Chloro-m-cresol	ND		220	52	ug/L		03/21/13 13:09	03/26/13 01:38	20
Hexachlorobutadiene	ND		220	71	ug/L		03/21/13 13:09	03/26/13 01:38	20
Hexachlorocyclopentadiene	ND		1100	33	ug/L		03/21/13 13:09	03/26/13 01:38	20
Isophorone	ND		220	4.5	ug/L		03/21/13 13:09	03/26/13 01:38	20
Naphthalene	ND		220	6.3	ug/L		03/21/13 13:09	03/26/13 01:38	20
Nitrobenzene	ND		220	17	ug/L		03/21/13 13:09	03/26/13 01:38	20
2-Nitrophenol	ND		430	8.4	ug/L		03/21/13 13:09	03/26/13 01:38	20
1,2-Dichlorobenzene	ND		220	5.0	ug/L		03/21/13 13:09	03/26/13 01:38	20
2,4-Dinitrophenol	ND		1300	220	ug/L		03/21/13 13:09	03/26/13 01:38	20
1,3-Dichlorobenzene	ND		220	6.5	ug/L		03/21/13 13:09	03/26/13 01:38	20
4-Nitrophenol	ND		1100	27	ug/L		03/21/13 13:09	03/26/13 01:38	20
1,4-Dichlorobenzene	ND		220	6.9	ug/L		03/21/13 13:09	03/26/13 01:38	20
4,6-Dinitro-o-cresol	ND		1300	86	ug/L		03/21/13 13:09	03/26/13 01:38	20
N-Nitrosodimethylamine	ND		220	6.3	ug/L		03/21/13 13:09	03/26/13 01:38	20
N-Nitrosodi-n-propylamine	ND		220	7.5	ug/L		03/21/13 13:09	03/26/13 01:38	20
N-Nitrosodiphenylamine	ND		220	9.5	ug/L		03/21/13 13:09	03/26/13 01:38	20
Pentachlorophenol	ND		1300	430	ug/L		03/21/13 13:09	03/26/13 01:38	20
Phenol	ND		220	43	ug/L		03/21/13 13:09	03/26/13 01:38	20
Bis(2-ethylhexyl) phthalate	ND		220	12	ug/L		03/21/13 13:09	03/26/13 01:38	20
Butyl benzyl phthalate	ND		220	22	ug/L		03/21/13 13:09	03/26/13 01:38	20
Di-n-butyl phthalate	ND		220	25	ug/L		03/21/13 13:09	03/26/13 01:38	20
Di-n-octyl phthalate	ND		220	7.5	ug/L		03/21/13 13:09	03/26/13 01:38	20
Diethyl phthalate	ND		220	8.2	ug/L		03/21/13 13:09	03/26/13 01:38	20
Dimethyl phthalate	ND		220	4.5	ug/L		03/21/13 13:09	03/26/13 01:38	20
Benzo[a]anthracene	ND		220	7.5	ug/L		03/21/13 13:09	03/26/13 01:38	20
Benzo[a]pyrene	ND		220	6.7	ug/L		03/21/13 13:09	03/26/13 01:38	20
3,4-Benzofluoranthene	ND		220	11	ug/L		03/21/13 13:09	03/26/13 01:38	20
Benzo[k]fluoranthene	ND		220	9.9	ug/L		03/21/13 13:09	03/26/13 01:38	20
Anthracene	ND		220	9.1	ug/L		03/21/13 13:09	03/26/13 01:38	20
Acenaphthylene	ND		220	11	ug/L		03/21/13 13:09	03/26/13 01:38	20
Chrysene	ND		220	12	ug/L		03/21/13 13:09	03/26/13 01:38	20
Benzo[g,h,i]perylene	ND		220	11	ug/L		03/21/13 13:09	03/26/13 01:38	20
Fluorene	ND		220	6.7	ug/L		03/21/13 13:09	03/26/13 01:38	20
Phenanthrene	ND		220	5.6	ug/L		03/21/13 13:09	03/26/13 01:38	20
Dibenz(a,h)anthracene	ND		220	11	ug/L		03/21/13 13:09	03/26/13 01:38	20
Indeno[1,2,3-cd]pyrene	ND		220	14	ug/L		03/21/13 13:09	03/26/13 01:38	20
Pyrene	ND		220	8.0	ug/L		03/21/13 13:09	03/26/13 01:38	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*	*D*	*36 - 120*	*03/21/13 13:09*	*03/26/13 01:38*	*20*
2-Fluorophenol	*71*	*D*	*30 - 120*	*03/21/13 13:09*	*03/26/13 01:38*	*20*
2,4,6-Tribromophenol	*101*	*D*	*50 - 120*	*03/21/13 13:09*	*03/26/13 01:38*	*20*
Nitrobenzene-d5	*83*	*D*	*45 - 120*	*03/21/13 13:09*	*03/26/13 01:38*	*20*
Phenol-d5	*83*	*D*	*36 - 120*	*03/21/13 13:09*	*03/26/13 01:38*	*20*
Terphenyl-d14	*78*	*D*	*52 - 120*	*03/21/13 13:09*	*03/26/13 01:38*	*20*

Client Sample Results

Client: Cheyenne Board of Public Utilities
Project/Site: 1st Quarter 2013 - Crow Creek Influent

TestAmerica Job ID: 280-40078-1

Method: 608 - PP Pesticides/PCBs

Client Sample ID: CROW CREEK INFLUENT — **Lab Sample ID: 280-40078-1**
Date Collected: 03/18/13 09:52 — **Matrix: Water**
Date Received: 03/20/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	ND		0.11	0.016	ug/L		03/20/13 17:35	03/25/13 19:32	1
4,4'-DDE	ND		0.11	0.0081	ug/L		03/20/13 17:35	03/25/13 19:32	1
4,4'-DDD	ND		0.11	0.0083	ug/L		03/20/13 17:35	03/25/13 19:32	1
Aldrin	ND		0.054	0.0064	ug/L		03/20/13 17:35	03/25/13 19:32	1
Dieldrin	ND		0.11	0.0068	ug/L		03/20/13 17:35	03/25/13 19:32	1
Chlordane (technical)	ND		0.054	0.0057	ug/L		03/20/13 17:35	03/25/13 19:32	1
alpha-BHC	ND		0.054	0.0057	ug/L		03/20/13 17:35	03/25/13 19:32	1
beta-BHC	ND		0.054	0.0094	ug/L		03/20/13 17:35	03/25/13 19:32	1
delta-BHC	ND		0.054	0.0063	ug/L		03/20/13 17:35	03/25/13 19:32	1
gamma-BHC (Lindane)	ND		0.054	0.0075	ug/L		03/20/13 17:35	03/25/13 19:32	1
Endosulfan I	ND		0.054	0.0063	ug/L		03/20/13 17:35	03/25/13 19:32	1
Endosulfan sulfate	ND		0.11	0.0062	ug/L		03/20/13 17:35	03/25/13 19:32	1
Endosulfan II	ND		0.11	0.0076	ug/L		03/20/13 17:35	03/25/13 19:32	1
Endrin	ND		0.11	0.0085	ug/L		03/20/13 17:35	03/25/13 19:32	1
Endrin aldehyde	ND		0.11	0.0095	ug/L		03/20/13 17:35	03/25/13 19:32	1
Heptachlor	ND		0.054	0.0083	ug/L		03/20/13 17:35	03/25/13 19:32	1
Heptachlor epoxide	ND		0.054	0.0081	ug/L		03/20/13 17:35	03/25/13 19:32	1
PCB-1221	ND		1.1	0.23	ug/L		03/20/13 17:35	03/25/13 20:56	1
PCB-1232	ND		1.1	0.18	ug/L		03/20/13 17:35	03/25/13 20:56	1
PCB-1242	ND		1.1	0.11	ug/L		03/20/13 17:35	03/25/13 20:56	1
PCB-1248	ND		1.1	0.099	ug/L		03/20/13 17:35	03/25/13 20:56	1
PCB-1254	ND		1.1	0.12	ug/L		03/20/13 17:35	03/25/13 20:56	1
PCB-1016	ND		1.1	0.13	ug/L		03/20/13 17:35	03/25/13 20:56	1
PCB-1260	ND		1.1	0.17	ug/L		03/20/13 17:35	03/25/13 20:56	1
Toxaphene	ND		2.2	0.40	ug/L		03/20/13 17:35	03/25/13 19:32	1
alpha-Chlordane	ND		0.054	0.0057	ug/L		03/20/13 17:35	03/25/13 19:32	1
gamma-Chlordane	ND		0.054	0.0098	ug/L		03/20/13 17:35	03/25/13 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*64*		*34 - 122*	*03/20/13 17:35*	*03/25/13 19:32*	*1*
DCB Decachlorobiphenyl	*58*		*34 - 122*	*03/20/13 17:35*	*03/25/13 20:56*	*1*
Tetrachloro-m-xylene	*70*		*28 - 115*	*03/20/13 17:35*	*03/25/13 19:32*	*1*
Tetrachloro-m-xylene	*109*		*28 - 115*	*03/20/13 17:35*	*03/25/13 20:56*	*1*

Method: 1631E - Mercury, Low Level (CVAFS)

Client Sample ID: CROW CREEK INFLUENT — **Lab Sample ID: 280-40078-1**
Date Collected: 03/18/13 09:52 — **Matrix: Water**
Date Received: 03/20/13 10:00

OK

Convert to mg/L (6 decimal places)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	18		2.5	1.0	ng/L		03/25/13 15:35	03/26/13 13:20	1

Client Sample ID: CROW CREEK INFLUENT FIELD BLANK — **Lab Sample ID: 280-40078-2**
Date Collected: 03/18/13 10:40 — **Matrix: Water**
Date Received: 03/20/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.50	0.20	ng/L		03/25/13 15:35	03/26/13 13:28	1

Comments for Hg:
"ND" on FB

Client Sample Results

Client: Cheyenne Board of Public Utilities
Project/Site: 1st Quarter 2013 - Crow Creek Influent

TestAmerica Job ID: 280-40078-1

General Chemistry

Client Sample ID: CROW CREEK INFLUENT
Date Collected: 03/18/13 09:52
Date Received: 03/20/13 10:00

Lab Sample ID: 280-40078-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	140		15	1.3	mg/L			03/22/13 20:25	5
Sulfate	56		25	1.2	mg/L			03/22/13 20:25	5
Phenols, Total	0.055		0.0070	0.0020	mg/L		03/28/13 09:30	03/29/13 08:59	1
Cyanide, Total	0.0057	J B	0.010	0.0020	mg/L		03/21/13 09:45	03/22/13 12:37	1
Total Sulfide	0.60	J	1.0	0.50	mg/L			03/25/13 18:44	1

Detection Summary

Client: Cheyenne Board of Public Utilities
Project/Site: Cheyenne BOPU - Crow Creek Influent

TestAmerica Job ID: 280-39975-3

Client Sample ID: CROW CREEK INF. **Lab Sample ID: 280-39975-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrogen, Kjeldahl	33		5.0	0.90	mg/L	5		351.2	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Cheyenne Board of Public Utilities
Project/Site: Cheyenne BOPU - Crow Creek Influent

TestAmerica Job ID: 280-39975-3

General Chemistry

Client Sample ID: CROW CREEK INF.
Date Collected: 03/14/13 12:54
Date Received: 03/15/13 10:00

Lab Sample ID: 280-39975-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Kjeldahl	33		5.0	0.90	mg/L		03/22/13 18:44	03/26/13 15:24	5

ANALYTICAL RESULTS

DRY CREEK WWTP LABORATORY

Cheyenne BOPU
8911 Campstool Road
Cheyenne, Wyoming 82007
Phone: 307-635-3163
Fax: 307-635-6833

√posted 4-19-13 NBD

Date Sampled: 03-19-13 Sampled By: KS
Date Received: 03-19-13 Date Reported: 04-09-13
Sample Location: Crow Creek Effluent Qterly #1 Sample Matrix: Wastewater

Analyses	*Result*	*Units*	*Qual*	*RL*	*Method*	*Analysis Date/ By*
NONMETALS						
Ammonia as N	0.3	mg/l		0.1	SM 4500 NH_3-D	03/20/13 / mw
BOD_5 (Total)	2.7	mg/l		2.0	SM 5210 B	03/20/13 / ms
Hexavalent Chrome	ND	mg/l		0.013	SM 3500-Cr D	03/20/13 / kl
Oil & Grease (HEM)	ND	mg/l		5.0	EPA 1664A	03/20/13 / mw
pH	NA	P.U.	1	NA	SM 4500H^+ B	On-site/nd
TPH (SGT-HEM)	ND	mg/l		5.0	EPA 1664A	03/20/13 / mw
Total Phosphorus	0.9	mg/l		0.1	EPA 365.1	03/22/13 / kl
TDS	521	mg/l		NA	SM 2520 B	03/19/13 / mw
TSS	8.6	mg/l		3.0	SM 2540-D	03-20-13/ mw
METALS - TOTAL						
Ag, Silver	ND	mg/l		0.005	EPA 200.7	04-05-13/ kl
As, Arsenic	ND	mg/l		0.010	EPA 200.7	04-05-13/ kl
Be, Beryllium	ND	mg/l		0.005	EPA 200.7	04-05-13/ kl
Cd, Cadmium	ND	mg/l		0.005	EPA 200.7	04-05-13/ kl
Cr, Chromium	ND	mg/l		0.005	EPA 200.7	04-05-13/ kl
Cu, Copper	0.016	mg/l		0.010	EPA 200.7	04-05-13/ kl
Mo, Molybdenum	0.005	mg/l		0.005	EPA 200.7	04-05-13/ kl
Ni, Nickel	0.005	mg/l		0.005	EPA 200.7	04-05-13/ kl
Pb, Lead	0.007	mg/l		0.005	EPA 200.7	04-05-13/ kl
Sb, Antimony	ND	mg/l		0.010	EPA 200.7	04-05-13/ kl
Selenium, Se	0.008	mg/l		0.003	EPA 200.7	04-05-13/ kl
Tl, Thallium	0.025	mg/l		0.025	EPA 200.7	04-05-13/ kl
Zinc, Zn	0.037	mg/l		0.005	EPA 200.7	04-05-13/ kl

Comments: No contamination in the blank. 1. Probe error.
Report Definitions: ND – Not detected at the reporting limit. NA: Not Analyzed QA/QC: Available in Dry Creek laboratory.

Kent Loader, Laboratory Supervisor 4-9-13 *Date:*

Detection Summary

Client: Cheyenne Board of Public Utilities
Project/Site: 1st Quarter 2013 - Crow Creek Effluent

TestAmerica Job ID: 280-40156-1

Client Sample ID: CROW CREEK EFFLUENT — Lab Sample ID: 280-40156-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	3.0	J	5.0	2.0	ug/L	1		624	Total/NA
Hg	5.0		0.50	0.20	ng/L	1		1631E	Total/NA
Chloride	120		15	1.3	mg/L	5		300.0	Total/NA
Sulfate	80		25	1.2	mg/L	5		300.0	Total/NA
Phenols, Total	0.015		0.0070	0.0020	mg/L	1		420.1	Total/NA
Cyanide, Total	0.0042	J B	0.010	0.0020	mg/L	1		SM 4500 CN E	Total/NA
Total Sulfide	0.90	J	1.0	0.50	mg/L	1		SM 4500 S2 F	Total/NA

4-4-13

Client Sample ID: CROW CREEK EFFLUENT FIELD BLANK — Lab Sample ID: 280-40156-2

No Detections.

Client Sample ID: TRIP BLANK — Lab Sample ID: 280-40156-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	2.4	J	5.0	2.0	ug/L	1		624	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Cheyenne Board of Public Utilities
Project/Site: 1st Quarter 2013 - Crow Creek Effluent

TestAmerica Job ID: 280-40156-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Client Sample ID: CROW CREEK EFFLUENT — **Lab Sample ID: 280-40156-1**
Date Collected: 03/18/13 22:20 — **Matrix: Water**
Date Received: 03/21/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			03/21/13 13:48	1
Acrylonitrile	ND		100	17	ug/L			03/21/13 13:48	1
Benzene	ND		5.0	1.8	ug/L			03/21/13 13:48	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			03/21/13 13:48	1
Chlorobenzene	ND		5.0	2.3	ug/L			03/21/13 13:48	1
Chloroform	ND		5.0	1.1	ug/L			03/21/13 13:48	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			03/21/13 13:48	1
Chloroethane	ND		10	2.0	ug/L			03/21/13 13:48	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			03/21/13 13:48	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			03/21/13 13:48	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			03/21/13 13:48	1
1,2-Dichloroethane	ND		5.0	1.3	ug/L			03/21/13 13:48	1
Chloromethane	ND		10	0.89	ug/L			03/21/13 13:48	1
Bromoform	ND		5.0	0.48	ug/L			03/21/13 13:48	1
Bromomethane	ND		10	1.5	ug/L			03/21/13 13:48	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			03/21/13 13:48	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			03/21/13 13:48	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			03/21/13 13:48	1
Ethylbenzene	ND		5.0	2.2	ug/L			03/21/13 13:48	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			03/21/13 13:48	1
Methylene Chloride	**3.0**	**J**	5.0	2.0	ug/L			03/21/13 13:48	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			03/21/13 13:48	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			03/21/13 13:48	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			03/21/13 13:48	1
Tetrachloroethene	ND		5.0	2.7	ug/L			03/21/13 13:48	1
Toluene	ND		5.0	2.2	ug/L			03/21/13 13:48	1
Trichloroethene	ND		5.0	0.95	ug/L			03/21/13 13:48	1
Vinyl chloride	ND		10	1.3	ug/L			03/21/13 13:48	1
Xylenes, Total	ND		10	1.1	ug/L			03/21/13 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*73 - 122*		*03/21/13 13:48*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*03/21/13 13:48*	*1*
4-Bromofluorobenzene (Surr)	*101*		*79 - 119*		*03/21/13 13:48*	*1*

Client Sample ID: TRIP BLANK — **Lab Sample ID: 280-40156-3**
Date Collected: 03/18/13 22:20 — **Matrix: Water**
Date Received: 03/21/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			03/21/13 14:15	1
Acrylonitrile	ND		100	17	ug/L			03/21/13 14:15	1
Benzene	ND		5.0	1.8	ug/L			03/21/13 14:15	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			03/21/13 14:15	1
Chlorobenzene	ND		5.0	2.3	ug/L			03/21/13 14:15	1
Chloroform	ND		5.0	1.1	ug/L			03/21/13 14:15	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			03/21/13 14:15	1
Chloroethane	ND		10	2.0	ug/L			03/21/13 14:15	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			03/21/13 14:15	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			03/21/13 14:15	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			03/21/13 14:15	1

Client Sample Results

Client: Cheyenne Board of Public Utilities
Project/Site: 1st Quarter 2013 - Crow Creek Effluent

TestAmerica Job ID: 280-40156-1

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: TRIP BLANK
Date Collected: 03/18/13 22:20
Date Received: 03/21/13 10:00

Lab Sample ID: 280-40156-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		5.0	1.3	ug/L			03/21/13 14:15	1
Chloromethane	ND		10	0.89	ug/L			03/21/13 14:15	1
Bromoform	ND		5.0	0.48	ug/L			03/21/13 14:15	1
Bromomethane	ND		10	1.5	ug/L			03/21/13 14:15	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			03/21/13 14:15	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			03/21/13 14:15	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			03/21/13 14:15	1
Ethylbenzene	ND		5.0	2.2	ug/L			03/21/13 14:15	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			03/21/13 14:15	1
Methylene Chloride	2.4	J	5.0	2.0	ug/L			03/21/13 14:15	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			03/21/13 14:15	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			03/21/13 14:15	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			03/21/13 14:15	1
Tetrachloroethene	ND		5.0	2.7	ug/L			03/21/13 14:15	1
Toluene	ND		5.0	2.2	ug/L			03/21/13 14:15	1
Trichloroethene	ND		5.0	0.95	ug/L			03/21/13 14:15	1
Vinyl chloride	ND		10	1.3	ug/L			03/21/13 14:15	1
Xylenes, Total	ND		10	1.1	ug/L			03/21/13 14:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*73 - 122*		*03/21/13 14:15*	*1*
Toluene-d8 (Surr)	*88*		*80 - 120*		*03/21/13 14:15*	*1*
4-Bromofluorobenzene (Surr)	*92*		*79 - 119*		*03/21/13 14:15*	*1*

Jim Rosatti Comments

Method: 625 - PPL SVOC

Client Sample ID: CROW CREEK EFFLUENT
Date Collected: 03/18/13 22:20
Date Received: 03/21/13 10:00

Lab Sample ID: 280-40156-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		11	0.32	ug/L		03/21/13 13:09	03/26/13 06:40	1
Benzidine	ND		170	57	ug/L		03/21/13 13:09	03/26/13 06:40	1
1,2,4-Trichlorobenzene	ND		11	0.32	ug/L		03/21/13 13:09	03/26/13 06:40	1
Hexachlorobenzene	ND		11	0.75	ug/L		03/21/13 13:09	03/26/13 06:40	1
Bis(2-chloroethyl)ether	ND		11	0.47	ug/L		03/21/13 13:09	03/26/13 06:40	1
2-Chloronaphthalene	ND		11	0.30	ug/L		03/21/13 13:09	03/26/13 06:40	1
2-Chlorophenol	ND		11	2.3	ug/L		03/21/13 13:09	03/26/13 06:40	1
2,4,6-Trichlorophenol	ND		23	0.33	ug/L		03/21/13 13:09	03/26/13 06:40	1
3,3'-Dichlorobenzidine	ND		57	2.3	ug/L		03/21/13 13:09	03/26/13 06:40	1
Hexachloroethane	ND		11	2.4	ug/L		03/21/13 13:09	03/26/13 06:40	1
2,4-Dichlorophenol	ND		11	0.73	ug/L		03/21/13 13:09	03/26/13 06:40	1
2,4-Dimethylphenol	ND		11	0.66	ug/L		03/21/13 13:09	03/26/13 06:40	1
2,4-Dinitrotoluene	ND		11	1.9	ug/L		03/21/13 13:09	03/26/13 06:40	1
2,6-Dinitrotoluene	ND		11	2.2	ug/L		03/21/13 13:09	03/26/13 06:40	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		11	0.26	ug/L		03/21/13 13:09	03/26/13 06:40	1
Fluoranthene	ND		11	0.23	ug/L		03/21/13 13:09	03/26/13 06:40	1
4-Bromophenyl phenyl ether	ND		11	0.49	ug/L		03/21/13 13:09	03/26/13 06:40	1
4-Chlorophenyl phenyl ether	ND		11	1.9	ug/L		03/21/13 13:09	03/26/13 06:40	1
bis (2-chloroisopropyl) ether	ND		11	0.32	ug/L		03/21/13 13:09	03/26/13 06:40	1
Bis(2-chloroethoxy)methane	ND		11	1.1	ug/L		03/21/13 13:09	03/26/13 06:40	1

Method: 625 - PPL SVOC (Continued)

Client Sample ID: CROW CREEK EFFLUENT
Date Collected: 03/18/13 22:20
Date Received: 03/21/13 10:00

Lab Sample ID: 280-40156-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Chloro-m-cresol	ND		11	2.7	ug/L		03/21/13 13:09	03/26/13 06:40	1
Hexachlorobutadiene	ND		11	3.8	ug/L		03/21/13 13:09	03/26/13 06:40	1
Hexachlorocyclopentadiene	ND		57	1.7	ug/L		03/21/13 13:09	03/26/13 06:40	1
Isophorone	ND		11	0.24	ug/L		03/21/13 13:09	03/26/13 06:40	1
Naphthalene	ND		11	0.33	ug/L		03/21/13 13:09	03/26/13 06:40	1
Nitrobenzene	ND		11	0.92	ug/L		03/21/13 13:09	03/26/13 06:40	1
2-Nitrophenol	ND		23	0.44	ug/L		03/21/13 13:09	03/26/13 06:40	1
1,2-Dichlorobenzene	ND		11	0.26	ug/L		03/21/13 13:09	03/26/13 06:40	1
2,4-Dinitrophenol	ND		68	11	ug/L		03/21/13 13:09	03/26/13 06:40	1
1,3-Dichlorobenzene	ND		11	0.34	ug/L		03/21/13 13:09	03/26/13 06:40	1
4-Nitrophenol	ND		57	1.4	ug/L		03/21/13 13:09	03/26/13 06:40	1
1,4-Dichlorobenzene	ND		11	0.36	ug/L		03/21/13 13:09	03/26/13 06:40	1
4,6-Dinitro-o-cresol	ND		68	4.6	ug/L		03/21/13 13:09	03/26/13 06:40	1
N-Nitrosodimethylamine	ND		11	0.33	ug/L		03/21/13 13:09	03/26/13 06:40	1
N-Nitrosodi-n-propylamine	ND		11	0.40	ug/L		03/21/13 13:09	03/26/13 06:40	1
N-Nitrosodiphenylamine	ND		11	0.50	ug/L		03/21/13 13:09	03/26/13 06:40	1
Pentachlorophenol	ND		68	23	ug/L		03/21/13 13:09	03/26/13 06:40	1
Phenol	ND		11	2.3	ug/L		03/21/13 13:09	03/26/13 06:40	1
Bis(2-ethylhexyl) phthalate	ND		11	0.64	ug/L		03/21/13 13:09	03/26/13 06:40	1
Butyl benzyl phthalate	ND		11	1.1	ug/L		03/21/13 13:09	03/26/13 06:40	1
Di-n-butyl phthalate	ND		11	1.3	ug/L		03/21/13 13:09	03/26/13 06:40	1
Di-n-octyl phthalate	ND		11	0.40	ug/L		03/21/13 13:09	03/26/13 06:40	1
Diethyl phthalate	ND		11	0.43	ug/L		03/21/13 13:09	03/26/13 06:40	1
Dimethyl phthalate	ND		11	0.24	ug/L		03/21/13 13:09	03/26/13 06:40	1
Benzo[a]anthracene	ND		11	0.40	ug/L		03/21/13 13:09	03/26/13 06:40	1
Benzo[a]pyrene	ND		11	0.35	ug/L		03/21/13 13:09	03/26/13 06:40	1
3,4-Benzofluoranthene	ND		11	0.60	ug/L		03/21/13 13:09	03/26/13 06:40	1
Benzo[k]fluoranthene	ND		11	0.52	ug/L		03/21/13 13:09	03/26/13 06:40	1
Anthracene	ND		11	0.48	ug/L		03/21/13 13:09	03/26/13 06:40	1
Acenaphthylene	ND		11	0.56	ug/L		03/21/13 13:09	03/26/13 06:40	1
Chrysene	ND		11	0.61	ug/L		03/21/13 13:09	03/26/13 06:40	1
Benzo[g,h,i]perylene	ND		11	0.57	ug/L		03/21/13 13:09	03/26/13 06:40	1
Fluorene	ND		11	0.35	ug/L		03/21/13 13:09	03/26/13 06:40	1
Phenanthrene	ND		11	0.30	ug/L		03/21/13 13:09	03/26/13 06:40	1
Dibenz(a,h)anthracene	ND		11	0.58	ug/L		03/21/13 13:09	03/26/13 06:40	1
Indeno[1,2,3-cd]pyrene	ND		11	0.74	ug/L		03/21/13 13:09	03/26/13 06:40	1
Pyrene	ND		11	0.42	ug/L		03/21/13 13:09	03/26/13 06:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*55*		*36 - 120*	*03/21/13 13:09*	*03/26/13 06:40*	*1*
2-Fluorophenol	*60*		*30 - 120*	*03/21/13 13:09*	*03/26/13 06:40*	*1*
2,4,6-Tribromophenol	*87*		*50 - 120*	*03/21/13 13:09*	*03/26/13 06:40*	*1*
Nitrobenzene-d5	*60*		*45 - 120*	*03/21/13 13:09*	*03/26/13 06:40*	*1*
Phenol-d5	*63*		*36 - 120*	*03/21/13 13:09*	*03/26/13 06:40*	*1*
Terphenyl-d14	*75*		*52 - 120*	*03/21/13 13:09*	*03/26/13 06:40*	*1*

Client Sample Results

Client: Cheyenne Board of Public Utilities
Project/Site: 1st Quarter 2013 - Crow Creek Effluent

TestAmerica Job ID: 280-40156-1

Method: 608 - PP Pesticides/PCBs

Client Sample ID: CROW CREEK EFFLUENT — **Lab Sample ID: 280-40156-1**
Date Collected: 03/18/13 22:20 — **Matrix: Water**
Date Received: 03/21/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	ND		0.12	0.017	ug/L		03/22/13 17:08	03/25/13 21:44	1
4,4'-DDE	ND		0.12	0.0087	ug/L		03/22/13 17:08	03/25/13 21:44	1
4,4'-DDD	ND		0.12	0.0090	ug/L		03/22/13 17:08	03/25/13 21:44	1
Aldrin	ND		0.058	0.0069	ug/L		03/22/13 17:08	03/25/13 21:44	1
Dieldrin	ND		0.12	0.0073	ug/L		03/22/13 17:08	03/25/13 21:44	1
Chlordane (technical)	ND		0.058	0.0062	ug/L		03/22/13 17:08	03/25/13 21:44	1
alpha-BHC	ND		0.058	0.0062	ug/L		03/22/13 17:08	03/25/13 21:44	1
beta-BHC	ND		0.058	0.010	ug/L		03/22/13 17:08	03/25/13 21:44	1
delta-BHC	ND		0.058	0.0068	ug/L		03/22/13 17:08	03/25/13 21:44	1
gamma-BHC (Lindane)	ND		0.058	0.0080	ug/L		03/22/13 17:08	03/25/13 21:44	1
Endosulfan I	ND		0.058	0.0068	ug/L		03/22/13 17:08	03/25/13 21:44	1
Endosulfan sulfate	ND		0.12	0.0066	ug/L		03/22/13 17:08	03/25/13 21:44	1
Endosulfan II	ND		0.12	0.0082	ug/L		03/22/13 17:08	03/25/13 21:44	1
Endrin	ND		0.12	0.0092	ug/L		03/22/13 17:08	03/25/13 21:44	1
Endrin aldehyde	ND		0.12	0.010	ug/L		03/22/13 17:08	03/25/13 21:44	1
Heptachlor	ND		0.058	0.0090	ug/L		03/22/13 17:08	03/25/13 21:44	1
Heptachlor epoxide	ND		0.058	0.0087	ug/L		03/22/13 17:08	03/25/13 21:44	1
PCB-1221	ND		1.2	0.25	ug/L		03/22/13 17:08	03/29/13 10:36	1
PCB-1232	ND		1.2	0.19	ug/L		03/22/13 17:08	03/29/13 10:36	1
PCB-1242	ND		1.2	0.12	ug/L		03/22/13 17:08	03/29/13 10:36	1
PCB-1248	ND		1.2	0.11	ug/L		03/22/13 17:08	03/29/13 10:36	1
PCB-1254	ND		1.2	0.13	ug/L		03/22/13 17:08	03/29/13 10:36	1
PCB-1016	ND		1.2	0.14	ug/L		03/22/13 17:08	03/29/13 10:36	1
PCB-1260	ND		1.2	0.19	ug/L		03/22/13 17:08	03/29/13 10:36	1
Toxaphene	ND		2.3	0.43	ug/L		03/22/13 17:08	03/25/13 21:44	1
alpha-Chlordane	ND		0.058	0.0062	ug/L		03/22/13 17:08	03/25/13 21:44	1
gamma-Chlordane	ND		0.058	0.011	ug/L		03/22/13 17:08	03/25/13 21:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*104*		*34 - 122*	*03/22/13 17:08*	*03/25/13 21:44*	*1*
DCB Decachlorobiphenyl	*92*		*34 - 122*	*03/22/13 17:08*	*03/29/13 10:36*	*1*
Tetrachloro-m-xylene	*68*		*28 - 115*	*03/22/13 17:08*	*03/25/13 21:44*	*1*
Tetrachloro-m-xylene	*81*		*28 - 115*	*03/22/13 17:08*	*03/29/13 10:36*	*1*

Method: 1631E - Mercury, Low Level (CVAFS)

Client Sample ID: CROW CREEK EFFLUENT — **Lab Sample ID: 280-40156-1**
Date Collected: 03/18/13 22:20 — **Matrix: Water**
Date Received: 03/21/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	5.0		0.50	0.20	ng/L		03/25/13 15:35	03/26/13 11:02	1

Client Sample ID: CROW CREEK EFFLUENT FIELD BLANK — **Lab Sample ID: 280-40156-2**
Date Collected: 03/18/13 22:45 — **Matrix: Water**
Date Received: 03/21/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.50	0.20	ng/L		03/25/13 15:35	03/26/13 11:10	1

RK 4-4-13
KS

Client Sample Results

Client: Cheyenne Board of Public Utilities
Project/Site: 1st Quarter 2013 - Crow Creek Effluent

TestAmerica Job ID: 280-40156-1

General Chemistry

Client Sample ID: CROW CREEK EFFLUENT
Date Collected: 03/18/13 22:20
Date Received: 03/21/13 10:00

Lab Sample ID: 280-40156-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		15	1.3	mg/L			03/22/13 20:40	5
Sulfate	60		25	1.2	mg/L			03/22/13 20:40	5
Phenols, Total	0.015		0.0070	0.0020	mg/L		03/28/13 09:30	03/29/13 08:59	1
Cyanide, Total	0.0042	J B	0.010	0.0020	mg/L		03/25/13 09:53	03/27/13 09:47	1
Total Sulfide	0.90	J	1.0	0.50	mg/L			03/25/13 18:44	1

OK 4-4-13 RS

Detection Summary

Client: Cheyenne Board of Public Utilities
Project/Site: Cheyenne BOPU - Crow Creek Effluent

TestAmerica Job ID: 280-39975-4

Client Sample ID: CROW CREEK EFF.

Lab Sample ID: 280-39975-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrogen, Kjeldahl	0.94	J	1.0	0.18	mg/L	1		351.2	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Cheyenne Board of Public Utilities
Project/Site: Cheyenne BOPU - Crow Creek Effluent

TestAmerica Job ID: 280-39975

General Chemistry

Client Sample ID: CROW CREEK EFF.
Date Collected: 03/14/13 15:14
Date Received: 03/15/13 10:00

Lab Sample ID: 280-39975-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Kjeldahl	0.94	J	1.0	0.18	mg/L		03/22/13 18:44	03/26/13 15:25	1

ANALYTICAL RESULTS

DRY CREEK WWTP LABORATORY

Cheyenne BOPU
8911 Campstool Road
Cheyenne, Wyoming 82007
Phone: 307-635-3163
Fax: 307-635-6833

6-6-13

Date Sampled: 04-22-13 Sampled By: KS
Date Received: 04-22-13 Date Reported: 05-31-13
Sample Location: Crow Creek Influent Qterly #2 Sample Matrix: Wastewater

Analyses	*Result*	*Units*	*Qual*	*RL*	*Method*	*Analysis Date/ By*
NONMETALS						
Ammonia as N	23.3	mg/l		0.1	SM 4500 NH_3-D	04/24/13 / kl
BOD_5 (Total)	221	mg/l		2.0	SM 5210 B	04/24/13 / mw
Hexavalent Chrome	ND	mg/l		0.030	SM 3500-Cr D	04/23/13 / mw
Oil & Grease (HEM)	21.7	mg/l		5.0	EPA 1664A	04/30/13 / mw
pH	7.70	P.U.		NA	SM 4500H^+ B	On-site/nd
TPH (SGT-HEM)	ND	mg/l		5.0	EPA 1664A	04/30/13 / mw
Total Phosphorus	6.2	mg/l		0.1	EPA 365.1	04/25/13 / kl
TDS	593	mg/l		NA	SM 2520 B	04/22/13 / mw
TSS	220	mg/l		3.0	SM 2540-D	04-24-13/ kl
METALS - TOTAL						
Ag, Silver	ND	mg/l		0.005	EPA 200.7	05-30-13/ kl
As, Arsenic	ND	mg/l		0.010	EPA 200.7	05-30-13/ kl
Be, Beryllium	ND	mg/l		0.005	EPA 200.7	05-30-13/ kl
Cd, Cadmium	ND	mg/l		0.005	EPA 200.7	05-30-13/ kl
Cr, Chromium	ND	mg/l		0.005	EPA 200.7	05-30-13/ kl
Cu, Copper	0.101	mg/l		0.010	EPA 200.7	05-30-13/ kl
Mo, Molybdenum	0.005	mg/l		0.005	EPA 200.7	05-30-13/ kl
Ni, Nickel	ND	mg/l		0.005	EPA 200.7	05-30-13/ kl
Pb, Lead	0.006	mg/l		0.005	EPA 200.7	05-30-13/ kl
Sb, Antimony	ND	mg/l		0.010	EPA 200.7	05-30-13/ kl
Selenium, Se	0.006	mg/l		0.003	EPA 200.7	05-30-13/ kl
Tl, Thallium	ND	mg/l		0.025	EPA 200.7	05-30-13/ kl
Zinc, Zn	0.103	mg/l		0.005	EPA 200.7	05-30-13/ kl

Comments:
Report Definitions: ND – Not detected at the reporting limit. NA: Not Analyzed QA/QC: Available in Dry Creek laboratory.

Kent Loader, Laboratory Supervisor

6-5-13
Date:

ANALYTICAL RESULTS

DRY CREEK WWTP LABORATORY

Cheyenne BOPU
8911 Campstool Road
Cheyenne, Wyoming 82007
Phone: 307-635-3163
Fax: 307-635-6833

Date Sampled: 04-10-13
Date Received: 04-10-13
Sample Location: Crow Creek Influent

Sampled By: ND
Date Reported: 04-11-13
Sample Matrix: Wastewater

Analyses	*Result*	*Units*	*Qual*	*RL*	*Method*	*Analysis Date/ By*
NONMETALS						
Nitrite as N	<0.1	mg/l		0.1	EPA 353.2	04/11/13 / kl
Nitrate as N	0.7	mg/l		0.1	SM 4500 NO_3-D	04/11/13 / mw

Comments:

Report Definitions: ND – Not detected at the reporting limit. NA: Not Analyzed QA/QC: Available in Dry Creek laboratory.

Kent Loader, Laboratory Supervisor

4.11.13
Date:

Detection Summary

Client: Cheyenne Board of Public Utilities
Project/Site: 2nd Quarter 2013 - Crow Creek Influent

TestAmerica Job ID: 280-41289-1

Client Sample ID: CROW CREEK INFLUENT — Lab Sample ID: 280-41289-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	3.0	J	5.0	1.1	ug/L	1		624	Total/NA
Trichloroethene	1.2	J	5.0	0.95	ug/L	1		624	Total/NA
1,4-Dichlorobenzene	0.49	J	11	0.34	ug/L	1		625	Total/NA
Phenol	3.5	J	11	2.2	ug/L	1		625	Total/NA
Bis(2-ethylhexyl) phthalate	8.1	J	11	0.60	ug/L	1		625	Total/NA
Di-n-butyl phthalate	1.6	J	11	1.2	ug/L	1		625	Total/NA
Diethyl phthalate	2.1	J	11	0.41	ug/L	1		625	Total/NA
Hg	30		2.5	1.0	ng/L	1		1631E	Total/NA
Chloride	210		15	1.3	mg/L	5		300.0	Total/NA
Sulfate	68		25	1.2	mg/L	5		300.0	Total/NA
Phenols, Total	0.0058	J B	0.0070	0.0020	mg/L	1		420.1	Total/NA
Cyanide, Total	0.0038	J B	0.010	0.0020	mg/L	1		SM 4500 CN E	Total/NA
Total Sulfide	0.70	J	1.0	0.50	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: CROW CREEK INFLUENT FIELD BLANK — Lab Sample ID: 280-41289-2

No Detections.

Client Sample ID: TRIP BLANK — Lab Sample ID: 280-41289-3

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Cheyenne Board of Public Utilities
Project/Site: 2nd Quarter 2013 - Crow Creek Influent

TestAmerica Job ID: 280-41289-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Client Sample ID: CROW CREEK INFLUENT
Date Collected: 04/22/13 08:22
Date Received: 04/23/13 10:30

Lab Sample ID: 280-41289-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			04/25/13 21:39	1
Acrylonitrile	ND		100	17	ug/L			04/25/13 21:39	1
Benzene	ND		5.0	1.8	ug/L			04/25/13 21:39	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			04/25/13 21:39	1
Chlorobenzene	ND		5.0	2.3	ug/L			04/25/13 21:39	1
Chloroform	**3.0**	**J**	5.0	1.1	ug/L			04/25/13 21:39	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			04/25/13 21:39	1
Chloroethane	ND		10	2.0	ug/L			04/25/13 21:39	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			04/25/13 21:39	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			04/25/13 21:39	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			04/25/13 21:39	1
1,2-Dichloroethane	ND		5.0	1.3	ug/L			04/25/13 21:39	1
Chloromethane	ND		10	0.89	ug/L			04/25/13 21:39	1
Bromoform	ND		5.0	0.48	ug/L			04/25/13 21:39	1
Bromomethane	ND		10	1.5	ug/L			04/25/13 21:39	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			04/25/13 21:39	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			04/25/13 21:39	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			04/25/13 21:39	1
Ethylbenzene	ND		5.0	2.2	ug/L			04/25/13 21:39	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			04/25/13 21:39	1
Methylene Chloride	ND		5.0	2.0	ug/L			04/25/13 21:39	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			04/25/13 21:39	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			04/25/13 21:39	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			04/25/13 21:39	1
Tetrachloroethene	ND		5.0	2.7	ug/L			04/25/13 21:39	1
Toluene	ND		5.0	2.2	ug/L			04/25/13 21:39	1
Trichloroethene	**1.2**	**J**	5.0	0.95	ug/L			04/25/13 21:39	1
Vinyl chloride	ND		10	1.3	ug/L			04/25/13 21:39	1
Xylenes, Total	ND		5.0	0.45	ug/L			04/25/13 21:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*73 - 122*		*04/25/13 21:39*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*04/25/13 21:39*	*1*
4-Bromofluorobenzene (Surr)	*107*		*79 - 119*		*04/25/13 21:39*	*1*

Client Sample ID: TRIP BLANK
Date Collected: 04/22/13 08:27
Date Received: 04/23/13 10:30

Lab Sample ID: 280-41289-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			04/25/13 22:02	1
Acrylonitrile	ND		100	17	ug/L			04/25/13 22:02	1
Benzene	ND		5.0	1.8	ug/L			04/25/13 22:02	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			04/25/13 22:02	1
Chlorobenzene	ND		5.0	2.3	ug/L			04/25/13 22:02	1
Chloroform	ND		5.0	1.1	ug/L			04/25/13 22:02	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			04/25/13 22:02	1
Chloroethane	ND		10	2.0	ug/L			04/25/13 22:02	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			04/25/13 22:02	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			04/25/13 22:02	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			04/25/13 22:02	1

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: TRIP BLANK — **Lab Sample ID: 280-41289-3**
Date Collected: 04/22/13 08:27 — **Matrix: Water**
Date Received: 04/23/13 10:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		5.0	1.3	ug/L			04/25/13 22:02	1
Chloromethane	ND		10	0.89	ug/L			04/25/13 22:02	1
Bromoform	ND		5.0	0.48	ug/L			04/25/13 22:02	1
Bromomethane	ND		10	1.5	ug/L			04/25/13 22:02	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			04/25/13 22:02	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			04/25/13 22:02	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			04/25/13 22:02	1
Ethylbenzene	ND		5.0	2.2	ug/L			04/25/13 22:02	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			04/25/13 22:02	1
Methylene Chloride	ND		5.0	2.0	ug/L			04/25/13 22:02	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			04/25/13 22:02	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			04/25/13 22:02	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			04/25/13 22:02	1
Tetrachloroethene	ND		5.0	2.7	ug/L			04/25/13 22:02	1
Toluene	ND		5.0	2.2	ug/L			04/25/13 22:02	1
Trichloroethene	ND		5.0	0.95	ug/L			04/25/13 22:02	1
Vinyl chloride	ND		10	1.3	ug/L			04/25/13 22:02	1
Xylenes, Total	ND		5.0	0.45	ug/L			04/25/13 22:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*73 - 122*		*04/25/13 22:02*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*04/25/13 22:02*	*1*
4-Bromofluorobenzene (Surr)	*103*		*79 - 119*		*04/25/13 22:02*	*1*

Method: 625 - PPL SVOC

Client Sample ID: CROW CREEK INFLUENT — **Lab Sample ID: 280-41289-1**
Date Collected: 04/22/13 08:22 — **Matrix: Water**
Date Received: 04/23/13 10:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		11	0.30	ug/L		04/24/13 16:35	04/30/13 04:44	1
Benzidine	ND		160	54	ug/L		04/24/13 16:35	04/30/13 04:44	1
1,2,4-Trichlorobenzene	ND		11	0.30	ug/L		04/24/13 16:35	04/30/13 04:44	1
Hexachlorobenzene	ND		11	0.71	ug/L		04/24/13 16:35	04/30/13 04:44	1
Bis(2-chloroethyl)ether	ND		11	0.44	ug/L		04/24/13 16:35	04/30/13 04:44	1
2-Chloronaphthalene	ND		11	0.28	ug/L		04/24/13 16:35	04/30/13 04:44	1
2-Chlorophenol	ND		11	2.2	ug/L		04/24/13 16:35	04/30/13 04:44	1
2,4,6-Trichlorophenol	ND		22	0.31	ug/L		04/24/13 16:35	04/30/13 04:44	1
3,3'-Dichlorobenzidine	ND		54	2.2	ug/L		04/24/13 16:35	04/30/13 04:44	1
Hexachloroethane	ND		11	2.3	ug/L		04/24/13 16:35	04/30/13 04:44	1
2,4-Dichlorophenol	ND		11	0.69	ug/L		04/24/13 16:35	04/30/13 04:44	1
2,4-Dimethylphenol	ND		11	0.62	ug/L		04/24/13 16:35	04/30/13 04:44	1
2,4-Dinitrotoluene	ND		11	1.8	ug/L		04/24/13 16:35	04/30/13 04:44	1
2,6-Dinitrotoluene	ND		11	2.0	ug/L		04/24/13 16:35	04/30/13 04:44	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		11	0.25	ug/L		04/24/13 16:35	04/30/13 04:44	1
Fluoranthene	ND		11	0.22	ug/L		04/24/13 16:35	04/30/13 04:44	1
4-Bromophenyl phenyl ether	ND		11	0.46	ug/L		04/24/13 16:35	04/30/13 04:44	1
4-Chlorophenyl phenyl ether	ND		11	1.8	ug/L		04/24/13 16:35	04/30/13 04:44	1
bis (2-chloroisopropyl) ether	ND		11	0.30	ug/L		04/24/13 16:35	04/30/13 04:44	1
Bis(2-chloroethoxy)methane	ND		11	1.0	ug/L		04/24/13 16:35	04/30/13 04:44	1

Client Sample Results

Client: Cheyenne Board of Public Utilities
Project/Site: 2nd Quarter 2013 - Crow Creek Influent

TestAmerica Job ID: 280-41289-1

Method: 625 - PPL SVOC (Continued)

Client Sample ID: CROW CREEK INFLUENT
Date Collected: 04/22/13 08:22
Date Received: 04/23/13 10:30

Lab Sample ID: 280-41289-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Chloro-m-cresol	ND		11	2.6	ug/L		04/24/13 16:35	04/30/13 04:44	1
Hexachlorobutadiene	ND		11	3.5	ug/L		04/24/13 16:35	04/30/13 04:44	1
Hexachlorocyclopentadiene	ND		54	1.6	ug/L		04/24/13 16:35	04/30/13 04:44	1
Isophorone	ND		11	0.23	ug/L		04/24/13 16:35	04/30/13 04:44	1
Naphthalene	ND		11	0.31	ug/L		04/24/13 16:35	04/30/13 04:44	1
Nitrobenzene	ND		11	0.87	ug/L		04/24/13 16:35	04/30/13 04:44	1
2-Nitrophenol	ND		22	0.42	ug/L		04/24/13 16:35	04/30/13 04:44	1
1,2-Dichlorobenzene	ND		11	0.25	ug/L		04/24/13 16:35	04/30/13 04:44	1
2,4-Dinitrophenol	ND		65	11	ug/L		04/24/13 16:35	04/30/13 04:44	1
1,3-Dichlorobenzene	ND		11	0.32	ug/L		04/24/13 16:35	04/30/13 04:44	1
4-Nitrophenol	ND		54	1.3	ug/L		04/24/13 16:35	04/30/13 04:44	1
1,4-Dichlorobenzene	**0.49**	**J**	11	0.34	ug/L		04/24/13 16:35	04/30/13 04:44	1
4,6-Dinitro-o-cresol	ND		65	4.3	ug/L		04/24/13 16:35	04/30/13 04:44	1
N-Nitrosodimethylamine	ND		11	0.31	ug/L		04/24/13 16:35	04/30/13 04:44	1
N-Nitrosodi-n-propylamine	ND		11	0.38	ug/L		04/24/13 16:35	04/30/13 04:44	1
N-Nitrosodiphenylamine	ND		11	0.47	ug/L		04/24/13 16:35	04/30/13 04:44	1
Pentachlorophenol	ND		65	22	ug/L		04/24/13 16:35	04/30/13 04:44	1
Phenol	**3.5**	**J**	11	2.2	ug/L		04/24/13 16:35	04/30/13 04:44	1
Bis(2-ethylhexyl) phthalate	**8.1**	**J**	11	0.60	ug/L		04/24/13 16:35	04/30/13 04:44	1
Butyl benzyl phthalate	ND		11	1.1	ug/L		04/24/13 16:35	04/30/13 04:44	1
Di-n-butyl phthalate	**1.6**	**J**	11	1.2	ug/L		04/24/13 16:35	04/30/13 04:44	1
Di-n-octyl phthalate	ND		11	0.38	ug/L		04/24/13 16:35	04/30/13 04:44	1
Diethyl phthalate	**2.1**	**J**	11	0.41	ug/L		04/24/13 16:35	04/30/13 04:44	1
Dimethyl phthalate	ND		11	0.23	ug/L		04/24/13 16:35	04/30/13 04:44	1
Benzo[a]anthracene	ND		11	0.38	ug/L		04/24/13 16:35	04/30/13 04:44	1
Benzo[a]pyrene	ND		11	0.33	ug/L		04/24/13 16:35	04/30/13 04:44	1
3,4-Benzofluoranthene	ND		11	0.57	ug/L		04/24/13 16:35	04/30/13 04:44	1
Benzo[k]fluoranthene	ND		11	0.49	ug/L		04/24/13 16:35	04/30/13 04:44	1
Anthracene	ND		11	0.45	ug/L		04/24/13 16:35	04/30/13 04:44	1
Acenaphthylene	ND		11	0.53	ug/L		04/24/13 16:35	04/30/13 04:44	1
Chrysene	ND		11	0.58	ug/L		04/24/13 16:35	04/30/13 04:44	1
Benzo[g,h,i]perylene	ND		11	0.54	ug/L		04/24/13 16:35	04/30/13 04:44	1
Fluorene	ND		11	0.33	ug/L		04/24/13 16:35	04/30/13 04:44	1
Phenanthrene	ND		11	0.28	ug/L		04/24/13 16:35	04/30/13 04:44	1
Dibenz(a,h)anthracene	ND		11	0.55	ug/L		04/24/13 16:35	04/30/13 04:44	1
Indeno[1,2,3-cd]pyrene	ND		11	0.70	ug/L		04/24/13 16:35	04/30/13 04:44	1
Pyrene	ND		11	0.40	ug/L		04/24/13 16:35	04/30/13 04:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*60*		*36 - 120*	*04/24/13 16:35*	*04/30/13 04:44*	*1*
2-Fluorophenol	*66*		*30 - 120*	*04/24/13 16:35*	*04/30/13 04:44*	*1*
2,4,6-Tribromophenol	*89*		*50 - 120*	*04/24/13 16:35*	*04/30/13 04:44*	*1*
Nitrobenzene-d5	*73*		*45 - 120*	*04/24/13 16:35*	*04/30/13 04:44*	*1*
Phenol-d5	*71*		*36 - 120*	*04/24/13 16:35*	*04/30/13 04:44*	*1*
Terphenyl-d14	*51*	*X*	*52 - 120*	*04/24/13 16:35*	*04/30/13 04:44*	*1*

Client Sample Results

Client: Cheyenne Board of Public Utilities
Project/Site: 2nd Quarter 2013 - Crow Creek Influent

TestAmerica Job ID: 280-41289-1

Method: 608 - PP Pesticides/PCBs

Client Sample ID: CROW CREEK INFLUENT — **Lab Sample ID: 280-41289-1**
Date Collected: 04/22/13 08:22 — **Matrix: Water**
Date Received: 04/23/13 10:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	ND		0.11	0.016	ug/L		04/24/13 21:00	04/26/13 14:56	1
4,4'-DDE	ND		0.11	0.0082	ug/L		04/24/13 21:00	04/26/13 14:56	1
4,4'-DDD	ND		0.11	0.0084	ug/L		04/24/13 21:00	04/26/13 14:56	1
Aldrin	ND		0.054	0.0064	ug/L		04/24/13 21:00	04/26/13 14:56	1
Dieldrin	ND		0.11	0.0069	ug/L		04/24/13 21:00	04/26/13 14:56	1
Chlordane (technical)	ND		0.054	0.0058	ug/L		04/24/13 21:00	04/26/13 14:56	1
alpha-BHC	ND		0.054	0.0058	ug/L		04/24/13 21:00	04/26/13 14:56	1
beta-BHC	ND		0.054	0.0095	ug/L		04/24/13 21:00	04/26/13 14:56	1
delta-BHC	ND		0.054	0.0063	ug/L		04/24/13 21:00	04/26/13 14:56	1
gamma-BHC (Lindane)	ND		0.054	0.0075	ug/L		04/24/13 21:00	04/26/13 14:56	1
Endosulfan I	ND		0.054	0.0063	ug/L		04/24/13 21:00	04/26/13 14:56	1
Endosulfan sulfate	ND		0.11	0.0062	ug/L		04/24/13 21:00	04/26/13 14:56	1
Endosulfan II	ND		0.11	0.0076	ug/L		04/24/13 21:00	04/26/13 14:56	1
Endrin	ND		0.11	0.0086	ug/L		04/24/13 21:00	04/26/13 14:56	1
Endrin aldehyde	ND		0.11	0.0096	ug/L		04/24/13 21:00	04/26/13 14:56	1
Heptachlor	ND		0.054	0.0084	ug/L		04/24/13 21:00	04/26/13 14:56	1
Heptachlor epoxide	ND		0.054	0.0082	ug/L		04/24/13 21:00	04/26/13 14:56	1
PCB-1221	ND		1.1	0.23	ug/L		04/24/13 21:00	04/30/13 01:26	1
PCB-1232	ND		1.1	0.18	ug/L		04/24/13 21:00	04/30/13 01:26	1
PCB-1242	ND		1.1	0.11	ug/L		04/24/13 21:00	04/30/13 01:26	1
PCB-1248	ND		1.1	0.10	ug/L		04/24/13 21:00	04/30/13 01:26	1
PCB-1254	ND		1.1	0.12	ug/L		04/24/13 21:00	04/30/13 01:26	1
PCB-1016	ND		1.1	0.13	ug/L		04/24/13 21:00	04/30/13 01:26	1
PCB-1260	ND		1.1	0.17	ug/L		04/24/13 21:00	04/30/13 01:26	1
Toxaphene	ND		2.2	0.40	ug/L		04/24/13 21:00	04/26/13 14:56	1
alpha-Chlordane	ND		0.054	0.0058	ug/L		04/24/13 21:00	04/26/13 14:56	1
gamma-Chlordane	ND		0.054	0.0099	ug/L		04/24/13 21:00	04/26/13 14:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*49*		*34 - 122*	*04/24/13 21:00*	*04/26/13 14:56*	*1*
DCB Decachlorobiphenyl	*53*		*34 - 122*	*04/24/13 21:00*	*04/30/13 01:26*	*1*
Tetrachloro-m-xylene	*74*		*28 - 115*	*04/24/13 21:00*	*04/26/13 14:56*	*1*
Tetrachloro-m-xylene	*85*		*28 - 115*	*04/24/13 21:00*	*04/30/13 01:26*	*1*

Method: 1631E - Mercury, Low Level (CVAFS)

Client Sample ID: CROW CREEK INFLUENT — **Lab Sample ID: 280-41289-1**
Date Collected: 04/22/13 08:22 — **Matrix: Water**
Date Received: 04/23/13 10:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	30		2.5	1.0	ng/L		04/26/13 16:30	05/02/13 13:17	1

Client Sample ID: CROW CREEK INFLUENT FIELD BLANK — **Lab Sample ID: 280-41289-2**
Date Collected: 04/22/13 08:45 — **Matrix: Water**
Date Received: 04/23/13 10:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.50	0.20	ng/L		04/26/13 16:30	05/02/13 13:25	1

Client Sample Results

Client: Cheyenne Board of Public Utilities
Project/Site: 2nd Quarter 2013 - Crow Creek Influent

TestAmerica Job ID: 280-41289-1

General Chemistry

Client Sample ID: CROW CREEK INFLUENT
Date Collected: 04/22/13 08:22
Date Received: 04/23/13 10:30

Lab Sample ID: 280-41289-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	210		15	1.3	mg/L			04/25/13 03:12	5
Sulfate	68		25	1.2	mg/L			04/25/13 03:12	5
Phenols, Total	0.0058	J B	0.0070	0.0020	mg/L		04/24/13 14:39	04/25/13 14:27	1
Cyanide, Total	0.0038	J B	0.010	0.0020	mg/L		04/25/13 08:40	04/25/13 12:28	1
Total Sulfide	0.70	J	1.0	0.50	mg/L			04/29/13 15:20	1

ANALYTICAL RESULTS

DRY CREEK WWTP LABORATORY

Cheyenne BOPU
8911 Campstool Road
Cheyenne, Wyoming 82007
Phone: 307-635-3163
Fax: 307-635-6833

6-6-13

Date Sampled: 04-22-13
Date Received: 04-22-13
Sample Location: Crow Creek Effluent Qterly #2

Sampled By: KS
Date Reported: 05-31-13
Sample Matrix: Wastewater

Analyses	*Result*	*Units*	*Qual*	*RL*	*Method*	*Analysis Date/ By*
NONMETALS						
Ammonia as N	0.3	mg/l		0.1	SM 4500 NH_3-D	04/24/13 / kl
BOD_5 (Total)	7.1	mg/l		2.0	SM 5210 B	04/24/13 / mw
Hexavalent Chrome	ND	mg/l		0.030	SM 3500-Cr D	04/23/13 / mw
Oil & Grease (HEM)	5.2	mg/l		5.0	EPA 1664A	04/30/13 / mw
pH	7.71	P.U.		NA	SM 4500H^+ B	On-site/ks
TPH (SGT-HEM)	ND	mg/l		5.0	EPA 1664A	04/30/13 / mw
Total Phosphorus	2.7	mg/l		0.1	EPA 365.1	04/25/13 / kl
TDS	535	mg/l		NA	SM 2520 B	04/22/13 / mw
TSS	8.2	mg/l		3.0	SM 2540-D	04-24-13/ kl
METALS - TOTAL						
Ag, Silver	ND	mg/l		0.005	EPA 200.7	05-30-13/ kl
As, Arsenic	ND	mg/l		0.010	EPA 200.7	05-30-13/ kl
Be, Beryllium	ND	mg/l		0.005	EPA 200.7	05-30-13/ kl
Cd, Cadmium	ND	mg/l		0.005	EPA 200.7	05-30-13/ kl
Cr, Chromium	ND	mg/l		0.005	EPA 200.7	05-30-13/ kl
Cu, Copper	0.017	mg/l		0.010	EPA 200.7	05-30-13/ kl
Mo, Molybdenum	ND	mg/l		0.005	EPA 200.7	05-30-13/ kl
Ni, Nickel	ND	mg/l		0.005	EPA 200.7	05-30-13/ kl
Pb, Lead	ND	mg/l		0.005	EPA 200.7	05-30-13/ kl
Sb, Antimony	ND	mg/l		0.010	EPA 200.7	05-30-13/ kl
Selenium, Se	0.004	mg/l		0.003	EPA 200.7	05-30-13/ kl
Tl, Thallium	ND	mg/l	1	0.025	EPA 200.7	05-30-13/ kl
Zinc, Zn	0.039	mg/l		0.005	EPA 200.7	05-30-13/ kl

Comments:

Report Definitions: ND – Not detected at the reporting limit. NA: Not Analyzed QA/QC: Available in Dry Creek laboratory.

Kent Loader, Laboratory Supervisor

6-5-13
Date:

ANALYTICAL RESULTS

DRY CREEK WWTP LABORATORY

Cheyenne BOPU
8911 Campstool Road
Cheyenne, Wyoming 82007
Phone: 307-635-3163
Fax: 307-635-6833

Date Sampled: 04-10-13
Date Received: 04-10-13
Sample Location: Crow Creek Effluent

Sampled By: ND
Date Reported: 04-11-13
Sample Matrix: Wastewater

Analyses	*Result*	*Units*	*Qual*	*RL*	*Method*	*Analysis Date/ By*
NONMETALS						
Nitrite as N	0.1	mg/l		0.1	EPA 353.2	04/11/13 / kl
Nitrate as N	12.7	mg/l		0.1	SM 4500 NO_3-D	04/11/13 / mw

Comments:

Report Definitions: ND – Not detected at the reporting limit. NA: Not Analyzed QA/QC: Available in Dry Creek laboratory.

Kent Loader, Laboratory Supervisor

Date: 4.11.13

Detection Summary

Client: Cheyenne Board of Public Utilities
Project/Site: 2nd Quarter 2013 - Crow Creek Effluent

TestAmerica Job ID: 280-41322-1

Client Sample ID: CROW CREEK EFFLUENT — Lab Sample ID: 280-41322-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	0.83	J	11	0.61	ug/L	1		625	Total/NA
Hg	0.51		0.50	0.20	ng/L	1		1631E	Total/NA
Selenium	0.0044	J	0.0050	0.0010	mg/L	1		200.8	Total/NA
Chloride	120		15	1.3	mg/L	5		300.0	Total/NA
Sulfate	65		25	1.2	mg/L	5		300.0	Total/NA
Phenols, Total	0.0027	J B	0.0070	0.0020	mg/L	1		420.1	Total/NA
Total Sulfide	0.50	J	1.0	0.50	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: CROW CREEK EFFLUENT FIELD BLANK — Lab Sample ID: 280-41322-2

No Detections.

Client Sample ID: TRIP BLANK — Lab Sample ID: 280-41322-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	2.1	J B	5.0	2.0	ug/L	1		624	Total/NA

Client Sample ID: CROW CREEK INFLUENT — Lab Sample ID: 280-41322-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Selenium	0.0059		0.0050	0.0010	mg/L	1		200.8	Total/NA

Client Sample ID: CROW CREEK EFFLUENT — Lab Sample ID: 280-41322-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Selenium	0.0047	J	0.0050	0.0010	mg/L	1		200.8	Total/NA

Client Sample ID: CROW CREEK INFLUENT — Lab Sample ID: 280-41322-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Selenium	0.0056		0.0050	0.0010	mg/L	1		200.8	Total/NA

Client Sample ID: CROW CREEK EFFLUENT — Lab Sample ID: 280-41322-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Selenium	0.0039	J	0.0050	0.0010	mg/L	1		200.8	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Cheyenne Board of Public Utilities
Project/Site: 2nd Quarter 2013 - Crow Creek Effluent

TestAmerica Job ID: 280-41322-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Client Sample ID: CROW CREEK EFFLUENT
Date Collected: 04/22/13 20:42
Date Received: 04/24/13 10:00

Lab Sample ID: 280-41322-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			04/25/13 22:25	1
Acrylonitrile	ND		100	17	ug/L			04/25/13 22:25	1
Benzene	ND		5.0	1.8	ug/L			04/25/13 22:25	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			04/25/13 22:25	1
Chlorobenzene	ND		5.0	2.3	ug/L			04/25/13 22:25	1
Chloroform	ND		5.0	1.1	ug/L			04/25/13 22:25	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			04/25/13 22:25	1
Chloroethane	ND		10	2.0	ug/L			04/25/13 22:25	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			04/25/13 22:25	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			04/25/13 22:25	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			04/25/13 22:25	1
1,2-Dichloroethane	ND		5.0	1.3	ug/L			04/25/13 22:25	1
Chloromethane	ND		10	0.89	ug/L			04/25/13 22:25	1
Bromoform	ND		5.0	0.48	ug/L			04/25/13 22:25	1
Bromomethane	ND		10	1.5	ug/L			04/25/13 22:25	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			04/25/13 22:25	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			04/25/13 22:25	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			04/25/13 22:25	1
Ethylbenzene	ND		5.0	2.2	ug/L			04/25/13 22:25	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			04/25/13 22:25	1
Methylene Chloride	ND		5.0	2.0	ug/L			04/25/13 22:25	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			04/25/13 22:25	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			04/25/13 22:25	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			04/25/13 22:25	1
Tetrachloroethene	ND		5.0	2.7	ug/L			04/25/13 22:25	1
Toluene	ND		5.0	2.2	ug/L			04/25/13 22:25	1
Trichloroethene	ND		5.0	0.95	ug/L			04/25/13 22:25	1
Vinyl chloride	ND		10	1.3	ug/L			04/25/13 22:25	1
Xylenes, Total	ND		5.0	0.45	ug/L			04/25/13 22:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*73 - 122*		*04/25/13 22:25*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*04/25/13 22:25*	*1*
4-Bromofluorobenzene (Surr)	*103*		*79 - 119*		*04/25/13 22:25*	*1*

Client Sample ID: TRIP BLANK
Date Collected: 04/22/13 21:48
Date Received: 04/24/13 10:00

Lab Sample ID: 280-41322-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			04/25/13 22:49	1
Acrylonitrile	ND		100	17	ug/L			04/25/13 22:49	1
Benzene	ND		5.0	1.8	ug/L			04/25/13 22:49	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			04/25/13 22:49	1
Chlorobenzene	ND		5.0	2.3	ug/L			04/25/13 22:49	1
Chloroform	ND		5.0	1.1	ug/L			04/25/13 22:49	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			04/25/13 22:49	1
Chloroethane	ND		10	2.0	ug/L			04/25/13 22:49	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			04/25/13 22:49	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			04/25/13 22:49	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			04/25/13 22:49	1

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: TRIP BLANK — **Lab Sample ID: 280-41322-3**
Date Collected: 04/22/13 21:48 — **Matrix: Water**
Date Received: 04/24/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		5.0	1.3	ug/L			04/25/13 22:49	1
Chloromethane	ND		10	0.89	ug/L			04/25/13 22:49	1
Bromoform	ND		5.0	0.48	ug/L			04/25/13 22:49	1
Bromomethane	ND		10	1.5	ug/L			04/25/13 22:49	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			04/25/13 22:49	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			04/25/13 22:49	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			04/25/13 22:49	1
Ethylbenzene	ND		5.0	2.2	ug/L			04/25/13 22:49	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			04/25/13 22:49	1
Methylene Chloride	2.1	J B	5.0	2.0	ug/L			04/25/13 22:49	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			04/25/13 22:49	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			04/25/13 22:49	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			04/25/13 22:49	1
Tetrachloroethene	ND		5.0	2.7	ug/L			04/25/13 22:49	1
Toluene	ND		5.0	2.2	ug/L			04/25/13 22:49	1
Trichloroethene	ND		5.0	0.95	ug/L			04/25/13 22:49	1
Vinyl chloride	ND		10	1.3	ug/L			04/25/13 22:49	1
Xylenes, Total	ND		5.0	0.45	ug/L			04/25/13 22:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*73 - 122*		*04/25/13 22:49*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*04/25/13 22:49*	*1*
4-Bromofluorobenzene (Surr)	*106*		*79 - 119*		*04/25/13 22:49*	*1*

Method: 625 - PPL SVOC

Client Sample ID: CROW CREEK EFFLUENT — **Lab Sample ID: 280-41322-1**
Date Collected: 04/22/13 20:42 — **Matrix: Water**
Date Received: 04/24/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		11	0.31	ug/L		04/24/13 16:35	04/30/13 05:10	1
Benzidine	ND		160	54	ug/L		04/24/13 16:35	04/30/13 05:10	1
1,2,4-Trichlorobenzene	ND		11	0.31	ug/L		04/24/13 16:35	04/30/13 05:10	1
Hexachlorobenzene	ND		11	0.72	ug/L		04/24/13 16:35	04/30/13 05:10	1
Bis(2-chloroethyl)ether	ND		11	0.45	ug/L		04/24/13 16:35	04/30/13 05:10	1
2-Chloronaphthalene	ND		11	0.28	ug/L		04/24/13 16:35	04/30/13 05:10	1
2-Chlorophenol	ND		11	2.2	ug/L		04/24/13 16:35	04/30/13 05:10	1
2,4,6-Trichlorophenol	ND		22	0.32	ug/L		04/24/13 16:35	04/30/13 05:10	1
3,3'-Dichlorobenzidine	ND		54	2.2	ug/L		04/24/13 16:35	04/30/13 05:10	1
Hexachloroethane	ND		11	2.3	ug/L		04/24/13 16:35	04/30/13 05:10	1
2,4-Dichlorophenol	ND		11	0.70	ug/L		04/24/13 16:35	04/30/13 05:10	1
2,4-Dimethylphenol	ND		11	0.63	ug/L		04/24/13 16:35	04/30/13 05:10	1
2,4-Dinitrotoluene	ND		11	1.8	ug/L		04/24/13 16:35	04/30/13 05:10	1
2,6-Dinitrotoluene	ND		11	2.1	ug/L		04/24/13 16:35	04/30/13 05:10	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		11	0.25	ug/L		04/24/13 16:35	04/30/13 05:10	1
Fluoranthene	ND		11	0.22	ug/L		04/24/13 16:35	04/30/13 05:10	1
4-Bromophenyl phenyl ether	ND		11	0.47	ug/L		04/24/13 16:35	04/30/13 05:10	1
4-Chlorophenyl phenyl ether	ND		11	1.8	ug/L		04/24/13 16:35	04/30/13 05:10	1
bis (2-chloroisopropyl) ether	ND		11	0.31	ug/L		04/24/13 16:35	04/30/13 05:10	1
Bis(2-chloroethoxy)methane	ND		11	1.1	ug/L		04/24/13 16:35	04/30/13 05:10	1

Client Sample Results

Client: Cheyenne Board of Public Utilities
Project/Site: 2nd Quarter 2013 - Crow Creek Effluent

TestAmerica Job ID: 280-41322-1

Method: 625 - PPL SVOC (Continued)

Client Sample ID: CROW CREEK EFFLUENT
Date Collected: 04/22/13 20:42
Date Received: 04/24/13 10:00

Lab Sample ID: 280-41322-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Chloro-m-cresol	ND		11	2.6	ug/L		04/24/13 16:35	04/30/13 05:10	1
Hexachlorobutadiene	ND		11	3.6	ug/L		04/24/13 16:35	04/30/13 05:10	1
Hexachlorocyclopentadiene	ND		54	1.7	ug/L		04/24/13 16:35	04/30/13 05:10	1
Isophorone	ND		11	0.23	ug/L		04/24/13 16:35	04/30/13 05:10	1
Naphthalene	ND		11	0.32	ug/L		04/24/13 16:35	04/30/13 05:10	1
Nitrobenzene	ND		11	0.88	ug/L		04/24/13 16:35	04/30/13 05:10	1
2-Nitrophenol	ND		22	0.42	ug/L		04/24/13 16:35	04/30/13 05:10	1
1,2-Dichlorobenzene	ND		11	0.25	ug/L		04/24/13 16:35	04/30/13 05:10	1
2,4-Dinitrophenol	ND		65	11	ug/L		04/24/13 16:35	04/30/13 05:10	1
1,3-Dichlorobenzene	ND		11	0.33	ug/L		04/24/13 16:35	04/30/13 05:10	1
4-Nitrophenol	ND		54	1.3	ug/L		04/24/13 16:35	04/30/13 05:10	1
1,4-Dichlorobenzene	ND		11	0.35	ug/L		04/24/13 16:35	04/30/13 05:10	1
4,6-Dinitro-o-cresol	ND		65	4.4	ug/L		04/24/13 16:35	04/30/13 05:10	1
N-Nitrosodimethylamine	ND		11	0.32	ug/L		04/24/13 16:35	04/30/13 05:10	1
N-Nitrosodi-n-propylamine	ND		11	0.38	ug/L		04/24/13 16:35	04/30/13 05:10	1
N-Nitrosodiphenylamine	ND		11	0.48	ug/L		04/24/13 16:35	04/30/13 05:10	1
Pentachlorophenol	ND		65	22	ug/L		04/24/13 16:35	04/30/13 05:10	1
Phenol	ND		11	2.2	ug/L		04/24/13 16:35	04/30/13 05:10	1
Bis(2-ethylhexyl) phthalate	**0.83**	**J**	11	0.61	ug/L		04/24/13 16:35	04/30/13 05:10	1
Butyl benzyl phthalate	ND		11	1.1	ug/L		04/24/13 16:35	04/30/13 05:10	1
Di-n-butyl phthalate	ND		11	1.3	ug/L		04/24/13 16:35	04/30/13 05:10	1
Di-n-octyl phthalate	ND		11	0.38	ug/L		04/24/13 16:35	04/30/13 05:10	1
Diethyl phthalate	ND		11	0.41	ug/L		04/24/13 16:35	04/30/13 05:10	1
Dimethyl phthalate	ND		11	0.23	ug/L		04/24/13 16:35	04/30/13 05:10	1
Benzo[a]anthracene	ND		11	0.38	ug/L		04/24/13 16:35	04/30/13 05:10	1
Benzo[a]pyrene	ND		11	0.34	ug/L		04/24/13 16:35	04/30/13 05:10	1
3,4-Benzofluoranthene	ND		11	0.58	ug/L		04/24/13 16:35	04/30/13 05:10	1
Benzo[k]fluoranthene	ND		11	0.50	ug/L		04/24/13 16:35	04/30/13 05:10	1
Anthracene	ND		11	0.46	ug/L		04/24/13 16:35	04/30/13 05:10	1
Acenaphthylene	ND		11	0.53	ug/L		04/24/13 16:35	04/30/13 05:10	1
Chrysene	ND		11	0.59	ug/L		04/24/13 16:35	04/30/13 05:10	1
Benzo[g,h,i]perylene	ND		11	0.54	ug/L		04/24/13 16:35	04/30/13 05:10	1
Fluorene	ND		11	0.34	ug/L		04/24/13 16:35	04/30/13 05:10	1
Phenanthrene	ND		11	0.28	ug/L		04/24/13 16:35	04/30/13 05:10	1
Dibenz(a,h)anthracene	ND		11	0.56	ug/L		04/24/13 16:35	04/30/13 05:10	1
Indeno[1,2,3-cd]pyrene	ND		11	0.71	ug/L		04/24/13 16:35	04/30/13 05:10	1
Pyrene	ND		11	0.40	ug/L		04/24/13 16:35	04/30/13 05:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*36 - 120*	*04/24/13 16:35*	*04/30/13 05:10*	*1*
2-Fluorophenol	*72*		*30 - 120*	*04/24/13 16:35*	*04/30/13 05:10*	*1*
2,4,6-Tribromophenol	*94*		*50 - 120*	*04/24/13 16:35*	*04/30/13 05:10*	*1*
Nitrobenzene-d5	*74*		*45 - 120*	*04/24/13 16:35*	*04/30/13 05:10*	*1*
Phenol-d5	*74*		*36 - 120*	*04/24/13 16:35*	*04/30/13 05:10*	*1*
Terphenyl-d14	*64*		*52 - 120*	*04/24/13 16:35*	*04/30/13 05:10*	*1*

Client Sample Results

Client: Cheyenne Board of Public Utilities
Project/Site: 2nd Quarter 2013 - Crow Creek Effluent

TestAmerica Job ID: 280-41322-1

Method: 608 - PP Pesticides/PCBs

Client Sample ID: CROW CREEK EFFLUENT — **Lab Sample ID: 280-41322-1**
Date Collected: 04/22/13 20:42 — **Matrix: Water**
Date Received: 04/24/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	ND		0.11	0.016	ug/L		04/24/13 21:00	04/26/13 14:40	1
4,4'-DDE	ND		0.11	0.0082	ug/L		04/24/13 21:00	04/26/13 14:40	1
4,4'-DDD	ND		0.11	0.0084	ug/L		04/24/13 21:00	04/26/13 14:40	1
Aldrin	ND		0.054	0.0064	ug/L		04/24/13 21:00	04/26/13 14:40	1
Dieldrin	ND		0.11	0.0068	ug/L		04/24/13 21:00	04/26/13 14:40	1
Chlordane (technical)	ND		0.054	0.0058	ug/L		04/24/13 21:00	04/26/13 14:40	1
alpha-BHC	ND		0.054	0.0058	ug/L		04/24/13 21:00	04/26/13 14:40	1
beta-BHC	ND		0.054	0.0095	ug/L		04/24/13 21:00	04/26/13 14:40	1
delta-BHC	ND		0.054	0.0063	ug/L		04/24/13 21:00	04/26/13 14:40	1
gamma-BHC (Lindane)	ND		0.054	0.0075	ug/L		04/24/13 21:00	04/26/13 14:40	1
Endosulfan I	ND		0.054	0.0063	ug/L		04/24/13 21:00	04/26/13 14:40	1
Endosulfan sulfate	ND		0.11	0.0062	ug/L		04/24/13 21:00	04/26/13 14:40	1
Endosulfan II	ND		0.11	0.0076	ug/L		04/24/13 21:00	04/26/13 14:40	1
Endrin	ND		0.11	0.0086	ug/L		04/24/13 21:00	04/26/13 14:40	1
Endrin aldehyde	ND		0.11	0.0096	ug/L		04/24/13 21:00	04/26/13 14:40	1
Heptachlor	ND		0.054	0.0084	ug/L		04/24/13 21:00	04/26/13 14:40	1
Heptachlor epoxide	ND		0.054	0.0082	ug/L		04/24/13 21:00	04/26/13 14:40	1
PCB-1221	ND		1.1	0.23	ug/L		04/24/13 21:00	04/30/13 01:02	1
PCB-1232	ND		1.1	0.18	ug/L		04/24/13 21:00	04/30/13 01:02	1
PCB-1242	ND		1.1	0.11	ug/L		04/24/13 21:00	04/30/13 01:02	1
PCB-1248	ND		1.1	0.099	ug/L		04/24/13 21:00	04/30/13 01:02	1
PCB-1254	ND		1.1	0.12	ug/L		04/24/13 21:00	04/30/13 01:02	1
PCB-1016	ND		1.1	0.13	ug/L		04/24/13 21:00	04/30/13 01:02	1
PCB-1260	ND		1.1	0.17	ug/L		04/24/13 21:00	04/30/13 01:02	1
Toxaphene	ND		2.2	0.40	ug/L		04/24/13 21:00	04/26/13 14:40	1
alpha-Chlordane	ND		0.054	0.0058	ug/L		04/24/13 21:00	04/26/13 14:40	1
gamma-Chlordane	ND		0.054	0.0099	ug/L		04/24/13 21:00	04/26/13 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*69*		*34 - 122*	*04/24/13 21:00*	*04/26/13 14:40*	*1*
DCB Decachlorobiphenyl	*73*		*34 - 122*	*04/24/13 21:00*	*04/30/13 01:02*	*1*
Tetrachloro-m-xylene	*74*		*28 - 115*	*04/24/13 21:00*	*04/26/13 14:40*	*1*
Tetrachloro-m-xylene	*87*		*28 - 115*	*04/24/13 21:00*	*04/30/13 01:02*	*1*

Method: 1631E - Mercury, Low Level (CVAFS)

Client Sample ID: CROW CREEK EFFLUENT — **Lab Sample ID: 280-41322-1**
Date Collected: 04/22/13 20:42 — **Matrix: Water**
Date Received: 04/24/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	0.51		0.50	0.20	ng/L		04/26/13 16:30	05/02/13 13:57	1

Client Sample ID: CROW CREEK EFFLUENT FIELD BLANK — **Lab Sample ID: 280-41322-2**
Date Collected: 04/22/13 21:54 — **Matrix: Water**
Date Received: 04/24/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.50	0.20	ng/L		04/26/13 16:30	05/02/13 14:05	1

Client Sample Results

Client: Cheyenne Board of Public Utilities
Project/Site: 2nd Quarter 2013 - Crow Creek Effluent

TestAmerica Job ID: 280-41322-1

Method: 200.8 - Metals (ICP/MS)

Client Sample ID: CROW CREEK EFFLUENT — **Lab Sample ID: 280-41322-1**
Date Collected: 04/22/13 20:42 — **Matrix: Water**
Date Received: 04/24/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.0044	J	0.0050	0.0010	mg/L		04/30/13 13:30	05/01/13 05:12	1

Client Sample ID: CROW CREEK INFLUENT ~~2.957~~ 2.813 — **Lab Sample ID: 280-41322-4**
Date Collected: 04/17/13 05:00 — **Matrix: Water**
Date Received: 04/24/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.0059		0.0050	0.0010	mg/L		04/30/13 13:30	05/01/13 05:22	1

Client Sample ID: CROW CREEK EFFLUENT ~~1.995~~ 1.844 — **Lab Sample ID: 280-41322-5**
Date Collected: 04/17/13 05:00 — **Matrix: Water**
Date Received: 04/24/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.0047	J	0.0050	0.0010	mg/L		04/30/13 13:30	05/01/13 05:26	1

Client Sample ID: CROW CREEK INFLUENT 2.957 — **Lab Sample ID: 280-41322-6**
Date Collected: 04/19/13 05:00 — **Matrix: Water**
Date Received: 04/24/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.0056		0.0050	0.0010	mg/L		04/30/13 13:30	05/01/13 05:30	1

Client Sample ID: CROW CREEK EFFLUENT 1.995 — **Lab Sample ID: 280-41322-7**
Date Collected: 04/19/13 05:00 — **Matrix: Water**
Date Received: 04/24/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.0039	J	0.0050	0.0010	mg/L		04/30/13 13:30	05/01/13 05:33	1

General Chemistry

Client Sample ID: CROW CREEK EFFLUENT — **Lab Sample ID: 280-41322-1**
Date Collected: 04/22/13 20:42 — **Matrix: Water**
Date Received: 04/24/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		15	1.3	mg/L			04/25/13 07:59	5
Sulfate	65		25	1.2	mg/L			04/25/13 07:59	5
Phenols, Total	0.0027	J B	0.0070	0.0020	mg/L		05/02/13 15:37	05/02/13 19:06	1
Cyanide, Total	ND		0.010	0.0020	mg/L		04/25/13 08:40	04/25/13 13:17	1
Total Sulfide	0.50	J	1.0	0.50	mg/L			04/29/13 15:20	1

ANALYTICAL RESULTS

DRY CREEK WWTP LABORATORY

Cheyenne BOPU
8911 Campstool Road
Cheyenne, Wyoming 82007
Phone: 307-635-3163
Fax: 307-635-6833

Date Sampled: 07-30-13 Sampled By: KS
Date Received: 07-30-13 Date Reported: 08-27-13
Sample Location: Crow Creek Influent Qterly #3 Sample Matrix: Wastewater

Analyses	*Result*	*Units*	*Qual*	*RL*	*Method*	*Analysis Date/ By*
NONMETALS						
Ammonia as N	26.0	mg/l		0.1	SM 4500 NH_3-D	08/07/13 / kl
BOD_5 (Total)	162	mg/l		2.0	SM 5210 B	07/31/13 / ms
Hexavalent Chrome	NA	mg/l			SM 3500-Cr D	NA
Oil & Grease (HEM)	19.6	mg/l		5.0	EPA 1664A	08/27/13 / mw
pH	7.49	P.U.		NA	SM 4500H^+ B	On-site/ks
TPH (SGT-HEM)	ND	mg/l		5.0	EPA 1664A	08/27/13 / mw
Total Phosphorus	4.5	mg/l		0.1	EPA 365.1	08/06/13 / kl
TDS	702	mg/l		NA	SM 2520 B	07/31/13 / ms
TSS	206	mg/l		3.0	SM 2540-D	07-31-13/ ms
METALS - TOTAL						
Ag, Silver	ND	mg/l		0.005	EPA 200.7	08-06-13/ kl
As, Arsenic	ND	mg/l		0.010	EPA 200.7	08-06-13/ kl
Be, Beryllium	ND	mg/l		0.005	EPA 200.7	08-06-13/ kl
Cd, Cadmium	ND	mg/l		0.005	EPA 200.7	08-06-13/ kl
Cr, Chromium	ND	mg/l		0.005	EPA 200.7	08-06-13/ kl
Cu, Copper	0.063	mg/l		0.010	EPA 200.7	08-06-13/ kl
Mo, Molybdenum	0.007	mg/l		0.005	EPA 200.7	08-06-13/ kl
Ni, Nickel	ND	mg/l		0.005	EPA 200.7	08-06-13/ kl
Pb, Lead	0.006	mg/l		0.005	EPA 200.7	08-06-13/ kl
Sb, Antimony	ND	mg/l		0.010	EPA 200.7	08-06-13/ kl
Selenium, Se	0.008	mg/l		0.003	EPA 200.7	08-06-13/ kl
Tl, Thallium	ND	mg/l		0.025	EPA 200.7	08-06-13/ kl
Zinc, Zn	0.127	mg/l		0.005	EPA 200.7	08-06-13/ kl

Comments:

Report Definitions: ND: Not detected at the reporting limit. NA: Not Analyzed QA/QC: Available in Dry Creek laboratory.

Kent Loader, Laboratory Supervisor *Date:* 8-28-13

Detection Summary

Client: Cheyenne Board of Public Utilities
Project/Site: Local Limits 3rd Qt- Crow Creek Influent

TestAmerica Job ID: 280-44937-

Client Sample ID: CROW CREEK INFLUENT — Lab Sample ID: 280-44937-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	3.0	J	5.0	1.1	ug/L	1		624	Total/NA
Toluene	2.3	J	5.0	2.2	ug/L	1		624	Total/NA
Trichloroethene	1.4	J	5.0	0.95	ug/L	1		624	Total/NA
Fluoranthene	2.1	J	51	1.0	ug/L	5		625	Total/NA
Phenol	18	J	51	10	ug/L	5		625	Total/NA
Bis(2-ethylhexyl) phthalate	7.4	J	51	2.9	ug/L	5		625	Total/NA
Diethyl phthalate	3.0	J	51	1.9	ug/L	5		625	Total/NA
Phenanthrene	3.5	J	51	1.3	ug/L	5		625	Total/NA
Chloride	110		15	1.3	mg/L	5		300.0	Total/NA
Sulfate	70		25	1.2	mg/L	5		300.0	Total/NA
Phenols, Total	0.039		0.0070	0.0020	mg/L	1		420.1	Total/NA
Cyanide, Total	0.0040	J	0.010	0.0020	mg/L	1		SM 4500 CN E	Total/NA
Total Sulfide	1.4		1.0	0.50	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 280-44937-3

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

ent: Cheyenne Board of Public Utilities
Project/Site: Local Limits 3rd Qt- Crow Creek Influent

TestAmerica Job ID: 280-44937-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Client Sample ID: CROW CREEK INFLUENT
Date Collected: 07/30/13 10:07
Date Received: 07/31/13 10:00

Lab Sample ID: 280-44937-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			08/01/13 20:43	1
Acrylonitrile	ND		100	17	ug/L			08/01/13 20:43	1
Benzene	ND		5.0	1.8	ug/L			08/01/13 20:43	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			08/01/13 20:43	1
Chlorobenzene	ND		5.0	2.3	ug/L			08/01/13 20:43	1
Chloroform	**3.0**	**J**	5.0	1.1	ug/L			08/01/13 20:43	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			08/01/13 20:43	1
Chloroethane	ND		10	2.0	ug/L			08/01/13 20:43	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			08/01/13 20:43	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			08/01/13 20:43	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			08/01/13 20:43	1
1,2-Dichloroethane	ND		5.0	1.3	ug/L			08/01/13 20:43	1
Chloromethane	ND		10	0.89	ug/L			08/01/13 20:43	1
Bromoform	ND		5.0	0.48	ug/L			08/01/13 20:43	1
Bromomethane	ND		10	1.5	ug/L			08/01/13 20:43	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			08/01/13 20:43	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			08/01/13 20:43	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			08/01/13 20:43	1
Ethylbenzene	ND		5.0	2.2	ug/L			08/01/13 20:43	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			08/01/13 20:43	1
Methylene Chloride	ND		5.0	2.0	ug/L			08/01/13 20:43	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			08/01/13 20:43	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			08/01/13 20:43	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			08/01/13 20:43	1
Tetrachloroethene	ND		5.0	2.7	ug/L			08/01/13 20:43	1
Toluene	**2.3**	**J**	5.0	2.2	ug/L			08/01/13 20:43	1
Trichloroethene	**1.4**	**J**	5.0	0.95	ug/L			08/01/13 20:43	1
Vinyl chloride	ND		10	1.3	ug/L			08/01/13 20:43	1
Xylenes, Total	ND		5.0	0.45	ug/L			08/01/13 20:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*73 - 122*		*08/01/13 20:43*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*08/01/13 20:43*	*1*
4-Bromofluorobenzene (Surr)	*109*		*79 - 119*		*08/01/13 20:43*	*1*

Client Sample ID: TRIP BLANK
Date Collected: 07/30/13 10:07
Date Received: 07/31/13 10:00

Lab Sample ID: 280-44937-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			08/01/13 21:06	1
Acrylonitrile	ND		100	17	ug/L			08/01/13 21:06	1
Benzene	ND		5.0	1.8	ug/L			08/01/13 21:06	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			08/01/13 21:06	1
Chlorobenzene	ND		5.0	2.3	ug/L			08/01/13 21:06	1
Chloroform	ND		5.0	1.1	ug/L			08/01/13 21:06	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			08/01/13 21:06	1
Chloroethane	ND		10	2.0	ug/L			08/01/13 21:06	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			08/01/13 21:06	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			08/01/13 21:06	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			08/01/13 21:06	1

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: TRIP BLANK — **Lab Sample ID: 280-44937-3**
Date Collected: 07/30/13 10:07 — **Matrix: Water**
Date Received: 07/31/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		5.0	1.3	ug/L			08/01/13 21:06	1
Chloromethane	ND		10	0.89	ug/L			08/01/13 21:06	1
Bromoform	ND		5.0	0.48	ug/L			08/01/13 21:06	1
Bromomethane	ND		10	1.5	ug/L			08/01/13 21:06	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			08/01/13 21:06	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			08/01/13 21:06	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			08/01/13 21:06	1
Ethylbenzene	ND		5.0	2.2	ug/L			08/01/13 21:06	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			08/01/13 21:06	1
Methylene Chloride	ND		5.0	2.0	ug/L			08/01/13 21:06	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			08/01/13 21:06	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			08/01/13 21:06	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			08/01/13 21:06	1
Tetrachloroethene	ND		5.0	2.7	ug/L			08/01/13 21:06	1
Toluene	ND		5.0	2.2	ug/L			08/01/13 21:06	1
Trichloroethene	ND		5.0	0.95	ug/L			08/01/13 21:06	1
Vinyl chloride	ND		10	1.3	ug/L			08/01/13 21:06	1
Xylenes, Total	ND		5.0	0.45	ug/L			08/01/13 21:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*73 - 122*		*08/01/13 21:06*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*08/01/13 21:06*	*1*
4-Bromofluorobenzene (Surr)	*110*		*79 - 119*		*08/01/13 21:06*	*1*

Method: 625 - PPL SVOC

Client Sample ID: CROW CREEK INFLUENT — **Lab Sample ID: 280-44937-1**
Date Collected: 07/30/13 10:07 — **Matrix: Water**
Date Received: 07/31/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		51	1.4	ug/L		07/31/13 15:50	08/09/13 00:56	5
Benzidine	ND		770	260	ug/L		07/31/13 15:50	08/09/13 00:56	5
1,2,4-Trichlorobenzene	ND		51	1.4	ug/L		07/31/13 15:50	08/09/13 00:56	5
Hexachlorobenzene	ND		51	3.4	ug/L		07/31/13 15:50	08/09/13 00:56	5
Bis(2-chloroethyl)ether	ND		51	2.1	ug/L		07/31/13 15:50	08/09/13 00:56	5
2-Chloronaphthalene	ND		51	1.3	ug/L		07/31/13 15:50	08/09/13 00:56	5
2-Chlorophenol	ND		51	10	ug/L		07/31/13 15:50	08/09/13 00:56	5
2,4,6-Trichlorophenol	ND		100	1.5	ug/L		07/31/13 15:50	08/09/13 00:56	5
3,3'-Dichlorobenzidine	ND		260	10	ug/L		07/31/13 15:50	08/09/13 00:56	5
Hexachloroethane	ND		51	11	ug/L		07/31/13 15:50	08/09/13 00:56	5
2,4-Dichlorophenol	ND		51	3.3	ug/L		07/31/13 15:50	08/09/13 00:56	5
2,4-Dimethylphenol	ND		51	3.0	ug/L		07/31/13 15:50	08/09/13 00:56	5
2,4-Dinitrotoluene	ND		51	8.5	ug/L		07/31/13 15:50	08/09/13 00:56	5
2,6-Dinitrotoluene	ND		51	9.7	ug/L		07/31/13 15:50	08/09/13 00:56	5
1,2-Diphenylhydrazine(as Azobenzene)	ND		51	1.2	ug/L		07/31/13 15:50	08/09/13 00:56	5
Fluoranthene	2.1	J	51	1.0	ug/L		07/31/13 15:50	08/09/13 00:56	5
4-Bromophenyl phenyl ether	ND		51	2.2	ug/L		07/31/13 15:50	08/09/13 00:56	5
4-Chlorophenyl phenyl ether	ND		51	8.5	ug/L		07/31/13 15:50	08/09/13 00:56	5
bis (2-chloroisopropyl) ether	ND		51	1.4	ug/L		07/31/13 15:50	08/09/13 00:56	5

Method: 625 - PPL SVOC (Continued)

Client Sample ID: CROW CREEK INFLUENT
Date Collected: 07/30/13 10:07
Date Received: 07/31/13 10:00

Lab Sample ID: 280-44937-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		51	5.0	ug/L		07/31/13 15:50	08/09/13 00:56	5
p-Chloro-m-cresol	ND		51	12	ug/L		07/31/13 15:50	08/09/13 00:56	5
Hexachlorobutadiene	ND		51	17	ug/L		07/31/13 15:50	08/09/13 00:56	5
Hexachlorocyclopentadiene	ND		260	7.8	ug/L		07/31/13 15:50	08/09/13 00:56	5
Isophorone	ND		51	1.1	ug/L		07/31/13 15:50	08/09/13 00:56	5
Naphthalene	ND		51	1.5	ug/L		07/31/13 15:50	08/09/13 00:56	5
Nitrobenzene	ND		51	4.1	ug/L		07/31/13 15:50	08/09/13 00:56	5
2-Nitrophenol	ND		100	2.0	ug/L		07/31/13 15:50	08/09/13 00:56	5
1,2-Dichlorobenzene	ND		51	1.2	ug/L		07/31/13 15:50	08/09/13 00:56	5
2,4-Dinitrophenol	ND		310	51	ug/L		07/31/13 15:50	08/09/13 00:56	5
1,3-Dichlorobenzene	ND		51	1.5	ug/L		07/31/13 15:50	08/09/13 00:56	5
4-Nitrophenol	ND		260	6.3	ug/L		07/31/13 15:50	08/09/13 00:56	5
1,4-Dichlorobenzene	ND		51	1.6	ug/L		07/31/13 15:50	08/09/13 00:56	5
4,6-Dinitro-o-cresol	ND		310	20	ug/L		07/31/13 15:50	08/09/13 00:56	5
N-Nitrosodimethylamine	ND		51	1.5	ug/L		07/31/13 15:50	08/09/13 00:56	5
N-Nitrosodi-n-propylamine	ND		51	1.8	ug/L		07/31/13 15:50	08/09/13 00:56	5
N-Nitrosodiphenylamine	ND		51	2.3	ug/L		07/31/13 15:50	08/09/13 00:56	5
Pentachlorophenol	ND		310	100	ug/L		07/31/13 15:50	08/09/13 00:56	5
Phenol	**18**	**J**	51	10	ug/L		07/31/13 15:50	08/09/13 00:56	5
Bis(2-ethylhexyl) phthalate	**7.4**	**J**	51	2.9	ug/L		07/31/13 15:50	08/09/13 00:56	5
Butyl benzyl phthalate	ND		51	5.1	ug/L		07/31/13 15:50	08/09/13 00:56	5
Di-n-butyl phthalate	ND		51	5.9	ug/L		07/31/13 15:50	08/09/13 00:56	5
Di-n-octyl phthalate	ND		51	1.8	ug/L		07/31/13 15:50	08/09/13 00:56	5
Diethyl phthalate	**3.0**	**J**	51	1.9	ug/L		07/31/13 15:50	08/09/13 00:56	5
Dimethyl phthalate	ND		51	1.1	ug/L		07/31/13 15:50	08/09/13 00:56	5
Benzo[a]anthracene	ND		51	1.8	ug/L		07/31/13 15:50	08/09/13 00:56	5
Benzo[a]pyrene	ND		51	1.6	ug/L		07/31/13 15:50	08/09/13 00:56	5
3,4-Benzofluoranthene	ND		51	2.7	ug/L		07/31/13 15:50	08/09/13 00:56	5
Benzo[k]fluoranthene	ND		51	2.4	ug/L		07/31/13 15:50	08/09/13 00:56	5
Anthracene	ND		51	2.2	ug/L		07/31/13 15:50	08/09/13 00:56	5
Acenaphthylene	ND		51	2.5	ug/L		07/31/13 15:50	08/09/13 00:56	5
Chrysene	ND		51	2.8	ug/L		07/31/13 15:50	08/09/13 00:56	5
Benzo[g,h,i]perylene	ND		51	2.6	ug/L		07/31/13 15:50	08/09/13 00:56	5
Fluorene	ND		51	1.6	ug/L		07/31/13 15:50	08/09/13 00:56	5
Phenanthrene	**3.5**	**J**	51	1.3	ug/L		07/31/13 15:50	08/09/13 00:56	5
Dibenz(a,h)anthracene	ND		51	2.6	ug/L		07/31/13 15:50	08/09/13 00:56	5
Indeno[1,2,3-cd]pyrene	ND		51	3.3	ug/L		07/31/13 15:50	08/09/13 00:56	5
Pyrene	ND		51	1.9	ug/L		07/31/13 15:50	08/09/13 00:56	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*	*D*	*36 - 120*	*07/31/13 15:50*	*08/09/13 00:56*	*5*
2-Fluorophenol	*80*	*D*	*30 - 120*	*07/31/13 15:50*	*08/09/13 00:56*	*5*
2,4,6-Tribromophenol	*82*	*D*	*50 - 120*	*07/31/13 15:50*	*08/09/13 00:56*	*5*
Nitrobenzene-d5	*88*	*D*	*45 - 120*	*07/31/13 15:50*	*08/09/13 00:56*	*5*
Phenol-d5	*86*	*D*	*36 - 120*	*07/31/13 15:50*	*08/09/13 00:56*	*5*
Terphenyl-d14	*37*	*X D*	*52 - 120*	*07/31/13 15:50*	*08/09/13 00:56*	*5*

Client Sample Results

Client: Cheyenne Board of Public Utilities
Project/Site: Local Limits 3rd Qt- Crow Creek Influent

TestAmerica Job ID: 280-4493

Method: 608 - PP Pesticides/PCBs

Client Sample ID: CROW CREEK INFLUENT — **Lab Sample ID: 280-44937-1**
Date Collected: 07/30/13 10:07 — **Matrix: Water**
Date Received: 07/31/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	ND		0.10	0.015	ug/L		08/05/13 14:07	08/07/13 16:32	1
4,4'-DDE	ND		0.10	0.0077	ug/L		08/05/13 14:07	08/07/13 16:32	1
4,4'-DDD	ND		0.10	0.0079	ug/L		08/05/13 14:07	08/07/13 16:32	1
Aldrin	ND		0.051	0.0061	ug/L		08/05/13 14:07	08/07/13 16:32	1
Dieldrin	ND		0.10	0.0065	ug/L		08/05/13 14:07	08/07/13 16:32	1
Chlordane (technical)	ND		0.051	0.0054	ug/L		08/05/13 14:07	08/07/13 16:32	1
alpha-BHC	ND		0.051	0.0054	ug/L		08/05/13 14:07	08/07/13 16:32	1
beta-BHC	ND		0.051	0.0089	ug/L		08/05/13 14:07	08/07/13 16:32	1
delta-BHC	ND		0.051	0.0060	ug/L		08/05/13 14:07	08/07/13 16:32	1
gamma-BHC (Lindane)	ND		0.051	0.0071	ug/L		08/05/13 14:07	08/07/13 16:32	1
Endosulfan I	ND		0.051	0.0060	ug/L		08/05/13 14:07	08/07/13 16:32	1
Endosulfan sulfate	ND		0.10	0.0059	ug/L		08/05/13 14:07	08/07/13 16:32	1
Endosulfan II	ND		0.10	0.0072	ug/L		08/05/13 14:07	08/07/13 16:32	1
Endrin	ND		0.10	0.0081	ug/L		08/05/13 14:07	08/07/13 16:32	1
Endrin aldehyde	ND		0.10	0.0090	ug/L		08/05/13 14:07	08/07/13 16:32	1
Heptachlor	ND		0.051	0.0079	ug/L		08/05/13 14:07	08/07/13 16:32	1
Heptachlor epoxide	ND		0.051	0.0077	ug/L		08/05/13 14:07	08/07/13 16:32	1
PCB-1221	ND		1.0	0.22	ug/L		08/05/13 14:07	08/08/13 13:46	1
PCB-1232	ND		1.0	0.17	ug/L		08/05/13 14:07	08/08/13 13:46	1
PCB-1242	ND		1.0	0.11	ug/L		08/05/13 14:07	08/08/13 13:46	1
PCB-1248	ND		1.0	0.094	ug/L		08/05/13 14:07	08/08/13 13:46	1
PCB-1254	ND		1.0	0.12	ug/L		08/05/13 14:07	08/08/13 13:46	1
PCB-1016	ND		1.0	0.13	ug/L		08/05/13 14:07	08/08/13 13:46	1
PCB-1260	ND		1.0	0.16	ug/L		08/05/13 14:07	08/08/13 13:46	1
Toxaphene	ND		2.1	0.38	ug/L		08/05/13 14:07	08/07/13 16:32	1
alpha-Chlordane	ND		0.051	0.0054	ug/L		08/05/13 14:07	08/07/13 16:32	1
gamma-Chlordane	ND		0.051	0.0094	ug/L		08/05/13 14:07	08/07/13 16:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*60*		*34 - 122*	*08/05/13 14:07*	*08/07/13 16:32*	*1*
DCB Decachlorobiphenyl	*55*		*34 - 122*	*08/05/13 14:07*	*08/08/13 13:46*	*1*
Tetrachloro-m-xylene	*69*		*28 - 115*	*08/05/13 14:07*	*08/07/13 16:32*	*1*
Tetrachloro-m-xylene	*80*		*28 - 115*	*08/05/13 14:07*	*08/08/13 13:46*	*1*

General Chemistry

Client Sample ID: CROW CREEK INFLUENT — **Lab Sample ID: 280-44937-1**
Date Collected: 07/30/13 10:07 — **Matrix: Water**
Date Received: 07/31/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**110**		15	1.3	mg/L			08/02/13 01:23	5
Sulfate	**70**		25	1.2	mg/L			08/02/13 01:23	5
Phenols, Total	**0.039**		0.0070	0.0020	mg/L		08/01/13 19:29	08/02/13 13:09	1
Cyanide, Total	**0.0040**	J	0.010	0.0020	mg/L		08/06/13 09:51	08/07/13 14:13	1
Total Sulfide	**1.4**		1.0	0.50	mg/L			08/05/13 18:10	1

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-185504/3
Matrix: Water
Analysis Batch: 185504

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			08/01/13 20:20	1
Acrylonitrile	ND		100	17	ug/L			08/01/13 20:20	1
Benzene	ND		5.0	1.8	ug/L			08/01/13 20:20	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			08/01/13 20:20	1
Chlorobenzene	ND		5.0	2.3	ug/L			08/01/13 20:20	1
Chloroform	ND		5.0	1.1	ug/L			08/01/13 20:20	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			08/01/13 20:20	1
Chloroethane	ND		10	2.0	ug/L			08/01/13 20:20	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			08/01/13 20:20	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			08/01/13 20:20	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			08/01/13 20:20	1
1,2-Dichloroethane	ND		5.0	1.3	ug/L			08/01/13 20:20	1
Chloromethane	ND		10	0.89	ug/L			08/01/13 20:20	1
Bromoform	ND		5.0	0.48	ug/L			08/01/13 20:20	1
Bromomethane	ND		10	1.5	ug/L			08/01/13 20:20	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			08/01/13 20:20	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			08/01/13 20:20	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			08/01/13 20:20	1
Ethylbenzene	ND		5.0	2.2	ug/L			08/01/13 20:20	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			08/01/13 20:20	1
Methylene Chloride	ND		5.0	2.0	ug/L			08/01/13 20:20	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			08/01/13 20:20	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			08/01/13 20:20	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			08/01/13 20:20	1
Tetrachloroethene	ND		5.0	2.7	ug/L			08/01/13 20:20	1
Toluene	ND		5.0	2.2	ug/L			08/01/13 20:20	1
Trichloroethene	ND		5.0	0.95	ug/L			08/01/13 20:20	1
Vinyl chloride	ND		10	1.3	ug/L			08/01/13 20:20	1
Xylenes, Total	ND		5.0	0.45	ug/L			08/01/13 20:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*73 - 122*		*08/01/13 20:20*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*08/01/13 20:20*	*1*
4-Bromofluorobenzene (Surr)	*109*		*79 - 119*		*08/01/13 20:20*	*1*

Lab Sample ID: LCS 280-185504/1002
Matrix: Water
Analysis Batch: 185504

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acrolein	200	195		ug/L		98	38 - 188
Acrylonitrile	200	192		ug/L		96	48 - 149
Benzene	20.0	22.7		ug/L		114	37 - 151
Carbon tetrachloride	20.0	20.5		ug/L		102	70 - 140
Chlorobenzene	20.0	21.5		ug/L		107	37 - 160
Chloroform	20.0	21.1		ug/L		105	51 - 138
2-Chloroethyl vinyl ether	20.0	21.7		ug/L		109	10 - 305
Chloroethane	20.0	20.8		ug/L		104	14 - 230

Detection Summary

Client: Cheyenne Board of Public Utilities
Project/Site: 3rd Quarter 2013 - Crow Creek Influent

TestAmerica Job ID: 280-46269-1

Client Sample ID: CROW CREEK INFLUENT — Lab Sample ID: 280-46269-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Hg	6.0		2.5	1.0	ng/L	1		1631E	Total/NA

Client Sample ID: CROW CREEK INFLUENT FIELD BLANK — Lab Sample ID: 280-46269-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Cheyenne Board of Public Utilities
Project/Site: 3rd Quarter 2013 - Crow Creek Influent

TestAmerica Job ID: 280-46269-1

Method: 1631E - Mercury, Low Level (CVAFS)

Client Sample ID: CROW CREEK INFLUENT — **Lab Sample ID: 280-46269-1**
Date Collected: 09/04/13 07:55 — **Matrix: Water**
Date Received: 09/05/13 11:17

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	6.0		2.5	1.0	ng/L		09/12/13 11:40	09/13/13 12:46	1

Client Sample ID: CROW CREEK INFLUENT FIELD BLANK — **Lab Sample ID: 280-46269-2**
Date Collected: 09/04/13 07:40 — **Matrix: Water**
Date Received: 09/05/13 11:17

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.50	0.20	ng/L		09/12/13 11:40	09/13/13 12:54	1

Detection Summary

heyenne Board of Public Utilities
/Site: 3rd Quarter 2013 - Crow Creek Effluent

TestAmerica Job ID: 280-46268-1

lient Sample ID: CROW CREEK EFFLUENT — Lab Sample ID: 280-46268-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Hg	5.9		2.5	1.0	ng/L	1		1631E	Total/NA

Client Sample ID: CROW CREEK EFFLUENT FIELD BLANK — Lab Sample ID: 280-46268-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Cheyenne Board of Public Utilities
Project/Site: 3rd Quarter 2013 - Crow Creek Effluent

TestAmerica Job ID: 280-4

Method: 1631E - Mercury, Low Level (CVAFS)

Client Sample ID: CROW CREEK EFFLUENT — **Lab Sample ID: 280-46268-1**
Date Collected: 09/04/13 19:20 — **Matrix: Water**
Date Received: 09/05/13 11:17

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	5.9		2.5	1.0	ng/L		09/11/13 15:00	09/12/13 11:04	1

Client Sample ID: CROW CREEK EFFLUENT FIELD BLANK — **Lab Sample ID: 280-46268-2**
Date Collected: 09/04/13 19:25 — **Matrix: Water**
Date Received: 09/05/13 11:17

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.50	0.20	ng/L		09/11/13 15:00	09/12/13 11:12	1

ANALYTICAL RESULTS

DRY CREEK WWTP LABORATORY

Cheyenne BOPU
8911 Campstool Road
Cheyenne, Wyoming 82007
Phone: 307-635-3163
Fax: 307-635-6833

Date Sampled: 07-30-13 | Sampled By: KS
Date Received: 07-30-13 | Date Reported: 08-27-13
Sample Location: Crow Creek Effluent Qterly #3 | Sample Matrix: Wastewater

Analyses	Result	Units	Qual	RL	Method	Analysis Date/ By
NONMETALS						
Ammonia as N	1.1	mg/l		0.1	SM 4500 NH_3-D	08/07/13 / kl
BOD_5 (Total)	9.6	mg/l		2.0	SM 5210 B	07/31/13 / ms
Hexavalent Chrome	NA	mg/l			SM 3500-Cr D	NA
Oil & Grease (HEM)	ND	mg/l		5.0	EPA 1664A	08/27/13 / mw
pH	7.45	P.U.		NA	SM 4500H^+ B	On-site/ks
TPH (SGT-HEM)	ND	mg/l		5.0	EPA 1664A	08/27/13 / mw
Total Phosphorus	3.6	mg/l		0.1	EPA 365.1	08/06/13 / kl
TDS	591	mg/l		NA	SM 2520 B	07/31/13 / ms
TSS	18.6	mg/l		3.0	SM 2540-D	07-31-13/ ms
METALS - TOTAL						
Ag, Silver	ND	mg/l		0.005	EPA 200.7	08-06-13/ kl
As, Arsenic	ND	mg/l		0.010	EPA 200.7	08-06-13/ kl
Be, Beryllium	ND	mg/l		0.005	EPA 200.7	08-06-13/ kl
Cd, Cadmium	ND	mg/l		0.005	EPA 200.7	08-06-13/ kl
Cr, Chromium	ND	mg/l		0.005	EPA 200.7	08-06-13/ kl
Cu, Copper	0.027	mg/l		0.010	EPA 200.7	08-06-13/ kl
Mo, Molybdenum	0.006	mg/l		0.005	EPA 200.7	08-06-13/ kl
Ni, Nickel	ND	mg/l		0.005	EPA 200.7	08-06-13/ kl
Pb, Lead	0.006	mg/l		0.005	EPA 200.7	08-06-13/ kl
Sb, Antimony	ND	mg/l		0.010	EPA 200.7	08-06-13/ kl
Selenium, Se	0.004	mg/l		0.003	EPA 200.7	08-06-13/ kl
Tl, Thallium	ND	mg/l		0.025	EPA 200.7	08-06-13/ kl
Zinc, Zn	0.045	mg/l		0.005	EPA 200.7	08-06-13/ kl

Comments:

Report Definitions: ND: Not detected at the reporting limit. NA: Not Analyzed QA/QC: Available in Dry Creek laboratory.

Kent Loader, Laboratory Supervisor

Date: 8·28·13

Detection Summary

Client: Cheyenne Board of Public Utilities
Project/Site: 2013 3rd Quarter - Crow Creek Effluent

TestAmerica Job ID: 280-44993-1

Client Sample ID: CROW CREEK EFFLUENT — Lab Sample ID: 280-44993-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	1.4	J	11	0.59	ug/L	1		625	Total/NA
Hg	1.2		0.50	0.20	ng/L	1		1631E	Total/NA
Chloride	120		15	1.3	mg/L	5		300.0	Total/NA
Sulfate	72		25	1.2	mg/L	5		300.0	Total/NA
Cyanide, Total	0.0022	J	0.010	0.0020	mg/L	1		SM 4500 CN E	Total/NA

Client Sample ID: CROW CREEK EFFLUENT FIELD BLANK — Lab Sample ID: 280-44993-2

No Detections.

Client Sample ID: TRIP BLANK — Lab Sample ID: 280-44993-3

No Detections.

This Detection Summary does not include radiochemical test results.

Method: 624 - Volatile Organic Compounds (GC/MS)

Client Sample ID: CROW CREEK EFFLUENT — **Lab Sample ID: 280-44993-1**
Date Collected: 07/30/13 22:10 — **Matrix: Water**
Date Received: 08/01/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			08/01/13 21:29	1
Acrylonitrile	ND		100	17	ug/L			08/01/13 21:29	1
Benzene	ND		5.0	1.8	ug/L			08/01/13 21:29	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			08/01/13 21:29	1
Chlorobenzene	ND		5.0	2.3	ug/L			08/01/13 21:29	1
Chloroform	ND		5.0	1.1	ug/L			08/01/13 21:29	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			08/01/13 21:29	1
Chloroethane	ND		10	2.0	ug/L			08/01/13 21:29	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			08/01/13 21:29	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			08/01/13 21:29	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			08/01/13 21:29	1
1,2-Dichloroethane	ND		5.0	1.3	ug/L			08/01/13 21:29	1
Chloromethane	ND		10	0.89	ug/L			08/01/13 21:29	1
Bromoform	ND		5.0	0.48	ug/L			08/01/13 21:29	1
Bromomethane	ND		10	1.5	ug/L			08/01/13 21:29	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			08/01/13 21:29	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			08/01/13 21:29	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			08/01/13 21:29	1
Ethylbenzene	ND		5.0	2.2	ug/L			08/01/13 21:29	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			08/01/13 21:29	1
Methylene Chloride	ND		5.0	2.0	ug/L			08/01/13 21:29	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			08/01/13 21:29	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			08/01/13 21:29	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			08/01/13 21:29	1
Tetrachloroethene	ND		5.0	2.7	ug/L			08/01/13 21:29	1
Toluene	ND		5.0	2.2	ug/L			08/01/13 21:29	1
Trichloroethene	ND		5.0	0.95	ug/L			08/01/13 21:29	1
Vinyl chloride	ND		10	1.3	ug/L			08/01/13 21:29	1
Xylenes, Total	ND		5.0	0.45	ug/L			08/01/13 21:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*73 - 122*		*08/01/13 21:29*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*08/01/13 21:29*	*1*
4-Bromofluorobenzene (Surr)	*107*		*79 - 119*		*08/01/13 21:29*	*1*

Client Sample ID: TRIP BLANK — **Lab Sample ID: 280-44993-3**
Date Collected: 07/30/13 21:59 — **Matrix: Water**
Date Received: 08/01/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			08/01/13 22:38	1
Acrylonitrile	ND		100	17	ug/L			08/01/13 22:38	1
Benzene	ND		5.0	1.8	ug/L			08/01/13 22:38	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			08/01/13 22:38	1
Chlorobenzene	ND		5.0	2.3	ug/L			08/01/13 22:38	1
Chloroform	ND		5.0	1.1	ug/L			08/01/13 22:38	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			08/01/13 22:38	1
Chloroethane	ND		10	2.0	ug/L			08/01/13 22:38	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			08/01/13 22:38	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			08/01/13 22:38	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			08/01/13 22:38	1

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: TRIP BLANK — **Lab Sample ID: 280-44993-3**
Date Collected: 07/30/13 21:59 — **Matrix: Water**
Date Received: 08/01/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		5.0	1.3	ug/L			08/01/13 22:38	1
Chloromethane	ND		10	0.89	ug/L			08/01/13 22:38	1
Bromoform	ND		5.0	0.48	ug/L			08/01/13 22:38	1
Bromomethane	ND		10	1.5	ug/L			08/01/13 22:38	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			08/01/13 22:38	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			08/01/13 22:38	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			08/01/13 22:38	1
Ethylbenzene	ND		5.0	2.2	ug/L			08/01/13 22:38	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			08/01/13 22:38	1
Methylene Chloride	ND		5.0	2.0	ug/L			08/01/13 22:38	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			08/01/13 22:38	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			08/01/13 22:38	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			08/01/13 22:38	1
Tetrachloroethene	ND		5.0	2.7	ug/L			08/01/13 22:38	1
Toluene	ND		5.0	2.2	ug/L			08/01/13 22:38	1
Trichloroethene	ND		5.0	0.95	ug/L			08/01/13 22:38	1
Vinyl chloride	ND		10	1.3	ug/L			08/01/13 22:38	1
Xylenes, Total	ND		5.0	0.45	ug/L			08/01/13 22:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*73 - 122*		*08/01/13 22:38*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*08/01/13 22:38*	*1*
4-Bromofluorobenzene (Surr)	*106*		*79 - 119*		*08/01/13 22:38*	*1*

Method: 625 - PPL SVOC

Client Sample ID: CROW CREEK EFFLUENT — **Lab Sample ID: 280-44993-1**
Date Collected: 07/30/13 22:10 — **Matrix: Water**
Date Received: 08/01/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		11	0.29	ug/L		08/01/13 14:35	08/08/13 00:03	1
Benzidine	ND		160	53	ug/L		08/01/13 14:35	08/08/13 00:03	1
1,2,4-Trichlorobenzene	ND		11	0.29	ug/L		08/01/13 14:35	08/08/13 00:03	1
Hexachlorobenzene	ND		11	0.69	ug/L		08/01/13 14:35	08/08/13 00:03	1
Bis(2-chloroethyl)ether	ND		11	0.43	ug/L		08/01/13 14:35	08/08/13 00:03	1
2-Chloronaphthalene	ND		11	0.27	ug/L		08/01/13 14:35	08/08/13 00:03	1
2-Chlorophenol	ND		11	2.1	ug/L		08/01/13 14:35	08/08/13 00:03	1
2,4,6-Trichlorophenol	ND		21	0.31	ug/L		08/01/13 14:35	08/08/13 00:03	1
3,3'-Dichlorobenzidine	ND		53	2.1	ug/L		08/01/13 14:35	08/08/13 00:03	1
Hexachloroethane	ND		11	2.2	ug/L		08/01/13 14:35	08/08/13 00:03	1
2,4-Dichlorophenol	ND		11	0.67	ug/L		08/01/13 14:35	08/08/13 00:03	1
2,4-Dimethylphenol	ND		11	0.61	ug/L		08/01/13 14:35	08/08/13 00:03	1
2,4-Dinitrotoluene	ND		11	1.7	ug/L		08/01/13 14:35	08/08/13 00:03	1
2,6-Dinitrotoluene	ND		11	2.0	ug/L		08/01/13 14:35	08/08/13 00:03	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		11	0.24	ug/L		08/01/13 14:35	08/08/13 00:03	1
Fluoranthene	ND		11	0.21	ug/L		08/01/13 14:35	08/08/13 00:03	1
4-Bromophenyl phenyl ether	ND		11	0.45	ug/L		08/01/13 14:35	08/08/13 00:03	1
4-Chlorophenyl phenyl ether	ND		11	1.7	ug/L		08/01/13 14:35	08/08/13 00:03	1
bis (2-chloroisopropyl) ether	ND		11	0.29	ug/L		08/01/13 14:35	08/08/13 00:03	1

Method: 625 - PPL SVOC (Continued)

Client Sample ID: CROW CREEK EFFLUENT
Date Collected: 07/30/13 22:10
Date Received: 08/01/13 10:00

Lab Sample ID: 280-44993-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		11	1.0	ug/L		08/01/13 14:35	08/08/13 00:03	1
p-Chloro-m-cresol	ND		11	2.5	ug/L		08/01/13 14:35	08/08/13 00:03	1
Hexachlorobutadiene	ND		11	3.5	ug/L		08/01/13 14:35	08/08/13 00:03	1
Hexachlorocyclopentadiene	ND		53	1.6	ug/L		08/01/13 14:35	08/08/13 00:03	1
Isophorone	ND		11	0.22	ug/L		08/01/13 14:35	08/08/13 00:03	1
Naphthalene	ND		11	0.31	ug/L		08/01/13 14:35	08/08/13 00:03	1
Nitrobenzene	ND		11	0.85	ug/L		08/01/13 14:35	08/08/13 00:03	1
2-Nitrophenol	ND		21	0.41	ug/L		08/01/13 14:35	08/08/13 00:03	1
1,2-Dichlorobenzene	ND		11	0.24	ug/L		08/01/13 14:35	08/08/13 00:03	1
2,4-Dinitrophenol	ND		63	11	ug/L		08/01/13 14:35	08/08/13 00:03	1
1,3-Dichlorobenzene	ND		11	0.32	ug/L		08/01/13 14:35	08/08/13 00:03	1
4-Nitrophenol	ND		53	1.3	ug/L		08/01/13 14:35	08/08/13 00:03	1
1,4-Dichlorobenzene	ND		11	0.34	ug/L		08/01/13 14:35	08/08/13 00:03	1
4,6-Dinitro-o-cresol	ND		63	4.2	ug/L		08/01/13 14:35	08/08/13 00:03	1
N-Nitrosodimethylamine	ND		11	0.31	ug/L		08/01/13 14:35	08/08/13 00:03	1
N-Nitrosodi-n-propylamine	ND		11	0.37	ug/L		08/01/13 14:35	08/08/13 00:03	1
N-Nitrosodiphenylamine	ND		11	0.46	ug/L		08/01/13 14:35	08/08/13 00:03	1
Pentachlorophenol	ND		63	21	ug/L		08/01/13 14:35	08/08/13 00:03	1
Phenol	ND		11	2.1	ug/L		08/01/13 14:35	08/08/13 00:03	1
Bis(2-ethylhexyl) phthalate	**1.4**	**J**	11	0.59	ug/L		08/01/13 14:35	08/08/13 00:03	1
Butyl benzyl phthalate	ND		11	1.1	ug/L		08/01/13 14:35	08/08/13 00:03	1
Di-n-butyl phthalate	ND		11	1.2	ug/L		08/01/13 14:35	08/08/13 00:03	1
Di-n-octyl phthalate	ND		11	0.37	ug/L		08/01/13 14:35	08/08/13 00:03	1
Diethyl phthalate	ND		11	0.40	ug/L		08/01/13 14:35	08/08/13 00:03	1
Dimethyl phthalate	ND		11	0.22	ug/L		08/01/13 14:35	08/08/13 00:03	1
Benzo[a]anthracene	ND		11	0.37	ug/L		08/01/13 14:35	08/08/13 00:03	1
Benzo[a]pyrene	ND		11	0.33	ug/L		08/01/13 14:35	08/08/13 00:03	1
3,4-Benzofluoranthene	ND		11	0.56	ug/L		08/01/13 14:35	08/08/13 00:03	1
Benzo[k]fluoranthene	ND		11	0.48	ug/L		08/01/13 14:35	08/08/13 00:03	1
Anthracene	ND		11	0.44	ug/L		08/01/13 14:35	08/08/13 00:03	1
Acenaphthylene	ND		11	0.52	ug/L		08/01/13 14:35	08/08/13 00:03	1
Chrysene	ND		11	0.57	ug/L		08/01/13 14:35	08/08/13 00:03	1
Benzo[g,h,i]perylene	ND		11	0.53	ug/L		08/01/13 14:35	08/08/13 00:03	1
Fluorene	ND		11	0.33	ug/L		08/01/13 14:35	08/08/13 00:03	1
Phenanthrene	ND		11	0.27	ug/L		08/01/13 14:35	08/08/13 00:03	1
Dibenz(a,h)anthracene	ND		11	0.54	ug/L		08/01/13 14:35	08/08/13 00:03	1
Indeno[1,2,3-cd]pyrene	ND		11	0.68	ug/L		08/01/13 14:35	08/08/13 00:03	1
Pyrene	ND		11	0.39	ug/L		08/01/13 14:35	08/08/13 00:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*36 - 120*	*08/01/13 14:35*	*08/08/13 00:03*	*1*
2-Fluorophenol	*69*		*30 - 120*	*08/01/13 14:35*	*08/08/13 00:03*	*1*
2,4,6-Tribromophenol	*95*		*50 - 120*	*08/01/13 14:35*	*08/08/13 00:03*	*1*
Nitrobenzene-d5	*71*		*45 - 120*	*08/01/13 14:35*	*08/08/13 00:03*	*1*
Phenol-d5	*73*		*36 - 120*	*08/01/13 14:35*	*08/08/13 00:03*	*1*
Terphenyl-d14	*34*	*X*	*52 - 120*	*08/01/13 14:35*	*08/08/13 00:03*	*1*

Client Sample Results

Client: Cheyenne Board of Public Utilities
Project/Site: 2013 3rd Quarter - Crow Creek Effluent

TestAmerica Job ID: 280-44993-1

Method: 608 - PP Pesticides/PCBs

Client Sample ID: CROW CREEK EFFLUENT — **Lab Sample ID: 280-44993-1**
Date Collected: 07/30/13 22:10 — **Matrix: Water**
Date Received: 08/01/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	ND		0.10	0.015	ug/L		08/05/13 14:07	08/10/13 00:09	1
4,4'-DDE	ND		0.10	0.0078	ug/L		08/05/13 14:07	08/10/13 00:09	1
4,4'-DDD	ND		0.10	0.0080	ug/L		08/05/13 14:07	08/10/13 00:09	1
Aldrin	ND		0.052	0.0061	ug/L		08/05/13 14:07	08/10/13 00:09	1
Dieldrin	ND		0.10	0.0065	ug/L		08/05/13 14:07	08/10/13 00:09	1
Chlordane (technical)	ND		0.052	0.0055	ug/L		08/05/13 14:07	08/10/13 00:09	1
alpha-BHC	ND		0.052	0.0055	ug/L		08/05/13 14:07	08/10/13 00:09	1
beta-BHC	ND		0.052	0.0090	ug/L		08/05/13 14:07	08/10/13 00:09	1
delta-BHC	ND		0.052	0.0080	ug/L		08/05/13 14:07	08/10/13 00:09	1
gamma-BHC (Lindane)	ND		0.052	0.0072	ug/L		08/05/13 14:07	08/10/13 00:09	1
Endosulfan I	ND		0.052	0.0060	ug/L		08/05/13 14:07	08/10/13 00:09	1
Endosulfan sulfate	ND		0.10	0.0059	ug/L		08/05/13 14:07	08/10/13 00:09	1
Endosulfan II	ND		0.10	0.0073	ug/L		08/05/13 14:07	08/10/13 00:09	1
Endrin	ND		0.10	0.0082	ug/L		08/05/13 14:07	08/10/13 00:09	1
Endrin aldehyde	ND		0.10	0.0091	ug/L		08/05/13 14:07	08/10/13 00:09	1
Heptachlor	ND		0.052	0.0080	ug/L		08/05/13 14:07	08/10/13 00:09	1
Heptachlor epoxide	ND		0.052	0.0078	ug/L		08/05/13 14:07	08/10/13 00:09	1
PCB-1221	ND		1.0	0.22	ug/L		08/05/13 14:07	08/08/13 14:07	1
PCB-1232	ND		1.0	0.17	ug/L		08/05/13 14:07	08/08/13 14:07	1
PCB-1242	ND		1.0	0.11	ug/L		08/05/13 14:07	08/08/13 14:07	1
PCB-1248	ND		1.0	0.095	ug/L		08/05/13 14:07	08/08/13 14:07	1
PCB-1254	ND		1.0	0.12	ug/L		08/05/13 14:07	08/08/13 14:07	1
PCB-1016	ND		1.0	0.13	ug/L		08/05/13 14:07	08/08/13 14:07	1
PCB-1260	ND		1.0	0.17	ug/L		08/05/13 14:07	08/08/13 14:07	1
Toxaphene	ND		2.1	0.38	ug/L		08/05/13 14:07	08/10/13 00:09	1
alpha-Chlordane	ND		0.052	0.0055	ug/L		08/05/13 14:07	08/10/13 00:09	1
gamma-Chlordane	ND		0.052	0.0094	ug/L		08/05/13 14:07	08/10/13 00:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*83*		*34 - 122*	*08/05/13 14:07*	*08/08/13 14:07*	*1*
DCB Decachlorobiphenyl	*109*		*34 - 122*	*08/05/13 14:07*	*08/10/13 00:09*	*1*
Tetrachloro-m-xylene	*86*		*28 - 115*	*08/05/13 14:07*	*08/08/13 14:07*	*1*
Tetrachloro-m-xylene	*72*		*28 - 115*	*08/05/13 14:07*	*08/10/13 00:09*	*1*

Method: 1631E - Mercury, Low Level (CVAFS)

Client Sample ID: CROW CREEK EFFLUENT — **Lab Sample ID: 280-44993-1**
Date Collected: 07/30/13 22:10 — **Matrix: Water**
Date Received: 08/01/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	1.2		0.50	0.20	ng/L		08/02/13 16:10	08/05/13 11:09	1

Client Sample ID: CROW CREEK EFFLUENT FIELD BLANK — **Lab Sample ID: 280-44993-2**
Date Collected: 07/30/13 22:12 — **Matrix: Water**
Date Received: 08/01/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.50	0.20	ng/L		08/02/13 16:10	08/05/13 11:17	1

Client Sample Results

Client: Cheyenne Board of Public Utilities
Project/Site: 2013 3rd Quarter - Crow Creek Effluent

TestAmerica Job ID: 280-44993-1

General Chemistry

Client Sample ID: CROW CREEK EFFLUENT
Date Collected: 07/30/13 22:10
Date Received: 08/01/13 10:00

Lab Sample ID: 280-44993-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		15	1.3	mg/L			08/02/13 03:10	5
Sulfate	72		25	1.2	mg/L			08/02/13 03:10	5
Phenols, Total	ND		0.0070	0.0020	mg/L		08/01/13 19:29	08/02/13 13:09	1
Cyanide, Total	0.0022	J	0.010	0.0020	mg/L		08/06/13 09:51	08/07/13 13:47	1
Total Sulfide	ND		1.0	0.50	mg/L			08/05/13 18:10	1

ANALYTICAL RESULTS

OCT 29 2013
BY: R. Spiker
10-31-13

DRY CREEK WWTP LABORATORY

Cheyenne BOPU
8911 Campstool Road
Cheyenne, Wyoming 82007
Phone: 307-635-3163
Fax: 307-635-6833

Date Sampled: 10-10-13 Sampled By: KS
Date Received: 10-10-13 Date Reported: 10-22-13
Sample Location: Crow Creek Influent Qterly #4 Sample Matrix: Wastewater

Analyses	*Result*	*Units*	*Qual*	*RL*	*Method*	*Analysis Date/ By*
NONMETALS						
Ammonia as N C	16.1	mg/l		0.1	SM 4500 NH_3-D	10/16/13 / mw
BOD_5 (Total) C	153	mg/l		2.0	SM 5210 B	10/11/13 / kl
Hexavalent Chrome G	0.018	mg/l	1	0.013	SM 3500-Cr D	10-10-13 / mw
Oil & Grease (HEM) G	14.4	mg/l		5.0	EPA 1664A	10/22/13 / mw
pH G	7.79	P.U.		NA	SM 4500H^+ B	On-site/ks
TPH (SGT-HEM) G	ND	mg/l		5.0	EPA 1664A	10/22/13 / mw
Total Phosphorus C	3.2	mg/l		0.1	EPA 365.1	10/15/13 / mw
TDS C	581	mg/l		NA	SM 2520 B	10/10/13 / kl
TSS C	176	mg/l		3.0	SM 2540-D	10-11-13/ kl
METALS - TOTAL						
Ag, Silver	ND	mg/l		0.005	EPA 200.7	10-17-13/ kl
As, Arsenic	ND	mg/l		0.010	EPA 200.7	10-17-13/ kl
Be, Beryllium	ND	mg/l		0.005	EPA 200.7	10-17-13/ kl
Cd, Cadmium	ND	mg/l		0.005	EPA 200.7	10-17-13/ kl
Cr, Chromium	ND	mg/l		0.005	EPA 200.7	10-17-13/ kl
Comp. Cu, Copper	0.054	mg/l		0.010	EPA 200.7	10-17-13/ kl
Mo, Molybdenum	ND	mg/l		0.005	EPA 200.7	10-17-13/ kl
Ni, Nickel	0.005	mg/l		0.005	EPA 200.7	10-17-13/ kl
Pb, Lead	ND	mg/l		0.005	EPA 200.7	10-17-13/ kl
Sb, Antimony	ND	mg/l		0.010	EPA 200.7	10-17-13/ kl
Selenium, Se	0.005	mg/l	3,564	0.003	EPA 200.7	10-17-13/ kl
Tl, Thallium	ND	mg/l		0.025	EPA 200.7	10-17-13/ kl
Zinc, Zn	0.079	mg/l		0.005	EPA 200.7	10-17-13/ kl

Comments: 1. Hex chrome was not present, see ICP chrome values.

Report Definitions: ND: Not detected at the reporting limit. NA: Not Analyzed QA/QC: Available in Dry Creek laboratory

Kent Loader, Laboratory Supervisor *Date:* 10-29-13

Detection Summary

Client: Cheyenne Board of Public Utilities
Project/Site: 4th Quarter 2013 - Crow Creek Influent

TestAmerica Job ID: 280-47771-1

Client Sample ID: CROW CREEK INFLUENT — Lab Sample ID: 280-47771-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	3.5	J	5.0	1.1	ug/L	1		624	Total/NA
Trichloroethene	2.9	J	5.0	0.95	ug/L	1		624	Total/NA
Hg	100		2.5	1.0	ng/L	1		1631E	Total/NA
Chloride	93		15	1.3	mg/L	5		300.0	Total/NA
Sulfate	61		25	1.2	mg/L	5		300.0	Total/NA
Phenols, Total	0.028		0.0070	0.0020	mg/L	1		420.1	Total/NA
Cyanide, Total	0.0028	J	0.010	0.0020	mg/L	1		SM 4500 CN E	Total/NA

Client Sample ID: CROW CREEK INFLUENT FIELD BLANK — Lab Sample ID: 280-47771-2

No Detections.

Client Sample ID: TRIP BLANK — Lab Sample ID: 280-47771-3

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Cheyenne Board of Public Utilities
Project/Site: 4th Quarter 2013 - Crow Creek Influent

TestAmerica Job ID: 280-47771-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Client Sample ID: CROW CREEK INFLUENT
Date Collected: 10/10/13 09:10
Date Received: 10/11/13 09:00

Lab Sample ID: 280-47771-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			10/11/13 21:58	1
Acrylonitrile	ND		100	17	ug/L			10/11/13 21:58	1
Benzene	ND		5.0	1.8	ug/L			10/11/13 21:58	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			10/11/13 21:58	1
Chlorobenzene	ND		5.0	2.3	ug/L			10/11/13 21:58	1
Chloroform	**3.5**	**J**	5.0	1.1	ug/L			10/11/13 21:58	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			10/11/13 21:58	1
Chloroethane	ND		10	2.0	ug/L			10/11/13 21:58	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			10/11/13 21:58	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			10/11/13 21:58	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			10/11/13 21:58	1
1,2-Dichloroethane	ND		5.0	1.3	ug/L			10/11/13 21:58	1
Chloromethane	ND		10	0.89	ug/L			10/11/13 21:58	1
Bromoform	ND		5.0	0.48	ug/L			10/11/13 21:58	1
Bromomethane	ND		10	1.5	ug/L			10/11/13 21:58	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			10/11/13 21:58	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			10/11/13 21:58	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			10/11/13 21:58	1
Ethylbenzene	ND		5.0	2.2	ug/L			10/11/13 21:58	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			10/11/13 21:58	1
Methylene Chloride	ND		5.0	2.0	ug/L			10/11/13 21:58	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			10/11/13 21:58	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			10/11/13 21:58	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			10/11/13 21:58	1
Tetrachloroethene	ND		5.0	2.7	ug/L			10/11/13 21:58	1
Toluene	ND		5.0	2.2	ug/L			10/11/13 21:58	1
Trichloroethene	**2.9**	**J**	5.0	0.95	ug/L			10/11/13 21:58	1
Vinyl chloride	ND		10	1.3	ug/L			10/11/13 21:58	1
Xylenes, Total	ND		10	1.1	ug/L			10/11/13 21:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*73 - 122*		*10/11/13 21:58*	*1*
Toluene-d8 (Surr)	*87*		*80 - 120*		*10/11/13 21:58*	*1*
4-Bromofluorobenzene (Surr)	*96*		*79 - 119*		*10/11/13 21:58*	*1*

Client Sample ID: TRIP BLANK
Date Collected: 10/10/13 09:22
Date Received: 10/11/13 09:00

Lab Sample ID: 280-47771-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			10/11/13 22:24	1
Acrylonitrile	ND		100	17	ug/L			10/11/13 22:24	1
Benzene	ND		5.0	1.8	ug/L			10/11/13 22:24	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			10/11/13 22:24	1
Chlorobenzene	ND		5.0	2.3	ug/L			10/11/13 22:24	1
Chloroform	ND		5.0	1.1	ug/L			10/11/13 22:24	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			10/11/13 22:24	1
Chloroethane	ND		10	2.0	ug/L			10/11/13 22:24	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			10/11/13 22:24	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			10/11/13 22:24	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			10/11/13 22:24	1

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: TRIP BLANK — **Lab Sample ID: 280-47771-3**
Date Collected: 10/10/13 09:22 — **Matrix: Water**
Date Received: 10/11/13 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		5.0	1.3	ug/L			10/11/13 22:24	1
Chloromethane	ND		10	0.89	ug/L			10/11/13 22:24	1
Bromoform	ND		5.0	0.48	ug/L			10/11/13 22:24	1
Bromomethane	ND		10	1.5	ug/L			10/11/13 22:24	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			10/11/13 22:24	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			10/11/13 22:24	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			10/11/13 22:24	1
Ethylbenzene	ND		5.0	2.2	ug/L			10/11/13 22:24	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			10/11/13 22:24	1
Methylene Chloride	ND		5.0	2.0	ug/L			10/11/13 22:24	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			10/11/13 22:24	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			10/11/13 22:24	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			10/11/13 22:24	1
Tetrachloroethene	ND		5.0	2.7	ug/L			10/11/13 22:24	1
Toluene	ND		5.0	2.2	ug/L			10/11/13 22:24	1
Trichloroethene	ND		5.0	0.95	ug/L			10/11/13 22:24	1
Vinyl chloride	ND		10	1.3	ug/L			10/11/13 22:24	1
Xylenes, Total	ND		10	1.1	ug/L			10/11/13 22:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*73 - 122*		*10/11/13 22:24*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*10/11/13 22:24*	*1*
4-Bromofluorobenzene (Surr)	*98*		*79 - 119*		*10/11/13 22:24*	*1*

Method: 625 - PPL SVOC

Client Sample ID: CROW CREEK INFLUENT — **Lab Sample ID: 280-47771-1**
Date Collected: 10/10/13 09:10 — **Matrix: Water**
Date Received: 10/11/13 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		54	1.5	ug/L		10/15/13 11:15	10/21/13 00:41	5
Benzidine	ND		820	270	ug/L		10/15/13 11:15	10/21/13 00:41	5
1,2,4-Trichlorobenzene	ND		54	1.5	ug/L		10/15/13 11:15	10/21/13 00:41	5
Hexachlorobenzene	ND		54	3.6	ug/L		10/15/13 11:15	10/21/13 00:41	5
Bis(2-chloroethyl)ether	ND		54	2.2	ug/L		10/15/13 11:15	10/21/13 00:41	5
2-Chloronaphthalene	ND		54	1.4	ug/L		10/15/13 11:15	10/21/13 00:41	5
2-Chlorophenol	ND		54	11	ug/L		10/15/13 11:15	10/21/13 00:41	5
2,4,6-Trichlorophenol	ND		110	1.6	ug/L		10/15/13 11:15	10/21/13 00:41	5
3,3'-Dichlorobenzidine	ND		270	11	ug/L		10/15/13 11:15	10/21/13 00:41	5
Hexachloroethane	ND		54	11	ug/L		10/15/13 11:15	10/21/13 00:41	5
2,4-Dichlorophenol	ND		54	3.5	ug/L		10/15/13 11:15	10/21/13 00:41	5
2,4-Dimethylphenol	ND		54	3.2	ug/L		10/15/13 11:15	10/21/13 00:41	5
2,4-Dinitrotoluene	ND		54	9.0	ug/L		10/15/13 11:15	10/21/13 00:41	5
2,6-Dinitrotoluene	ND		54	10	ug/L		10/15/13 11:15	10/21/13 00:41	5
1,2-Diphenylhydrazine(as Azobenzene)	ND		54	1.3	ug/L		10/15/13 11:15	10/21/13 00:41	5
Fluoranthene	ND		54	1.1	ug/L		10/15/13 11:15	10/21/13 00:41	5
4-Bromophenyl phenyl ether	ND		54	2.3	ug/L		10/15/13 11:15	10/21/13 00:41	5
4-Chlorophenyl phenyl ether	ND		54	9.0	ug/L		10/15/13 11:15	10/21/13 00:41	5
bis (2-chloroisopropyl) ether	ND		54	1.5	ug/L		10/15/13 11:15	10/21/13 00:41	5

Method: 625 - PPL SVOC (Continued)

Client Sample ID: CROW CREEK INFLUENT
Date Collected: 10/10/13 09:10
Date Received: 10/11/13 09:00

Lab Sample ID: 280-47771-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		54	5.3	ug/L		10/15/13 11:15	10/21/13 00:41	5
p-Chloro-m-cresol	ND		54	13	ug/L		10/15/13 11:15	10/21/13 00:41	5
Hexachlorobutadiene	ND		54	18	ug/L		10/15/13 11:15	10/21/13 00:41	5
Hexachlorocyclopentadiene	ND	*	270	8.3	ug/L		10/15/13 11:15	10/21/13 00:41	5
Isophorone	ND		54	1.1	ug/L		10/15/13 11:15	10/21/13 00:41	5
Naphthalene	ND		54	1.6	ug/L		10/15/13 11:15	10/21/13 00:41	5
Nitrobenzene	ND		54	4.4	ug/L		10/15/13 11:15	10/21/13 00:41	5
2-Nitrophenol	ND		110	2.1	ug/L		10/15/13 11:15	10/21/13 00:41	5
1,2-Dichlorobenzene	ND		54	1.3	ug/L		10/15/13 11:15	10/21/13 00:41	5
2,4-Dinitrophenol	ND		330	54	ug/L		10/15/13 11:15	10/21/13 00:41	5
1,3-Dichlorobenzene	ND		54	1.6	ug/L		10/15/13 11:15	10/21/13 00:41	5
4-Nitrophenol	ND		270	6.7	ug/L		10/15/13 11:15	10/21/13 00:41	5
1,4-Dichlorobenzene	ND		54	1.7	ug/L		10/15/13 11:15	10/21/13 00:41	5
4,6-Dinitro-o-cresol	ND		330	22	ug/L		10/15/13 11:15	10/21/13 00:41	5
N-Nitrosodimethylamine	ND		54	1.6	ug/L		10/15/13 11:15	10/21/13 00:41	5
N-Nitrosodi-n-propylamine	ND		54	1.9	ug/L		10/15/13 11:15	10/21/13 00:41	5
N-Nitrosodiphenylamine	ND		54	2.4	ug/L		10/15/13 11:15	10/21/13 00:41	5
Pentachlorophenol	ND		330	110	ug/L		10/15/13 11:15	10/21/13 00:41	5
Phenol	ND		54	11	ug/L		10/15/13 11:15	10/21/13 00:41	5
Bis(2-ethylhexyl) phthalate	ND		54	3.0	ug/L		10/15/13 11:15	10/21/13 00:41	5
Butyl benzyl phthalate	ND		54	5.4	ug/L		10/15/13 11:15	10/21/13 00:41	5
Di-n-butyl phthalate	ND		54	6.3	ug/L		10/15/13 11:15	10/21/13 00:41	5
Di-n-octyl phthalate	ND		54	1.9	ug/L		10/15/13 11:15	10/21/13 00:41	5
Diethyl phthalate	ND		54	2.1	ug/L		10/15/13 11:15	10/21/13 00:41	5
Dimethyl phthalate	ND		54	1.1	ug/L		10/15/13 11:15	10/21/13 00:41	5
Benzo[a]anthracene	ND		54	1.9	ug/L		10/15/13 11:15	10/21/13 00:41	5
Benzo[a]pyrene	ND		54	1.7	ug/L		10/15/13 11:15	10/21/13 00:41	5
3,4-Benzofluoranthene	ND		54	2.9	ug/L		10/15/13 11:15	10/21/13 00:41	5
Benzo[k]fluoranthene	ND		54	2.5	ug/L		10/15/13 11:15	10/21/13 00:41	5
Anthracene	ND		54	2.3	ug/L		10/15/13 11:15	10/21/13 00:41	5
Acenaphthylene	ND		54	2.7	ug/L		10/15/13 11:15	10/21/13 00:41	5
Chrysene	ND		54	2.9	ug/L		10/15/13 11:15	10/21/13 00:41	5
Benzo[g,h,i]perylene	ND		54	2.7	ug/L		10/15/13 11:15	10/21/13 00:41	5
Fluorene	ND		54	1.7	ug/L		10/15/13 11:15	10/21/13 00:41	5
Phenanthrene	ND		54	1.4	ug/L		10/15/13 11:15	10/21/13 00:41	5
Dibenz(a,h)anthracene	ND		54	2.8	ug/L		10/15/13 11:15	10/21/13 00:41	5
Indeno[1,2,3-cd]pyrene	ND		54	3.5	ug/L		10/15/13 11:15	10/21/13 00:41	5
Pyrene	ND		54	2.0	ug/L		10/15/13 11:15	10/21/13 00:41	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*	*D*	*36 - 120*	*10/15/13 11:15*	*10/21/13 00:41*	*5*
2-Fluorophenol	*85*	*D*	*30 - 120*	*10/15/13 11:15*	*10/21/13 00:41*	*5*
2,4,6-Tribromophenol	*95*	*D*	*50 - 120*	*10/15/13 11:15*	*10/21/13 00:41*	*5*
Nitrobenzene-d5	*92*	*D*	*45 - 120*	*10/15/13 11:15*	*10/21/13 00:41*	*5*
Phenol-d5	*87*	*D*	*36 - 120*	*10/15/13 11:15*	*10/21/13 00:41*	*5*
Terphenyl-d14	*44*	*D*	*41 - 120*	*10/15/13 11:15*	*10/21/13 00:41*	*5*

Method: 608 - PP Pesticides/PCBs

Client Sample ID: CROW CREEK INFLUENT — **Lab Sample ID: 280-47771-1**
Date Collected: 10/10/13 09:10 — **Matrix: Water**
Date Received: 10/11/13 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	ND		0.11	0.016	ug/L		10/15/13 20:41	10/21/13 16:39	1
4,4'-DDE	ND		0.11	0.0082	ug/L		10/15/13 20:41	10/21/13 16:39	1
4,4'-DDD	ND		0.11	0.0084	ug/L		10/15/13 20:41	10/21/13 16:39	1
Aldrin	ND		0.054	0.0064	ug/L		10/15/13 20:41	10/21/13 16:39	1
Dieldrin	ND		0.11	0.0069	ug/L		10/15/13 20:41	10/21/13 16:39	1
Chlordane (technical)	ND		0.054	0.0058	ug/L		10/15/13 20:41	10/21/13 16:39	1
alpha-BHC	ND		0.054	0.0058	ug/L		10/15/13 20:41	10/21/13 16:39	1
beta-BHC	ND		0.054	0.0095	ug/L		10/15/13 20:41	10/21/13 16:39	1
delta-BHC	ND		0.054	0.0063	ug/L		10/15/13 20:41	10/21/13 16:39	1
gamma-BHC (Lindane)	ND		0.054	0.0075	ug/L		10/15/13 20:41	10/21/13 16:39	1
Endosulfan I	ND		0.054	0.0063	ug/L		10/15/13 20:41	10/21/13 16:39	1
Endosulfan sulfate	ND		0.11	0.0062	ug/L		10/15/13 20:41	10/21/13 16:39	1
Endosulfan II	ND		0.11	0.0076	ug/L		10/15/13 20:41	10/21/13 16:39	1
Endrin	ND		0.11	0.0086	ug/L		10/15/13 20:41	10/21/13 16:39	1
Endrin aldehyde	ND		0.11	0.0096	ug/L		10/15/13 20:41	10/21/13 16:39	1
Heptachlor	ND		0.054	0.0084	ug/L		10/15/13 20:41	10/21/13 16:39	1
Heptachlor epoxide	ND		0.054	0.0082	ug/L		10/15/13 20:41	10/21/13 16:39	1
PCB-1221	ND		1.1	0.23	ug/L		10/15/13 20:41	10/18/13 12:01	1
PCB-1232	ND		1.1	0.18	ug/L		10/15/13 20:41	10/18/13 12:01	1
PCB-1242	ND		1.1	0.11	ug/L		10/15/13 20:41	10/18/13 12:01	1
PCB-1248	ND		1.1	0.099	ug/L		10/15/13 20:41	10/18/13 12:01	1
PCB-1254	ND		1.1	0.12	ug/L		10/15/13 20:41	10/18/13 12:01	1
PCB-1016	ND		1.1	0.13	ug/L		10/15/13 20:41	10/18/13 12:01	1
PCB-1260	ND		1.1	0.17	ug/L		10/15/13 20:41	10/18/13 12:01	1
Toxaphene	ND		2.2	0.40	ug/L		10/15/13 20:41	10/21/13 16:39	1
alpha-Chlordane	ND		0.054	0.0058	ug/L		10/15/13 20:41	10/21/13 16:39	1
gamma-Chlordane	ND		0.054	0.0099	ug/L		10/15/13 20:41	10/21/13 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*63*		*34 - 122*	*10/15/13 20:41*	*10/18/13 12:01*	*1*
DCB Decachlorobiphenyl	*63*		*34 - 122*	*10/15/13 20:41*	*10/21/13 16:39*	*1*
Tetrachloro-m-xylene	*82*		*28 - 115*	*10/15/13 20:41*	*10/18/13 12:01*	*1*
Tetrachloro-m-xylene	*79*		*28 - 115*	*10/15/13 20:41*	*10/21/13 16:39*	*1*

Method: 1631E - Mercury, Low Level (CVAFS)

Client Sample ID: CROW CREEK INFLUENT — **Lab Sample ID: 280-47771-1**
Date Collected: 10/10/13 09:10 — **Matrix: Water**
Date Received: 10/11/13 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	100		2.5	1.0	ng/L		10/15/13 15:45	10/17/13 12:19	1

Client Sample ID: CROW CREEK INFLUENT FIELD BLANK — **Lab Sample ID: 280-47771-2**
Date Collected: 10/10/13 09:15 — **Matrix: Water**
Date Received: 10/11/13 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.50	0.20	ng/L		10/15/13 15:45	10/17/13 12:27	1

Client Sample Results

Client: Cheyenne Board of Public Utilities
Project/Site: 4th Quarter 2013 - Crow Creek Influent

TestAmerica Job ID: 280-47771-1

General Chemistry

Client Sample ID: CROW CREEK INFLUENT
Date Collected: 10/10/13 09:10
Date Received: 10/11/13 09:00

Lab Sample ID: 280-47771-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	93		15	1.3	mg/L			10/17/13 19:39	5
Sulfate	61		25	1.2	mg/L			10/17/13 19:39	5
Phenols, Total	0.028		0.0070	0.0020	mg/L		10/17/13 16:57	10/18/13 16:49	1
Cyanide, Total	0.0028	J	0.010	0.0020	mg/L		10/17/13 08:52	10/17/13 15:43	1
Total Sulfide	ND	H	1.0	0.50	mg/L			10/18/13 19:53	1

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ANALYTICAL RESULTS

DRY CREEK WWTP LABORATORY

Cheyenne BOPU
8911 Campstool Road
Cheyenne, Wyoming 82007
Phone: 307-635-3163
Fax: 307-635-6833

OCT 29 2013
10-31-13

Date Sampled: 10-10-13
Date Received: 10-10-13
Sample Location: Crow Creek Effluent Qterly #4

Sampled By: KS
Date Reported: 10-22-13
Sample Matrix: Wastewater

Analyses	*Result*	*Units*	*Qual*	*RL*	*Method*	*Analysis Date/ By*
NONMETALS						
Ammonia as N	<0.1	mg/l		0.1	SM 4500 NH_3-D	10/16/13 / mw
BOD_5 (Total)	5.7	mg/l		2.0	SM 5210 B	10/11/13 / kl
Hexavalent Chrome	<0.013	mg/l		0.013	SM 3500-Cr D	10-11-13 / kl
Oil & Grease (HEM)	ND	mg/l		5.0	EPA 1664A	10/22/13 / mw
pH	7.77	P.U.		NA	SM 4500H^+ B	On-site/ks
TPH (SGT-HEM)	ND	mg/l		5.0	EPA 1664A	10/22/13 / mw
Total Phosphorus	2.3	mg/l		0.1	EPA 365.1	10/15/13 / mw
TDS	495	mg/l		NA	SM 2520 B	10/10/13 / kl
TSS	13.0	mg/l		3.0	SM 2540-D	10-11-13/ kl
METALS - TOTAL						
Ag, Silver	ND	mg/l		0.005	EPA 200.7	10-17-13/ kl
As, Arsenic	ND	mg/l		0.010	EPA 200.7	10-17-13/ kl
Be, Beryllium	ND	mg/l		0.005	EPA 200.7	10-17-13/ kl
Cd, Cadmium	ND	mg/l		0.005	EPA 200.7	10-17-13/ kl
Cr, Chromium	ND	mg/l		0.005	EPA 200.7	10-17-13/ kl
Cu, Copper	0.018	mg/l		0.010	EPA 200.7	10-17-13/ kl
Mo, Molybdenum	ND	mg/l		0.005	EPA 200.7	10-17-13/ kl
Ni, Nickel	0.005	mg/l		0.005	EPA 200.7	10-17-13/ kl
Pb, Lead	ND	mg/l		0.005	EPA 200.7	10-17-13/ kl
Sb, Antimony	ND	mg/l		0.010	EPA 200.7	10-17-13/ kl
Selenium, Se	0.007	mg/l	2.557	0.003	EPA 200.7	10-17-13/ kl
Tl, Thallium	ND	mg/l		0.025	EPA 200.7	10-17-13/ kl
Zinc, Zn	0.036	mg/l		0.005	EPA 200.7	10-17-13/ kl

Comments:

Report Definitions: ND: Not detected at the reporting limit. NA: Not Analyzed QA/QC: Available in Dry Creek laboratory.

Kent Loader, Laboratory Supervisor

10-29-13
Date:

Detection Summary

Client: Cheyenne Board of Public Utilities
Project/Site: 4th Quarter 2013 - Crow Creek Effluent

TestAmerica Job ID: 280-47820-1

Client Sample ID: CROW CREEK EFFLUENT — Lab Sample ID: 280-47820-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	1.4	J	5.0	1.1	ug/L	1		624	Total/NA
Bis(2-ethylhexyl) phthalate	2.8	J	11	0.59	ug/L	1		625	Total/NA
Hg	6.9		0.50	0.20	ng/L	1		1631E	Total/NA
Chloride	95		15	1.3	mg/L	5		300.0	Total/NA
Sulfate	65		25	1.2	mg/L	5		300.0	Total/NA
Phenols, Total	0.0048	J	0.0070	0.0020	mg/L	1		420.1	Total/NA
Cyanide, Total	0.0041	J	0.010	0.0020	mg/L	1		SM 4500 CN E	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 280-47820-2

No Detections.

Client Sample ID: CROW CREEK EFFLUENT FIELD BLANK — Lab Sample ID: 280-47820-3

No Detections.

This Detection Summary does not include radiochemical test results.

Method: 624 - Volatile Organic Compounds (GC/MS)

Client Sample ID: CROW CREEK EFFLUENT — **Lab Sample ID: 280-47820-1**
Date Collected: 10/10/13 18:50 — **Matrix: Water**
Date Received: 10/12/13 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			10/12/13 16:39	1
Acrylonitrile	ND		100	17	ug/L			10/12/13 16:39	1
Benzene	ND		5.0	1.8	ug/L			10/12/13 16:39	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			10/12/13 16:39	1
Chlorobenzene	ND		5.0	2.3	ug/L			10/12/13 16:39	1
Chloroform	**1.4**	**J**	5.0	1.1	ug/L			10/12/13 16:39	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			10/12/13 16:39	1
Chloroethane	ND		10	2.0	ug/L			10/12/13 16:39	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			10/12/13 16:39	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			10/12/13 16:39	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			10/12/13 16:39	1
1,2-Dichloroethane	ND		5.0	1.3	ug/L			10/12/13 16:39	1
Chloromethane	ND		10	0.89	ug/L			10/12/13 16:39	1
Bromoform	ND		5.0	0.48	ug/L			10/12/13 16:39	1
Bromomethane	ND		10	1.5	ug/L			10/12/13 16:39	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			10/12/13 16:39	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			10/12/13 16:39	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			10/12/13 16:39	1
Ethylbenzene	ND		5.0	2.2	ug/L			10/12/13 16:39	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			10/12/13 16:39	1
Methylene Chloride	ND		5.0	2.0	ug/L			10/12/13 16:39	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			10/12/13 16:39	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			10/12/13 16:39	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			10/12/13 16:39	1
Tetrachloroethene	ND		5.0	2.7	ug/L			10/12/13 16:39	1
Toluene	ND		5.0	2.2	ug/L			10/12/13 16:39	1
Trichloroethene	ND		5.0	0.95	ug/L			10/12/13 16:39	1
Vinyl chloride	ND		10	1.3	ug/L			10/12/13 16:39	1
Xylenes, Total	ND		10	1.1	ug/L			10/12/13 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*73 - 122*		*10/12/13 16:39*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/12/13 16:39*	*1*
4-Bromofluorobenzene (Surr)	*105*		*79 - 119*		*10/12/13 16:39*	*1*

Client Sample ID: TRIP BLANK — **Lab Sample ID: 280-47820-2**
Date Collected: 10/10/13 19:02 — **Matrix: Water**
Date Received: 10/12/13 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			10/12/13 17:56	1
Acrylonitrile	ND		100	17	ug/L			10/12/13 17:56	1
Benzene	ND		5.0	1.8	ug/L			10/12/13 17:56	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			10/12/13 17:56	1
Chlorobenzene	ND		5.0	2.3	ug/L			10/12/13 17:56	1
Chloroform	ND		5.0	1.1	ug/L			10/12/13 17:56	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			10/12/13 17:56	1
Chloroethane	ND		10	2.0	ug/L			10/12/13 17:56	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			10/12/13 17:56	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			10/12/13 17:56	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			10/12/13 17:56	1

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: TRIP BLANK — **Lab Sample ID: 280-47820-2**
Date Collected: 10/10/13 19:02 — **Matrix: Water**
Date Received: 10/12/13 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		5.0	1.3	ug/L			10/12/13 17:56	1
Chloromethane	ND		10	0.89	ug/L			10/12/13 17:56	1
Bromoform	ND		5.0	0.48	ug/L			10/12/13 17:56	1
Bromomethane	ND		10	1.5	ug/L			10/12/13 17:56	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			10/12/13 17:56	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			10/12/13 17:56	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			10/12/13 17:56	1
Ethylbenzene	ND		5.0	2.2	ug/L			10/12/13 17:56	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			10/12/13 17:56	1
Methylene Chloride	ND		5.0	2.0	ug/L			10/12/13 17:56	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			10/12/13 17:56	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			10/12/13 17:56	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			10/12/13 17:56	1
Tetrachloroethene	ND		5.0	2.7	ug/L			10/12/13 17:56	1
Toluene	ND		5.0	2.2	ug/L			10/12/13 17:56	1
Trichloroethene	ND		5.0	0.95	ug/L			10/12/13 17:56	1
Vinyl chloride	ND		10	1.3	ug/L			10/12/13 17:56	1
Xylenes, Total	ND		10	1.1	ug/L			10/12/13 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*73 - 122*		*10/12/13 17:56*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*10/12/13 17:56*	*1*
4-Bromofluorobenzene (Surr)	*101*		*79 - 119*		*10/12/13 17:56*	*1*

Method: 625 - PPL SVOC

Client Sample ID: CROW CREEK EFFLUENT — **Lab Sample ID: 280-47820-1**
Date Collected: 10/10/13 18:50 — **Matrix: Water**
Date Received: 10/12/13 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		11	0.30	ug/L		10/15/13 11:15	10/20/13 23:20	1
Benzidine	ND		160	53	ug/L		10/15/13 11:15	10/20/13 23:20	1
1,2,4-Trichlorobenzene	ND		11	0.30	ug/L		10/15/13 11:15	10/20/13 23:20	1
Hexachlorobenzene	ND		11	0.70	ug/L		10/15/13 11:15	10/20/13 23:20	1
Bis(2-chloroethyl)ether	ND		11	0.43	ug/L		10/15/13 11:15	10/20/13 23:20	1
2-Chloronaphthalene	ND		11	0.27	ug/L		10/15/13 11:15	10/20/13 23:20	1
2-Chlorophenol	ND		11	2.1	ug/L		10/15/13 11:15	10/20/13 23:20	1
2,4,6-Trichlorophenol	ND		21	0.31	ug/L		10/15/13 11:15	10/20/13 23:20	1
3,3'-Dichlorobenzidine	ND		53	2.1	ug/L		10/15/13 11:15	10/20/13 23:20	1
Hexachloroethane	ND		11	2.2	ug/L		10/15/13 11:15	10/20/13 23:20	1
2,4-Dichlorophenol	ND		11	0.67	ug/L		10/15/13 11:15	10/20/13 23:20	1
2,4-Dimethylphenol	ND		11	0.61	ug/L		10/15/13 11:15	10/20/13 23:20	1
2,4-Dinitrotoluene	ND		11	1.8	ug/L		10/15/13 11:15	10/20/13 23:20	1
2,6-Dinitrotoluene	ND		11	2.0	ug/L		10/15/13 11:15	10/20/13 23:20	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		11	0.24	ug/L		10/15/13 11:15	10/20/13 23:20	1
Fluoranthene	ND		11	0.21	ug/L		10/15/13 11:15	10/20/13 23:20	1
4-Bromophenyl phenyl ether	ND		11	0.45	ug/L		10/15/13 11:15	10/20/13 23:20	1
4-Chlorophenyl phenyl ether	ND		11	1.8	ug/L		10/15/13 11:15	10/20/13 23:20	1
bis (2-chloroisopropyl) ether	ND		11	0.30	ug/L		10/15/13 11:15	10/20/13 23:20	1

Method: 625 - PPL SVOC (Continued)

Client Sample ID: CROW CREEK EFFLUENT
Date Collected: 10/10/13 18:50
Date Received: 10/12/13 09:00

Lab Sample ID: 280-47820-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		11	1.0	ug/L		10/15/13 11:15	10/20/13 23:20	1
p-Chloro-m-cresol	ND		11	2.5	ug/L		10/15/13 11:15	10/20/13 23:20	1
Hexachlorobutadiene	ND		11	3.5	ug/L		10/15/13 11:15	10/20/13 23:20	1
Hexachlorocyclopentadiene	ND	*	53	1.6	ug/L		10/15/13 11:15	10/20/13 23:20	1
Isophorone	ND		11	0.22	ug/L		10/15/13 11:15	10/20/13 23:20	1
Naphthalene	ND		11	0.31	ug/L		10/15/13 11:15	10/20/13 23:20	1
Nitrobenzene	ND		11	0.85	ug/L		10/15/13 11:15	10/20/13 23:20	1
2-Nitrophenol	ND		21	0.41	ug/L		10/15/13 11:15	10/20/13 23:20	1
1,2-Dichlorobenzene	ND		11	0.24	ug/L		10/15/13 11:15	10/20/13 23:20	1
2,4-Dinitrophenol	ND		63	11	ug/L		10/15/13 11:15	10/20/13 23:20	1
1,3-Dichlorobenzene	ND		11	0.32	ug/L		10/15/13 11:15	10/20/13 23:20	1
4-Nitrophenol	ND		53	1.3	ug/L		10/15/13 11:15	10/20/13 23:20	1
1,4-Dichlorobenzene	ND		11	0.34	ug/L		10/15/13 11:15	10/20/13 23:20	1
4,6-Dinitro-o-cresol	ND		63	4.2	ug/L		10/15/13 11:15	10/20/13 23:20	1
N-Nitrosodimethylamine	ND		11	0.31	ug/L		10/15/13 11:15	10/20/13 23:20	1
N-Nitrosodi-n-propylamine	ND		11	0.37	ug/L		10/15/13 11:15	10/20/13 23:20	1
N-Nitrosodiphenylamine	ND		11	0.46	ug/L		10/15/13 11:15	10/20/13 23:20	1
Pentachlorophenol	ND		63	21	ug/L		10/15/13 11:15	10/20/13 23:20	1
Phenol	ND		11	2.1	ug/L		10/15/13 11:15	10/20/13 23:20	1
Bis(2-ethylhexyl) phthalate	**2.8**	**J**	11	0.59	ug/L		10/15/13 11:15	10/20/13 23:20	1
Butyl benzyl phthalate	ND		11	1.1	ug/L		10/15/13 11:15	10/20/13 23:20	1
Di-n-butyl phthalate	ND		11	1.2	ug/L		10/15/13 11:15	10/20/13 23:20	1
Di-n-octyl phthalate	ND		11	0.37	ug/L		10/15/13 11:15	10/20/13 23:20	1
Diethyl phthalate	ND		11	0.40	ug/L		10/15/13 11:15	10/20/13 23:20	1
Dimethyl phthalate	ND		11	0.22	ug/L		10/15/13 11:15	10/20/13 23:20	1
Benzo[a]anthracene	ND		11	0.37	ug/L		10/15/13 11:15	10/20/13 23:20	1
Benzo[a]pyrene	ND		11	0.33	ug/L		10/15/13 11:15	10/20/13 23:20	1
3,4-Benzofluoranthene	ND		11	0.56	ug/L		10/15/13 11:15	10/20/13 23:20	1
Benzo[k]fluoranthene	ND		11	0.49	ug/L		10/15/13 11:15	10/20/13 23:20	1
Anthracene	ND		11	0.44	ug/L		10/15/13 11:15	10/20/13 23:20	1
Acenaphthylene	ND		11	0.52	ug/L		10/15/13 11:15	10/20/13 23:20	1
Chrysene	ND		11	0.57	ug/L		10/15/13 11:15	10/20/13 23:20	1
Benzo[g,h,i]perylene	ND		11	0.53	ug/L		10/15/13 11:15	10/20/13 23:20	1
Fluorene	ND		11	0.33	ug/L		10/15/13 11:15	10/20/13 23:20	1
Phenanthrene	ND		11	0.27	ug/L		10/15/13 11:15	10/20/13 23:20	1
Dibenz(a,h)anthracene	ND		11	0.54	ug/L		10/15/13 11:15	10/20/13 23:20	1
Indeno[1,2,3-cd]pyrene	ND		11	0.69	ug/L		10/15/13 11:15	10/20/13 23:20	1
Pyrene	ND		11	0.39	ug/L		10/15/13 11:15	10/20/13 23:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*90*		*36 - 120*	*10/15/13 11:15*	*10/20/13 23:20*	*1*
2-Fluorophenol	*81*		*30 - 120*	*10/15/13 11:15*	*10/20/13 23:20*	*1*
2,4,6-Tribromophenol	*108*		*50 - 120*	*10/15/13 11:15*	*10/20/13 23:20*	*1*
Nitrobenzene-d5	*90*		*45 - 120*	*10/15/13 11:15*	*10/20/13 23:20*	*1*
Phenol-d5	*85*		*36 - 120*	*10/15/13 11:15*	*10/20/13 23:20*	*1*
Terphenyl-d14	*41*		*41 - 120*	*10/15/13 11:15*	*10/20/13 23:20*	*1*

Method: 608 - PP Pesticides/PCBs

Client Sample ID: CROW CREEK EFFLUENT — **Lab Sample ID: 280-47820-1**
Date Collected: 10/10/13 18:50 — **Matrix: Water**
Date Received: 10/12/13 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	ND		0.10	0.015	ug/L		10/15/13 20:41	10/18/13 15:01	1
4,4'-DDE	ND		0.10	0.0078	ug/L		10/15/13 20:41	10/18/13 15:01	1
4,4'-DDD	ND		0.10	0.0080	ug/L		10/15/13 20:41	10/18/13 15:01	1
Aldrin	ND		0.052	0.0061	ug/L		10/15/13 20:41	10/18/13 15:01	1
Dieldrin	ND		0.10	0.0066	ug/L		10/15/13 20:41	10/18/13 15:01	1
Chlordane (technical)	ND		0.052	0.0055	ug/L		10/15/13 20:41	10/18/13 15:01	1
alpha-BHC	ND		0.052	0.0055	ug/L		10/15/13 20:41	10/18/13 15:01	1
beta-BHC	ND		0.052	0.0091	ug/L		10/15/13 20:41	10/18/13 15:01	1
delta-BHC	ND		0.052	0.0060	ug/L		10/15/13 20:41	10/18/13 15:01	1
gamma-BHC (Lindane)	ND		0.052	0.0072	ug/L		10/15/13 20:41	10/18/13 15:01	1
Endosulfan I	ND		0.052	0.0060	ug/L		10/15/13 20:41	10/18/13 15:01	1
Endosulfan sulfate	ND		0.10	0.0059	ug/L		10/15/13 20:41	10/18/13 15:01	1
Endosulfan II	ND		0.10	0.0073	ug/L		10/15/13 20:41	10/18/13 15:01	1
Endrin	ND		0.10	0.0082	ug/L		10/15/13 20:41	10/18/13 15:01	1
Endrin aldehyde	ND		0.10	0.0092	ug/L		10/15/13 20:41	10/18/13 15:01	1
Heptachlor	ND		0.052	0.0080	ug/L		10/15/13 20:41	10/18/13 15:01	1
Heptachlor epoxide	ND		0.052	0.0078	ug/L		10/15/13 20:41	10/18/13 15:01	1
PCB-1221	ND		1.0	0.22	ug/L		10/15/13 20:41	10/18/13 12:23	1
PCB-1232	ND		1.0	0.17	ug/L		10/15/13 20:41	10/18/13 12:23	1
PCB-1242	ND		1.0	0.11	ug/L		10/15/13 20:41	10/18/13 12:23	1
PCB-1248	ND		1.0	0.095	ug/L		10/15/13 20:41	10/18/13 12:23	1
PCB-1254	ND		1.0	0.12	ug/L		10/15/13 20:41	10/18/13 12:23	1
PCB-1016	ND		1.0	0.13	ug/L		10/15/13 20:41	10/18/13 12:23	1
PCB-1260	ND		1.0	0.17	ug/L		10/15/13 20:41	10/18/13 12:23	1
Toxaphene	ND		2.1	0.38	ug/L		10/15/13 20:41	10/18/13 15:01	1
alpha-Chlordane	ND		0.052	0.0055	ug/L		10/15/13 20:41	10/18/13 15:01	1
gamma-Chlordane	ND		0.052	0.0095	ug/L		10/15/13 20:41	10/18/13 15:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*82*		*34 - 122*	*10/15/13 20:41*	*10/18/13 12:23*	*1*
DCB Decachlorobiphenyl	*78*		*34 - 122*	*10/15/13 20:41*	*10/18/13 15:01*	*1*
Tetrachloro-m-xylene	*79*		*28 - 115*	*10/15/13 20:41*	*10/18/13 12:23*	*1*
Tetrachloro-m-xylene	*59*		*28 - 115*	*10/15/13 20:41*	*10/18/13 15:01*	*1*

Method: 1631E - Mercury, Low Level (CVAFS)

Client Sample ID: CROW CREEK EFFLUENT — **Lab Sample ID: 280-47820-1**
Date Collected: 10/10/13 18:50 — **Matrix: Water**
Date Received: 10/12/13 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	6.9		0.50	0.20	ng/L		10/15/13 15:45	10/17/13 12:35	1

Client Sample ID: CROW CREEK EFFLUENT FIELD BLANK — **Lab Sample ID: 280-47820-3**
Date Collected: 10/10/13 19:15 — **Matrix: Water**
Date Received: 10/12/13 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.50	0.20	ng/L		10/15/13 15:45	10/17/13 12:43	1

Client Sample Results

Client: Cheyenne Board of Public Utilities
Project/Site: 4th Quarter 2013 - Crow Creek Effluent

TestAmerica Job ID: 280-47820-1

General Chemistry

Client Sample ID: CROW CREEK EFFLUENT
Date Collected: 10/10/13 18:50
Date Received: 10/12/13 09:00

Lab Sample ID: 280-47820-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	95		15	1.3	mg/L			10/17/13 19:22	5
Sulfate	65		25	1.2	mg/L			10/17/13 19:22	5
Phenols, Total	0.0048	J	0.0070	0.0020	mg/L		10/17/13 16:57	10/18/13 16:49	1
Cyanide, Total	0.0041	J	0.010	0.0020	mg/L		10/17/13 08:52	10/17/13 15:44	1
Total Sulfide	ND	H	1.0	0.50	mg/L			10/18/13 19:53	1

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