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Wastewater Unit

Industrial Pretreatment Program
Annual Report on POTW Implementation

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

(PSSD) (PSED)

CHEYENNE - DRY CREEK	WY	22934

NPDES Permit Exp. Date: 10/31/2013

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

Pretreatment Contact: ~~Natalie Dunn~~ Nathan Kie
Pretreatment Coordinator

NPDES Permit Signator Jim Hughes
Plant Manager

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

Site Address of POTW: (If different from above) 8911 Campstool Road, 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? ___ YES X NO

What Parameter(s): _____

Sludge Disposal Method(s) LAND APPLICATION

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	Y	Anaerobic Digestion	Y
Trickling Filter		Aerobic Digestion	
Oxidation Ditch		Chlorination	
Biotowers		Dechlorination	
		UV Disinfection	Y

Other (Specify): INTEGRATED FIXED FILM ACTI

POTW Design Flow 10.5 MGD

Total SIU Flow: 0 MGD

Actual POTW Flow ~~5.2~~ 4.374 MGD

% Industrial Flow: 0

POTW Organic (BOD) Design Capacity 17200 lbs/day

POTW TSS Design Capacity 19940 lbs/day

POTW Ammonia (NH3) Design Capacity 2460 lbs/day

Actual or Estimated total Flow for Commercial (Non-SIU) Dischargers 0.782 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:	Ø	(CIUs)
	SIUs:	Ø	(SIUs)
	# of Other Permitted IUs:	Ø	
	Number of Zero-Discharging CIUs	Ø	
	Number of Permitted Zero-Discharging CIUs	1	

This is actually a zero-discharging SIU.

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

5. # of SIUs in SNC anytime during the reporting year: Ø (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	Ø	Ø (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	Ø (FENF)
Number of different IUs with formal enforcement actions taken during the reporting year.	Ø	Ø (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)	Ø (IUPN)
Total penalties collected:	Ø (PAMT)	Ø (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: Ø (SVPU)

IV. Compliance Monitoring

	Non-SIUs	SIUs
1. # of Inspections during the reporting year:	Ø	1
2. # of SIUs not inspected during the reporting year:		Ø (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	☒	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 waste from commercial sources	☐		
Hauled categorical waste	☐		
Hauled Grease Interceptor/Trap waste	☐		

Other Unique Waste (Specify): Primary and Secondary Sludge from Crow Creek WRF.

Hauled Industrial Wastes are recieved into drying beds, not 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

N/A

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 Crow Creek Report.

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.

N/A

ATTACHMENT D

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

N/A - Please see note on next page.

ATTACHMENT D: DRY 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
   C. All non-permitted (if any) zero discharging CIUs
   D. All non-permitted SIUs (if any)

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.

Current

CIUs/SIUs

CHEYENNE - DRY 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?
EMERALD FOAM CONTROL INC.	CITY	2899	417	0	0	FOOD GRADE FOAM CONTROL ADDITIVES; formerly LUBRIZOL FOAM CONTROL ADDITIVES,ZERO DISCHARGER	NO

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

None for Dry Creek Plant, Please see Crow Creek Report.

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)	6	6	

CHEYENNE - DRY 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		4.606	9.49
Cadmium	5/14/07	0.013 ✓	mg/l	D		mg/l	M		0.163	0.58
Chromium - T	5/14/07	5.129 ✓	mg/l	D		mg/l	M		51.941	104.25
Chromium (III)			mg/l	D		mg/l	M			
Chromium (VI)	5/14/07	1.34 ✓	lbs/d	D		mg/l	M		2.631	3
Copper	5/14/07	0.19 ✓	mg/l	D		mg/l	M		2.61	6.03
Lead	5/14/07	0.18 ✓	mg/l	D		mg/l	M		1.341	3.28
Mercury	5/14/07	0.012 ✓	mg/l	D		mg/l	M		0.189	0.38
Molybdenum	5/14/07	0.638 ✓	mg/l	D		mg/l	M		6.43	13.03
Nickel	5/14/07	0.336 ✓	mg/l	D		mg/l	M		5.228	9.2
Selenium	5/14/07	0.583 ✓	lbs/day	D		mg/l	M		0.8197	1.17
Silver	5/14/07	0.161 ✓	mg/l	D		mg/l	M		1.9304	2.99
Zinc	5/14/07	1.339 ✓	mg/l	D		mg/l	M		63.256	76.39

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 - DRY 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					4722	17200
TSS	5/14/07	700	MG/L	D					8639	19940
Ammonia	5/14/07	60	MG/L	D					917	2460
Oil Grease	5/14/2007	100	MG/L	D						
Pet Oil/Grease	5/14/07	50	MG/L	D						
Benzene	5/14/07	0.05	MG/L	D						
BTEX	5/14/07	0.75	MG/L	D						
PCE										
TKN	5/14/07	70	MG/L	D					1183	3070

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

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	0	0	6.2	9.49	NO
Cadmium	0	0	2.7	0.58	NO
Chromium - T	0.321	0.08	18.5	104.25	NO
Chromium (III)					
Chromium (VI)	2.660	1.007		3	NO
Copper	11.69	6.196	782	6.03	Yes
Lead	0.55	0.396	58.8	3.28	NO
Mercury	0.004	0.002	2.7	0.38	NO
Molybdenum	0.366	0.169	2.6	13.03	NO
Nickel	0.366	0.28	14.5	9.2	NO
Selenium	0.596	0.488	13.9	1.17	NO
Silver	0	0	13.5	2.99	NO
Zinc	17.614	8.653	653	76.39	NO
BOD	20,773	15,075		17200	Yes
TSS	34,035	22,519		19940	Yes
Ammonia	2338	1682	12,000	2460	NO
Oil and Grease	1375	889			
Pet Oil/Grease	0	0			
Antimony	0	0			
Berillium	0	0			
Thallium	1.279	0.319			
Cyanide	0.274	0.216			
Phenols	8.22	2.68			

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.

ATTACHMENT K: DRY CREEK 2013

The highest influent data exceeded the approved MAHL for: Copper, BOD and TSS.

Cu:

Copper is believed to be contributed primarily by residential sources.

A local limits update has been conducted and the new limits are anticipated to go into effect in 2014. The new copper limit is more stringent and should help control the copper contributed by industrial sources.

Additionally, a copper study is included as part of the Crow Creek WRF Improvements Project to examine the copper issues. Strategies to reduce copper concentrations coming into the WRF will be examined and/or suggestions to enhance copper removal will be provided.

BOD & TSS:

The Integrated Fixed Film Activated Sludge (IFAS) Treatment System at the Dry Creek Facility has provided higher removal efficiencies. The plant exceeds the removal efficiency originally anticipated by the engineering design and results have been well below NPDES permit limits. Biweekly monitoring has illustrated that the plant can treat the increased BOD and TSS loadings without affecting the quality of the effluent.

It appears that the BOD and TSS MAHLs were conservatively estimated by the design engineer. An evaluation and update of these MAHLs is part of the Cheyenne BOPU Master Plan.

CHEYENNE - DRY CREEK

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

Type of Modification		Date of PN	Approva
DSS/PIRT		02/04/92	05/28/92
LOCLIM		12/13/95	01/29/96
PROGRAM APPROVAL			03/28/86
Legal Authority	Rules for oil/water separators, sand interceptors, gr	07/17/99	
Rules for Oil/Water Separators	Rules for Oil/Water Separators, sand interceptors,	07/17/99	10/07/99
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 Enforcement 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: 03-11-13
Date Received: 03-11-13
Sample Location: Dry Creek Influent Qterly #1

Sampled By: ND
Date Reported: 04-09-13
Sample Matrix: Wastewater

Analyses	*Result*	*Units*	*Qual*	*RL*	*Method*	*Analysis Date/ By*
NONMETALS						
Ammonia as N	29.7	mg/l		0.1	SM 4500 NH_3-D	03/13/13 / kl
BOD_5 (Total)	352	mg/l		2.0	SM 5210 B	03/13/13 / mw
Hexavalent Chrome	ND	mg/l		0.013	SM 3500-Cr D	03/12/13 / kl
Oil & Grease (HEM)	30.1	mg/l		5.0	EPA 1664A	03/20/13 / mw
pH	7.9	P.U.		NA	SM 4500H^+ B	On-site/nd
TPH (SGT-HEM)	ND	mg/l		5.0	EPA 1664A	03/20/13 / mw
Total Phosphorus	6.6	mg/l		0.1	EPA 365.1	04/05/13 / kl
TDS	654	mg/l		NA	SM 2520 B	03/13/13 / mw
TSS	308	mg/l		3.0	SM 2540-D	03-13-13/ 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	0.096	mg/l		0.010	EPA 200.7	04-05-13/ kl
Mo, Molybdenum	ND	mg/l		0.005	EPA 200.7	04-05-13/ kl
Ni, Nickel	0.008	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	0.008	mg/l		0.003	EPA 200.7	04-05-13/ kl
Tl, Thallium	0.028	mg/l	1	0.025	EPA 200.7	04-05-13/ kl
Zinc, Zn	0.120	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 Louder, Laboratory Supervisor

4-9-13
Date:

Detection Summary

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

TestAmerica Job ID: 280-39785-1

Client Sample ID: DRY CREEK INFLUENT — Lab Sample ID: 280-39785-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	18		5.0	1.8	ug/L	1		624	Total/NA
Chloroform	3.7	J	5.0	1.1	ug/L	1		624	Total/NA
Ethylbenzene	16		5.0	2.2	ug/L	1		624	Total/NA
Methylene Chloride	2.3	J	5.0	2.0	ug/L	1		624	Total/NA
Toluene	87		5.0	2.2	ug/L	1		624	Total/NA
Xylenes, Total	100		10	1.1	ug/L	1		624	Total/NA
Naphthalene	8.4	J	50	1.4	ug/L	5		625	Total/NA
Phenol	180		50	10	ug/L	5		625	Total/NA
Bis(2-ethylhexyl) phthalate	26	J	50	2.8	ug/L	5		625	Total/NA
Diethyl phthalate	3.8	J	50	1.9	ug/L	5		625	Total/NA
beta-BHC - RERA	0.018	J H	0.049	0.0086	ug/L	1		608	Total/NA
Hg	60		2.5	1.0	ng/L	1		1631E	Total/NA
Chloride	85		15	1.3	mg/L	5		300.0	Total/NA
Sulfate	41		5.0	0.23	mg/L	1		300.0	Total/NA
Phenols, Total	0.18		0.035	0.010	mg/L	5		420.1	Total/NA
Cyanide, Total	0.0060	J B	0.010	0.0020	mg/L	1		SM 4500 CN E	Total/NA
Total Sulfide	2.2		1.0	0.50	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: DRY CREEK INFLUENT FIELD BLANK — Lab Sample ID: 280-39785-2

No Detections.

Client Sample ID: TRIP BLANK — Lab Sample ID: 280-39785-3

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

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

TestAmerica Job ID: 280-39785-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL DEN
625	PPL SVOC	40CFR136A	TAL DEN
608	PP Pesticides/PCBs	40CFR136A	TAL DEN
1631E	Mercury, Low Level (CVAFS)	EPA	TAL PEN
300.0	Chloride & Sulfate	40CFR136A	TAL DEN
420.1	Phenolics, Total Recoverable	MCAWW	TAL DEN
SM 4500 CN E	Cyanide, Total	SM	TAL DEN
SM 4500 S2 F	Sulfide, Total	SM	TAL DEN

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

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

TestAmerica Job ID: 280-39785-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-39785-1	DRY CREEK INFLUENT	Water	03/11/13 13:25	03/12/13 10:00
280-39785-2	DRY CREEK INFLUENT FIELD BLANK	Water	03/11/13 14:00	03/12/13 10:00
280-39785-3	TRIP BLANK	Water	03/11/13 13:25	03/12/13 10:00

Client Sample Results

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

TestAmerica Job ID: 280-39785-1

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

Client Sample ID: DRY CREEK INFLUENT
Date Collected: 03/11/13 13:25
Date Received: 03/12/13 10:00

Lab Sample ID: 280-39785-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			03/13/13 08:17	1
Acrylonitrile	ND		100	17	ug/L			03/13/13 08:17	1
Benzene	**18**		5.0	1.8	ug/L			03/13/13 08:17	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			03/13/13 08:17	1
Chlorobenzene	ND		5.0	2.3	ug/L			03/13/13 08:17	1
Chloroform	**3.7**	J	5.0	1.1	ug/L			03/13/13 08:17	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			03/13/13 08:17	1
Chloroethane	ND		10	2.0	ug/L			03/13/13 08:17	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			03/13/13 08:17	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			03/13/13 08:17	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			03/13/13 08:17	1
1,2-Dichloroethane	ND		5.0	1.3	ug/L			03/13/13 08:17	1
Chloromethane	ND		10	0.89	ug/L			03/13/13 08:17	1
Bromoform	ND		5.0	0.48	ug/L			03/13/13 08:17	1
Bromomethane	ND		10	1.5	ug/L			03/13/13 08:17	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			03/13/13 08:17	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			03/13/13 08:17	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			03/13/13 08:17	1
Ethylbenzene	**16**		5.0	2.2	ug/L			03/13/13 08:17	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			03/13/13 08:17	1
Methylene Chloride	**2.3**	J	5.0	2.0	ug/L			03/13/13 08:17	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			03/13/13 08:17	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			03/13/13 08:17	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			03/13/13 08:17	1
Tetrachloroethene	ND		5.0	2.7	ug/L			03/13/13 08:17	1
Toluene	**87**		5.0	2.2	ug/L			03/13/13 08:17	1
Trichloroethene	ND		5.0	0.95	ug/L			03/13/13 08:17	1
Vinyl chloride	ND		10	1.3	ug/L			03/13/13 08:17	1
Xylenes, Total	**100**		10	1.1	ug/L			03/13/13 08:17	1

18
87
16
100
221

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*73 - 122*		*03/13/13 08:17*	*1*
Toluene-d8 (Surr)	*89*		*80 - 120*		*03/13/13 08:17*	*1*
4-Bromofluorobenzene (Surr)	*101*		*79 - 119*		*03/13/13 08:17*	*1*

Client Sample ID: TRIP BLANK
Date Collected: 03/11/13 13:25
Date Received: 03/12/13 10:00

Lab Sample ID: 280-39785-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			03/13/13 09:26	1
Acrylonitrile	ND		100	17	ug/L			03/13/13 09:26	1
Benzene	ND		5.0	1.8	ug/L			03/13/13 09:26	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			03/13/13 09:26	1
Chlorobenzene	ND		5.0	2.3	ug/L			03/13/13 09:26	1
Chloroform	ND		5.0	1.1	ug/L			03/13/13 09:26	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			03/13/13 09:26	1
Chloroethane	ND		10	2.0	ug/L			03/13/13 09:26	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			03/13/13 09:26	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			03/13/13 09:26	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			03/13/13 09:26	1

Client Sample Results

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

TestAmerica Job ID: 280-39785-1

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

Client Sample ID: TRIP BLANK
Date Collected: 03/11/13 13:25
Date Received: 03/12/13 10:00

Lab Sample ID: 280-39785-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		5.0	1.3	ug/L			03/13/13 09:26	1
Chloromethane	ND		10	0.89	ug/L			03/13/13 09:26	1
Bromoform	ND		5.0	0.48	ug/L			03/13/13 09:26	1
Bromomethane	ND		10	1.5	ug/L			03/13/13 09:26	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			03/13/13 09:26	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			03/13/13 09:26	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			03/13/13 09:26	1
Ethylbenzene	ND		5.0	2.2	ug/L			03/13/13 09:26	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			03/13/13 09:26	1
Methylene Chloride	ND		5.0	2.0	ug/L			03/13/13 09:26	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			03/13/13 09:26	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			03/13/13 09:26	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			03/13/13 09:26	1
Tetrachloroethene	ND		5.0	2.7	ug/L			03/13/13 09:26	1
Toluene	ND		5.0	2.2	ug/L			03/13/13 09:26	1
Trichloroethene	ND		5.0	0.95	ug/L			03/13/13 09:26	1
Vinyl chloride	ND		10	1.3	ug/L			03/13/13 09:26	1
Xylenes, Total	ND		10	1.1	ug/L			03/13/13 09:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*73 - 122*		*03/13/13 09:26*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*03/13/13 09:26*	*1*
4-Bromofluorobenzene (Surr)	*100*		*79 - 119*		*03/13/13 09:26*	*1*

Method: 625 - PPL SVOC

Client Sample ID: DRY CREEK INFLUENT
Date Collected: 03/11/13 13:25
Date Received: 03/12/13 10:00

Lab Sample ID: 280-39785-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		50	1.4	ug/L		03/18/13 11:55	03/25/13 23:51	5
Benzidine	ND		750	250	ug/L		03/18/13 11:55	03/25/13 23:51	5
1,2,4-Trichlorobenzene	ND		50	1.4	ug/L		03/18/13 11:55	03/25/13 23:51	5
Hexachlorobenzene	ND		50	3.3	ug/L		03/18/13 11:55	03/25/13 23:51	5
Bis(2-chloroethyl)ether	ND		50	2.0	ug/L		03/18/13 11:55	03/25/13 23:51	5
2-Chloronaphthalene	ND		50	1.3	ug/L		03/18/13 11:55	03/25/13 23:51	5
2-Chlorophenol	ND		50	10	ug/L		03/18/13 11:55	03/25/13 23:51	5
2,4,6-Trichlorophenol	ND		100	1.4	ug/L		03/18/13 11:55	03/25/13 23:51	5
3,3'-Dichlorobenzidine	ND		250	10	ug/L		03/18/13 11:55	03/25/13 23:51	5
Hexachloroethane	ND		50	10	ug/L		03/18/13 11:55	03/25/13 23:51	5
2,4-Dichlorophenol	ND		50	3.2	ug/L		03/18/13 11:55	03/25/13 23:51	5
2,4-Dimethylphenol	ND		50	2.9	ug/L		03/18/13 11:55	03/25/13 23:51	5
2,4-Dinitrotoluene	ND		50	8.3	ug/L		03/18/13 11:55	03/25/13 23:51	5
2,6-Dinitrotoluene	ND		50	9.4	ug/L		03/18/13 11:55	03/25/13 23:51	5
1,2-Diphenylhydrazine(as Azobenzene)	ND		50	1.1	ug/L		03/18/13 11:55	03/25/13 23:51	5
Fluoranthene	ND		50	1.0	ug/L		03/18/13 11:55	03/25/13 23:51	5
4-Bromophenyl phenyl ether	ND		50	2.1	ug/L		03/18/13 11:55	03/25/13 23:51	5
4-Chlorophenyl phenyl ether	ND		50	8.3	ug/L		03/18/13 11:55	03/25/13 23:51	5
bis (2-chloroisopropyl) ether	ND		50	1.4	ug/L		03/18/13 11:55	03/25/13 23:51	5
Bis(2-chloroethoxy)methane	ND		50	4.8	ug/L		03/18/13 11:55	03/25/13 23:51	5

Client Sample Results

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

TestAmerica Job ID: 280-39785-1

Method: 625 - PPL SVOC (Continued)

Client Sample ID: DRY CREEK INFLUENT
Date Collected: 03/11/13 13:25
Date Received: 03/12/13 10:00

Lab Sample ID: 280-39785-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Chloro-m-cresol	ND		50	12	ug/L		03/18/13 11:55	03/25/13 23:51	5
Hexachlorobutadiene	ND		50	16	ug/L		03/18/13 11:55	03/25/13 23:51	5
Hexachlorocyclopentadiene	ND		250	7.6	ug/L		03/18/13 11:55	03/25/13 23:51	5
Isophorone	ND		50	1.0	ug/L		03/18/13 11:55	03/25/13 23:51	5
Naphthalene	**8.4**	**J**	50	1.4	ug/L		03/18/13 11:55	03/25/13 23:51	5
Nitrobenzene	ND		50	4.0	ug/L		03/18/13 11:55	03/25/13 23:51	5
2-Nitrophenol	ND		100	1.9	ug/L		03/18/13 11:55	03/25/13 23:51	5
1,2-Dichlorobenzene	ND		50	1.1	ug/L		03/18/13 11:55	03/25/13 23:51	5
2,4-Dinitrophenol	ND		300	50	ug/L		03/18/13 11:55	03/25/13 23:51	5
1,3-Dichlorobenzene	ND		50	1.5	ug/L		03/18/13 11:55	03/25/13 23:51	5
4-Nitrophenol	ND		250	6.1	ug/L		03/18/13 11:55	03/25/13 23:51	5
1,4-Dichlorobenzene	ND		50	1.6	ug/L		03/18/13 11:55	03/25/13 23:51	5
4,6-Dinitro-o-cresol	ND		300	20	ug/L		03/18/13 11:55	03/25/13 23:51	5
N-Nitrosodimethylamine	ND		50	1.4	ug/L		03/18/13 11:55	03/25/13 23:51	5
N-Nitrosodi-n-propylamine	ND		50	1.7	ug/L		03/18/13 11:55	03/25/13 23:51	5
N-Nitrosodiphenylamine	ND		50	2.2	ug/L		03/18/13 11:55	03/25/13 23:51	5
Pentachlorophenol	ND		300	100	ug/L		03/18/13 11:55	03/25/13 23:51	5
Phenol	**180**		50	10	ug/L		03/18/13 11:55	03/25/13 23:51	5
Bis(2-ethylhexyl) phthalate	**26**	**J**	50	2.8	ug/L		03/18/13 11:55	03/25/13 23:51	5
Butyl benzyl phthalate	ND		50	5.0	ug/L		03/18/13 11:55	03/25/13 23:51	5
Di-n-butyl phthalate	ND		50	5.8	ug/L		03/18/13 11:55	03/25/13 23:51	5
Di-n-octyl phthalate	ND		50	1.7	ug/L		03/18/13 11:55	03/25/13 23:51	5
Diethyl phthalate	**3.8**	**J**	50	1.9	ug/L		03/18/13 11:55	03/25/13 23:51	5
Dimethyl phthalate	ND		50	1.0	ug/L		03/18/13 11:55	03/25/13 23:51	5
Benzo[a]anthracene	ND		50	1.7	ug/L		03/18/13 11:55	03/25/13 23:51	5
Benzo[a]pyrene	ND		50	1.5	ug/L		03/18/13 11:55	03/25/13 23:51	5
3,4-Benzofluoranthene	ND		50	2.6	ug/L		03/18/13 11:55	03/25/13 23:51	5
Benzo[k]fluoranthene	ND		50	2.3	ug/L		03/18/13 11:55	03/25/13 23:51	5
Anthracene	ND		50	2.1	ug/L		03/18/13 11:55	03/25/13 23:51	5
Acenaphthylene	ND		50	2.4	ug/L		03/18/13 11:55	03/25/13 23:51	5
Chrysene	ND		50	2.7	ug/L		03/18/13 11:55	03/25/13 23:51	5
Benzo[g,h,i]perylene	ND		50	2.5	ug/L		03/18/13 11:55	03/25/13 23:51	5
Fluorene	ND		50	1.5	ug/L		03/18/13 11:55	03/25/13 23:51	5
Phenanthrene	ND		50	1.3	ug/L		03/18/13 11:55	03/25/13 23:51	5
Dibenz(a,h)anthracene	ND		50	2.5	ug/L		03/18/13 11:55	03/25/13 23:51	5
Indeno[1,2,3-cd]pyrene	ND		50	3.2	ug/L		03/18/13 11:55	03/25/13 23:51	5
Pyrene	ND		50	1.8	ug/L		03/18/13 11:55	03/25/13 23:51	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*49*	*D*	*36 - 120*	*03/18/13 11:55*	*03/25/13 23:51*	*5*
2-Fluorophenol	*73*	*D*	*30 - 120*	*03/18/13 11:55*	*03/25/13 23:51*	*5*
2,4,6-Tribromophenol	*78*	*D*	*50 - 120*	*03/18/13 11:55*	*03/25/13 23:51*	*5*
Nitrobenzene-d5	*77*	*D*	*45 - 120*	*03/18/13 11:55*	*03/25/13 23:51*	*5*
Phenol-d5	*77*	*D*	*36 - 120*	*03/18/13 11:55*	*03/25/13 23:51*	*5*
Terphenyl-d14	*54*	*D*	*52 - 120*	*03/18/13 11:55*	*03/25/13 23:51*	*5*

Client Sample Results

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

TestAmerica Job ID: 280-39785-1

Method: 608 - PP Pesticides/PCBs

Client Sample ID: DRY CREEK INFLUENT
Date Collected: 03/11/13 13:25
Date Received: 03/12/13 10:00

Lab Sample ID: 280-39785-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	ND		1.1	0.16	ug/L		03/14/13 17:40	03/20/13 20:25	10
4,4'-DDE	ND		1.1	0.080	ug/L		03/14/13 17:40	03/20/13 20:25	10
4,4'-DDD	ND		1.1	0.082	ug/L		03/14/13 17:40	03/20/13 20:25	10
Aldrin	ND	*	0.53	0.063	ug/L		03/14/13 17:40	03/20/13 20:25	10
Dieldrin	ND		1.1	0.067	ug/L		03/14/13 17:40	03/20/13 20:25	10
Chlordane (technical)	ND		0.53	0.056	ug/L		03/14/13 17:40	03/20/13 20:25	10
alpha-BHC	ND		0.53	0.056	ug/L		03/14/13 17:40	03/20/13 20:25	10
beta-BHC	ND		0.53	0.092	ug/L		03/14/13 17:40	03/20/13 20:25	10
delta-BHC	ND		0.53	0.062	ug/L		03/14/13 17:40	03/20/13 20:25	10
gamma-BHC (Lindane)	ND		0.53	0.073	ug/L		03/14/13 17:40	03/20/13 20:25	10
Endosulfan I	ND		0.53	0.062	ug/L		03/14/13 17:40	03/20/13 20:25	10
Endosulfan sulfate	ND		1.1	0.060	ug/L		03/14/13 17:40	03/20/13 20:25	10
Endosulfan II	ND		1.1	0.074	ug/L		03/14/13 17:40	03/20/13 20:25	10
Endrin	ND		1.1	0.084	ug/L		03/14/13 17:40	03/20/13 20:25	10
Endrin aldehyde	ND		1.1	0.093	ug/L		03/14/13 17:40	03/20/13 20:25	10
Heptachlor	ND	*	0.53	0.082	ug/L		03/14/13 17:40	03/20/13 20:25	10
Heptachlor epoxide	ND		0.53	0.080	ug/L		03/14/13 17:40	03/20/13 20:25	10
PCB-1221	ND		1.1	0.23	ug/L		03/14/13 17:40	03/19/13 02:29	1
PCB-1232	ND		1.1	0.18	ug/L		03/14/13 17:40	03/19/13 02:29	1
PCB-1242	ND		1.1	0.11	ug/L		03/14/13 17:40	03/19/13 02:29	1
PCB-1248	ND		1.1	0.097	ug/L		03/14/13 17:40	03/19/13 02:29	1
PCB-1254	ND		1.1	0.12	ug/L		03/14/13 17:40	03/19/13 02:29	1
PCB-1016	ND		1.1	0.13	ug/L		03/14/13 17:40	03/19/13 02:29	1
PCB-1260	ND		1.1	0.17	ug/L		03/14/13 17:40	03/19/13 02:29	1
Toxaphene	ND		21	3.9	ug/L		03/14/13 17:40	03/20/13 20:25	10
alpha-Chlordane	ND		0.53	0.056	ug/L		03/14/13 17:40	03/20/13 20:25	10
gamma-Chlordane	ND		0.53	0.097	ug/L		03/14/13 17:40	03/20/13 20:25	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*43*		*34 - 122*	*03/14/13 17:40*	*03/19/13 02:29*	*1*
DCB Decachlorobiphenyl	*41*		*34 - 122*	*03/14/13 17:40*	*03/20/13 20:25*	*10*
Tetrachloro-m-xylene	*73*		*28 - 115*	*03/14/13 17:40*	*03/19/13 02:29*	*1*
Tetrachloro-m-xylene	*71*		*28 - 115*	*03/14/13 17:40*	*03/20/13 20:25*	*10*

Method: 608 - PP Pesticides/PCBs - RERA

Client Sample ID: DRY CREEK INFLUENT
Date Collected: 03/11/13 13:25
Date Received: 03/12/13 10:00

Lab Sample ID: 280-39785-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	ND	H	0.098	0.015	ug/L		03/22/13 17:08	03/25/13 20:00	1
4,4'-DDE	ND	H	0.098	0.0074	ug/L		03/22/13 17:08	03/25/13 20:00	1
4,4'-DDD	ND	H	0.098	0.0076	ug/L		03/22/13 17:08	03/25/13 20:00	1
Aldrin	ND	H	0.049	0.0058	ug/L		03/22/13 17:08	03/25/13 20:00	1
Dieldrin	ND	H	0.098	0.0062	ug/L		03/22/13 17:08	03/25/13 20:00	1
Chlordane (technical)	ND	H	0.049	0.0052	ug/L		03/22/13 17:08	03/25/13 20:00	1
alpha-BHC	ND	H	0.049	0.0052	ug/L		03/22/13 17:08	03/25/13 20:00	1
beta-BHC	0.018	J H	0.049	0.0086	ug/L		03/22/13 17:08	03/25/13 20:00	1
delta-BHC	ND	H	0.049	0.0057	ug/L		03/22/13 17:08	03/25/13 20:00	1
gamma-BHC (Lindane)	ND	H	0.049	0.0068	ug/L		03/22/13 17:08	03/25/13 20:00	1

Client Sample Results

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

TestAmerica Job ID: 280-39785-1

Method: 608 - PP Pesticides/PCBs - RERA (Continued)

Client Sample ID: DRY CREEK INFLUENT — **Lab Sample ID: 280-39785-1**
Date Collected: 03/11/13 13:25 — **Matrix: Water**
Date Received: 03/12/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan I	ND	H	0.049	0.0057	ug/L		03/22/13 17:08	03/25/13 20:00	1
Endosulfan sulfate	ND	H	0.098	0.0056	ug/L		03/22/13 17:08	03/25/13 20:00	1
Endosulfan II	ND	H	0.098	0.0069	ug/L		03/22/13 17:08	03/25/13 20:00	1
Endrin	ND	H	0.098	0.0078	ug/L		03/22/13 17:08	03/25/13 20:00	1
Endrin aldehyde	ND	H	0.098	0.0087	ug/L		03/22/13 17:08	03/25/13 20:00	1
Heptachlor	ND	H	0.049	0.0076	ug/L		03/22/13 17:08	03/25/13 20:00	1
Heptachlor epoxide	ND	H	0.049	0.0074	ug/L		03/22/13 17:08	03/25/13 20:00	1
Toxaphene	ND	H	2.0	0.36	ug/L		03/22/13 17:08	03/25/13 20:00	1
alpha-Chlordane	ND	H	0.049	0.0052	ug/L		03/22/13 17:08	03/25/13 20:00	1
gamma-Chlordane	ND	H	0.049	0.0089	ug/L		03/22/13 17:08	03/25/13 20:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*52*		*34 - 122*	*03/22/13 17:08*	*03/25/13 20:00*	*1*
Tetrachloro-m-xylene	*65*		*28 - 115*	*03/22/13 17:08*	*03/25/13 20:00*	*1*

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

Client Sample ID: DRY CREEK INFLUENT — **Lab Sample ID: 280-39785-1**
Date Collected: 03/11/13 13:25 — **Matrix: Water**
Date Received: 03/12/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	60		2.5	1.0	ng/L		03/15/13 17:20	03/18/13 12:10	1

Client Sample ID: DRY CREEK INFLUENT FIELD BLANK — **Lab Sample ID: 280-39785-2**
Date Collected: 03/11/13 14:00 — **Matrix: Water**
Date Received: 03/12/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.50	0.20	ng/L		03/15/13 17:20	03/18/13 12:17	1

General Chemistry

Client Sample ID: DRY CREEK INFLUENT — **Lab Sample ID: 280-39785-1**
Date Collected: 03/11/13 13:25 — **Matrix: Water**
Date Received: 03/12/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	85		15	1.3	mg/L			03/18/13 19:50	5
Sulfate	41		5.0	0.23	mg/L			03/18/13 18:43	1
Phenols, Total	0.18		0.035	0.010	mg/L		03/19/13 13:37	03/19/13 16:49	5
Cyanide, Total	0.0060	J B	0.010	0.0020	mg/L		03/18/13 11:43	03/19/13 11:03	1
Total Sulfide	2.2		1.0	0.50	mg/L			03/18/13 19:23	1

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

Lab Sample ID: MB 280-164461/3
Matrix: Water
Analysis Batch: 164461

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			03/13/13 07:29	1
Acrylonitrile	ND		100	17	ug/L			03/13/13 07:29	1
Benzene	ND		5.0	1.8	ug/L			03/13/13 07:29	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			03/13/13 07:29	1
Chlorobenzene	ND		5.0	2.3	ug/L			03/13/13 07:29	1
Chloroform	ND		5.0	1.1	ug/L			03/13/13 07:29	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			03/13/13 07:29	1
Chloroethane	ND		10	2.0	ug/L			03/13/13 07:29	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			03/13/13 07:29	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			03/13/13 07:29	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			03/13/13 07:29	1
1,2-Dichloroethane	ND		5.0	1.3	ug/L			03/13/13 07:29	1
Chloromethane	ND		10	0.89	ug/L			03/13/13 07:29	1
Bromoform	ND		5.0	0.48	ug/L			03/13/13 07:29	1
Bromomethane	ND		10	1.5	ug/L			03/13/13 07:29	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			03/13/13 07:29	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			03/13/13 07:29	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			03/13/13 07:29	1
Ethylbenzene	ND		5.0	2.2	ug/L			03/13/13 07:29	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			03/13/13 07:29	1
Methylene Chloride	ND		5.0	2.0	ug/L			03/13/13 07:29	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			03/13/13 07:29	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			03/13/13 07:29	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			03/13/13 07:29	1
Tetrachloroethene	ND		5.0	2.7	ug/L			03/13/13 07:29	1
Toluene	ND		5.0	2.2	ug/L			03/13/13 07:29	1
Trichloroethene	ND		5.0	0.95	ug/L			03/13/13 07:29	1
Vinyl chloride	ND		10	1.3	ug/L			03/13/13 07:29	1
Xylenes, Total	ND		10	1.1	ug/L			03/13/13 07:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*73 - 122*		*03/13/13 07:29*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*03/13/13 07:29*	*1*
4-Bromofluorobenzene (Surr)	*101*		*79 - 119*		*03/13/13 07:29*	*1*

Lab Sample ID: CCV 280-164461/1000 LCS
Matrix: Water
Analysis Batch: 164461

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acrolein	200	211		ug/L		105	38 - 188
Acrylonitrile	200	190		ug/L		95	48 - 149
Benzene	20.0	16.2		ug/L		81	37 - 151
Carbon tetrachloride	20.0	17.4		ug/L		87	70 - 140
Chlorobenzene	20.0	17.1		ug/L		85	37 - 160
Chloroform	20.0	16.5		ug/L		82	51 - 138
2-Chloroethyl vinyl ether	20.0	15.9		ug/L		80	10 - 305
Chloroethane	20.0	16.0		ug/L		80	14 - 230

Detection Summary

Cheyenne Board of Public Utilities
ct/Site: Cheyenne BOPU - Dry Creek Influent

TestAmerica Job ID: 280-39975-1

Client Sample ID: DRY CREEK INF. **Lab Sample ID: 280-39975-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrogen, Kjeldahl	37		5.0	0.90	mg/L	5		351.2	Total/NA

This Detection Summary does not include radiochemical test results.

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: 03-12-13 Sampled By: ND
Date Received: 03-12-13 Date Reported: 04-09-13
Sample Location: Dry Creek Effluent Qterly #1 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	03/13/13 / kl
BOD_5 (Total)	8.1	mg/l		2.0	SM 5210 B	03/13/13 / mw
Hexavalent Chrome	ND	mg/l		0.013	SM 3500-Cr D	03/12/13 / kl
Oil & Grease (HEM)	ND	mg/l		5.0	EPA 1664A	03/20/13 / mw
pH	7.20	P.U.		NA	SM 4500H^+ B	On-site/nd
TPH (SGT-HEM)	ND	mg/l		5.0	EPA 1664A	03/20/13 / mw
Total Phosphorus	3.4	mg/l		0.1	EPA 365.1	04/05/13 / kl
TDS	524	mg/l		NA	SM 2520 B	03/13/13 / mw
TSS	5.0	mg/l		3.0	SM 2540-D	03-13-13/ 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	ND	mg/l		0.010	EPA 200.7	04-05-13/ kl
Mo, Molybdenum	ND	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	0.006	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	0.005	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	0.040	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 *Date:* 4-9-13

Detection Summary

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

TestAmerica Job ID: 280-39838-1

Client Sample ID: DRY CREEK EFFLUENT — Lab Sample ID: 280-39838-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	2.0	J	5.0	2.0	ug/L	1		624	Total/NA
Chloride	91		15	1.3	mg/L	5		300.0	Total/NA
Sulfate	50		25	1.2	mg/L	5		300.0	Total/NA
Phenols, Total	0.0027	J	0.0070	0.0020	mg/L	1		420.1	Total/NA

Client Sample ID: DRY CREEK EFFLUENT FIELD BLANK — Lab Sample ID: 280-39838-2

No Detections.

Client Sample ID: TRIP BLANK — Lab Sample ID: 280-39838-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	2.2	J	5.0	2.0	ug/L	1		624	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

ent: Cheyenne Board of Public Utilities
roject/Site: 1st Quarter 2013 - Dry Creek Effluent

TestAmerica Job ID: 280-39838-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL DEN
625	PPL SVOC	40CFR136A	TAL DEN
608	PP Pesticides/PCBs	40CFR136A	TAL DEN
1631E	Mercury, Low Level (CVAFS)	EPA	TAL PEN
300.0	Chloride & Sulfate	40CFR136A	TAL DEN
420.1	Phenolics, Total Recoverable	MCAWW	TAL DEN
SM 4500 CN E	Cyanide, Total	SM	TAL DEN
SM 4500 S2 F	Sulfide, Total	SM	TAL DEN

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

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

TestAmerica Job ID: 280-39838-

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-39838-1	DRY CREEK EFFLUENT	Water	03/12/13 11:35	03/13/13 10:00
280-39838-2	DRY CREEK EFFLUENT FIELD BLANK	Water	03/12/13 12:00	03/13/13 10:00
280-39838-3	TRIP BLANK	Water	03/12/13 11:35	03/13/13 10:00

Client Sample Results

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

TestAmerica Job ID: 280-39838-1

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

Client Sample ID: DRY CREEK EFFLUENT
Date Collected: 03/12/13 11:35
Date Received: 03/13/13 10:00

Lab Sample ID: 280-39838-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			03/13/13 15:29	1
Acrylonitrile	ND		100	17	ug/L			03/13/13 15:29	1
Benzene	ND		5.0	1.8	ug/L			03/13/13 15:29	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			03/13/13 15:29	1
Chlorobenzene	ND		5.0	2.3	ug/L			03/13/13 15:29	1
Chloroform	ND		5.0	1.1	ug/L			03/13/13 15:29	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			03/13/13 15:29	1
Chloroethane	ND		10	2.0	ug/L			03/13/13 15:29	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			03/13/13 15:29	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			03/13/13 15:29	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			03/13/13 15:29	1
1,2-Dichloroethane	ND		5.0	1.3	ug/L			03/13/13 15:29	1
Chloromethane	ND		10	0.89	ug/L			03/13/13 15:29	1
Bromoform	ND		5.0	0.48	ug/L			03/13/13 15:29	1
Bromomethane	ND		10	1.5	ug/L			03/13/13 15:29	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			03/13/13 15:29	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			03/13/13 15:29	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			03/13/13 15:29	1
Ethylbenzene	ND		5.0	2.2	ug/L			03/13/13 15:29	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			03/13/13 15:29	1
Methylene Chloride	2.0	J	5.0	2.0	ug/L			03/13/13 15:29	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			03/13/13 15:29	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			03/13/13 15:29	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			03/13/13 15:29	1
Tetrachloroethene	ND		5.0	2.7	ug/L			03/13/13 15:29	1
Toluene	ND		5.0	2.2	ug/L			03/13/13 15:29	1
Trichloroethene	ND		5.0	0.95	ug/L			03/13/13 15:29	1
Vinyl chloride	ND		10	1.3	ug/L			03/13/13 15:29	1
Xylenes, Total	ND		10	1.1	ug/L			03/13/13 15:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*73 - 122*		*03/13/13 15:29*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*03/13/13 15:29*	*1*
4-Bromofluorobenzene (Surr)	*101*		*79 - 119*		*03/13/13 15:29*	*1*

Client Sample ID: TRIP BLANK
Date Collected: 03/12/13 11:35
Date Received: 03/13/13 10:00

Lab Sample ID: 280-39838-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			03/13/13 15:53	1
Acrylonitrile	ND		100	17	ug/L			03/13/13 15:53	1
Benzene	ND		5.0	1.8	ug/L			03/13/13 15:53	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			03/13/13 15:53	1
Chlorobenzene	ND		5.0	2.3	ug/L			03/13/13 15:53	1
Chloroform	ND		5.0	1.1	ug/L			03/13/13 15:53	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			03/13/13 15:53	1
Chloroethane	ND		10	2.0	ug/L			03/13/13 15:53	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			03/13/13 15:53	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			03/13/13 15:53	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			03/13/13 15:53	1

Client Sample Results

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

TestAmerica Job ID: 280-39838-

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

Client Sample ID: TRIP BLANK
Date Collected: 03/12/13 11:35
Date Received: 03/13/13 10:00

Lab Sample ID: 280-39838-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		5.0	1.3	ug/L			03/13/13 15:53	1
Chloromethane	ND		10	0.89	ug/L			03/13/13 15:53	1
Bromoform	ND		5.0	0.48	ug/L			03/13/13 15:53	1
Bromomethane	ND		10	1.5	ug/L			03/13/13 15:53	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			03/13/13 15:53	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			03/13/13 15:53	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			03/13/13 15:53	1
Ethylbenzene	ND		5.0	2.2	ug/L			03/13/13 15:53	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			03/13/13 15:53	1
Methylene Chloride	2.2	J	5.0	2.0	ug/L			03/13/13 15:53	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			03/13/13 15:53	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			03/13/13 15:53	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			03/13/13 15:53	1
Tetrachloroethene	ND		5.0	2.7	ug/L			03/13/13 15:53	1
Toluene	ND		5.0	2.2	ug/L			03/13/13 15:53	1
Trichloroethene	ND		5.0	0.95	ug/L			03/13/13 15:53	1
Vinyl chloride	ND		10	1.3	ug/L			03/13/13 15:53	1
Xylenes, Total	ND		10	1.1	ug/L			03/13/13 15:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*73 - 122*		*03/13/13 15:53*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*03/13/13 15:53*	*1*
4-Bromofluorobenzene (Surr)	*103*		*79 - 119*		*03/13/13 15:53*	*1*

Method: 625 - PPL SVOC

Client Sample ID: DRY CREEK EFFLUENT
Date Collected: 03/12/13 11:35
Date Received: 03/13/13 10:00

Lab Sample ID: 280-39838-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		10	0.29	ug/L		03/13/13 16:25	03/22/13 22:54	1
Benzidine	ND		160	52	ug/L		03/13/13 16:25	03/22/13 22:54	1
1,2,4-Trichlorobenzene	ND		10	0.29	ug/L		03/13/13 16:25	03/22/13 22:54	1
Hexachlorobenzene	ND		10	0.68	ug/L		03/13/13 16:25	03/22/13 22:54	1
Bis(2-chloroethyl)ether	ND		10	0.42	ug/L		03/13/13 16:25	03/22/13 22:54	1
2-Chloronaphthalene	ND		10	0.27	ug/L		03/13/13 16:25	03/22/13 22:54	1
2-Chlorophenol	ND		10	2.1	ug/L		03/13/13 16:25	03/22/13 22:54	1
2,4,6-Trichlorophenol	ND		21	0.30	ug/L		03/13/13 16:25	03/22/13 22:54	1
3,3'-Dichlorobenzidine	ND		52	2.1	ug/L		03/13/13 16:25	03/22/13 22:54	1
Hexachloroethane	ND		10	2.2	ug/L		03/13/13 16:25	03/22/13 22:54	1
2,4-Dichlorophenol	ND		10	0.66	ug/L		03/13/13 16:25	03/22/13 22:54	1
2,4-Dimethylphenol	ND		10	0.60	ug/L		03/13/13 16:25	03/22/13 22:54	1
2,4-Dinitrotoluene	ND		10	1.7	ug/L		03/13/13 16:25	03/22/13 22:54	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		03/13/13 16:25	03/22/13 22:54	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		10	0.24	ug/L		03/13/13 16:25	03/22/13 22:54	1
Fluoranthene	ND		10	0.21	ug/L		03/13/13 16:25	03/22/13 22:54	1
4-Bromophenyl phenyl ether	ND		10	0.44	ug/L		03/13/13 16:25	03/22/13 22:54	1
4-Chlorophenyl phenyl ether	ND		10	1.7	ug/L		03/13/13 16:25	03/22/13 22:54	1
bis (2-chloroisopropyl) ether	ND		10	0.29	ug/L		03/13/13 16:25	03/22/13 22:54	1
Bis(2-chloroethoxy)methane	ND		10	1.0	ug/L		03/13/13 16:25	03/22/13 22:54	1

Client Sample Results

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

TestAmerica Job ID: 280-39838-1

Method: 625 - PPL SVOC (Continued)

Client Sample ID: DRY CREEK EFFLUENT
Date Collected: 03/12/13 11:35
Date Received: 03/13/13 10:00

Lab Sample ID: 280-39838-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Chloro-m-cresol	ND		10	2.5	ug/L		03/13/13 16:25	03/22/13 22:54	1
Hexachlorobutadiene	ND		10	3.4	ug/L		03/13/13 16:25	03/22/13 22:54	1
Hexachlorocyclopentadiene	ND		52	1.6	ug/L		03/13/13 16:25	03/22/13 22:54	1
Isophorone	ND		10	0.22	ug/L		03/13/13 16:25	03/22/13 22:54	1
Naphthalene	ND		10	0.30	ug/L		03/13/13 16:25	03/22/13 22:54	1
Nitrobenzene	ND		10	0.84	ug/L		03/13/13 16:25	03/22/13 22:54	1
2-Nitrophenol	ND		21	0.40	ug/L		03/13/13 16:25	03/22/13 22:54	1
1,2-Dichlorobenzene	ND		10	0.24	ug/L		03/13/13 16:25	03/22/13 22:54	1
2,4-Dinitrophenol	ND		62	10	ug/L		03/13/13 16:25	03/22/13 22:54	1
1,3-Dichlorobenzene	ND		10	0.31	ug/L		03/13/13 16:25	03/22/13 22:54	1
4-Nitrophenol	ND		52	1.3	ug/L		03/13/13 16:25	03/22/13 22:54	1
1,4-Dichlorobenzene	ND		10	0.33	ug/L		03/13/13 16:25	03/22/13 22:54	1
4,6-Dinitro-o-cresol	ND		62	4.1	ug/L		03/13/13 16:25	03/22/13 22:54	1
N-Nitrosodimethylamine	ND		10	0.30	ug/L		03/13/13 16:25	03/22/13 22:54	1
N-Nitrosodi-n-propylamine	ND		10	0.36	ug/L		03/13/13 16:25	03/22/13 22:54	1
N-Nitrosodiphenylamine	ND		10	0.45	ug/L		03/13/13 16:25	03/22/13 22:54	1
Pentachlorophenol	ND		62	21	ug/L		03/13/13 16:25	03/22/13 22:54	1
Phenol	ND		10	2.1	ug/L		03/13/13 16:25	03/22/13 22:54	1
Bis(2-ethylhexyl) phthalate	ND		10	0.58	ug/L		03/13/13 16:25	03/22/13 22:54	1
Butyl benzyl phthalate	ND		10	1.0	ug/L		03/13/13 16:25	03/22/13 22:54	1
Di-n-butyl phthalate	ND		10	1.2	ug/L		03/13/13 16:25	03/22/13 22:54	1
Di-n-octyl phthalate	ND		10	0.36	ug/L		03/13/13 16:25	03/22/13 22:54	1
Diethyl phthalate	ND		10	0.39	ug/L		03/13/13 16:25	03/22/13 22:54	1
Dimethyl phthalate	ND		10	0.22	ug/L		03/13/13 16:25	03/22/13 22:54	1
Benzo[a]anthracene	ND		10	0.36	ug/L		03/13/13 16:25	03/22/13 22:54	1
Benzo[a]pyrene	ND		10	0.32	ug/L		03/13/13 16:25	03/22/13 22:54	1
3,4-Benzofluoranthene	ND		10	0.55	ug/L		03/13/13 16:25	03/22/13 22:54	1
Benzo[k]fluoranthene	ND		10	0.48	ug/L		03/13/13 16:25	03/22/13 22:54	1
Anthracene	ND		10	0.43	ug/L		03/13/13 16:25	03/22/13 22:54	1
Acenaphthylene	ND		10	0.51	ug/L		03/13/13 16:25	03/22/13 22:54	1
Chrysene	ND		10	0.56	ug/L		03/13/13 16:25	03/22/13 22:54	1
Benzo[g,h,i]perylene	ND		10	0.52	ug/L		03/13/13 16:25	03/22/13 22:54	1
Fluorene	ND		10	0.32	ug/L		03/13/13 16:25	03/22/13 22:54	1
Phenanthrene	ND		10	0.27	ug/L		03/13/13 16:25	03/22/13 22:54	1
Dibenz(a,h)anthracene	ND		10	0.53	ug/L		03/13/13 16:25	03/22/13 22:54	1
Indeno[1,2,3-cd]pyrene	ND		10	0.67	ug/L		03/13/13 16:25	03/22/13 22:54	1
Pyrene	ND		10	0.38	ug/L		03/13/13 16:25	03/22/13 22:54	1

NO! TOTALS only

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*36 - 120*	*03/13/13 16:25*	*03/22/13 22:54*	*1*
2-Fluorophenol	*85*		*30 - 120*	*03/13/13 16:25*	*03/22/13 22:54*	*1*
2,4,6-Tribromophenol	*91*		*50 - 120*	*03/13/13 16:25*	*03/22/13 22:54*	*1*
Nitrobenzene-d5	*86*		*45 - 120*	*03/13/13 16:25*	*03/22/13 22:54*	*1*
Phenol-d5	*89*		*36 - 120*	*03/13/13 16:25*	*03/22/13 22:54*	*1*
Terphenyl-d14	*70*		*52 - 120*	*03/13/13 16:25*	*03/22/13 22:54*	*1*

NA

Client Sample Results

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

TestAmerica Job ID: 280-39838-

Method: 608 - PP Pesticides/PCBs

Client Sample ID: DRY CREEK EFFLUENT — **Lab Sample ID: 280-39838-1**
Date Collected: 03/12/13 11:35 — **Matrix: Water**
Date Received: 03/13/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	ND		0.10	0.016	ug/L		03/14/13 17:40	03/20/13 21:17	1
4,4'-DDE	ND		0.10	0.0079	ug/L		03/14/13 17:40	03/20/13 21:17	1
4,4'-DDD	ND		0.10	0.0081	ug/L		03/14/13 17:40	03/20/13 21:17	1
Aldrin	ND	*	0.052	0.0062	ug/L		03/14/13 17:40	03/20/13 21:17	1
Dieldrin	ND		0.10	0.0066	ug/L		03/14/13 17:40	03/20/13 21:17	1
Chlordane (technical)	ND		0.052	0.0056	ug/L		03/14/13 17:40	03/20/13 21:17	1
alpha-BHC	ND		0.052	0.0056	ug/L		03/14/13 17:40	03/20/13 21:17	1
beta-BHC	ND		0.052	0.0091	ug/L		03/14/13 17:40	03/20/13 21:17	1
delta-BHC	ND		0.052	0.0061	ug/L		03/14/13 17:40	03/20/13 21:17	1
gamma-BHC (Lindane)	ND		0.052	0.0072	ug/L		03/14/13 17:40	03/20/13 21:17	1
Endosulfan I	ND		0.052	0.0061	ug/L		03/14/13 17:40	03/20/13 21:17	1
Endosulfan sulfate	ND		0.10	0.0060	ug/L		03/14/13 17:40	03/20/13 21:17	1
Endosulfan II	ND		0.10	0.0073	ug/L		03/14/13 17:40	03/20/13 21:17	1
Endrin	ND		0.10	0.0083	ug/L		03/14/13 17:40	03/20/13 21:17	1
Endrin aldehyde	ND		0.10	0.0092	ug/L		03/14/13 17:40	03/20/13 21:17	1
Heptachlor	ND	*	0.052	0.0081	ug/L		03/14/13 17:40	03/20/13 21:17	1
Heptachlor epoxide	ND		0.052	0.0079	ug/L		03/14/13 17:40	03/20/13 21:17	1
PCB-1221	ND		1.0	0.22	ug/L		03/14/13 17:40	03/19/13 03:38	1
PCB-1232	ND		1.0	0.17	ug/L		03/14/13 17:40	03/19/13 03:38	1
PCB-1242	ND		1.0	0.11	ug/L		03/14/13 17:40	03/19/13 03:38	1
PCB-1248	ND		1.0	0.096	ug/L		03/14/13 17:40	03/19/13 03:38	1
PCB-1254	ND		1.0	0.12	ug/L		03/14/13 17:40	03/19/13 03:38	1
PCB-1016	ND		1.0	0.13	ug/L		03/14/13 17:40	03/19/13 03:38	1
PCB-1260	ND		1.0	0.17	ug/L		03/14/13 17:40	03/19/13 03:38	1
Toxaphene	ND		2.1	0.38	ug/L		03/14/13 17:40	03/20/13 21:17	1
alpha-Chlordane	ND		0.052	0.0056	ug/L		03/14/13 17:40	03/20/13 21:17	1
gamma-Chlordane	ND		0.052	0.0095	ug/L		03/14/13 17:40	03/20/13 21:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*73*		*34 - 122*	*03/14/13 17:40*	*03/19/13 03:38*	*1*
DCB Decachlorobiphenyl	*74*		*34 - 122*	*03/14/13 17:40*	*03/20/13 21:17*	*1*
Tetrachloro-m-xylene	*84*		*28 - 115*	*03/14/13 17:40*	*03/19/13 03:38*	*1*
Tetrachloro-m-xylene	*70*		*28 - 115*	*03/14/13 17:40*	*03/20/13 21:17*	*1*

Method: 608 - PP Pesticides/PCBs - RERA

Client Sample ID: DRY CREEK EFFLUENT — **Lab Sample ID: 280-39838-1**
Date Collected: 03/12/13 11:35 — **Matrix: Water**
Date Received: 03/13/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	ND	H	0.10	0.015	ug/L		03/22/13 17:08	03/25/13 20:52	1
4,4'-DDE	ND	H	0.10	0.0078	ug/L		03/22/13 17:08	03/25/13 20:52	1
4,4'-DDD	ND	H	0.10	0.0080	ug/L		03/22/13 17:08	03/25/13 20:52	1
Aldrin	ND	H	0.052	0.0061	ug/L		03/22/13 17:08	03/25/13 20:52	1
Dieldrin	ND	H	0.10	0.0065	ug/L		03/22/13 17:08	03/25/13 20:52	1
Chlordane (technical)	ND	H	0.052	0.0055	ug/L		03/22/13 17:08	03/25/13 20:52	1
alpha-BHC	ND	H	0.052	0.0055	ug/L		03/22/13 17:08	03/25/13 20:52	1
beta-BHC	ND	H	0.052	0.0090	ug/L		03/22/13 17:08	03/25/13 20:52	1
delta-BHC	ND	H	0.052	0.0060	ug/L		03/22/13 17:08	03/25/13 20:52	1
gamma-BHC (Lindane)	ND	H	0.052	0.0072	ug/L		03/22/13 17:08	03/25/13 20:52	1

Client Sample Results

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

TestAmerica Job ID: 280-39838-1

Method: 608 - PP Pesticides/PCBs - RERA (Continued)

Client Sample ID: DRY CREEK EFFLUENT — **Lab Sample ID: 280-39838-1**
Date Collected: 03/12/13 11:35 — **Matrix: Water**
Date Received: 03/13/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan I	ND	H	0.052	0.0060	ug/L		03/22/13 17:08	03/25/13 20:52	1
Endosulfan sulfate	ND	H	0.10	0.0059	ug/L		03/22/13 17:08	03/25/13 20:52	1
Endosulfan II	ND	H	0.10	0.0073	ug/L		03/22/13 17:08	03/25/13 20:52	1
Endrin	ND	H	0.10	0.0082	ug/L		03/22/13 17:08	03/25/13 20:52	1
Endrin aldehyde	ND	H	0.10	0.0091	ug/L		03/22/13 17:08	03/25/13 20:52	1
Heptachlor	ND	H	0.052	0.0080	ug/L		03/22/13 17:08	03/25/13 20:52	1
Heptachlor epoxide	ND	H	0.052	0.0078	ug/L		03/22/13 17:08	03/25/13 20:52	1
Toxaphene	ND	H	2.1	0.38	ug/L		03/22/13 17:08	03/25/13 20:52	1
alpha-Chlordane	ND	H	0.052	0.0055	ug/L		03/22/13 17:08	03/25/13 20:52	1
gamma-Chlordane	ND	H	0.052	0.0095	ug/L		03/22/13 17:08	03/25/13 20:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*89*		*34 - 122*	*03/22/13 17:08*	*03/25/13 20:52*	*1*
Tetrachloro-m-xylene	*61*		*28 - 115*	*03/22/13 17:08*	*03/25/13 20:52*	*1*

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

Client Sample ID: DRY CREEK EFFLUENT — **Lab Sample ID: 280-39838-1**
Date Collected: 03/12/13 11:35 — **Matrix: Water**
Date Received: 03/13/13 10:00

NOTE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.50	0.20	ng/L		03/15/13 17:25	03/18/13 14:08	1

Client Sample ID: DRY CREEK EFFLUENT FIELD BLANK — **Lab Sample ID: 280-39838-2**
Date Collected: 03/12/13 12:00 — **Matrix: Water**
Date Received: 03/13/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.50	0.20	ng/L		03/15/13 17:25	03/18/13 14:16	1

General Chemistry

Client Sample ID: DRY CREEK EFFLUENT — **Lab Sample ID: 280-39838-1**
Date Collected: 03/12/13 11:35 — **Matrix: Water**
Date Received: 03/13/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride OK	91		15	1.3	mg/L			03/14/13 23:42	5
Sulfate OK	50		25	1.2	mg/L			03/14/13 23:42	5
Phenols, Total OK	0.0027	J	0.0070	0.0020	mg/L		03/19/13 13:37	03/19/13 16:49	1
Cyanide, Total OK	ND		0.010	0.0020	mg/L		03/18/13 11:43	03/19/13 11:07	1
Total Sulfide OK	ND		1.0	0.50	mg/L			03/18/13 19:23	1

QC Sample Results

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

TestAmerica Job ID: 280-39838

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

Lab Sample ID: MB 280-164461/3
Matrix: Water
Analysis Batch: 164461

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			03/13/13 07:29	1
Acrylonitrile	ND		100	17	ug/L			03/13/13 07:29	1
Benzene	ND		5.0	1.8	ug/L			03/13/13 07:29	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			03/13/13 07:29	1
Chlorobenzene	ND		5.0	2.3	ug/L			03/13/13 07:29	1
Chloroform	ND		5.0	1.1	ug/L			03/13/13 07:29	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			03/13/13 07:29	1
Chloroethane	ND		10	2.0	ug/L			03/13/13 07:29	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			03/13/13 07:29	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			03/13/13 07:29	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			03/13/13 07:29	1
1,2-Dichloroethane	ND		5.0	1.3	ug/L			03/13/13 07:29	1
Chloromethane	ND		10	0.89	ug/L			03/13/13 07:29	1
Bromoform	ND		5.0	0.48	ug/L			03/13/13 07:29	1
Bromomethane	ND		10	1.5	ug/L			03/13/13 07:29	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			03/13/13 07:29	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			03/13/13 07:29	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			03/13/13 07:29	1
Ethylbenzene	ND		5.0	2.2	ug/L			03/13/13 07:29	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			03/13/13 07:29	1
Methylene Chloride	ND		5.0	2.0	ug/L			03/13/13 07:29	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			03/13/13 07:29	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			03/13/13 07:29	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			03/13/13 07:29	1
Tetrachloroethene	ND		5.0	2.7	ug/L			03/13/13 07:29	1
Toluene	ND		5.0	2.2	ug/L			03/13/13 07:29	1
Trichloroethene	ND		5.0	0.95	ug/L			03/13/13 07:29	1
Vinyl chloride	ND		10	1.3	ug/L			03/13/13 07:29	1
Xylenes, Total	ND		10	1.1	ug/L			03/13/13 07:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*73 - 122*		*03/13/13 07:29*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*03/13/13 07:29*	*1*
4-Bromofluorobenzene (Surr)	*101*		*79 - 119*		*03/13/13 07:29*	*1*

Lab Sample ID: CCV 280-164461/1000 LCS
Matrix: Water
Analysis Batch: 164461

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acrolein	200	211		ug/L		105	38 - 188
Acrylonitrile	200	190		ug/L		95	48 - 149
Benzene	20.0	16.2		ug/L		81	37 - 151
Carbon tetrachloride	20.0	17.4		ug/L		87	70 - 140
Chlorobenzene	20.0	17.1		ug/L		85	37 - 160
Chloroform	20.0	16.5		ug/L		82	51 - 138
2-Chloroethyl vinyl ether	20.0	15.9		ug/L		80	10 - 305
Chloroethane	20.0	16.0		ug/L		80	14 - 230

Detection Summary

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

TestAmerica Job ID: 280-39975-2

Client Sample ID: DRY CREEK EFF. **Lab Sample ID: 280-39975-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrogen, Kjeldahl	5.5		1.0	0.18	mg/L	1		351.2	Total/NA

This Detection Summary does not include radiochemical test results.

ANALYTICAL RESULTS

6-6-13

DRY CREEK WWTP LABORATORY

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

Date Sampled: 04-08-13 Sampled By: ND
Date Received: 04-08-13 Date Reported: 05-08-13
Sample Location: Dry Creek Influent Qterly #2 Sample Matrix: Wastewater

Analyses	*Result*	*Units*	*Qual*	*RL*	*Method*	*Analysis Date/ By*
NONMETALS						
Ammonia as N	44.7	mg/l		0.1	SM 4500 NH_3-D	04/10/13 / kl
BOD_5 (Total)	397	mg/l		2.0	SM 5210 B	04/10/13 / mw
Hexavalent Chrome	ND	mg/l		0.013	SM 3500-Cr D	04/09/13 / kl
Oil & Grease (HEM)	15.2	mg/l		5.0	EPA 1664A	04/09/13 / mw
pH	7.99	P.U.		NA	SM 4500H^+ B	On-site/nd
TPH (SGT-HEM)	ND	mg/l		5.0	EPA 1664A	04/09/13 / mw
Total Phosphorus	8.9	mg/l		0.1	EPA 365.1	04/09/13 / kl
TDS	611	mg/l		5.0	SM 2520 B	04/10/13 / mw
TSS	504	mg/l		3.0	SM 2540-D	04-10-13/ kl
METALS - TOTAL						
Ag, Silver	ND	mg/l		0.005	EPA 200.7	04-12-13/ kl
As, Arsenic	ND	mg/l		0.010	EPA 200.7	04-12-13/ kl
Be, Beryllium	ND	mg/l		0.005	EPA 200.7	04-12-13/ kl
Cd, Cadmium	ND	mg/l		0.005	EPA 200.7	04-12-13/ kl
Cr, Chromium	ND	mg/l		0.005	EPA 200.7	04-12-13/ kl
Cu, Copper	0.063	mg/l		0.010	EPA 200.7	04-12-13/ kl
Mo, Molybdenum	0.006	mg/l		0.005	EPA 200.7	04-12-13/ kl
Ni, Nickel	0.005	mg/l		0.005	EPA 200.7	04-12-13/ kl
Pb, Lead	0.006	mg/l		0.005	EPA 200.7	04-12-13/ kl
Sb, Antimony	ND	mg/l		0.010	EPA 200.7	04-12-13/ kl
Selenium, Se	0.013	mg/l		0.003	EPA 200.7	04-12-13/ kl
Tl, Thallium	ND	mg/l		0.025	EPA 200.7	04-12-13/ kl
Zinc, Zn	0.104	mg/l		0.005	EPA 200.7	04-12-13/ kl

Comments: Contamination in blank for Cr (0.012), Ni (0.010) and Zn (0.019)
Report Definitions: ND – Not detected at the reporting limit. NA: Not Analyzed QA/QC: Available in Dry Creek laboratory.

Kent Loader, Laboratory Supervisor *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: Dry 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	1.0	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:

Method Summary

Cheyenne Board of Public Utilities
ect/Site: 2nd Quarter 2013 Dry Creek Influent

TestAmerica Job ID: 280-40825-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL DEN
625	PPL SVOC	40CFR136A	TAL DEN
608	PP Pesticides/PCBs	40CFR136A	TAL DEN
1631E	Mercury, Low Level (CVAFS)	EPA	TAL PEN
300.0	Chloride & Sulfate	40CFR136A	TAL DEN
420.1	Phenolics, Total Recoverable	MCAWW	TAL DEN
SM 4500 CN E	Cyanide, Total	SM	TAL DEN
SM 4500 S2 F	Sulfide, Total	SM	TAL DEN

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
EPA = US Environmental Protection Agency
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100
TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Detection Summary

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

TestAmerica Job ID: 280-4082

Client Sample ID: DRY CREEK INFLUENT — Lab Sample ID: 280-40825-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	3.6	J	5.0	1.1	ug/L	1		624	Total/NA
Toluene	7.7		5.0	2.2	ug/L	1		624	Total/NA
Xylenes, Total	9.9		5.0	0.45	ug/L	1		624	Total/NA
Bis(2-ethylhexyl) phthalate	29	J	88	4.9	ug/L	8		625	Total/NA
Diethyl phthalate	3.7	J	88	3.4	ug/L	8		625	Total/NA
Hg	48		2.5	1.0	ng/L	1		1631E	Total/NA
Chloride	69		15	1.3	mg/L	5		300.0	Total/NA
Sulfate	43		25	1.2	mg/L	5		300.0	Total/NA
Cyanide, Total	0.0047	J	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

Client Sample ID: DRY CREEK INFLUENT FIELD BLANK — Lab Sample ID: 280-40825-2

No Detections.

Client Sample ID: DRY CREEK INFLUENT TRIP BLANK — Lab Sample ID: 280-40825-3

No Detections.

This Detection Summary does not include radiochemical test results.

Sample Summary

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

TestAmerica Job ID: 280-408

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-40825-1	DRY CREEK INFLUENT	Water	04/08/13 10:32	04/09/13 10:00
280-40825-2	DRY CREEK INFLUENT FIELD BLANK	Water	04/08/13 10:50	04/09/13 10:00
280-40825-3	DRY CREEK INFLUENT TRIP BLANK	Water	04/08/13 10:35	04/09/13 10:00

Client Sample Results

Cheyenne Board of Public Utilities
ect/Site: 2nd Quarter 2013 Dry Creek Influent

TestAmerica Job ID: 280-40825-1

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

Client Sample ID: DRY CREEK INFLUENT — **Lab Sample ID: 280-40825-1**
Date Collected: 04/08/13 10:32 — **Matrix: Water**
Date Received: 04/09/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			04/11/13 08:43	1
Acrylonitrile	ND		100	17	ug/L			04/11/13 08:43	1
Benzene	ND		5.0	1.8	ug/L			04/11/13 08:43	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			04/11/13 08:43	1
Chlorobenzene	ND		5.0	2.3	ug/L			04/11/13 08:43	1
Chloroform	**3.6**	**J**	5.0	1.1	ug/L			04/11/13 08:43	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			04/11/13 08:43	1
Chloroethane	ND		10	2.0	ug/L			04/11/13 08:43	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			04/11/13 08:43	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			04/11/13 08:43	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			04/11/13 08:43	1
1,2-Dichloroethane	ND		5.0	1.3	ug/L			04/11/13 08:43	1
Chloromethane	ND		10	0.89	ug/L			04/11/13 08:43	1
Bromoform	ND		5.0	0.48	ug/L			04/11/13 08:43	1
Bromomethane	ND		10	1.5	ug/L			04/11/13 08:43	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			04/11/13 08:43	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			04/11/13 08:43	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			04/11/13 08:43	1
Ethylbenzene	ND		5.0	2.2	ug/L			04/11/13 08:43	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			04/11/13 08:43	1
Methylene Chloride	ND		5.0	2.0	ug/L			04/11/13 08:43	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			04/11/13 08:43	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			04/11/13 08:43	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			04/11/13 08:43	1
Tetrachloroethene	ND		5.0	2.7	ug/L			04/11/13 08:43	1
Toluene	**7.7**		5.0	2.2	ug/L			04/11/13 08:43	1
Trichloroethene	ND		5.0	0.95	ug/L			04/11/13 08:43	1
Vinyl chloride	ND		10	1.3	ug/L			04/11/13 08:43	1
Xylenes, Total	**9.9**		5.0	0.45	ug/L			04/11/13 08:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*73 - 122*		*04/11/13 08:43*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*04/11/13 08:43*	*1*
4-Bromofluorobenzene (Surr)	*107*		*79 - 119*		*04/11/13 08:43*	*1*

Client Sample ID: DRY CREEK INFLUENT TRIP BLANK — **Lab Sample ID: 280-40825-3**
Date Collected: 04/08/13 10:35 — **Matrix: Water**
Date Received: 04/09/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			04/11/13 09:53	1
Acrylonitrile	ND		100	17	ug/L			04/11/13 09:53	1
Benzene	ND		5.0	1.8	ug/L			04/11/13 09:53	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			04/11/13 09:53	1
Chlorobenzene	ND		5.0	2.3	ug/L			04/11/13 09:53	1
Chloroform	ND		5.0	1.1	ug/L			04/11/13 09:53	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			04/11/13 09:53	1
Chloroethane	ND		10	2.0	ug/L			04/11/13 09:53	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			04/11/13 09:53	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			04/11/13 09:53	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			04/11/13 09:53	1

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

Client Sample ID: DRY CREEK INFLUENT TRIP BLANK — **Lab Sample ID: 280-40825-3**
Date Collected: 04/08/13 10:35 — **Matrix: Water**
Date Received: 04/09/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		5.0	1.3	ug/L			04/11/13 09:53	1
Chloromethane	ND		10	0.89	ug/L			04/11/13 09:53	1
Bromoform	ND		5.0	0.48	ug/L			04/11/13 09:53	1
Bromomethane	ND		10	1.5	ug/L			04/11/13 09:53	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			04/11/13 09:53	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			04/11/13 09:53	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			04/11/13 09:53	1
Ethylbenzene	ND		5.0	2.2	ug/L			04/11/13 09:53	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			04/11/13 09:53	1
Methylene Chloride	ND		5.0	2.0	ug/L			04/11/13 09:53	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			04/11/13 09:53	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			04/11/13 09:53	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			04/11/13 09:53	1
Tetrachloroethene	ND		5.0	2.7	ug/L			04/11/13 09:53	1
Toluene	ND		5.0	2.2	ug/L			04/11/13 09:53	1
Trichloroethene	ND		5.0	0.95	ug/L			04/11/13 09:53	1
Vinyl chloride	ND		10	1.3	ug/L			04/11/13 09:53	1
Xylenes, Total	ND		5.0	0.45	ug/L			04/11/13 09:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*73 - 122*		*04/11/13 09:53*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*04/11/13 09:53*	*1*
4-Bromofluorobenzene (Surr)	*106*		*79 - 119*		*04/11/13 09:53*	*1*

Method: 625 - PPL SVOC

Client Sample ID: DRY CREEK INFLUENT — **Lab Sample ID: 280-40825-1**
Date Collected: 04/08/13 10:32 — **Matrix: Water**
Date Received: 04/09/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		88	2.5	ug/L		04/10/13 15:55	04/16/13 22:39	8
Benzidine	ND		1300	440	ug/L		04/10/13 15:55	04/16/13 22:39	8
1,2,4-Trichlorobenzene	ND		88	2.5	ug/L		04/10/13 15:55	04/16/13 22:39	8
Hexachlorobenzene	ND		88	5.8	ug/L		04/10/13 15:55	04/16/13 22:39	8
Bis(2-chloroethyl)ether	ND		88	3.6	ug/L		04/10/13 15:55	04/16/13 22:39	8
2-Chloronaphthalene	ND		88	2.3	ug/L		04/10/13 15:55	04/16/13 22:39	8
2-Chlorophenol	ND		88	18	ug/L		04/10/13 15:55	04/16/13 22:39	8
2,4,6-Trichlorophenol	ND		180	2.6	ug/L		04/10/13 15:55	04/16/13 22:39	8
3,3'-Dichlorobenzidine	ND		440	18	ug/L		04/10/13 15:55	04/16/13 22:39	8
Hexachloroethane	ND		88	19	ug/L		04/10/13 15:55	04/16/13 22:39	8
2,4-Dichlorophenol	ND		88	5.7	ug/L		04/10/13 15:55	04/16/13 22:39	8
2,4-Dimethylphenol	ND		88	5.1	ug/L		04/10/13 15:55	04/16/13 22:39	8
2,4-Dinitrotoluene	ND		88	15	ug/L		04/10/13 15:55	04/16/13 22:39	8
2,6-Dinitrotoluene	ND		88	17	ug/L		04/10/13 15:55	04/16/13 22:39	8
1,2-Diphenylhydrazine(as Azobenzene)	ND		88	2.0	ug/L		04/10/13 15:55	04/16/13 22:39	8
Fluoranthene	ND		88	1.8	ug/L		04/10/13 15:55	04/16/13 22:39	8
4-Bromophenyl phenyl ether	ND		88	3.8	ug/L		04/10/13 15:55	04/16/13 22:39	8
4-Chlorophenyl phenyl ether	ND		88	15	ug/L		04/10/13 15:55	04/16/13 22:39	8
bis (2-chloroisopropyl) ether	ND		88	2.5	ug/L		04/10/13 15:55	04/16/13 22:39	8

ethod: 625 - PPL SVOC (Continued)

Client Sample ID: DRY CREEK INFLUENT
Date Collected: 04/08/13 10:32
Date Received: 04/09/13 10:00

Lab Sample ID: 280-40825-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		88	8.6	ug/L		04/10/13 15:55	04/16/13 22:39	8
p-Chloro-m-cresol	ND		88	21	ug/L		04/10/13 15:55	04/16/13 22:39	8
Hexachlorobutadiene	ND		88	29	ug/L		04/10/13 15:55	04/16/13 22:39	8
Hexachlorocyclopentadiene	ND		440	14	ug/L		04/10/13 15:55	04/16/13 22:39	8
Isophorone	ND		88	1.9	ug/L		04/10/13 15:55	04/16/13 22:39	8
Naphthalene	ND		88	2.6	ug/L		04/10/13 15:55	04/16/13 22:39	8
Nitrobenzene	ND		88	7.2	ug/L		04/10/13 15:55	04/16/13 22:39	8
2-Nitrophenol	ND		180	3.4	ug/L		04/10/13 15:55	04/16/13 22:39	8
1,2-Dichlorobenzene	ND		88	2.0	ug/L		04/10/13 15:55	04/16/13 22:39	8
2,4-Dinitrophenol	ND		530	88	ug/L		04/10/13 15:55	04/16/13 22:39	8
1,3-Dichlorobenzene	ND		88	2.6	ug/L		04/10/13 15:55	04/16/13 22:39	8
4-Nitrophenol	ND		440	11	ug/L		04/10/13 15:55	04/16/13 22:39	8
1,4-Dichlorobenzene	ND		88	2.8	ug/L		04/10/13 15:55	04/16/13 22:39	8
4,6-Dinitro-o-cresol	ND		530	35	ug/L		04/10/13 15:55	04/16/13 22:39	8
N-Nitrosodimethylamine	ND		88	2.6	ug/L		04/10/13 15:55	04/16/13 22:39	8
N-Nitrosodi-n-propylamine	ND		88	3.1	ug/L		04/10/13 15:55	04/16/13 22:39	8
N-Nitrosodiphenylamine	ND		88	3.9	ug/L		04/10/13 15:55	04/16/13 22:39	8
Pentachlorophenol	ND		530	180	ug/L		04/10/13 15:55	04/16/13 22:39	8
Phenol	ND		88	18	ug/L		04/10/13 15:55	04/16/13 22:39	8
Bis(2-ethylhexyl) phthalate	**29**	**J**	88	4.9	ug/L		04/10/13 15:55	04/16/13 22:39	8
Butyl benzyl phthalate	ND		88	8.8	ug/L		04/10/13 15:55	04/16/13 22:39	8
Di-n-butyl phthalate	ND		88	10	ug/L		04/10/13 15:55	04/16/13 22:39	8
Di-n-octyl phthalate	ND		88	3.1	ug/L		04/10/13 15:55	04/16/13 22:39	8
Diethyl phthalate	**3.7**	**J**	88	3.4	ug/L		04/10/13 15:55	04/16/13 22:39	8
Dimethyl phthalate	ND		88	1.9	ug/L		04/10/13 15:55	04/16/13 22:39	8
Benzo[a]anthracene	ND		88	3.1	ug/L		04/10/13 15:55	04/16/13 22:39	8
Benzo[a]pyrene	ND		88	2.7	ug/L		04/10/13 15:55	04/16/13 22:39	8
3,4-Benzofluoranthene	ND		88	4.7	ug/L		04/10/13 15:55	04/16/13 22:39	8
Benzo[k]fluoranthene	ND		88	4.1	ug/L		04/10/13 15:55	04/16/13 22:39	8
Anthracene	ND		88	3.7	ug/L		04/10/13 15:55	04/16/13 22:39	8
Acenaphthylene	ND		88	4.3	ug/L		04/10/13 15:55	04/16/13 22:39	8
Chrysene	ND		88	4.8	ug/L		04/10/13 15:55	04/16/13 22:39	8
Benzo[g,h,i]perylene	ND		88	4.4	ug/L		04/10/13 15:55	04/16/13 22:39	8
Fluorene	ND		88	2.7	ug/L		04/10/13 15:55	04/16/13 22:39	8
Phenanthrene	ND		88	2.3	ug/L		04/10/13 15:55	04/16/13 22:39	8
Dibenz(a,h)anthracene	ND		88	4.5	ug/L		04/10/13 15:55	04/16/13 22:39	8
Indeno[1,2,3-cd]pyrene	ND		88	5.7	ug/L		04/10/13 15:55	04/16/13 22:39	8
Pyrene	ND		88	3.3	ug/L		04/10/13 15:55	04/16/13 22:39	8

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*	*D*	*36 - 120*	*04/10/13 15:55*	*04/16/13 22:39*	*8*
2-Fluorophenol	*85*	*D*	*30 - 120*	*04/10/13 15:55*	*04/16/13 22:39*	*8*
2,4,6-Tribromophenol	*97*	*D*	*50 - 120*	*04/10/13 15:55*	*04/16/13 22:39*	*8*
Nitrobenzene-d5	*90*	*D*	*45 - 120*	*04/10/13 15:55*	*04/16/13 22:39*	*8*
Phenol-d5	*94*	*D*	*36 - 120*	*04/10/13 15:55*	*04/16/13 22:39*	*8*
Terphenyl-d14	*69*	*D*	*52 - 120*	*04/10/13 15:55*	*04/16/13 22:39*	*8*

Method: 608 - PP Pesticides/PCBs

Client Sample ID: DRY CREEK INFLUENT — **Lab Sample ID: 280-40825-1**
Date Collected: 04/08/13 10:32 — **Matrix: Water**
Date Received: 04/09/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	ND		0.11	0.016	ug/L		04/09/13 16:50	04/12/13 13:43	1
4,4'-DDE	ND		0.11	0.0082	ug/L		04/09/13 16:50	04/12/13 13:43	1
4,4'-DDD	ND		0.11	0.0084	ug/L		04/09/13 16:50	04/12/13 13:43	1
Aldrin	ND		0.054	0.0064	ug/L		04/09/13 16:50	04/12/13 13:43	1
Dieldrin	ND		0.11	0.0069	ug/L		04/09/13 16:50	04/12/13 13:43	1
Chlordane (technical)	ND		0.054	0.0058	ug/L		04/09/13 16:50	04/12/13 13:43	1
alpha-BHC	ND		0.054	0.0058	ug/L		04/09/13 16:50	04/12/13 13:43	1
beta-BHC	ND		0.054	0.0095	ug/L		04/09/13 16:50	04/12/13 13:43	1
delta-BHC	ND		0.054	0.0063	ug/L		04/09/13 16:50	04/12/13 13:43	1
gamma-BHC (Lindane)	ND		0.054	0.0075	ug/L		04/09/13 16:50	04/12/13 13:43	1
Endosulfan I	ND		0.054	0.0063	ug/L		04/09/13 16:50	04/12/13 13:43	1
Endosulfan sulfate	ND		0.11	0.0062	ug/L		04/09/13 16:50	04/12/13 13:43	1
Endosulfan II	ND		0.11	0.0076	ug/L		04/09/13 16:50	04/12/13 13:43	1
Endrin	ND		0.11	0.0086	ug/L		04/09/13 16:50	04/12/13 13:43	1
Endrin aldehyde	ND		0.11	0.0096	ug/L		04/09/13 16:50	04/12/13 13:43	1
Heptachlor	ND		0.054	0.0084	ug/L		04/09/13 16:50	04/12/13 13:43	1
Heptachlor epoxide	ND		0.054	0.0082	ug/L		04/09/13 16:50	04/12/13 13:43	1
PCB-1221	ND		1.1	0.23	ug/L		04/09/13 16:50	04/17/13 03:29	1
PCB-1232	ND		1.1	0.18	ug/L		04/09/13 16:50	04/17/13 03:29	1
PCB-1242	ND		1.1	0.11	ug/L		04/09/13 16:50	04/17/13 03:29	1
PCB-1248	ND		1.1	0.10	ug/L		04/09/13 16:50	04/17/13 03:29	1
PCB-1254	ND		1.1	0.12	ug/L		04/09/13 16:50	04/17/13 03:29	1
PCB-1016	ND		1.1	0.13	ug/L		04/09/13 16:50	04/17/13 03:29	1
PCB-1260	ND		1.1	0.17	ug/L		04/09/13 16:50	04/17/13 03:29	1
Toxaphene	ND		2.2	0.40	ug/L		04/09/13 16:50	04/12/13 13:43	1
alpha-Chlordane	ND		0.054	0.0058	ug/L		04/09/13 16:50	04/12/13 13:43	1
gamma-Chlordane	ND		0.054	0.0099	ug/L		04/09/13 16:50	04/12/13 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*49*		*34 - 122*	*04/09/13 16:50*	*04/12/13 13:43*	*1*
DCB Decachlorobiphenyl	*53*		*34 - 122*	*04/09/13 16:50*	*04/17/13 03:29*	*1*
Tetrachloro-m-xylene	*81*		*28 - 115*	*04/09/13 16:50*	*04/12/13 13:43*	*1*
Tetrachloro-m-xylene	*94*		*28 - 115*	*04/09/13 16:50*	*04/17/13 03:29*	*1*

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

Client Sample ID: DRY CREEK INFLUENT — **Lab Sample ID: 280-40825-1**
Date Collected: 04/08/13 10:32 — **Matrix: Water**
Date Received: 04/09/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	48		2.5	1.0	ng/L		04/11/13 16:00	04/12/13 13:25	1

Client Sample ID: DRY CREEK INFLUENT FIELD BLANK — **Lab Sample ID: 280-40825-2**
Date Collected: 04/08/13 10:50 — **Matrix: Water**
Date Received: 04/09/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.50	0.20	ng/L		04/11/13 16:00	04/12/13 14:24	1

Client Sample Results

Cheyenne Board of Public Utilities
ect/Site: 2nd Quarter 2013 Dry Creek Influent

TestAmerica Job ID: 280-40825-1

General Chemistry

Client Sample ID: DRY CREEK INFLUENT
Date Collected: 04/08/13 10:32
Date Received: 04/09/13 10:00

Lab Sample ID: 280-40825-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	69		15	1.3	mg/L			04/09/13 23:19	5
Sulfate	43		25	1.2	mg/L			04/09/13 23:19	5
Phenols, Total	ND		0.035	0.010	mg/L		04/11/13 07:52	04/11/13 10:52	5
Cyanide, Total	0.0047	J	0.010	0.0020	mg/L		04/16/13 09:56	04/17/13 12:26	1
Total Sulfide	0.90	J	1.0	0.50	mg/L			04/09/13 18:00	1

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

Lab Sample ID: MB 280-168930/3
Matrix: Water
Analysis Batch: 168930

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			04/11/13 08:02	1
Acrylonitrile	ND		100	17	ug/L			04/11/13 08:02	1
Benzene	ND		5.0	1.8	ug/L			04/11/13 08:02	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			04/11/13 08:02	1
Chlorobenzene	ND		5.0	2.3	ug/L			04/11/13 08:02	1
Chloroform	ND		5.0	1.1	ug/L			04/11/13 08:02	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			04/11/13 08:02	1
Chloroethane	ND		10	2.0	ug/L			04/11/13 08:02	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			04/11/13 08:02	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			04/11/13 08:02	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			04/11/13 08:02	1
1,2-Dichloroethane	ND		5.0	1.3	ug/L			04/11/13 08:02	1
Chloromethane	ND		10	0.89	ug/L			04/11/13 08:02	1
Bromoform	ND		5.0	0.48	ug/L			04/11/13 08:02	1
Bromomethane	ND		10	1.5	ug/L			04/11/13 08:02	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			04/11/13 08:02	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			04/11/13 08:02	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			04/11/13 08:02	1
Ethylbenzene	ND		5.0	2.2	ug/L			04/11/13 08:02	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			04/11/13 08:02	1
Methylene Chloride	ND		5.0	2.0	ug/L			04/11/13 08:02	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			04/11/13 08:02	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			04/11/13 08:02	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			04/11/13 08:02	1
Tetrachloroethene	ND		5.0	2.7	ug/L			04/11/13 08:02	1
Toluene	ND		5.0	2.2	ug/L			04/11/13 08:02	1
Trichloroethene	ND		5.0	0.95	ug/L			04/11/13 08:02	1
Vinyl chloride	ND		10	1.3	ug/L			04/11/13 08:02	1
Xylenes, Total	ND		5.0	0.45	ug/L			04/11/13 08:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*73 - 122*		*04/11/13 08:02*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*04/11/13 08:02*	*1*
4-Bromofluorobenzene (Surr)	*107*		*79 - 119*		*04/11/13 08:02*	*1*

Lab Sample ID: LCS 280-168930/1000
Matrix: Water
Analysis Batch: 168930

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acrolein	200	153		ug/L		76	38 - 188
Acrylonitrile	200	137		ug/L		68	48 - 149
Benzene	20.0	17.1		ug/L		86	37 - 151
Carbon tetrachloride	20.0	17.3		ug/L		87	70 - 140
Chlorobenzene	20.0	18.6		ug/L		93	37 - 160
Chloroform	20.0	17.5		ug/L		87	51 - 138
2-Chloroethyl vinyl ether	20.0	18.0		ug/L		90	10 - 305
Chloroethane	20.0	16.9		ug/L		84	14 - 230

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: 04-09-13 Sampled By: ND
Date Received: 04-09-13 Date Reported: 05-08-13
Sample Location: Dry Creek Effluent Qterly #2 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	04/10/13 / kl
BOD_5 (Total)	4.7	mg/l		2.0	SM 5210 B	04/10/13 / mw
Hexavalent Chrome	ND	mg/l		0.013	SM 3500-Cr D	04/09/13 / kl
Oil & Grease (HEM)	ND	mg/l		5.0	EPA 1664A	04/30/13 / mw
pH	7.42	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	4.1	mg/l		0.1	EPA 365.1	04/09/13 / kl
TDS	500	mg/l		NA	SM 2520 B	04/10/13 / mw
TSS	10.7	mg/l		3.0	SM 2540-D	04-10-13/ kl
METALS - TOTAL						
Ag, Silver	ND	mg/l		0.005	EPA 200.7	04-12-13/ kl
As, Arsenic	ND	mg/l		0.010	EPA 200.7	04-12-13/ kl
Be, Beryllium	ND	mg/l		0.005	EPA 200.7	04-12-13/ kl
Cd, Cadmium	ND	mg/l		0.005	EPA 200.7	04-12-13/ kl
Cr, Chromium	ND	mg/l		0.005	EPA 200.7	04-12-13/ kl
Cu, Copper	0.009	mg/l		0.010	EPA 200.7	04-12-13/ kl
Mo, Molybdenum	ND	mg/l		0.005	EPA 200.7	04-12-13/ kl
Ni, Nickel	ND	mg/l		0.005	EPA 200.7	04-12-13/ kl
Pb, Lead	0.005	mg/l		0.005	EPA 200.7	04-12-13/ kl
Sb, Antimony	ND	mg/l		0.010	EPA 200.7	04-12-13/ kl
Selenium, Se	ND	mg/l		0.003	EPA 200.7	04-12-13/ kl
Tl, Thallium	ND	mg/l		0.025	EPA 200.7	04-12-13/ kl
Zinc, Zn	0.051	mg/l		0.005	EPA 200.7	04-12-13/ 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

5-8-13
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: Dry 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	0.2	mg/l		0.1	EPA 353.2	04/11/13 / kl
Nitrate as N	8.4	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 Dry Creek Effluent

TestAmerica Job ID: 280-40906-1

Client Sample ID: DRY CREEK EFFLUENT — Lab Sample ID: 280-40906-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Hg	0.27	J	0.50	0.20	ng/L	1		1631E	Total/NA
Chloride	80		15	1.3	mg/L	5		300.0	Total/NA
Sulfate	47	B	5.0	0.23	mg/L	1		300.0	Total/NA
Phenols, Total	0.0054	J B	0.0070	0.0020	mg/L	1		420.1	Total/NA
Cyanide, Total	0.0038	J	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: DRY CREEK EFFLUENT FIELD BLANK — Lab Sample ID: 280-40906-2

No Detections.

Client Sample ID: DRY CREEK EFFLUENT TRIP BLANK — Lab Sample ID: 280-40906-3

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

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

TestAmerica Job ID: 280-40906-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL DEN
625	PPL SVOC	40CFR136A	TAL DEN
608	PP Pesticides/PCBs	40CFR136A	TAL DEN
1631E	Mercury, Low Level (CVAFS)	EPA	TAL PEN
300.0	Chloride & Sulfate	40CFR136A	TAL DEN
420.1	Phenolics, Total Recoverable	MCAWW	TAL DEN
SM 4500 CN E	Cyanide, Total	SM	TAL DEN
SM 4500 S2 F	Sulfide, Total	SM	TAL DEN

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

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

TestAmerica Job ID: 280-40906-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-40906-1	DRY CREEK EFFLUENT	Water	04/09/13 09:00	04/11/13 10:00
280-40906-2	DRY CREEK EFFLUENT FIELD BLANK	Water	04/09/13 09:17	04/11/13 10:00
280-40906-3	DRY CREEK EFFLUENT TRIP BLANK	Water	04/09/13 09:08	04/11/13 10:00

Client Sample Results

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

TestAmerica Job ID: 280-40906-1

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

Client Sample ID: DRY CREEK EFFLUENT
Date Collected: 04/09/13 09:00
Date Received: 04/11/13 10:00

Lab Sample ID: 280-40906-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			04/11/13 20:38	1
Acrylonitrile	ND		100	17	ug/L			04/11/13 20:38	1
Benzene	ND		5.0	1.8	ug/L			04/11/13 20:38	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			04/11/13 20:38	1
Chlorobenzene	ND		5.0	2.3	ug/L			04/11/13 20:38	1
Chloroform	ND		5.0	1.1	ug/L			04/11/13 20:38	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			04/11/13 20:38	1
Chloroethane	ND		10	2.0	ug/L			04/11/13 20:38	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			04/11/13 20:38	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			04/11/13 20:38	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			04/11/13 20:38	1
1,2-Dichloroethane	ND		5.0	1.3	ug/L			04/11/13 20:38	1
Chloromethane	ND		10	0.89	ug/L			04/11/13 20:38	1
Bromoform	ND		5.0	0.48	ug/L			04/11/13 20:38	1
Bromomethane	ND		10	1.5	ug/L			04/11/13 20:38	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			04/11/13 20:38	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			04/11/13 20:38	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			04/11/13 20:38	1
Ethylbenzene	ND		5.0	2.2	ug/L			04/11/13 20:38	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			04/11/13 20:38	1
Methylene Chloride	ND		5.0	2.0	ug/L			04/11/13 20:38	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			04/11/13 20:38	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			04/11/13 20:38	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			04/11/13 20:38	1
Tetrachloroethene	ND		5.0	2.7	ug/L			04/11/13 20:38	1
Toluene	ND		5.0	2.2	ug/L			04/11/13 20:38	1
Trichloroethene	ND		5.0	0.95	ug/L			04/11/13 20:38	1
Vinyl chloride	ND		10	1.3	ug/L			04/11/13 20:38	1
Xylenes, Total	ND		5.0	0.45	ug/L			04/11/13 20:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*73 - 122*		*04/11/13 20:38*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*04/11/13 20:38*	*1*
4-Bromofluorobenzene (Surr)	*105*		*79 - 119*		*04/11/13 20:38*	*1*

Client Sample ID: DRY CREEK EFFLUENT TRIP BLANK
Date Collected: 04/09/13 09:08
Date Received: 04/11/13 10:00

Lab Sample ID: 280-40906-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			04/11/13 21:01	1
Acrylonitrile	ND		100	17	ug/L			04/11/13 21:01	1
Benzene	ND		5.0	1.8	ug/L			04/11/13 21:01	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			04/11/13 21:01	1
Chlorobenzene	ND		5.0	2.3	ug/L			04/11/13 21:01	1
Chloroform	ND		5.0	1.1	ug/L			04/11/13 21:01	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			04/11/13 21:01	1
Chloroethane	ND		10	2.0	ug/L			04/11/13 21:01	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			04/11/13 21:01	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			04/11/13 21:01	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			04/11/13 21:01	1

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

Client Sample ID: DRY CREEK EFFLUENT TRIP BLANK — **Lab Sample ID: 280-40906-3**
Date Collected: 04/09/13 09:08 — **Matrix: Water**
Date Received: 04/11/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		5.0	1.3	ug/L			04/11/13 21:01	1
Chloromethane	ND		10	0.89	ug/L			04/11/13 21:01	1
Bromoform	ND		5.0	0.48	ug/L			04/11/13 21:01	1
Bromomethane	ND		10	1.5	ug/L			04/11/13 21:01	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			04/11/13 21:01	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			04/11/13 21:01	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			04/11/13 21:01	1
Ethylbenzene	ND		5.0	2.2	ug/L			04/11/13 21:01	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			04/11/13 21:01	1
Methylene Chloride	ND		5.0	2.0	ug/L			04/11/13 21:01	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			04/11/13 21:01	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			04/11/13 21:01	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			04/11/13 21:01	1
Tetrachloroethene	ND		5.0	2.7	ug/L			04/11/13 21:01	1
Toluene	ND		5.0	2.2	ug/L			04/11/13 21:01	1
Trichloroethene	ND		5.0	0.95	ug/L			04/11/13 21:01	1
Vinyl chloride	ND		10	1.3	ug/L			04/11/13 21:01	1
Xylenes, Total	ND		5.0	0.45	ug/L			04/11/13 21:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*73 - 122*		*04/11/13 21:01*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*04/11/13 21:01*	*1*
4-Bromofluorobenzene (Surr)	*103*		*79 - 119*		*04/11/13 21:01*	*1*

Method: 625 - PPL SVOC

Client Sample ID: DRY CREEK EFFLUENT — **Lab Sample ID: 280-40906-1**
Date Collected: 04/09/13 09:00 — **Matrix: Water**
Date Received: 04/11/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		10	0.29	ug/L		04/12/13 13:30	04/16/13 21:18	1
Benzidine	ND		160	52	ug/L		04/12/13 13:30	04/16/13 21:18	1
1,2,4-Trichlorobenzene	ND		10	0.29	ug/L		04/12/13 13:30	04/16/13 21:18	1
Hexachlorobenzene	ND		10	0.69	ug/L		04/12/13 13:30	04/16/13 21:18	1
Bis(2-chloroethyl)ether	ND		10	0.43	ug/L		04/12/13 13:30	04/16/13 21:18	1
2-Chloronaphthalene	ND		10	0.27	ug/L		04/12/13 13:30	04/16/13 21:18	1
2-Chlorophenol	ND		10	2.1	ug/L		04/12/13 13:30	04/16/13 21:18	1
2,4,6-Trichlorophenol	ND		21	0.30	ug/L		04/12/13 13:30	04/16/13 21:18	1
3,3'-Dichlorobenzidine	ND		52	2.1	ug/L		04/12/13 13:30	04/16/13 21:18	1
Hexachloroethane	ND		10	2.2	ug/L		04/12/13 13:30	04/16/13 21:18	1
2,4-Dichlorophenol	ND		10	0.67	ug/L		04/12/13 13:30	04/16/13 21:18	1
2,4-Dimethylphenol	ND		10	0.60	ug/L		04/12/13 13:30	04/16/13 21:18	1
2,4-Dinitrotoluene	ND		10	1.7	ug/L		04/12/13 13:30	04/16/13 21:18	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		04/12/13 13:30	04/16/13 21:18	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		10	0.24	ug/L		04/12/13 13:30	04/16/13 21:18	1
Fluoranthene	ND		10	0.21	ug/L		04/12/13 13:30	04/16/13 21:18	1
4-Bromophenyl phenyl ether	ND		10	0.45	ug/L		04/12/13 13:30	04/16/13 21:18	1
4-Chlorophenyl phenyl ether	ND		10	1.7	ug/L		04/12/13 13:30	04/16/13 21:18	1
bis (2-chloroisopropyl) ether	ND		10	0.29	ug/L		04/12/13 13:30	04/16/13 21:18	1
Bis(2-chloroethoxy)methane	ND		10	1.0	ug/L		04/12/13 13:30	04/16/13 21:18	1

Method: 625 - PPL SVOC (Continued)

Client Sample ID: DRY CREEK EFFLUENT
Date Collected: 04/09/13 09:00
Date Received: 04/11/13 10:00

Lab Sample ID: 280-40906-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Chloro-m-cresol	ND		10	2.5	ug/L		04/12/13 13:30	04/16/13 21:18	1
Hexachlorobutadiene	ND		10	3.4	ug/L		04/12/13 13:30	04/16/13 21:18	1
Hexachlorocyclopentadiene	ND		52	1.6	ug/L		04/12/13 13:30	04/16/13 21:18	1
Isophorone	ND		10	0.22	ug/L		04/12/13 13:30	04/16/13 21:18	1
Naphthalene	ND		10	0.30	ug/L		04/12/13 13:30	04/16/13 21:18	1
Nitrobenzene	ND		10	0.84	ug/L		04/12/13 13:30	04/16/13 21:18	1
2-Nitrophenol	ND		21	0.41	ug/L		04/12/13 13:30	04/16/13 21:18	1
1,2-Dichlorobenzene	ND		10	0.24	ug/L		04/12/13 13:30	04/16/13 21:18	1
2,4-Dinitrophenol	ND		62	10	ug/L		04/12/13 13:30	04/16/13 21:18	1
1,3-Dichlorobenzene	ND		10	0.31	ug/L		04/12/13 13:30	04/16/13 21:18	1
4-Nitrophenol	ND		52	1.3	ug/L		04/12/13 13:30	04/16/13 21:18	1
1,4-Dichlorobenzene	ND		10	0.33	ug/L		04/12/13 13:30	04/16/13 21:18	1
4,6-Dinitro-o-cresol	ND		62	4.2	ug/L		04/12/13 13:30	04/16/13 21:18	1
N-Nitrosodimethylamine	ND		10	0.30	ug/L		04/12/13 13:30	04/16/13 21:18	1
N-Nitrosodi-n-propylamine	ND		10	0.36	ug/L		04/12/13 13:30	04/16/13 21:18	1
N-Nitrosodiphenylamine	ND		10	0.46	ug/L		04/12/13 13:30	04/16/13 21:18	1
Pentachlorophenol	ND		62	21	ug/L		04/12/13 13:30	04/16/13 21:18	1
Phenol	ND		10	2.1	ug/L		04/12/13 13:30	04/16/13 21:18	1
Bis(2-ethylhexyl) phthalate	ND		10	0.58	ug/L		04/12/13 13:30	04/16/13 21:18	1
Butyl benzyl phthalate	ND		10	1.0	ug/L		04/12/13 13:30	04/16/13 21:18	1
Di-n-butyl phthalate	ND		10	1.2	ug/L		04/12/13 13:30	04/16/13 21:18	1
Di-n-octyl phthalate	ND		10	0.36	ug/L		04/12/13 13:30	04/16/13 21:18	1
Diethyl phthalate	ND		10	0.40	ug/L		04/12/13 13:30	04/16/13 21:18	1
Dimethyl phthalate	ND		10	0.22	ug/L		04/12/13 13:30	04/16/13 21:18	1
Benzo[a]anthracene	ND		10	0.36	ug/L		04/12/13 13:30	04/16/13 21:18	1
Benzo[a]pyrene	ND		10	0.32	ug/L		04/12/13 13:30	04/16/13 21:18	1
3,4-Benzofluoranthene	ND		10	0.55	ug/L		04/12/13 13:30	04/16/13 21:18	1
Benzo[k]fluoranthene	ND		10	0.48	ug/L		04/12/13 13:30	04/16/13 21:18	1
Anthracene	ND		10	0.44	ug/L		04/12/13 13:30	04/16/13 21:18	1
Acenaphthylene	ND		10	0.51	ug/L		04/12/13 13:30	04/16/13 21:18	1
Chrysene	ND		10	0.56	ug/L		04/12/13 13:30	04/16/13 21:18	1
Benzo[g,h,i]perylene	ND		10	0.52	ug/L		04/12/13 13:30	04/16/13 21:18	1
Fluorene	ND		10	0.32	ug/L		04/12/13 13:30	04/16/13 21:18	1
Phenanthrene	ND		10	0.27	ug/L		04/12/13 13:30	04/16/13 21:18	1
Dibenz(a,h)anthracene	ND		10	0.53	ug/L		04/12/13 13:30	04/16/13 21:18	1
Indeno[1,2,3-cd]pyrene	ND		10	0.68	ug/L		04/12/13 13:30	04/16/13 21:18	1
Pyrene	ND		10	0.39	ug/L		04/12/13 13:30	04/16/13 21:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*36 - 120*	*04/12/13 13:30*	*04/16/13 21:18*	*1*
2-Fluorophenol	*74*		*30 - 120*	*04/12/13 13:30*	*04/16/13 21:18*	*1*
2,4,6-Tribromophenol	*102*		*50 - 120*	*04/12/13 13:30*	*04/16/13 21:18*	*1*
Nitrobenzene-d5	*76*		*45 - 120*	*04/12/13 13:30*	*04/16/13 21:18*	*1*
Phenol-d5	*82*		*36 - 120*	*04/12/13 13:30*	*04/16/13 21:18*	*1*
Terphenyl-d14	*90*		*52 - 120*	*04/12/13 13:30*	*04/16/13 21:18*	*1*

Client Sample Results

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

TestAmerica Job ID: 280-40906-1

Method: 608 - PP Pesticides/PCBs

Client Sample ID: DRY CREEK EFFLUENT — **Lab Sample ID: 280-40906-1**
Date Collected: 04/09/13 09:00 — **Matrix: Water**
Date Received: 04/11/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	ND		0.10	0.015	ug/L		04/12/13 17:00	04/16/13 19:25	1
4,4'-DDE	ND		0.10	0.0078	ug/L		04/12/13 17:00	04/16/13 19:25	1
4,4'-DDD	ND		0.10	0.0080	ug/L		04/12/13 17:00	04/16/13 19:25	1
Aldrin	ND		0.052	0.0061	ug/L		04/12/13 17:00	04/16/13 19:25	1
Dieldrin	ND		0.10	0.0065	ug/L		04/12/13 17:00	04/16/13 19:25	1
Chlordane (technical)	ND		0.052	0.0055	ug/L		04/12/13 17:00	04/16/13 19:25	1
alpha-BHC	ND		0.052	0.0055	ug/L		04/12/13 17:00	04/16/13 19:25	1
beta-BHC	ND		0.052	0.0090	ug/L		04/12/13 17:00	04/16/13 19:25	1
delta-BHC	ND		0.052	0.0060	ug/L		04/12/13 17:00	04/16/13 19:25	1
gamma-BHC (Lindane)	ND		0.052	0.0071	ug/L		04/12/13 17:00	04/16/13 19:25	1
Endosulfan I	ND		0.052	0.0060	ug/L		04/12/13 17:00	04/16/13 19:25	1
Endosulfan sulfate	ND		0.10	0.0059	ug/L		04/12/13 17:00	04/16/13 19:25	1
Endosulfan II	ND		0.10	0.0073	ug/L		04/12/13 17:00	04/16/13 19:25	1
Endrin	ND		0.10	0.0082	ug/L		04/12/13 17:00	04/16/13 19:25	1
Endrin aldehyde	ND		0.10	0.0091	ug/L		04/12/13 17:00	04/16/13 19:25	1
Heptachlor	ND		0.052	0.0080	ug/L		04/12/13 17:00	04/16/13 19:25	1
Heptachlor epoxide	ND		0.052	0.0078	ug/L		04/12/13 17:00	04/16/13 19:25	1
PCB-1221	ND		1.0	0.22	ug/L		04/12/13 17:00	04/17/13 20:23	1
PCB-1232	ND		1.0	0.17	ug/L		04/12/13 17:00	04/17/13 20:23	1
PCB-1242	ND		1.0	0.11	ug/L		04/12/13 17:00	04/17/13 20:23	1
PCB-1248	ND		1.0	0.095	ug/L		04/12/13 17:00	04/17/13 20:23	1
PCB-1254	ND		1.0	0.12	ug/L		04/12/13 17:00	04/17/13 20:23	1
PCB-1016	ND		1.0	0.13	ug/L		04/12/13 17:00	04/17/13 20:23	1
PCB-1260	ND		1.0	0.17	ug/L		04/12/13 17:00	04/17/13 20:23	1
Toxaphene	ND		2.1	0.38	ug/L		04/12/13 17:00	04/16/13 19:25	1
alpha-Chlordane	ND		0.052	0.0055	ug/L		04/12/13 17:00	04/16/13 19:25	1
gamma-Chlordane	ND		0.052	0.0094	ug/L		04/12/13 17:00	04/16/13 19:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*83*		*34 - 122*	*04/12/13 17:00*	*04/16/13 19:25*	*1*
DCB Decachlorobiphenyl	*77*		*34 - 122*	*04/12/13 17:00*	*04/17/13 20:23*	*1*
Tetrachloro-m-xylene	*67*		*28 - 115*	*04/12/13 17:00*	*04/16/13 19:25*	*1*
Tetrachloro-m-xylene	*76*		*28 - 115*	*04/12/13 17:00*	*04/17/13 20:23*	*1*

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

Client Sample ID: DRY CREEK EFFLUENT — **Lab Sample ID: 280-40906-1**
Date Collected: 04/09/13 09:00 — **Matrix: Water**
Date Received: 04/11/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	0.27	J	0.50	0.20	ng/L		04/16/13 17:15	04/18/13 12:08	1

Client Sample ID: DRY CREEK EFFLUENT FIELD BLANK — **Lab Sample ID: 280-40906-2**
Date Collected: 04/09/13 09:17 — **Matrix: Water**
Date Received: 04/11/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.50	0.20	ng/L		04/16/13 17:15	04/18/13 12:16	1

Client Sample Results

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

TestAmerica Job ID: 280-40906-1

General Chemistry

Client Sample ID: DRY CREEK EFFLUENT
Date Collected: 04/09/13 09:00
Date Received: 04/11/13 10:00

Lab Sample ID: 280-40906-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	80		15	1.3	mg/L			04/16/13 00:42	5
Sulfate	47	B	5.0	0.23	mg/L			04/15/13 19:56	1
Phenols, Total	0.0054	J B	0.0070	0.0020	mg/L		04/18/13 14:13	04/18/13 20:45	1
Cyanide, Total	0.0038	J	0.010	0.0020	mg/L		04/16/13 09:56	04/17/13 12:27	1
Total Sulfide	0.60	J	1.0	0.50	mg/L			04/16/13 19:22	1

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

Lab Sample ID: MB 280-168930/3
Matrix: Water
Analysis Batch: 168930

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			04/11/13 08:02	1
Acrylonitrile	ND		100	17	ug/L			04/11/13 08:02	1
Benzene	ND		5.0	1.8	ug/L			04/11/13 08:02	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			04/11/13 08:02	1
Chlorobenzene	ND		5.0	2.3	ug/L			04/11/13 08:02	1
Chloroform	ND		5.0	1.1	ug/L			04/11/13 08:02	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			04/11/13 08:02	1
Chloroethane	ND		10	2.0	ug/L			04/11/13 08:02	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			04/11/13 08:02	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			04/11/13 08:02	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			04/11/13 08:02	1
1,2-Dichloroethane	ND		5.0	1.3	ug/L			04/11/13 08:02	1
Chloromethane	ND		10	0.89	ug/L			04/11/13 08:02	1
Bromoform	ND		5.0	0.48	ug/L			04/11/13 08:02	1
Bromomethane	ND		10	1.5	ug/L			04/11/13 08:02	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			04/11/13 08:02	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			04/11/13 08:02	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			04/11/13 08:02	1
Ethylbenzene	ND		5.0	2.2	ug/L			04/11/13 08:02	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			04/11/13 08:02	1
Methylene Chloride	ND		5.0	2.0	ug/L			04/11/13 08:02	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			04/11/13 08:02	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			04/11/13 08:02	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			04/11/13 08:02	1
Tetrachloroethene	ND		5.0	2.7	ug/L			04/11/13 08:02	1
Toluene	ND		5.0	2.2	ug/L			04/11/13 08:02	1
Trichloroethene	ND		5.0	0.95	ug/L			04/11/13 08:02	1
Vinyl chloride	ND		10	1.3	ug/L			04/11/13 08:02	1
Xylenes, Total	ND		5.0	0.45	ug/L			04/11/13 08:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*73 - 122*		*04/11/13 08:02*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*04/11/13 08:02*	*1*
4-Bromofluorobenzene (Surr)	*107*		*79 - 119*		*04/11/13 08:02*	*1*

Lab Sample ID: LCS 280-168930/1000
Matrix: Water
Analysis Batch: 168930

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acrolein	200	153		ug/L		76	38 - 188
Acrylonitrile	200	137		ug/L		68	48 - 149
Benzene	20.0	17.1		ug/L		86	37 - 151
Carbon tetrachloride	20.0	17.3		ug/L		87	70 - 140
Chlorobenzene	20.0	18.8		ug/L		93	37 - 160
Chloroform	20.0	17.5		ug/L		87	51 - 138
2-Chloroethyl vinyl ether	20.0	18.0		ug/L		90	10 - 305
Chloroethane	20.0	16.9		ug/L		84	14 - 230

ANALYTICAL RESULTS

DRY CREEK WWTP LABORATORY

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

RECEIVED
NOV 06 2013
KS
11-07-13

Date Sampled: 08-22-13
Date Received: 08-22-13
Sample Location: Dry Creek Influent Qterly #3

Sampled By: KS
Date Reported: 08-28-13
Sample Matrix: Wastewater

Analyses	*Result*	*Units*	*Qual*	*RL*	*Method*	*Analysis Date/ By*
NONMETALS						
Ammonia as N	39.9	mg/l	C	0.1	SM 4500 NH_3-D	08/29/13 / ms
BOD_5 (Total)	236	mg/l	C	2.0	SM 5210 B	08/23/13 / kl
Hexavalent Chrome	0.058	mg/l	1G	0.013	SM 3500-Cr D	08/22/13 / mw
Oil & Grease (HEM)	13.1	mg/l	G	5.0	EPA 1664A	08/26/13 / mw
pH	7.60	P.U.	G	NA	SM 4500H^+ B	On-site/ks
TPH (SGT-HEM)	ND	mg/l	G	5.0	EPA 1664A	08/26/13 / mw
Total Phosphorus	6.8	mg/l	C	0.1	EPA 365.1	08/27/13 / kl
TDS	646	mg/l	C	5.0	SM 2520 B	08/23/13 / kl
TSS	742	mg/l	C	3.0	SM 2540-D	08-27-13/ ms
METALS - TOTAL						
Ag, Silver	ND	mg/l		0.005	EPA 200.7	08-23-13/ kl
As, Arsenic	ND	mg/l		0.010	EPA 200.7	08-23-13/ kl
Be, Beryllium	ND	mg/l		0.005	EPA 200.7	08-23-13/ kl
Cd, Cadmium	ND	mg/l		0.005	EPA 200.7	08-23-13/ kl
Cr, Chromium	0.007	mg/l	C	0.005	EPA 200.7	08-23-13/ kl
Cu, Copper	0.255	mg/l		0.010	EPA 200.7	08-23-13/ kl
Mo, Molybdenum	0.008	mg/l		0.005	EPA 200.7	08-23-13/ kl
Ni, Nickel	0.008	mg/l		0.005	EPA 200.7	08-23-13/ kl
Pb, Lead	0.012	mg/l		0.005	EPA 200.7	08-23-13/ kl
Sb, Antimony	ND	mg/l		0.010	EPA 200.7	08-23-13/ kl
Selenium, Se	0.013	mg/l		0.003	EPA 200.7	08-23-13/ kl
Tl, Thallium	ND	mg/l		0.025	EPA 200.7	08-23-13/ kl
Zinc, Zn	0.384	mg/l	2	0.005	EPA 200.7	08-23-13/ kl

Comments: 1: Interference from turbidity. See total chrome. 2: Contamination in blank for Zn (0.189 mg/L)

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

Kent Loader, Laboratory Supervisor

Date: 11-6-13

Detection Summary

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

TestAmerica Job ID: 280-45873-1

Client Sample ID: DRY CREEK INFLUENT — Lab Sample ID: 280-45873-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	2.1	J	5.0	1.1	ug/L	1		624	Total/NA
Bis(2-ethylhexyl) phthalate	7.9	J	53	3.0	ug/L	5		625	Total/NA
Diethyl phthalate	3.2	J B	53	2.0	ug/L	5		625	Total/NA
Hg	25	B	2.5	1.0	ng/L	1		1631E	Total/NA
Chloride	83		15	1.3	mg/L	5		300.0	Total/NA
Sulfate	52		25	1.2	mg/L	5		300.0	Total/NA
Phenols, Total	0.030		0.0070	0.0020	mg/L	1		420.1	Total/NA
Cyanide, Total	0.0039	J B	0.010	0.0020	mg/L	1		SM 4500 CN E	Total/NA
Total Sulfide	1.7		1.0	0.50	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: DRY CREEK INFLUENT FIELD BLANK — Lab Sample ID: 280-45873-2

No Detections.

Client Sample ID: TRIP BLANK — Lab Sample ID: 280-45873-3

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

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

TestAmerica Job ID: 280-45873-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL DEN
625	PPL SVOC	40CFR136A	TAL DEN
608	PP Pesticides/PCBs	40CFR136A	TAL DEN
1631E	Mercury, Low Level (CVAFS)	EPA	TAL PEN
300.0	Chloride & Sulfate	40CFR136A	TAL DEN
420.1	Phenolics, Total Recoverable	MCAWW	TAL DEN
SM 4500 CN E	Cyanide, Total	SM	TAL DEN
SM 4500 S2 F	Sulfide, Total	SM	TAL DEN

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
EPA = US Environmental Protection Agency
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100
TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

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

TestAmerica Job ID: 280-45873-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-45873-1	DRY CREEK INFLUENT	Water	08/22/13 08:50	08/23/13 10:00
280-45873-2	DRY CREEK INFLUENT FIELD BLANK	Water	08/22/13 09:10	08/23/13 10:00
280-45873-3	TRIP BLANK	Water	08/22/13 09:06	08/23/13 10:00

Client Sample Results

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

TestAmerica Job ID: 280-45873-1

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

Client Sample ID: DRY CREEK INFLUENT
Date Collected: 08/22/13 08:50
Date Received: 08/23/13 10:00

Lab Sample ID: 280-45873-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			08/24/13 08:09	1
Acrylonitrile	ND		100	17	ug/L			08/24/13 08:09	1
Benzene	ND		5.0	1.8	ug/L			08/24/13 08:09	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			08/24/13 08:09	1
Chlorobenzene	ND		5.0	2.3	ug/L			08/24/13 08:09	1
Chloroform	2.1	J	5.0	1.1	ug/L			08/24/13 08:09	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			08/24/13 08:09	1
Chloroethane	ND		10	2.0	ug/L			08/24/13 08:09	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			08/24/13 08:09	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			08/24/13 08:09	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			08/24/13 08:09	1
1,2-Dichloroethane	ND		5.0	1.3	ug/L			08/24/13 08:09	1
Chloromethane	ND		10	0.89	ug/L			08/24/13 08:09	1
Bromoform	ND		5.0	0.48	ug/L			08/24/13 08:09	1
Bromomethane	ND		10	1.5	ug/L			08/24/13 08:09	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			08/24/13 08:09	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			08/24/13 08:09	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			08/24/13 08:09	1
Ethylbenzene	ND		5.0	2.2	ug/L			08/24/13 08:09	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			08/24/13 08:09	1
Methylene Chloride	ND		5.0	2.0	ug/L			08/24/13 08:09	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			08/24/13 08:09	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			08/24/13 08:09	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			08/24/13 08:09	1
Tetrachloroethene	ND		5.0	2.7	ug/L			08/24/13 08:09	1
Toluene	ND		5.0	2.2	ug/L			08/24/13 08:09	1
Trichloroethene	ND		5.0	0.95	ug/L			08/24/13 08:09	1
Vinyl chloride	ND		10	1.3	ug/L			08/24/13 08:09	1
Xylenes, Total	ND		5.0	0.45	ug/L			08/24/13 08:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*73 - 122*		*08/24/13 08:09*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/24/13 08:09*	*1*
4-Bromofluorobenzene (Surr)	*102*		*79 - 119*		*08/24/13 08:09*	*1*

Client Sample ID: TRIP BLANK
Date Collected: 08/22/13 09:06
Date Received: 08/23/13 10:00

Lab Sample ID: 280-45873-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			08/24/13 08:33	1
Acrylonitrile	ND		100	17	ug/L			08/24/13 08:33	1
Benzene	ND		5.0	1.8	ug/L			08/24/13 08:33	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			08/24/13 08:33	1
Chlorobenzene	ND		5.0	2.3	ug/L			08/24/13 08:33	1
Chloroform	ND		5.0	1.1	ug/L			08/24/13 08:33	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			08/24/13 08:33	1
Chloroethane	ND		10	2.0	ug/L			08/24/13 08:33	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			08/24/13 08:33	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			08/24/13 08:33	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			08/24/13 08:33	1

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

Client Sample ID: TRIP BLANK — **Lab Sample ID: 280-45873-3**
Date Collected: 08/22/13 09:06 — **Matrix: Water**
Date Received: 08/23/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		5.0	1.3	ug/L			08/24/13 08:33	1
Chloromethane	ND		10	0.89	ug/L			08/24/13 08:33	1
Bromoform	ND		5.0	0.48	ug/L			08/24/13 08:33	1
Bromomethane	ND		10	1.5	ug/L			08/24/13 08:33	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			08/24/13 08:33	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			08/24/13 08:33	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			08/24/13 08:33	1
Ethylbenzene	ND		5.0	2.2	ug/L			08/24/13 08:33	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			08/24/13 08:33	1
Methylene Chloride	ND		5.0	2.0	ug/L			08/24/13 08:33	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			08/24/13 08:33	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			08/24/13 08:33	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			08/24/13 08:33	1
Tetrachloroethene	ND		5.0	2.7	ug/L			08/24/13 08:33	1
Toluene	ND		5.0	2.2	ug/L			08/24/13 08:33	1
Trichloroethene	ND		5.0	0.95	ug/L			08/24/13 08:33	1
Vinyl chloride	ND		10	1.3	ug/L			08/24/13 08:33	1
Xylenes, Total	ND		5.0	0.45	ug/L			08/24/13 08:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*73 - 122*		*08/24/13 08:33*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*08/24/13 08:33*	*1*
4-Bromofluorobenzene (Surr)	*104*		*79 - 119*		*08/24/13 08:33*	*1*

Method: 625 - PPL SVOC

Client Sample ID: DRY CREEK INFLUENT — **Lab Sample ID: 280-45873-1**
Date Collected: 08/22/13 08:50 — **Matrix: Water**
Date Received: 08/23/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		53	1.5	ug/L		08/29/13 12:40	09/03/13 23:00	5
Benzidine	ND		790	260	ug/L		08/29/13 12:40	09/03/13 23:00	5
1,2,4-Trichlorobenzene	ND		53	1.5	ug/L		08/29/13 12:40	09/03/13 23:00	5
Hexachlorobenzene	ND		53	3.5	ug/L		08/29/13 12:40	09/03/13 23:00	5
Bis(2-chloroethyl)ether	ND		53	2.2	ug/L		08/29/13 12:40	09/03/13 23:00	5
2-Chloronaphthalene	ND		53	1.4	ug/L		08/29/13 12:40	09/03/13 23:00	5
2-Chlorophenol	ND		53	11	ug/L		08/29/13 12:40	09/03/13 23:00	5
2,4,6-Trichlorophenol	ND		110	1.5	ug/L		08/29/13 12:40	09/03/13 23:00	5
3,3'-Dichlorobenzidine	ND		260	11	ug/L		08/29/13 12:40	09/03/13 23:00	5
Hexachloroethane	ND		53	11	ug/L		08/29/13 12:40	09/03/13 23:00	5
2,4-Dichlorophenol	ND		53	3.4	ug/L		08/29/13 12:40	09/03/13 23:00	5
2,4-Dimethylphenol	ND		53	3.1	ug/L		08/29/13 12:40	09/03/13 23:00	5
2,4-Dinitrotoluene	ND		53	8.8	ug/L		08/29/13 12:40	09/03/13 23:00	5
2,6-Dinitrotoluene	ND		53	10	ug/L		08/29/13 12:40	09/03/13 23:00	5
1,2-Diphenylhydrazine(as Azobenzene)	ND		53	1.2	ug/L		08/29/13 12:40	09/03/13 23:00	5
Fluoranthene	ND		53	1.1	ug/L		08/29/13 12:40	09/03/13 23:00	5
4-Bromophenyl phenyl ether	ND		53	2.3	ug/L		08/29/13 12:40	09/03/13 23:00	5
4-Chlorophenyl phenyl ether	ND		53	8.8	ug/L		08/29/13 12:40	09/03/13 23:00	5
bis (2-chloroisopropyl) ether	ND		53	1.5	ug/L		08/29/13 12:40	09/03/13 23:00	5

Method: 625 - PPL SVOC (Continued)

Client Sample ID: DRY CREEK INFLUENT **Lab Sample ID: 280-45873-1**
Date Collected: 08/22/13 08:50 **Matrix: Water**
Date Received: 08/23/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		53	5.1	ug/L		08/29/13 12:40	09/03/13 23:00	5
p-Chloro-m-cresol	ND		53	13	ug/L		08/29/13 12:40	09/03/13 23:00	5
Hexachlorobutadiene	ND		53	17	ug/L		08/29/13 12:40	09/03/13 23:00	5
Hexachlorocyclopentadiene	ND		260	8.1	ug/L		08/29/13 12:40	09/03/13 23:00	5
Isophorone	ND		53	1.1	ug/L		08/29/13 12:40	09/03/13 23:00	5
Naphthalene	ND		53	1.5	ug/L		08/29/13 12:40	09/03/13 23:00	5
Nitrobenzene	ND		53	4.3	ug/L		08/29/13 12:40	09/03/13 23:00	5
2-Nitrophenol	ND		110	2.1	ug/L		08/29/13 12:40	09/03/13 23:00	5
1,2-Dichlorobenzene	ND		53	1.2	ug/L		08/29/13 12:40	09/03/13 23:00	5
2,4-Dinitrophenol	ND		320	53	ug/L		08/29/13 12:40	09/03/13 23:00	5
1,3-Dichlorobenzene	ND		53	1.6	ug/L		08/29/13 12:40	09/03/13 23:00	5
4-Nitrophenol	ND		260	6.5	ug/L		08/29/13 12:40	09/03/13 23:00	5
1,4-Dichlorobenzene	ND		53	1.7	ug/L		08/29/13 12:40	09/03/13 23:00	5
4,6-Dinitro-o-cresol	ND		320	21	ug/L		08/29/13 12:40	09/03/13 23:00	5
N-Nitrosodimethylamine	ND		53	1.5	ug/L		08/29/13 12:40	09/03/13 23:00	5
N-Nitrosodi-n-propylamine	ND		53	1.8	ug/L		08/29/13 12:40	09/03/13 23:00	5
N-Nitrosodiphenylamine	ND		53	2.3	ug/L		08/29/13 12:40	09/03/13 23:00	5
Pentachlorophenol	ND		320	110	ug/L		08/29/13 12:40	09/03/13 23:00	5
Phenol	ND		53	11	ug/L		08/29/13 12:40	09/03/13 23:00	5
Bis(2-ethylhexyl) phthalate	**7.9**	**J**	53	3.0	ug/L		08/29/13 12:40	09/03/13 23:00	5
Butyl benzyl phthalate	ND		53	5.3	ug/L		08/29/13 12:40	09/03/13 23:00	5
Di-n-butyl phthalate	ND		53	6.1	ug/L		08/29/13 12:40	09/03/13 23:00	5
Di-n-octyl phthalate	ND		53	1.8	ug/L		08/29/13 12:40	09/03/13 23:00	5
Diethyl phthalate	**3.2**	**J B**	53	2.0	ug/L		08/29/13 12:40	09/03/13 23:00	5
Dimethyl phthalate	ND		53	1.1	ug/L		08/29/13 12:40	09/03/13 23:00	5
Benzo[a]anthracene	ND		53	1.8	ug/L		08/29/13 12:40	09/03/13 23:00	5
Benzo[a]pyrene	ND		53	1.6	ug/L		08/29/13 12:40	09/03/13 23:00	5
3,4-Benzofluoranthene	ND		53	2.8	ug/L		08/29/13 12:40	09/03/13 23:00	5
Benzo[k]fluoranthene	ND		53	2.4	ug/L		08/29/13 12:40	09/03/13 23:00	5
Anthracene	ND		53	2.2	ug/L		08/29/13 12:40	09/03/13 23:00	5
Acenaphthylene	ND		53	2.6	ug/L		08/29/13 12:40	09/03/13 23:00	5
Chrysene	ND		53	2.9	ug/L		08/29/13 12:40	09/03/13 23:00	5
Benzo[g,h,i]perylene	ND		53	2.6	ug/L		08/29/13 12:40	09/03/13 23:00	5
Fluorene	ND		53	1.6	ug/L		08/29/13 12:40	09/03/13 23:00	5
Phenanthrene	ND		53	1.4	ug/L		08/29/13 12:40	09/03/13 23:00	5
Dibenz(a,h)anthracene	ND		53	2.7	ug/L		08/29/13 12:40	09/03/13 23:00	5
Indeno[1,2,3-cd]pyrene	ND		53	3.4	ug/L		08/29/13 12:40	09/03/13 23:00	5
Pyrene	ND		53	2.0	ug/L		08/29/13 12:40	09/03/13 23:00	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*	*D*	*36 - 120*	*08/29/13 12:40*	*09/03/13 23:00*	*5*
2-Fluorophenol	*62*	*D*	*30 - 120*	*08/29/13 12:40*	*09/03/13 23:00*	*5*
2,4,6-Tribromophenol	*77*	*D*	*50 - 120*	*08/29/13 12:40*	*09/03/13 23:00*	*5*
Nitrobenzene-d5	*70*	*D*	*45 - 120*	*08/29/13 12:40*	*09/03/13 23:00*	*5*
Phenol-d5	*68*	*D*	*36 - 120*	*08/29/13 12:40*	*09/03/13 23:00*	*5*
Terphenyl-d14	*61*	*D*	*52 - 120*	*08/29/13 12:40*	*09/03/13 23:00*	*5*

Client Sample Results

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

TestAmerica Job ID: 280-45873-1

Method: 608 - PP Pesticides/PCBs

Client Sample ID: DRY CREEK INFLUENT — **Lab Sample ID: 280-45873-1**
Date Collected: 08/22/13 08:50 — **Matrix: Water**
Date Received: 08/23/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	ND		0.53	0.079	ug/L		08/27/13 16:55	08/29/13 13:13	5
4,4'-DDE	ND		0.53	0.040	ug/L		08/27/13 16:55	08/29/13 13:13	5
4,4'-DDD	ND		0.53	0.041	ug/L		08/27/13 16:55	08/29/13 13:13	5
Aldrin	ND		0.27	0.032	ug/L		08/27/13 16:55	08/29/13 13:13	5
Dieldrin	ND		0.53	0.034	ug/L		08/27/13 16:55	08/29/13 13:13	5
Chlordane (technical)	ND		0.27	0.028	ug/L		08/27/13 16:55	08/29/13 13:13	5
alpha-BHC	ND		0.27	0.028	ug/L		08/27/13 16:55	08/29/13 13:13	5
beta-BHC	ND		0.27	0.047	ug/L		08/27/13 16:55	08/29/13 13:13	5
delta-BHC	ND		0.27	0.031	ug/L		08/27/13 16:55	08/29/13 13:13	5
gamma-BHC (Lindane)	ND		0.27	0.037	ug/L		08/27/13 16:55	08/29/13 13:13	5
Endosulfan I	ND		0.27	0.031	ug/L		08/27/13 16:55	08/29/13 13:13	5
Endosulfan sulfate	ND		0.53	0.030	ug/L		08/27/13 16:55	08/29/13 13:13	5
Endosulfan II	ND		0.53	0.037	ug/L		08/27/13 16:55	08/29/13 13:13	5
Endrin	ND		0.53	0.042	ug/L		08/27/13 16:55	08/29/13 13:13	5
Endrin aldehyde	ND		0.53	0.047	ug/L		08/27/13 16:55	08/29/13 13:13	5
Heptachlor	ND		0.27	0.041	ug/L		08/27/13 16:55	08/29/13 13:13	5
Heptachlor epoxide	ND		0.27	0.040	ug/L		08/27/13 16:55	08/29/13 13:13	5
PCB-1221	ND		1.1	0.23	ug/L		08/27/13 16:55	08/29/13 12:37	1
PCB-1232	ND		1.1	0.18	ug/L		08/27/13 16:55	08/29/13 12:37	1
PCB-1242	ND		1.1	0.11	ug/L		08/27/13 16:55	08/29/13 12:37	1
PCB-1248	ND		1.1	0.098	ug/L		08/27/13 16:55	08/29/13 12:37	1
PCB-1254	ND		1.1	0.12	ug/L		08/27/13 16:55	08/29/13 12:37	1
PCB-1016	ND		1.1	0.13	ug/L		08/27/13 16:55	08/29/13 12:37	1
PCB-1260	ND		1.1	0.17	ug/L		08/27/13 16:55	08/29/13 12:37	1
Toxaphene	ND		11	2.0	ug/L		08/27/13 16:55	08/29/13 13:13	5
alpha-Chlordane	ND		0.27	0.028	ug/L		08/27/13 16:55	08/29/13 13:13	5
gamma-Chlordane	ND		0.27	0.049	ug/L		08/27/13 16:55	08/29/13 13:13	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*50*		*34 - 122*	*08/27/13 16:55*	*08/29/13 12:37*	*1*
DCB Decachlorobiphenyl	*83*	*D*	*34 - 122*	*08/27/13 16:55*	*08/29/13 13:13*	*5*
Tetrachloro-m-xylene	*64*		*28 - 115*	*08/27/13 16:55*	*08/29/13 12:37*	*1*
Tetrachloro-m-xylene	*78*	*D*	*28 - 115*	*08/27/13 16:55*	*08/29/13 13:13*	*5*

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

Client Sample ID: DRY CREEK INFLUENT — **Lab Sample ID: 280-45873-1**
Date Collected: 08/22/13 08:50 — **Matrix: Water**
Date Received: 08/23/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	25	B	2.5	1.0	ng/L		08/27/13 15:40	08/30/13 10:57	1

Client Sample ID: DRY CREEK INFLUENT FIELD BLANK — **Lab Sample ID: 280-45873-2**
Date Collected: 08/22/13 09:10 — **Matrix: Water**
Date Received: 08/23/13 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.50	0.20	ng/L		08/27/13 15:40	08/30/13 11:05	1

Client Sample Results

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

TestAmerica Job ID: 280-45873-1

General Chemistry

Client Sample ID: DRY CREEK INFLUENT
Date Collected: 08/22/13 08:50
Date Received: 08/23/13 10:00

Lab Sample ID: 280-45873-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	83		15	1.3	mg/L			08/26/13 23:23	5
Sulfate	52		25	1.2	mg/L			08/26/13 23:23	5
Phenols, Total	0.030		0.0070	0.0020	mg/L		08/27/13 15:52	08/28/13 14:32	1
Cyanide, Total	0.0039	J B	0.010	0.0020	mg/L		08/28/13 08:58	08/29/13 15:15	1
Total Sulfide	1.7		1.0	0.50	mg/L			08/29/13 18:52	1

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

Lab Sample ID: MB 280-188670/3
Matrix: Water
Analysis Batch: 188670

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			08/24/13 07:39	1
Acrylonitrile	ND		100	17	ug/L			08/24/13 07:39	1
Benzene	ND		5.0	1.8	ug/L			08/24/13 07:39	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			08/24/13 07:39	1
Chlorobenzene	ND		5.0	2.3	ug/L			08/24/13 07:39	1
Chloroform	ND		5.0	1.1	ug/L			08/24/13 07:39	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			08/24/13 07:39	1
Chloroethane	ND		10	2.0	ug/L			08/24/13 07:39	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			08/24/13 07:39	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			08/24/13 07:39	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			08/24/13 07:39	1
1,2-Dichloroethane	ND		5.0	1.3	ug/L			08/24/13 07:39	1
Chloromethane	ND		10	0.89	ug/L			08/24/13 07:39	1
Bromoform	ND		5.0	0.48	ug/L			08/24/13 07:39	1
Bromomethane	ND		10	1.5	ug/L			08/24/13 07:39	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			08/24/13 07:39	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			08/24/13 07:39	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			08/24/13 07:39	1
Ethylbenzene	ND		5.0	2.2	ug/L			08/24/13 07:39	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			08/24/13 07:39	1
Methylene Chloride	ND		5.0	2.0	ug/L			08/24/13 07:39	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			08/24/13 07:39	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			08/24/13 07:39	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			08/24/13 07:39	1
Tetrachloroethene	ND		5.0	2.7	ug/L			08/24/13 07:39	1
Toluene	ND		5.0	2.2	ug/L			08/24/13 07:39	1
Trichloroethene	ND		5.0	0.95	ug/L			08/24/13 07:39	1
Vinyl chloride	ND		10	1.3	ug/L			08/24/13 07:39	1
Xylenes, Total	ND		5.0	0.45	ug/L			08/24/13 07:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*73 - 122*		*08/24/13 07:39*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*08/24/13 07:39*	*1*
4-Bromofluorobenzene (Surr)	*98*		*79 - 119*		*08/24/13 07:39*	*1*

Lab Sample ID: LCS 280-188670/1002
Matrix: Water
Analysis Batch: 188670

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acrolein	200	203		ug/L		101	38 - 188
Acrylonitrile	200	253		ug/L		127	48 - 149
Benzene	20.0	23.1		ug/L		115	37 - 151
Carbon tetrachloride	20.0	22.1		ug/L		110	70 - 140
Chlorobenzene	20.0	22.0		ug/L		110	37 - 160
Chloroform	20.0	22.4		ug/L		112	51 - 138
2-Chloroethyl vinyl ether	20.0	20.2		ug/L		101	10 - 305
Chloroethane	20.0	27.7		ug/L		138	14 - 230

ANALYTICAL RESULTS

DRY CREEK WWTP LABORATORY

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

RECEIVED
NOV 06 2013
BY: 11-6-13
KS

Date Sampled: 08-23-13 Sampled By: KS
Date Received: 08-23-13 Date Reported: 08-28-13
Sample Location: Dry Creek Effluent Qterly #3 Sample Matrix: Wastewater

Analyses	Result	Units	Qual	RL	Method	Analysis Date/ By
NONMETALS						
Ammonia as N	0.2	mg/l	C	0.1	SM 4500 NH_3-D	08/29/13 / ms
BOD_5 (Total)	ND	mg/l	C	2.0	SM 5210 B	08/23/13 / kl
Hexavalent Chrome	ND	mg/l	G	0.013	SM 3500-Cr D	08/23/13 / kl
Oil & Grease (HEM)	ND	mg/l	G	5.0	EPA 1664A	08/26/13 / mw
pH	7.41	P.U.	G	NA	SM 4500H^+ B	On-site/ks
TPH (SGT-HEM)	ND	mg/l	G	5.0	EPA 1664A	08/26/13 / mw
Total Phosphorus	0.9	mg/l	C	0.1	EPA 365.1	08/23/13 / kl
TDS	500	mg/l	C	5.0	SM 2520 B	08/23/13 / kl
TSS	3.6	mg/l	C	3.0	SM 2540-D	08-27-13/ ms
METALS - TOTAL						
Ag, Silver	ND	mg/l		0.005	EPA 200.7	08-23-13/ kl
As, Arsenic	ND	mg/l		0.010	EPA 200.7	08-23-13/ kl
Be, Beryllium	ND	mg/l		0.005	EPA 200.7	08-23-13/ kl
Cd, Cadmium	ND	mg/l		0.005	EPA 200.7	08-23-13/ kl
Cr, Chromium	ND	mg/l		0.005	EPA 200.7	08-23-13/ kl
Cu, Copper	ND	mg/l	C	0.010	EPA 200.7	08-23-13/ kl
Mo, Molybdenum	0.005	mg/l		0.005	EPA 200.7	08-23-13/ kl
Ni, Nickel	ND	mg/l		0.005	EPA 200.7	08-23-13/ kl
Pb, Lead	ND	mg/l		0.005	EPA 200.7	08-23-13/ kl
Sb, Antimony	ND	mg/l		0.010	EPA 200.7	08-23-13/ kl
Selenium, Se	ND	mg/l		0.003	EPA 200.7	08-23-13/ kl
Tl, Thallium	ND	mg/l		0.025	EPA 200.7	08-23-13/ kl
Zinc, Zn	0.031	mg/l	1	0.005	EPA 200.7	08-23-13/ kl

Comments: 1: Contamination in blank for Zn (0.096 mg/L)

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

Kent Louder, Laboratory Supervisor *Date:* 11-6-13

Detection Summary

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

TestAmerica Job ID: 280-45899-1

Client Sample ID: DRY CREEK EFFLUENT — Lab Sample ID: 280-45899-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	0.61	J	10	0.57	ug/L	1		625	Total/NA
Hg	0.31	J B	0.50	0.20	ng/L	1		1631E	Total/NA
Chloride	78		15	1.3	mg/L	5		300.0	Total/NA
Sulfate	52		25	1.2	mg/L	5		300.0	Total/NA
Cyanide, Total	0.0034	J B	0.010	0.0020	mg/L	1		SM 4500 CN E	Total/NA
Total Sulfide	0.80	J	1.0	0.50	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: DRY CREEK EFFLUENT FIELD BLANK — Lab Sample ID: 280-45899-2

No Detections.

Client Sample ID: TRIP BLANK — Lab Sample ID: 280-45899-3

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

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

TestAmerica Job ID: 280-45899-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL DEN
625	PPL SVOC	40CFR136A	TAL DEN
608	PP Pesticides/PCBs	40CFR136A	TAL DEN
1631E	Mercury, Low Level (CVAFS)	EPA	TAL PEN
300.0	Chloride & Sulfate	40CFR136A	TAL DEN
420.1	Phenolics, Total Recoverable	MCAWW	TAL DEN
SM 4500 CN E	Cyanide, Total	SM	TAL DEN
SM 4500 S2 F	Sulfide, Total	SM	TAL DEN

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

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

TestAmerica Job ID: 280-45899-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-45899-1	DRY CREEK EFFLUENT	Water	08/23/13 08:23	08/24/13 12:56
280-45899-2	DRY CREEK EFFLUENT FIELD BLANK	Water	08/23/13 08:50	08/24/13 12:56
280-45899-3	TRIP BLANK	Water	08/23/13 08:34	08/24/13 12:56

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

Client Sample ID: DRY CREEK EFFLUENT — **Lab Sample ID: 280-45899-1**
Date Collected: 08/23/13 08:23 — **Matrix: Water**
Date Received: 08/24/13 12:56

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			08/26/13 19:39	1
Acrylonitrile	ND		100	17	ug/L			08/26/13 19:39	1
Benzene	ND		5.0	1.8	ug/L			08/26/13 19:39	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			08/26/13 19:39	1
Chlorobenzene	ND		5.0	2.3	ug/L			08/26/13 19:39	1
Chloroform	ND		5.0	1.1	ug/L			08/26/13 19:39	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			08/26/13 19:39	1
Chloroethane	ND		10	2.0	ug/L			08/26/13 19:39	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			08/26/13 19:39	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			08/26/13 19:39	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			08/26/13 19:39	1
1,2-Dichloroethane	ND		5.0	1.3	ug/L			08/26/13 19:39	1
Chloromethane	ND		10	0.89	ug/L			08/26/13 19:39	1
Bromoform	ND		5.0	0.48	ug/L			08/26/13 19:39	1
Bromomethane	ND		10	1.5	ug/L			08/26/13 19:39	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			08/26/13 19:39	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			08/26/13 19:39	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			08/26/13 19:39	1
Ethylbenzene	ND		5.0	2.2	ug/L			08/26/13 19:39	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			08/26/13 19:39	1
Methylene Chloride	ND		5.0	2.0	ug/L			08/26/13 19:39	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			08/26/13 19:39	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			08/26/13 19:39	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			08/26/13 19:39	1
Tetrachloroethene	ND		5.0	2.7	ug/L			08/26/13 19:39	1
Toluene	ND		5.0	2.2	ug/L			08/26/13 19:39	1
Trichloroethene	ND		5.0	0.95	ug/L			08/26/13 19:39	1
Vinyl chloride	ND		10	1.3	ug/L			08/26/13 19:39	1
Xylenes, Total	ND		5.0	0.45	ug/L			08/26/13 19:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*77*		*73 - 122*		*08/26/13 19:39*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*08/26/13 19:39*	*1*
4-Bromofluorobenzene (Surr)	*97*		*79 - 119*		*08/26/13 19:39*	*1*

Client Sample ID: TRIP BLANK — **Lab Sample ID: 280-45899-3**
Date Collected: 08/23/13 08:34 — **Matrix: Water**
Date Received: 08/24/13 12:56

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			08/26/13 20:48	1
Acrylonitrile	ND		100	17	ug/L			08/26/13 20:48	1
Benzene	ND		5.0	1.8	ug/L			08/26/13 20:48	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			08/26/13 20:48	1
Chlorobenzene	ND		5.0	2.3	ug/L			08/26/13 20:48	1
Chloroform	ND		5.0	1.1	ug/L			08/26/13 20:48	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			08/26/13 20:48	1
Chloroethane	ND		10	2.0	ug/L			08/26/13 20:48	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			08/26/13 20:48	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			08/26/13 20:48	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			08/26/13 20:48	1

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

Client Sample ID: TRIP BLANK — **Lab Sample ID: 280-45899-3**
Date Collected: 08/23/13 08:34 — **Matrix: Water**
Date Received: 08/24/13 12:56

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		5.0	1.3	ug/L			08/26/13 20:48	1
Chloromethane	ND		10	0.89	ug/L			08/26/13 20:48	1
Bromoform	ND		5.0	0.48	ug/L			08/26/13 20:48	1
Bromomethane	ND		10	1.5	ug/L			08/26/13 20:48	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			08/26/13 20:48	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			08/26/13 20:48	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			08/26/13 20:48	1
Ethylbenzene	ND		5.0	2.2	ug/L			08/26/13 20:48	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			08/26/13 20:48	1
Methylene Chloride	ND		5.0	2.0	ug/L			08/26/13 20:48	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			08/26/13 20:48	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			08/26/13 20:48	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			08/26/13 20:48	1
Tetrachloroethene	ND		5.0	2.7	ug/L			08/26/13 20:48	1
Toluene	ND		5.0	2.2	ug/L			08/26/13 20:48	1
Trichloroethene	ND		5.0	0.95	ug/L			08/26/13 20:48	1
Vinyl chloride	ND		10	1.3	ug/L			08/26/13 20:48	1
Xylenes, Total	ND		5.0	0.45	ug/L			08/26/13 20:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*73 - 122*		*08/26/13 20:48*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*08/26/13 20:48*	*1*
4-Bromofluorobenzene (Surr)	*105*		*79 - 119*		*08/26/13 20:48*	*1*

Method: 625 - PPL SVOC

Client Sample ID: DRY CREEK EFFLUENT — **Lab Sample ID: 280-45899-1**
Date Collected: 08/23/13 08:23 — **Matrix: Water**
Date Received: 08/24/13 12:56

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		10	0.28	ug/L		08/29/13 12:40	09/04/13 01:19	1
Benzidine	ND		150	51	ug/L		08/29/13 12:40	09/04/13 01:19	1
1,2,4-Trichlorobenzene	ND		10	0.28	ug/L		08/29/13 12:40	09/04/13 01:19	1
Hexachlorobenzene	ND		10	0.67	ug/L		08/29/13 12:40	09/04/13 01:19	1
Bis(2-chloroethyl)ether	ND		10	0.42	ug/L		08/29/13 12:40	09/04/13 01:19	1
2-Chloronaphthalene	ND		10	0.26	ug/L		08/29/13 12:40	09/04/13 01:19	1
2-Chlorophenol	ND		10	2.0	ug/L		08/29/13 12:40	09/04/13 01:19	1
2,4,6-Trichlorophenol	ND		20	0.29	ug/L		08/29/13 12:40	09/04/13 01:19	1
3,3'-Dichlorobenzidine	ND		51	2.0	ug/L		08/29/13 12:40	09/04/13 01:19	1
Hexachloroethane	ND		10	2.1	ug/L		08/29/13 12:40	09/04/13 01:19	1
2,4-Dichlorophenol	ND		10	0.65	ug/L		08/29/13 12:40	09/04/13 01:19	1
2,4-Dimethylphenol	ND		10	0.59	ug/L		08/29/13 12:40	09/04/13 01:19	1
2,4-Dinitrotoluene	ND		10	1.7	ug/L		08/29/13 12:40	09/04/13 01:19	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		08/29/13 12:40	09/04/13 01:19	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		10	0.23	ug/L		08/29/13 12:40	09/04/13 01:19	1
Fluoranthene	ND		10	0.20	ug/L		08/29/13 12:40	09/04/13 01:19	1
4-Bromophenyl phenyl ether	ND		10	0.44	ug/L		08/29/13 12:40	09/04/13 01:19	1
4-Chlorophenyl phenyl ether	ND		10	1.7	ug/L		08/29/13 12:40	09/04/13 01:19	1
bis (2-chloroisopropyl) ether	ND		10	0.28	ug/L		08/29/13 12:40	09/04/13 01:19	1

Method: 625 - PPL SVOC (Continued)

Client Sample ID: DRY CREEK EFFLUENT
Date Collected: 08/23/13 08:23
Date Received: 08/24/13 12:56

Lab Sample ID: 280-45899-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		10	0.99	ug/L		08/29/13 12:40	09/04/13 01:19	1
p-Chloro-m-cresol	ND		10	2.4	ug/L		08/29/13 12:40	09/04/13 01:19	1
Hexachlorobutadiene	ND		10	3.4	ug/L		08/29/13 12:40	09/04/13 01:19	1
Hexachlorocyclopentadiene	ND		51	1.6	ug/L		08/29/13 12:40	09/04/13 01:19	1
Isophorone	ND		10	0.21	ug/L		08/29/13 12:40	09/04/13 01:19	1
Naphthalene	ND		10	0.29	ug/L		08/29/13 12:40	09/04/13 01:19	1
Nitrobenzene	ND		10	0.82	ug/L		08/29/13 12:40	09/04/13 01:19	1
2-Nitrophenol	ND		20	0.40	ug/L		08/29/13 12:40	09/04/13 01:19	1
1,2-Dichlorobenzene	ND		10	0.23	ug/L		08/29/13 12:40	09/04/13 01:19	1
2,4-Dinitrophenol	ND		61	10	ug/L		08/29/13 12:40	09/04/13 01:19	1
1,3-Dichlorobenzene	ND		10	0.30	ug/L		08/29/13 12:40	09/04/13 01:19	1
4-Nitrophenol	ND		51	1.2	ug/L		08/29/13 12:40	09/04/13 01:19	1
1,4-Dichlorobenzene	ND		10	0.33	ug/L		08/29/13 12:40	09/04/13 01:19	1
4,6-Dinitro-o-cresol	ND		61	4.1	ug/L		08/29/13 12:40	09/04/13 01:19	1
N-Nitrosodimethylamine	ND		10	0.29	ug/L		08/29/13 12:40	09/04/13 01:19	1
N-Nitrosodi-n-propylamine	ND		10	0.36	ug/L		08/29/13 12:40	09/04/13 01:19	1
N-Nitrosodiphenylamine	ND		10	0.45	ug/L		08/29/13 12:40	09/04/13 01:19	1
Pentachlorophenol	ND		61	20	ug/L		08/29/13 12:40	09/04/13 01:19	1
Phenol	ND		10	2.0	ug/L		08/29/13 12:40	09/04/13 01:19	1
Bis(2-ethylhexyl) phthalate	**0.61**	**J**	10	0.57	ug/L		08/29/13 12:40	09/04/13 01:19	1
Butyl benzyl phthalate	ND		10	1.0	ug/L		08/29/13 12:40	09/04/13 01:19	1
Di-n-butyl phthalate	ND		10	1.2	ug/L		08/29/13 12:40	09/04/13 01:19	1
Di-n-octyl phthalate	ND		10	0.36	ug/L		08/29/13 12:40	09/04/13 01:19	1
Diethyl phthalate	ND		10	0.39	ug/L		08/29/13 12:40	09/04/13 01:19	1
Dimethyl phthalate	ND		10	0.21	ug/L		08/29/13 12:40	09/04/13 01:19	1
Benzo[a]anthracene	ND		10	0.36	ug/L		08/29/13 12:40	09/04/13 01:19	1
Benzo[a]pyrene	ND		10	0.31	ug/L		08/29/13 12:40	09/04/13 01:19	1
3,4-Benzofluoranthene	ND		10	0.54	ug/L		08/29/13 12:40	09/04/13 01:19	1
Benzo[k]fluoranthene	ND		10	0.47	ug/L		08/29/13 12:40	09/04/13 01:19	1
Anthracene	ND		10	0.43	ug/L		08/29/13 12:40	09/04/13 01:19	1
Acenaphthylene	ND		10	0.50	ug/L		08/29/13 12:40	09/04/13 01:19	1
Chrysene	ND		10	0.55	ug/L		08/29/13 12:40	09/04/13 01:19	1
Benzo[g,h,i]perylene	ND		10	0.51	ug/L		08/29/13 12:40	09/04/13 01:19	1
Fluorene	ND		10	0.31	ug/L		08/29/13 12:40	09/04/13 01:19	1
Phenanthrene	ND		10	0.26	ug/L		08/29/13 12:40	09/04/13 01:19	1
Dibenz(a,h)anthracene	ND		10	0.52	ug/L		08/29/13 12:40	09/04/13 01:19	1
Indeno[1,2,3-cd]pyrene	ND		10	0.66	ug/L		08/29/13 12:40	09/04/13 01:19	1
Pyrene	ND		10	0.38	ug/L		08/29/13 12:40	09/04/13 01:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*36 - 120*	*08/29/13 12:40*	*09/04/13 01:19*	*1*
2-Fluorophenol	*75*		*30 - 120*	*08/29/13 12:40*	*09/04/13 01:19*	*1*
2,4,6-Tribromophenol	*90*		*50 - 120*	*08/29/13 12:40*	*09/04/13 01:19*	*1*
Nitrobenzene-d5	*78*		*45 - 120*	*08/29/13 12:40*	*09/04/13 01:19*	*1*
Phenol-d5	*80*		*36 - 120*	*08/29/13 12:40*	*09/04/13 01:19*	*1*
Terphenyl-d14	*95*		*52 - 120*	*08/29/13 12:40*	*09/04/13 01:19*	*1*

Method: 608 - PP Pesticides/PCBs

Client Sample ID: DRY CREEK EFFLUENT — **Lab Sample ID: 280-45899-1**
Date Collected: 08/23/13 08:23 — **Matrix: Water**
Date Received: 08/24/13 12:56

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	ND		0.10	0.015	ug/L		08/27/13 16:55	08/29/13 13:31	1
4,4'-DDE	ND		0.10	0.0076	ug/L		08/27/13 16:55	08/29/13 13:31	1
4,4'-DDD	ND		0.10	0.0078	ug/L		08/27/13 16:55	08/29/13 13:31	1
Aldrin	ND		0.051	0.0060	ug/L		08/27/13 16:55	08/29/13 13:31	1
Dieldrin	ND		0.10	0.0064	ug/L		08/27/13 16:55	08/29/13 13:31	1
Chlordane (technical)	ND		0.051	0.0054	ug/L		08/27/13 16:55	08/29/13 13:31	1
alpha-BHC	ND		0.051	0.0054	ug/L		08/27/13 16:55	08/29/13 13:31	1
beta-BHC	ND		0.051	0.0088	ug/L		08/27/13 16:55	08/29/13 13:31	1
delta-BHC	ND		0.051	0.0059	ug/L		08/27/13 16:55	08/29/13 13:31	1
gamma-BHC (Lindane)	ND		0.051	0.0070	ug/L		08/27/13 16:55	08/29/13 13:31	1
Endosulfan I	ND		0.051	0.0059	ug/L		08/27/13 16:55	08/29/13 13:31	1
Endosulfan sulfate	ND		0.10	0.0058	ug/L		08/27/13 16:55	08/29/13 13:31	1
Endosulfan II	ND		0.10	0.0071	ug/L		08/27/13 16:55	08/29/13 13:31	1
Endrin	ND		0.10	0.0080	ug/L		08/27/13 16:55	08/29/13 13:31	1
Endrin aldehyde	ND		0.10	0.0089	ug/L		08/27/13 16:55	08/29/13 13:31	1
Heptachlor	ND		0.051	0.0078	ug/L		08/27/13 16:55	08/29/13 13:31	1
Heptachlor epoxide	ND		0.051	0.0076	ug/L		08/27/13 16:55	08/29/13 13:31	1
PCB-1221	ND		1.0	0.22	ug/L		08/27/13 16:55	08/29/13 12:59	1
PCB-1232	ND		1.0	0.17	ug/L		08/27/13 16:55	08/29/13 12:59	1
PCB-1242	ND		1.0	0.11	ug/L		08/27/13 16:55	08/29/13 12:59	1
PCB-1248	ND		1.0	0.093	ug/L		08/27/13 16:55	08/29/13 12:59	1
PCB-1254	ND		1.0	0.12	ug/L		08/27/13 16:55	08/29/13 12:59	1
PCB-1016	ND		1.0	0.13	ug/L		08/27/13 16:55	08/29/13 12:59	1
PCB-1260	ND		1.0	0.16	ug/L		08/27/13 16:55	08/29/13 12:59	1
Toxaphene	ND		2.0	0.37	ug/L		08/27/13 16:55	08/29/13 13:31	1
alpha-Chlordane	ND		0.051	0.0054	ug/L		08/27/13 16:55	08/29/13 13:31	1
gamma-Chlordane	ND		0.051	0.0092	ug/L		08/27/13 16:55	08/29/13 13:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*81*		*34 - 122*	*08/27/13 16:55*	*08/29/13 12:59*	*1*
DCB Decachlorobiphenyl	*97*		*34 - 122*	*08/27/13 16:55*	*08/29/13 13:31*	*1*
Tetrachloro-m-xylene	*68*		*28 - 115*	*08/27/13 16:55*	*08/29/13 12:59*	*1*
Tetrachloro-m-xylene	*73*		*28 - 115*	*08/27/13 16:55*	*08/29/13 13:31*	*1*

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

Client Sample ID: DRY CREEK EFFLUENT — **Lab Sample ID: 280-45899-1**
Date Collected: 08/23/13 08:23 — **Matrix: Water**
Date Received: 08/24/13 12:56

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	0.31	J B	0.50	0.20	ng/L		08/27/13 15:40	08/30/13 13:14	1

Client Sample ID: DRY CREEK EFFLUENT FIELD BLANK — **Lab Sample ID: 280-45899-2**
Date Collected: 08/23/13 08:50 — **Matrix: Water**
Date Received: 08/24/13 12:56

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.50	0.20	ng/L		08/27/13 15:40	08/30/13 13:22	1

Client Sample Results

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

TestAmerica Job ID: 280-45899-1

General Chemistry

Client Sample ID: DRY CREEK EFFLUENT
Date Collected: 08/23/13 08:23
Date Received: 08/24/13 12:56

Lab Sample ID: 280-45899-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	78		15	1.3	mg/L			08/26/13 23:39	5
Sulfate	52		25	1.2	mg/L			08/26/13 23:39	5
Phenols, Total	ND		0.0070	0.0020	mg/L		08/27/13 15:52	08/28/13 14:32	1
Cyanide, Total	0.0034	J B	0.010	0.0020	mg/L		08/28/13 08:58	08/29/13 15:23	1
Total Sulfide	0.80	J	1.0	0.50	mg/L			08/29/13 18:52	1

ANALYTICAL RESULTS

DRY CREEK WWTP LABORATORY

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

1-21-14
KS

Date Sampled: 12-17-13
Date Received: 12-17-13
Sample Location: Dry Creek Influent Qterly #4

Sampled By: KS
Date Reported: 01-02-14
Sample Matrix: Wastewater

Analyses	*Result*	*Units*	*Qual*	*RL*	*Method*	*Analysis Date/ By*
NONMETALS						
Ammonia as N	30.8	mg/l	1.20 ppt	0.1	SM 4500 NH_3-D	12/19/13 / mw
BOD_5 (Total)	322	mg/l		2.0	SM 5210 B	12/18/13 / mw
Hexavalent Chrome	0.035	mg/l	1 G	0.013	SM 3500-Cr D	12/17/13 / mw
Oil & Grease (HEM)	20.1	mg/l	G	5.0	EPA 1664A	01/03/14 / kl
pH	7.98	P.U.		NA	SM 4500H^+ B	On-site/nk
TPH (SGT-HEM)	ND	mg/l	G	5.0	EPA 1664A	01/03/14 / kl
Total Phosphorus	6.7	mg/l		0.1	EPA 365.1	12/31/13 / kl
TDS	623	mg/l		5.0	SM 2520 B	12/19/13 / mw
TSS	398	mg/l		3.0	SM 2540-D	12-18-13/ ms
METALS - TOTAL						
Ag, Silver	ND	mg/l		0.005	EPA 200.7	12-27-13/ kl
As, Arsenic	ND	mg/l		0.010	EPA 200.7	12-27-13/ kl
Be, Beryllium	ND	mg/l		0.005	EPA 200.7	12-27-13/ kl
Cd, Cadmium	ND	mg/l		0.005	EPA 200.7	12-27-13/ kl
Cr, Chromium	ND	mg/l		0.005	EPA 200.7	12-27-13/ kl
Cu, Copper	0.138	mg/l		0.010	EPA 200.7	12-27-13/ kl
Mo, Molybdenum	ND	mg/l		0.005	EPA 200.7	12-27-13/ kl
Ni, Nickel	0.008	mg/l		0.005	EPA 200.7	12-27-13/ kl
Pb, Lead	0.008	mg/l		0.005	EPA 200.7	12-27-13/ kl
Sb, Antimony	ND	mg/l		0.010	EPA 200.7	12-27-13/ kl
Selenium, Se	0.008	mg/l	0.274	0.003	EPA 200.7	12-27-13/ kl
Tl, Thallium	ND	mg/l		0.025	EPA 200.7	12-27-13/ kl
Zinc, Zn	0.155	mg/l	2	0.005	EPA 200.7	12-27-13/ kl

4107

Comments: 1: Interference from turbidity. See total chrome. 2: Contamination in blank for Zn (0.014 mg/L)

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

Kent Loader, Laboratory Supervisor

Date: 1-2-14

ANALYTICAL RESULTS

DRY CREEK WATER RECLAMATION LABORATORY

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

1-21-14 BS

Date Sampled: 12-17-13
Date Received: 12-17-13
Sample Location: Dry Creek Influent Dissolved Metals Quarterly #4

Sampled By: Autosampler
Date Reported: 01-02-14
Sample Matrix: Wastewater

Analyses	*Result*	*Units*	*Qual*	*RL*	*Method*	*Analysis Date/ By*
METALS - TOTAL						
Ag, Silver	ND	mg/l		0.005	EPA 200.7	12-27-13/ kl
As, Arsenic	ND	mg/l		0.010	EPA 200.7	12-27-13/ kl
Be, Beryllium	ND	mg/l		0.005	EPA 200.7	12-27-13/ kl
Cd, Cadmium	ND	mg/l		0.005	EPA 200.7	12-27-13/ kl
Cr, Chromium	ND	mg/l		0.005	EPA 200.7	12-27-13/ kl
Cu, Copper	0.005	mg/l		0.010	EPA 200.7	12-27-13/ kl
Mo, Molybdenum	ND	mg/l		0.005	EPA 200.7	12-27-13/ kl
Ni, Nickel	0.006	mg/l		0.005	EPA 200.7	12-27-13/ kl
Pb, Lead	ND	mg/l		0.005	EPA 200.7	12-27-13/ kl
Sb, Antimony	ND	mg/l		0.010	EPA 200.7	12-27-13/ kl
Selenium, Se	0.006	mg/l	0.205	0.003	EPA 200.7	12-27-13/ kl
Tl, Thallium	ND	mg/l		0.025	EPA 200.7	12-27-13/ kl
Zinc, Zn	0.055	mg/l		0.005	EPA 200.7	12-27-13/ kl

4107

Comments:

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

Kent Lodder, Laboratory Supervisor

1-2-14
Date:

Detection Summary

eyenne Board of Public Utilities
Site: Dry Creek Influent - 4th Qtr 2013

TestAmerica Job ID: 280-50438-1

lient Sample ID: DRY CREEK INFLUENT — Lab Sample ID: 280-50438-1

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
Xylenes, Total	1.3	J	5.0	0.45	ug/L	1		624	Total/NA
Bis(2-ethylhexyl) phthalate	36	J	100	5.7	ug/L	10		625	Total/NA
Diethyl phthalate	5.6	J	100	3.9	ug/L	10		625	Total/NA
Hg	110		2.5	1.0	ng/L	1		1631E	Total/NA
Chloride	100		15	1.3	mg/L	5		300.0	Total/NA
Sulfate	71		25	1.2	mg/L	5		300.0	Total/NA
Phenols, Total	0.029		0.0070	0.0020	mg/L	1		420.1	Total/NA
Cyanide, Total	0.0043	J B	0.010	0.0020	mg/L	1		SM 4500 CN E	Total/NA
Total Sulfide	3.2		1.0	0.50	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: DRY CREEK INFLUENT FIELD BLANK — Lab Sample ID: 280-50438-2

No Detections.

Client Sample ID: TRIP BLANK — Lab Sample ID: 280-50438-3

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

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

TestAmerica Job ID: 280-50438-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL DEN
625	PPL SVOC	40CFR136A	TAL DEN
608	PP Pesticides/PCBs	40CFR136A	TAL DEN
1631E	Mercury, Low Level (CVAFS)	EPA	TAL PEN
300.0	Chloride & Sulfate	40CFR136A	TAL DEN
420.1	Phenolics, Total Recoverable	MCAWW	TAL DEN
SM 4500 CN E	Cyanide, Total	SM	TAL DEN
SM 4500 S2 F	Sulfide, Total	SM	TAL DEN

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

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

TestAmerica Job ID: 280-50438-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-50438-1	DRY CREEK INFLUENT	Water	12/17/13 14:30	12/18/13 10:30
280-50438-2	DRY CREEK INFLUENT FIELD BLANK	Water	12/17/13 14:30	12/18/13 10:30
280-50438-3	TRIP BLANK	Water	12/17/13 14:30	12/18/13 10:30

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

Client Sample ID: DRY CREEK INFLUENT — **Lab Sample ID: 280-50438-1**
Date Collected: 12/17/13 14:30 — **Matrix: Water**
Date Received: 12/18/13 10:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			12/20/13 01:42	1
Acrylonitrile	ND		100	17	ug/L			12/20/13 01:42	1
Benzene	ND		5.0	1.8	ug/L			12/20/13 01:42	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			12/20/13 01:42	1
Chlorobenzene	ND		5.0	2.3	ug/L			12/20/13 01:42	1
Chloroform	**3.5**	**J**	5.0	1.1	ug/L			12/20/13 01:42	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			12/20/13 01:42	1
Chloroethane	ND		10	2.0	ug/L			12/20/13 01:42	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			12/20/13 01:42	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			12/20/13 01:42	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			12/20/13 01:42	1
1,2-Dichloroethane	ND		5.0	1.3	ug/L			12/20/13 01:42	1
Chloromethane	ND		10	0.89	ug/L			12/20/13 01:42	1
Bromoform	ND		5.0	0.48	ug/L			12/20/13 01:42	1
Bromomethane	ND		10	1.5	ug/L			12/20/13 01:42	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			12/20/13 01:42	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			12/20/13 01:42	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			12/20/13 01:42	1
Ethylbenzene	ND		5.0	2.2	ug/L			12/20/13 01:42	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			12/20/13 01:42	1
Methylene Chloride	ND		5.0	2.0	ug/L			12/20/13 01:42	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			12/20/13 01:42	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			12/20/13 01:42	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			12/20/13 01:42	1
Tetrachloroethene	ND		5.0	2.7	ug/L			12/20/13 01:42	1
Toluene	ND		5.0	2.2	ug/L			12/20/13 01:42	1
Trichloroethene	ND		5.0	0.95	ug/L			12/20/13 01:42	1
Vinyl chloride	ND		10	1.3	ug/L			12/20/13 01:42	1
Xylenes, Total	**1.3**	**J**	5.0	0.45	ug/L			12/20/13 01:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*79*		*73 - 122*		*12/20/13 01:42*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*12/20/13 01:42*	*1*
4-Bromofluorobenzene (Surr)	*117*		*79 - 119*		*12/20/13 01:42*	*1*

Client Sample ID: TRIP BLANK — **Lab Sample ID: 280-50438-3**
Date Collected: 12/17/13 14:30 — **Matrix: Water**
Date Received: 12/18/13 10:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			12/20/13 02:55	1
Acrylonitrile	ND		100	17	ug/L			12/20/13 02:55	1
Benzene	ND		5.0	1.8	ug/L			12/20/13 02:55	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			12/20/13 02:55	1
Chlorobenzene	ND		5.0	2.3	ug/L			12/20/13 02:55	1
Chloroform	ND		5.0	1.1	ug/L			12/20/13 02:55	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			12/20/13 02:55	1
Chloroethane	ND		10	2.0	ug/L			12/20/13 02:55	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			12/20/13 02:55	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			12/20/13 02:55	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			12/20/13 02:55	1

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

Client Sample ID: TRIP BLANK — **Lab Sample ID: 280-50438-3**
Date Collected: 12/17/13 14:30 — **Matrix: Water**
Date Received: 12/18/13 10:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		5.0	1.3	ug/L			12/20/13 02:55	1
Chloromethane	ND		10	0.89	ug/L			12/20/13 02:55	1
Bromoform	ND		5.0	0.48	ug/L			12/20/13 02:55	1
Bromomethane	ND		10	1.5	ug/L			12/20/13 02:55	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			12/20/13 02:55	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			12/20/13 02:55	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			12/20/13 02:55	1
Ethylbenzene	ND		5.0	2.2	ug/L			12/20/13 02:55	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			12/20/13 02:55	1
Methylene Chloride	ND		5.0	2.0	ug/L			12/20/13 02:55	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			12/20/13 02:55	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			12/20/13 02:55	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			12/20/13 02:55	1
Tetrachloroethene	ND		5.0	2.7	ug/L			12/20/13 02:55	1
Toluene	ND		5.0	2.2	ug/L			12/20/13 02:55	1
Trichloroethene	ND		5.0	0.95	ug/L			12/20/13 02:55	1
Vinyl chloride	ND		10	1.3	ug/L			12/20/13 02:55	1
Xylenes, Total	ND		5.0	0.45	ug/L			12/20/13 02:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*79*		*73 - 122*		*12/20/13 02:55*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*12/20/13 02:55*	*1*
4-Bromofluorobenzene (Surr)	*112*		*79 - 119*		*12/20/13 02:55*	*1*

Method: 625 - PPL SVOC

Client Sample ID: DRY CREEK INFLUENT — **Lab Sample ID: 280-50438-1**
Date Collected: 12/17/13 14:30 — **Matrix: Water**
Date Received: 12/18/13 10:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		100	2.8	ug/L		12/20/13 10:34	12/27/13 03:30	10
Benzidine	ND		1500	510	ug/L		12/20/13 10:34	12/27/13 03:30	10
1,2,4-Trichlorobenzene	ND		100	2.8	ug/L		12/20/13 10:34	12/27/13 03:30	10
Hexachlorobenzene	ND		100	6.7	ug/L		12/20/13 10:34	12/27/13 03:30	10
Bis(2-chloroethyl)ether	ND		100	4.2	ug/L		12/20/13 10:34	12/27/13 03:30	10
2-Chloronaphthalene	ND		100	2.6	ug/L		12/20/13 10:34	12/27/13 03:30	10
2-Chlorophenol	ND		100	20	ug/L		12/20/13 10:34	12/27/13 03:30	10
2,4,6-Trichlorophenol	ND		200	2.9	ug/L		12/20/13 10:34	12/27/13 03:30	10
3,3'-Dichlorobenzidine	ND		510	20	ug/L		12/20/13 10:34	12/27/13 03:30	10
Hexachloroethane	ND		100	21	ug/L		12/20/13 10:34	12/27/13 03:30	10
2,4-Dichlorophenol	ND		100	6.5	ug/L		12/20/13 10:34	12/27/13 03:30	10
2,4-Dimethylphenol	ND		100	5.9	ug/L		12/20/13 10:34	12/27/13 03:30	10
2,4-Dinitrotoluene	ND		100	17	ug/L		12/20/13 10:34	12/27/13 03:30	10
2,6-Dinitrotoluene	ND		100	19	ug/L		12/20/13 10:34	12/27/13 03:30	10
1,2-Diphenylhydrazine(as Azobenzene)	ND		100	2.3	ug/L		12/20/13 10:34	12/27/13 03:30	10
Fluoranthene	ND		100	2.0	ug/L		12/20/13 10:34	12/27/13 03:30	10
4-Bromophenyl phenyl ether	ND		100	4.4	ug/L		12/20/13 10:34	12/27/13 03:30	10
4-Chlorophenyl phenyl ether	ND		100	17	ug/L		12/20/13 10:34	12/27/13 03:30	10
bis (2-chloroisopropyl) ether	ND		100	2.8	ug/L		12/20/13 10:34	12/27/13 03:30	10

Method: 625 - PPL SVOC (Continued)

Client Sample ID: DRY CREEK INFLUENT — **Lab Sample ID: 280-50438-1**
Date Collected: 12/17/13 14:30 — **Matrix: Water**
Date Received: 12/18/13 10:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		100	9.9	ug/L		12/20/13 10:34	12/27/13 03:30	10
p-Chloro-m-cresol	ND		100	25	ug/L		12/20/13 10:34	12/27/13 03:30	10
Hexachlorobutadiene	ND		100	34	ug/L		12/20/13 10:34	12/27/13 03:30	10
Hexachlorocyclopentadiene	ND		510	16	ug/L		12/20/13 10:34	12/27/13 03:30	10
Isophorone	ND		100	2.1	ug/L		12/20/13 10:34	12/27/13 03:30	10
Naphthalene	ND		100	2.9	ug/L		12/20/13 10:34	12/27/13 03:30	10
Nitrobenzene	ND		100	8.2	ug/L		12/20/13 10:34	12/27/13 03:30	10
2-Nitrophenol	ND		200	4.0	ug/L		12/20/13 10:34	12/27/13 03:30	10
1,2-Dichlorobenzene	ND		100	2.3	ug/L		12/20/13 10:34	12/27/13 03:30	10
2,4-Dinitrophenol	ND		610	100	ug/L		12/20/13 10:34	12/27/13 03:30	10
1,3-Dichlorobenzene	ND		100	3.1	ug/L		12/20/13 10:34	12/27/13 03:30	10
4-Nitrophenol	ND		510	13	ug/L		12/20/13 10:34	12/27/13 03:30	10
1,4-Dichlorobenzene	ND		100	3.3	ug/L		12/20/13 10:34	12/27/13 03:30	10
4,6-Dinitro-o-cresol	ND		610	41	ug/L		12/20/13 10:34	12/27/13 03:30	10
N-Nitrosodimethylamine	ND		100	2.9	ug/L		12/20/13 10:34	12/27/13 03:30	10
N-Nitrosodi-n-propylamine	ND		100	3.6	ug/L		12/20/13 10:34	12/27/13 03:30	10
N-Nitrosodiphenylamine	ND		100	4.5	ug/L		12/20/13 10:34	12/27/13 03:30	10
Pentachlorophenol	ND		610	200	ug/L		12/20/13 10:34	12/27/13 03:30	10
Phenol	ND		100	20	ug/L		12/20/13 10:34	12/27/13 03:30	10
Bis(2-ethylhexyl) phthalate	**36**	**J**	100	5.7	ug/L		12/20/13 10:34	12/27/13 03:30	10
Butyl benzyl phthalate	ND		100	10	ug/L		12/20/13 10:34	12/27/13 03:30	10
Di-n-butyl phthalate	ND		100	12	ug/L		12/20/13 10:34	12/27/13 03:30	10
Di-n-octyl phthalate	ND		100	3.6	ug/L		12/20/13 10:34	12/27/13 03:30	10
Diethyl phthalate	**5.6**	**J**	100	3.9	ug/L		12/20/13 10:34	12/27/13 03:30	10
Dimethyl phthalate	ND		100	2.1	ug/L		12/20/13 10:34	12/27/13 03:30	10
Benzo[a]anthracene	ND		100	3.6	ug/L		12/20/13 10:34	12/27/13 03:30	10
Benzo[a]pyrene	ND		100	3.2	ug/L		12/20/13 10:34	12/27/13 03:30	10
3,4-Benzofluoranthene	ND		100	5.4	ug/L		12/20/13 10:34	12/27/13 03:30	10
Benzo[k]fluoranthene	ND		100	4.7	ug/L		12/20/13 10:34	12/27/13 03:30	10
Anthracene	ND		100	4.3	ug/L		12/20/13 10:34	12/27/13 03:30	10
Acenaphthylene	ND		100	5.0	ug/L		12/20/13 10:34	12/27/13 03:30	10
Chrysene	ND		100	5.5	ug/L		12/20/13 10:34	12/27/13 03:30	10
Benzo[g,h,i]perylene	ND		100	5.1	ug/L		12/20/13 10:34	12/27/13 03:30	10
Fluorene	ND		100	3.2	ug/L		12/20/13 10:34	12/27/13 03:30	10
Phenanthrene	ND		100	2.6	ug/L		12/20/13 10:34	12/27/13 03:30	10
Dibenz(a,h)anthracene	ND		100	5.2	ug/L		12/20/13 10:34	12/27/13 03:30	10
Indeno[1,2,3-cd]pyrene	ND		100	6.6	ug/L		12/20/13 10:34	12/27/13 03:30	10
Pyrene	ND		100	3.8	ug/L		12/20/13 10:34	12/27/13 03:30	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*99*	*D*	*36 - 120*	*12/20/13 10:34*	*12/27/13 03:30*	*10*
2-Fluorophenol	*105*	*D*	*30 - 120*	*12/20/13 10:34*	*12/27/13 03:30*	*10*
2,4,6-Tribromophenol	*97*	*D*	*50 - 120*	*12/20/13 10:34*	*12/27/13 03:30*	*10*
Nitrobenzene-d5	*112*	*D*	*45 - 120*	*12/20/13 10:34*	*12/27/13 03:30*	*10*
Phenol-d5	*111*	*D*	*36 - 120*	*12/20/13 10:34*	*12/27/13 03:30*	*10*
Terphenyl-d14	*81*	*D*	*41 - 120*	*12/20/13 10:34*	*12/27/13 03:30*	*10*

Method: 608 - PP Pesticides/PCBs

Client Sample ID: DRY CREEK INFLUENT — **Lab Sample ID: 280-50438-1**
Date Collected: 12/17/13 14:30 — **Matrix: Water**
Date Received: 12/18/13 10:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	ND		0.10	0.015	ug/L		12/23/13 19:27	12/27/13 13:37	1
4,4'-DDE	ND		0.10	0.0076	ug/L		12/23/13 19:27	12/27/13 13:37	1
4,4'-DDD	ND		0.10	0.0078	ug/L		12/23/13 19:27	12/27/13 13:37	1
Aldrin	ND		0.051	0.0060	ug/L		12/23/13 19:27	12/27/13 13:37	1
Dieldrin	ND		0.10	0.0064	ug/L		12/23/13 19:27	12/27/13 13:37	1
Chlordane (technical)	ND		0.051	0.0054	ug/L		12/23/13 19:27	12/27/13 13:37	1
alpha-BHC	ND		0.051	0.0054	ug/L		12/23/13 19:27	12/27/13 13:37	1
beta-BHC	ND		0.051	0.0088	ug/L		12/23/13 19:27	12/27/13 13:37	1
delta-BHC	ND		0.051	0.0059	ug/L		12/23/13 19:27	12/27/13 13:37	1
gamma-BHC (Lindane)	ND		0.051	0.0070	ug/L		12/23/13 19:27	12/27/13 13:37	1
Endosulfan I	ND		0.051	0.0059	ug/L		12/23/13 19:27	12/27/13 13:37	1
Endosulfan sulfate	ND		0.10	0.0058	ug/L		12/23/13 19:27	12/27/13 13:37	1
Endosulfan II	ND		0.10	0.0071	ug/L		12/23/13 19:27	12/27/13 13:37	1
Endrin	ND		0.10	0.0080	ug/L		12/23/13 19:27	12/27/13 13:37	1
Endrin aldehyde	ND		0.10	0.0089	ug/L		12/23/13 19:27	12/27/13 13:37	1
Heptachlor	ND		0.051	0.0078	ug/L		12/23/13 19:27	12/27/13 13:37	1
Heptachlor epoxide	ND		0.051	0.0076	ug/L		12/23/13 19:27	12/27/13 13:37	1
PCB-1221	ND		1.0	0.22	ug/L		12/23/13 19:27	12/27/13 20:16	1
PCB-1232	ND		1.0	0.17	ug/L		12/23/13 19:27	12/27/13 20:16	1
PCB-1242	ND		1.0	0.11	ug/L		12/23/13 19:27	12/27/13 20:16	1
PCB-1248	ND		1.0	0.093	ug/L		12/23/13 19:27	12/27/13 20:16	1
PCB-1254	ND		1.0	0.12	ug/L		12/23/13 19:27	12/27/13 20:16	1
PCB-1016	ND		1.0	0.13	ug/L		12/23/13 19:27	12/27/13 20:16	1
PCB-1260	ND		1.0	0.16	ug/L		12/23/13 19:27	12/27/13 20:16	1
Toxaphene	ND		2.0	0.37	ug/L		12/23/13 19:27	12/27/13 13:37	1
alpha-Chlordane	ND		0.051	0.0054	ug/L		12/23/13 19:27	12/27/13 13:37	1
gamma-Chlordane	ND		0.051	0.0092	ug/L		12/23/13 19:27	12/27/13 13:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*61*		*34 - 122*	*12/23/13 19:27*	*12/27/13 13:37*	*1*
DCB Decachlorobiphenyl	*49*		*34 - 122*	*12/23/13 19:27*	*12/27/13 20:16*	*1*
Tetrachloro-m-xylene	*67*		*28 - 115*	*12/23/13 19:27*	*12/27/13 13:37*	*1*
Tetrachloro-m-xylene	*75*		*28 - 115*	*12/23/13 19:27*	*12/27/13 20:16*	*1*

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

Client Sample ID: DRY CREEK INFLUENT — **Lab Sample ID: 280-50438-1**
Date Collected: 12/17/13 14:30 — **Matrix: Water**
Date Received: 12/18/13 10:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	110		2.5	1.0	ng/L		12/20/13 15:40	12/24/13 13:18	1

Client Sample ID: DRY CREEK INFLUENT FIELD BLANK — **Lab Sample ID: 280-50438-2**
Date Collected: 12/17/13 14:30 — **Matrix: Water**
Date Received: 12/18/13 10:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.50	0.20	ng/L		12/20/13 15:40	12/24/13 13:26	1

Client Sample Results

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

TestAmerica Job ID: 280-50438-1

General Chemistry

Client Sample ID: DRY CREEK INFLUENT
Date Collected: 12/17/13 14:30
Date Received: 12/18/13 10:30

Lab Sample ID: 280-50438-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	100		15	1.3	mg/L			12/28/13 18:23	5
Sulfate	71		25	1.2	mg/L			12/28/13 18:23	5
Phenols, Total	0.029		0.0070	0.0020	mg/L		12/19/13 09:04	12/20/13 09:51	1
Cyanide, Total	0.0043	J B	0.010	0.0020	mg/L		12/19/13 15:41	12/24/13 14:37	1
Total Sulfide	3.2		1.0	0.50	mg/L			12/21/13 10:00	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

1-21-14

Date Sampled: 12-18-13
Date Received: 12-18-13
Sample Location: Dry Creek Effluent Qterly #4

Sampled By: KS
Date Reported: 01-03-14
Sample Matrix: Wastewater

Analyses	*Result*	*Units*	*Qual*	*RL*	*Method*	*Analysis Date/ By*
NONMETALS						
Ammonia as N	0.2	mg/l		0.1	SM 4500 NH_3-D	12/19/13 / mw
BOD_5 (Total)	ND	mg/l	0.638	2.0	SM 5210 B	12/19/13 / mw
Hexavalent Chrome	0.017	mg/l	1 G	0.013	SM 3500-Cr D	12/19/13 / mw
Oil & Grease (HEM)	ND	mg/l	G	5.0	EPA 1664A	01/03/14 / kl
pH	7.17	P.U.		NA	SM 4500H^+ B	On-site/nk
TPH (SGT-HEM)	ND	mg/l	G	5.0	EPA 1664A	01/03/14 / kl
Total Phosphorus	1.9	mg/l		0.1	EPA 365.1	12/31/13 / kl
TDS	513	mg/l		5.0	SM 2520 B	12/19/13 / mw
TSS	4.0	mg/l		3.0	SM 2540-D	12-19-13/ ms
METALS - TOTAL						
Ag, Silver	ND	mg/l		0.005	EPA 200.7	12-27-13/ kl
As, Arsenic	ND	mg/l		0.010	EPA 200.7	12-27-13/ kl
Be, Beryllium	ND	mg/l		0.005	EPA 200.7	12-27-13/ kl
Cd, Cadmium	ND	mg/l		0.005	EPA 200.7	12-27-13/ kl
Cr, Chromium	ND	mg/l		0.005	EPA 200.7	12-27-13/ kl
Cu, Copper	ND	mg/l		0.010	EPA 200.7	12-27-13/ kl
Mo, Molybdenum	ND	mg/l		0.005	EPA 200.7	12-27-13/ kl
Ni, Nickel	0.005	mg/l		0.005	EPA 200.7	12-27-13/ kl
Pb, Lead	ND	mg/l		0.005	EPA 200.7	12-27-13/ kl
Sb, Antimony	ND	mg/l		0.010	EPA 200.7	12-27-13/ kl
Selenium, Se	ND	mg/l	<113	0.003	EPA 200.7	12-27-13/ kl
Tl, Thallium	ND	mg/l		0.025	EPA 200.7	12-27-13/ kl
Zinc, Zn	0.045	mg/l	2	0.005	EPA 200.7	12-27-13/ kl

4501

Comments: 1: Interference from turbidity. See total chrome. 2: Contamination in blank for Zn (0.009 mg/L)

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

Kent Loader, Laboratory Supervisor

Date: 1-3-14

ANALYTICAL RESULTS

DRY CREEK WATER RECLAMATION LABORATORY

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

1-21-14

Date Sampled: 12-18-13
Date Received: 12-18-13
Sample Location: Dry Creek Effluent Dissolved Metals Quarterly #4

Sampled By: Autosampler
Date Reported: 01-02-14
Sample Matrix: Wastewater

Analyses	*Result*	*Units*	*Qual*	*RL*	*Method*	*Analysis Date/ By*
METALS - TOTAL						
Ag, Silver	ND	mg/l		0.005	EPA 200.7	12-27-13/ kl
As, Arsenic	ND	mg/l		0.010	EPA 200.7	12-27-13/ kl
Be, Beryllium	ND	mg/l		0.005	EPA 200.7	12-27-13/ kl
Cd, Cadmium	ND	mg/l		0.005	EPA 200.7	12-27-13/ kl
Cr, Chromium	ND	mg/l		0.005	EPA 200.7	12-27-13/ kl
Cu, Copper	0.004	mg/l		0.010	EPA 200.7	12-27-13/ kl
Mo, Molybdenum	ND	mg/l		0.005	EPA 200.7	12-27-13/ kl
Ni, Nickel	0.005	mg/l		0.005	EPA 200.7	12-27-13/ kl
Pb, Lead	ND	mg/l		0.005	EPA 200.7	12-27-13/ kl
Sb, Antimony	ND	mg/l		0.010	EPA 200.7	12-27-13/ kl
Selenium, Se	ND	mg/l	0.113	0.003	EPA 200.7	12-27-13/ kl
Tl, Thallium	ND	mg/l		0.025	EPA 200.7	12-27-13/ kl
Zinc, Zn	0.038	mg/l		0.005	EPA 200.7	12-27-13/ kl

4501

Comments:

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

Kent Loader, Laboratory Supervisor

1-2-14
Date:

Detection Summary

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

TestAmerica Job ID: 280-50524-1

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Client Sample ID: DRY CREEK EFFLUENT — Lab Sample ID: 280-50524-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Hg	0.72		0.50	0.20	ng/L	1		1631E	Total/NA
Chloride	98		15	1.3	mg/L	5		300.0	Total/NA
Sulfate	69		25	1.2	mg/L	5		300.0	Total/NA
Phenols, Total	0.0031	J	0.0070	0.0020	mg/L	1		420.1	Total/NA
Cyanide, Total	0.0060	J B	0.010	0.0020	mg/L	1		SM 4500 CN E	Total/NA

Client Sample ID: DRY CREEK EFFLUENT FIELD BLANK — Lab Sample ID: 280-50524-2

No Detections.

Client Sample ID: TRIP BLANK — Lab Sample ID: 280-50524-3

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

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

TestAmerica Job ID: 280-50524-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL DEN
625	PPL SVOC	40CFR136A	TAL DEN
608	PP Pesticides/PCBs	40CFR136A	TAL DEN
1631E	Mercury, Low Level (CVAFS)	EPA	TAL PEN
300.0	Chloride & Sulfate	40CFR136A	TAL DEN
420.1	Phenolics, Total Recoverable	MCAWW	TAL DEN
SM 4500 CN E	Cyanide, Total	SM	TAL DEN
SM 4500 S2 F	Sulfide, Total	SM	TAL DEN

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

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

TestAmerica Job ID: 280-50524-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-50524-1	DRY CREEK EFFLUENT	Water	12/18/13 16:30	12/20/13 12:30
280-50524-2	DRY CREEK EFFLUENT FIELD BLANK	Water	12/18/13 16:30	12/20/13 12:30
280-50524-3	TRIP BLANK	Water	12/18/13 16:30	12/20/13 12:30

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

Client Sample ID: DRY CREEK EFFLUENT — **Lab Sample ID: 280-50524-1**
Date Collected: 12/18/13 16:30 — **Matrix: Water**
Date Received: 12/20/13 12:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			12/20/13 21:29	1
Acrylonitrile	ND		100	17	ug/L			12/20/13 21:29	1
Benzene	ND		5.0	1.8	ug/L			12/20/13 21:29	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			12/20/13 21:29	1
Chlorobenzene	ND		5.0	2.3	ug/L			12/20/13 21:29	1
Chloroform	ND		5.0	1.1	ug/L			12/20/13 21:29	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			12/20/13 21:29	1
Chloroethane	ND		10	2.0	ug/L			12/20/13 21:29	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			12/20/13 21:29	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			12/20/13 21:29	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			12/20/13 21:29	1
1,2-Dichloroethane	ND		5.0	1.3	ug/L			12/20/13 21:29	1
Chloromethane	ND		10	0.89	ug/L			12/20/13 21:29	1
Bromoform	ND		5.0	0.48	ug/L			12/20/13 21:29	1
Bromomethane	ND		10	1.5	ug/L			12/20/13 21:29	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			12/20/13 21:29	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			12/20/13 21:29	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			12/20/13 21:29	1
Ethylbenzene	ND		5.0	2.2	ug/L			12/20/13 21:29	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			12/20/13 21:29	1
Methylene Chloride	ND		5.0	2.0	ug/L			12/20/13 21:29	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			12/20/13 21:29	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			12/20/13 21:29	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			12/20/13 21:29	1
Tetrachloroethene	ND		5.0	2.7	ug/L			12/20/13 21:29	1
Toluene	ND		5.0	2.2	ug/L			12/20/13 21:29	1
Trichloroethene	ND		5.0	0.95	ug/L			12/20/13 21:29	1
Vinyl chloride	ND		10	1.3	ug/L			12/20/13 21:29	1
Xylenes, Total	ND		10	1.1	ug/L			12/20/13 21:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*73 - 122*		*12/20/13 21:29*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*12/20/13 21:29*	*1*
4-Bromofluorobenzene (Surr)	*108*		*79 - 119*		*12/20/13 21:29*	*1*

Client Sample ID: TRIP BLANK — **Lab Sample ID: 280-50524-3**
Date Collected: 12/18/13 16:30 — **Matrix: Water**
Date Received: 12/20/13 12:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		100	15	ug/L			12/20/13 21:02	1
Acrylonitrile	ND		100	17	ug/L			12/20/13 21:02	1
Benzene	ND		5.0	1.8	ug/L			12/20/13 21:02	1
Carbon tetrachloride	ND		5.0	1.8	ug/L			12/20/13 21:02	1
Chlorobenzene	ND		5.0	2.3	ug/L			12/20/13 21:02	1
Chloroform	ND		5.0	1.1	ug/L			12/20/13 21:02	1
2-Chloroethyl vinyl ether	ND		5.0	1.9	ug/L			12/20/13 21:02	1
Chloroethane	ND		10	2.0	ug/L			12/20/13 21:02	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/L			12/20/13 21:02	1
1,1-Dichloroethene	ND		5.0	2.4	ug/L			12/20/13 21:02	1
1,1-Dichloroethane	ND		5.0	1.5	ug/L			12/20/13 21:02	1

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

Client Sample ID: TRIP BLANK — **Lab Sample ID: 280-50524-3**
Date Collected: 12/18/13 16:30 — **Matrix: Water**
Date Received: 12/20/13 12:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		5.0	1.3	ug/L			12/20/13 21:02	1
Chloromethane	ND		10	0.89	ug/L			12/20/13 21:02	1
Bromoform	ND		5.0	0.48	ug/L			12/20/13 21:02	1
Bromomethane	ND		10	1.5	ug/L			12/20/13 21:02	1
Chlorodibromomethane	ND		5.0	2.2	ug/L			12/20/13 21:02	1
1,2-Dichloropropane	ND		5.0	1.9	ug/L			12/20/13 21:02	1
1,3-Dichloropropene, Total	ND		5.0	2.0	ug/L			12/20/13 21:02	1
Ethylbenzene	ND		5.0	2.2	ug/L			12/20/13 21:02	1
Dichlorobromomethane	ND		5.0	1.5	ug/L			12/20/13 21:02	1
Methylene Chloride	ND		5.0	2.0	ug/L			12/20/13 21:02	1
1,1,1-Trichloroethane	ND		5.0	1.1	ug/L			12/20/13 21:02	1
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			12/20/13 21:02	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			12/20/13 21:02	1
Tetrachloroethene	ND		5.0	2.7	ug/L			12/20/13 21:02	1
Toluene	ND		5.0	2.2	ug/L			12/20/13 21:02	1
Trichloroethene	ND		5.0	0.95	ug/L			12/20/13 21:02	1
Vinyl chloride	ND		10	1.3	ug/L			12/20/13 21:02	1
Xylenes, Total	ND		10	1.1	ug/L			12/20/13 21:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*73 - 122*		*12/20/13 21:02*	*1*
Toluene-d8 (Surr)	*85*		*80 - 120*		*12/20/13 21:02*	*1*
4-Bromofluorobenzene (Surr)	*99*		*79 - 119*		*12/20/13 21:02*	*1*

Method: 625 - PPL SVOC

Client Sample ID: DRY CREEK EFFLUENT — **Lab Sample ID: 280-50524-1**
Date Collected: 12/18/13 16:30 — **Matrix: Water**
Date Received: 12/20/13 12:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	*	10	0.28	ug/L		12/22/13 13:50	01/01/14 00:27	1
Benzidine	ND		150	51	ug/L		12/22/13 13:50	01/01/14 00:27	1
1,2,4-Trichlorobenzene	ND	*	10	0.28	ug/L		12/22/13 13:50	01/01/14 00:27	1
Hexachlorobenzene	ND		10	0.67	ug/L		12/22/13 13:50	01/01/14 00:27	1
Bis(2-chloroethyl)ether	ND	*	10	0.42	ug/L		12/22/13 13:50	01/01/14 00:27	1
2-Chloronaphthalene	ND	*	10	0.26	ug/L		12/22/13 13:50	01/01/14 00:27	1
2-Chlorophenol	ND	*	10	2.0	ug/L		12/22/13 13:50	01/01/14 00:27	1
2,4,6-Trichlorophenol	ND	*	20	0.29	ug/L		12/22/13 13:50	01/01/14 00:27	1
3,3'-Dichlorobenzidine	ND	*	51	2.0	ug/L		12/22/13 13:50	01/01/14 00:27	1
Hexachloroethane	ND	*	10	2.1	ug/L		12/22/13 13:50	01/01/14 00:27	1
2,4-Dichlorophenol	ND	*	10	0.65	ug/L		12/22/13 13:50	01/01/14 00:27	1
2,4-Dimethylphenol	ND	*	10	0.59	ug/L		12/22/13 13:50	01/01/14 00:27	1
2,4-Dinitrotoluene	ND		10	1.7	ug/L		12/22/13 13:50	01/01/14 00:27	1
2,6-Dinitrotoluene	ND	*	10	1.9	ug/L		12/22/13 13:50	01/01/14 00:27	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		10	0.23	ug/L		12/22/13 13:50	01/01/14 00:27	1
Fluoranthene	ND		10	0.20	ug/L		12/22/13 13:50	01/01/14 00:27	1
4-Bromophenyl phenyl ether	ND		10	0.44	ug/L		12/22/13 13:50	01/01/14 00:27	1
4-Chlorophenyl phenyl ether	ND	*	10	1.7	ug/L		12/22/13 13:50	01/01/14 00:27	1
bis (2-chloroisopropyl) ether	ND	*	10	0.28	ug/L		12/22/13 13:50	01/01/14 00:27	1

Method: 625 - PPL SVOC (Continued)

Client Sample ID: DRY CREEK EFFLUENT
Date Collected: 12/18/13 16:30
Date Received: 12/20/13 12:30

Lab Sample ID: 280-50524-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND	*	10	0.98	ug/L		12/22/13 13:50	01/01/14 00:27	1
p-Chloro-m-cresol	ND	*	10	2.4	ug/L		12/22/13 13:50	01/01/14 00:27	1
Hexachlorobutadiene	ND	*	10	3.3	ug/L		12/22/13 13:50	01/01/14 00:27	1
Hexachlorocyclopentadiene	ND	*	51	1.6	ug/L		12/22/13 13:50	01/01/14 00:27	1
Isophorone	ND	*	10	0.21	ug/L		12/22/13 13:50	01/01/14 00:27	1
Naphthalene	ND	*	10	0.29	ug/L		12/22/13 13:50	01/01/14 00:27	1
Nitrobenzene	ND	*	10	0.82	ug/L		12/22/13 13:50	01/01/14 00:27	1
2-Nitrophenol	ND	*	20	0.40	ug/L		12/22/13 13:50	01/01/14 00:27	1
1,2-Dichlorobenzene	ND	*	10	0.23	ug/L		12/22/13 13:50	01/01/14 00:27	1
2,4-Dinitrophenol	ND		61	10	ug/L		12/22/13 13:50	01/01/14 00:27	1
1,3-Dichlorobenzene	ND	*	10	0.30	ug/L		12/22/13 13:50	01/01/14 00:27	1
4-Nitrophenol	ND		51	1.2	ug/L		12/22/13 13:50	01/01/14 00:27	1
1,4-Dichlorobenzene	ND	*	10	0.32	ug/L		12/22/13 13:50	01/01/14 00:27	1
4,6-Dinitro-o-cresol	ND		61	4.1	ug/L		12/22/13 13:50	01/01/14 00:27	1
N-Nitrosodimethylamine	ND	*	10	0.29	ug/L		12/22/13 13:50	01/01/14 00:27	1
N-Nitrosodi-n-propylamine	ND	*	10	0.35	ug/L		12/22/13 13:50	01/01/14 00:27	1
N-Nitrosodiphenylamine	ND	*	10	0.45	ug/L		12/22/13 13:50	01/01/14 00:27	1
Pentachlorophenol	ND		61	20	ug/L		12/22/13 13:50	01/01/14 00:27	1
Phenol	ND	*	10	2.0	ug/L		12/22/13 13:50	01/01/14 00:27	1
Bis(2-ethylhexyl) phthalate	ND		10	0.57	ug/L		12/22/13 13:50	01/01/14 00:27	1
Butyl benzyl phthalate	ND		10	1.0	ug/L		12/22/13 13:50	01/01/14 00:27	1
Di-n-butyl phthalate	ND		10	1.2	ug/L		12/22/13 13:50	01/01/14 00:27	1
Di-n-octyl phthalate	ND		10	0.35	ug/L		12/22/13 13:50	01/01/14 00:27	1
Diethyl phthalate	ND		10	0.39	ug/L		12/22/13 13:50	01/01/14 00:27	1
Dimethyl phthalate	ND		10	0.21	ug/L		12/22/13 13:50	01/01/14 00:27	1
Benzo[a]anthracene	ND		10	0.35	ug/L		12/22/13 13:50	01/01/14 00:27	1
Benzo[a]pyrene	ND		10	0.31	ug/L		12/22/13 13:50	01/01/14 00:27	1
3,4-Benzofluoranthene	ND		10	0.54	ug/L		12/22/13 13:50	01/01/14 00:27	1
Benzo[k]fluoranthene	ND		10	0.47	ug/L		12/22/13 13:50	01/01/14 00:27	1
Anthracene	ND		10	0.43	ug/L		12/22/13 13:50	01/01/14 00:27	1
Acenaphthylene	ND	*	10	0.50	ug/L		12/22/13 13:50	01/01/14 00:27	1
Chrysene	ND		10	0.55	ug/L		12/22/13 13:50	01/01/14 00:27	1
Benzo[g,h,i]perylene	ND		10	0.51	ug/L		12/22/13 13:50	01/01/14 00:27	1
Fluorene	ND	*	10	0.31	ug/L		12/22/13 13:50	01/01/14 00:27	1
Phenanthrene	ND		10	0.26	ug/L		12/22/13 13:50	01/01/14 00:27	1
Dibenz(a,h)anthracene	ND		10	0.52	ug/L		12/22/13 13:50	01/01/14 00:27	1
Indeno[1,2,3-cd]pyrene	ND		10	0.66	ug/L		12/22/13 13:50	01/01/14 00:27	1
Pyrene	ND		10	0.37	ug/L		12/22/13 13:50	01/01/14 00:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*36 - 120*	*12/22/13 13:50*	*01/01/14 00:27*	*1*
2-Fluorophenol	*73*		*30 - 120*	*12/22/13 13:50*	*01/01/14 00:27*	*1*
2,4,6-Tribromophenol	*104*		*50 - 120*	*12/22/13 13:50*	*01/01/14 00:27*	*1*
Nitrobenzene-d5	*75*		*45 - 120*	*12/22/13 13:50*	*01/01/14 00:27*	*1*
Phenol-d5	*79*		*36 - 120*	*12/22/13 13:50*	*01/01/14 00:27*	*1*
Terphenyl-d14	*56*		*41 - 120*	*12/22/13 13:50*	*01/01/14 00:27*	*1*

Method: 608 - PP Pesticides/PCBs

Client Sample ID: DRY CREEK EFFLUENT — **Lab Sample ID: 280-50524-1**
Date Collected: 12/18/13 16:30 — **Matrix: Water**
Date Received: 12/20/13 12:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	ND		0.10	0.015	ug/L		12/23/13 19:27	12/31/13 13:36	1
4,4'-DDE	ND		0.10	0.0077	ug/L		12/23/13 19:27	12/31/13 13:36	1
4,4'-DDD	ND		0.10	0.0079	ug/L		12/23/13 19:27	12/31/13 13:36	1
Aldrin	ND		0.051	0.0060	ug/L		12/23/13 19:27	12/31/13 13:36	1
Dieldrin	ND		0.10	0.0064	ug/L		12/23/13 19:27	12/31/13 13:36	1
Chlordane (technical)	ND		0.051	0.0054	ug/L		12/23/13 19:27	12/31/13 13:36	1
alpha-BHC	ND		0.051	0.0054	ug/L		12/23/13 19:27	12/31/13 13:36	1
beta-BHC	ND		0.051	0.0089	ug/L		12/23/13 19:27	12/31/13 13:36	1
delta-BHC	ND		0.051	0.0059	ug/L		12/23/13 19:27	12/31/13 13:36	1
gamma-BHC (Lindane)	ND		0.051	0.0070	ug/L		12/23/13 19:27	12/31/13 13:36	1
Endosulfan I	ND		0.051	0.0059	ug/L		12/23/13 19:27	12/31/13 13:36	1
Endosulfan sulfate	ND		0.10	0.0058	ug/L		12/23/13 19:27	12/31/13 13:36	1
Endosulfan II	ND		0.10	0.0071	ug/L		12/23/13 19:27	12/31/13 13:36	1
Endrin	ND		0.10	0.0081	ug/L		12/23/13 19:27	12/31/13 13:36	1
Endrin aldehyde	ND		0.10	0.0090	ug/L		12/23/13 19:27	12/31/13 13:36	1
Heptachlor	ND		0.051	0.0079	ug/L		12/23/13 19:27	12/31/13 13:36	1
Heptachlor epoxide	ND		0.051	0.0077	ug/L		12/23/13 19:27	12/31/13 13:36	1
PCB-1221	ND		1.0	0.22	ug/L		12/23/13 19:27	12/27/13 20:39	1
PCB-1232	ND		1.0	0.17	ug/L		12/23/13 19:27	12/27/13 20:39	1
PCB-1242	ND		1.0	0.11	ug/L		12/23/13 19:27	12/27/13 20:39	1
PCB-1248	ND		1.0	0.093	ug/L		12/23/13 19:27	12/27/13 20:39	1
PCB-1254	ND		1.0	0.12	ug/L		12/23/13 19:27	12/27/13 20:39	1
PCB-1016	ND		1.0	0.13	ug/L		12/23/13 19:27	12/27/13 20:39	1
PCB-1260	ND		1.0	0.16	ug/L		12/23/13 19:27	12/27/13 20:39	1
Toxaphene	ND		2.0	0.37	ug/L		12/23/13 19:27	12/31/13 13:36	1
alpha-Chlordane	ND		0.051	0.0054	ug/L		12/23/13 19:27	12/31/13 13:36	1
gamma-Chlordane	ND		0.051	0.0093	ug/L		12/23/13 19:27	12/31/13 13:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*81*		*34 - 122*	*12/23/13 19:27*	*12/27/13 20:39*	*1*
DCB Decachlorobiphenyl	*102*		*34 - 122*	*12/23/13 19:27*	*12/31/13 13:36*	*1*
Tetrachloro-m-xylene	*87*		*28 - 115*	*12/23/13 19:27*	*12/27/13 20:39*	*1*
Tetrachloro-m-xylene	*93*		*28 - 115*	*12/23/13 19:27*	*12/31/13 13:36*	*1*

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

Client Sample ID: DRY CREEK EFFLUENT — **Lab Sample ID: 280-50524-1**
Date Collected: 12/18/13 16:30 — **Matrix: Water**
Date Received: 12/20/13 12:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	0.72		0.50	0.20	ng/L		12/23/13 10:05	12/31/13 13:56	1

Client Sample ID: DRY CREEK EFFLUENT FIELD BLANK — **Lab Sample ID: 280-50524-2**
Date Collected: 12/18/13 16:30 — **Matrix: Water**
Date Received: 12/20/13 12:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.50	0.20	ng/L		12/23/13 10:05	12/31/13 14:04	1

Client Sample Results

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

TestAmerica Job ID: 280-50524-1

General Chemistry

Client Sample ID: DRY CREEK EFFLUENT
Date Collected: 12/18/13 16:30
Date Received: 12/20/13 12:30

Lab Sample ID: 280-50524-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**98**		15	1.3	mg/L			01/03/14 03:03	5
Sulfate	**69**		25	1.2	mg/L			01/03/14 03:03	5
Phenols, Total	**0.0031**	**J**	0.0070	0.0020	mg/L		01/02/14 09:21	01/03/14 09:02	1
Cyanide, Total	**0.0060**	**J B**	0.010	0.0020	mg/L		12/26/13 07:28	12/27/13 16:15	1
Total Sulfide	ND		1.0	0.50	mg/L			12/21/13 10:00	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

Date Sampled: 02-12-13
Date Received: 02-12-13
Sample Location: Dry Sludge

Sampled By: CB
Date Reported: 04-09-13
Sample Matrix: Solid

Analyses	*Result*	*Units*	*Qual*	*RL*	*Method*	*Analysis Date/ By*
MAJOR IONS						
Ammonia as N	0.1	%-dry		0.001	SM 4500NH_3^+ D	02-13-13 / mw
NON-METALS						
Total Solids	82.8	%		0.2	SM 2540 G	02-12-13 / mw
Total Vol. Solids	39.5	%		1.0	SM 2540 E	02-12-13/ mw
METALS – TOTAL						
Ag, Silver	10.3	mg/kg		0.6	EPA 6010B	04-05-13 / kl
As, Arsenic	4.8	mg/kg		1.1	EPA 6010B	04-05/13 / kl
Cadmium, Cd	2.0	mg/kg		0.6	EPA 6010B	04-05-13 / kl
Chromium, Cr	15.5	mg/kg		0.6	EPA 6010B	04-05-13 / kl
Copper, Cu	578	mg/kg		1.1	EPA 6010B	04-05-13 / kl
Molybdenum, Mo	5.6	mg/kg		0.6	EPA 6010B	04-05/13 / kl
Nickel, Ni	11.2	mg/kg		0.6	EPA 6010B	04-05-13 / kl
Lead, Pb	32.5	mg/kg		1.1	EPA 6010B	04-05/13 / kl
Selenium, Se	10.3	mg/kg		0.3	EPA 6010B	04-05-13 / kl
Zinc, Zn	486	mg/kg		0.6	EPA 6010B	04-05-13 / kl

Report Definitions:

RL – Reporting Limit
NA – Not Analyzed

ND – Not detected at the reporting limit.
Note: 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: Biosolids - Dry Creek WRF

TestAmerica Job ID: 280-38806-1

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Client Sample ID: #1 RAW SLUDGE — Lab Sample ID: 280-38806-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phosphorus	11000		9400	51	mg/Kg	1	☼	6010B	Total/NA
Potassium	2400	J	9400	1300	mg/Kg	1	☼	6010B	Total/NA
Mercury	1.9		0.58	0.19	mg/Kg	1	☼	7471A	Total/NA
Ammonia	11000		870	360	mg/Kg	1	☼	350.1	Total/NA
Nitrogen, Kjeldahl	32000	B	8800	2100	mg/Kg	5	☼	351.2	Total/NA
Nitrogen, Organic	21000		170	71	mg/Kg	1	☼	Nitrogen,Org	Total/NA
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
pH adj. to 25 deg C	5.87		0.100	0.100	SU	1		9045C	Soluble

Client Sample ID: #2 PRIMARY DIGESTER — Lab Sample ID: 280-38806-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phosphorus	32000		16000	86	mg/Kg	1	☼	6010B	Total/NA
Potassium	9500	J	16000	2200	mg/Kg	1	☼	6010B	Total/NA
Mercury	1.2		0.92	0.30	mg/Kg	1	☼	7471A	Total/NA
Ammonia	84000		7300	3000	mg/Kg	5	☼	350.1	Total/NA
Nitrogen, Kjeldahl	63000	B	15000	3700	mg/Kg	5	☼	351.2	Total/NA
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
pH adj. to 25 deg C	7.72		0.100	0.100	SU	1		9045C	Soluble

Client Sample ID: #3 SECONDARY DIGESTER — Lab Sample ID: 280-38806-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phosphorus	34000		17000	94	mg/Kg	1	☼	6010B	Total/NA
Potassium	9800	J	17000	2400	mg/Kg	1	☼	6010B	Total/NA
Mercury	2.8		0.95	0.31	mg/Kg	1	☼	7471A	Total/NA
Ammonia	95000		8100	3400	mg/Kg	5	☼	350.1	Total/NA
Nitrogen, Kjeldahl	63000	B	17000	4100	mg/Kg	5	☼	351.2	Total/NA
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
pH adj. to 25 deg C	7.96		0.100	0.100	SU	1		9045C	Soluble

Client Sample ID: #4 DRY SLUDGE — Lab Sample ID: 280-38806-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phosphorus	23000		3500	19	mg/Kg	10	☼	6010B	Total/NA
Potassium	2300		350	47	mg/Kg	1	☼	6010B	Total/NA
Mercury	1.2		0.18	0.059	mg/Kg	10	☼	7471A	Total/NA
Ammonia	12000		590	240	mg/Kg	20	☼	350.1	Total/NA
Nitrogen, Kjeldahl	7100	B	1400	330	mg/Kg	20	☼	351.2	Total/NA
Nitrate Nitrite as N	2900		1100	34	mg/Kg	100	☼	353.2	Soluble
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
pH adj. to 25 deg C	6.24		0.100	0.100	SU	1		9045C	Soluble

This Detection Summary does not include radiochemical test results.

ANALYTICAL RESULTS

DRY CREEK WWTP LABORATORY

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

Date Sampled: 04-22-13
Date Received: 04-22-13
Sample Location: Dry Sludge

Sampled By: CB
Date Reported: 05-03-13
Sample Matrix: Solid

Analyses	*Result*	*Units*	*Qual*	*RL*	*Method*	*Analysis Date/ By*
MAJOR IONS						
Ammonia as N	0.3	%-dry		0.001	SM 4500NH_3^+ D	04-24-13 / kl
NON-METALS						
Total Solids	83.1	%		0.2	SM 2540 G	04-22-13 / mw
Total Vol. Solids	41.1	%		1.0	SM 2540 E	04-22-13/ mw
METALS – TOTAL						
Ag, Silver	4.4	mg/kg		0.5	EPA 6010B	04-25-13 / kl
As, Arsenic	ND	mg/kg		1.0	EPA 6010B	04-25/13 / kl
Cadmium, Cd	1.0	mg/kg		0.5	EPA 6010B	04-25-13 / kl
Chromium, Cr	7.0	mg/kg		0.5	EPA 6010B	04-25-13 / kl
Copper, Cu	225	mg/kg		1.0	EPA 6010B	04-25-13 / kl
Molybdenum, Mo	2.6	mg/kg		0.5	EPA 6010B	04-25/13 / kl
Nickel, Ni	5.1	mg/kg		0.5	EPA 6010B	04-25-13 / kl
Lead, Pb	15.4	mg/kg		1.0	EPA 6010B	04-25/13 / kl
Selenium, Se	5.0	mg/kg		0.3	EPA 6010B	04-25-13 / kl
Zinc, Zn	209	mg/kg		0.5	EPA 6010B	04-25-13 / kl

Report Definitions:

RL – Reporting Limit
NA – Not Analyzed

ND – Not detected at the reporting limit.
Note: QA/QC available in Dry Creek Laboratory

Kent Loader, Laboratory Supervisor

5-3-13
Date:

Detection Summary

Client: Cheyenne Board of Public Utilities
Project/Site: Biosoloids - Dry Creek WRF

TestAmerica Job ID: 280-41284-1

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Client Sample ID: #1 RAW SLUDGE — Lab Sample ID: 280-41284-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phosphorus	8200	B	5500	30	mg/Kg	1	☼	6010B	Total/NA
Potassium	1900	J	5500	750	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.43		0.38	0.13	mg/Kg	1	☼	7471A	Total/NA
Ammonia	7000		550	230	mg/Kg	1	☼	350.1	Total/NA
Nitrogen, Kjeldahl	19000		6100	1500	mg/Kg	5	☼	351.2	Total/NA
Nitrogen, Organic	12000		110	45	mg/Kg	1	☼	Nitrogen,Org	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH adj. to 25 deg C	5.59		0.100	0.100	SU	1		9045C	Soluble

Client Sample ID: #2 PRIMARY DIGESTER — Lab Sample ID: 280-41284-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phosphorus	30000	B	14000	78	mg/Kg	1	☼	6010B	Total/NA
Potassium	10000	J	14000	2000	mg/Kg	1	☼	6010B	Total/NA
Mercury	1.0		0.92	0.30	mg/Kg	1	☼	7471A	Total/NA
Ammonia	62000		6600	2700	mg/Kg	5	☼	350.1	Total/NA
Nitrogen, Kjeldahl	57000		16000	3900	mg/Kg	5	☼	351.2	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH adj. to 25 deg C	7.27		0.100	0.100	SU	1		9045C	Soluble

Client Sample ID: #3 SECONDARY DIGESTER — Lab Sample ID: 280-41284-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phosphorus	36000	B	17000	94	mg/Kg	1	☼	6010B	Total/NA
Potassium	12000	J	17000	2400	mg/Kg	1	☼	6010B	Total/NA
Mercury	1.1		1.1	0.36	mg/Kg	1	☼	7471A	Total/NA
Ammonia	80000		7800	3200	mg/Kg	5	☼	350.1	Total/NA
Nitrogen, Kjeldahl	64000		19000	4600	mg/Kg	5	☼	351.2	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH adj. to 25 deg C	7.70		0.100	0.100	SU	1		9045C	Soluble

Client Sample ID: #4 DRY SLUDGE — Lab Sample ID: 280-41284-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phosphorus	18000	B	3300	18	mg/Kg	10	☼	6010B	Total/NA
Potassium	2200		330	45	mg/Kg	1	☼	6010B	Total/NA
Mercury	1.1		0.20	0.066	mg/Kg	10	☼	7471A	Total/NA
Ammonia	3900		290	120	mg/Kg	10	☼	350.1	Total/NA
Nitrogen, Kjeldahl	9700		1500	350	mg/Kg	20	☼	351.2	Total/NA
Nitrogen, Organic	5800		5.8	2.4	mg/Kg	1	☼	Nitrogen,Org	Total/NA
Nitrate Nitrite as N	2600		1200	35	mg/Kg	50	☼	353.2	Soluble

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH adj. to 25 deg C	5.88		0.100	0.100	SU	1		9045C	Soluble

This Detection Summary does not include radiochemical test results.

ANALYTICAL RESULTS

DRY CREEK WWTP LABORATORY

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

Date Sampled: 06-17-13
Date Received: 06-17-13
Sample Location: Dry Sludge

Sampled By: CB
Date Reported: 08-07-13
Sample Matrix: Solid

Analyses	*Result*	*Units*	*Qual*	*RL*	*Method*	*Analysis Date/ By*
MAJOR IONS						
Ammonia as N	0.2	%-dry		0.0005	SM 4500NH_3^+ D	06-19-13 / kl
NON-METALS						
Total Solids	91.7	%		0.2	SM 2540 G	06-20-13 / mw
Total Vol. Solids	31.2	%		1.0	SM 2540 E	06-20-13/ mw
METALS – TOTAL						
Ag, Silver	12.3	mg/kg		0.5	EPA 6010B	08-06-13 / kl
As, Arsenic	3.9	mg/kg		1.1	EPA 6010B	08-06/13 / kl
Cadmium, Cd	2.6	mg/kg		0.5	EPA 6010B	08-06-13 / kl
Chromium, Cr	17.1	mg/kg		0.5	EPA 6010B	08-06-13 / kl
Copper, Cu	732	mg/kg		1.1	EPA 6010B	08-06-13 / kl
Molybdenum, Mo	7.1	mg/kg		0.5	EPA 6010B	08-06/13 / kl
Nickel, Ni	12.9	mg/kg		0.5	EPA 6010B	08-06-13 / kl
Lead, Pb	58.8	mg/kg		1.1	EPA 6010B	08-06-13 / kl
Selenium, Se	13.1	mg/kg		0.3	EPA 6010B	08-06-13 / kl
Zinc, Zn	634	mg/kg		0.5	EPA 6010B	08-06-13 / kl

Report Definitions:

RL – Reporting Limit
NA – Not Analyzed

ND – Not detected at the reporting limit.
Note: QA/QC available in Dry Creek Laboratory

Kent Loader, Laboratory Supervisor

8-7-13
Date:

Detection Summary

Client: Cheyenne Board of Public Utilities
Project/Site: Biosolids - Dry Creek WRF

TestAmerica Job ID: 280-43506-1

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Client Sample ID: #1 RAW SLUDGE — Lab Sample ID: 280-43506-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phosphorus	13000	B	8100	44	mg/Kg	1	☼	6010B	Total/NA
Potassium	2700	J	8100	1100	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.43	J	0.52	0.17	mg/Kg	1	☼	7471A	Total/NA
Ammonia	5400		710	300	mg/Kg	1	☼	350.1	Total/NA
Nitrogen, Kjeldahl	67000		8000	1900	mg/Kg	5	☼	351.2	Total/NA
Nitrogen, Organic	62000		150	61	mg/Kg	1	☼	Nitrogen,Org	Total/NA
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
pH adj. to 25 deg C	5.10		0.100	0.100	SU	1		9045C	Soluble

Client Sample ID: #2 PRIMARY DIGESTER — Lab Sample ID: 280-43506-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phosphorus	23000	B	15000	79	mg/Kg	1	☼	6010B	Total/NA
Potassium	6700	J	15000	2000	mg/Kg	1	☼	6010B	Total/NA
Mercury	1.4		0.80	0.26	mg/Kg	1	☼	7471A	Total/NA
Ammonia	49000		1200	510	mg/Kg	1	☼	350.1	Total/NA
Nitrogen, Kjeldahl	77000		16000	3700	mg/Kg	5	☼	351.2	Total/NA
Nitrogen, Organic	28000		250	100	mg/Kg	1	☼	Nitrogen,Org	Total/NA
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
pH adj. to 25 deg C	7.60		0.100	0.100	SU	1		9045C	Soluble

Client Sample ID: #3 SECONDARY DIGESTER — Lab Sample ID: 280-43506-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phosphorus	18000	B	13000	72	mg/Kg	1	☼	6010B	Total/NA
Potassium	5700	J	13000	1800	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.85	J	0.92	0.30	mg/Kg	1	☼	7471A	Total/NA
Ammonia	54000		6400	2600	mg/Kg	5	☼	350.1	Total/NA
Nitrogen, Kjeldahl	76000		17000	4100	mg/Kg	5	☼	351.2	Total/NA
Nitrogen, Organic	22000		250	100	mg/Kg	1	☼	Nitrogen,Org	Total/NA
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
pH adj. to 25 deg C	7.74		0.100	0.100	SU	1		9045C	Soluble

Client Sample ID: #4 DRY SLUDGE — Lab Sample ID: 280-43506-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phosphorus	13000	B	1500	8.3	mg/Kg	5	☼	6010B	Total/NA
Potassium	1800		310	42	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.76		0.020	0.0066	mg/Kg	1	☼	7471A	Total/NA
Ammonia	5900		530	220	mg/Kg	20	☼	350.1	Total/NA
Nitrogen, Kjeldahl	4600		690	170	mg/Kg	10	☼	351.2	Total/NA
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
pH adj. to 25 deg C	5.88		0.100	0.100	SU	1		9045C	Soluble

This Detection Summary does not include radiochemical test results.

ANALYTICAL RESULTS

DRY CREEK WWTP LABORATORY

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

Date Sampled: 08-20-13
Date Received: 08-20-13
Sample Location: Dry Sludge

Sampled By: CB
Date Reported: 08-27-13
Sample Matrix: Solid

Analyses	*Result*	*Units*	*Qual*	*RL*	*Method*	*Analysis Date/ By*
MAJOR IONS						
Ammonia as N	14.7	%-dry		0.0005	SM 4500NH_3^+ D	08-21-13 / mw
NON-METALS						
Total Solids	83.1	%		0.2	SM 2540 G	08-20-13 / mw
Total Vol. Solids	42.7	%		1.0	SM 2540 E	08-20-13/ mw
METALS – TOTAL						
Ag, Silver	6.9	mg/kg		0.5	EPA 6010B	08-23-13 / kl
As, Arsenic	2.5	mg/kg		0.9	EPA 6010B	08-23/13 / kl
Cadmium, Cd	1.4	mg/kg		0.5	EPA 6010B	08-23-13 / kl
Chromium, Cr	10.2	mg/kg		0.5	EPA 6010B	08-23-13 / kl
Copper, Cu	366	mg/kg		0.9	EPA 6010B	08-23-13 / kl
Molybdenum, Mo	4.3	mg/kg		0.5	EPA 6010B	08-23/13 / kl
Nickel, Ni	7.2	mg/kg		0.5	EPA 6010B	08-23-13 / kl
Lead, Pb	24.9	mg/kg		0.9	EPA 6010B	08-23-13 / kl
Selenium, Se	8.6	mg/kg		0.3	EPA 6010B	08-23-13 / kl
Zinc, Zn	347	mg/kg		0.5	EPA 6010B	08-23/13 / kl

Report Definitions:

RL – Reporting Limit
NA – Not Analyzed

ND – Not detected at the reporting limit.
Note: QA/QC available in Dry Creek Laboratory

Kent Loader, Laboratory Supervisor

8·27·13
Date:

Detection Summary

Client: Cheyenne Board of Public Utilities
Project/Site: Biosolids - Dry Creek WRF

TestAmerica Job ID: 280-45777-1

Client Sample ID: #1 RAW SLUDGE — Lab Sample ID: 280-45777-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phosphorus	12000		8400	45	mg/Kg	1	☼	6010B	Total/NA
Potassium	2400	J	8400	1100	mg/Kg	1	☼	6010B	Total/NA
Mercury	2.5		0.44	0.14	mg/Kg	1	☼	7471A	Total/NA
Ammonia	4800		760	310	mg/Kg	1	☼	350.1	Total/NA
Nitrogen, Kjeldahl	42000		9600	2300	mg/Kg	5	☼	351.2	Total/NA
Nitrogen, Organic	37000		150	64	mg/Kg	1	☼	Nitrogen,Org	Total/NA
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
pH adj. to 25 deg C	4.92		0.100	0.100	SU	1		9045C	Soluble

Client Sample ID: #2 PRIMARY DIGESTER — Lab Sample ID: 280-45777-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phosphorus	33000		13000	69	mg/Kg	1	☼	6010B	Total/NA
Potassium	8900	J	13000	1700	mg/Kg	1	☼	6010B	Total/NA
Mercury	3.0		0.75	0.24	mg/Kg	1	☼	7471A	Total/NA
Ammonia	43000		1100	470	mg/Kg	1	☼	350.1	Total/NA
Nitrogen, Kjeldahl	74000		13000	3100	mg/Kg	5	☼	351.2	Total/NA
Nitrogen, Organic	31000		220	93	mg/Kg	1	☼	Nitrogen,Org	Total/NA
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
pH adj. to 25 deg C	7.71		0.100	0.100	SU	1		9045C	Soluble

Client Sample ID: #3 SECONDARY DIGESTER — Lab Sample ID: 280-45777-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phosphorus	25000		10000	56	mg/Kg	1	☼	6010B	Total/NA
Potassium	4700	J	10000	1400	mg/Kg	1	☼	6010B	Total/NA
Mercury	1.6		0.58	0.19	mg/Kg	1	☼	7471A	Total/NA
Ammonia	41000		18000	7600	mg/Kg	20	☼	350.1	Total/NA
Nitrogen, Kjeldahl	66000		11000	2600	mg/Kg	5	☼	351.2	Total/NA
Nitrogen, Organic	25000		190	77	mg/Kg	1	☼	Nitrogen,Org	Total/NA
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
pH adj. to 25 deg C	7.74		0.100	0.100	SU	1		9045C	Soluble

Client Sample ID: #4 DRY SLUDGE — Lab Sample ID: 280-45777-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phosphorus	21000		2200	12	mg/Kg	5	☼	6010B	Total/NA
Potassium	2100		450	61	mg/Kg	1	☼	6010B	Total/NA
Mercury	2.1		0.13	0.042	mg/Kg	5	☼	7471A	Total/NA
Ammonia	5300		41	17	mg/Kg	1	☼	350.1	Total/NA
Nitrogen, Kjeldahl	4500		1000	250	mg/Kg	10	☼	351.2	Total/NA
Nitrate Nitrite as N	2800		1600	48	mg/Kg	100	☼	353.2	Soluble
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
pH adj. to 25 deg C	5.53		0.100	0.100	SU	1		9045C	Soluble

This Detection Summary does not include radiochemical test results.

ANALYTICAL RESULTS

DRY CREEK WWTP LABORATORY

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

Date Sampled: 10-15-13
Date Received: 10-15-13
Sample Location: Dry Sludge

Sampled By: CB
Date Reported: 10-24-13
Sample Matrix: Solid

Analyses	*Result*	*Units*	*Qual*	*RL*	*Method*	*Analysis Date/ By*
MAJOR IONS						
Ammonia as N	0.04	%-dry		0.040	SM 4500NH_3^+ D	10-16-13 / mw
NON-METALS						
Total Solids	57.5	%		0.2	SM 2540 G	10-21-13 / mw
Total Vol. Solids	37.1	%		1.0	SM 2540 E	10-21-13/ mw
METALS – TOTAL						
Ag, Silver	13.5	mg/kg		0.5	EPA 6010B	10-17-13 / kl
As, Arsenic	3.4	mg/kg		1.1	EPA 6010B	10-17/13 / kl
Cadmium, Cd	2.7	mg/kg		0.5	EPA 6010B	10-17-13 / kl
Chromium, Cr	18.5	mg/kg		0.5	EPA 6010B	10-17-13 / kl
Copper, Cu	782	mg/kg		1.1	EPA 6010B	10-17-13 / kl
Molybdenum, Mo	8.4	mg/kg		0.5	EPA 6010B	10-17/13 / kl
Nickel, Ni	14.5	mg/kg		0.5	EPA 6010B	10-17-13 / kl
Lead, Pb	44.2	mg/kg		1.1	EPA 6010B	10-17/13 / kl
Selenium, Se	13.2	mg/kg		0.3	EPA 6010B	10-17-13 / kl
Zinc, Zn	653	mg/kg		0.5	EPA 6010B	10-17-13 / kl

Report Definitions:

RL – Reporting Limit
NA – Not Analyzed

ND – Not detected at the reporting limit.
Note: QA/QC available in Dry Creek Laboratory

Kent Loader, Laboratory Supervisor

10·24·13
Date:

Detection Summary

Client: Cheyenne Board of Public Utilities
Project/Site: Biosolids Dry Creek WRF

TestAmerica Job ID: 280-47978-1

Client Sample ID: #1 RAW SLUDGE — Lab Sample ID: 280-47978-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phosphorus	9300		7200	39	mg/Kg	1	☼	6010B	Total/NA
Potassium	2800	J	7200	990	mg/Kg	1	☼	6010B	Total/NA
Mercury	1.7		0.42	0.14	mg/Kg	1	☼	7471A	Total/NA
Ammonia	32000		14000	6000	mg/Kg	20	☼	350.1	Total/NA
Nitrogen, Kjeldahl	23000	B	3600	870	mg/Kg	2	☼	351.2	Total/NA
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
pH adj. to 25 deg C	5.43		0.100	0.100	SU	1		9045C	Soluble

Client Sample ID: #2 PRIMARY DIGESTER — Lab Sample ID: 280-47978-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phosphorus	29000		12000	62	mg/Kg	1	☼	6010B	Total/NA
Potassium	8500	J	12000	1600	mg/Kg	1	☼	6010B	Total/NA
Mercury	1.7		0.72	0.23	mg/Kg	1	☼	7471A	Total/NA
Ammonia	94000		20000	8400	mg/Kg	20	☼	350.1	Total/NA
Nitrogen, Kjeldahl	87000	B	11000	2600	mg/Kg	5	☼	351.2	Total/NA
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
pH adj. to 25 deg C	7.81		0.100	0.100	SU	1		9045C	Soluble

Client Sample ID: #3 SECONDRY DIGESTER — Lab Sample ID: 280-47978-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phosphorus	29000		12000	66	mg/Kg	1	☼	6010B	Total/NA
Potassium	8000	J	12000	1700	mg/Kg	1	☼	6010B	Total/NA
Mercury	3.7		0.67	0.22	mg/Kg	1	☼	7471A	Total/NA
Ammonia	2700		1100	460	mg/Kg	1	☼	350.1	Total/NA
Nitrogen, Kjeldahl	89000	B	13000	3100	mg/Kg	5	☼	351.2	Total/NA
Nitrogen, Organic	86000		220	93	mg/Kg	1	☼	Nitrogen,Org	Total/NA
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
pH adj. to 25 deg C	7.86		0.100	0.100	SU	1		9045C	Soluble

Client Sample ID: #4 DRY SLUDGE — Lab Sample ID: 280-47978-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phosphorus	13000		4000	22	mg/Kg	10	☼	6010B	Total/NA
Potassium	1900		400	55	mg/Kg	1	☼	6010B	Total/NA
Mercury	1.5		0.11	0.035	mg/Kg	5	☼	7471A	Total/NA
Ammonia	800		730	300	mg/Kg	20	☼	350.1	Total/NA
Nitrogen, Kjeldahl	7700	B	840	200	mg/Kg	10	☼	351.2	Total/NA
Nitrogen, Organic	6900		7.2	3.0	mg/Kg	1	☼	Nitrogen,Org	Total/NA
Nitrate Nitrite as N	2700		72	26	mg/Kg	50	☼	353.2	Soluble
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
pH adj. to 25 deg C	4.96		0.100	0.100	SU	1		9045C	Soluble

This Detection Summary does not include radiochemical test results.

ANALYTICAL RESULTS

DRY CREEK WWTP LABORATORY

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

Date Sampled: 12-10-13
Date Received: 12-10-13
Sample Location: Dry Sludge

Sampled By: CB
Date Reported: 12-19-13
Sample Matrix: Solid

Analyses	*Result*	*Units*	*Qual*	*RL*	*Method*	*Analysis Date/ By*
MAJOR IONS						
Ammonia as N	0.1	%-dry		0.0006	SM 4500NH_3^+ D	12-11-13 / kl
NON-METALS						
Total Solids	73.9	%		0.2	SM 2540 G	12-11-13 / mw
Total Vol. Solids	33.1	%		1.0	SM 2540 E	12-11-13/ mw
METALS – TOTAL						
Ag, Silver	11.8	mg/kg		0.5	EPA 6010B	12-17-13 / kl
As, Arsenic	4.1	mg/kg		1.0	EPA 6010B	12-17/13 / kl
Cadmium, Cd	2.5	mg/kg		0.5	EPA 6010B	12-17-13 / kl
Chromium, Cr	17.5	mg/kg		0.5	EPA 6010B	12-17-13 / kl
Copper, Cu	635	mg/kg		1.0	EPA 6010B	12-17-13 / kl
Molybdenum, Mo	7.1	mg/kg		0.5	EPA 6010B	12-17/13 / kl
Nickel, Ni	11.6	mg/kg		0.5	EPA 6010B	12-17-13 / kl
Lead, Pb	42.3	mg/kg		1.0	EPA 6010B	12-17/13 / kl
Selenium, Se	13.9	mg/kg		0.3	EPA 6010B	12-17-13 / kl
Zinc, Zn	544	mg/kg		0.5	EPA 6010B	12-17-13 / kl

Report Definitions:

RL – Reporting Limit
NA – Not Analyzed

ND – Not detected at the reporting limit.
Note: QA/QC available in Dry Creek Laboratory

Kent Loader, Laboratory Supervisor

12.19.13
Date:

Detection Summary

Client: Cheyenne Board of Public Utilities
Project/Site: Biosolids Dry Creek WRF

TestAmerica Job ID: 280-50177-1

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Client Sample ID: #1 RAW SLUDGE — Lab Sample ID: 280-50177-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phosphorus	7500		7000	38	mg/Kg	1	☼	6010B	Total/NA
Potassium	2000	J	7000	960	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.32	J	0.38	0.12	mg/Kg	1	☼	7471A	Total/NA
Ammonia	2600		240	120	mg/Kg	1	☼	350.1	Total/NA
Nitrogen, Kjeldahl	59000	H	2500	1300	mg/Kg	4	☼	351.2	Total/NA
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
Nitrogen, Organic	56000	H	7.5	7.5	mg/Kg	1	☼	Nitrogen,Org	Total/NA
pH adj. to 25 deg C	5.03		0.100	0.100	SU	1		9045C	Soluble

Client Sample ID: #2 PRIMARY DIGESTER — Lab Sample ID: 280-50177-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phosphorus	29000		13000	71	mg/Kg	1	☼	6010B	Total/NA
Potassium	9700	J	13000	1800	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.97		0.81	0.26	mg/Kg	1	☼	7471A	Total/NA
Ammonia	24000		450	230	mg/Kg	1	☼	350.1	Total/NA
Nitrogen, Kjeldahl	100000	H	11000	6000	mg/Kg	10	☼	351.2	Total/NA
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
Nitrogen, Organic	76000	H	14	14	mg/Kg	1	☼	Nitrogen,Org	Total/NA
pH adj. to 25 deg C	7.71		0.100	0.100	SU	1		9045C	Soluble

Client Sample ID: #3 SECONDARY DIGESTER — Lab Sample ID: 280-50177-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phosphorus	30000		15000	80	mg/Kg	1	☼	6010B	Total/NA
Potassium	11000	J	15000	2000	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.80	J	1.0	0.33	mg/Kg	1	☼	7471A	Total/NA
Ammonia	62000		1100	560	mg/Kg	2	☼	350.1	Total/NA
Nitrogen, Kjeldahl	46000	H	1400	750	mg/Kg	1	☼	351.2	Total/NA
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
pH adj. to 25 deg C	7.76		0.100	0.100	SU	1		9045C	Soluble

Client Sample ID: #4 DRY SLUDGE — Lab Sample ID: 280-50177-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phosphorus	16000		2000	11	mg/Kg	5	☼	6010B	Total/NA
Potassium	1800		390	54	mg/Kg	1	☼	6010B	Total/NA
Mercury	2.7		0.23	0.076	mg/Kg	10	☼	7471A	Total/NA
Ammonia	690		13	6.7	mg/Kg	1	☼	350.1	Total/NA
Nitrogen, Kjeldahl	12000	H	670	350	mg/Kg	20	☼	351.2	Total/NA
Nitrate Nitrite as N	2100		27	9.6	mg/Kg	20	☼	353.2	Soluble
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
Nitrogen, Organic	11000	H	0.40	0.40	mg/Kg	1	☼	Nitrogen,Org	Total/NA
pH adj. to 25 deg C	5.00		0.100	0.100	SU	1		9045C	Soluble

This Detection Summary does not include radiochemical test results.