SM

HI R50A533

Waimanalo Gulch Sanitary Landfill

WASTE MANAGEMENT

WASTE MANAGEMENT OF HAWAII INC.
92-460 Farrington Highway
Kapolei, HI 96707
(808) 668-2985
(808) 668-1366 Fax

July 13, 2015

2015 JUL 16 10:42AM

Ms. Kris Poentis, Engineering Section
State Department of Health
Environmental Management Division
Clean Water Branch
919 Ala Moana Boulevard, # 300
Honolulu, HI 96801-3378

Subject: Waimanalo Gulch Sanitary Landfill, Kapolei, Oahu, Hawaii
File No. HI R50A533

Dear Ms. Poentis:

Per Hawaii Administrative Rules (HAR) Chapter 11-55, Appendix B, this letter serves as written notification to the State Department of Health (DOH) Clean Water Branch (CWB) of recent potential exceedances of storm water discharge limitations as stated in the Waimanalo Gulch Sanitary Landfill (WGSL) Notice of General Permit Coverage (NGPC), dated August 30, 2010 and renewed on December 9, 2013.

The potential exceedances are listed in the table below, along with the corresponding discharge limitation per the NGPC:

Table 1: WGSL Storm Water Sampling Exceedances

Sample Date	Parameter	Result (mg/L)	Effluent Limitation (mg/L)
June 15, 2015	Iron	14	1
	Zinc	0.056	0.022
	Total Suspended Solids	310	100

Discharge from the site was the result of a short rainfall event which occurred in the afternoon of June 15, 2015. The sampling event occurred in the late afternoon of the same day. Analytical grab and composite samples were collected from the water actively discharging over the concrete weir at the point of compliance. At the time of the event, the continuous discharge averaged 0.21 ft^3/sec at the east outfall (DB01-E) and no flow at the west outfall (DB01-W). The Field Information Form is attached for your information.

Analytical laboratory data were received on July 10, 2015 from TestAmerica Laboratories, Inc. - Denver. Waste Management of Hawaii (WMH) notified the CWB of the potential exceedances via email on July 13, 2015.

A pH exceedance (field measurement of 11.87 units, versus a limit of 5.5 to 8.0) was also noted during the sampling event. The notice of that exceedance was delivered to the CWB on June 19, 2015.

No direct cause for the iron, zinc, and TSS exceedances could be identified. Exceedances of iron, zinc, and TSS from the compliance point have been reported in the past at similar concentrations. It is suspected that naturally occurring background ion levels in surrounding soils are the primary source of the elevated iron and zinc values. Water discharging from the Western Diversion Flip Bucket appeared visually more turbid than the DB01-E sample.

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 ensure that qualified personnel properly gathered and evaluated 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.

If you should have any questions or require additional information, please contact me at (808) 668-2985.

Very truly yours,

Joseph R. Whelan

Joseph Whelan
General Manager/Vice President
Waste Management of Hawaii

Enclosures: Attachment A – Field Forms
Attachment B – Laboratory Report

cc: Wayne Hamada – City and County of Honolulu
Mark Hofferbert – AECOM Technical Services

Storm Water Sampling Form

Waimanalo Gulch Sanitary Landfill

Storm Water Monitoring Plan

Sampling Location: DB01	Date: 06/15/2015
	Project Number:

Sampling Personnel: AM, KL

Weather Conditions: Cloudy not raining during sampling

Observations/Comments: Damp site conditions

Instrument	Manufacturer	Model	Serial No	Calibration Date and Time
pH Meter	Ecosense	pH10A	JC000609	06/15/2015 1810

Calibration results: Auto Cal Successful ; pH pen calibrated with buffers 7, 4, 10, Calibration good.

Comments: High pH readings during sampling. pH checked again during compositing aliquots

Time at Start of Rain: ENDED BEFORE ARRIVAL TO SITE	Time of First Run-off: UNKNOWN

Sample Collection Method: Grab (oil + grease) & Composite

Flow-Measurement Method: measurement at weir (ruler)

Describe: No flow at DB01-W, Flow measured at DB01-E

Sample Appearance:	Odor: None	Color: light brown/light tan
Floating Debris: None	Scum or Foam: None	Oil Sheen: None

pH @ 8:05

SAMPLE NUMBER	TIME SAMPLED	pH	FLOW MEASUREMENTS	pH remeasure
A	1817	11.87	1.5" E, 0" W	8.13
B	1832	11.02	1" E, 0" W	8.27
C	1847	10.40	7/8" E, 0" W	8.33
D	1902	10.37	3/4" E, 0" W	8.38

Comments:

water: 8.30

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 280-70887-1

Job Description: 995|Waimanalo Gulch LF

For:
Waste Management
Waimanalo Gulch Landfill
92-460 Farrington Highway
Kapolei, HI 96707

Attention: Mr. Justin Lottig

Approved for release.
Betsy A Sara
Project Manager II
7/10/2015 11:22 AM

Betsy A Sara, Project Manager II
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0189
betsy.sara@testamericainc.com
07/10/2015

cc: Mr. Mark Hofferbert
Ms. Margie Thach

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is 4025.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

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CASE NARRATIVE

Client: Waste Management

Project: 995|Waimanalo Gulch LF

Report Number: 280-70887-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

This report may include reporting limits (RLs) less than TestAmerica's standard reporting limit. The reported sample results and associated reporting limits are being used specifically to meet the needs of this project. Note that data are not normally reported to these levels without qualification because they are inherently less reliable and potentially less defensible than required by the latest industry standards.

Sample Receiving

The sample was received on 06/18/2015; the sample arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 2.0 C.

The sample collection time was not listed on the chain of custody. The time was obained from the container labels. The client was notified on 6/16/2015.

Holding Times

All holding times were met.

Method Blanks

Total Selenium Method 200.7 was detected in the Method Blank below the project established reporting limit. No corrective action is taken for any values in Method Blanks that are below the requested reporting limits. The Method Blank data are included at the end of this report.

All other Method Blanks were within established control limits.

Laboratory Control Samples (LCS)

All Laboratory Control Samples were within established control limits.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD)

The method required MS/MSD could not be performed for Method 625 due to insufficient sample volume, however, a LCS/LCSD pair was analyzed to demonstrate method precision and accuracy.

All other MS and MSD samples were within established control limits.

General Comments

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

For samples requiring analysis at a dilution, the dilution factor has been multiplied by the Method Detection Limit (MDL) for each analyte and evaluated versus the project-specific reporting limit (PSRL). If the obtained value is below the PSRL, then the PSRL is preserved as the reporting limit for the diluted result, otherwise, the obtained value becomes the reporting limit. This is done in order to maintain the PSRL to meet permit requirements at the request of the client and to report the lowest possible RL for each analyte.

The analysis for Biochemical Oxygen Demand (BOD) was performed by TestAmerica Honolulu. Their address and phone number are:
TestAmerica Honolulu
1946 Young Street
Suite 400A
Honolulu, HI 96826
Phone: 808.486.5227

The analysis for Hexavalent Chromium was performed at TestAmerica's Irvine facility.

TestAmerica Irvine
17461 Derian Avenue
Suite 100
Irvine, CA 92614
Phone: 949.261.1022

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-70887-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-70887-1	**DB01-E**					
Mercury		0.000063	J	0.00020	mg/L	245.1
Ammonia		0.083	J	0.10	mg/L	350.1
Nitrogen, Kjeldahl		0.66		0.50	mg/L	351.2
Nitrate Nitrite as N		3.2		0.10	mg/L	353.2
Phosphorus, Total		1.1		0.050	mg/L	365.1
Chemical Oxygen Demand		26		20	mg/L	410.4
Total Suspended Solids		310		5.5	mg/L	SM 2540D
Nitrogen, Total		3.9		0.10	mg/L	Total Nitrogen
Dissolved						
Chromium, hexavalent		3.7		1.0	ug/L	218.6
Total Recoverable						
Cadmium		0.00070	J	0.0050	mg/L	200.7 Rev 4.4
Iron		14		0.10	mg/L	200.7 Rev 4.4
Selenium		0.0085	J B	0.015	mg/L	200.7 Rev 4.4
Zinc		0.056		0.020	mg/L	200.7 Rev 4.4

METHOD SUMMARY

Client: Waste Management

Job Number: 280-70887-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Semivolatile Organic Compounds (GC/MS)	TAL DEN	40CFR136A 625	
Liquid-Liquid Extraction	TAL DEN		40CFR136A 625
Metals (ICP)	TAL DEN	EPA 200.7 Rev 4.4	
Preparation, Total Recoverable Metals	TAL DEN		EPA 200.7
Mercury (CVAA)	TAL DEN	EPA 245.1	
Preparation, Mercury	TAL DEN		EPA 245.1
HEM and SGT-HEM	TAL DEN	1664A 1664A	
HEM and SGT-HEM (SPE)	TAL DEN		1664A 1664A
Nitrogen, Ammonia	TAL DEN	MCAWW 350.1	
Nitrogen, Total Kjeldahl	TAL DEN	MCAWW 351.2	
Nitrogen, Total Kjeldahl	TAL DEN		MCAWW 351.2
Nitrogen, Nitrate-Nitrite	TAL DEN	MCAWW 353.2	
Phosphorus, Total	TAL DEN	EPA 365.1	
Phosphorus, Total	TAL DEN		MCAWW 365.2/365.3/365
COD	TAL DEN	MCAWW 410.4	
Solids, Total Suspended (TSS)	TAL DEN	SM SM 2540D	
Nitrogen, Total	TAL DEN	EPA Total Nitrogen	
General Sub Contract Method	TAL HON	Subcontract	
Chromium, Hexavalent (Ion Chromatography)	TAL IRV	EPA 218.6	
Sample Filtration, Field			FIELD_FLTRD

Lab References:

TAL DEN = TestAmerica Denver

TAL HON = TestAmerica Honolulu

TAL IRV = TestAmerica Irvine

Method References:

1664A = EPA-821-98-002

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"

METHOD / ANALYST SUMMARY

Client: Waste Management

Job Number: 280-70887-1

Method	Analyst	Analyst ID
40CFR136A 625	Kiekel, Daniel C	DCK
EPA 200.7 Rev 4.4	Scott, Samantha J	SJS
EPA 245.1	Kelly, Cara M	CMK
1664A 1664A	Lehman, Jeffrey M	JML
MCAWW 350.1	Lawrence, Caitlyn M	CML
MCAWW 351.2	Woolley, Mark -	MW1
MCAWW 353.2	Lawrence, Caitlyn M	CML
EPA 365.1	Schwemin, Andrew J	AJS
MCAWW 410.4	Shaheen, Scott W	SWS
SM SM 2540D	Woolley, Mark -	MW1
EPA Total Nitrogen	Allen, Andrew J	AJA
EPA 218.6	Nguyen, Tung	TN

SAMPLE SUMMARY

Client: Waste Management

Job Number: 280-70887-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-70887-1	DB01-E	Water	06/15/2015 1817	06/18/2015 1102

SAMPLE RESULTS

Client: Waste Management

Job Number: 280-70887-1

Client Sample ID: **DB01-E**

Lab Sample ID: 280-70887-1
Client Matrix: Water

Date Sampled: 06/15/2015 1817
Date Received: 06/18/2015 1102

625 Semivolatile Organic Compounds (GC/MS)

Analysis Method:	625	Analysis Batch:	280-284505	Instrument ID:	SMS_Y
Prep Method:	625	Prep Batch:	280-283130	Lab File ID:	Y3936.D
Dilution:	1.0			Initial Weight/Volume:	1049.5 mL
Analysis Date:	07/02/2015 0553			Final Weight/Volume:	1 mL
Prep Date:	06/22/2015 1415			Injection Volume:	0.5 uL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Alpha-Terpineol	ND		0.0019	0.010
Benzoic acid	ND		0.0095	0.050
p-Cresol	ND		0.00024	0.010
Pentachlorophenol	ND		0.019	0.060
Phenol	ND		0.0019	0.010

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	87		16 - 147
2-Fluorobiphenyl	92		43 - 120
2-Fluorophenol	103		16 - 136
Nitrobenzene-d5	102		52 - 120
Phenol-d5	109		11 - 145
Terphenyl-d14	53		10 - 145

Client: Waste Management

Job Number: 280-70887-1

Client Sample ID: **DB01-E**

Lab Sample ID: 280-70887-1
Client Matrix: Water

Date Sampled: 06/15/2015 1817
Date Received: 06/18/2015 1102

218.6 Chromium, Hexavalent (Ion Chromatography)-Dissolved

Analysis Method:	218.6	Analysis Batch:	440-262655	Instrument ID:	IC-16
	N/A	Prep Batch:	N/A	Lab File ID:	Info 2_TAIIRV167_He›
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/22/2015 2237			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1000 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chromium, hexavalent	3.7		0.25	1.0

Client: Waste Management

Job Number: 280-70887-1

Client Sample ID: **DB01-E**

Lab Sample ID: 280-70887-1
Client Matrix: Water

Date Sampled: 06/15/2015 1817
Date Received: 06/18/2015 1102

200.7 Rev 4.4 Metals (ICP)-Total Recoverable

Analysis Method:	200.7 Rev 4.4	Analysis Batch:	280-284266	Instrument ID:	MT_025
Prep Method:	200.7	Prep Batch:	280-283017	Lab File ID:	25A062915C.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/29/2015 1817			Final Weight/Volume:	50 mL
Prep Date:	06/23/2015 0815				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Arsenic	ND		0.0044	0.015
Cadmium	0.00070	J	0.00045	0.0050
Lead	ND		0.0026	0.0090
Selenium	0.0085	J B	0.0049	0.015
Zinc	0.056		0.0045	0.020
Silver	ND		0.00093	0.010

Analysis Method:	200.7 Rev 4.4	Analysis Batch:	280-284460	Instrument ID:	MT_025
Prep Method:	200.7	Prep Batch:	280-283017	Lab File ID:	25063015A.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/30/2015 1820			Final Weight/Volume:	50 mL
Prep Date:	06/23/2015 0815				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Iron	14		0.022	0.10

245.1 Mercury (CVAA)

Analysis Method:	245.1	Analysis Batch:	280-283632	Instrument ID:	MT_034
Prep Method:	245.1	Prep Batch:	280-282971	Lab File ID:	150624ba.txt
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	06/24/2015 2227			Final Weight/Volume:	30 mL
Prep Date:	06/24/2015 1610				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	0.000063	J	0.000027	0.00020

General Chemistry

Client Sample ID: DB01-E

Lab Sample ID: 280-70887-1 Date Sampled: 06/15/2015 1817
Client Matrix: Water Date Received: 06/18/2015 1102

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
HEM	ND		mg/L	4.5	5.0	1.0	1664A
Analysis Batch: 280-283374	Analysis Date: 06/23/2015 1801						
Prep Batch: 280-283343	Prep Date: 06/23/2015 1513						
Ammonia	0.083	J	mg/L	0.022	0.10	1.0	350.1
Analysis Batch: 280-283377	Analysis Date: 06/23/2015 1533						
Nitrogen, Kjeldahl	0.66		mg/L	0.18	0.50	1.0	351.2
Analysis Batch: 280-284809	Analysis Date: 07/04/2015 1553						
Prep Batch: 280-284803	Prep Date: 07/03/2015 1734						
Nitrate Nitrite as N	3.2		mg/L	0.019	0.10	1.0	353.2
Analysis Batch: 280-285283	Analysis Date: 07/08/2015 1436						
Phosphorus, Total	1.1		mg/L	0.010	0.050	2.0	365.1
Analysis Batch: 280-284598	Analysis Date: 07/01/2015 2143						
Prep Batch: 280-284554	Prep Date: 07/01/2015 1559						
Chemical Oxygen Demand	26		mg/L	4.1	20	1.0	410.4
Analysis Batch: 280-283589	Analysis Date: 06/24/2015 1726						
Total Suspended Solids	310		mg/L	5.5	5.5	1.0	SM 2540D
Analysis Batch: 280-282898	Analysis Date: 06/20/2015 1059						
Nitrogen, Total	3.9		mg/L	0.042	0.10	1.0	Total Nitrogen
Analysis Batch: 280-285419	Analysis Date: 07/09/2015 1321						

DATA REPORTING QUALIFIERS

Client: Waste Management

Job Number: 280-70887-1

Lab Section	Qualifier	Description
GC/MS Semi VOA		
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Metals		
	B	Compound was found in the blank and sample.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
General Chemistry		
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

QUALITY CONTROL RESULTS

Client: Waste Management

Job Number: 280-70887-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 280-283130					
LCS 280-283130/2-A	Lab Control Sample	T	Water	625	
LCSD 280-283130/3-A	Lab Control Sample Duplicate	T	Water	625	
MB 280-283130/1-A	Method Blank	T	Water	625	
280-70887-1	DB01-E	T	Water	625	
Analysis Batch:280-284505					
LCS 280-283130/2-A	Lab Control Sample	T	Water	625	280-283130
LCSD 280-283130/3-A	Lab Control Sample Duplicate	T	Water	625	280-283130
MB 280-283130/1-A	Method Blank	T	Water	625	280-283130
280-70887-1	DB01-E	T	Water	625	280-283130

Report Basis
T = Total

Client: Waste Management

Job Number: 280-70887-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-282971					
LCS 280-282971/2-A	Lab Control Sample	T	Water	245.1	
MB 280-282971/1-A	Method Blank	T	Water	245.1	
280-70887-1	DB01-E	T	Water	245.1	
280-71019-B-1-B MS	Matrix Spike	T	Water	245.1	
280-71019-B-1-C MSD	Matrix Spike Duplicate	T	Water	245.1	
Prep Batch: 280-283017					
LCS 280-283017/2-A	Lab Control Sample	R	Water	200.7	
MB 280-283017/1-A	Method Blank	R	Water	200.7	
280-70887-1	DB01-E	R	Water	200.7	
280-70968-D-1-C MS	Matrix Spike	R	Water	200.7	
280-70968-D-1-D MSD	Matrix Spike Duplicate	R	Water	200.7	
Analysis Batch:280-283632					
LCS 280-282971/2-A	Lab Control Sample	T	Water	245.1	280-282971
MB 280-282971/1-A	Method Blank	T	Water	245.1	280-282971
280-70887-1	DB01-E	T	Water	245.1	280-282971
280-71019-B-1-B MS	Matrix Spike	T	Water	245.1	280-282971
280-71019-B-1-C MSD	Matrix Spike Duplicate	T	Water	245.1	280-282971
Analysis Batch:280-284266					
LCS 280-283017/2-A	Lab Control Sample	R	Water	200.7 Rev 4.4	280-283017
MB 280-283017/1-A	Method Blank	R	Water	200.7 Rev 4.4	280-283017
280-70887-1	DB01-E	R	Water	200.7 Rev 4.4	280-283017
280-70968-D-1-C MS	Matrix Spike	R	Water	200.7 Rev 4.4	280-283017
280-70968-D-1-D MSD	Matrix Spike Duplicate	R	Water	200.7 Rev 4.4	280-283017
Analysis Batch:280-284460					
LCS 280-283017/2-A	Lab Control Sample	R	Water	200.7 Rev 4.4	280-283017
MB 280-283017/1-A	Method Blank	R	Water	200.7 Rev 4.4	280-283017
280-70887-1	DB01-E	R	Water	200.7 Rev 4.4	280-283017
280-70968-D-1-C MS	Matrix Spike	R	Water	200.7 Rev 4.4	280-283017
280-70968-D-1-D MSD	Matrix Spike Duplicate	R	Water	200.7 Rev 4.4	280-283017

Report Basis
R = Total Recoverable
T = Total

Client: Waste Management

Job Number: 280-70887-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-282898					
LCS 280-282898/1	Lab Control Sample	T	Water	SM 2540D	
MB 280-282898/2	Method Blank	T	Water	SM 2540D	
280-70887-1	DB01-E	T	Water	SM 2540D	
280-70980-A-4 DU	Duplicate	T	Water	SM 2540D	
Prep Batch: 280-283343					
LCS 280-283343/1-A	Lab Control Sample	T	Water	1664A	
LCSD 280-283343/2-A	Lab Control Sample Duplicate	T	Water	1664A	
MB 280-283343/3-A	Method Blank	T	Water	1664A	
280-70887-1	DB01-E	T	Water	1664A	
280-71048-A-5-B MS	Matrix Spike	T	Water	1664A	
Analysis Batch:280-283374					
LCS 280-283343/1-A	Lab Control Sample	T	Water	1664A	280-283343
LCSD 280-283343/2-A	Lab Control Sample Duplicate	T	Water	1664A	280-283343
MB 280-283343/3-A	Method Blank	T	Water	1664A	280-283343
280-70887-1	DB01-E	T	Water	1664A	280-283343
280-71048-A-5-B MS	Matrix Spike	T	Water	1664A	280-283343
Analysis Batch:280-283377					
LCS 280-283377/59	Lab Control Sample	T	Water	350.1	
LCSD 280-283377/60	Lab Control Sample Duplicate	T	Water	350.1	
MB 280-283377/61	Method Blank	T	Water	350.1	
280-70884-F-1 MS	Matrix Spike	T	Water	350.1	
280-70884-F-1 MSD	Matrix Spike Duplicate	T	Water	350.1	
280-70887-1	DB01-E	T	Water	350.1	
Analysis Batch:280-283589					
LCS 280-283589/3	Lab Control Sample	T	Water	410.4	
LCSD 280-283589/4	Lab Control Sample Duplicate	T	Water	410.4	
MB 280-283589/5	Method Blank	T	Water	410.4	
280-70887-1	DB01-E	T	Water	410.4	
280-70887-1MS	Matrix Spike	T	Water	410.4	
280-70887-1MSD	Matrix Spike Duplicate	T	Water	410.4	
Prep Batch: 280-284554					
LCS 280-284554/1-A	Lab Control Sample	T	Water	365.2/365.3/365	
MB 280-284554/2-A	Method Blank	T	Water	365.2/365.3/365	
280-70887-1	DB01-E	T	Water	365.2/365.3/365	
280-71207-X-2-B MS	Matrix Spike	T	Water	365.2/365.3/365	
280-71207-X-2-C MSD	Matrix Spike Duplicate	T	Water	365.2/365.3/365	

Client: Waste Management

Job Number: 280-70887-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-284598					
LCS 280-284554/1-A	Lab Control Sample	T	Water	365.1	280-284554
MB 280-284554/2-A	Method Blank	T	Water	365.1	280-284554
280-70887-1	DB01-E	T	Water	365.1	280-284554
280-71207-X-2-B MS	Matrix Spike	T	Water	365.1	280-284554
280-71207-X-2-C MSD	Matrix Spike Duplicate	T	Water	365.1	280-284554
Prep Batch: 280-284803					
LCS 280-284803/1-A	Lab Control Sample	T	Water	351.2	
LCSD 280-284803/2-A	Lab Control Sample Duplicate	T	Water	351.2	
MB 280-284803/3-A	Method Blank	T	Water	351.2	
280-70652-C-5-B MS	Matrix Spike	T	Water	351.2	
280-70652-C-5-C MSD	Matrix Spike Duplicate	T	Water	351.2	
280-70887-1	DB01-E	T	Water	351.2	
Analysis Batch:280-284809					
LCS 280-284803/1-A	Lab Control Sample	T	Water	351.2	280-284803
LCSD 280-284803/2-A	Lab Control Sample Duplicate	T	Water	351.2	280-284803
MB 280-284803/3-A	Method Blank	T	Water	351.2	280-284803
280-70652-C-5-B MS	Matrix Spike	T	Water	351.2	280-284803
280-70652-C-5-C MSD	Matrix Spike Duplicate	T	Water	351.2	280-284803
280-70887-1	DB01-E	T	Water	351.2	280-284803
Analysis Batch:280-285283					
LCS 280-285283/21	Lab Control Sample	T	Water	353.2	
LCSD 280-285283/60	Lab Control Sample Duplicate	T	Water	353.2	
MB 280-285283/22	Method Blank	T	Water	353.2	
280-70887-1	DB01-E	T	Water	353.2	
280-70896-A-3 MS	Matrix Spike	T	Water	353.2	
280-70896-A-3 MSD	Matrix Spike Duplicate	T	Water	353.2	
Analysis Batch:280-285419					
MB 280-285419/1	Method Blank	T	Water	Total Nitrogen	
280-70887-1	DB01-E	T	Water	Total Nitrogen	

Report Basis
T = Total

Client: Waste Management

Job Number: 280-70887-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
HPLC/IC					
Analysis Batch:440-262655					
LCS 440-262655/2	Lab Control Sample	T	Water	218.6	
MB 440-262655/3	Method Blank	T	Water	218.6	
280-70887-1	DB01-E	D	Water	218.6	
440-113319-D-12 MS	Matrix Spike	T	Water	218.6	
440-113319-D-12 MSD	Matrix Spike Duplicate	T	Water	218.6	

Report Basis
D = Dissolved
T = Total

Client: Waste Management

Job Number: 280-70887-1

Surrogate Recovery Report

625 Semivolatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	TBP %Rec	FBP %Rec	2FP %Rec	NBZ %Rec	PHL %Rec	TPH %Rec
280-70887-1	DB01-E	87	92	103	102	109	53
MB 280-283130/1-A		70	82	88	91	97	83
LCS 280-283130/2-A		85	82	91	93	93	82
LCSD 280-283130/3-A		84	84	92	92	95	80

Surrogate	Acceptance Limits
TBP = 2,4,6-Tribromophenol	16-147
FBP = 2-Fluorobiphenyl	43-120
2FP = 2-Fluorophenol	16-136
NBZ = Nitrobenzene-d5	52-120
PHL = Phenol-d5	11-145
TPH = Terphenyl-d14	10-145

Client: Waste Management

Job Number: 280-70887-1

Method Blank - Batch: 280-283130

Method: 625
Preparation: 625

Lab Sample ID:	MB 280-283130/1-A	Analysis Batch:	280-284505	Instrument ID:	SMS_Y
Client Matrix:	Water	Prep Batch:	280-283130	Lab File ID:	Y3912.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	07/01/2015 1854	Units:	mg/L	Final Weight/Volume:	1 mL
Prep Date:	06/22/2015 1415			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Alpha-Terpineol	ND		0.0020	0.010
Benzoic acid	ND		0.010	0.050
p-Cresol	ND		0.00025	0.010
Pentachlorophenol	ND		0.020	0.060
Phenol	ND		0.0020	0.010

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol	70	16 - 147
2-Fluorobiphenyl	82	43 - 120
2-Fluorophenol	88	16 - 136
Nitrobenzene-d5	91	52 - 120
Phenol-d5	97	11 - 145
Terphenyl-d14	83	10 - 145

Client: Waste Management

Job Number: 280-70887-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-283130

Method: 625
Preparation: 625

LCS Lab Sample ID:	LCS 280-283130/2-A	Analysis Batch:	280-284505	Instrument ID:	SMS_Y
Client Matrix:	Water	Prep Batch:	280-283130	Lab File ID:	Y3913.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	07/01/2015 1922	Units:	mg/L	Final Weight/Volume:	1 mL
Prep Date:	06/22/2015 1415			Injection Volume:	0.5 uL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-283130/3-A	Analysis Batch:	280-284505	Instrument ID:	SMS_Y
Client Matrix:	Water	Prep Batch:	280-283130	Lab File ID:	Y3914.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	07/01/2015 1950	Units:	mg/L	Final Weight/Volume:	1 mL
Prep Date:	06/22/2015 1415			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
1,2,4-Trichlorobenzene	76	67	44 - 120	12	35		
1,2-Dichlorobenzene	77	69	32 - 120	10	42		
1,3-Dichlorobenzene	75	66	23 - 120	13	47		
1,4-Dichlorobenzene	76	68	24 - 120	11	49		
2,2'-Oxybis(1-chloropropane)	100	99	37 - 120	2	30		
2,4,6-Trichlorophenol	92	92	51 - 120	0	30		
2,4-Dichlorophenol	89	89	46 - 120	0	30		
2,4-Dimethylphenol	76	77	44 - 119	2	35		
2,4-Dinitrophenol	93	94	20 - 121	1	61		
2,4-Dinitrotoluene	95	93	57 - 120	2	35		
2,6-Dinitrotoluene	91	91	56 - 120	0	30		
2-Chloronaphthalene	83	83	60 - 118	1	30		
2-Chlorophenol	93	93	34 - 120	0	30		
2-Methylphenol	92	95	38 - 120	2	35		
2-Nitrophenol	94	93	47 - 120	1	30		
3,3'-Dichlorobenzidine	68	67	18 - 120	2	50		
4,6-Dinitro-2-methylphenol	95	95	40 - 120	0	55		
4-Bromophenyl phenyl ether	86	84	53 - 120	2	34		
4-Chloro-3-methylphenol	92	91	57 - 120	1	30		
4-Chlorophenyl phenyl ether	85	83	51 - 120	1	30		
4-Nitrophenol	92	88	53 - 120	5	42		
Acenaphthene	87	86	47 - 120	1	30		
Acenaphthylene	85	85	33 - 120	0	30		
Anthracene	89	87	52 - 120	2	30		
Benzidine	20	21	10 - 218	3	50		
Benzo[a]anthracene	88	86	54 - 120	3	30		
Benzo[a]pyrene	84	83	39 - 120	1	73		
Benzo[b]fluoranthene	85	85	51 - 120	0	90		
Benzo[g,h,i]perylene	86	84	48 - 120	2	64		
Benzo[k]fluoranthene	88	86	49 - 120	2	50		
Bis(2-chloroethoxy)methane	93	92	50 - 120	1	30		
Bis(2-chloroethyl)ether	108	111	35 - 120	2	30		
Bis(2-ethylhexyl) phthalate	103	101	56 - 120	2	30		
Butyl benzyl phthalate	98	96	53 - 120	2	30		
Chrysene	88	86	51 - 120	3	30		
Dibenz(a,h)anthracene	87	86	45 - 120	1	78		

Client: Waste Management

Job Number: 280-70887-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-283130

Method: 625
Preparation: 625

LCS Lab Sample ID:	LCS 280-283130/2-A	Analysis Batch:	280-284505	Instrument ID:	SMS_Y
Client Matrix:	Water	Prep Batch:	280-283130	Lab File ID:	Y3913.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	07/01/2015 1922	Units:	mg/L	Final Weight/Volume:	1 mL
Prep Date:	06/22/2015 1415			Injection Volume:	0.5 uL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-283130/3-A	Analysis Batch:	280-284505	Instrument ID:	SMS_Y
Client Matrix:	Water	Prep Batch:	280-283130	Lab File ID:	Y3914.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	07/01/2015 1950	Units:	mg/L	Final Weight/Volume:	1 mL
Prep Date:	06/22/2015 1415			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Diethyl phthalate	93	91	59 - 114	2	30		
Dimethyl phthalate	88	88	58 - 112	1	30		
Di-n-butyl phthalate	94	92	57 - 118	2	30		
Di-n-octyl phthalate	104	101	56 - 120	3	30		
Fluoranthene	88	86	58 - 120	2	30		
Fluorene	87	86	59 - 120	2	30		
Hexachlorobenzene	83	82	53 - 120	2	30		
Hexachlorobutadiene	67	58	27 - 116	15	41		
Hexachlorocyclopentadiene	11	11	10 - 120	6	82	J	J
Hexachloroethane	73	63	40 - 113	14	52		
Indeno[1,2,3-cd]pyrene	88	86	50 - 120	2	73		
Isophorone	93	92	50 - 120	1	30		
Naphthalene	83	76	37 - 120	9	30		
n-Decane	83	62	28 - 120	29	61		
Nitrobenzene	94	91	46 - 120	3	30		
N-Nitrosodimethylamine	94	95	37 - 120	1	30		
N-Nitrosodi-n-propylamine	96	98	50 - 120	2	30		
N-Nitrosodiphenylamine	88	86	46 - 203	2	50		
p-Cresol	93	97	42 - 120	4	39		
Pentachlorophenol	101	100	46 - 120	1	30		
Phenanthrene	88	86	54 - 120	1	30		
Phenol	95	98	37 - 112	2	30		
Pyrene	90	89	55 - 115	2	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
2,4,6-Tribromophenol	85	84	16 - 147
2-Fluorobiphenyl	82	84	43 - 120
2-Fluorophenol	91	92	16 - 136
Nitrobenzene-d5	93	92	52 - 120
Phenol-d5	93	95	11 - 145
Terphenyl-d14	82	80	10 - 145

Client: Waste Management

Job Number: 280-70887-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-283130

Method: 625
Preparation: 625

LCS Lab Sample ID:	LCS 280-283130/2-A	Units: mg/L		LCSD Lab Sample ID:	LCSD 280-283130/3-A
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	07/01/2015 1922			Analysis Date:	07/01/2015 1950
Prep Date:	06/22/2015 1415			Prep Date:	06/22/2015 1415
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
1,2,4-Trichlorobenzene	0.0800	0.0800	0.0606	0.0539
1,2-Dichlorobenzene	0.0800	0.0800	0.0617	0.0556
1,3-Dichlorobenzene	0.0800	0.0800	0.0601	0.0530
1,4-Dichlorobenzene	0.0800	0.0800	0.0606	0.0542
2,2'-Oxybis(1-chloropropane)	0.0800	0.0800	0.0801	0.0789
2,4,6-Trichlorophenol	0.0800	0.0800	0.0738	0.0740
2,4-Dichlorophenol	0.0800	0.0800	0.0715	0.0715
2,4-Dimethylphenol	0.0800	0.0800	0.0606	0.0617
2,4-Dinitrophenol	0.160	0.160	0.150	0.150
2,4-Dinitrotoluene	0.0800	0.0800	0.0757	0.0740
2,6-Dinitrotoluene	0.0800	0.0800	0.0732	0.0728
2-Chloronaphthalene	0.0800	0.0800	0.0668	0.0660
2-Chlorophenol	0.0800	0.0800	0.0746	0.0745
2-Methylphenol	0.0800	0.0800	0.0739	0.0757
2-Nitrophenol	0.0800	0.0800	0.0752	0.0748
3,3'-Dichlorobenzidine	0.0800	0.0800	0.0547	0.0534
4,6-Dinitro-2-methylphenol	0.160	0.160	0.152	0.152
4-Bromophenyl phenyl ether	0.0800	0.0800	0.0689	0.0675
4-Chloro-3-methylphenol	0.0800	0.0800	0.0738	0.0729
4-Chlorophenyl phenyl ether	0.0800	0.0800	0.0676	0.0667
4-Nitrophenol	0.160	0.160	0.148	0.140
Acenaphthene	0.0800	0.0800	0.0693	0.0690
Acenaphthylene	0.0800	0.0800	0.0678	0.0679
Anthracene	0.0800	0.0800	0.0708	0.0697
Benzidine	0.0800	0.0800	ND	ND
Benzo[a]anthracene	0.0800	0.0800	0.0703	0.0685
Benzo[a]pyrene	0.0800	0.0800	0.0672	0.0666
Benzo[b]fluoranthene	0.0800	0.0800	0.0679	0.0678
Benzo[g,h,i]perylene	0.0800	0.0800	0.0688	0.0675
Benzo[k]fluoranthene	0.0800	0.0800	0.0703	0.0688
Bis(2-chloroethoxy)methane	0.0800	0.0800	0.0743	0.0738
Bis(2-chloroethyl)ether	0.0800	0.0800	0.0866	0.0884
Bis(2-ethylhexyl) phthalate	0.0800	0.0800	0.0824	0.0805
Butyl benzyl phthalate	0.0800	0.0800	0.0781	0.0767
Chrysene	0.0800	0.0800	0.0707	0.0688
Dibenz(a,h)anthracene	0.0800	0.0800	0.0699	0.0689
Diethyl phthalate	0.0800	0.0800	0.0741	0.0729
Dimethyl phthalate	0.0800	0.0800	0.0706	0.0701
Di-n-butyl phthalate	0.0800	0.0800	0.0750	0.0733

Client: Waste Management

Job Number: 280-70887-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-283130

Method: 625
Preparation: 625

LCS Lab Sample ID:	LCS 280-283130/2-A	Units: mg/L	LCSD Lab Sample ID:	LCSD 280-283130/3-A	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	07/01/2015 1922		Analysis Date:	07/01/2015 1950	
Prep Date:	06/22/2015 1415		Prep Date:	06/22/2015 1415	
Leach Date:	N/A		Leach Date:	N/A	

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Di-n-octyl phthalate	0.0800	0.0800	0.0834	0.0809
Fluoranthene	0.0800	0.0800	0.0706	0.0691
Fluorene	0.0800	0.0800	0.0700	0.0687
Hexachlorobenzene	0.0800	0.0800	0.0663	0.0653
Hexachlorobutadiene	0.0800	0.0800	0.0537	0.0462
Hexachlorocyclopentadiene	0.0800	0.0800	0.00848 J	0.00899 J
Hexachloroethane	0.0800	0.0800	0.0581	0.0505
Indeno[1,2,3-cd]pyrene	0.0800	0.0800	0.0701	0.0686
Isophorone	0.0800	0.0800	0.0746	0.0735
Naphthalene	0.0800	0.0800	0.0665	0.0607
n-Decane	0.0800	0.0800	0.0660	0.0494
Nitrobenzene	0.0800	0.0800	0.0752	0.0729
N-Nitrosodimethylamine	0.0800	0.0800	0.0752	0.0756
N-Nitrosodi-n-propylamine	0.0800	0.0800	0.0768	0.0787
N-Nitrosodiphenylamine	0.160	0.160	0.141	0.138
p-Cresol	0.0800	0.0800	0.0746	0.0778
Pentachlorophenol	0.160	0.160	0.162	0.160
Phenanthrene	0.0800	0.0800	0.0702	0.0692
Phenol	0.0800	0.0800	0.0764	0.0781
Pyrene	0.0800	0.0800	0.0722	0.0710

Client: Waste Management

Job Number: 280-70887-1

Method Blank - Batch: 440-262655

Method: 218.6
Preparation: N/A

Lab Sample ID:	MB 440-262655/3	Analysis Batch:	440-262655	Instrument ID:	IC-16
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	Info 2_TAIIRV167_Hex
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/22/2015 0441	Units:	ug/L	Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1000 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Chromium, hexavalent	ND		0.25	1.0

Lab Control Sample - Batch: 440-262655

Method: 218.6
Preparation: N/A

Lab Sample ID:	LCS 440-262655/2	Analysis Batch:	440-262655	Instrument ID:	IC-16
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	Info 2_TAIIRV167_Hex
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/22/2015 0428	Units:	ug/L	Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1000 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chromium, hexavalent	50.0	51.9	104	90 - 110	

Method Reporting Limit Check - Batch: 440-262655

Method: 218.6
Preparation: N/A

Lab Sample ID:	MRL 440-262655/4	Analysis Batch:	440-262655	Instrument ID:	IC-16
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	Info 2_TAIIRV167_Hex
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/22/2015 0454	Units:	ug/L	Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1000 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chromium, hexavalent	1.00	1.29	129	50 - 150	

Client: Waste Management

Job Number: 280-70887-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 440-262655

Method: 218.6
Preparation: N/A

MS Lab Sample ID:	440-113319-D-12 MS	Analysis Batch:	440-262655	Instrument ID:	IC-16
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	Info 2_TAIIRV167_Hex (
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/22/2015 2147			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1000 uL
Leach Date:	N/A				

MSD Lab Sample ID:	440-113319-D-12 MSD	Analysis Batch:	440-262655	Instrument ID:	IC-16
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	Info 2_TAIIRV167_Hex (
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/22/2015 2159			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1000 uL
Leach Date:	N/A				

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Chromium, hexavalent	101	99	90 - 110	1	10		

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 440-262655

Method: 218.6
Preparation: N/A

MS Lab Sample ID:	440-113319-D-12 MS	Units:	ug/L	MSD Lab Sample ID:	440-113319-D-12 MSD
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	06/22/2015 2147			Analysis Date:	06/22/2015 2159
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Chromium, hexavalent	ND	50.0	50.0	50.4	49.7

Client: Waste Management

Job Number: 280-70887-1

Method Blank - Batch: 280-283017

Method: 200.7 Rev 4.4
Preparation: 200.7
Total Recoverable

Lab Sample ID:	MB 280-283017/1-A	Analysis Batch:	280-284266	Instrument ID:	MT_025
Client Matrix:	Water	Prep Batch:	280-283017	Lab File ID:	25A062915C.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/29/2015 1810	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	06/23/2015 0815				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Arsenic	ND		0.0044	0.015
Cadmium	ND		0.00045	0.0050
Iron	ND		0.022	0.10
Lead	ND		0.0026	0.0090
Selenium	0.00521	J	0.0049	0.015
Zinc	ND		0.0045	0.020
Silver	ND		0.00093	0.010

Method Blank - Batch: 280-283017

Method: 200.7 Rev 4.4
Preparation: 200.7
Total Recoverable

Lab Sample ID:	MB 280-283017/1-A	Analysis Batch:	280-284460	Instrument ID:	MT_025
Client Matrix:	Water	Prep Batch:	280-283017	Lab File ID:	25063015A.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/30/2015 1812	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	06/23/2015 0815				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Iron	ND		0.022	0.10

Client: Waste Management

Job Number: 280-70887-1

Lab Control Sample - Batch: 280-283017

Method: 200.7 Rev 4.4
Preparation: 200.7
Total Recoverable

Lab Sample ID:	LCS 280-283017/2-A	Analysis Batch:	280-284266	Instrument ID:	MT_025
Client Matrix:	Water	Prep Batch:	280-283017	Lab File ID:	25A062915C.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/29/2015 1812	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	06/23/2015 0815				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	1.00	0.948	95	88 - 110	
Cadmium	0.100	0.0972	97	88 - 111	
Lead	0.500	0.464	93	89 - 110	
Selenium	2.00	1.98	99	85 - 112	
Zinc	0.500	0.433	87	85 - 111	
Silver	0.0500	0.0523	105	85 - 115	

Lab Control Sample - Batch: 280-283017

Method: 200.7 Rev 4.4
Preparation: 200.7
Total Recoverable

Lab Sample ID:	LCS 280-283017/2-A	Analysis Batch:	280-284460	Instrument ID:	MT_025
Client Matrix:	Water	Prep Batch:	280-283017	Lab File ID:	25063015A.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/30/2015 1815	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	06/23/2015 0815				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Iron	1.00	0.942	94	89 - 115	

Client: Waste Management

Job Number: 280-70887-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-283017

Method: 200.7 Rev 4.4
Preparation: 200.7
Total Recoverable

MS Lab Sample ID:	280-70968-D-1-C MS	Analysis Batch:	280-284266	Instrument ID:	MT_025
Client Matrix:	Water	Prep Batch:	280-283017	Lab File ID:	25A062915C.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/29/2015 1844			Final Weight/Volume:	50 mL
Prep Date:	06/23/2015 0815				
Leach Date:	N/A				

MSD Lab Sample ID:	280-70968-D-1-D MSD	Analysis Batch:	280-284266	Instrument ID:	MT_025
Client Matrix:	Water	Prep Batch:	280-283017	Lab File ID:	25A062915C.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/29/2015 1847			Final Weight/Volume:	50 mL
Prep Date:	06/23/2015 0815				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Arsenic	103	104	88 - 110	1	20		
Cadmium	104	105	88 - 111	0	20		
Lead	98	97	89 - 110	0	20		
Selenium	105	105	85 - 112	1	20		
Zinc	96	98	85 - 111	2	20		
Silver	109	111	85 - 115	2	20		

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-283017

Method: 200.7 Rev 4.4
Preparation: 200.7
Total Recoverable

MS Lab Sample ID:	280-70968-D-1-C MS	Analysis Batch:	280-284460	Instrument ID:	MT_025
Client Matrix:	Water	Prep Batch:	280-283017	Lab File ID:	25063015A.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/30/2015 1848			Final Weight/Volume:	50 mL
Prep Date:	06/23/2015 0815				
Leach Date:	N/A				

MSD Lab Sample ID:	280-70968-D-1-D MSD	Analysis Batch:	280-284460	Instrument ID:	MT_025
Client Matrix:	Water	Prep Batch:	280-283017	Lab File ID:	25063015A.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/30/2015 1850			Final Weight/Volume:	50 mL
Prep Date:	06/23/2015 0815				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Iron	97	96	89 - 115	1	20		

Client: Waste Management

Job Number: 280-70887-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-283017

Method: 200.7 Rev 4.4
Preparation: 200.7
Total Recoverable

MS Lab Sample ID:	280-70968-D-1-C MS	Units: mg/L	MSD Lab Sample ID:	280-70968-D-1-D MSD	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	06/29/2015 1844		Analysis Date:	06/29/2015 1847	
Prep Date:	06/23/2015 0815		Prep Date:	06/23/2015 0815	
Leach Date:	N/A		Leach Date:	N/A	

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Arsenic	ND		1.00	1.00	1.03	1.04
Cadmium	ND		0.100	0.100	0.104	0.105
Lead	ND		0.500	0.500	0.489	0.487
Selenium	0.014	J	2.00	2.00	2.10	2.12
Zinc	ND		0.500	0.500	0.480	0.490
Silver	ND		0.0500	0.0500	0.0543	0.0555

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-283017

Method: 200.7 Rev 4.4
Preparation: 200.7
Total Recoverable

MS Lab Sample ID:	280-70968-D-1-C MS	Units: mg/L	MSD Lab Sample ID:	280-70968-D-1-D MSD
Client Matrix:	Water		Client Matrix:	Water
Dilution:	1.0		Dilution:	1.0
Analysis Date:	06/30/2015 1848		Analysis Date:	06/30/2015 1850
Prep Date:	06/23/2015 0815		Prep Date:	06/23/2015 0815
Leach Date:	N/A		Leach Date:	N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Iron	0.024	J	1.00	1.00	0.996	0.988

Client: Waste Management

Job Number: 280-70887-1

Method Blank - Batch: 280-282971

Method: 245.1
Preparation: 245.1

Lab Sample ID:	MB 280-282971/1-A	Analysis Batch:	280-283632	Instrument ID:	MT_034
Client Matrix:	Water	Prep Batch:	280-282971	Lab File ID:	150624ba.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	06/24/2015 2207	Units:	mg/L	Final Weight/Volume:	30 mL
Prep Date:	06/24/2015 1610				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	ND		0.000027	0.00020

Lab Control Sample - Batch: 280-282971

Method: 245.1
Preparation: 245.1

Lab Sample ID:	LCS 280-282971/2-A	Analysis Batch:	280-283632	Instrument ID:	MT_034
Client Matrix:	Water	Prep Batch:	280-282971	Lab File ID:	150624ba.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	06/24/2015 2209	Units:	mg/L	Final Weight/Volume:	30 mL
Prep Date:	06/24/2015 1610				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.00500	0.00536	107	90 - 110	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-282971

Method: 245.1
Preparation: 245.1

MS Lab Sample ID:	280-71019-B-1-B MS	Analysis Batch:	280-283632	Instrument ID:	MT_034
Client Matrix:	Water	Prep Batch:	280-282971	Lab File ID:	150624ba.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	06/24/2015 2216			Final Weight/Volume:	30 mL
Prep Date:	06/24/2015 1610				
Leach Date:	N/A				

MSD Lab Sample ID:	280-71019-B-1-C MSD	Analysis Batch:	280-283632	Instrument ID:	MT_034
Client Matrix:	Water	Prep Batch:	280-282971	Lab File ID:	150624ba.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	06/24/2015 2218			Final Weight/Volume:	30 mL
Prep Date:	06/24/2015 1610				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Mercury	109	104	80 - 120	4	10		

Client: Waste Management

Job Number: 280-70887-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-282971

Method: 245.1
Preparation: 245.1

MS Lab Sample ID:	280-71019-B-1-B MS	Units: mg/L	
Client Matrix:	Water		
Dilution:	1.0		
Analysis Date:	06/24/2015 2216		
Prep Date:	06/24/2015 1610		
Leach Date:	N/A		

MSD Lab Sample ID:	280-71019-B-1-C MSD
Client Matrix:	Water
Dilution:	1.0
Analysis Date:	06/24/2015 2218
Prep Date:	06/24/2015 1610
Leach Date:	N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Mercury	ND	0.00500	0.00500	0.00546	0.00522

Client: Waste Management

Job Number: 280-70887-1

Method Blank - Batch: 280-283343

Method: 1664A
Preparation: 1664A

Lab Sample ID:	MB 280-283343/3-A	Analysis Batch:	280-283374	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	280-283343	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	06/23/2015 1801	Units:	mg/L	Final Weight/Volume:	1000 mL
Prep Date:	06/23/2015 1513				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
HEM	ND		1.6	5.0

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-283343

Method: 1664A
Preparation: 1664A

LCS Lab Sample ID:	LCS 280-283343/1-A	Analysis Batch:	280-283374	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	280-283343	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	06/23/2015 1801	Units:	mg/L	Final Weight/Volume:	1000 mL
Prep Date:	06/23/2015 1513				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-283343/2-A	Analysis Batch:	280-283374	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	280-283343	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	06/23/2015 1801	Units:	mg/L	Final Weight/Volume:	1000 mL
Prep Date:	06/23/2015 1513				
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
HEM	93	88	78 - 114	6	18		

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-283343

Method: 1664A
Preparation: 1664A

LCS Lab Sample ID:	LCS 280-283343/1-A	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-283343/2-A
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	06/23/2015 1801			Analysis Date:	06/23/2015 1801
Prep Date:	06/23/2015 1513			Prep Date:	06/23/2015 1513
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
HEM	40.0	40.0	37.1	35.1

Client: Waste Management

Job Number: 280-70887-1

Matrix Spike - Batch: 280-283343

Method: 1664A
Preparation: 1664A

Lab Sample ID:	280-71048-A-5-B MS	Analysis Batch:	280-283374	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	280-283343	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	06/23/2015 1801	Units:	mg/L	Final Weight/Volume:	1000 mL
Prep Date:	06/23/2015 1513				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
HEM	ND	160	124	78	78 - 114	

Client: Waste Management

Job Number: 280-70887-1

Method Blank - Batch: 280-283377

Method: 350.1
Preparation: N/A

Lab Sample ID:	MB 280-283377/61	Analysis Batch:	280-283377	Instrument ID:	WC_Alp 3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	E:\FLOW_4\062315B.R
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	06/23/2015 1437	Units:	mg/L	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Ammonia	ND		0.022	0.10

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-283377

Method: 350.1
Preparation: N/A

LCS Lab Sample ID:	LCS 280-283377/59	Analysis Batch:	280-283377	Instrument ID:	WC_Alp 3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	E:\FLOW_4\062315B.R
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	06/23/2015 1433	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-283377/60	Analysis Batch:	280-283377	Instrument ID:	WC_Alp 3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	E:\FLOW_4\062315B.R
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	06/23/2015 1435	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Ammonia	97	97	90 - 110	0	10		

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-283377

Method: 350.1
Preparation: N/A

LCS Lab Sample ID:	LCS 280-283377/59	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-283377/60
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	06/23/2015 1433			Analysis Date:	06/23/2015 1435
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Ammonia	2.50	2.50	2.42	2.42

Client: Waste Management

Job Number: 280-70887-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-283377

Method: 350.1
Preparation: N/A

MS Lab Sample ID:	280-70884-F-1 MS	Analysis Batch:	280-283377	Instrument ID:	WC_Alp 3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	E:\FLOW_4\062315B.R!
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/23/2015 1503			Final Weight/Volume:	10 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	280-70884-F-1 MSD	Analysis Batch:	280-283377	Instrument ID:	WC_Alp 3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	E:\FLOW_4\062315B.R!
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/23/2015 1505			Final Weight/Volume:	10 mL
Prep Date:	N/A				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Ammonia	102	104	90 - 110	2	10		

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-283377

Method: 350.1
Preparation: N/A

MS Lab Sample ID:	280-70884-F-1 MS	Units:	mg/L	MSD Lab Sample ID:	280-70884-F-1 MSD
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	06/23/2015 1503			Analysis Date:	06/23/2015 1505
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Ammonia	0.25	1.00	1.00	1.26	1.29

Client: Waste Management

Job Number: 280-70887-1

Method Blank - Batch: 280-284803

Method: 351.2
Preparation: 351.2

Lab Sample ID:	MB 280-284803/3-A	Analysis Batch:	280-284809	Instrument ID:	WC_Astoria
Client Matrix:	Water	Prep Batch:	280-284803	Lab File ID:	070415TKN.tab
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	07/04/2015 1532	Units:	mg/L	Final Weight/Volume:	25 mL
Prep Date:	07/03/2015 1734				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Nitrogen, Kjeldahl	ND		0.18	0.50

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-284803

Method: 351.2
Preparation: 351.2

LCS Lab Sample ID:	LCS 280-284803/1-A	Analysis Batch:	280-284809	Instrument ID:	WC_Astoria
Client Matrix:	Water	Prep Batch:	280-284803	Lab File ID:	070415TKN.tab
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	07/04/2015 1530	Units:	mg/L	Final Weight/Volume:	25 mL
Prep Date:	07/03/2015 1734				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-284803/2-A	Analysis Batch:	280-284809	Instrument ID:	WC_Astoria
Client Matrix:	Water	Prep Batch:	280-284803	Lab File ID:	070415TKN.tab
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	07/04/2015 1531	Units:	mg/L	Final Weight/Volume:	25 mL
Prep Date:	07/03/2015 1734				
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Nitrogen, Kjeldahl	96	97	90 - 110	1	25		

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-284803

Method: 351.2
Preparation: 351.2

LCS Lab Sample ID:	LCS 280-284803/1-A	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-284803/2-A
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	07/04/2015 1530			Analysis Date:	07/04/2015 1531
Prep Date:	07/03/2015 1734			Prep Date:	07/03/2015 1734
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Nitrogen, Kjeldahl	6.00	6.00	5.78	5.81

Client: Waste Management

Job Number: 280-70887-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-284803

Method: 351.2
Preparation: 351.2

MS Lab Sample ID:	280-70652-C-5-B MS	Analysis Batch:	280-284809	Instrument ID:	WC_Astoria
Client Matrix:	Water	Prep Batch:	280-284803	Lab File ID:	070415TKN.tab
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	07/04/2015 1535			Final Weight/Volume:	25 mL
Prep Date:	07/03/2015 1734				
Leach Date:	N/A				

MSD Lab Sample ID:	280-70652-C-5-C MSD	Analysis Batch:	280-284809	Instrument ID:	WC_Astoria
Client Matrix:	Water	Prep Batch:	280-284803	Lab File ID:	070415TKN.tab
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	07/04/2015 1536			Final Weight/Volume:	25 mL
Prep Date:	07/03/2015 1734				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Nitrogen, Kjeldahl	91	94	90 - 110	3	25		

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-284803

Method: 351.2
Preparation: 351.2

MS Lab Sample ID:	280-70652-C-5-B MS	Units:	mg/L	MSD Lab Sample ID:	280-70652-C-5-C MSD
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	07/04/2015 1535			Analysis Date:	07/04/2015 1536
Prep Date:	07/03/2015 1734			Prep Date:	07/03/2015 1734
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Nitrogen, Kjeldahl	ND	3.00	3.00	2.74	2.81

Client: Waste Management

Job Number: 280-70887-1

Method Blank - Batch: 280-285283

Method: 353.2
Preparation: N/A

Lab Sample ID:	MB 280-285283/22	Analysis Batch:	280-285283	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\070815B.R:
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	07/08/2015 1406	Units:	mg/L	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Nitrate Nitrite as N	ND		0.019	0.10

Method Reporting Limit Check - Batch: 280-285283

Method: 353.2
Preparation: N/A

Lab Sample ID:	MRL 280-285283/20	Analysis Batch:	280-285283	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\070815B.R:
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	07/08/2015 1402	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate Nitrite as N	0.100	0.0908	91	50 - 150	J

Lab Control Sample - Batch: 280-285283

Method: 353.2
Preparation: N/A

Lab Sample ID:	LCS 280-285283/21	Analysis Batch:	280-285283	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\070815B.R:
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	07/08/2015 1404	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate Nitrite as N	5.00	5.11	102	90 - 110	

Client: Waste Management

Job Number: 280-70887-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-285283

Method: 353.2
Preparation: N/A

MS Lab Sample ID:	280-70896-A-3 MS	Analysis Batch:	280-285283	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\070815B.R:
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	07/08/2015 1410			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	280-70896-A-3 MSD	Analysis Batch:	280-285283	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\070815B.R:
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	07/08/2015 1412			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Nitrate Nitrite as N	106	107	90 - 110	2	10		

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-285283

Method: 353.2
Preparation: N/A

MS Lab Sample ID:	280-70896-A-3 MS	Units:	mg/L	MSD Lab Sample ID:	280-70896-A-3 MSD
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	07/08/2015 1410			Analysis Date:	07/08/2015 1412
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Nitrate Nitrite as N	ND	4.00	4.00	4.23	4.29

Client: Waste Management

Job Number: 280-70887-1

Method Blank - Batch: 280-284554

Method: 365.1
Preparation: 365.2/365.3/365

Lab Sample ID:	MB 280-284554/2-A	Analysis Batch:	280-284598	Instrument ID:	WC_Konelab
Client Matrix:	Water	Prep Batch:	280-284554	Lab File ID:	070115TPHOS.xls
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50.0 mL
Analysis Date:	07/01/2015 2115	Units:	mg/L	Final Weight/Volume:	50.0 mL
Prep Date:	07/01/2015 1559				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Phosphorus, Total	ND		0.0050	0.050

Lab Control Sample - Batch: 280-284554

Method: 365.1
Preparation: 365.2/365.3/365

Lab Sample ID:	LCS 280-284554/1-A	Analysis Batch:	280-284598	Instrument ID:	WC_Konelab
Client Matrix:	Water	Prep Batch:	280-284554	Lab File ID:	070115TPHOS.xls
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50.0 mL
Analysis Date:	07/01/2015 2115	Units:	mg/L	Final Weight/Volume:	50.0 mL
Prep Date:	07/01/2015 1559				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Phosphorus, Total	0.500	0.525	105	90 - 110	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-284554

Method: 365.1
Preparation: 365.2/365.3/365

MS Lab Sample ID:	280-71207-X-2-B MS	Analysis Batch:	280-284598	Instrument ID:	WC_Konelab
Client Matrix:	Water	Prep Batch:	280-284554	Lab File ID:	070115TPHOS.xls
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50.0 mL
Analysis Date:	07/01/2015 2118			Final Weight/Volume:	50.0 mL
Prep Date:	07/01/2015 1559				
Leach Date:	N/A				

MSD Lab Sample ID:	280-71207-X-2-C MSD	Analysis Batch:	280-284598	Instrument ID:	WC_Konelab
Client Matrix:	Water	Prep Batch:	280-284554	Lab File ID:	070115TPHOS.xls
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50.0 mL
Analysis Date:	07/01/2015 2118			Final Weight/Volume:	50.0 mL
Prep Date:	07/01/2015 1559				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Phosphorus, Total	104	103	90 - 110	1	10		

Client: Waste Management

Job Number: 280-70887-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-284554

Method: 365.1
Preparation: 365.2/365.3/365

MS Lab Sample ID:	280-71207-X-2-B MS	Units: mg/L	MSD Lab Sample ID:	280-71207-X-2-C MSD
Client Matrix:	Water		Client Matrix:	Water
Dilution:	1.0		Dilution:	1.0
Analysis Date:	07/01/2015 2118		Analysis Date:	07/01/2015 2118
Prep Date:	07/01/2015 1559		Prep Date:	07/01/2015 1559
Leach Date:	N/A		Leach Date:	N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Phosphorus, Total	ND	0.500	0.500	0.521	0.516

Client: Waste Management

Job Number: 280-70887-1

Method Blank - Batch: 280-283589

Method: 410.4
Preparation: N/A

Lab Sample ID:	MB 280-283589/5	Analysis Batch:	280-283589	Instrument ID:	WC_HACH SPEC
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	2 mL
Analysis Date:	06/24/2015 1726	Units:	mg/L	Final Weight/Volume:	2 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Chemical Oxygen Demand	ND		4.1	20

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-283589

Method: 410.4
Preparation: N/A

LCS Lab Sample ID:	LCS 280-283589/3	Analysis Batch:	280-283589	Instrument ID:	WC_HACH SPEC
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	06/24/2015 1726	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-283589/4	Analysis Batch:	280-283589	Instrument ID:	WC_HACH SPEC
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	06/24/2015 1726	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Chemical Oxygen Demand	104	103	90 - 110	1	11		

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-283589

Method: 410.4
Preparation: N/A

LCS Lab Sample ID:	LCS 280-283589/3	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-283589/4
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	06/24/2015 1726			Analysis Date:	06/24/2015 1726
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Chemical Oxygen Demand	100	100	104	103

Client: Waste Management

Job Number: 280-70887-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-283589

Method: 410.4
Preparation: N/A

MS Lab Sample ID:	280-70887-1	Analysis Batch:	280-283589	Instrument ID:	WC_HACH SPEC
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	06/24/2015 1726			Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	280-70887-1	Analysis Batch:	280-283589	Instrument ID:	WC_HACH SPEC
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	06/24/2015 1726			Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Chemical Oxygen Demand	98	92	90 - 110	4	11		

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-283589

Method: 410.4
Preparation: N/A

MS Lab Sample ID:	280-70887-1	Units:	mg/L	MSD Lab Sample ID:	280-70887-1
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	06/24/2015 1726			Analysis Date:	06/24/2015 1726
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Chemical Oxygen Demand	26	50.0	50.0	74.8	71.9

Client: Waste Management

Job Number: 280-70887-1

Method Blank - Batch: 280-282898

Method: SM 2540D
Preparation: N/A

Lab Sample ID:	MB 280-282898/2	Analysis Batch:	280-282898	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	06/20/2015 1059	Units:	mg/L	Final Weight/Volume:	250 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Total Suspended Solids	ND		1.1	4.0

Lab Control Sample - Batch: 280-282898

Method: SM 2540D
Preparation: N/A

Lab Sample ID:	LCS 280-282898/1	Analysis Batch:	280-282898	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	06/20/2015 1059	Units:	mg/L	Final Weight/Volume:	250 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Suspended Solids	100	90.8	91	86 - 114	

Duplicate - Batch: 280-282898

Method: SM 2540D
Preparation: N/A

Lab Sample ID:	280-70980-A-4 DU	Analysis Batch:	280-282898	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	06/20/2015 1059	Units:	mg/L	Final Weight/Volume:	250 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Total Suspended Solids	2.0	J	2.00	0	10	J

Client: Waste Management

Job Number: 280-70887-1

Method Blank - Batch: 280-285419

Method: Total Nitrogen
Preparation: N/A

Lab Sample ID:	MB 280-285419/1	Analysis Batch:	280-285419	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	07/09/2015 1321	Units:	mg/L	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Nitrogen, Total	ND		0.042	0.10

Client: Waste Management

Job Number: 280-70887-1

Laboratory Chronicle

Lab ID: 280-70887-1 **Client ID: DB01-E**

Sample Date/Time: 06/15/2015 18:17 Received Date/Time: 06/18/2015 11:02

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:625	280-70887-B-1-A		280-284505	280-283130	06/22/2015 14:15	1	TAL DEN	JRK
A:625	280-70887-B-1-A		280-284505	280-283130	07/02/2015 05:53	1	TAL DEN	DCK
A:218.6	280-70887-I-1		440-262655		06/22/2015 22:37	1	TAL IRV	TN
P:200.7	280-70887-H-1-B		280-284266	280-283017	06/23/2015 08:15	1	TAL DEN	SUR
A:200.7 Rev 4.4	280-70887-H-1-B		280-284266	280-283017	06/29/2015 18:17	1	TAL DEN	SJS
P:200.7	280-70887-H-1-B		280-284460	280-283017	06/23/2015 08:15	1	TAL DEN	SUR
A:200.7 Rev 4.4	280-70887-H-1-B		280-284460	280-283017	06/30/2015 18:20	1	TAL DEN	SJS
P:245.1	280-70887-H-1-A		280-283632	280-282971	06/24/2015 16:10	1	TAL DEN	CMK
A:245.1	280-70887-H-1-A		280-283632	280-282971	06/24/2015 22:27	1	TAL DEN	CMK
P:1664A	280-70887-D-1-A		280-283374	280-283343	06/23/2015 15:13	1	TAL DEN	JML
A:1664A	280-70887-D-1-A		280-283374	280-283343	06/23/2015 18:01	1	TAL DEN	JML
A:350.1	280-70887-F-1		280-283377		06/23/2015 15:33	1	TAL DEN	CML
P:351.2	280-70887-G-1-B		280-284809	280-284803	07/03/2015 17:34	1	TAL DEN	MW1
A:351.2	280-70887-G-1-B		280-284809	280-284803	07/04/2015 15:53	1	TAL DEN	MW1
A:353.2	280-70887-F-1		280-285283		07/08/2015 14:36	1	TAL DEN	CML
P:365.2/365.3/365	280-70887-G-1-A		280-284598	280-284554	07/01/2015 15:59	2	TAL DEN	AJS
A:365.1	280-70887-G-1-A		280-284598	280-284554	07/01/2015 21:43	2	TAL DEN	AJS
A:410.4	280-70887-G-1		280-283589		06/24/2015 17:26	1	TAL DEN	SWS
A:SM 2540D	280-70887-E-1		280-282898		06/20/2015 10:59	1	TAL DEN	MW1
A:Total Nitrogen	280-70887-A-1		280-285419		07/09/2015 13:21	1	TAL DEN	AJA

Lab ID: 280-70887-1 MS **Client ID: DB01-E**

Sample Date/Time: 06/15/2015 18:17 Received Date/Time: 06/18/2015 11:02

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:410.4	280-70887-G-1 MS		280-283589		06/24/2015 17:26	1	TAL DEN	SWS

Lab ID: 280-70887-1 MSD **Client ID: DB01-E**

Sample Date/Time: 06/15/2015 18:17 Received Date/Time: 06/18/2015 11:02

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:410.4	280-70887-G-1 MSD		280-283589		06/24/2015 17:26	1	TAL DEN	SWS

Client: Waste Management

Job Number: 280-70887-1

Laboratory Chronicle

Lab ID: MB **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:625	MB 280-283130/1-A		280-284505	280-283130	06/22/2015 14:15	1	TAL DEN	JRK
A:625	MB 280-283130/1-A		280-284505	280-283130	07/01/2015 18:54	1	TAL DEN	DCK
A:218.6	MB 440-262655/3		440-262655		06/22/2015 04:41	1	TAL IRV	TN
P:200.7	MB 280-283017/1-A		280-284266	280-283017	06/23/2015 08:15	1	TAL DEN	SUR
A:200.7 Rev 4.4	MB 280-283017/1-A		280-284266	280-283017	06/29/2015 18:10	1	TAL DEN	SJS
P:200.7	MB 280-283017/1-A		280-284460	280-283017	06/23/2015 08:15	1	TAL DEN	SUR
A:200.7 Rev 4.4	MB 280-283017/1-A		280-284460	280-283017	06/30/2015 18:12	1	TAL DEN	SJS
P:245.1	MB 280-282971/1-A		280-283632	280-282971	06/24/2015 16:10	1	TAL DEN	CMK
A:245.1	MB 280-282971/1-A		280-283632	280-282971	06/24/2015 22:07	1	TAL DEN	CMK
P:1664A	MB 280-283343/3-A		280-283374	280-283343	06/23/2015 15:13	1	TAL DEN	JML
A:1664A	MB 280-283343/3-A		280-283374	280-283343	06/23/2015 18:01	1	TAL DEN	JML
A:350.1	MB 280-283377/61		280-283377		06/23/2015 14:37	1	TAL DEN	CML
P:351.2	MB 280-284803/3-A		280-284809	280-284803	07/03/2015 17:34	1	TAL DEN	MW1
A:351.2	MB 280-284803/3-A		280-284809	280-284803	07/04/2015 15:32	1	TAL DEN	MW1
A:353.2	MB 280-285283/22		280-285283		07/08/2015 14:06	1	TAL DEN	CML
P:365.2/365.3/365	MB 280-284554/2-A		280-284598	280-284554	07/01/2015 15:59	1	TAL DEN	AJS
A:365.1	MB 280-284554/2-A		280-284598	280-284554	07/01/2015 21:15	1	TAL DEN	AJS
A:410.4	MB 280-283589/5		280-283589		06/24/2015 17:26	1	TAL DEN	SWS
A:SM 2540D	MB 280-282898/2		280-282898		06/20/2015 10:59	1	TAL DEN	MW1
A:Total Nitrogen	MB 280-285419/1		280-285419		07/09/2015 13:21	1	TAL DEN	AJA

Client: Waste Management

Job Number: 280-70887-1

Laboratory Chronicle

Lab ID: LCS **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:625	LCS 280-283130/2-A		280-284505	280-283130	06/22/2015 14:15	1	TAL DEN	JRK
A:625	LCS 280-283130/2-A		280-284505	280-283130	07/01/2015 19:22	1	TAL DEN	DCK
A:218.6	LCS 440-262655/2		440-262655		06/22/2015 04:28	1	TAL IRV	TN
P:200.7	LCS 280-283017/2-A		280-284266	280-283017	06/23/2015 08:15	1	TAL DEN	SUR
A:200.7 Rev 4.4	LCS 280-283017/2-A		280-284266	280-283017	06/29/2015 18:12	1	TAL DEN	SJS
P:200.7	LCS 280-283017/2-A		280-284460	280-283017	06/23/2015 08:15	1	TAL DEN	SUR
A:200.7 Rev 4.4	LCS 280-283017/2-A		280-284460	280-283017	06/30/2015 18:15	1	TAL DEN	SJS
P:245.1	LCS 280-282971/2-A		280-283632	280-282971	06/24/2015 16:10	1	TAL DEN	CMK
A:245.1	LCS 280-282971/2-A		280-283632	280-282971	06/24/2015 22:09	1	TAL DEN	CMK
P:1664A	LCS 280-283343/1-A		280-283374	280-283343	06/23/2015 15:13	1	TAL DEN	JML
A:1664A	LCS 280-283343/1-A		280-283374	280-283343	06/23/2015 18:01	1	TAL DEN	JML
A:350.1	LCS 280-283377/59		280-283377		06/23/2015 14:33	1	TAL DEN	CML
P:351.2	LCS 280-284803/1-A		280-284809	280-284803	07/03/2015 17:34	1	TAL DEN	MW1
A:351.2	LCS 280-284803/1-A		280-284809	280-284803	07/04/2015 15:30	1	TAL DEN	MW1
A:353.2	LCS 280-285283/21		280-285283		07/08/2015 14:04	1	TAL DEN	CML
P:365.2/365.3/365	LCS 280-284554/1-A		280-284598	280-284554	07/01/2015 15:59	1	TAL DEN	AJS
A:365.1	LCS 280-284554/1-A		280-284598	280-284554	07/01/2015 21:15	1	TAL DEN	AJS
A:410.4	LCS 280-283589/3		280-283589		06/24/2015 17:26	1	TAL DEN	SWS
A:SM 2540D	LCS 280-282898/1		280-282898		06/20/2015 10:59	1	TAL DEN	MW1

Lab ID: LCSD **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:625	LCSD 280-283130/3-A		280-284505	280-283130	06/22/2015 14:15	1	TAL DEN	JRK
A:625	LCSD 280-283130/3-A		280-284505	280-283130	07/01/2015 19:50	1	TAL DEN	DCK
P:1664A	LCSD 280-283343/2-A		280-283374	280-283343	06/23/2015 15:13	1	TAL DEN	JML
A:1664A	LCSD 280-283343/2-A		280-283374	280-283343	06/23/2015 18:01	1	TAL DEN	JML
A:350.1	LCSD 280-283377/60		280-283377		06/23/2015 14:35	1	TAL DEN	CML
P:351.2	LCSD 280-284803/2-A		280-284809	280-284803	07/03/2015 17:34	1	TAL DEN	MW1
A:351.2	LCSD 280-284803/2-A		280-284809	280-284803	07/04/2015 15:31	1	TAL DEN	MW1
A:353.2	LCSD 280-285283/60		280-285283		07/08/2015 15:22	1	TAL DEN	CML
A:410.4	LCSD 280-283589/4		280-283589		06/24/2015 17:26	1	TAL DEN	SWS

Client: Waste Management

Job Number: 280-70887-1

Laboratory Chronicle

Lab ID: MRL **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:218.6	MRL 440-262655/4		440-262655		06/22/2015 04:54	1	TAL IRV	TN
A:353.2	MRL 280-285283/20		280-285283		07/08/2015 14:02	1	TAL DEN	CML

Lab ID: MS **Client ID: N/A**

Sample Date/Time: 06/22/2015 14:30 Received Date/Time: 06/22/2015 17:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:218.6	440-113319-D-12 MS		440-262655		06/22/2015 21:47	1	TAL IRV	TN
P:200.7	280-70968-D-1-C MS		280-284266	280-283017	06/23/2015 08:15	1	TAL DEN	SUR
A:200.7 Rev 4.4	280-70968-D-1-C MS		280-284266	280-283017	06/29/2015 18:44	1	TAL DEN	SJS
P:200.7	280-70968-D-1-C MS		280-284460	280-283017	06/23/2015 08:15	1	TAL DEN	SUR
A:200.7 Rev 4.4	280-70968-D-1-C MS		280-284460	280-283017	06/30/2015 18:48	1	TAL DEN	SJS
P:245.1	280-71019-B-1-B MS		280-283632	280-282971	06/24/2015 16:10	1	TAL DEN	CMK
A:245.1	280-71019-B-1-B MS		280-283632	280-282971	06/24/2015 22:16	1	TAL DEN	CMK
P:1664A	280-71048-A-5-B MS		280-283374	280-283343	06/23/2015 15:13	1	TAL DEN	JML
A:1664A	280-71048-A-5-B MS		280-283374	280-283343	06/23/2015 18:01	1	TAL DEN	JML
A:350.1	280-70884-F-1 MS		280-283377		06/23/2015 15:03	1	TAL DEN	CML
P:351.2	280-70652-C-5-B MS		280-284809	280-284803	07/03/2015 17:34	1	TAL DEN	MW1
A:351.2	280-70652-C-5-B MS		280-284809	280-284803	07/04/2015 15:35	1	TAL DEN	MW1
A:353.2	280-70896-A-3 MS		280-285283		07/08/2015 14:10	1	TAL DEN	CML
P:365.2/365.3/365	280-71207-X-2-B MS		280-284598	280-284554	07/01/2015 15:59	1	TAL DEN	AJS
A:365.1	280-71207-X-2-B MS		280-284598	280-284554	07/01/2015 21:18	1	TAL DEN	AJS

Client: Waste Management

Job Number: 280-70887-1

Laboratory Chronicle

Lab ID: MSD **Client ID: N/A**

Sample Date/Time: 06/22/2015 14:30 Received Date/Time: 06/22/2015 17:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:218.6	440-113319-D-12 MSD		440-262655		06/22/2015 21:59	1	TAL IRV	TN
P:200.7	280-70968-D-1-D MSD		280-284266	280-283017	06/23/2015 08:15	1	TAL DEN	SUR
A:200.7 Rev 4.4	280-70968-D-1-D MSD		280-284266	280-283017	06/29/2015 18:47	1	TAL DEN	SJS
P:200.7	280-70968-D-1-D MSD		280-284460	280-283017	06/23/2015 08:15	1	TAL DEN	SUR
A:200.7 Rev 4.4	280-70968-D-1-D MSD		280-284460	280-283017	06/30/2015 18:50	1	TAL DEN	SJS
P:245.1	280-71019-B-1-C MSD		280-283632	280-282971	06/24/2015 16:10	1	TAL DEN	CMK
A:245.1	280-71019-B-1-C MSD		280-283632	280-282971	06/24/2015 22:18	1	TAL DEN	CMK
A:350.1	280-70884-F-1 MSD		280-283377		06/23/2015 15:05	1	TAL DEN	CML
P:351.2	280-70652-C-5-C MSD		280-284809	280-284803	07/03/2015 17:34	1	TAL DEN	MW1
A:351.2	280-70652-C-5-C MSD		280-284809	280-284803	07/04/2015 15:36	1	TAL DEN	MW1
A:353.2	280-70896-A-3 MSD		280-285283		07/08/2015 14:12	1	TAL DEN	CML
P:365.2/365.3/365	280-71207-X-2-C MSD		280-284598	280-284554	07/01/2015 15:59	1	TAL DEN	AJS
A:365.1	280-71207-X-2-C MSD		280-284598	280-284554	07/01/2015 21:18	1	TAL DEN	AJS

Lab ID: DU **Client ID: N/A**

Sample Date/Time: 06/16/2015 13:55 Received Date/Time: 06/18/2015 09:20

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:SM 2540D	280-70980-A-4 DU		280-282898		06/20/2015 10:59	1	TAL DEN	MW1

Lab References:

TAL DEN = TestAmerica Denver

TAL IRV = TestAmerica Irvine

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Honolulu
4429 Malaai St. #104
Honolulu, HI 96818
Tel: 808-486-5227

TestAmerica Job ID: HYF0025
Client Project/Site: 60147675.02
Client Project Description: AECOM, WGSL STORMWATER

For:
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Attn: Betsy Sara

Authorized for release by:
6/25/2015 12:48:24 PM

Craig O. Pilialoha, Project Manager
808-486-5227
Craig.Pilialoha@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: TestAmerica Denver
Project/Site: 60147675.02

TestAmerica Job ID: HYF0025

Job ID: HYF0025

Laboratory: TestAmerica Honolulu

Narrative

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory unless otherwise stated in the report. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. TestAmerica Analytical Testing Corporation certifies that the analytical results contained herein apply only to the specific sample(s) analyzed.

The Chain(s) of Custody are included and are an integral part of this report. This entire report was reviewed and approved for release.

If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-(808)486-5227

LABORATORY REPORT

At sample receipt, the cooler/sample was 9 degrees C.

TestAmerica has determined that samples which require thermal preservation shall be considered acceptable if the arrival temperature is within 2 degrees C of the required temperature or the method specified range. For samples with a temperature requirement of 4 degrees C, an arrival temperature from 0 degrees C to 6 degrees C meets specifications. Samples that are delivered to the laboratory on the same day that they are collected may not meet these criteria. In these cases, the samples are considered acceptable if there is evidence that the chilling process has begun, such as arrival on ice.

Sample Summary

Client: TestAmerica Denver
Project/Site: 60147675.02

TestAmerica Job ID: HYF0025

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
HYF0025-01	DB01-E	Water - NonPotable	06/15/15 18:17	06/16/15 09:31

Detection Summary

Client: TestAmerica Denver
Project/Site: 60147675.02

TestAmerica Job ID: HYF0025

Client Sample ID: DB01-E

Lab Sample ID: HYF0025-01

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
BOD - 5 Day	3.94		2.00		mg/L	1.00		SM5210B	Total

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: TestAmerica Denver
Project/Site: 60147675.02

TestAmerica Job ID: HYF0025

Client Sample ID: DB01-E

Date Collected: 06/15/15 18:17
Date Received: 06/16/15 09:31

Lab Sample ID: HYF0025-01

Matrix: Water - NonPotable

Method: SM5210B - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
BOD - 5 Day	3.94		2.00		mg/L		06/17/15 16:24	06/22/15 13:07	1.00

QC Sample Results

Client: TestAmerica Denver
Project/Site: 60147675.02

TestAmerica Job ID: HYF0025

Method: SM5210B - General Chemistry Parameters

Lab Sample ID: 15F0020-BLK1
Matrix: Water - NonPotable
Analysis Batch: 15F0020

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 15F0020_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
BOD - 5 Day	ND		2.00		mg/L		06/17/15 16:11	06/22/15 12:50	1.00

Lab Sample ID: 15F0020-BS1
Matrix: Water - NonPotable
Analysis Batch: 15F0020

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 15F0020_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
BOD - 5 Day	198	189		mg/L		95	85 - 115

Lab Sample ID: 15F0020-DUP1
Matrix: Water - NonPotable
Analysis Batch: 15F0020

Client Sample ID: Duplicate
Prep Type: Total
Prep Batch: 15F0020_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
BOD - 5 Day	2.88		2.87		mg/L		0.3	20

QC Association Summary

Client: TestAmerica Denver
Project/Site: 60147675.02

TestAmerica Job ID: HYF0025

WetChem

Analysis Batch: 15F0020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
15F0020-BLK1	Method Blank	Total	Water - NonPotable	SM5210B	15F0020_P
15F0020-BS1	Lab Control Sample	Total	Water - NonPotable	SM5210B	15F0020_P
15F0020-DUP1	Duplicate	Total	Water - NonPotable	SM5210B	15F0020_P
HYF0025-01	DB01-E	Total	Water - NonPotable	SM5210B	15F0020_P

Prep Batch: 15F0020_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
15F0020-BLK1	Method Blank	Total	Water - NonPotable	*** DEFAULT PREP ***	
15F0020-BS1	Lab Control Sample	Total	Water - NonPotable	*** DEFAULT PREP ***	
15F0020-DUP1	Duplicate	Total	Water - NonPotable	*** DEFAULT PREP ***	
HYF0025-01	DB01-E	Total	Water - NonPotable	*** DEFAULT PREP ***	

Lab Chronicle

Client: TestAmerica Denver
Project/Site: 60147675.02

TestAmerica Job ID: HYF0025

Client Sample ID: DB01-E

Date Collected: 06/15/15 18:17
Date Received: 06/16/15 09:31

Lab Sample ID: HYF0025-01

Matrix: Water - NonPotable

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	*** DEFAULT PREP ***		1.00	15F0020_P	06/17/15 16:24	JMC	TAL HON
Total	Analysis	SM5210B		1.00	15F0020	06/22/15 13:07	JMC	TAL HON

Laboratory References:

TAL HON = TestAmerica Honolulu, 4429 Malaai St. #104, Honolulu, HI 96818, TEL 808-486-5227

Certification Summary

Client: TestAmerica Denver
Project/Site: 60147675.02

TestAmerica Job ID: HYF0025

Laboratory: TestAmerica Honolulu

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
USDA	Federal		HON-S-206	01-31-18

Method Summary

Client: TestAmerica Denver
Project/Site: 60147675.02

TestAmerica Job ID: HYF0025

Method	Method Description	Protocol	Laboratory
SM5210B	General Chemistry Parameters		TAL HON

Protocol References:

Laboratory References:

TAL HON = TestAmerica Honolulu, 4429 Malaai St. #104, Honolulu, HI 96818, TEL 808-486-5227

Chain of Custody Record

TAL-4124-280 (0508)

Sampler ID _____

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☐

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Client	Waste Management / AECOM
Address	1001 Bishop st. Suite 1600
City	Honolulu
State	HI
Zip Code	96813
Project Manager	Mark Holterbert
Telephone Number (Area Code)/Fax Number	808-523-8874 / 808-523-8950
Site Contact	Justin Loftus
Lab Contact	Betty Sara
Carrier/Waybill Number	
Project Name and Location (State)	WASL stormwater
Contract/Purchase Order/Quote No.	
Date	06/16/15
Chain of Custody Number	166281
Lab Number	
Page _____ of _____	

Analysis (Attach list if more space is needed): HYF0025

Special Instructions/Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		1,1,1-TCA DB/Gross	9056 Chloride	218.6 Hex Chrom	SM 2540D TSS	6325 GVOCs	410.4 COD	200.7/6 T Phos	350.1 Ammonia	351.1/2 TKN	353.2 NO2-NO3	SM4500N T Nitrogen	200.7/8 Metals	245.1/2 Hg	Special Instructions/Conditions of Receipt
DB01-E	06/15/15			X			4	4	1					X	X	X	X	X	X	X	X	X	X	X	X	X	HYF0025-01

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify): intact no ice 9°C

1. Relinquished By: Margie Thach	AECOM	Date: 06/16/15	Time: 931	1. Received By: David Buchli / DB	Date: 6/16/15 Time: 931
2. Relinquished By		Date	Time	2. Received By	Date Time
3. Relinquished By		Date	Time	3. Received By	Date Time

Comments: BUD - CrVI preservation at TA Honolulu. GVOC: 1-terpinol, benzoic acid, p-cresol, pentachlorophenol, phenol; Metals: As, Cd, Fe, Pb, Hg, Ag, Zn, Se

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Rush TAT Confirmation (Initial/Date) _____

Sample Receipt Checklist

Client Name: Waste Mgmt. /AECOM **Date/ Time Received:** 6/16/15 0931

Received By: David Buchli

Matrices: AQ **Carrier:** Client **Airbill# :**

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Chain of Custody present?	Yes ☑	No ☐	☐
Chain of Custody Signed when relinquished and received?	Yes ☑	No ☐	
Chain of Custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sample containers on ice?	Yes ☐	No ☑	Type: _____
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Water - VOA Vials have Zero Headspace?	Yes ☐	No ☐	No VOA vials present: ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Checked: ☑
pH Adjusted?	Yes ☐	No ☑	Final pH:
Encores / MI-VOC / 5035 Vials Present?	Yes ☐	No ☑	Location: _____
Sample Filtration Needed?	Yes ☐	No ☑	Filtered in Field: ☐
Dry Weight Corrected Results?	Yes ☐	No ☑	Take Action: ☐
DODQSM / QAPP Project?	Yes ☐	No ☑	Type: _____

Temperature Blank Present? Yes ☐ No ☑

Sample Container Temperature: 9 °C

Comments/ Sampling Handling Notes:

Chain of Custody Record

Sampler ID _____

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☐

TestAmeric

THE LEADER IN ENVIRONMENTAL TE

280-70887 Chain of Custody

TAL-4124-280 (0508)

Client: Waste Management / AECOM	Project Manager: Mark Hofferbert	Date: 06/16/15	Chain of Custody Number: 166281
Address: 1001 Bishop St. Suite 1600	Telephone Number (Area Code)/Fax Number: 808-523-8874 / 808-523-8950	Lab Number:	Page ____ of ____
City: Honolulu; State: HI; Zip Code: 96813	Site Contact: Justin Lottig; Lab Contact: Betsy Sara		HYF0025
Project Name and Location (State): WGSL stormwater	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.:			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	1664A/B Oil/Grease	SM5210B BOD	218.6 Hex Chrom	SM2540D TSS	625 SVOCs	410.4 COD	365.4 T.Phos	350.1 Ammonia	351.1/2 TKN	353.2 NO2-NO3	SM4500N T.Nitrogen	200.7/8 Metals	245.1/2 Hg	Special Instructions/ Conditions of Receipt
DB01-E	06/15/15			X			4	4	1				X	X	X	X	X	X	X	X	X	X	X	X	X	HYF0025-01

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other ____

QC Requirements (Specify): intact no ice 9°C

		Date	Time			Date	Time
1. Relinquished By: Margie Thach [signature]	AECOM	06/16/15	931	1. Received By: David Buchli / [signature]		6/16/15	931
2. Relinquished By: David Buchli / [signature]	Fed Ex	6/16/15	1300	2. Received By: [signature]		15 Jun 15	920
3. Relinquished By				3. Received By			

Comments: 1.9+0.1 IR#5 DW 6/18/15

BOD + CrVI preservation at TA-Honolulu; SVOC: a-terpineol, benzoic acid, p-cresol, pentachlorophenol, phenol; Metals: As, Cd, Fe, Pb, Hg, Ag, Zn, Se

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: WGSL

Site No.:

Sample Point: DB01-E (Sample ID)

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory)

Laboratory Use Only/Lab ID

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment ... Dedicated: Y or N

Filter Device: Y or N — 0.45 µ or ____ µ (circle or fill in)

Purging Device ____ A- Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle

Sampling Device F

Filter Type: A-In-line Disposable, B-Pressure, C-Vacuum, X-Other ____

X-Other: ____

Sample Tube Type: A-Teflon, B-Stainless Steel, C-PVC, D-Polypropylene, X-Other: ____

WELL DATA

Well Elevation (at TOC) ____ (ft/msl)

Depth to Water (DTW) (from TOC) ____ (ft)

Groundwater Elevation (site datum, from TOC) ____ (ft/msl)

Total Well Depth (from TOC) ____ (ft)

Stick Up (from ground elevation) ____ (ft)

Casing ID ____ (in)

Casing Material ____

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm @ 25 °C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
	1st	1st	1st					
	2nd	2nd	2nd					
	3rd	3rd	3rd					
	4th	4th	4th					
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	--	--	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional *(i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.*

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: ____ Units ____
061515	11.87						

Final Field Readings are required *(i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site.*

Sample Appearance: turbid Odor: none Color: light tan Other: no scum, no oil sheen

Weather Conditions (required daily, or as conditions change): Direction/Speed: NW Outlook: Cloudy/overcast Precipitation: Y or (N)

Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS

Aliquot	Time	pH	flow measurements (DB01-E)	remeasured pH @ 8:05pm	flow (DB01-W)
A	1817	11.87	1.5" = ~0.3 ft³/s	8.13	Ø"
B	1832	11.02	1" = 0.2 ft³/s	8.27	Ø"
C	1847	10.40	7/8" = 0.175 ft³/s	8.33	Ø"
D	1902	10.37	3/4" = 0.15 ft³/s	8.38	Ø"

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
6/15/15	KEVIN LEE	[signature]	AECOM

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

TAL-8029WM (0108)

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-70887-1

Login Number: 70887
List Number: 1
Creator: White, Denise E

List Source: TestAmerica Denver

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-70887-1

Login Number: 70887
List Number: 2
Creator: Ornelas, Olga

List Source: TestAmerica Irvine
List Creation: 06/19/15 10:30 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	