SCANNED

Date Received: MAR 1 9 2013 WPC

Route File: Enforcement: S.M. 4/3/13 MK

Engineering:

(JD) Monitoring: AN 11/20/13

DISCHARGE MONITORING REPORT (DMR) EVALUATION

Permit No.: HI R50A933 Permittee: Waste Management

Date of Report: 03/21/12 Type of Report: DMR

ITEM	EVALUATION	RECOMMENDATION
Effluent Limit	total recoverable Fe 180 vs 1.0 mg/L total recoverable Zn 0.13 vs 0.072 mg/L TSS 970 vs 100 mg/L pH 8.41 vs 8.0 SU 3/20/2012	3/6/2012
Monitoring		missing complete data on DMR form spoke w/ Joseph W. - to resubmit form
Progress		
Other		

CWB-6/99 (dmrfmt)

R50A533

Sm
DCL.

2013 MAR 19 10:57 AM

WASTE MANAGEMENT
92-460 Farrington Hwy.
Kapolei, HI 96707
(808) 668-2985
(808) 668-1366 Fax

March 15, 2013

Director of Health
Clean Water Branch
Environmental Management Division
State Department of Health
P.O. Box 3378
Honolulu, HI 96801-3378

Attention: Ms. Kris Poentis, Engineering Section

Subject: Annual Discharge Monitoring Report and Storm Water Results, Waimanalo Gulch Sanitary Landfill, Kapolei, Oahu, Hawaii, File No. HI R50A533

Dear Ms. Poentis:

On behalf of the City & County of Honolulu, Waste Management of Hawaii (WMH) submits the annual storm water monitoring results, including the Discharge Monitoring Report (DMR), for the Waimanalo Gulch Sanitary Landfill for the monitoring period of January 1, 2012 through December 31, 2012.

Rainfall events on March 5 and 6, 2012, and again on March 20 and 21, 2012, resulted in discharges of stormwater from the site.

The March 5th event caused apparent discharge during the night. Stormwater samples were collected in the morning of March 6th though no flow was present at the time. The samples were collected by grab method from water which had ponded in the area of the current Stilling Basin (sample identification "Southern Channel") upgradient of the point of permit compliance Additional grab samples were collected at the "detention basin" outfall and "up canyon" locations.

Rain fell again on the afternoon of March 6th and stormwater samples were then collected at the permit compliance point (i.e. the "Culvert" leading under the Farrington Highway). The afternoon samples were collected in aliquots from flowing discharge. The flow rate was estimated to be 3.85 cubic feet per second. This was the only 2012 event in which flowing

2013A773

storm water was observed and sampled at the compliance point, and it should be considered representative for permit compliance purposes. Total rain fall during the March 5th and 6th event was 2.27 inches.

As indicated on the attached DMR form (EPA Form 3320-1) (Attachment C), three of the March 6th (afternoon) parameters (iron, zinc and total suspended solids) exceeded the discharge limitations provided in the Notice of General Permit Coverage (NGPC), dated August 30, 2010. The required verbal notification of exceedance was provided to the State Department of Health, Clean Water Branch (DOH CWB) on March 29, 2012 (the day the laboratory report was received). The required written notification regarding the exceedance was submitted to the DOH CWB in a letter dated April 3, 2012, a copy of which is included (letter text only) as Attachment D.

The March 20th rainfall event also caused apparent discharge during the night. Stormwater samples were collected in the morning of March 21st though no flow was present at the time. The samples were collected by grab method from water which had ponded immediately adjacent to the point of permit compliance ("Culvert") and from the "detention basin" outfall and "up canyon" locations. Total rain fall during the March 20th and 21st event was 1.04 inches.

Two of the March 21st parameters (pH and iron) exceeded the discharge limitations provided in the NGPC. Verbal and written notices of exceedance were submitted to the DOH CWB following receipt of the results. As there was no flowing discharge at the time of the sampling event, the grab samples are not considered representative for permit compliance purposes.

The 2012 Field Information Forms are presented as Attachment A and provide the details of the sampling events. Laboratory reports, including quality assurance/quality control data and chains of custody, are included as Attachment B. The flow rates were determined using the depth-flow tables (Attachment F) developed for both the west and the east detention basin outfall pipes.

The bi-annual site inspection logs and the non-storm water discharge certifications are included as Attachment E.

Extensive corrective actions and improvements to the site storm water conveyance systems have recently been completed. Additional improvements are currently under construction. Following completion of the Western Diversion System, the permit point of compliance was moved upgradient from the Farrington Highway "Culvert" to the Detention Basin Outfalls "DB01E" and "DB01W". The Storm Water Pollution Control Plan dated March 2013 describes the improvements implemented in 2012.

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
General Manager
Waste Management of Hawaii

Enclosures: Attachment A – Field Information Form
Attachment B – Analytical Laboratory Reports
Attachment C – Discharge Monitoring Report Form
Attachment D – Written Notices of Exceedance
Attachment E – Inspection Reports
Attachment F – Depth-Flow Tables

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

Attachment D
Written Notices of Exceedance

Attachment A
Field Information Form

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: WSCL (PH)

Site No.:

Sample Point: WPCMW04 (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

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

Sampling Device: Teflon

X-Other: Groundwater Pro, bottle

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

WELL DATA

Well Elevation (at TOC)	Depth to Water (DTW) (from TOC)	Groundwater Elevation (site datum, from TOC)
(ft/msl)	(ft)	(ft/msl)

Total Well Depth (from TOC)	Stick Up (from ground elevation)	Casing ID	Casing Material
(ft)	(ft)	(in)	

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 _____
03/21/12	7.10						

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.*

FIELD COMMENTS

Sample Appearance: Multi-colored Odor: _____ Color: Brown Other: _____

Weather Conditions (required daily, or as conditions change): Direction/Speed: _____ Outlook: Sunny Precipitation: Y or (N)

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

Well Sample at engine test running water
No Discharge

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
03/21/12	Dan Lundberg		ASCOM

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

TAL-8029WM (0108)

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: Detention Basin ~~East Outfall~~, WEL

Site No.:

Sample Point: Detention Basin ~~East Outfall~~ 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

X-Other:

Filter Type: A-In-line Disposable, B-Pressure, C-Vacuum, 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						
	2nd	2nd						
	3rd	3rd						
	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
03 21 12	8.35						

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.*

FIELD COMMENTS

Sample Appearance: Cloudy Odor: no odor Color: brownish Other: —

Weather Conditions (required daily, or as conditions change): Direction/Speed: no flow Outlook: sunny Precipitation: Y or N

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

There is no discharge throughout the sampling process. Grab samples are collected at the east outfall (at the detention basin). There was no flow from the outfall. Sampling time: 10:13 am.
(still) water depth at east outfall: 1 inch @ 10:05 am
(still) water depth at west outfall: 2 inch @ 10:07 am

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
03/21/12	Yue Qiu	[signature]	AECOM
03 21 12	Katie Langford	[signature]	AECOM

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

TAL-8029WM (0108)

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: CURRENT WELL W52

Site No.: | | | | | Sample Point: CURRENT WELL W52 (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					
		2nd	2nd					
		3rd	3rd					
		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 _____
01/21/13	9.47						

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: _____ Odor: _____ Color: _____ Other: _____

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

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

FIELD COMMENTS

There is no water in the sampling probe. Grab samples are collected from the water depth at the inlet of the probe. There is no pH at the outlet. Sampling time is 12 hours.

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
1/21/13	Kirk Teal	Kirk Teal	AECOM

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

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: WGSL

Site No.: ____ Sample Point: CULVERT (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)	Depth to Water (DTW) (from TOC)	Groundwater Elevation (site datum, from TOC)	Total Well Depth (from TOC)	Stick Up (from ground elevation)	Casing ID	Casing Material
(ft/msl)	(ft)	(ft/msl)	(ft)	(ft)	(in)	

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					
	2nd		2nd					
	3rd		3rd					
	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 ____
030612	732						

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: reddish brown Odor: dirt Color: reddish brown Other: —

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

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

FIELD COMMENTS

no rain upon arrival at site; mostly cloudy
site discharging upon arrival
Total flow at 3.85 cfs based on measurements at Detention Basin Outfalls.

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
3/6/12	Julie Zimmerman		AECOM
3/6/12	YUE QIU		AECOM

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

TAL-8029WM (0108)

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: WGSL

Site No.: ____ Sample Point: upcanyon (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 (hr: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)	Depth to Water (DTW) (from TOC)	Groundwater Elevation (site datum, from TOC)
(ft/msl)	(ft)	(ft/msl)

Total Well Depth (from TOC)	Stick Up (from ground elevation)	Casing ID	Casing Material
(ft)	(ft)	(in)	

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 ____
03 06 12	6.90						

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.*

FIELD COMMENTS

Sample Appearance: silty Odor: none Color: rusty-orange Other: —

Weather Conditions (required daily, or as conditions change): Direction/Speed: SE Outlook: cloudy Precipitation: Y or (N)

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

Grab samples taken at 10:40AM at upcanyon

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
03,06,12	Margie Thach		AECOM
03,6,12	Charles Begeal		AECOM

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

TAL-8029WM (0108)

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: WGSL

Site No.:

Sample Point: southern channel (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)	Depth to Water (DTW) (from TOC)	Groundwater Elevation (site datum, from TOC)
(ft/msl)	(ft)	(ft/msl)

Total Well Depth (from TOC)	Stick Up (from ground elevation)	Casing ID	Casing Material
(ft)	(ft)	(in)	

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by State/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					
		2nd	2nd					
		3rd	3rd					
		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
030612	7.78						

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: muddy, cloudy Odor: slight odor Color: reddish-orange Other: —

Weather Conditions (required daily, or as conditions change): Direction/Speed: to west Outlook: cloudy Precipitation: Y or (N)

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

FIELD COMMENTS

Grab samples taken at 10:15AM at ponded water in southern channel.

No discharge over the wall at time of sampling.

Joe Whelan noted flow over property boundary at 7:30AM.

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
03,06,12	Margie Thach		AECOM
03,06,12	Charles Begeal		AECOM

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

TAL-8029WM (0108)

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: WGSL

Site No.:

Sample Point: Retention Basin East Outfall (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 [ ]

Sampling Device [F]

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

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)	Depth to Water (DTW) (from TOC)	Groundwater Elevation (site datum, from TOC)
(ft/msl)	(ft)	(ft/msl)

Total Well Depth (from TOC)	Stick Up (from ground elevation)	Casing ID	Casing Material
(ft)	(ft)	(in)	

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by State/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					
		2nd	2nd					
		3rd	3rd					
		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
030612	808						

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.*

FIELD COMMENTS

Sample Appearance: clear Odor: none Color: clear Other: —

Weather Conditions (required daily, or as conditions change): Direction/Speed: to west Outlook: cloudy Precipitation: Y or (N)

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

Grab samples taken at 10:00AM at eastern Outfall of Detention Basin

Flow

Western Outfall: 7cm = 0.6 cfs

Eastern Outfall: 14.5cm = 3.2 cfs

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
03,06,12	Margie Thach		AECOM
03,06,12	Charles Begeal		AECOM

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

TAL-8029WM (0108)

Attachment B
Analytical Laboratory Reports

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 280-26964-1

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
4/12/2012 9:39 AM

Betsy A Sara
Project Manager II
betsy.sara@testamericainc.com
04/12/2012
Revision: 1

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 E87667.

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

TestAmerica Laboratories, Inc.
TestAmerica Denver 4955 Yarrow Street, Arvada, CO 80002
Tel (303) 736-0100 Fax (303) 431-7171 www.testamericainc.com

ACCREDITED IN ACCORDANCE WITH nelac

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CASE NARRATIVE

Client: TestAmerica Laboratories, Inc.

Project: 995|Waimanalo Gulch LF

Report Number: 280-26964-1

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 samples were received on 03/23/2012; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 4.8C and 5.1C.

The sampling date and sampling time were not recorded on the Chain of custody for sample DETENTION BASIN. The sampling date and sampling time were obtained from the sample bottle labels. The client was notified.

Holding Times

All holding times were met.

Method Blanks

The Method 625 surrogate recovery of 2,4,6-Tribromophenol in the Method Blank associated with prep batch 113443 was below the lower control limit at 43% (control limits 50%-120%) Because all Method 625 surrogate recoveries were within control limits for the associated samples, corrective action was deemed unnecessary.

HEM Method 1664A 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)

The Method 625 LCSD exhibited recoveries of Bis(2-ethylhexyl) phthalate, 2,4-Dichlorophenol, Diethyl phthalate, 2,4-Dimethylphenol, 2,4-Dinitrotoluene, Di-n-octyl phthalate and 2-Nitrophenol above the upper control limits. In addition, the RPD results were outside the RPD limits for Benzidine, Bis(2-ethylhexyl) phthalate, 2,4-Dichlorophenol, 2,4-Dimethylphenol and 2-Nitrophenol. Because these were not target compounds, corrective action was deemed unnecessary. In addition, all samples were non-detect for all target Method 625 compounds.

All other 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.

The method required MS/MSD could not be performed for Method 1664A due to insufficient sample volume, however, a LCS/LCSD pair was analyzed to demonstrate method precision and accuracy.

The Matrix Spikes and Matrix Spike Duplicates performed on samples from other clients exhibited recoveries outside control limits for Ammonia Method 350.1, Total Kjeldahl Nitrogen Method 351.2 and Total Phosphorus Method 365.1. Because the corresponding Laboratory Control Samples and the Method Blank samples were within control limits, these anomalies may be due to matrix interference and no corrective action was taken.

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

General Comments

The analyses for Biochemical Oxygen Demand (BOD) and Hexavalent Chromium were performed at Food Quality Lab.
FQL
3375 Koapaka Street, G314
Honolulu, HI 96819
Phone: 808.839.9444

Report Revision

This submission was revised to correct the primary contact information on the coverpage. Due to a laboratory error, the incorrect contact was referenced as the primary on the original report.

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-26964-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-26964-1	**DETENTION BASIN**					
Field pH		8.35			SU	Field Sampling
HEM		1.5	J B	5.0	mg/L	1664A
Ammonia		4.5		0.10	mg/L	350.1
Nitrogen, Kjeldahl		0.71		0.50	mg/L	351.2
Nitrate Nitrite as N		5.9		0.10	mg/L	353.2
Phosphorus, Total		0.28		0.050	mg/L	365.1
Chemical Oxygen Demand		18	J	20	mg/L	410.4
Total Suspended Solids		50		4.0	mg/L	SM 2540D
Nitrogen, Total		6.6		0.10	mg/L	Total Nitrogen
Total Recoverable						
Iron		4.4		0.10	mg/L	200.7 Rev 4.4
Lead		0.0055	J	0.0090	mg/L	200.7 Rev 4.4
Zinc		0.022		0.020	mg/L	200.7 Rev 4.4
280-26964-2	**CULVERT**					
Field pH		8.41			SU	Field Sampling
HEM		3.4	J B	5.0	mg/L	1664A
Nitrogen, Kjeldahl		0.96		0.50	mg/L	351.2
Nitrate Nitrite as N		3.2		0.10	mg/L	353.2
Phosphorus, Total		0.22		0.050	mg/L	365.1
Chemical Oxygen Demand		21		20	mg/L	410.4
Total Suspended Solids		100		4.0	mg/L	SM 2540D
Nitrogen, Total		4.2		0.10	mg/L	Total Nitrogen
Total Recoverable						
Iron		2.1		0.10	mg/L	200.7 Rev 4.4
Zinc		0.014	J	0.020	mg/L	200.7 Rev 4.4

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-26964-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-26964-3	**UPCANYON**					
Mercury		0.000042	J	0.00020	mg/L	245.1
Field pH		8.30			SU	Field Sampling
HEM		1.9	J B	5.0	mg/L	1664A
Ammonia		0.31		0.10	mg/L	350.1
Nitrogen, Kjeldahl		1.0		0.50	mg/L	351.2
Nitrate Nitrite as N		2.5		0.10	mg/L	353.2
Phosphorus, Total		0.33		0.050	mg/L	365.1
Chemical Oxygen Demand		44		20	mg/L	410.4
Total Suspended Solids		460		4.0	mg/L	SM 2540D
Nitrogen, Total		3.5		0.10	mg/L	Total Nitrogen
Total Recoverable						
Iron		60		0.10	mg/L	200.7 Rev 4.4
Lead		0.0050	J	0.0090	mg/L	200.7 Rev 4.4
Zinc		0.068		0.020	mg/L	200.7 Rev 4.4

METHOD SUMMARY

Client: Waste Management

Job Number: 280-26964-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
General Sub Contract Method	Honolulu	Subcontract	
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	
Field Sampling	TAL DEN	EPA Field Sampling	

Lab References:

TAL DEN = TestAmerica Denver

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: 280-26964-1

Method	Analyst	Analyst ID
40CFR136A 625	Hoffman, Michael G	MGH
EPA 200.7 Rev 4.4	Bowen, Heidi E	HEB
EPA 245.1	Rawlings, Brendon L	BLR
EPA Field Sampling	Field, Sampler	FS
1664A 1664A	Elkin, David	DE
MCAWW 350.1	Scott, Samantha J	SJS
MCAWW 351.2	Woolley, Mark	MW
MCAWW 353.2	Scott, Samantha J	SJS
EPA 365.1	Taylor, Juli M	JMT
MCAWW 410.4	Allen, Andrew J	AJA
SM SM 2540D	Allen, Andrew J	AJA
EPA Total Nitrogen	Bandy, Darlene F	DFB

SAMPLE SUMMARY

Client: Waste Management

Job Number: 280-26964-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-26964-1	DETENTION BASIN	Water	03/21/2012 1013	03/23/2012 0900
280-26964-2	CULVERT	Water	03/21/2012 1036	03/23/2012 0900
280-26964-3	UPCANYON	Water	03/21/2012 1023	03/23/2012 0900

SAMPLE RESULTS

Client: Waste Management

Job Number: 280-26964-1

Client Sample ID: DETENTION BASIN

Lab Sample ID: 280-26964-1
Client Matrix: Water

Date Sampled: 03/21/2012 1013
Date Received: 03/23/2012 0900

625 Semivolatile Organic Compounds (GC/MS)

Analysis Method:	625	Analysis Batch:	280-114019	Instrument ID:	MSS_D
Prep Method:	625	Prep Batch:	280-113443	Lab File ID:	D9775.D
Dilution:	1.0			Initial Weight/Volume:	1044.7 mL
Analysis Date:	04/02/2012 2156			Final Weight/Volume:	1000 uL
Prep Date:	03/28/2012 1700			Injection Volume:	0.5 uL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Alpha-Terpineol	ND		0.0019	0.010
Benzoic acid	ND		0.0096	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-Fluorobiphenyl	86		36 - 120
2-Fluorophenol	87		30 - 120
2,4,6-Tribromophenol	65		50 - 120
Nitrobenzene-d5	87		45 - 120
Phenol-d5	94		36 - 120
Terphenyl-d14	106		52 - 120

Client: Waste Management

Job Number: 280-26964-1

Client Sample ID: CULVERT

Lab Sample ID: 280-26964-2
Client Matrix: Water

Date Sampled: 03/21/2012 1036
Date Received: 03/23/2012 0900

625 Semivolatile Organic Compounds (GC/MS)

Analysis Method:	625	Analysis Batch:	280-114019	Instrument ID:	MSS_D
Prep Method:	625	Prep Batch:	280-113443	Lab File ID:	D9776.D
Dilution:	1.0			Initial Weight/Volume:	972.9 mL
Analysis Date:	04/02/2012 2215			Final Weight/Volume:	1000 uL
Prep Date:	03/28/2012 1700			Injection Volume:	0.5 uL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Alpha-Terpineol	ND		0.0021	0.010
Benzoic acid	ND		0.010	0.050
p-Cresol	ND		0.00026	0.010
Pentachlorophenol	ND		0.021	0.060
Phenol	ND		0.0021	0.010

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	84		36 - 120
2-Fluorophenol	84		30 - 120
2,4,6-Tribromophenol	77		50 - 120
Nitrobenzene-d5	88		45 - 120
Phenol-d5	92		36 - 120
Terphenyl-d14	116		52 - 120

Client: Waste Management

Job Number: 280-26964-1

Client Sample ID: **UPCANYON**

Lab Sample ID: 280-26964-3
Client Matrix: Water

Date Sampled: 03/21/2012 1023
Date Received: 03/23/2012 0900

625 Semivolatile Organic Compounds (GC/MS)

Analysis Method:	625	Analysis Batch:	280-114019	Instrument ID:	MSS_D
Prep Method:	625	Prep Batch:	280-113443	Lab File ID:	D9777.D
Dilution:	1.0			Initial Weight/Volume:	953.4 mL
Analysis Date:	04/02/2012 2234			Final Weight/Volume:	1000 uL
Prep Date:	03/28/2012 1700			Injection Volume:	0.5 uL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Alpha-Terpineol	ND		0.0021	0.010
Benzoic acid	ND		0.010	0.050
p-Cresol	ND		0.00026	0.010
Pentachlorophenol	ND		0.021	0.060
Phenol	ND		0.0021	0.010

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	78		36 - 120
2-Fluorophenol	62		30 - 120
2,4,6-Tribromophenol	82		50 - 120
Nitrobenzene-d5	85		45 - 120
Phenol-d5	70		36 - 120
Terphenyl-d14	89		52 - 120

Client: Waste Management

Job Number: 280-26964-1

Client Sample ID: DETENTION BASIN

Lab Sample ID: 280-26964-1
Client Matrix: Water

Date Sampled: 03/21/2012 1013
Date Received: 03/23/2012 0900

200.7 Rev 4.4 Metals (ICP)-Total Recoverable

Analysis Method:	200.7 Rev 4.4	Analysis Batch:	280-113314	Instrument ID:	MT_026
Prep Method:	200.7	Prep Batch:	280-112986	Lab File ID:	26a032712.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	03/27/2012 1740			Final Weight/Volume:	50 mL
Prep Date:	03/26/2012 1400				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Arsenic	ND		0.0044	0.015
Cadmium	ND		0.00045	0.0050
Iron	4.4		0.022	0.10
Lead	0.0055	J	0.0026	0.0090
Selenium	ND		0.0049	0.015
Zinc	0.022		0.0045	0.020
Silver	ND		0.00093	0.010

245.1 Mercury (CVAA)

Analysis Method:	245.1	Analysis Batch:	280-113693	Instrument ID:	MT_034
Prep Method:	245.1	Prep Batch:	280-113392	Lab File ID:	120329taa.txt
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	03/29/2012 1535			Final Weight/Volume:	30 mL
Prep Date:	03/29/2012 1120				

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

Client: Waste Management

Job Number: 280-26964-1

Client Sample ID: CULVERT

Lab Sample ID: 280-26964-2
Client Matrix: Water

Date Sampled: 03/21/2012 1036
Date Received: 03/23/2012 0900

200.7 Rev 4.4 Metals (ICP)-Total Recoverable

Analysis Method:	200.7 Rev 4.4	Analysis Batch:	280-113314	Instrument ID:	MT_026
Prep Method:	200.7	Prep Batch:	280-112986	Lab File ID:	26a032712.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	03/27/2012 1742			Final Weight/Volume:	50 mL
Prep Date:	03/26/2012 1400				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Arsenic	ND		0.0044	0.015
Cadmium	ND		0.00045	0.0050
Iron	2.1		0.022	0.10
Lead	ND		0.0026	0.0090
Selenium	ND		0.0049	0.015
Zinc	0.014	J	0.0045	0.020
Silver	ND		0.00093	0.010

245.1 Mercury (CVAA)

Analysis Method:	245.1	Analysis Batch:	280-113693	Instrument ID:	MT_034
Prep Method:	245.1	Prep Batch:	280-113392	Lab File ID:	120329taa.txt
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	03/29/2012 1542			Final Weight/Volume:	30 mL
Prep Date:	03/29/2012 1120				

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

Client: Waste Management

Job Number: 280-26964-1

Client Sample ID: UPCANYON

Lab Sample ID: 280-26964-3
Client Matrix: Water

Date Sampled: 03/21/2012 1023
Date Received: 03/23/2012 0900

200.7 Rev 4.4 Metals (ICP)-Total Recoverable

Analysis Method:	200.7 Rev 4.4	Analysis Batch:	280-113314	Instrument ID:	MT_026
Prep Method:	200.7	Prep Batch:	280-112986	Lab File ID:	26a032712.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	03/27/2012 1745			Final Weight/Volume:	50 mL
Prep Date:	03/26/2012 1400				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Arsenic	ND		0.0044	0.015
Cadmium	ND		0.00045	0.0050
Iron	60		0.022	0.10
Lead	0.0050	J	0.0026	0.0090
Selenium	ND		0.0049	0.015
Zinc	0.068		0.0045	0.020
Silver	ND		0.00093	0.010

245.1 Mercury (CVAA)

Analysis Method:	245.1	Analysis Batch:	280-113693	Instrument ID:	MT_034
Prep Method:	245.1	Prep Batch:	280-113392	Lab File ID:	120329taa.txt
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	03/29/2012 1544			Final Weight/Volume:	30 mL
Prep Date:	03/29/2012 1120				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	0.000042	J	0.000027	0.00020

General Chemistry

Client Sample ID: DETENTION BASIN

Lab Sample ID: 280-26964-1
Client Matrix: Water

Date Sampled: 03/21/2012 1013
Date Received: 03/23/2012 0900

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
HEM	1.5	J B	mg/L	1.3	5.0	1.0	1664A
Analysis Batch: 280-113532	Analysis Date: 03/29/2012 0950						
Prep Batch: 280-113523	Prep Date: 03/29/2012 0950						
Ammonia	4.5		mg/L	0.022	0.10	1.0	350.1
Analysis Batch: 280-113596	Analysis Date: 03/29/2012 1421						
Nitrogen, Kjeldahl	0.71		mg/L	0.077	0.50	1.0	351.2
Analysis Batch: 280-114082	Analysis Date: 04/03/2012 1347						
Prep Batch: 280-113968	Prep Date: 04/02/2012 1522						
Nitrate Nitrite as N	5.9		mg/L	0.019	0.10	1.0	353.2
Analysis Batch: 280-113600	Analysis Date: 03/29/2012 1421						
Phosphorus, Total	0.28		mg/L	0.0050	0.050	1.0	365.1
Analysis Batch: 280-113979	Analysis Date: 04/02/2012 1653						
Prep Batch: 280-113928	Prep Date: 04/02/2012 1232						
Chemical Oxygen Demand	18	J	mg/L	4.1	20	1.0	410.4
Analysis Batch: 280-113353	Analysis Date: 03/28/2012 1104						
Total Suspended Solids	50		mg/L	1.1	4.0	1.0	SM 2540D
Analysis Batch: 280-113184	Analysis Date: 03/27/2012 0845						
Nitrogen, Total	6.6		mg/L	0.042	0.10	1.0	Total Nitrogen
Analysis Batch: 280-114134	Analysis Date: 04/03/2012 1742						

General Chemistry

Client Sample ID: CULVERT

Lab Sample ID: 280-26964-2
Client Matrix: Water

Date Sampled: 03/21/2012 1036
Date Received: 03/23/2012 0900

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
HEM	3.4	J B	mg/L	1.8	5.0	1.0	1664A
Analysis Batch: 280-113532	Analysis Date: 03/29/2012 0950						
Prep Batch: 280-113523	Prep Date: 03/29/2012 0950						
Ammonia	ND		mg/L	0.022	0.10	1.0	350.1
Analysis Batch: 280-113596	Analysis Date: 03/29/2012 1342						
Nitrogen, Kjeldahl	0.96		mg/L	0.077	0.50	1.0	351.2
Analysis Batch: 280-114082	Analysis Date: 04/03/2012 1348						
Prep Batch: 280-113968	Prep Date: 04/02/2012 1522						
Nitrate Nitrite as N	3.2		mg/L	0.019	0.10	1.0	353.2
Analysis Batch: 280-113600	Analysis Date: 03/29/2012 1342						
Phosphorus, Total	0.22		mg/L	0.0050	0.050	1.0	365.1
Analysis Batch: 280-113979	Analysis Date: 04/02/2012 1653						
Prep Batch: 280-113928	Prep Date: 04/02/2012 1232						
Chemical Oxygen Demand	21		mg/L	4.1	20	1.0	410.4
Analysis Batch: 280-113353	Analysis Date: 03/28/2012 1104						
Total Suspended Solids	100		mg/L	1.1	4.0	1.0	SM 2540D
Analysis Batch: 280-113184	Analysis Date: 03/27/2012 0845						
Nitrogen, Total	4.2		mg/L	0.042	0.10	1.0	Total Nitrogen
Analysis Batch: 280-114134	Analysis Date: 04/03/2012 1742						

General Chemistry

Client Sample ID: **UPCANYON**

Lab Sample ID: 280-26964-3
Client Matrix: Water

Date Sampled: 03/21/2012 1023
Date Received: 03/23/2012 0900

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
HEM	1.9	J B	mg/L	1.3	5.0	1.0	1664A
Analysis Batch: 280-113532	Analysis Date: 03/29/2012 0950						
Prep Batch: 280-113523	Prep Date: 03/29/2012 0950						
Ammonia	0.31		mg/L	0.022	0.10	1.0	350.1
Analysis Batch: 280-113596	Analysis Date: 03/29/2012 1344						
Nitrogen, Kjeldahl	1.0		mg/L	0.077	0.50	1.0	351.2
Analysis Batch: 280-114082	Analysis Date: 04/03/2012 1350						
Prep Batch: 280-113968	Prep Date: 04/02/2012 1522						
Nitrate Nitrite as N	2.5		mg/L	0.019	0.10	1.0	353.2
Analysis Batch: 280-113600	Analysis Date: 03/29/2012 1344						
Phosphorus, Total	0.33		mg/L	0.0050	0.050	1.0	365.1
Analysis Batch: 280-113979	Analysis Date: 04/02/2012 1653						
Prep Batch: 280-113928	Prep Date: 04/02/2012 1232						
Chemical Oxygen Demand	44		mg/L	4.1	20	1.0	410.4
Analysis Batch: 280-113353	Analysis Date: 03/28/2012 1104						
Total Suspended Solids	460		mg/L	3.7	4.0	1.0	SM 2540D
Analysis Batch: 280-113184	Analysis Date: 03/27/2012 0845						
Nitrogen, Total	3.5		mg/L	0.042	0.10	1.0	Total Nitrogen
Analysis Batch: 280-114134	Analysis Date: 04/03/2012 1742						

Field Service / Mobile Lab

Client Sample ID: DETENTION BASIN

Lab Sample ID: 280-26964-1
Client Matrix: Water

Date Sampled: 03/21/2012 1013
Date Received: 03/23/2012 0900

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed Date Prepared
Field pH	8.35		SU	1.0	Field Sampling	280-113011	03/21/2012 1013

Field Service / Mobile Lab

Client Sample ID: **CULVERT**

Lab Sample ID: 280-26964-2
Client Matrix: Water

Date Sampled: 03/21/2012 1036
Date Received: 03/23/2012 0900

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed Date Prepared
Field pH	8.41		SU	1.0	Field Sampling	280-113011	03/21/2012 1036

Field Service / Mobile Lab

Client Sample ID: UPCANYON

Lab Sample ID: 280-26964-3
Client Matrix: Water

Date Sampled: 03/21/2012 1023
Date Received: 03/23/2012 0900

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed Date Prepared
Field pH	8.30		SU	1.0	Field Sampling	280-113011	03/21/2012 1023

DATA REPORTING QUALIFIERS

Client: Waste Management

Job Number: 280-26964-1

Lab Section	Qualifier	Description
GC/MS Semi VOA		
	*	Recovery or RPD exceeds control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	X	Surrogate is outside control limits
Metals		
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
General Chemistry		
	B	Compound was found in the blank and sample.
	F	MS/MSD Recovery or RPD exceeds the control limits
	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: 280-26964-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 280-113443					
LCS 280-113443/2-A	Lab Control Sample	T	Water	625	
LCSD 280-113443/3-A	Lab Control Sample Duplicate	T	Water	625	
MB 280-113443/1-A	Method Blank	T	Water	625	
280-26964-1	DETENTION BASIN	T	Water	625	
280-26964-2	CULVERT	T	Water	625	
280-26964-3	UPCANYON	T	Water	625	
Analysis Batch:280-114019					
LCS 280-113443/2-A	Lab Control Sample	T	Water	625	280-113443
LCSD 280-113443/3-A	Lab Control Sample Duplicate	T	Water	625	280-113443
MB 280-113443/1-A	Method Blank	T	Water	625	280-113443
280-26964-1	DETENTION BASIN	T	Water	625	280-113443
280-26964-2	CULVERT	T	Water	625	280-113443
280-26964-3	UPCANYON	T	Water	625	280-113443

Report Basis
T = Total

Client: Waste Management

Job Number: 280-26964-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-112986					
LCS 280-112986/2-A	Lab Control Sample	R	Water	200.7	
MB 280-112986/1-A	Method Blank	R	Water	200.7	
280-26959-B-2-B MS	Matrix Spike	R	Water	200.7	
280-26959-B-2-C MSD	Matrix Spike Duplicate	R	Water	200.7	
280-26964-1	DETENTION BASIN	R	Water	200.7	
280-26964-2	CULVERT	R	Water	200.7	
280-26964-3	UPCANYON	R	Water	200.7	
Analysis Batch:280-113314					
LCS 280-112986/2-A	Lab Control Sample	R	Water	200.7 Rev 4.4	280-112986
MB 280-112986/1-A	Method Blank	R	Water	200.7 Rev 4.4	280-112986
280-26959-B-2-B MS	Matrix Spike	R	Water	200.7 Rev 4.4	280-112986
280-26959-B-2-C MSD	Matrix Spike Duplicate	R	Water	200.7 Rev 4.4	280-112986
280-26964-1	DETENTION BASIN	R	Water	200.7 Rev 4.4	280-112986
280-26964-2	CULVERT	R	Water	200.7 Rev 4.4	280-112986
280-26964-3	UPCANYON	R	Water	200.7 Rev 4.4	280-112986
Prep Batch: 280-113392					
LCS 280-113392/2-A	Lab Control Sample	T	Water	245.1	
MB 280-113392/1-A	Method Blank	T	Water	245.1	
280-26964-1	DETENTION BASIN	T	Water	245.1	
280-26964-1MS	Matrix Spike	T	Water	245.1	
280-26964-1MSD	Matrix Spike Duplicate	T	Water	245.1	
280-26964-2	CULVERT	T	Water	245.1	
280-26964-3	UPCANYON	T	Water	245.1	
Analysis Batch:280-113693					
LCS 280-113392/2-A	Lab Control Sample	T	Water	245.1	280-113392
MB 280-113392/1-A	Method Blank	T	Water	245.1	280-113392
280-26964-1	DETENTION BASIN	T	Water	245.1	280-113392
280-26964-1MS	Matrix Spike	T	Water	245.1	280-113392
280-26964-1MSD	Matrix Spike Duplicate	T	Water	245.1	280-113392
280-26964-2	CULVERT	T	Water	245.1	280-113392
280-26964-3	UPCANYON	T	Water	245.1	280-113392

Report Basis

R = Total Recoverable

T = Total

Client: Waste Management

Job Number: 280-26964-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Field Service / Mobile Lab					
Analysis Batch:280-113011					
280-26964-1	DETENTION BASIN	T	Water	Field Sampling	
280-26964-2	CULVERT	T	Water	Field Sampling	
280-26964-3	UPCANYON	T	Water	Field Sampling	

Report Basis
T = Total

Client: Waste Management

Job Number: 280-26964-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-113184					
LCS 280-113184/2	Lab Control Sample	T	Water	SM 2540D	
LCSD 280-113184/3	Lab Control Sample Duplicate	T	Water	SM 2540D	
MB 280-113184/1	Method Blank	T	Water	SM 2540D	
280-26932-A-7 DU	Duplicate	T	Water	SM 2540D	
280-26964-1	DETENTION BASIN	T	Water	SM 2540D	
280-26964-2	CULVERT	T	Water	SM 2540D	
280-26964-3	UPCANYON	T	Water	SM 2540D	
Analysis Batch:280-113353					
LCS 280-113353/3	Lab Control Sample	T	Water	410.4	
LCSD 280-113353/4	Lab Control Sample Duplicate	T	Water	410.4	
MB 280-113353/5	Method Blank	T	Water	410.4	
280-26920-E-1 MS	Matrix Spike	T	Water	410.4	
280-26920-E-1 MSD	Matrix Spike Duplicate	T	Water	410.4	
280-26964-1	DETENTION BASIN	T	Water	410.4	
280-26964-2	CULVERT	T	Water	410.4	
280-26964-3	UPCANYON	T	Water	410.4	
Prep Batch: 280-113523					
LCS 280-113523/2-A	Lab Control Sample	T	Water	1664A	
LCSD 280-113523/3-A	Lab Control Sample Duplicate	T	Water	1664A	
MB 280-113523/1-A	Method Blank	T	Water	1664A	
280-26964-1	DETENTION BASIN	T	Water	1664A	
280-26964-2	CULVERT	T	Water	1664A	
280-26964-3	UPCANYON	T	Water	1664A	
Analysis Batch:280-113532					
LCS 280-113523/2-A	Lab Control Sample	T	Water	1664A	280-113523
LCSD 280-113523/3-A	Lab Control Sample Duplicate	T	Water	1664A	280-113523
MB 280-113523/1-A	Method Blank	T	Water	1664A	280-113523
280-26964-1	DETENTION BASIN	T	Water	1664A	280-113523
280-26964-2	CULVERT	T	Water	1664A	280-113523
280-26964-3	UPCANYON	T	Water	1664A	280-113523

Client: Waste Management

Job Number: 280-26964-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-113596					
LCS 280-113596/130	Lab Control Sample	T	Water	350.1	
LCS 280-113596/98	Lab Control Sample	T	Water	350.1	
LCSD 280-113596/131	Lab Control Sample Duplicate	T	Water	350.1	
LCSD 280-113596/99	Lab Control Sample Duplicate	T	Water	350.1	
MB 280-113596/117	Method Blank	T	Water	350.1	
MB 280-113596/129	Method Blank	T	Water	350.1	
MB 280-113596/97	Method Blank	T	Water	350.1	
280-26950-B-6 MS	Matrix Spike	T	Water	350.1	
280-26950-B-6 MSD	Matrix Spike Duplicate	T	Water	350.1	
280-26964-1	DETENTION BASIN	T	Water	350.1	
280-26964-2	CULVERT	T	Water	350.1	
280-26964-3	UPCANYON	T	Water	350.1	
280-26989-B-1 MS	Matrix Spike	T	Water	350.1	
280-26989-B-1 MSD	Matrix Spike Duplicate	T	Water	350.1	
Analysis Batch:280-113600					
LCS 280-113600/130	Lab Control Sample	T	Water	353.2	
LCS 280-113600/21	Lab Control Sample	T	Water	353.2	
LCS 280-113600/98	Lab Control Sample	T	Water	353.2	
LCSD 280-113600/131	Lab Control Sample Duplicate	T	Water	353.2	
LCSD 280-113600/22	Lab Control Sample Duplicate	T	Water	353.2	
LCSD 280-113600/99	Lab Control Sample Duplicate	T	Water	353.2	
MB 280-113600/117	Method Blank	T	Water	353.2	
MB 280-113600/129	Method Blank	T	Water	353.2	
MB 280-113600/20	Method Blank	T	Water	353.2	
MB 280-113600/97	Method Blank	T	Water	353.2	
280-26930-B-1 MS	Matrix Spike	T	Water	353.2	
280-26930-B-1 MSD	Matrix Spike Duplicate	T	Water	353.2	
280-26964-1	DETENTION BASIN	T	Water	353.2	
280-26964-2	CULVERT	T	Water	353.2	
280-26964-3	UPCANYON	T	Water	353.2	
280-26989-B-1 MS	Matrix Spike	T	Water	353.2	
280-26989-B-1 MSD	Matrix Spike Duplicate	T	Water	353.2	
Prep Batch: 280-113928					
LCS 280-113928/1-A	Lab Control Sample	T	Water	365.2/365.3/365	
LCSD 280-113928/2-A	Lab Control Sample Duplicate	T	Water	365.2/365.3/365	
MB 280-113928/3-A	Method Blank	T	Water	365.2/365.3/365	
280-26961-A-1-B MS	Matrix Spike	T	Water	365.2/365.3/365	
280-26961-A-1-C MSD	Matrix Spike Duplicate	T	Water	365.2/365.3/365	
280-26964-1	DETENTION BASIN	T	Water	365.2/365.3/365	
280-26964-2	CULVERT	T	Water	365.2/365.3/365	
280-26964-2MS	Matrix Spike	T	Water	365.2/365.3/365	
280-26964-2MSD	Matrix Spike Duplicate	T	Water	365.2/365.3/365	
280-26964-3	UPCANYON	T	Water	365.2/365.3/365	

Client: Waste Management

Job Number: 280-26964-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Prep Batch: 280-113968					
LCS 280-113968/1-A	Lab Control Sample	T	Water	351.2	
LCSD 280-113968/2-A	Lab Control Sample Duplicate	T	Water	351.2	
MB 280-113968/3-A	Method Blank	T	Water	351.2	
280-26961-B-6-B MS	Matrix Spike	T	Water	351.2	
280-26961-B-6-C MSD	Matrix Spike Duplicate	T	Water	351.2	
280-26964-1	DETENTION BASIN	T	Water	351.2	
280-26964-2	CULVERT	T	Water	351.2	
280-26964-3	UPCANYON	T	Water	351.2	
Analysis Batch:280-113979					
LCS 280-113928/1-A	Lab Control Sample	T	Water	365.1	280-113928
LCSD 280-113928/2-A	Lab Control Sample Duplicate	T	Water	365.1	280-113928
MB 280-113928/3-A	Method Blank	T	Water	365.1	280-113928
280-26961-A-1-B MS	Matrix Spike	T	Water	365.1	280-113928
280-26961-A-1-C MSD	Matrix Spike Duplicate	T	Water	365.1	280-113928
280-26964-1	DETENTION BASIN	T	Water	365.1	280-113928
280-26964-2	CULVERT	T	Water	365.1	280-113928
280-26964-2MS	Matrix Spike	T	Water	365.1	280-113928
280-26964-2MSD	Matrix Spike Duplicate	T	Water	365.1	280-113928
280-26964-3	UPCANYON	T	Water	365.1	280-113928
Analysis Batch:280-114082					
LCS 280-113968/1-A	Lab Control Sample	T	Water	351.2	280-113968
LCSD 280-113968/2-A	Lab Control Sample Duplicate	T	Water	351.2	280-113968
MB 280-113968/3-A	Method Blank	T	Water	351.2	280-113968
280-26961-B-6-B MS	Matrix Spike	T	Water	351.2	280-113968
280-26961-B-6-C MSD	Matrix Spike Duplicate	T	Water	351.2	280-113968
280-26964-1	DETENTION BASIN	T	Water	351.2	280-113968
280-26964-2	CULVERT	T	Water	351.2	280-113968
280-26964-3	UPCANYON	T	Water	351.2	280-113968
Analysis Batch:280-114134					
MB 280-114134/1	Method Blank	T	Water	Total Nitrogen	
280-26964-1	DETENTION BASIN	T	Water	Total Nitrogen	
280-26964-2	CULVERT	T	Water	Total Nitrogen	
280-26964-3	UPCANYON	T	Water	Total Nitrogen	

Report Basis
T = Total

Client: Waste Management

Job Number: 280-26964-1

Surrogate Recovery Report

625 Semivolatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	FBP %Rec	2FP %Rec	TBP %Rec	NBZ %Rec	PHL %Rec	TPH %Rec
280-26964-1	DETENTION BASIN	86	87	65	87	94	106
280-26964-2	CULVERT	84	84	77	88	92	116
280-26964-3	UPCANYON	78	62	82	85	70	89
MB 280-113443/1-A		82	92	43X	93	96	114
LCS 280-113443/2-A		87	92	102	93	98	100
LCSD 280-113443/3-A		95	89	108	91	87	106

Surrogate	Acceptance Limits
FBP = 2-Fluorobiphenyl	36-120
2FP = 2-Fluorophenol	30-120
TBP = 2,4,6-Tribromophenol	50-120
NBZ = Nitrobenzene-d5	45-120
PHL = Phenol-d5	36-120
TPH = Terphenyl-d14	52-120

Client: Waste Management

Job Number: 280-26964-1

Method Blank - Batch: 280-113443

Method: 625
Preparation: 625

Lab Sample ID:	MB 280-113443/1-A	Analysis Batch:	280-114019	Instrument ID:	MSS_D
Client Matrix:	Water	Prep Batch:	280-113443	Lab File ID:	D9774.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	04/02/2012 2137	Units:	mg/L	Final Weight/Volume:	1000 uL
Prep Date:	03/28/2012 1700			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-Fluorobiphenyl	82		36 - 120
2-Fluorophenol	92		30 - 120
2,4,6-Tribromophenol	43	X	50 - 120
Nitrobenzene-d5	93		45 - 120
Phenol-d5	96		36 - 120
Terphenyl-d14	114		52 - 120

Client: Waste Management

Job Number: 280-26964-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-113443

Method: 625
Preparation: 625

LCS Lab Sample ID:	LCS 280-113443/2-A	Analysis Batch:	280-114019	Instrument ID:	MSS_D
Client Matrix:	Water	Prep Batch:	280-113443	Lab File ID:	D9746.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	04/02/2012 1258	Units:	mg/L	Final Weight/Volume:	1000 uL
Prep Date:	03/28/2012 1700			Injection Volume:	0.5 uL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-113443/3-A	Analysis Batch:	280-114019	Instrument ID:	MSS_D
Client Matrix:	Water	Prep Batch:	280-113443	Lab File ID:	D9747.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	04/02/2012 1317	Units:	mg/L	Final Weight/Volume:	1000 uL
Prep Date:	03/28/2012 1700			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Acenaphthene	89	94	47 - 120	6	30		
Acenaphthylene	93	99	33 - 120	6	30		
Anthracene	98	102	52 - 120	4	30		
Benzidine	42	22	10 - 218	63	50		J *
Benzo[a]anthracene	97	102	54 - 120	6	30		
Benzo[b]fluoranthene	94	92	51 - 120	2	90		
Benzo[k]fluoranthene	91	102	49 - 120	11	50		
Benzo[a]pyrene	80	84	39 - 120	6	73		
Bis(2-chloroethoxy)methane	90	119	50 - 120	28	30		
Bis(2-chloroethyl)ether	87	98	35 - 120	12	30		
Bis(2-ethylhexyl) phthalate	104	172	56 - 120	49	30		*
4-Bromophenyl phenyl ether	95	101	53 - 120	6	34		
Butyl benzyl phthalate	99	112	53 - 120	12	30		
4-Chloro-3-methylphenol	100	101	57 - 120	1	30		
2-Chloronaphthalene	85	91	60 - 118	7	30		
2-Chlorophenol	93	99	34 - 120	7	30		
4-Chlorophenyl phenyl ether	91	100	51 - 120	10	30		
Chrysene	99	103	51 - 120	4	30		
Dibenz(a,h)anthracene	77	80	45 - 120	4	78		
Di-n-butyl phthalate	101	108	57 - 118	7	30		
1,2-Dichlorobenzene	72	63	32 - 120	14	42		
1,3-Dichlorobenzene	69	57	23 - 120	19	47		
1,4-Dichlorobenzene	70	60	24 - 120	15	49		
3,3'-Dichlorobenzidine	67	77	18 - 120	13	50		
2,4-Dichlorophenol	94	136	46 - 120	36	30		*
Diethyl phthalate	103	121	59 - 114	16	30		*
2,4-Dimethylphenol	83	128	44 - 119	43	35		*
Dimethyl phthalate	100	106	58 - 112	6	30		
4,6-Dinitro-2-methylphenol	99	103	40 - 120	4	55		
2,4-Dinitrophenol	94	107	20 - 121	13	61		
2,4-Dinitrotoluene	100	142	57 - 120	34	35		*
2,6-Dinitrotoluene	96	101	56 - 120	5	30		
Di-n-octyl phthalate	106	121	56 - 120	14	30		*
Fluoranthene	104	107	58 - 120	3	30		
Fluorene	92	100	59 - 120	8	30		
Hexachlorobenzene	95	101	53 - 120	5	30		

Client: Waste Management

Job Number: 280-26964-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-113443

Method: 625
Preparation: 625

LCS Lab Sample ID:	LCS 280-113443/2-A	Analysis Batch:	280-114019	Instrument ID:	MSS_D
Client Matrix:	Water	Prep Batch:	280-113443	Lab File ID:	D9746.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	04/02/2012 1258	Units:	mg/L	Final Weight/Volume:	1000 uL
Prep Date:	03/28/2012 1700			Injection Volume:	0.5 uL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-113443/3-A	Analysis Batch:	280-114019	Instrument ID:	MSS_D
Client Matrix:	Water	Prep Batch:	280-113443	Lab File ID:	D9747.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	04/02/2012 1317	Units:	mg/L	Final Weight/Volume:	1000 uL
Prep Date:	03/28/2012 1700			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Hexachlorobutadiene	66	56	27 - 116	15	41		
Hexachlorocyclopentadiene	41	46	10 - 120	12	82	J	J
Hexachloroethane	67	54	40 - 113	22	52		
Indeno[1,2,3-cd]pyrene	99	105	50 - 120	5	73		
Isophorone	96	120	50 - 120	23	30		
p-Cresol	100	103	42 - 120	3	39		
Naphthalene	81	85	37 - 120	5	30		
Nitrobenzene	93	92	46 - 120	1	30		
2-Nitrophenol	98	151	47 - 120	42	30		*
4-Nitrophenol	101	99	53 - 120	2	42		
N-Nitrosodimethylamine	94	86	37 - 120	8	30		
N-Nitrosodiphenylamine	91	98	46 - 203	7	50		
N-Nitrosodi-n-propylamine	99	108	50 - 120	9	30		
Pentachlorophenol	94	107	46 - 120	13	30		
Phenanthrene	97	101	54 - 120	4	30		
Phenol	98	89	37 - 112	9	30		
Pyrene	96	103	55 - 115	7	30		
1,2,4-Trichlorobenzene	70	68	44 - 120	2	35		
2,4,6-Trichlorophenol	97	80	51 - 120	18	30		
2-Methylphenol	90	98	38 - 120	9	35		
Benzo[g,h,i]perylene	99	103	48 - 120	4	64		
2,2'-Oxybis(1-chloropropane)	90	97	37 - 120	8	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
2-Fluorobiphenyl	87	95	36 - 120
2-Fluorophenol	92	89	30 - 120
2,4,6-Tribromophenol	102	108	50 - 120
Nitrobenzene-d5	93	91	45 - 120
Phenol-d5	98	87	36 - 120
Terphenyl-d14	100	106	52 - 120

Client: Waste Management

Job Number: 280-26964-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-113443

Method: 625
Preparation: 625

LCS Lab Sample ID:	LCS 280-113443/2-A	Units: mg/L	LCSD Lab Sample ID:	LCSD 280-113443/3-A	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	04/02/2012 1258		Analysis Date:	04/02/2012 1317	
Prep Date:	03/28/2012 1700		Prep Date:	03/28/2012 1700	
Leach Date:	N/A		Leach Date:	N/A	

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual		LCSD Result/Qual	
Acenaphthene	0.0800	0.0800	0.0709		0.0754	
Acenaphthylene	0.0800	0.0800	0.0740		0.0788	
Anthracene	0.0800	0.0800	0.0785		0.0813	
Benzidine	0.400	0.400	0.167		0.0869	J *
Benzo[a]anthracene	0.0800	0.0800	0.0773		0.0818	
Benzo[b]fluoranthene	0.0800	0.0800	0.0749		0.0735	
Benzo[k]fluoranthene	0.0800	0.0800	0.0728		0.0815	
Benzo[a]pyrene	0.0800	0.0800	0.0637		0.0674	
Bis(2-chloroethoxy)methane	0.0800	0.0800	0.0716		0.0952	
Bis(2-chloroethyl)ether	0.0800	0.0800	0.0694		0.0786	
Bis(2-ethylhexyl) phthalate	0.0800	0.0800	0.0835		0.138	*
4-Bromophenyl phenyl ether	0.0800	0.0800	0.0763		0.0809	
Butyl benzyl phthalate	0.0800	0.0800	0.0793		0.0895	
4-Chloro-3-methylphenol	0.0800	0.0800	0.0801		0.0806	
2-Chloronaphthalene	0.0800	0.0800	0.0678		0.0727	
2-Chlorophenol	0.0800	0.0800	0.0741		0.0796	
4-Chlorophenyl phenyl ether	0.0800	0.0800	0.0728		0.0801	
Chrysene	0.0800	0.0800	0.0793		0.0827	
Dibenz(a,h)anthracene	0.0800	0.0800	0.0614		0.0640	
Di-n-butyl phthalate	0.0800	0.0800	0.0805		0.0865	
1,2-Dichlorobenzene	0.0800	0.0800	0.0577		0.0504	
1,3-Dichlorobenzene	0.0800	0.0800	0.0549		0.0455	
1,4-Dichlorobenzene	0.0800	0.0800	0.0557		0.0480	
3,3'-Dichlorobenzidine	0.0800	0.0800	0.0536		0.0612	
2,4-Dichlorophenol	0.0800	0.0800	0.0753		0.109	*
Diethyl phthalate	0.0800	0.0800	0.0823		0.0969	*
2,4-Dimethylphenol	0.0800	0.0800	0.0665		0.102	*
Dimethyl phthalate	0.0800	0.0800	0.0800		0.0851	
4,6-Dinitro-2-methylphenol	0.0800	0.0800	0.0795		0.0825	
2,4-Dinitrophenol	0.0800	0.0800	0.0751		0.0859	
2,4-Dinitrotoluene	0.0800	0.0800	0.0804		0.114	*
2,6-Dinitrotoluene	0.0800	0.0800	0.0768		0.0805	
Di-n-octyl phthalate	0.0800	0.0800	0.0844		0.0970	*
Fluoranthene	0.0800	0.0800	0.0834		0.0856	
Fluorene	0.0800	0.0800	0.0738		0.0798	
Hexachlorobenzene	0.0800	0.0800	0.0763		0.0806	
Hexachlorobutadiene	0.0800	0.0800	0.0524		0.0451	
Hexachlorocyclopentadiene	0.0800	0.0800	0.0328	J	0.0370	J
Hexachloroethane	0.0800	0.0800	0.0539		0.0431	

Client: Waste Management

Job Number: 280-26964-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-113443

Method: 625
Preparation: 625

LCS Lab Sample ID:	LCS 280-113443/2-A	Units: mg/L		LCSD Lab Sample ID:	LCSD 280-113443/3-A
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/02/2012 1258			Analysis Date:	04/02/2012 1317
Prep Date:	03/28/2012 1700			Prep Date:	03/28/2012 1700
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Indeno[1,2,3-cd]pyrene	0.0800	0.0800	0.0796	0.0837
Isophorone	0.0800	0.0800	0.0766	0.0961
p-Cresol	0.160	0.160	0.160	0.165
Naphthalene	0.0800	0.0800	0.0646	0.0681
Nitrobenzene	0.0800	0.0800	0.0748	0.0739
2-Nitrophenol	0.0800	0.0800	0.0787	0.121 *
4-Nitrophenol	0.0800	0.0800	0.0809	0.0790
N-Nitrosodimethylamine	0.0800	0.0800	0.0749	0.0689
N-Nitrosodiphenylamine	0.0683	0.0683	0.0624	0.0672
N-Nitrosodi-n-propylamine	0.0800	0.0800	0.0789	0.0865
Pentachlorophenol	0.0800	0.0800	0.0750	0.0855
Phenanthrene	0.0800	0.0800	0.0774	0.0806
Phenol	0.0800	0.0800	0.0781	0.0712
Pyrene	0.0800	0.0800	0.0770	0.0826
1,2,4-Trichlorobenzene	0.0800	0.0800	0.0557	0.0544
2,4,6-Trichlorophenol	0.0800	0.0800	0.0772	0.0643
2-Methylphenol	0.0800	0.0800	0.0721	0.0787
Benzo[g,h,i]perylene	0.0800	0.0800	0.0792	0.0827
2,2'-Oxybis(1-chloropropane)	0.0800	0.0800	0.0719	0.0776

Client: Waste Management

Job Number: 280-26964-1

Method Blank - Batch: 280-112986

Method: 200.7 Rev 4.4
Preparation: 200.7
Total Recoverable

Lab Sample ID:	MB 280-112986/1-A	Analysis Batch:	280-113314	Instrument ID:	MT_026
Client Matrix:	Water	Prep Batch:	280-112986	Lab File ID:	26a032712.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	03/27/2012 1632	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	03/26/2012 1400				
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	ND		0.0049	0.015
Zinc	ND		0.0045	0.020
Silver	ND		0.00093	0.010

Lab Control Sample - Batch: 280-112986

Method: 200.7 Rev 4.4
Preparation: 200.7
Total Recoverable

Lab Sample ID:	LCS 280-112986/2-A	Analysis Batch:	280-113314	Instrument ID:	MT_026
Client Matrix:	Water	Prep Batch:	280-112986	Lab File ID:	26a032712.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	03/27/2012 1634	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	03/26/2012 1400				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	1.00	1.01	101	88 - 110	
Cadmium	0.100	0.105	105	88 - 111	
Iron	1.00	0.992	99	89 - 115	
Lead	0.500	0.511	102	89 - 110	
Selenium	2.00	2.04	102	85 - 112	
Zinc	0.500	0.498	100	85 - 111	
Silver	0.0500	0.0536	107	85 - 115	

Client: Waste Management

Job Number: 280-26964-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-112986

Method: 200.7 Rev 4.4
Preparation: 200.7
Total Recoverable

MS Lab Sample ID:	280-26959-B-2-B MS	Analysis Batch:	280-113314	Instrument ID:	MT_026
Client Matrix:	Water	Prep Batch:	280-112986	Lab File ID:	26a032712.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	03/27/2012 1701			Final Weight/Volume:	50 mL
Prep Date:	03/26/2012 1400				
Leach Date:	N/A				

MSD Lab Sample ID:	280-26959-B-2-C MSD	Analysis Batch:	280-113314	Instrument ID:	MT_026
Client Matrix:	Water	Prep Batch:	280-112986	Lab File ID:	26a032712.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	03/27/2012 1703			Final Weight/Volume:	50 mL
Prep Date:	03/26/2012 1400				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Arsenic	101	103	88 - 110	2	20		
Cadmium	104	106	88 - 111	1	20		
Iron	95	96	89 - 115	1	20		
Lead	98	100	89 - 110	1	20		
Selenium	101	102	85 - 112	1	20		
Zinc	96	98	85 - 111	1	20		
Silver	108	109	85 - 115	1	20		

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-112986

Method: 200.7 Rev 4.4
Preparation: 200.7
Total Recoverable

MS Lab Sample ID:	280-26959-B-2-B MS	Units:	mg/L
Client Matrix:	Water		
Dilution:	1.0		
Analysis Date:	03/27/2012 1701		
Prep Date:	03/26/2012 1400		
Leach Date:	N/A		

MSD Lab Sample ID:	280-26959-B-2-C MSD
Client Matrix:	Water
Dilution:	1.0
Analysis Date:	03/27/2012 1703
Prep Date:	03/26/2012 1400
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	1.01	1.03
Cadmium	ND	0.100	0.100	0.104	0.106
Iron	0.10	1.00	1.00	1.05	1.06
Lead	ND	0.500	0.500	0.491	0.498
Selenium	ND	2.00	2.00	2.01	2.04
Zinc	0.033	0.500	0.500	0.515	0.521
Silver	ND	0.0500	0.0500	0.0541	0.0545

Client: Waste Management

Job Number: 280-26964-1

Method Blank - Batch: 280-113392

Method: 245.1
Preparation: 245.1

Lab Sample ID:	MB 280-113392/1-A	Analysis Batch:	280-113693	Instrument ID:	MT_034
Client Matrix:	Water	Prep Batch:	280-113392	Lab File ID:	120329taa.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	03/29/2012 1523	Units:	mg/L	Final Weight/Volume:	30 mL
Prep Date:	03/29/2012 1120				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	ND		0.000027	0.00020

Lab Control Sample - Batch: 280-113392

Method: 245.1
Preparation: 245.1

Lab Sample ID:	LCS 280-113392/2-A	Analysis Batch:	280-113693	Instrument ID:	MT_034
Client Matrix:	Water	Prep Batch:	280-113392	Lab File ID:	120329taa.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	03/29/2012 1531	Units:	mg/L	Final Weight/Volume:	30 mL
Prep Date:	03/29/2012 1120				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.00500	0.00484	97	90 - 110	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-113392

Method: 245.1
Preparation: 245.1

MS Lab Sample ID:	280-26964-1	Analysis Batch:	280-113693	Instrument ID:	MT_034
Client Matrix:	Water	Prep Batch:	280-113392	Lab File ID:	120329taa.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	03/29/2012 1537			Final Weight/Volume:	30 mL
Prep Date:	03/29/2012 1120				
Leach Date:	N/A				

MSD Lab Sample ID:	280-26964-1	Analysis Batch:	280-113693	Instrument ID:	MT_034
Client Matrix:	Water	Prep Batch:	280-113392	Lab File ID:	120329taa.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	03/29/2012 1540			Final Weight/Volume:	30 mL
Prep Date:	03/29/2012 1120				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Mercury	96	92	80 - 120	4	10		

Client: Waste Management

Job Number: 280-26964-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-113392

Method: 245.1
Preparation: 245.1

MS Lab Sample ID:	280-26964-1	Units: mg/L	MSD Lab Sample ID:	280-26964-1	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	03/29/2012 1537		Analysis Date:	03/29/2012 1540	
Prep Date:	03/29/2012 1120		Prep Date:	03/29/2012 1120	
Leach Date:	N/A		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	0.00478	0.00461

Client: Waste Management

Job Number: 280-26964-1

Method Blank - Batch: 280-113523

Method: 1664A
Preparation: 1664A

Lab Sample ID:	MB 280-113523/1-A	Analysis Batch:	280-113532	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	280-113523	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	03/29/2012 0950	Units:	mg/L	Final Weight/Volume:	1000 mL
Prep Date:	03/29/2012 0950				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
HEM	2.90	J	1.4	5.0

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-113523

Method: 1664A
Preparation: 1664A

LCS Lab Sample ID:	LCS 280-113523/2-A	Analysis Batch:	280-113532	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	280-113523	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	03/29/2012 0950	Units:	mg/L	Final Weight/Volume:	1000 mL
Prep Date:	03/29/2012 0950				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-113523/3-A	Analysis Batch:	280-113532	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	280-113523	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	03/29/2012 0950	Units:	mg/L	Final Weight/Volume:	1000 mL
Prep Date:	03/29/2012 0950				
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
HEM	91	88	81 - 107	3	22		

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-113523

Method: 1664A
Preparation: 1664A

LCS Lab Sample ID:	LCS 280-113523/2-A	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-113523/3-A
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/29/2012 0950			Analysis Date:	03/29/2012 0950
Prep Date:	03/29/2012 0950			Prep Date:	03/29/2012 0950
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	36.5	35.3

Client: Waste Management

Job Number: 280-26964-1

Method Blank - Batch: 280-113596

Method: 350.1
Preparation: N/A

Lab Sample ID:	MB 280-113596/97	Analysis Batch:	280-113596	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0329NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/29/2012 1259	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Ammonia	ND		0.022	0.10

Method Blank - Batch: 280-113596

Method: 350.1
Preparation: N/A

Lab Sample ID:	MB 280-113596/117	Analysis Batch:	280-113596	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0329NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/29/2012 1329	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Ammonia	ND		0.022	0.10

Method Blank - Batch: 280-113596

Method: 350.1
Preparation: N/A

Lab Sample ID:	MB 280-113596/129	Analysis Batch:	280-113596	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0329NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/29/2012 1354	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Ammonia	ND		0.022	0.10

Client: Waste Management

Job Number: 280-26964-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-113596

Method: 350.1
Preparation: N/A

LCS Lab Sample ID:	LCS 280-113596/98	Analysis Batch:	280-113596	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0329NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	03/29/2012 1300	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-113596/99	Analysis Batch:	280-113596	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0329NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	03/29/2012 1302	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	100	101	90 - 110	1	10		

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-113596

Method: 350.1
Preparation: N/A

LCS Lab Sample ID:	LCS 280-113596/130	Analysis Batch:	280-113596	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0329NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	03/29/2012 1356	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-113596/131	Analysis Batch:	280-113596	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0329NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	03/29/2012 1357	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	101	101	90 - 110	1	10		

Client: Waste Management

Job Number: 280-26964-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-113596

Method: 350.1
Preparation: N/A

LCS Lab Sample ID:	LCS 280-113596/98	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-113596/99
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/29/2012 1300			Analysis Date:	03/29/2012 1302
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	5.00	5.00	4.98	5.04

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-113596

Method: 350.1
Preparation: N/A

LCS Lab Sample ID:	LCS 280-113596/130	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-113596/131
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/29/2012 1356			Analysis Date:	03/29/2012 1357
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	5.00	5.00	5.03	5.07

Client: Waste Management

Job Number: 280-26964-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-113596

Method: 350.1
Preparation: N/A

MS Lab Sample ID:	280-26950-B-6 MS	Analysis Batch:	280-113596	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0329NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	03/29/2012 1324			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	280-26950-B-6 MSD	Analysis Batch:	280-113596	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0329NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	03/29/2012 1326			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Ammonia	94	96	90 - 110	2	20		

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-113596

Method: 350.1
Preparation: N/A

MS Lab Sample ID:	280-26989-B-1 MS	Analysis Batch:	280-113596	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0329NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	03/29/2012 1400			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	280-26989-B-1 MSD	Analysis Batch:	280-113596	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0329NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	03/29/2012 1402			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Ammonia	83	83	90 - 110	0	20	F	F

Client: Waste Management

Job Number: 280-26964-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-113596

Method: 350.1
Preparation: N/A

MS Lab Sample ID:	280-26950-B-6 MS	Units: mg/L	MSD Lab Sample ID:	280-26950-B-6 MSD	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	03/29/2012 1324		Analysis Date:	03/29/2012 1326	
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	ND	4.00	4.00	3.76	3.83

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-113596

Method: 350.1
Preparation: N/A

MS Lab Sample ID:	280-26989-B-1 MS	Units: mg/L	MSD Lab Sample ID:	280-26989-B-1 MSD	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	03/29/2012 1400		Analysis Date:	03/29/2012 1402	
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	ND	4.00	4.00	3.32 F	3.32 F

Client: Waste Management

Job Number: 280-26964-1

Method Blank - Batch: 280-113968

Method: 351.2
Preparation: 351.2

Lab Sample ID:	MB 280-113968/3-A	Analysis Batch:	280-114082	Instrument ID:	WC_Astoria
Client Matrix:	Water	Prep Batch:	280-113968	Lab File ID:	040312TKN.tab
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	04/03/2012 1315	Units:	mg/L	Final Weight/Volume:	25 mL
Prep Date:	04/02/2012 1522				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Nitrogen, Kjeldahl	ND		0.077	0.50

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-113968

Method: 351.2
Preparation: 351.2

LCS Lab Sample ID:	LCS 280-113968/1-A	Analysis Batch:	280-114082	Instrument ID:	WC_Astoria
Client Matrix:	Water	Prep Batch:	280-113968	Lab File ID:	040312TKN.tab
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	04/03/2012 1312	Units:	mg/L	Final Weight/Volume:	25 mL
Prep Date:	04/02/2012 1522				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-113968/2-A	Analysis Batch:	280-114082	Instrument ID:	WC_Astoria
Client Matrix:	Water	Prep Batch:	280-113968	Lab File ID:	040312TKN.tab
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	04/03/2012 1313	Units:	mg/L	Final Weight/Volume:	25 mL
Prep Date:	04/02/2012 1522				
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Nitrogen, Kjeldahl	95	98	90 - 110	3	25		

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-113968

Method: 351.2
Preparation: 351.2

LCS Lab Sample ID:	LCS 280-113968/1-A	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-113968/2-A
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/03/2012 1312			Analysis Date:	04/03/2012 1313
Prep Date:	04/02/2012 1522			Prep Date:	04/02/2012 1522
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	5.70	5.86

Client: Waste Management

Job Number: 280-26964-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-113968

Method: 351.2
Preparation: 351.2

MS Lab Sample ID:	280-26961-B-6-B MS	Analysis Batch:	280-114082	Instrument ID:	WC_Astoria
Client Matrix:	Water	Prep Batch:	280-113968	Lab File ID:	040312TKN.tab
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	04/03/2012 1331			Final Weight/Volume:	25 mL
Prep Date:	04/02/2012 1522				
Leach Date:	N/A				

MSD Lab Sample ID:	280-26961-B-6-C MSD	Analysis Batch:	280-114082	Instrument ID:	WC_Astoria
Client Matrix:	Water	Prep Batch:	280-113968	Lab File ID:	040312TKN.tab
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	04/03/2012 1332			Final Weight/Volume:	25 mL
Prep Date:	04/02/2012 1522				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Nitrogen, Kjeldahl	55	58	90 - 110	4	25	F	F

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-113968

Method: 351.2
Preparation: 351.2

MS Lab Sample ID:	280-26961-B-6-B MS	Units:	mg/L	MSD Lab Sample ID:	280-26961-B-6-C MSD
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/03/2012 1331			Analysis Date:	04/03/2012 1332
Prep Date:	04/02/2012 1522			Prep Date:	04/02/2012 1522
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	0.86	3.00	3.00	2.51 F	2.60 F

Client: Waste Management

Job Number: 280-26964-1

Method Blank - Batch: 280-113600

Method: 353.2
Preparation: N/A

Lab Sample ID:	MB 280-113600/20	Analysis Batch:	280-113600	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0329NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/29/2012 1103	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

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

Method Blank - Batch: 280-113600

Method: 353.2
Preparation: N/A

Lab Sample ID:	MB 280-113600/97	Analysis Batch:	280-113600	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0329NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/29/2012 1259	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

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

Method Blank - Batch: 280-113600

Method: 353.2
Preparation: N/A

Lab Sample ID:	MB 280-113600/117	Analysis Batch:	280-113600	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0329NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/29/2012 1329	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

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

Client: Waste Management

Job Number: 280-26964-1

Method Blank - Batch: 280-113600

Method: 353.2
Preparation: N/A

Lab Sample ID:	MB 280-113600/129	Analysis Batch:	280-113600	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0329NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/29/2012 1354	Units:	mg/L	Final Weight/Volume:	1.0 mL
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: 280-113600

Method: 353.2
Preparation: N/A

Lab Sample ID:	MRL 280-113600/18	Analysis Batch:	280-113600	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0329NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	03/29/2012 1100	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	0.0872	87	50 - 150	J

Client: Waste Management

Job Number: 280-26964-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-113600

Method: 353.2
Preparation: N/A

LCS Lab Sample ID:	LCS 280-113600/21	Analysis Batch:	280-113600	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0329NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	03/29/2012 1105	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-113600/22	Analysis Batch:	280-113600	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0329NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	03/29/2012 1106	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
Nitrate Nitrite as N	102	102	90 - 110	0	10		

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-113600

Method: 353.2
Preparation: N/A

LCS Lab Sample ID:	LCS 280-113600/98	Analysis Batch:	280-113600	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0329NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	03/29/2012 1300	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-113600/99	Analysis Batch:	280-113600	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0329NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	03/29/2012 1302	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
Nitrate Nitrite as N	102	101	90 - 110	1	10		

Client: Waste Management

Job Number: 280-26964-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-113600

Method: 353.2
Preparation: N/A

LCS Lab Sample ID:	LCS 280-113600/130	Analysis Batch:	280-113600	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0329NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	03/29/2012 1356	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-113600/131	Analysis Batch:	280-113600	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0329NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	03/29/2012 1357	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
Nitrate Nitrite as N	101	103	90 - 110	1	10		

Client: Waste Management

Job Number: 280-26964-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-113600

Method: 353.2
Preparation: N/A

LCS Lab Sample ID:	LCS 280-113600/21	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-113600/22
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/29/2012 1105			Analysis Date:	03/29/2012 1106
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
Nitrate Nitrite as N	5.00	5.00	5.10	5.11

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-113600

Method: 353.2
Preparation: N/A

LCS Lab Sample ID:	LCS 280-113600/98	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-113600/99
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/29/2012 1300			Analysis Date:	03/29/2012 1302
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
Nitrate Nitrite as N	5.00	5.00	5.09	5.05

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-113600

Method: 353.2
Preparation: N/A

LCS Lab Sample ID:	LCS 280-113600/130	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-113600/131
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/29/2012 1356			Analysis Date:	03/29/2012 1357
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
Nitrate Nitrite as N	5.00	5.00	5.06	5.13

Client: Waste Management

Job Number: 280-26964-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-113600

Method: 353.2
Preparation: N/A

MS Lab Sample ID:	280-26930-B-1 MS	Analysis Batch:	280-113600	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0329NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	03/29/2012 1109			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	280-26930-B-1 MSD	Analysis Batch:	280-113600	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0329NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	03/29/2012 1111			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Nitrate Nitrite as N	104	104	90 - 110	0	17		

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-113600

Method: 353.2
Preparation: N/A

MS Lab Sample ID:	280-26989-B-1 MS	Analysis Batch:	280-113600	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0329NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	03/29/2012 1400			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	280-26989-B-1 MSD	Analysis Batch:	280-113600	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0329NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	03/29/2012 1402			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Nitrate Nitrite as N	95	97	90 - 110	1	17		

Client: Waste Management

Job Number: 280-26964-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-113600

Method: 353.2
Preparation: N/A

MS Lab Sample ID:	280-26930-B-1 MS	Units: mg/L	
Client Matrix:	Water		
Dilution:	1.0		
Analysis Date:	03/29/2012 1109		
Prep Date:	N/A		
Leach Date:	N/A		

MSD Lab Sample ID:	280-26930-B-1 MSD
Client Matrix:	Water
Dilution:	1.0
Analysis Date:	03/29/2012 1111
Prep 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	1.4	4.00	4.00	5.53	5.52

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-113600

Method: 353.2
Preparation: N/A

MS Lab Sample ID:	280-26989-B-1 MS	Units: mg/L	
Client Matrix:	Water		
Dilution:	1.0		
Analysis Date:	03/29/2012 1400		
Prep Date:	N/A		
Leach Date:	N/A		

MSD Lab Sample ID:	280-26989-B-1 MSD
Client Matrix:	Water
Dilution:	1.0
Analysis Date:	03/29/2012 1402
Prep 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	2.6	4.00	4.00	6.37	6.44

Client: Waste Management

Job Number: 280-26964-1

Method Blank - Batch: 280-113928

Method: 365.1
Preparation: 365.2/365.3/365

Lab Sample ID:	MB 280-113928/3-A	Analysis Batch:	280-113979	Instrument ID:	WC_Konelab
Client Matrix:	Water	Prep Batch:	280-113928	Lab File ID:	040212TPHOSB.xls
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	04/02/2012 1649	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	04/02/2012 1232				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Phosphorus, Total	ND		0.0050	0.050

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-113928

Method: 365.1
Preparation: 365.2/365.3/365

LCS Lab Sample ID:	LCS 280-113928/1-A	Analysis Batch:	280-113979	Instrument ID:	WC_Konelab
Client Matrix:	Water	Prep Batch:	280-113928	Lab File ID:	040212TPHOSB.xls
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	04/02/2012 1649	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	04/02/2012 1232				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-113928/2-A	Analysis Batch:	280-113979	Instrument ID:	WC_Konelab
Client Matrix:	Water	Prep Batch:	280-113928	Lab File ID:	040212TPHOSB.xls
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	04/02/2012 1649	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	04/02/2012 1232				
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Phosphorus, Total	96	96	90 - 110	0	10		

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-113928

Method: 365.1
Preparation: 365.2/365.3/365

LCS Lab Sample ID:	LCS 280-113928/1-A	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-113928/2-A
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/02/2012 1649			Analysis Date:	04/02/2012 1649
Prep Date:	04/02/2012 1232			Prep Date:	04/02/2012 1232
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Phosphorus, Total	0.500	0.500	0.478	0.480

Client: Waste Management

Job Number: 280-26964-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-113928

Method: 365.1
Preparation: 365.2/365.3/365

MS Lab Sample ID:	280-26961-A-1-B MS	Analysis Batch:	280-113979	Instrument ID:	WC_Konelab
Client Matrix:	Water	Prep Batch:	280-113928	Lab File ID:	040212TPHOSB.xls
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	04/02/2012 1649			Final Weight/Volume:	50 mL
Prep Date:	04/02/2012 1232				
Leach Date:	N/A				

MSD Lab Sample ID:	280-26961-A-1-C MSD	Analysis Batch:	280-113979	Instrument ID:	WC_Konelab
Client Matrix:	Water	Prep Batch:	280-113928	Lab File ID:	040212TPHOSB.xls
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	04/02/2012 1650			Final Weight/Volume:	50 mL
Prep Date:	04/02/2012 1232				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Phosphorus, Total	114	105	90 - 110	8	22	F	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-113928

Method: 365.1
Preparation: 365.2/365.3/365

MS Lab Sample ID:	280-26964-2	Analysis Batch:	280-113979	Instrument ID:	WC_Konelab
Client Matrix:	Water	Prep Batch:	280-113928	Lab File ID:	040212TPHOSB.xls
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	04/02/2012 1653			Final Weight/Volume:	50 mL
Prep Date:	04/02/2012 1232				
Leach Date:	N/A				

MSD Lab Sample ID:	280-26964-2	Analysis Batch:	280-113979	Instrument ID:	WC_Konelab
Client Matrix:	Water	Prep Batch:	280-113928	Lab File ID:	040212TPHOSB.xls
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	04/02/2012 1653			Final Weight/Volume:	50 mL
Prep Date:	04/02/2012 1232				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Phosphorus, Total	90	91	90 - 110	1	22		

Client: Waste Management

Job Number: 280-26964-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-113928

Method: 365.1
Preparation: 365.2/365.3/365

MS Lab Sample ID:	280-26961-A-1-B MS	Units:	mg/L	MSD Lab Sample ID:	280-26961-A-1-C MSD
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/02/2012 1649			Analysis Date:	04/02/2012 1650
Prep Date:	04/02/2012 1232			Prep Date:	04/02/2012 1232
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	0.034	J	0.500	0.500	0.605	F	0.561

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-113928

Method: 365.1
Preparation: 365.2/365.3/365

MS Lab Sample ID:	280-26964-2	Units:	mg/L	MSD Lab Sample ID:	280-26964-2
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/02/2012 1653			Analysis Date:	04/02/2012 1653
Prep Date:	04/02/2012 1232			Prep Date:	04/02/2012 1232
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	0.22	0.500	0.500	0.665	0.670

Client: Waste Management

Job Number: 280-26964-1

Method Blank - Batch: 280-113353

Method: 410.4
Preparation: N/A

Lab Sample ID:	MB 280-113353/5	Analysis Batch:	280-113353	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:	03/28/2012 1104	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: 280-113353

Method: 410.4
Preparation: N/A

LCS Lab Sample ID:	LCS 280-113353/3	Analysis Batch:	280-113353	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:	10 mL
Analysis Date:	03/28/2012 1104	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-113353/4	Analysis Batch:	280-113353	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:	10 mL
Analysis Date:	03/28/2012 1104	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	98	97	90 - 110	1	11		

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-113353

Method: 410.4
Preparation: N/A

LCS Lab Sample ID:	LCS 280-113353/3	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-113353/4
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/28/2012 1104			Analysis Date:	03/28/2012 1104
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	98.5	97.1

Client: Waste Management

Job Number: 280-26964-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-113353

Method: 410.4
Preparation: N/A

MS Lab Sample ID:	280-26920-E-1 MS	Analysis Batch:	280-113353	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:	03/28/2012 1104			Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	280-26920-E-1 MSD	Analysis Batch:	280-113353	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:	03/28/2012 1104			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	101	99	90 - 110	1	11		

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-113353

Method: 410.4
Preparation: N/A

MS Lab Sample ID:	280-26920-E-1 MS	Units:	mg/L	MSD Lab Sample ID:	280-26920-E-1 MSD
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/28/2012 1104			Analysis Date:	03/28/2012 1104
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	31	50.0	50.0	81.7	80.6

Client: Waste Management

Job Number: 280-26964-1

Method Blank - Batch: 280-113184

Method: SM 2540D
Preparation: N/A

Lab Sample ID:	MB 280-113184/1	Analysis Batch:	280-113184	Instrument ID:	No Equipment
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:	03/27/2012 0845	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/
Lab Control Sample Duplicate Recovery Report - Batch: 280-113184

Method: SM 2540D
Preparation: N/A

LCS Lab Sample ID:	LCS 280-113184/2	Analysis Batch:	280-113184	Instrument ID:	No Equipment
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:	03/27/2012 0845	Units:	mg/L	Final Weight/Volume:	250 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-113184/3	Analysis Batch:	280-113184	Instrument ID:	No Equipment
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:	03/27/2012 0845	Units:	mg/L	Final Weight/Volume:	250 mL
Prep Date:	N/A				
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Total Suspended Solids	91	92	86 - 114	1	20		

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-113184

Method: SM 2540D
Preparation: N/A

LCS Lab Sample ID:	LCS 280-113184/2	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-113184/3
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/27/2012 0845			Analysis Date:	03/27/2012 0845
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
Total Suspended Solids	100	100	91.0	92.0

Client: Waste Management

Job Number: 280-26964-1

Duplicate - Batch: 280-113184

Method: SM 2540D
Preparation: N/A

Lab Sample ID:	280-26932-A-7 DU	Analysis Batch:	280-113184	Instrument ID:	No Equipment
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:	03/27/2012 0845	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	11	12.0	7	10	

Client: Waste Management

Job Number: 280-26964-1

Method Blank - Batch: 280-114134

Method: Total Nitrogen
Preparation: N/A

Lab Sample ID:	MB 280-114134/1	Analysis Batch:	280-114134	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	04/03/2012 1742	Units:	mg/L	Final Weight/Volume:	1.0 mL
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: 280-26964-1

Laboratory Chronicle

Lab ID: 280-26964-1 **Client ID:** DETENTION BASIN

Sample Date/Time: 03/21/2012 10:13 Received Date/Time: 03/23/2012 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:625	280-26964-E-1-A		280-114019	280-113443	03/28/2012 17:00	1	TAL DEN	DFB
A:625	280-26964-E-1-A		280-114019	280-113443	04/02/2012 21:56	1	TAL DEN	MGH
P:200.7	280-26964-H-1-A		280-113314	280-112986	03/26/2012 14:00	1	TAL DEN	JM
A:200.7 Rev 4.4	280-26964-H-1-A		280-113314	280-112986	03/27/2012 17:40	1	TAL DEN	HEB
P:245.1	280-26964-H-1-B		280-113693	280-113392	03/29/2012 11:20	1	TAL DEN	BLR
A:245.1	280-26964-H-1-B		280-113693	280-113392	03/29/2012 15:35	1	TAL DEN	BLR
P:1664A	280-26964-A-1-A		280-113532	280-113523	03/29/2012 09:50	1	TAL DEN	DE
A:1664A	280-26964-A-1-A		280-113532	280-113523	03/29/2012 09:50	1	TAL DEN	DE
A:350.1	280-26964-G-1		280-113596		03/29/2012 14:21	1	TAL DEN	SJS
P:351.2	280-26964-G-1-A		280-114082	280-113968	04/02/2012 15:22	1	TAL DEN	MW
A:351.2	280-26964-G-1-A		280-114082	280-113968	04/03/2012 13:47	1	TAL DEN	MW
A:353.2	280-26964-G-1		280-113600		03/29/2012 14:21	1	TAL DEN	SJS
P:365.2/365.3/365	280-26964-F-1-A		280-113979	280-113928	04/02/2012 12:32	1	TAL DEN	JMT
A:365.1	280-26964-F-1-A		280-113979	280-113928	04/02/2012 16:53	1	TAL DEN	JMT
A:410.4	280-26964-F-1		280-113353		03/28/2012 11:04	1	TAL DEN	AJA
A:SM 2540D	280-26964-C-1		280-113184		03/27/2012 08:45	1	TAL DEN	AJA
A:Total Nitrogen	280-26964-A-1		280-114134		04/03/2012 17:42	1	TAL DEN	DFB
A:Field Sampling	280-26964-A-1		280-113011		03/21/2012 10:13	1	TAL DEN	FS

Lab ID: 280-26964-1 MS **Client ID:** DETENTION BASIN

Sample Date/Time: 03/21/2012 10:13 Received Date/Time: 03/23/2012 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:245.1	280-26964-H-1-C MS		280-113693	280-113392	03/29/2012 11:20	1	TAL DEN	BLR
A:245.1	280-26964-H-1-C MS		280-113693	280-113392	03/29/2012 15:37	1	TAL DEN	BLR

Lab ID: 280-26964-1 MSD **Client ID:** DETENTION BASIN

Sample Date/Time: 03/21/2012 10:13 Received Date/Time: 03/23/2012 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:245.1	280-26964-H-1-D MSD		280-113693	280-113392	03/29/2012 11:20	1	TAL DEN	BLR
A:245.1	280-26964-H-1-D MSD		280-113693	280-113392	03/29/2012 15:40	1	TAL DEN	BLR

Client: Waste Management

Job Number: 280-26964-1

Laboratory Chronicle

Lab ID: 280-26964-2 **Client ID:** CULVERT

Sample Date/Time: 03/21/2012 10:36 Received Date/Time: 03/23/2012 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:625	280-26964-D-2-A		280-114019	280-113443	03/28/2012 17:00	1	TAL DEN	DFB
A:625	280-26964-D-2-A		280-114019	280-113443	04/02/2012 22:15	1	TAL DEN	MGH
P:200.7	280-26964-H-2-A		280-113314	280-112986	03/26/2012 14:00	1	TAL DEN	JM
A:200.7 Rev 4.4	280-26964-H-2-A		280-113314	280-112986	03/27/2012 17:42	1	TAL DEN	HEB
P:245.1	280-26964-H-2-B		280-113693	280-113392	03/29/2012 11:20	1	TAL DEN	BLR
A:245.1	280-26964-H-2-B		280-113693	280-113392	03/29/2012 15:42	1	TAL DEN	BLR
P:1664A	280-26964-A-2-A		280-113532	280-113523	03/29/2012 09:50	1	TAL DEN	DE
A:1664A	280-26964-A-2-A		280-113532	280-113523	03/29/2012 09:50	1	TAL DEN	DE
A:350.1	280-26964-F-2		280-113596		03/29/2012 13:42	1	TAL DEN	SJS
P:351.2	280-26964-F-2-A		280-114082	280-113968	04/02/2012 15:22	1	TAL DEN	MW
A:351.2	280-26964-F-2-A		280-114082	280-113968	04/03/2012 13:48	1	TAL DEN	MW
A:353.2	280-26964-F-2		280-113600		03/29/2012 13:42	1	TAL DEN	SJS
P:365.2/365.3/365	280-26964-G-2-A		280-113979	280-113928	04/02/2012 12:32	1	TAL DEN	JMT
A:365.1	280-26964-G-2-A		280-113979	280-113928	04/02/2012 16:53	1	TAL DEN	JMT
A:410.4	280-26964-G-2		280-113353		03/28/2012 11:04	1	TAL DEN	AJA
A:SM 2540D	280-26964-E-2		280-113184		03/27/2012 08:45	1	TAL DEN	AJA
A:Total Nitrogen	280-26964-A-2		280-114134		04/03/2012 17:42	1	TAL DEN	DFB
A:Field Sampling	280-26964-A-2		280-113011		03/21/2012 10:36	1	TAL DEN	FS

Lab ID: 280-26964-2 MS **Client ID:** CULVERT

Sample Date/Time: 03/21/2012 10:36 Received Date/Time: 03/23/2012 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:365.2/365.3/365	280-26964-G-2-B MS		280-113979	280-113928	04/02/2012 12:32	1	TAL DEN	JMT
A:365.1	280-26964-G-2-B MS		280-113979	280-113928	04/02/2012 16:53	1	TAL DEN	JMT

Lab ID: 280-26964-2 MSD **Client ID:** CULVERT

Sample Date/Time: 03/21/2012 10:36 Received Date/Time: 03/23/2012 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:365.2/365.3/365	280-26964-G-2-C MSD		280-113979	280-113928	04/02/2012 12:32	1	TAL DEN	JMT
A:365.1	280-26964-G-2-C MSD		280-113979	280-113928	04/02/2012 16:53	1	TAL DEN	JMT

Client: Waste Management

Job Number: 280-26964-1

Laboratory Chronicle

Lab ID: 280-26964-3 **Client ID:** UPCANYON

Sample Date/Time: 03/21/2012 10:23 Received Date/Time: 03/23/2012 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:625	280-26964-C-3-A		280-114019	280-113443	03/28/2012 17:00	1	TAL DEN	DFB
A:625	280-26964-C-3-A		280-114019	280-113443	04/02/2012 22:34	1	TAL DEN	MGH
P:200.7	280-26964-H-3-A		280-113314	280-112986	03/26/2012 14:00	1	TAL DEN	JM
A:200.7 Rev 4.4	280-26964-H-3-A		280-113314	280-112986	03/27/2012 17:45	1	TAL DEN	HEB
P:245.1	280-26964-H-3-B		280-113693	280-113392	03/29/2012 11:20	1	TAL DEN	BLR
A:245.1	280-26964-H-3-B		280-113693	280-113392	03/29/2012 15:44	1	TAL DEN	BLR
P:1664A	280-26964-B-3-A		280-113532	280-113523	03/29/2012 09:50	1	TAL DEN	DE
A:1664A	280-26964-B-3-A		280-113532	280-113523	03/29/2012 09:50	1	TAL DEN	DE
A:350.1	280-26964-G-3		280-113596		03/29/2012 13:44	1	TAL DEN	SJS
P:351.2	280-26964-F-3-A		280-114082	280-113968	04/02/2012 15:22	1	TAL DEN	MW
A:351.2	280-26964-F-3-A		280-114082	280-113968	04/03/2012 13:50	1	TAL DEN	MW
A:353.2	280-26964-G-3		280-113600		03/29/2012 13:44	1	TAL DEN	SJS
P:365.2/365.3/365	280-26964-G-3-A		280-113979	280-113928	04/02/2012 12:32	1	TAL DEN	JMT
A:365.1	280-26964-G-3-A		280-113979	280-113928	04/02/2012 16:53	1	TAL DEN	JMT
A:410.4	280-26964-G-3		280-113353		03/28/2012 11:04	1	TAL DEN	AJA
A:SM 2540D	280-26964-E-3		280-113184		03/27/2012 08:45	1	TAL DEN	AJA
A:Total Nitrogen	280-26964-A-3		280-114134		04/03/2012 17:42	1	TAL DEN	DFB
A:Field Sampling	280-26964-A-3		280-113011		03/21/2012 10:23	1	TAL DEN	FS

Client: Waste Management

Job Number: 280-26964-1

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 280-113443/1-A		280-114019	280-113443	03/28/2012 17:00	1	TAL DEN	DFB
A:625	MB 280-113443/1-A		280-114019	280-113443	04/02/2012 21:37	1	TAL DEN	MGH
P:200.7	MB 280-112986/1-A		280-113314	280-112986	03/26/2012 14:00	1	TAL DEN	JM
A:200.7 Rev 4.4	MB 280-112986/1-A		280-113314	280-112986	03/27/2012 16:32	1	TAL DEN	HEB
P:245.1	MB 280-113392/1-A		280-113693	280-113392	03/29/2012 11:20	1	TAL DEN	BLR
A:245.1	MB 280-113392/1-A		280-113693	280-113392	03/29/2012 15:23	1	TAL DEN	BLR
P:1664A	MB 280-113523/1-A		280-113532	280-113523	03/29/2012 09:50	1	TAL DEN	DE
A:1664A	MB 280-113523/1-A		280-113532	280-113523	03/29/2012 09:50	1	TAL DEN	DE
A:350.1	MB 280-113596/97		280-113596		03/29/2012 12:59	1	TAL DEN	SJS
A:350.1	MB 280-113596/117		280-113596		03/29/2012 13:29	1	TAL DEN	SJS
A:350.1	MB 280-113596/129		280-113596		03/29/2012 13:54	1	TAL DEN	SJS
P:351.2	MB 280-113968/3-A		280-114082	280-113968	04/02/2012 15:22	1	TAL DEN	MW
A:351.2	MB 280-113968/3-A		280-114082	280-113968	04/03/2012 13:15	1	TAL DEN	MW
A:353.2	MB 280-113600/20		280-113600		03/29/2012 11:03	1	TAL DEN	SJS
A:353.2	MB 280-113600/97		280-113600		03/29/2012 12:59	1	TAL DEN	SJS
A:353.2	MB 280-113600/117		280-113600		03/29/2012 13:29	1	TAL DEN	SJS
A:353.2	MB 280-113600/129		280-113600		03/29/2012 13:54	1	TAL DEN	SJS
P:365.2/365.3/365	MB 280-113928/3-A		280-113979	280-113928	04/02/2012 12:32	1	TAL DEN	JMT
A:365.1	MB 280-113928/3-A		280-113979	280-113928	04/02/2012 16:49	1	TAL DEN	JMT
A:410.4	MB 280-113353/5		280-113353		03/28/2012 11:04	1	TAL DEN	AJA
A:SM 2540D	MB 280-113184/1		280-113184		03/27/2012 08:45	1	TAL DEN	AJA
A:Total Nitrogen	MB 280-114134/1		280-114134		04/03/2012 17:42	1	TAL DEN	DFB

Client: Waste Management

Job Number: 280-26964-1

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 280-113443/2-A		280-114019	280-113443	03/28/2012 17:00	1	TAL DEN	DFB
A:625	LCS 280-113443/2-A		280-114019	280-113443	04/02/2012 12:58	1	TAL DEN	MGH
P:200.7	LCS 280-112986/2-A		280-113314	280-112986	03/26/2012 14:00	1	TAL DEN	JM
A:200.7 Rev 4.4	LCS 280-112986/2-A		280-113314	280-112986	03/27/2012 16:34	1	TAL DEN	HEB
P:245.1	LCS 280-113392/2-A		280-113693	280-113392	03/29/2012 11:20	1	TAL DEN	BLR
A:245.1	LCS 280-113392/2-A		280-113693	280-113392	03/29/2012 15:31	1	TAL DEN	BLR
P:1664A	LCS 280-113523/2-A		280-113532	280-113523	03/29/2012 09:50	1	TAL DEN	DE
A:1664A	LCS 280-113523/2-A		280-113532	280-113523	03/29/2012 09:50	1	TAL DEN	DE
A:350.1	LCS 280-113596/98		280-113596		03/29/2012 13:00	1	TAL DEN	SJS
A:350.1	LCS 280-113596/130		280-113596		03/29/2012 13:56	1	TAL DEN	SJS
P:351.2	LCS 280-113968/1-A		280-114082	280-113968	04/02/2012 15:22	1	TAL DEN	MW
A:351.2	LCS 280-113968/1-A		280-114082	280-113968	04/03/2012 13:12	1	TAL DEN	MW
A:353.2	LCS 280-113600/21		280-113600		03/29/2012 11:05	1	TAL DEN	SJS
A:353.2	LCS 280-113600/98		280-113600		03/29/2012 13:00	1	TAL DEN	SJS
A:353.2	LCS 280-113600/130		280-113600		03/29/2012 13:56	1	TAL DEN	SJS
P:365.2/365.3/365	LCS 280-113928/1-A		280-113979	280-113928	04/02/2012 12:32	1	TAL DEN	JMT
A:365.1	LCS 280-113928/1-A		280-113979	280-113928	04/02/2012 16:49	1	TAL DEN	JMT
A:410.4	LCS 280-113353/3		280-113353		03/28/2012 11:04	1	TAL DEN	AJA
A:SM 2540D	LCS 280-113184/2		280-113184		03/27/2012 08:45	1	TAL DEN	AJA

Client: Waste Management

Job Number: 280-26964-1

Laboratory Chronicle

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 280-113443/3-A		280-114019	280-113443	03/28/2012 17:00	1	TAL DEN	DFB
A:625	LCSD 280-113443/3-A		280-114019	280-113443	04/02/2012 13:17	1	TAL DEN	MGH
P:1664A	LCSD 280-113523/3-A		280-113532	280-113523	03/29/2012 09:50	1	TAL DEN	DE
A:1664A	LCSD 280-113523/3-A		280-113532	280-113523	03/29/2012 09:50	1	TAL DEN	DE
A:350.1	LCSD 280-113596/99		280-113596		03/29/2012 13:02	1	TAL DEN	SJS
A:350.1	LCSD 280-113596/131		280-113596		03/29/2012 13:57	1	TAL DEN	SJS
P:351.2	LCSD 280-113968/2-A		280-114082	280-113968	04/02/2012 15:22	1	TAL DEN	MW
A:351.2	LCSD 280-113968/2-A		280-114082	280-113968	04/03/2012 13:13	1	TAL DEN	MW
A:353.2	LCSD 280-113600/22		280-113600		03/29/2012 11:06	1	TAL DEN	SJS
A:353.2	LCSD 280-113600/99		280-113600		03/29/2012 13:02	1	TAL DEN	SJS
A:353.2	LCSD 280-113600/131		280-113600		03/29/2012 13:57	1	TAL DEN	SJS
P:365.2/365.3/365	LCSD 280-113928/2-A		280-113979	280-113928	04/02/2012 12:32	1	TAL DEN	JMT
A:365.1	LCSD 280-113928/2-A		280-113979	280-113928	04/02/2012 16:49	1	TAL DEN	JMT
A:410.4	LCSD 280-113353/4		280-113353		03/28/2012 11:04	1	TAL DEN	AJA
A:SM 2540D	LCSD 280-113184/3		280-113184		03/27/2012 08:45	1	TAL DEN	AJA

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:353.2	MRL 280-113600/18		280-113600		03/29/2012 11:00	1	TAL DEN	SJS

Client: Waste Management

Job Number: 280-26964-1

Laboratory Chronicle

Lab ID: MS **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:200.7	280-26959-B-2-B MS		280-113314	280-112986	03/26/2012 14:00	1	TAL DEN	JM
A:200.7 Rev 4.4	280-26959-B-2-B MS		280-113314	280-112986	03/27/2012 17:01	1	TAL DEN	HEB
A:350.1	280-26950-B-6 MS		280-113596		03/29/2012 13:24	1	TAL DEN	SJS
A:350.1	280-26989-B-1 MS		280-113596		03/29/2012 14:00	1	TAL DEN	SJS
P:351.2	280-26961-B-6-B MS		280-114082	280-113968	04/02/2012 15:22	1	TAL DEN	MW
A:351.2	280-26961-B-6-B MS		280-114082	280-113968	04/03/2012 13:31	1	TAL DEN	MW
A:353.2	280-26930-B-1 MS		280-113600		03/29/2012 11:09	1	TAL DEN	SJS
A:353.2	280-26989-B-1 MS		280-113600		03/29/2012 14:00	1	TAL DEN	SJS
P:365.2/365.3/365	280-26961-A-1-B MS		280-113979	280-113928	04/02/2012 12:32	1	TAL DEN	JMT
A:365.1	280-26961-A-1-B MS		280-113979	280-113928	04/02/2012 16:49	1	TAL DEN	JMT
A:410.4	280-26920-E-1 MS		280-113353		03/28/2012 11:04	1	TAL DEN	AJA

Lab ID: MSD **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:200.7	280-26959-B-2-C MSD		280-113314	280-112986	03/26/2012 14:00	1	TAL DEN	JM
A:200.7 Rev 4.4	280-26959-B-2-C MSD		280-113314	280-112986	03/27/2012 17:03	1	TAL DEN	HEB
A:350.1	280-26950-B-6 MSD		280-113596		03/29/2012 13:26	1	TAL DEN	SJS
A:350.1	280-26989-B-1 MSD		280-113596		03/29/2012 14:02	1	TAL DEN	SJS
P:351.2	280-26961-B-6-C MSD		280-114082	280-113968	04/02/2012 15:22	1	TAL DEN	MW
A:351.2	280-26961-B-6-C MSD		280-114082	280-113968	04/03/2012 13:32	1	TAL DEN	MW
A:353.2	280-26930-B-1 MSD		280-113600		03/29/2012 11:11	1	TAL DEN	SJS
A:353.2	280-26989-B-1 MSD		280-113600		03/29/2012 14:02	1	TAL DEN	SJS
P:365.2/365.3/365	280-26961-A-1-C MSD		280-113979	280-113928	04/02/2012 12:32	1	TAL DEN	JMT
A:365.1	280-26961-A-1-C MSD		280-113979	280-113928	04/02/2012 16:50	1	TAL DEN	JMT
A:410.4	280-26920-E-1 MSD		280-113353		03/28/2012 11:04	1	TAL DEN	AJA

Lab ID: DU **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:SM 2540D	280-26932-A-7 DU		280-113184		03/27/2012 08:45	1	TAL DEN	AJA

Lab References:
TAL DEN = TestAmerica Denver

Food Quality Lab

3375 Koapaka Street, G314
Honolulu, HI 96819
Phone: 808-839-9444, Fax: 808-839-9744

AECOM
1001 Bishop St., Suite 1600
Honolulu, HI, 96813
Attn: Mark Hofferbert
Project Name: WGSL Stormwater
PO No: 6246625.02

CERTIFICATE OF ANALYSIS

Received: 03/21/2012 @ 12:10 PM
Completed: 04/06/2012 @
Project Number: 120321-2568-015
Temperature: 4.0 °C
Client Project No: 6246625.02

Sample ID: 120321-2568-015-01 | **Water Sample -25 Culvert Inlet** | **Sampled: 3/21/2012 @ 10:36 AM** | **Sampler: Katie Langford**

Analysis	Results	Units	MDL	Test Method	Analyzed	By
Biochemical Oxygen Demand, 5-day	4.6	mg/L	1.0	SM 5210 B	03/21/2012	LS
Chromium 6+	See Attached	ug/L	0.030	EPA 218.6	04/04/2012	Weck

Approved By: Arnelda D. Amarto
Friday, April 06, 2012

14339

FQ Labs.

3375 Koapaka St., G314
Honolulu, HI 96819
808-839-9444 Fax 808-839-9744

CHAIN OF CUSTODY AND ANALYSIS REQUEST

DATE: _____ PAGE _____ OF _____

LOG BOOK NO. _____ FILE NO. _____ LAB NO. _____

CLIENT NAME: **AECOM Technical Services, Inc.**

PROJECT NAME: **WGSL Stormwater** PROJECT NO: **6024662** P.O. NO: **60246625.02**

ADDRESS: **1001 Bishop St., Suite 1600, Honolulu, HI 96813**

PROJECT MANAGER: **Mark Hofferbert** PHONE NO. **523-8874** FAX NO: **523-8950**

SAMPLER NAME: Didier Dumas (Printed) (Signature)

TAT(Analytical Turn Around Time) 0 = Same day; 1 = 24 Hour; 2 = 48 Hour; (Etc.) N = NORMAL

CONTAINER TYPES: B = Brass, G = Glass, P = Plastic, V = VOA Vial, O = Other:

ANALYSES REQUESTED:

AIRBILL NO: hand delivered

COOLER TEMP: 4°C

PRESERVED: _____

REMARKS: Report to: Betsy Sara (betsy.sara@testamericainc.com)

	SAMPLE NO.	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX: WATER	MATRIX: SOIL	MATRIX: SLUDGE	MATRIX: OTHER	CONTAINER: #	CONTAINER: TYPE	CONTAINER: GRAB/COMP	ON-SITE: PH	ON-SITE: CL2	BOD SM5210	CrVI 218.6					SAMPLE CONDITION/ COMMENTS:
1	24	3/21/12	10:20	UPCANYON	X				1	poly	X			X	X					preserve&analyze CrVI
2																				~~X~~ NO DISCHARGE
3																				Mfr. CH used their own container
4																				1L - NORMAL MOUTH
5																				
6																				
7																				
8																				
9																				
10																				

Relinquished By (Signature and Printed Name)	Received By (Signature and Printed Name)	Date	Time
[signature]	Mary Hatch Mary Hatch	3/21/12	1210
Relinquished By (Signature and Printed Name)	Received By (Signature and Printed Name)	Date	Time
Relinquished By (Signature and Printed Name)	Received By (Signature and Printed Name)	Date	Time

SPECIAL INSTRUCTIONS:

SAMPLE DISPOSITION:
1. Samples returned to client? YES NO
2. Samples will not be stored over 30 days, unless additional storage time is requested.
3. Storage time requested: _____ days
By _____ Date _____

LAB COPY

FQLabs
Analysts of Excellence
3375 Koapaka St., Suite G314 • Honolulu, HI 96819 • Tel: (808) 839-9444 • Fax: (808) 839-9744 • fql@fqlab.com
FOOD, WATER, SOIL & ENVIRONMENTAL TESTING & CONSULTING

QC Report

AECOM
1001 Bishop St., Suite 1600
Honolulu, HI, 96813
Attn: Mark Hofferbert
Project Name: WGSL Stormwater

Received: 3/21/2012
Completed: 4/6/2012
Project Number: 120321-2568-015

Analysis	QC Test	Results	MDL	Units	GGA Range	Source Result	% Rec	Rec Limits	% RPD	RPD Limit	Qualifier
Glucose-Glutamic Acid Check (GGA) 3/21/2012											
BOD	Blank	0.04	1	mg/L	-	-	-	-	-	-	
BOD	GGA	209	1	mg/L	198±30.5	-	-	-	-	-	Pass

The results are within the control limit range of 198 ± 30.5

Notes:

B1	Target Analyte detected in method blank was above the method detection limit.
D8	The duplicate exceeded the acceptance limit due to sample matrix effects.
dry	Sample results reported on a dry weight basis.
LCS	Laboratory Control Standard
M8	The matrix spike was below the acceptance limits. See Blank Spike (LCS)
M9	The matrix spike was above the acceptance limits. See Blank Spike (LCS)
MDL	Method Detection Levels are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
ND	Not Detected
NR	Not Reported
R8	The LCS recovery was below the acceptance limits.
R9	The LCS recovery was above the acceptance limits.
REC	Recovery
RPD	Relative Percent Difference

CERTIFICATE OF ANALYSIS

Client:	Food Quality Labs 3375 Koapaka Street, G314 Honolulu HI, 96819	**Report Date:**	04/06/12 13:52
		Received Date:	03/27/12 09:15
		Turn Around:	Normal
Attention:	Imelda Quarto	**Client Project:**	AECOM WGSL Stormwater
Phone:	(808) 839-9444		
Fax:	(808) 839-9744		
Work Order(s):	2C27022		

NELAP #04229CA ELAP#1132 NEVADA #CA211 HAWAII LACSD #10143

The results in this report apply to the samples analyzed in accordance with the Chain of Custody document. Weck Laboratories, Inc. certifies that the test results meet all NELAC requirements unless noted in the case narrative. This analytical report is confidential and is only intended for the use of Weck Laboratories, Inc. and its client. This report contains the Chain of Custody document, which is an integral part of it, and can only be reproduced in full with the authorization of Weck Laboratories, Inc.

Dear Imelda Quarto :

Enclosed are the results of analyses for samples received 03/27/12 09:15 with the Chain of Custody document. The samples were received in good condition, at 4.0 °C and on ice. All analysis met the method criteria except as noted below or in the report with data qualifiers.

Case Narrative:

Reviewed by:

Ana Carrera For Hai Van Nguyen
Project Manager

Food Quality Labs
3375 Koapaka Street, G314
Honolulu HI, 96819

Date Received: 03/27/12 09:15
Date Reported: 04/06/12 13:52

2C27022-03 Culvert Inlet

Sampled: 03/21/12 10:36 Sampled By: client Matrix: Water

Hexavalent Chromium by IC

Method: EPA 218.6 Batch: W2D0185 Prepared: 03/21/12 12:00 Analyst: mac

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Chromium 6+	1.6	0.030	1.5	ug/l	5	04/04/12 15:12	

Weck Laboratories, Inc 14859 East Clark Avenue, City of Industry, California 91745-1396 (626) 336-2139 FAX (626) 336-2634
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Food Quality Labs
3375 Koapaka Street, G314
Honolulu HI, 96819

Date Received: 03/27/12 09:15
Date Reported: 04/06/12 13:52

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Sampled by:	Sample Comments	Lab ID	Matrix	Date Sampled
Detension Basin	client		2C27022-01	Water	03/21/12 10:13
UP Canyon	client		2C27022-02	Water	03/21/12 10:20
Culvert Inlet	client		2C27022-03	Water	03/21/12 10:36

ANALYSES

Hexavalent Chromium by IC

Food Quality Labs
3375 Koapaka Street, G314
Honolulu HI, 96819

Date Received: 03/27/12 09:15
Date Reported: 04/06/12 13:52

QUALITY CONTROL SECTION

Weck Laboratories, Inc 14859 East Clark Avenue, City of Industry, California 91745-1396 (626) 336-2139 FAX (626) 336-2634
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Food Quality Labs
3375 Koapaka Street, G314
Honolulu HI, 96819

Date Received: 03/27/12 09:15
Date Reported: 04/06/12 13:52

Hexavalent Chromium by IC - Quality Control

Batch W2D0185 - EPA 218.6

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W2D0185-BLK1)				Analyzed: 04/04/12 15:12						
Chromium 6+	ND	0.30	ug/l							
LCS (W2D0185-BS1)				Analyzed: 04/04/12 15:12						
Chromium 6+	4.98	0.30	ug/l	5.00		100	90-110			
Matrix Spike (W2D0185-MS1)	Source: 2D04009-01			Analyzed: 04/04/12 15:12						
Chromium 6+	5.06	0.30	ug/l	5.00	0.0291	101	88-112			
Matrix Spike Dup (W2D0185-MSD1)	Source: 2D04009-01			Analyzed: 04/04/12 15:12						
Chromium 6+	5.15	0.30	ug/l	5.00	0.0291	102	88-112	2	10	

Food Quality Labs
3375 Koapaka Street, G314
Honolulu HI, 96819

Date Received: 03/27/12 09:15
Date Reported: 04/06/12 13:52

Notes and Definitions

ND	NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL)
NR	Not Reportable
Dil	Dilution
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
% Rec	Percent Recovery
Sub	Subcontracted analysis, original report available upon request
MDL	Method Detection Limit
MDA	Minimum Detectable Activity
MRL	Method Reporting Limit

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

An Absence of Total Coliform meets the drinking water standards as established by the California Department of Health Services.

The Reporting Limit (RL) is referenced as the Laboratory's Practical Quantitation Limit (PQL) or the Detection Limit for Reporting Purposes (DLR).

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.

Weck Laboratories, Inc 14859 East Clark Avenue, City of Industry, California 91745-1396 (626) 336-2139 FAX (626) 336-2634
The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety
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FQ Labs.

3375 Koapaka St., G314
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2C27022

CHAIN OF CUSTODY AND ANALYSIS REQUEST

DATE: _____ PAGE _____ OF _____

CUSTOMER NO. _____ LAB NO. _____

CLIENT NAME: FQ Labs EMAIL: Imelda@fqlab.com

ADDRESS: 3375 koapaka Street G314

PROJECT NAME: AECOM WGSL STORMWater PROJECT NO: P.O. NO:

PROJECT MANAGER: IMELDA QUARTO PHONE NO: 808-839-9444 FAX NO: 808-839-9744

SAMPLER NAME: (Printed) (Signature)

TAT(Analytical Turn Around Time) 0 = Same day; 1 = 24 Hour; 2 = 48 Hour; (Etc.) N = NORMAL

CONTAINER TYPES: B = Brass, G = Glass, P = Plastic, V = VOA Vial, O = Other:

ANALYSES REQUESTED: Chromium (VI) 218.6

AIRBILL NO: _____

COOLER TEMP: _____

PRESERVED: _____

REMARKS:

	SAMPLE NO.	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX: WATER	MATRIX: OTHER	CONTAINER: #	CONTAINER: TYPE	CONTAINER: GRAB/COMP	Chromium (VI) 218.6	SAMPLE CONDITION/ COMMENTS:
1	23	3/21	10:13	Detension Basin	X		1	P	G	X	As per Imelda
2	24	3/21	10:20	UPCANYON	X		1	P	G	X	@FQ Lab
3	25	3/21	10:36	Culvert Inlet	X		1	P	G	X	samples were
4											pre-filtered and
5											buffered before
6											submitting to
7											week. on 3/27/12
8											@ 11:40 am
9											Fedex
10											per

Relinquished By: (Signature and Printed Name) WANG, ZHAOHUI — Received By: (Signature and Printed Name) — Date: 3/26/2012 — Time: 11:13 am

Relinquished By: (Signature and Printed Name) — Received By: (Signature and Printed Name) — Date: 3/27/12 — Time: 09:15

Relinquished By: (Signature and Printed Name) — Received By: (Signature and Printed Name) — Date: — Time:

SPECIAL INSTRUCTIONS:

SAMPLE DISPOSITION:

1. Samples returned to client? YES NO
2. Samples will not be stored over 30 days, unless additional storage time is requested.
3. Storage time requested: _____ days

By _____ Date _____

Food Quality Lab

3375 Koapaka Street, G314
Honolulu, HI 96819
Phone: 808-839-9444, Fax: 808-839-9744

AECOM
1001 Bishop St., Suite 1600
Honolulu, HI, 96813
Attn:Mark Hofferbert
Project Name: WGSL Stormwater
PO No: 6246625.02

CERTIFICATE OF ANALYSIS

Received: 03/21/2012 @ 12:10 PM
Completed: 04/06/2012 @
Project Number: 120321-2568-013
Temperature: 4.0 °C
Client Project No: 6246625.02

Sample ID: 120321-2568-013-01 | **Water Sample -23 Detention Basin** | **Sampled: 3/21/2012 @ 10:13 AM** | **Sampler: Katie Langford**

Analysis	Results	Units	MDL	Test Method	Analyzed	By
Biochemical Oxygen Demand, 5-day	1.8	mg/L	1.0	SM 5210 B	03/21/2012	LS
Chromium 6+	See Attached	ug/L	0.030	EPA 218.6	04/04/2012	Weck

Approved By: Jonelle D. Evans
Friday, April 06, 2012

14339

FQ Labs.

3375 Koapaka St., G314
Honolulu, HI 96819
808-839-9444 Fax 808-839-9744

CHAIN OF CUSTODY AND ANALYSIS REQUEST

DATE _____ PAGE _____ OF _____

LOG BOOK NO. _____ FILE NO. _____ LAB NO. _____

CLIENT NAME: **AECOM Technical Services, Inc.**

PROJECT NAME: **WGSL Stormwater** PROJECT NO: **6024662** P.O. NO: **60246625.02**

ADDRESS: **1001 Bishop St., Suite 1600, Honolulu, HI 96813**

PROJECT MANAGER: **Mark Hofferbert** PHONE NO. **523-8874** FAX NO. **523-8950**

SAMPLER NAME: Katie Langford (Printed) (Signature) KLangford

TAT(Analytical Turn Around Time) 0 = Same day; 1 = 24 Hour; 2 = 48 Hour; (Etc.) N = NORMAL

CONTAINER TYPES: B = Brass, G = Glass, P = Plastic, V = VOA Vial, O = Other:

ANALYSES REQUESTED:

AIRBILL NO: Hand delivered

COOLER TEMP: 4°C

PRESERVED: _____

REMARKS: Report to: Betsy Sara (betsy.sara@testamericainc.com)

	SAMPLE NO.	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX: WATER	MATRIX: SOIL	MATRIX: SLUDGE	MATRIX: OTHER	CONTAINER: #	CONTAINER: TYPE	CONTAINER: GRAB/COMP	ON-SITE: PH	ON-SITE: CLZ	BOD SM5210	CrVI 218.6					SAMPLE CONDITION/ COMMENTS:
1	23	3/21/12	10:13	Detention Basin	X				1	poly	X			X	X					preserve&analyze CrVI
2																				* NO DISCHARGE
3																				pH - [illegible]
4																				[illegible] (AMBER)
5																				
6																				
7																				
8																				
9																				
10																				

Relinquished By (Signature and Printed Name)	Received By (Signature and Printed Name)	Date	Time
Katie Langford	Katie Langford Mary Hatch Mary Hatch	3/21/12	1210

SPECIAL INSTRUCTIONS:

SAMPLE DISPOSITION:
1. Samples returned to client? YES NO
2. Samples will not be stored over 30 days, unless additional storage time is requested.
3. Storage time requested: _____ days

By _____ Date _____

LAB COPY

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FOOD, WATER, SOIL & ENVIRONMENTAL TESTING & CONSULTING

QC Report

AECOM
1001 Bishop St., Suite 1600
Honolulu, HI, 96813
Attn: Mark Hofferbert
Project Name: WGSL Stormwater

Received: 3/21/2012
Completed: 4/6/2012
Project Number: 120321-2568-015

Analysis	QC Test	Results	MDL	Units	GGA Range	Source Result	% Rec	Rec Limits	% RPD	RPD Limit	Qualifier
Glucose-Glutamic Acid Check (GGA) 3/21/2012											
BOD	Blank	0.04	1	mg/L	-	-	-	-	-	-	
BOD	GGA	209	1	mg/L	198±30.5	-	-	-	-	-	Pass

The results are within the control limit range of 198 ± 30.5

Notes:

B1	Target Analyte detected in method blank was above the method detection limit.
D8	The duplicate exceeded the acceptance limit due to sample matrix effects.
dry	Sample results reported on a dry weight basis.
LCS	Laboratory Control Standard
M8	The matrix spike was below the acceptance limits. See Blank Spike (LCS)
M9	The matrix spike was above the acceptance limits. See Blank Spike (LCS)
MDL	Method Detection Levels are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
ND	Not Detected
NR	Not Reported
R8	The LCS recovery was below the acceptance limits.
R9	The LCS recovery was above the acceptance limits.
REC	Recovery
RPD	Relative Percent Difference

CERTIFICATE OF ANALYSIS

Client:	Food Quality Labs 3375 Koapaka Street, G314 Honolulu HI, 96819	**Report Date:**	04/06/12 13:52
		Received Date:	03/27/12 09:15
		Turn Around:	Normal
Attention:	Imelda Quarto	**Client Project:**	AECOM WGSL Stormwater
Phone:	(808) 839-9444		
Fax:	(808) 839-9744		
Work Order(s):	2C27022		

NELAP #04229CA ELAP#1132 NEVADA #CA211 HAWAII LACSD #10143

The results in this report apply to the samples analyzed in accordance with the Chain of Custody document. Weck Laboratories, Inc. certifies that the test results meet all NELAC requirements unless noted in the case narrative. This analytical report is confidential and is only intended for the use of Weck Laboratories, Inc. and its client. This report contains the Chain of Custody document, which is an Integral part of it, and can only be reproduced in full with the authorization of Weck Laboratories, Inc.

Dear Imelda Quarto :

Enclosed are the results of analyses for samples received 03/27/12 09:15 with the Chain of Custody document. The samples were received in good condition, at 4.0 °C and on ice. All analysis met the method criteria except as noted below or in the report with data qualifiers.

Case Narrative:

Reviewed by:

Ana Carrera For Hai Van Nguyen
Project Manager

Food Quality Labs
3375 Koapaka Street, G314
Honolulu HI, 96819

Date Received: 03/27/12 09:15
Date Reported: 04/06/12 13:52

2C27022-01 Detension Basin

Sampled: 03/21/12 10:13 Sampled By: client Matrix: Water

Hexavalent Chromium by IC

Method: EPA 218.6 Batch: W2D0185 Prepared: 03/21/12 12:00 Analyst: mac

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Chromium 6+	2.3	0.030	1.5	ug/l	5	04/04/12 15:12	

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Food Quality Labs
3375 Koapaka Street, G314
Honolulu HI, 96819

Date Received: 03/27/12 09:15
Date Reported: 04/06/12 13:52

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Sampled by:	Sample Comments	Lab ID	Matrix	Date Sampled
Detension Basin	client		2C27022-01	Water	03/21/12 10:13
UP Canyon	client		2C27022-02	Water	03/21/12 10:20
Culvert Inlet	client		2C27022-03	Water	03/21/12 10:36

ANALYSES

Hexavalent Chromium by IC

Food Quality Labs
3375 Koapaka Street, G314
Honolulu HI, 96819

Date Received: 03/27/12 09:15
Date Reported: 04/06/12 13:52

QUALITY CONTROL SECTION

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Food Quality Labs
3375 Koapaka Street, G314
Honolulu HI, 96819

Date Received: 03/27/12 09:15
Date Reported: 04/06/12 13:52

Hexavalent Chromium by IC - Quality Control

Batch W2D0185 - EPA 218.6

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W2D0185-BLK1)				Analyzed: 04/04/12 15:12						
Chromium 6+	ND	0.30	ug/l							
LCS (W2D0185-BS1)				Analyzed: 04/04/12 15:12						
Chromium 6+	4.98	0.30	ug/l	5.00		100	90-110			
Matrix Spike (W2D0185-MS1)	Source: 2D04009-01			Analyzed: 04/04/12 15:12						
Chromium 6+	5.06	0.30	ug/l	5.00	0.0291	101	88-112			
Matrix Spike Dup (W2D0185-MSD1)	Source: 2D04009-01			Analyzed: 04/04/12 15:12						
Chromium 6+	5.15	0.30	ug/l	5.00	0.0291	102	88-112	2	10	

Food Quality Labs
3375 Koapaka Street, G314
Honolulu HI, 96819

Date Received: 03/27/12 09:15
Date Reported: 04/06/12 13:52

Notes and Definitions

ND	NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL)
NR	Not Reportable
Dil	Dilution
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
% Rec	Percent Recovery
Sub	Subcontracted analysis, original report available upon request
MDL	Method Detection Limit
MDA	Minimum Detectable Activity
MRL	Method Reporting Limit

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

An Absence of Total Coliform meets the drinking water standards as established by the California Department of Health Services.

The Reporting Limit (RL) is referenced as the Laboratory's Practical Quantitation Limit (PQL) or the Detection Limit for Reporting Purposes (DLR).

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.

Weck Laboratories, Inc 14859 East Clark Avenue, City of Industry, California 91745-1396 (626) 336-2139 FAX (626) 336-2634
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FQ Labs.

3375 Koapaka St., G314
Honolulu, HI 96819
808-839-9444 Fax 808-839-9744

2C27022

CHAIN OF CUSTODY AND ANALYSIS REQUEST

DATE: _____ PAGE _____ OF _____

CUSTOMER NO. _____ LAB NO. _____

CLIENT NAME: FQ Labs EMAIL: Imelda@fqlab.com

ADDRESS: 3375 koapaka Street G314

PROJECT NAME: AECOM WGSL STORM Water PO NO: P.O. NO:

PROJECT MANAGER: IMELDA QUARTO PHONE NO: 808-839-9444 FAX NO: 808-839-9744.

SAMPLER NAME: (Printed) (Signature)

TAT(Analytical Turn Around Time) 0 = Same day; 1 = 24 Hour; 2 = 48 Hour; (Etc.) N = NORMAL

CONTAINER TYPES: B = Brass, G = Glass, P = Plastic, V = VOA Vial, O = Other:

ANALYSES REQUESTED: Chromium (VI) 218.6

AIRBILL NO: _____

COOLER TEMP: _____

PRESERVED: _____

REMARKS:

	SAMPLE NO.	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX: WATER	MATRIX: OTHER	CONTAINER: #	CONTAINER: TYPE	CONTAINER: GRAB/COMP	SAMPLE CONDITION/ COMMENTS:
1	23	3/21	10:13	Detension Basin	X		1	P	G	As per Imelda
2	24	3/21	10:20	UP CANYON	X		1	P	G	@FQ Lab
3	25	3/21	10:36	Culvert Inlet	X		1	P	G	samples were
4										pre-filtered and
5										buffered before
6										submitting to
7										week. on 3/27/12
8										@ 11:40 am
9										Fedex
10										PSL

Relinquished By: (Signature and Printed Name) WANG, ZHAOHUI Received By: (Signature and Printed Name) Date: 3/26/2012 Time: 11:13 am

Relinquished By: (Signature and Printed Name) Received By: (Signature and Printed Name) Date: Time:

Relinquished By: (Signature and Printed Name) Received By: (Signature and Printed Name) Date: 3/27/12 Time: 09215

SPECIAL INSTRUCTIONS:

SAMPLE DISPOSITION:

1. Samples returned to client? YES NO
2. Samples will not be stored over 30 days, unless additional storage time is requested.
3. Storage time requested: _____ days

By _____ Date _____

Food Quality Lab

3375 Koapaka Street, G314
Honolulu, HI 96819
Phone: 808-839-9444, Fax: 808-839-9744

AECOM
1001 Bishop St., Suite 1600
Honolulu, HI, 96813
Attn:Mark Hofferbert
Project Name: WGSL Stormwater
PO No: 6246625.02

CERTIFICATE OF ANALYSIS

Received: 03/21/2012 @ 12:10 PM
Completed: 04/06/2012 @
Project Number: 120321-2568-014
Temperature: 4.0 °C
Client Project No: 6246625.02

Sample ID: 120321-2568-014-01 | **Water Sample -24 Up Canyon** | **Sampled: 3/21/2012 @ 10:20 AM** | **Sampler: Didiar Dumas**

Analysis	Results	Units	MDL	Test Method	Analyzed	By
Biochemical Oxygen Demand, 5-day	13.0	mg/L	1.0	SM 5210 B	03/21/2012	LS
Chromium 6+	See Attached	ug/L	0.030	EPA 218.6	04/04/2012	Weck

Approved By: Omelda D. Ewards
Friday, April 06, 2012

14339

FQ Labs.

3375 Koapaka St., G314
Honolulu, HI 96819
808-839-9444 Fax 808-839-9744

CHAIN OF CUSTODY AND ANALYSIS REQUEST

DATE _____ PAGE _____ OF _____

LOG BOOK NO._____ FILE NO._____ LAB NO _____

CLIENT NAME: **AECOM Technical Services, Inc.**

PROJECT NAME: **WGSL Stormwater** PROJECT NO: **60246625** P.O. NO: **60246625.02**

ADDRESS: **1001 Bishop St., Suite 1600, Honolulu, HI 96813**

PROJECT MANAGER: **Mark Hofferbert** PHONE NO: **523-8874** FAX NO: **523-8950**

SAMPLER NAME: Katie Langford (Printed) (Signature) Katie Langford

TAT(Analytical Turn Around Time) 0 = Same day; 1 = 24 Hour; 2 = 48 Hour; (Etc.) N = NORMAL

CONTAINER TYPES: B = Brass, G = Glass, P = Plastic, V = VOA Vial, O = Other:

ANALYSES REQUESTED:

BOD	CrVI				
SM5210	218.6				

AIRBILL NO: hand delivered

COOLER TEMP: 4°C

PRESERVED: _____

REMARKS:
Report to: Betsy Sara (betsy.sara@testamericainc.com)

	SAMPLE NO.	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX: WATER	MATRIX: SOIL	MATRIX: SLUDGE	MATRIX: OTHER	CONTAINER: #	CONTAINER: TYPE	CONTAINER: BRASS/COMP	CoC SITE: PH	CoC SITE: CL2	SAMPLE CONDITION/ COMMENTS:
1	25	3/21/12	10:30	Culvert Inlet	X				1	poly	X			preserve&analyze CrVI
2														* NO DISCHARGE
3														MP - do need their own container
4														1L - WIDE mouth
5														
6														
7														
8														
9														
10														

Relinquished By (Signature and Printed Name)	Received By (Signature and Printed Name)	Date	Time
Katie Langford	Mary Kirk Mary Kirk	03/21/12	1240
Relinquished By (Signature and Printed Name)	Received By (Signature and Printed Name)	Date	Time
Relinquished By (Signature and Printed Name)	Received By (Signature and Printed Name)	Date	Time

SPECIAL INSTRUCTIONS:

SAMPLE DISPOSITION:
1. Samples returned to client? YES NO
2. Samples will not be stored over 30 days, unless additional storage time is requested.
3. Storage time requested: _____ days.

By _____ Date _____

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FOOD, WATER, SOIL & ENVIRONMENTAL TESTING & CONSULTING

QC Report

AECOM
1001 Bishop St., Suite 1600
Honolulu, HI, 96813
Attn: Mark Hofferbert
Project Name: WGSL Stormwater

Received: 3/21/2012
Completed: 4/6/2012
Project Number: 120321-2568-015

Analysis	QC Test	Results	MDL	Units	GGA Range	Source Result	% Rec	Rec Limits	% RPD	RPD Limit	Qualifier
Glucose-Glutamic Acid Check (GGA) 3/21/2012											
BOD	Blank	0.04	1	mg/L	-	-	-	-	-	-	
BOD	GGA	209	1	mg/L	198±30.5	-	-	-	-	-	Pass

The results are within the control limit range of 198 ± 30.5

Notes:

B1	Target Analyte detected in method blank was above the method detection limit.
D8	The duplicate exceeded the acceptance limit due to sample matrix effects.
dry	Sample results reported on a dry weight basis.
LCS	Laboratory Control Standard
M8	The matrix spike was below the acceptance limits. See Blank Spike (LCS)
M9	The matrix spike was above the acceptance limits. See Blank Spike (LCS)
MDL	Method Detection Levels are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
ND	Not Detected
NR	Not Reported
R8	The LCS recovery was below the acceptance limits.
R9	The LCS recovery was above the acceptance limits.
REC	Recovery
RPD	Relative Percent Difference

CERTIFICATE OF ANALYSIS

Client:	Food Quality Labs 3375 Koapaka Street, G314 Honolulu HI, 96819	**Report Date:**	04/06/12 13:52
		Received Date:	03/27/12 09:15
		Turn Around:	Normal
Attention:	Imelda Quarto	**Client Project:**	AECOM WGSL Stormwater
Phone:	(808) 839-9444		
Fax:	(808) 839-9744		
Work Order(s):	2C27022		

NELAP #04229CA ELAP#1132 NEVADA #CA211 HAWAII LACSD #10143

The results in this report apply to the samples analyzed in accordance with the Chain of Custody document. Weck Laboratories, Inc. certifies that the test results meet all NELAC requirements unless noted in the case narrative. This analytical report is confidential and is only intended for the use of Weck Laboratories, Inc. and its client. This report contains the Chain of Custody document, which is an integral part of it, and can only be reproduced in full with the authorization of Weck Laboratories, Inc.

Dear Imelda Quarto :

Enclosed are the results of analyses for samples received 03/27/12 09:15 with the Chain of Custody document. The samples were received in good condition, at 4.0 °C and on ice. All analysis met the method criteria except as noted below or in the report with data qualifiers.

Case Narrative:

Reviewed by:

Ana Carrera For Hai Van Nguyen
Project Manager

Food Quality Labs
3375 Koapaka Street, G314
Honolulu HI, 96819

Date Received: 03/27/12 09:15
Date Reported: 04/06/12 13:52

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Sampled by:	Sample Comments	Lab ID	Matrix	Date Sampled
Detension Basin	client		2C27022-01	Water	03/21/12 10:13
UP Canyon	client		2C27022-02	Water	03/21/12 10:20
Culvert Inlet	client		2C27022-03	Water	03/21/12 10:36

ANALYSES

Hexavalent Chromium by IC

Food Quality Labs
3375 Koapaka Street, G314
Honolulu HI, 96819

Date Received: 03/27/12 09:15
Date Reported: 04/06/12 13:52

2C27022-02 UP Canyon

Sampled: 03/21/12 10:20 Sampled By: client Matrix: Water

Hexavalent Chromium by IC

Method: EPA 218.6 Batch: W2D0185 Prepared: 03/21/12 12:00 Analyst: mac

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Chromium 6+	**20**	0.030	1.5	ug/l	5	04/04/12 15:12	

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Food Quality Labs
3375 Koapaka Street, G314
Honolulu HI, 96819

Date Received: 03/27/12 09:15
Date Reported: 04/06/12 13:52

QUALITY CONTROL SECTION

Weck Laboratories, Inc 14859 East Clark Avenue, City of Industry, California 91745-1396 (626) 336-2139 FAX (626) 336-2634
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Food Quality Labs
3375 Koapaka Street, G314
Honolulu HI, 96819

Date Received: 03/27/12 09:15
Date Reported: 04/06/12 13:52

Hexavalent Chromium by IC - Quality Control

Batch W2D0185 - EPA 218.6

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W2D0185-BLK1)				Analyzed: 04/04/12 15:12						
Chromium 6+	ND	0.30	ug/l							
LCS (W2D0185-BS1)				Analyzed: 04/04/12 15:12						
Chromium 6+	4.98	0.30	ug/l	5.00		100	90-110			
Matrix Spike (W2D0185-MS1)	Source: 2D04009-01			Analyzed: 04/04/12 15:12						
Chromium 6+	5.06	0.30	ug/l	5.00	0.0291	101	88-112			
Matrix Spike Dup (W2D0185-MSD1)	Source: 2D04009-01			Analyzed: 04/04/12 15:12						
Chromium 6+	5.15	0.30	ug/l	5.00	0.0291	102	88-112	2	10	

Weck Laboratories, Inc 14859 East Clark Avenue, City of Industry, California 91745-1396 (626) 336-2139 FAX (626) 336-2634
The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety
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Food Quality Labs
3375 Koapaka Street, G314
Honolulu HI, 96819

Date Received: 03/27/12 09:15
Date Reported: 04/06/12 13:52

Notes and Definitions

ND	NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL)
NR	Not Reportable
Dil	Dilution
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
% Rec	Percent Recovery
Sub	Subcontracted analysis, original report available upon request
MDL	Method Detection Limit
MDA	Minimum Detectable Activity
MRL	Method Reporting Limit

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

An Absence of Total Coliform meets the drinking water standards as established by the California Department of Health Services.

The Reporting Limit (RL) is referenced as the Laboratory's Practical Quantitation Limit (PQL) or the Detection Limit for Reporting Purposes (DLR).

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.

Weck Laboratories, Inc 14859 East Clark Avenue, City of Industry, California 91745-1396 (626) 336-2139 FAX (626) 336-2634
The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety
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FQ Labs.

3375 Koapaka St., G314
Honolulu, HI 96819
808-839-9444 Fax 808-839-9744

2C27022

CHAIN OF CUSTODY AND ANALYSIS REQUEST

DATE: _____ PAGE _____ OF _____

CUSTOMER NO. _____ LAB NO. _____

CLIENT NAME: FQ Labs EMAIL: Imelda@fqlab.com

ADDRESS: 335 koapaka Street G314

PROJECT NAME: AECOM WGSL STORMWATER PROJECT NO: P.O. NO:

PROJECT MANAGER: IMELDA QUARTO PHONE NO: 808-839-9444 FAX NO: 808-839-9744

SAMPLER NAME: (Printed) (Signature)

TAT(Analytical Turn Around Time) 0 = Same day; 1 = 24 Hour; 2 = 48 Hour; (Etc.) N = NORMAL

CONTAINER TYPES: B = Brass, G = Glass, P = Plastic, V = VOA Vial, O = Other:

ANALYSES REQUESTED: Chromium (VI) 218.6

AIRBILL NO: _____

COOLER TEMP: _____

PRESERVED: _____

REMARKS:

	SAMPLE NO.	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX: WATER	MATRIX: OTHER	CONTAINER: #	CONTAINER: TYPE	CONTAINER: GRAB/COMP	Chromium (VI) 218.6	SAMPLE CONDITION/ COMMENTS:
1	23	3/21	10:13	Detension Basin	X		1	P	G	X	As per Imelda
2	24	3/21	10:20	UP CANYON	X		1	P	G	X	@ FQ Lab
3	25	3/21	10:36	Culvert Inlet	X		1	P	G	X	samples were
4											pre-filtered and
5											buffered before
6											submitting to
7											week. hm 3/27/12
8											@ 11:40 am
9											Fedex
10											Y&R

Relinquished By: (Signature and Printed Name) WANG, ZHAOHUI — Received By: (Signature and Printed Name) — Date: 3/26/2012 — Time: 11:13 am

Relinquished By: (Signature and Printed Name) — Received By: (Signature and Printed Name) — Date: 03/27/12 — Time: 0925

Relinquished By: (Signature and Printed Name) — Received By: (Signature and Printed Name) — Date: — Time:

SPECIAL INSTRUCTIONS:

SAMPLE DISPOSITION:

1. Samples returned to client? YES NO
2. Samples will not be stored over 30 days, unless additional storage time is requested.
3. Storage time requested: _____ days

By _____ Date _____

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TESTAMERICA DENVER

LABORATORY USE ONLY
LAB JOB NO.
LOCATION
CONTAINERS

Chain of Custody / Analysis Request Form

Report to:	Project identification	Indicate analyses requested
Mark Hofferbert		
Company name: AECOM Technical Services, Inc.	Job name: WGSL Stormwater	
Address: 1001 Bishop St., Suite 1600	Job number: 60246625.02	
City: Honolulu / State: HI / ZIP: 96813	FedEx# 8096 3258 5712	
Phone: 808-523-8874 / Fax: 808-523-8950	Contact email address: mark.hofferbert@aecom.com, margie.thach@aecom.com / Date results needed: 2 weeks	
Sampler: Katie Langford / # samples in shipment: 1		

Page 1 of 107 Item no.	Client sample ID	DW/WP	GRAB	Matrix: Water	Soil	Wastewater	Drinking water	Sludge	Liquid	Solid	Oil	Other	Preservation method	Sampling: Date	Time	No. of containers	1664 Oil&Grease	TSS SM2540D	625 SVOCs*	COD 410.4, T. Phos 365.1, NH3 350.1 NO2-NO3 353.2, T. Nitrogen SM4500N	200.7, 245.1 Metals**					Laboratory ID no.
1	Detention Basin		X	X									HCl				X								☒ No Discharge
2	Detention Basin		X	X									varies					X	X	X	X				☒ Grab Sample
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									

Released by (print / sign)	Date / time released	Delivery method	Received by (print / sign)	Company / Agency affiliation	Date / time received	Condition noted
K Langford	3/21/12 / 2:00	FedEx	[signature]	TestAmerica	3/23/12 / 0900	
	/				/	
	/				/	

Comments: * SVOCs: alpha-terpineol, benzoic acid, p-cresol, pentachlorophenol, phenol. ** Metals: As, Cd, Fe, Pb, Hg, Se, Ag, Zn

Food Quality Labs to analyze BOD (SM 5210) and preserve CrVI (218.6); report to TA-Denver (PM: Betsy Sara).

Please check one:
☒ Dispose by lab
☐ Return to client
☐ Archive

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TESTAMERICA DENVER

LABORATORY USE ONLY
LAB JOB NO.
LOCATION
CONTAINERS

Chain of Custody / Analysis Request Form

Report to:	Project identification	
Mark Hofferbert		
Company name: AECOM Technical Services, Inc.	Job name: WGSL Stormwater	
Address: 1001 Bishop St., Suite 1600	Job number: 60246625.02	
City: Honolulu / State: HI / ZIP: 96813	Fedex 8963258 5712	
Phone: 808-523-8874 / Fax: 808-523-8950	Contact email address: mark.hofferbert@aecom.com, margie.thach@aecom.com	Date results needed: 2 weeks
Sampler: Katie Langford	# samples in shipment: 1	

Item no.	Client sample ID	COMP	GRAB	Matrix: Water	Soil	Wastewater	Drinking water	Sludge	Liquid	Solid	Oil	Other	Preservation method	Sampling: Date	Time	No. of containers	1664 Oil&Grease	TSS SM2540D	625 SVOCs*	COD 410.4, T. Phos 365.1, NH3 350.1 NO2-NO3 353.2, T. Nitrogen SM4500N	200.7, 245.1 Metals**	Laboratory ID no.
1	Culvert inlet		X	X									HCl	3/21/12	10:36	2	X					*NO DISCHARGE
2	Culvert inlet		X	X									varies	3/21/12	10:36	6		X	X	X	X	*ALL GRAB SAMPLES.
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						

Released by (print / sign)	Date / time released	Delivery method	Received by (print / sign)	Company / Agency affiliation	Date / time received	Condition noted
Katie Langford	3/21/12 2400	FedEx		TestAmerica	3/23/12 0900	
	/				/	
	/				/	

Comments: * SVOCs: alpha-terpineol, benzoic acid, p-cresol, pentachlorophenol, phenol. ** Metals: As, Cd, Fe, Pb, Hg, Se, Ag, Zn

Food Quality Labs to analyze BOD (SM 5210) and preserve CrVI (218.6); report to TA-Denver (PM: Betsy Sara).

Please check one:
☒ Dispose by lab
☐ Return to client
☐ Archive

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TESTAMERICA DENVER

4/8/12 Dm my 3/23

LABORATORY USE ONLY
LAB JOB NO.
LOCATION
CONTAINERS

Chain of Custody / Analysis Request Form

Report to:	Project identification	
Mark Hofferbert		
Company name: AECOM Technical Services, Inc.	Job name: WGSL Stormwater	
Address: 1001 Bishop St., Suite 1600	Job number: 60246625.02	
City: Honolulu / State: HI / ZIP: 96813	FedEx # 8996 3258 5712	
Phone: 808-523-8874 / Fax: 808-523-8950	Contact email address: mark.hofferbert@aecom.com, margie.thach@aecom.com	Date results needed: 2 weeks
Sampler: Didier Dumas	# samples in shipment: 1	

Indicate analyses requested

Item no.	Client sample ID	Sample type: GRAB	Matrix: Water	Soil	Wastewater	Drinking water	Sludge	Liquid	Solid	Oil	Other	Preservation method	Sampling: Date	Time	No. of containers	1664 Oil&Grease	TSS SM2540D	625 SVOCs*	COD 410.4, T. Phos 365.1, NH3 350.1 NO2-NO3 353.2, T. Nitrogen SM4500N	200.7, 245.1 Metals**					Laboratory ID no.
1	UPCANYON	X	X									HCl	3/21	10:19	2	X									✱ NO
2	UPCANYON	X	X									varies	3/21	10:23	6		X	X	X	X					DISCHARGE
3																									✱ GRAB
4																									ONLY
5																									
6																									
7																									
8																									
9																									
10																									

Released by (print / sign)	Date / time released	Delivery method	Received by (print / sign)	Company / Agency affiliation	Date / time received	Condition noted
Didier Dumas	3/21 /	FedEx		TestAmerica	3/22/12 / 0900	
	/				/	
	/				/	

Comments: * SVOCs: alpha-terpineol, benzoic acid, p-cresol, pentachlorophenol, phenol. ** Metals: As, Cd, Fe, Pb, Hg, Se, Ag, Zn

Food Quality Labs to analyze BOD (SM 5210) and preserve CrVI (218.6); report to TA-Denver (PM: Betsy Sara).

Please check one:
☒ Dispose by lab
☐ Return to client
☐ Archive

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FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: GY Detention Basin ~~East Outfall~~, WQSL

Site No.:

Sample Point: Detention Basin ~~East GY~~ (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 (hr: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)	Depth to Water (DTW) (from TOC)	Groundwater Elevation (site datum, from TOC)
(ft/msl)	(ft)	(ft/msl)

Total Well Depth (from TOC)	Stick Up (from ground elevation)	Casing ID	Casing Material
(ft)	(ft)	(in)	

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 ____
03/21/12	8.35						

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: Cloudy Odor: no odor Color: brownish Other: —

Weather Conditions (required daily, or as conditions change): Direction/Speed: no flow Outlook: sunny Precipitation: Y or (N)

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

FIELD COMMENTS

There is no discharge throughout the sampling process. Grab samples are collected at the east outfall (at the detention basin). There was no flow from the outfall. Sampling time: 10:13 am

(Still) water depth at east outfall: 1 inch @ 10:05 am

(Still) water depth at west outfall: 2 inch @ 10:07 am

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
03/21/12	Yue Qin		AECOM
3/21/12	Katie Langford	Klangford	AECOM

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

TAL-8029WM (0108)

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: Culvert Inlet, WBSL
Site No.:
Sample Point: Culvert Inlet (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 (hrsmin)	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:
Sampling Device: F
A- Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle
X-Other:
Filter Type:
A-In-line Disposable, B-Pressure, C-Vacuum, 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					
		2nd	2nd					
		3rd	3rd					
		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
032112	8.41						

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.*

FIELD COMMENTS

Sample Appearance: Cloudy Odor: No odor Color: light brown Other: —

Weather Conditions (required daily, or as conditions change): Direction/Speed: no flow Outlook: Sunny Precipitation: Y or (N)

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

There is no discharge throughout the sampling process. Grab samples are collected at the culvert inlet. Water depth at the inlet is 4.5 inch. There is no flow at the culvert.
Sampling time: 10:36 am.

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
03/21/2012	Yue Qin		AECOM
3/21/12	Katie J. Langford	Katie J. Langford	AECOM

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

TAL-8029WM (0108)

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: WSL (SW) UP CANYON

Site No.:

Sample Point: UPCANYON (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 D-Bailer
B-Peristaltic Pump E-Piston Pump

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

Sampling Device: F
C-QED Bladder Pump (F)-Dipper/Bottle

X-Other: Glass amber + Poly probottles

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

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 ____
03/21/12	8.30						

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.*

FIELD COMMENTS

Sample Appearance: Muddy water Odor: None Color: Brown Other: —

Weather Conditions (required daily, or as conditions change): Direction/Speed: ____ Outlook: Sunny Precipitation: Y or (N)

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

Grab Samples up canyon in muddy water.
No Discharge

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
03/21/12	Dave Hamsberger		AECOM
03/21/12	YUE QIN		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: 280-26964-1

Login Number: 26964
List Number: 1
Creator: Philipp, Nicholas A

List Source: TestAmerica Denver

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
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.	False	NO DATE/TIME FOR SAMPLE 1
Is the Field Sampler's name present on COC?	True	
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	

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ANALYTICAL REPORT

Job Number: 280-26403-1

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
3/29/2012 3:56 PM

Betsy A Sara
Project Manager II
betsy.sara@testamericainc.com
03/29/2012

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 E87667.

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

TestAmerica Laboratories, Inc.
TestAmerica Denver 4955 Yarrow Street, Arvada, CO 80002
Tel (303) 736-0100 Fax (303) 431-7171 www.testamericainc.com

ACCREDITED IN ACCORDANCE WITH nelac

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CASE NARRATIVE

Client: Waste Management

Project: 995|Waimanalo Gulch LF

Report Number: 280-26403-1

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 samples were received on 03/08/2012 and 03/09/2012; the samples arrived in good condition, properly preserved and on ice. The temperatures of the cooler at receipt were 3.8C, 5.3C, 2.1C and 3.9 C.

Holding Times

All holding times were met.

Method Blanks

HEM Method 1664A and Ammonia Method 350.1 were detected in the Method Blanks below the project established reporting limits. No corrective action is taken for any values in Method Blanks that are below the requested reporting limits.

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 and Method 1664A due to insufficient sample volume; however, LCS/LCSD pairs were analyzed to demonstrate method precision and accuracy.

Sample SOUTHERN CHANNEL was selected to fulfill the laboratory batch quality control requirements for Method350.1. Analysis of the laboratory generated MS/MSD for this sample exhibited recoveries of Ammonia below the lower control limit indicating the possible presence of a matrix interference.

Sample DETENTION BASIN EASTERN OUTFALL was selected to fulfill the laboratory batch quality control requirements for Method 351.2. Analysis of the laboratory generated MS/MSD for this sample exhibited recoveries of TKN below the lower control limit indicating the possible presence of a matrix interference.

The Matrix Spike and Matrix Spike Duplicate performed on a sample from another client exhibited recoveries outside control limits for Total Phosphorus Method 365.1. Because the corresponding Laboratory Control Sample and the Method Blank sample were within control limits, this anomaly may be due to matrix interference and no corrective action was taken.

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

Organics

The Method 625 surrogate recovery of Terphenyl-d14 for the sample CULVERT was outside control limits. Because evidence of matrix interferences was not obvious, the sample was re-extracted and reanalyzed. The surrogate was outside of the control limits upon re-extraction and reanalysis therefore confirming matrix interference. Only the original results are reported in this submission.

General Chemistry

Due to the matrix, the initial volumes used for the samples UPCANYON and CULVERT for Method 1664A analysis deviated from the

standard procedure. The reporting limits (RLs) have been adjusted proportionately. The samples were muddy.

Due to the matrix, the initial volumes used for the samples UPCANYON, CULVERT for TSS analysis deviated from the standard procedure. The reporting limits (RLs) have been adjusted proportionately.

General Comments

The analysis for Biochemical Oxygen Demand (BOD) was performed at TestAmerica's Honolulu facility.
TestAmerica Honolulu
99-193 Aiea Heights Drive
Suite 121
Aiea, HI 96701
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: 280-26403-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-26403-1	**SOUTHERN CHANNEL**					
Mercury		0.000035	J	0.00020	mg/L	245.1
Field pH		7.78			SU	Field Sampling
HEM		1.9	J B	5.0	mg/L	1664A
Ammonia		0.059	J B	0.10	mg/L	350.1
Nitrogen, Kjeldahl		0.83		0.50	mg/L	351.2
Nitrate Nitrite as N		6.6		0.10	mg/L	353.2
Phosphorus, Total		0.22		0.050	mg/L	365.1
Chemical Oxygen Demand		34		20	mg/L	410.4
Total Suspended Solids		30		4.0	mg/L	SM 2540D
Nitrogen, Total		7.4		0.10	mg/L	Total Nitrogen
Total Recoverable						
Cadmium		0.00052	J	0.0050	mg/L	200.7 Rev 4.4
Iron		23		0.10	mg/L	200.7 Rev 4.4
Lead		0.0035	J	0.0090	mg/L	200.7 Rev 4.4
Zinc		0.024		0.020	mg/L	200.7 Rev 4.4
280-26403-2	**UPCANYON**					
Mercury		0.00029		0.00020	mg/L	245.1
Field pH		6.90			SU	Field Sampling
HEM		14	B	8.8	mg/L	1664A
Ammonia		0.19	B	0.10	mg/L	350.1
Nitrogen, Kjeldahl		4.1		0.50	mg/L	351.2
Nitrate Nitrite as N		3.1		0.10	mg/L	353.2
Phosphorus, Total		0.43		0.050	mg/L	365.1
Chemical Oxygen Demand		58		20	mg/L	410.4
Total Suspended Solids		660		18	mg/L	SM 2540D
Nitrogen, Total		7.2		0.10	mg/L	Total Nitrogen
Total Recoverable						
Cadmium		0.00067	J	0.0050	mg/L	200.7 Rev 4.4
Iron		170		0.10	mg/L	200.7 Rev 4.4
Lead		0.014		0.0090	mg/L	200.7 Rev 4.4
Zinc		0.12		0.020	mg/L	200.7 Rev 4.4

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-26403-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-26403-3	**DETENTION BASIN EASTERN OUTFALL**					
Field pH		8.08			SU	Field Sampling
HEM		1.4	J B	5.0	mg/L	1664A
Ammonia		0.025	J B	0.10	mg/L	350.1
Nitrogen, Kjeldahl		0.59		0.50	mg/L	351.2
Nitrate Nitrite as N		7.4		0.10	mg/L	353.2
Phosphorus, Total		0.20		0.050	mg/L	365.1
Chemical Oxygen Demand		39		20	mg/L	410.4
Nitrogen, Total		8.0		0.10	mg/L	Total Nitrogen
Total Recoverable						
Iron		0.34		0.10	mg/L	200.7 Rev 4.4
Zinc		0.0053	J	0.020	mg/L	200.7 Rev 4.4
280-26483-1	**CULVERT**					
Mercury		0.00026		0.00020	mg/L	245.1
Field pH		7.32			SU	Field Sampling
Field Temperature		22.7			Degrees C	Field Sampling
HEM		14	B	8.9	mg/L	1664A
Ammonia		0.19		0.10	mg/L	350.1
Nitrogen, Kjeldahl		3.4		0.50	mg/L	351.2
Nitrate Nitrite as N		2.4		0.10	mg/L	353.2
Chemical Oxygen Demand		50		20	mg/L	410.4
Total Suspended Solids		970		28	mg/L	SM 2540D
Nitrogen, Total		5.8		0.10	mg/L	Total Nitrogen
Total Recoverable						
Cadmium		0.00089	J	0.0050	mg/L	200.7 Rev 4.4
Iron		180		0.10	mg/L	200.7 Rev 4.4
Lead		0.020		0.0090	mg/L	200.7 Rev 4.4
Zinc		0.13		0.020	mg/L	200.7 Rev 4.4

METHOD SUMMARY

Client: Waste Management

Job Number: 280-26403-1

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	
Field Sampling	TAL DEN	EPA Field Sampling	
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: 280-26403-1

Method	Analyst	Analyst ID
40CFR136A 625	Hoffman, Michael G	MGH
40CFR136A 625	Schiller, Jon	JS
EPA 200.7 Rev 4.4	Harre, John K	JKH
EPA 200.7 Rev 4.4	Trudell, Lynn-Anne	LT
EPA 245.1	Ivey, Crystal L	CLI
EPA Field Sampling	Field, Sampler	FS
1664A 1664A	Gheorghe, Philip A	PAG
MCAWW 350.1	Scott, Samantha J	SJS
MCAWW 351.2	Woolley, Mark	MW
MCAWW 353.2	Scott, Samantha J	SJS
EPA 365.1	Taylor, Juli M	JMT
MCAWW 410.4	Allen, Andrew J	AJA
SM SM 2540D	Gheorghe, Philip A	PAG
EPA Total Nitrogen	Sullivan, Roxanne	RS
EPA 218.6	Lai, Steven	SL

SAMPLE SUMMARY

Client: Waste Management

Job Number: 280-26403-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-26403-1	SOUTHERN CHANNEL	Water	03/06/2012 1015	03/08/2012 0930
280-26403-2	UPCANYON	Water	03/06/2012 1040	03/08/2012 0930
280-26403-3	DETENTION BASIN EASTERN OUTFALL	Water	03/06/2012 1000	03/08/2012 0930
280-26483-1	CULVERT	Water	03/06/2012 1820	03/09/2012 0930

SAMPLE RESULTS

Client: Waste Management

Job Number: 280-26403-1

Client Sample ID: SOUTHERN CHANNEL

Lab Sample ID: 280-26403-1
Client Matrix: Water

Date Sampled: 03/06/2012 1015
Date Received: 03/08/2012 0930

625 Semivolatile Organic Compounds (GC/MS)

Analysis Method:	625	Analysis Batch:	280-111883	Instrument ID:	MSS_Y
Prep Method:	625	Prep Batch:	280-111029	Lab File ID:	Y6433.D
Dilution:	1.0			Initial Weight/Volume:	1054.7 mL
Analysis Date:	03/15/2012 0349			Final Weight/Volume:	1000 uL
Prep Date:	03/09/2012 1005			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-Fluorobiphenyl	86		36 - 120
2-Fluorophenol	84		30 - 120
2,4,6-Tribromophenol	98		50 - 120
Nitrobenzene-d5	93		45 - 120
Phenol-d5	87		36 - 120
Terphenyl-d14	53		52 - 120

Client: Waste Management

Job Number: 280-26403-1

Client Sample ID: UPCANYON

Lab Sample ID: 280-26403-2
Client Matrix: Water

Date Sampled: 03/06/2012 1040
Date Received: 03/08/2012 0930

625 Semivolatile Organic Compounds (GC/MS)

Analysis Method:	625	Analysis Batch:	280-111883	Instrument ID:	MSS_Y
Prep Method:	625	Prep Batch:	280-111029	Lab File ID:	Y6434.D
Dilution:	1.0			Initial Weight/Volume:	1050.8 mL
Analysis Date:	03/15/2012 0409			Final Weight/Volume:	1000 uL
Prep Date:	03/09/2012 1005			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-Fluorobiphenyl	80		36 - 120
2-Fluorophenol	81		30 - 120
2,4,6-Tribromophenol	99		50 - 120
Nitrobenzene-d5	86		45 - 120
Phenol-d5	86		36 - 120
Terphenyl-d14	82		52 - 120

Client: Waste Management

Job Number: 280-26403-1

Client Sample ID: DETENTION BASIN EASTERN OUTFALL

Lab Sample ID: 280-26403-3
Client Matrix: Water

Date Sampled: 03/06/2012 1000
Date Received: 03/08/2012 0930

625 Semivolatile Organic Compounds (GC/MS)

Analysis Method:	625	Analysis Batch:	280-111883	Instrument ID:	MSS_Y
Prep Method:	625	Prep Batch:	280-111029	Lab File ID:	Y6435.D
Dilution:	1.0			Initial Weight/Volume:	1053 mL
Analysis Date:	03/15/2012 0428			Final Weight/Volume:	1000 uL
Prep Date:	03/09/2012 1005			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-Fluorobiphenyl	83		36 - 120
2-Fluorophenol	75		30 - 120
2,4,6-Tribromophenol	94		50 - 120
Nitrobenzene-d5	91		45 - 120
Phenol-d5	73		36 - 120
Terphenyl-d14	75		52 - 120

Client: Waste Management

Job Number: 280-26403-1

Client Sample ID: CULVERT

Lab Sample ID: 280-26483-1
Client Matrix: Water

Date Sampled: 03/06/2012 1820
Date Received: 03/09/2012 0930

625 Semivolatile Organic Compounds (GC/MS)

Analysis Method:	625	Analysis Batch:	280-112258	Instrument ID:	MSS_B
Prep Method:	625	Prep Batch:	280-111377	Lab File ID:	B0180.D
Dilution:	1.0			Initial Weight/Volume:	1007.1 mL
Analysis Date:	03/16/2012 1930			Final Weight/Volume:	1000 uL
Prep Date:	03/12/2012 2020			Injection Volume:	0.5 uL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Alpha-Terpineol	ND		0.0020	0.010
Benzoic acid	ND		0.0099	0.050
p-Cresol	ND		0.00025	0.010
Pentachlorophenol	ND		0.020	0.060
Phenol	ND		0.0020	0.010

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	87		36 - 120
2-Fluorophenol	83		30 - 120
2,4,6-Tribromophenol	98		50 - 120
Nitrobenzene-d5	91		45 - 120
Phenol-d5	87		36 - 120
Terphenyl-d14	32	X	52 - 120

Client: Waste Management

Job Number: 280-26403-1

Client Sample ID: SOUTHERN CHANNEL

Lab Sample ID: 280-26403-1
Client Matrix: Water

Date Sampled: 03/06/2012 1015
Date Received: 03/08/2012 0930

218.6 Chromium, Hexavalent (Ion Chromatography)-Dissolved

Analysis Method:	218.6	Analysis Batch:	440-13750	Instrument ID:	IC-16
	N/A	Prep Batch:	N/A	Lab File ID:	440-0003195-010_TAI
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	03/16/2012 1747			Final Weight/Volume:	10 mL
Prep Date:	N/A			Injection Volume:	1 uL

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

Client: Waste Management

Job Number: 280-26403-1

Client Sample ID: UPCANYON

Lab Sample ID: 280-26403-2
Client Matrix: Water

Date Sampled: 03/06/2012 1040
Date Received: 03/08/2012 0930

218.6 Chromium, Hexavalent (Ion Chromatography)-Dissolved

Analysis Method:	218.6	Analysis Batch:	440-13750	Instrument ID:	IC-16
	N/A	Prep Batch:	N/A	Lab File ID:	440-0003195-008_TAI
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	03/16/2012 1725			Final Weight/Volume:	10 mL
Prep Date:	N/A			Injection Volume:	1 uL

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

Client: Waste Management

Job Number: 280-26403-1

Client Sample ID: DETENTION BASIN EASTERN OUTFALL

Lab Sample ID: 280-26403-3

Client Matrix: Water

Date Sampled: 03/06/2012 1000

Date Received: 03/08/2012 0930

218.6 Chromium, Hexavalent (Ion Chromatography)-Dissolved

Analysis Method:	218.6	Analysis Batch:	440-13750	Instrument ID:	IC-16
	N/A	Prep Batch:	N/A	Lab File ID:	440-0003195-009_TAI
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	03/16/2012 1736			Final Weight/Volume:	10 mL
Prep Date:	N/A			Injection Volume:	1 uL

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

Client: Waste Management

Job Number: 280-26403-1

Client Sample ID: CULVERT

Lab Sample ID: 280-26483-1
Client Matrix: Water

Date Sampled: 03/06/2012 1820
Date Received: 03/09/2012 0930

218.6 Chromium, Hexavalent (Ion Chromatography)-Dissolved

Analysis Method:	218.6	Analysis Batch:	440-13750	Instrument ID:	IC-16
	N/A	Prep Batch:	N/A	Lab File ID:	440-0003195-011_TAI
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	03/16/2012 1758			Final Weight/Volume:	10 mL
Prep Date:	N/A			Injection Volume:	1 uL

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

Client: Waste Management

Job Number: 280-26403-1

Client Sample ID: SOUTHERN CHANNEL

Lab Sample ID: 280-26403-1
Client Matrix: Water

Date Sampled: 03/06/2012 1015
Date Received: 03/08/2012 0930

200.7 Rev 4.4 Metals (ICP)-Total Recoverable

Analysis Method:	200.7 Rev 4.4	Analysis Batch:	280-111597	Instrument ID:	MT_026
Prep Method:	200.7	Prep Batch:	280-111038	Lab File ID:	26a4031312.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	03/13/2012 2303			Final Weight/Volume:	50 mL
Prep Date:	03/13/2012 1400				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Arsenic	ND		0.0044	0.015
Cadmium	0.00052	J	0.00045	0.0050
Lead	0.0035	J	0.0026	0.0090
Selenium	ND		0.0049	0.015
Zinc	0.024		0.0045	0.020
Silver	ND		0.00093	0.010

Analysis Method:	200.7 Rev 4.4	Analysis Batch:	280-111807	Instrument ID:	MT_026
Prep Method:	200.7	Prep Batch:	280-111038	Lab File ID:	26a031412.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	03/14/2012 1313			Final Weight/Volume:	50 mL
Prep Date:	03/13/2012 1400				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Iron	23		0.022	0.10

245.1 Mercury (CVAA)

Analysis Method:	245.1	Analysis Batch:	280-111565	Instrument ID:	MT_033
Prep Method:	245.1	Prep Batch:	280-111215	Lab File ID:	120313ab.txt
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	03/13/2012 1402			Final Weight/Volume:	30 mL
Prep Date:	03/13/2012 0945				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	0.000035	J	0.000027	0.00020

Client: Waste Management

Job Number: 280-26403-1

Client Sample ID: UPCANYON

Lab Sample ID: 280-26403-2
Client Matrix: Water

Date Sampled: 03/06/2012 1040
Date Received: 03/08/2012 0930

200.7 Rev 4.4 Metals (ICP)-Total Recoverable

Analysis Method:	200.7 Rev 4.4	Analysis Batch:	280-111597	Instrument ID:	MT_026
Prep Method:	200.7	Prep Batch:	280-111038	Lab File ID:	26a4031312.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	03/13/2012 2305			Final Weight/Volume:	50 mL
Prep Date:	03/13/2012 1400				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Arsenic	ND		0.0044	0.015
Cadmium	0.00067	J	0.00045	0.0050
Lead	0.014		0.0026	0.0090
Selenium	ND		0.0049	0.015
Zinc	0.12		0.0045	0.020
Silver	ND		0.00093	0.010

Analysis Method:	200.7 Rev 4.4	Analysis Batch:	280-111807	Instrument ID:	MT_026
Prep Method:	200.7	Prep Batch:	280-111038	Lab File ID:	26a031412.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	03/14/2012 1316			Final Weight/Volume:	50 mL
Prep Date:	03/13/2012 1400				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Iron	170		0.022	0.10

245.1 Mercury (CVAA)

Analysis Method:	245.1	Analysis Batch:	280-111565	Instrument ID:	MT_033
Prep Method:	245.1	Prep Batch:	280-111215	Lab File ID:	120313ab.txt
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	03/13/2012 1404			Final Weight/Volume:	30 mL
Prep Date:	03/13/2012 0945				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	0.00029		0.000027	0.00020

Client: Waste Management

Job Number: 280-26403-1

Client Sample ID: DETENTION BASIN EASTERN OUTFALL

Lab Sample ID: 280-26403-3
Client Matrix: Water

Date Sampled: 03/06/2012 1000
Date Received: 03/08/2012 0930

200.7 Rev 4.4 Metals (ICP)-Total Recoverable

Analysis Method:	200.7 Rev 4.4	Analysis Batch:	280-111597	Instrument ID:	MT_026
Prep Method:	200.7	Prep Batch:	280-111038	Lab File ID:	26a4031312.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	03/13/2012 2308			Final Weight/Volume:	50 mL
Prep Date:	03/13/2012 1400				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Arsenic	ND		0.0044	0.015
Cadmium	ND		0.00045	0.0050
Lead	ND		0.0026	0.0090
Selenium	ND		0.0049	0.015
Zinc	0.0053	J	0.0045	0.020
Silver	ND		0.00093	0.010

Analysis Method:	200.7 Rev 4.4	Analysis Batch:	280-111807	Instrument ID:	MT_026
Prep Method:	200.7	Prep Batch:	280-111038	Lab File ID:	26a031412.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	03/14/2012 1318			Final Weight/Volume:	50 mL
Prep Date:	03/13/2012 1400				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Iron	0.34		0.022	0.10

245.1 Mercury (CVAA)

Analysis Method:	245.1	Analysis Batch:	280-111565	Instrument ID:	MT_033
Prep Method:	245.1	Prep Batch:	280-111215	Lab File ID:	120313ab.txt
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	03/13/2012 1407			Final Weight/Volume:	30 mL
Prep Date:	03/13/2012 0945				

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

Client: Waste Management

Job Number: 280-26403-1

Client Sample ID: CULVERT

Lab Sample ID: 280-26483-1
Client Matrix: Water

Date Sampled: 03/06/2012 1820
Date Received: 03/09/2012 0930

200.7 Rev 4.4 Metals (ICP)-Total Recoverable

Analysis Method:	200.7 Rev 4.4	Analysis Batch:	280-112188	Instrument ID:	MT_026
Prep Method:	200.7	Prep Batch:	280-111449	Lab File ID:	26a031612.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	03/16/2012 1454			Final Weight/Volume:	50 mL
Prep Date:	03/16/2012 0645				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Arsenic	ND		0.0044	0.015
Cadmium	0.00089	J	0.00045	0.0050
Iron	180		0.022	0.10
Lead	0.020		0.0026	0.0090
Selenium	ND		0.0049	0.015
Zinc	0.13		0.0045	0.020
Silver	ND		0.00093	0.010

245.1 Mercury (CVAA)

Analysis Method:	245.1	Analysis Batch:	280-111565	Instrument ID:	MT_033
Prep Method:	245.1	Prep Batch:	280-111385	Lab File ID:	120313ab.txt
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	03/13/2012 1328			Final Weight/Volume:	30 mL
Prep Date:	03/13/2012 0945				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	0.00026		0.000027	0.00020

General Chemistry

Client Sample ID: SOUTHERN CHANNEL

Lab Sample ID: 280-26403-1
Client Matrix: Water

Date Sampled: 03/06/2012 1015
Date Received: 03/08/2012 0930

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
HEM	1.9	J B	mg/L	1.3	5.0	1.0	1664A
Analysis Batch: 280-111226	Analysis Date: 03/12/2012 0729						
Prep Batch: 280-111214	Prep Date: 03/12/2012 0702						
Ammonia	0.059	J B	mg/L	0.022	0.10	1.0	350.1
Analysis Batch: 280-111530	Analysis Date: 03/13/2012 1350						
Nitrogen, Kjeldahl	0.83		mg/L	0.077	0.50	1.0	351.2
Analysis Batch: 280-111943	Analysis Date: 03/15/2012 1653						
Prep Batch: 280-111759	Prep Date: 03/14/2012 1900						
Nitrate Nitrite as N	6.6		mg/L	0.019	0.10	1.0	353.2
Analysis Batch: 280-111532	Analysis Date: 03/13/2012 1350						
Phosphorus, Total	0.22		mg/L	0.0050	0.050	1.0	365.1
Analysis Batch: 280-112060	Analysis Date: 03/16/2012 1411						
Prep Batch: 280-112015	Prep Date: 03/16/2012 1210						
Chemical Oxygen Demand	34		mg/L	4.1	20	1.0	410.4
Analysis Batch: 280-111843	Analysis Date: 03/15/2012 1116						
Total Suspended Solids	30		mg/L	1.1	4.0	1.0	SM 2540D
Analysis Batch: 280-110958	Analysis Date: 03/08/2012 1805						
Nitrogen, Total	7.4		mg/L	0.042	0.10	1.0	Total Nitrogen
Analysis Batch: 280-112271	Analysis Date: 03/19/2012 1333						

General Chemistry

Client Sample ID: UPCANYON

Lab Sample ID: 280-26403-2
Client Matrix: Water

Date Sampled: 03/06/2012 1040
Date Received: 03/08/2012 0930

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
HEM	14	B	mg/L	8.8	8.8	1.0	1664A
Analysis Batch: 280-111226	Analysis Date: 03/12/2012 0729						
Prep Batch: 280-111214	Prep Date: 03/12/2012 0702						
Ammonia	0.19	B	mg/L	0.022	0.10	1.0	350.1
Analysis Batch: 280-111530	Analysis Date: 03/13/2012 1354						
Nitrogen, Kjeldahl	4.1		mg/L	0.077	0.50	1.0	351.2
Analysis Batch: 280-111943	Analysis Date: 03/15/2012 1654						
Prep Batch: 280-111759	Prep Date: 03/14/2012 1900						
Nitrate Nitrite as N	3.1		mg/L	0.019	0.10	1.0	353.2
Analysis Batch: 280-111532	Analysis Date: 03/13/2012 1354						
Phosphorus, Total	0.43		mg/L	0.0050	0.050	1.0	365.1
Analysis Batch: 280-112060	Analysis Date: 03/16/2012 1411						
Prep Batch: 280-112015	Prep Date: 03/16/2012 1210						
Chemical Oxygen Demand	58		mg/L	4.1	20	1.0	410.4
Analysis Batch: 280-111843	Analysis Date: 03/15/2012 1116						
Total Suspended Solids	660		mg/L	18	18	1.0	SM 2540D
Analysis Batch: 280-110958	Analysis Date: 03/08/2012 1805						
Nitrogen, Total	7.2		mg/L	0.042	0.10	1.0	Total Nitrogen
Analysis Batch: 280-112271	Analysis Date: 03/19/2012 1333						

General Chemistry

Client Sample ID: DETENTION BASIN EASTERN OUTFALL

Lab Sample ID: 280-26403-3
Client Matrix: Water

Date Sampled: 03/06/2012 1000
Date Received: 03/08/2012 0930

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
HEM	1.4	J B	mg/L	1.3	5.0	1.0	1664A
Analysis Batch: 280-111226	Analysis Date: 03/12/2012 0729						
Prep Batch: 280-111214	Prep Date: 03/12/2012 0702						
Ammonia	0.025	J B	mg/L	0.022	0.10	1.0	350.1
Analysis Batch: 280-111530	Analysis Date: 03/13/2012 1356						
Nitrogen, Kjeldahl	0.59		mg/L	0.077	0.50	1.0	351.2
Analysis Batch: 280-111943	Analysis Date: 03/15/2012 1655						
Prep Batch: 280-111759	Prep Date: 03/14/2012 1900						
Nitrate Nitrite as N	7.4		mg/L	0.019	0.10	1.0	353.2
Analysis Batch: 280-111532	Analysis Date: 03/13/2012 1356						
Phosphorus, Total	0.20		mg/L	0.0050	0.050	1.0	365.1
Analysis Batch: 280-112060	Analysis Date: 03/16/2012 1414						
Prep Batch: 280-112015	Prep Date: 03/16/2012 1210						
Chemical Oxygen Demand	39		mg/L	4.1	20	1.0	410.4
Analysis Batch: 280-111843	Analysis Date: 03/15/2012 1116						
Total Suspended Solids	ND		mg/L	1.1	4.0	1.0	SM 2540D
Analysis Batch: 280-110958	Analysis Date: 03/08/2012 1805						
Nitrogen, Total	8.0		mg/L	0.042	0.10	1.0	Total Nitrogen
Analysis Batch: 280-112271	Analysis Date: 03/19/2012 1333						

General Chemistry

Client Sample ID: CULVERT

Lab Sample ID: 280-26483-1
Client Matrix: Water

Date Sampled: 03/06/2012 1820
Date Received: 03/09/2012 0930

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
HEM	14	B	mg/L	8.9	8.9	1.0	1664A
Analysis Batch: 280-112216	Analysis Date: 03/19/2012 0926						
Prep Batch: 280-112192	Prep Date: 03/19/2012 0837						
Ammonia	0.19		mg/L	0.022	0.10	1.0	350.1
Analysis Batch: 280-112578	Analysis Date: 03/21/2012 1525						
Nitrogen, Kjeldahl	3.4		mg/L	0.077	0.50	1.0	351.2
Analysis Batch: 280-111943	Analysis Date: 03/15/2012 1700						
Prep Batch: 280-111759	Prep Date: 03/14/2012 1900						
Nitrate Nitrite as N	2.4		mg/L	0.019	0.10	1.0	353.2
Analysis Batch: 280-111932	Analysis Date: 03/15/2012 1340						
Phosphorus, Total	ND		mg/L	0.0050	0.050	1.0	365.1
Analysis Batch: 280-113525	Analysis Date: 03/28/2012 1600						
Prep Batch: 280-113349	Prep Date: 03/28/2012 1053						
Chemical Oxygen Demand	50		mg/L	4.1	20	1.0	410.4
Analysis Batch: 280-112220	Analysis Date: 03/19/2012 0948						
Total Suspended Solids	970		mg/L	28	28	1.0	SM 2540D
Analysis Batch: 280-111552	Analysis Date: 03/13/2012 1804						
Nitrogen, Total	5.8		mg/L	0.042	0.10	1.0	Total Nitrogen
Analysis Batch: 280-112271	Analysis Date: 03/19/2012 1333						

Field Service / Mobile Lab

Client Sample ID: SOUTHERN CHANNEL

Lab Sample ID: 280-26403-1
Client Matrix: Water

Date Sampled: 03/06/2012 1015
Date Received: 03/08/2012 0930

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed Date Prepared
Field pH	7.78		SU	1.0	Field Sampling	280-111461	03/06/2012 1015

Field Service / Mobile Lab

Client Sample ID: UPCANYON

Lab Sample ID: 280-26403-2
Client Matrix: Water

Date Sampled: 03/06/2012 1040
Date Received: 03/08/2012 0930

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed Date Prepared
Field pH	6.90		SU	1.0	Field Sampling	280-111461	03/06/2012 1040

Field Service / Mobile Lab

Client Sample ID: DETENTION BASIN EASTERN OUTFALL

Lab Sample ID: 280-26403-3

Client Matrix: Water

Date Sampled: 03/06/2012 1000

Date Received: 03/08/2012 0930

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed Date Prepared
Field pH	8.08		SU	1.0	Field Sampling	280-111461	03/06/2012 1000

Field Service / Mobile Lab

Client Sample ID: **CULVERT**

Lab Sample ID: 280-26483-1
Client Matrix: Water

Date Sampled: 03/06/2012 1820
Date Received: 03/09/2012 0930

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed Date Prepared
Field pH	7.32		SU	1.0	Field Sampling	280-111284	03/06/2012 2020
Field Temperature	22.7		Degrees C	1.0	Field Sampling	280-111284	03/06/2012 2020

DATA REPORTING QUALIFIERS

Client: Waste Management

Job Number: 280-26403-1

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.
	X	Surrogate is outside control limits
Metals		
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
General Chemistry		
	B	Compound was found in the blank and sample.
	F	MS/MSD Recovery or RPD exceeds the control limits
	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: 280-26403-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 280-111029					
LCS 280-111029/2-A	Lab Control Sample	T	Water	625	
LCSD 280-111029/3-A	Lab Control Sample Duplicate	T	Water	625	
MB 280-111029/1-A	Method Blank	T	Water	625	
280-26403-1	SOUTHERN CHANNEL	T	Water	625	
280-26403-2	UPCANYON	T	Water	625	
280-26403-3	DETENTION BASIN EASTERN OUTFALL	T	Water	625	
Prep Batch: 280-111377					
LCS 280-111377/2-A	Lab Control Sample	T	Water	625	
LCSD 280-111377/3-A	Lab Control Sample Duplicate	T	Water	625	
MB 280-111377/1-A	Method Blank	T	Water	625	
280-26483-1	CULVERT	T	Water	625	
Analysis Batch:280-111883					
LCS 280-111029/2-A	Lab Control Sample	T	Water	625	280-111029
LCSD 280-111029/3-A	Lab Control Sample Duplicate	T	Water	625	280-111029
MB 280-111029/1-A	Method Blank	T	Water	625	280-111029
280-26403-1	SOUTHERN CHANNEL	T	Water	625	280-111029
280-26403-2	UPCANYON	T	Water	625	280-111029
280-26403-3	DETENTION BASIN EASTERN OUTFALL	T	Water	625	280-111029
Analysis Batch:280-112258					
LCS 280-111377/2-A	Lab Control Sample	T	Water	625	280-111377
LCSD 280-111377/3-A	Lab Control Sample Duplicate	T	Water	625	280-111377
MB 280-111377/1-A	Method Blank	T	Water	625	280-111377
280-26483-1	CULVERT	T	Water	625	280-111377

Report Basis
T = Total

Client: Waste Management

Job Number: 280-26403-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-111038					
LCS 280-111038/2-A	Lab Control Sample	R	Water	200.7	
MB 280-111038/1-A	Method Blank	R	Water	200.7	
280-26368-H-1-B MS	Matrix Spike	R	Water	200.7	
280-26368-H-1-C MSD	Matrix Spike Duplicate	R	Water	200.7	
280-26403-1	SOUTHERN CHANNEL	R	Water	200.7	
280-26403-2	UPCANYON	R	Water	200.7	
280-26403-3	DETENTION BASIN EASTERN OUTFALL	R	Water	200.7	
Prep Batch: 280-111215					
LCS 280-111215/2-A	Lab Control Sample	T	Water	245.1	
MB 280-111215/1-A	Method Blank	T	Water	245.1	
280-26403-1	SOUTHERN CHANNEL	T	Water	245.1	
280-26403-2	UPCANYON	T	Water	245.1	
280-26403-3	DETENTION BASIN EASTERN OUTFALL	T	Water	245.1	
280-26403-3MS	Matrix Spike	T	Water	245.1	
280-26403-3MSD	Matrix Spike Duplicate	T	Water	245.1	
Prep Batch: 280-111385					
LCS 280-111385/2-A	Lab Control Sample	T	Water	245.1	
MB 280-111385/1-A	Method Blank	T	Water	245.1	
280-26483-1	CULVERT	T	Water	245.1	
280-26483-1MS	Matrix Spike	T	Water	245.1	
280-26483-1MSD	Matrix Spike Duplicate	T	Water	245.1	
Prep Batch: 280-111449					
LCS 280-111449/2-A	Lab Control Sample	R	Water	200.7	
MB 280-111449/1-A	Method Blank	R	Water	200.7	
280-26441-E-1-B MS	Matrix Spike	R	Water	200.7	
280-26441-E-1-C MSD	Matrix Spike Duplicate	R	Water	200.7	
280-26483-1	CULVERT	R	Water	200.7	

Client: Waste Management

Job Number: 280-26403-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-111565					
LCS 280-111215/2-A	Lab Control Sample	T	Water	245.1	280-111215
MB 280-111215/1-A	Method Blank	T	Water	245.1	280-111215
LCS 280-111385/2-A	Lab Control Sample	T	Water	245.1	280-111385
MB 280-111385/1-A	Method Blank	T	Water	245.1	280-111385
280-26403-1	SOUTHERN CHANNEL	T	Water	245.1	280-111215
280-26403-2	UPCANYON	T	Water	245.1	280-111215
280-26403-3	DETENTION BASIN EASTERN OUTFALL	T	Water	245.1	280-111215
280-26403-3MS	Matrix Spike	T	Water	245.1	280-111215
280-26403-3MSD	Matrix Spike Duplicate	T	Water	245.1	280-111215
280-26483-1	CULVERT	T	Water	245.1	280-111385
280-26483-1MS	Matrix Spike	T	Water	245.1	280-111385
280-26483-1MSD	Matrix Spike Duplicate	T	Water	245.1	280-111385
Analysis Batch:280-111597					
LCS 280-111038/2-A	Lab Control Sample	R	Water	200.7 Rev 4.4	280-111038
MB 280-111038/1-A	Method Blank	R	Water	200.7 Rev 4.4	280-111038
280-26368-H-1-B MS	Matrix Spike	R	Water	200.7 Rev 4.4	280-111038
280-26368-H-1-C MSD	Matrix Spike Duplicate	R	Water	200.7 Rev 4.4	280-111038
280-26403-1	SOUTHERN CHANNEL	R	Water	200.7 Rev 4.4	280-111038
280-26403-2	UPCANYON	R	Water	200.7 Rev 4.4	280-111038
280-26403-3	DETENTION BASIN EASTERN OUTFALL	R	Water	200.7 Rev 4.4	280-111038
Analysis Batch:280-111807					
LCS 280-111038/2-A	Lab Control Sample	R	Water	200.7 Rev 4.4	280-111038
MB 280-111038/1-A	Method Blank	R	Water	200.7 Rev 4.4	280-111038
280-26368-H-1-B MS	Matrix Spike	R	Water	200.7 Rev 4.4	280-111038
280-26368-H-1-C MSD	Matrix Spike Duplicate	R	Water	200.7 Rev 4.4	280-111038
280-26403-1	SOUTHERN CHANNEL	R	Water	200.7 Rev 4.4	280-111038
280-26403-2	UPCANYON	R	Water	200.7 Rev 4.4	280-111038
280-26403-3	DETENTION BASIN EASTERN OUTFALL	R	Water	200.7 Rev 4.4	280-111038
Analysis Batch:280-112188					
LCS 280-111449/2-A	Lab Control Sample	R	Water	200.7 Rev 4.4	280-111449
MB 280-111449/1-A	Method Blank	R	Water	200.7 Rev 4.4	280-111449
280-26441-E-1-B MS	Matrix Spike	R	Water	200.7 Rev 4.4	280-111449
280-26441-E-1-C MSD	Matrix Spike Duplicate	R	Water	200.7 Rev 4.4	280-111449
280-26483-1	CULVERT	R	Water	200.7 Rev 4.4	280-111449

Report Basis

R = Total Recoverable

T = Total

Client: Waste Management

Job Number: 280-26403-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Field Service / Mobile Lab					
Analysis Batch:280-111284					
280-26483-1	CULVERT	T	Water	Field Sampling	
Analysis Batch:280-111461					
280-26403-1	SOUTHERN CHANNEL	T	Water	Field Sampling	
280-26403-2	UPCANYON	T	Water	Field Sampling	
280-26403-3	DETENTION BASIN EASTERN OUTFALL	T	Water	Field Sampling	

Report Basis
T = Total

Client: Waste Management

Job Number: 280-26403-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-110958					
LCS 280-110958/2	Lab Control Sample	T	Water	SM 2540D	
LCSD 280-110958/3	Lab Control Sample Duplicate	T	Water	SM 2540D	
MB 280-110958/1	Method Blank	T	Water	SM 2540D	
280-26292-D-5 DU	Duplicate	T	Water	SM 2540D	
280-26403-1	SOUTHERN CHANNEL	T	Water	SM 2540D	
280-26403-2	UPCANYON	T	Water	SM 2540D	
280-26403-3	DETENTION BASIN EASTERN OUTFALL	T	Water	SM 2540D	
Prep Batch: 280-111214					
LCS 280-111214/2-A	Lab Control Sample	T	Water	1664A	
LCSD 280-111214/19-A	Lab Control Sample Duplicate	T	Water	1664A	
MB 280-111214/1-A	Method Blank	T	Water	1664A	
280-26403-1	SOUTHERN CHANNEL	T	Water	1664A	
280-26403-2	UPCANYON	T	Water	1664A	
280-26403-3	DETENTION BASIN EASTERN OUTFALL	T	Water	1664A	
Analysis Batch:280-111226					
LCS 280-111214/2-A	Lab Control Sample	T	Water	1664A	280-111214
LCSD 280-111214/19-A	Lab Control Sample Duplicate	T	Water	1664A	280-111214
MB 280-111214/1-A	Method Blank	T	Water	1664A	280-111214
280-26403-1	SOUTHERN CHANNEL	T	Water	1664A	280-111214
280-26403-2	UPCANYON	T	Water	1664A	280-111214
280-26403-3	DETENTION BASIN EASTERN OUTFALL	T	Water	1664A	280-111214
Analysis Batch:280-111530					
LCS 280-111530/57	Lab Control Sample	T	Water	350.1	
LCSD 280-111530/58	Lab Control Sample Duplicate	T	Water	350.1	
MB 280-111530/56	Method Blank	T	Water	350.1	
280-26403-1	SOUTHERN CHANNEL	T	Water	350.1	
280-26403-1MS	Matrix Spike	T	Water	350.1	
280-26403-1MSD	Matrix Spike Duplicate	T	Water	350.1	
280-26403-2	UPCANYON	T	Water	350.1	
280-26403-3	DETENTION BASIN EASTERN OUTFALL	T	Water	350.1	

Client: Waste Management

Job Number: 280-26403-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-111532					
LCS 280-111532/57	Lab Control Sample	T	Water	353.2	
LCSD 280-111532/58	Lab Control Sample Duplicate	T	Water	353.2	
MB 280-111532/56	Method Blank	T	Water	353.2	
280-26403-1	SOUTHERN CHANNEL	T	Water	353.2	
280-26403-1MS	Matrix Spike	T	Water	353.2	
280-26403-1MSD	Matrix Spike Duplicate	T	Water	353.2	
280-26403-2	UPCANYON	T	Water	353.2	
280-26403-3	DETENTION BASIN EASTERN OUTFALL	T	Water	353.2	
Analysis Batch:280-111552					
LCS 280-111552/2	Lab Control Sample	T	Water	SM 2540D	
LCSD 280-111552/3	Lab Control Sample Duplicate	T	Water	SM 2540D	
MB 280-111552/1	Method Blank	T	Water	SM 2540D	
280-26437-A-1 DU	Duplicate	T	Water	SM 2540D	
280-26483-1	CULVERT	T	Water	SM 2540D	
Prep Batch: 280-111759					
LCS 280-111759/1-A	Lab Control Sample	T	Water	351.2	
LCSD 280-111759/2-A	Lab Control Sample Duplicate	T	Water	351.2	
MB 280-111759/3-A	Method Blank	T	Water	351.2	
280-26403-1	SOUTHERN CHANNEL	T	Water	351.2	
280-26403-2	UPCANYON	T	Water	351.2	
280-26403-3	DETENTION BASIN EASTERN OUTFALL	T	Water	351.2	
280-26403-3MS	Matrix Spike	T	Water	351.2	
280-26403-3MSD	Matrix Spike Duplicate	T	Water	351.2	
280-26483-1	CULVERT	T	Water	351.2	
Analysis Batch:280-111843					
LCS 280-111843/3	Lab Control Sample	T	Water	410.4	
LCSD 280-111843/4	Lab Control Sample Duplicate	T	Water	410.4	
MB 280-111843/5	Method Blank	T	Water	410.4	
280-26403-1	SOUTHERN CHANNEL	T	Water	410.4	
280-26403-1MS	Matrix Spike	T	Water	410.4	
280-26403-1MSD	Matrix Spike Duplicate	T	Water	410.4	
280-26403-2	UPCANYON	T	Water	410.4	
280-26403-3	DETENTION BASIN EASTERN OUTFALL	T	Water	410.4	

Client: Waste Management

Job Number: 280-26403-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-111932					
LCS 280-111932/86	Lab Control Sample	T	Water	353.2	
LCSD 280-111932/87	Lab Control Sample Duplicate	T	Water	353.2	
MB 280-111932/85	Method Blank	T	Water	353.2	
280-26483-1	CULVERT	T	Water	353.2	
280-26483-1MS	Matrix Spike	T	Water	353.2	
280-26483-1MSD	Matrix Spike Duplicate	T	Water	353.2	
Analysis Batch:280-111943					
LCS 280-111759/1-A	Lab Control Sample	T	Water	351.2	280-111759
LCSD 280-111759/2-A	Lab Control Sample Duplicate	T	Water	351.2	280-111759
MB 280-111759/3-A	Method Blank	T	Water	351.2	280-111759
280-26403-1	SOUTHERN CHANNEL	T	Water	351.2	280-111759
280-26403-2	UPCANYON	T	Water	351.2	280-111759
280-26403-3	DETENTION BASIN EASTERN OUTFALL	T	Water	351.2	280-111759
280-26403-3MS	Matrix Spike	T	Water	351.2	280-111759
280-26403-3MSD	Matrix Spike Duplicate	T	Water	351.2	280-111759
280-26483-1	CULVERT	T	Water	351.2	280-111759
Prep Batch: 280-112015					
LCS 280-112015/1-A	Lab Control Sample	T	Water	365.2/365.3/365	
LCSD 280-112015/2-A	Lab Control Sample Duplicate	T	Water	365.2/365.3/365	
MB 280-112015/3-A	Method Blank	T	Water	365.2/365.3/365	
280-26365-E-1-E MS	Matrix Spike	T	Water	365.2/365.3/365	
280-26365-E-1-F MSD	Matrix Spike Duplicate	T	Water	365.2/365.3/365	
280-26403-1	SOUTHERN CHANNEL	T	Water	365.2/365.3/365	
280-26403-2	UPCANYON	T	Water	365.2/365.3/365	
280-26403-3	DETENTION BASIN EASTERN OUTFALL	T	Water	365.2/365.3/365	
Analysis Batch:280-112060					
LCS 280-112015/1-A	Lab Control Sample	T	Water	365.1	280-112015
LCSD 280-112015/2-A	Lab Control Sample Duplicate	T	Water	365.1	280-112015
MB 280-112015/3-A	Method Blank	T	Water	365.1	280-112015
280-26365-E-1-E MS	Matrix Spike	T	Water	365.1	280-112015
280-26365-E-1-F MSD	Matrix Spike Duplicate	T	Water	365.1	280-112015
280-26403-1	SOUTHERN CHANNEL	T	Water	365.1	280-112015
280-26403-2	UPCANYON	T	Water	365.1	280-112015
280-26403-3	DETENTION BASIN EASTERN OUTFALL	T	Water	365.1	280-112015

Client: Waste Management

Job Number: 280-26403-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Prep Batch: 280-112192					
LCS 280-112192/2-A	Lab Control Sample	T	Water	1664A	
LCSD 280-112192/3-A	Lab Control Sample Duplicate	T	Water	1664A	
MB 280-112192/1-A	Method Blank	T	Water	1664A	
280-26483-1	CULVERT	T	Water	1664A	
Analysis Batch:280-112216					
LCS 280-112192/2-A	Lab Control Sample	T	Water	1664A	280-112192
LCSD 280-112192/3-A	Lab Control Sample Duplicate	T	Water	1664A	280-112192
MB 280-112192/1-A	Method Blank	T	Water	1664A	280-112192
280-26483-1	CULVERT	T	Water	1664A	280-112192
Analysis Batch:280-112220					
LCS 280-112220/3	Lab Control Sample	T	Water	410.4	
LCSD 280-112220/4	Lab Control Sample Duplicate	T	Water	410.4	
MB 280-112220/5	Method Blank	T	Water	410.4	
280-26483-1	CULVERT	T	Water	410.4	
280-26483-1MS	Matrix Spike	T	Water	410.4	
280-26483-1MSD	Matrix Spike Duplicate	T	Water	410.4	
Analysis Batch:280-112271					
MB 280-112271/1	Method Blank	T	Water	Total Nitrogen	
280-26403-1	SOUTHERN CHANNEL	T	Water	Total Nitrogen	
280-26403-2	UPCANYON	T	Water	Total Nitrogen	
280-26403-3	DETENTION BASIN EASTERN OUTFALL	T	Water	Total Nitrogen	
280-26483-1	CULVERT	T	Water	Total Nitrogen	
Analysis Batch:280-112578					
LCS 280-112578/107	Lab Control Sample	T	Water	350.1	
LCSD 280-112578/108	Lab Control Sample Duplicate	T	Water	350.1	
MB 280-112578/106	Method Blank	T	Water	350.1	
280-26483-1	CULVERT	T	Water	350.1	
280-26573-F-6 MS	Matrix Spike	T	Water	350.1	
280-26573-F-6 MSD	Matrix Spike Duplicate	T	Water	350.1	
Prep Batch: 280-113349					
LCS 280-113349/1-A	Lab Control Sample	T	Water	365.2/365.3/365	
LCSD 280-113349/2-A	Lab Control Sample Duplicate	T	Water	365.2/365.3/365	
MB 280-113349/3-A	Method Blank	T	Water	365.2/365.3/365	
280-26483-1	CULVERT	T	Water	365.2/365.3/365	
280-26694-D-7-C MS	Matrix Spike	T	Water	365.2/365.3/365	
280-26694-D-7-D MSD	Matrix Spike Duplicate	T	Water	365.2/365.3/365	

Client: Waste Management

Job Number: 280-26403-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-113525					
LCS 280-113349/1-A	Lab Control Sample	T	Water	365.1	280-113349
LCSD 280-113349/2-A	Lab Control Sample Duplicate	T	Water	365.1	280-113349
MB 280-113349/3-A	Method Blank	T	Water	365.1	280-113349
280-26483-1	CULVERT	T	Water	365.1	280-113349
280-26694-D-7-C MS	Matrix Spike	T	Water	365.1	280-113349
280-26694-D-7-D MSD	Matrix Spike Duplicate	T	Water	365.1	280-113349

Report Basis
T = Total

HPLC/IC					
Analysis Batch:440-13750					
440-5418-A-1 MSD	Matrix Spike Duplicate	D	Water	218.6	
280-26403-1	SOUTHERN CHANNEL	D	Water	218.6	
280-26403-2	UPCANYON	D	Water	218.6	
280-26403-3	DETENTION BASIN EASTERN OUTFALL	D	Water	218.6	
280-26483-1	CULVERT	D	Water	218.6	

Report Basis
D = Dissolved

Surrogate Recovery Report

625 Semivolatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	FBP %Rec	2FP %Rec	TBP %Rec	NBZ %Rec	PHL %Rec	TPH %Rec
280-26403-1	SOUTHERN CHANNEL	86	84	98	93	87	53
280-26403-2	UPCANYON	80	81	99	86	86	82
280-26403-3	DETENTION BASIN EASTERN OUTFALL	83	75	94	91	73	75
280-26483-1	CULVERT	87	83	98	91	87	32X
MB 280-111029/1-A		71	78	91	86	76	92
MB 280-111377/1-A		80	87	98	92	91	106
LCS 280-111029/2-A		82	84	106	92	89	95
LCS 280-111377/2-A		81	88	106	93	92	100
LCSD 280-111029/3-A		84	86	111	94	90	101
LCSD 280-111377/3-A		82	77	102	91	74	94

Surrogate	Acceptance Limits
FBP = 2-Fluorobiphenyl	36-120
2FP = 2-Fluorophenol	30-120
TBP = 2,4,6-Tribromophenol	50-120
NBZ = Nitrobenzene-d5	45-120
PHL = Phenol-d5	36-120
TPH = Terphenyl-d14	52-120

Client: Waste Management

Job Number: 280-26403-1

Method Blank - Batch: 280-111029

Method: 625
Preparation: 625

Lab Sample ID:	MB 280-111029/1-A	Analysis Batch:	280-111883	Instrument ID:	MSS_Y
Client Matrix:	Water	Prep Batch:	280-111029	Lab File ID:	Y6412.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	03/14/2012 2059	Units:	mg/L	Final Weight/Volume:	1000 uL
Prep Date:	03/09/2012 1005			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
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-Fluorobiphenyl	71	36 - 120
2-Fluorophenol	78	30 - 120
2,4,6-Tribromophenol	91	50 - 120
Nitrobenzene-d5	86	45 - 120
Phenol-d5	76	36 - 120
Terphenyl-d14	92	52 - 120

Client: Waste Management

Job Number: 280-26403-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-111029

Method: 625
Preparation: 625

LCS Lab Sample ID:	LCS 280-111029/2-A	Analysis Batch:	280-111883	Instrument ID:	MSS_Y
Client Matrix:	Water	Prep Batch:	280-111029	Lab File ID:	Y6413.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	03/14/2012 2118	Units:	mg/L	Final Weight/Volume:	1000 uL
Prep Date:	03/09/2012 1005			Injection Volume:	0.5 uL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-111029/3-A	Analysis Batch:	280-111883	Instrument ID:	MSS_Y
Client Matrix:	Water	Prep Batch:	280-111029	Lab File ID:	Y6414.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	03/14/2012 2138	Units:	mg/L	Final Weight/Volume:	1000 uL
Prep Date:	03/09/2012 1005			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Acenaphthene	88	89	47 - 120	1	30		
Acenaphthylene	90	92	33 - 120	2	30		
Anthracene	93	97	52 - 120	5	30		
Benzidine	81	84	10 - 218	3	50		
Benzo[a]anthracene	94	101	54 - 120	7	30		
Benzo[b]fluoranthene	101	108	51 - 120	7	90		
Benzo[k]fluoranthene	90	95	49 - 120	6	50		
Benzo[a]pyrene	89	94	39 - 120	6	73		
Bis(2-chloroethoxy)methane	89	90	50 - 120	1	30		
Bis(2-chloroethyl)ether	92	91	35 - 120	1	30		
Bis(2-ethylhexyl) phthalate	96	103	56 - 120	7	30		
4-Bromophenyl phenyl ether	92	95	53 - 120	3	34		
Butyl benzyl phthalate	101	106	53 - 120	5	30		
4-Chloro-3-methylphenol	100	102	57 - 120	2	30		
2-Chloronaphthalene	84	84	60 - 118	1	30		
2-Chlorophenol	93	94	34 - 120	1	30		
4-Chlorophenyl phenyl ether	95	98	51 - 120	3	30		
Chrysene	93	98	51 - 120	5	30		
Dibenz(a,h)anthracene	82	87	45 - 120	6	78		
Di-n-butyl phthalate	100	105	57 - 118	5	30		
1,2-Dichlorobenzene	68	56	32 - 120	19	42		
1,3-Dichlorobenzene	63	50	23 - 120	23	47		
1,4-Dichlorobenzene	65	52	24 - 120	22	49		
3,3'-Dichlorobenzidine	73	77	18 - 120	5	50		
2,4-Dichlorophenol	93	95	46 - 120	2	30		
Diethyl phthalate	103	107	59 - 114	4	30		
2,4-Dimethylphenol	75	75	44 - 119	0	35		
Dimethyl phthalate	100	104	58 - 112	4	30		
4,6-Dinitro-2-methylphenol	109	117	40 - 120	7	55		
2,4-Dinitrophenol	107	115	20 - 121	7	61		
2,4-Dinitrotoluene	107	113	57 - 120	6	35		
2,6-Dinitrotoluene	101	104	56 - 120	3	30		
Di-n-octyl phthalate	98	105	56 - 120	6	30		
Fluoranthene	98	104	58 - 120	5	30		
Fluorene	94	97	59 - 120	3	30		
Hexachlorobenzene	94	99	53 - 120	5	30		

Client: Waste Management

Job Number: 280-26403-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-111029

Method: 625
Preparation: 625

LCS Lab Sample ID:	LCS 280-111029/2-A	Analysis Batch:	280-111883	Instrument ID:	MSS_Y
Client Matrix:	Water	Prep Batch:	280-111029	Lab File ID:	Y6413.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	03/14/2012 2118	Units:	mg/L	Final Weight/Volume:	1000 uL
Prep Date:	03/09/2012 1005			Injection Volume:	0.5 uL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-111029/3-A	Analysis Batch:	280-111883	Instrument ID:	MSS_Y
Client Matrix:	Water	Prep Batch:	280-111029	Lab File ID:	Y6414.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	03/14/2012 2138	Units:	mg/L	Final Weight/Volume:	1000 uL
Prep Date:	03/09/2012 1005			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Hexachlorobutadiene	60	46	27 - 116	25	41		
Hexachlorocyclopentadiene	30	19	10 - 120	46	82	J	J
Hexachloroethane	58	43	40 - 113	30	52		
Indeno[1,2,3-cd]pyrene	94	100	50 - 120	7	73		
Isophorone	93	93	50 - 120	0	30		
p-Cresol	90	91	42 - 120	1	39		
Naphthalene	78	73	37 - 120	6	30		
Nitrobenzene	93	92	46 - 120	2	30		
2-Nitrophenol	99	101	47 - 120	2	30		
4-Nitrophenol	113	116	53 - 120	2	42		
N-Nitrosodimethylamine	87	87	37 - 120	1	30		
N-Nitrosodiphenylamine	91	94	46 - 203	3	50		
N-Nitrosodi-n-propylamine	92	93	50 - 120	1	30		
Pentachlorophenol	103	110	46 - 120	6	30		
Phenanthrene	93	98	54 - 120	4	30		
Phenol	90	90	37 - 112	1	30		
Pyrene	91	97	55 - 115	6	30		
1,2,4-Trichlorobenzene	67	58	44 - 120	14	35		
2,4,6-Trichlorophenol	103	104	51 - 120	1	30		
2-Methylphenol	88	89	38 - 120	0	35		
Benzo[g,h,i]perylene	98	103	48 - 120	5	64		
2,2'-Oxybis(1-chloropropane)	87	86	37 - 120	1	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
2-Fluorobiphenyl	82	84	36 - 120
2-Fluorophenol	84	86	30 - 120
2,4,6-Tribromophenol	106	111	50 - 120
Nitrobenzene-d5	92	94	45 - 120
Phenol-d5	89	90	36 - 120
Terphenyl-d14	95	101	52 - 120

Client: Waste Management

Job Number: 280-26403-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-111029

Method: 625
Preparation: 625

LCS Lab Sample ID:	LCS 280-111029/2-A	Units: mg/L	LCSD Lab Sample ID:	LCSD 280-111029/3-A	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	03/14/2012 2118		Analysis Date:	03/14/2012 2138	
Prep Date:	03/09/2012 1005		Prep Date:	03/09/2012 1005	
Leach Date:	N/A		Leach Date:	N/A	

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Acenaphthene	0.0800	0.0800	0.0703	0.0711
Acenaphthylene	0.0800	0.0800	0.0721	0.0739
Anthracene	0.0800	0.0800	0.0743	0.0778
Benzidine	0.200	0.200	0.163	0.167
Benzo[a]anthracene	0.0800	0.0800	0.0750	0.0808
Benzo[b]fluoranthene	0.0800	0.0800	0.0808	0.0866
Benzo[k]fluoranthene	0.0800	0.0800	0.0717	0.0759
Benzo[a]pyrene	0.0800	0.0800	0.0712	0.0754
Bis(2-chloroethoxy)methane	0.0800	0.0800	0.0711	0.0721
Bis(2-chloroethyl)ether	0.0800	0.0800	0.0737	0.0731
Bis(2-ethylhexyl) phthalate	0.0800	0.0800	0.0767	0.0826
4-Bromophenyl phenyl ether	0.0800	0.0800	0.0735	0.0759
Butyl benzyl phthalate	0.0800	0.0800	0.0807	0.0852
4-Chloro-3-methylphenol	0.0800	0.0800	0.0798	0.0815
2-Chloronaphthalene	0.0800	0.0800	0.0670	0.0676
2-Chlorophenol	0.0800	0.0800	0.0741	0.0751
4-Chlorophenyl phenyl ether	0.0800	0.0800	0.0759	0.0785
Chrysene	0.0800	0.0800	0.0740	0.0782
Dibenz(a,h)anthracene	0.0800	0.0800	0.0658	0.0700
Di-n-butyl phthalate	0.0800	0.0800	0.0798	0.0839
1,2-Dichlorobenzene	0.0800	0.0800	0.0544	0.0449
1,3-Dichlorobenzene	0.0800	0.0800	0.0507	0.0401
1,4-Dichlorobenzene	0.0800	0.0800	0.0521	0.0417
3,3'-Dichlorobenzidine	0.0800	0.0800	0.0584	0.0615
2,4-Dichlorophenol	0.0800	0.0800	0.0741	0.0759
Diethyl phthalate	0.0800	0.0800	0.0823	0.0858
2,4-Dimethylphenol	0.0800	0.0800	0.0602	0.0600
Dimethyl phthalate	0.0800	0.0800	0.0798	0.0830
4,6-Dinitro-2-methylphenol	0.0800	0.0800	0.0874	0.0933
2,4-Dinitrophenol	0.0800	0.0800	0.0857	0.0918
2,4-Dinitrotoluene	0.0800	0.0800	0.0853	0.0907
2,6-Dinitrotoluene	0.0800	0.0800	0.0811	0.0834
Di-n-octyl phthalate	0.0800	0.0800	0.0786	0.0838
Fluoranthene	0.0800	0.0800	0.0786	0.0829
Fluorene	0.0800	0.0800	0.0755	0.0776
Hexachlorobenzene	0.0800	0.0800	0.0750	0.0791
Hexachlorobutadiene	0.0800	0.0800	0.0477	0.0370
Hexachlorocyclopentadiene	0.0800	0.0800	0.0243 J	0.0152 J
Hexachloroethane	0.0800	0.0800	0.0465	0.0345

Client: Waste Management

Job Number: 280-26403-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-111029

Method: 625
Preparation: 625

LCS Lab Sample ID:	LCS 280-111029/2-A	Units: mg/L		LCSD Lab Sample ID:	LCSD 280-111029/3-A
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/14/2012 2118			Analysis Date:	03/14/2012 2138
Prep Date:	03/09/2012 1005			Prep Date:	03/09/2012 1005
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Indeno[1,2,3-cd]pyrene	0.0800	0.0800	0.0750	0.0804
Isophorone	0.0800	0.0800	0.0744	0.0741
p-Cresol	0.160	0.160	0.145	0.146
Naphthalene	0.0800	0.0800	0.0624	0.0587
Nitrobenzene	0.0800	0.0800	0.0744	0.0732
2-Nitrophenol	0.0800	0.0800	0.0790	0.0805
4-Nitrophenol	0.0800	0.0800	0.0908	0.0929
N-Nitrosodimethylamine	0.0800	0.0800	0.0695	0.0700
N-Nitrosodiphenylamine	0.0683	0.0683	0.0623	0.0643
N-Nitrosodi-n-propylamine	0.0800	0.0800	0.0737	0.0743
Pentachlorophenol	0.0800	0.0800	0.0827	0.0881
Phenanthrene	0.0800	0.0800	0.0748	0.0781
Phenol	0.0800	0.0800	0.0719	0.0723
Pyrene	0.0800	0.0800	0.0728	0.0775
1,2,4-Trichlorobenzene	0.0800	0.0800	0.0538	0.0465
2,4,6-Trichlorophenol	0.0800	0.0800	0.0827	0.0834
2-Methylphenol	0.0800	0.0800	0.0706	0.0709
Benzo[g,h,i]perylene	0.0800	0.0800	0.0784	0.0825
2,2'-Oxybis(1-chloropropane)	0.0800	0.0800	0.0697	0.0688

Client: Waste Management

Job Number: 280-26403-1

Method Blank - Batch: 280-111377

Method: 625
Preparation: 625

Lab Sample ID:	MB 280-111377/1-A	Analysis Batch:	280-112258	Instrument ID:	MSS_B
Client Matrix:	Water	Prep Batch:	280-111377	Lab File ID:	B0179.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	03/16/2012 1911	Units:	mg/L	Final Weight/Volume:	1000 uL
Prep Date:	03/12/2012 2020			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-Fluorobiphenyl	80	36 - 120
2-Fluorophenol	87	30 - 120
2,4,6-Tribromophenol	98	50 - 120
Nitrobenzene-d5	92	45 - 120
Phenol-d5	91	36 - 120
Terphenyl-d14	106	52 - 120

Client: Waste Management

Job Number: 280-26403-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-111377

Method: 625
Preparation: 625

LCS Lab Sample ID:	LCS 280-111377/2-A	Analysis Batch:	280-112258	Instrument ID:	MSS_B
Client Matrix:	Water	Prep Batch:	280-111377	Lab File ID:	B0152.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	03/16/2012 1024	Units:	mg/L	Final Weight/Volume:	1000 uL
Prep Date:	03/12/2012 2020			Injection Volume:	0.5 uL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-111377/3-A	Analysis Batch:	280-112258	Instrument ID:	MSS_B
Client Matrix:	Water	Prep Batch:	280-111377	Lab File ID:	B0153.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	03/16/2012 1043	Units:	mg/L	Final Weight/Volume:	1000 uL
Prep Date:	03/12/2012 2020			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Acenaphthene	89	86	47 - 120	4	30		
Acenaphthylene	91	88	33 - 120	4	30		
Anthracene	95	90	52 - 120	5	30		
Benzidine	79	66	10 - 218	18	50		J
Benzo[a]anthracene	96	89	54 - 120	7	30		
Benzo[b]fluoranthene	88	86	51 - 120	2	90		
Benzo[k]fluoranthene	99	93	49 - 120	6	50		
Benzo[a]pyrene	81	77	39 - 120	6	73		
Bis(2-chloroethoxy)methane	93	92	50 - 120	1	30		
Bis(2-chloroethyl)ether	90	88	35 - 120	2	30		
Bis(2-ethylhexyl) phthalate	105	99	56 - 120	6	30		
4-Bromophenyl phenyl ether	95	91	53 - 120	4	34		
Butyl benzyl phthalate	102	96	53 - 120	6	30		
4-Chloro-3-methylphenol	100	95	57 - 120	4	30		
2-Chloronaphthalene	86	82	60 - 118	4	30		
2-Chlorophenol	90	89	34 - 120	2	30		
4-Chlorophenyl phenyl ether	95	92	51 - 120	3	30		
Chrysene	98	92	51 - 120	6	30		
Dibenz(a,h)anthracene	79	76	45 - 120	4	78		
Di-n-butyl phthalate	102	97	57 - 118	4	30		
1,2-Dichlorobenzene	77	74	32 - 120	4	42		
1,3-Dichlorobenzene	75	71	23 - 120	6	47		
1,4-Dichlorobenzene	77	71	24 - 120	7	49		
3,3'-Dichlorobenzidine	69	59	18 - 120	16	50		J
2,4-Dichlorophenol	93	92	46 - 120	1	30		
Diethyl phthalate	102	100	59 - 114	3	30		
2,4-Dimethylphenol	76	75	44 - 119	1	35		
Dimethyl phthalate	100	97	58 - 112	3	30		
4,6-Dinitro-2-methylphenol	100	95	40 - 120	5	55		
2,4-Dinitrophenol	89	87	20 - 121	3	61		
2,4-Dinitrotoluene	103	100	57 - 120	4	35		
2,6-Dinitrotoluene	97	95	56 - 120	1	30		
Di-n-octyl phthalate	107	101	56 - 120	6	30		
Fluoranthene	99	94	58 - 120	5	30		
Fluorene	94	90	59 - 120	4	30		
Hexachlorobenzene	96	92	53 - 120	4	30		

Client: Waste Management

Job Number: 280-26403-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-111377

Method: 625
Preparation: 625

LCS Lab Sample ID:	LCS 280-111377/2-A	Analysis Batch:	280-112258	Instrument ID:	MSS_B
Client Matrix:	Water	Prep Batch:	280-111377	Lab File ID:	B0152.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	03/16/2012 1024	Units:	mg/L	Final Weight/Volume:	1000 uL
Prep Date:	03/12/2012 2020			Injection Volume:	0.5 uL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-111377/3-A	Analysis Batch:	280-112258	Instrument ID:	MSS_B
Client Matrix:	Water	Prep Batch:	280-111377	Lab File ID:	B0153.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	03/16/2012 1043	Units:	mg/L	Final Weight/Volume:	1000 uL
Prep Date:	03/12/2012 2020			Injection Volume:	0.5 uL
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Hexachlorobutadiene	75	71	27 - 116	6	41		
Hexachlorocyclopentadiene	17	10	10 - 120	51	82	J	J
Hexachloroethane	76	70	40 - 113	8	52		
Indeno[1,2,3-cd]pyrene	90	85	50 - 120	6	73		
Isophorone	97	96	50 - 120	1	30		
p-Cresol	94	88	42 - 120	6	39		
Naphthalene	82	77	37 - 120	6	30		
Nitrobenzene	96	93	46 - 120	3	30		
2-Nitrophenol	93	95	47 - 120	1	30		
4-Nitrophenol	108	84	53 - 120	25	42		
N-Nitrosodimethylamine	89	86	37 - 120	3	30		
N-Nitrosodiphenylamine	90	87	46 - 203	4	50		
N-Nitrosodi-n-propylamine	98	96	50 - 120	3	30		
Pentachlorophenol	93	87	46 - 120	6	30		
Phenanthrene	95	93	54 - 120	3	30		
Phenol	94	76	37 - 112	21	30		
Pyrene	95	91	55 - 115	5	30		
1,2,4-Trichlorobenzene	72	68	44 - 120	5	35		
2,4,6-Trichlorophenol	98	95	51 - 120	3	30		
2-Methylphenol	90	87	38 - 120	3	35		
Benzo[g,h,i]perylene	95	91	48 - 120	4	64		
2,2'-Oxybis(1-chloropropane)	88	86	37 - 120	3	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
2-Fluorobiphenyl	81	82	36 - 120
2-Fluorophenol	88	77	30 - 120
2,4,6-Tribromophenol	106	102	50 - 120
Nitrobenzene-d5	93	91	45 - 120
Phenol-d5	92	74	36 - 120
Terphenyl-d14	100	94	52 - 120

Client: Waste Management

Job Number: 280-26403-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-111377

Method: 625
Preparation: 625

LCS Lab Sample ID:	LCS 280-111377/2-A	Units: mg/L	LCSD Lab Sample ID:	LCSD 280-111377/3-A	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	03/16/2012 1024		Analysis Date:	03/16/2012 1043	
Prep Date:	03/12/2012 2020		Prep Date:	03/12/2012 2020	
Leach Date:	N/A		Leach Date:	N/A	

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual	
Acenaphthene	0.0800	0.0800	0.0713	0.0686	
Acenaphthylene	0.0800	0.0800	0.0730	0.0703	
Anthracene	0.0800	0.0800	0.0756	0.0723	
Benzidine	0.200	0.200	0.158	0.133	J
Benzo[a]anthracene	0.0800	0.0800	0.0764	0.0714	
Benzo[b]fluoranthene	0.0800	0.0800	0.0703	0.0691	
Benzo[k]fluoranthene	0.0800	0.0800	0.0793	0.0745	
Benzo[a]pyrene	0.0800	0.0800	0.0652	0.0615	
Bis(2-chloroethoxy)methane	0.0800	0.0800	0.0742	0.0736	
Bis(2-chloroethyl)ether	0.0800	0.0800	0.0723	0.0707	
Bis(2-ethylhexyl) phthalate	0.0800	0.0800	0.0844	0.0795	
4-Bromophenyl phenyl ether	0.0800	0.0800	0.0761	0.0730	
Butyl benzyl phthalate	0.0800	0.0800	0.0813	0.0769	
4-Chloro-3-methylphenol	0.0800	0.0800	0.0798	0.0764	
2-Chloronaphthalene	0.0800	0.0800	0.0686	0.0657	
2-Chlorophenol	0.0800	0.0800	0.0722	0.0709	
4-Chlorophenyl phenyl ether	0.0800	0.0800	0.0764	0.0739	
Chrysene	0.0800	0.0800	0.0785	0.0738	
Dibenz(a,h)anthracene	0.0800	0.0800	0.0634	0.0608	
Di-n-butyl phthalate	0.0800	0.0800	0.0813	0.0778	
1,2-Dichlorobenzene	0.0800	0.0800	0.0618	0.0591	
1,3-Dichlorobenzene	0.0800	0.0800	0.0602	0.0568	
1,4-Dichlorobenzene	0.0800	0.0800	0.0613	0.0570	
3,3'-Dichlorobenzidine	0.0800	0.0800	0.0548	0.0468	J
2,4-Dichlorophenol	0.0800	0.0800	0.0741	0.0736	
Diethyl phthalate	0.0800	0.0800	0.0819	0.0798	
2,4-Dimethylphenol	0.0800	0.0800	0.0608	0.0601	
Dimethyl phthalate	0.0800	0.0800	0.0797	0.0776	
4,6-Dinitro-2-methylphenol	0.0800	0.0800	0.0797	0.0757	
2,4-Dinitrophenol	0.0800	0.0800	0.0715	0.0695	
2,4-Dinitrotoluene	0.0800	0.0800	0.0826	0.0798	
2,6-Dinitrotoluene	0.0800	0.0800	0.0773	0.0762	
Di-n-octyl phthalate	0.0800	0.0800	0.0857	0.0809	
Fluoranthene	0.0800	0.0800	0.0788	0.0752	
Fluorene	0.0800	0.0800	0.0750	0.0722	
Hexachlorobenzene	0.0800	0.0800	0.0767	0.0739	
Hexachlorobutadiene	0.0800	0.0800	0.0601	0.0565	
Hexachlorocyclopentadiene	0.0800	0.0800	0.0135 J	0.00797	J
Hexachloroethane	0.0800	0.0800	0.0606	0.0558	

Client: Waste Management

Job Number: 280-26403-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-111377

Method: 625
Preparation: 625

LCS Lab Sample ID:	LCS 280-111377/2-A	Units: mg/L		LCSD Lab Sample ID:	LCSD 280-111377/3-A
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/16/2012 1024			Analysis Date:	03/16/2012 1043
Prep Date:	03/12/2012 2020			Prep Date:	03/12/2012 2020
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Indeno[1,2,3-cd]pyrene	0.0800	0.0800	0.0717	0.0676
Isophorone	0.0800	0.0800	0.0773	0.0764
p-Cresol	0.160	0.160	0.150	0.141
Naphthalene	0.0800	0.0800	0.0652	0.0615
Nitrobenzene	0.0800	0.0800	0.0766	0.0744
2-Nitrophenol	0.0800	0.0800	0.0745	0.0756
4-Nitrophenol	0.0800	0.0800	0.0865	0.0673
N-Nitrosodimethylamine	0.0800	0.0800	0.0716	0.0692
N-Nitrosodiphenylamine	0.0683	0.0683	0.0617	0.0593
N-Nitrosodi-n-propylamine	0.0800	0.0800	0.0787	0.0767
Pentachlorophenol	0.0800	0.0800	0.0743	0.0696
Phenanthrene	0.0800	0.0800	0.0764	0.0743
Phenol	0.0800	0.0800	0.0751	0.0608
Pyrene	0.0800	0.0800	0.0762	0.0726
1,2,4-Trichlorobenzene	0.0800	0.0800	0.0577	0.0548
2,4,6-Trichlorophenol	0.0800	0.0800	0.0781	0.0758
2-Methylphenol	0.0800	0.0800	0.0717	0.0698
Benzo[g,h,i]perylene	0.0800	0.0800	0.0758	0.0728
2,2'-Oxybis(1-chloropropane)	0.0800	0.0800	0.0703	0.0684

Client: Waste Management

Job Number: 280-26403-1

Method Blank - Batch: 280-111038

Method: 200.7 Rev 4.4
Preparation: 200.7
Total Recoverable

Lab Sample ID:	MB 280-111038/1-A	Analysis Batch:	280-111597	Instrument ID:	MT_026
Client Matrix:	Water	Prep Batch:	280-111038	Lab File ID:	26a4031312.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	03/13/2012 2233	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	03/13/2012 1400				
Leach Date:	N/A				

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

Method Blank - Batch: 280-111038

Method: 200.7 Rev 4.4
Preparation: 200.7
Total Recoverable

Lab Sample ID:	MB 280-111038/1-A	Analysis Batch:	280-111807	Instrument ID:	MT_026
Client Matrix:	Water	Prep Batch:	280-111038	Lab File ID:	26a031412.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	03/14/2012 1257	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	03/13/2012 1400				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Iron	ND		0.022	0.10

Client: Waste Management

Job Number: 280-26403-1

Lab Control Sample - Batch: 280-111038

Method: 200.7 Rev 4.4
Preparation: 200.7
Total Recoverable

Lab Sample ID:	LCS 280-111038/2-A	Analysis Batch:	280-111597	Instrument ID:	MT_026
Client Matrix:	Water	Prep Batch:	280-111038	Lab File ID:	26a4031312.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	03/13/2012 2236	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	03/13/2012 1400				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	1.00	0.985	98	88 - 110	
Cadmium	0.100	0.102	102	88 - 111	
Lead	0.500	0.501	100	89 - 110	
Selenium	2.00	1.98	99	85 - 112	
Zinc	0.500	0.501	100	85 - 111	
Silver	0.0500	0.0523	105	85 - 115	

Lab Control Sample - Batch: 280-111038

Method: 200.7 Rev 4.4
Preparation: 200.7
Total Recoverable

Lab Sample ID:	LCS 280-111038/2-A	Analysis Batch:	280-111807	Instrument ID:	MT_026
Client Matrix:	Water	Prep Batch:	280-111038	Lab File ID:	26a031412.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	03/14/2012 1259	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	03/13/2012 1400				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Iron	1.00	1.01	101	89 - 115	

Client: Waste Management

Job Number: 280-26403-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-111038

Method: 200.7 Rev 4.4
Preparation: 200.7
Total Recoverable

MS Lab Sample ID:	280-26368-H-1-B MS	Analysis Batch:	280-111597	Instrument ID:	MT_026
Client Matrix:	Water	Prep Batch:	280-111038	Lab File ID:	26a4031312.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	03/13/2012 2243			Final Weight/Volume:	50 mL
Prep Date:	03/13/2012 1400				
Leach Date:	N/A				

MSD Lab Sample ID:	280-26368-H-1-C MSD	Analysis Batch:	280-111597	Instrument ID:	MT_026
Client Matrix:	Water	Prep Batch:	280-111038	Lab File ID:	26a4031312.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	03/13/2012 2245			Final Weight/Volume:	50 mL
Prep Date:	03/13/2012 1400				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Arsenic	100	100	88 - 110	1	20		
Cadmium	102	103	88 - 111	1	20		
Lead	99	100	89 - 110	1	20		
Selenium	98	99	85 - 112	1	20		
Zinc	100	101	85 - 111	1	20		
Silver	103	104	85 - 115	1	20		

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-111038

Method: 200.7 Rev 4.4
Preparation: 200.7
Total Recoverable

MS Lab Sample ID:	280-26368-H-1-B MS	Analysis Batch:	280-111807	Instrument ID:	MT_026
Client Matrix:	Water	Prep Batch:	280-111038	Lab File ID:	26a031412.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	03/14/2012 1306			Final Weight/Volume:	50 mL
Prep Date:	03/13/2012 1400				
Leach Date:	N/A				

MSD Lab Sample ID:	280-26368-H-1-C MSD	Analysis Batch:	280-111807	Instrument ID:	MT_026
Client Matrix:	Water	Prep Batch:	280-111038	Lab File ID:	26a031412.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	03/14/2012 1309			Final Weight/Volume:	50 mL
Prep Date:	03/13/2012 1400				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Iron	99	100	89 - 115	1	20		

Client: Waste Management

Job Number: 280-26403-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-111038

Method: 200.7 Rev 4.4
Preparation: 200.7
Total Recoverable

MS Lab Sample ID:	280-26368-H-1-B MS	Units:	mg/L	MSD Lab Sample ID:	280-26368-H-1-C MSD
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/13/2012 2243			Analysis Date:	03/13/2012 2245
Prep Date:	03/13/2012 1400			Prep Date:	03/13/2012 1400
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	0.995	1.00
Cadmium	ND	0.100	0.100	0.102	0.103
Lead	ND	0.500	0.500	0.494	0.498
Selenium	ND	2.00	2.00	1.96	1.98
Zinc	ND	0.500	0.500	0.499	0.504
Silver	ND	0.0500	0.0500	0.0515	0.0520

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-111038

Method: 200.7 Rev 4.4
Preparation: 200.7
Total Recoverable

MS Lab Sample ID:	280-26368-H-1-B MS	Units:	mg/L	MSD Lab Sample ID:	280-26368-H-1-C MSD
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/14/2012 1306			Analysis Date:	03/14/2012 1309
Prep Date:	03/13/2012 1400			Prep Date:	03/13/2012 1400
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	0.037	J	1.00	1.00	1.02	1.03

Client: Waste Management

Job Number: 280-26403-1

Method Blank - Batch: 280-111449

Method: 200.7 Rev 4.4
Preparation: 200.7
Total Recoverable

Lab Sample ID:	MB 280-111449/1-A	Analysis Batch:	280-112188	Instrument ID:	MT_026
Client Matrix:	Water	Prep Batch:	280-111449	Lab File ID:	26a031612.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	03/16/2012 1422	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	03/16/2012 0645				
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	ND		0.0049	0.015
Zinc	ND		0.0045	0.020
Silver	ND		0.00093	0.010

Lab Control Sample - Batch: 280-111449

Method: 200.7 Rev 4.4
Preparation: 200.7
Total Recoverable

Lab Sample ID:	LCS 280-111449/2-A	Analysis Batch:	280-112188	Instrument ID:	MT_026
Client Matrix:	Water	Prep Batch:	280-111449	Lab File ID:	26a031612.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	03/16/2012 1425	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	03/16/2012 0645				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	1.00	0.989	99	88 - 110	
Cadmium	0.100	0.103	103	88 - 111	
Iron	1.00	0.958	96	89 - 115	
Lead	0.500	0.502	100	89 - 110	
Selenium	2.00	1.97	99	85 - 112	
Zinc	0.500	0.484	97	85 - 111	
Silver	0.0500	0.0523	105	85 - 115	

Client: Waste Management

Job Number: 280-26403-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-111449

Method: 200.7 Rev 4.4
Preparation: 200.7
Total Recoverable

MS Lab Sample ID:	280-26441-E-1-B MS	Analysis Batch:	280-112188	Instrument ID:	MT_026
Client Matrix:	Water	Prep Batch:	280-111449	Lab File ID:	26a031612.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	03/16/2012 1432			Final Weight/Volume:	50 mL
Prep Date:	03/16/2012 0645				
Leach Date:	N/A				

MSD Lab Sample ID:	280-26441-E-1-C MSD	Analysis Batch:	280-112188	Instrument ID:	MT_026
Client Matrix:	Water	Prep Batch:	280-111449	Lab File ID:	26a031612.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	03/16/2012 1434			Final Weight/Volume:	50 mL
Prep Date:	03/16/2012 0645				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Arsenic	100	100	88 - 110	0	20		
Cadmium	105	104	88 - 111	1	20		
Iron	100	95	89 - 115	1	20		
Lead	99	99	89 - 110	0	20		
Selenium	99	99	85 - 112	0	20		
Zinc	97	96	85 - 111	1	20		
Silver	107	105	85 - 115	2	20		

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-111449

Method: 200.7 Rev 4.4
Preparation: 200.7
Total Recoverable

MS Lab Sample ID:	280-26441-E-1-B MS	Units:	mg/L	MSD Lab Sample ID:	280-26441-E-1-C MSD
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/16/2012 1432			Analysis Date:	03/16/2012 1434
Prep Date:	03/16/2012 0645			Prep Date:	03/16/2012 0645
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	1.00	0.999
Cadmium	ND		0.100	0.100	0.105	0.104
Iron	2.5		1.00	1.00	3.54	3.50
Lead	0.0028	J	0.500	0.500	0.500	0.498
Selenium	ND		2.00	2.00	1.98	1.98
Zinc	0.018	J	0.500	0.500	0.503	0.500
Silver	ND		0.0500	0.0500	0.0537	0.0526

Client: Waste Management

Job Number: 280-26403-1

Method Blank - Batch: 280-111215

Method: 245.1
Preparation: 245.1

Lab Sample ID:	MB 280-111215/1-A	Analysis Batch:	280-111565	Instrument ID:	MT_033
Client Matrix:	Water	Prep Batch:	280-111215	Lab File ID:	120313ab.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	03/13/2012 1358	Units:	mg/L	Final Weight/Volume:	30 mL
Prep Date:	03/13/2012 0945				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	ND		0.000027	0.00020

Lab Control Sample - Batch: 280-111215

Method: 245.1
Preparation: 245.1

Lab Sample ID:	LCS 280-111215/2-A	Analysis Batch:	280-111565	Instrument ID:	MT_033
Client Matrix:	Water	Prep Batch:	280-111215	Lab File ID:	120313ab.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	03/13/2012 1400	Units:	mg/L	Final Weight/Volume:	30 mL
Prep Date:	03/13/2012 0945				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.00500	0.00523	105	90 - 110	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-111215

Method: 245.1
Preparation: 245.1

MS Lab Sample ID:	280-26403-3	Analysis Batch:	280-111565	Instrument ID:	MT_033
Client Matrix:	Water	Prep Batch:	280-111215	Lab File ID:	120313ab.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	03/13/2012 1409			Final Weight/Volume:	30 mL
Prep Date:	03/13/2012 0945				
Leach Date:	N/A				

MSD Lab Sample ID:	280-26403-3	Analysis Batch:	280-111565	Instrument ID:	MT_033
Client Matrix:	Water	Prep Batch:	280-111215	Lab File ID:	120313ab.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	03/13/2012 1411			Final Weight/Volume:	30 mL
Prep Date:	03/13/2012 0945				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Mercury	100	99	80 - 120	1	10		

Client: Waste Management

Job Number: 280-26403-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-111215

Method: 245.1
Preparation: 245.1

MS Lab Sample ID:	280-26403-3	Units: mg/L	MSD Lab Sample ID:	280-26403-3	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	03/13/2012 1409		Analysis Date:	03/13/2012 1411	
Prep Date:	03/13/2012 0945		Prep Date:	03/13/2012 0945	
Leach Date:	N/A		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	0.00498	0.00494

Client: Waste Management

Job Number: 280-26403-1

Method Blank - Batch: 280-111385

Method: 245.1
Preparation: 245.1

Lab Sample ID:	MB 280-111385/1-A	Analysis Batch:	280-111565	Instrument ID:	MT_033
Client Matrix:	Water	Prep Batch:	280-111385	Lab File ID:	120313ab.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	03/13/2012 1323	Units:	mg/L	Final Weight/Volume:	30 mL
Prep Date:	03/13/2012 0945				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	ND		0.000027	0.00020

Lab Control Sample - Batch: 280-111385

Method: 245.1
Preparation: 245.1

Lab Sample ID:	LCS 280-111385/2-A	Analysis Batch:	280-111565	Instrument ID:	MT_033
Client Matrix:	Water	Prep Batch:	280-111385	Lab File ID:	120313ab.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	03/13/2012 1325	Units:	mg/L	Final Weight/Volume:	30 mL
Prep Date:	03/13/2012 0945				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.00500	0.00544	109	90 - 110	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-111385

Method: 245.1
Preparation: 245.1

MS Lab Sample ID:	280-26483-1	Analysis Batch:	280-111565	Instrument ID:	MT_033
Client Matrix:	Water	Prep Batch:	280-111385	Lab File ID:	120313ab.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	03/13/2012 1330			Final Weight/Volume:	30 mL
Prep Date:	03/13/2012 0945				
Leach Date:	N/A				

MSD Lab Sample ID:	280-26483-1	Analysis Batch:	280-111565	Instrument ID:	MT_033
Client Matrix:	Water	Prep Batch:	280-111385	Lab File ID:	120313ab.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	03/13/2012 1332			Final Weight/Volume:	30 mL
Prep Date:	03/13/2012 0945				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Mercury	106	101	80 - 120	5	10		

Client: Waste Management

Job Number: 280-26403-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-111385

Method: 245.1
Preparation: 245.1

MS Lab Sample ID:	280-26483-1	Units: mg/L	
Client Matrix:	Water		
Dilution:	1.0		
Analysis Date:	03/13/2012 1330		
Prep Date:	03/13/2012 0945		
Leach Date:	N/A		

MSD Lab Sample ID:	280-26483-1
Client Matrix:	Water
Dilution:	1.0
Analysis Date:	03/13/2012 1332
Prep Date:	03/13/2012 0945
Leach Date:	N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Mercury	0.00026	0.00500	0.00500	0.00558	0.00533

Client: Waste Management

Job Number: 280-26403-1

Method Blank - Batch: 280-111214

Method: 1664A
Preparation: 1664A

Lab Sample ID:	MB 280-111214/1-A	Analysis Batch:	280-111226	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	280-111214	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	03/12/2012 0729	Units:	mg/L	Final Weight/Volume:	1000 mL
Prep Date:	03/12/2012 0702				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
HEM	2.50	J	1.4	5.0

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-111214

Method: 1664A
Preparation: 1664A

LCS Lab Sample ID:	LCS 280-111214/2-A	Analysis Batch:	280-111226	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	280-111214	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	03/12/2012 0729	Units:	mg/L	Final Weight/Volume:	1000 mL
Prep Date:	03/12/2012 0702				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-111214/19-A	Analysis Batch:	280-111226	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	280-111214	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	03/12/2012 0729	Units:	mg/L	Final Weight/Volume:	1000 mL
Prep Date:	03/12/2012 0702				
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
HEM	83	86	81 - 107	4	22		

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-111214

Method: 1664A
Preparation: 1664A

LCS Lab Sample ID:	LCS 280-111214/2-A	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-111214/19-A
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/12/2012 0729			Analysis Date:	03/12/2012 0729
Prep Date:	03/12/2012 0702			Prep Date:	03/12/2012 0702
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	33.0	34.5

Client: Waste Management

Job Number: 280-26403-1

Method Blank - Batch: 280-112192

Method: 1664A
Preparation: 1664A

Lab Sample ID:	MB 280-112192/1-A	Analysis Batch:	280-112216	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	280-112192	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	03/19/2012 0926	Units:	mg/L	Final Weight/Volume:	1000 mL
Prep Date:	03/19/2012 0837				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
HEM	3.00	J	1.4	5.0

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-112192

Method: 1664A
Preparation: 1664A

LCS Lab Sample ID:	LCS 280-112192/2-A	Analysis Batch:	280-112216	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	280-112192	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	03/19/2012 0926	Units:	mg/L	Final Weight/Volume:	1000 mL
Prep Date:	03/19/2012 0837				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-112192/3-A	Analysis Batch:	280-112216	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	280-112192	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	03/19/2012 0926	Units:	mg/L	Final Weight/Volume:	1000 mL
Prep Date:	03/19/2012 0837				
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
HEM	81	87	81 - 107	7	22		

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-112192

Method: 1664A
Preparation: 1664A

LCS Lab Sample ID:	LCS 280-112192/2-A	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-112192/3-A
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/19/2012 0926			Analysis Date:	03/19/2012 0926
Prep Date:	03/19/2012 0837			Prep Date:	03/19/2012 0837
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	32.3	34.6

Client: Waste Management

Job Number: 280-26403-1

Method Blank - Batch: 280-111530

Method: 350.1
Preparation: N/A

Lab Sample ID:	MB 280-111530/56	Analysis Batch:	280-111530	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0313NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/13/2012 1306	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Ammonia	0.0232	J	0.022	0.10

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-111530

Method: 350.1
Preparation: N/A

LCS Lab Sample ID:	LCS 280-111530/57	Analysis Batch:	280-111530	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0313NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	03/13/2012 1308	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-111530/58	Analysis Batch:	280-111530	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0313NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	03/13/2012 1309	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	101	101	90 - 110	0	10		

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-111530

Method: 350.1
Preparation: N/A

LCS Lab Sample ID:	LCS 280-111530/57	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-111530/58
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/13/2012 1308			Analysis Date:	03/13/2012 1309
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	5.00	5.00	5.06	5.07

Client: Waste Management

Job Number: 280-26403-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-111530

Method: 350.1
Preparation: N/A

MS Lab Sample ID:	280-26403-1	Analysis Batch:	280-111530	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0313NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	03/13/2012 1351			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	280-26403-1	Analysis Batch:	280-111530	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0313NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	03/13/2012 1353			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Ammonia	88	89	90 - 110	0	20	F	F

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-111530

Method: 350.1
Preparation: N/A

MS Lab Sample ID:	280-26403-1	Units:	mg/L	MSD Lab Sample ID:	280-26403-1
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/13/2012 1351			Analysis Date:	03/13/2012 1353
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	0.059	J	4.00	4.00	3.59	F	3.60	F

Client: Waste Management

Job Number: 280-26403-1

Method Blank - Batch: 280-112578

Method: 350.1
Preparation: N/A

Lab Sample ID:	MB 280-112578/106	Analysis Batch:	280-112578	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0321NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/21/2012 1447	Units:	mg/L	Final Weight/Volume:	1.0 mL
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: 280-112578

Method: 350.1
Preparation: N/A

LCS Lab Sample ID:	LCS 280-112578/107	Analysis Batch:	280-112578	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0321NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	03/21/2012 1449	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-112578/108	Analysis Batch:	280-112578	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0321NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	03/21/2012 1450	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	102	103	90 - 110	0	10		

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-112578

Method: 350.1
Preparation: N/A

LCS Lab Sample ID:	LCS 280-112578/107	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-112578/108
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/21/2012 1449			Analysis Date:	03/21/2012 1450
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	5.00	5.00	5.12	5.13

Client: Waste Management

Job Number: 280-26403-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-112578

Method: 350.1
Preparation: N/A

MS Lab Sample ID:	280-26573-F-6 MS	Analysis Batch:	280-112578	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0321NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	03/21/2012 1513			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	280-26573-F-6 MSD	Analysis Batch:	280-112578	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0321NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	03/21/2012 1514			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Ammonia	91	91	90 - 110	0	20		

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-112578

Method: 350.1
Preparation: N/A

MS Lab Sample ID:	280-26573-F-6 MS	Units:	mg/L	MSD Lab Sample ID:	280-26573-F-6 MSD
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/21/2012 1513			Analysis Date:	03/21/2012 1514
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	1.1	4.00	4.00	4.75	4.75

Client: Waste Management

Job Number: 280-26403-1

Method Blank - Batch: 280-111759

Method: 351.2
Preparation: 351.2

Lab Sample ID:	MB 280-111759/3-A	Analysis Batch:	280-111943	Instrument ID:	WC_Astoria
Client Matrix:	Water	Prep Batch:	280-111759	Lab File ID:	0315123TKN.tab
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	03/15/2012 1625	Units:	mg/L	Final Weight/Volume:	25 mL
Prep Date:	03/14/2012 1900				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Nitrogen, Kjeldahl	ND		0.077	0.50

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-111759

Method: 351.2
Preparation: 351.2

LCS Lab Sample ID:	LCS 280-111759/1-A	Analysis Batch:	280-111943	Instrument ID:	WC_Astoria
Client Matrix:	Water	Prep Batch:	280-111759	Lab File ID:	0315123TKN.tab
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	03/15/2012 1623	Units:	mg/L	Final Weight/Volume:	25 mL
Prep Date:	03/14/2012 1900				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-111759/2-A	Analysis Batch:	280-111943	Instrument ID:	WC_Astoria
Client Matrix:	Water	Prep Batch:	280-111759	Lab File ID:	0315123TKN.tab
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	03/15/2012 1624	Units:	mg/L	Final Weight/Volume:	25 mL
Prep Date:	03/14/2012 1900				
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Nitrogen, Kjeldahl	103	103	90 - 110	0	25		

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-111759

Method: 351.2
Preparation: 351.2

LCS Lab Sample ID:	LCS 280-111759/1-A	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-111759/2-A
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/15/2012 1623			Analysis Date:	03/15/2012 1624
Prep Date:	03/14/2012 1900			Prep Date:	03/14/2012 1900
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	6.20	6.20

Client: Waste Management

Job Number: 280-26403-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-111759

Method: 351.2
Preparation: 351.2

MS Lab Sample ID:	280-26403-3	Analysis Batch:	280-111943	Instrument ID:	WC_Astoria
Client Matrix:	Water	Prep Batch:	280-111759	Lab File ID:	0315123TKN.tab
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	03/15/2012 1657			Final Weight/Volume:	25 mL
Prep Date:	03/14/2012 1900				
Leach Date:	N/A				

MSD Lab Sample ID:	280-26403-3	Analysis Batch:	280-111943	Instrument ID:	WC_Astoria
Client Matrix:	Water	Prep Batch:	280-111759	Lab File ID:	0315123TKN.tab
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	03/15/2012 1658			Final Weight/Volume:	25 mL
Prep Date:	03/14/2012 1900				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Nitrogen, Kjeldahl	62	62	90 - 110	0	25	F	F

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-111759

Method: 351.2
Preparation: 351.2

MS Lab Sample ID:	280-26403-3	Units:	mg/L	MSD Lab Sample ID:	280-26403-3
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/15/2012 1657			Analysis Date:	03/15/2012 1658
Prep Date:	03/14/2012 1900			Prep Date:	03/14/2012 1900
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	0.59	3.00	3.00	2.44	F	2.45	F

Client: Waste Management

Job Number: 280-26403-1

Method Blank - Batch: 280-111532

Method: 353.2
Preparation: N/A

Lab Sample ID:	MB 280-111532/56	Analysis Batch:	280-111532	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0313NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/13/2012 1306	Units:	mg/L	Final Weight/Volume:	1.0 mL
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: 280-111532

Method: 353.2
Preparation: N/A

Lab Sample ID:	MRL 280-111532/18	Analysis Batch:	280-111532	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0313NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	03/13/2012 1209	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	0.101	101	50 - 150	

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-111532

Method: 353.2
Preparation: N/A

LCS Lab Sample ID:	LCS 280-111532/57	Analysis Batch:	280-111532	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0313NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	03/13/2012 1308	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-111532/58	Analysis Batch:	280-111532	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0313NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	03/13/2012 1309	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
Nitrate Nitrite as N	103	101	90 - 110	1	10		

Client: Waste Management

Job Number: 280-26403-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-111532

Method: 353.2
Preparation: N/A

LCS Lab Sample ID:	LCS 280-111532/57	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-111532/58
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/13/2012 1308			Analysis Date:	03/13/2012 1309
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
Nitrate Nitrite as N	5.00	5.00	5.13	5.06

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-111532

Method: 353.2
Preparation: N/A

MS Lab Sample ID:	280-26403-1	Analysis Batch:	280-111532	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0313NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	03/13/2012 1351			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	280-26403-1	Analysis Batch:	280-111532	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0313NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	03/13/2012 1353			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	87	82	72 - 113	2	17		

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-111532

Method: 353.2
Preparation: N/A

MS Lab Sample ID:	280-26403-1	Units:	mg/L	MSD Lab Sample ID:	280-26403-1
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/13/2012 1351			Analysis Date:	03/13/2012 1353
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	6.6	4.00	4.00	10.1	9.93

Client: Waste Management

Job Number: 280-26403-1

Method Blank - Batch: 280-111932

Method: 353.2
Preparation: N/A

Lab Sample ID:	MB 280-111932/85	Analysis Batch:	280-111932	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0315NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/15/2012 1335	Units:	mg/L	Final Weight/Volume:	1.0 mL
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: 280-111932

Method: 353.2
Preparation: N/A

Lab Sample ID:	MRL 280-111932/18	Analysis Batch:	280-111932	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0315NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	03/15/2012 1140	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	0.103	103	50 - 150	

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-111932

Method: 353.2
Preparation: N/A

LCS Lab Sample ID:	LCS 280-111932/86	Analysis Batch:	280-111932	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0315NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	03/15/2012 1337	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-111932/87	Analysis Batch:	280-111932	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0315NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	03/15/2012 1338	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
Nitrate Nitrite as N	95	95	90 - 110	0	10		

Client: Waste Management

Job Number: 280-26403-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-111932

Method: 353.2
Preparation: N/A

LCS Lab Sample ID:	LCS 280-111932/86	Units: mg/L	
Client Matrix:	Water		
Dilution:	1.0		
Analysis Date:	03/15/2012 1337		
Prep Date:	N/A		
Leach Date:	N/A		

LCSD Lab Sample ID:	LCSD 280-111932/87
Client Matrix:	Water
Dilution:	1.0
Analysis Date:	03/15/2012 1338
Prep Date:	N/A
Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Nitrate Nitrite as N	5.00	5.00	4.74	4.74

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-111932

Method: 353.2
Preparation: N/A

MS Lab Sample ID:	280-26483-1	Analysis Batch:	280-111932	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0315NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	03/15/2012 1341			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	280-26483-1	Analysis Batch:	280-111932	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0315NXNB
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	03/15/2012 1343			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Nitrate Nitrite as N	94	94	72 - 113	0	17		

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-111932

Method: 353.2
Preparation: N/A

MS Lab Sample ID:	280-26483-1	Units: mg/L	
Client Matrix:	Water		
Dilution:	1.0		
Analysis Date:	03/15/2012 1341		
Prep Date:	N/A		
Leach Date:	N/A		

MSD Lab Sample ID:	280-26483-1
Client Matrix:	Water
Dilution:	1.0
Analysis Date:	03/15/2012 1343
Prep 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	2.4	4.00	4.00	6.21	6.23

Client: Waste Management

Job Number: 280-26403-1

Method Blank - Batch: 280-112015

Method: 365.1
Preparation: 365.2/365.3/365

Lab Sample ID:	MB 280-112015/3-A	Analysis Batch:	280-112060	Instrument ID:	WC_Konelab
Client Matrix:	Water	Prep Batch:	280-112015	Lab File ID:	031612TPHOS.xls
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	03/16/2012 1352	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	03/16/2012 1210				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Phosphorus, Total	ND		0.0050	0.050

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-112015

Method: 365.1
Preparation: 365.2/365.3/365

LCS Lab Sample ID:	LCS 280-112015/1-A	Analysis Batch:	280-112060	Instrument ID:	WC_Konelab
Client Matrix:	Water	Prep Batch:	280-112015	Lab File ID:	031612TPHOS.xls
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	03/16/2012 1352	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	03/16/2012 1210				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-112015/2-A	Analysis Batch:	280-112060	Instrument ID:	WC_Konelab
Client Matrix:	Water	Prep Batch:	280-112015	Lab File ID:	031612TPHOS.xls
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	03/16/2012 1352	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	03/16/2012 1210				
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Phosphorus, Total	97	98	90 - 110	1	10		

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-112015

Method: 365.1
Preparation: 365.2/365.3/365

LCS Lab Sample ID:	LCS 280-112015/1-A	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-112015/2-A
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/16/2012 1352			Analysis Date:	03/16/2012 1352
Prep Date:	03/16/2012 1210			Prep Date:	03/16/2012 1210
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Phosphorus, Total	0.500	0.500	0.486	0.490

Client: Waste Management

Job Number: 280-26403-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-112015

Method: 365.1
Preparation: 365.2/365.3/365

MS Lab Sample ID:	280-26365-E-1-E MS	Analysis Batch:	280-112060	Instrument ID:	WC_Konelab
Client Matrix:	Water	Prep Batch:	280-112015	Lab File ID:	031612TPHOS.xls
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	03/16/2012 1411			Final Weight/Volume:	50 mL
Prep Date:	03/16/2012 1210				
Leach Date:	N/A				

MSD Lab Sample ID:	280-26365-E-1-F MSD	Analysis Batch:	280-112060	Instrument ID:	WC_Konelab
Client Matrix:	Water	Prep Batch:	280-112015	Lab File ID:	031612TPHOS.xls
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	03/16/2012 1411			Final Weight/Volume:	50 mL
Prep Date:	03/16/2012 1210				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Phosphorus, Total	-45	-41	71 - 128	4	22	F	F

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-112015

Method: 365.1
Preparation: 365.2/365.3/365

MS Lab Sample ID:	280-26365-E-1-E MS	Units:	mg/L	MSD Lab Sample ID:	280-26365-E-1-F MSD
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/16/2012 1411			Analysis Date:	03/16/2012 1411
Prep Date:	03/16/2012 1210			Prep Date:	03/16/2012 1210
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	0.67	0.500	0.500	0.444 F	0.462 F

Client: Waste Management

Job Number: 280-26403-1

Method Blank - Batch: 280-113349

Method: 365.1
Preparation: 365.2/365.3/365

Lab Sample ID:	MB 280-113349/3-A	Analysis Batch:	280-113525	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	280-113349	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	03/28/2012 1600	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	03/28/2012 1053				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Phosphorus, Total	ND		0.0050	0.050

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-113349

Method: 365.1
Preparation: 365.2/365.3/365

LCS Lab Sample ID:	LCS 280-113349/1-A	Analysis Batch:	280-113525	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	280-113349	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	03/28/2012 1600	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	03/28/2012 1053				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-113349/2-A	Analysis Batch:	280-113525	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	280-113349	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	03/28/2012 1600	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	03/28/2012 1053				
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Phosphorus, Total	106	106	90 - 110	0	10		

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-113349

Method: 365.1
Preparation: 365.2/365.3/365

LCS Lab Sample ID:	LCS 280-113349/1-A	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-113349/2-A
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/28/2012 1600			Analysis Date:	03/28/2012 1600
Prep Date:	03/28/2012 1053			Prep Date:	03/28/2012 1053
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Phosphorus, Total	0.500	0.500	0.531	0.532

Client: Waste Management

Job Number: 280-26403-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-113349

Method: 365.1
Preparation: 365.2/365.3/365

MS Lab Sample ID:	280-26694-D-7-C MS	Analysis Batch:	280-113525	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	280-113349	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	03/28/2012 1600			Final Weight/Volume:	50 mL
Prep Date:	03/28/2012 1053				
Leach Date:	N/A				

MSD Lab Sample ID:	280-26694-D-7-D MSD	Analysis Batch:	280-113525	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	280-113349	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	03/28/2012 1600			Final Weight/Volume:	50 mL
Prep Date:	03/28/2012 1053				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Phosphorus, Total	104	105	71 - 128	0	22		

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-113349

Method: 365.1
Preparation: 365.2/365.3/365

MS Lab Sample ID:	280-26694-D-7-C MS	Units:	mg/L	MSD Lab Sample ID:	280-26694-D-7-D MSD
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/28/2012 1600			Analysis Date:	03/28/2012 1600
Prep Date:	03/28/2012 1053			Prep Date:	03/28/2012 1053
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	0.523

Client: Waste Management

Job Number: 280-26403-1

Method Blank - Batch: 280-111843

Method: 410.4
Preparation: N/A

Lab Sample ID:	MB 280-111843/5	Analysis Batch:	280-111843	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:	03/15/2012 1116	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: 280-111843

Method: 410.4
Preparation: N/A

LCS Lab Sample ID:	LCS 280-111843/3	Analysis Batch:	280-111843	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:	10 mL
Analysis Date:	03/15/2012 1116	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-111843/4	Analysis Batch:	280-111843	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:	10 mL
Analysis Date:	03/15/2012 1116	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Chemical Oxygen Demand	102	104	90 - 110	2	11		

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-111843

Method: 410.4
Preparation: N/A

LCS Lab Sample ID:	LCS 280-111843/3	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-111843/4
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/15/2012 1116			Analysis Date:	03/15/2012 1116
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	102	104

Client: Waste Management

Job Number: 280-26403-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-111843

Method: 410.4
Preparation: N/A

MS Lab Sample ID:	280-26403-1	Analysis Batch:	280-111843	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:	03/15/2012 1116			Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	280-26403-1	Analysis Batch:	280-111843	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:	03/15/2012 1116			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	97	96	90 - 110	0	11		

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-111843

Method: 410.4
Preparation: N/A

MS Lab Sample ID:	280-26403-1	Units:	mg/L	MSD Lab Sample ID:	280-26403-1
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/15/2012 .1116			Analysis Date:	03/15/2012 1116
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	34	50.0	50.0	82.4	82.0

Client: Waste Management

Job Number: 280-26403-1

Method Blank - Batch: 280-112220

Method: 410.4
Preparation: N/A

Lab Sample ID:	MB 280-112220/5	Analysis Batch:	280-112220	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:	03/19/2012 0948	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: 280-112220

Method: 410.4
Preparation: N/A

LCS Lab Sample ID:	LCS 280-112220/3	Analysis Batch:	280-112220	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:	10 mL
Analysis Date:	03/19/2012 0948	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-112220/4	Analysis Batch:	280-112220	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:	10 mL
Analysis Date:	03/19/2012 0948	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	99	100	90 - 110	1	11		

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-112220

Method: 410.4
Preparation: N/A

LCS Lab Sample ID:	LCS 280-112220/3	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-112220/4
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/19/2012 0948			Analysis Date:	03/19/2012 0948
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	99.1	100

Client: Waste Management

Job Number: 280-26403-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-112220

Method: 410.4
Preparation: N/A

MS Lab Sample ID:	280-26483-1	Analysis Batch:	280-112220	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:	03/19/2012 0948			Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	280-26483-1	Analysis Batch:	280-112220	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:	03/19/2012 0948			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	96	92	90 - 110	2	11		

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-112220

Method: 410.4
Preparation: N/A

MS Lab Sample ID:	280-26483-1	Units:	mg/L	MSD Lab Sample ID:	280-26483-1
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/19/2012 0948			Analysis Date:	03/19/2012 0948
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	50	50.0	50.0	98.1	96.4

Client: Waste Management

Job Number: 280-26403-1

Method Blank - Batch: 280-110958

Method: SM 2540D
Preparation: N/A

Lab Sample ID:	MB 280-110958/1	Analysis Batch:	280-110958	Instrument ID:	No Equipment
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:	03/08/2012 1805	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/
Lab Control Sample Duplicate Recovery Report - Batch: 280-110958

Method: SM 2540D
Preparation: N/A

LCS Lab Sample ID:	LCS 280-110958/2	Analysis Batch:	280-110958	Instrument ID:	No Equipment
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:	03/08/2012 1805	Units:	mg/L	Final Weight/Volume:	250 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-110958/3	Analysis Batch:	280-110958	Instrument ID:	No Equipment
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:	03/08/2012 1805	Units:	mg/L	Final Weight/Volume:	250 mL
Prep Date:	N/A				
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Total Suspended Solids	99	95	86 - 114	4	20		

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-110958

Method: SM 2540D
Preparation: N/A

LCS Lab Sample ID:	LCS 280-110958/2	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-110958/3
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/08/2012 1805			Analysis Date:	03/08/2012 1805
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
Total Suspended Solids	100	100	99.0	95.0

Client: Waste Management

Job Number: 280-26403-1

Duplicate - Batch: 280-110958

Method: SM 2540D
Preparation: N/A

Lab Sample ID:	280-26292-D-5 DU	Analysis Batch:	280-110958	Instrument ID:	No Equipment
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:	03/08/2012 1805	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	28	28.4	0	10	

Client: Waste Management

Job Number: 280-26403-1

Method Blank - Batch: 280-111552

Method: SM 2540D
Preparation: N/A

Lab Sample ID:	MB 280-111552/1	Analysis Batch:	280-111552	Instrument ID:	No Equipment
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:	03/13/2012 1804	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/
Lab Control Sample Duplicate Recovery Report - Batch: 280-111552

Method: SM 2540D
Preparation: N/A

LCS Lab Sample ID:	LCS 280-111552/2	Analysis Batch:	280-111552	Instrument ID:	No Equipment
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:	03/13/2012 1804	Units:	mg/L	Final Weight/Volume:	250 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-111552/3	Analysis Batch:	280-111552	Instrument ID:	No Equipment
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:	03/13/2012 1804	Units:	mg/L	Final Weight/Volume:	250 mL
Prep Date:	N/A				
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Total Suspended Solids	98	95	86 - 114	3	20		

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-111552

Method: SM 2540D
Preparation: N/A

LCS Lab Sample ID:	LCS 280-111552/2	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-111552/3
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/13/2012 1804			Analysis Date:	03/13/2012 1804
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
Total Suspended Solids	100	100	98.0	95.0

Client: Waste Management

Job Number: 280-26403-1

Duplicate - Batch: 280-111552

Method: SM 2540D
Preparation: N/A

Lab Sample ID:	280-26437-A-1 DU	Analysis Batch:	280-111552	Instrument ID:	No Equipment
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:	03/13/2012 1804	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	14	12.8	9	10	

Client: Waste Management

Job Number: 280-26403-1

Method Blank - Batch: 280-112271

Method: Total Nitrogen
Preparation: N/A

Lab Sample ID:	MB 280-112271/1	Analysis Batch:	280-112271	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	03/19/2012 1333	Units:	mg/L	Final Weight/Volume:	1.0 mL
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: 280-26403-1

Laboratory Chronicle

Lab ID: 280-26403-1 **Client ID:** SOUTHERN CHANNEL

Sample Date/Time: 03/06/2012 10:15 Received Date/Time: 03/08/2012 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:625	280-26403-C-1-A		280-111883	280-111029	03/09/2012 10:05	1	TAL DEN	JCV
A:625	280-26403-C-1-A		280-111883	280-111029	03/15/2012 03:49	1	TAL DEN	JS
A:218.6	280-26403-A-1		440-13750		03/16/2012 17:47	1	TAL IRV	SL
P:200.7	280-26403-H-1-B		280-111597	280-111038	03/13/2012 14:00	1	TAL DEN	JM
A:200.7 Rev 4.4	280-26403-H-1-B		280-111597	280-111038	03/13/2012 23:03	1	TAL DEN	JKH
P:200.7	280-26403-H-1-B		280-111807	280-111038	03/13/2012 14:00	1	TAL DEN	JM
A:200.7 Rev 4.4	280-26403-H-1-B		280-111807	280-111038	03/14/2012 13:13	1	TAL DEN	LT
P:245.1	280-26403-H-1-C		280-111565	280-111215	03/13/2012 09:45	1	TAL DEN	CLI
A:245.1	280-26403-H-1-C		280-111565	280-111215	03/13/2012 14:02	1	TAL DEN	CLI
P:1664A	280-26403-A-1-A		280-111226	280-111214	03/12/2012 07:02	1	TAL DEN	PAG
A:1664A	280-26403-A-1-A		280-111226	280-111214	03/12/2012 07:29	1	TAL DEN	PAG
A:350.1	280-26403-F-1		280-111530		03/13/2012 13:50	1	TAL DEN	SJS
P:351.2	280-26403-F-1-A		280-111943	280-111759	03/14/2012 19:00	1	TAL DEN	MW
A:351.2	280-26403-F-1-A		280-111943	280-111759	03/15/2012 16:53	1	TAL DEN	MW
A:353.2	280-26403-F-1		280-111532		03/13/2012 13:50	1	TAL DEN	SJS
P:365.2/365.3/365	280-26403-G-1-B		280-112060	280-112015	03/16/2012 12:10	1	TAL DEN	JMT
A:365.1	280-26403-G-1-B		280-112060	280-112015	03/16/2012 14:11	1	TAL DEN	JMT
A:410.4	280-26403-G-1		280-111843		03/15/2012 11:16	1	TAL DEN	AJA
A:SM 2540D	280-26403-E-1		280-110958		03/08/2012 18:05	1	TAL DEN	PAG
A:Total Nitrogen	280-26403-A-1		280-112271		03/19/2012 13:33	1	TAL DEN	RS
A:Field Sampling	280-26403-A-1		280-111461		03/06/2012 10:15	1	TAL DEN	FS

Lab ID: 280-26403-1 MS **Client ID:** SOUTHERN CHANNEL

Sample Date/Time: 03/06/2012 10:15 Received Date/Time: 03/08/2012 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:350.1	280-26403-F-1 MS		280-111530		03/13/2012 13:51	1	TAL DEN	SJS
A:353.2	280-26403-F-1 MS		280-111532		03/13/2012 13:51	1	TAL DEN	SJS
A:410.4	280-26403-G-1 MS		280-111843		03/15/2012 11:16	1	TAL DEN	AJA

Lab ID: 280-26403-1 MSD **Client ID:** SOUTHERN CHANNEL

Sample Date/Time: 03/06/2012 10:15 Received Date/Time: 03/08/2012 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:350.1	280-26403-F-1 MSD		280-111530		03/13/2012 13:53	1	TAL DEN	SJS
A:353.2	280-26403-F-1 MSD		280-111532		03/13/2012 13:53	1	TAL DEN	SJS
A:410.4	280-26403-G-1 MSD		280-111843		03/15/2012 11:16	1	TAL DEN	AJA

Client: Waste Management

Job Number: 280-26403-1

Laboratory Chronicle

Lab ID: 280-26403-2 **Client ID:** UPCANYON

Sample Date/Time: 03/06/2012 10:40 Received Date/Time: 03/08/2012 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:625	280-26403-C-2-A		280-111883	280-111029	03/09/2012 10:05	1	TAL DEN	JCV
A:625	280-26403-C-2-A		280-111883	280-111029	03/15/2012 04:09	1	TAL DEN	JS
A:218.6	280-26403-A-2		440-13750		03/16/2012 17:25	1	TAL IRV	SL
P:200.7	280-26403-A-2-A		280-111597	280-111038	03/13/2012 14:00	1	TAL DEN	JM
A:200.7 Rev 4.4	280-26403-A-2-A		280-111597	280-111038	03/13/2012 23:05	1	TAL DEN	JKH
P:200.7	280-26403-A-2-A		280-111807	280-111038	03/13/2012 14:00	1	TAL DEN	JM
A:200.7 Rev 4.4	280-26403-A-2-A		280-111807	280-111038	03/14/2012 13:16	1	TAL DEN	LT
P:245.1	280-26403-H-2-B		280-111565	280-111215	03/13/2012 09:45	1	TAL DEN	CLI
A:245.1	280-26403-H-2-B		280-111565	280-111215	03/13/2012 14:04	1	TAL DEN	CLI
P:1664A	280-26403-A-2-B		280-111226	280-111214	03/12/2012 07:02	1	TAL DEN	PAG
A:1664A	280-26403-A-2-B		280-111226	280-111214	03/12/2012 07:29	1	TAL DEN	PAG
A:350.1	280-26403-G-2		280-111530		03/13/2012 13:54	1	TAL DEN	SJS
P:351.2	280-26403-G-2-A		280-111943	280-111759	03/14/2012 19:00	1	TAL DEN	MW
A:351.2	280-26403-G-2-A		280-111943	280-111759	03/15/2012 16:54	1	TAL DEN	MW
A:353.2	280-26403-G-2		280-111532		03/13/2012 13:54	1	TAL DEN	SJS
P:365.2/365.3/365	280-26403-F-2-B		280-112060	280-112015	03/16/2012 12:10	1	TAL DEN	JMT
A:365.1	280-26403-F-2-B		280-112060	280-112015	03/16/2012 14:11	1	TAL DEN	JMT
A:410.4	280-26403-F-2		280-111843		03/15/2012 11:16	1	TAL DEN	AJA
A:SM 2540D	280-26403-E-2		280-110958		03/08/2012 18:05	1	TAL DEN	PAG
A:Total Nitrogen	280-26403-A-2		280-112271		03/19/2012 13:33	1	TAL DEN	RS
A:Field Sampling	280-26403-A-2		280-111461		03/06/2012 10:40	1	TAL DEN	FS

Client: Waste Management

Job Number: 280-26403-1

Laboratory Chronicle

Lab ID: 280-26403-3 **Client ID:** DETENTION BASIN EASTERN OUTFALL

Sample Date/Time: 03/06/2012 10:00 Received Date/Time: 03/08/2012 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:625	280-26403-C-3-A		280-111883	280-111029	03/09/2012 10:05	1	TAL DEN	JCV
A:625	280-26403-C-3-A		280-111883	280-111029	03/15/2012 04:28	1	TAL DEN	JS
A:218.6	280-26403-A-3		440-13750		03/16/2012 17:36	1	TAL IRV	SL
P:200.7	280-26403-A-3-A		280-111597	280-111038	03/13/2012 14:00	1	TAL DEN	JM
A:200.7 Rev 4.4	280-26403-A-3-A		280-111597	280-111038	03/13/2012 23:08	1	TAL DEN	JKH
P:200.7	280-26403-A-3-A		280-111807	280-111038	03/13/2012 14:00	1	TAL DEN	JM
A:200.7 Rev 4.4	280-26403-A-3-A		280-111807	280-111038	03/14/2012 13:18	1	TAL DEN	LT
P:245.1	280-26403-H-3-D		280-111565	280-111215	03/13/2012 09:45	1	TAL DEN	CLI
A:245.1	280-26403-H-3-D		280-111565	280-111215	03/13/2012 14:07	1	TAL DEN	CLI
P:1664A	280-26403-A-3-B		280-111226	280-111214	03/12/2012 07:02	1	TAL DEN	PAG
A:1664A	280-26403-A-3-B		280-111226	280-111214	03/12/2012 07:29	1	TAL DEN	PAG
A:350.1	280-26403-G-3		280-111530		03/13/2012 13:56	1	TAL DEN	SJS
P:351.2	280-26403-G-3-A		280-111943	280-111759	03/14/2012 19:00	1	TAL DEN	MW
A:351.2	280-26403-G-3-A		280-111943	280-111759	03/15/2012 16:55	1	TAL DEN	MW
A:353.2	280-26403-G-3		280-111532		03/13/2012 13:56	1	TAL DEN	SJS
P:365.2/365.3/365	280-26403-F-3-B		280-112060	280-112015	03/16/2012 12:10	1	TAL DEN	JMT
A:365.1	280-26403-F-3-B		280-112060	280-112015	03/16/2012 14:14	1	TAL DEN	JMT
A:410.4	280-26403-F-3		280-111843		03/15/2012 11:16	1	TAL DEN	AJA
A:SM 2540D	280-26403-E-3		280-110958		03/08/2012 18:05	1	TAL DEN	PAG
A:Total Nitrogen	280-26403-A-3		280-112271		03/19/2012 13:33	1	TAL DEN	RS
A:Field Sampling	280-26403-A-3		280-111461		03/06/2012 10:00	1	TAL DEN	FS

Lab ID: 280-26403-3 MS **Client ID:** DETENTION BASIN EASTERN OUTFALL

Sample Date/Time: 03/06/2012 10:00 Received Date/Time: 03/08/2012 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:245.1	280-26403-H-3-E MS		280-111565	280-111215	03/13/2012 09:45	1	TAL DEN	CLI
A:245.1	280-26403-H-3-E MS		280-111565	280-111215	03/13/2012 14:09	1	TAL DEN	CLI
P:351.2	280-26403-G-3-B MS		280-111943	280-111759	03/14/2012 19:00	1	TAL DEN	MW
A:351.2	280-26403-G-3-B MS		280-111943	280-111759	03/15/2012 16:57	1	TAL DEN	MW

Client: Waste Management

Job Number: 280-26403-1

Laboratory Chronicle

Lab ID: 280-26403-3 MSD **Client ID:** DETENTION BASIN EASTERN OUTFALL

Sample Date/Time: 03/06/2012 10:00 Received Date/Time: 03/08/2012 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:245.1	280-26403-H-3-F MSD		280-111565	280-111215	03/13/2012 09:45	1	TAL DEN	CLI
A:245.1	280-26403-H-3-F MSD		280-111565	280-111215	03/13/2012 14:11	1	TAL DEN	CLI
P:351.2	280-26403-G-3-C MSD		280-111943	280-111759	03/14/2012 19:00	1	TAL DEN	MW
A:351.2	280-26403-G-3-C MSD		280-111943	280-111759	03/15/2012 16:58	1	TAL DEN	MW

Lab ID: 280-26483-1 **Client ID:** CULVERT

Sample Date/Time: 03/06/2012 18:20 Received Date/Time: 03/09/2012 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:625	280-26483-D-1-A		280-112258	280-111377	03/12/2012 20:20	1	TAL DEN	EJP
A:625	280-26483-D-1-A		280-112258	280-111377	03/16/2012 19:30	1	TAL DEN	MGH
A:218.6	280-26483-A-1		440-13750		03/16/2012 17:58	1	TAL IRV	SL
P:200.7	280-26483-H-1-D		280-112188	280-111449	03/16/2012 06:45	1	TAL DEN	CLI
A:200.7 Rev 4.4	280-26483-H-1-D		280-112188	280-111449	03/16/2012 14:54	1	TAL DEN	LT
P:245.1	280-26483-H-1-A		280-111565	280-111385	03/13/2012 09:45	1	TAL DEN	CLI
A:245.1	280-26483-H-1-A		280-111565	280-111385	03/13/2012 13:28	1	TAL DEN	CLI
P:1664A	280-26483-A-1-A		280-112216	280-112192	03/19/2012 08:37	1	TAL DEN	PAG
A:1664A	280-26483-A-1-A		280-112216	280-112192	03/19/2012 09:26	1	TAL DEN	PAG
A:350.1	280-26483-F-1		280-112578		03/21/2012 15:25	1	TAL DEN	SJS
P:351.2	280-26483-F-1-A		280-111943	280-111759	03/14/2012 19:00	1	TAL DEN	MW
A:351.2	280-26483-F-1-A		280-111943	280-111759	03/15/2012 17:00	1	TAL DEN	MW
A:353.2	280-26483-F-1		280-111932		03/15/2012 13:40	1	TAL DEN	SJS
P:365.2/365.3/365	280-26483-G-1-D		280-113525	280-113349	03/28/2012 10:53	1	TAL DEN	JMT
A:365.1	280-26483-G-1-D		280-113525	280-113349	03/28/2012 16:00	1	TAL DEN	JMT
A:410.4	280-26483-G-1		280-112220		03/19/2012 09:48	1	TAL DEN	AJA
A:SM 2540D	280-26483-E-1		280-111552		03/13/2012 18:04	1	TAL DEN	PAG
A:Total Nitrogen	280-26483-A-1		280-112271		03/19/2012 13:33	1	TAL DEN	RS
A:Field Sampling	280-26483-A-1		280-111284		03/06/2012 20:20	1	TAL DEN	FS

Lab ID: 280-26483-1 MS **Client ID:** CULVERT

Sample Date/Time: 03/06/2012 18:20 Received Date/Time: 03/09/2012 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:245.1	280-26483-H-1-B MS		280-111565	280-111385	03/13/2012 09:45	1	TAL DEN	CLI
A:245.1	280-26483-H-1-B MS		280-111565	280-111385	03/13/2012 13:30	1	TAL DEN	CLI
A:353.2	280-26483-F-1 MS		280-111932		03/15/2012 13:41	1	TAL DEN	SJS
A:410.4	280-26483-G-1 MS		280-112220		03/19/2012 09:48	1	TAL DEN	AJA

Client: Waste Management

Job Number: 280-26403-1

Laboratory Chronicle

Lab ID: 280-26483-1 MSD **Client ID:** CULVERT

Sample Date/Time: 03/06/2012 18:20 Received Date/Time: 03/09/2012 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:245.1	280-26483-H-1-C MSD		280-111565	280-111385	03/13/2012 09:45	1	TAL DEN	CLI
A:245.1	280-26483-H-1-C MSD		280-111565	280-111385	03/13/2012 13:32	1	TAL DEN	CLI
A:353.2	280-26483-F-1 MSD		280-111932		03/15/2012 13:43	1	TAL DEN	SJS
A:410.4	280-26483-G-1 MSD		280-112220		03/19/2012 09:48	1	TAL DEN	AJA

Client: Waste Management

Job Number: 280-26403-1

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 280-111029/1-A		280-111883	280-111029	03/09/2012 10:05	1	TAL DEN	JCV
A:625	MB 280-111029/1-A		280-111883	280-111029	03/14/2012 20:59	1	TAL DEN	JS
P:625	MB 280-111377/1-A		280-112258	280-111377	03/12/2012 20:20	1	TAL DEN	EJP
A:625	MB 280-111377/1-A		280-112258	280-111377	03/16/2012 19:11	1	TAL DEN	MGH
P:200.7	MB 280-111038/1-A		280-111597	280-111038	03/13/2012 14:00	1	TAL DEN	JM
A:200.7 Rev 4.4	MB 280-111038/1-A		280-111597	280-111038	03/13/2012 22:33	1	TAL DEN	JKH
P:200.7	MB 280-111038/1-A		280-111807	280-111038	03/13/2012 14:00	1	TAL DEN	JM
A:200.7 Rev 4.4	MB 280-111038/1-A		280-111807	280-111038	03/14/2012 12:57	1	TAL DEN	LT
P:200.7	MB 280-111449/1-A		280-112188	280-111449	03/16/2012 06:45	1	TAL DEN	CLI
A:200.7 Rev 4.4	MB 280-111449/1-A		280-112188	280-111449	03/16/2012 14:22	1	TAL DEN	LT
P:245.1	MB 280-111385/1-A		280-111565	280-111385	03/13/2012 09:45	1	TAL DEN	CLI
A:245.1	MB 280-111385/1-A		280-111565	280-111385	03/13/2012 13:23	1	TAL DEN	CLI
P:245.1	MB 280-111215/1-A		280-111565	280-111215	03/13/2012 09:45	1	TAL DEN	CLI
A:245.1	MB 280-111215/1-A		280-111565	280-111215	03/13/2012 13:58	1	TAL DEN	CLI
P:1664A	MB 280-111214/1-A		280-111226	280-111214	03/12/2012 07:02	1	TAL DEN	PAG
A:1664A	MB 280-111214/1-A		280-111226	280-111214	03/12/2012 07:29	1	TAL DEN	PAG
P:1664A	MB 280-112192/1-A		280-112216	280-112192	03/19/2012 08:37	1	TAL DEN	PAG
A:1664A	MB 280-112192/1-A		280-112216	280-112192	03/19/2012 09:26	1	TAL DEN	PAG
A:350.1	MB 280-111530/56		280-111530		03/13/2012 13:06	1	TAL DEN	SJS
A:350.1	MB 280-112578/106		280-112578		03/21/2012 14:47	1	TAL DEN	SJS
P:351.2	MB 280-111759/3-A		280-111943	280-111759	03/14/2012 19:00	1	TAL DEN	MW
A:351.2	MB 280-111759/3-A		280-111943	280-111759	03/15/2012 16:25	1	TAL DEN	MW
A:353.2	MB 280-111532/56		280-111532		03/13/2012 13:06	1	TAL DEN	SJS
A:353.2	MB 280-111932/85		280-111932		03/15/2012 13:35	1	TAL DEN	SJS
P:365.2/365.3/365	MB 280-112015/3-A		280-112060	280-112015	03/16/2012 12:10	1	TAL DEN	JMT
A:365.1	MB 280-112015/3-A		280-112060	280-112015	03/16/2012 13:52	1	TAL DEN	JMT
P:365.2/365.3/365	MB 280-113349/3-A		280-113525	280-113349	03/28/2012 10:53	1	TAL DEN	JMT
A:365.1	MB 280-113349/3-A		280-113525	280-113349	03/28/2012 16:00	1	TAL DEN	JMT
A:410.4	MB 280-111843/5		280-111843		03/15/2012 11:16	1	TAL DEN	AJA
A:410.4	MB 280-112220/5		280-112220		03/19/2012 09:48	1	TAL DEN	AJA
A:SM 2540D	MB 280-110958/1		280-110958		03/08/2012 18:05	1	TAL DEN	PAG
A:SM 2540D	MB 280-111552/1		280-111552		03/13/2012 18:04	1	TAL DEN	PAG
A:Total Nitrogen	MB 280-112271/1		280-112271		03/19/2012 13:33	1	TAL DEN	RS

Client: Waste Management

Job Number: 280-26403-1

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 280-111029/2-A		280-111883	280-111029	03/09/2012 10:05	1	TAL DEN	JCV
A:625	LCS 280-111029/2-A		280-111883	280-111029	03/14/2012 21:18	1	TAL DEN	JS
P:625	LCS 280-111377/2-A		280-112258	280-111377	03/12/2012 20:20	1	TAL DEN	EJP
A:625	LCS 280-111377/2-A		280-112258	280-111377	03/16/2012 10:24	1	TAL DEN	MGH
P:200.7	LCS 280-111038/2-A		280-111597	280-111038	03/13/2012 14:00	1	TAL DEN	JM
A:200.7 Rev 4.4	LCS 280-111038/2-A		280-111597	280-111038	03/13/2012 22:36	1	TAL DEN	JKH
P:200.7	LCS 280-111038/2-A		280-111807	280-111038	03/13/2012 14:00	1	TAL DEN	JM
A:200.7 Rev 4.4	LCS 280-111038/2-A		280-111807	280-111038	03/14/2012 12:59	1	TAL DEN	LT
P:200.7	LCS 280-111449/2-A		280-112188	280-111449	03/16/2012 06:45	1	TAL DEN	CLI
A:200.7 Rev 4.4	LCS 280-111449/2-A		280-112188	280-111449	03/16/2012 14:25	1	TAL DEN	LT
P:245.1	LCS 280-111385/2-A		280-111565	280-111385	03/13/2012 09:45	1	TAL DEN	CLI
A:245.1	LCS 280-111385/2-A		280-111565	280-111385	03/13/2012 13:25	1	TAL DEN	CLI
P:245.1	LCS 280-111215/2-A		280-111565	280-111215	03/13/2012 09:45	1	TAL DEN	CLI
A:245.1	LCS 280-111215/2-A		280-111565	280-111215	03/13/2012 14:00	1	TAL DEN	CLI
P:1664A	LCS 280-111214/2-A		280-111226	280-111214	03/12/2012 07:02	1	TAL DEN	PAG
A:1664A	LCS 280-111214/2-A		280-111226	280-111214	03/12/2012 07:29	1	TAL DEN	PAG
P:1664A	LCS 280-112192/2-A		280-112216	280-112192	03/19/2012 08:37	1	TAL DEN	PAG
A:1664A	LCS 280-112192/2-A		280-112216	280-112192	03/19/2012 09:26	1	TAL DEN	PAG
A:350.1	LCS 280-111530/57		280-111530		03/13/2012 13:08	1	TAL DEN	SJS
A:350.1	LCS 280-112578/107		280-112578		03/21/2012 14:49	1	TAL DEN	SJS
P:351.2	LCS 280-111759/1-A		280-111943	280-111759	03/14/2012 19:00	1	TAL DEN	MW
A:351.2	LCS 280-111759/1-A		280-111943	280-111759	03/15/2012 16:23	1	TAL DEN	MW
A:353.2	LCS 280-111532/57		280-111532		03/13/2012 13:08	1	TAL DEN	SJS
A:353.2	LCS 280-111932/86		280-111932		03/15/2012 13:37	1	TAL DEN	SJS
P:365.2/365.3/365	LCS 280-112015/1-A		280-112060	280-112015	03/16/2012 12:10	1	TAL DEN	JMT
A:365.1	LCS 280-112015/1-A		280-112060	280-112015	03/16/2012 13:52	1	TAL DEN	JMT
P:365.2/365.3/365	LCS 280-113349/1-A		280-113525	280-113349	03/28/2012 10:53	1	TAL DEN	JMT
A:365.1	LCS 280-113349/1-A		280-113525	280-113349	03/28/2012 16:00	1	TAL DEN	JMT
A:410.4	LCS 280-111843/3		280-111843		03/15/2012 11:16	1	TAL DEN	AJA
A:410.4	LCS 280-112220/3		280-112220		03/19/2012 09:48	1	TAL DEN	AJA
A:SM 2540D	LCS 280-110958/2		280-110958		03/08/2012 18:05	1	TAL DEN	PAG
A:SM 2540D	LCS 280-111552/2		280-111552		03/13/2012 18:04	1	TAL DEN	PAG

Client: Waste Management

Job Number: 280-26403-1

Laboratory Chronicle

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 280-111029/3-A		280-111883	280-111029	03/09/2012 10:05	1	TAL DEN	JCV
A:625	LCSD 280-111029/3-A		280-111883	280-111029	03/14/2012 21:38	1	TAL DEN	JS
P:625	LCSD 280-111377/3-A		280-112258	280-111377	03/12/2012 20:20	1	TAL DEN	EJP
A:625	LCSD 280-111377/3-A		280-112258	280-111377	03/16/2012 10:43	1	TAL DEN	MGH
P:1664A	LCSD 280-111214/19-A		280-111226	280-111214	03/12/2012 07:02	1	TAL DEN	PAG
A:1664A	LCSD 280-111214/19-A		280-111226	280-111214	03/12/2012 07:29	1	TAL DEN	PAG
P:1664A	LCSD 280-112192/3-A		280-112216	280-112192	03/19/2012 08:37	1	TAL DEN	PAG
A:1664A	LCSD 280-112192/3-A		280-112216	280-112192	03/19/2012 09:26	1	TAL DEN	PAG
A:350.1	LCSD 280-111530/58		280-111530		03/13/2012 13:09	1	TAL DEN	SJS
A:350.1	LCSD 280-112578/108		280-112578		03/21/2012 14:50	1	TAL DEN	SJS
P:351.2	LCSD 280-111759/2-A		280-111943	280-111759	03/14/2012 19:00	1	TAL DEN	MW
A:351.2	LCSD 280-111759/2-A		280-111943	280-111759	03/15/2012 16:24	1	TAL DEN	MW
A:353.2	LCSD 280-111532/58		280-111532		03/13/2012 13:09	1	TAL DEN	SJS
A:353.2	LCSD 280-111932/87		280-111932		03/15/2012 13:38	1	TAL DEN	SJS
P:365.2/365.3/365	LCSD 280-112015/2-A		280-112060	280-112015	03/16/2012 12:10	1	TAL DEN	JMT
A:365.1	LCSD 280-112015/2-A		280-112060	280-112015	03/16/2012 13:52	1	TAL DEN	JMT
P:365.2/365.3/365	LCSD 280-113349/2-A		280-113525	280-113349	03/28/2012 10:53	1	TAL DEN	JMT
A:365.1	LCSD 280-113349/2-A		280-113525	280-113349	03/28/2012 16:00	1	TAL DEN	JMT
A:410.4	LCSD 280-111843/4		280-111843		03/15/2012 11:16	1	TAL DEN	AJA
A:410.4	LCSD 280-112220/4		280-112220		03/19/2012 09:48	1	TAL DEN	AJA
A:SM 2540D	LCSD 280-110958/3		280-110958		03/08/2012 18:05	1	TAL DEN	PAG
A:SM 2540D	LCSD 280-111552/3		280-111552		03/13/2012 18:04	1	TAL DEN	PAG

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:353.2	MRL 280-111532/18		280-111532		03/13/2012 12:09	1	TAL DEN	SJS
A:353.2	MRL 280-111932/18		280-111932		03/15/2012 11:40	1	TAL DEN	SJS

Client: Waste Management

Job Number: 280-26403-1

Laboratory Chronicle

Lab ID: MS **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:200.7	280-26368-H-1-B MS		280-111597	280-111038	03/13/2012 14:00	1	TAL DEN	JM
A:200.7 Rev 4.4	280-26368-H-1-B MS		280-111597	280-111038	03/13/2012 22:43	1	TAL DEN	JKH
P:200.7	280-26368-H-1-B MS		280-111807	280-111038	03/13/2012 14:00	1	TAL DEN	JM
A:200.7 Rev 4.4	280-26368-H-1-B MS		280-111807	280-111038	03/14/2012 13:06	1	TAL DEN	LT
P:200.7	280-26441-E-1-B MS		280-112188	280-111449	03/16/2012 06:45	1	TAL DEN	CLI
A:200.7 Rev 4.4	280-26441-E-1-B MS		280-112188	280-111449	03/16/2012 14:32	1	TAL DEN	LT
A:350.1	280-26573-F-6 MS		280-112578		03/21/2012 15:13	1	TAL DEN	SJS
P:365.2/365.3/365	280-26365-E-1-E MS		280-112060	280-112015	03/16/2012 12:10	1	TAL DEN	JMT
A:365.1	280-26365-E-1-E MS		280-112060	280-112015	03/16/2012 14:11	1	TAL DEN	JMT
P:365.2/365.3/365	280-26694-D-7-C MS		280-113525	280-113349	03/28/2012 10:53	1	TAL DEN	JMT
A:365.1	280-26694-D-7-C MS		280-113525	280-113349	03/28/2012 16:00	1	TAL DEN	JMT

Lab ID: MSD **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	440-5418-A-1 MSD		440-13750		03/16/2012 17:13	1	TAL IRV	SL
P:200.7	280-26368-H-1-C MSD		280-111597	280-111038	03/13/2012 14:00	1	TAL DEN	JM
A:200.7 Rev 4.4	280-26368-H-1-C MSD		280-111597	280-111038	03/13/2012 22:45	1	TAL DEN	JKH
P:200.7	280-26368-H-1-C MSD		280-111807	280-111038	03/13/2012 14:00	1	TAL DEN	JM
A:200.7 Rev 4.4	280-26368-H-1-C MSD		280-111807	280-111038	03/14/2012 13:09	1	TAL DEN	LT
P:200.7	280-26441-E-1-C MSD		280-112188	280-111449	03/16/2012 06:45	1	TAL DEN	CLI
A:200.7 Rev 4.4	280-26441-E-1-C MSD		280-112188	280-111449	03/16/2012 14:34	1	TAL DEN	LT
A:350.1	280-26573-F-6 MSD		280-112578		03/21/2012 15:14	1	TAL DEN	SJS
P:365.2/365.3/365	280-26365-E-1-F MSD		280-112060	280-112015	03/16/2012 12:10	1	TAL DEN	JMT
A:365.1	280-26365-E-1-F MSD		280-112060	280-112015	03/16/2012 14:11	1	TAL DEN	JMT
P:365.2/365.3/365	280-26694-D-7-D MSD		280-113525	280-113349	03/28/2012 10:53	1	TAL DEN	JMT
A:365.1	280-26694-D-7-D MSD		280-113525	280-113349	03/28/2012 16:00	1	TAL DEN	JMT

Client: Waste Management

Job Number: 280-26403-1

Laboratory Chronicle

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

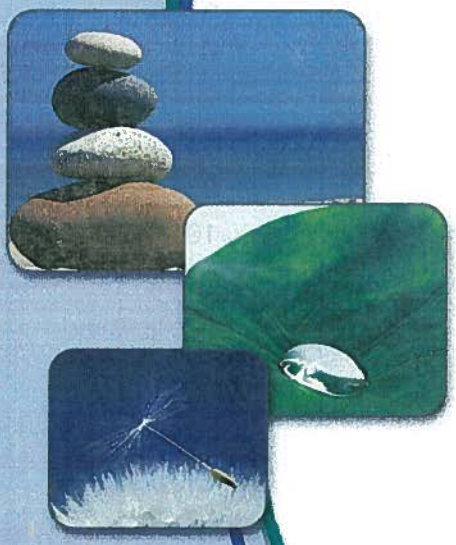
Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:SM 2540D	280-26292-D-5 DU		280-110958		03/08/2012 18:05	1	TAL DEN	PAG
A:SM 2540D	280-26437-A-1 DU		280-111552		03/13/2012 18:04	1	TAL DEN	PAG

Lab References:

TAL DEN = TestAmerica Denver

TAL IRV = TestAmerica Irvine



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Honolulu
99-193 Aiea Heights Drive, Suite 121
Aiea, HI 96701
Tel: 808-486-5227

TestAmerica Job ID: HVC0052
Client Project/Site: 60246625.02
Client Project Description: AECOM, WGSL STORMWATER

For:
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Attn: Betsy Sarah

Kristie Reilly

Authorized for release by:
3/22/2012 3:22:44 PM
Kristie Reilly
Project Manager
Kristie.Brachmann@testamericainc.com

Designee for

Marvin D. Heskett III
Service center manager
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LINKS

Review your project results through TotalAccess

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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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Definitions/Glossary

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0052

Qualifiers

WetChem

Qualifier	Qualifier Description
A5	Incubator/water bath temperature was outside method requirements.
H	Sample analysis performed past method-specified holding time.

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
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
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: 60246625.02

TestAmerica Job ID: HVC0052

Job ID: HVC0052

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 6 degrees C.
NELAC states 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.

The reported results were obtained in compliance with the 2003 NELAC standards unless otherwise noted.

Sample Summary

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0052

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
HVC0052-01	UPCANYON	Water - NonPotable	03/06/12 10:40	03/06/12 11:30

Detection Summary

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0052

Client Sample ID: UPCANYON

Lab Sample ID: HVC0052-01

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
BOD - 5 Day	2.68	A5	2.00		mg/L	1.00		SM5210B	Total

Client Sample Results

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0052

Client Sample ID: UPCANYON
Date Collected: 03/06/12 10:40
Date Received: 03/06/12 11:30

Lab Sample ID: HVC0052-01
Matrix: Water - NonPotable

Method: SM5210B - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
BOD - 5 Day	2.68	A5	2.00		mg/L		03/07/12 11:26	03/12/12 10:32	1.00

QC Sample Results

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0052

Method: SM5210B - General Chemistry Parameters

Lab Sample ID: 12C0006-BLK1
Matrix: Water - NonPotable
Analysis Batch: 12C0006

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 12C0006_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
BOD - 5 Day	ND	A5	2.00		mg/L		03/07/12 11:18	03/12/12 10:21	1.00

Lab Sample ID: 12C0006-BS1
Matrix: Water - NonPotable
Analysis Batch: 12C0006

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 12C0006_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
BOD - 5 Day	198	196	A5	mg/L		99	85 - 115

Lab Sample ID: 12C0006-DUP1
Matrix: Water - NonPotable
Analysis Batch: 12C0006

Client Sample ID: Duplicate
Prep Type: Total
Prep Batch: 12C0006_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
BOD - 5 Day	5.82		5.55	A5 H	mg/L		5	20

QC Association Summary

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0052

WetChem

Analysis Batch: 12C0006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12C0006-BLK1	Method Blank	Total	Water - NonPotable	SM5210B	12C0006_P
12C0006-BS1	Lab Control Sample	Total	Water - NonPotable	SM5210B	12C0006_P
12C0006-DUP1	Duplicate	Total	Water - NonPotable	SM5210B	12C0006_P
HVC0052-01	UPCANYON	Total	Water - NonPotable	SM5210B	12C0006_P

Prep Batch: 12C0006_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12C0006-BLK1	Method Blank	Total	Water - NonPotable	Default Prep GenChem	
12C0006-BS1	Lab Control Sample	Total	Water - NonPotable	Default Prep GenChem	
12C0006-DUP1	Duplicate	Total	Water - NonPotable	Default Prep GenChem	
HVC0052-01	UPCANYON	Total	Water - NonPotable	Default Prep GenChem	

Lab Chronicle

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0052

Client Sample ID: UPCANYON

Date Collected: 03/06/12 10:40
Date Received: 03/06/12 11:30

Lab Sample ID: HVC0052-01

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	12C0006_P	03/07/12 11:26	HJM	TAL HON
Total	Analysis	GenChem SM5210B		1.00	12C0006	03/12/12 10:32	HJM	TAL HON

Laboratory References:

TAL HON = TestAmerica Honolulu, 99-193 Aiea Heights Drive, Suite 121, Aiea, HI 96701, TEL 808-486-5227

Certification Summary

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0052

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Honolulu	Alaska (UST)	State Program	10	
TestAmerica Honolulu	Florida	NELAC	4	E87907
TestAmerica Honolulu	Hawaii	State Program	9	
TestAmerica Honolulu	L-A-B	DoD ELAP		L2250
TestAmerica Honolulu	L-A-B	ISO/IEC 17025		L2250
TestAmerica Honolulu	USDA	Federal		HON-S-206

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0052

Method	Method Description	Protocol	Laboratory
SM5210B	General Chemistry Parameters		TAL HON

Protocol References:

Laboratory References:

TAL HON = TestAmerica Honolulu, 99-193 Aiea Heights Drive, Suite 121, Aiea, HI 96701, TEL 808-486-5227

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TESTAMERICA DENVER

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LAB JOB NO. HUC0052
LOCATION
CONTAINERS

Chain of Custody / Analysis Request Form

Report to: Mark Hofferbert	Project identification
Company name: AECOM Technical Services, Inc.	Job name: WGSL Stormwater
Address: 1001 Bishop St., Suite 1600	Job number: 60246625.02
City: Honolulu; State: HI; ZIP: 96813	
Phone: 808-523-8874; Fax: 808-523-8950	Contact email address: mark.hofferbert@aecom.com, margie.thach@aecom.com; Date results needed: 2 weeks
Sampler; # samples in shipment	

Indicate analyses requested

Item no.	Client sample ID	COMP	GRAB	Matrix: Water	Soil	Wastewater	Drinking water	Sludge	Liquid	Solid	Oil	Other	Preservation method	Sampling: Date	Time	No. of containers	1664 Oil&Grease	BOD SM5210B, Hex Chromium 218.6	TSS SM2540D	COD 410.4, T. Phos 365.1	Nitrate-Nitrite N 353.2, Ammonia 350.	T. Nitrogen SM4500-N	625 SVOCs*	200.7 Metals**			Laboratory ID no.
1	Upcanyon	~~X~~	X	X									HCl	03/06	10:40		X										HUC0052-01
2		MPT 03/06/12 ~~X~~	X	X									varies					X	X	X	X	X	X	X			
3																											
4																											
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7																											
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9																											
10																											

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Margie Thach [signature]	3/6/12 10:32	Hand	[signature]	TestAmerica	3/6/12 1430	[illegible] 62
[signature]	3/6/12 1400	Fedex				

Comments: * SVOCs: alpha-terpineol, benzoic acid, p-cresol, pentachlorophenol, phenol. ** Metals: As, Cd, Fe, Pb, Hg, Se, Ag, Zn

Drop ship to TA-Denver (PM: Betsy Sara). TA-Honolulu to analyze BOD and preserve CrVI (218.6); report to TA-Denver.

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3/22/2012

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SUITE 121
AIEA, HI 96701

Origin ID: HNLA

FedEx Express

J12101112190225

Ship Date: 06MAR12
ActWgt: 35.0 LB
CAD: 2315095/INET3250

Delivery Address Bar Code

Ref # 162-260
Invoice #
PO #
Dept #

SHIP TO: (303) 736-0100

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TestAmerica - Denver
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Arvada, CO 80002

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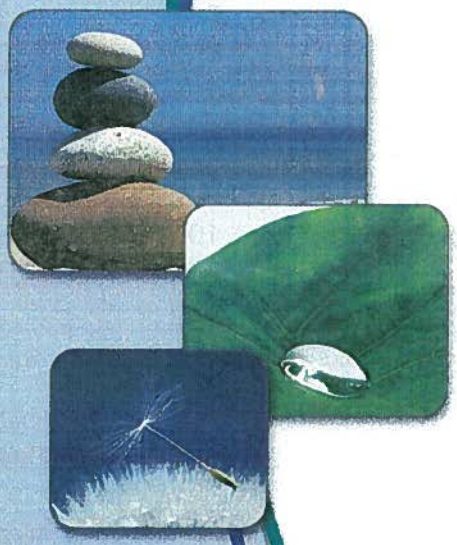

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Honolulu
99-193 Aiea Heights Drive, Suite 121
Aiea, HI 96701
Tel: 808-486-5227

TestAmerica Job ID: HVC0053
Client Project/Site: 60246625.02
Client Project Description: AECOM, WGSL STORMWATER

For:
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Attn: Betsy Sarah

Kristie Reilly

Authorized for release by:
3/22/2012 3:24:51 PM
Kristie Reilly
Project Manager
Kristie.Brachmann@testamericainc.com

Designee for

Marvin D. Heskett III
Service center manager
marvin.heskett@testamericainc.com

LINKS

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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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Table of Contents 2
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Definitions/Glossary

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0053

Qualifiers

WetChem

Qualifier	Qualifier Description
A5	Incubator/water bath temperature was outside method requirements.
H	Sample analysis performed past method-specified holding time.

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
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
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: 60246625.02

TestAmerica Job ID: HVC0053

Job ID: HVC0053

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 3 degrees C.
NELAC states 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.

The reported results were obtained in compliance with the 2003 NELAC standards unless otherwise noted.

Sample Summary

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0053

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
HVC0053-01	SOUTHERN CHANNEL	Water - NonPotable	03/06/12 10:15	03/06/12 11:30

Detection Summary

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0053

Client Sample ID: SOUTHERN CHANNEL

Lab Sample ID: HVC0053-01

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
BOD - 5 Day	3.88	A5	2.00		mg/L	1.00		SM5210B	Total

Client Sample Results

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0053

Client Sample ID: SOUTHERN CHANNEL
Date Collected: 03/06/12 10:15
Date Received: 03/06/12 11:30

Lab Sample ID: HVC0053-01
Matrix: Water - NonPotable

Method: SM5210B - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
BOD - 5 Day	3.88	A5	2.00		mg/L		03/07/12 11:23	03/12/12 10:29	1.00

QC Sample Results

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0053

Method: SM5210B - General Chemistry Parameters

Lab Sample ID: 12C0006-BLK1
Matrix: Water - NonPotable
Analysis Batch: 12C0006

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 12C0006_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
BOD - 5 Day	ND	A5	2.00		mg/L		03/07/12 11:18	03/12/12 10:21	1.00

Lab Sample ID: 12C0006-BS1
Matrix: Water - NonPotable
Analysis Batch: 12C0006

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 12C0006_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
BOD - 5 Day	198	196	A5	mg/L		99	85 - 115

Lab Sample ID: 12C0006-DUP1
Matrix: Water - NonPotable
Analysis Batch: 12C0006

Client Sample ID: Duplicate
Prep Type: Total
Prep Batch: 12C0006_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
BOD - 5 Day	5.82		5.55	A5 H	mg/L		5	20

QC Association Summary

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0053

WetChem

Analysis Batch: 12C0006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12C0006-BLK1	Method Blank	Total	Water - NonPotable	SM5210B	12C0006_P
12C0006-BS1	Lab Control Sample	Total	Water - NonPotable	SM5210B	12C0006_P
12C0006-DUP1	Duplicate	Total	Water - NonPotable	SM5210B	12C0006_P
HVC0053-01	SOUTHERN CHANNEL	Total	Water - NonPotable	SM5210B	12C0006_P

Prep Batch: 12C0006_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12C0006-BLK1	Method Blank	Total	Water - NonPotable	Default Prep GenChem	
12C0006-BS1	Lab Control Sample	Total	Water - NonPotable	Default Prep GenChem	
12C0006-DUP1	Duplicate	Total	Water - NonPotable	Default Prep GenChem	
HVC0053-01	SOUTHERN CHANNEL	Total	Water - NonPotable	Default Prep GenChem	

Lab Chronicle

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0053

Client Sample ID: SOUTHERN CHANNEL

Lab Sample ID: HVC0053-01

Date Collected: 03/06/12 10:15

Matrix: Water - NonPotable

Date Received: 03/06/12 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	Default Prep		1.00	12C0006_P	03/07/12 11:23	HJM	TAL HON
Total	Analysis	GenChem SM5210B		1.00	12C0006	03/12/12 10:29	HJM	TAL HON

Laboratory References:

TAL HON = TestAmerica Honolulu, 99-193 Aiea Heights Drive, Suite 121, Aiea, HI 96701, TEL 808-486-5227

Certification Summary

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0053

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Honolulu	Alaska (UST)	State Program	10	
TestAmerica Honolulu	Florida	NELAC	4	E87907
TestAmerica Honolulu	Hawaii	State Program	9	
TestAmerica Honolulu	L-A-B	DoD ELAP		L2250
TestAmerica Honolulu	L-A-B	ISO/IEC 17025		L2250
TestAmerica Honolulu	USDA	Federal		HON-S-206

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0053

Method	Method Description	Protocol	Laboratory
SM5210B	General Chemistry Parameters		TAL HON

Protocol References:

Laboratory References:

TAL HON = TestAmerica Honolulu, 99-193 Aiea Heights Drive, Suite 121, Aiea, HI 96701, TEL 808-486-5227

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LAB JOB NO. HUL0053
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CONTAINERS

Chain of Custody / Analysis Request Form

Report to:	Project identification	
Mark Hofferbert		
Company name: AECOM Technical Services, Inc.	Job name: WGSL Stormwater	
Address: 1001 Bishop St., Suite 1600	Job number: 60246625.02	
City: Honolulu / State: HI / ZIP: 96813		
Phone: 808-523-8874 / Fax: 808-523-8950	Contact email address: mark.hofferbert@aecom.com, margie.thach@aecom.com	Date results needed: 2 weeks
Sampler: / # samples in shipment:		

Indicate analyses requested

Item no.	Client sample ID	COMP	GRAB	Matrix: Water	Soil	Wastewater	Drinking water	Sludge	Liquid	Solid	Oil	Other	Preservation method	Sampling: Date	Time	No. of containers	1664 Oil&Grease	BOD SM5210B, Hex Chromium 218.6	TSS SM2540D	COD 410.4, T. Phos 365.1	Nitrate-Nitrite N 353.2, Ammonia 350.	T. Nitrogen SM4500-N	625 SVOCs*	200.7 Metals**			Laboratory ID no.
1	~~Detention basin pond~~ MPT 03/07/12		X	X									HCl	03/06	10:15		X										HUL0053-01
2	Southern channel MPT 3/7/12	~~X~~	X	X									varies	03/06	10:15			X	X	X	X	X	X	X			
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											

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Margie Thach jr	03/07 11:32	Hand		TestAmerica	3/8/12 1130	Cool 32
	/				3/8/12 /	Wet
	/				/	

Comments: * SVOCs: alpha-terpineol, benzoic acid, p-cresol, pentachlorophenol, phenol. ** Metals: As, Cd, Fe, Pb, Hg, Se, Ag, Zn

Drop ship to TA-Denver (PM: Betsy Sara). TA-Honolulu to analyze BOD and preserve CrVI (218.6); report to TA-Denver.

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LABORATORY USE ONLY
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Chain of Custody / Analysis Request Form

Report to: Mark Hofferbert	Project identification
Company name: AECOM Technical Services, Inc.	Job name: WGSL Stormwater
Address: 1001 Bishop St., Suite 1600	Job number: 60246625.02
City: Honolulu; State: HI; ZIP: 96813	
Phone: 808-523-8874; Fax: 808-523-8950	Contact email address: mark.hofferbert@aecom.com, margie.thach@aecom.com; Date results needed: 2 weeks
Sampler: ; # samples in shipment:	

Indicate analyses requested

Item no.	Client sample ID	COMP	GRAB	Matrix: Water	Soil	Wastewater	Drinking water	Sludge	Liquid	Solid	Oil	Other	Preservation method	Sampling: Date	Time	No. of containers	1664 Oil&Grease	BOD SM5210B, Hex Chromium 218.6	TSS SM2540D	COD 410.4, T. Phos 365.1	Nitrate-Nitrite N 353.2, Ammonia 350.	T. Nitrogen SM4500-N	625 SVOCs*	200.7 Metals**			Laboratory ID no.
1	Detention basin pond		X	X									HCl	03/06	10:15		X										
2	MPT 03/06/12	X	X	X									varies	03/06	10:15			X	X	X	X	X	X	X			
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											

Released by (print / sign)	Date / time released	Delivery method	Received by (print / sign)	Company / Agency affiliation	Date / time received	Condition noted
Margie Thach	03/06/12 11:32	Hand	[signature]	TestAmerica	3/6/12 1130	Pink 32
[signature]	3/6/12 1400	Fedex			3/6/12	Wet

Comments: * SVOCs: alpha-terpineol, benzoic acid, p-cresol, pentachlorophenol, phenol. ** Metals: As, Cd, Fe, Pb, Hg, Se, Ag, Zn

Drop ship to TA-Denver (PM: Betsy Sara). TA-Honolulu to analyze BOD and preserve CrVI (218.6); report to TA-Denver.

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13

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Sample Control
TestAmerica Honolulu
99-193 AIEA HEIGHTS DRIVE
SUITE 121
AIEA, HI 96701

Origin ID: HNLA

FedEx Express

J1210111219022S

Ship Date: 06MAR12
ActWgt: 35.0 LB
CAD: 2315095/INET3250

Delivery Address Bar Code

Ref # 162-260
Invoice #
PO #
Dept #

SHIP TO: (303) 736-0100
Sample Receiving
TestAmerica - Denver
4955 Yarrow Street

Arvada, CO 80002

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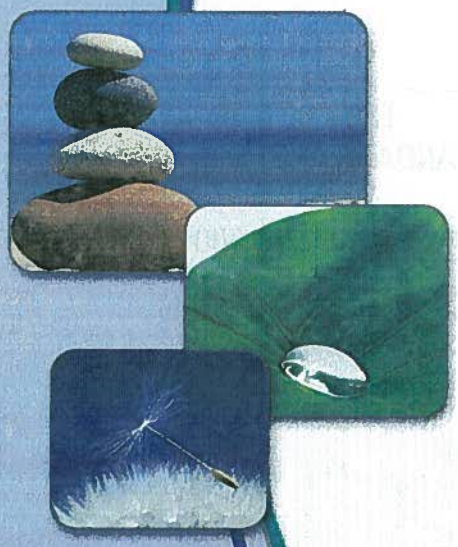

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Honolulu
99-193 Aiea Heights Drive, Suite 121
Aiea, HI 96701
Tel: 808-486-5227

TestAmerica Job ID: HVC0055
Client Project/Site: 60246625.02
Client Project Description: AECOM, WGSL STORMWATER

For:
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Attn: Betsy Sarah

Kristie Reilly

Authorized for release by:
3/22/2012 3:27:11 PM
Kristie Reilly
Project Manager
Kristie.Brachmann@testamericainc.com

Designee for

Marvin D. Heskett III
Service center manager
marvin.heskett@testamericainc.com

LINKS

Review your project results through TotalAccess

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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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Method Summary 12
Chain of Custody 13

Definitions/Glossary

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0055

Qualifiers

WetChem

Qualifier	Qualifier Description
A5	Incubator/water bath temperature was outside method requirements.
H	Sample analysis performed past method-specified holding time.

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
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
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: 60246625.02

TestAmerica Job ID: HVC0055

Job ID: HVC0055

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 4 degrees C.
NELAC states 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.

The reported results were obtained in compliance with the 2003 NELAC standards unless otherwise noted.

Sample Summary

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0055

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
HVC0055-01	DETENTION BASIN EASTERN OUTFALL	Water - NonPotable	03/06/12 10:00	03/06/12 11:30

Detection Summary

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0055

Client Sample ID: DETENTION BASIN EASTERN OUTFALL — Lab Sample ID: HVC0055-01

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
BOD - 5 Day	3.42	A5	2.00		mg/L	1.00		SM5210B	Total

Client Sample Results

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0055

Client Sample ID: DETENTION BASIN EASTERN OUTFALL
Date Collected: 03/06/12 10:00
Date Received: 03/06/12 11:30

Lab Sample ID: HVC0055-01
Matrix: Water - NonPotable

Method: SM5210B - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
BOD - 5 Day	3.42	A5	2.00		mg/L		03/07/12 11:27	03/12/12 10:34	1.00

QC Sample Results

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0055

Method: SM5210B - General Chemistry Parameters

Lab Sample ID: 12C0006-BLK1
Matrix: Water - NonPotable
Analysis Batch: 12C0006

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 12C0006_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
BOD - 5 Day	ND	A5	2.00		mg/L		03/07/12 11:18	03/12/12 10:21	1.00

Lab Sample ID: 12C0006-BS1
Matrix: Water - NonPotable
Analysis Batch: 12C0006

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 12C0006_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
BOD - 5 Day	198	196	A5	mg/L		99	85 - 115

Lab Sample ID: 12C0006-DUP1
Matrix: Water - NonPotable
Analysis Batch: 12C0006

Client Sample ID: Duplicate
Prep Type: Total
Prep Batch: 12C0006_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
BOD - 5 Day	5.82		5.55	A5 H	mg/L		5	20

QC Association Summary

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0055

WetChem

Analysis Batch: 12C0006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12C0006-BLK1	Method Blank	Total	Water - NonPotable	SM5210B	12C0006_P
12C0006-BS1	Lab Control Sample	Total	Water - NonPotable	SM5210B	12C0006_P
12C0006-DUP1	Duplicate	Total	Water - NonPotable	SM5210B	12C0006_P
HVC0055-01	DETENTION BASIN EASTERN OUTFALL	Total	Water - NonPotable	SM5210B	12C0006_P

Prep Batch: 12C0006_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12C0006-BLK1	Method Blank	Total	Water - NonPotable	Default Prep GenChem	
12C0006-BS1	Lab Control Sample	Total	Water - NonPotable	Default Prep GenChem	
12C0006-DUP1	Duplicate	Total	Water - NonPotable	Default Prep GenChem	
HVC0055-01	DETENTION BASIN EASTERN OUTFALL	Total	Water - NonPotable	Default Prep GenChem	

Lab Chronicle

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0055

Client Sample ID: DETENTION BASIN EASTERN OUTFALL

Lab Sample ID: HVC0055-01

Date Collected: 03/06/12 10:00

Matrix: Water - NonPotable

Date Received: 03/06/12 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	Default Prep		1.00	12C0006_P	03/07/12 11:27	HJM	TAL HON
Total	Analysis	GenChem SM5210B		1.00	12C0006	03/12/12 10:34	HJM	TAL HON

Laboratory References:

TAL HON = TestAmerica Honolulu, 99-193 Aiea Heights Drive, Suite 121, Aiea, HI 96701, TEL 808-486-5227

Certification Summary

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0055

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Honolulu	Alaska (UST)	State Program	10	
TestAmerica Honolulu	Florida	NELAC	4	E87907
TestAmerica Honolulu	Hawaii	State Program	9	
TestAmerica Honolulu	L-A-B	DoD ELAP		L2250
TestAmerica Honolulu	L-A-B	ISO/IEC 17025		L2250
TestAmerica Honolulu	USDA	Federal		HON-S-206

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0055

Method	Method Description	Protocol	Laboratory
SM5210B	General Chemistry Parameters		TAL HON

Protocol References:

Laboratory References:

TAL HON = TestAmerica Honolulu, 99-193 Aiea Heights Drive, Suite 121, Aiea, HI 96701, TEL 808-486-5227

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Honolulu
99-193 Aiea Heights Drive Suite 121 • Aiea, HI 96701-3900
808-486-LABS (5227) • Fax 808-486-2456

LABORATORY USE ONLY
LAB JOB NO. HUC0055
LOCATION
CONTAINERS

Chain of Custody / Analysis Request Form

Report to: Mark Hofferbert
Company name: AECOM Technical Services, Inc.
Address: 1001 Bishop St., Suite 1600
City: Honolulu State: HI ZIP: 96813
Phone: 808-523-8874 Fax: 808-523-8950
Sampler: CB, MT, DG, TA # samples in shipment: 1

Project identification
Job name: WGSL Stormwater
Job number: 60246625.02
Contact email address: mark.hofferbert@aecom.com
Date results needed: 2 weeks

Indicate analyses requested

Item no.	Client sample ID	COMP	GRAB	Matrix: Water	Soil	Wastewater	Drinking water	Sludge	Liquid	Solid	Oil	Other	Preservation method	Sampling: Date	Time	No. of containers	1664 Oil&Grease	BOD SM5210B, Hex Chromium 218.6	TSS SM2540D	COD 410.4, T. Phos 365.1	Nitrate-Nitrite N 353.2, Ammonia 350.	T. Nitrogen SM4500-N	625 SVOCs*	200.7 Metals**			Laboratory ID no.
1	~~culvert pond~~ MDT 03/07/12		X	X									HCl	03/06	10:00		X										HUC0055-01
2	Detention Basin Eastern Outfall MDT 03/06/12		X	X									varies	03/06	10:00			X	X	X	X	X	X	X			
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											

Released by (print / sign)	Date / time released	Delivery method	Received by (print / sign)	Company / Agency affiliation	Date / time received	Condition noted
Margie Trach [signature]	03/06/12 11:32	Hand	[signature]	TestAmerica	3/12/12, 3/6/12	Bottle 42
	/				3/8/12 1130	Wet
	/				/	

Comments: * SVOCs: alpha-terpineol, benzoic acid, p-cresol, pentachlorophenol, phenol. ** Metals: As, Cd, Fe, Pb, Hg, Se, Ag, Zn

Drop ship to TestAmerica Denver. TA-Honolulu to perform BOD and CrVI preservation (218.6); report to TA-D.
(PM: Betsy Sara)

Please check one:
☒ Dispose by lab
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Revised COC emailed by Margie 3/8/12

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Honolulu
99-193 Aiea Heights Drive Suite 121 • Aiea, HI 96701-3900
808-486-LABS (5227) • Fax 808-486-2456

LABORATORY USE ONLY
LAB JOB NO. _____
LOCATION _____
CONTAINERS _____

Chain of Custody / Analysis Request Form

Report to: Mark Hofferbert
Company name: AECOM Technical Services, Inc.
Address: 1001 Bishop St., Suite 1600
City: Honolulu | State: HI | ZIP: 96813
Phone: 808-523-8874 | Fax: 808-523-8950
Sampler: CB, MT, DG, TA | # samples in shipment: 1

Project identification
Job name: WGSL Stormwater
Job number: 60246625.02
Contact email address: mark.hofferbert@aecom.com
Date results needed: 2 weeks

Indicate analyses requested

Item no.	Client sample ID	COMP	GRAB	Matrix: Water	Soil	Wastewater	Drinking water	Sludge	Liquid	Solid	Oil	Other	Preservation method	Sampling: Date	Time	No. of containers	1664 Oil&Grease	BOD SM5210B, Hex Chromium 218.6	TSS SM2540D	COD 410.4, T. Phos 365.1	Nitrate-Nitrite N 353.2, Ammonia 350.	T. Nitrogen SM4500-N	625 SVOCs*	200.7 Metals**			Laboratory ID no.
1	culvert pond		X	X									HCl	03/06	10:00		X										
2		MD 03/06/12	X	X									varies	03/06	10:00			X	X	X	X	X	X	X			
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											

Released by (print / sign)	Date / time released	Delivery method	Received by (print / sign)	Company / Agency affiliation	Date / time received	Condition noted
Margie Trach [signature]	03/06/12 10:32	Hand	[signature]	TestAmerica	3/6/12 3/6/12	[signature] 4.2
[signature]	3/6/12 / 1400	Fed			3/6/12 1130	[signature]

Comments: * SVOCs: alpha-terpineol, benzoic acid, p-cresol, pentachlorophenol, phenol. ** Metals: As, Cd, Fe, Pb, Hg, Se, Ag, Zn

Drop ship to TestAmerica Denver (PM: Betsy Sara) TA-Honolulu to perform BOD and CrVI preservation (218.6); report to TA-D.

Please check one:
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Sample Control
TestAmerica Honolulu
99-193 AIEA HEIGHTS DRIVE
SUITE 121
AIEA, HI 96701

Origin ID: HNLA

FedEx Express

J12101112190225

Ship Date: 06MAR12
ActWgt: 35.0 LB
CAD: 2315095/INET3250

Delivery Address Bar Code

Ref # 162-260
Invoice #
PO #
Dept #

SHIP TO: (303) 736-0100
Sample Receiving
TestAmerica - Denver
4955 Yarrow Street

Arvada, CO 80002

BILL THIRD PARTY

1 of 3

THU - 08 MAR A1
STANDARD OVERNIGHT

TRK# 7933 0881 7312
0201

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NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
DISCHARGE MONITORING REPORT *(DMR)*

Form Approved.
OMB No. 2040-0004

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)*
NAME City and County of Honolulu
Department of Environmental Services, Refuse Division
1000 Uluohia Street, Suite 212
Kapolei, Hawaii 96707

ADDRESS 92-460 Farrington Highway
Kapolei, HI 96707

FACILITY Waimanalo Gulch Sanitary Landfill

LOCATION Culvert Entrance, Property Boundary
Sampled on 03/06/2012

HI R50A533	WGLF-Culvert-01
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD	YEAR	MO	DAY		YEAR	MO	DAY
FROM	2012	01	01	TO	2012	12	31

☐ Check here if No Discharge

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING AVERAGE	QUANTITY OR LOADING MAXIMUM	QUANTITY OR LOADING UNITS	QUALITY OR CONCENTRATION MINIMUM	QUALITY OR CONCENTRATION AVERAGE	QUALITY OR CONCENTRATION MAXIMUM	QUALITY OR CONCENTRATION UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
Flow	SAMPLE MEASUREMENT	3.85		cfs				cfs	0	1/365	Calculated/ Estimated
	PERMIT REQUIREMENT		No limitation at this time							1/365	Calculated/ Estimated
Biochemical Oxygen Demand	SAMPLE MEASUREMENT						3.11	mg/L	0	1/365	Composite
	PERMIT REQUIREMENT						Report			1/365	Composite
Chemical Oxygen Demand	SAMPLE MEASUREMENT						50	mg/L	0	1/365	Composite
	PERMIT REQUIREMENT						Report			1/365	Composite
Total Suspended Solids	SAMPLE MEASUREMENT						970	mg/L	1	1/365	Composite
	PERMIT REQUIREMENT						100			1/365	Composite
Total Phosphorus	SAMPLE MEASUREMENT						< 0.050	mg/L	0	1/365	Composite
	PERMIT REQUIREMENT						Report			1/365	Composite
Total Nitrogen	SAMPLE MEASUREMENT						5.8	mg/L	0	1/365	Composite
	PERMIT REQUIREMENT						Report			1/365	Composite
Nitrate + Nitrite Nitrogen	SAMPLE MEASUREMENT						2.4	mg/L	0	1/365	Composite
	PERMIT REQUIREMENT						Report			1/365	Composite
Oil and Grease	SAMPLE MEASUREMENT						14	mg/L	0	1/365	Grab
	PERMIT REQUIREMENT						15			1/365	Grab

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			TELEPHONE		DATE		
Joseph Whelan, General Manager/Vice President Waste Management of Hawaii, Inc.	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	Joseph R. Whelan	808	668-2985	2013		
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
DISCHARGE MONITORING REPORT *(DMR)*

Form Approved.
OMB No. 2040-0004

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)*
NAME City and County of Honolulu
Department of Environmental Services, Refuse Division
1000 Uluohia Street, Suite 212
Kapolei, Hawaii 96707

ADDRESS 92-460 Farrington Highway
Kapolei, HI 96707

FACILITY Waimanalo Gulch Sanitary Landfill

LOCATION Culvert Entrance, Property Boundary
Sampled on 03/06/2012

HI R50A533	WGLF-Culvert-01
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD	YEAR	MO	DAY		YEAR	MO	DAY
FROM	2012	01	01	TO	2012	12	31

☐ Check here if No Discharge

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
pH	SAMPLE MEASUREMENT						7.32	Standard Units	0	1/365	Grab
	PERMIT REQUIREMENT						5.5-8.0			1/365	Grab
Ammonia	SAMPLE MEASUREMENT						0.19	mg/L	0	1/365	Composite
	PERMIT REQUIREMENT						10 (daily) 4.9 (monthly avg)			1/365	Composite
Alpha Terpineol	SAMPLE MEASUREMENT						< 0.010	mg/L	0	1/365	Composite
	PERMIT REQUIREMENT						0.033 (daily) 0.016 (monthly avg)			1/365	Composite
Benzoic Acid	SAMPLE MEASUREMENT						< 0.050	mg/L	0	1/365	Composite
	PERMIT REQUIREMENT						0.12 (daily) 0.071 (monthly avg)			1/365	Composite
p-Cresol	SAMPLE MEASUREMENT						< 0.010	mg/L	0	1/365	Composite
	PERMIT REQUIREMENT						0.025 (daily) 0.014 (monthly avg)			1/365	Composite
Pentachlorophenol	SAMPLE MEASUREMENT						< 0.020	mg/L	0	1/365	Composite
	PERMIT REQUIREMENT						0.02			1/365	Composite
Phenol	SAMPLE MEASUREMENT						< 0.010	mg/L	0	1/365	Composite
	PERMIT REQUIREMENT						0.026 (daily) 0.015 (monthly avg)			1/365	Composite

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			TELEPHONE		DATE		
Joseph Whelan, General Manager/Vice President Waste Management of Hawaii, Inc.	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	Joseph R. Whelan	808	668-2985	2013		
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
DISCHARGE MONITORING REPORT *(DMR)*

Form Approved.
OMB No. 2040-0004

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)*
NAME City and County of Honolulu
Department of Environmental Services, Refuse Division
1000 Uluohia Street, Suite 212
Kapolei, Hawaii 96707

ADDRESS 92-460 Farrington Highway
Kapolei, HI 96707

FACILITY Waimanalo Gulch Sanitary Landfill

LOCATION Culvert Entrance, Property Boundary
Sampled on 03/06/2012

HI R50A533	WGLF-Culvert-01
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD	YEAR	MO	DAY		YEAR	MO	DAY
FROM	2012	01	01	TO	2012	12	31

☐ Check here If No Discharge

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
Total Recoverable Arsenic	SAMPLE MEASUREMENT						< 0.015	mg/L	0	1/365	Composite
	PERMIT REQUIREMENT						0.36			1/365	Composite
Total Recoverable Cadmium	SAMPLE MEASUREMENT						0.00089	mg/L	0	1/365	Composite
	PERMIT REQUIREMENT						0.003			1/365	Composite
Total Recoverable Chromium IV	SAMPLE MEASUREMENT						< 0.001	mg/L	0	1/365	Composite
	PERMIT REQUIREMENT						0.016			1/365	Composite
Total Recoverable Iron	SAMPLE MEASUREMENT						180	mg/L	1	1/365	Composite
	PERMIT REQUIREMENT						1.0			1/365	Composite
Total Recoverable Lead	SAMPLE MEASUREMENT						0.020	mg/L	0	1/365	Composite
	PERMIT REQUIREMENT						0.029			1/365	Composite
Total Recoverable Mercury	SAMPLE MEASUREMENT						0.00026	mg/L	0	1/365	Composite
	PERMIT REQUIREMENT						0.0024			1/365	Composite
Total Recoverable Selenium	SAMPLE MEASUREMENT						< 0.015	mg/L	0	1/365	Composite
	PERMIT REQUIREMENT						0.02			1/365	Composite
Total Recoverable Silver	SAMPLE MEASUREMENT						< 0.00093	mg/L	0	1/365	Composite
	PERMIT REQUIREMENT						0.001			1/365	Composite

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			TELEPHONE		DATE		
Joseph Whelan, General Manager/Vice President Waste Management of Hawaii, Inc.	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	Joseph R. Whelan	808	668-2985	2013		
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
DISCHARGE MONITORING REPORT *(DMR)*

Form Approved.
OMB No. 2040-0004

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)*
NAME City and County of Honolulu
Department of Environmental Services, Refuse Division
1000 Uluohia Street, Suite 212
Kapolei, Hawaii 96707

ADDRESS 92-460 Farrington Highway
Kapolei, HI 96707

FACILITY Waimanalo Gulch Sanitary Landfill

LOCATION Culvert Entrance, Property Boundary
Sampled on 03/06/2012

HI R50A533	WGLF-Culvert-01
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD	YEAR	MO	DAY		YEAR	MO	DAY
FROM	2012	01	01	TO	2012	12	31

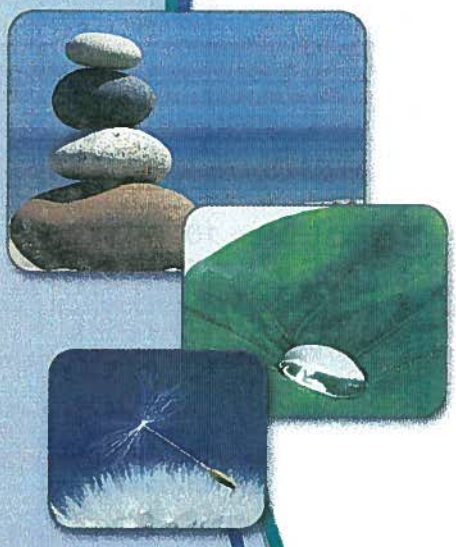
☐ Check here if No Discharge

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
Total Recoverable Zinc	SAMPLE MEASUREMENT						0.13	mg/L	1	1/365	Composite
	PERMIT REQUIREMENT						0.022			1/365	Composite

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			TELEPHONE		DATE		
Joseph Whelan, General Manager/Vice President Waste Management of Hawaii, Inc.	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	Joseph R. Whelan	808	668-2985	2013		
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Honolulu
99-193 Aiea Heights Drive, Suite 121
Aiea, HI 96701
Tel: 808-486-5227

TestAmerica Job ID: HVC0056
Client Project/Site: 60246625.02
Client Project Description: AECOM, WGSL STORMWATER

For:
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Attn: Betsy Sarah

Kristie Reilly

Authorized for release by:
3/22/2012 4:19:21 PM
Kristie Reilly
Project Manager
Kristie.Brachmann@testamericainc.com

Designee for

Marvin D. Heskett III
Service center manager
marvin.heskett@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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Table of Contents 2
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Detection Summary 6
Client Sample Results 7
QC Sample Results 8
QC Association 9
Chronicle 10
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Method Summary 12
Chain of Custody 13

Definitions/Glossary

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0056

Qualifiers

WetChem

Qualifier	Qualifier Description
A5	Incubator/water bath temperature was outside method requirements.
H	Sample analysis performed past method-specified holding time.

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
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
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: 60246625.02

TestAmerica Job ID: HVC0056

Job ID: HVC0056

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 5 degrees C.
NELAC states 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.

The reported results were obtained in compliance with the 2003 NELAC standards unless otherwise noted.

Sample Summary

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0056

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
HVC0056-01	CULVERT	Water - NonPotable	03/06/12 06:28	03/07/12 09:55

Detection Summary

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0056

Client Sample ID: CULVERT

Lab Sample ID: HVC0056-01

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
BOD - 5 Day	3.11	A5	2.00		mg/L	1.00		SM5210B	Total

Client Sample Results

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0056

Client Sample ID: CULVERT
Date Collected: 03/06/12 06:28
Date Received: 03/07/12 09:55

Lab Sample ID: HVC0056-01
Matrix: Water - NonPotable

Method: SM5210B - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
BOD - 5 Day	3.11	A5	2.00		mg/L		03/07/12 12:06	03/12/12 10:57	1.00

QC Sample Results

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0056

Method: SM5210B - General Chemistry Parameters

Lab Sample ID: 12C0006-BLK1
Matrix: Water - NonPotable
Analysis Batch: 12C0006

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 12C0006_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
BOD - 5 Day	ND	A5	2.00		mg/L		03/07/12 11:18	03/12/12 10:21	1.00

Lab Sample ID: 12C0006-BS1
Matrix: Water - NonPotable
Analysis Batch: 12C0006

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 12C0006_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
BOD - 5 Day	198	196	A5	mg/L		99	85 - 115

Lab Sample ID: 12C0006-DUP1
Matrix: Water - NonPotable
Analysis Batch: 12C0006

Client Sample ID: Duplicate
Prep Type: Total
Prep Batch: 12C0006_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
BOD - 5 Day	5.82		5.55	A5 H	mg/L		5	20

QC Association Summary

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0056

WetChem

Analysis Batch: 12C0006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12C0006-BLK1	Method Blank	Total	Water - NonPotable	SM5210B	12C0006_P
12C0006-BS1	Lab Control Sample	Total	Water - NonPotable	SM5210B	12C0006_P
12C0006-DUP1	Duplicate	Total	Water - NonPotable	SM5210B	12C0006_P
HVC0056-01	CULVERT	Total	Water - NonPotable	SM5210B	12C0006_P

Prep Batch: 12C0006_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12C0006-BLK1	Method Blank	Total	Water - NonPotable	Default Prep GenChem	
12C0006-BS1	Lab Control Sample	Total	Water - NonPotable	Default Prep GenChem	
12C0006-DUP1	Duplicate	Total	Water - NonPotable	Default Prep GenChem	
HVC0056-01	CULVERT	Total	Water - NonPotable	Default Prep GenChem	

Lab Chronicle

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0056

Client Sample ID: CULVERT
Date Collected: 03/06/12 06:28
Date Received: 03/07/12 09:55

Lab Sample ID: HVC0056-01
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	12C0006_P	03/07/12 12:06	HJM	TAL HON
Total	Analysis	GenChem SM5210B		1.00	12C0006	03/12/12 10:57	HJM	TAL HON

Laboratory References:

TAL HON = TestAmerica Honolulu, 99-193 Aiea Heights Drive, Suite 121, Aiea, HI 96701, TEL 808-486-5227

Certification Summary

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0056

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Honolulu	Alaska (UST)	State Program	10	
TestAmerica Honolulu	Florida	NELAC	4	E87907
TestAmerica Honolulu	Hawaii	State Program	9	
TestAmerica Honolulu	L-A-B	DoD ELAP		L2250
TestAmerica Honolulu	L-A-B	ISO/IEC 17025		L2250
TestAmerica Honolulu	USDA	Federal		HON-S-206

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: TestAmerica Denver
Project/Site: 60246625.02

TestAmerica Job ID: HVC0056

Method	Method Description	Protocol	Laboratory
SM5210B	General Chemistry Parameters		TAL HON

Protocol References:

Laboratory References:

TAL HON = TestAmerica Honolulu, 99-193 Aiea Heights Drive, Suite 121, Aiea, HI 96701, TEL 808-486-5227

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA DENVER

LABORATORY USE ONLY
LAB JOB NO. HUC0056
LOCATION
CONTAINERS

Chain of Custody / Analysis Request Form

Report to: Mark Hofferbert
Company name: AECOM Technical Services, Inc.
Address: 1001 Bishop St., Suite 1600
City: Honolulu State: HI ZIP: 96813
Phone: 808-523-8874 Fax: 808-523-8950
Sampler: JZ, SQ, TA, DG # samples in shipment: 1

Project identification
Job name: WGSL Stormwater
Job number: 60246625.02
Contact email address: mark.hofferbert@aecom.com, margie.thach@aecom.com
Date results needed: 2 weeks

Indicate analyses requested

Item no.	Client sample ID	COMP	GRAB	Matrix: Water	Soil	Wastewater	Drinking water	Sludge	Liquid	Solid	Oil	Other	Preservation method	Sampling: Date	Time	No. of containers	1664 Oil&Grease	BOD SM5210B, Hex Chromium 218.6	TSS SM2540D	COD 410.4, T. Phos 365.1	Nitrate-Nitrite N 353.2, Ammonia 350	T. Nitrogen SM4500-N	625 SVOCs*	200.7 Metals**		Laboratory ID no.
1	Culvert		X	X									HCl	3/6	7:30	9	X									HUC0056-01
2		X		X									varies		Q1 03/07/12			X	X	X	X	X	X	X		
3																										
4																										
5																										
6																										
7																										
8																										
9																										
10																										

Released by (print / sign)	Date / time released	Delivery method	Received by (print / sign)	Company / Agency affiliation	Date / time received	Condition noted
Margie Thach [signature]	02/07/12 9:55	Hand	[signature] Simon [signature]	TestAmerica	3/7/12 / 955	8 wet 5°C
[signature] Simon [signature]	3/7/12 / 1040	Fedex			/	3/7/12 [illegible] Wet
					/	

Comments: * SVOCs: alpha-terpineol, benzoic acid, p-cresol, pentachlorophenol, phenol. ** Metals: As, Cd, Fe, Pb, Hg, Se, Ag, Zn

Drop ship to TA-Denver (PM: Betsy Sara). TA-Honolulu to analyze BOD and preserve CrVI (218.6); report to TA-Denver.

Please check one:
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3/22/2012

13

From: (808) 486-5227
Sample Control
TestAmerica Honolulu
99-193 AIEA HEIGHTS DRIVE
SUITE 121
AIEA, HI 96701

Origin ID: HNLA

FedEx Express

J12101112190225

Ship Date: 07MAR12
ActWgt: 40.0 LB
CAD: 2315095/INET3250

Delivery Address Bar Code

Ref # 162-260
Invoice #
PO #
Dept #

SHIP TO: (303) 736-0100
Sample Receiving
TestAmerica - Denver
4955 Yarrow Street

Arvada, CO 80002

BILL THIRD PARTY

FRI - 09 MAR A1
PRIORITY OVERNIGHT

TRK# 0201 7933 1385 6514

XH WHHA

80002
CO-US
DEN

512G1/8 IDS/A278

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TESTAMERICA DENVER

LABORATORY USE ONLY
LAB JOB NO.
LOCATION
CONTAINERS

Chain of Custody / Analysis Request Form

Report to: Mark Hofferbert	Project identification
Company name: AECOM Technical Services, Inc.	Job name: WGSL Stormwater
Address: 1001 Bishop St., Suite 1600	Job number: 60246625.02
City: Honolulu State: HI ZIP: 96813	
Phone: 808-523-8874 Fax: 808-523-8950	Contact email address: mark.hofferbert@aecom.com, margie.thach@aecom.com Date results needed: 2 weeks
Sampler: # samples in shipment	

Indicate analyses requested

Item no.	Client sample ID	COMP	GRAB	Matrix: Water	Soil	Wastewater	Drinking water	Sludge	Liquid	Solid	Oil	Other	Preservation method	Sampling: Date	Time	No. of containers	1664 Oil&Grease	BOD SM5210B, Hex Chromium 218.6	TSS SM2540D	COD 410.4, T. Phos 365.1	Nitrate-Nitrite N 353.2, Ammonia 350.	T. Nitrogen SM4500-N	625 SVOCs*	200.7 Metals**			Laboratory ID no.
1	~~Detention basin pond~~ MPT 03/07/12		X	X									HCl	03/06	10:15		X										
2	Southern Channel MPT 03/06/12	~~X~~	X	X									varies	03/06	10:15			X	X	X	X	X	X	X			
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											

Released by (print / sign)	Date / time released	Delivery method	Received by (print / sign)	Company / Agency affiliation	Date / time received	Condition noted
Margie Thach [signature]	03/06/12 11:32	Hand	[signature]	TestAmerica	3/6/12 / 1130	[signature] 32
	/				3/6/12 /	Wet
	/		[signature]	TAD	3/8/12 / 0930	

Comments: * SVOCs: alpha-terpineol, benzoic acid, p-cresol, pentachlorophenol, phenol. ** Metals: As, Cd, Fe, Pb, Hg, Se, Ag, Zn

Drop ship to TA-Denver (PM: Betsy Sara). TA-Honolulu to analyze BOD and preserve CrVI (218.6); report to TA-Denver.

Please check one:
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TestAmerica
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TESTAMERICA DENVER

LABORATORY USE ONLY
LAB JOB NO.
LOCATION
CONTAINERS

Chain of Custody / Analysis Request Form

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Company name: AECOM Technical Services, Inc.	Job name: WGSL Stormwater
Address: 1001 Bishop St., Suite 1600	Job number: 60246625.02
City: Honolulu; State: HI; ZIP: 96813	
Phone: 808-523-8874; Fax: 808-523-8950	Contact email address: mark.hofferbert@aecom.com, margie.thach@aecom.com; Date results needed: 2 weeks
Sampler: ; # samples in shipment:	

Indicate analyses requested

Item no.	Client sample ID	COMP	GRAB	Matrix: Water	Soil	Wastewater	Drinking water	Sludge	Liquid	Solid	Oil	Other	Preservation method	Sampling: Date	Time	No. of containers	1664 Oil&Grease	BOD SM5210B, Hex Chromium 218.6	TSS SM2540D	COD 410.4, T. Phos 365.1	Nitrate-Nitrite N 353.2, Ammonia 350.	T. Nitrogen SM4500-N	625 SVOCs*	200.7 Metals**			Laboratory ID no.
1	Upcanyon	~~X~~	X	X									HCl	03/06	10:40		X										
2		MPT 03/06/12 ~~X~~	~~X~~	X									varies					X	X	X	X	X	X	X			
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											

Released by (print / sign)	Date / time released	Delivery method	Received by (print / sign)	Company / Agency affiliation	Date / time received	Condition noted
Margie Thach [signature]	3/6/12 / MPT 10:32	Hand	[signature] [signature]	TestAmerica	3/6/12 / 1130	Burst 6"
	/				/	wet
	/		[signature]	TAD	3/8/12 / 0930	

Comments: * SVOCs: alpha-terpineol, benzoic acid, p-cresol, pentachlorophenol, phenol. ** Metals: As, Cd, Fe, Pb, Hg, Se, Ag, Zn

Drop ship to TA-Denver (PM: Betsy Sara). TA-Honolulu to analyze BOD and preserve CrVI (218.6); report to TA-Denver.

Please check one:
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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Honolulu
99-193 Aiea Heights Drive Suite 121 • Aiea, HI 96701-3900
808-486-LABS (5227) • Fax 808-486-2456

3.8, 5.3, 2.1
1/14
3/8

LABORATORY USE ONLY
LAB JOB NO. ____
LOCATION ____
CONTAINERS ____

Chain of Custody / Analysis Request Form

Report to: Mark Hofferbert
Company name: AECOM Technical Services, Inc.
Address: 1001 Bishop St., Suite 1600
City: Honolulu State: HI ZIP: 96813
Phone: 808-523-8874 Fax: 808-523-8950
Sampler: CB, MT, DG, TA # samples in shipment: 1

Project identification
Job name: WGSL Stormwater
Job number: 60246625.02
Contact email address: mark.hofferbert@aecom.com
Date results needed: 2 weeks

Indicate analyses requested

Item no.	Client sample ID	COMP	GRAB	Matrix: Water	Soil	Wastewater	Drinking water	Sludge	Liquid	Solid	Oil	Other	Preservation method	Sampling: Date	Time	No. of containers	1664 Oil&Grease	BOD SM5210B, Hex Chromium 218.6	TSS SM2540D	COD 410.4, T. Phos 365.1	Nitrate-Nitrite N 353.2, Ammonia 350.	T. Nitrogen SM4500-N	625 SVOCs*	200.7 Metals**			Laboratory ID no.
1	~~Culvert pond~~ MPT 03/07/12		X	X									HCl	03/06	10:00		X										
2	Detention Basin Eastern Outfall MPT 03/06/12		X	X									varies	03/06	10:00			X	X	X	X	X	X	X			
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											

Released by (print / sign)	Date / time released	Delivery method	Received by (print / sign)	Company / Agency affiliation	Date / time received	Condition noted
Margie Trach [signature]	03/06/12 11:32	Hand	[signature]	TestAmerica	3/12 [initials], 3/6/12	Butler 42
	/				3/8/12 1130	Wet
	/		[signature]	TAD	3/8/12 1 0920	

Comments: * SVOCs: alpha-terpineol, benzoic acid, p-cresol, pentachlorophenol, phenol. **Metals: As, Cd, Fe, Pb, Hg, Se, Ag, Zn

Drop ship to TestAmerica Denver. TA-Honolulu to perform BOD and CrVI preservation (218.6), report to TA-D.
(PM: Betsy Sara)

Please check one:
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FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: WGSL

Site No.:

Sample Point: southern channel (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]

X-Other:

Filter Type: [ ] A-In-line Disposable B-Pressure C-Vacuum X-Other

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

WELL DATA

Well Elevation (at TOC)	Depth to Water (DTW) (from TOC)	Groundwater Elevation (site datum, from TOC)
(ft/msl)	(ft)	(ft/msl)

Total Well Depth (from TOC)	Stick Up (from ground elevation)	Casing ID	Casing Material
(ft)	(ft)	(in)	

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								
2nd								
3rd								
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 (µmhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: Units
030612	778						

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.*

FIELD COMMENTS

Sample Appearance: muddy, cloudy Odor: slight odor Color: reddish-orange Other:

Weather Conditions (required daily, or as conditions change): Direction/Speed: to West Outlook: cloudy Precipitation: Y or (N)

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

Grab samples taken at 10:15AM at ponded water in southern channel.

No discharge over the wall at time of sampling.

Joe Whelan noted flow over property boundary at 7:30AM.

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
03/06/12	Margie Thach		AECOM
03/06/12	Charles Begeal		AECOM

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

TAL 8020MM (0108)

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: WGCL

Site No.:

Sample Point: upcanyon (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]

X-Other:

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

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

WELL DATA

Well Elevation (at TOC)	Depth to Water (DTW) (from TOC)	Groundwater Elevation (site datum, from TOC)
(ft/msl)	(ft)	(ft/msl)

Total Well Depth (from TOC)	Stick Up (from ground elevation)	Casing ID	Casing Material
(ft)	(ft)	(in)	

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 (µmhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L - ppm)	eH/ORP (mV)	Other: Units
030612	690						

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: silty Odor: none Color: rusty-orange Other:

Weather Conditions (required daily, or as conditions change): Direction/Speed: SE Outlook: cloudy Precipitation: Y or (N)

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

FIELD COMMENTS

Grab samples taken at 10:40AM at upcanyon

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
03/06/12	Margie Thach		AECOM
03/6/12	Charles Begeal		AECOM

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

TAL-8020WM (0108)

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: WGSL

Site No.:

Sample Point: Detention Basin East Outfall (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 D-Bailer
B-Peristaltic Pump E-Piston Pump
C-QED Bladder Pump F-Dipper/Bottle

Sampling Device: [F]

X-Other:

Filter Type: [ ]
A-In-line Disposable C-Vacuum
B-Pressure X-Other

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

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									
2nd									
3rd									
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 (µmhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: Units
03 06 12	8.08						

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: clear Odor: none Color: clear Other: —

Weather Conditions (required daily, or as conditions change): Direction/Speed: to west Outlook: cloudy Precipitation: Y or (N)

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

FIELD COMMENTS

Grab samples taken at 10:00AM at eastern Outfall of Detention Basin

Flow

Western Outfall: 7cm = 0.6 cfs

Eastern Outfall: 14.5cm = 3.2 cfs

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
03,06,12	Margie Thach		AECOM
03,06,12	Charles Bagal		AECom.

DISTRIBUTION: WHITE/ORIGINAL - Stays with sample; YELLOW - Returned to Client; PINK - Field Copy

TAL-8020WM (0108)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA DENVER

3.9 JP
VRJ
3/9/12

LABORATORY USE ONLY
LAB JOB NO.
LOCATION
CONTAINERS

Chain of Custody / Analysis Request Form

Report to: Mark Hofferbert	Project identification
Company name: AECOM Technical Services, Inc.	Job name: WGSL Stormwater
Address: 1001 Bishop St., Suite 1600	Job number: 60246625.02
City: Honolulu; State: HI; ZIP: 96813	
Phone: 808-523-8874; Fax: 808-523-8950	Contact email address: mark.hofferbert@aecom.com, margie.thach@aecom.com; Date results needed: 2 weeks
Sampler: JZ, SQ, JA, DG; # samples in shipment: 1	

Indicate analyses requested

Item no.	Client sample ID	COMP	GRAB	Matrix: Water	Soil	Wastewater	Drinking water	Sludge	Liquid	Solid	Oil	Other	Preservation method	Sampling: Date	Time	No. of containers	1664 Oil&Grease	BOD SM5210B, Hex Chromium 218.6	TSS SM2540D	COD 410.4, T. Phos 365.1	Nitrate-Nitrite N 353.2, Ammonia 350.1	T. Nitrogen SM4500-N	625 SVOCs*	200.7 Metals**			Laboratory ID no.
1	Culvert		X	X									HCl	3/6	~~7:30~~ 6:28PM	9	X										
2		X		X									varies		QI 03/07/12			X	X	X	X	X	X	X			
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											

Released by (print / sign)	Date / time released	Delivery method	Received by (print / sign)	Company / Agency affiliation	Date / time received	Condition noted
Margie Thach [signature]	03/07/12 9:55	Hand	[signature]	TestAmerica	3/7/12 / 955	[illegible] 5°C
[signature]	3/7/12 / 1040	Fedex	[signature]	TAD	3/9/12 930	3/7/12 [illegible] Wet

Comments: * SVOCs: alpha-terpineol, benzoic acid, p-cresol, pentachlorophenol, phenol. ** Metals: As, Cd, Fe, Pb, Hg, Se, Ag, Zn

Drop ship to TA-Denver (PM: Betsy Sara). TA-Honolulu to analyze BOD and preserve CrVI (218.6); report to TA-Denver.

Please check one:
- ☐ Dispose by lab
- ☐ Return to client
- ☐ Archive

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COC REV 04/2008 Distribution: White - TestAmerica Yellow - TestAmerica Pink - Client

Page ____ of ____

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: WGSL Culvert/Prop Boundary

Site No.:

Sample Point: 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

X-Other:

Filter Type: A-In-line Disposable, B-Pressure, C-Vacuum, 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					
	2nd		2nd					
	3rd		3rd					
	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
030612	732		227				

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.*

FIELD COMMENTS

Sample Appearance: Reddish Brown / Dirt Odor: None Color: Reddish Brown Other: —

Weather Conditions (required daily, or as conditions change): Direction/Speed: No wind Outlook: Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required): Arrived at site at 6pm.

No rain upon arrival @ site. Mostly cloudy.

Site discharging upon arrival.

Flow	Aliquot A	Aliquot B	Aliquot C	Aliquot D
East	5.91 inch = 3.34 cfs	5.71 inch = 3.24 cfs	5.71 inch = 3.24 cfs	5.71 inch = 3.24 cfs
West	2.76 inch = 0.621 cfs	2.56 inch = 0.576 cfs	2.56 inch = 0.576 cfs	2.56 inch = 0.576 cfs

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
03, 07, 12	Margie Thach	[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: 280-26403-1

Login Number: 26403
List Number: 1
Creator: Philipp, Nicholas A

List Source: TestAmerica Denver

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
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?	True	
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.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-26403-1

Login Number: 26403
List Number: 1
Creator: Robb, Kathleen

List Source: TestAmerica Irvine
List Creation: 03/19/12 04:11 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	N/A	
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 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.	N/A	
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	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-26403-1

Login Number: 26483
List Number: 1
Creator: Cofoid, Stephen T

List Source: TestAmerica Denver

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
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?	True	
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.	True	
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.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-26403-1

Login Number: 26483
List Number: 1
Creator: Robb, Kathleen

List Source: TestAmerica Irvine
List Creation: 03/19/12 04:12 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	N/A	
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 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.	N/A	
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	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Attachment C
Discharge Monitoring Report Form

WASTE MANAGEMENT
92-460 Farrington Hwy.
Kapolei, HI 96707
(808) 668-2985
(808) 668-1366 Fax

April 3, 2012

Ms. Kris Poentis, Engineering Section
State Department of Health
Environmental Management Division
Clean Water Branch
P.O. Box 3378
Honolulu, HI 96801-3378

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

Dear Ms. Poentis:

On the afternoon of March 6, 2012, rainfall caused a discharge of stormwater from the detention basin at the Waimanalo Gulch Sanitary Landfill. A compliance sample was collected at the Culvert Inlet discharge sampling point located near the property boundary. The analytical laboratory report was received March 29th and indicated that Iron, Zinc, and Total Suspended Solids in the sample were present in excess of State Water Quality Standards. Attached is the Laboratory Data Report. The exceedances are listed in Table 1 below, along with the corresponding discharge limitation per the latest Waimanalo Gulch Sanitary Landfill (WGSL) Notice of General Permit Coverage (NGPC), dated August 30, 2010:

Table 1: WGSL Ponded Water Exceedances at the Culvert Inlet

Parameter	Result (mg/L)	WGSL NGPC Effluent Limitation (mg/L)
Iron	180	1
Zinc	0.13	0.022
Total Suspended Solids	970	100

mg/L milligram per liter

A representative of Waste Management of Hawaii (WMH) orally communicated the Iron, Zinc, and Total Suspended Solids exceedances to the Clean Water Branch on March 29, 2012.

No direct cause for the higher Iron, Zinc, and Total Suspended Solids in the Culvert Inlet could be identified. It was noted that concurrently high levels of Iron, Zinc, and Total Suspended Solids were also present in a sample collected from the ponded water up canyon near the WGSL's mauka property boundary. In addition, exceedances of Iron, Zinc, and Total Suspended Solids also have been reported in the past. It is suspected that naturally occurring background levels in surrounding soils are the primary source of the exceedance.

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: Laboratory Data Report

cc: Wayne Hamada – City and County of Honolulu
Justin Lottig – WMH
Jesse Frey – WMH
Mark Hofferbert – AECOM Technical Services

WASTE MANAGEMENT
92-460 Farrington Hwy.
Kapolei, HI 96707
(808) 668-2985
(808) 668-1366 Fax

March 26, 2012

Ms. Kris Poentis, Engineering Section
State Department of Health
Environmental Management Division
Clean Water Branch
P.O. Box 3378
Honolulu, HI 96801-3378

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

Dear Ms. Poentis:

On the evening of Tuesday, March 20 and after business hours, rainfall caused an apparent discharge of stormwater from the detention basin at the Waimanalo Gulch Sanitary Landfill and possibly at the Culvert Inlet discharge sampling point located near the property boundary. The following morning (March 21), a sampling team collected stormwater samples from the standing water that remained near the Culvert Inlet to Farrington Highway. At the time of the sampling event, no stormwater flow was observed at the Culvert Inlet discharge sampling point. The pH field measurements and analytical grab samples were collected from ponded water near the point of compliance. The Field Information Form is attached.

Table 1: WGSL Ponded Water pH at the Culvert Inlet

Parameter	Result	Effluent Limitation
pH	8.41	5.5-8.0

A representative of Waste Management of Hawaii (WMH) orally communicated the pH result to the State of Hawaii Department of Health Clean Water Branch on March 23, 2012.

No direct cause for the higher pH could be identified, but it was noted that a concurrently high pH level was also present in the ponded water upcanyon near the WGSL's mauka property boundary. Those results showed a pH level of 8.30. As WMH has noted on prior occasions, high pH levels appear to be associated with the background pH levels resulting from the soils and geology at and uphill from WGSL.

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 Whelan
General Manager/Vice President
Waste Management of Hawaii

Enclosures: Attachment A – Field Information Form

cc: Wayne Hamada - City and County of Honolulu
Justin Lottig - WMH
Jesse Frey – WMH
Mark Hofferbert – AECOM Technical Services

WASTE MANAGEMENT
92-460 Farrington Hwy.
Kapolei, HI 96707
(808) 668-2985
(808) 668-1366 Fax

April 11, 2012

Ms. Kris Poentis, Engineering Section
State Department of Health
Environmental Management Division
Clean Water Branch
P.O. Box 3378
Honolulu, HI 96801-3378

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

Dear Ms. Poentis:

On the evening of Tuesday, March 20, 2012 and after business hours, rainfall caused a discharge of stormwater from the detention basin at the Waimanalo Gulch Sanitary Landfill. The following morning (March 21, 2012), a sample of ponded surface water was collected near the Culvert inlet at the property boundary. There was no flowing discharge at the time of the sampling event and the sample, therefore, should not be considered representative for permit compliance purposes.

The analytical laboratory report was received April 11, 2012 and indicated that Iron in the sample was present in excess of State Water Quality Standards. Attached is the Laboratory Data Report. The exceedance is listed in Table 1 below, along with the corresponding discharge limitation per the latest Waimanalo Gulch Sanitary Landfill (WGSL) Notice of General Permit Coverage (NGPC), dated August 30, 2010:

Table 1: WGSL Ponded Water Exceedances at the Culvert Inlet

Parameter	Result (mg/L)	Effluent Limitation (mg/L)
Iron	2.1	1

mg/L milligram per liter

A representative of Waste Management of Hawaii (WMH) made a verbal notification of the potential exceedance to the Hawaii State Department of Health, Clean Water Branch (CWB) on April 11, 2012.

A pH exceedance (field measurement of 8.41 units, versus a limit of 5.5 to 8.0) was also noted during the March 21st sampling event. The notice of that exceedance was previously delivered to the CWB on March 23rd.

No direct cause for the Iron exceedance could be identified. It was noted that a concurrently high level of Iron was also present in a sample collected from the ponded water upcanyon near the WGSL's mauka property boundary. In addition, exceedances of Iron have been reported in the

past. It is suspected that naturally occurring background levels in surrounding soils are the primary source of the exceedance.

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 Information Form

cc: Wayne Hamada - City and County of Honolulu
Justin Lottig - WMH
Jesse Frey – WMH
Mark Hofferbert – AECOM Technical Services

Attachment E
Inspection Reports

BI-ANNUAL INSPECTION LOG
WAIMANALO GULCH SANITARY LANDFILL
STORM WATER POLLUTION CONTROL PLAN

GENERAL INFORMATION

Date: 08/01/2012

Personnel: Justin Lottig (WMH), Mark Hofferbert (AECOM), Julie Zimmerman (AECOM)

Weather: sunny and clear, gusty, dry

Raining Yes ☐ No ☒

0.01" of rain fell in the last 72 hours

Runoff:

Flow observed? Yes ☐ No ☒

Type of Flow Sheet ☐ Rill ☐ Concentrated ☐

VISUAL OBSERVATIONS

Inspection List	*Yes/No/NA*	*Required Follow-up Action (if any)*
Active Face / Landfill Cover		
Active face minimized and controlled?	Yes	Active face is covered with 6" of soil every day.
Bare or sparsely vegetated areas?	Yes	Some slopes are sparsely vegetated, primarily in the Alternative Cap construction zone. Other areas at higher elevation are scheduled to be irrigated following installation of a water pump.
Settlement or depressions?	No	None observed.
Slope instability?	No	None observed.
Gullies caused by erosion?	No	Small rivulettes are evident, but no gullies were observed.
Illicitly-dumped material?	No	None observed.
Stressed or dead vegetation?	No	Dormant grass observed on many slopes.
Other indicators of leachate seepage or other non-storm water discharge?	No	None observed.
Drainage swales		
Evidence of erosion?	Yes	Some minor erosion along both sides of the main haul road near the gas flare. Silt fence was removed, and should be replaced, along toe of Alternative Cap construction area.
Sediment deposition?	Yes	Minor sediment accumulation in some ditches, particularly in Eastern Drainage System inlet pipes. Cleanout is part of routine maintenance. Culvert inlet under main haul road, at the bunker access road intersection, is buried in sediment and should be reconstructed.

Inspection List	*Yes/No/NA*	*Required Follow-up Action (if any)*
Diversion structure clear/unobstructed?	Yes	No action necessary at this time.
Drainage swales functional?	Yes	One drop inlet structure near the lower end of the Smart drain is currently under construction. That work should be completed as soon as possible.
Highway culvert entrances free of debris?	Yes	
Detention Basins		
Structure blocked or has obstructions?	No	None observed.
Outfall areas eroded?	Yes	Outfall of Culvert Cross Drain at South Detention Basin shows evidence of erosion and should be armored with stone or outfall should be re-routed to the North Detention Basin.
Sediment accumulation?	No	None observed. North Detention Basin was recently cleaned of sediment, but some windblown trash was visible in base of concrete channel.
Standing water?	No	None observed, except small puddle at base of concrete channel in North Detention Basin.
Security Measures		
Landfill access road or gate damaged?	No	
Access Roads		
Roads inaccessible?	No	
Roads damaged by erosion or settlement?	No	No substantial erosion observed.
Leachate Sumps		
Sump logs show that leachate levels within compliance limits?	Yes	Logs for the month of July 2012 were checked and levels were all below compliance levels. The form for Sump 4B should be updated to show the actual compliance level.
Maintenance Area & Fuel Storage		
Are all solvents, oils, etc. properly stored?	Yes	
Is the facility and surrounding area in proper order (good housekeeping)?	Yes	
Are the diesel fuel storage tanks (mobile) in good working order?	Yes	

NON-STORM WATER DISCHARGE ASSESSMENT AND CERTIFICATION Waimanalo Gulch Sanitary Landfill Storm Water Pollution Control Plan	Completed by:	Joseph Whelan
	Title:	General Manager
	Date:	August 1, 2012

Date of Test or Evaluation	Outfall Directly Observed During the Test (identify as indicated on the site map)	Method Used to Test or Evaluate Discharge	Describe Results from Test for the Presence of Non-Storm Water Discharge	Identify Potential Significant Sources	Name of Person Who Conducted the Test or Evaluation
08/01/2012	Culvert Inlet (at Farrington Highway)	Visual	Dry. No flow or visible evidence of moisture or recent discharge.	N/A	Justin Lottig (WMH), Mark Hofferbert (AECOM), Julie Zimmerman (AECOM)
08/01/2012	DB01E and DB01W (at Riser Outfall sampling locations)	Visual	Dry. No flow or visible evidence of moisture or recent discharge.	N/A	Justin Lottig (WMH), Mark Hofferbert (AECOM), Julie Zimmerman (AECOM)
08/01/2012	Western Bypass System Outfall (at "Flip Bucket")	Visual	Dry. No flow or visible evidence of moisture or recent discharge.	N/A	Justin Lottig (WMH), Mark Hofferbert (AECOM), Julie Zimmerman (AECOM)

CERTIFICATION

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

A. Name & Official Title (type or print) Joseph Whelan, General Manager	B. Area Code and Telephone Number 808-668-2985
C. Signature Joseph R. Whelan	D. Date Signed 8-10-12

(Rev. 04/11)

BI-ANNUAL INSPECTION LOG
WAIMANALO GULCH SANITARY LANDFILL
STORM WATER POLLUTION CONTROL PLAN

GENERAL INFORMATION

Date: December 14, 2012

Personnel: Mark Hofferbert (AECOM), Justin Lottig (WMH)

Weather:

Raining Yes ☐ No ☒

0.01" of rain fell in the last 72 hours

Runoff:

Flow observed? Yes ☐ No ☒

Type of Flow Sheet ☐ Rill ☐ Concentrated ☐

VISUAL OBSERVATIONS

Inspection List	*Yes/No/NA*	*Required Follow-up Action (if any)*
Active Face / Landfill Cover		
Active face minimized and controlled?	Yes	The top edge of the face was exposed to windy conditions. Some debris was windblown, though fences were installed and mitigated the effect. Recommend placing waste at a lower elevation in the cell during similarly windy conditions.
Bare or sparsely vegetated areas?	No	Landfill surfaces are generally covered with vegetation, however there are areas currently under active construction, such as the Alternative Cap, without vegetation. Re-vegetation efforts at some isolated areas have not been successful due to lack of rain. WMH has recently mapped the vegetative cover throughout the property.
Settlement or depressions?	No	None noted.
Slope instability?	No	None noted.
Gullies caused by erosion?	No	None noted.
Illicitly-dumped material?	No	None noted.
Stressed or dead vegetation?	No	None noted.
Other indicators of leachate seepage or other non-storm water discharge?	No	None noted.

Inspection List	*Yes/No/NA*	*Required Follow-up Action (if any)*
Drainage swales		
Evidence of erosion?	No	None noted. Exception: The HDPE "Smart Ditch" system (in the Western Perimeter Access Road Drainage) is significantly eroded and in disrepair. Recommend considering replacement of the Smart Ditch with a grouted stone swale.
Sediment deposition?	No	None noted. Exception: The culvert near the HECO Road access is plugged but a surface drainage swale has been constructed. Exception: The E8/E9 Drop Inlet (to the 36" Western Drainage pipe) has been moved/extended due to blasting and excavation for Cell E8/E9. This inlet will require continuous maintenance to remain functional during the Cell E9 expansion.
Diversion structure clear/unobstructed?	Yes	
Drainage swales functional?	Yes	Exception: Smart Ditch, as noted above.
Highway culvert entrances free of debris?	Yes	
Detention Basins		
Structure blocked or has obstructions?	No	None noted.
Outfall areas eroded?	No	None noted.
Sediment accumulation?	No	North Basin was recently cleaned of sediment.
Standing water?	No	None noted.
Security Measures		
Landfill access road or gate damaged?	No	No damage noted.
Access Roads		
Roads inaccessible?	No	Roads were clear.
Roads damaged by erosion or settlement?	No	None noted.

Inspection List	*Yes/No/NA*	*Required Follow-up Action (if any)*
Leachate Sumps		
Sump logs show that leachate levels within compliance limits?	Yes	Logs show levels within compliance (July thru December 2012). Exception: The form for Cell 4b lists an incorrectly calculated transducer compliance elevation (30.4 inches). To avoid confusion, the form should be revised to show the correct elevation (54 inches).
Maintenance Area & Fuel Storage		
Are all solvents, oils, etc. properly stored?	Yes	
Is the facility and surrounding area in proper order (good housekeeping)?	Yes	Some accumulated trash (cardboard) should be removed from the maintenance shed.
Are the diesel fuel storage tanks (mobile) in good working order?	Yes	

NON-STORM WATER DISCHARGE ASSESSMENT AND CERTIFICATION Waimanalo Gulch Sanitary Landfill Storm Water Pollution Control Plan	Completed by:	Joseph Whelan
	Title:	General Manager
	Date:	December 14, 2012

Date of Test or Evaluation	Outfall Directly Observed During the Test (identify as indicated on the site map)	Method Used to Test or Evaluate Discharge	Describe Results from Test for the Presence of Non-Storm Water Discharge	Identify Potential Significant Sources	Name of Person Who Conducted the Test or Evaluation
12/14/2012	Culvert Inlet (at Farrington Highway)	Visual	Dry. No flow or visible evidence of moisture or recent discharge.	N/A	Justin Lottig (WMH), Mark Hofferbert (AECOM)
12/14/2012	DB01E and DB01W (at Riser Outfall sampling locations)	Visual	Dry. No flow or visible evidence of moisture or recent discharge.	N/A	Justin Lottig (WMH), Mark Hofferbert (AECOM)
12/14/2012	Western Bypass System Outfall (at "Flip Bucket")	Visual	Dry. No flow or visible evidence of moisture or recent discharge.	N/A	Justin Lottig (WMH), Mark Hofferbert (AECOM)

CERTIFICATION

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

A. Name & Official Title (type or print)	B. Area Code and Telephone Number
Joseph Whelan, General Manager	808-668-2985
C. Signature Joseph R. Whelan	D. Date Signed 2-5-13

(Rev. 04/11)

Attachment F
Depth-Flow Tables

Table 1: Volume of Discharge Through Outfall WGSLF-DB01E

Depth of Water through Outfall (inches)	Flow (cubic feet per second)
0.0	0
2.0	0.3
4.0	1.5
6.0	3.4
8.0	6.1
10.0	9.5
12.0	13.7
14.0	18.5
16.0	23.8
18.0	29.4
20.0	35.4
21.0	38.5
22.0	41.6
24.0	47.9
26.0	54.3
28.0	60.3
30.0	66.1
32.0	71.5
34.0	76.0
36.0	79.8
38.0	82.3

Table 2: Volume of Discharge Through Outfall WGSLF-DB01W

Depth of Water through Outfall (inches)	Flow (cubic feet per second)
0.0	0
2.0	0.2
4.0	0.9
6.0	2.2
8.0	3.9
10.0	6.1
12.0	8.7
14.0	11.8
16.0	15.1
18.0	18.7
20.0	22.5
21.0	24.4
22.0	26.4
24.0	30.5
26.0	34.4
28.0	38.3
30.0	42.0
32.0	45.3
34.0	48.3
36.0	50.6
38.0	52.1