



Quarterly Report

Area H1 Landfill Leachate and Groundwater Extraction System Mare Island, Vallejo, California

July 8, 2010

Prepared Under:
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Prepared By:
Weston Solutions, Inc.
750 Dump Road
Vallejo, CA 94592
WDCN 0095

I certify under penalty of law that this document and all its attachment were prepared under my direction or supervision in accordance with a system designed to assure qualified personnel 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 gather 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.

Signed by Permittee or Duly Authorized Representative,

A handwritten signature in black ink, appearing to read "Dwight Gemar".

Dwight Gemar, P.E.
WESTON Project Manager

WESTON TRANSMITTAL FORM

TO: Ms. Janet Naito

California Environmental Protection Agency
 Department of Toxic Substances Control
 700 Heinz Avenue, Suite 200
 Berkeley, CA 94710-2721

Date:	7/9/2010	Job No.:	N68711-01-MDC-1061 (no CTO)
Attn.:	Ms. Janet Naito		
Re:	Permit No. 016V4953 Quarterly Report for April – June 2010		
File No:	WEST-1061-0000-0041		

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Signed: *Reynold Roman* Date: 7/9/2010
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1. INTRODUCTION

This “Quarterly Report” summarizes the operation of the Investigation Area H1 (IA-H1) Landfill Leachate and Groundwater Collection, Conveyance, and Treatment System (System). This report covers the reporting period of April 1, 2010 through June 30, 2010.

The IA-H1 landfill remediation includes a soil-bentonite (S-B) groundwater/leachate containment barrier (slurry wall), an engineered cap, and the System. A 72-acre area, including the landfill and adjacent disposal areas, is surrounded by the slurry wall and is now referred to as the “Containment Area”. The Containment Area is located on the former Mare Island Naval Shipyard, southwest of the intersection of “A” Street and Azuar Avenue, and within the city limits of Vallejo, California. The purpose of the System is to collect groundwater and potential leachate within the Containment Area. The System conveys groundwater/leachate to the Vallejo Sanitation and Flood Control District (VSFCD) sanitary sewage collection system.

The Department of Toxic Substances Control (DTSC) has determined that the extracted groundwater should carry an EPA hazardous waste code of F039 (landfill leachate) due to the possibility that landfill leachate may commingle with the groundwater that is being collected and discharged. Therefore, notification was provided to VSFCD prior to initial system startup in accordance with Standard Condition 10 of the VSFCD permit. However, this waste stream is excluded from RCRA Subtitle C requirements under 40 CFR §261.4. The Navy’s EPA number for Mare Island is CA7170024775.

The System collects water from two trenches (west and east trenches) located just inside the alignment of the slurry wall. Each trench is comprised of a 6-inch diameter perforated high density polyethylene (HDPE) collection pipe surrounded by 1-1/2-inch minus drain rock wrapped with geotextile fabric. The water collected within the trenches is removed by 15 pneumatic pumps and is conveyed via buried HDPE piping to an Operations Building. The Operations Building is located south of Dump Road, approximately 1,250 feet west of the intersection of “A” Street and Azuar Avenue at Mare Island, Vallejo, CA. Inside the building, each trench conveyance piping is measured for flow rate and total flow extracted and discharged



to the VSFCO manhole, located southeast of the Azuar Drive and "A" Street intersection. The water collected from the East Trench is passed through a 1,000-gallon oil-water separator prior to discharge to VSFCO to remove potential oil in the water from this area. The water extracted from the West Trench is pumped into the oil-water separator outlet chamber where it mixes with East Trench water and is pumped together through a 3-inch HDPE pipeline to a VSFCO manway located southeast of the Azuar Drive and "A" Street intersection. An ISCO composite sampler is installed to sample the combined flow from the East and West Trenches. An air compressor is installed inside the Building to provide compressed air to the 15 pneumatic collection pumps.

Operation of the System is monitored by an automated management system that will immediately shut the System down (i.e., stop pumping water) in the event of a problem. An autodialer call-out system is also programmed to notify assigned personnel who must resolve the problem and then manually restart the System. The System is being operated and maintained in accordance with the Operations and Maintenance Plan, Revision 1, Area H1 Landfill Groundwater Collection System Mare Island, Vallejo, California, dated February 2005 (WESTON, 2005).

2. OPERATION AND FLOW DATA

During the period of April 1, 2010 through June 30, 2010, a total of 886,530 gallons were extracted and discharged to the VSFCO system. An additional 30 gallons of purge water generated by groundwater monitoring well sampling activities was discharged into the VSFCO system, for a grand total of 886,560 gallons discharged to the VSFCO system during this reporting period.

The eastern and western extraction trenches operated for a total of approximately 2,184 hours during this reporting period with an average flow rate of 6.76 gallons per minute (gpm). Table 2-1 summarizes the flow data by extraction trench. The flow rates are anticipated to decrease due to the reduced groundwater infiltration caused by the horizontal engineered cap of the IA-H1 Containment Area, which was completed in May 2010. It is anticipated that the long-term flow rate will average less than 5 gpm.



3. COMPLIANCE SAMPLING

3.1 Quarterly Sample Collection and Results

Quarterly sampling was performed on June 8 and 9, 2010 in accordance with the permit requirements. Table 3-1 summarizes the sampling requirements. Table 3-2 summarizes the VSFCDD discharge criteria. For billing purposes, the BOD and TSS results for June 9, 2010 are presented separately in Table 3-3. Laboratory data sheets for the required analyses were extracted from the laboratory reports and are included in Attachment 1 (copies of the complete laboratory reports are available upon request).

Table 3-4 summarizes the quarterly sample results, which includes volatile organic compounds (VOCs), Total Petroleum Hydrocarbons (TPH) as gasoline, TPH as diesel and motor oil, semi-volatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), pH, metals, cyanide, oil and grease, and phenolics. Concentrations of cyanide, phenolics, PCBs, pesticides, SVOCs, oil and grease, and TPH-motor oil were below the detection limits. None of the sample results exceeded the VSFCDD discharge criteria. Laboratory results are included in Attachment 1.

4. PREVENTIVE MAINTENANCE AND INSPECTIONS

4.1 Inspections

During this period of operation, WESTON inspected the following system components on a bi-weekly basis when the system was operational:

- Air compressor operation (operating pressure and temperature, filter condition, and run/load hours)
- Oil-water separator operation and oil level
- Pneumatic pump operation (15 pumps)
- East/west leachate trench flow rate data
- Sump water level data collection



- No oil accumulated within the oil-water separator during this quarter, therefore removal of oil from the oil-water separator was not required. The cumulative total of oil and oily water recovered for off-site disposal since startup remains at 2,385 gallons.

4.2 Preventive and Corrective Maintenance

Preventive maintenance of the pneumatic pumps was conducted as needed based on inspection observations. Two new pneumatic pumps were purchased to replace non-operating pumps. The two non-operating pumps were sent in to the manufacturer for repair and parts replacement, and are now spares.

5. SUMMARY AND CONCLUSIONS

The System extracted and discharged a total of 886,530 gallons of water to the VSFC system at an average flow rate of 6.76 gpm during the hours of operation. In addition, 30 gallons of purge water generated by groundwater monitoring well sampling activities was discharged into the VSFC system, for a grand total of 886,560 gallons discharged to the VSFC system during this reporting period. No oil was removed from the oil/water separator this reporting period.

Quarterly sampling was conducted in accordance with the permit requirements. The analytical results of this quarter's samples are below the VSFC criteria. The next sampling event will be in September 2010.



TABLES



Table 2-1
Quarterly Flow Data

Trench	Start Gallons (flow meter)	End Gallons (flow meter)	Total Gallons	Operational Time (hrs)	Average Flow Rate (gpm)
East	13,062,450	13,525,790	463,340	2,184	3.54
West	13,060,330	13,483,520	423,190	2,184	3.23
		Trench Total	886,530	2,184	6.76
		Other Activities	30		
		Total	886,560		



**Table 3-1
Summary of Permit Sampling and Analytical Requirements**

Target Analytes	Analytical Method	Sample Container	Sample Type
pH	EPA Method 150.1	1 L amber	Grabs (2 per day, 3 per event), <i>analyze each bottle</i>
Oil & Grease	EPA Method 1664A	1 L amber w/ HCl	Grabs (2 per day), <i>analyze each bottle</i>
Total Cyanide	SM4500-CN	1 L poly w/ NaOH	Grabs (2 per day), <i>to be composited by the laboratory</i>
Total Phenolics	EPA Method 420.1	1 L amber w/ H ₂ SO ₄	
VOCs	EPA Method 624	3 40-ml VOA	
TPH-gasoline	EPA Method 8015	3 40-ml VOA	
SVOCs	EPA Method 625	1 L amber	
Total Metals*	EPA Method 200.7/245.1	500 ml poly w/ HNO ₃	
BOD	SM5210B (formerly EPA Method 405.1) ***	1 L poly	24 Hour Proportional Flow Composite
TSS	SM2540D (formerly EPA Method 160.2) ***	250 ml poly	
TICH**	EPA Method 608 (Organochlorine Pesticides)	1 L amber	
	EPA Method 608 (PCBs)	1 L amber	
TPH-diesel & motor oil	EPA Method 8015	1 L amber	

* Metals are defined as arsenic, beryllium, cadmium, chromium (total), copper, lead, mercury, nickel, selenium, silver, and zinc.

** Pesticides and PCBs are defined as Aldrin, alpha-BHC, beta-BHC, gamma-BHC (Lindane), delta-BHC, Chlordane, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, Dieldrin, Endosulfan I, Endosulfan II, Endosulfan Sulfate, Endrin, Endrin Aldehyde, Endrin Ketone, Heptachlor, Heptachlor Epoxide, Methoxychlor, Toxaphene, PCB 1016, PCB 1221, PCB 1232, PCB 1242, PCB 1248, PCB 1254, and PCB 1260.

*** Revisions to 40 CFR 136 and 40 CFR 141 were published by the USEPA on March 12, 2007. These revisions, known as the Method Update Rule (MUR) that became effective 30 days after their publication, constitute approval of newly developed methods and the withdrawal of outdated methods. The equivalent procedures have the same or similar technology to those methods being withdrawn; except they are published by another organization, such as ASTM or Standard Methods.



**Table 3-2
Vallejo Sanitation and Flood Control District Acceptance Criteria**

Parameter	Daily Average (mg/L)	Instantaneous Maximum (mg/L)
Arsenic	0.04	0.08
Beryllium	0.01	0.02
Cadmium	0.02	0.04
Chromium (total)	0.10	0.20
Copper	0.50	1.00
Lead	0.50	1.00
Mercury	0.005	0.02
Nickel	0.50	1.00
Selenium	0.02	0.04
Silver	0.75	2.00
Zinc	1.00	2.00
Total Cyanide	0.10	0.80
Total Phenolics	2.00	4.00
Petroleum Based Oil & Grease	100	100
TICH*	0.01	0.01
pH	6.0 - 9.0 pH units at all times	

* TICH (Total Identifiable Chlorinated Hydrocarbons) is defined as the sum of the masses or concentrations of toxic organic compounds as analyzed by EPA method 608 Organochlorine Pesticides and PCBs.

**Table 3-3
Quarterly BOD and TSS Sample Results**

Field Sample IDs	Effluent-1Q10-2
Lab Sample IDs	218674-007
Sampling Dates	3/9/2010

Analyte	Sample Type	Result (mg/L)	Qual
BOD (EPA 405.1 specified, superceded by equivalent test method SM5210B)			
Biochemical Oxygen Demand	24-hour ISCO composite sample	15	
TSS (EPA 160.2 specified, superceded by equivalent test method SM2540D)			
Total Suspended Solids	24-hour ISCO composite sample	21	

Notes:

U = not detected above the specified reporting limit

Qual = Laboratory Qualifier

Bolded values are detected results

**Table 3-4
Summary of Quarterly Sampling Results**

Field Sample IDs	Effluent-2Q10-1, Effluent-2Q10-1A, Effluent-2Q10-1B, Effluent-2Q10-2, Effluent-2Q10-2A
Lab Sample IDs	220602-001, 220634-005, 220634-006, 220634-007, 220634-008, and K030411001
Sampling Dates	6/8/10 - 6/9/10

Analyte	Sample Type	Result (mg/L)	Qual	VSFCD Discharge Criteria (mg/L)
<u>pH (EPA 150.1), pH units</u>				
pH (1st sample)	3 grab samples (each analyzed)	7.9		6 - 9
pH (2nd sample)		7.2		6 - 9
pH (3rd sample)		7.1		6 - 9
<u>Metals (EPA 200.7/245.1), mg/L</u>				
Arsenic	24-hour ISCO composite sample	0.0026		0.04
Beryllium		0.001	U	0.01
Cadmium		0.001	U	0.02
Chromium, total		0.0024		0.1
Copper		0.001	U	0.5
Lead		0.001	U	0.5
Mercury		0.0002	U	0.005
Nickel		0.088		0.5
Selenium		0.001	U	0.02
Silver		0.001	U	0.75
Zinc		0.027		1
<u>Cyanide (SM 4500 CN)</u>				
Cyanide	2 grab samples (composited by lab)	0.01		0.1
<u>Total Oil & Grease (EPA 1664A)</u>				
Oil & Grease (1st grab sample)	2 grab samples (each analyzed)	4.8	U	100
Oil & Grease (2nd grab sample)		4.75	U	100
<u>Phenolic Compounds (EPA 420.1)</u>				
Phenolics	2 grab samples (composited by lab)	0.059	U	2.00
<u>TPH Gasoline (EPA 8015)</u>				
Gasoline C6-C12	2 grab samples (composited by lab)	0.058	U	NA

**Table 3-4
Summary of Quarterly Sampling Results**

Field Sample IDs	Effluent-2Q10-1, Effluent-2Q10-1A, Effluent-2Q10-1B, Effluent-2Q10-2, Effluent-2Q10-2A
Lab Sample IDs	220602-001, 220634-005, 220634-006, 220634-007, 220634-008, and K030411001
Sampling Dates	6/8/10 - 6/9/10

Analyte	Sample Type	Result (mg/L)	Qual	VSFCD Discharge Criteria (mg/L)
VOCs (EPA 624)				
Chloroethane	2 grab samples (composited by lab)	0.0012		NA
Benzene		0.0029		
Chlorobenzene		0.0041		
1,4-Dichlorobenzene		0.0042		
(all other VOC analytes)		<0.001	U	
PCBs (EPA 608)				
Aroclor-1016	24-hour ISCO composite sample	< 0.0001	U	0.01 (cumulative total for pesticides and PCBs)
Aroclor-1221		< 0.0001	U	
Aroclor-1232		< 0.0001	U	
Aroclor-1242		< 0.0001	U	
Aroclor-1248		< 0.0001	U	
Aroclor-1254		< 0.0001	U	
Aroclor-1260		< 0.0001	U	
Organochlorine Pesticides (EPA 608)				
alpha-BHC	24-hour ISCO composite sample	<0.00001	U	0.01 (cumulative total for pesticides and PCBs)
beta-BHC		<0.000005	U	
gamma-BHC		<0.00001	U	
delta-BHC		<0.000005	U	
Heptachlor		<0.00001	U	
Aldrin		<0.000005	U	
Heptachlor epoxide		<0.00001	U	
Endosulfan I		<0.00001	U	
Dieldrin		<0.00001	U	
4,4'-DDE		<0.00001	U	
Endrin		<0.00001	U	
Endosulfan II		<0.00001	U	
Endosulfan sulfate		<0.00001	U	
4,4'-DDD		<0.00001	U	
Endrin aldehyde		<0.00001	U	
4,4'-DDT		<0.00001	U	
Chlordane		<0.00005	U	
Methoxychlor		<0.00001	U	
Endrin Ketone		<0.00001	U	
Toxaphene		< 0.0005	U	

**Table 3-4
Summary of Quarterly Sampling Results**

Field Sample IDs	Effluent-2Q10-1, Effluent-2Q10-1A, Effluent-2Q10-1B, Effluent-2Q10-2, Effluent-2Q10-2A
Lab Sample IDs	220602-001, 220634-005, 220634-006, 220634-007, 220634-008, and K030411001
Sampling Dates	6/8/10 - 6/9/10

Analyte	Sample Type	Result (mg/L)	Qual	VSFCD Discharge Criteria (mg/L)
<u>SVOCs (EPA 625)</u>				
All SVOCs	2 grab samples (composited by lab)	<0.010	U	NA
<u>TPH Diesel & Motor Oil (EPA 8015)</u>				
TPH-diesel	24-hour ISCO composite sample	0.078		NA
TPH-motor oil		0.300	U	

Notes:

U = not detected above the specified reporting limit

Y = sample exhibits a fuel chromatographic pattern which does not resemble fuel standard used for quantitation

NA = Not Applicable (no criteria specified by VSFCD)

Qual = Laboratory Qualifier

Bolded values are detected results

Data exceeding the discharge criteria (if any) are indicated by shaded cells



ATTACHMENT 1

LABORATORY ANALYTICAL SAMPLE REPORTS



Sampling Chain-of-Custody Forms



Chain-of-Custody Form for Cal Test

Project Number: 12826.001.001.0013.90		Project Name: Building 2Q10 Monitoring		Operations		Request for Analysis							Chain of Custody No.: CALTEST-2Q10		
Sampler's (Signature) <i>L. Mezza</i>													Page 1 of 1		
Field Sample ID	Date	Time	Comp.	Grab	Sample Location (Station ID)	No. of Containers	PCBs * (EPA 608)	Organochlorine Pesticides * (EPA 608)							Additional Requirements
							1-L amber	1-L amber							
Effluent-2Q10-2	6/9/10	0730		X	Combined Discharge	2	X	X							
<i>L. Mezza</i> 6/9/10 0758															
Relinquished by: (Signature and affiliation) <i>L. Mezza (WESTON)</i>				Date and Time: 6/9/10 1410		Received by: (Signature and affiliation) <i>[Signature]</i>				Date and Time: 6-9-10 1410					
Relinquished by: (Signature and affiliation)				Date and Time:		Received by: (Signature and affiliation)				Date and Time:					
Relinquished by: (Signature and affiliation)				Date and Time:		Received by: (Signature and affiliation)				Date and Time:					
P. O. Number: 0056966		Comments, special instructions: Data packages will require the analyst signatures and date on the data form 1's * Pesticides and PCBs are defined as Aldrin, alpha-BHC, beta-BHC, gamma-BHC (Lindane), delta-BHC, Chlordane, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, Dieldrin, Endosulfan I, Endosulfan II, Endosulfan Sulfate, Endrin, Endrin Aldehyde, Endrin Ketone, Heptachlor, Heptachlor Epoxide, Methoxychlor, Toxaphene, PCB 1016, PCB 1221, PCB 1232, PCB 1242, PCB 1248, PCB 1254, and PCB 1260.													
Data package: Level III		For Laboratory Use Only													
Turnaround time: 10-day TAT															

220602



Chain-of-Custody Form for Curtis and Tompkins

Project Number: 12826.001.001.0013.90		Project Name: Building 2Q10 Monitoring		Operations		Request for Analysis										Chain of Custody No.: C&T-2Q10A					
Sampler's (Signature) <i>L. Meyer</i>																Page 1 of 1					
Field Sample ID	Date	Time	Comp.	Grab	Sample Location (Station ID)	No. of Containers	Metals* (200.7/245.1)	Total Phenolics (EPA 420.1)	Total Cyanide (SM 4500CN)	Petroleum Based Oil & Grease (1664A)	BOD (SM 5210B)	TSS (SM 2540D)	VOCs ** (EPA 624)	TPH-gasoline (EPA 8015)	SVOCs (EPA 625)	TPH - diesel and motor oil (EPA 8015) w/silica gel cleanup	pH (EPA 150.1)	Extra Bottle	Additional Requirements		
							0.5-L HNO ₃	1-L amber H ₂ SO ₄	1-L poly NaOH	1-L amber HCl	1-L Poly	250-ml Poly	3 40-ml VOA	3 40-ml VOA	1-L amber	1-L amber	1-L amber	1-L amber			
Effluent-2Q10-1A	6/8/10	0730		X	Combined Discharge	2			X								X				
<i>L. Meyer</i> 6/8/10 0730																					
Relinquished by: (Signature and affiliation) <i>L. Meyer</i> (WESTON)		Date and Time: 6/8/10 1008		Received by: (Signature and affiliation) <i>C&T</i>		Date and Time: 6/8/10 1008														Date and Time: 6/8/10 1008	
Relinquished by: (Signature and affiliation)		Date and Time:		Received by: (Signature and affiliation)		Date and Time:														Date and Time:	
Relinquished by: (Signature and affiliation)		Date and Time:		Received by: (Signature and affiliation)		Date and Time:														Date and Time:	
P. O. Number: 0054345		Comments, special instructions: Perform silica gel cleanup for TPH. Data packages will require the analyst signatures and date on the data form 1's																			
Data package: Level III		For Laboratory Use Only																			
Turnaround time: 10-day TAT																					



Chain-of-Custody Form for Curtis and Tompkins

220634

Project Number:
12826.001.001.0013.90

Project Name:
Building 2Q10 Monitoring

Operations

Request for Analysis

Chain of Custody No.:

C&T-2Q10B

Page 1 of 1

Sampler's (Signature) *L. Maggs*

1
2
3
4
5
6
7

Field Sample ID	Date	Time	Comp.	Grab	Sample Location (Station ID)	No. of Containers	Request for Analysis														Additional Requirements
							Metals* (200.7/245.1)	Total Phenolics (EPA 420.1)	Total Cyanide (SM 4500CN)	Petroleum Based Oil & Grease (1664A)	BOD (SM 5210B)	TSS (SM 2540D)	VOCs ** (EPA 624)	TPH-gasoline (EPA 8015)	SVOCs (EPA 625)	TPH - diesel and motor oil (EPA 8015) w/silica gel cleanup	pH (EPA 150.1)	Extra Bottle			
							0.5-L HNO ₃	1-L amber H ₂ SO ₄	1-L poly NaOH	1-L amber HCl	1-L Poly	250-ml Poly	3 40-ml VOA	3 40-ml VOA	1-L amber	1-L amber	1-L amber	1-L amber			
TripBlank-2Q10A	6/8/10	0730		X	N/A	1															
TripBlank-2Q10B	6/8/10	0730		X	N/A	1														Preserved with HCl	
Effluent-2Q10-1C	6/8/10	0730		X	Combined Discharge	9		X	X					X	X	X				Preserved with HCl	
Effluent-2Q10-1D	6/8/10	1430		X	Combined Discharge	9		X	X					X	X	X				See Note 1	
Effluent-2Q10-1B	6/8/10	1430		X	Combined Discharge	2								X	X	X				See Note 1	
Effluent-2Q10-2A	6/9/10	0730		X	Combined Discharge	1													X		
Effluent-2Q10-2	6/9/10	0730	X		Combined Discharge	5	X												X		

L. Maggs 6/9/10 0758

Relinquished by: (Signature and affiliation)
L. Maggs (WESTON)

Date and Time:
6/9/10 1015

Received by: (Signature and affiliation)
CT

Date and Time:
6/9/10 1015

Relinquished by: (Signature and affiliation)

Date and Time:

Received by: (Signature and affiliation)

Date and Time:

Relinquished by: (Signature and affiliation)

Date and Time:

Received by: (Signature and affiliation)

Date and Time:

P. O. Number: 0054345

Comments, special instructions:

Data packages will require the analyst signatures and date on the data form 1's

Perform silica gel cleanup for TPH.

Note 1: Composite Effluent-2Q10-1C and Effluent-2Q10-1D for each analyte and report as Effluent-2Q10-1

* Metals are defined as arsenic, beryllium, cadmium, chromium (total), copper, lead, mercury, nickel, selenium, silver, and zinc

** Include chloroethylvinyl ether with the standard VOC list

Data package: Level III

Turnaround time: 10-day TAT

For Laboratory Use Only



BOD and TSS Laboratory Reports

Biochemical Oxygen Demand

Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	METHOD
Project#:	12826.001.001.0013.9	Analysis:	SM5210B
Analyte:	Biochemical Oxygen Demand	Batch#:	163859
Field ID:	EFFLUENT-2Q10-2	Sampled:	06/09/10 07:30
Matrix:	Water	Received:	06/09/10
Units:	mg/L	Prepared:	06/09/10 17:00
Diln Fac:	1.000	Analyzed:	06/14/10 14:15

Type	Lab ID	Result	RL
SAMPLE	220634-007	15	10
BLANK	QC547928	ND	5.0

ND= Not Detected
 RL= Reporting Limit



6/17/10

Batch QC Report

Biochemical Oxygen Demand			
Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	METHOD
Project#:	12826.001.001.0013.9	Analysis:	SM5210B
Analyte:	Biochemical Oxygen Demand	Batch#:	163859
Field ID:	ZZZZZZZZZZ	Sampled:	06/08/10 07:29
MSS Lab ID:	220593-003	Received:	06/08/10
Matrix:	Water	Prepared:	06/09/10 17:00
Units:	mg/L	Analyzed:	06/14/10 14:15
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim
BS	QC547929		198.0	188.2		95	85-115		
BSD	QC547930		198.0	172.2		87	85-115	9	20
SDUP	QC547931	<5.000		<5.000	5.000			NC	21

NC= Not Calculated

RL= Reporting Limit

RPD= Relative Percent Difference



 6/17/10

Total Suspended Solids (TSS)

Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	METHOD
Project#:	12826.001.001.0013.9	Analysis:	SM2540D
Analyte:	Total Suspended Solids	Batch#:	164008
Field ID:	EFFLUENT-2Q10-2	Sampled:	06/09/10
Matrix:	Water	Received:	06/09/10
Units:	mg/L	Prepared:	06/14/10
Diln Fac:	1.000	Analyzed:	06/15/10

Type	Lab ID	Result	RL
SAMPLE	220634-007	21	5
BLANK	QC548519	ND	5

ND= Not Detected
 RL= Reporting Limit

John Red
 6/17/10

Batch QC Report

Total Suspended Solids (TSS)			
Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	METHOD
Project#:	12826.001.001.0013.9	Analysis:	SM2540D
Analyte:	Total Suspended Solids	Batch#:	164008
Field ID:	ZZZZZZZZZZ	Sampled:	06/09/10
MSS Lab ID:	220636-001	Received:	06/09/10
Matrix:	Water	Prepared:	06/14/10
Units:	mg/L	Analyzed:	06/15/10
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC548520		50.00	52.00	104	80-120		
MS	QC548521	13.00	50.00	57.00	88	53-132		
MSD	QC548522		50.00	56.00	86	53-132	2	38

RPD= Relative Percent Difference



 6/17/10



Quarterly Laboratory Reports



ENVIRONMENTAL ANALYSES

Friday, June 25, 2010

Emma Popek
Weston Solutions
1340 Treat Blvd. Suite 210
Walnut Creek, CA 94597

RE: Lab Order: K060396
Project ID: BUILDING 2Q10 MONITORING

Collected By: CLIENT
PO/Contract #: 12826.001.001.0013.9

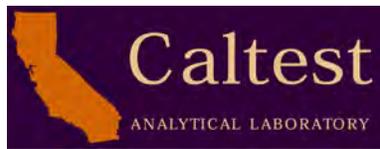
Dear Emma Popek:

Enclosed are the analytical results for sample(s) received by the laboratory on Wednesday, June 09, 2010. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Enclosures

Project Manager: Bill Svoboda



ENVIRONMENTAL ANALYSES

SAMPLE SUMMARY

Lab Order: K060396

Project ID: BUILDING 2Q10 MONITORING

Lab ID	Sample ID	Matrix	Date Collected	Date Received
K060396001	EFFLUENT-2Q10-2	Water	6/9/2010 07:30	6/9/2010 14:50

REPORT OF LABORATORY ANALYSIS

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without the written consent of CALTEST ANALYTICAL LABORATORY.





ENVIRONMENTAL ANALYSES

NARRATIVE

Lab Order: K060396

Project ID: BUILDING 2Q10 MONITORING

General Qualifiers and Notes

Caltest authorizes this report to be reproduced only in its entirety. Results are specific to the sample(s) as submitted and only to the parameter(s) reported.

Caltest certifies that all test results for wastewater and hazardous waste analyses meet all applicable NELAC requirements; all microbiology and drinking water testing meet applicable ELAP requirements, unless stated otherwise.

All analyses performed by EPA Methods or Standard Methods (SM) 18th Ed. except where noted.

Caltest collects samples in compliance with 40 CFR, EPA Methods, Cal. Title 22, and Standard Methods.

Dilution Factors (DF) reported greater than '1' have been used to adjust the result, Reporting Limit (RL), and Method Detection Limit (MDL).

All Solid, sludge, and/or biosolids data is reported in Wet Weight, unless otherwise specified.

Laboratory filtration for dissolved metals (excluding mercury) and/or pH analysis was not performed within the 15 minute holding time as specified by 40CFR 136.3 table II.

Results Qualifiers: Report fields may contain codes and non-numeric data correlating to one or more of the following definitions:

ND - Non Detect - indicates analytical result has not been detected.

RL - Reporting Limit is the quantitation limit at which the laboratory is able to detect an analyte. An analyte not detected at or above the RL is reported as ND unless otherwise noted or qualified. For analyses pertaining to the State Implementation Plan of the California Toxics Rule, the Caltest Reporting Limit (RL) is equivalent to the Minimum Level (ML). A standard is always run at or below the ML. Where Reporting Limits are elevated due to dilution, the ML calibration criteria has been met.

J - reflects estimated analytical result value detected below the Reporting Limit (RL) and above the Method Detection Limit (MDL). The 'J' flag is equivalent to the DNQ Estimated Concentration flag.

E - indicates an estimated analytical result value.

B - indicates the analyte has been detected in the blank associated with the sample.

NC - means not able to be calculated for RPD or Spike Recoveries.

SS - compound is a Surrogate Spike used per laboratory quality assurance manual.

NOTE: This document represents a complete Analytical Report for the samples referenced herein and should be retained as a permanent record thereof.

Qualifiers and Compound Notes

1 Analyte(s) reported as 'ND' means not detected at or above the listed Method Detection Limits (MDL).



ENVIRONMENTAL ANALYSIS

ANALYTICAL RESULTS

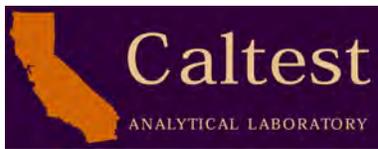
Lab Order: K060396

Project ID BUILDING 2Q10 MONITORING

Lab ID: K060396001 Date Collected: 6/9/2010 07:30 Matrix: Water
Sample ID: EFFLUENT-2Q10-2 Date Received: 6/9/2010 14:50

Parameters	Result	Units	R. L.	DF	Prepared	Batch	Analyzed	Batch	Qual
Chlorinated Pesticides & PCBs Analysis	Prep Method:		EPA 608	Prep by:		DAV			
	Analytical Method:		EPA 608	Analyzed by:		NTA			
Aldrin	ND	ug/L	0.005	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	1
alpha-BHC	ND	ug/L	0.010	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	
beta-BHC	ND	ug/L	0.005	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	
delta-BHC	ND	ug/L	0.005	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	
gamma-BHC (Lindane)	ND	ug/L	0.010	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	
Chlordane	ND	ug/L	0.050	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	
4,4'-DDD	ND	ug/L	0.010	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	
4,4'-DDE	ND	ug/L	0.010	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	
4,4'-DDT	ND	ug/L	0.010	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	
Dieldrin	ND	ug/L	0.010	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	
Endosulfan I	ND	ug/L	0.010	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	
Endosulfan II	ND	ug/L	0.010	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	
Endosulfan sulfate	ND	ug/L	0.010	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	
Endrin	ND	ug/L	0.010	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	
Endrin aldehyde	ND	ug/L	0.010	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	
Endrin ketone	ND	ug/L	0.010	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	
Heptachlor	ND	ug/L	0.010	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	
Heptachlor epoxide	ND	ug/L	0.010	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	
Methoxychlor	ND	ug/L	0.010	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	
PCB 1016	ND	ug/L	0.10	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	
PCB 1221	ND	ug/L	0.10	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	
PCB 1232	ND	ug/L	0.10	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	
PCB 1242	ND	ug/L	0.10	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	
PCB 1248	ND	ug/L	0.10	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	
PCB 1254	ND	ug/L	0.10	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	
PCB 1260	ND	ug/L	0.10	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	
Toxaphene	ND	ug/L	0.5	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	
Tetrachloro-m-xylene (SS)	50	%	10-100	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	
Decachlorobiphenyl (SS)	58	%	10-131	1	06/10/10 18:16	SPR 4111	06/23/10 00:08	SMS 1958	





ENVIRONMENTAL ANALYSES

QUALITY CONTROL DATA

Lab Order: K060396

Project ID: BUILDING 2Q10 MONITORING

Analysis Description: Chlorinated Pesticides & PCBs Analysis	QC Batch: SPR/4111
Analysis Method: EPA 608	QC Batch Method: EPA 608

METHOD BLANK: 335382

Parameter	Blank Result	Reporting Limit	Units	Qualifiers
Aldrin	ND	0.005	ug/L	
alpha-BHC	ND	0.010	ug/L	
beta-BHC	ND	0.005	ug/L	
delta-BHC	ND	0.005	ug/L	
gamma-BHC (Lindane)	ND	0.010	ug/L	
Chlordane	ND	0.050	ug/L	
4,4'-DDD	ND	0.010	ug/L	
4,4'-DDE	ND	0.010	ug/L	
4,4'-DDT	ND	0.010	ug/L	
Dieldrin	ND	0.010	ug/L	
Endosulfan I	ND	0.010	ug/L	
Endosulfan II	ND	0.010	ug/L	
Endosulfan sulfate	ND	0.010	ug/L	
Endrin	ND	0.010	ug/L	
Endrin aldehyde	ND	0.010	ug/L	
Endrin ketone	ND	0.010	ug/L	
Heptachlor	ND	0.010	ug/L	
Heptachlor epoxide	ND	0.010	ug/L	
Methoxychlor	ND	0.010	ug/L	
PCB 1016	ND	0.10	ug/L	
PCB 1221	ND	0.10	ug/L	
PCB 1232	ND	0.10	ug/L	
PCB 1242	ND	0.10	ug/L	
PCB 1248	ND	0.10	ug/L	
PCB 1254	ND	0.10	ug/L	
PCB 1260	ND	0.10	ug/L	
Toxaphene	ND	0.5	ug/L	
Decachlorobiphenyl (SS)	76	10-131	%	
Tetrachloro-m-xylene (SS)	67	10-100	%	

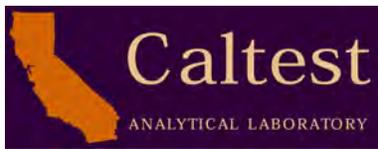
LABORATORY CONTROL SAMPLE: 335383

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aldrin	ug/L	2	1.7	83	42-122	
alpha-BHC	ug/L	2	1.6	79	37-134	
beta-BHC	ug/L	2	1.8	93	17-147	
delta-BHC	ug/L	2	1.7	85	19-140	
gamma-BHC (Lindane)	ug/L	2	1.7	87	32-127	
4,4'-DDD	ug/L	2	1.9	96	31-141	

REPORT OF LABORATORY ANALYSIS

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ENVIRONMENTAL ANALYSES

QUALITY CONTROL DATA

Lab Order: K060396

Project ID: BUILDING 2Q10 MONITORING

Analysis Description: Chlorinated Pesticides & PCBs Analysis	QC Batch: SPR/4111
Analysis Method: EPA 608	QC Batch Method: EPA 608

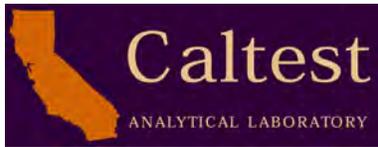
LABORATORY CONTROL SAMPLE: 335383

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4,4'-DDE	ug/L	2	1.9	93	30-145	
4,4'-DDT	ug/L	2	2.2	108	25-160	
Dieldrin	ug/L	2	2	98	36-146	
Endosulfan I	ug/L	2	1.9	95	45-153	
Endosulfan II	ug/L	2	2	100	1-202	
Endosulfan sulfate	ug/L	2	2.2	110	26-144	
Endrin	ug/L	2	1.9	97	30-147	
Endrin aldehyde	ug/L	2	1.9	96	34-105	
Endrin ketone	ug/L	2	2	102	41-127	
Heptachlor	ug/L	2	1.8	89	34-111	
Heptachlor epoxide	ug/L	2	1.9	95	37-142	
Methoxychlor	ug/L	2	2	99	1-186	
Decachlorobiphenyl (SS)	%			130	10-131	
Tetrachloro-m-xylene (SS)	%			80	10-100	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 335385 335386

Parameter	Units	K060397002 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Aldrin	ug/L	0	2	1.1	1.1	54	52	42-122	1.9	24	
alpha-BHC	ug/L	0	2	1.8	1.8	93	86	37-134	5	30	
beta-BHC	ug/L	0	2	2.1	2	105	98	17-147	3.9	30	
delta-BHC	ug/L	0	2	2.6	2.3	130	111	19-140	14	30	
gamma-BHC (Lindane)	ug/L	0	2	2.1	2	104	97	32-127	5.4	29	
4,4'-DDD	ug/L	0	2	2.6	2.5	129	124	31-141	1.2	30	
4,4'-DDE	ug/L	0	2	2	1.9	101	93	30-145	5.6	30	
4,4'-DDT	ug/L	0	2	1.3	1.2	66	59	25-160	8.7	46	
Dieldrin	ug/L	0	2	2.3	2.2	114	109	36-146	2.7	24	
Endosulfan I	ug/L	0	2	2.3	2.3	117	114	45-153	0.4	30	
Endosulfan II	ug/L	0	2	2.4	2.3	119	112	1-202	4.3	30	
Endosulfan sulfate	ug/L	0	2	2.5	2.3	123	114	26-144	5.4	30	
Endrin	ug/L	0	2	2.3	2.2	115	109	30-147	3.5	23	
Endrin aldehyde	ug/L	0	2	1.3	1.4	67	68	34-105	3.7	30	
Endrin ketone	ug/L	0	2	2.2	2.2	113	106	41-127	4.1	30	
Heptachlor	ug/L	0	2	1.9	1.7	97	84	34-111	12	52	
Heptachlor epoxide	ug/L	0	2	2.2	2.2	113	107	37-142	3.2	30	
Methoxychlor	ug/L	0	2	1.1	1.1	57	54	1-186	1.8	30	
PCB 1260	ug/L			0	0					0	
Decachlorobiphenyl (SS)	%					195	186	10-131	2.3	2	





ENVIRONMENTAL ANALYSES

QUALITY CONTROL DATA

Lab Order: K060396

Project ID: BUILDING 2Q10 MONITORING

Analysis Description:	Chlorinated Pesticides & PCBs Analysis	QC Batch:	SPR/4111
Analysis Method:	EPA 608	QC Batch Method:	EPA 608

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 335385 335386

Parameter	Units	K060397002 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Tetrachloro-m-xylene (SS)	%					91	80	10-100	10		





ENVIRONMENTAL ANALYSES

QUALITY CONTROL DATA QUALIFIERS

Lab Order: K060396

Project ID: BUILDING 2Q10 MONITORING

QUALITY CONTROL PARAMETER QUALIFIERS

Results Qualifiers: Report fields may contain codes and non-numeric data correlating to one or more of the following definitions:

NS - means not spiked and will not have recoveries reported for Analyte Spike Amounts

NC - means not able to be calculated for RPD or Spike Recoveries.

QC Codes Keys: These descriptors are used to help identify the specific QC samples and clarify the report.

MB - Method Blank

Method Blanks are reported to the same Method Detection Limits (MDLs) or Reporting Limits (RLs) as the analytical samples in the corresponding QC batch.

LCS/LCSD - Laboratory Control Spike / Laboratory Control Spike Duplicate

DUP - Duplicate of Original Sample Matrix

MS/MSD - Matrix Spike / Matrix Spike Duplicate

RPD - Relative Percent Difference

%Recovery - Spike Recovery stated as a percentage

2 Caltest allows one surrogate outside of laboratory control limits per SOP.



ENVIRONMENTAL ANALYSES

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab Order: K060396

Project ID: BUILDING 2Q10 MONITORING

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
K060396001	EFFLUENT-2Q10-2	EPA 608	SPR/4111	EPA 608	SMS/1958



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 220602
ANALYTICAL REPORT

Weston Solutions
1340 Treat Blvd
Walnut Creek, CA 94597

Project : 12826.001.001.0013.9
Location : Building 2Q10 Monitoring
Level : III

Sample ID
EFFLUENT-2Q10-1A

Lab ID
220602-001

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: 
Project Manager

Date: 06/18/2010

NELAP # 01107CA

CASE NARRATIVE

Laboratory number: 220602
Client: Weston Solutions
Project: 12826.001.001.0013.9
Location: Building 2Q10 Monitoring
Request Date: 06/08/10
Samples Received: 06/08/10

This data package contains sample and QC results for one water sample, requested for the above referenced project on 06/08/10. See attached cooler receipt form for any sample receipt problems or discrepancies.

Total Oil & Grease (HEM) (EPA 1664A):

Matrix spikes were not performed for this analysis due to insufficient sample volume.

No analytical problems were encountered.

pH (EPA 150.1):

No analytical problems were encountered.

Laboratory Job Number 220602

ANALYTICAL REPORT

Wet Chemistry

Matrix: Water

Total Oil & Grease (HEM)

Lab #:	220602	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	METHOD
Project#:	12826.001.001.0013.9	Analysis:	EPA 1664A
Analyte:	Oil & Grease (HEM)	Batch#:	164123
Field ID:	EFFLUENT-2Q10-1A	Sampled:	06/08/10
Matrix:	Water	Received:	06/08/10
Units:	mg/L		

Type	Lab ID	Result	RL	Diln Fac	Analyzed
SAMPLE	220602-001	ND	4.80	0.9600	06/18/10
BLANK	QC548994	ND	5.00	1.000	06/17/10

ND= Not Detected
 RL= Reporting Limit
 Page 1 of 1


 6/18/10

Batch QC Report

Total Oil & Grease (HEM)

Lab #:	220602	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	METHOD
Project#:	12826.001.001.0013.9	Analysis:	EPA 1664A
Analyte:	Oil & Grease (HEM)	Diln Fac:	1.000
Matrix:	Water	Batch#:	164123
Units:	mg/L	Analyzed:	06/17/10

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC548995	40.00	33.30	83	78-114		
BSD	QC548996	40.00	39.40	98	78-114	17	18

Dad Rob
6/18/10

pH			
Lab #:	220602	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	METHOD
Project#:	12826.001.001.0013.9	Analysis:	EPA 150.1
Analyte:	pH	Diln Fac:	1.000
Field ID:	EFFLUENT-2Q10-1A	Batch#:	163814
Lab ID:	220602-001	Sampled:	06/08/10 07:30
Matrix:	Water	Received:	06/08/10
Units:	SU	Analyzed:	06/08/10 18:30

Result	RL
7.9	1.0

[Handwritten Signature]
6/18/10

Batch QC Report

pH			
Lab #:	220602	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	METHOD
Project#:	12826.001.001.0013.9	Analysis:	EPA 150.1
Analyte:	pH	Units:	SU
Field ID:	EFFLUENT-2Q10-1A	Diln Fac:	1.000
Type:	SDUP	Batch#:	163814
MSS Lab ID:	220602-001	Sampled:	06/08/10 07:30
Lab ID:	QC547744	Received:	06/08/10
Matrix:	Water	Analyzed:	06/08/10 18:30

MSS Result	Result	RL	RPD	Lim
7.850	7.880	1.000	0	20

RL= Reporting Limit
 RPD= Relative Percent Difference
 Page 1 of 1



 6/18/10

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	EPA 5030B
Project#:	12826.001.001.0013.9	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	163900
MSS Lab ID:	220646-001	Sampled:	06/09/10
Matrix:	Water	Received:	06/09/10
Units:	ug/L	Analyzed:	06/10/10
Diln Fac:	1.000		

Type: MS Lab ID: QC548106

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C6-C12	461.9	2,000	2,269	90	67-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	104	70-140

Type: MSD Lab ID: QC548107

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C6-C12	2,000	2,280	91	67-120	0	20

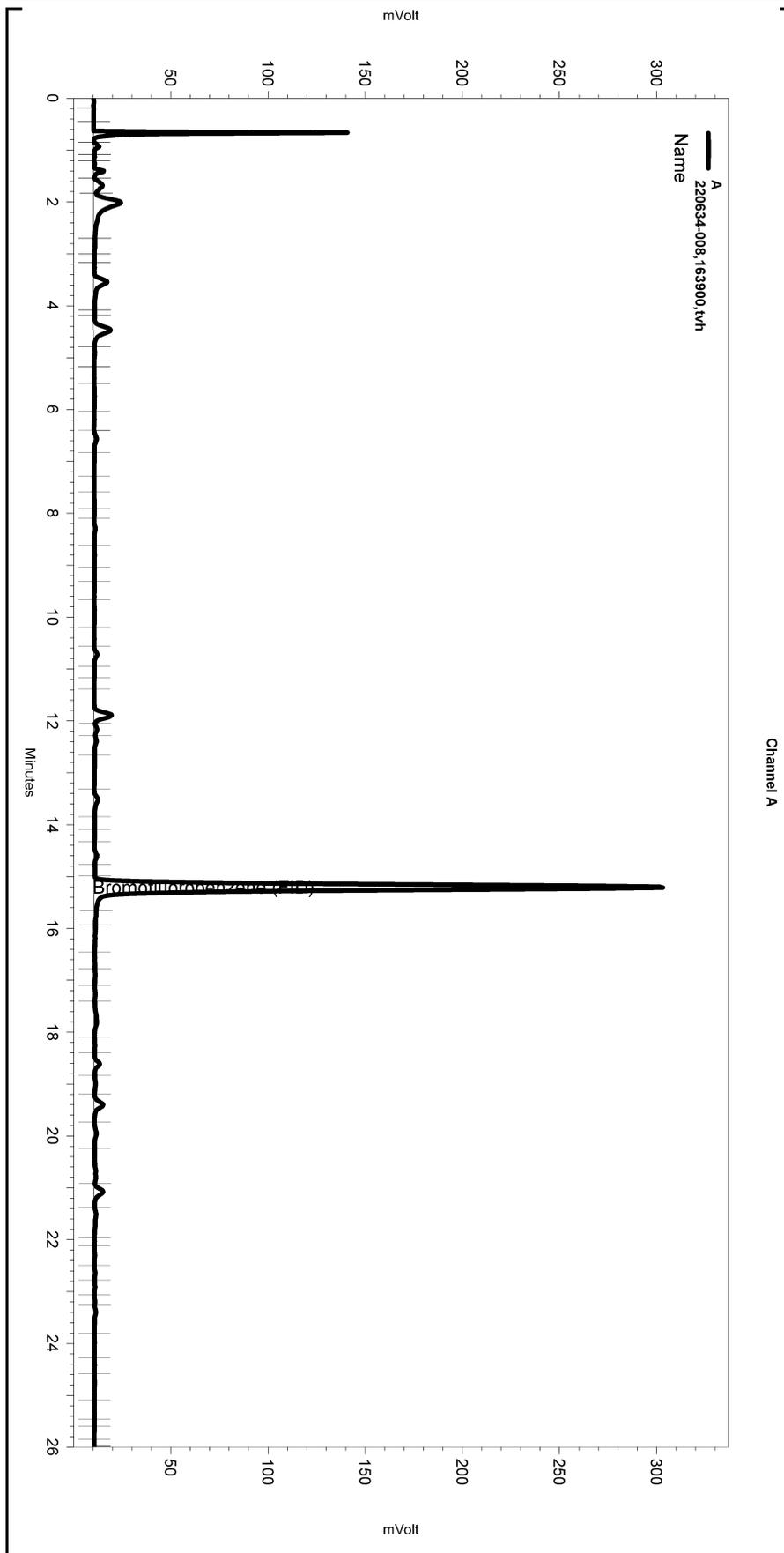
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	109	70-140

Cheryl Pocheo 6/18/10

RPD= Relative Percent Difference

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\161.seq
 Sample Name: 220634-008,163900,tvh
 Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\161_018
 Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 1. Analyst (lims2k3\tvh1)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\lvhbtxe152.met

Software Version 3.1.7
 Run Date: 6/10/2010 10:25:13 PM
 Analysis Date: 6/11/2010 10:18:39 AM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: comp



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

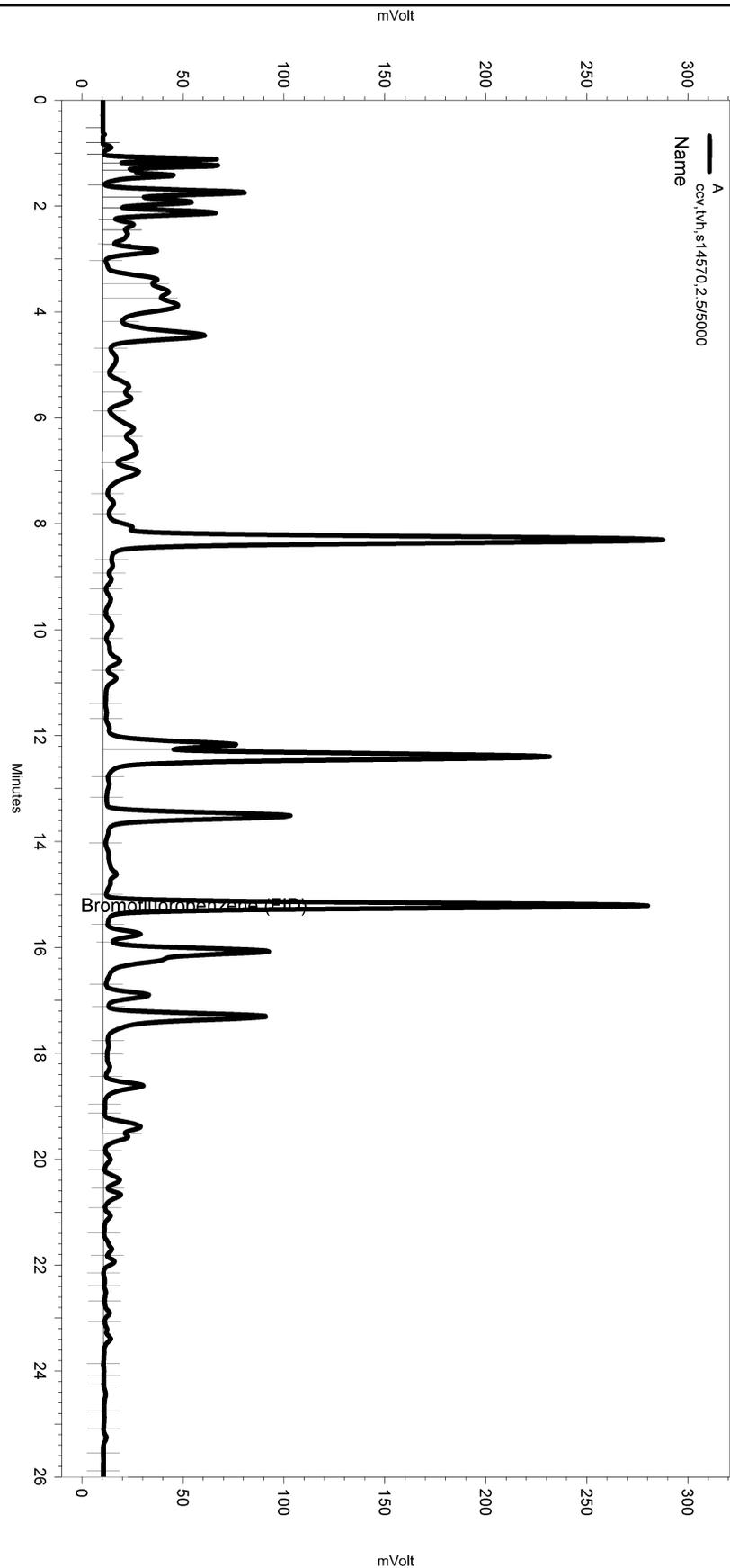
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\161_018

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	15.665	0	0

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\161.seq
 Sample Name: ccv,tvh,s14570,2.5/5000
 Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\161_003
 Instrument: GC07 Vial: N/A Operator: lims2k3\tvh3
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe152.met

Software Version 3.1.7
 Run Date: 6/10/2010 10:33:51 AM
 Analysis Date: 6/10/2010 11:02:34 AM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: {Data Description}



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10049\161_003_6786.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Channel A

Laboratory Job Number 220634

ANALYTICAL REPORT

TPH-Extractables by GC

Matrix: Water

Total Extractable Hydrocarbons

Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	EPA 3520C
Project#:	12826.001.001.0013.9	Analysis:	EPA 8015B
Field ID:	EFFLUENT-2Q10-2	Batch#:	163901
Matrix:	Water	Sampled:	06/09/10
Units:	ug/L	Received:	06/09/10
Diln Fac:	1.000	Prepared:	06/10/10

Type: SAMPLE Analyzed: 06/14/10
 Lab ID: 220634-007 Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	78 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	86	60-129

Type: BLANK Analyzed: 06/15/10
 Lab ID: QC548108 Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	96	60-129

Porter Williams 6/17/10

Y= Sample exhibits chromatographic pattern which does not resemble standard
 ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	EPA 3520C
Project#:	12826.001.001.0013.9	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC548109	Batch#:	163901
Matrix:	Water	Prepared:	06/10/10
Units:	ug/L	Analyzed:	06/15/10

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,520	101	54-125

Surrogate	%REC	Limits
o-Terphenyl	99	60-129

Patricia Williams 6/17/10

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	EPA 3520C
Project#:	12826.001.001.0013.9	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	163901
MSS Lab ID:	220633-002	Sampled:	06/07/10
Matrix:	Water	Received:	06/09/10
Units:	ug/L	Prepared:	06/10/10
Diln Fac:	1.000	Analyzed:	06/12/10

Type: MS Lab ID: QC548110

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	30.80	2,500	2,677	106	46-131

Surrogate	%REC	Limits
o-Terphenyl	111	60-129

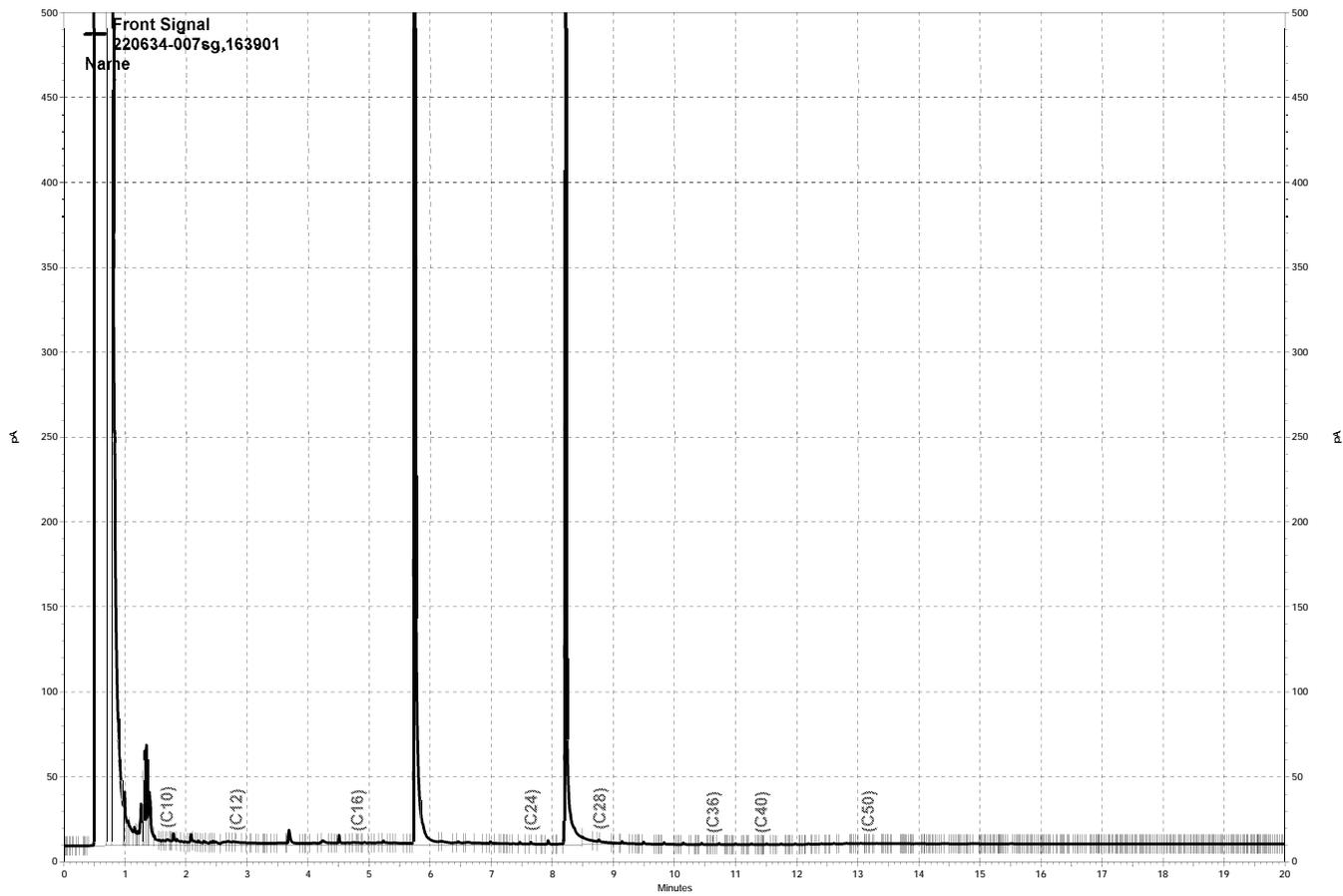
Type: MSD Lab ID: QC548111

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,714	107	46-131	1	61

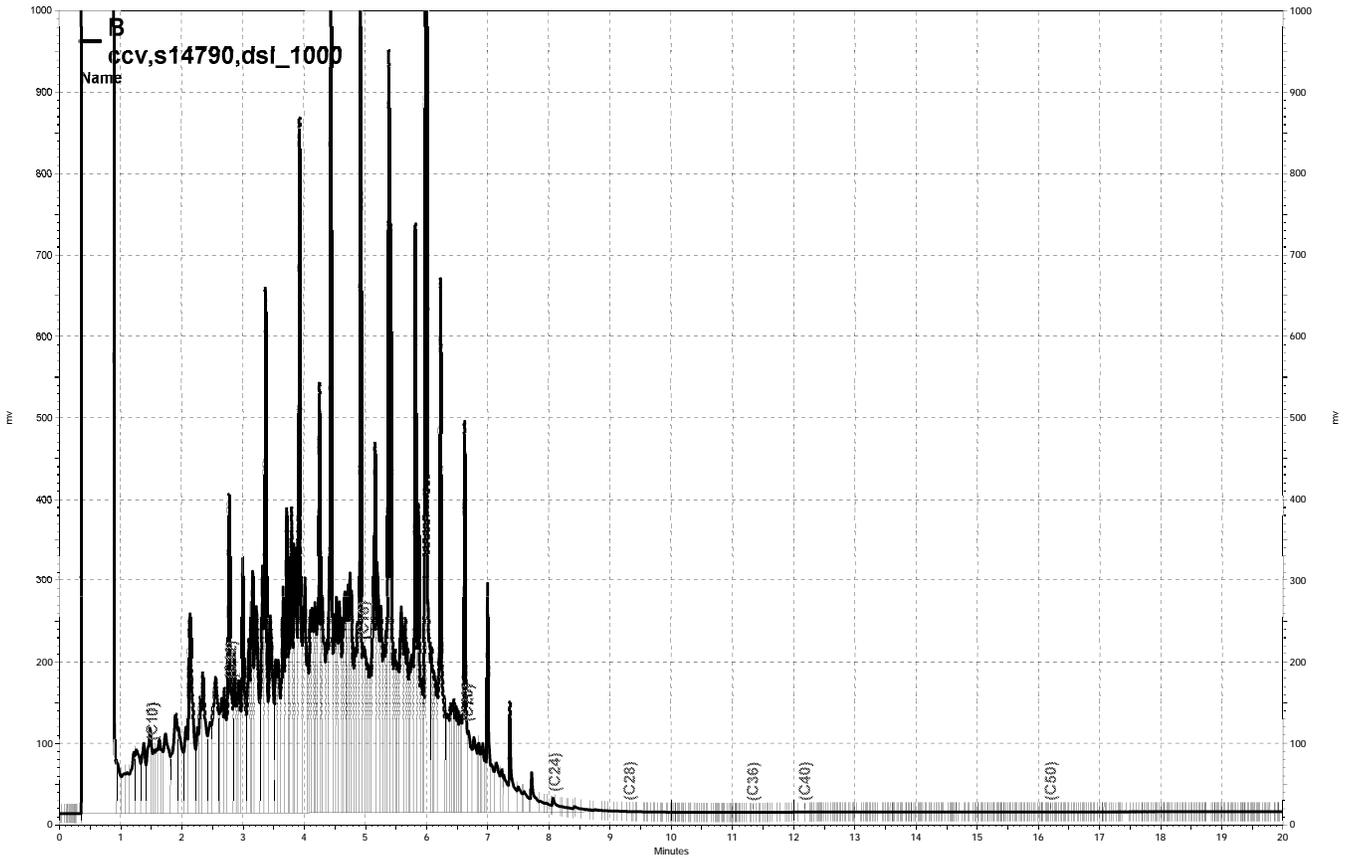
Surrogate	%REC	Limits
o-Terphenyl	109	60-129

Pat Williams 6/17/10

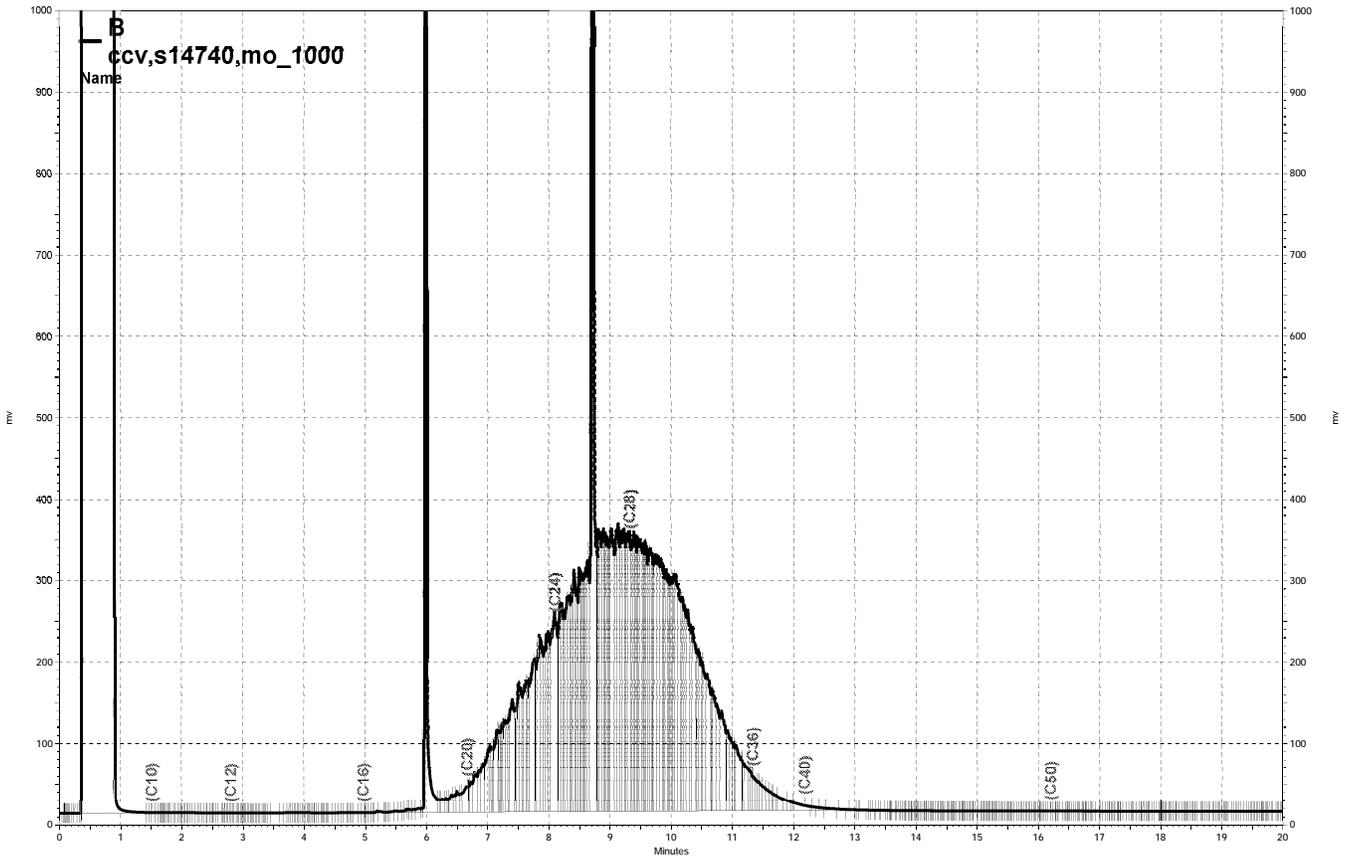
RPD= Relative Percent Difference



— G:\ezchrom\Projects\GC27\Data\165a009.dat, Front Signal



— \\Lims\gdrive\ezchrom\Projects\GC15B\Data\162b019, B



— \\Lims\gdrive\ezchrom\Projects\GC15B\Data\162b018, B

Laboratory Job Number 220634

ANALYTICAL REPORT

Volatile Organics by GC/MS

Matrix: Water

PURGABLE ORGANICS IN WATERS

Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	EPA 624
Project#:	12826.001.001.0013.9	Analysis:	EPA 624
Field ID:	TRIPBLANK-2Q10B	Batch#:	164035
Lab ID:	220634-002	Sampled:	06/08/10
Matrix:	Water	Received:	06/09/10
Units:	ug/L	Analyzed:	06/15/10
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
2-Chloroethylvinylether	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Ethylbenzene	ND	0.5
Bromoform	ND	1.0
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Tentatively Identified Compounds

No TICs found.

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	127	71-140
Toluene-d8	103	80-120
Bromofluorobenzene	102	80-121


 6/18/10

PURGABLE ORGANICS IN WATERS

Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	EPA 624
Project#:	12826.001.001.0013.9	Analysis:	EPA 624
Field ID:	EFFLUENT-2Q10-1	Batch#:	164035
Lab ID:	220634-008	Sampled:	06/08/10
Matrix:	Water	Received:	06/09/10
Units:	ug/L	Analyzed:	06/15/10
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	1.2	1.0
Trichlorofluoromethane	ND	1.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	2.9	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
2-Chloroethylvinylether	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	4.1	0.5
Ethylbenzene	ND	0.5
Bromoform	ND	1.0
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	1.5	0.5
1,2-Dichlorobenzene	ND	0.5

Tentatively Identified Compounds
 No TICs found.

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	127	71-140
Toluene-d8	102	80-120
Bromofluorobenzene	103	80-121

[Handwritten Signature]
 6/18/10

ND= Not Detected
 RL= Reporting Limit
 Page 1 of 1

Batch QC Report

PURGABLE ORGANICS IN WATERS

Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	EPA 624
Project#:	12826.001.001.0013.9	Analysis:	EPA 624
Matrix:	Water	Batch#:	164035
Units:	ug/L	Analyzed:	06/15/10
Diln Fac:	1.000		

Type: BS Lab ID: QC548639

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	21.70	87	72-138
Benzene	25.00	25.57	102	80-122
Trichloroethene	25.00	27.16	109	80-122
Toluene	25.00	25.10	100	80-120
Chlorobenzene	25.00	26.13	105	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	130	71-140
Toluene-d8	101	80-120
Bromofluorobenzene	100	80-121

Type: BSD Lab ID: QC548640

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	20.84	83	72-138	4	20
Benzene	25.00	24.75	99	80-122	3	20
Trichloroethene	25.00	25.03	100	80-122	8	20
Toluene	25.00	25.45	102	80-120	1	20
Chlorobenzene	25.00	25.22	101	80-120	4	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	126	71-140
Toluene-d8	104	80-120
Bromofluorobenzene	100	80-121



RPD= Relative Percent Difference

Batch QC Report

PURGABLE ORGANICS IN WATERS			
Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	EPA 624
Project#:	12826.001.001.0013.9	Analysis:	EPA 624
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC548641	Batch#:	164035
Matrix:	Water	Analyzed:	06/15/10
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
2-Chloroethylvinylether	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Ethylbenzene	ND	0.5
Bromoform	ND	1.0
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Tentatively Identified Compounds
No TICs found.

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	126	71-140
Toluene-d8	103	80-120
Bromofluorobenzene	103	80-121



ND= Not Detected
 RL= Reporting Limit
 Page 1 of 1

Batch QC Report

PURGABLE ORGANICS IN WATERS

Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	EPA 624
Project#:	12826.001.001.0013.9	Analysis:	EPA 624
Field ID:	ZZZZZZZZZZ	Batch#:	164035
MSS Lab ID:	220621-031	Sampled:	06/08/10
Matrix:	Water	Received:	06/08/10
Units:	ug/L	Analyzed:	06/15/10
Diln Fac:	5.000		

Type: MS Lab ID: QC548691

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.7953	125.0	106.5	85	80-134
Benzene	<0.5000	125.0	130.0	104	80-121
Trichloroethene	<0.5000	125.0	125.8	101	77-126
Toluene	<0.5000	125.0	127.7	102	80-120
Chlorobenzene	<0.5000	125.0	128.6	103	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	131	71-140
Toluene-d8	101	80-120
Bromofluorobenzene	99	80-121

Type: MSD Lab ID: QC548692

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	125.0	105.8	85	80-134	1	20
Benzene	125.0	127.1	102	80-121	2	20
Trichloroethene	125.0	123.8	99	77-126	2	20
Toluene	125.0	125.2	100	80-120	2	20
Chlorobenzene	125.0	126.2	101	80-120	2	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	130	71-140
Toluene-d8	101	80-120
Bromofluorobenzene	101	80-121


 6/15/10

RPD= Relative Percent Difference

Laboratory Job Number 220634

ANALYTICAL REPORT

Semivolatile Organics by GC/MS

Matrix: Water

SEMIVOLATILE COMPOUNDS

Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	EPA 625
Project#:	12826.001.001.0013.9	Analysis:	EPA 625
Field ID:	EFFLUENT-2Q10-1	Batch#:	164005
Lab ID:	220634-008	Sampled:	06/08/10
Matrix:	Water	Received:	06/09/10
Units:	ug/L	Prepared:	06/14/10
Diln Fac:	3.000	Analyzed:	06/15/10

Analyte	Result	RL
bis (2-Chloroethyl) ether	ND	30
1,3-Dichlorobenzene	ND	30
1,4-Dichlorobenzene	ND	30
1,2-Dichlorobenzene	ND	30
bis (2-Chloroisopropyl) ether	ND	30
N-Nitroso-di-n-propylamine	ND	30
Hexachloroethane	ND	30
Nitrobenzene	ND	30
Isophorone	ND	30
bis (2-Chloroethoxy) methane	ND	30
1,2,4-Trichlorobenzene	ND	30
Naphthalene	ND	30
Hexachlorobutadiene	ND	30
2-Chloronaphthalene	ND	30
Dimethylphthalate	ND	30
Acenaphthylene	ND	30
2,6-Dinitrotoluene	ND	30
Acenaphthene	ND	30
2,4-Dinitrotoluene	ND	30
Diethylphthalate	ND	30
Fluorene	ND	30
4-Chlorophenyl-phenylether	ND	30
4-Bromophenyl-phenylether	ND	30
Hexachlorobenzene	ND	30
Phenanthrene	ND	30
Anthracene	ND	30
Di-n-butylphthalate	ND	30
Fluoranthene	ND	30
Pyrene	ND	30
Butylbenzylphthalate	ND	30
3,3'-Dichlorobenzidine	ND	60
Benzo (a) anthracene	ND	30
Chrysene	ND	30
bis (2-Ethylhexyl) phthalate	ND	30
Di-n-octylphthalate	ND	30
Benzo (b) fluoranthene	ND	30

J= Estimated value

ND= Not Detected

RL= Reporting Limit

SEMIVOLATILE COMPOUNDS

Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	EPA 625
Project#:	12826.001.001.0013.9	Analysis:	EPA 625
Field ID:	EFFLUENT-2Q10-1	Batch#:	164005
Lab ID:	220634-008	Sampled:	06/08/10
Matrix:	Water	Received:	06/09/10
Units:	ug/L	Prepared:	06/14/10
Diln Fac:	3.000	Analyzed:	06/15/10

Analyte	Result	RL
Benzo (k) fluoranthene	ND	30
Benzo (a) pyrene	ND	30
Indeno (1, 2, 3-cd) pyrene	ND	30
Dibenz (a, h) anthracene	ND	30
Benzo (g, h, i) perylene	ND	30

Tentatively Identified Compounds	Result
2-Propanol, 1,1'-[(1-methyl-1,2-ethanediyl)bis(oxy)]bis-	14 J
Bicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic acid, 1,4,5,6,7,7-hexachloro-	310 J
Chloriodomethane	83 J
Unknown 1	19 J
Unknown 2	63 J
Unknown 3	23 J
Unknown 4	41 J
Unknown 5	410 J

Surrogate	%REC	Limits
2-Fluorophenol	83	37-120
Phenol-d5	74	38-120
2,4,6-Tribromophenol	110	42-120
Nitrobenzene-d5	85	46-120
2-Fluorobiphenyl	93	51-120
Terphenyl-d14	45	21-120

J= Estimated value
 ND= Not Detected
 RL= Reporting Limit

Cheryl Roehner 6/18/10

Batch QC Report

SEMIVOLATILE COMPOUNDS

Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	EPA 625
Project#:	12826.001.001.0013.9	Analysis:	EPA 625
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC548506	Batch#:	164005
Matrix:	Water	Prepared:	06/14/10
Units:	ug/L	Analyzed:	06/15/10

Analyte	Result	RL
bis(2-Chloroethyl) ether	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
1,2-Dichlorobenzene	ND	10
bis(2-Chloroisopropyl) ether	ND	10
N-Nitroso-di-n-propylamine	ND	10
Hexachloroethane	ND	10
Nitrobenzene	ND	10
Isophorone	ND	10
bis(2-Chloroethoxy) methane	ND	10
1,2,4-Trichlorobenzene	ND	10
Naphthalene	ND	10
Hexachlorobutadiene	ND	10
2-Chloronaphthalene	ND	10
Dimethylphthalate	ND	10
Acenaphthylene	ND	10
2,6-Dinitrotoluene	ND	10
Acenaphthene	ND	10
2,4-Dinitrotoluene	ND	10
Diethylphthalate	ND	10
Fluorene	ND	10
4-Chlorophenyl-phenylether	ND	10
4-Bromophenyl-phenylether	ND	10
Hexachlorobenzene	ND	10
Phenanthrene	ND	10
Anthracene	ND	10
Di-n-butylphthalate	ND	10
Fluoranthene	ND	10
Pyrene	ND	10
Butylbenzylphthalate	ND	10
3,3'-Dichlorobenzidine	ND	20
Benzo(a)anthracene	ND	10
Chrysene	ND	10
bis(2-Ethylhexyl) phthalate	ND	10
Di-n-octylphthalate	ND	10
Benzo(b)fluoranthene	ND	10
Benzo(k)fluoranthene	ND	10
Benzo(a)pyrene	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Dibenz(a,h)anthracene	ND	10
Benzo(g,h,i)perylene	ND	10

Tentatively Identified Compounds

No TICs found.

Surrogate	%REC	Limits
2-Fluorophenol	81	37-120
Phenol-d5	69	38-120
2,4,6-Tribromophenol	72	42-120
Nitrobenzene-d5	75	46-120
2-Fluorobiphenyl	78	51-120
Terphenyl-d14	76	21-120

ND= Not Detected
 RL= Reporting Limit
 Page 1 of 1

Cheryl Parker 6/18/10 32.1

Batch QC Report

SEMIVOLATILE COMPOUNDS			
Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	EPA 625
Project#:	12826.001.001.0013.9	Analysis:	EPA 625
Matrix:	Water	Batch#:	164005
Units:	ug/L	Prepared:	06/14/10
Diln Fac:	1.000	Analyzed:	06/15/10

Type: BS Lab ID: QC548507

Analyte	Spiked	Result	%REC	Limits
1,4-Dichlorobenzene	80.00	57.41	72	45-120
N-Nitroso-di-n-propylamine	80.00	61.28	77	47-120
1,2,4-Trichlorobenzene	80.00	54.63	68	49-120
Acenaphthene	30.00	22.21	74	53-120
2,4-Dinitrotoluene	80.00	66.50	83	53-120
Pyrene	30.00	25.91	86	54-120

Surrogate	%REC	Limits
2-Fluorophenol	84	37-120
Phenol-d5	73	38-120
2,4,6-Tribromophenol	102	42-120
Nitrobenzene-d5	69	46-120
2-Fluorobiphenyl	77	51-120
Terphenyl-d14	89	21-120

Type: BSD Lab ID: QC548508

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,4-Dichlorobenzene	80.00	51.60	65	45-120	11	30
N-Nitroso-di-n-propylamine	80.00	59.92	75	47-120	2	32
1,2,4-Trichlorobenzene	80.00	52.02	65	49-120	5	29
Acenaphthene	30.00	21.97	73	53-120	1	30
2,4-Dinitrotoluene	80.00	64.87	81	53-120	2	28
Pyrene	30.00	24.44	81	54-120	6	29

Surrogate	%REC	Limits
2-Fluorophenol	80	37-120
Phenol-d5	71	38-120
2,4,6-Tribromophenol	99	42-120
Nitrobenzene-d5	68	46-120
2-Fluorobiphenyl	77	51-120
Terphenyl-d14	83	21-120

RPD= Relative Percent Difference


 Cheryl Peck 6/18/10^{33.0}
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Laboratory Job Number 220634

ANALYTICAL REPORT

Metals

Matrix: Water

Metals Analytical Report

Lab #:	220634	Project#:	12826.001.001.0013.9
Client:	Weston Solutions	Location:	Building 2Q10 Monitoring
Field ID:	EFFLUENT-2Q10-2	Units:	ug/L
Lab ID:	220634-007	Sampled:	06/09/10
Matrix:	Water	Received:	06/09/10

Analyte	Result	RL	Diln	Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Arsenic	2.6	1.0	5.000		163976	06/14/10	06/17/10	EPA 200.8	EPA 200.8
Beryllium	ND	1.0	5.000		163976	06/14/10	06/17/10	EPA 200.8	EPA 200.8
Cadmium	ND	1.0	5.000		163976	06/14/10	06/17/10	EPA 200.8	EPA 200.8
Chromium	2.4	1.0	5.000		163976	06/14/10	06/17/10	EPA 200.8	EPA 200.8
Copper	ND	1.0	5.000		163976	06/14/10	06/17/10	EPA 200.8	EPA 200.8
Lead	ND	1.0	5.000		163976	06/14/10	06/17/10	EPA 200.8	EPA 200.8
Mercury	ND	0.20	1.000		163881	06/10/10	06/10/10	METHOD	EPA 245.1
Nickel	88	1.0	5.000		163976	06/14/10	06/17/10	EPA 200.8	EPA 200.8
Selenium	ND	1.0	5.000		163976	06/14/10	06/17/10	EPA 200.8	EPA 200.8
Silver	ND	1.0	5.000		163976	06/14/10	06/17/10	EPA 200.8	EPA 200.8
Zinc	27	5.0	5.000		163976	06/14/10	06/17/10	EPA 200.8	EPA 200.8

Handwritten signature and date: 6-29-10

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Metals Analytical Report

Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	METHOD
Project#:	12826.001.001.0013.9	Analysis:	EPA 245.1
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	163881
Lab ID:	QC548023	Prepared:	06/10/10
Matrix:	Filtrate	Analyzed:	06/10/10
Units:	ug/L		

Result	RL
ND	0.20

Ad Don Long 6-29-10

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Metals Analytical Report

Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	METHOD
Project#:	12826.001.001.0013.9	Analysis:	EPA 245.1
Analyte:	Mercury	Batch#:	163881
Matrix:	Filtrate	Prepared:	06/10/10
Units:	ug/L	Analyzed:	06/10/10
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC548024	2.500	2.420	97	80-120		
BSD	QC548025	2.500	2.380	95	80-120	2	20

Checked by J-L

RPD= Relative Percent Difference

Batch QC Report

Metals Analytical Report			
Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	METHOD
Project#:	12826.001.001.0013.9	Analysis:	EPA 245.1
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	163881
MSS Lab ID:	220646-001	Sampled:	06/09/10
Lab ID:	QC548028	Received:	06/09/10
Matrix:	Filtrate	Analyzed:	06/10/10

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
 ND= Not Detected
 RL= Reporting Limit

91. Dani Deigo 6.29-10

Batch QC Report

Metals Analytical Report

Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	METHOD
Project#:	12826.001.001.0013.9	Analysis:	EPA 245.1
Analyte:	Mercury	Batch#:	163881
Field ID:	EFFLUENT-2Q10-2	Sampled:	06/09/10
MSS Lab ID:	220634-007	Received:	06/09/10
Matrix:	Water	Prepared:	06/10/10
Units:	ug/L	Analyzed:	06/10/10
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC548029	<0.03335	2.500	2.330	93	76-124		
MSD	QC548030		2.500	2.360	94	76-124	1	21

John Duggan 6-10-10

RPD= Relative Percent Difference

Batch QC Report

Metals Analytical Report

Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	EPA 200.8
Project#:	12826.001.001.0013.9	Analysis:	EPA 200.8
Type:	BLANK	Diln Fac:	5.000
Lab ID:	QC548386	Batch#:	163976
Matrix:	Water	Prepared:	06/14/10
Units:	ug/L	Analyzed:	06/17/10

Analyte	Result	RL
Arsenic	ND	1.0
Beryllium	ND	1.0
Cadmium	ND	1.0
Chromium	ND	1.0
Copper	ND	1.0
Lead	ND	1.0
Nickel	ND	1.0
Selenium	ND	1.0
Silver	ND	1.0
Zinc	ND	5.0

ND= Not Detected
 RL= Reporting Limit

9.6 ug/L 6-24-10

Batch QC Report

Metals Analytical Report

Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	EPA 200.8
Project#:	12826.001.001.0013.9	Analysis:	EPA 200.8
Matrix:	Water	Batch#:	163976
Units:	ug/L	Prepared:	06/14/10
Diln Fac:	5.000		

Type: BS Lab ID: QC548387

Analyte	Spiked	Result	%REC	Limits	Analyzed
Arsenic	100.0	96.75	97	80-120	06/17/10
Beryllium	100.0	99.30	99	76-120	06/17/10
Cadmium	100.0	96.50	97	80-120	06/17/10
Chromium	100.0	94.10	94	80-120	06/17/10
Copper	100.0	94.40	94	79-120	06/17/10
Lead	100.0	103.6	104	80-120	06/17/10
Nickel	100.0	98.20	98	80-120	06/17/10
Selenium	100.0	84.65	85	80-120	06/18/10
Silver	100.0	99.90	100	80-120	06/17/10
Zinc	100.0	99.30	99	79-120	06/17/10

Type: BSD Lab ID: QC548388

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
Arsenic	100.0	94.75	95	80-120	2	20	06/17/10
Beryllium	100.0	101.7	102	76-120	2	20	06/17/10
Cadmium	100.0	99.95	100	80-120	4	20	06/17/10
Chromium	100.0	97.00	97	80-120	3	20	06/17/10
Copper	100.0	96.00	96	79-120	2	20	06/17/10
Lead	100.0	105.3	105	80-120	2	20	06/17/10
Nickel	100.0	102.5	102	80-120	4	20	06/17/10
Selenium	100.0	89.60	90	80-120	6	20	06/18/10
Silver	100.0	101.4	101	80-120	1	20	06/17/10
Zinc	100.0	98.05	98	79-120	1	20	06/17/10

OK, M's by 6.10.10

RPD= Relative Percent Difference

Batch QC Report

Metals Analytical Report			
Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	EPA 200.8
Project#:	12826.001.001.0013.9	Analysis:	EPA 200.8
Field ID:	ZZZZZZZZZZ	Batch#:	163976
MSS Lab ID:	220532-003	Sampled:	06/02/10
Matrix:	Water	Received:	06/03/10
Units:	ug/L	Prepared:	06/14/10
Diln Fac:	5.000		

Type: MS Lab ID: QC548389

Analyte	MSS Result	Spiked	Result	%REC	Limits	Analyzed
Arsenic	0.7180	100.0	95.75	95	78-120	06/17/10
Beryllium	<0.1148	100.0	100.7	101	75-120	06/17/10
Cadmium	<0.1668	100.0	98.95	99	76-120	06/17/10
Chromium	0.3290	100.0	97.50	97	75-120	06/17/10
Copper	<0.1749	100.0	117.8	118	70-120	06/17/10
Lead	<0.1323	100.0	104.9	105	75-120	06/17/10
Nickel	0.6400	100.0	98.60	98	72-120	06/17/10
Selenium	<0.1544	100.0	92.50	93	75-120	06/18/10
Silver	<0.06677	100.0	101.9	102	70-120	06/17/10
Zinc	<1.085	100.0	107.0	107	63-120	06/17/10

Type: MSD Lab ID: QC548390

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
Arsenic	100.0	99.95	99	78-120	4	29	06/17/10
Beryllium	100.0	98.70	99	75-120	2	22	06/17/10
Cadmium	100.0	96.85	97	76-120	2	23	06/17/10
Chromium	100.0	97.30	97	75-120	0	29	06/17/10
Copper	100.0	99.75	100	70-120	17	38	06/17/10
Lead	100.0	102.2	102	75-120	3	20	06/17/10
Nickel	100.0	100.9	100	72-120	2	23	06/17/10
Selenium	100.0	97.90	98	75-120	6	24	06/18/10
Silver	100.0	97.90	98	70-120	4	22	06/17/10
Zinc	100.0	99.90	100	63-120	7	44	06/17/10

John W. Jones

RPD= Relative Percent Difference

Batch QC Report

Metals Analytical Report

Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	EPA 200.8
Project#:	12826.001.001.0013.9	Analysis:	EPA 200.8
Field ID:	ZZZZZZZZZZ	Diln Fac:	25.00
Type:	Serial Dilution	Batch#:	163976
MSS Lab ID:	220532-003	Sampled:	06/02/10
Lab ID:	QC548391	Received:	06/03/10
Matrix:	Water	Analyzed:	06/17/10
Units:	ug/L		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim
Arsenic	0.7180	1.000	ND	3.204	NC	10
Beryllium	ND	1.000	ND	2.500	NC	10
Cadmium	ND	1.000	ND	2.502	NC	10
Chromium	0.3290	1.000	ND	2.500	NC	10
Copper	ND	1.000	ND	2.623	NC	10
Lead	ND	1.000	ND	2.500	NC	10
Nickel	0.6400	1.000	ND	2.932	NC	10
Selenium	ND	1.000	ND	2.500	NC	10
Silver	ND	1.000	ND	2.500	NC	10
Zinc	ND	5.000	58.45	11.49	NC	10

NC= Not Calculated
 ND= Not Detected
 RL= Reporting Limit

Review by [signature]

Batch QC Report

Metals Analytical Report

Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	EPA 200.8
Project#:	12826.001.001.0013.9	Analysis:	EPA 200.8
Field ID:	ZZZZZZZZZZ	Units:	ug/L
Type:	Post Digest Spike	Diln Fac:	5.000
MSS Lab ID:	220532-003	Batch#:	163976
Lab ID:	QC548392	Sampled:	06/02/10
Matrix:	Water	Received:	06/03/10

Analyte	MSS Result	Spiked	Result	%REC	Limits	Analyzed
Arsenic	0.7180	500.0	462.4	92	75-125	06/17/10
Beryllium	<0.1148	500.0	491.5	98	75-125	06/17/10
Cadmium	<0.1668	500.0	470.1	94	75-125	06/17/10
Chromium	0.3290	500.0	471.6	94	75-125	06/17/10
Copper	<0.1749	500.0	451.9	90	75-125	06/17/10
Lead	<0.1323	500.0	494.1	99	75-125	06/17/10
Nickel	0.6400	500.0	475.3	95	75-125	06/17/10
Selenium	<0.1544	500.0	463.7	93	75-125	06/18/10
Silver	<0.06677	500.0	470.9	94	75-125	06/17/10
Zinc	<1.085	500.0	461.1	92	75-125	06/17/10

And as per Guy

Laboratory Job Number 220634

ANALYTICAL REPORT

Wet Chemistry

Matrix: Water

Total Oil & Grease (HEM)

Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	METHOD
Project#:	12826.001.001.0013.9	Analysis:	EPA 1664A
Analyte:	Oil & Grease (HEM)	Batch#:	164123
Field ID:	EFFLUENT-2Q10-1B	Sampled:	06/08/10
Matrix:	Water	Received:	06/09/10
Units:	mg/L		

Type	Lab ID	Result	RL	Diln Fac	Analyzed
SAMPLE	220634-005	ND	4.75	0.9500	06/18/10
BLANK	QC548994	ND	5.00	1.000	06/17/10

ND= Not Detected
 RL= Reporting Limit

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 6/18/10

Batch QC Report

Total Oil & Grease (HEM)

Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	METHOD
Project#:	12826.001.001.0013.9	Analysis:	EPA 1664A
Analyte:	Oil & Grease (HEM)	Diln Fac:	1.000
Matrix:	Water	Batch#:	164123
Units:	mg/L	Analyzed:	06/17/10

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC548995	40.00	33.30	83	78-114		
BSD	QC548996	40.00	39.40	98	78-114	17	18

RPD= Relative Percent Difference



 6/18/10

Total Cyanide

Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	METHOD
Project#:	12826.001.001.0013.9	Analysis:	SM4500CN-E
Analyte:	Cyanide	Batch#:	164022
Field ID:	EFFLUENT-2Q10-1	Sampled:	06/08/10
Matrix:	Water	Received:	06/09/10
Units:	mg/L	Analyzed:	06/15/10
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	220634-008	0.01	0.01
BLANK	QC548582	ND	0.01

ND= Not Detected
 RL= Reporting Limit

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 6/17/10

Batch QC Report

Total Cyanide			
Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	METHOD
Project#:	12826.001.001.0013.9	Analysis:	SM4500CN-E
Analyte:	Cyanide	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	164022
MSS Lab ID:	220530-004	Sampled:	06/03/10
Matrix:	Water	Received:	06/03/10
Units:	mg/L	Analyzed:	06/15/10

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC548583	<0.01000	0.2000	0.2040	102	74-120		
MSD	QC548584		0.2000	0.2164	108	74-120	6	20
LCS	QC548585		0.2000	0.2024	101	80-120		

RPD= Relative Percent Difference

Page 1 of 1


 J. D. [Signature]
 6/17/10

18.0

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pH			
Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	METHOD
Project#:	12826.001.001.0013.9	Analysis:	EPA 150.1
Analyte:	pH	Batch#:	163864
Matrix:	Water	Received:	06/09/10
Units:	SU	Analyzed:	06/09/10 18:45
Diln Fac:	1.000		

Field ID	Lab ID	Result	RL	Sampled
EFFLUENT-2Q10-1B	220634-005	7.2 b	1.0	06/08/10 14:30
EFFLUENT-2Q10-2A	220634-006	7.1	1.0	06/09/10 07:30

b= See narrative
 RL= Reporting Limit

Don Red
 6/17/10

Batch QC Report

pH					
Lab #:	220634	Location:	Building 2Q10 Monitoring		
Client:	Weston Solutions	Prep:	METHOD		
Project#:	12826.001.001.0013.9	Analysis:	EPA 150.1		
Analyte:	pH	Units:	SU		
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000		
Type:	SDUP	Batch#:	163864		
MSS Lab ID:	220627-002	Sampled:	06/09/10		
Lab ID:	QC547945	Received:	06/09/10		
Matrix:	Water	Analyzed:	06/09/10 18:45		
MSS Result	Result	RL	RPD	Lim	
9.890	9.900	1.000	0	20	

RL= Reporting Limit

RPD= Relative Percent Difference

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 6/10/10

10.0

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Phenolic Compounds

Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	METHOD
Project#:	12826.001.001.0013.9	Analysis:	EPA 420.1
Analyte:	Phenolic Compounds	Batch#:	163992
Field ID:	EFFLUENT-2Q10-1	Sampled:	06/08/10
Matrix:	Water	Received:	06/09/10
Units:	mg/L	Prepared:	06/14/10
Diln Fac:	1.000	Analyzed:	06/16/10

Type	Lab ID	Result	RL
SAMPLE	220634-008	0.059	0.050
BLANK	QC548456	ND	0.050

ND= Not Detected
 RL= Reporting Limit



6/17/10

Batch QC Report

Phenolic Compounds			
Lab #:	220634	Location:	Building 2Q10 Monitoring
Client:	Weston Solutions	Prep:	METHOD
Project#:	12826.001.001.0013.9	Analysis:	EPA 420.1
Analyte:	Phenolic Compounds	Batch#:	163992
Field ID:	EFFLUENT-2Q10-1	Sampled:	06/08/10
MSS Lab ID:	220634-008	Received:	06/09/10
Matrix:	Water	Prepared:	06/14/10
Units:	mg/L	Analyzed:	06/16/10
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC548457		1.000	0.9974	100	80-120		
MS	QC548458	0.05890	1.000	0.9795	92	55-134		
MSD	QC548459		1.000	0.8233	76	55-134	17	38

RPD= Relative Percent Difference


 6/17/10