ATTACHMENT 1(C)

BERKELEY LAB
Environment, Health & Safety Division

December 2, 2009
DIR-09-05

Cecil Felix
San Francisco Regional Water Quality Control Board
1515 Clay St, Suite 1400
Oakland, California 94612

Bill Jennings, Chairman
California Sportfishing Protection Alliance
3536 Rainier Road
Stockton, California 95204

Lesley Emmington
Strawberry Canyon Stewardship Group
195 The Uplands
Berkeley, California 94705

Michael R. Lozeau
Douglas J. Chermak
Lozeau Drury LLP
1516 Oak Street, Suite 216
Alameda, California 94501

SUBJECT: Lawrence Berkeley National Laboratory Stormwater Results from October 13, 2009 Sampling Event

A copy of the stormwater sampling results for a stormwater event that occurred on the October 13, 2009 at Lawrence Berkeley National Laboratory (the Facility) is attached to this letter. The sampling that was performed is consistent with the most recent *Alternative Stormwater Monitoring Plan* for the Facility, which was submitted to you on October 7, 2009. Please note that the bus parking area at Building 64 was added as a new sampling location, and new sampling parameters were added at the metal fabrication and scrap recycling area between buildings 77 and 79.

The attached results include the Facility's sample collection forms and the laboratory analysis reports from BC Laboratories. Based on these results, the stormwater Best Management Practices (BMPs) appear adequate to control industrial discharges with the exception of the following parameters that exceeded benchmark goals during the recent stormwater event:

- Total suspended solids at the Blackberry Canyon Parking Lot
- Aluminum, iron, zinc, and copper at the Building 77/79 Metal Fabrication and Scrap Recycling Area
- Magnesium at the Building 85 Hazardous Waste Handling Facility Lower and Upper Yards and pH at the Upper Yard.

At these monitoring locations that are causing or contributing to exceedances of the benchmark goals, the following BMPs were implemented as described in the 2008/2009 Stormwater Annual Report:

- Blackberry Canyon Parking Lot: Scheduled dry sweeping of the surrounding area, placed gravel bags around the storm drain inlets and installed a new filter in the storm drain.
- Building 77/79 Metal Fabrication and Scrap Recycling Area: Performed stormwater protection training for site workers, covered exposed metal plates with plastic; and installed additional filter fabric over the trench drain.

Ernest Orlando Lawrence Berkeley National Laboratory
One Cyclotron Road, MS 90-1140 | Berkeley, California 94720
Tel: 510.486.5514 Fax: 510.486.7488

- Building 85 Hazardous Waste Handling Facility Lower and Upper Yard: Completed an investigative study which determined the source of the magnesium to be from the soil surrounding the Facility. The results of the investigative study will be included in the 2009/2010 Stormwater Annual Report.

Additional BMPs that will be implemented at these locations include:

- Blackberry Canyon Parking Lot: Installation of an asphalt berm around the edge of the parking area
- Building 77/79 Metal Fabrication and Scrap Recycling Area: Schedule vacuuming, in addition to dry sweeping, to further reduce the amount of small metal particles exposed to stormwater
- Building 85 Hazardous Waste Handling Facility Upper Yard: Perform an investigative study to determine the source of the elevated pH level.

It is anticipated that the additional BMPs will be implemented by March 31, 2010. A revised *Stormwater Pollution Prevention Plan* will be submitted to the Regional Water Board within 90 days that describes the additional BMPs in accordance with the General Permit requirements.

If you have any questions, please contact Tim Bauters at 510-486-5831 or Ron Pauer at 510-486-7614.

Sincerely,

Howard Hatayama, Director
Environment, Health & Safety Division

Enc: Stormwater Sampling Results for October 13, 2009

cc (w/enclosure):
K. Abbott, DOE/BSO
T. Bauters
R. Pauer

Ernest Orlando Lawrence Berkeley National Laboratory
One Cyclotron Road, MS 90-1140 | Berkeley, California 94720
Tel: 510.486.5514 Fax: 510.486.7488

Case Narrative

November 11, 2009

COC# 06283

Samplers: John Jelinski

Laboratory ID	Field ID	Sample Time	Analysis
09-13672-01	57837	10/13/2009@07:45	E120.1 TSS: SM2540D
09-13672-02	57838	10/13/2009@07:45	E1664
09-13672-03	57840	10/13/2009@07:55	E120.1 TSS:SM2540D
09-13672-04	57841	10/13/2009@07:55	E1664
09-13672-05	57843	10/13/2009@08:05	E120.1 TSS:SM2540D
09-13672-06	57844	10/13/2009@08:05	E1664
09-13672-07	57845	10/13/2009@08:05	E410.4 NO3+NO2(asN):MULT
09-13672-08	57846	10/13/2009@08:05	STORMMET-ASWMP-77
09-13672-09	57848	10/13/2009@08:25	E120.1 TSS:SM2540D
09-13672-10	57849	10/13/2009@08:25	E1664
09-13672-11	57850	10/13/2009@08:25	Ammonia(asN):MULT E410.4
09-13672-12	57851	10/13/2009@08:25	STORMMET-ASWMP-85
09-13672-13	57853	10/13/2009@08:35	E120.1 TSS:SM2540D
09-13672-14	57854	10/13/2009@08:35	E1664
09-13672-15	57855	10/13/2009@08:35	Ammonia(asN):MULT E410.4
09-13672-16	57856	10/13/2009@08:35	STORMMET-ASWMP-85
09-13672-17	57863	10/13/2009@07:30	E120.1 TSS:SM2540D
09-13672-18	57864	10/13/2009@07:30	E1664
09-13672-19	57866	10/13/2009@08:50	E200.7:AG E200.7:AL E200.7:AS E200.7:CD E200.7:CU E200.7:FE E200.7:MG E200.7: PB E200.7:SE E200.7:ZN Met-aq:MULT-Hg

Samples were received refrigerated to 2.4 °C upon receipt at the BCL Bakersfield facility.

Holding Time: All samples were analyzed within holding time restrictions.

Calibration: All calibration frequency and requirements were met.

Blanks: Total Copper was detected in the Method Blank at a level at or above the PQL. The QC –Method Blank Analysis report has been flagged accordingly.

Laboratory Control Samples: All frequency and accuracy requirements were met.

Duplicates and/or Matrix spikes: All frequency, accuracy and precision requirements were met except for the matrix spike recoveries for Total Recoverable Iron and Total Recoverable Aluminum. The difference between duplicate readings is less than the PQL for Total Magnesium, Total Iron, and Total Recoverable Mercury. The QC –Precision & Accuracy report has been flagged accordingly.

Discussion:

Sincerely,

Christina Herndon
Project Manager

BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 11/03/2009

John Jelinski

Lawrence Berkeley National Laboratory
Environmental Services Group
1 Cyclotron Road, Mail Stop 85B0198
Berkeley, CA 94720

RE: Surface Water Monitoring Program
BC Work Order: 0913672
Invoice ID: B070600

Enclosed are the results of analyses for samples received by the laboratory on 10/13/2009. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Christina Herndon
Client Service Rep

Authorized Signature

U.C. Lawrence Berkeley National Laboratory
1 Cyclotron Road
Berkeley CA 94720

09-13672

LBNL ENVIRONMENTAL SERVICES GROUP
Chain of Custody

Send final reports to: Suying Xu, Mailstop 85B0198
For questions contact John Jelinski, e-mail: JAJelinski@lbl.gov
Phone: 510-486-7616 Fax: 510-486-7034

Purpose: Surface Water Monitoring Program - ASWMP Sampling

COC No.: 06283 Page 1 of 4
Release Number / Document Control No.: ESG-06283
Collection(s): 6884

	Sample Location	Date & Time Sampled	Reference Date/time*	Collection Method	Sample Type	Container Volume & Code**	#	Preservative	Analysis Code	Field Sample ID***	Notes to Lab
-1	57837	10/13/2009 7:45	10/13/2009 7:45	Grab	Aqueous	1 Liter PE	1	None	E120.1		
		10/13/2009 7:45	10/13/2009 7:45	Grab	Aqueous	1 Liter PE	1	None	TSS:SM2540D		
-2	57838	10/13/2009 7:45	10/13/2009 7:45	Grab	Aqueous	1 Liter AG	1	HCL	E1664		
-3	57840	10/13/2009 7:55	10/13/2009 7:55	Grab	Aqueous	1 Liter PE	1	None	E120.1		
		10/13/2009 7:55	10/13/2009 7:55	Grab	Aqueous	1 Liter PE	1	None	TSS:SM2540D		
-4	57841	10/13/2009 7:55	10/13/2009 7:55	Grab	Aqueous	1 Liter AG	1	HCL	E1664		
-5	57843	10/13/2009 8:05	10/13/2009 8:05	Grab	Aqueous	1 Liter PE	1	None	E120.1		
		10/13/2009 8:05	10/13/2009 8:05	Grab	Aqueous	1 Liter PE	1	None	TSS:SM2540D		
-6	57844	10/13/2009 8:05	10/13/2009 8:05	Grab	Aqueous	1 Liter AG	1	HCL	E1664		
-7	57845	10/13/2009 8:05	10/13/2009 8:05	Grab	Aqueous	500 ml PE	1	H2SO4	E410.4		
		10/13/2009 8:05	10/13/2009 8:05	Grab	Aqueous	500 ml PE	1	H2SO4	NO3+NO2(asN):MULT		
-8	57846	10/13/2009 8:05	10/13/2009 8:05	Grab	Aqueous	500 ml PE	1	HNO3	STORMMET-ASWMP-77		

Total No. of Containers: 21
Shipping Document ID: BC courier
Turnaround Time****: 20 days
Lab Name: BCLABS-BAK
Sampled by:

Special Instructions/Comments:

Relinquished By (Sampler)	Relinquished By	Relinquished By
Signature: [signature]	Signature: [signature]	Signature: [signature]
Time: 1450	Time: 1645	Time: 2115
Printed Name: Jelinski	Printed Name: RossDicday	Printed Name: RLRichmond 10.13.09
Date: 10/13/09	Date: 10/13-09	Date:
Company: LBNL	Company: BCLabs	Company: BCL

Received By	Received By	Received By
Signature: [signature]	Signature: [signature]	Signature: [signature]
Time: 1950	Time: 1645	Time: 2115
Printed Name: RossDicday	Printed Name: RLRichmond 10.13.09	Printed Name: Jennifer Watts
Date: 10/13/09	Date:	Date: 10-13-09
Company: BC Lab	Company: BCL	Company: BCLabs

*REFERENCE DATE/TIME: Use this value for decay calculations in radiological analyses when applicable **Container Codes: AG = amber glass CG = clear glass PE = polyethylene VV = VOA vial

*** Field Sample ID: If present, use this information as the sample identifier in hard-copy reports (please include Sample Location information in the notes). If blank, and in electronic deliverable files, use Sample Location as the identifier. ****Listed turnaround time is for reporting and is in work days, as defined in the Joint LBNL/LLNL Analytical Services blanket order.

U.C. Lawrence Berkeley National Laboratory
1 Cyclotron Road
Berkeley CA 94720

09 73672

LBNL ENVIRONMENTAL SERVICES GROUP
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Send final reports to: Suying Xu, Mailstop 85B0198
For questions contact John Jelinski, e-mail: JAJelinski@lbl.gov
Phone: 510-486-7616 Fax: 510-486-7034

Purpose: Surface Water Monitoring Program - ASWMP Sampling

COC No.: 06283 Page 2 of 4
Release Number / Document Control No.: ESG-06283
Collection(s): 6884

Sample Location	Date & Time Sampled	Reference Date/time*	Collection Method	Sample Type	Container Volume & Code**	#	Preservative	Analysis Code	Field Sample ID***	Notes to Lab
57848	10/13/2009 8:25	10/13/2009 8:25	Grab	Aqueous	1 Liter PE	1	None	E120.1		
	10/13/2009 8:25	10/13/2009 8:25	Grab	Aqueous	1 Liter PE	1	None	TSS:SM2540D		
57849	10/13/2009 8:25	10/13/2009 8:25	Grab	Aqueous	1 Liter AG	1	HCL	E1664		
57850	10/13/2009 8:25	10/13/2009 8:25	Grab	Aqueous	500 ml PE	1	H2SO4	Ammonia(asN):MULT		
	10/13/2009 8:25	10/13/2009 8:25	Grab	Aqueous	500 ml PE	1	H2SO4	E410.4		
57851	10/13/2009 8:25	10/13/2009 8:25	Grab	Aqueous	500 ml PE	2	None	STORMMET-ASWMP-85		Preserve 1st-500ml PE w/NaOH for Cyanide; 2nd-500ml PE w/HNO3 for Metals
57853	10/13/2009 8:35	10/13/2009 8:35	Grab	Aqueous	1 Liter PE	1	None	E120.1		
	10/13/2009 8:35	10/13/2009 8:35	Grab	Aqueous	1 Liter PE	1	None	TSS:SM2540D		
57854	10/13/2009 8:35	10/13/2009 8:35	Grab	Aqueous	1 Liter AG	1	HCL	E1664		
57855	10/13/2009 8:35	10/13/2009 8:35	Grab	Aqueous	500 ml PE	1	H2SO4	Ammonia(asN):MULT		
	10/13/2009 8:35	10/13/2009 8:35	Grab	Aqueous	500 ml PE	1	H2SO4	E410.4		

Total No. of Containers: 21
Shipping Document ID: BC courier
Turnaround Time****: 20 days
Lab Name: BCLABS-BAK
Sampled by:

Special Instructions/Comments:

Relinquished By (Sampler)
Signature: [signature] Time: 1450
Printed Name: Jelinski Date: 10/13/09
Company: LBNL

Relinquished By
Signature: [signature] Time: 1645
Printed Name: Ross Dickey Date: 10/13/09
Company: BCLAB

Relinquished By
Signature: [signature] Time: 2115
Printed Name: R Reynolds Date: 10.13.09
Company: BCL

Received By
Signature: [signature] Time: 1450
Printed Name: Ross Dickey Date: 10/13/09
Company: BCLAB

Received By
Signature: [signature] Time: 1645
Printed Name: R Reynolds Date: 10.13.09
Company: BCL

Received By
Signature: [signature] Time: 2115
Printed Name: Jenifer Watts Date: 10.13.09
Company: BCLabs

*REFERENCE DATE/TIME: Use this value for decay calculations in radiological analyses when applicable **Container Codes: AG = amber glass CG = clear glass PE = polyethylene VV = VOA vial

*** Field Sample ID: If present, use this information as the sample identifier in hard-copy reports (please include Sample Location information in the notes). If blank, and in electronic deliverable files, use Sample Location as the identifier. ****Listed turnaround time is for reporting and is in work days, as defined in the Joint LBNL/LLNL Analytical Services blanket order.

U.C. Lawrence Berkeley National Laboratory
1 Cyclotron Road
Berkeley CA 94720

09-136772

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For questions contact John Jelinski, e-mail: JAJelinski@lbl.gov
Phone: 510-486-7616 Fax: 510-486-7034

Purpose: Surface Water Monitoring Program - ASWMP Sampling

COC No.: 06283 Page 3 of 4
Release Number / Document Control No.: ESG-06283
Collection(s): 6884

Sample Location	Date & Time Sampled	Reference Date/time*	Collection Method	Sample Type	Container Volume & Code**	#	Preservative	Analysis Code	Field Sample ID***	Notes to Lab
57856	10/13/2009 8:35	10/13/2009 8:35	Grab	Aqueous	500 ml PE	2	None	STORMMET-ASWMP-85		Preserve 1st-500ml PE w/NaOH for Cyanide; 2nd-500ml PE w/HNO3 for Metals
57863	10/13/2009 7:30	10/13/2009 7:30	Grab	Aqueous	1 Liter PE	1	None	E120.1		
	10/13/2009 7:30	10/13/2009 7:30	Grab	Aqueous	1 Liter PE	1	None	TSS:SM2540D		
57864	10/13/2009 7:30	10/13/2009 7:30	Grab	Aqueous	1 Liter AG	1	HCL	E1664		
57866	10/13/2009 8:50	10/13/2009 8:50	Grab	Aqueous	500 ml PE	1	None	E200.7:AG		preserve w/ HN03 upon receipt
	10/13/2009 8:50	10/13/2009 8:50	Grab	Aqueous	500 ml PE	1	None	E200.7:AL		preserve w/ HN03 upon receipt
	10/13/2009 8:50	10/13/2009 8:50	Grab	Aqueous	500 ml PE	1	None	E200.7:AS		preserve w/ HN03 upon receipt
	10/13/2009 8:50	10/13/2009 8:50	Grab	Aqueous	500 ml PE	1	None	E200.7:CD		preserve w/ HN03 upon receipt
	10/13/2009 8:50	10/13/2009 8:50	Grab	Aqueous	500 ml PE	1	None	E200.7:CU		preserve w/ HN03 upon receipt
	10/13/2009 8:50	10/13/2009 8:50	Grab	Aqueous	500 ml PE	1	None	E200.7:FE		preserve w/ HN03 upon receipt
	10/13/2009 8:50	10/13/2009 8:50	Grab	Aqueous	500 ml PE	1	None	E200.7:MG		preserve w/ HN03 upon receipt

Total No. of Containers: 21
Shipping Document ID: BC courier
Turnaround Time**:** 20 days
Lab Name: BCLABS-BAK
Sampled by:

Special Instructions/Comments:

Relinquished By (Sampler)
Signature: [signature] Time: 1450
Printed Name: Jelinski Date: 10/13/09
Company: LBNL

Relinquished By
Signature: [signature] Time: 1645
Printed Name: Ross Dicday Date: 10/13/09
Company: BCLabs

Relinquished By
Signature: [signature] Time: 2145
Printed Name: [illegible] Date: 10-13-09
Company: BCL

Received By
Signature: [signature] Time: 1450
Printed Name: Ross Dicday Date: 10/13/09
Company: BCLabs

Received By
Signature: [signature] Time: 1645
Printed Name: [illegible] Date: 10-13-09
Company: BCL

Received By
Signature: [signature] Time: 2115
Printed Name: Jenifer Watts Date: 10-13-09
Company: BCLabs

*REFERENCE DATE/TIME: Use this value for decay calculations in radiological analyses when applicable **Container Codes: AG = amber glass CG = clear glass PE = polyethylene VV = VOA vial

*** Field Sample ID: If present, use this information as the sample identifier in hard-copy reports (please include Sample Location information in the notes). If blank, and in electronic deliverable files, use Sample Location as the identifier. ****Listed turnaround time is for reporting and is in work days, as defined in the Joint LBNL/LLNL Analytical Services blanket order.

U.C. Lawrence Berkeley National Laboratory
1 Cyclotron Road
Berkeley CA 94720

09-13672

LBNL ENVIRONMENTAL SERVICES GROUP
Chain of Custody

Send final reports to: Suying Xu, Mailstop 85B0198
For questions contact John Jelinski, e-mail: JAJelinski@lbl.gov
Phone: 510-486-7616 Fax: 510-486-7034

Purpose: Surface Water Monitoring Program - ASWMP Sampling

COC No.: 06283
Release Number / Document Control No.: ESG-06283
Collection(s): 6884

Sample Location	Date & Time Sampled	Reference Date/time*	Collection Method	Sample Type	Container Volume & Code**	#	Preservative	Analysis Code	Field Sample ID***	Notes to Lab
57866	10/13/2009 8:50	10/13/2009 8:50	Grab	Aqueous	500 ml PE	1	None	E200.7:PB		preserve w/ HN03 upon receipt
	10/13/2009 8:50	10/13/2009 8:50	Grab	Aqueous	500 ml PE	1	None	E200.7:SE		preserve w/ HN03 upon receipt
	10/13/2009 8:50	10/13/2009 8:50	Grab	Aqueous	500 ml PE	1	None	E200.7:ZN		preserve w/ HN03 upon receipt
	10/13/2009 8:50	10/13/2009 8:50	Grab	Aqueous	500 ml PE	1	None	MET-aq:MULT-Hg		preserve w/ HN03 upon receipt

-19

Total No. of Containers: 21
Shipping Document ID: BC courier
Turnaround Time****: 20 days
Lab Name: BCLABS-BAK
Sampled by:

Special Instructions/Comments:

Relinquished By (Sampler)	Relinquished By	Relinquished By
Signature: [signature] Time: 1450	Signature: [signature] Time: 1645	Signature: [signature] Time: 2115
Printed Name: JELINSKI Date: 10/13/09	Printed Name: Ross Dicka Date: 10/13/09	Printed Name: R Reinosa Date: 10-13-09
Company: LBNL	Company: BCLABS	Company: BCL
Received By	**Received By**	**Received By**
Signature: [signature] Time: 1450	Signature: [signature] Time: 1645	Signature: [signature] Time: 2115
Printed Name: Ross Dicka Date: 10/13/09	Printed Name: R Reinosa Date: 10-13-09	Printed Name: Jennifer Watts Date: 10/13/09
Company: BCLABS	Company: BCL	Company: BCLabs

*REFERENCE DATE/TIME: Use this value for decay calculations in radiological analyses when applicable **Container Codes: AG = amber glass CG = clear glass PE = polyethylene VV = VOA vial

*** Field Sample ID: If present, use this information as the sample identifier in hard-copy reports (please include Sample Location information in the notes). If blank, and in electronic deliverable files, use Sample Location as the identifier. ****Listed turnaround time is for reporting and is in work days, as defined in the Joint LBNL/LLNL Analytical Services blanket order.

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12. 06/24/08 Page 1 Of 2

Submission #: 09-13672

SHIPPING INFORMATION

Federal Express ☐ UPS ☐ Hand Delivery ☐
BC Lab Field Service ☑ Other ☐ (Specify)_____

SHIPPING CONTAINER

Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.98 Container: Qt Thermometer ID: TH05C

Temperature: A 2.2 °C / C 2.4 °C

Date/Time 10/13/09 2127

Analyst Init JNW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL	A		A		A				A	
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS								A		
PT CYANIDE										
PT NITROGEN FORMS							A			
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )
QT EPA 413.1, 413.2, 418.1		A		A		A				A
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

CHK BY

DISTRIBUTION

SUB-OUT ☐

Comments:

Sample Numbering Completed By: CMM Date/Time: 10/14/09 0807

A = Actual / C = Corrected

[H:\DOCS\WP80\LAB_DOCS\FORMS\SAMREC2.WPD]

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 1 of 2

Submission #: 04-136072

SHIPPING INFORMATION

Federal Express ☐ UPS ☐ Hand Delivery ☐
BC Lab Field Service ☑ Other ☐ (Specify)_____

SHIPPING CONTAINER

Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals | Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.98 Container: Other Thermometer ID: IR080

Temperature: A 2.2 °C / C 2.4 °C

Date/Time 10/13/04 3127

Analyst Init JNW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL			A			A ~~10/14/04~~ A				
PT PE UNPRESERVED		A,B				A,B			A	
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS	A				A					
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )
QT EPA 413.1, 413.2, 418.1				A				A		
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:_____

Sample Numbering Completed By: _____ Date/Time: 10/14/04 0807

A = Actual / C = Corrected

[H:\DOCS\WP80\LAB_DOCS\FORMS\SAMREC2.WPD]

Lawrence Berkeley National Laboratory Environmental Services Group 1 Cyclotron Road, Mail Stop 85B0198 Berkeley, CA 94720	Project: Surface Water Monitoring Program Project Number: ASWMP Sampling Project Manager: John Jelinski	**Reported:** 11/03/2009 14:51 **COC Number:** 06283

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information				
0913672-01	**COC Number:**	06283	**Receive Date:**	10/13/2009 21:15	Document Control Number:
	Project Number:	---	**Sampling Date:**	10/13/2009 07:45	Sample Matrix:
	Sampling Location:	---	**Sample Depth:**	---	Requestor:
	Sampling Point:	57837	**Sample Matrix:**	Water	Sample Filtered in Field:
	Sampled By:	John Jelinski			
0913672-02	**COC Number:**	06283	**Receive Date:**	10/13/2009 21:15	Document Control Number:
	Project Number:	---	**Sampling Date:**	10/13/2009 07:45	Sample Matrix:
	Sampling Location:	---	**Sample Depth:**	---	Requestor:
	Sampling Point:	57838	**Sample Matrix:**	Water	Sample Filtered in Field:
	Sampled By:	John Jelinski			
0913672-03	**COC Number:**	06283	**Receive Date:**	10/13/2009 21:15	Document Control Number:
	Project Number:	---	**Sampling Date:**	10/13/2009 07:55	Sample Matrix:
	Sampling Location:	---	**Sample Depth:**	---	Requestor:
	Sampling Point:	57840	**Sample Matrix:**	Water	Sample Filtered in Field:
	Sampled By:	John Jelinski			
0913672-04	**COC Number:**	06283	**Receive Date:**	10/13/2009 21:15	Document Control Number:
	Project Number:	---	**Sampling Date:**	10/13/2009 07:55	Sample Matrix:
	Sampling Location:	---	**Sample Depth:**	---	Requestor:
	Sampling Point:	57841	**Sample Matrix:**	Water	Sample Filtered in Field:
	Sampled By:	John Jelinski			
0913672-05	**COC Number:**	06283	**Receive Date:**	10/13/2009 21:15	Document Control Number:
	Project Number:	---	**Sampling Date:**	10/13/2009 08:05	Sample Matrix:
	Sampling Location:	---	**Sample Depth:**	---	Requestor:
	Sampling Point:	57843	**Sample Matrix:**	Water	Sample Filtered in Field:
	Sampled By:	John Jelinski			

Lawrence Berkeley National Laboratory Environmental Services Group 1 Cyclotron Road, Mail Stop 85B0198 Berkeley, CA 94720	Project: Surface Water Monitoring Program Project Number: ASWMP Sampling Project Manager: John Jelinski	**Reported:** 11/03/2009 14:51 **COC Number:** 06283

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information				
0913672-06	**COC Number:**	06283	**Receive Date:**	10/13/2009 21:15	Document Control Number:
	Project Number:	---	**Sampling Date:**	10/13/2009 08:05	Sample Matrix:
	Sampling Location:	---	**Sample Depth:**	---	Requestor:
	Sampling Point:	57844	**Sample Matrix:**	Water	Sample Filtered in Field:
	Sampled By:	John Jelinski			
0913672-07	**COC Number:**	06283	**Receive Date:**	10/13/2009 21:15	Document Control Number:
	Project Number:	---	**Sampling Date:**	10/13/2009 08:05	Sample Matrix:
	Sampling Location:	---	**Sample Depth:**	---	Requestor:
	Sampling Point:	57845	**Sample Matrix:**	Water	Sample Filtered in Field:
	Sampled By:	John Jelinski			
0913672-08	**COC Number:**	06283	**Receive Date:**	10/13/2009 21:15	Document Control Number:
	Project Number:	---	**Sampling Date:**	10/13/2009 08:05	Sample Matrix:
	Sampling Location:	---	**Sample Depth:**	---	Requestor:
	Sampling Point:	57846	**Sample Matrix:**	Water	Sample Filtered in Field:
	Sampled By:	John Jelinski			
0913672-09	**COC Number:**	06283	**Receive Date:**	10/13/2009 21:15	Document Control Number:
	Project Number:	---	**Sampling Date:**	10/13/2009 08:25	Sample Matrix:
	Sampling Location:	---	**Sample Depth:**	---	Requestor:
	Sampling Point:	57848	**Sample Matrix:**	Water	Sample Filtered in Field:
	Sampled By:	John Jelinski			
0913672-10	**COC Number:**	06283	**Receive Date:**	10/13/2009 21:15	Document Control Number:
	Project Number:	---	**Sampling Date:**	10/13/2009 08:25	Sample Matrix:
	Sampling Location:	---	**Sample Depth:**	---	Requestor:
	Sampling Point:	57849	**Sample Matrix:**	Water	Sample Filtered in Field:
	Sampled By:	John Jelinski			

Lawrence Berkeley National Laboratory Environmental Services Group 1 Cyclotron Road, Mail Stop 85B0198 Berkeley, CA 94720	Project: Surface Water Monitoring Program Project Number: ASWMP Sampling Project Manager: John Jelinski	**Reported:** 11/03/2009 14:51 **COC Number:** 06283

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information				
0913672-11	**COC Number:**	06283	**Receive Date:**	10/13/2009 21:15	Document Control Number:
	Project Number:	---	**Sampling Date:**	10/13/2009 08:25	Sample Matrix:
	Sampling Location:	---	**Sample Depth:**	---	Requestor:
	Sampling Point:	57850	**Sample Matrix:**	Water	Sample Filtered in Field:
	Sampled By:	John Jelinski			
0913672-12	**COC Number:**	06283	**Receive Date:**	10/13/2009 21:15	Document Control Number:
	Project Number:	---	**Sampling Date:**	10/13/2009 08:25	Sample Matrix:
	Sampling Location:	---	**Sample Depth:**	---	Requestor:
	Sampling Point:	57851	**Sample Matrix:**	Water	Sample Filtered in Field:
	Sampled By:	John Jelinski			
0913672-13	**COC Number:**	06283	**Receive Date:**	10/13/2009 21:15	Document Control Number:
	Project Number:	---	**Sampling Date:**	10/13/2009 08:35	Sample Matrix:
	Sampling Location:	---	**Sample Depth:**	---	Requestor:
	Sampling Point:	57853	**Sample Matrix:**	Water	Sample Filtered in Field:
	Sampled By:	John Jelinski			
0913672-14	**COC Number:**	06283	**Receive Date:**	10/13/2009 21:15	Document Control Number:
	Project Number:	---	**Sampling Date:**	10/13/2009 08:35	Sample Matrix:
	Sampling Location:	---	**Sample Depth:**	---	Requestor:
	Sampling Point:	57854	**Sample Matrix:**	Water	Sample Filtered in Field:
	Sampled By:	John Jelinski			
0913672-15	**COC Number:**	06283	**Receive Date:**	10/13/2009 21:15	Document Control Number:
	Project Number:	---	**Sampling Date:**	10/13/2009 08:35	Sample Matrix:
	Sampling Location:	---	**Sample Depth:**	---	Requestor:
	Sampling Point:	57855	**Sample Matrix:**	Water	Sample Filtered in Field:
	Sampled By:	John Jelinski			

Lawrence Berkeley National Laboratory Environmental Services Group 1 Cyclotron Road, Mail Stop 85B0198 Berkeley, CA 94720	Project: Surface Water Monitoring Program Project Number: ASWMP Sampling Project Manager: John Jelinski	**Reported:** 11/03/2009 14:51 **COC Number:** 06283

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information				
0913672-16	**COC Number:**	06283	**Receive Date:**	10/13/2009 21:15	Document Control Number:
	Project Number:	---	**Sampling Date:**	10/13/2009 08:35	Sample Matrix:
	Sampling Location:	---	**Sample Depth:**	---	Requestor:
	Sampling Point:	57856	**Sample Matrix:**	Water	Sample Filtered in Field:
	Sampled By:	John Jelinski			
0913672-17	**COC Number:**	06283	**Receive Date:**	10/13/2009 21:15	Document Control Number:
	Project Number:	---	**Sampling Date:**	10/13/2009 07:30	Sample Matrix:
	Sampling Location:	---	**Sample Depth:**	---	Requestor:
	Sampling Point:	57863	**Sample Matrix:**	Water	Sample Filtered in Field:
	Sampled By:	John Jelinski			
0913672-18	**COC Number:**	06283	**Receive Date:**	10/13/2009 21:15	Document Control Number:
	Project Number:	---	**Sampling Date:**	10/13/2009 07:30	Sample Matrix:
	Sampling Location:	---	**Sample Depth:**	---	Requestor:
	Sampling Point:	57864	**Sample Matrix:**	Water	Sample Filtered in Field:
	Sampled By:	John Jelinski			
0913672-19	**COC Number:**	06283	**Receive Date:**	10/13/2009 21:15	Document Control Number:
	Project Number:	---	**Sampling Date:**	10/13/2009 08:50	Sample Matrix:
	Sampling Location:	---	**Sample Depth:**	---	Requestor:
	Sampling Point:	57866	**Sample Matrix:**	Water	Sample Filtered in Field:
	Sampled By:	John Jelinski			

Lawrence Berkeley National Laboratory Environmental Services Group 1 Cyclotron Road, Mail Stop 85B0198 Berkeley, CA 94720	Project: Surface Water Monitoring Program Project Number: ASWMP Sampling Project Manager: John Jelinski	**Reported:** 11/03/2009 14:51 **COC Number:** 06283

Water Analysis (General Chemistry)

BCL Sample ID: 0913672-01 | **Client Sample Name:** 57837, 10/13/2009 7:45:00AM, John Jelinski

Constituent	Result	Units	PQL	Prep Method	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	CCV Ref ID	LLNL Method	LLNL Code	Lab Quals
Electrical Conductivity @ 25 C	48.3	umhos/cm	1.00	No Prep	EPA-120.1	10/15/09	10/15/09 16:32	RML	MET-1	1	BSJ0998		E120.1	8000	
Total Suspended Solids (Glass Fiber)	260	mg/L	5.0	No Prep	SM-2540D	10/14/09	10/14/09 08:30	MRM	MANUAL	10	BSJ0895		TSS:SM2540D	7450	

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Project: Surface Water Monitoring Program
Project Number: ASWMP Sampling
Project Manager: John Jelinski

Reported: 11/03/2009 14:51

COC Number: 06283

EPA Method 1664

BCL Sample ID: 0913672-02 | **Client Sample Name:** 57838, 10/13/2009 7:45:00AM, John Jelinski

Constituent	Result	Units	PQL	Prep Method	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	CCV Ref ID	LLNL Method	LLNL Code	Lab Quals
Oil and Grease	ND	mg/L	5.0	EPA 1664/HEM	EPA-1664H EM	10/22/09	10/22/09 09:00	OAA	MAN-SV	1	BSJ1670		E1664	6325	

Lawrence Berkeley National Laboratory Environmental Services Group 1 Cyclotron Road, Mail Stop 85B0198 Berkeley, CA 94720	Project: Surface Water Monitoring Program Project Number: ASWMP Sampling Project Manager: John Jelinski	**Reported:** 11/03/2009 14:51 **COC Number:** 06283

Water Analysis (General Chemistry)

BCL Sample ID: 0913672-03 | **Client Sample Name:** 57840, 10/13/2009 7:55:00AM, John Jelinski

Constituent	Result	Units	PQL	Prep Method	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	CCV Ref ID	LLNL Method	LLNL Code	Lab Quals
Electrical Conductivity @ 25 C	58.7	umhos/cm	1.00	No Prep	EPA-120.1	10/15/09	10/15/09 16:37	RML	MET-1	1	BSJ0998		E120.1	8000	
Total Suspended Solids (Glass Fiber)	41	mg/L	2.5	No Prep	SM-2540D	10/14/09	10/14/09 08:30	MRM	MANUAL	5	BSJ0895		TSS:SM2540D	7450	

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Project: Surface Water Monitoring Program
Project Number: ASWMP Sampling
Project Manager: John Jelinski

Reported: 11/03/2009 14:51

COC Number: 06283

EPA Method 1664

BCL Sample ID: 0913672-04 | **Client Sample Name:** 57841, 10/13/2009 7:55:00AM, John Jelinski

Constituent	Result	Units	PQL	Prep Method	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	CCV Ref ID	LLNL Method	LLNL Code	Lab Quals
Oil and Grease	ND	mg/L	5.0	EPA 1664/HEM	EPA-1664H EM	10/22/09	10/22/09 09:00	OAA	MAN-SV	1	BSJ1670		E1664	6325	

Lawrence Berkeley National Laboratory Environmental Services Group 1 Cyclotron Road, Mail Stop 85B0198 Berkeley, CA 94720	Project: Surface Water Monitoring Program Project Number: ASWMP Sampling Project Manager: John Jelinski	**Reported:** 11/03/2009 14:51 **COC Number:** 06283

Water Analysis (General Chemistry)

BCL Sample ID: 0913672-05 | **Client Sample Name:** 57843, 10/13/2009 8:05:00AM, John Jelinski

Constituent	Result	Units	PQL	Prep Method	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	CCV Ref ID	LLNL Method	LLNL Code	Lab Quals
Electrical Conductivity @ 25 C	37.0	umhos/cm	1.00	No Prep	EPA-120.1	10/15/09	10/15/09 16:42	RML	MET-1	1	BSJ0998		E120.1	8000	
Total Suspended Solids (Glass Fiber)	83	mg/L	1.7	No Prep	SM-2540D	10/14/09	10/14/09 08:30	MRM	MANUAL	3.333	BSJ0895		TSS:SM2540D	7450	

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EPA Method 1664

BCL Sample ID: 0913672-06 | **Client Sample Name:** 57844, 10/13/2009 8:05:00AM, John Jelinski

Constituent	Result	Units	PQL	Prep Method	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	CCV Ref ID	LLNL Method	LLNL Code	Lab Quals
Oil and Grease	ND	mg/L	5.0	EPA 1664/HEM	EPA-1664H EM	10/22/09	10/22/09 09:00	OAA	MAN-SV	1	BSJ1670		E1664	6325	

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Project: Surface Water Monitoring Program
Project Number: ASWMP Sampling
Project Manager: John Jelinski

Reported: 11/03/2009 14:51

COC Number: 06283

Water Analysis (General Chemistry)

BCL Sample ID: 0913672-07 | **Client Sample Name:** 57845, 10/13/2009 8:05:00AM, John Jelinski

Constituent	Result	Units	PQL	Prep Method	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	CCV Ref ID	LLNL Method	LLNL Code	Lab Quals
Nitrate/Nitrite as N	0.37	mg/L	0.10	No Prep	EPA-353.2	10/19/09	10/19/09 11:41	JSM	SC-1	1	BSJ1156		NO3+NO2(asN):MULT	5950	
Chemical Oxygen Demand	83	mg O/L	25	EPA 410.4	EPA-410.4	10/20/09	10/20/09 13:20	HPR	SPEC05	1	BSJ1275		E410.4	1875	

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Project: Surface Water Monitoring Program
Project Number: ASWMP Sampling
Project Manager: John Jelinski

Reported: 11/03/2009 14:51

COC Number: 06283

Water Analysis (Metals)

BCL Sample ID: 0913672-08 | **Client Sample Name:** 57846, 10/13/2009 8:05:00AM, John Jelinski

Constituent	Result	Units	PQL	Prep Method	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	CCV Ref ID	LLNL Method	LLNL Code	Lab Quals
Total Recoverable Aluminum	2.2	mg/L	0.050	EPA 200.2	EPA-200.7	10/27/09	10/28/09 23:38	ARD	PE-OP1	1	BSJ1737		STORMMET-ASWMP-77		
Total Recoverable Copper	0.10	mg/L	0.0020	EPA 200.2	EPA-200.8	10/22/09	10/26/09 19:46	JDC	PE-EL1	1	BSJ1428		STORMMET-ASWMP-77	2800	
Total Recoverable Iron	4.6	mg/L	0.050	EPA 200.2	EPA-200.7	10/22/09	10/23/09 15:59	JRG	PE-OP2	1	BSJ1427		STORMMET-ASWMP-77		
Total Recoverable Lead	0.067	mg/L	0.0010	EPA 200.2	EPA-200.8	10/22/09	10/26/09 19:46	JDC	PE-EL1	1	BSJ1428		STORMMET-ASWMP-77	5450	
Total Recoverable Zinc	0.91	mg/L	0.050	EPA 200.2	EPA-200.7	10/22/09	10/23/09 15:59	JRG	PE-OP2	1	BSJ1427		STORMMET-ASWMP-77		

Lawrence Berkeley National Laboratory Environmental Services Group 1 Cyclotron Road, Mail Stop 85B0198 Berkeley, CA 94720	Project: Surface Water Monitoring Program Project Number: ASWMP Sampling Project Manager: John Jelinski	**Reported:** 11/03/2009 14:51 **COC Number:** 06283

Water Analysis (General Chemistry)

BCL Sample ID: 0913672-09 | **Client Sample Name:** 57848, 10/13/2009 8:25:00AM, John Jelinski

Constituent	Result	Units	PQL	Prep Method	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	CCV Ref ID	LLNL Method	LLNL Code	Lab Quals
Electrical Conductivity @ 25 C	13.5	umhos/cm	1.00	No Prep	EPA-120.1	10/15/09	10/15/09 16:47	RML	MET-1	1	BSJ0998		E120.1	8000	
Total Suspended Solids (Glass Fiber)	14	mg/L	1.2	No Prep	SM-2540D	10/14/09	10/14/09 08:30	MRM	MANUAL	2.500	BSJ0895		TSS:SM2540D	7450	

Lawrence Berkeley National Laboratory Environmental Services Group 1 Cyclotron Road, Mail Stop 85B0198 Berkeley, CA 94720	Project: Surface Water Monitoring Program Project Number: ASWMP Sampling Project Manager: John Jelinski	**Reported:** 11/03/2009 14:51 **COC Number:** 06283

EPA Method 1664

BCL Sample ID: 0913672-10 | **Client Sample Name:** 57849, 10/13/2009 8:25:00AM, John Jelinski

Constituent	Result	Units	PQL	Prep Method	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	CCV Ref ID	LLNL Method	LLNL Code	Lab Quals
Oil and Grease	ND	mg/L	5.0	EPA 1664/HEM	EPA-1664H EM	10/22/09	10/22/09 09:00	OAA	MAN-SV	1	BSJ1670		E1664	6325	

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Project: Surface Water Monitoring Program
Project Number: ASWMP Sampling
Project Manager: John Jelinski

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COC Number: 06283

Water Analysis (General Chemistry)

BCL Sample ID: 0913672-11 | **Client Sample Name:** 57850, 10/13/2009 8:25:00AM, John Jelinski

Constituent	Result	Units	PQL	Prep Method	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	CCV Ref ID	LLNL Method	LLNL Code	Lab Quals
Ammonia as N (Distilled)	ND	mg/L	0.10	EPA 350.1	EPA-350.1	10/16/09	10/19/09 08:30	JSM	SC-1	1	BSJ1024		Ammonia(asN):MULT	0325	
Chemical Oxygen Demand	**25**	**mg O/L**	**25**	**EPA 410.4**	**EPA-410.4**	**10/20/09**	**10/20/09 13:20**	**HPR**	**SPEC05**	**1**	**BSJ1275**		**E410.4**	**1875**	

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Project: Surface Water Monitoring Program
Project Number: ASWMP Sampling
Project Manager: John Jelinski

Reported: 11/03/2009 14:51

COC Number: 06283

Water Analysis (General Chemistry)

BCL Sample ID: 0913672-12 | **Client Sample Name:** 57851, 10/13/2009 8:25:00AM, John Jelinski

Constituent	Result	Units	PQL	Prep Method	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	CCV Ref ID	LLNL Method	LLNL Code	Lab Quals
Total Recoverable Magnesium	0.21	mg/L	0.050	EPA 200.2	EPA-200.7	10/22/09	10/23/09 16:17	JRG	PE-OP2	1	BSJ1427		STORMMET-ASWMP-85		
Total Cyanide	ND	mg/L	0.0050	EPA 335.4 Total	EPA-335.4	10/20/09	10/20/09 16:38	TDC	KONE-1	1	BSJ1264		STORMMET-ASWMP-85	2850	

Lawrence Berkeley National Laboratory Environmental Services Group 1 Cyclotron Road, Mail Stop 85B0198 Berkeley, CA 94720	Project: Surface Water Monitoring Program Project Number: ASWMP Sampling Project Manager: John Jelinski	**Reported:** 11/03/2009 14:51 **COC Number:** 06283

Water Analysis (Metals)

BCL Sample ID: 0913672-12 | **Client Sample Name:** 57851, 10/13/2009 8:25:00AM, John Jelinski

Constituent	Result	Units	PQL	Prep Method	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	CCV Ref ID	LLNL Method	LLNL Code	Lab Quals
Total Recoverable Arsenic	ND	mg/L	0.0020	EPA 200.2	EPA-200.8	10/22/09	10/26/09 20:43	JDC	PE-EL1	1	BSJ1433		STORMMET-ASWMP-85	0450	
Total Recoverable Cadmium	ND	mg/L	0.0010	EPA 200.2	EPA-200.8	10/22/09	10/26/09 20:43	JDC	PE-EL1	1	BSJ1433		STORMMET-ASWMP-85	1650	
Total Recoverable Lead	**0.0032**	**mg/L**	**0.0010**	**EPA 200.2**	**EPA-200.8**	**10/22/09**	**10/26/09 20:43**	**JDC**	**PE-EL1**	**1**	**BSJ1433**		**STORMMET-ASWMP-85**	**5450**	
Total Recoverable Mercury	ND	mg/L	0.00020	EPA 245.1	EPA-245.1	10/22/09	10/23/09 11:35	MEV	CETAC1	1	BSJ1431		STORMMET-ASWMP-85	5600	
Total Recoverable Selenium	ND	mg/L	0.0020	EPA 200.2	EPA-200.8	10/22/09	10/26/09 20:43	JDC	PE-EL1	1	BSJ1433		STORMMET-ASWMP-85	7600	
Total Recoverable Silver	ND	mg/L	0.0010	EPA 200.2	EPA-200.8	10/22/09	10/26/09 20:43	JDC	PE-EL1	1	BSJ1433		STORMMET-ASWMP-85	7800	

Lawrence Berkeley National Laboratory Environmental Services Group 1 Cyclotron Road, Mail Stop 85B0198 Berkeley, CA 94720	Project: Surface Water Monitoring Program Project Number: ASWMP Sampling Project Manager: John Jelinski	**Reported:** 11/03/2009 14:51 **COC Number:** 06283

Water Analysis (General Chemistry)

BCL Sample ID: 0913672-13 | **Client Sample Name:** 57853, 10/13/2009 8:35:00AM, John Jelinski

Constituent	Result	Units	PQL	Prep Method	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	CCV Ref ID	LLNL Method	LLNL Code	Lab Quals
Electrical Conductivity @ 25 C	14.6	umhos/cm	1.00	No Prep	EPA-120.1	10/15/09	10/15/09 16:51	RML	MET-1	1	BSJ0998		E120.1	8000	
Total Suspended Solids (Glass Fiber)	45	mg/L	1.2	No Prep	SM-2540D	10/14/09	10/14/09 08:30	MRM	MANUAL	2.500	BSJ0895		TSS:SM2540D	7450	

Lawrence Berkeley National Laboratory Environmental Services Group 1 Cyclotron Road, Mail Stop 85B0198 Berkeley, CA 94720	Project: Surface Water Monitoring Program Project Number: ASWMP Sampling Project Manager: John Jelinski	**Reported:** 11/03/2009 14:51 **COC Number:** 06283

EPA Method 1664

BCL Sample ID: 0913672-14 | **Client Sample Name:** 57854, 10/13/2009 8:35:00AM, John Jelinski

Constituent	Result	Units	PQL	Prep Method	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	CCV Ref ID	LLNL Method	LLNL Code	Lab Quals
Oil and Grease	ND	mg/L	5.0	EPA 1664/HEM	EPA-1664H EM	10/22/09	10/22/09 09:00	OAA	MAN-SV	1	BSJ1670		E1664	6325	

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Project: Surface Water Monitoring Program
Project Number: ASWMP Sampling
Project Manager: John Jelinski

Reported: 11/03/2009 14:51

COC Number: 06283

Water Analysis (General Chemistry)

BCL Sample ID: 0913672-15 | **Client Sample Name:** 57855, 10/13/2009 8:35:00AM, John Jelinski

Constituent	Result	Units	PQL	Prep Method	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	CCV Ref ID	LLNL Method	LLNL Code	Lab Quals
Ammonia as N (Distilled)	0.13	mg/L	0.10	EPA 350.1	EPA-350.1	10/16/09	10/19/09 08:34	JSM	SC-1	1	BSJ1024		Ammonia(asN):MULT	0325	
Chemical Oxygen Demand	46	mg O/L	25	EPA 410.4	EPA-410.4	10/20/09	10/20/09 13:20	HPR	SPEC05	1	BSJ1275		E410.4	1875	

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Project: Surface Water Monitoring Program
Project Number: ASWMP Sampling
Project Manager: John Jelinski

Reported: 11/03/2009 14:51

COC Number: 06283

Water Analysis (General Chemistry)

BCL Sample ID: 0913672-16 | **Client Sample Name:** 57856, 10/13/2009 8:35:00AM, John Jelinski

Constituent	Result	Units	PQL	Prep Method	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	CCV Ref ID	LLNL Method	LLNL Code	Lab Quals
Total Recoverable Magnesium	**0.49**	**mg/L**	**0.050**	**EPA 200.2**	**EPA-200.7**	**10/22/09**	**10/23/09 16:20**	**JRG**	**PE-OP2**	**1**	**BSJ1427**		**STORMMET-ASWMP-85**		
Total Cyanide	ND	mg/L	0.0050	EPA 335.4 Total	EPA-335.4	10/20/09	10/20/09 16:38	TDC	KONE-1	1	BSJ1264		STORMMET-ASWMP-85	2850	

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Water Analysis (Metals)

BCL Sample ID: 0913672-16 | **Client Sample Name:** 57856, 10/13/2009 8:35:00AM, John Jelinski

Constituent	Result	Units	PQL	Prep Method	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	CCV Ref ID	LLNL Method	LLNL Code	Lab Quals
Total Recoverable Arsenic	ND	mg/L	0.0020	EPA 200.2	EPA-200.8	10/22/09	10/26/09 20:46	JDC	PE-EL1	1	BSJ1433		STORMMET-ASWMP-85	0450	
Total Recoverable Cadmium	ND	mg/L	0.0010	EPA 200.2	EPA-200.8	10/22/09	10/26/09 20:46	JDC	PE-EL1	1	BSJ1433		STORMMET-ASWMP-85	1650	
Total Recoverable Lead	**0.0077**	**mg/L**	**0.0010**	**EPA 200.2**	**EPA-200.8**	**10/22/09**	**10/26/09 20:46**	**JDC**	**PE-EL1**	**1**	**BSJ1433**		**STORMMET-ASWMP-85**	**5450**	
Total Recoverable Mercury	ND	mg/L	0.00020	EPA 245.1	EPA-245.1	10/22/09	10/23/09 11:37	MEV	CETAC1	1	BSJ1431		STORMMET-ASWMP-85	5600	
Total Recoverable Selenium	ND	mg/L	0.0020	EPA 200.2	EPA-200.8	10/22/09	10/26/09 20:46	JDC	PE-EL1	1	BSJ1433		STORMMET-ASWMP-85	7600	
Total Recoverable Silver	ND	mg/L	0.0010	EPA 200.2	EPA-200.8	10/22/09	10/26/09 20:46	JDC	PE-EL1	1	BSJ1433		STORMMET-ASWMP-85	7800	

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Water Analysis (General Chemistry)

BCL Sample ID: 0913672-17 | **Client Sample Name:** 57863, 10/13/2009 7:30:00AM, John Jelinski

Constituent	Result	Units	PQL	Prep Method	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	CCV Ref ID	LLNL Method	LLNL Code	Lab Quals
Electrical Conductivity @ 25 C	20.7	umhos/cm	1.00	No Prep	EPA-120.1	10/15/09	10/15/09 17:19	RML	MET-1	1	BSJ0999		E120.1	8000	
Total Suspended Solids (Glass Fiber)	29	mg/L	1.2	No Prep	SM-2540D	10/14/09	10/14/09 08:30	MRM	MANUAL	2.500	BSJ0895		TSS:SM2540D	7450	

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EPA Method 1664

BCL Sample ID: 0913672-18 | **Client Sample Name:** 57864, 10/13/2009 7:30:00AM, John Jelinski

Constituent	Result	Units	PQL	Prep Method	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	CCV Ref ID	LLNL Method	LLNL Code	Lab Quals
Oil and Grease	ND	mg/L	5.0	EPA 1664/HEM	EPA-1664H EM	10/22/09	10/22/09 09:00	OAA	MAN-SV	1	BSJ1670		E1664	6325	

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Project Manager: John Jelinski

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COC Number: 06283

Water Analysis (General Chemistry)

BCL Sample ID: 0913672-19 | **Client Sample Name:** 57866, 10/13/2009 8:50:00AM, John Jelinski

Constituent	Result	Units	PQL	Prep Method	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	CCV Ref ID	LLNL Method	LLNL Code	Lab Quals
Total Magnesium	ND	mg/L	0.050	EPA 3010A	EPA-200.7	10/16/09	10/16/09 19:02	JRG	PE-OP2	1	BSJ1007		E200.7:MG	5500	

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Project Manager: John Jelinski

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COC Number: 06283

Water Analysis (Metals)

BCL Sample ID: 0913672-19 | **Client Sample Name:** 57866, 10/13/2009 8:50:00AM, John Jelinski

Constituent	Result	Units	PQL	Prep Method	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	CCV Ref ID	LLNL Method	LLNL Code	Lab Quals
Total Aluminum	ND	mg/L	0.050	EPA 3010A	EPA-200.7	10/16/09	10/16/09 19:02	JRG	PE-OP2	1	BSJ1007		E200.7:AL	0313	
Total Arsenic	ND	mg/L	0.050	EPA 3010A	EPA-200.7	10/16/09	10/16/09 19:02	JRG	PE-OP2	1	BSJ1007		E200.7:AS	0450	
Total Cadmium	ND	mg/L	0.010	EPA 3010A	EPA-200.7	10/16/09	10/16/09 19:02	JRG	PE-OP2	1	BSJ1007		E200.7:CD	1650	
Total Copper	ND	mg/L	0.010	EPA 3010A	EPA-200.7	10/16/09	10/16/09 19:02	JRG	PE-OP2	1	BSJ1007		E200.7:CU	2800	S10
Total Iron	ND	mg/L	0.050	EPA 3010A	EPA-200.7	10/16/09	10/16/09 19:02	JRG	PE-OP2	1	BSJ1007		E200.7:FE	5350	
Total Lead	ND	mg/L	0.050	EPA 3010A	EPA-200.7	10/16/09	10/16/09 19:02	JRG	PE-OP2	1	BSJ1007		E200.7:PB	5450	
Total Mercury	ND	mg/L	0.00020	EPA 245.1	EPA-245.1	10/19/09	10/27/09 15:34	MEV	CETAC1	1	BSJ1107		MET-aq:MULT-Hg	5600	
Total Selenium	ND	mg/L	0.10	EPA 3010A	EPA-200.7	10/16/09	10/16/09 19:02	JRG	PE-OP2	1	BSJ1007		E200.7:SE	7600	
Total Silver	ND	mg/L	0.010	EPA 3010A	EPA-200.7	10/16/09	10/16/09 19:02	JRG	PE-OP2	1	BSJ1007		E200.7:AG	7800	
Total Zinc	ND	mg/L	0.050	EPA 3010A	EPA-200.7	10/16/09	10/16/09 19:02	JRG	PE-OP2	1	BSJ1007		E200.7:ZN	9050	

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EPA Method 1664

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Oil and Grease	BSJ1670	Matrix Spike	0913673-30	-0.15000	34.300	40.700	mg/L		84.3		78 - 114	
		Matrix Spike Duplicate	0913673-30	-0.15000	34.900	40.700	mg/L	1.7	85.7	18	78 - 114	

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Project: Surface Water Monitoring Program
Project Number: ASWMP Sampling
Project Manager: John Jelinski

Reported: 11/03/2009 14:51

COC Number: 06283

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Suspended Solids (Glass Fiber)	BSJ0895	Duplicate	0913672-01	262.00	260.00		mg/L	0.8		10		
Electrical Conductivity @ 25 C	BSJ0998	Duplicate	0913669-02	143.50	142.10		umhos/cm	1.0		10		
Electrical Conductivity @ 25 C	BSJ0999	Duplicate	0913672-17	20.700	20.320		umhos/cm	1.9		10		
Total Magnesium	BSJ1007	Duplicate	0913672-19	0.040046	ND		mg/L			20		A02
		Matrix Spike	0913672-19	0.040046	9.6227	10.000	mg/L		95.8		75 - 125	
		Matrix Spike Duplicate	0913672-19	0.040046	10.049	10.000	mg/L	4.4	100	20	75 - 125	
Ammonia as N (Distilled)	BSJ1024	Duplicate	0913672-11	0.091900	ND		mg/L			20		
		Matrix Spike	0913672-11	0.091900	0.99930	1.0000	mg/L		90.7		80 - 120	
		Matrix Spike Duplicate	0913672-11	0.091900	0.98420	1.0000	mg/L	1.7	89.2	20	80 - 120	
Nitrate/Nitrite as N	BSJ1156	Duplicate	0913357-11	0.065500	ND		mg/L			10		
		Matrix Spike	0913357-11	0.065500	2.1924	2.1053	mg/L		101		90 - 110	
		Matrix Spike Duplicate	0913357-11	0.065500	2.2024	2.1053	mg/L	0.5	102	10	90 - 110	
Total Cyanide	BSJ1264	Duplicate	0913919-01	0.0017740	ND		mg/L			10		
		Matrix Spike	0913919-01	0.0017740	0.094273	0.10000	mg/L		92.5		90 - 110	
		Matrix Spike Duplicate	0913919-01	0.0017740	0.097081	0.10000	mg/L	3.0	95.3	20	90 - 110	
Chemical Oxygen Demand	BSJ1275	Duplicate	0913524-01	17.308	ND		mg O/L			20		
		Matrix Spike	0913524-01	17.308	763.66	750.00	mg O/L		99.5		80 - 120	
		Matrix Spike Duplicate	0913524-01	17.308	768.32	750.00	mg O/L	0.6	100	20	80 - 120	
Total Recoverable Magnesium	BSJ1427	Duplicate	0913749-01	3.8011	3.7328		mg/L	1.8		20		
		Matrix Spike	0913749-01	3.8011	15.370	10.000	mg/L		116		75 - 125	
		Matrix Spike Duplicate	0913749-01	3.8011	14.828	10.000	mg/L	4.8	110	20	75 - 125	

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Project: Surface Water Monitoring Program
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Project Manager: John Jelinski

Reported: 11/03/2009 14:51

COC Number: 06283

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Aluminum	BSJ1007	Duplicate	0913672-19	0.019759	ND		mg/L			20		
		Matrix Spike	0913672-19	0.019759	0.97724	1.0000	mg/L		95.7		75 - 125	
		Matrix Spike Duplicate	0913672-19	0.019759	1.0308	1.0000	mg/L	5.4	101	20	75 - 125	
Total Arsenic	BSJ1007	Duplicate	0913672-19	-0.0041556	ND		mg/L			20		
		Matrix Spike	0913672-19	-0.0041556	0.18701	0.20000	mg/L		93.5		75 - 125	
		Matrix Spike Duplicate	0913672-19	-0.0041556	0.18720	0.20000	mg/L	0.1	93.6	20	75 - 125	
Total Cadmium	BSJ1007	Duplicate	0913672-19	0.00030622	ND		mg/L			20		
		Matrix Spike	0913672-19	0.00030622	0.19462	0.20000	mg/L		97.2		75 - 125	
		Matrix Spike Duplicate	0913672-19	0.00030622	0.19106	0.20000	mg/L	1.9	95.4	20	75 - 125	
Total Copper	BSJ1007	Duplicate	0913672-19	0.00074344	ND		mg/L			20		
		Matrix Spike	0913672-19	0.00074344	0.40095	0.40000	mg/L		100		75 - 125	
		Matrix Spike Duplicate	0913672-19	0.00074344	0.38804	0.40000	mg/L	3.3	96.8	20	75 - 125	
Total Iron	BSJ1007	Duplicate	0913672-19	0.0078356	ND		mg/L			20		A02
		Matrix Spike	0913672-19	0.0078356	0.97758	1.0000	mg/L		97.0		75 - 125	
		Matrix Spike Duplicate	0913672-19	0.0078356	1.0230	1.0000	mg/L	4.6	102	20	75 - 125	
Total Lead	BSJ1007	Duplicate	0913672-19	0.0061153	ND		mg/L			20		
		Matrix Spike	0913672-19	0.0061153	0.40900	0.40000	mg/L		101		75 - 125	
		Matrix Spike Duplicate	0913672-19	0.0061153	0.40108	0.40000	mg/L	2.0	98.7	20	75 - 125	
Total Selenium	BSJ1007	Duplicate	0913672-19	-0.00082860	ND		mg/L			20		
		Matrix Spike	0913672-19	-0.00082860	0.18932	0.20000	mg/L		94.7		75 - 125	
		Matrix Spike Duplicate	0913672-19	-0.00082860	0.17394	0.20000	mg/L	8.5	87.0	20	75 - 125	
Total Silver	BSJ1007	Duplicate	0913672-19	-0.00075130	ND		mg/L			20		
		Matrix Spike	0913672-19	-0.00075130	0.10096	0.10000	mg/L		101		75 - 125	
		Matrix Spike Duplicate	0913672-19	-0.00075130	0.096863	0.10000	mg/L	4.1	96.9	20	75 - 125	
Total Zinc	BSJ1007	Duplicate	0913672-19	0.0064124	ND		mg/L			20		
		Matrix Spike	0913672-19	0.0064124	0.49735	0.50000	mg/L		98.2		75 - 125	
		Matrix Spike Duplicate	0913672-19	0.0064124	0.49067	0.50000	mg/L	1.4	96.9	20	75 - 125	

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Project: Surface Water Monitoring Program
Project Number: ASWMP Sampling
Project Manager: John Jelinski

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COC Number: 06283

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Mercury	BSJ1107	Duplicate	0913648-01	0.000075000	ND		mg/L			20		
		Matrix Spike	0913648-01	0.000075000	0.0012350	0.0010000	mg/L		116		70 - 130	
		Matrix Spike Duplicate	0913648-01	0.000075000	0.0011900	0.0010000	mg/L	4.0	112	20	70 - 130	
Total Recoverable Iron	BSJ1427	Duplicate	0913749-01	1.7290	1.8596		mg/L	7.3		20		
		Matrix Spike	0913749-01	1.7290	3.6363	1.0000	mg/L		191		75 - 125	Q03
Total Recoverable Zinc	BSJ1427	Duplicate	0913749-01	0.040948	ND		mg/L			20		
		Matrix Spike	0913749-01	0.040948	0.63120	0.50000	mg/L		118		75 - 125	
		Matrix Spike Duplicate	0913749-01	0.040948	0.61958	0.50000	mg/L	2.0	116	20	75 - 125	
Total Recoverable Copper	BSJ1428	Duplicate	0913690-01	0.12898	0.13159		mg/L	2.0		20		
		Matrix Spike	0913690-01	0.12898	0.23027	0.10000	mg/L		101		70 - 130	
		Matrix Spike Duplicate	0913690-01	0.12898	0.22943	0.10000	mg/L	0.8	100	20	70 - 130	
Total Recoverable Lead	BSJ1428	Duplicate	0913690-01	0.0011930	0.0011200		mg/L	6.3		20		
		Matrix Spike	0913690-01	0.0011930	0.10757	0.10000	mg/L		106		70 - 130	
		Matrix Spike Duplicate	0913690-01	0.0011930	0.10605	0.10000	mg/L	1.4	105	20	70 - 130	
Total Recoverable Mercury	BSJ1431	Duplicate	0913986-01	0.000030000	ND		mg/L			20		A02
		Matrix Spike	0913986-01	0.000030000	0.00091500	0.0010000	mg/L		88.5		70 - 130	
		Matrix Spike Duplicate	0913986-01	0.000030000	0.00089250	0.0010000	mg/L	2.6	86.2	20	70 - 130	
Total Recoverable Arsenic	BSJ1433	Duplicate	0913836-01	0.0042900	0.0045290		mg/L	5.4		20		
		Matrix Spike	0913836-01	0.0042900	0.10665	0.10000	mg/L		102		70 - 130	
		Matrix Spike Duplicate	0913836-01	0.0042900	0.10925	0.10000	mg/L	2.5	105	20	70 - 130	
Total Recoverable Cadmium	BSJ1433	Duplicate	0913836-01	0.00025500	ND		mg/L			20		
		Matrix Spike	0913836-01	0.00025500	0.040234	0.040000	mg/L		99.9		70 - 130	
		Matrix Spike Duplicate	0913836-01	0.00025500	0.042218	0.040000	mg/L	4.8	105	20	70 - 130	
Total Recoverable Lead	BSJ1433	Duplicate	0913836-01	0.0083350	0.0083750		mg/L	0.5		20		
		Matrix Spike	0913836-01	0.0083350	0.10737	0.10000	mg/L		99.0		70 - 130	
		Matrix Spike Duplicate	0913836-01	0.0083350	0.11050	0.10000	mg/L	3.1	102	20	70 - 130	

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Project: Surface Water Monitoring Program
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COC Number: 06283

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Selenium	BSJ1433	Duplicate	0913836-01	0.00077800	ND		mg/L			20		
		Matrix Spike	0913836-01	0.00077800	0.10198	0.10000	mg/L		101		70 - 130	
		Matrix Spike Duplicate	0913836-01	0.00077800	0.10454	0.10000	mg/L	2.5	104	20	70 - 130	
Total Recoverable Silver	BSJ1433	Duplicate	0913836-01	0.00050200	ND		mg/L			20		
		Matrix Spike	0913836-01	0.00050200	0.040537	0.040000	mg/L		100		70 - 130	
		Matrix Spike Duplicate	0913836-01	0.00050200	0.041284	0.040000	mg/L	1.8	102	20	70 - 130	
Total Recoverable Aluminum	BSJ1737	Duplicate	0914007-01	0.39686	0.44637		mg/L	11.7		20		
		Matrix Spike	0914007-01	0.39686	1.5245	1.0000	mg/L		113		75 - 125	
		Matrix Spike Duplicate	0914007-01	0.39686	1.6626	1.0000	mg/L	11.5	127	20	75 - 125	Q03

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EPA Method 1664

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Oil and Grease	BSJ1670	BSJ1670-BS1	LCS	35.400	40.700	5.0	mg/L	87.0		78 - 114		

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COC Number: 06283

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Electrical Conductivity @ 25 C	BSJ0998	BSJ0998-BS1	LCS	299.80	303.00	1.00	umhos/cm	98.9		90 - 110		
Electrical Conductivity @ 25 C	BSJ0999	BSJ0999-BS1	LCS	308.20	303.00	1.00	umhos/cm	102		90 - 110		
Total Magnesium	BSJ1007	BSJ1007-BS1	LCS	10.368	10.000	0.050	mg/L	104		85 - 115		
Ammonia as N (Distilled)	BSJ1024	BSJ1024-BS1	LCS	1.0762	1.0000	0.10	mg/L	108		85 - 115		
Nitrate/Nitrite as N	BSJ1156	BSJ1156-BS1	LCS	2.0719	2.0000	0.10	mg/L	104		90 - 110		
Total Cyanide	BSJ1264	BSJ1264-BS1	LCS	0.13504	0.15000	0.0050	mg/L	90.0		90 - 110		
Chemical Oxygen Demand	BSJ1275	BSJ1275-BS1	LCS	756.67	750.00	25	mg O/L	101		85 - 115		
Total Recoverable Magnesium	BSJ1427	BSJ1427-BS1	LCS	10.921	10.000	0.050	mg/L	109		85 - 115		

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COC Number: 06283

Water Analysis (Metals)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Total Aluminum	BSJ1007	BSJ1007-BS1	LCS	1.0605	1.0000	0.050	mg/L	106		85 - 115		
Total Arsenic	BSJ1007	BSJ1007-BS1	LCS	0.19553	0.20000	0.050	mg/L	97.8		85 - 115		
Total Cadmium	BSJ1007	BSJ1007-BS1	LCS	0.20290	0.20000	0.010	mg/L	101		85 - 115		
Total Copper	BSJ1007	BSJ1007-BS1	LCS	0.41434	0.40000	0.010	mg/L	104		85 - 115		
Total Iron	BSJ1007	BSJ1007-BS1	LCS	1.0572	1.0000	0.050	mg/L	106		85 - 115		
Total Lead	BSJ1007	BSJ1007-BS1	LCS	0.42538	0.40000	0.050	mg/L	106		85 - 115		
Total Selenium	BSJ1007	BSJ1007-BS1	LCS	0.19674	0.20000	0.10	mg/L	98.4		85 - 115		
Total Silver	BSJ1007	BSJ1007-BS1	LCS	0.10466	0.10000	0.010	mg/L	105		85 - 115		
Total Zinc	BSJ1007	BSJ1007-BS1	LCS	0.51097	0.50000	0.050	mg/L	102		85 - 115		
Total Mercury	BSJ1107	BSJ1107-BS1	LCS	0.0010550	0.0010000	0.00020	mg/L	106		85 - 115		
Total Recoverable Iron	BSJ1427	BSJ1427-BS1	LCS	1.1115	1.0000	0.050	mg/L	111		85 - 115		
Total Recoverable Zinc	BSJ1427	BSJ1427-BS1	LCS	0.56439	0.50000	0.050	mg/L	113		85 - 115		
Total Recoverable Copper	BSJ1428	BSJ1428-BS1	LCS	0.10445	0.10000	0.0020	mg/L	104		85 - 115		
Total Recoverable Lead	BSJ1428	BSJ1428-BS1	LCS	0.10636	0.10000	0.0010	mg/L	106		85 - 115		
Total Recoverable Mercury	BSJ1431	BSJ1431-BS1	LCS	0.0010425	0.0010000	0.00020	mg/L	104		85 - 115		
Total Recoverable Arsenic	BSJ1433	BSJ1433-BS1	LCS	0.10239	0.10000	0.0020	mg/L	102		85 - 115		
Total Recoverable Cadmium	BSJ1433	BSJ1433-BS1	LCS	0.041472	0.040000	0.0010	mg/L	104		85 - 115		
Total Recoverable Lead	BSJ1433	BSJ1433-BS1	LCS	0.10395	0.10000	0.0010	mg/L	104		85 - 115		
Total Recoverable Selenium	BSJ1433	BSJ1433-BS1	LCS	0.10196	0.10000	0.0020	mg/L	102		85 - 115		
Total Recoverable Silver	BSJ1433	BSJ1433-BS1	LCS	0.041136	0.040000	0.0010	mg/L	103		85 - 115		
Total Recoverable Aluminum	BSJ1737	BSJ1737-BS1	LCS	1.0506	1.0000	0.050	mg/L	105		85 - 115		

Lawrence Berkeley National Laboratory Environmental Services Group 1 Cyclotron Road, Mail Stop 85B0198 Berkeley, CA 94720	Project: Surface Water Monitoring Program Project Number: ASWMP Sampling Project Manager: John Jelinski	**Reported:** 11/03/2009 14:51 **COC Number:** 06283

EPA Method 1664

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Oil and Grease	BSJ1670	BSJ1670-BLK1	ND	mg/L	5.0		

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COC Number: 06283

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Total Suspended Solids (Glass Fiber)	BSJ0895	BSJ0895-BLK1	ND	mg/L	0.50		
Total Magnesium	BSJ1007	BSJ1007-BLK1	ND	mg/L	0.050		
Ammonia as N (Distilled)	BSJ1024	BSJ1024-BLK1	ND	mg/L	0.10		
Nitrate/Nitrite as N	BSJ1156	BSJ1156-BLK1	ND	mg/L	0.10		
Total Cyanide	BSJ1264	BSJ1264-BLK1	ND	mg/L	0.0050		
Chemical Oxygen Demand	BSJ1275	BSJ1275-BLK1	ND	mg O/L	25		
Total Recoverable Magnesium	BSJ1427	BSJ1427-BLK1	ND	mg/L	0.050		

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COC Number: 06283

Water Analysis (Metals)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Total Aluminum	BSJ1007	BSJ1007-BLK1	ND	mg/L	0.050		
Total Arsenic	BSJ1007	BSJ1007-BLK1	ND	mg/L	0.050		
Total Cadmium	BSJ1007	BSJ1007-BLK1	ND	mg/L	0.010		
Total Copper	BSJ1007	BSJ1007-BLK1	0.010324	mg/L	0.010		M01
Total Iron	BSJ1007	BSJ1007-BLK1	ND	mg/L	0.050		
Total Lead	BSJ1007	BSJ1007-BLK1	ND	mg/L	0.050		
Total Selenium	BSJ1007	BSJ1007-BLK1	ND	mg/L	0.10		
Total Silver	BSJ1007	BSJ1007-BLK1	ND	mg/L	0.010		
Total Zinc	BSJ1007	BSJ1007-BLK1	ND	mg/L	0.050		
Total Mercury	BSJ1107	BSJ1107-BLK1	ND	mg/L	0.00020		
Total Recoverable Iron	BSJ1427	BSJ1427-BLK1	ND	mg/L	0.050		
Total Recoverable Zinc	BSJ1427	BSJ1427-BLK1	ND	mg/L	0.050		
Total Recoverable Copper	BSJ1428	BSJ1428-BLK1	ND	mg/L	0.0020		
Total Recoverable Lead	BSJ1428	BSJ1428-BLK1	ND	mg/L	0.0010		
Total Recoverable Mercury	BSJ1431	BSJ1431-BLK1	ND	mg/L	0.00020		
Total Recoverable Arsenic	BSJ1433	BSJ1433-BLK1	ND	mg/L	0.0020		
Total Recoverable Cadmium	BSJ1433	BSJ1433-BLK1	ND	mg/L	0.00050		
Total Recoverable Lead	BSJ1433	BSJ1433-BLK1	ND	mg/L	0.0010		
Total Recoverable Selenium	BSJ1433	BSJ1433-BLK1	ND	mg/L	0.0020		
Total Recoverable Silver	BSJ1433	BSJ1433-BLK1	ND	mg/L	0.0010		
Total Recoverable Aluminum	BSJ1737	BSJ1737-BLK1	ND	mg/L	0.050		

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Berkeley, CA 94720		

Notes And Definitions

MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A02	The difference between duplicate readings is less than the PQL.
M01	Analyte detected in the Method Blank at or above the PQL.
Q03	Matrix spike recovery(s) is(are) not within the control limits.
S10	The analyte in the Method Blank is greater than the laboratory PQL and the sample result is less than 10 times the Method Blar

pH Calibration & Measurement Worksheet

Analytical Method:	Standard Method 4500H+B		
Instrument ID:	EXTECH EX900	Serial #	76528
Analyst:	John Jelinski		

Analysis Date:	October 13, 2009
Time of Analysis:	11:30 to 13:30
Analysis Units:	pH

Program Name: Surface Water Monitoring
ASWMP Sampling

Collection # 0884

Calibration Standards Results

Standard	Manufacturer	Lot #	Exp. Date	Value (as found)	Calibration Value	Value (as left)	+/- 0.5 pH units	Pass/Fail
4.00 pH	EKI	67066	01/17/11	3.99	4.00	3.99	0.01	PASS
7.00 pH	EKI	66600	11/20/10	6.99	7.00	7.00	0.00	PASS
10.00 pH	EKI	66395	10/30/10	10.15	10.00	10.00	0.00	PASS

Sample Analysis Results

Sample ID	Location	Sample Date	Result (pH)	Comments
57839	MP1	October 13, 2009	6.90	
57842	MP2	October 13, 2009	7.40	
57847	MP3	October 13, 2009	8.27	
57852	MP4	October 13, 2009	8.05	
57857	MP5	October 13, 2009	8.39	Measured samples 2 times to confirm. 2nd Measurement = 8.25
57862	MP3 (Field Duplicate)	October 13, 2009	8.38	
57865	MP6	October 13, 2009	8.00	

Quality Assurance Quality Control Analysis Results

QAQC	Sample Result / ID		Duplicate Result / ID		RPD	Pass/Fail	Comments
Dup QAQC	8.39	57857	8.25	NA	0.02	PASS	
Field Dup QAQC	8.27	57847	8.38	57862	0.01	PASS	

QAQC	Spike Amount	Spike Sample Result	RPD	% Recovery	Pass/Fail	Comments
LCS	7.00	7.01	0.00	99.60%	PASS	

LCS Manufacture:	JT Baker	LCS Lot #	H24518	Exp. Date	07/31/09

Notes:

RPD = (Sample Result -Dup Result)/ (Mean of Result Pair). RPD (intra-laboratory) must be less than 0.3 to pass QAQC criteria
± 0.5 pH units = Calibration Value - Value (as left). The "as left" pH value must be within 0.5 pH units of the Calibration Value in order to pass.
% Recovery = (Spike Result / Result)*100. % Recovery must be between 90 to 110 % to pass QAQC criteria

Analyst Signature: _____
Date: 12/02/2009

QAQC Reviewer Signature: _____
Date: 12/02/2009