

2/24/10
SL

From: Renee_McFarlan@URSCorp.com
Sent: Wednesday, February 24, 2010 1:31 PM
To: Renfrew, Scott (Cupertino) NA
Cc: Michael_Velzy@URSCorp.com
Subject: Procedure for pH and conductivity measurements during Stormwater Sampling

Hi Scott,

During each storm event, pH, conductivity, and temperature are measured in the field at each sampling location with a Harriba U-10. After URS personnel collect the samples in the laboratory-provided sampling containers, a small cup that is provided with the Harriba U-10 is filled with water directly from the sampling location. The pH, conductivity, and temperature are then measured and read directly from the Harriba U-10, using the mode function to switch between the different parameters.

The samples are submitted to Curtis and Tompkins, Ltd., a State of California-certified laboratory in Berkeley, California, and the pH and conductivity are analyzed. pH is analyzed by United States Environmental Protection Agency (USEPA) Method 9040/9045 and conductivity is analyzed by USEPA Method 120.1.

The field and analytical results for pH and conductivity are relative similar historically (through 2003/2004 storm season). pH discrepancies are typically less than or equal to 1.3 pH units, and one higher discrepancy in 2003/2004 of 2.39 units between the field and lab analyzed sample at sample SL-BG-CR. For the 2009/2010 storm season, the highest discrepancy was 0.75 pH units. The conductivity results are similar. The results are also consistently in the normal pH range for what has been observed historically at the site. If the discrepancy were ever large between the field and laboratory sample, then the laboratory analyzed sample would be utilized because it is more precise than the field measurements (e.g., instrument or probe malfunctions, highly susceptible to becoming too wet, etc.).

Please let us know if you have any questions. Thanks!

Best,
Renee McFarlan
Geologist
URS Corporation
1333 Broadway Suite 800
Oakland, CA 94612
direct:(510) 874-3229
fax: (510) 874-3268

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Curtis & Tompkins, Ltd.
 Analytical Laboratory Since 1878
 2323 Fifth Street
 Berkeley, CA 94710
 (510) 486-0900 Phone
 (510) 486-0532 Fax

CHAIN OF CUSTODY

Analysis

C & T LOGIN #: 217803

Project No.: 26817600

Sampler: JR-RMF-IM-SUS

Project Name: Lehigh

Report To: Aiko Velazquez / Renee McErdan

Turnaround Time: Std

Fax: 510-874-3268

Project P.O.:

Company: WPS
 Telephone: 510-893-3600

Lab No.	Sample ID.	Sampling Date Time	Matrix			# of Containers	Preservative				RECEIVED BY:	DATE / TIME		
			Soil	Water	Waste		HCL	H ₂ SO ₄	HNO ₃	ICE				
1	SC-2-RD	11/21/2010 08:30	X	X	X	3	X	X	X	X	X	X		
2	SC-6-RD	" 08:35	X	X	X	3	X	X	X	X	X	X		
3	SC-4A1-RD	" 08:50	X	X	X	3	X	X	X	X	X	X		
4	SC-5-B-02	" 09:05	X	X	X	3	X	X	X	X	X	X		
5	SC-12-PD	" 10:00	X	X	X	3	X	X	X	X	X	X		
6	SC-11-CR	" 09:45	X	X	X	3	X	X	X	X	X	X		
7	SC-11A-10	" 10:20	X	X	X	3	X	X	X	X	X	X		
8	SC-16B-RD	" 10:30	X	X	X	3	X	X	X	X	X	X		
9	SC-18-RD	" 10:40	X	X	X	3	X	X	X	X	X	X		
10	SC-22A-RD	" 10:50	X	X	X	3	X	X	X	X	X	X		
11	SC-22B-RD	" 11:05	X	X	X	3	X	X	X	X	X	X		
12	SC-21-PD	" 11:15	X	X	X	3	X	X	X	X	X	X		

Notes: SC-6-RD - reaction w/ H₂O

RELINQUISHED BY: [Signature] 1-18-10/14:00

RECEIVED BY: [Signature] 1-18-10/14:22

SIGNATURE

DATE / TIME

DATE / TIME

Curtis & Tompkins, Ltd.
 Analytical Laboratory Since 1878
 2323 Fifth Street
 Berkeley, CA 94710
 (510) 486-0900 Phone
 (510) 486-0532 Fax

CHAIN OF CUSTODY

C & T LOGIN #: 217803

Analysis

3/23/10
SL

Project No.: 06817000

Sampler: JQ, PM, TW, ST

Project Name: Lehigh

Report To: Mike Velez, Renee Nusselman

Turnaround Time: Standard

Company: URS

Telephone: 510-893-3000

Fax: 510-894-3208

Lab No.	Sample ID.	Sampling Date Time	Matrix			# of Containers	Preservative			
			Soil	Water	Waste		HCl	H ₂ O ₂	HNO ₃	ICE
13	SL-1-CR	1/18/10 025	X			3	X	X	X	
14	SL-4A3-PD	055				3				
15	SL-13A-PD	045				3				
16	SL-14-CR	1010				3				
17	SL-15-CR	1025				3				
18	SL-17- CR PD	1035				3				
19	SL-23-CR	1050				3				
20	SL-26-CR	1105				3				
21	SL-D25-CR	1110				6				
22	SL-210-CR	1115				6				
23	SL-D210-CR	1120				6				
24	SL-27-PD	1125				6				
25	SL-D23-PD	1130				6				

Notes:

SAMPLE RECEIPT
 Intact Cold
 On Ice Ambient
 Preservative Correct?
 Yes No N/A

RELINQUISHED BY:

[Signature]

1-18-10/14 02

DATE / TIME

RECEIVED BY:

[Signature]

1-18-10 192

DATE / TIME

SIGNATURE

DATE / TIME

DATE / TIME