APPENDIX C

Select Site Investigation Reports (Provided on CD)

Appendix G
Chain of Custody Forms

Chain of Custody Record

DATE: 03-28-07

King County
Department of
Natural Resources and Parks
Solid Waste Division

COPY

No. 6873

Environmental Monitoring Program

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention: Sendy Jimenez (206) 296-4411
Contract No: T02344T
Project Site Test: VASW (21)

Project Site Test Reference

GROUNDWATER												SURFACE WATER												LEACHATE/WASTEWATER															
CHGW-A Cedar Hills GW Annly	CHGW/ C. Hills GW Only (NP / OS)	CHGWV C. Hills GW VOAs Only	CMGWV C. Hills GW VOAs Only	GW APP3 Appendix III Addt'l Analytes	CFGW Cedar Falls GW Only	DUGW Duvall GW Only	ENGW Enumclaw GW Only	HOGW Hobart GW Only	HTGW Houghton GW Only	PUGW Puyallup GW Only	SPGW South Park GW Only	VAGW Vashon GW Only	CHSW-A Cedar Hills SW Annly	CHSW-O Cedar Hills SW Only	CHSW-M Cedar Hills SW Mnly	CHSW-P Cedar Hills SW Permit	CFSW Cedar Falls SW Only	DUSW Duvall SW Only	RESW Renton SW Only	SPSW South Park SW Only	VASW Vashon SW Only	CHLS-A C. Hills Leachate Annly	CHLS-M Cedar Hills Leachate Mnly	CHTW Cedar Hills Trucbwash	CHLS-P C. Hills Leachate Permit	ALLS Algona WW Permit	EMLS Enumclaw WW Permit	FALS Factoria WW Permit	FLS First NE WW Permit	HTLS Houghton WW Permit	RELS Renton WW Permit	VALS-P Vashon Leachate Permit	VALS-A Vashon Leachate Annly	VALS-O Vashon Leachate Olly	VALS-M Vashon Leachate Mnly	RESS Renton Solds / Rinsate (R)	S
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36				

PERMIT

Lab No.	Sample ID	Date	Time	Number of Containers	Remarks
	SVW10703280	3-28-07	1355	21	+Dissolved Metals (* See Note)

Relinquished By Sampler: [signature]
Sampler Signature: SEVIN BILIR
Sampler Printed Name: KCSWD
Company
Date: 3/28/07
Time: 1614

Received By
Signature
Printed Name
Company
Date
Time

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By: [signature]
Signature: [signature]
Printed Name: Lewis
Company
Date: 3/28/07
Time: 1614

Observations/Comments/Special Instructions:
* Note: Filter in lab. Use non preserved sample from other containers.

Total # Containers: 21

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages; receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name
Tel

White and Canary: KCSWD
Pink and Goldenrod: Receiving Laboratory

Chain of Custody Record

DATE: 03-28-07

King County
Department of
Natural Resources and Parks
Solid Waste Division

COPY

No. 6874

Environmental Monitoring Program

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention: Sendy Jimenez (206) 296-4411
Contract No: T02344T
Project Site Test: VASW (21)

Project Site Test Reference

GROUNDWATER												SURFACE WATER												LEACHATE/WASTEWATER															
CHGW-A Cedar Hills GW Annly	CHGW/ C. Hills GW Only (NP / OS)	CHGWV C. Hills GW VOAs Only	CMGWV C. Hills GW VOAs Only	GW APP3 Appendix III Addt'l Analytes	CFGW Cedar Falls GW Only	DUGW Duvall GW Only	ENGW Enumclaw GW Only	HOGW Hobart GW Only	HTGW Houghton GW Only	PUGW Puyallup GW Only	SPGW South Park GW Only	VAGW Vashon GW Only	CHSW-A Cedar Hills SW Annly	CHSW-O Cedar Hills SW Only	CHSW-M Cedar Hills SW Mnly	CHSW-P Cedar Hills SW Permit	CFSW Cedar Falls SW Only	DUSW Duvall SW Only	RESW Renton SW Only	SPSW South Park SW Only	VASW Vashon SW Only	CHLS-A C. Hills Leachate Annly	CHLS-M Cedar Hills Leachate Mnly	CHTW Cedar Hills Trucbwash	CHLS-P C. Hills Leachate Permit	ALLS Algona WW Permit	EMLS Enumclaw WW Permit	FALS Factoria WW Permit	FLS First NE WW Permit	HTLS Houghton WW Permit	RELS Renton WW Permit	VALS-P Vashon Leachate Permit	VALS-A Vashon Leachate Annly	VALS-O Vashon Leachate Olly	VALS-M Vashon Leachate Mnly	RESS Renton Solds / Rinsate (R)	S
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36				

Lab No.	Sample ID	Date	Time	Number of Containers	Remarks
	~~SVW20703270~~	~~3-27-07~~			
	SVW20703280	3-28-07	1145	21	+Dissolved Metals (* See Note)

Relinquished By Sampler: [signature]
Sampler Signature: SEVIN BILIR
Sampler Printed Name: KCSWD
Company
Date: 3/28/07
Time: 1614

Received By
Signature
Printed Name
Company
Date
Time

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By: [signature]
Signature: [signature]
Printed Name: Lewis
Company
Date: 3/28/07
Time: 1614

Observations/Comments/Special Instructions:
* Note: Filter in lab. Use Sample water from other non-preserved containers.

Total # Containers: 21

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages; receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name
Tel

White and Canary: KCSWD
Pink and Goldenrod: Receiving Laboratory

King County
Department of
Natural Resources and Parks
Solid Waste Division

Chain of Custody Record

DATE: 03-28-07

Environmental Monitoring Program

COPY

No. 6875

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention: Sendy Jimenez (206) 296-4411
Contract No: T02344T
Project Site Test: VASW (21)

Project Site Test Reference

Lab No.	Sample ID	Date	Time	GROUNDWATER 1–12	SURFACE WATER 13–24	LEACHATE/WASTEWATER 25–36	Number of Containers	Remarks
	SVW3070328Q	3-28-07	1230			X	21	+Dissolved metals (* See Note)

Project Site Test Reference columns (1–36):
1 CHGW-A Cedar Hills GW Aquifer; 2 CHGW C. Hills GW Qty (NP / OS); 3 CHGW-U C. Hills GW VOAs Only; 4 GW-APP3 Appendix III Addnl Analytes; 5 CFGW Cedar Falls GW Qty; 6 DUGW Duvall GW Qty; 7 ENGW Enumclaw GW Qty; 8 HOGW Hobart GW Qty; 9 HTGW Houghton GW Qty; 10 PUGW Puyallup GW Qty; 11 SPGW South Park GW Qty; 12 VAGW Vashon GW Qty; 13 CHSW-A Cedar Hills SW Aquifer; 14 CHSW-O Cedar Hills SW Qty; 15 CHSW-M Cedar Hills SW Mfg; 16 CHSW-P Cedar Hills SW Permit; 17 CFSW Cedar Falls SW Qty; 18 DUSW Duvall SW Qty; 19 RESW Renton SW Qty; 20 SPSW South Park SW Qty; 21 VASW Vashon SW Qty; 22 CHLS-A C. Hills Leachate Aquifer; 23 CHLS-M Cedar Hills Leachate Mfg; 24 CHTW Cedar Hills Treatwash; 25 CHLS-P C. Hills Leachate Permit; 26 ALLS Algona WW Permit; 27 ENLS Enumclaw WW Permit; 28 FALS Factoria WW Permit; 29 FILS First NE WW Permit; 30 HTLS Houghton WW Permit; 31 RELS Renton WW Permit; 32 VALS-P Vashon Leachate Permit; 33 VALS-A Vashon Leachate Aquifer; 34 VALS-O Vashon Leachate Qty; 35 VALS-M Vashon Leachate Mfg; 36 RFDS Renton Soils / Rinsate (R)

Relinquished By Sampler	Date: 3/28/07	Received By	Date
Sampler Signature: SEVIN BILIR		Signature	
Sampler Printed Name: KCSWD	Time: 1614	Printed Name	Time
Company		Company	
Relinquished By	Date	Received By	Date: 3/28/07
Signature		Signature	
Printed Name	Time	Printed Name: Lewis	Time: 1614
Company		Company	

Observations/Comments/Special Instructions:
* Filter in lab. Use none preserved sample water from other bottles.

Total # Containers: 21

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial
2. Receiving lab is to sign in the shaded box
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed
4. KCSWD personnel are to retain white and canary pages; receiving lab is to keep pink and goldenrod pages
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name: _____
Tel: _____

White and Canary: KCSWD — Pink and Goldenrod: Receiving Laboratory

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King County
Department of
Natural Resources and Parks
Solid Waste Division

Chain of Custody Record

DATE: 05-09-07

Environmental Monitoring Program

No. 7887

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention: Sendy Jimenez (206) 296-4411
Contract No: T02344T
Project Site Test: VA Hillslope

Project Site Test Reference

Lab No.	Sample ID	Date	Time	GROUNDWATER 1–12	SURFACE WATER 13–24	LEACHATE/WASTEWATER 25–36	Number of Containers	Remarks
	SVW1070509Q	05-09-07	1200				22	VASW-2(44)
	SVW2070509Q	05-09-07	1130				22	VASW-2(44)
	SVW3070509Q	05-09-07	1000				22	VASW-2(44)

Project Site Test Reference columns (1–36):
1 CHGW-A Cedar Hills GW Aquifer; 2 CHGW C. Hills GW Qty (NP / OS); 3 CHGW-U C. Hills GW VOAs Only; 4 GW-APP3 Appendix III Addnl Analytes; 5 CFGW Cedar Falls GW Qty; 6 DUGW Duvall GW Qty; 7 ENGW Enumclaw GW Qty; 8 HOGW Hobart GW Qty; 9 HTGW Houghton GW Qty; 10 PUGW Puyallup GW Qty; 11 SPGW South Park GW Qty; 12 VAGW Vashon GW Qty; 13 CHSW-A Cedar Hills SW Aquifer; 14 CHSW-O Cedar Hills SW Qty; 15 CHSW-M Cedar Hills SW Mfg; 16 CHSW-P Cedar Hills SW Permit; 17 CFSW Cedar Falls SW Qty; 18 DUSW Duvall SW Qty; 19 RESW Renton SW Qty; 20 SPSW South Park SW Qty; 21 VASW Vashon SW Qty; 22 CHLS-A C. Hills Leachate Aquifer; 23 CHLS-M Cedar Hills Leachate Mfg; 24 CHTW Cedar Hills Treatwash; 25 CHLS-P C. Hills Leachate Permit; 26 ALLS Algona WW Permit; 27 ENLS Enumclaw WW Permit; 28 FALS Factoria WW Permit; 29 FILS First NE WW Permit; 30 HTLS Houghton WW Permit; 31 RELS Renton WW Permit; 32 VALS-P Vashon Leachate Permit; 33 VALS-A Vashon Leachate Aquifer; 34 VALS-O Vashon Leachate Qty; 35 VALS-M Vashon Leachate Mfg; 36 RFDS Renton Soils / Rinsate (R)

Relinquished By Sampler	Date: 05/09/07	Received By	Date
Sampler Signature: SEVIN BILIR		Signature	
Sampler Printed Name: KCSWD	Time: 1620	Printed Name	Time
Company		Company	
Relinquished By	Date	Received By	Date: 5/9/07
Signature		Signature: Mike Buster	
Printed Name	Time	Printed Name: Lewis	Time: 16:10
Company		Company	

Observations/Comments/Special Instructions:

Total # Containers: 66

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial
2. Receiving lab is to sign in the shaded box
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed
4. KCSWD personnel are to retain white and canary pages; receiving lab is to keep pink and goldenrod pages
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name: _____
Tel: _____

White and Canary: KCSWD — Pink and Goldenrod: Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program

DATE: 05-09-07

King County
Department of
Natural Resources and Parks
Solid Waste Division

No. 7888

Name King County Solid Waste Division
Address 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention Sendy Jimenez (206) 296-4411
Contract No. T02344T

Project Site Test VA Hillslope

Project Site Test Reference

No.	Code	Test	Group
1	CHGW-A	Cedar Hills GW Annly	GROUNDWATER
2	CHGW	C. Hills GW Qtly (NP / OS)	GROUNDWATER
3	CHGW-V	C. Hills GW VOAs Only	GROUNDWATER
4	GW-APP3	Appendix III Add'l Analytes	GROUNDWATER
5	CFGW	Cedar Falls GW Qtly	GROUNDWATER
6	DUGW	Duvall GW Qtly	GROUNDWATER
7	ENGW	Enumclaw GW Qtly	GROUNDWATER
8	HOGW	Hobart GW Qtly	GROUNDWATER
9	HTGW	Houghton GW Qtly	GROUNDWATER
10	PUGW	Puyallup GW Qtly	GROUNDWATER
11	SPGW	South Park GW Qtly	GROUNDWATER
12	VAGW	Vashon GW Qtly	GROUNDWATER
13	CHSW-A	Cedar Hills SW Annly	SURFACE WATER
14	CHSW-Q	Cedar Hills SW Qtly	SURFACE WATER
15	CHSW-M	Cedar Hills SW Mtly	SURFACE WATER
16	CHSW-P	Cedar Hills SW Permit	SURFACE WATER
17	CFSW	Cedar Falls SW Qtly	SURFACE WATER
18	DUSW	Duvall SW Qtly	SURFACE WATER
19	RESW	Renton SW Qtly	SURFACE WATER
20	SPSW	South Park SW Qtly	SURFACE WATER
21	VASW	Vashon SW Qtly	SURFACE WATER
22	CHLS-A	C. Hills Leachate Annly	LEACHATE/WASTEWATER
23	CHLS-M	Cedar Hills Leachate Mtly	LEACHATE/WASTEWATER
24	CHTW	Cedar Hills Truckwash	LEACHATE/WASTEWATER
25	CHLS-P	C. Hills Leachate Permit	LEACHATE/WASTEWATER (PERMIT)
26	ALLS	Algona WW Permit	LEACHATE/WASTEWATER (PERMIT)
27	ENLS	Enumclaw WW Permit	LEACHATE/WASTEWATER (PERMIT)
28	FALS	Factoria WW Permit	LEACHATE/WASTEWATER (PERMIT)
29	FILS	First NE WW Permit	LEACHATE/WASTEWATER (PERMIT)
30	HTLS	Houghton WW Permit	LEACHATE/WASTEWATER (PERMIT)
31	RELS	Renton WW Permit	LEACHATE/WASTEWATER (PERMIT)
32	VALS-P	Vashon Leachate Permit	LEACHATE/WASTEWATER (PERMIT)
33	VALS-A	Vashon Leachate Annly	LEACHATE/WASTEWATER
34	VALS-Q	Vashon Leachate Qtly	LEACHATE/WASTEWATER
35	VALS-M	Vashon Leachate Mtly	LEACHATE/WASTEWATER
35	REDS	Renton Soils / Rinsate (R)	S

Lab No.	Sample ID	Date	Time	Number of Containers	Remarks
					should bell
	SV14E070509-	05-09-07	1015	10	VASW-3(45)

Relinquished By Sampler
Date 05/09/07
Sampler Signature SEVIN BILLR
Sampler Printed Name KCSWD
Company
Time 1620

Received By
Signature
Printed Name
Company
Date
Time

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By
Signature Mike Bustiv
Printed Name Laucks
Company
Date 5/9/07
Time 16:20

Observations/Comments/Special Instructions:

Total # Containers: 10

Instructions
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages; receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name
Tel

White and Canary: KCSWD
Pink and Goldenrod: Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program

DATE: 5/10/0

King County
Department of
Natural Resources and Parks
Solid Waste Division

No. 7890

Name King County Solid Waste Division
Address 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention Sendy Jimenez (206) 296-4411
Contract No. T02344T

Project Site Test VA Hillslope

Project Site Test Reference: the same columns 1–35 as on No. 7888 (GROUNDWATER 1–12, SURFACE WATER 13–21, LEACHATE/WASTEWATER 22–35, PERMIT 25–32); S: 36 REDS Renton Soils / Rinsate (R)

Lab No.	Sample ID	Date	Time	Number of Containers	Remarks
	SVW4070510-	05-10-07	1335		
	SVW5070510-	↓	1015	11	VASW-3(45)
	SVW6070510-	↓	1105	11	VASW-3(45)
	SVW7070510-	↓	1045	11	VASW-3(45)
	~~VTRP[illegible]~~			11 ~~3~~	VASW-3(45)
	VTRP070510T	05-08-07	0800	3 ~~3~~	

Relinquished By Sampler SEVIN BILR
Date 05/10/07
Sampler Signature
Sampler Printed Name KCSWD
Company
Time 1620

Received By
Signature
Printed Name
Company
Date
Time

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By A Weishaar
Signature J Weishaar
Printed Name
Company
Date 5/10/07
Time 1620

Observations/Comments/Special Instructions:

Total # Containers: 47

Instructions
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages; receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name
Tel

White and Canary: KCSWD
Pink and Goldenrod: Receiving Laboratory

King County
Department of
Natural Resources and Parks
Solid Waste Division

Chain of Custody Record

DATE: 08-14-07

Environmental Monitoring Program

No. 7894

Name King County Solid Waste Division
Address 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention Sendy Jimenez (206) 296-4411
Contract No T02344T
Project Site Test VA Hillslope

Project Site Test Reference

GROUNDWATER: CHGW-A Cedar Hills GW Array; CHGW C. Hills GW Qty (NP / OS); CHGW-V C. Hills GW VOAs Only; GW-APP3 Appendix III Addn'l Analytes; CFGW Cedar Falls GW Qty; DUGW Duvall GW Qty; ENGW Enumclaw GW Qty; HOGW Hobart GW Qty; HTGW Houghton GW Qty; PUGW Puyallup GW Qty; SPGW South Park GW Qty; VAGW Vashon GW Qty

SURFACE WATER: CHSW-A Cedar Hills SW Array; CHSW-O Cedar Hills SW Qty; CHSW-M Cedar Hills SW Mfg; CHSW-P Cedar Hills SW Permit; CFSW Cedar Falls SW Qty; DUSW Duvall SW Qty; RESW Renton SW Qty; SPSW South Park SW Qty; VASW Vashon SW Qty

LEACHATE/WASTEWATER: CHLS-A C. Hills Leachate Array; CHLS-M Cedar Hills Leachate Mfg; CHTW Cedar Hills Truckwash; PERMIT: CHLS-P C. Hills Leachate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; FILS First NE WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-A Vashon Leachate Array; VALS-O Vashon Leachate Qty; VALS-M Vashon Leachate Mfg; RESS Renton Solis / Rinsate (R)

Lab No.	Sample ID	Date	Time	Number of Containers	Remarks
	SVW1070814Q	08/14/07	1130	22	VASW2(44)
	SVW2070814Q		0845	22	VASW2(44)
	SVW3070814Q		0800	22	VASW2(44)
	VTRP070814T		0800	3	

Total # Containers: 69

Relinquished By Sampler: SEVIN BILIR — Date: 08/14/07 — Time: 1510

Sampler Signature: SEVIN BILIR
Sampler Printed Name: KCSWD
Company

Relinquished By — Date — Time
Signature
Printed Name
Company

Received By: Jeff Downs — Date: 8/14/07
Signature
Printed Name: Laura — Time: 1510
Company

Observations/Comments/Special Instructions:

Instructions

1 Complete in ballpoint pen. Draw one line through errors and initial
2 Receiving lab is to sign in the shaded box
3 Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed
4 KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages
5 If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name
Tel

White and Canary KCSWD — Pink and Goldenrod Receiving Laboratory

King County
Department of
Natural Resources and Parks
Solid Waste Division

Chain of Custody Record

DATE: 08-14-07

Environmental Monitoring Program

No. 7892

Name King County Solid Waste Division
Address 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention Sendy Jimenez (206) 296-4411
Contract No T02344T
Project Site Test VA Hillslope

Project Site Test Reference

GROUNDWATER: CHGW-A Cedar Hills GW Array; CHGW C. Hills GW Qty (NP / OS); CHGW-V C. Hills GW VOAs Only; GW-APP3 Appendix III Addn'l Analytes; CFGW Cedar Falls GW Qty; DUGW Duvall GW Qty; ENGW Enumclaw GW Qty; HOGW Hobart GW Qty; HTGW Houghton GW Qty; PUGW Puyallup GW Qty; SPGW South Park GW Qty; VAGW Vashon GW Qty

SURFACE WATER: CHSW-A Cedar Hills SW Array; CHSW-O Cedar Hills SW Qty; CHSW-M Cedar Hills SW Mfg; CHSW-P Cedar Hills SW Permit; CFSW Cedar Falls SW Qty; DUSW Duvall SW Qty; RESW Renton SW Qty; SPSW South Park SW Qty; VASW Vashon SW Qty

LEACHATE/WASTEWATER: CHLS-A C. Hills Leachate Array; CHLS-M Cedar Hills Leachate Mfg; CHTW Cedar Hills Truckwash; PERMIT: CHLS-P C. Hills Leachate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; FILS First NE WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-A Vashon Leachate Array; VALS-O Vashon Leachate Qty; VALS-M Vashon Leachate Mfg; RESS Renton Solis / Rinsate (R)

Lab No.	Sample ID	Date	Time	Number of Containers	Remarks
	[illegible]				
	[illegible]				
	[illegible]				
	SVW5070814-	08/14/07	0930	11	VASW3(45)
	SVW6070814-		1000	11	
	SVW7070814-		1030	11	
	SVW4070814-		1045	11	
	VTRP070814S		0930	3	

Total # Containers: 47

Relinquished By Sampler: SEVIN BILIR — Date: 08/14/07 — Time: 1510

Sampler Signature: SEVIN BILIR
Sampler Printed Name: KCSWD
Company

Relinquished By — Date — Time
Signature
Printed Name
Company

Received By: Jeff Downs — Date: 8/14/07
Signature
Printed Name: Laura — Time: 1510
Company

Observations/Comments/Special Instructions:

Instructions

1 Complete in ballpoint pen. Draw one line through errors and initial
2 Receiving lab is to sign in the shaded box
3 Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed
4 KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages
5 If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name
Tel

White and Canary KCSWD — Pink and Goldenrod Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program

DATE: 10/30/07

King County
Department of
Natural Resources and Parks
Solid Waste Division

No. 7897

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention: Sendy Jimenez (206) 296-4411
Contract No: T02344T
Project Site Test: VA Hillslope

Project Site Test Reference

Lab No	Sample ID	Date	Time
	SVW2071030Q	10/30	1040
	SVW3071030Q	10/30	1015
	VTRP071030R	10/30	1015

Number of Containers: 22, 22, 3

Remarks: VASW2(44), VASW2(44)

Total # Containers: 47

Relinquished By Sampler: Sevin Bilir
Sampler Signature:
Sampler Printed Name: KCSWD
Company:
Date: 10/30/2007
Time: 1510

Received By:
Signature:
Printed Name:
Company:
Date:
Time:

Relinquished By:
Signature:
Printed Name:
Company:
Date:
Time:

Received By: JWeishaar
Printed Name: Lucks
Company:
Date: 10/30/07
Time: 1510

Observations/Comments/Special Instructions:

Instructions
1 Complete in ballpoint pen Draw one line through errors and initial
2 Receiving lab is to sign in the shaded box
3 Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed
4 KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages
5 If KCSWD personnel request, please provide a name and telephone number of your contact person

Name:
Tel:

White and Canary: KCSWD — Pink and Goldenrod: Receiving Laboratory

---

Chain of Custody Record

Environmental Monitoring Program

DATE: 10/30/07

King County
Department of
Natural Resources and Parks
Solid Waste Division

No. 7898

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention: Sendy Jimenez (206) 296-4411
Contract No: T02344T
Project Site Test: VA Hillslope

Project Site Test Reference

Lab No.	Sample ID	Date	Time
	SVW5071030T	10/30	
	VTRP071030T	10/30	

Number of Containers: 11, 3

Remarks: VASW3(45)

Total # Containers: 14

Relinquished By Sampler: Sevin Bilir
Sampler Signature:
Sampler Printed Name: KCSWD
Company:
Date: 10/30/2007
Time: 1510

Received By:
Signature:
Printed Name:
Company:
Date:
Time:

Relinquished By:
Signature:
Printed Name:
Company:
Date:
Time:

Received By: JWeishaar
Printed Name: Lucks
Company:
Date: 10/30/07
Time: 1510

Observations/Comments/Special Instructions:

Instructions
1 Complete in ballpoint pen Draw one line through errors and initial
2 Receiving lab is to sign in the shaded box
3 Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed
4 KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages
5 If KCSWD personnel request, please provide a name and telephone number of your contact person

Name:
Tel:

White and Canary: KCSWD — Pink and Goldenrod: Receiving Laboratory

King County
Department of
Natural Resources and Parks
Solid Waste Division

Chain of Custody Record

DATE: 10/31/07

No. 7903

Environmental Monitoring Program

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention: Sendy Jimenez (206) 296-4411
Contract No: T02344T
Project Site Test: VA Hillslope

Project Site Test Reference

GROUNDWATER: CHGW-A Cedar Hills GW Analy; CHGW C. Hills GW Qlty (NP / OS); CHGW-V C. Hills GW VOAs Only; CHGWV C. Hills GW VOAs Only; GW-APP3 Appendix III Addn'l Analytes; CFGW Cedar Falls GW Qlty; DUGW Duvall GW Qlty; ENGW Enumclaw GW Qlty; HOGW Hobart GW Qlty; HTGW Houghton GW Qlty; PUGW Puyallup GW Qlty; SPGW South Park GW Qlty; VAGW Vashon GW Qlty

SURFACE WATER: CHSW-A Cedar Hills SW Analy; CHSW-Q Cedar Hills SW Qlty; CHSW-M Cedar Hills SW Mtly; CHSW-P Cedar Hills SW Permit; CFSW Cedar Falls SW Qlty; DUSW Duvall SW Qlty; RESW Renton SW Qlty; SPSW South Park SW Qlty; VASW Vashon SW Qlty

LEACHATE/WASTEWATER: CHLS-A C. Hills Leachate Analy; CHLS-M Cedar Hills Leachate Mtly; CHTW Cedar Hills Truckwash; CHLS-P C. Hills Leachate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; FILS First NE WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-A Vashon Leachate Analy; VALS-Q Vashon Leachate Qlty; VALS-M Vashon Leachate Mtly; REDS Renton Solids / Rinsate (R); S

PERMIT

Lab No.	Sample ID	Date	Time	Number of Containers	Remarks
	SYW107103I-	10/31	1200	11	VASW-3(45)
	VTRP07103I5	10/31	1200	3	

Relinquished By Sampler: Sevin Bilir
Sampler Signature:
Sampler Printed Name: KCSWD
Company:
Date: 10/31/2007
Time: 1605

Received By:
Signature:
Printed Name:
Company:
Date:
Time:

Relinquished By:
Signature:
Printed Name:
Company:
Date:
Time:

Received By: JW Lishman
Signature: JW Lishman
Printed Name: Lawicks
Company:
Date: 10/31/07
Time: 15:05

Observations/Comments/Special Instructions:

Total # Containers: 14

Instructions
1 Complete in ballpoint pen. Draw one line through errors and initial.
2 Receiving lab to sign in the shaded box.
3 Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4 KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5 If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name:
Tel:

White and Canary: KCSWD — Pink and Goldenrod: Receiving Laboratory

King County
Department of
Natural Resources and Parks
Solid Waste Division

Chain of Custody Record

DATE: 11/1/07

No. 7905

Environmental Monitoring Program

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention: Sendy Jimenez (206) 296-4411
Contract No: T02344T
Project Site Test: VA Hillslope

Project Site Test Reference

GROUNDWATER: CHGW-A Cedar Hills GW Analy; CHGW C. Hills GW Qlty (NP / OS); CHGW-V C. Hills GW VOAs Only; GW-APP3 Appendix III Addn'l Analytes; CFGW Cedar Falls GW Qlty; DUGW Duvall GW Qlty; ENGW Enumclaw GW Qlty; HOGW Hobart GW Qlty; HTGW Houghton GW Qlty; PUGW Puyallup GW Qlty; SPGW South Park GW Qlty; VAGW Vashon GW Qlty

SURFACE WATER: CHSW-A Cedar Hills SW Analy; CHSW-Q Cedar Hills SW Qlty; CHSW-M Cedar Hills SW Mtly; CHSW-P Cedar Hills SW Permit; CFSW Cedar Falls SW Qlty; DUSW Duvall SW Qlty; RESW Renton SW Qlty; SPSW South Park SW Qlty; VASW Vashon SW Qlty

LEACHATE/WASTEWATER: CHLS-A C. Hills Leachate Analy; CHLS-M Cedar Hills Leachate Mtly; CHTW Cedar Hills Truckwash; CHLS-P C. Hills Leachate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; FILS First NE WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-A Vashon Leachate Analy; VALS-Q Vashon Leachate Qlty; VALS-M Vashon Leachate Mtly; REDS Renton Solids / Rinsate (R); S

PERMIT

Lab No.	Sample ID	Date	Time	Number of Containers	Remarks
	SYW107110IQ	11/1	1015	22	VASW-2(44)
	VTRP07110IR	11/1	1015	3	

Relinquished By Sampler: Sevin Bilir
Sampler Signature:
Sampler Printed Name: KCSWD
Company:
Date: 11/1/2007
Time: 1615

Received By:
Signature:
Printed Name:
Company:
Date:
Time:

Relinquished By:
Signature:
Printed Name:
Company:
Date:
Time:

Received By: Brandon Williams
Signature: Brandon Williams
Printed Name: Lawicks
Company:
Date: 11/1/07
Time: 16:15

Observations/Comments/Special Instructions:

Total # Containers: 25

Instructions
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name:
Tel:

White and Canary: KCSWD — Pink and Goldenrod: Receiving Laboratory

Chain of Custody Record

King County
Department of
Natural Resources and Parks
Solid Waste Division

DATE: 11/1/07

Environmental Monitoring Program

No. 7906

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention: Sendy Jimenez (206) 296-4411
Contract No: T02344T
Project Site Test: VA Hillslope

Project Site Test Reference

Lab No.	Sample ID	Date	Time
	SVW607110I-	11/1	1100
	SVW707110I-	11/1	1130
	VTRP07110IT	11/1	1100

Number of Containers: 11 (VASW3(45)), 11, 3

Remarks: VASW3(45)

Relinquished By Sampler: Sevin Bilir
Sampler Signature:
Sampler Printed Name: KCSWD
Company:
Date: 11/1
Time: 1615

Received By:
Signature:
Printed Name:
Company:
Date:
Time:

Relinquished By:
Signature:
Printed Name:
Company:
Date:
Time:

Received By: Rhonda Johns
Signature:
Printed Name: Rhonda Johns
Company: Cweb
Date: 11/1/07
Time: 1615

Observations/Comments/Special Instructions:

Total # Containers: 25

Instructions
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name:
Tel:

White and Canary: KCSWD — Pink and Goldenrod: Receiving Laboratory

Chain of Custody Record

King County
Department of
Natural Resources and Parks
Solid Waste Division

DATE: 12-18-07

Environmental Monitoring Program

No. 7907

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention: Sendy Jimenez (206) 296-4411
Contract No: T02344T
Project Site Test: VA Hillslope

Project Site Test Reference

Lab No.	Sample ID	Date	Time
	SVW207218-	12/18/07	1015
	SVW307218-		1000
	SVW407218-		1030
	SVW507218-		1245
	SVW607218-		1115
	SVW707218-		1130
	VTRP07218S	12/18/07	1015

Number of Containers: 11 (VASW-3(45)), 11, 11, 11, 11, 11, 3

Remarks: VASW-3(45)

Relinquished By Sampler:
Sampler Signature: Sevin Bilir
Sampler Printed Name: KCSWD
Company:
Date: 12/18
Time: 1517

Received By:
Signature:
Printed Name:
Company:
Date:
Time:

Relinquished By:
Signature:
Printed Name:
Company:
Date:
Time:

Received By:
Signature:
Printed Name: Louella
Company:
Date: 12/18/07
Time: 1517

Observations/Comments/Special Instructions:

Total # Containers: 69

Instructions
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name:
Tel:

White and Canary: KCSWD — Pink and Goldenrod: Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 03,12,08

Department of Natural Resources and Parks
King County **Solid Waste Division**

No. 8374

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy Jimenez 206-296-4411
Contract No.	T02344T
Project Test Site	VA Hillslope

Project Site Test Reference

Lab No.	Sample I.D.	Date	Time	Number of Containers	Remarks
	SVW1080312Q	3/12/08	1145	22	VASW2(44)
	SVW2080312Q	↓	1000	22	↓
	SVW3080312Q	↓	1015	22	
	VTRP080312S	3/12/08		3	

Relinquished By		Date 03/12/2008	Received By	Date	Observations/Comments/Special Instructions:
Signature	Sevin Bilir		Signature		
Printed Name	KCSWD	Time 0735	Printed Name	Time	
Company			Company		
Relinquished By		Date	Received By	Date 3/12/08	
Signature			Signature		
Printed Name		Time	Printed Name	Time 14:35	
Company			Company		

Total # Containers: 69

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name_____

Tel._____

0496 (10/07) Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 03,12,08

Department of Natural Resources and Parks
King County **Solid Waste Division**

No. 8375

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy Jimenez 206-296-4411
Contract No.	T02344T
Project Test Site	VA Hillslope

Project Site Test Reference

Lab No.	Sample I.D.	Date	Time	Number of Containers	Remarks
	SVW4080312-	3/12/08 ~~1250~~	1030	11	VASW3(45)
	SVW5080312-	↓	1250	10	*
	SVW6080312-	↓	1210	11	↓
	SVW7080312-	↓	1230	11	
	VTRP080312R	3/12/08		3	

Relinquished By		Date 03/12/2008	Received By	Date	Observations/Comments/Special Instructions: * SVW5080312- was missing the DO Bottle (Will collect tomorrow.)
Signature	Sevin Bilir		Signature		
Printed Name	KCSWD	Time 0735	Printed Name	Time	
Company			Company		
Relinquished By		Date	Received By	Date 3/12/08	
Signature			Signature		
Printed Name		Time	Printed Name	Time 14:35	
Company			Company		

Total # Containers: 46

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name_____

Tel._____

0496 (10/07) Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 03/13/08

King County Department of Natural Resources and Parks — Solid Waste Division

№ 8376

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy Jimenez 206-296-4411
Contract No.	T02344T
Project Test Site	VA Hillslope

Project Site Test Reference

Lab No.	Sample I.D.	Date	Time	Groundwater (1–12)	Surface Water (13–21)	Leachate / Wastewater (22–33)	S (34–36)	Number of Containers	Remarks
	SVW5080312-	3/13/08	1230					1	VASW3(45) (DO only)

Groundwater: 1 CHGW-A Cedar Hills GW Amly; 2 CHGW C. Hills GW DTLY (NPDES); 3 CHGW-V C. Hills GW VOAs Only; 4 GW-APP3 Appendix III Addn'l Analytes; 5 CFGW Cedar Falls GW Qtly; 6 DUGW Duvall GW Qtly; 7 ENGW Enumclaw GW Qtly; 8 HOGW Hobart GW Qtly; 9 HTGW Houghton GW Qtly; 10 PUGW Puyallup GW Qtly; 11 SPGW South Park GW Qtly; 12 VAGW Vashon GW Qtly

Surface Water: 13 CHSW-A Cedar Hills SW Amly; 14 CHSW-Q Cedar Hills SW Qtly; 15 CHSW-M Cedar Hills SW Mthly; 16 CHSW-P Cedar Hills SW Permit; 17 CFSW Cedar Falls SW Qtly; 18 DUSW Duvall SW Qtly; 19 RESW Renton SW Qtly; 20 SPSW South Park SW Qtly; 21 VASW Vashon SW Qtly

Leachate / Wastewater: 22 CHLS-A C. Hills Leachate Amly; 23 CHLS-M Cedar Hills Leachate Mthly; 24 CHTW Cedar Hills Treatment; 25 CHLS-P C. Hills Leachate Permit; 26 ALLS Algona WW Permit; 27 ENLS Enumclaw WW Permit; 28 FALS Factoria WW Permit; 29 FILS First NE WW Permit; 30 HTLS Houghton WW Permit; 31 RELS Renton WW Permit; 32 VALS-A Vashon Leachate Amly; 33 VALS-Q Vashon Leachate Qtly; 34 VALS-M Vashon Leachate Mthly; 35 REDS Renton Solid / Rinsate (R)

Relinquished By	Date	Received By	Date	Observations/Comments/Special Instructions:	Total # Containers:
Signature: Sevin Bilir	3/13/2008	Signature			1
Printed Name: KCSWD (Company)	Time: 1610	Printed Name (Company)	Time		
Relinquished By	Date	Received By: Pwerkheiser	Date: 3/13/08		
Signature		Signature: JPWerkheiser			
Printed Name (Company)	Time	Printed Name: Pace (Company)	Time: 1618		

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name_____

Tel._____

0498 (10/07)

Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 05/21/08

King County Department of Natural Resources and Parks — Solid Waste Division

№ 8378

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy Jimenez 206-296-4411
Contract No.	T02344T
Project Test Site	VA Hillslope

Project Site Test Reference

Lab No.	Sample I.D.	Date	Time	Groundwater (1–12)	Surface Water (13–21)	Leachate / Wastewater (22–33)	S (34–36)	Number of Containers	Remarks
	SVW1080521Q	5/21/08	1145					21	
	SVW2080521Q	↓	1040					21	
	SVW3080521Q	↓	1055					21	
	VTRP080521S	5/21/08	1140					3	VOA

Groundwater: 1 CHGW-A Cedar Hills GW Amly; 2 CHGW C. Hills GW DTLY (NPDES); 3 CHGW-V C. Hills GW VOAs Only; 4 GW-APP3 Appendix III Addn'l Analytes; 5 CFGW Cedar Hills GW Qtly; 6 DUGW Duvall GW Qtly; 7 ENGW Enumclaw GW Qtly; 8 HOGW Hobart GW Qtly; 9 HTGW Houghton GW Qtly; 10 PUGW Puyallup GW Qtly; 11 SPGW South Park GW Qtly; 12 VAGW Vashon GW Qtly

Surface Water: 13 CHSW-A Cedar Hills SW Amly; 14 CHSW-Q Cedar Hills SW Qtly; 15 CHSW-M Cedar Hills SW Mthly; 16 CHSW-P Cedar Hills SW Permit; 17 CFSW Cedar Falls SW Qtly; 18 DUSW Duvall SW Qtly; 19 RESW Renton SW Qtly; 20 SPSW South Park SW Qtly; 21 VASW Vashon SW Qtly

Leachate / Wastewater: 22 CHLS-A C. Hills Leachate Amly; 23 CHLS-M Cedar Hills Leachate Mthly; 24 CHTW Cedar Hills Treatment; 25 CHLS-P C. Hills Leachate Permit; 26 ALLS Algona WW Permit; 27 ENLS Enumclaw WW Permit; 28 FALS Factoria WW Permit; 29 FILS First NE WW Permit; 30 HTLS Houghton WW Permit; 31 RELS Renton WW Permit; 32 VALS-A Vashon Leachate Amly; 33 VALS-Q Vashon Leachate Qtly; 34 VALS-M Vashon Leachate Mthly; 35 REDS Renton Solid / Rinsate (R)

Relinquished By	Date	Received By	Date	Observations/Comments/Special Instructions:	Total # Containers:
Signature: Sevin Bilir	5/21/08	Signature			66
Printed Name: KCSWD (Company)	Time: 1505	Printed Name (Company)	Time		
Relinquished By	Date	Received By: Pwerkheiser	Date: 5/21/08		
Signature		Signature: JPWerkheiser			
Printed Name (Company)	Time	Printed Name: Pace (Company)	Time: 15:05		

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name_____

Tel._____

0498 (10/07)

Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 07, 15, 08

King County Department of Natural Resources and Parks — Solid Waste Division

№ 8415

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy Jimenez 206-296-4411
Contract No.	T02344T
Project Test Site	VA Hillslope

Project Site Test Reference

Groundwater: CHGW-A Cedar Hills GW Annly; CHGW C. Hills GW QTLY (NP/DS); CHGW-V C. Hills GW VOAs Only; GW-APP3 Appendix III Addn'l Analytes; CFGW Cedar Hills GW Only; DUGW Duvall GW Only; ENGW Enumclaw GW Only; HOGW Hobart GW Only; HTGW Houghton GW Only; PUGW Puyallup GW Only; SPGW South Park GW Only; VAGW Vashon GW Only

Surface Water: CHSW-A Cedar Hills SW Annly; CHSW-Q Cedar Hills SW Only; CHSW-M Cedar Hills SW Mthy; CHSW-P Cedar Hills SW Permit; CFSW Cedar Falls SW Only; DUSW Duvall SW Only; RESW Renton SW Only; SPSW South Park SW Only; VASW Vashon SW Only

Leachate / Wastewater: CHLS-A C. Hills Leachate Annly; CHLS-M Cedar Hills Leachate Mthy; CHTW Cedar Hills Trockwash; CHLS-P C. Hills Leachate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; FILS First NE WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-A Vashon Leachate Permit; VALS-S Vashon Leachate Annly; VALS-Q Vashon Leachate Only; VALS-M Vashon Leachate Mthy; RESS Renton Solv / Rinsate (R); Number of Containers

Lab No.	Sample I.D.	Date	Time	Number of Containers	Remarks
	SVW1080715Q	07/15/08	1130	22	VASW2(44)
	SVW2080715Q	07/15/08	1030	22	↓
	SVW3080715Q	07/15/08	1005	22	
	VTRP080715R	07/15/08	1130	3	

Relinquished By	Date 07/15	Received By	Date	Observations/Comments/Special Instructions:
Signature Sevin Bilir	2008	Signature		Total # Containers: 69
Printed Name KCSWD	Time 1340	Printed Name	Time	Instructions:
Company		Company		1. Complete in ballpoint pen. Draw one line through errors and initial.
Relinquished By	Date	Received By	Date 7/15/08	2. Receiving lab is to sign in the shaded box.
Signature		Signature JPWilshaar		3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
Printed Name	Time	Printed Name Pace	Time 1340	4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
Company		Company		5. If KCSWD personnel request, please provide a name and telephone number of your contact person.
				Name
				Tel

0498 (10/07) Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 07, 15, 08

King County Department of Natural Resources and Parks — Solid Waste Division

№ 8416

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy Jimenez 206-296-4411
Contract No.	T02344T
Project Test Site	VA Hillslope

Project Site Test Reference

Groundwater: CHGW-A Cedar Hills GW Annly; CHGW C. Hills GW QTLY (NP/DS); CHGW-V C. Hills GW VOAs Only; GW-APP3 Appendix III Addn'l Analytes; CFGW Cedar Hills GW Only; DUGW Duvall GW Only; ENGW Enumclaw GW Only; HOGW Hobart GW Only; HTGW Houghton GW Only; PUGW Puyallup GW Only; SPGW South Park GW Only; VAGW Vashon GW Only

Surface Water: CHSW-A Cedar Hills SW Annly; CHSW-Q Cedar Hills SW Only; CHSW-M Cedar Hills SW Mthy; CHSW-P Cedar Hills SW Permit; CFSW Cedar Falls SW Only; DUSW Duvall SW Only; RESW Renton SW Only; SPSW South Park SW Only; VASW Vashon SW Only

Leachate / Wastewater: CHLS-A C. Hills Leachate Annly; CHLS-M Cedar Hills Leachate Mthy; CHTW Cedar Hills Trockwash; CHLS-P C. Hills Leachate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; FILS First NE WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-A Vashon Leachate Permit; VALS-S Vashon Leachate Annly; VALS-Q Vashon Leachate Only; VALS-M Vashon Leachate Mthy; RESS Renton Solv / Rinsate (R); Number of Containers

Lab No.	Sample I.D.	Date	Time	Number of Containers	Remarks
	SVW5080715	07/15/2008	1040	11	VASW3(45)
	SVW6080715	07/15/2008	1110	11	VASW3(45)
	SVW6080715E	07/15/2008	1105	1	Dissolved metals only (same sample as on SVW6080715-)
	VTRP080715T	07/15/2008	1040	3	

Relinquished By	Date 07/15	Received By	Date	Observations/Comments/Special Instructions:
Signature Sevin Bilir	2008	Signature		Total # Containers: 26
Printed Name KCSWD	Time 1340	Printed Name	Time	Instructions:
Company		Company		1. Complete in ballpoint pen. Draw one line through errors and initial.
Relinquished By	Date	Received By	Date 7/15/08	2. Receiving lab is to sign in the shaded box.
Signature		Signature JPWilshaar		3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
Printed Name	Time	Printed Name Pace	Time 1340	4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
Company		Company		5. If KCSWD personnel request, please provide a name and telephone number of your contact person.
				Name
				Tel

0498 (10/07) Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

KC440803

Chain of Custody Record

LS#8899

Environmental Monitoring Program Date 10,06,08

King County Department of Natural Resources and Parks — Solid Waste Division

No. 8420

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy Jimenez 206-296-4411
Contract No.	T02344T
Project Test Site	VASW2(44) VA Hillslope

Project Site Test Reference

Groundwater: CHGW-A Cedar Hills GW Amnly; CHGW C. Hills GW OTLY (NPDES); CHGW-V C. Hills GW VOAs Only; GW-APP3 Appendix III Addn'l Analytes; CFGW Cedar Hills GW Only; DUGW Duvall GW Only; ENGW Enumclaw GW Only; HOGW Hobart GW Only; HTGW Houghton GW Only; PUGW Puyallup GW Only; SPGW South Park GW Only; VAGW Vashon GW Only

Surface Water: CHSW-A Cedar Hills SW Amnly; CHSW-O Cedar Hills SW Only; CHSW-M Cedar Hills SW Mthly; CHSW-P Cedar Hills SW Permit; CFSW Cedar Falls SW Only; DUSW Duvall SW Only; RESW Renton SW Only; SPSW South Park SW Only; VASW Vashon SW Only

Leachate / Wastewater: CHLS-A C. Hills Leachate Amnly; CHLS-M Cedar Hills Leachate Mthly; CHTW Cedar Hills Trockwash; CHLS-P C. Hills Leachate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; FILS First NE WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-A Vashon Leachate Permit; VALS-S Vashon Leachate Amnly; VALS-O Vashon Leachate Only; VALS-M Vashon Leachate Mthly; REDS Renton Soils / Rinsate (R)

PERMIT

Lab No.	Sample I.D.	Date	Time	Groundwater 1–12	Surface Water 13–21	Leachate / Wastewater 22–35	S 36	Number of Containers	Remarks
1	SVW1081006Q	10/06/2008	1300					22	VASW2(44)
2	SVW2081006Q	↓	1005					22	↓
3	SVW3081006Q		1030					22	
7	VTRP081006R	10/06/2008	1030					3	

KC440803 Pg. 2/10

Relinquished By	Date: 10/06/2008	Received By	Date	Observations/Comments/Special Instructions:	Total # Containers: 89		
Signature: Selim BILIR	Time: 1505	Signature	Time				
Printed Name: KCSWD	Company	Printed Name	Company				
Relinquished By	Date	Received By	Date: 10/6/08				
Signature		Signature	Time: 15:05				
Printed Name	Time	Printed Name	Company				
Company		Company					

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name: Tel:

0498 (10/07)

Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

KC450804

Chain of Custody Record

LS#8900

Environmental Monitoring Program Date 10,06,08

King County Department of Natural Resources and Parks — Solid Waste Division

No. 8421

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy Jimenez 206-296-4411
Contract No.	T02344T
Project Test Site	VASW3(45) VA Hillslope

Project Site Test Reference

Groundwater: CHGW-A Cedar Hills GW Amnly; CHGW C. Hills GW OTLY (NPDES); CHGW-V C. Hills GW VOAs Only; GW-APP3 Appendix III Addn'l Analytes; CFGW Cedar Hills GW Only; DUGW Duvall GW Only; ENGW Enumclaw GW Only; HOGW Hobart GW Only; HTGW Houghton GW Only; PUGW Puyallup GW Only; SPGW South Park GW Only; VAGW Vashon GW Only

Surface Water: CHSW-A Cedar Hills SW Amnly; CHSW-O Cedar Hills SW Only; CHSW-M Cedar Hills SW Mthly; CHSW-P Cedar Hills SW Permit; CFSW Cedar Falls SW Only; DUSW Duvall SW Only; RESW Renton SW Only; SPSW South Park SW Only; VASW Vashon SW Only

Leachate / Wastewater: CHLS-A C. Hills Leachate Amnly; CHLS-M Cedar Hills Leachate Mthly; CHTW Cedar Hills Trockwash; CHLS-P C. Hills Leachate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; FILS First NE WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-A Vashon Leachate Permit; VALS-S Vashon Leachate Amnly; VALS-O Vashon Leachate Only; VALS-M Vashon Leachate Mthly; REDS Renton Soils / Rinsate (R)

PERMIT

Lab No.	Sample I.D.	Date	Time	Groundwater 1–12	Surface Water 13–21	Leachate / Wastewater 22–35	S 36	Number of Containers	Remarks
1	SVW5081006-	10/06/2008	1045					11	VASW3(45)
2	SVW6081006-	↓	1115					11	↓
4	VTRP081006T	10/06/2008	1045					3	
3	SVW6081006E	10/06/2008	1105					1	*See Note

KC450804 Pg. 2/7

Relinquished By	Date: 10/06/2008	Received By	Date	Observations/Comments/Special Instructions: *Note: Dissolved Metals Only	Total # Containers: 26		
Signature: Selim BILIR	Time: 1505	Signature	Time				
Printed Name: KCSWD	Company	Printed Name	Company				
Relinquished By	Date	Received By	Date: 10/6/08				
Signature		Signature	Time: 15:05				
Printed Name	Time	Printed Name	Company				
Company		Company					

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name: Tel:

0498 (10/07)

Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 01,06,09

King County Department of Natural Resources and Parks — Solid Waste Division

№ 08877

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy Jimenez 206-296-4411
Contract No.	T02344T
Project Test Site	VASW (2)44 VA Hillslope

Project Site Test Reference

Groundwater: CHGW-A Cedar Hills GW Annly; CHGW C. Hills GW QTLY (NPDES); CHGW-V C. Hills GW VOAs Only; GW-APP3 Appendix III Addn'l Analytes; CFGW Cedar Falls GW Only; DUGW Duvall GW Only; ENGW Enumclaw GW Only; HOGW Hobart GW Only; HTGW Houghton GW Only; PUGW Puyallup GW Only; VAGW Vashon GW Only

Surface Water: CHSW-A Cedar Hills SW Annly; CHSW-Q Cedar Hills SW Only; CHSW-M Cedar Hills SW Mthly; CHSW-P Cedar Hills SW Permit; CHSW-P+FC South Lagoon SW; CHSW Area 5 Surface Water; CFSW Cedar Falls SW Only; DUSW Duvall SW Only; RESW Renton SW Only; VASW Vashon SW Only

Leachate / Wastewater: CHLS-A C. Hills Leachate Annly; CHLS-M Cedar Hills Leachate Mthly; CHTW Cedar Hills Truckwash; PERMIT: CHLS-P C. Hills Leachate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; SHLS Shoreline WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-A Vashon Leachate Annly; VALS-Q Vashon Leachate Qtly; VALS-M Vashon Leachate Mthly; REDS Renton Solis / Rinsate (RI); S; Number of Containers

Remarks

Lab No.	Sample I.D.	Date	Time	Number of Containers
	SVW20901060	01/06 2009	1115	22
	SVW30901060	01/06 2009	1030	22
	VTRP090106R	01/06 2009	1030	3

Relinquished By Sampler	SBILLR	Date	01/06 2009	Received By / Signature / Printed Name / Company
Sampler Signature		Time	1615	Date / Time
Sampler Printed Name	KCSWD	Relinquished By / Signature / Printed Name / Company		Received By: JENNI GROSS; Signature: JENNI GROSS; Printed Name: PACE; Company; Date 1/6/9; Time 16:15

Observations/Comments/Special Instructions:

Total # Containers: 47

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name_____

Tel._____

0498 (Rev. 6/08) Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

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Chain of Custody Record

Environmental Monitoring Program Date 01,06,09

King County Department of Natural Resources and Parks — Solid Waste Division

№ 08876

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy Jimenez 206-296-4411
Contract No.	T02344T
Project Test Site	VASW 3(45) VA Hillslope

Project Site Test Reference

Groundwater: CHGW-A Cedar Hills GW Annly; CHGW C. Hills GW QTLY (NPDES); CHGW-V C. Hills GW VOAs Only; GW-APP3 Appendix III Addn'l Analytes; CFGW Cedar Falls GW Only; DUGW Duvall GW Only; ENGW Enumclaw GW Only; HOGW Hobart GW Only; HTGW Houghton GW Only; PUGW Puyallup GW Only; VAGW Vashon GW Only

Surface Water: CHSW-A Cedar Hills SW Annly; CHSW-Q Cedar Hills SW Only; CHSW-M Cedar Hills SW Mthly; CHSW-P Cedar Hills SW Permit; CHSW-P+FC South Lagoon SW; CHSW Area 5 Surface Water; CFSW Cedar Falls SW Only; DUSW Duvall SW Only; RESW Renton SW Only; VASW Vashon SW Only

Leachate / Wastewater: CHLS-A C. Hills Leachate Annly; CHLS-M Cedar Hills Leachate Mthly; CHTW Cedar Hills Truckwash; PERMIT: CHLS-P C. Hills Leachate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; SHLS Shoreline WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-A Vashon Leachate Annly; VALS-Q Vashon Leachate Qtly; VALS-M Vashon Leachate Mthly; REDS Renton Solis / Rinsate (RI); S; Number of Containers

Remarks

Lab No.	Sample I.D.	Date	Time	Number of Containers	
	SVW50901060	01/06 2009	1130	11	
	SVW60901060	01/06 2009	1155	11	
	VTRP090106	01/06 2009	1155	3	
	SVW60901060E	01/06 2009	1155	1	Dissolved Metals ONLY

Relinquished By Sampler	SBILLR	Date	01/06 2009	Received By / Signature / Printed Name / Company
Sampler Signature		Time	1615	Date / Time
Sampler Printed Name	KCSWD	Relinquished By / Signature / Printed Name / Company		Received By: JENNI GROSS; Signature: JENNI GROSS; Printed Name: PACE; Company; Date 1/6/9; Time 16:15

Observations/Comments/Special Instructions:

Total # Containers: 26

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name_____

Tel._____

Chain of Custody Record

Environmental Monitoring Program Date 03,23,09

King County Department of Natural Resources and Parks — Solid Waste Division

№ 08881

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy Jimenez 206-296-4411
Contract No.	T02344T
Project Test Site	VASW-3(45) VA West Hillslope

Project Site Test Reference

Groundwater												Surface Water												Leachate / Wastewater														S	
CHGW-A Cedar Hills GW Annly	CHGW C. Hills GW OTLY (NPDES)	CHGW-V C. Hills GW VOAs Only	GW-APP3 Appendix III Addtl Analytes	CFGW Cedar Falls GW Only	DUGW Duvall GW Only	ENGW Enumclaw GW Only	HOGW Hobart GW Only	HTGW Houghton GW Only	PUGW Puyallup GW Only	VAGW Vashon GW Only	CHSW-A Cedar Hills SW Annly	CHSW-Q Cedar Hills SW Only	CHSW-M Cedar Hills SW Mthly	CHSW-P Cedar Hills SW Permit	CHSW-P-FC South Lagoon SW	CHSW Area 5 Surface Water	CFSW Cedar Falls SW Only	DUSW Duvall SW Only	RESW Renton SW Only	VASW Vashon SW Only	CHLS-A C. Hills Leachate Annly	CHLS-M Cedar Hills Leachate Mthly	CHTW Cedar Hills Trucwash	CHLS-P C. Hills Leachate Permit	ALLS Algona WW Permit	ENLS Enumclaw WW Permit	FALS Factoria WW Permit	SHLS Shoreline WW Permit	HTLS Houghton WW Permit	RELS Renton WW Permit	VALS-P Vashon Leachate Permit	VALS-A Vashon Leachate Annly	VALS-Q Vashon Leachate Only	VALS-M Vashon Leachate Mthly	REDS Renton Solid / Rilosate (R)	Number of Containers	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	16*	42	17	18	19	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36			

Lab No.	Sample I.D.	Date	Time																																						
	SVW5090323-	3/23 2009	1200																																			11	VASW-3(45)
	VTRP090323R	↓	1200																																			3	

Relinquished By Sampler	SBILIK	Date 3/23	Received By	Date	Observations/Comments/Special Instructions:
Sampler Signature		2009	Signature		
Sampler Printed Name	KCSWD	Time 1610	Printed Name	Time	
Company			Company		
Relinquished By		Date	Received By JENNI GRASS	Date 3/23/2009	
Signature			Signature JENNI GRASS		
Printed Name		Time	Printed Name PACE	Time 16:10	
Company			Company		

Total # Containers: 14

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name_____

Tel._____

0498 (Rev. 6/08) Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 03,24,09

King County Department of Natural Resources and Parks — Solid Waste Division

№ 08879

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy Jimenez 206-296-4411
Contract No.	T02344T
Project Test Site	VASW-3(45) VA West Hillslope

Project Site Test Reference

Groundwater												Surface Water												Leachate / Wastewater														S	
CHGW-A Cedar Hills GW Annly	CHGW C. Hills GW OTLY (NPDES)	CHGW-V C. Hills GW VOAs Only	GW-APP3 Appendix III Addtl Analytes	CFGW Cedar Falls GW Only	DUGW Duvall GW Only	ENGW Enumclaw GW Only	HOGW Hobart GW Only	HTGW Houghton GW Only	PUGW Puyallup GW Only	VAGW Vashon GW Only	CHSW-A Cedar Hills SW Annly	CHSW-Q Cedar Hills SW Only	CHSW-M Cedar Hills SW Mthly	CHSW-P Cedar Hills SW Permit	CHSW-P-FC South Lagoon SW	CHSW Area 5 Surface Water	CFSW Cedar Falls SW Only	DUSW Duvall SW Only	RESW Renton SW Only	VASW Vashon SW Only	CHLS-A C. Hills Leachate Annly	CHLS-M Cedar Hills Leachate Mthly	CHTW Cedar Hills Trucwash	CHLS-P C. Hills Leachate Permit	ALLS Algona WW Permit	ENLS Enumclaw WW Permit	FALS Factoria WW Permit	SHLS Shoreline WW Permit	HTLS Houghton WW Permit	RELS Renton WW Permit	VALS-P Vashon Leachate Permit	VALS-A Vashon Leachate Annly	VALS-Q Vashon Leachate Only	VALS-M Vashon Leachate Mthly	REDS Renton Solid / Rilosate (R)	Number of Containers	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	16*	42	17	18	19	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36			

Lab No.	Sample I.D.	Date	Time																																						
	SVW6090324-	3/24 2009	1300																																				11	VASW-3(45)
	VTRP090324T	↓	1300																																				3	
	SVW6090324E	↓	1310																																				1	Dissolved Metals ONLY

Relinquished By Sampler	SBILIK	Date 3/24	Received By	Date	Observations/Comments/Special Instructions:
Sample: Signature		2009	Signature		
Sampler Printed Name	KCSWD	Time 1430	Printed Name	Time	
Company			Company		
Relinquished By		Date	Received By Natalie Taylor	Date 3/24/09	
Signature			Signature Natalie Taylor		
Printed Name		Time	Printed Name Pace	Time 1430	
Company			Company		

Total # Containers: 15

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name_____

Tel._____

0498 (Rev. 6/08) Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record
Environmental Monitoring Program Date 03/26/09

Department of Natural Resources and Parks
King County **Solid Waste Division**

Nº 08884

Name King County Solid Waste Division
Address 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention Sendy Jimenez 206-296-4411
Contract No. T02344T
Project Test Site VASW-2(44) VA West Hillslope

Remarks
COPY

Project Site Test Reference

				Groundwater											Surface Water										Leachate / Wastewater			PERMIT											S		
Lab No.	Sample I.D.	Date	Time	1 CHGW-A Cedar Hills GW Annly	2 CHGW C. Hills GW QTLY (NP/OS)	3 CHGW-V C. Hills GW VOAs Only	4 GW-APP3 Appendix III Add'l Analytes	5 CFGW Cedar Falls GW Qtly	6 DUGW Duvall GW Qtly	7 ENGW Enumclaw GW Qtly	8 HOGW Hobart GW Qtly	9 HTGW Houghton GW Qtly	10 FUGW Puyallup GW Qtly	12 VAGW Vashon GW Qtly	13 CHSW-A Cedar Hills SW Annly	14 CHSW-Q Cedar Hills SW Qtly	15 CHSW-M Cedar Hills SW Mtly	16 CHSW-P Cedar Hills SW Permit	16+ CHSW+P+FC South Lagoon SW	42 CHSW Area 5 Surface Water	17 CFSW Cedar Falls SW Qtly	18 DUSW Duvall SW Qtly	19 RESW Renton SW Qtly	21 VASW Vashon SW Qtly	22 CHLS-A C. Hills Leachate Annly	23 CHLS-M Cedar Hills Leachate Mtly	24 CHTW Cedar Hills Truckwash	25 CHLS-P C. Hills Leachate Permit	26 ALLS Algona WW Permit	27 ENLS Enumclaw WW Permit	28 FALS Factoria WW Permit	29 SHLS Shoreline WW Permit	30 HTLS Houghton WW Permit	31 RELS Renton WW Permit	32 VALS-P Vashon Leachate Permit	33 VALS-A Vashon Leachate Annly	34 VALS-Q Vashon Leachate Qtly	35 VALS-M Vashon Leachate Mtly	36 REDS Renton Soils / Rinsate (R)	Number of Containers	Remarks
	SVW1090326Q	3/26	1100																																					22	VASW-2(44)
	SVW2090326Q	2009	1000																																					22	↓
	SVW3090326Q	↓	1015																																					22	↓
	VTRP090326R	↓	1015																																					3	

Relinquished By Sampler: Sevin Bilir
Date: 3/26 2009
Sampler Signature
Sampler Printed Name: KCSWD
Company
Time: 1245
Received By: Crystal Petrillo
Signature: Crystal Petrillo
Printed Name: Crystal Petrillo
Company: Pace
Date: 3/26 2009
Time: 12:45

Relinquished By
Signature
Printed Name
Company
Date
Time
Received By
Signature
Printed Name
Company
Date
Time

Observations/Comments/Special Instructions:

Total # Containers: 69

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name
Tel.

0498 (Rev. 6/08) Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

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Chain of Custody Record
Environmental Monitoring Program Date 07/10/09

Department of Natural Resources and Parks
King County **Solid Waste Division**

Nº 09657

Name King County Solid Waste Division
Address 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention Sendy P. Jimenez 206-296-4411
Authorization KCEL Lab Services to KCSWD
Project Test Site VASW-3(45) VA Hillslope

Remarks
COPY

Project Site Test Reference

				GROUNDWATER													SURFACE WATER								HILL			LEACHATE/WASTEWATER		PERMIT											
Lab No.	Sample I.D.	Date	Time	2 CHGW Cedar Hills GW Qtly	3 CHGW-V C. Hills GW VOAs Only	37 CHGW-NP Cedar Hills GW-NonPotable	38 CHGW-OS C. Hills GW Offsite	41 CHGW-E Cedar Hills GW Eqpt Blank	50 CHGW-O Cedar Hills GW-OrthoP Blank	5 CFGW Cedar Falls GW Qtly	6 DUGW Duvall GW Qtly	7 ENGW Enumclaw GW Qtly	8 HOGW Hobart GW Qtly	9 HTGW Houghton GW Qtly	10 PUGW Puyallup GW Qtly	12 VAGW Vashon GW Qtly	14 CHSW-Q Cedar Hills SW Quarterly	15 CHSW-M Cedar Hills SW Monthly	16 CHSW-P Cedar Hills SW Permit	46 CHSW-P2 Cedar Hills SW South Lagoon	42 CHSW-A5 Cedar Hills Area 5 Top Deck	17 CFSW Cedar Falls SW Qtly	18 DUSW Duvall SW Qtly	21 VASW Vashon SW Qtly	43 VASW-1 Vashon Hillslope SW Qtly	44 VASW-2 Vashon Hillslope SW Qtly	45 VASW-3 Vashon Hillslope SW Qtly	23 CHLS-M Cedar Hills Leachate Mtly	24 CHTW Cedar Hills Truckwash	25 CHLS-P Cedar Hills L'chate Permit	26 ALLS Algona WW Permit	27 ENLS Enumclaw WW Permit	28 FALS Factoria WW Permit	29 SRTS Shoreline WW Permit	30 HTLS Houghton WW Permit	31 RELS Renton WW Permit	32 VALS-P Vashon Leachate Permit	34 VALS-Q/M Vashon Leachate Qtly/Mtly	49 CHSW-E Cedar Hills Emergency Spill	Number of Containers	Remarks
	SVW5090710-	2009 07/10	1025																																					12	VASW-3(45)
	SVW5090710E	↓	1025																																					1	Dissolved Metals
	SVW6090710-		1115																																					12	VASW-3(45)
	VTRP090710R	↓	1115																																					3	

Relinquished By Sampler
Date: 2009 07/10
Sampler Signature: SEVIN BILIR
Sampler Printed Name: KCED for KCSWD
Company
Time: 1350
Received By
Signature
Printed Name
Company
Date
Time

Relinquished By
Signature
Printed Name
Company
Date
Time
Received By
Signature: Jason Kinnard
Printed Name: KCEL
Company
Date: 7-10-09
Time: 1350

Observations/Comments/Special Instructions:

Total # of Bottles:

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/09) Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 07/13/09

King County Department of Natural Resources and Parks — Solid Waste Division

No 09658

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy P. Jimenez 206-296-4411
Authorization	KCEL Lab Services to KCSWD
Project Test Site	VASW-2(44) VA hillslope

Project Site Test Reference

GROUNDWATER: CHGW Cedar Hills GW Qlty; CHGW-V C. Hills GW VOAs Only; CHGW-NP Cedar Hills GW-NonPotable; CHGW-OS C. Hills GW Offsite; CHGW-E Cedar Hills GW Eqpt Blank; CHGW-O Cedar Hills GW-OnNoP Blank; CFGW Cedar Falls GW Qlty; DUGW Duvall GW Qlty; ENGW Enumclaw GW Qlty; HOGW Hobart GW Qlty; HTGW Houghton GW Qlty; PUGW Puyallup GW Qlty; VAGW Vashon GW Qlty

SURFACE WATER: CHSW-Q Cedar Hills SW Quarterly; CHSW-M Cedar Hills SW Monthly; CHSW-P Cedar Hills SW Permit; CHSW-P2 Cedar Hills SW South Lagoon; CHSW-A5 Cedar Hills Area 5 Top Deck; CFSW Cedar Falls SW Qlty; DUSW Duvall SW Qlty; VASW Vashon SW Qlty; VASW-1 Vashon Hillslope SW Qlty; VASW-2 Vashon Hillslope SW Qlty; VASW-3 Vashon Hillslope SW Qlty

HILL: CHLSM Cedar Hills Leachate Mtly; CHTW Cedar Hills Treatwash

LEACHATE/WASTEWATER: CHLS-P Cedar Hills Leachate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; SRTS Shoreline WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-Q,TM Vashon Leachate Qtly/Mthly; CHSW-E Cedar Hills Emergency Spill

Lab No.	Sample I.D.	Date	Time	Number of Containers	Remarks
	SVW10907130	2009 7/13	1110	23	VASW-2(44) *
	SVW20907130	↓	0940	23	↓
	SVW30907130	↓	1045	23	↓
	VTRP090713R	2009 7/13	0940	3	

	Date	Received By	Date	Observations/Comments/Special Instructions:	Total # of Bottles:
Relinquished By Sampler	2009			* RE: CN	
Sampler Signature: SEVIN BILIK	7/13	Signature		"TEST STRIP = NO REACTION"	
Sampler Printed Name: WLRD GR KCSWD	Time 1441	Printed Name	Time		
Company		Company			
Relinquished By	Date	Received By	Date		
Signature		Signature: Jason Kinard	7-13-09		
Printed Name	Time	Printed Name: KCEL	Time 1441		
Company		Company			

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

9498 (Rev. 3/09)

Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 10/19/2009

King County Department of Natural Resources and Parks — Solid Waste Division

No 09672

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy P. Jimenez 206-296-4411
Authorization	KCEL Lab Services to KCSWD
Project Test Site	VASW-3(45) VA West hillslope

Project Site Test Reference

GROUNDWATER: CHGW Cedar Hills GW Qlty; CHGW-V C. Hills GW VOAs Only; CHGW-NP Cedar Hills GW-NonPotable; CHGW-OS C. Hills GW Offsite; CHGW-E Cedar Hills GW Eqpt Blank; CHGW-O Cedar Hills GW-OnNoP Blank; CFGW Cedar Falls GW Qlty; DUGW Duvall GW Qlty; ENGW Enumclaw GW Qlty; HOGW Hobart GW Qlty; HTGW Houghton GW Qlty; PUGW Puyallup GW Qlty; VAGW Vashon GW Qlty

SURFACE WATER: CHSW-Q Cedar Hills SW Quarterly; CHSW-M Cedar Hills SW Monthly; CHSW-P Cedar Hills SW Permit; CHSW-P2 Cedar Hills SW South Lagoon; CHSW-A5 Cedar Hills Area 5 Top Deck; CFSW Cedar Falls SW Qlty; DUSW Duvall SW Qlty; VASW Vashon SW Qlty; VASW-1 Vashon Hillslope SW Qlty; VASW-2 Vashon Hillslope SW Qlty; VASW-3 Vashon Hillslope SW Qlty

HILL: CHLSM Cedar Hills Leachate Mtly; CHTW Cedar Hills Treatwash

LEACHATE/WASTEWATER: CHLS-P Cedar Hills Leachate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; SRTS Shoreline WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-Q,TM Vashon Leachate Qtly/Mthly; CHSW-E Cedar Hills Emergency Spill

Lab No.	Sample I.D.	Date	Time	Number of Containers	Remarks
	SVW5091019—	10/19/09	1130	12	VASW-3(45)
	SVW5091019E	↓	1120	1	Dissolved Metals
	SVW6091019—	↓	1230	12	VASW-3(45)
	VTRP091019R	10/16/09	—	3	

	Date	Received By	Date	Observations/Comments/Special Instructions:	Total # of Bottles:
Relinquished By Sampler: SEVIN BILIK	10/19 2009				27
Sampler Signature		Signature			
Sampler Printed Name: KCSWD	Time 1500	Printed Name	Time		
Company		Company			
Relinquished By	Date	Received By	Date		
Signature		Signature: Jason Kinard	10-19-09		
Printed Name	Time	Printed Name: KCEL	Time 1500		
Company		Company			

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

9498 (Rev. 3/09)

Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 10/20/2009

King County Department of Natural Resources and Parks — Solid Waste Division

№ 09673

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy P. Jimenez 206-296-4411
Authorization	KCEL Lab Services to KCSWD
Project Test Site	VASW-2(44) WA West Hillslope

Project Site Test Reference

GROUNDWATER: CHGW Cedar Hills GW Only; CHGW-V C. Hills GW WOAs Only; CHGW-NP Cedar Hills GW-NonPotable; CHGW-OS C. Hills GW Offsite; CHGW-E Cedar Hills GW Eqpt Blank; CHGW-O Cedar Hills GW-OrthoP Blank; CFGW Cedar Falls GW Only; DUGW Duvall GW Only; ENGW Enumclaw GW Only; HOGW Hobart GW Only; HTGW Houghton GW Only; PUGW Puyallup GW Only; YAGW Yashon GW Only

SURFACE WATER: CHSW-Q Cedar Hills SW Quarterly; CHSW-M Cedar Hills SW Monthly; CHSW-P Cedar Hills SW Permit; CHSW-P2 Cedar Hills SW South Lagoon; CHSW-A5 Cedar Hills Area 5 Top Deck; CFSW Cedar Falls SW Only; DUSW Duvall SW Only; YASW Yashon SW Only; HILL: VASW-1 Yashon Hillslope SW Qtly; VASW-2 Yashon Hillslope SW Qtly; VASW-3 Yashon Hillslope SW Qtly

LEACHATE/WASTEWATER: CHLS-M Cedar Hills Leachate Mthly; CHTW Cedar Hills Treatment; PERMIT: CHLS-P Cedar Hills Leachate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; SRTS Shoreline WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; YALS-P Yashon Leachate Permit; YALS-Q / M Yashon Leachate Qtly/Mthly; CHSW-E Cedar Hills Emergency Spill; Number of Containers

Lab No.	Sample I.D.	Date	Time	Project Site Test Reference	Number of Containers	Remarks
	SVW1 09102 09	10/20/2009	1205	2 3 37 38 41 50 5 6 7 8 9 10 12 14 15 16 46 42 17 18 21 43 44 45 23 24 25 26 27 28 29 30 31 32 34 49	23	VASW-2(44)
	SVW2 09102 09		1145		23	
	SVW3 09102 09		1110		23	
	SVW3 09102 0D		1120		23	
	VTRP 09102 0R	10/19/2009	—		3	

Relinquished By Sampler	Date 10/19	Received By	Date	Observations/Comments/Special Instructions:	Total # of Bottles: 95
Sampler Signature SEVIN BILIR	Time 09	Signature	Time		
Sampler Printed Name KCSWD	Time 1420	Printed Name	Time		
Company		Company			
Relinquished By	Date	Received By	Date		
Signature		Signature Jason Lynard	10-19-09		
Printed Name	Time	Printed Name KCEL	Time 1420		
Company		Company			

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0499 (Rev. 3/09) Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 01/21/2010

King County Department of Natural Resources and Parks — Solid Waste Division

№ 09677

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy P. Jimenez 206-296-4411
Authorization	KCEL Lab Services to KCSWD
Project Test Site	VASW-2(44) West Hillslope

Project Site Test Reference

GROUNDWATER: CHGW Cedar Hills GW Only; CHGW-V C. Hills GW WOAs Only; CHGW-NP Cedar Hills GW-NonPotable; CHGW-OS C. Hills GW Offsite; CHGW-E Cedar Hills GW Eqpt Blank; CHGW-O Cedar Hills GW-OrthoP Blank; CFGW Cedar Falls GW Only; DUGW Duvall GW Only; ENGW Enumclaw GW Only; HOGW Hobart GW Only; HTGW Houghton GW Only; PUGW Puyallup GW Only; YAGW Yashon GW Only

SURFACE WATER: CHSW-Q Cedar Hills SW Quarterly; CHSW-M Cedar Hills SW Monthly; CHSW-P Cedar Hills SW Permit; CHSW-P2 Cedar Hills SW South Lagoon; CHSW-A5 Cedar Hills Area 5 Top Deck; CFSW Cedar Falls SW Only; DUSW Duvall SW Only; YASW Yashon SW Only; HILL: VASW-1 Yashon Hillslope SW Qtly; VASW-2 Yashon Hillslope SW Qtly; VASW-3 Yashon Hillslope SW Qtly

LEACHATE/WASTEWATER: CHLS-M Cedar Hills Leachate Mthly; CHTW Cedar Hills Treatment; PERMIT: CHLS-P Cedar Hills Leachate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; SRTS Shoreline WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; YALS-P Yashon Leachate Permit; YALS-Q / M Yashon Leachate Qtly/Mthly; CHSW-E Cedar Hills Emergency Spill; Number of Containers

Lab No.	Sample I.D.	Date	Time	Project Site Test Reference	Number of Containers	Remarks
L499493-4	SVW1 00121 Q	01/21/2010	1140	2 3 37 38 41 50 5 6 7 8 9 10 12 14 15 16 46 42 17 18 21 43 44 45 23 24 25 26 27 28 29 30 31 32 34 49	23	
L499493-3	SVW2 00121 Q		1000		23	
L499493-1	SVW3 00121 Q		1035		23	
L499493-2	VTRP 00121 R	01/19/2010	—		3	

Relinquished By Sampler	Date 01/21	Received By	Date	Observations/Comments/Special Instructions:	Total # of Bottles: 59
Sampler Signature SEVIN BILIR	Time 2010	Signature	Time		
Sampler Printed Name KCSWD	Time 1441	Printed Name	Time		
Company		Company			
Relinquished By	Date	Received By	Date		
Signature		Signature Jason Lynard	1-21-10		
Printed Name	Time	Printed Name KCEL	Time 1441		
Company		Company			

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/09) Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 01/22/2010

King County Department of Natural Resources and Parks — Solid Waste Division

№ 09678

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy P. Jimenez 206-296-4411
Authorization	KCEL Lab Services to KCSWD
Project Test Site	VASW-3 (45) West Hillslope

Project Site Test Reference

GROUNDWATER: CHGW Cedar Hills GW Qtly; CHGW-V C. Hills GW VOAs Only; CHGW-NP Cedar Hills GW-NonPotable; CHGW-DS C. Hills GW Offsite; CHGW-E Cedar Hills GW Eggt Blank; CHGW-O Cedar Hills GW-OrthoP Blank; CFGW Cedar Falls GW Qtly; DUGW Duvall GW Qtly; ENGW Enumclaw GW Qtly; HOGW Hobart GW Qtly; HTGW Houghton GW Qtly; PUGW Puyallup GW Qtly; VAGW Vashon GW Qtly

SURFACE WATER: CHSW-Q Cedar Hills SW Quarterly; CHSW-M Cedar Hills SW Monthly; CHSW-P Cedar Hills SW Permit; CHSW-P2 Cedar Hills SW South Lagoon; CHSW-A5 Cedar Hills Area 5 Top Deck; CFSW Cedar Falls SW Qtly; DUSW Duvall SW Qtly; VASW Vashon SW Qtly; VASW-1 Vashon Hillslope SW Qtly; VASW-2 Vashon Hillslope SW Qtly; VASW-3 Vashon Hillslope SW Qtly

HILL

LEACHATE/WASTEWATER: CHLS-M Cedar Hills Leachate Mthly; CHTW Cedar Hills Truckwash

PERMIT: CHLS-P Cedar Hills Lchate Permit; ALLS Algona WW Permit; FBLS Enumclaw WW Permit; FALS Fall City WW Permit; SMTS Shoreline WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-O/M Vashon Leachate Qtly/Mthly; CHSW-E Cedar Hills Emergency Spill

Remarks

Lab No.	Sample I.D.	Date	Time	Number of Containers
	SVW5100122-	01/22 2010	1005	1
	SVW5100122E	"	1000	1 dissolved metals
	SVW6100122-	↓	0930	1
	VTRP100122R	01/19 2010	—	3

	Date		Date	
Relinquished By Sampler: Sam Bolt	01/22	Received By		Observations/Comments/Special Instructions:
Sampler Signature: Selin BILIR	200	Signature		
Sampler Printed Name: KCSWD	Time: 1200	Printed Name	Time	
Company		Company		
Relinquished By	Date	Received By: Jason Linnaea	Date: 01-22-10	
Signature		Signature		
Printed Name	Time	Printed Name: KCEL	Time: 1200	
Company		Company		

Total # of Bottles: 26 30

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/09)

Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 4/19/10

King County Department of Natural Resources and Parks — Solid Waste Division

№ 09689

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy P. Jimenez 206-296-4411
Authorization	KCEL Lab Services to KCSWD
Project Test Site	VASW-2 (44) Vashon West Hills

Project Site Test Reference

GROUNDWATER: CHGW Cedar Hills GW Qtly; CHGW-V C. Hills GW VOAs Only; CHGW-NP Cedar Hills GW-NonPotable; CHGW-DS C. Hills GW Offsite; CHGW-E Cedar Hills GW Eggt Blank; CHGW-O Cedar Hills GW-OrthoP Blank; CFGW Cedar Falls GW Qtly; DUGW Duvall GW Qtly; ENGW Enumclaw GW Qtly; HOGW Hobart GW Qtly; HTGW Houghton GW Qtly; PUGW Puyallup GW Qtly; VAGW Vashon GW Qtly

SURFACE WATER: CHSW-Q Cedar Hills SW Quarterly; CHSW-M Cedar Hills SW Monthly; CHSW-P Cedar Hills SW Permit; CHSW-P2 Cedar Hills SW South Lagoon; CHSW-A5 Cedar Hills Area 5 Top Deck; CFSW Cedar Falls SW Qtly; DUSW Duvall SW Qtly; VASW Vashon SW Qtly; VASW-1 Vashon Hillslope SW Qtly; VASW-2 Vashon Hillslope SW Qtly; VASW-3 Vashon Hillslope SW Qtly

HILL

LEACHATE/WASTEWATER: CHLS-M Cedar Hills Leachate Mthly; CHTW Cedar Hills Truckwash

PERMIT: CHLS-P Cedar Hills Lchate Permit; ALLS Algona WW Permit; FBLS Enumclaw WW Permit; FALS Fall City WW Permit; SMTS Shoreline WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-O/M Vashon Leachate Qtly/Mthly; CHSW-E Cedar Hills Emergency Spill

Remarks: Did lead-acetate strip react?

Lab No.	Sample I.D.	Date	Time	Number of Containers	
	SVW1Ø0419Q	4/19/10	12:20	22	No
	SVW2Ø0419Q	4/19/10	10:50	22	No
	SVW3Ø0419Q	4/19/10	11:40	22	No
	SVW2Ø0419E	4/19/10	10:40	1	dissolved metals

	Date		Date	
Relinquished By Sampler: Rebecca Thompson	4/19	Received By		Observations/Comments/Special Instructions:
Sampler Signature	2010	Signature		
Sampler Printed Name: KCSWD	Time: 14:50	Printed Name	Time	
Company		Company		
Relinquished By	Date	Received By: Jason Linnaea	Date: 4/19/10	
Signature		Signature		
Printed Name	Time	Printed Name: KCEL	Time: 1450	
Company		Company		

Total # of Bottles: 67

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/09)

Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 4/19/10

King County Department of Natural Resources and Parks — Solid Waste Division

No. 09690

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701, Seattle, WA 98104-3855
Attention: Sendy P. Jimenez 206-296-4411
Authorization: KCEL Lab Services to KCSWD
Project Test Site: VASW-3(45) Vashon West Hillslope

Project Site Test Reference

Lab No.	Sample I.D.	Date	Time
	SVW6100419-	04/19/2010	1315
	SVW5100419-	↓	1300

Number of Containers: 11, 11

Remarks:

Relinquished By Sampler: Sam Blair — Date: 04/19/2010 — Time: 1608
Sampler Signature: Sam Blair
Sampler Printed Name: KCSWD
Company
Relinquished By — Signature — Printed Name — Company — Date — Time
Received By: Jason Kinnard — Date: 4/19/2010 — Time: 1608
Received By — Signature — Printed Name — Company — Date — Time

Observations/Comments/Special Instructions:

Total # of Bottles: 22

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/06)

Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 8/16/10

King County Department of Natural Resources and Parks — Solid Waste Division

No. 09697

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701, Seattle, WA 98104-3855
Attention: Sendy P. Jimenez 206-296-4411
Authorization: KCEL Lab Services to KCSWD
Project Test Site: VASW-2(44) Vashon West Hillslope

Project Site Test Reference

Lab No.	Sample I.D.	Date	Time	Number of Containers	Remarks
	SVW2100816Q	8/16/10	11:20	22	No
	SVW2100816Q	8/16/10	12:03	22	No
	SVW2100816D	8/16/10	12:03	22	No
	VTRP100816R	8/16/10	—	3	
	SVW2100816E	8/16/10	12:15	1	dissolved metals
	SVW1100816Q	8/16/10	13:05	22	No

Did lead-acetate strip react?

Relinquished By Sampler: Rebecca Thompson — Date: 8/16/10 — Time: 16:12
Sampler Signature: Rebecca Thompson
Sampler Printed Name: KCSWD
Company
Relinquished By — Signature — Printed Name — Company — Date — Time
Received By: Jason Kinnard — Date: 8-16-10 — Time: 1615
Received By — Signature — Printed Name — Company — Date — Time

Observations/Comments/Special Instructions:

Total # of Bottles: 93

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/06)

Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 12

King County Department of Natural Resources and Parks Solid Waste Division

No. 09456

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701, Seattle, WA 98104-3855
Attention: Sendy P. Jimenez 206-296-4411
Authorization: KCEL Lab Services to KCSWD
Project Test Site:

Project Site Test Reference

GROUNDWATER: CHGW Cedar Hills GW Qtly; CHGW-V Cedar Hills GW VOAs Only; CHGW-NP Cedar Hills GW-NonPotable; CHGW-MW Cedar Hills GW-Monitor; CHGW-OS Cedar Hills GW Offsite; CHGW-E Cedar Hills GW Equip Blank; CHGW-O Cedar Hills GW OrthoP Blank; CFGW Cedar Falls GW Qtly; DUGW Duvall GW Qtly; ENGW Enumclaw GW Qtly; HDGW Hobart GW Qtly; HTGW Houghton GW Qtly; PUGW Puyallup GW Qtly; VAGW Vashon GW Qtly

SURFACE WATER: CHSW-Q Cedar Hills SW Quarterly; CHSW-M Cedar Hills SW Monthly; CHSW-P Cedar Hills SW Permit; CHSW-P2 Cedar Hills SW South Lagoon; CHSW-A5 Cedar Hills Area 5 Top Deck; CFSW Cedar Falls SW Qtly; DUSW Duvall SW Qtly; VASW Vashon SW Qtly

HILL: CHLS-M Cedar Hills Leachate Mthly; CHTW Cedar Hills Treatwash

PERMIT: CHLS-P Cedar Hills Leachate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; SHTS Shoreline WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-O/M Vashon Leachate Qtly/Mthly; CHSW-E Cedar Hills Emergency Spill

LEACHATE/WASTEWATER

Remarks

Number of Containers

Lab No.	Sample I.D.	Date	Time
	12		1100
	12		1135
	12		1315

Relinquished By Sampler: Date: 12
Sampler Signature:
Sampler Printed Name: KCSWD
Company:
Relinquished By: Date:
Signature:
Printed Name: Time:
Company:

Received By: Date:
Signature:
Printed Name: Time:
Company:
Received By: Date:
Signature:
Printed Name: KCEL Time:
Company:

Observations/Comments/Special Instructions:

Total # of Bottles: 12

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/09)

Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

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Chain of Custody Record

Environmental Monitoring Program Date 11/09/10

ENTERED JL 11/16/10

King County Department of Natural Resources and Parks Solid Waste Division

No. 09749

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701, Seattle, WA 98104-3855
Attention: Sendy P. Jimenez 206-296-4411
Authorization: KCEL Lab Services to KCSWD
Project Test Site: VASW (21)

Project Site Test Reference

GROUNDWATER: CHGW Cedar Hills GW Qtly; CHGW-V C. Hills GW VOAs Only; CHGW-NP Cedar Hills GW-NonPotable; CHGW-OS C. Hills GW Offsite; CHGW-E Cedar Hills GW Equip Blank; CHGW-O Cedar Hills GW OrthoP Blank; CFGW Cedar Falls GW Qtly; DUGW Duvall GW Qtly; ENGW Enumclaw GW Qtly; HDGW Hobart GW Qtly; HTGW Houghton GW Qtly; PUGW Puyallup GW Qtly; VAGW Vashon GW Qtly

SURFACE WATER: CHSW-Q Cedar Hills SW Quarterly; CHSW-M Cedar Hills SW Monthly; CHSW-P Cedar Hills SW Permit; CHSW-P2 Cedar Hills SW South Lagoon; CHSW-A5 Cedar Hills Area 5 Top Deck; CFSW Cedar Falls SW Qtly; DUSW Duvall SW Qtly; VASW Vashon SW Qtly; VASW-1 Vashon Hillslope SW Qtly; VASW-2 Vashon Hillslope SW Qtly; VASW-3 Vashon Hillslope SW Qtly

HILL: CHLS-M Cedar Hills Leachate Mthly; CHTW Cedar Hills Treatwash

PERMIT: CHLS-P Cedar Hills Leachate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; SHTS Shoreline WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-O/M Vashon Leachate Qtly/Mthly; CHSW-E Cedar Hills Emergency Spill

LEACHATE/WASTEWATER

Remarks: Did sulfide test strip read?

Number of Containers

Lab No.	Sample I.D.	Date	Time		
	~~SVW1101108~~	11/9/10	12:30	X	22 * No
	SVW1101109Q				
	VTRD101109R	11/8/10	—	X	3
	SVW2101109Q	11/9/10	11:58	X	22 No
	SVW3101109Q	11/9/10	10:47	X	22 No

Relinquished By Sampler: Date: 11/9/10 Time: 15:05
Sampler Signature:
Sampler Printed Name: Rebecca Thompson
Company: KCSWD
Relinquished By: Date: Time:
Signature:
Printed Name: Company:

Received By: Date: Time:
Signature:
Printed Name: Company:
Received By: Date: 11/9/10 Time: KCEL 1565
Signature:
Printed Name: Company:

Observations/Comments/Special Instructions:
* A Dissolved metals not field filtered for SVW1101109Q.

Total # of Bottles: 69

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/09)

Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 11/01/10

King County
Department of
Natural Resources and Parks
Solid Waste Division

№ 10501

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Sendy P. Jimenez 206-296-4411
Authorization: KCEL Lab Services to KCSWD
Project Test Site: VASW-3(045)

Project Site Test Reference

Lab No.	Sample I.D.	Date	Time	CHGW Cedar Hills GW Qtly	CHGW-V C. Hills GW VOAs Only	CHGW-NP Cedar Hills GW-NonPotable	CHGW-OS C. Hills GW Offsite	CHGW-E Cedar Hills GW Eqpt Blank	CHGW-O Cedar Hills GW-OrthoP Blank	CFGW Cedar Falls GW Qtly	DUGW Duvall GW Qtly	ENGW Enumclaw GW Qtly	HOGW Hobart GW Qtly	HTGW Houghton GW Qtly	PUGW Puyallup GW Qtly	VAGW Vashon GW Qtly	CHSW-Q Cedar Hills SW Quarterly	CHSW-M Cedar Hills SW Monthly	CHSW-P Cedar Hills SW Permit	CHSW-P2 Cedar Hills SW South Lagoon	CHSW-A5 Cedar Hills Area 5 Top Deck	CFSW Cedar Falls SW Qtly	DUSW Duvall SW Qtly	VASW Vashon SW Qtly	VASW-1 Vashon Hillslope SW Qtly	VASW-2 Vashon Hillslope SW Qtly	VASW-3 Vashon Hillslope SW Qtly	CHLS-M Cedar Hills Leachate Mthy	CHTW Cedar Hills Truckwash	CHLS-P Cedar Hills L'chate Permit	ALLS Algona WW Permit	ENLS Enumclaw WW Permit	FALS Factoria WW Permit	SRTS Shoreline WW Permit	HTLS Houghton WW Permit	RELS Renton WW Permit	VALS-P Vashon Leachate Permit	VALS-Q/M Vashon Leachate Qtly/Mthy	CHSW-E Cedar Hills Emergency Spill	Number of Containers	Remarks
																									HILL					PERMIT											
				GROUNDWATER													SURFACE WATER											LEACHATE/WASTEWATER													
				2	3	37	38	41	50	5	6	7	8	9	10	12	14	15	16	46	42	17	18	21	43	44	45	23	24	25	26	27	28	29	30	31	32	34	49		
	SWN5101101-	11/01	1050																								X													11	
	SWN6101101-	↓	1155																								X													11	
	SWN5101101E	↓	1546																																					1	[illegible]
	VTN101101R	11/01	—																																					3	

Relinquished By Sampler	Date 11/01	Received By	Date
Sampler Signature		Signature	
Sampler Printed Name KCSWD	Time 1440	Printed Name	Time
Company		Company	
Relinquished By	Date	Received By	Date 11/1/10
Signature		Signature Lynne Cox	
Printed Name	Time	Printed Name KCEL	Time 1440
Company		Company	

Observations/Comments/Special Instructions:

Total # of Bottles: [illegible]

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/09)

Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

DATE: 05-09-07

King County
Department of
Natural Resources and Parks
Solid Waste Division

Environmental Monitoring Program

No. 6876

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention: Sendy Jimenez (206) 296-4411
Contract No: T02344T
Project Site Test: VA Hillslope

Project Site Test Reference

GROUNDWATER: CHGW-A Cedar Hills GW Aerly; CHGW-U C. Hills GW Qtly (NP / OS); CHGW-V C. Hills GW VOAs Only; GW APP3 Appendix III Acdfl Analytes; CFGW Cedar Falls GW Qtly; DUGW Duvall GW Qtly; ENGW Enumclaw GW Qtly; HOGW Hobart GW Qtly; HTGW Houghton GW Qtly; PUGW Puyallup GW Qtly; SPGW South Park GW Qtly; VAGW Vashon GW Qtly

SURFACE WATER: CHSW-A Cedar Hills SW Aerly; CHSW-Q Cedar Hills SW Qtly; CHSW-M Cedar Hills SW Mthly; CHSW-P Cedar Hills SW Permit; CFSW Cedar Falls SW Qtly; DUSW Duvall SW Qtly; RESW Renton SW Qtly; SPSW South Park SW Qtly; VASW Vashon SW Qtly

LEACHATE/WASTEWATER: CHLS-A C. Hills Leachate Aerly; CHLS-M Cedar Hills Leachate Mthly; CHTW Cedar Hills Truckwash; CHLS-P C. Hills Leachate Permit; PERMIT: ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Fairoaks WW Permit; FILS First NE WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-A Vashon Leachate Aerly; VALS-Q Vashon Leachate Qtly; VALS-M Vashon Leachate Mthly; RESS Renton Solid / Recycle (P)

Lab No.	Sample ID	Date	Time	Number of Containers	Remarks
	SVS2070509-	05-09-07	1310	12	VASW-1(43)
	SV24S070509-	05-09-07	1450	12	VASW-1(43)
	VTRP070509S	05-09-07	0800	3	

Relinquished By Sampler: Date: 05/09/07
Sampler Signature: SEVIN BILIR
Sampler Printed Name: KCSWD
Company:
Relinquished By: Time: 1620
Signature:
Printed Name:
Company:

Received By:
Signature:
Printed Name:
Company:
Date:
Time:

Received By:
Signature: Mike Fowler
Printed Name: Landau
Company:
Date: 5/9/07
Time: 16:20

Observations/Comments/Special Instructions:

Total # Containers: 27

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages; receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name:
Tel:

White and Canary: KCSWD — Pink and Goldenrod: Receiving Laboratory

Chain of Custody Record

DATE: 05-11-07

King County
Department of
Natural Resources and Parks
Solid Waste Division

Environmental Monitoring Program

No. 7891

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention: Sendy Jimenez (206) 296-4411
Contract No: T02344T
Project Site Test: VA Hillslope

Project Site Test Reference

GROUNDWATER: CHGW-A Cedar Hills GW Aerly; CHGW-U C. Hills GW Qtly (NP / OS); CHGW-V C. Hills GW VOAs Only; GW APP3 Appendix III Acdfl Analytes; CFGW Cedar Falls GW Qtly; DUGW Duvall GW Qtly; ENGW Enumclaw GW Qtly; HOGW Hobart GW Qtly; HTGW Houghton GW Qtly; PUGW Puyallup GW Qtly; SPGW South Park GW Qtly; VAGW Vashon GW Qtly

SURFACE WATER: CHSW-A Cedar Hills SW Aerly; CHSW-Q Cedar Hills SW Qtly; CHSW-M Cedar Hills SW Mthly; CHSW-P Cedar Hills SW Permit; CFSW Cedar Falls SW Qtly; DUSW Duvall SW Qtly; RESW Renton SW Qtly; SPSW South Park SW Qtly; VASW Vashon SW Qtly

LEACHATE/WASTEWATER: CHLS-A C. Hills Leachate Aerly; CHLS-M Cedar Hills Leachate Mthly; CHTW Cedar Hills Truckwash; CHLS-P C. Hills Leachate Permit; PERMIT: ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Fairoaks WW Permit; FILS First NE WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-A Vashon Leachate Aerly; VALS-Q Vashon Leachate Qtly; VALS-M Vashon Leachate Mthly; RESS Renton Solid / Recycle (P)

Lab No.	Sample ID	Date	Time	Number of Containers	Remarks
	SVS1070511-	05-11-07	1130	12	VASW-1(43)
	SVS3070511-	05-11-07	0930	12	VASW-1(43)
	VTRP070511S	05-11-07	0800	3	
	SVEB070511S	05-11-07	1300	12	VASW-1(43)

Relinquished By Sampler: Date: 05/11/07
Sampler Signature: SEVIN BILIR
Sampler Printed Name: KCSWD
Company:
Relinquished By: Time: 1915
Signature:
Printed Name:
Company:

Received By:
Signature:
Printed Name:
Company:
Date:
Time:

Received By: JENNI GROSS
Signature: JENNI GROSS
Printed Name: LANCK'S
Company:
Date: 5/11/07
Time: 16:15

Observations/Comments/Special Instructions:

Total # Containers: 27

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages; receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name:
Tel:

White and Canary: KCSWD — Pink and Goldenrod: Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program

DATE: 05-10-07

King County
Department of
Natural Resources and Parks
Solid Waste Division

No. 7889

Name King County Solid Waste Division
Address 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention Sendy Jimenez (206) 296-4411
Contract No T02344T

Project Site Test VA Hillslope

Project Site Test Reference

No.	Code	Test	Group
1	CHGW-A	Cedar Hills GW Annly	GROUNDWATER
2	CHGW	C Hills GW Qtly (NP / OS)	GROUNDWATER
3	CHGW-V	C Hills GW VOAs Only	GROUNDWATER
4	GW-APP3	Appendix III Add'l Analyses	GROUNDWATER
5	CFGW	Cedar Falls GW Qtly	GROUNDWATER
6	DUGW	Duvall GW Qtly	GROUNDWATER
7	ENGW	Enumclaw GW Qtly	GROUNDWATER
8	HOGW	Hobart GW Qtly	GROUNDWATER
9	HTGW	Houghton GW Qtly	GROUNDWATER
10	PUGW	Puyallup GW Qtly	GROUNDWATER
11	SPGW	South Park GW Qtly	GROUNDWATER
12	VAGW	Vashon GW Qtly	GROUNDWATER
13	CHSW-A	Cedar Hills SW Annly	SURFACE WATER
14	CHSW-Q	Cedar Hills SW Qtly	SURFACE WATER
15	CHSW-M	Cedar Hills SW Mtly	SURFACE WATER
16	CHSW-P	Cedar Hills SW Permit	SURFACE WATER
17	CFSW	Cedar Falls SW Qtly	SURFACE WATER
18	DUSW	Duvall SW Qtly	SURFACE WATER
19	RESW	Renton SW Qtly	SURFACE WATER
20	SPSW	South Park SW Qtly	SURFACE WATER
21	VASW	Vashon SW Qtly	SURFACE WATER
22	CHLS-A	C Hills Leachate Annly	LEACHATE/WASTEWATER
23	CHLS-M	Cedar Hills Leachate Mtly	LEACHATE/WASTEWATER
24	CHTW	Cedar Hills Truckwash	LEACHATE/WASTEWATER
25	CHLS-P	C Hills Leachate Permit	LEACHATE/WASTEWATER — PERMIT
26	ALLS	Algona WW Permit	LEACHATE/WASTEWATER — PERMIT
27	ENLS	Enumclaw WW Permit	LEACHATE/WASTEWATER — PERMIT
28	FALS	Factoria WW Permit	LEACHATE/WASTEWATER — PERMIT
29	FILS	First NE WW Permit	LEACHATE/WASTEWATER — PERMIT
30	HTLS	Houghton WW Permit	LEACHATE/WASTEWATER — PERMIT
31	RELS	Renton WW Permit	LEACHATE/WASTEWATER — PERMIT
32	VALS-P	Vashon Leachate Permit	LEACHATE/WASTEWATER — PERMIT
33	VALS-A	Vashon Leachate Annly	LEACHATE/WASTEWATER
34	VALS-Q	Vashon Leachate Qtly	LEACHATE/WASTEWATER
35	VALS-M	Vashon Leachate Mtly	LEACHATE/WASTEWATER
36	REDS	Renton Soils / Resate (R)	S

Lab No.	Sample ID	Date	Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	Number of Containers	Remarks
	SVS4070510-	05/10/07	1410																																					12	VASW1(43)
	SVS5070510-	05/10/07	1220																																					12	VASW1 (43)
	SVS6070510-	05/10/07	1140																																					12	VASW1(43)
	VTRP070510S	05/8/07	0800																																					3	

Relinquished By Sampler: SEVIN BILIR
Date: 05/10/07
Sampler Signature:
Sampler Printed Name: KCSWD
Company
Time: 1620
Received By:
Signature:
Printed Name:
Company:
Date:
Time:
Relinquished By:
Signature:
Printed Name:
Company
Date:
Time:
Received By: JWeishaar
Signature: JPWeishaar
Printed Name:
Company:
Date: 5/10/07
Time: 16:20

Observations/Comments/Special Instructions:

Total # Containers: 39

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name ____________________
Tel ____________________

White and Canary: KCSWD
Pink and Goldenrod: Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program

DATE: 08-14-07

King County
Department of
Natural Resources and Parks
Solid Waste Division

No. 7893

COPY

Name King County Solid Waste Division
Address 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention Sendy Jimenez (206) 296-4411
Contract No T02344T

Project Site Test VA Hillslope

Project Site Test Reference

No.	Code	Test	Group
1	CHGW-A	Cedar Hills GW Annly	GROUNDWATER
2	CHGW	C Hills GW Qtly (NP / OS)	GROUNDWATER
3	CHGW-V	C Hills GW VOAs Only	GROUNDWATER
4	GW-APP3	Appendix III Add'l Analyses	GROUNDWATER
5	CFGW	Cedar Falls GW Qtly	GROUNDWATER
6	DUGW	Duvall GW Qtly	GROUNDWATER
7	ENGW	Enumclaw GW Qtly	GROUNDWATER
8	HOGW	Hobart GW Qtly	GROUNDWATER
9	HTGW	Houghton GW Qtly	GROUNDWATER
10	PUGW	Puyallup GW Qtly	GROUNDWATER
11	SPGW	South Park GW Qtly	GROUNDWATER
12	VAGW	Vashon GW Qtly	GROUNDWATER
13	CHSW-A	Cedar Hills SW Annly	SURFACE WATER
14	CHSW-Q	Cedar Hills SW Qtly	SURFACE WATER
15	CHSW-M	Cedar Hills SW Mtly	SURFACE WATER
16	CHSW-P	Cedar Hills SW Permit	SURFACE WATER
17	CFSW	Cedar Falls SW Qtly	SURFACE WATER
18	DUSW	Duvall SW Qtly	SURFACE WATER
19	RESW	Renton SW Qtly	SURFACE WATER
20	SPSW	South Park SW Qtly	SURFACE WATER
21	VASW	Vashon SW Qtly	SURFACE WATER
22	CHLS-A	C Hills Leachate Annly	LEACHATE/WASTEWATER
23	CHLS-M	Cedar Hills Leachate Mtly	LEACHATE/WASTEWATER
24	CHTW	Cedar Hills Truckwash	LEACHATE/WASTEWATER
25	CHLS-P	C Hills Leachate Permit	LEACHATE/WASTEWATER — PERMIT
26	ALLS	Algona WW Permit	LEACHATE/WASTEWATER — PERMIT
27	ENLS	Enumclaw WW Permit	LEACHATE/WASTEWATER — PERMIT
28	FALS	Factoria WW Permit	LEACHATE/WASTEWATER — PERMIT
29	FILS	First NE WW Permit	LEACHATE/WASTEWATER — PERMIT
30	HTLS	Houghton WW Permit	LEACHATE/WASTEWATER — PERMIT
31	RELS	Renton WW Permit	LEACHATE/WASTEWATER — PERMIT
32	VALS-P	Vashon Leachate Permit	LEACHATE/WASTEWATER — PERMIT
33	VALS-A	Vashon Leachate Annly	LEACHATE/WASTEWATER
34	VALS-Q	Vashon Leachate Qtly	LEACHATE/WASTEWATER
35	VALS-M	Vashon Leachate Mtly	LEACHATE/WASTEWATER
36	REDS	Renton Soils / Resate (R)	S

Lab No.	Sample ID	Date	Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	Number of Containers	Remarks
	SVS1070814-	08/14/07	1200																																					[illegible]	* VASW1(43)
																																								9	
	VTRP070814R	08/14/07	1200																																					3	
	[illegible]	[illegible]																																						[illegible]	

Relinquished By Sampler:
Date: 08/14/07
Sampler Signature: SEVIN BILIR
Sampler Printed Name: KCSWD
Company
Time: 1510
Received By:
Signature:
Printed Name:
Company:
Date:
Time:
Relinquished By:
Signature:
Printed Name:
Company
Date:
Time:
Received By:
Signature: Jeff Owen
Printed Name: Locks
Company:
Date: 8/14/07
Time: 1510

Observations/Comments/Special Instructions:
*Note: was only able to Collect 6 VOAS, 2 TOC + 1 Metals, D today, will submit Rest tomorrow.

Total # Containers:

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name ____________________
Tel ____________________

White and Canary: KCSWD
Pink and Goldenrod: Receiving Laboratory

Chain of Custody Record

DATE: 8/15/07

King County
Department of
Natural Resources and Parks
Solid Waste Division

Environmental Monitoring Program

No. 7895

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention: Sendy Jimenez (206) 296-4411
Contract No: T02344T
Project Site Test: VA Hillslope

Project Site Test Reference

	Lab No.	Sample ID	Date	Time
		SVS1070815-	8/15/07	0900
		~~SVS5070815-~~		
		~~SVS6070815-~~		
		SVS2070815-	8/15/07	0945
		SVS3070815-	8/15/07	1100
		VTRP070815R	8/15/07	0945
		SV24S070815-	8/15/07	1000

Remarks: *

Number of Containers: 3 VASW1(43); ~~1~~; ~~1~~; 12 VASW1(43); 12 VASW1(43); 3; 12 VASW1(43)

Relinquished By Sampler: Sampler Signature: Sevim Bilir — Date: 8/15/07 — Time: 1435
Sampler Printed Name: KCSWD — Company
Relinquished By — Signature — Printed Name — Company — Date — Time
Received By — Signature — Printed Name: Lewis — Company — Date: 8/16/07 — Time: 1435

Observations/Comments/Special Instructions:
*Note: SVS1070815- submitted in part 8/14/07.

Total # Containers: 42

Instructions:
1 Complete in ballpoint pen. Draw one line through errors and initial.
2 Receiving lab is to sign in the shaded box.
3 Check off pre-printed Project Site Test Reference to be performed for each sample or provide specific instruction if not listed.
4 KCSWD personnel are to retain white and canary pages; receiving lab is to keep pink and goldenrod pages.
5 If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name: _____
Tel: _____

White and Canary: KCSWD — Pink and Goldenrod: Receiving Laboratory

Chain of Custody Record

DATE: 8/16/07

King County
Department of
Natural Resources and Parks
Solid Waste Division

Environmental Monitoring Program

No. 7896

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention: Sendy Jimenez (206) 296-4411
Contract No: T02344T
Project Site Test: VA Hillslope

Project Site Test Reference

	Lab No.	Sample ID	Date	Time
		VTRP070816R	8/16/07	1230
		SVSH070816-	8/16/07	1040
		SVSS070816-	↓	1230
		SVS6070816-	↓	1130
		SVEB070816S	8/16/07	1330

Remarks: ~~3~~

Number of Containers: 12 VASW1(43); 12; 12; 12 VASW1(43)

Relinquished By Sampler: Sampler Signature: Sevim Bilir — Date: 8/16/07 — Time: 1510
Sampler Printed Name: KCSWD — Company
Relinquished By — Signature — Printed Name — Company — Date — Time
Received By — Signature — Printed Name: Lewis — Company — Date: 8/16/07 — Time: 1510

Observations/Comments/Special Instructions

Total # Containers: 51

Instructions:
1 Complete in ballpoint pen. Draw one line through errors and initial.
2 Receiving lab is to sign in the shaded box.
3 Check off pre-printed Project Site Test Reference to be performed for each sample or provide specific instruction if not listed.
4 KCSWD personnel are to retain white and canary pages; receiving lab is to keep pink and goldenrod pages.
5 If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name: _____
Tel: _____

White and Canary: KCSWD — Pink and Goldenrod: Receiving Laboratory

King County
Department of
Natural Resources and Parks
Solid Waste Division

Chain of Custody Record

DATE: 10/30/07

Environmental Monitoring Program

No. 7899

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention: Sendy Jimenez (206) 296-4411
Contract No: T02344T
Project Site Test: VA Hillslope

Project Site Test Reference

	Lab No.	Sample ID	Date	Time	Number of Containers	Remarks
		SVS407103O-	10/30	1130	12	VASW-1(43)
		SVS307103O-	10/30	1300	12	VASW-1(43)
		SVEB07103O-	10/30	1100	12	VASW-1(43)
		VTRP07103OS	10/30	1130	3	

Relinquished By Sampler: Sevin Bilir
Sampler Signature:
Sampler Printed Name: KCSWD
Company:
Date: 10/30 2007
Time: 1510

Received By:
Signature:
Printed Name:
Company:
Date:
Time:

Relinquished By:
Signature:
Printed Name:
Company:
Date:
Time:

Received By:
Signature:
Printed Name:
Company:
Date: 10/30/07
Time: 1510

Observations/Comments/Special Instructions:

Total # Containers: 39

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages; receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request:, please provide a name and telephone number of your contact person.

Name:
Tel:

White and Canary: KCSWD — Pink and Goldenrod: Receiving Laboratory

King County
Department of
Natural Resources and Parks
Solid Waste Division

Chain of Custody Record

DATE: 10/31/07

Environmental Monitoring Program

No. 7902

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention: Sendy Jimenez (206) 296-4411
Contract No: T02344T
Project Site Test: VA Hillslope

Project Site Test Reference

	Lab No.	Sample ID	Date	Time	Number of Containers	Remarks
		SVS207103I-	10/31	1030	11	VASW-1(43)
		SV24S07103I-	10/31	1055	12	↓
		SVS107103I-	10/31	1130	10	↓ *
		VTRP07103IR	10/31	1030	3	

Relinquished By Sampler: Sevin Bilir
Sampler Signature:
Sampler Printed Name: KCSWD
Company:
Date: 10/31 2007
Time: 1505

Received By:
Signature:
Printed Name:
Company:
Date:
Time:

Relinquished By:
Signature:
Printed Name:
Company:
Date:
Time:

Received By:
Signature:
Printed Name:
Company:
Date: 10/31/07
Time: 1505

Observations/Comments/Special Instructions:
* Re: SVS107103I-
Part 1 of 2. Submitted partial set due to slow recovery. Rest of set submit on 11/07.
TODAY = 1x500(yellow), 1x1000(blue-PHYS), 2 TOC 4 6 VOAs

Total # Containers: 36

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages; receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request:, please provide a name and telephone number of your contact person.

Name:
Tel:

White and Canary: KCSWD — Pink and Goldenrod: Receiving Laboratory

King County
Department of
Natural Resources and Parks
Solid Waste Division

Chain of Custody Record

DATE: 11/1/07

Environmental Monitoring Program

No. 7904

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention: Sendy Jimenez (206) 296-4411
Contract No: T02344T

Project Site Test: VA #illslope

Project: Site Test Reference

	Lab No.	Sample ID	Date	Time	Number of Containers	Remarks
		SVS1071101-	11/1	0930	2	VASW-1(43)*
		SVS5071101-	11/1	1215	12	VASW-1(43)
		SVS6071101-	11/1	1245	12	"
		VTRP071101S	11/1	1245	3	

Relinquished By Sampler: Sevin Biltr
Sampler Signature:
Sampler Printed Name: KCSWD
Company:
Date: 11/1/2007
Time: 1615

Received By:
Signature:
Printed Name:
Company:
Date:
Time:

Relinquished By:
Signature:
Printed Name:
Company:
Date:
Time:

Received By:
Signature:
Printed Name:
Company:
Date: 11/1/07
Time: 16:15

Observations/Comments/Special Instructions:
* Re: SVS1071101-
Part 2 of 2. Submitted partial set due to slow recovery. Part 1 submitted as SVS1071031-.
Today- 1X1000 (blue TSS/TS)
1X 500 (red) Metals D

Total # Containers: 29

Instructions
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages; receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name:
Tel:

White and Canary: KCSWD — Pink and Goldenrod: Receiving Laboratory

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King County
Department of
Natural Resources and Parks
Solid Waste Division

Chain of Custody Record

DATE: 12-18-07

Environmental Monitoring Program

No. 7910

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention: Sendy Jimenez (206) 296-4411
Contract No: T02344T

Project Site Test: VA #illslope

Project Site Test Reference

	Lab No.	Sample ID	Date	Time	Number of Containers	Remarks
		SVS5071218-	12-18-07	1200	12	VASW-1(43)
		SVS6071218-	12-18-07	1300	11	VASW-1(43) *
		VTRP071218R	12-18-07	1200	3	

Relinquished By Sampler: Sevin Biltr
Sampler Signature:
Sampler Printed Name: KCSWD
Company:
Date: 12/18/2007
Time: 1517

Received By:
Signature:
Printed Name:
Company:
Date:
Time:

Relinquished By:
Signature:
Printed Name:
Company:
Date:
Time:

Received By:
Signature:
Printed Name:
Company:
Date: 12/18/07
Time: 1517

Observations/Comments/Special Instructions:
* SVS6071218-
Did not turn in Blue bottle (TSS/TS). Will turn in on 12-19-07 as SVS6071219-

Total # Containers: 26

Instructions
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages; receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name:
Tel:

White and Canary: KCSWD — Pink and Goldenrod: Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program

DATE: 12-19-07

King County
Department of
Natural Resources and Parks
Solid Waste Division

No. 7908

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention: Sendy Jimenez (206) 296-4411
Contract No: T02344T
Project Site Test: VA Hillslope

Project Site Test Reference

	Lab No.	Sample ID	Date	Time
		SVS4071219-	12-19-07	1200
		SVS24S071219-		1045
		SVS 207 1219-		1030
		SVS 607 1219-		1100
		SVS 107 1219-		0945
		VTRP071219R		1200

Number of Containers: 12, 12, 12, 10, 3

Remarks: VASW-1(43)

*1
*2

Relinquished By Sampler: [signature]
Sampler Signature: SEVIN BILIR
Sampler Printed Name: KCSWD
Company
Date: 12/19/2007
Time

Received By
Signature
Printed Name
Company
Date
Time

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By: [signature]
Signature: Jennifer Millsap
Printed Name: Laacke
Company
Date: 12/19/07
Time: 1515

Observations/Comments/Special Instructions:
*1 Part 2 of Set, This bottle for TSS/TS
*2 Part 1 of Set. Part 2 delivered tomorrow as SVS107 1220-
Due to Slow Recovery

Total # Containers: 50

Instructions
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name: _____
Tel: _____

White and Canary: KCSWD
Pink and Goldenrod: Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program

DATE: 12-20-07

King County
Department of
Natural Resources and Parks
Solid Waste Division

No. 7909

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention: Sendy Jimenez (206) 296-4411
Contract No: T02344T
Project Site Test: VA Hillslope

Project Site Test Reference

	Lab No.	Sample ID	Date	Time
		SVS107 1220-	12/20 2007	1000
		SVS307 1220-	12/20	1040
		VTRP071220R	12/20	1040
		SVEB071220-	12/20	1150

Number of Containers: 2, 12, 3, 3

Remarks: VASW-1(43), VASW-1(43)

Relinquished By Sampler: [signature]
Sampler Signature: SEVIN BILIR
Sampler Printed Name: KCSWD
Company
Date: 12/20/2007
Time: 1:10

Received By
Signature
Printed Name
Company
Date
Time

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By: [signature]
Signature: [signature]
Printed Name: Laacke
Company
Date: 12/20/07
Time: 1:10

Observations/Comments/Special Instructions:
SVS107 1220- is part 2 of set from yesterday (SVS107 1219-)

Total # Containers: 20

Instructions
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name: _____
Tel: _____

White and Canary: KCSWD
Pink and Goldenrod: Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program

DATE: 03-11-08

King County
Department of
Natural Resources and Parks
Solid Waste Division

COPY

No. 7911

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention: Sendy Jimenez (206) 296-4411
Contract No: T02344T
Project Site Test: VA Hillslope

Project Site Test Reference

GROUNDWATER: CHGW-A Cedar Hills GW Annly; CHGW Cedar Hills GW Qty (NPDES); CHGW-V C. Hills GW VOAs Only; CHLAPP3 Appendix III Addn'l Analytes; CFGW Cedar Falls GW Qty; DUGW Duvall GW Qty; ENGW Enumclaw GW Qty; HOGW Hobart GW Qty; HTGW Houghton GW Qty; PUGW Puyallup GW Qty; SPGW South Park GW Qty; VAGW Vashon GW Qty

SURFACE WATER: CHSW-A Cedar Hills SW Annly; CHSW-Q Cedar Hills SW Qty; CHSW-M Cedar Hills SW Mtly; CHSW-P Cedar Hills SW Permit; CFSW Cedar Falls SW Qty; DUSW Duvall SW Qty; RESW Renton SW Qty; SPSW South Park SW Qty; VASW Vashon SW Qty

LEACHATE/WASTEWATER: CHLS-A C. Hills Leachate Annly; CHLS-M Cedar Hills Leachate Mtly; CHTW Cedar Hills Truckwash; CHLS-P C. Hills Leachate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; FILS First NE WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-A Vashon Leachate Annly; VALS-Q Vashon Leachate Qty; VALS-M Vashon Leachate Mtly; REDS Renton Seds / Rinsate (R)

Lab No.	Sample ID	Date	Time	Number of Containers	Remarks
	SVS1Ø8Ø311-	03/11/08	0940	8	VASW1 (43) *see Note
	SVS2Ø8Ø311-	↓	1000	12	↓
	SVS24SØ8Ø311-	↓	1020	12	
	VTRPØ8Ø311R	03/11/08		3	
	SVS3Ø8Ø311-	03/11/08	1200	12	VASW1

Relinquished By / Sampler Signature: Sevin Biller — Date: 03/11/2008 — Time: 1505
Sampler Printed Name: KCSWD — Company:
Relinquished By — Signature: — Printed Name: — Company: — Date: — Time:
Received By — Signature: — Printed Name: — Company: — Date: — Time:
Received By — Signature: — Printed Name: — Company: — Date: — Time:

Observations/Comments/Special Instructions:
* Re: SVS1Ø8Ø311- Due to slow recovery, only submitting 6 VOA's 2 TOC will submit rest on 03.12.13/08

Total # Containers: 47

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name: _____
Tel: _____

White and Canary: KCSWD — Pink and Goldenrod: Receiving Laboratory

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Chain of Custody Record

Environmental Monitoring Program Date 03, 12, 08

King County
Department of
Natural Resources and Parks
Solid Waste Division

COPY

No. 8373

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

Attention: Sendy Jimenez 206-296-4411
Contract No: T02344T
Project Test Site: VA Hillslope

Project Site Test Reference

Groundwater: CHGW-A Cedar Hills GW Annly; CHGW Cedar Hills GW Qty (NPDES); CHGW-V C. Hills GW VOAs Only; CHLAPP3 Appendix III Addn'l Analytes; CFGW Cedar Falls GW Qty; DUGW Duvall GW Qty; ENGW Enumclaw GW Qty; HOGW Hobart GW Qty; HTGW Houghton GW Qty; PUGW Puyallup GW Qty; SPGW South Park GW Qty; VAGW Vashon GW Qty

Surface Water: CHSW-A Cedar Hills SW Annly; CHSW-Q Cedar Hills SW Qty; CHSW-M Cedar Hills SW Mtly; CHSW-P Cedar Hills SW Permit; CFSW Cedar Falls SW Qty; DUSW Duvall SW Qty; RESW Renton SW Qty; SPSW South Park SW Qty; VASW Vashon SW Qty

Leachate / Wastewater: CHLS-A C. Hills Leachate Annly; CHLS-M Cedar Hills Leachate Mtly; CHTW Cedar Hills Truckwash; CHLS-P C. Hills Leachate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; FILS First NE WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-A Vashon Leachate Annly; VALS-Q Vashon Leachate Qty; VALS-M Vashon Leachate Mtly; REDS Renton Seds / Rinsate (R)

Lab No.	Sample I.D.	Date	Time	Number of Containers	Remarks
	SVS1Ø8Ø311-	3/12/08	0935	3	VASW1 (43) *

Relinquished By / Sampler Signature: Sevin Biller — Date: 03/12/2008 — Time: 1435
Printed Name: KCSWD — Company:
Relinquished By — Signature: — Printed Name: — Company: — Date: — Time:
Received By — Signature: — Printed Name: — Company: — Date: 3/12/08 — Time: 14:35

Observations/Comments/Special Instructions:
* Due to slow recovery, collected only Red 500mL, Yellow 500mL, and 3/4 of 1000 mL HDPE
Run TSS/TS and PHYS on the 1000mL HDPE Bottle

Total # Containers: 3

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name: _____
Tel: _____

0498 (10/07) — Distribution: White and Canary – KCSWD; Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record
Environmental Monitoring Program Date 03/13/08

Department of Natural Resources and Parks
King County **Solid Waste Division**

COPY

№ 83771

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy Jimenez 206-296-4411
Contract No.	T02344T
Project Test Site	VA Hillslope

Project Site Test Reference

Groundwater: CHGW-A Cedar Hills GW Annly; CHGW C. Hills GW OTLY (NPDES); CHGW-V C. Hills GW VOAs Only; GW-APP3 Appendix III Addn'l Analytes; CFGW Cedar Hills GW Qtly; DUGW Duvall GW Qtly; ENGW Enumclaw GW Qtly; HDGW Hobart GW Qtly; HTGW Houghton GW Qtly; PUGW Puyallup GW Qtly; SFGW South Park GW Qtly; VAGW Vashon GW Qtly

Surface Water: CHSW-A Cedar Hills SW Annly; CHSW-Q Cedar Hills SW Qtly; CHSW-M Cedar Hills SW Mthly; CHSW-P Cedar Hills SW Permit; CFSW Cedar Falls SW Qtly; DUSW Duvall SW Qtly; RESW Renton SW Qtly; SPSW South Park SW Qtly; VASW Vashon SW Qtly

Leachate / Wastewater: CHLS-A C. Hills Leachate Annly; CHLS-M Cedar Hills Leachate Mthly; CHTW Cedar Hills Trucwash; CHLS-P C. Hills Leachate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; FILS First NE WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-A Vashon Leachate Permit; VALS-S Vashon Leachate Annly; VALS-Q Vashon Leachate Qtly; VALS-M Vashon Leachate Mthly; REDS Renton Sole / Primate (R)

PERMIT

Lab No.	Sample I.D.	Date	Time	Number of Containers	Remarks
	SVS4080313-	3/13/08	1000	12	VASW-1(43)
	SVS5080313-	↓	1115	12	↓
	SVS6080313-		1200	11	*
					10 Forgot 2 TCC
	SVEB080313-		1100	12	VASW-1(43)
	VTRP080313R	↓		3	

Relinquished By	Date	Received By	Date	Observations/Comments/Special Instructions:	Total # Containers: 50
Signature: Sevin Bilir	3/13/2008	Signature		*Re: SVS6080313- Due to slow recovery, could only collect 1 bottle. Run PHYS & TSS/TS on bottle in this set.	
Printed Name: KCSWD	Time: 1618	Printed Name / Company	Time		
Relinquished By	Date	Received By: P Wishaar	Date: 3/3/08		
Signature		Signature: P Wishaar			
Printed Name / Company	Time	Printed Name: Pace	Time: 1618		

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name_____

Tel_____

0498 (10/07) Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

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Chain of Custody Record
Environmental Monitoring Program Date 07/16/08

Department of Natural Resources and Parks
King County **Solid Waste Division**

№ 84171

COPY

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy Jimenez 206-296-4411
Contract No.	T02344T
Project Test Site	VA Hillslope

Project Site Test Reference

Groundwater: CHGW-A Cedar Hills GW Annly; CHGW C. Hills GW OTLY (NPDES); CHGW-V C. Hills GW VOAs Only; GW-APP3 Appendix III Addn'l Analytes; CFGW Cedar Hills GW Qtly; DUGW Duvall GW Qtly; ENGW Enumclaw GW Qtly; HDGW Hobart GW Qtly; HTGW Houghton GW Qtly; PUGW Puyallup GW Qtly; SFGW South Park GW Qtly; VAGW Vashon GW Qtly

Surface Water: CHSW-A Cedar Hills SW Annly; CHSW-Q Cedar Hills SW Qtly; CHSW-M Cedar Hills SW Mthly; CHSW-P Cedar Hills SW Permit; CFSW Cedar Hills SW Qtly; DUSW Duvall SW Qtly; RESW Renton SW Qtly; SPSW South Park SW Qtly; VASW Vashon SW Qtly

Leachate / Wastewater: CHLS-A C. Hills Leachate Annly; CHLS-M Cedar Hills Leachate Mthly; CHTW Cedar Hills Trucwash; CHLS-P C. Hills Leachate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; FILS First NE WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-A Vashon Leachate Permit; VALS-S Vashon Leachate Annly; VALS-Q Vashon Leachate Qtly; VALS-M Vashon Leachate Mthly; REDS Renton Sole / Primate (R)

PERMIT

Lab No.	Sample I.D.	Date	Time	Number of Containers	Remarks
	SVS2080716-	07/16/2008	1045	12	VASW 1(43)
	SVS4080716-	↓	1150	12	↓
	SVS5080716-		1320	12	
	SVS6080716-	↓	1255	11	*
	VTRP080716V	07/16/2008	1045	3	

Relinquished By	Date	Received By	Date	Observations/Comments/Special Instructions:	Total # Containers: 50
Signature: Sevin BILIR	07/16/2008	Signature		* Slow Recovery: only collected 1 Bottle for TSS/TS and PHYS.	
Printed Name: KCSWD	Time: 1616	Printed Name / Company	Time		
Relinquished By	Date	Received By: Pace Analytical	Date: 7/16/08		
Signature		Signature			
Printed Name / Company	Time	Printed Name: Tad Bell	Time: 4:18		

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name_____

Tel_____

0498 (10/07) Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 10/07/2008

Department of Natural Resources and Parks
King County **Solid Waste Division**

№ 08872

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy Jimenez 206-296-4411
Contract No.	T02344T
Project Test Site	VASW1(43) VA Hillslope

Project Site Test Reference

PERMIT

Lab No.	Sample I.D.	Date	Time	Groundwater 1–12	Surface Water 13–21	Leachate / Wastewater 22–35	S 36	Number of Containers	Remarks
	SVS2081007-	10/07/2008	1040					12	VASW1(43)
	SVS5081007-		1115					12	
	SVS6081007-		1200					11	*
	SVS4081007-		1220					12	
	VTRP081007R	10/07/2008	1220					3	

	Date		Date	Observations/Comments/Special Instructions	Total # Containers:
Relinquished By Sampler: Jevin BLIR	10/7/2008	Received By		*Note! Re SVS6081007- Could only collect 1 bottle of 1000 HDPE for PHYS and TSS/TS	50
Sampler Signature: Jevin BLIR		Signature			
Sampler Printed Name: KCSWD	Time: 1525	Printed Name	Time		
Company		Company			
Relinquished By	Date	Received By: Jenni Gross	Date: 10/7/08		
Signature		Signature: Jenni Gross			
Printed Name	Time	Printed Name: Pace	Time: 15:25		
Company		Company			

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name: _____ Tel: _____

0498 (Rev. 6/08) Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 01/07/09

Department of Natural Resources and Parks
King County **Solid Waste Division**

№ 08878

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy Jimenez 206-296-4411
Contract No.	T02344T
Project Test Site	VASW1(43) VA Hillslope

Project Site Test Reference

PERMIT

Lab No.	Sample I.D.	Date	Time	Groundwater 1–12	Surface Water 13–21	Leachate / Wastewater 22–35	S 36	Number of Containers	Remarks
	SVS2090107-	01/07/2009	1105					12	
	SVS4090107-		1130					12	
	SVS5090107-		1230					11	*See Note
	SVS6090107-		1300					11	*See Note
	VTRP090107T	01/07/2009	1300					3	

	Date		Date	Observations/Comments/Special Instructions	Total # Containers:
Relinquished By Sampler: SBLIR	01/07/2009	Received By		* Could only collect one 1000-blue HDPE bottle. Analyze for PHYS + TSS/TS in same bottle.	49
Sampler Signature: SBLIR		Signature			
Sampler Printed Name: KCSWD	Time: 1435	Printed Name	Time		
Company		Company			
Relinquished By	Date	Received By: Jenni Gross	Date: 1/7/09		
Signature		Signature: Jenni Gross			
Printed Name	Time	Printed Name: Pace	Time: 14:35		
Company		Company			

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name: _____ Tel: _____

0498 (Rev. 6/08) Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 03,23,09

King County Department of Natural Resources and Parks — Solid Waste Division

№ 08880

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy Jimenez 206-296-4411
Contract No.	T02344T
Project Test Site	VASW-1(43) VA West Hillslope

Project Site Test Reference

PERMIT

Lab No.	Sample I.D.	Date	Time	Groundwater 1–12	Surface Water 13–21	Leachate / Wastewater 22–35	S 36	Number of Containers	Remarks
	SVS4090323-	3/23/2009	1300					12	VASW-1(43)
	VTRP090323T	↓	1300					3	

COPY

Relinquished By Sampler	Date	Received By	Date	Observations/Comments/Special Instructions:
Sampler Signature	3/23/2009	Signature		Total # Containers: 15
Sampler Printed Name: KCSWD	Time: 1610	Printed Name / Company	Time	Instructions: 1. Complete in ballpoint pen. Draw one line through errors and initial. 2. Receiving lab is to sign in the shaded box. 3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed. 4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages. 5. If KCSWD personnel request, please provide a name and telephone number of your contact person.
Relinquished By	Date	Received By: JENNI CROSS	Date: 3/23/09	
Signature		Signature: JENNI CROSS		Name
Printed Name / Company	Time	Printed Name: PACE / Company	Time: 16:10	Tel.

0498 (Rev. 6/08) Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 03,25,09

King County Department of Natural Resources and Parks — Solid Waste Division

№ 08883

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy Jimenez 206-296-4411
Contract No.	T02344T
Project Test Site	VASW-1(43) VA West Hillslope

Project Site Test Reference

PERMIT

Lab No.	Sample I.D.	Date	Time	Groundwater 1–12	Surface Water 13–21	Leachate / Wastewater 22–35	S 36	Number of Containers	Remarks
	SVS2090325-	3/25/2009	1110					12	VASW-1(43)
	VTRP090325R	↓	1110					3	

COPY

Relinquished By Sampler	Date	Received By	Date	Observations/Comments/Special Instructions:
Sampler Signature	3/25/2009	Signature: Crystal Petrillo	3/25/09	Total # Containers: 15
Sampler Printed Name: KCSWD	Time: 1248	Printed Name: Crystal Petrillo / Company: Pace	Time: 12:48P	Instructions: 1. Complete in ballpoint pen. Draw one line through errors and initial. 2. Receiving lab is to sign in the shaded box. 3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed. 4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages. 5. If KCSWD personnel request, please provide a name and telephone number of your contact person.
Relinquished By	Date	Received By	Date	
Signature		Signature		Name
Printed Name / Company	Time	Printed Name / Company	Time	Tel.

0498 (Rev. 6/08) Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 03/24/09

King County Department of Natural Resources and Parks — Solid Waste Division

№ 08882

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy Jimenez 206-296-4411
Contract No.	T02344T
Project Test Site	VASW-1(43) VA West Hillslope

Project Site Test Reference

Groundwater: CHGW-A Cedar Hills GW Analy; CHGW C. Hills GW QTLY (1PT/QS); CHGW-V C. Hills GW VOAs Only; GW-APP3 Appendix III Addit'l Analytes; CFGW Cedar Falls GW Only; DUGW Duvall GW Only; ENGW Enumclaw GW Only; HOGW Hobart GW Only; HTGW Houghton GW Only; PUGW Puyallup GW Only; VAGW Vashon GW Only

Surface Water: CHSW-A Cedar Hills SW Analy; CHSW-D Cedar Hills SW Only; CHSW-M Cedar Hills SW Mthly; CHSW-P Cedar Hills SW Permit; CHSWP1-FC South Lagoon SW; CHSW Area 5 Surface Water; CFSW Cedar Falls SW Only; DUSW Duvall SW Only; RESW Renton SW Only; VASW Vashon SW Only

Leachate / Wastewater: C. Hills Leachate Analy; CHLS-M Cedar Hills Leachate Mthly; CHTW Cedar Hills Truckwash; CHLS-P C. Hills Leachate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; SHLS Shoreline WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-A Vashon Leachate Analy; VALS-O Vashon Leachate Qtly; VALS-M Vashon Leachate Mthly; REDS Renton Solds / Rinsate (R)

PERMIT

S

Remarks: COPY

Lab No.	Sample I.D.	Date	Time	Groundwater	Surface Water	Leachate / Wastewater	S	Number of Containers	Remarks
	SVS5090324-	3/24/2009	1150					12	VASW-1(43)
	SVS6090324-	↓	1130					12	" *
	VTRP090324R	↓	1130					3	

Relinquished By Sampler	SBILIR	3/24/2009	Received By	Date	Observations/Comments/Special Instructions:
Sampler Signature			Signature		ON *SVS6090324- Could only collect 1.5 1000mL bottles. (Please for PHYS and TSS/TS)
Sampler Printed Name	KCSWD	Time 1430	Printed Name	Time	
Company			Company		
Relinquished By		Date	Received By: Nicole Taylor	Date 3/24/09	
Signature			Signature		
Printed Name		Time	Printed Name: Pale	Time 1430	
Company			Company		

Total # Containers: 27

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

Name: _____

Tel: _____

0498 (Rev. 8/08) Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 7/14/09

King County Department of Natural Resources and Parks — Solid Waste Division

№ 09659

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy P. Jimenez 206-296-4411
Authorization	KCEL Lab Services to KCSWD
Project Test Site	VASW-1(43) VA Hillslope

Project Site Test Reference

Groundwater: CHGW Cedar Hills GW Only; CHGW-V C. Hills GW VOAs Only; CHGW-NP Cedar Hills GW-NonPotable; CHGW-OSC Hills GW Cflave; CHGW-E Cedar Hills GW Eqpt Blank; CHGW-O Cedar Hills GW OtHalP Blank; CFGW Cedar Falls GW Only; DUGW Duvall GW Only; ENGW Enumclaw GW Only; HOGW Hobart GW Only; HTGW Houghton GW Only; PUGW Puyallup GW Only; VAGW Vashon GW Only

Surface Water: CHSW-O Cedar Hills SW Quarterly; CHSW-M Cedar Hills SW Monthly; CHSW-P Cedar Hills SW Permit; CHSW-P2 Cedar Hills SW South Lagoon; CHSW-A5 Cedar Hills Area 5 Top Deck; CFSW Cedar Falls SW Only; DUSW Duvall SW Only; VASW Vashon SW Only; VASW-1 Vashon Hillslope SW Only; VASW-2 Vashon Hillslope SW Only; VASW-3 Vashon Hillslope SW Only

HILL

Leachate/Wastewater: CHLS-M Cedar Hills Leachate Mthly; CHTW Cedar Hills Truckwash; CHLS-P Cedar Hills Leachate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; SHLS Shoreline WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-O TM Vashon Leachate Ohly/Mthly; CHSW-E Cedar Hills Emergency Spill

PERMIT

Remarks: COPY

Lab No.	Sample I.D.	Date	Time	Groundwater	Surface Water	Leachate/Wastewater	Number of Containers	Remarks
	SVS3090714-	2009 7/14	1035				12	VASW-1(43)
	SVS4090714-	↓	1200				12	↓
	VTRP090714R	↓	1035				3	

Relinquished By Sampler		Date 2009	Received By	Date	Observations/Comments/Special Instructions:
Sampler Signature	SEVIN BILIR	7/14	Signature		
Sampler Printed Name	KCSWD	Time 1425	Printed Name	Time	
Company			Company		
Relinquished By		Date	Received By:	Date 7-14-09	
Signature			Signature: Jason Kinard		
Printed Name		Time	Printed Name: KCEL	Time 1425	
Company			Company		

Total # of Bottles: 27

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/09) Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 07/16/09

King County Department of Natural Resources and Parks — Solid Waste Division

№ 09660

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy P. Jimenez 206-296-4411
Authorization	KCEL Lab Services to KCSWD
Project Test Site	VASW-1(43) VA Hillslope

Project Site Test Reference

GROUNDWATER: CHGW Cedar Hills GW Qtly; CHGW-V C. Hills GW VOAs Only; CHGW-NP Cedar Hills GW-NonPotable; CHGW-OS C. Hills GW Offsite; CHGW-E Cedar Hills GW Eqpt Blank; CHGW-O Cedar Hills GW-OnhoP Blank; CFGW Cedar Falls GW Qtly; DUGW Duvall GW Qtly; ENGW Enumclaw GW Qtly; HOGW Hobart GW Qtly; HTGW Houghton GW Qtly; PUGW Puyallup GW Qtly; VAGW Vashon GW Qtly

SURFACE WATER: CHSW-Q Cedar Hills SW Quarterly; CHSW-M Cedar Hills SW Monthly; CHSW-P Cedar Hills SW Permit; CHSW-P2 Cedar Hills SW South Lagoon; CHSW-A5 Cedar Hills Area 5 Top Deck; CFSW Cedar Falls SW Qtly; DUSW Duvall SW Qtly; VASW Vashon SW Qtly; VASW-1 Vashon Hillslope SW Qtly; VASW-2 Vashon Hillslope SW Qtly; VASW-3 Vashon Hillslope SW Qtly

LEACHATE/WASTEWATER: CHLS-M Cedar Hills Leachate Mthly; CHTW Cedar Hills Truckwash; CHLS-P Cedar Hills LHaste Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; SRTS Shoreline WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-Q/M Vashon Leachate Qtly/Mthly; CHSW-E Cedar Hills Emergency Spill

HILL: Cedar Hills Leachate Mthly; Cedar Hills Truckwash

PERMIT: Cedar Hills LHaste Permit; Algona WW Permit; Enumclaw WW Permit; Factoria WW Permit; Shoreline WW Permit; Houghton WW Permit; Renton WW Permit; Vashon Leachate Permit; Vashon Leachate Qtly/Mthly; Cedar Hills Emergency Spill

Lab No.	Sample I.D.	Date	Time	Number of Containers	Remarks
	SVS5090716-	2009 7/16	1105	12	VASW-1(43)
	SVS6090716-	"	1050	12	"
	VTRP090716R	2009 7/16	—	3	

Relinquished By Sampler: Sevin Blue — Date: 2009 7/16 — Time: 1445

Sampler: Printed Name: WLRD for KCSWD — Company

Relinquished By — Signature — Printed Name — Company — Date — Time

Received By: Signature: Jason Kinnard — Printed Name: KCEL — Company — Date: 7-16-09 — Time: 1445

Received By — Signature — Printed Name — Company — Date — Time

Observations/Comments/Special Instructions:

Total # of Bottles: 27

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/09)

Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 10/27/09

King County Department of Natural Resources and Parks — Solid Waste Division

№ 09675

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy P. Jimenez 206-296-4411
Authorization	KCEL Lab Services to KCSWD
Project Test Site	VASW-1(43) VA West Hillslope

Project Site Test Reference

GROUNDWATER: CHGW Cedar Hills GW Qtly; CHGW-V C. Hills GW VOAs Only; CHGW-NP Cedar Hills GW-NonPotable; CHGW-OS C. Hills GW Offsite; CHGW-E Cedar Hills GW Eqpt Blank; CHGW-O Cedar Hills GW-OnhoP Blank; CFGW Cedar Falls GW Qtly; DUGW Duvall GW Qtly; ENGW Enumclaw GW Qtly; HOGW Hobart GW Qtly; HTGW Houghton GW Qtly; PUGW Puyallup GW Qtly; VAGW Vashon GW Qtly

SURFACE WATER: CHSW-Q Cedar Hills SW Quarterly; CHSW-M Cedar Hills SW Monthly; CHSW-P Cedar Hills SW Permit; CHSW-P2 Cedar Hills SW South Lagoon; CHSW-A5 Cedar Hills Area 5 Top Deck; CFSW Cedar Falls SW Qtly; DUSW Duvall SW Qtly; VASW Vashon SW Qtly; VASW-1 Vashon Hillslope SW Qtly; VASW-2 Vashon Hillslope SW Qtly; VASW-3 Vashon Hillslope SW Qtly

LEACHATE/WASTEWATER: CHLS-M Cedar Hills Leachate Mthly; CHTW Cedar Hills Truckwash; CHLS-P Cedar Hills LHaste Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; SRTS Shoreline WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-Q/M Vashon Leachate Qtly/Mthly; CHSW-E Cedar Hills Emergency Spill

HILL: Cedar Hills Leachate Mthly; Cedar Hills Truckwash

PERMIT: Cedar Hills LHaste Permit; Algona WW Permit; Enumclaw WW Permit; Factoria WW Permit; Shoreline WW Permit; Houghton WW Permit; Renton WW Permit; Vashon Leachate Permit; Vashon Leachate Qtly/Mthly; Cedar Hills Emergency Spill

Lab No.	Sample I.D.	Date	Time	Number of Containers	Remarks
	SVS2091027-	10-27 2009	1000	12	VASW-1(43)
	SVS4091027-	"	1140	10	*
	SVS5091027-	"	1050	12	
	SVS6091027-	"	1110	10	*
	VTRP091027R	10-16 2009	—	3	

Relinquished By Sampler: Sevin Blue — Date: 10/27 2009 — Time: 1450

Sampler: Printed Name: KCSWD — Company

Relinquished By — Signature — Printed Name — Company — Date — Time

Received By: Signature: Jason Kinnard — Printed Name: KCEL — Company — Date: 10-27-09 — Time: 1450

Received By — Signature — Printed Name — Company — Date — Time

Observations/Comments/Special Instructions:
* DID NOT COLLECT BOTTLES FOR TSS & TDS/TOTS DUE TO SLOW RECOVERY

Total # of Bottles: 47

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/09)

Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 10/28/09

King County Department of Natural Resources and Parks — Solid Waste Division

№ 09674

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy P. Jimenez 206-296-4411
Authorization	KCEL Lab Services to KCSWD
Project Test Site	VASW-1 (43) VA West Hillslope

Project Site Test Reference

Lab No.	Sample I.D.	Date	Time	Number of Containers
	SVS1091027-2009	10-28	1230	2 * SEE NOTES
	SVS2091027-2009	10-28	1315	2 * SEE NOTES

Remarks

Relinquished By/Sampler	Date 10/28	Received By	Date	Observations/Comments/Special Instructions:
Sampler Signature: Sevin BILIR	2009	Signature		* PART OF SET FROM 10-27-2009 ANALYZE FOR TDS & TSS / TOTS
Sampler Printed Name: KCSWD	Time 1457	Printed Name	Time	
Company		Company		
Relinquished By	Date	Received By: Jason Kinnard	Date 10/28/09	
Signature				
Printed Name	Time	Printed Name: KCEL	Time 1457	
Company		Company		

Total # of Bottles: 4

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0406 (Rev. 3/09)

Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 02/04/10

King County Department of Natural Resources and Parks — Solid Waste Division

№ 09683

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy P. Jimenez 206-296-4411
Authorization	KCEL Lab Services to KCSWD
Project Test Site	VASW-1 (43) West Hillslope

Project Site Test Reference

Lab No.	Sample I.D.	Date	Time	Number of Containers
	SVS2100204-2010	02/04	1210	13
	VTRP100204R	02/02/2010	—	3

Remarks

Relinquished By/Sampler	Date 02/04	Received By	Date	Observations/Comments/Special Instructions:
Sampler Signature: Sevin BILIR	2010	Signature		
Sampler Printed Name: KCSWD	Time 1615	Printed Name	Time	
Company		Company		
Relinquished By	Date	Received By: Jason Kinnard	Date 2-4-10	
Signature				
Printed Name	Time	Printed Name: KCEL	Time 1615	
Company		Company		

Total # of Bottles: 16

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0406 (Rev. 3/09)

Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 01/29/10

King County Department of Natural Resources and Parks — Solid Waste Division

No. 09682

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy P. Jimenez 206-296-4411
Authorization	KCEL Lab Services to KCSWD
Project Test Site	VASW-1(43) West Hillslope

Project Site Test Reference

GROUNDWATER: CHGW Cedar Hills GW Qtly; CHGW-V C. Hills GW VOAs Qtly; CHGW-NP Cedar Hills GW-NonPotable; CHGW-OS C. Hills GW Offsite; CHGW-E Cedar Hills GW Eqpt Blank; CHGW-O Cedar Hills GW-OrihoP Blank; CFGW Cedar Falls GW Qtly; DUGW Duvall GW Qtly; ENGW Enumclaw GW Qtly; HOGW Hobart GW Qtly; HTGW Houghton GW Qtly; PUGW Puyallup GW Qtly; VAGW Vashon GW Qtly

SURFACE WATER: CHSW-Q Cedar Hills SW Quarterly; CHSW-M Cedar Hills SW Monthly; CHSW-P Cedar Hills SW Permit; CHSW-P2 Cedar Hills SW South Lagoon; CHSW-A5 Cedar Hills Area 5 Top Deck; CFSW Cedar Falls SW Qtly; DUSW Duvall SW Qtly; VASW Vashon SW Qtly; HILL: VASW-1 Vashon Hillslope SW Qtly; VASW-2 Vashon Hillslope SW Qtly; VASW-3 Vashon Hillslope SW Qtly

LEACHATE/WASTEWATER: CHLS-N Cedar Hills Leachate Mthy; CHTW Cedar Hills Trackwash; CHLS-P Cedar Hills LChate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; SRTS Shoreline WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-O/M Vashon Leachate Qtly/Mthly; CHSW-E Cedar Hills Emergency Spill

PERMIT

Lab No.	Sample I.D.	Date	Time	Number of Containers
	SVS4100129-	01/29/2010	1515	11
	SVS5100129-	"	1345	13
	SVS6100129-	"	1430	11

Remarks: COPY

Relinquished By Sampler	Date 01/29/2010	Received By	Date
Sampler Signature: Sevin Biller		Signature	
Sampler Printed Name: KCSWD	Time 1720	Printed Name	Time
Company		Company	
Relinquished By	Date	Received By	Date 1/29/10
Signature		Signature: Jason Kinnard	
Printed Name	Time	Printed Name: KCEL	Time 1720
Company		Company	

Observations/Comments/Special Instructions:

Total # of Bottles: 35

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/09)

Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 4/15/10

King County Department of Natural Resources and Parks — Solid Waste Division

No. 09687

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy P. Jimenez 206-296-4411
Authorization	KCEL Lab Services to KCSWD
Project Test Site	VASW-1(43) Vashon West Hillslope

Project Site Test Reference

GROUNDWATER: CHGW Cedar Hills GW Qtly; CHGW-V C. Hills GW VOAs Qtly; CHGW-NP Cedar Hills GW-NonPotable; CHGW-OS C. Hills GW Offsite; CHGW-E Cedar Hills GW Eqpt Blank; CHGW-O Cedar Hills GW-OrihoP Blank; CFGW Cedar Falls GW Qtly; DUGW Duvall GW Qtly; ENGW Enumclaw GW Qtly; HOGW Hobart GW Qtly; HTGW Houghton GW Qtly; PUGW Puyallup GW Qtly; VAGW Vashon GW Qtly

SURFACE WATER: CHSW-Q Cedar Hills SW Quarterly; CHSW-M Cedar Hills SW Monthly; CHSW-P Cedar Hills SW Permit; CHSW-P2 Cedar Hills SW South Lagoon; CHSW-A5 Cedar Hills Area 5 Top Deck; CFSW Cedar Falls SW Qtly; DUSW Duvall SW Qtly; VASW Vashon SW Qtly; HILL: VASW-1 Vashon Hillslope SW Qtly; VASW-2 Vashon Hillslope SW Qtly; VASW-3 Vashon Hillslope SW Qtly

LEACHATE/WASTEWATER: CHLS-N Cedar Hills Leachate Mthy; CHTW Cedar Hills Trackwash; CHLS-P Cedar Hills LChate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; SRTS Shoreline WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-O/M Vashon Leachate Qtly/Mthly; CHSW-E Cedar Hills Emergency Spill

PERMIT

Lab No.	Sample I.D.	Date	Time	Number of Containers
	SVS2100415-	04/15/2010	1120	13
	SVS6100414-2	"	1040	3
	VTRP100415R	04/12/2010	—	3

Remarks: COPY

Relinquished By Sampler	Date 4/15/2010	Received By	Date
Sampler Signature: Sevin Biller		Signature	
Sampler Printed Name: KCSWD	Time 1340	Printed Name	Time
Company		Company	
Relinquished By	Date	Received By	Date 4/15/10
Signature		Signature: Jason Kinnard	
Printed Name	Time	Printed Name: KCEL	Time 1340
Company		Company	

Observations/Comments/Special Instructions:

Total # of Bottles: 19

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/09)

Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 04/14/2010

King County Department of Natural Resources and Parks Solid Waste Division

№ 09686

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701, Seattle, WA 98104-3855
Attention: Sendy P. Jimenez 206-296-4411
Authorization: KCEL Lab Services to KCSWD
Project Test Site: VASW-1(43) Vashon West Hillslope

Project Site Test Reference

GROUNDWATER: CHGW Cedar Hills GW Qty; CHGW-V C. Hills GW VOAs Only; CHGW-NP Cedar Hills GW NonPotable; CHGW-OS C. Hills GW Offsite; CHGW-E Cedar Hills GW Eqpt Blank; CHGW-D Cedar Hills GW/DrinkP Blank; CFGW Cedar Falls GW Qty; DUGW Duvall GW Qty; ENGW Enumclaw GW Qty; HQGW Hobson GW Qty; HTGW Houghton GW Qty; PUGW Puyallup GW Qty; VAGW Vashon GW Qty

SURFACE WATER: CHSW-D Cedar Hills SW Quarterly; CHSW-M Cedar Hills SW Monthly; CHSW-P Cedar Hills SW Permit; CHSW-P2 Cedar Hills SW South Lagoon; CHSW-A5 Cedar Hills Area 5 Top Deck; CFSW Cedar Falls SW Qty; DUSW Duvall SW Qty; VASW Vashon SW Qty; VASW-1 Vashon Hillslope SW Qty; VASW-2 Vashon Hillslope SW Qty; VASW-3 Vashon Hillslope SW Qty

LEACHATE/WASTEWATER: CHLS-M Cedar Hills Leachate Mtly; CHTW Cedar Hills Truckwash; CHLS-P Cedar Hills Lchate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; SRTS Shoreline WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-D / H Vashon Leachate Qtly/Mthly; CHSW-E Cedar Hills Emergency Spill

Lab No.	Sample I.D.	Date	Time	Number of Containers
	SVS4 100414-	04/14/2010	1000	13
	SVS6 100414-	"	1025	13
	SVS6 100414-1	"	1045	10 * See Note
	VTRP 100414R	04/13/2010	—	3

Remarks: COPY

Relinquished By/Sampler: [signature] Date: 04/14/2010 Time: 1300
Sampler Signature: Devin Biller
Sampler Printed Name: KCSWD
Company:

Received By: [signature] Date: 4-14-10
Signature: Jason Kinnard
Printed Name: KCEL Time: 1300
Company:

Relinquished By / Signature / Printed Name / Company / Date / Time:

Received By / Signature / Printed Name / Company / Date / Time:

Observations/Comments/Special Instructions:
* Does NOT include bottles for TSS TDS/TOTS Metals, T

Total # of Bottles: 39

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/09) Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

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Chain of Custody Record

Environmental Monitoring Program Date

King County Department of Natural Resources and Parks Solid Waste Division

№ 09694

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701, Seattle, WA 98104-3855
Attention: Sendy P. Jimenez 206-296-4411
Authorization: KCEL Lab Services to KCSWD
Project Test Site:

Project Site Test Reference

GROUNDWATER: CHGW Cedar Hills GW Qty; CHGW-V C. Hills GW VOAs Only; CHGW-NP Cedar Hills GW NonPotable; CHGW-OS C. Hills GW Offsite; CHGW-E Cedar Hills GW Eqpt Blank; CHGW-D Cedar Hills GW/DrinkP Blank; CFGW Cedar Falls GW Qty; DUGW Duvall GW Qty; ENGW Enumclaw GW Qty; HQGW Hobart GW Qty; HTGW Houghton GW Qty; PUGW Puyallup GW Qty; VAGW Vashon GW Qty

SURFACE WATER: CHSW-D Cedar Hills SW Quarterly; CHSW-M Cedar Hills SW Monthly; CHSW-P Cedar Hills SW Permit; CHSW-P2 Cedar Hills SW South Lagoon; CHSW-A5 Cedar Hills Area 5 Top Deck; CFSW Cedar Falls SW Qty; DUSW Duvall SW Qty; VASW Vashon SW Qty; VASW-1 Vashon Hillslope SW Qty; VASW-2 Vashon Hillslope SW Qty; VASW-3 Vashon Hillslope SW Qty

LEACHATE/WASTEWATER: CHLS-M Cedar Hills Leachate Mtly; CHTW Cedar Hills Truckwash; CHLS-P Cedar Hills Lchate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Fairwood WW Permit; SRTS Shoreline WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-D / H Vashon Leachate Qtly/Mthly; CHSW-E Cedar Hills Emergency Spill

Lab No.	Sample I.D.	Date	Time	Number of Containers

Remarks:

Relinquished By/Sampler: [signature] Date: 4/14/10 Time: 1637
Sampler Signature: Devin Biller
Sampler Printed Name: KCSWD
Company:

Received By: [signature] Date:
Signature: Jason Kinnard
Printed Name: KCEL Time: 1637
Company:

Relinquished By / Signature / Printed Name / Company / Date / Time:

Received By / Signature / Printed Name / Company / Date / Time:

Observations/Comments/Special Instructions:

Total # of Bottles:

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/09) Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 12

King County Department of Natural Resources and Parks Solid Waste Division

№ 09695

Name King County Solid Waste Division
Address 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention Sendy P. Jimenez 206-296-4411
Authorization KCEL Lab Services to KCSWD
Project Test Site

Project Site Test Reference

Lab No.	Sample I.D.	Date	Time	GROUNDWATER													SURFACE WATER								HILL			LEACHATE/WASTEWATER			PERMIT											Number of Containers	Remarks
				2 CHGW Cedar Hills GW Qtly	3 CHGW-V C. Hills GW VOAs Only	37 CHGW-NP Cedar Hills GW-NonPotable	38 CHGW-OS C. Hills GW Offsite	41 CHGW-E Cedar Hills GW Eqpt Blank	50 CHGW-O Cedar Hills GW-OrthoP Blank	5 CFGW Cedar Falls GW Qtly	6 DUGW Duvall GW Qtly	7 ENGW Enumclaw GW Qtly	8 HOGW Hobart GW Qtly	9 HTGW Houghton GW Qtly	10 PUGW Puyallup GW Qtly	12 VAGW Vashon GW Qtly	14 CHSW-Q Cedar Hills SW Quarterly	15 CHSW-M Cedar Hills SW Monthly	16 CHSW-P Cedar Hills SW Permit	46 CHSW-P2 Cedar Hills SW South Lagoon	42 CHSW-A5 Cedar Hills Area 5 Top Deck	17 CFSW Cedar Falls SW Qtly	18 DUSW Duvall SW Qtly	21 VASW Vashon SW Qtly	43 VASW-1 Vashon Hillslope SW Qtly	44 VASW-2 Vashon Hillslope SW Qtly	45 VASW-3 Vashon Hillslope SW Qtly	23 CHLS-M Cedar Hills Leachate Mtly	24 CHTW Cedar Hills Truckwash	25 CHLS-P Cedar Hills L'chate Permit	26 ALLS Algona WW Permit	27 ENLS Enumclaw WW Permit	28 FALS Factoria WW Permit	29 SRTS Shoreline WW Permit	30 HTLS Houghton WW Permit	31 RELS Renton WW Permit	32 VALS-P Vashon Leachate Permit	34 VALS-O/M Vashon Leachate Qtly/Mtly	49 CHSW-E Cedar Hills Emergency Spill		
	12	[illegible]	[illegible]																																					13	
			1225																																						
	13	[illegible]																																							

Relinquished By Sampler
Date [illegible]
Sampler Signature
Sampler Printed Name KCSWD
Company
Time [illegible]
Received By
Signature
Printed Name
Company
Date
Time
Relinquished By
Date
Signature
Printed Name
Time
Company
Received By
Signature Jason Kinnard
Printed Name KCEL
Company
Date [illegible]
Time [illegible]

Observations/Comments/Special Instructions:

Total # of Bottles: [illegible]

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/09) Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

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Chain of Custody Record

Environmental Monitoring Program Date 11/02/2010

King County Department of Natural Resources and Parks Solid Waste Division

№ 09701

Name King County Solid Waste Division
Address 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention Sendy P. Jimenez 206-296-4411
Authorization KCEL Lab Services to KCSWD
Project Test Site VASW-1(43) Vashon West Hillslope

Project Site Test Reference

Lab No.	Sample I.D.	Date	Time	GROUNDWATER													SURFACE WATER								HILL			LEACHATE/WASTEWATER			PERMIT											Number of Containers	Remarks
				2 CHGW Cedar Hills GW Qtly	3 CHGW-V C. Hills GW VOAs Only	37 CHGW-NP Cedar Hills GW-NonPotable	38 CHGW-OS C. Hills GW Offsite	41 CHGW-E Cedar Hills GW Eqpt Blank	50 CHGW-O Cedar Hills GW-OrthoP Blank	5 CFGW Cedar Falls GW Qtly	6 DUGW Duvall GW Qtly	7 ENGW Enumclaw GW Qtly	8 HOGW Hobart GW Qtly	9 HTGW Houghton GW Qtly	10 PUGW Puyallup GW Qtly	12 VAGW Vashon GW Qtly	14 CHSW-Q Cedar Hills SW Quarterly	15 CHSW-M Cedar Hills SW Monthly	16 CHSW-P Cedar Hills SW Permit	46 CHSW-P2 Cedar Hills SW South Lagoon	42 CHSW-A5 Cedar Hills Area 5 Top Deck	17 CFSW Cedar Falls SW Qtly	18 DUSW Duvall SW Qtly	21 VASW Vashon SW Qtly	43 VASW-1 Vashon Hillslope SW Qtly	44 VASW-2 Vashon Hillslope SW Qtly	45 VASW-3 Vashon Hillslope SW Qtly	23 CHLS-M Cedar Hills Leachate Mtly	24 CHTW Cedar Hills Truckwash	25 CHLS-P Cedar Hills L'chate Permit	26 ALLS Algona WW Permit	27 ENLS Enumclaw WW Permit	28 FALS Factoria WW Permit	29 SRTS Shoreline WW Permit	30 HTLS Houghton WW Permit	31 RELS Renton WW Permit	32 VALS-P Vashon Leachate Permit	34 VALS-O/M Vashon Leachate Qtly/Mtly	49 CHSW-E Cedar Hills Emergency Spill		
	SVS2101102-	11/02 2010	1010																						X															13	
	VTRP101102R	11/01 2010	—																																					3	
	SVS4101102-	11/02 2010	1140																						X															13	

Relinquished By Sampler
Date 11/02 2010
Sampler Signature SBILIR
Sampler Printed Name KCSWD
Company
Time 1440
Received By
Signature
Printed Name
Company
Date
Time
Relinquished By
Date
Signature
Printed Name
Time
Company
Received By
Signature Lynne Cox
Printed Name KCEL
Company
Date [illegible]
Time [illegible]

Observations/Comments/Special Instructions:

Total # of Bottles: 29

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

(Rev. 3/09) Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 11/5/10

King County
Department of Natural Resources and Parks
Solid Waste Division

Nº [illegible]

Name King County Solid Waste Division
Address 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention Sendy P. Jimenez 206-296-4411
Authorization KCEL Lab Services to KCSWD
Project Test Site VASW-1(43) Vashon West Hillslope

Project Site Test Reference

Lab No.	Sample I.D.	Date	Time	CHGW Cedar Hills GW Qtly	CHGW-V C. Hills GW VOAs Only	CHGW-NP Cedar Hills GW-NonPotable	CHGW-OS C. Hills GW Offsite	CHGW-E Cedar Hills GW Eqpt Blank	CHGW-O Cedar Hills GW-OrthoP Blank	CFGW Cedar Falls GW Qtly	DUGW Duvall GW Qtly	ENGW Enumclaw GW Qtly	HOGW Hobart GW Qtly	HTGW Houghton GW Qtly	PUGW Puyallup GW Qtly	VAGW Vashon GW Qtly	CHSW-Q Cedar Hills SW Quarterly	CHSW-M Cedar Hills SW Monthly	CHSW-P Cedar Hills SW Permit	CHSW-P2 Cedar Hills SW South Lagoon	CHSW-AS Cedar Hills Area 5 Top Deck	CFSW Cedar Falls SW Qtly	DUSW Duvall SW Qtly	VASW Vashon SW Qtly	VASW-1 Vashon Hillslope SW Qtly	VASW-2 Vashon Hillslope SW Qtly	VASW-3 Vashon Hillslope SW Qtly	CHLS-M Cedar Hills Leachate Mthy	CHTW Cedar Hills Truckwash	CHLS-P Cedar Hills L'chate Permit	ALLS Algona WW Permit	ENLS Enumclaw WW Permit	FALS Factoria WW Permit	SHLS Shoreline WW Permit	HTLS Houghton WW Permit	RELS Renton WW Permit	VALS-P Vashon Leachate Permit	VALS-O/M Vashon Leachate Qtly/Mthy	CHSW-E Cedar Hills Emergency Spill	Number of Containers	Remarks
																									HILL					PERMIT											
				GROUNDWATER													SURFACE WATER											LEACHATE/WASTEWATER													
				2	3	37	38	41	50	5	6	7	8	9	10	12	14	15	16	46	42	17	18	21	43	44	45	23	24	25	26	27	28	29	30	31	32	34	49		
	SVS5101105-	11/5/2010	1150																						X															13	
	SVS6101105-	11/5/2010	1220																						X															10	*
	VTKF101105K	11/5/2010	—																																					3	

Relinquished By/Sampler
Date 11/5/2010
Sampler Signature Sevin Bulik
Sampler Printed Name
KCSWD
Company
Time 1515

Received By
Signature
Printed Name
Company
Date
Time

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By
Signature Jason Kinnear
Printed Name KCEL
Company
Date 11/5/2010
Time 1515

Observations/Comments/Special Instructions:
*Note: On Dissolved metals, do not analyze. Pending

Total # of Bottles: 26

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/09)

Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 01/26/10

King County Department of Natural Resources and Parks
Solid Waste Division

№ 09680

Name King County Solid Waste Division
Address 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention Sendy P. Jimenez 206-296-4411
Authorization KCEL Lab Services to KCSWD
Project Test Site VAGW (12) West Hillslope

COPY

Project Site Test Reference

				GROUNDWATER													SURFACE WATER								HILL			LEACHATE/WASTEWATER		PERMIT											Remarks
Lab No.	Sample I.D.	Date	Time	2 CHGW Cedar Hills GW Qtly	3 CHGW-V C. Hills GW VOAs Only	37 CHGW-NP Cedar Hills GW-NonPotable	38 CHGW-OS C. Hills GW Offsite	41 CHGW-E Cedar Hills GW Eqpt Blank	50 CHGW-O Cedar Hills GW-OrthoP Blank	5 CFGW Cedar Falls GW Qtly	6 DUGW Duvall GW Qtly	7 ENGW Enumclaw GW Qtly	8 HOGW Hobart GW Qtly	9 HTGW Houghton GW Qtly	10 PUGW Puyallup GW Qtly	12 VAGW Vashon GW Qtly	14 CHSW-Q Cedar Hills SW Quarterly	15 CHSW-M Cedar Hills SW Monthly	16 CHSW-P Cedar Hills SW Permit	46 CHSW-P2 Cedar Hills SW South Lagoon	42 CHSW-A5 Cedar Hills Area 5 Top Deck	17 CFSW Cedar Falls SW Qtly	18 DUSW Duvall SW Qtly	21 VASW Vashon SW Qtly	43 VASW-1 Vashon Hillslope SW Qtly	44 VASW-2 Vashon Hillslope SW Qtly	45 VASW-3 Vashon Hillslope SW Qtly	23 CHLS-M Cedar Hills Leachate Mtly	24 CHTW Cedar Hills Truckwash	25 CHLS-P Cedar Hills L'chate Permit	26 ALLS Algona WW Permit	27 ENLS Enumclaw WW Permit	28 FALS Factoria WW Permit	29 SRTS Shoreline WW Permit	30 HTLS Houghton WW Permit	31 RELS Renton WW Permit	32 VALS-P Vashon Leachate Permit	34 VALS-O/M Vashon Leachate Qtly/Mtly	49 CHSW-E Cedar Hills Emergency Spill	Number of Containers	
	WV30100126-	01/26 2010	1115													X																								12	
	VTRP100126R	01/22 2010	—																																					3	

Relinquished By Sampler: SBL
Date: 1/26 2010
Sampler Signature: Sevin BILIR
Sampler Printed Name: KCSWD
Company
Time: 1346

Received By
Signature
Printed Name
Company
Date
Time

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By: Lyne Cox
Signature: Lynne Cox
Printed Name: KCEL
Company
Date: 1/26/10
Time: 1345

Observations/Comments/Special Instructions:

Total # of Bottles: 15

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/09)

Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

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Chain of Custody Record

Environmental Monitoring Program Date 01/29/10

King County Department of Natural Resources and Parks
Solid Waste Division

№ 09679

Name King County Solid Waste Division
Address 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention Sendy P. Jimenez 206-296-4411
Authorization KCEL Lab Services to KCSWD
Project Test Site VAGW (12) West Hillslope

COPY

Project Site Test Reference

				GROUNDWATER													SURFACE WATER								HILL			LEACHATE/WASTEWATER		PERMIT											Remarks
Lab No.	Sample I.D.	Date	Time	2 CHGW Cedar Hills GW Qtly	3 CHGW-V C. Hills GW VOAs Only	37 CHGW-NP Cedar Hills GW-NonPotable	38 CHGW-OS C. Hills GW Offsite	41 CHGW-E Cedar Hills GW Eqpt Blank	50 CHGW-O Cedar Hills GW-OrthoP Blank	5 CFGW Cedar Falls GW Qtly	6 DUGW Duvall GW Qtly	7 ENGW Enumclaw GW Qtly	8 HOGW Hobart GW Qtly	9 HTGW Houghton GW Qtly	10 PUGW Puyallup GW Qtly	12 VAGW Vashon GW Qtly	14 CHSW-Q Cedar Hills SW Quarterly	15 CHSW-M Cedar Hills SW Monthly	16 CHSW-P Cedar Hills SW Permit	46 CHSW-P2 Cedar Hills SW South Lagoon	42 CHSW-A5 Cedar Hills Area 5 Top Deck	17 CFSW Cedar Falls SW Qtly	18 DUSW Duvall SW Qtly	21 VASW Vashon SW Qtly	43 VASW-1 Vashon Hillslope SW Qtly	44 VASW-2 Vashon Hillslope SW Qtly	45 VASW-3 Vashon Hillslope SW Qtly	23 CHLS-M Cedar Hills Leachate Mtly	24 CHTW Cedar Hills Truckwash	25 CHLS-P Cedar Hills L'chate Permit	26 ALLS Algona WW Permit	27 ENLS Enumclaw WW Permit	28 FALS Factoria WW Permit	29 SRTS Shoreline WW Permit	30 HTLS Houghton WW Permit	31 RELS Renton WW Permit	32 VALS-P Vashon Leachate Permit	34 VALS-O/M Vashon Leachate Qtly/Mtly	49 CHSW-E Cedar Hills Emergency Spill	Number of Containers	
	WV31100128-	01/28 2010	1530													X																								12	
	VTRP100128T	01/26 2010	—																																					3	

COPY

Relinquished By Sampler: SBL
Date: 1/29 2010
Sampler Signature: Sevin BiLiR
Sampler Printed Name: KCSWD
Company
Time: 0740

Received By
Signature
Printed Name
Company
Date
Time

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By
Signature: Benjamin Meador
Printed Name: King County Env Lab
Company
Date: 1/29/10
Time: 0740

Observations/Comments/Special Instructions:

Total # of Bottles: 15

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/09)

Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 02/19/10

King County Department of Natural Resources and Parks — Solid Waste Division

№ 09684

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy P. Jimenez 206-296-4411
Authorization	KCEL Lab Services to KCSWD
Project Test Site	VAGW(12) Vashon West Hillslope

Project Site Test Reference

GROUNDWATER: CHGW Cedar Hills GW Qtly; CHGW-V C. Hills GW VOAs Only; CHGW-NP Cedar Hills GW-NonPotable; CHGW-QS C. Hills GW Qtrly; CHGW-E Cedar Hills GW Eggl Blank; CHGW-O Cedar Hills GW-OrthoP Blank; CFGW Cedar Falls GW Qtrly; DUGW Dowell GW Qtly; ENGW Snoqualmie GW Qtly; HOGW Hobart GW Qtly; HTGW Houghton GW Qtly; PUGW Puyallup GW Qtly; VAGW Vashon GW Qtly

SURFACE WATER: CHSW-Q Cedar Hills SW Quarterly; CHSW-M Cedar Hills SW Monthly; CHSW-P Cedar Hills SW Permit; CHSW-P2 Cedar Hills SW South Lagoon; CHSW-A5 Cedar Hills Area 5 Top Deck; CFSW Cedar Falls SW Qtrly; DUSW Dowell SW Qtrly; VASW Vashon SW Qtrly; VASW-1 Vashon Hillslope SW Qtrly; VASW-2 Vashon Hillslope SW Qtrly; VASW-3 Vashon Hillslope SW Qtrly

LEACHATE/WASTEWATER: CHLS-M Cedar Hills Leachate Mthly; CHTW Cedar Hills Trackwash; CHLS-P Cedar Hills Lchate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; SRTS Shoreline WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-O,TM Vashon Leachate Qtly/Mthly; CHSW-E Cedar Hills Emergency Spill

Lab No.	Sample I.D.	Date	Time	Number of Containers	Remarks
	WV32100219-	02/19/2010	1250	5	* See Notes
	VTRP100219R	02/17/2010	—	3	

COPY

Relinquished By Sampler	Date 02/19	Received By	Date	Observations/Comments/Special Instructions:
Sampler Signature	2010	Signature		* Due to slow recovery of well could only collect minimum vols. for: 2 VOAs, 1 TOC, 1 CL, SO_4, 1 NH_3, NO_3. Will continue sampling on another day
Sampler Printed Name KCSWD	Time 1608	Printed Name	Time	
Company		Company		
Relinquished By	Date	Received By	Date 02/19	
Signature		Signature Jason Kinard	2010	
Printed Name	Time	Printed Name KCEL	Time	
Company		Company		

Total # of Bottles: 8

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/09) Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

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Chain of Custody Record

Environmental Monitoring Program Date 02/25/10

King County Department of Natural Resources and Parks — Solid Waste Division

№ 09685

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy P. Jimenez 206-296-4411
Authorization	KCEL Lab Services to KCSWD
Project Test Site	VAGW(12) VA West Hillslope

Project Site Test Reference

GROUNDWATER: CHGW Cedar Hills GW Qtly; CHGW-V C. Hills GW VOAs Only; CHGW-NP Cedar Hills GW-NonPotable; CHGW-QS C. Hills GW Qtrly; CHGW-E Cedar Hills GW Eggl Blank; CHGW-O Cedar Hills GW-OrthoP Blank; CFGW Cedar Falls GW Qtrly; DUGW Dowell GW Qtly; ENGW Snoqualmie GW Qtly; HOGW Hobart GW Qtly; HTGW Houghton GW Qtly; PUGW Puyallup GW Qtly; VAGW Vashon GW Qtly

SURFACE WATER: CHSW-Q Cedar Hills SW Quarterly; CHSW-M Cedar Hills SW Monthly; CHSW-P Cedar Hills SW Permit; CHSW-P2 Cedar Hills SW South Lagoon; CHSW-A5 Cedar Hills Area 5 Top Deck; CFSW Cedar Falls SW Qtrly; DUSW Dowell SW Qtrly; VASW Vashon SW Qtrly; VASW-1 Vashon Hillslope SW Qtrly; VASW-2 Vashon Hillslope SW Qtrly; VASW-3 Vashon Hillslope SW Qtrly

LEACHATE/WASTEWATER: CHLS-M Cedar Hills Leachate Mthly; CHTW Cedar Hills Trackwash; CHLS-P Cedar Hills Lchate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; SRTS Shoreline WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-O,TM Vashon Leachate Qtly/Mthly; CHSW-E Cedar Hills Emergency Spill

Lab No.	Sample I.D.	Date	Time	Number of Containers	Remarks
30	WV32100219-	02/25/2010		1	* See Notes
30	VTRP100219R	02/25/2010		1	
LS03117	WV32100219-	02/25/2010	1200	2	* See Notes

COPY

Relinquished By Sampler	Date 02/25	Received By	Date	Observations/Comments/Special Instructions:
Sampler Signature	2010	Signature		* Due to slow recovery, could only collect bottles with minimum volumes for: • Metals, d • COND/ALK • Partial Submittal with COC # 9684 • Will submit other bottles later.
Sampler Printed Name KCSWD	Time 1504	Printed Name	Time	
Company		Company		
Relinquished By	Date	Received By	Date 2/25/10	
Signature		Signature Jason Kinard		
Printed Name	Time	Printed Name KCEL	Time 1504	
Company		Company		

Total # of Bottles: 2

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/09) Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 4/22/10

King County Department of Natural Resources and Parks Solid Waste Division

№ 09691

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701, Seattle, WA 98104-3855
Attention: Sendy P. Jimenez 206-296-4411
Authorization: KCEL Lab Services to KCSWD
Project Test Site: VAGW(12) VA West Hillslope

Project Site Test Reference

Lab No.	Sample I.D.	Date	Time	Number of Containers
	WV31100422-	04/22/2010	1245	12
	VTRP100422R	04/22/2010	—	3

COPY

Relinquished By Sampler	Date	Received By	Date	Observations/Comments/Special Instructions	Total # of Bottles:
Sampler Signature: SBILIR	04/22/2010	Signature			15
Sampler Printed Name: KCSWD	Time: 1456	Printed Name	Time		
Company		Company			
Relinquished By	Date	Received By: David G. Hanna	Date: 4/22/2010		
Signature		Signature: DCH			
Printed Name	Time	Printed Name: KCEL	Time		
Company		Company			

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/09)

Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 04/29/10

King County Department of Natural Resources and Parks Solid Waste Division

№ 09692

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701, Seattle, WA 98104-3855
Attention: Sendy P. Jimenez 206-296-4411
Authorization: KCEL Lab Services to KCSWD
Project Test Site: VAGW(12) VA West Hillslope

Project Site Test Reference

Lab No.	Sample I.D.	Date	Time	Number of Containers
	WV30100429-	04/29/2010	1400	12
	WV32100429-1	04/29/2010	1455	5 *See Note
	VTRP100429R	4/29/2010	—	3

COPY

Relinquished By Sampler	Date	Received By	Date	Observations/Comments/Special Instructions	Total # of Bottles:
Sampler Signature: SBILIR	4/29/2010	Signature		*Collected only: 2 VOA's 2 TOC 1 CL/SO4	20
Sampler Printed Name: KCSWD	Time: 1610	Printed Name	Time		
Company		Company			
Relinquished By	Date	Received By	Date: 4-29-10		
Signature		Signature: Jason Brainard			
Printed Name	Time	Printed Name: KCEL	Time: 1610		
Company		Company			

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/09)

Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 4/30/10

King County Department of Natural Resources and Parks — Solid Waste Division

No. 09693

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701, Seattle, WA 98104-3855
Attention: Sendy P. Jimenez 206-296-4411
Authorization: KCEL Lab Services to KCSWD
Project Test Site: VAGW(12) VA West Hillslope

Project Site Test Reference

	Code	Description
GROUNDWATER	CHGW	Cedar Hills GW Only
	CHGW-V	C. Hills GW VOAs Only
	CHGW-NP	Cedar Hills GW-NonPotable
	CHGW-OS	C. Hills GW Offsite
	CHGW-E	Cedar Hills GW Eqpt Blank
	CHGW-O	Cedar Hills GW CntrlsP Blank
	CFGW	Cedar Falls GW Only
	DUGW	Duvall GW Only
	ENGW	Enumclaw GW Only
	HOGW	Hobart GW Only
	HTGW	Houghton GW Only
	RUGW	Puyallup GW Only
	VAGW	Vashon GW Only
SURFACE WATER	CHSW-Q	Cedar Hills SW Quarterly
	CHSW-M	Cedar Hills SW Monthly
	CHSW-P	Cedar Hills SW Permit
	CHSW-P2	Cedar Hills SW South Lagoon
	CHSW-A5	Cedar Hills Area 5 Top Deck
	CFSW	Cedar Falls SW Only
	DUSW	Duvall SW Only
	VASW	Vashon SW Only
HILL PERMIT	VASW-1	Vashon Hillslope SW Only
	VASW-2	Vashon Hillslope SW Only
	VASW-3	Vashon Hillslope SW Only
LEACHATE/WASTEWATER	CHLS-M	Cedar Hills Leachate Mfg
	CHTW	Cedar Hills Treatwash
	CHLS-P	Cedar Hills LChate Permit
	ALLS	Algona WW Permit
	ENLS	Enumclaw WW Permit
	FALS	Factoria WW Permit
	SRTS	Shoreline WW Permit
	HTLS	Houghton WW Permit
	RELS	Renton WW Permit
	VALS-P	Vashon Leachate Permit
	VALS-O/M	Vashon Leachate Cty/Mfg
	CHSW-E	Cedar Hills Emergency Spill

Lab No.	Sample I.D.	Date	Time	Number of Containers	Remarks
	WV32100429-2	4/30/2010	1200	2	* See Note

COPY

Relinquished By Sampler: [signature] Date: 4/30/2010 Time: 1505
Sampler Signature: Sean Blair
Sampler Printed Name: KCSWD
Company:

Relinquished By
Signature:
Printed Name:
Company:
Date:
Time:

Received By: [signature] Date: 4-30-10 Time: 1505
Signature: Jason Kinnard
Printed Name: KCEL
Company:

Received By
Signature:
Printed Name:
Company:
Date:
Time:

Observations/Comments/Special Instructions:
* Collected Min/Max Volumes
TOS/TOTS
NH3/NO3

Total # of Bottles: 2

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/09)

Distribution: White and Canary – KCS Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 8-17-2010

King County Department of Natural Resources and Parks — Solid Waste Division

No. 09698

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701, Seattle, WA 98104-3855
Attention: Sendy P. Jimenez 206-296-4411
Authorization: KCEL Lab Services to KCSWD
Project Test Site: VAGW(12) West Hillslope Vashon

Project Site Test Reference

	Code	Description
GROUNDWATER	CHGW	Cedar Hills GW Only
	CHGW-V	C. Hills GW VOAs Only
	CHGW-NP	Cedar Hills GW-NonPotable
	CHGW-OS	C. Hills GW Offsite
	CHGW-E	Cedar Hills GW Eqpt Blank
	CHGW-O	Cedar Hills GW CntrlsP Blank
	CFGW	Cedar Falls GW Only
	DUGW	Duvall GW Only
	ENGW	Enumclaw GW Only
	HOGW	Hobart GW Only
	HTGW	Houghton GW Only
	RUGW	Puyallup GW Only
	VAGW	Vashon GW Only
SURFACE WATER	CHSW-Q	Cedar Hills SW Quarterly
	CHSW-M	Cedar Hills SW Monthly
	CHSW-P	Cedar Hills SW Permit
	CHSW-P2	Cedar Hills SW South Lagoon
	CHSW-A5	Cedar Hills Area 5 Top Deck
	CFSW	Cedar Falls SW Only
	DUSW	Duvall SW Only
	VASW	Vashon SW Only
HILL PERMIT	VASW-1	Vashon Hillslope SW Only
	VASW-2	Vashon Hillslope SW Only
	VASW-3	Vashon Hillslope SW Only
LEACHATE/WASTEWATER	CHLS-M	Cedar Hills Leachate Mfg
	CHTW	Cedar Hills Treatwash
	CHLS-P	Cedar Hills LChate Permit
	ALLS	Algona WW Permit
	ENLS	Enumclaw WW Permit
	FALS	Factoria WW Permit
	SRTS	Shoreline WW Permit
	HTLS	Houghton WW Permit
	RELS	Renton WW Permit
	VALS-P	Vashon Leachate Permit
	VALS-O/M	Vashon Leachate Cty/Mfg
	CHSW-E	Cedar Hills Emergency Spill

Lab No.	Sample I.D.	Date	Time	Number of Containers	Remarks
	WV30100817-	8/17/10	1300	12	
	VTRIP00817R	8/16/10	—	3	

Relinquished By Sampler: [signature] Date: 8/17 Time: 1504
Sampler Signature: Sean Blair
Sampler Printed Name: WLRD for KCSWD
Company:

Relinquished By
Signature:
Printed Name:
Company:
Date:
Time:

Received By: [signature] Date: 8-17-10 Time: 1504
Signature: Jason Kinnard
Printed Name: KCEL
Company:

Received By
Signature:
Printed Name:
Company:
Date:
Time:

Observations/Comments/Special Instructions:

Total # of Bottles: 15

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/09)

Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 03/20/2010

King County Department of Natural Resources and Parks — Solid Waste Division

No. 98799

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701, Seattle, WA 98104-3855
Attention: Sendy P. Jimenez 206-296-4411
Authorization: KCEL Lab Services to KCSWD
Project Test Site: VAGW(12) WASH N WEST Hillslope OFFSITE

Project Site Test Reference

GROUNDWATER: CHGW Cedar Hills GW Qtly; CHGW-V C. Hills GW VOAs Qtly; CHGW-NP Cedar Hills GW-NonPotable; CHGW-OS C. Hills GW Offsite; CHGW-E Cedar Hills GW Eggt Blank; CHGW-D Cedar Hills GW DrinkP Blank; CFGW Cedar Falls GW Qtly; DUGW Duvall GW Qtly; ENGW Enumclaw GW Qtly; HOGW Hobart GW Qtly; HTGW Houghton GW Qtly; PUGW Puyallup GW Qtly; VAGW Vashon GW Qtly

SURFACE WATER: CHSW-Q Cedar Hills SW Quarterly; CHSW-M Cedar Hills SW Monthly; CHSW-P Cedar Hills SW Permit; CHSW-PS Cedar Hills SW South Lagoon; CHSW-AS Cedar Hills Area 5 Top Deck; CFSW Cedar Falls SW Qtly; DUSW Duvall SW Qtly; VASW Vashon SW Qtly; VASW-1 Vashon Hillslope SW Qtly; VASW-2 Vashon Hillslope SW Qtly; VASW-3 Vashon Hillslope SW Qtly

LEACHATE/WASTEWATER: CHLS-M Cedar Hills Leachate Mthly; CHTW Cedar Hills Truckwash; CHLS-P Cedar Hills LCHate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; SRTS Shoreline WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-Q/TM Vashon Leachate Qtly/Mthly; CHSW-E Cedar Hills Emergency Spill

Lab No.	Sample I.D.	Date	Time	Number of Containers	Remarks
	WVPA100320-	3/20/2010	1335	12	
	WV5100320-	3/20/2010	1203	12	
	VTRP100320R	3/20/2010	—	3	
	WV3100320-	3/20/2010	1345	10	* See Note

Relinquished By Sampler: Sampler Signature: SBILK — Date: 3/20/2010 — Time: 1520
Sampler Printed Name: KCSWD — Company: KCSWD

Received By: Signature: Jason Kinnard — Printed Name: KCEL — Company: KCEL — Date: 3/20/10 — Time: 1520

Relinquished By — Signature — Printed Name — Company — Date — Time

Received By — Signature — Printed Name — Company — Date — Time

Observations/Comments/Special Instructions:
* Only 2 VOAs Collected.

Total # of Bottles:

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/09)

Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

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Chain of Custody Record

Environmental Monitoring Program Date 11-05-2010

King County Department of Natural Resources and Parks — Solid Waste Division

No. 10503

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701, Seattle, WA 98104-3855
Attention: Sendy P. Jimenez 206-296-4411
Authorization: KCEL Lab Services to KCSWD
Project Test Site: VAGW(12) WEST HILLSLOPE - VASHON

Project Site Test Reference

GROUNDWATER: CHGW Cedar Hills GW Qtly; CHGW-V C. Hills GW VOAs Qtly; CHGW-NP Cedar Hills GW-NonPotable; CHGW-OS C. Hills GW Offsite; CHGW-E Cedar Hills GW Eggt Blank; CHGW-D Cedar Hills GW DrinkP Blank; CFGW Cedar Falls GW Qtly; DUGW Duvall GW Qtly; ENGW Enumclaw GW Qtly; HOGW Hobart GW Qtly; HTGW Houghton GW Qtly; PUGW Puyallup GW Qtly; VAGW Vashon GW Qtly

SURFACE WATER: CHSW-Q Cedar Hills SW Quarterly; CHSW-M Cedar Hills SW Monthly; CHSW-P Cedar Hills SW Permit; CHSW-PS Cedar Hills SW South Lagoon; CHSW-AS Cedar Hills Area 5 Top Deck; CFSW Cedar Falls SW Qtly; DUSW Duvall SW Qtly; VASW Vashon SW Qtly; VASW-1 Vashon Hillslope SW Qtly; VASW-2 Vashon Hillslope SW Qtly; VASW-3 Vashon Hillslope SW Qtly

LEACHATE/WASTEWATER: CHLS-M Cedar Hills Leachate Mthly; CHTW Cedar Hills Truckwash; CHLS-P Cedar Hills LCHate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; SRTS Shoreline WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-Q/TM Vashon Leachate Qtly/Mthly; CHSW-E Cedar Hills Emergency Spill

Lab No.	Sample I.D.	Date	Time	Number of Containers	Remarks
	WV3101108-	11-08-2010	1240	12	
	VTRP101108R	11-08-2010	—	3	
	WV3210108-1	11-08-2010	1300	2	* See note

Relinquished By Sampler: Sampler Signature: SBILK — Date: 11-08-2010 — Time: 1600
Sampler Printed Name: KCSWD — Company: KCSWD

Received By: Signature: — Printed Name: — Company: — Date: 11-08-2010 — Time: 1600

Relinquished By — Signature — Printed Name — Company — Date — Time

Received By — Signature — Printed Name — Company — Date — Time

Observations/Comments/Special Instructions:
*. DUP for SW received only collected
1 - 40/504 125mL (total volume)
1 - T&C. *2mL (minimum volume plus)

Total # of Bottles: 17

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0498 (Rev. 3/09)

Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 11/09/2010

King County Department of Natural Resources and Parks — Solid Waste Division

№ 10504

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy P. Jimenez 206-296-4411
Authorization	KCEL Lab Services to KCSWD
Project Test Site	VAGW(12) West Hillslope - Vashon

Project Site Test Reference

GROUNDWATER: CHGW Cedar Hills GW Qtly; CHGW-V C. Hills GW VOAs Only; CHGW-NP Cedar Hills GW-NonPotable; CHGW-OS C. Hills GW Offsite; CHGW-E Cedar Hills GW Eqpt Blank; CHGW-O Cedar Hills GW-OnhoP Blank; CFGW Cedar Falls GW Qtly; DUGW Duvall GW Qtly; ENGW Enumclaw GW Qtly; HOGW Hobart GW Qtly; HTGW Houghton GW Qtly; PUGW Puyallup GW Qtly; VAGW Vashon GW Qtly

SURFACE WATER: CHSW-Q Cedar Hills SW Quarterly; CHSW-M Cedar Hills SW Monthly; CHSW-P Cedar Hills SW Permit; CHSW-P2 Cedar Hills SW South Lagoon; CHSW-A5 Cedar Hills Area 5 Top Deck; CFSW Cedar Falls SW Qtly; DUSW Duvall SW Qtly; VASW Vashon SW Qtly; HILL: VASW-1 Vashon Hillslope SW Qtly; VASW-2 Vashon Hillslope SW Qtly; VASW-3 Vashon Hillslope SW Qtly

LEACHATE/WASTEWATER: CHLS-M Cedar Hills Leachate Mthly; CHTW Cedar Hills Truckwash; PERMIT: CHLS-P Cedar Hills Lchate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; SRTS Shoreline WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-Q/TM Vashon Leachate Qtly/Mthly; CHSW-E Cedar Hills Emergency Spill; Number of Containers

Lab No.	Sample I.D.	Date	Time	Number of Containers	Remarks
	WV32101109-	11-09-2010	0920	3	
	WV32101108-2	11-09-2010	1300	4	* See Note
	VTRP 10 11 09-T	11-1-2010	—	3	

Relinquished By Sampler	Date 11/09/2010	Received By	Date	Observations/Comments/Special Instructions: * Note: Due to Slow Recovery only collected 1 – VOA bottle (minimum volume) 1 – Metals bottle (minimum volume) FILTER IN LAB!! 2 – voA bottles (Do not analyze for mercury, dissolved)	Total # of Bottles: 19
Sampler Signature: Sevin BILIR		Signature			
Sampler Printed Name: KCSWD	Time 1610	Printed Name	Time		
Company		Company			
Relinquished By	Date	Received By	Date 11/09/2010		
Signature		Signature: Lynne Cox			
Printed Name	Time	Printed Name: KCEL	Time 1610		
Company		Company			

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0496 (Rev. 3/09) Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Chain of Custody Record

Environmental Monitoring Program Date 11/16/2010

King County Department of Natural Resources and Parks — Solid Waste Division

№ 10505

Name	King County Solid Waste Division
Address	201 South Jackson Street, Suite 701 Seattle, WA 98104-3855
Attention	Sendy P. Jimenez 206-296-4411
Authorization	KCEL Lab Services to KCSWD
Project Test Site	VAGW(12) West Hillslope Vashon

Project Site Test Reference

GROUNDWATER: CHGW Cedar Hills GW Qtly; CHGW-V C. Hills GW VOAs Only; CHGW-NP Cedar Hills GW-NonPotable; CHGW-OS C. Hills GW Offsite; CHGW-E Cedar Hills GW Eqpt Blank; CHGW-O Cedar Hills GW-OnhoP Blank; CFGW Cedar Falls GW Qtly; DUGW Duvall GW Qtly; ENGW Enumclaw GW Qtly; HOGW Hobart GW Qtly; HTGW Houghton GW Qtly; PUGW Puyallup GW Qtly; VAGW Vashon GW Qtly

SURFACE WATER: CHSW-Q Cedar Hills SW Quarterly; CHSW-M Cedar Hills SW Monthly; CHSW-P Cedar Hills SW Permit; CHSW-P2 Cedar Hills SW South Lagoon; CHSW-A5 Cedar Hills Area 5 Top Deck; CFSW Cedar Falls SW Qtly; DUSW Duvall SW Qtly; VASW Vashon SW Qtly; HILL: VASW-1 Vashon Hillslope SW Qtly; VASW-2 Vashon Hillslope SW Qtly; VASW-3 Vashon Hillslope SW Qtly

LEACHATE/WASTEWATER: CHLS-M Cedar Hills Leachate Mthly; CHTW Cedar Hills Truckwash; PERMIT: CHLS-P Cedar Hills Lchate Permit; ALLS Algona WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; SRTS Shoreline WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon Leachate Permit; VALS-Q/TM Vashon Leachate Qtly/Mthly; CHSW-E Cedar Hills Emergency Spill; Number of Containers

Lab No.	Sample I.D.	Date	Time	Number of Containers	Remarks
	WV32101108-3	11/16/2010	1030	2	* See Note

Relinquished By Sampler	Date 11/16/2010	Received By	Date	Observations/Comments/Special Instructions: * Note: Due to Slow Recovery only collected: 1 – ALK (do not Run COND) 1 – TDS/TOTS Both minimum volumes	Total # of Bottles: 2
Sampler Signature: Sevin BILIR		Signature			
Sampler Printed Name: KCSWD	Time 1345	Printed Name	Time		
Company		Company			
Relinquished By	Date	Received By	Date 11/16/2010		
Signature		Signature: Lynne Cox			
Printed Name	Time	Printed Name: KCEL	Time 1345		
Company		Company			

Instructions:
1. Complete in ballpoint pen. Draw one line through errors and initial.
2. Receiving lab is to sign in the shaded box.
3. Check off pre-printed Project Site Test Reference to be performed for each sample, or provide specific instruction if not listed.
4. KCSWD personnel are to retain white and canary pages, receiving lab is to keep pink and goldenrod pages.
5. If KCSWD personnel request, please provide a name and telephone number of your contact person.

0496 (Rev. 3/09) Distribution: White and Canary – KCSWD Pink and Goldenrod – Receiving Laboratory

Appendix H

Ion Balance Calculations

Appendix H.1- Seeps/Seepage Sampling Locations - Ion Balance Calculations

Site ID			SW-24S			SW-24S			SW-24S			SW-24S			SW-24S			SW-S1	
Date			5/9/2007			8/15/2007			10/31/2007			12/19/2007			3/11/2008			5/11/2007	
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L
Calcium	40.1	2	80.0	3.992	38.2	71.0	3.5429	38.0	56.0	2.7944	37.8	49.0	2.4451	38.0	63.0	3.1437	38.7	14.0	0.6986
Magnesium	24.3	2	56.0	4.6081	44.1	50.0	4.1144	44.1	41.0	3.3738	45.6	35.0	2.8801	44.8	45.0	3.7029	45.6	12.0	0.98745
Potassium	39.1	1	3.2	0.0818	0.8	2.8	0.0716	0.8	2.5	0.0639	0.9	2.4	0.0614	1.0	2.7	0.0691	0.9	0.9	0.02174
Sodium	23.0	1	17.0	0.7395	7.1	15.0	0.6525	7.0	15.0	0.6525	8.8	13.0	0.5655	8.8	15.0	0.6525	8.0	6.0	0.26099
Iron	55.8	2	27.0	0.9669	9.2	25.0	0.8953	9.6	13.0	0.4656	6.3	12.0	0.4297	6.7	14.0	0.5014	6.2	0.1	0.00301
Manganese	54.9	2	1.6	0.0582	0.6	1.5	0.0546	0.6	1.4	0.051	0.7	1.3	0.0473	0.7	1.3	0.0473	0.6	0.3	0.01056
Ammonia-N	14.0	1	0.1	0.0071	0.1	0.1	0.0044	0.0	0.0	0.0011	0.0	0.1	0.0042	0.1	0.0	0.0011	0.0	0.0	0.00243
Total Cations (meq/L)				**10.5**			**9.3**			**7.4**			**6.4**			**8.1**			**1.98**
Anions																			
Alkalinity, Total			540			450			400			340			400			92.0	
Carbonate	60.0	2	0.2406	0.008	0.1	0.2005	0.0067	0.1	0.1625	0.0054	0.1	0.2043	0.0068	0.1	0.2759	0.0092	0.1	0.1705	0.00568
Bicarbonate	61.0	1	658.31	10.79	95.1	548.59	8.992	94.6	487.67	7.9934	95.6	414.38	6.7922	92.0	487.44	7.9896	94.8	111.89	1.83404
Chloride	35.5	1	16.0	0.4513	4.0	14.0	0.3949	4.2	5.0	0.141	1.7	9.3	0.2623	3.6	5.0	0.141	1.7	4.4	0.12411
Fluoride	19.0	1	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0
Nitrate-N	14.0	1	0.4	0.0314	0.3	0.5	0.0357	0.4	1.3	0.0928	1.1	2.0	0.1428	1.9	2.1	0.1499	1.8	2.7	0.19276
Sulfate	96.1	2	3.2	0.0666	0.6	3.7	0.077	0.8	6.3	0.1312	1.6	8.6	0.1791	2.4	6.8	0.1416	1.7	12.0	0.24985
Total Anions (meq/L)				**11.3**			**9.5**			**8.4**			**7.4**			**8.4**			**2.41**
Total Ions (meq/L)				**21.8**			**18.8**			**15.8**			**13.8**			**16.5**			**4.4**
Cation/Anion Ratio				**0.92**			**0.98**			**0.89**			**0.87**			**0.96**			**0.82**
Percent Difference				**-4.1**			**-0.9**			**-6.1**			**-6.9**			**-1.9**			**-10**
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)				9.42			8.38			6.88			5.95			7.57			1.97
Calcium					42.37			42.27			40.59			41.08			41.54		
Magnesium					48.91			49.09			49.00			48.39			48.93		
Sodium + Potassium					8.72			8.64			10.41			10.53			9.53		
sum (SO_4, Cl, HCO_3+CO_3)				11.32			9.47			8.27			7.24			8.28			2.21
Sulfate					0.589			0.813			1.586			2.473			1.710		
Chloride					3.988			4.170			1.705			3.623			1.703		
Bicarbonate + Carbonate					95.423			95.017			96.709			93.904			96.587		

Red text indicates a greater than 10 percent difference in Cation/Anion ratio

Site ID				SW-S1			SW-S1			SW-S1			SW-S1			SW-S2			
Date				8/15/2007			10/31/2007			12/19/2007			3/12/2008			5/9/2007			
Cations	MW	n	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L
Calcium	40.1	2	35.2	15.0	0.7485	35.6	16.0	0.7984	38.1	16.0	0.7984	36.3	17.0	0.8483	37.4	92.0	4.5908	37.5	84.0
Magnesium	24.3	2	49.8	12.0	0.9875	47.0	12.0	0.9875	47.1	13.0	1.0697	48.7	13.0	1.0697	47.1	69.0	5.6778	46.4	64.0
Potassium	39.1	1	1.1	1.0	0.0248	1.2	0.9	0.0233	1.1	1.0	0.0246	1.1	1.0	0.0253	1.1	3.7	0.0946	0.8	3.3
Sodium	23.0	1	13.1	6.6	0.2871	13.7	6.5	0.2827	13.5	6.9	0.3001	13.7	7.3	0.3175	14.0	17.0	0.7395	6.0	16.0
Iron	55.8	2	0.2	0.2	0.0079	0.4	0.1	0.0027	0.1	0.1	0.0043	0.2	0.1	0.0036	0.2	25.0	0.8953	7.3	18.0
Manganese	54.9	2	0.5	1.1	0.04	1.9	0.0	0.0005	0.0	0.0	0.0003	0.0	0.2	0.0055	0.2	6.4	0.233	1.9	5.4
Ammonia-N	14.0	1	0.1	0.1	0.004	0.2	0.0	0.0011	0.1	0.0	0.0011	0.0	0.0	0.0011	0.0	0.2	0.0164	0.1	0.1
Total Cations (meq/L)					**2.1**			**2.1**			**2.2**			**2.3**			**12.2**		
Anions																			
Alkalinity, Total				90			88			100			94			570			580
Carbonate	60.0	2	0.2	0.0713	0.0024	0.1	0.0607	0.002	0.1	0.4632	0.0154	0.6	0.2755	0.0092	0.4	0.3842	0.0128	0.1	0.183
Bicarbonate	61.0	1	76.2	109.66	1.7974	71.2	107.24	1.7577	74.9	121.06	1.9843	78.8	114.12	1.8705	77.2	694.62	11.385	86.7	707.23
Chloride	35.5	1	5.2	4.8	0.1354	5.4	4.6	0.1297	5.5	4.8	0.1354	5.4	4.6	0.1297	5.4	55.0	1.5513	11.8	55.0
Fluoride	19.0	1	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Nitrate-N	14.0	1	8.0	3.3	0.2356	9.3	2.3	0.1642	7.0	1.3	0.0928	3.7	1.4	0.1	4.1	0.1	0.0057	0.0	0.0
Sulfate	96.1	2	10.4	17.0	0.354	14.0	14.0	0.2915	12.4	14.0	0.2915	11.6	15.0	0.3123	12.9	8.3	0.1728	1.3	6.7
Total Anions (meq/L)					**2.5**			**2.3**			**2.5**			**2.4**			**13.1**		
Total Ions (meq/L)					**4.6**			**4.4**			**4.7**			**4.7**			**25.4**		
Cation/Anion Ratio					**0.83**			**0.89**			**0.87**			**0.94**			**0.93**		
Percent Difference					**-9.2**			**-5.6**			**-6.8**			**-3.2**			**-3.5**		
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)					2.05			2.09			2.19			2.26			11.10		
Calcium			35.48			36.55			38.17			36.41			37.52			41.35	
Magnesium			50.16			48.22			47.20			48.78			47.31			51.14	
Sodium + Potassium			14.36			15.23			14.63			14.81			15.16			7.51	
sum (SO_4, Cl, HCO_3+CO_3)					2.29			2.18			2.43			2.32			13.12		
Sulfate			11.287			15.463			13.365			12.012			13.451			1.317	
Chloride			5.606			5.915			5.949			5.579			5.588			11.822	
Bicarbonate + Carbonate			83.107			78.623			80.686			82.408			80.960			86.861	

Red text indicates a greater than 10 percent difference in Cation/Anion ratio

Site ID			SW-S2		SW-S2			SW-S2			SW-S2			SW-S2			SW-S2		
Date			3/15/2007		10/31/2007			12/19/2007			3/11/2008			7/16/2008			10/7/2008		
Cations	MW	n	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	4.1916	37.8	83.0	4.1417	36.6	62.0	3.0938	37.7	84.0	4.1916	36.9	89.0	4.4411	37.9	93.0	4.6407	37.1
Magnesium	24.3	2	5.2664	47.5	66.0	5.431	48.1	47.0	3.8675	47.1	64.0	5.2664	46.3	68.0	5.5956	47.7	74.0	6.0893	48.7
Potassium	39.1	1	0.0844	0.8	3.4	0.087	0.8	3.0	0.0767	0.9	3.5	0.0895	0.8	3.5	0.0895	0.8	3.8	0.0972	0.8
Sodium	23.0	1	0.696	6.3	17.0	0.7395	6.5	14.0	0.609	7.4	18.0	0.783	6.9	17.0	0.7395	6.3	20.0	0.87	7.0
Iron	55.8	2	0.6446	5.8	19.0	0.6804	6.0	9.6	0.3438	4.2	23.0	0.8237	7.2	19.0	0.6804	5.8	18.0	0.6446	5.2
Manganese	54.9	2	0.1966	1.8	5.8	0.2111	1.9	5.4	0.1966	2.4	5.7	0.2075	1.8	4.6	0.1675	1.4	4.6	0.1675	1.3
Ammonia-N	14.0	1	0.0086	0.1	0.2	0.0107	0.1	0.4	0.0278	0.3	0.1	0.0086	0.1	0.1	0.0079	0.1	0.1	0.0054	0.0
Total Cations (meq/L)			**11.1**			**11.3**	**99.9**		**8.2**	**99.7**		**11.4**			**11.7**	**99.9**		**12.5**	
Anions																			
Alkalinity, Total					500			550			500			640			610		
Carbonate	60.0	2	0.0061	0.0	0.4145	0.0138	0.1	0.4159	0.0139	0.1	0.3294	0.011	0.1	0.3273	0.0109	0.1	0.2595	0.0087	0.1
Bicarbonate	61.0	1	11.592	87.2	609.16	9.9847	66.7	670.15	10.984	87.7	609.33	9.9875	86.2	780.13	12.787	87.4	743.67	12.19	87.6
Chloride	35.5	1	1.5513	11.7	170.0	4.7951	32.0	47.0	1.3257	10.6	48.0	1.3539	11.7	59.0	1.6642	11.4	55.0	1.5513	11.2
Fluoride	19.0	1	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0
Nitrate-N	14.0	1	0.0018	0.0	0.0	0.0018	0.0	0.4	0.0271	0.2	0.9	0.0643	0.6	0.0	0.0018	0.0	0.0	0.0018	0.0
Sulfate	96.1	2	0.1395	1.0	8.4	0.1749	1.2	8.3	0.1728	1.4	7.9	0.1645	1.4	8.4	0.1749	1.2	7.5	0.1562	1.1
Total Anions (meq/L)			**13.3**			**15.0**	**100.0**		**12.5**	**100.0**		**11.6**			**14.6**	**100.0**		**13.9**	
Total Ions (meq/L)			**24.4**			**26.3**			**20.7**			**23.0**			**26.4**			**26.4**	
Cation/Anion Ratio			**0.83**			**0.75**			**0.66**			**0.98**			**0.80**			**0.90**	
Percent Difference			**-9.0**			**-14.0**			**-20.8**			**-0.9**			**-11.1**			**-5.3**	
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)			10.24			10.40			7.65			10.33			10.87			11.70	
Calcium				40.94			39.83			40.46			40.58			40.87			39.67
Magnesium				51.44			52.23			50.58			50.98			51.50			52.06
Sodium + Potassium				7.62			7.95			8.97			8.45			7.63			8.27
				100.0			100.0			100.0						100.0			
sum (SO_4, Cl, HCO_3+CO_3)			13.29			14.97			12.50			11.52			14.64			13.91	
Sulfate				1.050			1.168			1.383			1.428			1.195			1.123
Chloride				11.674			32.035			10.608			11.756			11.370			11.156
Bicarbonate + Carbonate				87.276			66.797			88.009			86.816			87.436			87.721
				100.0			100.0			100.0						100.0			

Red text indicates a greater than 10 percent difference in Cation/Anion ratio

Site ID			SW-S2			SW-S2			SW-S2			SW-S2			SW-S2			SW-S2	
Date			1/7/2009			3/25/2009			7/14/2009			10/27/2009			2/4/2010			4/15/201(	
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L
Calcium	40.1	2	80.0	3.992	38.2	74.0	3.6926	35.5	98.5	4.9152	36.6	95.3	4.7555	36.1	81.0	4.0419	33.4	87.6	4.3713
Magnesium	24.3	2	59.0	4.855	46.4	62.0	5.1018	49.1	82.1	6.7558	50.4	80.0	6.583	50.0	72.2	5.9412	49.1	68.2	5.612
Potassium	39.1	1	3.6	0.0921	0.9	3.5	0.0895	0.9	4.4	0.113	0.8	4.4	0.1128	0.9	3.9	0.0997	0.8	4.0	0.1018
Sodium	23.0	1	17.0	0.7395	7.1	18.0	0.783	7.5	19.4	0.8439	6.3	24.9	1.0831	8.2	22.0	0.9569	7.9	20.0	0.87
Iron	55.8	2	17.0	0.6088	5.8	16.0	0.573	5.5	15.2	0.5443	4.1	13.2	0.4727	3.6	24.4	0.8738	7.2	17.7	0.6339
Manganese	54.9	2	4.2	0.1529	1.5	3.9	0.142	1.4	4.3	0.1565	1.2	4.2	0.1522	1.2	3.8	0.1383	1.1	3.7	0.1362
Ammonia-N	14.0	1	0.2	0.0143	0.1	0.1	0.0079	0.1	1.2	0.0885	0.7	0.1	0.0084	0.1	0.6	0.0408	0.3	0.1	0.0071
Total Cations (meq/L)				**10.5**			**10.4**			**13.4**			**13.2**			**12.1**			**11.7**
Anions																			
Alkalinity, Total			490			510			539			554			481			469	
Carbonate	60.0	2	0.2085	0.0069	0.1	0.1979	0.0066	0.1	0.2633	0.0088	0.1	0.2006	0.0067	0.1	0.2143	0.0071	0.1	3E-08	9E-10
Bicarbonate	61.0	1	597.38	9.7916	91.2	621.80	10.192	96.1	657.04	10.77	86.1	675.47	11.072	87.0	586.38	9.6114	85.2	572.18	9.3786
Chloride	35.5	1	29.0	0.818	7.6	4.6	0.1297	1.2	53.2	1.5006	12.0	50.3	1.4188	11.1	52.2	1.4724	13.0	52.8	1.4893
Fluoride	19.0	1	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0
Nitrate-N	14.0	1	0.0	0.0018	0.0	0.0	0.0018	0.0	0.0	0.0004	0.0	0.0	0.0008	0.0	0.0	0.0007	0.0	0.0	0.0012
Sulfate	96.1	2	5.8	0.1208	1.1	13.0	0.2707	2.6	10.9	0.2269	1.8	10.9	0.2269	1.8	9.3	0.193	1.7	12.4	0.2582
Total Anions (meq/L)				**10.7**			**10.6**			**12.5**			**12.7**			**11.3**			**11.1**
Total Ions (meq/L)				**21.2**			**21.0**			**25.9**			**25.9**			**23.4**			**22.9**
Cation/Anion Ratio				**0.97**			**0.98**			**1.07**			**1.03**			**1.07**			**1.05**
Percent Difference				**-1.3**			**-1.0**			**3.5**			**1.7**			**3.5**			**2.6**
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)				9.68			9.67			12.63			12.53			11.04			10.96
Calcium					41.25			38.20			38.92			37.94			36.61		
Magnesium					50.16			52.78			53.50			52.52			53.82		
Sodium + Potassium					8.59			9.03			7.58			9.54			9.57		
sum (SO_4, Cl, HCO_3+CO_3)				10.74			10.60			12.51			12.72			11.28			11.13
Sulfate					1.125			2.554			1.815			1.784			1.710		
Chloride					7.618			1.224			11.999			11.150			13.048		
Bicarbonate + Carbonate					91.257			96.222			86.186			87.066			85.241		

Red text indicates a greater than 10 percent difference in Cation/Anion ratio

Site ID				SW-S2			SW-S2			SW-S3			SW-S3			SW-S3			
Date				8/12/2010			11/2/2010			5/11/2007			8/15/2007			10/30/2007			1
Cations	MW	n	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L
Calcium	40.1	2	37.3	80.2	4.002	31.4	77.9	3.8872	34.6	36.0	1.7964	36.6	42.0	2.0958	37.5	35.0	1.7465	38.2	31.0
Magnesium	24.3	2	47.8	82.7	6.8052	53.4	69.4	5.7108	50.8	29.0	2.3863	48.6	34.0	2.7978	50.0	28.0	2.3041	50.4	26.0
Potassium	39.1	1	0.9	4.3	0.1107	0.9	4.3	0.1095	1.0	2.6	0.0665	1.4	2.7	0.0691	1.2	2.3	0.0588	1.3	2.3
Sodium	23.0	1	7.4	23.8	1.0352	8.1	19.3	0.8395	7.5	8.5	0.3697	7.5	9.6	0.4176	7.5	8.7	0.3784	8.3	8.3
Iron	55.8	2	5.4	18.9	0.6768	5.3	16.3	0.5837	5.2	5.3	0.1898	3.9	4.6	0.1647	2.9	1.8	0.0645	1.4	0.8
Manganese	54.9	2	1.2	3.1	0.1136	0.9	3.0	0.1092	1.0	2.1	0.0764	1.6	1.1	0.04	0.7	0.4	0.0157	0.3	0.3
Ammonia-N	14.0	1	0.1	0.1	0.0083	0.1	0.1	0.0068	0.1	0.3	0.0214	0.4	0.2	0.0107	0.2	0.1	0.0037	0.1	0.1
Total Cations (meq/L)					**12.8**			**11.2**			**4.9**			**5.6**			**4.6**		
Anions																			
Alkalinity, Total				541			466			250			290			250			210
Carbonate	60.0	2	0.0	0.1453	0.0048	0.0	0.0866	0.0029	0.0	0.1764	0.0059	0.1	0.1075	0.0036	0.1	0.125	0.0042	0.1	0.2954
Bicarbonate	61.0	1	84.3	659.72	10.814	87.3	568.34	9.3157	86.0	304.64	4.9934	93.5	353.58	5.7955	90.3	304.75	4.9951	89.9	255.60
Chloride	35.5	1	13.4	48.0	1.3539	10.9	47.4	1.337	12.3	6.4	0.1805	3.4	9.3	0.2623	4.1	7.2	0.2031	3.7	6.9
Fluoride	19.0	1	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Nitrate-N	14.0	1	0.0	0.0	0.0004	0.0	0.0	0.0004	0.0	0.1	0.005	0.1	0.0	0.0018	0.0	0.0	0.0018	0.0	0.0
Sulfate	96.1	2	2.3	10.2	0.2124	1.7	8.5	0.1766	1.6	7.4	0.1541	2.9	17.0	0.354	5.5	17.0	0.354	6.4	19.0
Total Anions (meq/L)					**12.4**			**10.8**			**5.3**			**6.4**			**5.6**		
Total Ions (meq/L)					**25.1**			**22.1**			**10.2**			**12.0**			**10.1**		
Cation/Anion Ratio					**1.03**			**1.04**			**0.92**			**0.87**			**0.82**		
Percent Difference					**1.5**			**1.9**			**-4.2**			**-6.8**			**-9.7**		
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)					11.95			10.55			4.62			5.38			4.49		
Calcium			39.90			33.48			36.86			38.89			38.95			38.92		
Magnesium			51.23			56.93			54.15			51.66			52.00			51.34		
Sodium + Potassium			8.87			9.59			9.00			9.44			9.04			9.74		
sum (SO_4, Cl, HCO_3+CO_3)					12.38			10.83			5.33			6.42			5.56		
Sulfate			2.320			1.715			1.630			2.889			5.517			6.370		
Chloride			13.386			10.932			12.343			3.384			4.089			3.655		
Bicarbonate + Carbonate			84.294			87.353			86.027			93.727			90.394			89.975		

Red text indicates a greater than 10 percent difference in Cation/Anion ratio

Site ID			SW-S3		SW-S3			SW-S4			SW-S4			SW-S4 10/30/2007			SW-S4 12/19/2007		
Date			2/20/2007		3/11/2008			5/10/2007			8/16/2007								
Cations	MW	n	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	1.5469	37.3	36.0	1.7964	37.7	35.0	1.7465	36.4	40.0	1.996	37.2	31.0	1.5469	35.6	27.0	1.3473	35.6
Magnesium	24.3	2	2.1395	51.6	30.0	2.4686	51.8	29.0	2.3863	49.7	33.0	2.7155	50.6	27.0	2.2218	51.1	23.0	1.8926	50.1
Potassium	39.1	1	0.0588	1.4	2.3	0.0588	1.2	2.9	0.0742	1.5	2.3	0.0588	1.1	2.4	0.0614	1.4	2.5	0.0639	1.7
Sodium	23.0	1	0.361	8.7	9.3	0.4045	8.5	8.9	0.3871	8.1	11.0	0.4785	8.9	8.1	0.3523	8.1	8.1	0.3523	9.3
Iron	55.8	2	0.0276	0.7	0.7	0.0233	0.5	0.1	0.0047	0.1	0.2	0.0057	0.1	0.1	0.0039	0.1	0.2	0.0079	0.2
Manganese	54.9	2	0.0095	0.2	0.3	0.0095	0.2	5.4	0.1966	4.1	3.0	0.1092	2.0	4.5	0.1638	3.8	3.1	0.1129	3.0
Ammonia-N	14.0	1	0.0037	0.1	0.1	0.0037	0.1	0.0	0.0025	0.1	0.0	0.0021	0.0	0.0	0.0011	0.0	0.0	0.0024	0.1
Total Cations (meq/L)			**4.1**			**4.8**			**4.8**			**5.4**			**4.4**	**100.0**		**3.8**	**99.9**
Anions																			
Alkalinity, Total					220			270			290			260			210		
Carbonate	60.0	2	0.0098	0.2	0.1262	0.0042	0.1	0.1413	0.0047	0.1	0.1553	0.0052	0.1	0.1878	0.0063	0.1	0.5008	0.0167	0.4
Bicarbonate	61.0	1	4.1895	87.4	268.14	4.3951	86.5	329.11	5.3945	91.4	353.48	5.7939	91.8	316.82	5.193	92.1	255.18	4.1827	88.0
Chloride	35.5	1	0.1946	4.1	6.6	0.1862	3.7	6.0	0.1692	2.9	6.2	0.1749	2.8	5.9	0.1664	3.0	5.8	0.1636	3.4
Fluoride	19.0	1	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0
Nitrate-N	14.0	1	0.0018	0.0	1.1	0.0785	1.5	1.5	0.1071	1.8	0.7	0.0478	0.8	0.6	0.0407	0.7	1.7	0.1214	2.6
Sulfate	96.1	2	0.3956	8.3	20.0	0.4164	8.2	11.0	0.229	3.9	14.0	0.2915	4.6	11.0	0.229	4.1	13.0	0.2707	5.7
Total Anions (meq/L)			**4.8**			**5.1**			**5.9**			**6.3**			**5.6**	**100.0**		**4.8**	**100.0**
Total Ions (meq/L)			**8.9**			**9.8**			**10.7**			**11.7**			**10.0**			**8.5**	
Cation/Anion Ratio			**0.87**			**0.94**			**0.81**			**0.85**			**0.77**			**0.79**	
Percent Difference			**-7.2**			**-3.2**			**-10.3**			**-8.1**			**-12.9**			**-11.4**	
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)			4.11			4.73			4.59			5.25			4.18			3.66	
Calcium				37.67			37.99			38.02			38.03			36.99			36.85
Magnesium				52.10			52.21			51.94			51.74			53.12			51.76
Sodium + Potassium				10.22			9.80			10.04			10.24			9.89			11.39
																100.0			100.0
sum (SO_4, Cl, HCO_3+CO_3)			4.79			5.00			5.80			6.27			5.59			4.63	
Sulfate				8.259			8.325			3.951			4.652			4.094			5.841
Chloride				4.063			3.722			2.919			2.791			2.975			3.531
Bicarbonate + Carbonate				87.677			87.953			93.130			92.557			92.932			90.628
																100.0			100.0

Red text indicates a greater than 10 percent difference in Cation/Anion ratio

Site ID			SW-S4			SW-S4			SW-S4			SW-S4			SW-S4			SW-S4	
Date			3/13/2008			7/16/2008			10/7/2008			1/7/2009			3/23/2009			7/14/200	
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L
Calcium	40.1	2	26.0	1.2974	34.9	32.0	1.5968	35.8	44.0	2.1956	35.6	30.0	1.497	35.9	31.0	1.5469	34.4	49.5	2.4701
Magnesium	24.3	2	23.0	1.8926	51.0	28.0	2.3041	51.7	39.0	3.2092	52.1	26.0	2.1395	51.3	29.0	2.3863	53.1	45.2	3.7194
Potassium	39.1	1	2.4	0.0614	1.7	2.5	0.0639	1.4	3.2	0.0818	1.3	2.7	0.0691	1.7	2.7	0.0691	1.5	3.9	0.0992
Sodium	23.0	1	8.5	0.3697	10.0	9.2	0.4002	9.0	11.0	0.4785	7.8	8.4	0.3654	8.8	9.2	0.4002	8.9	12.3	0.535
Iron	55.8	2	0.1	0.0033	0.1	0.2	0.0072	0.2	0.2	0.0075	0.1	0.1	0.0031	0.1	0.1	0.0033	0.1	0.0	0.0008
Manganese	54.9	2	2.4	0.0874	2.4	2.2	0.0801	1.8	5.0	0.182	3.0	2.5	0.091	2.2	2.5	0.091	2.0	3.8	0.1394
Ammonia-N	14.0	1	0.0	0.0011	0.0	0.0	0.0032	0.1	0.1	0.005	0.1	0.0	0.0031	0.1	0.0	0.0011	0.0	0.0	0.003
Total Cations (meq/L)				**3.7**			**4.5**	**99.9**		**6.2**			**4.2**			**4.5**			**7.0**
Anions																			
Alkalinity, Total			170			250			340			230			240			347	
Carbonate	60.0	2	0.1173	0.0039	0.1	0.2272	0.0076	0.1	0.2692	0.009	0.1	0.126	0.0042	0.1	0.4057	0.0135	0.3	0.2685	0.009
Bicarbonate	61.0	1	207.16	3.3956	84.7	304.54	4.9917	90.8	414.25	6.79	93.5	280.34	4.5951	90.3	291.98	4.7858	90.9	422.79	6.93
Chloride	35.5	1	5.5	0.1551	3.9	6.6	0.1862	3.4	8.1	0.2285	3.1	6.2	0.1749	3.4	6.0	0.1692	3.2	6.7	0.1901
Fluoride	19.0	1	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0
Nitrate-N	14.0	1	1.7	0.1214	3.0	0.0	0.0018	0.0	0.0	0.0018	0.0	0.0	0.0018	0.0	0.1	0.0056	0.1	0.0	0.0013
Sulfate	96.1	2	16.0	0.3331	8.3	15.0	0.3123	5.7	11.0	0.229	3.2	15.0	0.3123	6.1	14.0	0.2915	5.5	11.6	0.2415
Total Anions (meq/L)				**4.0**			**5.5**	**100.0**		**7.3**			**5.1**			**5.3**			**7.4**
Total Ions (meq/L)				**7.7**			**10.0**			**13.4**			**9.3**			**9.8**			**14.3**
Cation/Anion Ratio				**0.93**			**0.81**			**0.85**			**0.82**			**0.85**			**0.95**
Percent Difference				**-3.8**			**-10.5**			**-8.2**			**-9.9**			**-7.9**			**-2.8**
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)				3.62			4.36			5.97			4.07			4.40			6.82
Calcium					35.83			36.58			36.81			36.77			35.14		
Magnesium					52.27			52.78			53.80			52.56			54.20		
Sodium + Potassium					11.91			10.63			9.39			10.67			10.66		
								100.0											
sum (SO_4, Cl, HCO_3+CO_3)				3.89			5.50			7.26			5.09			5.26			7.37
Sulfate					8.569			5.681			3.156			6.140			5.542		
Chloride					3.990			3.386			3.149			3.438			3.217		
Bicarbonate + Carbonate					87.441			90.933			93.695			90.422			91.241		
								100.0											

Red text indicates a greater than 10 percent difference in Cation/Anion ratio

Site ID				SW-S4			SW-S4			SW-S4			SW-S4			SW-S4			
Date				10/27/2009			1/29/2010			4/14/2010			8/11/2010			11/2/2010			
Cations	MW	n	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L
Calcium	40.1	2	35.5	57.0	2.8443	34.5	36.4	1.8164	34.9	41.0	2.0459	34.6	54.3	2.7096	31.6	46.8	2.3353	34.6	24.0
Magnesium	24.3	2	53.4	52.8	4.3448	52.7	33.8	2.7813	53.5	38.9	3.201	54.2	60.2	4.9537	57.7	44.5	3.6618	54.3	25.0
Potassium	39.1	1	1.4	4.2	0.1082	1.3	2.8	0.0721	1.4	3.3	0.0836	1.4	4.1	0.1041	1.2	4.0	0.101	1.5	2.4
Sodium	23.0	1	7.7	17.1	0.7438	9.0	10.7	0.4654	9.0	10.9	0.4741	8.0	16.3	0.709	8.3	12.6	0.5481	8.1	8.6
Iron	55.8	2	0.0	0.5	0.018	0.2	0.1	0.0029	0.1	0.0	0.001	0.0	0.1	0.0025	0.0	0.0	0.0007	0.0	0.3
Manganese	54.9	2	2.0	5.1	0.186	2.3	1.7	0.0601	1.2	2.8	0.1001	1.7	2.8	0.1005	1.2	2.6	0.095	1.4	0.1
Ammonia-N	14.0	1	0.0	0.0	0.0023	0.0	0.0	0.0017	0.0	0.0	0.0004	0.0	0.1	0.0053	0.1	0.0	0.0026	0.0	0.1
Total Cations (meq/L)					**8.2**			**5.2**			**5.9**			**8.6**			**6.7**		
Anions																			
Alkalinity, Total				381			247			320			343			365			200
Carbonate	60.0	2	0.1	0.1548	0.0052	0.1	0.2245	0.0075	0.1	0.0305	0.001	0.0	0.1637	0.0055	0.1	0.1075	0.0036	0.0	0.1444
Bicarbonate	61.0	1	94.0	464.51	7.6137	94.6	300.88	4.9318	91.8	390.34	6.398	93.8	418.13	6.8535	94.2	445.08	7.2953	94.9	243.71
Chloride	35.5	1	2.6	6.9	0.1943	2.4	6.0	0.1678	3.1	6.3	0.178	2.6	5.7	0.1619	2.2	5.5	0.154	2.0	5.2
Fluoride	19.0	1	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Nitrate-N	14.0	1	0.0	0.0	0.001	0.0	0.3	0.0197	0.4	0.1	0.0052	0.1	0.2	0.0172	0.2	0.0	0.0004	0.0	1.0
Sulfate	96.1	2	3.3	11.2	0.2332	2.9	11.9	0.2478	4.6	11.5	0.2394	3.5	11.3	0.2353	3.2	11.3	0.2353	3.1	11.0
Total Anions (meq/L)					**8.0**			**5.4**			**6.8**			**7.3**			**7.7**		
Total Ions (meq/L)					**16.3**			**10.6**			**12.7**			**15.9**			**14.4**		
Cation/Anion Ratio					**1.02**			**0.97**			**0.87**			**1.18**			**0.88**		
Percent Difference					**1.2**			**-1.7**			**-7.2**			**8.3**			**-6.5**		
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)					8.04			5.14			5.80			8.48			6.65		
Calcium			36.20			35.37			35.37			35.25			31.97				35.14	
Magnesium			54.51			54.03			54.16			55.15			58.44				55.10	
Sodium + Potassium			9.29			10.60			10.47			9.61			9.59				9.77	
sum (SO_4, Cl, HCO_3+CO_3)					8.05			5.35			6.82			7.26			7.69		
Sulfate			3.277			2.898			4.627			3.513			3.242				3.060	
Chloride			2.579			2.415			3.134			2.611			2.231				2.003	
Bicarbonate + Carbonate			94.144			94.687			92.239			93.876			94.526				94.937	

Red text indicates a greater than 10 percent difference in Cation/Anion ratio

Site ID			SW-S5		SW-S5			SW-S5			SW-S5			SW-S5			SW-S5			SW-S5		
Date			5/10/2007		8/16/2007			11/1/2007			12/18/2007			3/13/2008			7/16/2008					
Cations	MW	n	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)			
Calcium	40.1	2	1.1976	32.3	23.0	1.1477	32.4	24.0	1.1976	31.6	25.0	1.2475	31.0	26.0	1.2974	31.3	24.0	1.1976	30.8			
Magnesium	24.3	2	2.0572	55.4	24.0	1.9749	55.7	26.0	2.1395	56.5	28.0	2.3041	57.2	29.0	2.3863	57.5	27.0	2.2218	57.1			
Potassium	39.1	1	0.0614	1.7	2.2	0.0563	1.6	2.2	0.0563	1.5	2.5	0.0639	1.6	2.3	0.0588	1.4	2.4	0.0614	1.6			
Sodium	23.0	1	0.3741	10.1	8.3	0.361	10.2	8.9	0.3871	10.2	9.3	0.4045	10.0	9.2	0.4002	9.6	9.2	0.4002	10.3			
Iron	55.8	2	0.0115	0.3	0.1	0.0043	0.1	0.2	0.0057	0.2	0.1	0.0047	0.1	0.1	0.0033	0.1	0.2	0.0054	0.1			
Manganese	54.9	2	0.0025	0.1	0.0	0.0006	0.0	0.0	0.0011	0.0	0.0	0.0005	0.0	0.0	0.0004	0.0	0.0	0.0012	0.0			
Ammonia-N	14.0	1	0.0066	0.2	0.0	0.0011	0.0	0.0	0.0011	0.0	0.0	0.0011	0.0	0.0	0.0011	0.0	0.0	0.0011	0.0			
Total Cations (meq/L)			**3.7**			**3.5**			**3.8**			**4.0**			**4.1**			**3.9**				
Anions					190			200			210			200			200					
Alkalinity, Total																						
Carbonate	60.0	2	0.0048	0.1	0.1018	0.0034	0.1	0.1478	0.0049	0.1	0.2694	0.009	0.2	0.1148	0.0038	0.1	0.2135	0.0071	0.2			
Bicarbonate	61.0	1	3.9946	89.9	231.59	3.796	92.0	243.70	3.9945	92.0	255.65	4.1904	91.6	243.77	3.9956	89.3	243.57	3.9923	90.6			
Chloride	35.5	1	0.1467	3.3	3.4	0.0959	2.3	3.2	0.0903	2.1	3.6	0.1015	2.2	3.4	0.0959	2.1	3.8	0.1072	2.4			
Fluoride	19.0	1	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0			
Nitrate-N	14.0	1	0.0685	1.5	0.0	0.0018	0.0	0.1	0.0042	0.1	0.0	0.0018	0.0	1.2	0.0857	1.9	0.1	0.0079	0.2			
Sulfate	96.1	2	0.229	5.2	11.0	0.229	5.6	12.0	0.2499	5.8	13.0	0.2707	5.9	14.0	0.2915	6.5	14.0	0.2915	6.6			
Total Anions (meq/L)			**4.4**			**4.1**			**4.3**			**4.6**			**4.5**			**4.4**				
Total Ions (meq/L)			**8.2**			**7.7**			**8.1**			**8.6**			**8.6**			**8.3**				
Cation/Anion Ratio			**0.84**			**0.86**			**0.87**			**0.88**			**0.93**			**0.88**				
Percent Difference			**-9.0**			**-7.6**			**-6.8**			**-6.4**			**-3.8**			**-6.2**				
TRILINEAR DIAGRAM DATA																						
sum (Ca, Mg, Na+K)			3.69			3.54			3.78			4.02			4.14			3.88				
Calcium				32.45			32.42			31.68			31.03			31.32			30.86			
Magnesium				55.75			55.79			56.59			57.31			57.60			57.25			
Sodium + Potassium				11.80			11.79			11.73			11.65			11.08			11.89			
sum (SO_4, Cl, HCO_3+CO_3)			4.38			4.12			4.34			4.57			4.39			4.40			
Sulfate				5.235			5.553			5.758			5.921			6.645			6.628			
Chloride				3.352			2.325			2.080			2.221			2.186			2.437			
Bicarbonate + Carbonate				91.413			92.122			92.162			91.858			91.169			90.935			

Red text indicates a greater than 10 percent difference in Cation/Anion rati

Site ID			SW-S5			SW-S5			SW-S5			SW-S5			SW-S5			SW-S5	
Date			10/7/2008			1/7/2009			3/24/2009			7/16/2009			10/27/2009			1/29/201(	
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L
Calcium	40.1	2	22.0	1.0978	29.8	24.0	1.1976	32.5	21.0	1.0479	29.0	24.3	1.2126	30.2	23.9	1.1926	27.8	24.0	1.1976
Magnesium	24.3	2	26.0	2.1395	58.1	25.0	2.0572	55.8	26.0	2.1395	59.2	28.3	2.3287	58.0	31.3	2.5756	60.0	28.9	2.3781
Potassium	39.1	1	2.4	0.0614	1.7	2.5	0.0639	1.7	2.3	0.0588	1.6	2.9	0.0729	1.8	2.7	0.0701	1.6	2.6	0.0675
Sodium	23.0	1	8.6	0.3741	10.2	8.4	0.3654	9.9	8.4	0.3654	10.1	9.2	0.3993	9.9	10.3	0.448	10.4	9.9	0.4293
Iron	55.8	2	0.1	0.0031	0.1	0.1	0.0023	0.1	0.1	0.0021	0.1	0.1	0.002	0.0	0.1	0.0026	0.1	0.0	0.0002
Manganese	54.9	2	0.0	0.0006	0.0	0.0	0.0007	0.0	0.0	0.0005	0.0	0.0	0.0005	0.0	0.0	0.0003	0.0	0.0	2E-05
Ammonia-N	14.0	1	0.1	0.0036	0.1	0.0	0.0011	0.0	0.0	0.0011	0.0	0.0	0.0004	0.0	0.0	0.0004	0.0	0.0	0.0004
Total Cations (meq/L)				**3.7**			**3.7**			**3.6**			**4.0**			**4.3**			**4.1**
Anions																			
Alkalinity, Total			200			190			190			170			169			182	
Carbonate	60.0	2	0.4993	0.0166	0.4	0.3067	0.0102	0.2	0.3286	0.011	0.3	0.0811	0.0027	0.1	0.1338	0.0045	0.1	0.1732	0.0058
Bicarbonate	61.0	1	242.98	3.9828	91.4	231.18	3.7892	90.0	231.13	3.7885	89.0	207.23	3.3968	89.3	205.91	3.375	89.4	221.69	3.6337
Chloride	35.5	1	3.4	0.0959	2.2	4.5	0.1269	3.0	4.9	0.1382	3.2	3.8	0.1075	2.8	3.7	0.1055	2.8	3.9	0.1094
Fluoride	19.0	1	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0
Nitrate-N	14.0	1	0.2	0.0129	0.3	0.2	0.0143	0.3	0.1	0.0086	0.2	0.3	0.0193	0.5	0.2	0.0146	0.4	0.3	0.0221
Sulfate	96.1	2	12.0	0.2499	5.7	13.0	0.2707	6.4	15.0	0.3123	7.3	13.3	0.2769	7.3	13.2	0.2748	7.3	12.7	0.2644
Total Anions (meq/L)				**4.4**			**4.2**			**4.3**			**3.8**			**3.8**			**4.0**
Total Ions (meq/L)				**8.0**			**7.9**			**7.9**			**7.8**			**8.1**			**8.1**
Cation/Anion Ratio				**0.84**			**0.88**			**0.85**			**1.06**			**1.14**			**1.01**
Percent Difference				**-8.4**			**-6.6**			**-8.2**			**2.7**			**6.4**			**0.5**
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)				3.67			3.68			3.61			4.01			4.29			4.07
Calcium					29.89			32.51			29.02			30.21			27.82		
Magnesium					58.25			55.84			59.24			58.02			60.09		
Sodium + Potassium					11.86			11.65			11.75			11.77			12.09		
sum (SO_4, Cl, HCO_3+CO_3)				4.35			4.20			4.25			3.78			3.76			4.01
Sulfate					5.750			6.449			7.349			7.318			7.310		
Chloride					2.207			3.024			3.252			2.840			2.806		
Bicarbonate + Carbonate					92.043			90.527			89.399			89.842			89.884		

Red text indicates a greater than 10 percent difference in Cation/A

Appendix H.1- Seeps/Seepage Sampling Locations - Ion Balance Calculations

Site ID				SW-S5			SW-S5			SW-S5			SW-S6			SW-S6			
Date				4/14/2010			8/11/2010			11/5/2010			5/10/2007			8/16/2007			
Cations	MW	n	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L
Calcium	40.1	2	29.4	23.1	1.1527	30.5	22.4	1.1178	28.6	21.3	1.0629	28.5	32.0	1.5968	37.3	28.0	1.3972	36.0	26.0
Magnesium	24.3	2	58.4	26.6	2.1889	57.9	27.8	2.2876	58.5	26.5	2.1806	58.4	27.0	2.2218	52.0	25.0	2.0572	52.9	24.0
Potassium	39.1	1	1.7	2.3	0.0593	1.6	2.6	0.0665	1.7	2.5	0.0634	1.7	1.9	0.0486	1.1	1.9	0.0486	1.3	1.6
Sodium	23.0	1	10.5	8.8	0.3819	10.1	10.1	0.4393	11.2	9.7	0.4237	11.4	9.3	0.4045	9.5	8.7	0.3784	9.7	8.7
Iron	55.8	2	0.0	0.0	0.0002	0.0	0.0	0.0002	0.0	0.0	0.0002	0.0	0.1	0.0033	0.1	0.1	0.0029	0.1	0.3
Manganese	54.9	2	0.0	0.0	8E-05	0.0	0.0	0.0002	0.0	0.0	8E-05	0.0	0.0	1E-04	0.0	0.0	0.0007	0.0	0.1
Ammonia-N	14.0	1	0.0	0.0	0.0004	0.0	0.0	0.0009	0.0	0.0	0.0004	0.0	0.0	0.0011	0.0	0.0	0.0011	0.0	0.0
Total Cations (meq/L)					**3.8**			**3.9**			**3.7**			**4.3**			**3.9**		
Anions																			
Alkalinity, Total				200			179			187			230			140			180
Carbonate	60.0	2	0.1	0.0269	0.0009	0.0	0.0348	0.0012	0.0	0.0469	0.0016	0.0	0.1414	0.0047	0.1	0.0556	0.0019	0.1	0.0699
Bicarbonate	61.0	1	90.0	243.95	3.9985	90.7	218.31	3.5783	90.3	228.04	3.7379	90.7	280.31	4.5946	91.4	170.69	2.7977	84.9	219
Chloride	35.5	1	2.7	3.7	0.1038	2.4	3.0	0.0852	2.1	3.1	0.0886	2.1	5.2	0.1467	2.9	5.2	0.1467	4.4	5.4
Fluoride	19.0	1	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Nitrate-N	14.0	1	0.5	0.5	0.0343	0.8	0.3	0.0228	0.6	0.4	0.0293	0.7	0.7	0.05	1.0	1.7	0.1214	3.7	1.0
Sulfate	96.1	2	6.6	13.0	0.2707	6.1	13.2	0.2748	6.9	12.7	0.2644	6.4	11.0	0.229	4.6	11.0	0.229	6.9	11.0
Total Anions (meq/L)					**4.4**			**4.0**			**4.1**			**5.0**			**3.3**		
Total Ions (meq/L)					**8.2**			**7.9**			**7.9**			**9.3**			**7.2**		
Cation/Anion Ratio					**0.86**			**0.99**			**0.91**			**0.85**			**1.18**		
Percent Difference					**-7.6**			**-0.6**			**-5.0**			**-8.1**			**8.2**		
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)					3.78			3.91			3.73			4.27			3.88		
Calcium			29.41			30.47			28.58			28.49			37.38			36.00		
Magnesium			58.39			57.86			58.49			58.45			52.01			53.00		
Sodium + Potassium			12.20			11.66			12.93			13.06			10.61			11.00		
sum (SO_4, Cl, HCO_3+CO_3)					4.37			3.94			4.09			4.98			3.18		
Sulfate			6.589			6.188			6.976			6.461			4.604			7.213		
Chloride			2.727			2.373			2.162			2.164			2.948			4.619		
Bicarbonate + Carbonate			90.684			91.438			90.861			91.374			92.448			88.168		

ıion ratio

Red text indicates a greater than 10 percent difference in (

Site ID			SW-S6		SW-S6			SW-S6			SW-S6			SW-S6		
Date			11/1/2007		7/16/2008			1/7/2009			10/27/2009			8/11/2010		
Cations	MW	n	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	1.2974	35.0	26.0	1.2974	34.7	26.0	1.2974	34.5	32.3	1.6118	32.4	30.3	1.512	32.8
Magnesium	24.3	2	1.9749	53.3	24.0	1.9749	52.9	25.0	2.0572	54.7	34.2	2.8142	56.5	31.1	2.5591	55.5
Potassium	39.1	1	0.0409	1.1	1.9	0.0486	1.3	1.9	0.0486	1.3	2.3	0.0588	1.2	2.3	0.0581	1.3
Sodium	23.0	1	0.3784	10.2	9.3	0.4045	10.8	8.1	0.3523	9.4	11.4	0.4959	10.0	11.1	0.4828	10.5
Iron	55.8	2	0.0118	0.3	0.1	0.0047	0.1	0.1	0.0033	0.1	0.0	0.0004	0.0	0.0	0.0002	0.0
Manganese	54.9	2	0.002	0.1	0.1	0.0019	0.1	0.0	1E-04	0.0	0.0	0.0001	0.0	0.0	1E-04	0.0
Ammonia-N	14.0	1	0.0011	0.0	0.0	0.0022	0.1	0.0	0.0011	0.0	0.0	0.0004	0.0	0.0	0.0011	0.0
Total Cations (meq/L)			**3.7**			**3.7**			**3.8**			**5.0**			**4.6**	
Anions																
Alkalinity, Total					200			170			4.2			213		
Carbonate	60.0	2	0.0023	0.1	0.1584	0.0053	0.1	0.2132	0.0071	0.2	0.0032	0.0001	0.0	0.0672	0.0022	0.0
Bicarbonate	61.0	1	3.5971	88.8	244	3.9941	89.4	207	3.3924	88.3	5	0.0839	16.5	260	4.2571	90.5
Chloride	35.5	1	0.1523	3.8	6.0	0.1692	3.8	6.1	0.1721	4.5	5.6	0.1588	31.3	4.8	0.1365	2.9
Fluoride	19.0	1	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0
Nitrate-N	14.0	1	0.0714	1.8	0.7	0.0493	1.1	1.0	0.0714	1.9	0.5	0.0363	7.1	0.7	0.048	1.0
Sulfate	96.1	2	0.229	5.7	12.0	0.2499	5.6	9.6	0.1999	5.2	11.0	0.229	45.1	12.4	0.2582	5.5
Total Anions (meq/L)			**4.1**			**4.5**			**3.8**			**0.5**			**4.7**	
Total Ions (meq/L)			**7.8**			**8.2**			**7.6**			**5.5**			**9.3**	
Cation/Anion Ratio			**0.91**			**0.84**			**0.98**			**9.80**			**0.98**	
Percent Difference			**-4.5**			**-8.9**			**-1.1**			**81.5**			**-1.0**	
TRILINEAR DIAGRAM DATA																
sum (Ca, Mg, Na+K)			3.69			3.73			3.76			4.98			4.61	
Calcium				35.14			34.83			34.55			32.36			32.78
Magnesium				53.50			53.01			54.78			56.50			55.49
Sodium + Potassium				11.36			12.16			10.68			11.14			11.73
sum (SO_4, Cl, HCO_3+CO_3)			3.98			4.42			3.77			0.47			4.65	
Sulfate				5.753			5.655			5.300			48.542			5.547
Chloride				3.826			3.830			4.562			33.657			2.933
Bicarbonate + Carbonate				90.420			90.515			90.138			17.801			91.519

Cation/Anion ratio

Red text indicates a greater than 10 percent di

Site ID		
Date		
Cations	MW	n
Calcium	40.1	2
Magnesium	24.3	2
Potassium	39.1	1
Sodium	23.0	1
Iron	55.8	2
Manganese	54.9	2
Ammonia-N	14.0	1
Total Cations (meq/L)		
Anions		
Alkalinity, Total		
Carbonate	60.0	2
Bicarbonate	61.0	1
Chloride	35.5	1
Fluoride	19.0	1
Nitrate-N	14.0	1
Sulfate	96.1	2
Total Anions (meq/L)		
Total Ions (meq/L)		
Cation/Anion Ratio		
Percent Difference		
TRILINEAR DIAGRAM DATA		
sum (Ca, Mg, Na+K)		
Calcium		
Magnesium		
Sodium + Potassium		
sum (SO_4, Cl, HCO_3+CO_3)		
Sulfate		
Chloride		
Bicarbonate + Carbonate		

fference in Cation/Anion ratio

Site ID			SW-14E			SW-W1			SW-W1			SW-W1			SW-W1			SW-W1	
Date			5/9/2007			3/28/2007			5/9/2007			8/14/2007			11/1/2007			3/12/2008	
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L
Calcium	40.1	2	37.0	1.8463	38.3	16.0	0.7984	38.1	18.0	0.8982	38.9	17.0	0.8483	37.7	17.0	0.8483	36.5	17.0	0.8483
Magnesium	24.3	2	30.0	2.4686	51.2	12.0	0.9875	47.1	13.0	1.0697	46.3	13.0	1.0697	47.6	14.0	1.152	49.6	12.0	0.98745
Potassium	39.1	1	2.5	0.0639	1.3	0.9	0.0225	1.1	0.9	0.0233	1.0	0.9	0.0228	1.0	0.8	0.0215	0.9	0.9	0.02379
Sodium	23.0	1	10.0	0.435	9.0	6.4	0.2784	13.3	7.1	0.3088	13.4	6.7	0.2914	13.0	6.7	0.2914	12.5	6.8	0.29578
Iron	55.8	2	0.2	0.0054	0.1	0.2	0.0064	0.3	0.1	0.0043	0.2	0.1	0.0036	0.2	0.1	0.0043	0.2	0.2	0.00609
Manganese	54.9	2	0.1	0.0032	0.1	0.1	0.0024	0.1	0.1	0.0047	0.2	0.3	0.0106	0.5	0.1	0.0051	0.2	0.3	0.00983
Ammonia-N	14.0	1	0.0	0.0011	0.0	0.0	0.0011	0.1	0.0	0.0011	0.0	0.0	0.0011	0.0	0.0	0.0011	0.0	0.0	0.00107
Total Cations (meq/L)				**4.8**			**2.1**			**2.3**			**2.2**			**2.3**			**2.17**
Anions																			
Alkalinity, Total			240			90			90			100			98			96.0	
Carbonate	60.0	2	1.8358	0.0612	1.1	0.3097	0.0103	0.4	0.3394	0.0113	0.5	0.3213	0.0107	0.4	0.2873	0.0096	0.4	0.379	0.01263
Bicarbonate	61.0	1	289.07	4.7381	85.0	109.17	1.7894	77.1	109.11	1.7884	75.2	121.35	1.989	75.7	118.98	1.9501	77.8	116.35	1.90708
Chloride	35.5	1	18.0	0.5077	9.1	3.5	0.0987	4.3	4.8	0.1354	5.7	5.1	0.1439	5.5	4.2	0.1185	4.7	3.8	0.10718
Fluoride	19.0	1	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0
Nitrate-N	14.0	1	0.6	0.0414	0.7	3.1	0.2213	9.5	2.7	0.1928	8.1	2.7	0.1928	7.3	1.9	0.1356	5.4	2.2	0.15706
Sulfate	96.1	2	11.0	0.229	4.1	9.7	0.202	8.7	12.0	0.2499	10.5	14.0	0.2915	11.1	14.0	0.2915	11.6	14.0	0.29149
Total Anions (meq/L)				**5.6**			**2.3**			**2.4**			**2.6**			**2.5**			**2.48**
Total Ions (meq/L)				**10.4**			**4.4**			**4.7**			**4.9**			**4.8**			**4.6**
Cation/Anion Ratio				**0.86**			**0.90**			**0.97**			**0.86**			**0.93**			**0.88**
Percent Difference				**-7.2**			**-5.1**			**-1.4**			**-7.8**			**-3.8**			**-7**
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)				4.81			2.09			2.30			2.23			2.31			2.16
Calcium					38.35			38.26			39.05			38.00			36.67		
Magnesium					51.28			47.32			46.51			47.92			49.80		
Sodium + Potassium					10.36			14.42			14.44			14.08			13.53		
sum (SO_4, Cl, HCO_3+CO_3)				5.54			2.10			2.18			2.44			2.37			2.32
Sulfate					4.137			9.615			11.435			11.971			12.301		
Chloride					9.171			4.700			6.196			5.908			4.999		
Bicarbonate + Carbonate					86.692			85.685			82.369			82.122			82.700		

Red Text indicates greater than 10 percent difference in the Cation/Anion Ratio

Site ID				SW-W1			SW-W1			SW-W1			SW-W1			SW-W1			
Date				7/15/2008			10/6/2008			3/26/2009			7/13/2009			10/20/2009			
Cations	MW	n	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L
Calcium	40.1	2	39.1	17.0	0.8483	36.3	19.0	0.9481	35.7	18.0	0.8982	35.4	18.3	0.9132	35.4	16.7	0.8333	34.3	14.9
Magnesium	24.3	2	45.5	14.0	1.152	49.3	16.0	1.3166	49.6	16.0	1.3166	50.4	14.6	1.2014	46.6	13.0	1.0697	44.0	12.4
Potassium	39.1	1	1.1	1.1	0.0281	1.2	1.3	0.0332	1.3	0.2	0.0038	0.1	1.4	0.0368	1.4	1.3	0.0327	1.3	1.2
Sodium	23.0	1	13.6	6.9	0.3001	12.8	7.6	0.3306	12.4	8.0	0.348	13.3	7.8	0.341	13.2	7.4	0.3223	13.3	6.7
Iron	55.8	2	0.3	0.1	0.0034	0.1	0.1	0.0039	0.1	0.7	0.0265	1.0	0.9	0.0338	1.3	1.4	0.0512	2.1	0.2
Manganese	54.9	2	0.5	0.1	0.0044	0.2	0.5	0.0186	0.7	0.5	0.0193	0.7	1.3	0.0462	1.8	3.2	0.1158	4.8	0.4
Ammonia-N	14.0	1	0.0	0.0	0.0011	0.0	0.1	0.0044	0.2	0.0	0.0011	0.0	0.1	0.0052	0.2	0.1	0.0065	0.3	0.0
Total Cations (meq/L)					**2.3**			**2.7**			**2.6**			**2.6**			**2.4**		
Anions																			
Alkalinity, Total				110			120			110			106			108			92.6
Carbonate	60.0	2	0.5	0.5334	0.0178	0.7	0.1142	0.0038	0.1	1.7339	0.0578	2.2	0.2968	0.0099	0.4	0.4463	0.0149	0.6	0.1084
Bicarbonate	61.0	1	77.0	133.12	2.1819	81.6	146.17	2.3958	84.8	130.67	2.1419	81.3	128.72	2.1098	82.3	130.85	2.1448	81.2	112.75
Chloride	35.5	1	4.3	4.6	0.1297	4.9	4.6	0.1297	4.6	4.5	0.1269	4.8	5.3	0.1484	5.8	4.9	0.1385	5.2	4.7
Fluoride	19.0	1	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Nitrate-N	14.0	1	6.3	0.8	0.0535	2.0	0.4	0.025	0.9	1.4	0.1	3.8	0.3	0.0238	0.9	0.2	0.0175	0.7	2.2
Sulfate	96.1	2	11.8	14.0	0.2915	10.9	13.0	0.2707	9.6	10.0	0.2082	7.9	13.0	0.2707	10.6	15.7	0.3269	12.4	10.9
Total Anions (meq/L)					**2.7**			**2.8**			**2.6**			**2.6**			**2.6**		
Total Ions (meq/L)					**5.0**			**5.5**			**5.2**			**5.1**			**5.1**		
Cation/Anion Ratio					**0.87**			**0.94**			**0.99**			**1.01**			**0.92**		
Percent Difference					**-6.7**			**-3.1**			**-0.4**			**0.3**			**-4.2**		
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)					2.33			2.63			2.57			2.49			2.26		
Calcium			39.36			36.43			36.07			35.00			36.64			36.90		
Magnesium			45.81			49.47			50.09			51.30			48.20			47.37		
Sodium + Potassium			14.83			14.10			13.84			13.71			15.16			15.72		
sum (SO_4, Cl, HCO_3+CO_3)					2.62			2.80			2.53			2.54			2.63		
Sulfate			12.573			11.122			9.667			8.214			10.662			12.453		
Chloride			4.623			4.951			4.634			5.007			5.844			5.276		
Bicarbonate + Carbonate			82.804			83.928			85.700			86.779			83.494			82.272		

Red Text indicates greater than 10 percent difference in the Cation/Anion Ratio

Site ID			SW-W1		SW-W1			SW-W1			SW-W1			SW-W2			SW-W2		
Date			/21/2010		4/19/2010			8/16/2010			11/9/2010			3/28/2007			5/9/2007		
Cations	MW	n	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	0.7435	35.3	14.9	0.7435	32.4	16.6	0.8283	32.9	13.6	0.6786	32.2	58.0	2.8942	37.5	68.0	3.3932	38.5
Magnesium	24.3	2	1.0204	48.4	14.3	1.1767	51.3	14.7	1.2096	48.1	13.4	1.1027	52.3	50.0	4.1144	53.4	56.0	4.6081	52.3
Potassium	39.1	1	0.0302	1.4	1.1	0.0284	1.2	1.4	0.0358	1.4	1.2	0.0315	1.5	2.9	0.0742	1.0	3.4	0.087	1.0
Sodium	23.0	1	0.2901	13.8	7.3	0.318	13.9	8.0	0.3497	13.9	6.5	0.2819	13.4	14.0	0.609	7.9	16.0	0.696	7.9
Iron	55.8	2	0.0082	0.4	0.3	0.0111	0.5	1.0	0.0362	1.4	0.1	0.0043	0.2	0.3	0.0097	0.1	0.2	0.0079	0.1
Manganese	54.9	2	0.0145	0.7	0.4	0.0137	0.6	1.4	0.0513	2.0	0.2	0.0071	0.3	0.2	0.0058	0.1	0.3	0.0098	0.1
Ammonia-N	14.0	1	0.0015	0.1	0.0	0.0013	0.1	0.0	0.003	0.1	0.0	0.0012	0.1	0.0	0.0011	0.0	0.0	0.0011	0.0
Total Cations (meq/L)			**2.1**			**2.3**			**2.5**			**2.1**			**7.7**			**8.8**	
Anions																			
Alkalinity, Total					92.8			105			83.4			400			440		
Carbonate	60.0	2	0.0036	0.2	0.0718	0.0024	0.1	0.1046	0.0035	0.1	0.0224	0.0007	0.0	5.2675	0.1756	2.1	5.1765	0.1726	1.7
Bicarbonate	61.0	1	1.8481	78.2	113.07	1.8533	77.2	127.89	2.0962	83.5	101.70	1.667	76.5	477.29	7.8232	95.6	526.27	8.6261	87.2
Chloride	35.5	1	0.132	5.6	5.4	0.1532	6.4	5.1	0.1441	5.7	4.8	0.1354	6.2	0.5	0.0141	0.2	33.0	0.9308	9.4
Fluoride	19.0	1	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0
Nitrate-N	14.0	1	0.1535	6.5	2.1	0.1506	6.3	0.6	0.0455	1.8	2.3	0.1635	7.5	0.2	0.0157	0.2	0.2	0.0107	0.1
Sulfate	96.1	2	0.2269	9.6	11.6	0.2415	10.1	10.6	0.2207	8.8	10.2	0.2124	9.7	7.4	0.1541	1.9	7.5	0.1562	1.6
Total Anions (meq/L)			**2.4**			**2.4**			**2.5**			**2.2**			**8.2**			**9.9**	
Total Ions (meq/L)			**4.5**			**4.7**			**5.0**			**4.3**			**15.9**			**18.7**	
Cation/Anion Ratio			**0.89**			**0.95**			**1.00**			**0.97**			**0.94**			**0.89**	
Percent Difference			**-5.7**			**-2.3**			**0.1**			**-1.7**			**-3.0**			**-5.8**	
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)			2.08			2.27			2.42			2.09			7.69			8.78	
Calcium				35.67			32.80			34.18			32.40			37.63			38.63
Magnesium				48.96			51.92			49.91			52.64			53.49			52.46
Sodium + Potassium				15.37			15.28			15.91			14.96			8.88			8.91
				100.0			100.0			100.0									
sum (SO_4, Cl, HCO_3+CO_3)			2.21			2.25			2.46			2.02			8.17			9.89	
Sulfate				10.266			10.732			8.955			10.537			1.887			1.580
Chloride				5.971			6.806			5.848			6.717			0.173			9.416
Bicarbonate + Carbonate				83.763			82.462			85.196			82.746			97.941			89.005
				100.0			100.0			100.0									

Red Text indicates greater than 10 percent difference in the Cation/Anion Ratio

Site ID			SW-W2			SW-W2			SW-W2			SW-W2			SW-W2			SW-W2	
Date			8/14/2007			10/30/2007			12/18/2007			3/12/2008			7/15/2008			10/6/200	
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L
Calcium	40.1	2	63.0	3.1437	37.0	63.0	3.1437	37.7	59.0	2.9441	38.3	63.0	3.1437	38.8	60.0	2.994	37.2	67.0	3.3433
Magnesium	24.3	2	56.0	4.6081	54.2	54.0	4.4435	53.3	49.0	4.0321	52.5	51.0	4.1967	51.7	53.0	4.3612	54.1	60.0	4.9373
Potassium	39.1	1	3.2	0.0818	1.0	3.0	0.0767	0.9	2.9	0.0742	1.0	4.0	0.1023	1.3	3.0	0.0767	1.0	3.3	0.0844
Sodium	23.0	1	15.0	0.6525	7.7	15.0	0.6525	7.8	14.0	0.609	7.9	15.0	0.6525	8.0	14.0	0.609	7.6	17.0	0.7395
Iron	55.8	2	0.2	0.0082	0.1	0.5	0.0172	0.2	0.3	0.0118	0.2	0.2	0.0082	0.1	0.3	0.0118	0.1	0.2	0.0086
Manganese	54.9	2	0.2	0.0087	0.1	0.3	0.0091	0.1	0.2	0.0069	0.1	0.2	0.0066	0.1	0.1	0.0047	0.1	0.2	0.0076
Ammonia-N	14.0	1	0.0	0.0011	0.0	0.0	0.0011	0.0	0.0	0.0011	0.0	0.0	0.0011	0.0	0.0	0.0011	0.0	0.0	0.0011
Total Cations (meq/L)				**8.5**			**8.3**			**7.7**			**8.1**			**8.1**	**100.0**		**9.1**
Anions																			
Alkalinity, Total			460			430			400			410			460			480	
Carbonate	60.0	2	4.9441	0.1648	1.6	3.9442	0.1315	1.4	4.9231	0.1641	1.8	6.609	0.2203	2.4	5.5353	0.1845	1.8	5.6471	0.1882
Bicarbonate	61.0	1	551.15	9.0338	87.2	516.58	8.4672	88.2	477.99	7.8347	87.6	486.76	7.9785	87.2	549.94	9.0141	86.9	574.12	9.4103
Chloride	35.5	1	36.0	1.0154	9.8	30.0	0.8462	8.8	26.0	0.7334	8.2	26.0	0.7334	8.0	36.0	1.0154	9.8	37.0	1.0436
Fluoride	19.0	1	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0
Nitrate-N	14.0	1	0.1	0.0079	0.1	0.1	0.0079	0.1	0.4	0.03	0.3	0.4	0.025	0.3	0.1	0.0093	0.1	0.1	0.0061
Sulfate	96.1	2	6.8	0.1416	1.4	7.3	0.152	1.6	8.7	0.1811	2.0	9.2	0.1916	2.1	7.0	0.1457	1.4	7.2	0.1499
Total Anions (meq/L)				**10.4**			**9.6**			**8.9**			**9.1**			**10.4**	**100.0**		**10.8**
Total Ions (meq/L)				**18.9**			**17.9**			**16.6**			**17.3**			**18.4**			**19.9**
Cation/Anion Ratio				**0.82**			**0.87**			**0.86**			**0.89**			**0.78**			**0.84**
Percent Difference				**-9.9**			**-7.0**			**-7.6**			**-6.0**			**-12.5**			**-8.4**
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)				8.49			8.32			7.66			8.10			8.04			9.10
Calcium					37.05			37.80			38.44			38.83			37.23		
Magnesium					54.30			53.43			52.64			51.84			54.24		
Sodium + Potassium					8.65			8.77			8.92			9.32			8.53		
																	100.0		
sum (SO_4, Cl, HCO_3+CO_3)				10.36			9.60			8.91			9.12			10.36			10.79
Sulfate					1.367			1.584			2.032			2.099			1.407		
Chloride					9.806			8.817			8.228			8.038			9.802		
Bicarbonate + Carbonate					88.827			89.599			89.740			89.862			88.792		
																	100.0		

Red Text indicates greater than 10 percent difference in the Cation/Anion Ratio

Site ID				SW-W2			SW-W2			SW-W2			SW-W2			SW-W2			
Date				1/6/2009			3/26/2009			7/13/2009			10/20/2009			1/21/2010			
Cations	MW	n	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L
Calcium	40.1	2	36.7	56.0	2.7944	38.6	65.0	3.2435	37.4	66.5	3.3184	36.7	67.4	3.3633	36.6	64.3	3.2086	37.8	57.9
Magnesium	24.3	2	54.1	46.0	3.7852	52.3	57.0	4.6904	54.1	59.1	4.8632	53.8	60.9	5.0113	54.5	54.6	4.4929	53.0	58.3
Potassium	39.1	1	0.9	3.0	0.0767	1.1	1.2	0.0307	0.4	4.1	0.1036	1.1	3.4	0.0877	1.0	3.0	0.076	0.9	3.3
Sodium	23.0	1	8.1	13.0	0.5655	7.8	16.0	0.696	8.0	17.1	0.7438	8.2	16.8	0.7308	7.9	16.1	0.7003	8.3	16.8
Iron	55.8	2	0.1	0.2	0.0057	0.1	0.3	0.009	0.1	0.0	0.0005	0.0	0.0	0.0015	0.0	0.0	0.0006	0.0	0.0
Manganese	54.9	2	0.1	0.1	0.0031	0.0	0.0	0.0015	0.0	0.1	0.0024	0.0	0.1	0.0024	0.0	0.0	0.0013	0.0	0.0
Ammonia-N	14.0	1	0.0	0.0	0.0011	0.0	0.0	0.0011	0.0	0.0	0.0004	0.0	0.0	0.0004	0.0	0.0	0.0008	0.0	0.0
Total Cations (meq/L)					7.2	100.0		8.7			9.0			9.2			8.5		
Anions																			
Alkalinity, Total				390			420			415			392			390			399
Carbonate	60.0	2	1.7	3.3419	0.1114	1.2	5.4077	0.1803	1.9	0.6548	0.0218	0.2	2.4431	0.0814	0.9	1.0194	0.034	0.4	2.1198
Bicarbonate	61.0	1	87.1	469.00	7.6874	86.1	501.40	8.2185	88.4	504.97	8.2769	87.7	473.27	7.7574	86.4	473.73	7.7648	88.3	482.47
Chloride	35.5	1	9.7	32.0	0.9026	10.1	26.0	0.7334	7.9	34.4	0.9703	10.3	33.1	0.9336	10.4	28.0	0.7898	9.0	32.6
Fluoride	19.0	1	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Nitrate-N	14.0	1	0.1	0.3	0.0193	0.2	0.2	0.015	0.2	0.1	0.0067	0.1	0.1	0.0047	0.1	0.2	0.0146	0.2	0.2
Sulfate	96.1	2	1.4	10.0	0.2082	2.3	7.0	0.1457	1.6	7.8	0.1624	1.7	9.5	0.1974	2.2	9.0	0.1882	2.1	9.3
Total Anions (meq/L)					8.9	100.0		9.3			9.4			9.0			8.8		
Total Ions (meq/L)					16.2			18.0			18.5			18.2			17.3		
Cation/Anion Ratio					0.81			0.93			0.96			1.02			0.96		
Percent Difference					-10.5			-3.5			-2.2			1.2			-1.8		
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)					7.22			8.66			9.03			9.19			8.48		
Calcium			36.72			38.69			37.45			36.75			36.58			37.85		
Magnesium			54.23			52.41			54.16			53.86			54.51			53.00		
Sodium + Potassium			9.05			8.89			8.39			9.39			8.90			9.16		
						100.0													
sum (SO_4, Cl, HCO_3+CO_3)					8.91			9.28			9.43			8.97			8.78		
Sulfate			1.389			2.337			1.571			1.722			2.201			2.145		
Chloride			9.670			10.131			7.904			10.288			10.409			8.998		
Bicarbonate + Carbonate			88.941			87.532			90.525			87.990			87.391			88.857		
						100.0													

Red Text indicates greater than 10 percent difference in the Cation/Anion Ratio

Site ID			SW-W2		SW-W2			SW-W2			SW-W3			SW-W3			SW-W3		
Date			4/19/2010		8/16/2010			11/9/2010			3/28/2007			5/9/2007			8/14/2007		
Cations	MW	n	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	2.8892	34.0	61.4	3.0639	33.2	55.0	2.7445	38.9	27.0	1.3473	38.4	30.0	1.497	38.8	33.0	1.6467	41.1
Magnesium	24.3	2	4.7974	56.4	63.6	5.2335	56.8	44.4	3.6536	51.8	21.0	1.728	49.3	23.0	1.8926	49.1	23.0	1.8926	47.3
Potassium	39.1	1	0.0852	1.0	3.8	0.0969	1.1	3.3	0.0847	1.2	1.8	0.046	1.3	2.0	0.0512	1.3	2.1	0.0537	1.3
Sodium	23.0	1	0.7308	8.6	18.8	0.8178	8.9	13.1	0.5698	8.1	8.5	0.3697	10.6	9.2	0.4002	10.4	9.0	0.3915	9.8
Iron	55.8	2	0.0004	0.0	0.0	0.0014	0.0	0.1	0.002	0.0	0.2	0.0057	0.2	0.1	0.0039	0.1	0.1	0.0039	0.1
Manganese	54.9	2	0.0007	0.0	0.1	0.0023	0.0	0.1	0.0023	0.0	0.2	0.0066	0.2	0.3	0.0098	0.3	0.4	0.0131	0.3
Ammonia-N	14.0	1	0.0008	0.0	0.0	0.0007	0.0	0.0	0.0004	0.0	0.0	0.0011	0.0	0.0	0.0011	0.0	0.0	0.0011	0.0
Total Cations (meq/L)			**8.5**			**9.2**			**7.1**			**3.5**			**3.9**			**4.0**	
Anions																			
Alkalinity, Total					428			323			180			180			190		
Carbonate	60.0	2	0.0707	0.8	1.4394	0.048	0.5	0.7882	0.0263	0.4	1.4085	0.047	1.2	1.286	0.0429	1.0	1.3269	0.0442	1.0
Bicarbonate	61.0	1	7.9081	86.9	519.23	8.5107	88.7	392.46	6.4328	87.8	216.74	3.5525	88.0	216.99	3.5566	86.5	229.10	3.7552	86.2
Chloride	35.5	1	0.9195	10.1	30.7	0.8659	9.0	24.7	0.6967	9.5	6.8	0.1918	4.7	8.5	0.2398	5.8	9.6	0.2708	6.2
Fluoride	19.0	1	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0
Nitrate-N	14.0	1	0.0114	0.1	0.1	0.0071	0.1	0.1	0.0044	0.1	0.7	0.0521	1.3	0.6	0.0414	1.0	0.5	0.0386	0.9
Sulfate	96.1	2	0.1934	2.1	8.1	0.1686	1.8	8.1	0.1676	2.3	9.4	0.1957	4.8	11.0	0.229	5.6	12.0	0.2499	5.7
Total Anions (meq/L)			**9.1**			**9.6**			**7.3**			**4.0**			**4.1**			**4.4**	
Total Ions (meq/L)			**17.6**			**18.8**			**14.4**			**7.5**			**8.0**			**8.4**	
Cation/Anion Ratio			**0.93**			**0.96**			**0.96**			**0.87**			**0.94**			**0.92**	
Percent Difference			**-3.4**			**-2.0**			**-1.9**			**-7.1**			**-3.2**			**-4.3**	
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)			8.50			9.21			7.05			3.49			3.84			3.98	
Calcium				33.98			33.26			38.92			38.59			38.97			41.33
Magnesium				56.42			56.81			51.80			49.50			49.27			47.50
Sodium + Potassium				9.60			9.93			9.28			11.91			11.75			11.17
sum (SO_4, Cl, HCO_3+CO_3)			9.09			9.59			7.32			3.99			4.07			4.32	
Sulfate				2.127			1.758			2.289			4.909			5.630			5.783
Chloride				10.114			9.026			9.513			4.811			5.893			6.268
Bicarbonate + Carbonate				87.759			89.216			88.198			90.280			88.477			87.949

Red Text indicates greater than 10 percent difference in the Cation/Anion Ratio

Site ID			SW-W3			SW-W3			SW-W3			SW-W3			SW-W3			SW-W3	
Date			10/30/2007			12/18/2007			3/12/2008			7/15/2008			10/6/2008			1/6/2009	
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L
Calcium	40.1	2	28.0	1.3972	38.2	26.0	1.2974	38.4	27.0	1.3473	40.2	28.0	1.3972	37.5	31.0	1.5469	37.5	24.0	1.1976
Magnesium	24.3	2	22.0	1.8103	49.5	20.0	1.6458	48.8	19.0	1.5635	46.7	23.0	1.8926	50.8	25.0	2.0572	49.9	19.0	1.5635
Potassium	39.1	1	2.0	0.0512	1.4	1.8	0.046	1.4	1.9	0.0486	1.5	2.1	0.0537	1.4	2.7	0.0691	1.7	2.8	0.0716
Sodium	23.0	1	8.8	0.3828	10.5	8.4	0.3654	10.8	8.6	0.3741	11.2	8.4	0.3654	9.8	10.0	0.435	10.5	7.9	0.3436
Iron	55.8	2	0.2	0.0057	0.2	0.2	0.0064	0.2	0.1	0.0047	0.1	0.2	0.0054	0.1	0.1	0.0047	0.1	0.1	0.005
Manganese	54.9	2	0.3	0.0124	0.3	0.4	0.0127	0.4	0.3	0.0113	0.3	0.3	0.0113	0.3	0.3	0.0124	0.3	0.3	0.0091
Ammonia-N	14.0	1	0.0	0.0011	0.0	0.0	0.0011	0.0	0.0	0.0011	0.0	0.0	0.0032	0.1	0.0	0.0011	0.0	0.0	0.0011
Total Cations (meq/L)				**3.7**	**100.0**		**3.4**			**3.4**	**100.0**		**3.7**			**4.1**			**3.2**
Anions																			
Alkalinity, Total			180			170			180			200			200			160	
Carbonate	60.0	2	0.7438	0.0248	0.5	1.4902	0.0497	1.3	1.4085	0.047	1.1	0.6425	0.0214	0.5	0.2749	0.0092	0.2	0.1421	0.0047
Bicarbonate	61.0	1	218.09	3.5747	77.2	204.37	3.3498	84.9	216.74	3.5525	85.8	242.69	3.978	87.7	243.44	3.9902	88.5	194.91	3.1948
Chloride	35.5	1	30.0	0.8462	18.3	8.6	0.2426	6.1	8.1	0.2285	5.5	9.4	0.2651	5.8	9.3	0.2623	5.8	8.7	0.2454
Fluoride	19.0	1	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0
Nitrate-N	14.0	1	0.5	0.0336	0.7	0.8	0.0543	1.4	0.6	0.04	1.0	0.3	0.02	0.4	0.3	0.0186	0.4	0.8	0.0557
Sulfate	96.1	2	7.3	0.152	3.3	12.0	0.2499	6.3	13.0	0.2707	6.5	12.0	0.2499	5.5	11.0	0.229	5.1	11.0	0.229
Total Anions (meq/L)				**4.6**	**100.0**		**3.9**			**4.1**	**100.0**		**4.5**			**4.5**			**3.7**
Total Ions (meq/L)				**8.3**			**7.3**			**7.5**			**8.3**			**8.6**			**6.9**
Cation/Anion Ratio				**0.79**			**0.86**			**0.81**			**0.82**			**0.92**			**0.86**
Percent Difference				**-11.7**			**-7.8**			**-10.5**			**-9.7**			**-4.4**			**-7.8**
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)				3.64			3.35			3.33			3.71			4.11			3.18
Calcium					38.37			38.68			40.42			37.67			37.65		
Magnesium					49.71			49.06			46.90			51.03			50.08		
Sodium + Potassium					11.92			12.26			12.68			11.30			12.27		
					100.0						100.0								
sum (SO_4, Cl, HCO_3+CO_3)				4.60			3.89			4.10			4.51			4.49			3.67
Sulfate					3.306			6.420			6.604			5.535			5.100		
Chloride					18.405			6.233			5.574			5.873			5.841		
Bicarbonate + Carbonate					78.289			87.348			87.822			88.592			89.059		
					100.0						100.0								

Red Text indicates greater than 10 percent difference in the Cation/Anion Ratio

Site ID				SW-W3			SW-W3			SW-W3			SW-W3			SW-W3			
Date				3/26/2009			7/13/2009			10/20/2009			1/21/2010			4/19/2010			
Cations	MW	n	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L
Calcium	40.1	2	37.5	29.0	1.4471	37.3	29.3	1.4621	36.7	25.5	1.2725	34.5	25.0	1.2475	36.0	24.3	1.2126	34.1	27.7
Magnesium	24.3	2	49.0	24.0	1.9749	51.0	24.4	2.0078	50.4	23.1	1.9008	51.5	21.5	1.7692	51.0	22.7	1.8679	52.5	25.8
Potassium	39.1	1	2.2	0.2	0.0038	0.1	2.6	0.066	1.7	2.4	0.0604	1.6	2.1	0.0524	1.5	2.3	0.0575	1.6	2.6
Sodium	23.0	1	10.8	10.0	0.435	11.2	10.1	0.4393	11.0	10.2	0.4437	12.0	8.9	0.3889	11.2	9.5	0.4132	11.6	11.1
Iron	55.8	2	0.2	0.1	0.0047	0.1	0.0	0.0006	0.0	0.0	0.001	0.0	0.0	0.0018	0.1	0.0	0.001	0.0	0.0
Manganese	54.9	2	0.3	0.2	0.0087	0.2	0.2	0.0087	0.2	0.3	0.0113	0.3	0.2	0.0079	0.2	0.2	0.0074	0.2	0.2
Ammonia-N	14.0	1	0.0	0.0	0.0011	0.0	0.0	0.0004	0.0	0.0	0.0004	0.0	0.0	0.0004	0.0	0.0	0.0004	0.0	0.0
Total Cations (meq/L)					**3.9**			**4.0**			**3.7**			**3.5**			**3.6**		
Anions																			
Alkalinity, Total				170			182			180			154			165			178
Carbonate	60.0	2	0.1	0.5717	0.0191	0.5	1.1087	0.037	0.9	0.1186	0.004	0.1	1.0276	0.0343	1.0	82.878	2.7626	72.4	0.0602
Bicarbonate	61.0	1	85.7	206.24	3.3804	88.0	219.79	3.6025	86.3	219.36	3.5955	86.7	185.79	3.0453	85.2	32.78	0.5373	14.1	217.04
Chloride	35.5	1	6.6	7.2	0.2031	5.3	9.0	0.255	6.1	9.1	0.2564	6.2	7.7	0.2166	6.1	8.4	0.2372	6.2	8.6
Fluoride	19.0	1	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Nitrate-N	14.0	1	1.5	0.5	0.0378	1.0	0.3	0.0207	0.5	0.3	0.0244	0.6	0.5	0.035	1.0	0.4	0.0291	0.8	0.3
Sulfate	96.1	2	6.1	9.6	0.1999	5.2	12.4	0.2582	6.2	12.9	0.2686	6.5	11.7	0.2436	6.8	12.1	0.2519	6.6	11.7
Total Anions (meq/L)					**3.8**			**4.2**			**4.1**			**3.6**			**3.8**		
Total Ions (meq/L)					**7.7**			**8.2**			**7.8**			**7.0**			**7.4**		
Cation/Anion Ratio					**1.01**			**0.95**			**0.89**			**0.97**			**0.93**		
Percent Difference					**0.5**			**-2.3**			**-5.9**			**-1.5**			**-3.5**		
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)					3.86			3.98			3.68			3.46			3.55		
Calcium			37.70			37.48			36.78			34.60			36.08			34.14		
Magnesium			49.22			51.15			50.51			51.69			51.16			52.60		
Sodium + Potassium			13.07			11.37			12.71			13.71			12.76			13.26		
sum (SO_4, Cl, HCO_3+CO_3)					3.80			4.15			4.12			3.54			3.79		
Sulfate			6.234			5.257			6.217			6.512			6.882			6.649		
Chloride			6.679			5.341			6.140			6.216			6.120			6.260		
Bicarbonate + Carbonate			87.087			89.402			87.642			87.271			86.998			87.091		

Red Text indicates greater than 10 percent difference in the Cation/Anion Ratio

Site ID			SW-W3		SW-W3			SW-W4			SW-W4			SW-W4			SW-W4		
Date			3/16/2010		11/9/2010			5/10/2007			8/14/2007			10/31/2007			12/18/2007		
Cations	MW	n	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	1.3822	34.0	22.4	1.1178	36.0	17.0	0.8483	34.2	16.0	0.7984	32.8	17.0	0.8483	32.8	16.0	0.7984	32.8
Magnesium	24.3	2	2.123	52.3	18.9	1.5552	50.0	16.0	1.3166	53.1	16.0	1.3166	54.1	17.0	1.3989	54.2	16.0	1.3166	54.2
Potassium	39.1	1	0.0657	1.6	2.2	0.0568	1.8	2.0	0.0512	2.1	1.8	0.046	1.9	1.7	0.0435	1.7	1.7	0.0435	1.8
Sodium	23.0	1	0.4828	11.9	8.5	0.3689	11.9	5.9	0.2566	10.3	6.1	0.2653	10.9	6.5	0.2827	10.9	6.1	0.2653	10.9
Iron	55.8	2	0.0009	0.0	0.1	0.0042	0.1	0.1	0.0043	0.2	0.2	0.0057	0.2	0.2	0.0075	0.3	0.1	0.005	0.2
Manganese	54.9	2	0.0073	0.2	0.1	0.005	0.2	0.1	0.0032	0.1	0.1	0.0023	0.1	0.0	0.0011	0.0	0.0	0.0006	0.0
Ammonia-N	14.0	1	0.0004	0.0	0.0	0.0004	0.0	0.0	0.0011	0.0	0.0	0.0011	0.0	0.0	0.0011	0.0	0.0	0.0011	0.0
Total Cations (meq/L)			**4.1**			**3.1**			**2.5**			**2.4**	**100.0**		**2.6**			**2.4**	
Anions																			
Alkalinity, Total					138			120			130			120			120		
Carbonate	60.0	2	0.002	0.0	0.0952	0.0032	0.1	0.5073	0.0169	0.6	0.3989	0.0133	0.4	0.4323	0.0144	0.5	0.8574	0.0286	1.0
Bicarbonate	61.0	1	3.5575	87.4	168.17	2.7564	86.3	145.37	2.3827	85.5	157.79	2.5863	86.4	145.52	2.3852	85.2	144.66	2.3711	84.0
Chloride	35.5	1	0.2437	6.0	7.6	0.2155	6.7	4.8	0.1354	4.9	4.9	0.1382	4.6	5.2	0.1467	5.2	5.3	0.1495	5.3
Fluoride	19.0	1	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0
Nitrate-N	14.0	1	0.0218	0.5	0.4	0.0266	0.8	0.0	0.0018	0.1	0.1	0.0044	0.1	0.1	0.0039	0.1	0.0	0.0018	0.1
Sulfate	96.1	2	0.2436	6.0	9.2	0.1911	6.0	12.0	0.2499	9.0	12.0	0.2499	8.4	12.0	0.2499	8.9	13.0	0.2707	9.6
Total Anions (meq/L)			**4.1**			**3.2**			**2.8**			**3.0**	**100.0**		**2.8**			**2.8**	
Total Ions (meq/L)			**8.1**			**6.3**			**5.3**			**5.4**			**5.4**			**5.3**	
Cation/Anion Ratio			**1.00**			**0.97**			**0.89**			**0.81**			**0.92**			**0.86**	
Percent Difference			**-0.1**			**-1.3**			**-5.8**			**-10.3**			**-4.0**			**-7.4**	
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)			4.05			3.10			2.47			2.43			2.57			2.42	
Calcium				34.10			36.07			34.31			32.91			32.96			32.94
Magnesium				52.37			50.19			53.25			54.26			54.36			54.32
Sodium + Potassium				13.53			13.74			12.45			12.83			12.68			12.74
													100.0						
sum (SO_4, Cl, HCO_3+CO_3)			4.05			3.17			2.78			2.99			2.80			2.82	
Sulfate				6.020			6.037			8.972			8.363			8.935			9.599
Chloride				6.022			6.806			4.862			4.626			5.246			5.302
Bicarbonate + Carbonate				87.958			87.157			86.167			87.011			85.819			85.100
													100.0						

Red Text indicates greater than 10 percent difference in the Cation/Anion R

Site ID			SW-W4			SW-W5			SW-W5			SW-W5			SW-W5			SW-W5	
Date			3/12/2008			5/10/2007			8/14/2007			10/30/2007			12/18/2007			3/12/2008	
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L
Calcium	40.1	2	16.0	0.7984	31.7	18.0	0.8982	34.0	18.0	0.8982	33.9	19.0	0.9481	35.4	17.0	0.8483	32.7	19.0	0.9481
Magnesium	24.3	2	17.0	1.3989	55.5	17.0	1.3989	53.0	17.0	1.3989	52.8	17.0	1.3989	52.2	17.0	1.3989	54.0	19.0	1.5635
Potassium	39.1	1	1.7	0.0435	1.7	2.0	0.0512	1.9	2.0	0.0512	1.9	1.9	0.0486	1.8	2.0	0.0512	2.0	2.0	0.0512
Sodium	23.0	1	6.3	0.274	10.9	6.6	0.2871	10.9	6.8	0.2958	11.2	6.4	0.2784	10.4	6.5	0.2827	10.9	7.3	0.3175
Iron	55.8	2	0.1	0.0033	0.1	0.1	0.0023	0.1	0.1	0.0027	0.1	0.1	0.0028	0.1	0.2	0.0079	0.3	0.1	0.005
Manganese	54.9	2	0.0	0.0006	0.0	0.0	0.0004	0.0	0.0	0.0007	0.0	0.0	0.0005	0.0	0.0	0.0005	0.0	0.0	0.0004
Ammonia-N	14.0	1	0.0	0.0011	0.0	0.0	0.0011	0.0	0.0	0.0011	0.0	0.0	0.0011	0.0	0.0	0.0011	0.0	0.0	0.0011
Total Cations (meq/L)				**2.5**			**2.6**			**2.6**			**2.7**			**2.6**			**2.9**
Anions																			
Alkalinity, Total			110			130			140			130			130			130	
Carbonate	60.0	2	0.734	0.0245	0.9	0.8875	0.0296	1.0	0.5919	0.0197	0.6	0.7066	0.0236	0.8	0.0696	0.0023	0.1	0.4372	0.0146
Bicarbonate	61.0	1	132.71	2.1752	82.2	156.80	2.57	84.6	169.60	2.7799	86.5	157.16	2.5761	86.3	158.46	2.5973	85.8	157.71	2.585
Chloride	35.5	1	4.6	0.1297	4.9	4.5	0.1269	4.2	4.4	0.1241	3.9	4.2	0.1185	4.0	4.7	0.1326	4.4	4.3	0.1213
Fluoride	19.0	1	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0
Nitrate-N	14.0	1	0.1	0.0057	0.2	0.3	0.0193	0.6	0.3	0.0186	0.6	0.3	0.0178	0.6	0.4	0.0257	0.8	1.6	0.1142
Sulfate	96.1	2	15.0	0.3123	11.8	14.0	0.2915	9.6	13.0	0.2707	8.4	12.0	0.2499	8.4	13.0	0.2707	8.9	14.0	0.2915
Total Anions (meq/L)				**2.6**			**3.0**			**3.2**			**3.0**			**3.0**			**3.1**
Total Ions (meq/L)				**5.2**			**5.7**			**5.9**			**5.7**			**5.6**			**6.0**
Cation/Anion Ratio				**0.95**			**0.87**			**0.82**			**0.90**			**0.86**			**0.92**
Percent Difference				**-2.5**			**-7.0**			**-9.6**			**-5.4**			**-7.8**			**-4.0**
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)				2.51			2.64			2.64			2.67			2.58			2.88
Calcium					31.75			34.08			33.97			35.46			32.87		
Magnesium					55.63			53.08			52.91			52.32			54.20		
Sodium + Potassium					12.63			12.83			13.12			12.23			12.94		
sum (SO_4, Cl, HCO_3+CO_3)				2.64			3.02			3.19			2.97			3.00			3.01
Sulfate					11.822			9.658			8.473			8.418			9.014		
Chloride					4.912			4.206			3.885			3.992			4.415		
Bicarbonate + Carbonate					83.266			86.136			87.641			87.590			86.571		

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Red Text indicates greater than 10 percent difference in the Cation

Site ID				SW-W5			SW-W5			SW-W5			SW-W5			SW-W5			
Date				7/15/2008			10/6/2008			1/6/2009			3/23/2009			7/10/2009			1
Cations	MW	n	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L
Calcium	40.1	2	32.8	19.0	0.9481	33.8	21.0	1.0479	34.0	20.0	0.998	34.0	17.0	0.8483	32.7	18.8	0.9381	31.6	19.0
Magnesium	24.3	2	54.2	18.0	1.4812	52.7	20.0	1.6458	53.4	19.0	1.5635	53.3	17.0	1.3989	53.9	19.8	1.6293	54.9	16.5
Potassium	39.1	1	1.8	2.0	0.0512	1.8	2.2	0.0563	1.8	2.3	0.0588	2.0	1.9	0.0486	1.9	2.3	0.0596	2.0	2.2
Sodium	23.0	1	11.0	7.4	0.3219	11.5	7.6	0.3306	10.7	7.1	0.3088	10.5	6.8	0.2958	11.4	7.8	0.3388	11.4	7.1
Iron	55.8	2	0.2	0.1	0.0029	0.1	0.1	0.0025	0.1	0.1	0.0024	0.1	0.1	0.0029	0.1	0.0	0.0002	0.0	0.0
Manganese	54.9	2	0.0	0.0	0.0005	0.0	0.0	0.0008	0.0	0.0	0.0003	0.0	0.0	0.0002	0.0	0.0	0.0004	0.0	0.0
Ammonia-N	14.0	1	0.0	0.0	0.0023	0.1	0.0	0.0011	0.0	0.0	0.0011	0.0	0.0	0.0011	0.0	0.0	0.0004	0.0	0.0
Total Cations (meq/L)					**2.8**			**3.1**			**2.9**			**2.6**	**100.0**		**3.0**		
Anions																			
Alkalinity, Total				140			150			130			140			123			124
Carbonate	60.0	2	0.5	0.9777	0.0326	1.0	0.7613	0.0254	0.7	0.8675	0.0289	0.9	0.226	0.0075	0.2	0.1615	0.0054	0.2	0.2194
Bicarbonate	61.0	1	82.7	168.81	2.767	85.3	181.45	2.9742	87.2	156.84	2.5707	84.1	170.34	2.792	85.9	149.73	2.4542	85.1	151
Chloride	35.5	1	3.9	4.7	0.1326	4.1	4.3	0.1213	3.6	5.5	0.1551	5.1	4.9	0.1382	4.2	4.6	0.1297	4.5	4.7
Fluoride	19.0	1	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Nitrate-N	14.0	1	3.7	0.3	0.02	0.6	0.3	0.0186	0.5	0.4	0.0314	1.0	0.3	0.0228	0.7	0.2	0.0172	0.6	0.2
Sulfate	96.1	2	9.3	14.0	0.2915	9.0	13.0	0.2707	7.9	13.0	0.2707	8.9	14.0	0.2915	9.0	13.3	0.2769	9.6	14.0
Total Anions (meq/L)					**3.2**			**3.4**			**3.1**			**3.3**	**100.0**		**2.9**		
Total Ions (meq/L)					**6.1**			**6.5**			**6.0**			**5.8**			**5.9**		
Cation/Anion Ratio					**0.87**			**0.90**			**0.96**			**0.80**			**1.03**		
Percent Difference					**-7.2**			**-5.0**			**-2.1**			**-11.2**			**1.4**		
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)					2.80			3.08			2.93			2.59			2.97		
Calcium			32.92			33.83			34.02			34.07			32.73			31.63	
Magnesium			54.28			52.86			53.42			53.38			53.98			54.94	
Sodium + Potassium			12.80			13.31			12.56			12.55			13.29			13.43	
															100.0				
sum (SO_4, Cl, HCO_3+CO_3)					3.22			3.39			3.03			3.23			2.87		
Sulfate			9.676			9.042			7.981			8.947			9.027			9.661	
Chloride			4.026			4.112			3.576			5.128			4.280			4.527	
Bicarbonate + Carbonate			86.297			86.845			88.443			85.926			86.694			85.812	
															100.0				

/Anion Ratio

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Site ID			SW-W5		SW-W5			SW-W6			SW-W6			SW-W6			SW-W6		
Date			0/19/2009		8/12/2010			8/14/2007			3/12/2008			3/24/2009			1/22/2010		
Cations	MW	n	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	0.9481	35.5	18.2	0.9082	30.9	17.0	0.8483	31.5	19.0	0.9481	32.9	18.0	0.8982	31.8	17.0	0.8483	29.0
Magnesium	24.3	2	1.3577	50.8	19.8	1.6293	55.4	18.0	1.4812	55.0	19.0	1.5635	54.2	19.0	1.5635	55.4	20.5	1.6869	57.7
Potassium	39.1	1	0.0558	2.1	2.2	0.057	1.9	2.0	0.0512	1.9	1.8	0.046	1.6	1.7	0.0435	1.5	2.1	0.0537	1.8
Sodium	23.0	1	0.3084	11.5	7.9	0.3449	11.7	7.1	0.3088	11.5	7.4	0.3219	11.2	6.9	0.3001	10.6	7.7	0.3345	11.4
Iron	55.8	2	0.0004	0.0	0.0	0.0002	0.0	0.1	0.0028	0.1	0.1	0.0031	0.1	0.3	0.0107	0.4	0.0	0.0002	0.0
Manganese	54.9	2	0.0004	0.0	0.0	0.0004	0.0	0.0	0.0004	0.0	0.0	0.0002	0.0	0.2	0.0058	0.2	0.0	1E-04	0.0
Ammonia-N	14.0	1	0.0004	0.0	0.0	0.0009	0.0	0.0	0.0011	0.0	0.0	0.0011	0.0	0.0	0.0011	0.0	0.0	0.0004	0.0
Total Cations (meq/L)			**2.7**			**2.9**			**2.7**			**2.9**			**2.8**			**2.9**	
Anions																			
Alkalinity, Total					128			140			150			150			128		
Carbonate	60.0	2	0.0073	0.3	0.0685	0.0023	0.1	0.5526	0.0184	0.6	0.7442	0.0248	0.7	0.4819	0.0161	0.5	0.0903	0.003	0.1
Bicarbonate	61.0	1	2.4723	84.7	156	2.5573	86.0	170	2.7812	87.5	181	2.9747	84.9	182	2.9835	86.6	156	2.5566	86.3
Chloride	35.5	1	0.1337	4.6	4.0	0.1134	3.8	3.8	0.1072	3.4	4.0	0.1128	3.2	5.2	0.1467	4.3	4.3	0.1221	4.1
Fluoride	19.0	1	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0
Nitrate-N	14.0	1	0.0151	0.5	0.2	0.0142	0.5	0.3	0.0236	0.7	1.7	0.1214	3.5	0.4	0.0278	0.8	0.4	0.0319	1.1
Sulfate	96.1	2	0.2915	10.0	13.7	0.2852	9.6	12.0	0.2499	7.9	13.0	0.2707	7.7	13.0	0.2707	7.9	12.0	0.2499	8.4
Total Anions (meq/L)			**2.9**			**3.0**			**3.2**			**3.5**			**3.4**			**3.0**	
Total Ions (meq/L)			**5.6**			**5.9**			**5.9**			**6.4**			**6.3**			**5.9**	
Cation/Anion Ratio			**0.91**			**0.99**			**0.85**			**0.82**			**0.82**			**0.99**	
Percent Difference			**-4.4**			**-0.5**			**-8.3**			**-9.7**			**-9.9**			**-0.7**	
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)			2.67			2.94			2.69			2.88			2.81			2.92	
Calcium				35.51			30.90			31.54			32.93			32.02			29.02
Magnesium				50.85			55.43			55.07			54.30			55.73			57.70
Sodium + Potassium				13.64			13.68			13.39			12.78			12.25			13.28
sum (SO_4, Cl, HCO_3+CO_3)			2.90			2.96			3.16			3.38			3.42			2.93	
Sulfate				10.035			9.642			7.915			8.001			7.922			8.523
Chloride				4.603			3.833			3.396			3.335			4.293			4.166
Bicarbonate + Carbonate				85.363			86.525			88.689			88.664			87.786			87.311

e Cation/Anion Ratio

Red Text indicates greater than 10 percent differe

Site ID			SW-W6			SW-W7		
Date			11/1/2010			11/1/2007		
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	13.7	0.6836	30.8	19.0	0.9481	32.7
Magnesium	24.3	2	14.6	1.2014	54.0	19.0	1.5635	54.0
Potassium	39.1	1	3.1	0.0803	3.6	1.8	0.046	1.6
Sodium	23.0	1	5.8	0.2532	11.4	7.6	0.3306	11.4
Iron	55.8	2	0.1	0.0038	0.2	0.2	0.0068	0.2
Manganese	54.9	2	0.0	0.0005	0.0	0.0	0.0001	0.0
Ammonia-N	14.0	1	0.0	0.0004	0.0	0.0	0.0011	0.0
Total Cations (meq/L)				**2.2**			**2.9**	
Anions								
Alkalinity, Total			89.2			130		
Carbonate	60.0	2	0.0251	0.0008	0.0	0.972	0.0324	1.1
Bicarbonate	61.0	1	109	1.7829	86.3	157	2.5672	83.5
Chloride	35.5	1	3.8	0.1083	5.2	4.7	0.1326	4.3
Fluoride	19.0	1	0.0	0	0.0	0.0	0	0.0
Nitrate-N	14.0	1	0.4	0.0286	1.4	1.0	0.0714	2.3
Sulfate	96.1	2	7.0	0.1447	7.0	13.0	0.2707	8.8
Total Anions (meq/L)				**2.1**			**3.1**	
Total Ions (meq/L)				**4.3**			**6.0**	
Cation/Anion Ratio				**1.08**			**0.94**	
Percent Difference				**3.7**			**-3.0**	
TRILINEAR DIAGRAM DATA								
sum (Ca, Mg, Na+K)				2.22			2.89	
Calcium					30.82			32.83
Magnesium					54.15			54.13
Sodium + Potassium					15.03			13.04
sum (SO_4, Cl, HCO_3+CO_3)				2.04			3.00	
Sulfate					7.105			9.014
Chloride					5.318			4.415
Bicarbonate + Carbonate					87.577			86.571

nce in the Cation/Anion Ratio

Appendix H.3 - Cc2 Perched Zone Monitoring Wells - Ion Balance Calculations

Site ID			MW-2			MW-2			MW-2			MW-2			MW-5D			MW-5D	
Date			5/12/2008			2/20/2009			11/17/2009			8/3/2010			2/6/2007			11/1/2007	
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L
Calcium	40.1	2	33.0	1.6467	32.7	35.0	1.7465	31.2	33.2	1.6567	29.9	35.8	1.7864	31.6	34.0	1.6966	33.5	35.0	1.7465
Magnesium	24.3	2	35.0	2.8801	57.2	40.0	3.2915	58.8	40.3	3.3162	59.9	40.0	3.2915	58.2	24.0	1.9749	39.0	24.0	1.9749
Potassium	39.1	1	2.5	0.0639	1.3	2.6	0.0665	1.2	2.6	0.067	1.2	2.7	0.0698	1.2	2.6	0.0665	1.3	2.5	0.0639
Sodium	23.0	1	10.0	0.435	8.6	11.0	0.4785	8.6	11.2	0.4872	8.8	11.5	0.5002	8.8	13.0	0.5655	11.2	14.0	0.609
Iron	55.8	2	0.2	0.0061	0.1	0.1	0.005	0.1	0.0	0.0002	0.0	0.0	0.0002	0.0	20.0	0.7162	14.1	16.0	0.573
Manganese	54.9	2	0.1	0.004	0.1	0.1	0.0044	0.1	0.1	0.0041	0.1	0.1	0.0041	0.1	1.1	0.04	0.8	1.2	0.0437
Ammonia-N	14.0	1	0.0	0.0011	0.0	0.0	0.0011	0.0	0.0	0.0004	0.0	0.0	0.0004	0.0	0.1	0.0043	0.1	0.1	0.0041
Total Cations (meq/L)				**5.0**			**5.6**			**5.5**			**5.7**			**5.1**			**5.0**
Anions																			
Alkalinity, Total			260			270			265			245			270			240	
Carbonate	60.0	2	0.0839	0.0028	0.1	0.0892	0.003	0.1	0.1128	0.0038	0.1	0.0689	0.0023	0.0	0.0813	0.0027	0.0	0.0588	0.002
Bicarbonate	61.0	1	317.03	5.1964	93.1	329.22	5.3962	93.3	323.07	5.2954	92.3	298.76	4.897	91.9	329.23	5.3965	95.6	292.68	4.7973
Chloride	35.5	1	3.4	0.0959	1.7	4.0	0.1128	2.0	4.2	0.1196	2.1	3.1	0.0883	1.7	3.6	0.1015	1.8	2.9	0.0818
Fluoride	19.0	1	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0
Nitrate-N	14.0	1	0.2	0.0157	0.3	0.3	0.0214	0.4	0.4	0.0316	0.6	0.3	0.0242	0.5	0.0	0.0018	0.0	0.0	0.0018
Sulfate	96.1	2	13.0	0.2707	4.8	12.0	0.2499	4.3	13.7	0.2852	5.0	15.3	0.3186	6.0	6.9	0.1437	2.5	6.8	0.1416
Total Anions (meq/L)				**5.6**			**5.8**			**5.7**			**5.3**			**5.6**			**5.0**
Total Ions (meq/L)				**10.6**			**11.4**			**11.3**			**11.0**			**10.7**			**10.0**
Cation/Anion Ratio				**0.90**			**0.97**			**0.96**			**1.06**			**0.90**			**1.00**
Percent Difference				**-5.1**			**-1.7**			**-1.8**			**2.9**			**-5.4**			**-0.1**
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)				5.03			5.58			5.53			5.65			4.30			4.39
Calcium					32.77			31.28			29.97			31.63			39.42		
Magnesium					57.31			58.96			60.00			58.28			45.89		
Sodium + Potassium					9.93			9.76			10.03			10.09			14.69		
sum (SO_4, Cl, HCO_3+CO_3)				5.57			5.76			5.70			5.31			5.64			5.02
Sulfate					4.863			4.336			5.001			6.004			2.545		
Chloride					1.723			1.958			2.097			1.664			1.799		
Bicarbonate + Carbonate					93.414			93.706			92.903			92.333			95.656		

Red text indicates a greater than 10 percent difference in cation/anion ratio

Appendix H.3 - Cc2 Perched Zone Monitoring Wells - Ion Balance Calculations

Site ID				MW-5D			MW-5D			MW-5D			MW-5D			MW-9			
Date				8/7/2008			5/12/2009			2/11/2010			11/2/2010			8/10/2007			
Cations	MW	n	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L
Calcium	40.1	2	34.8	31.0	1.5469	34.9	31.0	1.5469	30.8	39.0	1.9461	39.8	29.7	1.482	32.9	12.0	0.5988	37.0	13.0
Magnesium	24.3	2	39.4	21.0	1.728	38.9	26.2	2.1559	43.0	26.3	2.1642	44.2	21.7	1.7856	39.6	9.2	0.757	46.7	10.0
Potassium	39.1	1	1.3	2.3	0.0588	1.3	2.8	0.0716	1.4	2.8	0.0719	1.5	2.9	0.0734	1.6	1.9	0.0486	3.0	2.1
Sodium	23.0	1	12.1	13.0	0.5655	12.7	15.3	0.6655	13.3	13.4	0.5829	11.9	14.4	0.6264	13.9	4.9	0.2131	13.2	5.9
Iron	55.8	2	11.4	14.0	0.5014	11.3	15.1	0.5408	10.8	2.5	0.0877	1.8	14.1	0.505	11.2	0.0	0.0017	0.1	0.3
Manganese	54.9	2	0.9	0.9	0.032	0.7	0.8	0.0307	0.6	1.1	0.0408	0.8	0.8	0.0284	0.6	0.0	2E-05	0.0	0.0
Ammonia-N	14.0	1	0.1	0.1	0.0042	0.1	0.0	0.0032	0.1	0.0	0.0018	0.0	0.0	0.0035	0.1	0.0	0.0011	0.1	0.0
Total Cations (meq/L)					**4.4**			**5.0**			**4.9**			**4.5**			**1.6**		
Anions																			
Alkalinity, Total				240			230			267			209			72			68
Carbonate	60.0	2	0.0	0.0615	0.0021	0.0	0.0469	0.0016	0.0	0.099	0.0033	0.1	0.1475	0.0049	0.1	0.1274	0.0042	0.2	0.1176
Bicarbonate	61.0	1	95.5	292.67	4.7972	94.5	280.50	4.5977	93.4	325.54	5.3359	92.8	254.68	4.1745	93.0	87.58	1.4355	76.3	82.72
Chloride	35.5	1	1.6	3.6	0.1015	2.0	4.4	0.1227	2.5	5.7	0.1602	2.8	3.8	0.1069	2.4	4.4	0.1241	6.6	4.3
Fluoride	19.0	1	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Nitrate-N	14.0	1	0.0	0.0	0.0018	0.0	0.0	0.0004	0.0	0.0	0.0004	0.0	0.0	0.0004	0.0	0.4	0.0264	1.4	0.1
Sulfate	96.1	2	2.8	8.4	0.1749	3.4	9.6	0.2005	4.1	11.9	0.2478	4.3	9.7	0.2009	4.5	14.0	0.2915	15.5	15.0
Total Anions (meq/L)					**5.1**			**4.9**			**5.7**			**4.5**			**1.9**		
Total Ions (meq/L)					**9.5**			**9.9**			**10.6**			**9.0**			**3.5**		
Cation/Anion Ratio					**0.87**			**1.02**			**0.85**			**1.00**			**0.86**		
Percent Difference					**-6.7**			**0.9**			**-8.0**			**0.2**			**-7.5**		
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)					3.90			4.44			4.77			3.97			1.62		
Calcium			39.74			39.67			34.84			40.84			37.35				37.02	
Magnesium			44.94			44.32			48.56			45.42			45.01				46.80	
Sodium + Potassium			15.31			16.01			16.60			13.74			17.64				16.18	
sum (SO_4, Cl, HCO_3+CO_3)					5.08			4.92			5.75			4.49			1.86		
Sulfate			2.819			3.446			4.073			4.311			4.478				15.711	
Chloride			1.629			2.001			2.493			2.788			2.382				6.689	
Bicarbonate + Carbonate			95.553			94.554			93.434			92.901			93.140				77.600	

Red text indicates a greater than 10 percent difference in cation/anion ratio

Appendix H.3 - Cc2 Perched Zone Monitoring Wells - Ion Balance Calculations

Site ID			MW-9		MW-9			MW-9			MW-9			MW-21			MW-21		
Date			5/8/2008		2/4/2009			11/5/2009			8/9/2010			5/1/2007			2/5/2008		
Cations	MW	n	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	0.6487	36.2	15.0	0.7485	34.6	11.1	0.5539	36.0	12.7	0.6337	36.1	26.0	1.2974	34.3	26.0	1.2974	33.1
Magnesium	24.3	2	0.8229	45.9	13.0	1.0697	49.4	8.8	0.7208	46.8	10.1	0.8311	47.4	23.0	1.8926	50.1	25.0	2.0572	52.5
Potassium	39.1	1	0.0537	3.0	2.3	0.0588	2.7	2.0	0.0499	3.2	1.9	0.0491	2.8	2.1	0.0537	1.4	2.2	0.0563	1.4
Sodium	23.0	1	0.2566	14.3	6.1	0.2653	12.3	4.9	0.214	13.9	5.5	0.2401	13.7	9.8	0.4263	11.3	10.0	0.435	11.1
Iron	55.8	2	0.0104	0.6	0.1	0.0024	0.1	0.0	0.0002	0.0	0.0	0.0002	0.0	2.1	0.0752	2.0	1.4	0.0501	1.3
Manganese	54.9	2	8E-05	0.0	0.5	0.0197	0.9	0.0	2E-05	0.0	0.0	2E-05	0.0	0.9	0.0317	0.8	0.6	0.0229	0.6
Ammonia-N	14.0	1	0.0011	0.1	0.0	0.0011	0.0	0.0	0.0004	0.0	0.0	0.0004	0.0	0.0	0.0011	0.0	0.0	0.0011	0.0
Total Cations (meq/L)			**1.8**			**2.2**			**1.5**			**1.8**			**3.8**	**100.0**		**3.9**	**100.0**
Anions																			
Alkalinity, Total					100			65.2			69.7			220			230		
Carbonate	60.0	2	0.0039	0.2	0.1092	0.0036	0.1	0.1077	0.0036	0.2	0.0481	0.0016	0.1	0.098	0.0033	0.1	0.0852	0.0028	0.1
Bicarbonate	61.0	1	1.3559	75.2	121.78	1.9961	78.5	79.33	1.3002	77.0	84.94	1.3922	76.1	268.20	4.3961	92.9	280.43	4.5965	93.0
Chloride	35.5	1	0.1213	6.7	5.9	0.1664	6.5	4.1	0.1159	6.9	4.4	0.1241	6.8	2.8	0.079	1.7	3.3	0.0931	1.9
Fluoride	19.0	1	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0
Nitrate-N	14.0	1	0.01	0.6	0.0	0.0018	0.1	0.2	0.0112	0.7	0.2	0.0142	0.8	0.0	0.0018	0.0	0.0	0.0018	0.0
Sulfate	96.1	2	0.3123	17.3	18.0	0.3748	14.7	12.4	0.2582	15.3	14.3	0.2977	16.3	12.0	0.2499	5.3	12.0	0.2499	5.1
Total Anions (meq/L)			**1.8**			**2.5**			**1.7**			**1.8**			**4.7**	**100.0**		**4.9**	**100.0**
Total Ions (meq/L)			**3.6**			**4.7**			**3.2**			**3.6**			**8.5**			**8.9**	
Cation/Anion Ratio			**0.99**			**0.85**			**0.91**			**0.96**			**0.80**			**0.79**	
Percent Difference			**-0.3**			**-8.0**			**-4.6**			**-2.1**			**-11.2**			**-11.6**	
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)			1.78			2.14			1.54			1.75			3.67			3.85	
Calcium				36.40			34.94			36.00			36.13			35.35			33.74
Magnesium				46.18			49.93			46.85			47.38			51.57			53.49
Sodium + Potassium				17.42			15.13			17.15			16.49			13.08			12.77
																100.0			100.0
sum (SO_4, Cl, HCO_3+CO_3)			1.79			2.54			1.68			1.82			4.73			4.94	
Sulfate				17.415			14.750			15.387			16.399			5.284			5.055
Chloride				6.763			6.550			6.909			6.836			1.670			1.883
Bicarbonate + Carbonate				75.822			78.701			77.704			76.766			93.045			93.061
																100.0			100.0

Red text indicates a greater than 10 percent difference in cation/anion ratio

Site ID			MW-21			MW-21			MW-21		
Date			11/3/2008			8/11/2009			5/5/2010		
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	31.0	1.5469	31.4	34.8	1.7365	30.0	29.6	1.477	28.9
Magnesium	24.3	2	34.0	2.7978	56.9	41.6	3.4232	59.1	36.8	3.0282	59.3
Potassium	39.1	1	2.6	0.0665	1.4	3.2	0.0806	1.4	2.6	0.0675	1.3
Sodium	23.0	1	10.0	0.435	8.8	11.7	0.5089	8.8	11.3	0.4915	9.6
Iron	55.8	2	1.6	0.0573	1.2	0.9	0.0306	0.5	0.8	0.0295	0.6
Manganese	54.9	2	0.4	0.0157	0.3	0.3	0.012	0.2	0.4	0.0144	0.3
Ammonia-N	14.0	1	0.0	0.0011	0.0	0.0	0.0004	0.0	0.0	0.0004	0.0
Total Cations (meq/L)				**4.9**	**100.0**		**5.8**			**5.1**	
Anions											
Alkalinity, Total			290			262			260		
Carbonate	60.0	2	0.1384	0.0046	0.1	0.0949	0.0032	0.1	0.082	0.0027	0.0
Bicarbonate	61.0	1	353.52	5.7945	93.5	319.45	5.236	92.4	317.03	5.1965	91.7
Chloride	35.5	1	5.0	0.141	2.3	4.6	0.1297	2.3	5.0	0.1396	2.5
Fluoride	19.0	1	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0
Nitrate-N	14.0	1	0.1	0.0063	0.1	0.1	0.0098	0.2	0.2	0.0124	0.2
Sulfate	96.1	2	12.0	0.2499	4.0	13.9	0.2894	5.1	15.3	0.3186	5.6
Total Anions (meq/L)				**6.2**	**100.0**		**5.7**			**5.7**	
Total Ions (meq/L)				**11.1**			**11.5**			**10.8**	
Cation/Anion Ratio				**0.79**			**1.02**			**0.90**	
Percent Difference				**-11.5**			**1.1**			**-5.2**	
TRILINEAR DIAGRAM DATA											
sum (Ca, Mg, Na+K)				4.85			5.75			5.06	
Calcium					31.92			30.20			29.17
Magnesium					57.73			59.54			59.80
Sodium + Potassium					10.35			10.25			11.04
					100.0						
sum (SO_4, Cl, HCO_3+CO_3)				6.19			5.66			5.66	
Sulfate					4.036			5.115			5.631
Chloride					2.278			2.293			2.468
Bicarbonate + Carbonate					93.685			92.592			91.901
					100.0						

Red text indicates a greater than 10 percent difference in cation/anion ratio

Appendix H .4 - Cc3 and Regional Aquifer Monitoring Wells - Ion Balance Calculations

Site ID			MW-12			MW-12			MW-12			MW-12			MW-12			MW-12		
Date			4/27/2007			8/2/2007			11/2/2007			2/11/2008			11/13/2008			2/4/2009	
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L
Calcium	40.1	2	9.3	0.4641	36.2	8.7	0.4341	35.0	9.1	0.4541	35.8	9.1	0.4541	35.7	9.7	0.484	35.5	9.5	0.4741
Magnesium	24.3	2	7.0	0.576	44.9	7.0	0.576	46.4	7.0	0.576	45.5	7.0	0.576	45.3	7.6	0.6254	45.8	7.5	0.6172
Potassium	39.1	1	1.5	0.0384	3.0	1.5	0.0384	3.1	1.4	0.0358	2.8	1.4	0.0358	2.8	1.5	0.0384	2.8	1.5	0.0384
Sodium	23.0	1	4.6	0.2001	15.6	4.4	0.1914	15.4	4.5	0.1957	15.4	4.7	0.2044	16.1	4.9	0.2131	15.6	4.7	0.2044
Iron	55.8	2	0.1	0.0024	0.2	0.0	0.0009	0.1	0.1	0.0043	0.3	0.0	0.0012	0.1	0.1	0.0024	0.2	0.1	0.0018
Manganese	54.9	2	0.0	2E-05	0.0	0.0	2E-05	0.0	0.0	2E-05	0.0	0.0	2E-05	0.0	0.0	2E-05	0.0	0.0	2E-05
Ammonia-N	14.0	1	0.0	0.0011	0.1	0.0	0.0011	0.1	0.0	0.0011	0.1	0.0	0.0011	0.1	0.0	0.0011	0.1	0.0	0.0011
Total Cations (meq/L)				**1.3**			**1.2**			**1.3**			**1.3**			**1.4**			**1.3**
Anions																			
Alkalinity, Total			56			56			54			60			66			58	
Carbonate	60.0	2	0.0521	0.0017	0.1	0.0735	0.0025	0.2	0.0526	0.0018	0.1	0.0806	0.0027	0.2	0.1469	0.0049	0.3	0.1075	0.0036
Bicarbonate	61.0	1	68.21	1.1181	76.2	68.17	1.1174	76.7	65.77	1.0781	76.7	73.04	1.1971	78.6	80.22	1.3149	79.3	70.54	1.1562
Chloride	35.5	1	2.9	0.0818	5.6	2.8	0.079	5.4	2.7	0.0762	5.4	2.7	0.0762	5.0	2.7	0.0762	4.6	2.7	0.0762
Fluoride	19.0	1	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0
Nitrate-N	14.0	1	0.8	0.0571	3.9	0.8	0.0535	3.7	0.8	0.0535	3.8	0.8	0.0543	3.6	0.8	0.0557	3.4	0.8	0.0543
Sulfate	96.1	2	10.0	0.2082	14.2	9.8	0.204	14.0	9.4	0.1957	13.9	9.3	0.1936	12.7	9.9	0.2061	12.4	9.8	0.204
Total Anions (meq/L)				**1.5**			**1.5**			**1.4**			**1.5**			**1.7**			**1.5**
Total Ions (meq/L)				**2.7**			**2.7**			**2.7**			**2.8**			**3.0**			**2.8**
Cation/Anion Ratio				**0.87**			**0.85**			**0.90**			**0.84**			**0.82**			**0.89**
Percent Difference				**-6.7**			**-7.9**			**-5.2**			**-9.0**			**-9.7**			**-5.6**
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)				1.28			1.24			1.26			1.27			1.36			1.33
Calcium					36.30			35.01			35.99			35.75			35.57		
Magnesium					45.05			46.46			45.66			45.34			45.95		
Sodium + Potassium					18.65			18.53			18.35			18.91			18.48		
sum (SO_4, Cl, HCO_3+CO_3)				1.41			1.40			1.35			1.47			1.60			1.44
Sulfate					14.768			14.545			14.479			13.176			12.866		
Chloride					5.802			5.630			5.634			5.182			4.754		
Bicarbonate + Carbonate					79.430			79.825			79.887			81.642			82.380		

Red text indicates a greater than 10 percent difference in cation/anion ratio

Site ID				MW-12			MW-12			MW-12			MW-12			MW-12			
Date				5/13/2009			8/4/2009			11/2/2009			2/5/2010			5/6/2010			
Cations	MW	n	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L
Calcium	40.1	2	35.5	9.8	0.491	35.2	9.9	0.493	33.6	9.9	0.493	36.0	9.9	0.4925	34.2	9.0	0.4476	32.5	9.2
Magnesium	24.3	2	46.2	7.8	0.641	45.9	8.5	0.6962	47.4	7.6	0.6213	45.3	8.2	0.6756	46.9	8.1	0.6649	48.2	8.4
Potassium	39.1	1	2.9	1.7	0.0422	3.0	1.8	0.0448	3.0	1.6	0.0419	3.1	1.7	0.0425	2.9	1.6	0.0404	2.9	1.7
Sodium	23.0	1	15.3	5.1	0.2218	15.9	5.4	0.2345	16.0	4.9	0.2144	15.6	5.3	0.2305	16.0	5.2	0.2249	16.3	5.2
Iron	55.8	2	0.1	0.0	0.0002	0.0	0.0	0.0002	0.0	0.0	0.0002	0.0	0.0	0.0002	0.0	0.0	0.0002	0.0	0.0
Manganese	54.9	2	0.0	0.0	2E-05	0.0	0.0	2E-05	0.0	0.0	2E-05	0.0	0.0	2E-05	0.0	0.0	2E-05	0.0	0.0
Ammonia-N	14.0	1	0.1	0.0	0.0004	0.0	0.0	0.0004	0.0	0.0	0.0004	0.0	0.0	0.0004	0.0	0.0	0.0004	0.0	0.0
Total Cations (meq/L)					**1.4**			**1.5**			**1.4**			**1.4**			**1.4**		
Anions																			
Alkalinity, Total				57.2			52.5			63.4			58.9			57.6			57.4
Carbonate	60.0	2	0.2	0.1364	0.0045	0.3	0.0658	0.0022	0.2	0.1657	0.0055	0.3	0.154	0.0051	0.3	0.0615	0.002	0.1	0.1975
Bicarbonate	61.0	1	77.4	69.51	1.1393	76.6	63.92	1.0476	74.4	77.01	1.2623	78.2	71.54	1.1727	76.7	70.15	1.1498	76.1	69.63
Chloride	35.5	1	5.1	3.0	0.0857	5.8	3.1	0.0866	6.2	3.1	0.0886	5.5	3.1	0.0869	5.7	3.2	0.0894	5.9	2.8
Fluoride	19.0	1	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Nitrate-N	14.0	1	3.6	0.7	0.0534	3.6	0.8	0.0548	3.9	0.6	0.0441	2.7	0.7	0.0513	3.4	0.8	0.0535	3.5	0.7
Sulfate	96.1	2	13.7	9.8	0.2043	13.7	10.4	0.2165	15.4	10.3	0.2145	13.3	10.2	0.2124	13.9	10.4	0.2165	14.3	10.4
Total Anions (meq/L)					**1.5**			**1.4**			**1.6**			**1.5**			**1.5**		
Total Ions (meq/L)					**2.9**			**2.9**			**3.0**			**3.0**			**2.9**		
Cation/Anion Ratio					**0.94**			**1.04**			**0.85**			**0.94**			**0.91**		
Percent Difference					**-3.1**			**2.1**			**-8.2**			**-2.9**			**-4.6**		
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)					1.40			1.47			1.37			1.44			1.38		
Calcium			35.54			35.17			33.58			35.97			34.18			32.49		
Magnesium			46.26			45.92			47.41			45.33			46.88			48.26		
Sodium + Potassium			18.20			18.91			19.01			18.71			18.94			19.26		
															100.0			100.0	
sum (SO_4, Cl, HCO_3+CO_3)					1.43			1.35			1.57			1.48			1.46		
Sulfate			14.169			14.245			16.005			13.652			14.378			14.854		
Chloride			5.289			5.980			6.400			5.638			5.882			6.134		
Bicarbonate + Carbonate			80.542			79.774			77.595			80.709			79.740			79.013		
															100.0			100.0	

Red text indicates a greater than 10 percent difference in cation/anion ratio

Appendix H .4 - Cc3 and Regional Aquifer Monitoring Wells - Ion Balance Calculations

Site ID			MW-12		MW-12			MW-19			MW-19			MW-19			MW-19		
Date			9/28/2010		11/9/2010			1/30/2007			4/27/2007			8/10/2007			11/16/2007		
Cations	MW	n	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	0.4601	32.3	9.1	0.4546	32.7	13.0	0.6487	32.9	14.0	0.6986	34.7	14.0	0.6986	34.5	14.0	0.6986	36.5
Magnesium	24.3	2	0.6937	48.7	8.1	0.6674	48.0	12.0	0.9875	50.1	12.0	0.9875	49.0	12.0	0.9875	48.8	11.0	0.9052	47.3
Potassium	39.1	1	0.0427	3.0	1.7	0.0445	3.2	2.2	0.0563	2.9	2.2	0.0563	2.8	2.3	0.0588	2.9	2.2	0.0563	2.9
Sodium	23.0	1	0.2266	15.9	5.2	0.2244	16.1	5.9	0.2566	13.0	5.7	0.2479	12.3	5.9	0.2566	12.7	5.4	0.2349	12.3
Iron	55.8	2	0.0002	0.0	0.0	0.0002	0.0	0.1	0.0026	0.1	0.1	0.0039	0.2	0.1	0.0025	0.1	0.0	0.0017	0.1
Manganese	54.9	2	2E-05	0.0	0.0	2E-05	0.0	0.5	0.0186	0.9	0.5	0.0182	0.9	0.5	0.0186	0.9	0.4	0.0157	0.8
Ammonia-N	14.0	1	0.0004	0.0	0.0	0.0004	0.0	0.0	0.0011	0.1	0.0	0.0025	0.1	0.0	0.0011	0.1	0.0	0.0011	0.1
Total Cations (meq/L)			**1.4**			**1.4**			**2.0**			**2.0**			**2.0**			**1.9**	
Anions																			
Alkalinity, Total					55.7			82			86			89			86		
Carbonate	60.0	2	0.0066	0.4	0.1328	0.0044	0.3	0.2459	0.0082	0.4	0.2353	0.0078	0.4	0.3133	0.0104	0.5	0.317	0.0106	0.5
Bicarbonate	61.0	1	1.1412	76.3	67.68	1.1094	75.8	99.54	1.6316	73.8	104.44	1.7119	76.4	107.94	1.7693	76.6	104.28	1.7092	76.5
Chloride	35.5	1	0.0795	5.3	3.1	0.0874	6.0	5.4	0.1523	6.9	5.1	0.1439	6.4	5.4	0.1523	6.6	4.9	0.1382	6.2
Fluoride	19.0	1	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0
Nitrate-N	14.0	1	0.0525	3.5	0.7	0.0533	3.6	0.0	0.0018	0.1	0.0	0.0018	0.1	0.0	0.0018	0.1	0.0	0.0018	0.1
Sulfate	96.1	2	0.2165	14.5	10.0	0.2082	14.2	20.0	0.4164	18.8	18.0	0.3748	16.7	18.0	0.3748	16.2	18.0	0.3748	16.8
Total Anions (meq/L)			**1.5**			**1.5**			**2.2**			**2.2**			**2.3**			**2.2**	
Total Ions (meq/L)			**2.9**			**2.9**			**4.2**			**4.3**			**4.3**			**4.1**	
Cation/Anion Ratio			**0.95**			**0.95**			**0.89**			**0.90**			**0.88**			**0.86**	
Percent Difference			**-2.5**			**-2.5**			**-5.7**			**-5.3**			**-6.6**			**-7.7**	
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)			1.42			1.39			1.95			1.99			2.00			1.89	
Calcium				32.33			32.68			33.28			35.10			34.90			36.87
Magnesium				48.74			47.98			50.66			49.61			49.34			47.77
Sodium + Potassium				18.93			19.34			16.05			15.28			15.76			15.37
				100.0															
sum (SO_4, Cl, HCO_3+CO_3)			1.44			1.41			2.21			2.24			2.31			2.23	
Sulfate				14.997			14.772			18.855			16.743			16.246			16.786
Chloride				5.509			6.204			6.897			6.427			6.603			6.190
Bicarbonate + Carbonate				79.495			79.024			74.248			76.830			77.151			77.024
				100.0															

Red text indicates a greater than 10 percent difference in cation/anion ratio

Site ID			MW-19			MW-19			MW-19			MW-19			MW-19			MW-19	
Date			2/7/2008			5/7/2008			8/6/2008			2/4/2009			5/4/2009			7/31/200	
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L
Calcium	40.1	2	14.0	0.6986	34.7	16.0	0.7984	34.2	15.0	0.7485	34.5	10.0	0.499	34.5	16.2	0.8084	33.1	16.1	0.8034
Magnesium	24.3	2	12.0	0.9875	49.0	14.0	1.152	49.3	13.0	1.0697	49.4	8.4	0.6912	47.8	15.1	1.2425	50.9	14.2	1.1685
Potassium	39.1	1	2.1	0.0537	2.7	2.5	0.0639	2.7	2.1	0.0537	2.5	1.7	0.0435	3.0	2.6	0.0673	2.8	2.7	0.0688
Sodium	23.0	1	5.8	0.2523	12.5	6.8	0.2958	12.7	6.1	0.2653	12.2	4.8	0.2088	14.5	6.9	0.2997	12.3	6.4	0.2797
Iron	55.8	2	0.2	0.0054	0.3	0.2	0.0054	0.2	0.2	0.0061	0.3	0.0	0.0013	0.1	0.0	0.001	0.0	0.1	0.0019
Manganese	54.9	2	0.5	0.0175	0.9	0.5	0.0178	0.8	0.5	0.0197	0.9	0.0	2E-05	0.0	0.5	0.0194	0.8	0.7	0.0257
Ammonia-N	14.0	1	0.0	0.0011	0.1	0.0	0.0033	0.1	0.1	0.0038	0.2	0.0	0.0011	0.1	0.0	0.0026	0.1	0.0	0.0031
Total Cations (meq/L)				**2.0**			**2.3**			**2.2**			**1.4**			**2.4**			**2.4**
Anions																			
Alkalinity, Total			96			90			96			64			90			99.3	
Carbonate	60.0	2	0.2879	0.0096	0.4	0.2578	0.0086	0.4	0.1699	0.0057	0.2	0.133	0.0044	0.3	0.2299	0.0077	0.3	0.1926	0.0064
Bicarbonate	61.0	1	116.53	1.9101	78.1	109.28	1.7911	76.2	116.77	1.914	77.2	77.81	1.2754	77.6	109.33	1.7921	77.0	120.75	1.9793
Chloride	35.5	1	5.3	0.1495	6.1	6.2	0.1749	7.4	6.5	0.1833	7.4	3.7	0.1044	6.4	6.1	0.1712	7.4	6.2	0.1752
Fluoride	19.0	1	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0
Nitrate-N	14.0	1	0.0	0.0018	0.1	0.0	0.0018	0.1	0.0	0.0018	0.1	0.1	0.0086	0.5	0.0	0.0004	0.0	0.0	0.0011
Sulfate	96.1	2	18.0	0.3748	15.3	18.0	0.3748	15.9	18.0	0.3748	15.1	12.0	0.2499	15.2	17.1	0.356	15.3	18.4	0.3831
Total Anions (meq/L)				**2.4**			**2.4**			**2.5**			**1.6**			**2.3**			**2.5**
Total Ions (meq/L)				**4.5**			**4.7**			**4.6**			**3.1**			**4.8**			**4.9**
Cation/Anion Ratio				**0.82**			**0.99**			**0.87**			**0.88**			**1.05**			**0.92**
Percent Difference				**-9.6**			**-0.3**			**-6.7**			**-6.4**			**2.4**			**-4.0**
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)				1.99			2.31			2.14			1.44			2.42			2.32
Calcium					35.07			34.56			35.02			34.59			33.43		
Magnesium					49.57			49.87			50.05			47.92			51.39		
Sodium + Potassium					15.36			15.57			14.93			17.49			15.18		
sum (SO_4, Cl, HCO_3+CO_3)				2.44			2.35			2.48			1.63			2.33			2.54
Sulfate					15.335			15.952			15.125			15.291			15.300		
Chloride					6.117			7.444			7.399			6.387			7.358		
Bicarbonate + Carbonate					78.549			76.604			77.476			78.323			77.342		

Red text indicates a greater than 10 percent difference in cation/anion ratio

Site ID				MW-19			MW-19			MW-19			MW-19			MW-19			
Date				11/5/2009			2/4/2010			5/3/2010			8/9/2010			11/8/2010			
Cations	MW	n	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L
Calcium	40.1	2	34.2	15.8	0.7884	32.8	16.7	0.8333	32.4	14.8	0.7385	31.3	18.1	0.9032	33.9	15.9	0.7934	31.0	12.0
Magnesium	24.3	2	49.7	14.9	1.2261	51.0	16.2	1.3331	51.8	15.1	1.2425	52.6	16.1	1.3248	49.7	16.2	1.3331	52.1	9.3
Potassium	39.1	1	2.9	2.5	0.0627	2.6	2.6	0.0657	2.6	2.3	0.0593	2.5	2.6	0.0655	2.5	2.6	0.0657	2.6	1.2
Sodium	23.0	1	11.9	6.9	0.2984	12.4	7.3	0.3167	12.3	6.8	0.2971	12.6	7.3	0.3162	11.9	7.0	0.3062	12.0	5.3
Iron	55.8	2	0.1	0.0	0.0017	0.1	0.0	0.0015	0.1	0.0	0.0015	0.1	0.1	0.0036	0.1	0.2	0.0068	0.3	0.0
Manganese	54.9	2	1.1	0.6	0.0209	0.9	0.6	0.0203	0.8	0.5	0.0179	0.8	1.4	0.0491	1.8	1.3	0.047	1.8	0.0
Ammonia-N	14.0	1	0.1	0.1	0.0038	0.2	0.0	0.0026	0.1	0.0	0.0033	0.1	0.1	0.005	0.2	0.1	0.0067	0.3	0.0
Total Cations (meq/L)					**2.4**			**2.6**			**2.4**			**2.7**			**2.6**		
Anions																			
Alkalinity, Total				105			109			104			107			105			62
Carbonate	60.0	2	0.3	0.3613	0.012	0.5	0.3345	0.0111	0.4	0.1972	0.0066	0.2	0.2029	0.0068	0.3	0.3222	0.0107	0.4	0.0219
Bicarbonate	61.0	1	77.8	127.37	2.0876	78.6	132.30	2.1685	79.2	126.48	2.0731	78.8	130.13	2.1329	80.2	127.44	2.0889	79.0	75.60
Chloride	35.5	1	6.9	6.7	0.189	7.1	6.2	0.1754	6.4	6.2	0.1743	6.6	5.6	0.1577	5.9	6.3	0.178	6.7	4.3
Fluoride	19.0	1	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Nitrate-N	14.0	1	0.0	0.0	0.0004	0.0	0.0	0.0004	0.0	0.0	0.0004	0.0	0.0	0.0014	0.1	0.0	0.0028	0.1	4.8
Sulfate	96.1	2	15.1	17.6	0.3664	13.8	18.4	0.3831	14.0	18.1	0.3769	14.3	17.3	0.3602	13.5	17.4	0.3623	13.7	7.9
Total Anions (meq/L)					**2.7**			**2.7**			**2.6**			**2.7**			**2.6**		
Total Ions (meq/L)					**5.1**			**5.3**			**5.0**			**5.3**			**5.2**		
Cation/Anion Ratio					**0.90**			**0.94**			**0.90**			**1.00**			**0.97**		
Percent Difference					**-5.0**			**-3.1**			**-5.4**			**0.2**			**-1.6**		
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)					2.38			2.55			2.34			2.61			2.50		
Calcium			34.62			33.19			32.70			31.59			34.61			31.76		
Magnesium			50.36			51.61			52.30			53.16			50.77			53.36		
Sodium + Potassium			15.02			15.20			15.00			15.25			14.63			14.89		
sum (SO_4, Cl, HCO_3+CO_3)					2.66			2.74			2.63			2.66			2.64		
Sulfate			15.059			13.802			13.991			14.324			13.554			13.723		
Chloride			6.885			7.118			6.407			6.626			5.933			6.742		
Bicarbonate + Carbonate			78.055			79.081			79.602			79.050			80.513			79.535		

Red text indicates a greater than 10 percent difference in cation/anion ratio

Site ID			MW-27		MW-27			MW-27			MW-27			MW-27		
Date			8/6/2007		5/1/2009			8/11/2009			11/5/2009			8/10/2010		
Cations	MW	n	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	0.5988	36.8	12.8	0.6387	34.6	12.8	0.6387	34.4	12.9	0.6437	36.0	12.2	0.6088	33.1
Magnesium	24.3	2	0.7653	47.0	10.9	0.8969	48.6	11.0	0.9052	48.7	10.3	0.8476	47.4	11.0	0.9052	49.2
Potassium	39.1	1	0.0307	1.9	1.4	0.035	1.9	1.4	0.0353	1.9	1.4	0.0353	2.0	1.3	0.0343	1.9
Sodium	23.0	1	0.2305	14.2	6.3	0.2732	14.8	6.4	0.2779	15.0	6.0	0.2623	14.7	6.7	0.2923	15.9
Iron	55.8	2	0.0014	0.1	0.0	0.0002	0.0	0.0	0.0002	0.0	0.0	0.0002	0.0	0.0	0.0002	0.0
Manganese	54.9	2	2E-05	0.0	0.0	2E-05	0.0	0.0	2E-05	0.0	0.0	2E-05	0.0	0.0	2E-05	0.0
Ammonia-N	14.0	1	0.0011	0.1	0.0	0.0004	0.0	0.0	0.0004	0.0	0.0	0.0004	0.0	0.0	0.0004	0.0
Total Cations (meq/L)			**1.6**			**1.8**			**1.9**			**1.8**			**1.8**	
Anions																
Alkalinity, Total					69.5			68.5			71.4			65.7		
Carbonate	60.0	2	0.0007	0.0	0.0332	0.0011	0.1	0.0291	0.001	0.1	0.0201	0.0007	0.0	0.0147	0.0005	0.0
Bicarbonate	61.0	1	1.2391	66.3	84.72	1.3887	72.6	83.51	1.3688	72.5	87.07	1.4271	73.3	80.12	1.3133	70.6
Chloride	35.5	1	0.1213	6.5	5.0	0.1422	7.4	5.2	0.1461	7.7	5.3	0.1498	7.7	4.5	0.1275	6.9
Fluoride	19.0	1	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0
Nitrate-N	14.0	1	0.3427	18.3	2.3	0.1635	8.6	2.2	0.1592	8.4	2.1	0.1521	7.8	3.4	0.2413	13.0
Sulfate	96.1	2	0.1645	8.8	10.4	0.2165	11.3	10.2	0.2124	11.3	10.5	0.2186	11.2	8.5	0.1768	9.5
Total Anions (meq/L)			**1.9**			**1.9**			**1.9**			**1.9**			**1.9**	
Total Ions (meq/L)			**3.5**			**3.8**			**3.7**			**3.7**			**3.7**	
Cation/Anion Ratio			**0.87**			**0.96**			**0.98**			**0.92**			**0.99**	
Percent Difference			**-6.9**			**-1.8**			**-0.8**			**-4.2**			**-0.5**	
TRILINEAR DIAGRAM DATA																
sum (Ca, Mg, Na+K)			1.63			1.84			1.86			1.79			1.84	
Calcium				36.84			34.64			34.39			35.98			33.08
Magnesium				47.08			48.64			48.74			47.38			49.18
Sodium + Potassium				16.07			16.72			16.87			16.64			17.74
sum (SO_4, Cl, HCO_3+CO_3)			1.53			1.75			1.73			1.80			1.62	
Sulfate				10.782			12.384			12.288			12.171			10.925
Chloride				7.950			8.130			8.454			8.339			7.879
Bicarbonate + Carbonate				81.268			79.485			79.258			79.490			81.196

Red text indicates a greater than 10 percent difference in cation/anion ratio

Appendix H.5 - Western Hillslope Monitoring Wells - Ion Balance Calculations

Site ID			**MW-30**			**MW-30**			**MW-30**			**MW-30**			**MW-31**			**MW-31**	
Date			1/26/2010			4/29/2010			8/17/2010			11/9/2010			1/28/2010			4/22/2010	
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L
Calcium	40.1	2	24.4	1.2176	36.2	24.8	1.2375	35.4	26.2	1.3074	36.7	24.3	1.2126	36.5	22.1	1.1028	33.1	18.6	0.92814
Magnesium	24.3	2	19.5	1.6046	47.7	20.7	1.7034	48.7	20.5	1.6869	47.4	19.2	1.5799	47.5	22.8	1.8762	56.3	22.3	1.83501
Potassium	39.1	1	1.3	0.0332	1.0	1.4	0.0348	1.0	1.5	0.0379	1.1	1.4	0.0366	1.1	0.7	0.0178	0.5	0.6	0.01581
Sodium	23.0	1	11.6	0.5046	15.0	11.9	0.5176	14.8	12.1	0.5263	14.8	11.3	0.4915	14.8	7.6	0.331	9.9	8.3	0.35886
Iron	55.8	2	0.0	0.0002	0.0	0.0	0.0002	0.0	0.0	0.0002	0.0	0.1	0.002	0.1	0.0	0.0015	0.0	0.0	0.00018
Manganese	54.9	2	0.1	0.0032	0.1	0.1	0.0021	0.1	0.0	0.0006	0.0	0.0	0.0002	0.0	0.0	0.001	0.0	0.0	0.00023
Ammonia-N	14.0	1	0.0	0.0015	0.0	0.0	0.0004	0.0	0.0	0.0004	0.0	0.0	0.0004	0.0	0.0	0.0004	0.0	0.0	0.00036
Total Cations (meq/L)				**3.4**			**3.5**			**3.6**			**3.3**			**3.3**			**3.14**
Anions																			
Alkalinity, Total			124			134			140			139			138			142.0	
Carbonate	60.0	2	0.0391	0.0013	0.0	0.0377	0.0013	0.0	0.0335	0.0011	0.0	0.0196	0.0007	0.0	0.0829	0.0028	0.1	0.0428	0.00143
Bicarbonate	61.0	1	151.20	2.4783	70.5	163.40	2.6783	74.2	170.73	2.7985	78.0	169.54	2.7789	77.2	168.19	2.7568	82.9	173.15	2.83815
Chloride	35.5	1	8.2	0.2304	6.6	8.2	0.2307	6.4	5.8	0.1642	4.6	6.5	0.1836	5.1	4.7	0.1337	4.0	3.6	0.10154
Fluoride	19.0	1	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0
Nitrate-N	14.0	1	6.9	0.4933	14.0	4.7	0.3384	9.4	4.4	0.3148	8.8	4.6	0.327	9.1	1.1	0.0764	2.3	1.5	0.10423
Sulfate	96.1	2	15.1	0.3144	8.9	17.4	0.3623	10.0	14.9	0.3102	8.6	14.8	0.3081	8.6	17.1	0.356	10.7	9.3	0.19301
Total Anions (meq/L)				**3.5**			**3.6**			**3.6**			**3.6**			**3.3**			**3.24**
Total Ions (meq/L)				**6.9**			**7.1**			**7.1**			**6.9**			**6.7**			**6.4**
Cation/Anion Ratio				**0.96**			**0.97**			**0.99**			**0.92**			**1.00**			**0.97**
Percent Difference				**-2.2**			**-1.6**			**-0.4**			**-4.0**			**0.1**			**-2**
TRILINEAR DIAGRAM DATA																			
sum (Ca, Mg, Na+K)				3.36			3.49			3.56			3.32			3.33			3.14
Calcium					36.24			35.43			36.74			36.52			33.14		
Magnesium					47.76			48.76			47.41			47.58			56.38		
Sodium + Potassium					16.01			15.81			15.85			15.90			10.48		
sum (SO_4, Cl, HCO_3+CO_3)				3.02			3.27			3.27			3.27			3.25			3.13
Sulfate					10.395			11.070			9.476			9.420			10.957		
Chloride					7.619			7.050			5.014			5.613			4.115		
Bicarbonate + Carbonate					81.986			81.880			85.510			84.967			84.928		

Site ID				MW-31			MW-31			MW-32			MW-32		
Date				8/20/2010			11/8/2010			2/25/2010			11/9/2010		
Cations	MW	n	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	29.6	23.1	1.1527	32.4	18.3	0.9132	30.3	47.1	2.3503	41.8	42.3	2.1108	38.2
Magnesium	24.3	2	58.5	24.7	2.0325	57.2	20.5	1.6869	56.0	30.6	2.518	44.7	32.1	2.6414	47.8
Potassium	39.1	1	0.5	0.7	0.0186	0.5	0.7	0.0186	0.6	2.5	0.0642	1.1	2.8	0.0726	1.3
Sodium	23.0	1	11.4	8.0	0.3489	9.8	9.1	0.395	13.1	15.7	0.6829	12.1	16.1	0.7003	12.7
Iron	55.8	2	0.0	0.0	0.0004	0.0	0.0	0.0006	0.0	0.0	0.0002	0.0	0.0	0.0002	0.0
Manganese	54.9	2	0.0	0.0	0.0001	0.0	0.0	6E-05	0.0	0.0	0.0001	0.0	0.0	0.0002	0.0
Ammonia-N	14.0	1	0.0	0.0	0.0004	0.0	0.0	0.0004	0.0	0.2	0.0116	0.2	0.0	0.0004	0.0
Total Cations (meq/L)					**3.6**			**3.0**			**5.6**			**5.5**	
Anions															
Alkalinity, Total				160			119			246			286		
Carbonate	60.0	2	0.0	0.0553	0.0018	0.1	0.0495	0.0016	0.1	0.9491	0.0316	0.5	0.5809	0.0194	0.3
Bicarbonate	61.0	1	87.6	195.09	3.1977	92.1	145.08	2.378	76.2	298.19	4.8876	83.5	347.74	5.6998	90.4
Chloride	35.5	1	3.1	3.2	0.0908	2.6	4.7	0.1323	4.2	8.7	0.2462	4.2	5.6	0.1591	2.5
Fluoride	19.0	1	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0
Nitrate-N	14.0	1	3.2	0.1	0.0048	0.1	5.5	0.3955	12.7	1.32	0.0942	1.6	0.4	0.0294	0.5
Sulfate	96.1	2	6.0	8.5	0.1774	5.1	10.3	0.2145	6.9	28.5	0.5934	10.1	19.1	0.3977	6.3
Total Anions (meq/L)					**3.5**			**3.1**			**5.9**			**6.3**	
Total Ions (meq/L)					**7.0**			**6.1**			**11.5**			**11.8**	
Cation/Anion Ratio					**1.02**			**0.97**			**0.96**			**0.88**	
Percent Difference					**1.2**			**-1.7**			**-2.0**			**-6.6**	
TRILINEAR DIAGRAM DATA															
sum (Ca, Mg, Na+K)					3.55			3.01			5.62			5.53	
Calcium			29.58			32.45			30.30			41.85			38.20
Magnesium			58.48			57.21			55.98			44.84			47.81
Sodium + Potassium			11.94			10.34			13.72			13.30			13.99
sum (SO_4, Cl, HCO_3+CO_3)					3.47			2.73			5.76			6.28	
Sulfate			6.158			5.116			7.866			10.304			6.337
Chloride			3.240			2.619			4.852			4.276			2.535
Bicarbonate + Carbonate			90.602			92.265			87.282			85.420			91.129