SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 86216 -1	-2
40 mL clear vial (VOA)		
60 mL CWM HDPE	1	1
125 mL CNM HDPE		
125 mL CWM HDPE		
125 mL GANM w/HCl		
250 mL CWM HDPE		
250 mL GAWM w/H_2SO_4		
500 mL AWM HDPE		
500 mL CWM HDPE		
500 mL CWM PP (MICRO)		
500 mL HDPE (METALS)	1	1
500 mL GAWM		
1L CWM HDPE		
1L GANM		
1L GAWM w/ H_2SO_4		
2L CWM HDPE:		
Other -		
Other -		
Other -		
Other -		
Other -		
Total # of Samples 4	2	2

Number of bottles per sample

Sample Collect Date(s): 6-2-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P (25.1)

Receive Date: 6-3-25 COC / SDG No.: 18852

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	(Y) / N		Volumes	(Y) / N	
Container	(Y) / N		Holding Times	(Y) / N	
Cooler Temperature (° C)	(Y) / N	2.3 0.2 1.2 0	Delivery Location	(Y) / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other: Nutrients field filtered			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: JUN 03 '25 14:18

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

Chain of Custody Record

Environmental Monitoring Program

Date: 6/20/25

Department of Natural Resources and Parks
Solid Waste Division

No. **18868**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P(25.2)

Lab No.	Sample ID	Date	Time
863006-2	LEPS250618P	6/18/25	1000

Project Site Test Reference

| | | |

SWD SAMPLE RECEIPT RECORD

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s)										
	86306										
	2										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										
	Number of bottles per sample										

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	(Y) / N		Volumes	(Y) / N	
Container	(Y) / N		Holding Times	(Y) / N	
Cooler Temperature (° C)	(Y) / N	0.2 0.2 0.3	Delivery Location	(Y) / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 6/18/25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P (25.2)

Receive Date: 6/20/25 COC / SDG No.: 18808

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____ Date / Time Completed: JUN 20 '25 12:25

Chain of Custody Record

Environmental Monitoring Program

Date: 6/5/25

Department of Natural Resources and Parks
Solid Waste Division

No. **18872**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25.2)

Lab No.	Sample ID	Date	Time
86217-1	LEPS250604P	6/4/25	1100

| Project Site Test Reference | | |

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s)										
	86217 -1										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	2.1 R2212.2	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 6-4-25 Project No.: 421422

VTRP Collect Date(s): — Project Site Test Reference: CHLS-P (25.2)

Receive Date: 6-5-25 COC / SDG No.: 188712

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____ Date / Time Completed: 6/5/25 12:09

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

Chain of Custody Record

Environmental Monitoring Program

Date: 6/10/25

Department of Natural Resources and Parks
Solid Waste Division

No. **18875**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P(25)

Lab No.	Sample ID	Date	Time
86267-1	LEPS25Q6009P	6/9/25	1100

| Project Site Test Reference | | |

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s)										
	56267										
	-1										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	2.3R.1L2.0	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 6-9-25 Project No.: 421422

VTRP Collect Date(s): ——— Project Site Test Reference: CHLS-P(25)

Receive Date: 6-10-25 COC / SDG No.: 18873

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min.	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

JUN 10 '25 13:52

Date / Time Completed: _____

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

Chain of Custody Record

Environmental Monitoring Program

Date: 6/12/25

Department of Natural Resources and Parks
Solid Waste Division

No. **18879**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25.2)

Lab No.	Sample ID	Date	Time
862672	LEPS250611P	6/11/25	1100

Project Site Test Reference

GROUNDWATER											
CHGW Cedar Hills GW Qlty	2
CHGW Cedar Hills EPZ GW Qlty	2.1
CHGW/AGW Appendix III GW	4
CHGW-OS Cedar Hills GW Offsite	38
CFGW Cedar Falls GW Qlty	5
DUGW Duvall GW Qlty	6
ENGW Enumclaw GW Qlty	7
HOGW Hobart GW Qlty	8
HTGW Houghton GW Qlty	9
PUGW Puyallup GW Qlty	10
VAGW Vashon GW Qlty	12

SURFACE WATER												
CHSW-Q Cedar Hills SW Sta. E-1	14
CHSW-P Cedar Hills SW tSGP	16
CHSW-TD Cedar Hills SW Top Deck	42
CHSW-E CH Emergency	49.1
CFSW Cedar Falls SW Qlty	17
DUSW Duvall SW Qlty	18
VASW Vashon SW Qlty-WEIRS	21
TS												
HTSW-P Houghton SW NPDES	52
SHSW-P Shoreline SW NPDES	53
FASW-P Factoria SW NPDES	54
ENSW-P Enumclaw SW NPDES	56
ALSW-P Algona SW NPDES	57
VASW-P Vashon SW NPDES	58

LEACHATE/WASTEWATER																																		
CHTW Cedar Hills Truckwash	24
CHLS-M Cedar Hills Leachate Mthly	23
CHLS-M_MOD CH Leachate Mods Mthly	23+
CHLS-M_As CH Leachate As Semi-Ann.	23.1
PERMIT																																		
CHLS-P CH L Permit (wkly, 1st)	25
CHLS-P CH L Permit (mnthly)	25.1
CHLS-P CH L Permit (wkly, 2nd)	25.2	X																															
ALLS Algona WW Permit	26
BLLS Bow Lake WW Permit	20
ENLS Enumclaw WW Permit	27
FALS Factoria WW Permit	28
SRLS Shoreline WW Permit	29
HTLS Houghton WW Permit	30
RELS Renton WW Permit	31
VALS-P Vashon WW Permit Tanker	32
VALS-Q Vashon Leachate Qlty	34

Number of Bottles	Remarks
1	

Relinquished By Sampler: [signature]
Sampler Signature: I. Rivera
Sampler Printed Name: KCSWD
Company
Date: 6/12/25 FR 6/12
Time: 1350

Received By
Signature
Printed Name
Company
Date
Time

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By: [signature]
Signature: Jason Kinnaird
Printed Name: KCEL
Company
Date: 6/12/25
Time: 1350

Observations/Comments/Special Instructions:

Arsenic Only

Sample secured overnight

Total # of Bottles: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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. Receiving lab is to retain the original and create a copy for KCSWD personnel to keep.

FFB - Field Filtration Blank
FQ - Field QC

v4.00 (Rev 12/2023)

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s)										
	86297 -2										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	F: 7 11.8 11.9	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 6-11-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P(25-2)

Receive Date: 6-12-25 COC / SDG No.: 18879

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____ Date / Time Completed: JUN 12 '25 14:04

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

Chain of Custody Record

Environmental Monitoring Program

Date: 6/17/25

Department of Natural Resources and Parks
Solid Waste Division

No. **18890**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25)

Lab No.	Sample ID	Date	Time	Project Site Test Reference	Number of Bottles	Remarks
86306-1	LEPS250616P	6/16/25	1000	25 = X	1	Diss. Sulfide <0.1 ppm

Project Site Test Reference columns:

GROUNDWATER: 2 CHGW Cedar Hills GW Qlty; 2.1 CHGW Cedar Hills EPZ GW Qlty; 4 CHGW/VAGW Appendix III GW; 38 CHGW-OS Cedar Hills GW Offsite; 5 CFGW Cedar Falls GW Qlty; 6 DUGW Duvall GW Qlty; 7 ENGW Enumclaw GW Qlty; 8 HOGW Hobart GW Qlty; 9 HTGW Houghton GW Qlty; 10 PUGW Puyallup GW Qlty; 12 VAGW Vashon GW Qlty

SURFACE WATER: 14 CHSW-Q Cedar Hills SW Sta. E-1; 16 CHSW-P Cedar Hills SW ISGP; 42 CHSW-TD Cedar Hills SW Top Deck; 49.1 CHSW-E CH Emergency; 17 CFSW Cedar Falls SW Qlty; 18 DUSW Duvall SW Qlty; 21 VASW Vashon SW Qlty-WEIRS

TS: 52 HTSW-P Houghton SW NPDES; 53 SHSW-P Shoreline SW NPDES; 54 FASW-P Factoria SW NPDES; 56 ENSW-P Enumclaw SW NPDES; 57 ALSW-P Algona SW NPDES; 58 VASW-P Vashon SW NPDES

LEACHATE/WASTEWATER: 24 CHTW Cedar Hills Truckwash; 23 CHLS-M Cedar Hills Leachate Mthly; 23+ CHLS-M_MOD CH Leachate Mods Mthly; 23.1 CHLS-M_As CH Leachate As Semi-Ann.

PERMIT: 25 CHLS-P CH L Permit (wkly, 1st); 25.1 CHLS-P CH L Permit (mnthly); 25.2 CHLS-P CH L Permit (wkly, 2nd); 26 ALLS Algona WW Permit; 20 BLLS Bow Lake WW Permit; 27 ENLS Enumclaw WW Permit; 28 FALS Factoria WW Permit; 29 SRLS Shoreline WW Permit; 30 HTLS Houghton WW Permit; 31 RELS Renton WW Permit; 32 VALS-P Vashon WW Permit Tanker; 34 VALS-Q Vashon Leachate Qlty

Relinquished By Sampler		Received By	Date
Sampler Signature: E. Rivera	Date: 6/17/25	Signature	
Sampler Printed Name: KCSWD	Time: 1055	Printed Name / Company	Time
Company			
Relinquished By	Date	Received By: Jason Kinnaird KCEC	Date: 6/17/25
Signature		Signature	
Printed Name / Company	Time	Printed Name / Company	Time: 1245

Observations/Comments/Special Instructions:
Sample secured overnight
Sample custody sealed on 6/17 at 1055

Total # of Bottles: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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. Receiving lab is to retain the original and create a copy for KCSWD personnel to keep.

FFB - Field Filtration Blank
FQ - Field QC

v4.00 (Rev 12/2023)

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 849306										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										
	Number of bottles per sample										

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	2.4 12.4 12.9	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 6-16-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P(25)

Receive Date: 6-17-25 COC / SDG No.: 18890

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually Inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____ Date / Time Completed: JUN 17 25 12:55

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

July 3, 2025

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P)

Sample Id.	Sample Collect Date	COC
LEPS250623P	**6/23/2025**	**18903**
LEPS250625P	**6/25/2025**	**18896**

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 2 leachate permit samples collected June 23 and 25, 2025.

Sample Receiving Comments

No sample receiving anomalies were observed.

Metals QC Information

All calculable QC results for metals parameters were within laboratory control limits.

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,



Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

Sample Data

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 07/03/2025
Report Group: CHLS-P_070125

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250625P**
SDG / Lab Sample ID: **18896 / L86328-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **06/25/2025**
Login Date: **06/26/2025**
Matrix: **LEACHATE**

Analyses Requested:

6020B, AS-ICPMS, Metals

Client Sample ID: **LEPS250623P**
SDG / Lab Sample ID: **18903 / L86328-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **06/23/2025**
Login Date: **06/24/2025**
Matrix: **LEACHATE**

Analyses Requested:

6020B, P-ICPMS, Metals

6020B, SWD-ICPMS23, Metals

7470A, HG-CVAA-M, Metals

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 07/03/2025
Report Group: CHLS-P_070125

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250625P**
CoC / Lab Sample ID: **18896 / L86328-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **06/25/2025**
Login Date: **06/26/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.123		.000502	.000502	1	06/27/2025	06/30/2025	WG201106

Client Sample ID: **LEPS250623P**
CoC / Lab Sample ID: **18903 / L86328-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **06/23/2025**
Login Date: **06/24/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Aluminum, Total	10	mg/L	.527		.0503	.0503		06/25/2025	06/26/2025	WG201045
Antimony, Total	10	mg/L	.0141		.00302	.00302		06/25/2025	06/26/2025	WG201045
Arsenic, Total	10	mg/L	.121		.000503	.000503	1	06/25/2025	06/26/2025	WG201045
Barium, Total	10	mg/L	.0592		.00503	.00503		06/25/2025	06/26/2025	WG201045
Beryllium, Total	10	mg/L	<.00101	U	.00101	.00101		06/25/2025	06/26/2025	WG201045
Cadmium, Total	10	mg/L	<.000503	U	.000503	.000503	0.5	06/25/2025	06/26/2025	WG201045
Calcium, Total	10	mg/L	49		.503	.503		06/25/2025	06/26/2025	WG201045
Chromium, Total	10	mg/L	.147		.00201	.00201	2.75	06/25/2025	06/26/2025	WG201045
Cobalt, Total	10	mg/L	.0294		.000503	.000503		06/25/2025	06/26/2025	WG201045
Copper, Total	10	mg/L	.00721		.00201	.00201	3	06/25/2025	06/26/2025	WG201045
Iron, Total	10	mg/L	7.48		.101	.101		06/25/2025	06/26/2025	WG201045
Lead, Total	10	mg/L	.00116		.00101	.00101	2	06/25/2025	06/26/2025	WG201045
Magnesium, Total	10	mg/L	70.3		.503	.503		06/25/2025	06/26/2025	WG201045
Manganese, Total	10	mg/L	.241		.00101	.00101		06/25/2025	06/26/2025	WG201045
Nickel, Total	10	mg/L	.121		.00101	.00101	2.5	06/25/2025	06/26/2025	WG201045
Phosphorus, Total	10	mg/L	7.02		1.01	1.01		06/25/2025	06/26/2025	WG201045
Potassium, Total	10	mg/L	472		1.01	1.01		06/25/2025	06/26/2025	WG201045
Selenium, Total	10	mg/L	<.00503	U	.00503	.00503		06/25/2025	06/26/2025	WG201045
Silver, Total	10	mg/L	<.000403	U	.000403	.000403	1	06/25/2025	06/26/2025	WG201045
Sodium, Total	10	mg/L	1230		1.01	1.01		06/25/2025	06/26/2025	WG201045
Thallium, Total	10	mg/L	<.000755	U	.000755	.000755		06/25/2025	06/26/2025	WG201045
Tin, Total	10	mg/L	.0118		.00503	.00503		06/25/2025	06/26/2025	WG201045
Vanadium, Total	10	mg/L	.0429		.000755	.000755		06/25/2025	06/26/2025	WG201045
Zinc, Total	10	mg/L	.18		.00503	.00503	5	06/25/2025	06/26/2025	WG201045
Mercury, Total	2	mg/L	<.0001	U	.0001	.0001		06/27/2025	06/30/2025	WG201110

Target Parameter Count for Report Group: 26

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

Quality Control Data

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

King County Environmental Laboratory QC Report

CHLS-P_070125 COC 18896, 18903

Workgroup: WG201045 Total Metals by ICPMS

MB:WG201045-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD (Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.05	0.1	ug/L		<QL
Sodium, Total	50	100	ug/L		<QL
Magnesium, Total	25	50	ug/L		<QL
Aluminum, Total	2.5	5	ug/L		<QL
Phosphorus, Total	50	100	ug/L		<QL
Potassium, Total	50	100	ug/L		<QL
Calcium, Total	25	50	ug/L		<QL
Vanadium, Total	0.038	0.075	ug/L		<QL
Chromium, Total	0.1	0.2	ug/L		<QL
Manganese, Total	0.05	0.1	ug/L		<QL
Iron, Total	5	10	ug/L		<QL
Cobalt, Total	0.025	0.05	ug/L		<QL
Nickel, Total	0.05	0.1	ug/L		<QL
Copper, Total	0.1	0.2	ug/L		<QL
Zinc, Total	0.25	0.5	ug/L		<QL
Arsenic, Total	0.025	0.05	ug/L		<QL
Selenium, Total	0.25	0.5	ug/L		<QL
Silver, Total	0.02	0.04	ug/L		<QL
Cadmium, Total	0.025	0.05	ug/L		<QL
Tin, Total	0.25	0.5	ug/L		<QL
Antimony, Total	0.15	0.3	ug/L		<QL
Barium, Total	0.25	0.5	ug/L		<QL
Thallium, Total	0.038	0.075	ug/L		<QL
Lead, Total	0.05	0.1	ug/L		<QL

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

King County Environmental Laboratory QC Report

CHLS-P_070125 COC 18896, 18903

SB:WG201045-2 MB:WG201045-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.05	0.1	ug/L	<QL	20	18.7	93		85--115
Sodium, Total	50	100	ug/L	<QL	5000	5210	104		85--115
Magnesium, Total	25	50	ug/L	<QL	5000	5050	101		85--115
Aluminum, Total	2.5	5	ug/L	<QL	200	199	99		85--115
Phosphorus, Total	50	100	ug/L	<QL	5000	5070	101		85--115
Potassium, Total	50	100	ug/L	<QL	5000	5320	106		85--115
Calcium, Total	25	50	ug/L	<QL	5000	4980	100		85--115
Vanadium, Total	0.038	0.075	ug/L	<QL	20	20	100		85--115
Chromium, Total	0.1	0.2	ug/L	<QL	20	21.1	106		85--115
Manganese, Total	0.05	0.1	ug/L	<QL	20	20.9	105		85--115
Iron, Total	5	10	ug/L	<QL	5000	5220	104		85--115
Cobalt, Total	0.025	0.05	ug/L	<QL	20	20.2	101		85--115
Nickel, Total	0.05	0.1	ug/L	<QL	20	20.8	104		85--115
Copper, Total	0.1	0.2	ug/L	<QL	20	21.4	107		85--115
Zinc, Total	0.25	0.5	ug/L	<QL	20	20.8	104		85--115
Arsenic, Total	0.025	0.05	ug/L	<QL	20	19.9	100		85--115
Selenium, Total	0.25	0.5	ug/L	<QL	20	20.1	101		85--115
Silver, Total	0.02	0.04	ug/L	<QL	20	20.6	103		85--115
Cadmium, Total	0.025	0.05	ug/L	<QL	20	19.6	98		85--115
Tin, Total	0.25	0.5	ug/L	<QL	20	19.3	97		85--115
Antimony, Total	0.15	0.3	ug/L	<QL	20	19.3	96		85--115
Barium, Total	0.25	0.5	ug/L	<QL	20	20.9	105		85--115
Thallium, Total	0.038	0.075	ug/L	<QL	20	20	100		85--115
Lead, Total	0.05	0.1	ug/L	<QL	20	21.4	107		85--115

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

King County Environmental Laboratory QC Report

CHLS-P_070125 COC 18896, 18903

MSD:WG201045-4 MS:WG201045-3 L86328-1 Matrix: LEACHATE Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	1.03	1.03	ug/L	<QL	206	200	97		75--125	198	192	97		4		0--20
Sodium, Total	1030	1030	ug/L	1230000	51500	1260000		4xRule	75--125	49600	1310000		4xRule	3		0--20
Magnesium, Total	515	515	ug/L	70300	51500	117000	91		75--125	49600	121000	102		3		0--20
Aluminum, Total	51.5	51.5	ug/L	527	2060	2640	103		75--125	1980	2600	105		1		0--20
Phosphorus, Total	1030	1030	ug/L	7020	51500	59500	102		75--125	49600	58700	104		1		0--20
Potassium, Total	1030	1030	ug/L	472000	51500	509000		4xRule	75--125	49600	521000		4xRule	2		0--20
Calcium, Total	515	515	ug/L	49000	51500	98900	97		75--125	49600	99400	102		0		0--20
Vanadium, Total	0.772	0.772	ug/L	42.9	206	241	96		75--125	198	243	101		1		0--20
Chromium, Total	2.06	2.06	ug/L	147	206	354	100		75--125	198	352	103		1		0--20
Manganese, Total	1.03	1.03	ug/L	241	206	444	99		75--125	198	446	103		0		0--20
Iron, Total	103	103	ug/L	7480	51500	58800	100		75--125	49600	57400	101		2		0--20
Cobalt, Total	0.515	0.515	ug/L	29.4	206	236	100		75--125	198	229	100		3		0--20
Nickel, Total	1.03	1.03	ug/L	121	206	327	100		75--125	198	325	103		1		0--20
Copper, Total	2.06	2.06	ug/L	7.21	206	229	108		75--125	198	219	107		4		0--20
Zinc, Total	5.15	5.15	ug/L	180	206	390	102		75--125	198	383	103		2		0--20
Arsenic, Total	0.515	0.515	ug/L	121	206	332	102		75--125	198	322	101		3		0--20
Selenium, Total	5.15	5.15	ug/L	<QL	206	213	104		75--125	198	205	103		4		0--20
Silver, Total	0.412	0.412	ug/L	<QL	206	198	96		75--125	198	191	96		4		0--20
Cadmium, Total	0.515	0.515	ug/L	<QL	206	197	95		75--125	198	191	96		3		0--20
Tin, Total	5.15	5.15	ug/L	11.8	206	188	86		75--125	198	181	85		4		0--20
Antimony, Total	3.09	3.09	ug/L	14.1	206	212	96		75--125	198	211	99		0		0--20
Barium, Total	5.15	5.15	ug/L	59.2	206	267	101		75--125	198	264	103		1		0--20
Thallium, Total	0.772	0.772	ug/L	<QL	206	209	102		75--125	198	205	103		2		0--20
Lead, Total	1.03	1.03	ug/L	1.16	206	208	100		75--125	198	206	103		1		0--20

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King County Environmental Laboratory QC Report

CHLS-P_070125 COC 18896, 18903

Workgroup: WG201106 Total Metals by ICPMS

MB:WG201106-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total	0.025	0.05	ug/L		<QL

SB:WG201106-2 MB:WG201106-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Arsenic, Total	0.025	0.05	ug/L	<QL	20	20.1	101		85--115

MSD:WG201106-4 MS:WG201106-3 L86328-2 Matrix: LEACHATE Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Arsenic, Total	0.494	0.494	ug/L	123	197	321	100		75--125	198	323	101		1		0--20

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

King County Environmental Laboratory QC Report

CHLS-P_070125 COC 18896, 18903

Workgroup: WG201110 Total Mercury by CVAA

MB:WG201110-1 Matrix: BLANK WTR Listtype:MTHG-MID-QL Method:SW846 7470A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.025	0.05	ug/L		<QL

SB:WG201110-2 MB:WG201110-1 Matrix: BLANK WTR Listtype:MTHG-MID-QL Method:SW846 7470A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.025	0.05	ug/L	<QL	1	1.03	103		85--115

MSD:WG201110-4 MS:WG201110-3 L86328-1 Matrix: LEACHATE Listtype:MTHG-MID-QL Method:SW846 7470A Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.1	0.1	ug/L	<QL	2	1.75	87		75--125	2	1.74	87		0		0--20

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4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 6/24/25

Department of Natural Resources and Parks
Solid Waste Division

No. **18903**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25)

Lab No.	Sample ID	Date	Time	Number of Bottles	Remarks
86328-1	LEPS250623P	6/23/25	1000	1	Diss Sulfide <0.1 ppm

Project Site Test Reference

GROUNDWATER: CHGW Cedar Hills GW Qlty (2); CHGW Cedar Hills EPZ GW Qlty (2.1); CHGWN/AGW Appendix III GW (4); CHGW-OS Cedar Hills GW Offsite (38); CFGW Cedar Falls GW Qlty (5); DUGW Duvall GW Qlty (6); ENGW Enumclaw GW Qlty (7); HOGW Hobart GW Qlty (8); HTGW Houghton GW Qlty (9); PUGW Puyallup GW Qlty (10); VAGW Vashon GW Qlty (12)

SURFACE WATER: CHSW-Q Cedar Hills SW Sta. E-1 (14); CHSW-P Cedar Hills SW ISGP (16); CHSW-TD Cedar Hills SW Top Deck (42); CHSW-E CH Emergency (49.1); CFSW Cedar Falls SW Qlty (17); DUSW Duvall SW Qlty (18); VASW Vashon SW Qlty-WEIRS (21)

TS: HTSW-P Houghton SW NPDES (52); SHSW-P Shoreline SW NPDES (53); FASW-P Factoria SW NPDES (54); ENSW-P Enumclaw SW NPDES (56); ALSW-P Algona SW NPDES (57); VASW-P Vashon SW NPDES (58)

LEACHATE/WASTEWATER: CHTW Cedar Hills Trackwash (24); CHLS-M Cedar Hills Leachate Mlky (23); CHLS-M_MOD CH Leachate Mods Mlky (23+); CHLS-M_Aa CH Leachate As Semi-Ann. (23.1)

PERMIT: CHLS-P CH L Permit (wkly, 1st) (25); CHLS-P CH L Permit (mnthly) (25.1); CHLS-P CH L Permit (wkly, 2nd) (25.2); ALLS Algona WW Permit (26); BLLS Bow Lake WW Permit (20); ENLS Enumclaw WW Permit (27); FALS Factoria WW Permit (28); SRLS Shoreline WW Permit (29); HTLS Houghton WW Permit (30); RELS Renton WW Permit (31); VALS-P Vashon WW Permit Tanker (32); VALS-Q Vashon Leachate Qlty (34)

Relinquished By Sampler	Date	Received By	Date
E M	6/24/25	Signature	
Sampler Signature: I. Rivera	Time: 1310	Printed Name / Company	Time
Sampler Printed Name: KCSWD / Company			
Relinquished By / Signature / Printed Name / Company	Date / Time	Received By: Jason Linnard / Signature / Printed Name: KCEL / Company	Date: 6/24/25 Time: 1415

Observations/Comments/Special Instructions:

Sample custody sealed on 6/24 at 1310

Total # of Bottles: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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. Receiving lab is to retain the original and create a copy for KCSWD personnel to keep.

FFB - Field Filtration Blank
FQ - Field QC

v4.00 (Rev 12/2023)

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 860328 -1										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	21 |20|2.1	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 6-23-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P(25)

Receive Date: 6-24-25 COC / SDG No.: 198903

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	Y / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

JUN 24 '25 14:28

Date / Time Completed: _____

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

Chain of Custody Record

Environmental Monitoring Program

Date: 6/26/25

Department of Natural Resources and Parks
Solid Waste Division

No. **18896**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25.2)

Lab No.	Sample ID	Date	Time	2 CHGW Cedar Hills GW Qlty	2.1 CHGW Cedar Hills EPZ GW Qlty	4 CHGW/VAGW Appendix III GW	38 CHGW-OS Cedar Hills GW Offsite	5 CFGW Cedar Falls GW Qlty	6 DUGW Duvall GW Qlty	7 ENGW Enumclaw GW Qlty	8 HOGW Hobart GW Qlty	9 HTGW Houghton GW Qlty	10 PUGW Puyallup GW Qlty	12 VAGW Vashon GW Qlty	14 CHSW-Q Cedar Hills SW Sta. E-1	16 CHSW-P Cedar Hills SW ISGP	42 CHSW-TD Cedar Hills SW Top Deck	49.1 CHSW-E CH Emergency	17 CFSW Cedar Falls SW Qlty	18 DUSW Duvall SW Qlty	21 VASW Vashon SW Qlty-WEIRS	52 HTSW-P Houghton SW NPDES	53 SHSW-P Shoreline SW NPDES	54 FASW-P Factoria SW NPDES	56 ENSW-P Enumclaw SW NPDES	57 ALSW-P Algona SW NPDES	58 VASW-P Vashon SW NPDES	24 CHTW Cedar Hills Truckwash	23 CHLS-M Cedar Hills Leachate Mtly	23+ CHLS-M_MOD CH Leachate Mods Mtly	23.1 CHLS-M_As CH Leachate As Semi-Ann.	25 CHLS-P CH L Permit (wkly, 1st)	25.1 CHLS-P CH L Permit (mnthly)	25.2 CHLS-P CH L Permit (wkly, 2nd)	26 ALLS Algona WW Permit	20 BLLS Bow Lake WW Permit	27 ENLS Enumclaw WW Permit	28 FALS Factoria WW Permit	29 SRLS Shoreline WW Permit	30 HTLS Houghton WW Permit	31 RELS Renton WW Permit	32 VALS-P Vashon WW Permit Tanker	34 VALS-Q Vashon Leachate Qlty	Number of Bottles	Remarks
863282	LEPS250625P	6/25/25	1000																														X										1	

GROUNDWATER | SURFACE WATER | TS | PERMIT | LEACHATE/WASTEWATER

Relinquished By Sampler	Date	Received By	Date	Observations/Comments/Special Instructions:	Total # of Bottles:
N. Reiber	6/26/25			*Arsenic only	1
Sampler Signature: N. Reiber		Signature			
Sampler Printed Name: KCSWD	Time: 1205	Printed Name	Time		
Company		Company			
Relinquished By	Date	Received By: Jason Linnard	Date: 6/26/25		
Signature		Signature			
Printed Name	Time	Printed Name: KCEL	Time: 1205		
Company		Company			

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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. Receiving lab is to retain the original and create a copy for KCSWD personnel to keep.

FFB - Field Filtration Blank
FQ - Field QC

v4.00 (Rev 12/2023)

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 86328-2 -2										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	20.1, 21.8	Delivery Location	Y / N	

Sub-Contracting: Y / N List Product(s):

Changes: Y / N List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 6-25-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P(25.2)

Receive Date: 6-26-25 COC / SDG No.: 188946

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: JUN 26 '25 12:14

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

July 11, 2025

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P)

Sample Id.	Sample Collect Date	COC
LEPS250630P	**6/30/2025**	**18922**
LEPS250702P	**7/02/2025**	**18963**

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 2 leachate permit samples collected June 30 and Jul 2, 2025.

Sample Receiving Comments
No sample receiving anomalies were observed.

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

Metals QC Information

All calculable QC results for metals parameters were within laboratory control limits with the following exceptions.

During **Total Metals** analysis of analytical batch WG201181, the recoveries of ***total tin*** from the matrix spike (MS) and MS duplicate (MSD) exceeded the lower laboratory control limit. Sample LEPS250630P was used to prepare the MS/MSD. The *total tin* result for LEPS250630P was qualified G based on these exceedances and may be biased low.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,

Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

Sample Data

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 07/10/2025
Report Group: CHLS-P_070825

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250630P**
SDG / Lab Sample ID: **18922 / L86381-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **06/30/2025**
Login Date: **07/01/2025**
Matrix: **LEACHATE**

Analyses Requested:

6020B, P-ICPMS, Metals

6020B, SWD-ICPMS23, Metals

7470A, HG-CVAA-M, Metals

Client Sample ID: **LEPS250702P**
SDG / Lab Sample ID: **18963 / L86381-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **07/02/2025**
Login Date: **07/03/2025**
Matrix: **LEACHATE**

Analyses Requested:

6020B, AS-ICPMS, Metals

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 07/10/2025
Report Group: CHLS-P_070825

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250630P**
CoC / Lab Sample ID: **18922 / L86381-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **06/30/2025**
Login Date: **07/01/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Mercury, Total	2	mg/L	<.0001	U	.0001	.0001		07/02/2025	07/02/2025	WG201175
Aluminum, Total	10	mg/L	1.42		.05	.05		07/03/2025	07/07/2025	WG201181
Antimony, Total	10	mg/L	.0174		.003	.003		07/03/2025	07/07/2025	WG201181
Arsenic, Total	10	mg/L	.134		.0005	.0005	1	07/03/2025	07/07/2025	WG201181
Barium, Total	10	mg/L	.1		.005	.005		07/03/2025	07/07/2025	WG201181
Beryllium, Total	10	mg/L	<.001	U	.001	.001		07/03/2025	07/07/2025	WG201181
Cadmium, Total	10	mg/L	<.0005	U	.0005	.0005	0.5	07/03/2025	07/07/2025	WG201181
Calcium, Total	10	mg/L	67.7		.5	.5		07/03/2025	07/07/2025	WG201181
Chromium, Total	10	mg/L	.166		.002	.002	2.75	07/03/2025	07/07/2025	WG201181
Cobalt, Total	10	mg/L	.0332		.0005	.0005		07/03/2025	07/07/2025	WG201181
Copper, Total	10	mg/L	.0137		.002	.002	3	07/03/2025	07/07/2025	WG201181
Iron, Total	10	mg/L	10.5		.1	.1		07/03/2025	07/07/2025	WG201181
Lead, Total	10	mg/L	.00188		.001	.001	2	07/03/2025	07/07/2025	WG201181
Magnesium, Total	10	mg/L	77.4		.5	.5		07/03/2025	07/07/2025	WG201181
Manganese, Total	10	mg/L	.574		.001	.001		07/03/2025	07/07/2025	WG201181
Nickel, Total	10	mg/L	.133		.001	.001	2.5	07/03/2025	07/07/2025	WG201181
Phosphorus, Total	10	mg/L	9.22		1	1		07/03/2025	07/07/2025	WG201181
Potassium, Total	10	mg/L	496		1	1		07/03/2025	07/07/2025	WG201181
Selenium, Total	10	mg/L	<.005	U	.005	.005		07/03/2025	07/07/2025	WG201181
Silver, Total	10	mg/L	<.0004	U	.0004	.0004	1	07/03/2025	07/07/2025	WG201181
Sodium, Total	10	mg/L	1350		1	1		07/03/2025	07/07/2025	WG201181
Thallium, Total	10	mg/L	<.00075	U	.00075	.00075		07/03/2025	07/07/2025	WG201181
Tin, Total	10	mg/L	.0097	G	.005	.005		07/03/2025	07/07/2025	WG201181
Vanadium, Total	10	mg/L	.0489		.00075	.00075		07/03/2025	07/07/2025	WG201181
Zinc, Total	10	mg/L	.297		.005	.005	5	07/03/2025	07/07/2025	WG201181

Client Sample ID: **LEPS250702P**
CoC / Lab Sample ID: **18963 / L86381-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **07/02/2025**
Login Date: **07/03/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.132		.000503	.000503	1	07/07/2025	07/08/2025	WG201210

Target Parameter Count for Report Group: 26

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

Quality Control Data

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

King County Environmental Laboratory QC Report

CHLS-P_070825 COC 18922, 18963

Workgroup: WG201175 Total Mercury by CVAA

MB:WG201175-1 Matrix: BLANK WTR Listtype:MTHG-MID-QL Method:SW846 7470A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.025	0.05	ug/L		<QL

SB:WG201175-2 MB:WG201175-1 Matrix: BLANK WTR Listtype:MTHG-MID-QL Method:SW846 7470A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.025	0.05	ug/L	<QL	1	1.01	101		85--115

MSD:WG201175-4 MS:WG201175-3 L86381-1 Matrix: LEACHATE Listtype:MTHG-MID-QL Method:SW846 7470A Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.1	0.1	ug/L	<QL	2	1.65	83		75--125	2	1.68	84		2		0--20

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

King County Environmental Laboratory QC Report

CHLS-P_070825 COC 18922, 18963

Workgroup: WG201181 Total Metals by ICPMS

MB:WG201181-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD (Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.05	0.1	ug/L		<QL
Sodium, Total	50	100	ug/L		<QL
Magnesium, Total	25	50	ug/L		<QL
Aluminum, Total	2.5	5	ug/L		<QL
Phosphorus, Total	50	100	ug/L		<QL
Potassium, Total	50	100	ug/L		<QL
Calcium, Total	25	50	ug/L		<QL
Vanadium, Total	0.038	0.075	ug/L		<QL
Chromium, Total	0.1	0.2	ug/L		<QL
Manganese, Total	0.05	0.1	ug/L		<QL
Iron, Total	5	10	ug/L		<QL
Cobalt, Total	0.025	0.05	ug/L		<QL
Nickel, Total	0.05	0.1	ug/L		<QL
Copper, Total	0.1	0.2	ug/L		<QL
Zinc, Total	0.25	0.5	ug/L		<QL
Arsenic, Total	0.025	0.05	ug/L		<QL
Selenium, Total	0.25	0.5	ug/L		<QL
Silver, Total	0.02	0.04	ug/L		<QL
Cadmium, Total	0.025	0.05	ug/L		<QL
Tin, Total	0.25	0.5	ug/L		<QL
Antimony, Total	0.15	0.3	ug/L		<QL
Barium, Total	0.25	0.5	ug/L		<QL
Thallium, Total	0.038	0.075	ug/L		<QL
Lead, Total	0.05	0.1	ug/L		<QL

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

King County Environmental Laboratory QC Report

CHLS-P_070825 COC 18922, 18963

SB:WG201181-2 MB:WG201181-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.05	0.1	ug/L	<QL	20	19.5	98		85--115
Sodium, Total	50	100	ug/L	<QL	5000	5300	106		85--115
Magnesium, Total	25	50	ug/L	<QL	5000	5160	103		85--115
Aluminum, Total	2.5	5	ug/L	<QL	200	199	99		85--115
Phosphorus, Total	50	100	ug/L	<QL	5000	4960	99		85--115
Potassium, Total	50	100	ug/L	<QL	5000	5240	105		85--115
Calcium, Total	25	50	ug/L	<QL	5000	4970	99		85--115
Vanadium, Total	0.038	0.075	ug/L	<QL	20	20.4	102		85--115
Chromium, Total	0.1	0.2	ug/L	<QL	20	21.2	106		85--115
Manganese, Total	0.05	0.1	ug/L	<QL	20	20.4	102		85--115
Iron, Total	5	10	ug/L	<QL	5000	5160	103		85--115
Cobalt, Total	0.025	0.05	ug/L	<QL	20	21.1	106		85--115
Nickel, Total	0.05	0.1	ug/L	<QL	20	21.2	106		85--115
Copper, Total	0.1	0.2	ug/L	<QL	20	21.9	109		85--115
Zinc, Total	0.25	0.5	ug/L	<QL	20	21	105		85--115
Arsenic, Total	0.025	0.05	ug/L	<QL	20	20.3	102		85--115
Selenium, Total	0.25	0.5	ug/L	<QL	20	20.3	102		85--115
Silver, Total	0.02	0.04	ug/L	<QL	20	22.1	110		85--115
Cadmium, Total	0.025	0.05	ug/L	<QL	20	20.9	104		85--115
Tin, Total	0.25	0.5	ug/L	<QL	20	19.8	99		85--115
Antimony, Total	0.15	0.3	ug/L	<QL	20	20.9	105		85--115
Barium, Total	0.25	0.5	ug/L	<QL	20	21	105		85--115
Thallium, Total	0.038	0.075	ug/L	<QL	20	21.7	108		85--115
Lead, Total	0.05	0.1	ug/L	<QL	20	21.2	106		85--115

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

King County Environmental Laboratory QC Report

CHLS-P_070825 COC 18922, 18963

MSD:WG201181-4 MS:WG201181-3 L86381-1 Matrix: LEACHATE Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	1	1	ug/L	<QL	201	185	92		75--125	200	193	96		4		0--20
Sodium, Total	1000	1000	ug/L	1350000	50200	1380000		4xRule	75--125	50100	1400000		4xRule	1		0--20
Magnesium, Total	502	502	ug/L	77400	50200	122000	89		75--125	50100	123000	91		1		0--20
Aluminum, Total	50.2	50.2	ug/L	1420	2010	3400	99		75--125	2000	3370	97		1		0--20
Phosphorus, Total	1000	1000	ug/L	9220	50200	58300	98		75--125	50100	59300	100		2		0--20
Potassium, Total	1000	1000	ug/L	496000	50200	529000		4xRule	75--125	50100	544000		4xRule	3		0--20
Calcium, Total	502	502	ug/L	67700	50200	114000	93		75--125	50100	115000	94		0		0--20
Vanadium, Total	0.752	0.752	ug/L	48.9	201	240	95		75--125	200	246	99		2		0--20
Chromium, Total	2.01	2.01	ug/L	166	201	365	99		75--125	200	359	96		2		0--20
Manganese, Total	1	1	ug/L	574	201	757	91		75--125	200	766	96		1		0--20
Iron, Total	100	100	ug/L	10500	50200	58600	96		75--125	50100	59400	98		1		0--20
Cobalt, Total	0.502	0.502	ug/L	33.2	201	238	102		75--125	200	236	101		1		0--20
Nickel, Total	1	1	ug/L	133	201	339	103		75--125	200	332	99		2		0--20
Copper, Total	2.01	2.01	ug/L	13.7	201	225	105		75--125	200	225	105		0		0--20
Zinc, Total	5.02	5.02	ug/L	297	201	505	103		75--125	200	498	100		1		0--20
Arsenic, Total	0.502	0.502	ug/L	134	201	341	103		75--125	200	341	103		0		0--20
Selenium, Total	5.02	5.02	ug/L	<QL	201	207	103		75--125	200	207	103		0		0--20
Silver, Total	0.401	0.401	ug/L	<QL	201	201	100		75--125	200	199	99		1		0--20
Cadmium, Total	0.502	0.502	ug/L	<QL	201	198	99		75--125	200	199	100		1		0--20
Tin, Total	5.02	5.02	ug/L	9.7	201	145	68	*	75--125	200	150	70	*	3		0--20
Antimony, Total	3.01	3.01	ug/L	17.4	201	223	103		75--125	200	227	104		1		0--20
Barium, Total	5.02	5.02	ug/L	100	201	309	104		75--125	200	317	108		3		0--20
Thallium, Total	0.752	0.752	ug/L	<QL	201	200	100		75--125	200	205	102		2		0--20
Lead, Total	1	1	ug/L	1.88	201	202	100		75--125	200	206	102		2		0--20

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

King County Environmental Laboratory QC Report

CHLS-P_070825 COC 18922, 18963

Workgroup: WG201210 Total Metals & Hardness by ICPMS

MB:WG201210-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS-QL Method:EPA 200.8(MOD)/SW6020B*SM2340B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Hardness, Calc	0.165	0.331	mg CaCO3/L		<QL

MB:WG201210-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.05	0.1	ug/L		<QL
Sodium, Total	50	100	ug/L		<QL
Magnesium, Total	25	50	ug/L		<QL
Aluminum, Total	2.5	5	ug/L		<QL
Potassium, Total	50	100	ug/L		<QL
Calcium, Total	25	50	ug/L		<QL
Vanadium, Total	0.038	0.075	ug/L		<QL
Chromium, Total	0.1	0.2	ug/L		<QL
Manganese, Total	0.05	0.1	ug/L		<QL
Iron, Total	5	10	ug/L		<QL
Cobalt, Total	0.025	0.05	ug/L		<QL
Nickel, Total	0.05	0.1	ug/L		<QL
Copper, Total	0.1	0.2	ug/L		<QL
Zinc, Total	0.25	0.5	ug/L		<QL
Arsenic, Total	0.025	0.05	ug/L		<QL
Selenium, Total	0.25	0.5	ug/L		<QL
Silver, Total	0.02	0.04	ug/L		<QL
Cadmium, Total	0.025	0.05	ug/L		<QL
Tin, Total	0.25	0.5	ug/L		<QL
Antimony, Total	0.15	0.3	ug/L		<QL
Barium, Total	0.25	0.5	ug/L		<QL
Mercury, Total	0.025	0.05	ug/L		<QL
Thallium, Total	0.038	0.075	ug/L		<QL
Lead, Total	0.05	0.1	ug/L		<QL

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

King County Environmental Laboratory QC Report

CHLS-P_070825 COC 18922, 18963

SB:WG201210-2 MB:WG201210-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS-QL Method:EPA 200.8(MOD)/SW6020B*SM2340B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Hardness, Calc	0.165	0.331	mg CaCO3/L	<QL	33.1	33.3	101		85--115

SB:WG201210-2 MB:WG201210-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.05	0.1	ug/L	<QL	20	20.1	101		85--115
Sodium, Total	50	100	ug/L	<QL	5000	5230	105		85--115
Magnesium, Total	25	50	ug/L	<QL	5000	5110	102		85--115
Aluminum, Total	2.5	5	ug/L	<QL	20	20.4	102		85--115
Potassium, Total	50	100	ug/L	<QL	5000	5250	105		85--115
Calcium, Total	25	50	ug/L	<QL	5000	4920	98		85--115
Vanadium, Total	0.038	0.075	ug/L	<QL	20	20.4	102		85--115
Chromium, Total	0.1	0.2	ug/L	<QL	20	21.3	107		85--115
Manganese, Total	0.05	0.1	ug/L	<QL	20	21	105		85--115
Iron, Total	5	10	ug/L	<QL	5000	5300	106		85--115
Cobalt, Total	0.025	0.05	ug/L	<QL	20	20.6	103		85--115
Nickel, Total	0.05	0.1	ug/L	<QL	20	21.1	106		85--115
Copper, Total	0.1	0.2	ug/L	<QL	20	21.5	107		85--115
Zinc, Total	0.25	0.5	ug/L	<QL	20	20.8	104		85--115
Arsenic, Total	0.025	0.05	ug/L	<QL	20	20.4	102		85--115
Selenium, Total	0.25	0.5	ug/L	<QL	20	20.5	103		85--115
Silver, Total	0.02	0.04	ug/L	<QL	20	20.3	101		85--115
Cadmium, Total	0.025	0.05	ug/L	<QL	20	21.1	105		85--115
Tin, Total	0.25	0.5	ug/L	<QL	20	21.5	107		85--115
Antimony, Total	0.15	0.3	ug/L	<QL	20	21.2	106		85--115
Barium, Total	0.25	0.5	ug/L	<QL	20	21	105		85--115
Mercury, Total	0.025	0.05	ug/L	<QL	0.5	0.516	103		85--115
Thallium, Total	0.038	0.075	ug/L	<QL	20	21.2	106		85--115
Lead, Total	0.05	0.1	ug/L	<QL	20	20.8	104		85--115

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

King County Environmental Laboratory QC Report

CHLS-P_070825 COC 18922, 18963

MSD:WG201210-4 MS:WG201210-3 L86358-2 Matrix: FRESH WTR Listtype:MTHARD-ICPMS-QL Method:EPA 200.8(MOD)/SW6020B*SM2340B Project:421422-DUSW Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Hardness, Calc	0.331	0.331	mg CaCO3/L	173	33.1	206		4xRule	75--125	33.1	206		4xRule	0		0--20

MSD:WG201210-4 MS:WG201210-3 L86358-2 Matrix: FRESH WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project:421422-DUSW Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	0.1	0.1	ug/L	<QL	20	18.8	94		75--125	20	19	95		1		0--20
Sodium, Total	100	100	ug/L	7810	5000	12900	102		75--125	5000	12900	101		0		0--20
Magnesium, Total	50	50	ug/L	15100	5000	20200	102		75--125	5000	20300	103		0		0--20
Aluminum, Total	5	5	ug/L	26.5	20	48.9	112		75--125	20	48.8	111		0		0--20
Potassium, Total	100	100	ug/L	2380	5000	7600	104		75--125	5000	7460	102		2		0--20
Calcium, Total	50	50	ug/L	44300	5000	49300		4xRule	75--125	5000	48900		4xRule	1		0--20
Vanadium, Total	0.075	0.075	ug/L	0.36	20	20.8	102		75--125	20	20.6	101		1		0--20
Chromium, Total	0.2	0.2	ug/L	<QL	20	21.5	108		75--125	20	21.5	108		0		0--20
Manganese, Total	0.1	0.1	ug/L	11.1	20	32.2	106		75--125	20	32	105		1		0--20
Iron, Total	10	10	ug/L	28.2	5000	5290	105		75--125	5000	5330	106		1		0--20
Cobalt, Total	0.05	0.05	ug/L	0.0557	20	20.8	104		75--125	20	20.8	104		0		0--20
Nickel, Total	0.1	0.1	ug/L	0.754	20	21.7	104		75--125	20	22	106		2		0--20
Copper, Total	0.2	0.2	ug/L	0.767	20	22.2	107		75--125	20	22.1	107		0		0--20
Zinc, Total	0.5	0.5	ug/L	1.47	20	21.7	101		75--125	20	22	103		1		0--20
Arsenic, Total	0.05	0.05	ug/L	0.167	20	20.5	102		75--125	20	20.4	101		1		0--20
Selenium, Total	0.5	0.5	ug/L	<QL	20	19.9	99		75--125	20	19.9	99		0		0--20
Silver, Total	0.04	0.04	ug/L	<QL	20	20.4	102		75--125	20	20.8	104		2		0--20
Cadmium, Total	0.05	0.05	ug/L	<QL	20	20.6	103		75--125	20	20.7	104		1		0--20
Tin, Total	0.5	0.5	ug/L	<QL	20	21.4	107		75--125	20	21.7	108		2		0--20
Antimony, Total	0.3	0.3	ug/L	<QL	20	21.4	107		75--125	20	22.1	111		3		0--20
Barium, Total	0.5	0.5	ug/L	21	20	42	105		75--125	20	43	110		2		0--20
Mercury, Total	0.05	0.05	ug/L	<QL	0.5	0.513	103		75--125	0.5	0.523	105		2		0--20
Thallium, Total	0.075	0.075	ug/L	<QL	20	20.9	104		75--125	20	20.8	104		0		0--20
Lead, Total	0.1	0.1	ug/L	<QL	20	20.7	104		75--125	20	20.7	104		0		0--20

==========

4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 07/01/25

Department of Natural Resources and Parks
Solid Waste Division

No. **18922**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25)

| Lab No. | Sample ID | Date | Time | Project Site Test Reference | | |

SWD SAMPLE RECEIPT RECORD 7125

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s)										
	86381 -1										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)											
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	2.4 12:32.4	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 6/30/25 Project No.: 421422

VTRP Collect Date(s): 6/30/25 Project Site Test Reference: CHLS-P(25)

Receive Date: 7-1-25 COC / SDG No.: 19922

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____ Date / Time Completed: 7/1/25 1057

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

Chain of Custody Record

Environmental Monitoring Program

Date: 7/3/25

Department of Natural Resources and Parks
Solid Waste Division

No. **18963**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25.2)

Lab No.	Sample ID	Date	Time
86381-2	LEPS250702P	7/2/25	1000

| Project Site Test Reference | | |

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 863812
40 mL clear vial (VOA)	
60 mL CWM HDPE	
125 mL CNM HDPE	
125 mL CWM HDPE	
125 mL GANM w/HCl	
250 mL CWM HDPE	
250 mL GAWM w/H_2SO_4	
500 mL AWM HDPE	
500 mL CWM HDPE	
500 mL CWM PP (MICRO)	
500 mL HDPE (METALS)	1
500 mL GAWM	
1L CWM HDPE	
1L GANM	
1L GAWM w/ H_2SO_4	
2L CWM HDPE:	
Other -	
Other -	
Other -	
Other -	
Other -	
Total # of Samples	1

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	0.7/0.7/0.8	Delivery Location	Y / N	

Sub-Contracting: Y (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 7/2/25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P(25.2)

Receive Date: 7/3/25 COC / SDG No.: 189 63

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
(ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: Alex Jones

Date / Time Completed: JUL 03 '25 14:05

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

HYDROGEN SULFIDE GAS AT MANHOLE R10-52

Instrument #	Serial #	Calibration Date/Time
RKI Eagle 2	E2E656	4/28/25 @ 08:24
Sample Count	**Interval Time (sec)**	**Bump Test Date**
10117	60	6/3/25 @ 06:52

H2S Readings

Date	Daily Max	Daily Average
6/3/2025	0.0	0.0000
6/4/2025	2.5	0.0118
6/5/2025	0.0	0.0000
6/6/2025	0.0	0.0000
6/7/2025	0.0	0.0000
6/8/2025	0.0	0.0000
6/9/2025	1.5	0.0010
6/10/2025	0.0	0.0000

15-Minute Average Max	1.033
8-Hour Average Max	0.035
7-Day Average Max	0.002

Docusign Envelope ID: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6

KING COUNTY SOLID WASTE DIVISION

LEACHATE HAULING REPORT

TANKER LOADS

MONTH: JUNE

YEAR: 2025

	DUVALL						VASHON				HOBART		OTHER		
DATE	BRIGHT		C.H.		SPOK.		SPOK.		C.H.		C.H.		C.H.		REMARKS
LOAD	6000	7000	6000	7000	6000	7000	6000	7000	6000	7000	6000	7000	6000	7000	
1															
2															
3															
4										1					
5															
6		2		1											
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17								1							
18															
19															
20															
21															
22															
23															
24															
25															
26															
27															
28															
29															
30															
31															
TOTAL	0	14000	0	7000	0	0	0	7000	0	7000	0	0	0	0	

Certificate Of Completion

Envelope Id: B4FE35D9-D9BE-4C1F-ACE8-C59B18A454A6
Status: Completed
Subject: Complete with Docusign: 2025.06.03_EAGLETABLE.pdf, 7842-04_SMR_June2025.pdf, CHLS-P_061725 Repo...
Source Envelope:
Document Pages: 81
Signatures: 3
Certificate Pages: 5
Initials: 1
AutoNav: Enabled
EnvelopeId Stamping: Enabled
Time Zone: (UTC-08:00) Pacific Time (US & Canada)

Envelope Originator:
Aaron Copado
401 5TH AVE
SEATTLE, WA 98104
acopado@kingcounty.gov
IP Address: 76.147.161.144

Record Tracking

Status: Original
7/15/2025 1:56:37 PM
Holder: Aaron Copado
acopado@kingcounty.gov
Location: DocuSign

Security Appliance Status: Connected
Pool: FedRamp

Storage Appliance Status: Connected
Pool: King County-Dept of Natural Resources-Solid Waste
Location: Docusign

Signer Events	Signature	Timestamp
Aaron Copado acopado@kingcounty.gov Environmental Scientist III KC_DNRP_SWD Security Level: Email, Account Authentication (None)	 Signature Adoption: Pre-selected Style Using IP Address: 76.147.161.144	Sent: 7/15/2025 2:15:44 PM Viewed: 7/15/2025 2:15:52 PM Signed: 7/15/2025 2:16:06 PM
Electronic Record and Signature Disclosure: Not Offered via Docusign		
Jennifer Keune jennifer.keune@kingcounty.gov Interim Supervisor KC_DNRP_SWD Security Level: Email, Account Authentication (None)	 Signature Adoption: Pre-selected Style Using IP Address: 67.160.11.161	Sent: 7/15/2025 2:15:44 PM Viewed: 7/15/2025 2:38:13 PM Signed: 7/15/2025 2:39:20 PM
Electronic Record and Signature Disclosure: Accepted: 3/31/2021 3:20:14 PM ID: 040441cf-883c-43c6-a4af-1ccb2ef73edc		

In Person Signer Events	Signature	Timestamp

Editor Delivery Events	Status	Timestamp

Agent Delivery Events	Status	Timestamp

Intermediary Delivery Events	Status	Timestamp

Certified Delivery Events	Status	Timestamp

Carbon Copy Events	Status	Timestamp

Witness Events	Signature	Timestamp

Notary Events	Signature	Timestamp

Envelope Summary Events	Status	Timestamps

Envelope Summary Events	Status	Timestamps
Envelope Sent	Hashed/Encrypted	7/15/2025 2:15:44 PM
Certified Delivered	Security Checked	7/15/2025 2:38:13 PM
Signing Complete	Security Checked	7/15/2025 2:39:20 PM
Completed	Security Checked	7/15/2025 2:39:20 PM

Payment Events	Status	Timestamps

Electronic Record and Signature Disclosure

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If you decide to receive notices and disclosures from us electronically, you may at any time change your mind and tell us that thereafter you want to receive required notices and disclosures only in paper format. How you must inform us of your decision to receive future notices and disclosure in paper format and withdraw your consent to receive notices and disclosures electronically is described below.

Consequences of changing your mind

If you elect to receive required notices and disclosures only in paper format, it will slow the speed at which we can complete certain steps in transactions with you and delivering services to you because we will need first to send the required notices or disclosures to you in paper format, and then wait until we receive back from you your acknowledgment of your receipt of such paper notices or disclosures. Further, you will no longer be able to use the DocuSign system to receive required notices and consents electronically from us or to sign electronically documents from us.

All notices and disclosures will be sent to you electronically

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To contact us by email send messages to: cipriano.dacanay@kingcounty.gov

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If you created a DocuSign account, you may update it with your new email address through your account preferences.

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i. decline to sign a document from within your signing session, and on the subsequent page, select the check-box indicating you wish to withdraw your consent, or you may;

ii. send us an email to cipriano.dacanay@kingcounty.gov and in the body of such request you must state your email, full name, mailing address, and telephone number. We do not need any other information from you to withdraw consent.. The consequences of your withdrawing consent for online documents will be that transactions may take a longer time to process..

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The minimum system requirements for using the DocuSign system may change over time. The current system requirements are found here: https://support.docusign.com/guides/signer-guide-signing-system-requirements.

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To confirm to us that you can access this information electronically, which will be similar to other electronic notices and disclosures that we will provide to you, please confirm that you have read this ERSD, and (i) that you are able to print on paper or electronically save this ERSD for your future reference and access; or (ii) that you are able to email this ERSD to an email address where you will be able to print on paper or save it for your future reference and access. Further, if you consent to receiving notices and disclosures exclusively in electronic format as described herein, then select the check-box next to 'I agree to use electronic records and signatures' before clicking 'CONTINUE' within the DocuSign system.

By selecting the check-box next to 'I agree to use electronic records and signatures', you confirm that:

- You can access and read this Electronic Record and Signature Disclosure; and
- You can print on paper this Electronic Record and Signature Disclosure, or save or send this Electronic Record and Disclosure to a location where you can print it, for future reference and access; and
- Until or unless you notify King County-ZZDepartmentTemplate 03 as described above, you consent to receive exclusively through electronic means all notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you by King County-ZZDepartmentTemplate 03 during the course of your relationship with King County-ZZDepartmentTemplate 03.

Docusign Envelope ID: C5627A82-E47A-447D-A0C1-EC9A2E69FB1F

14-Day Report for Discharge or Permit Violation

For more information on reporting requirements refer to your Permit, Section S4.D. If you have a Major/Minor Discharge Authorization refer to General Conditions D

Date: 07/15/25 **Company Name:** **King County Solid Waste Division (KCSWD)**

Permit/Authorization Number: 7842-04 **Sample Site Number: A90021**

1. **Description and Cause of Non-Compliance Event:** (include dates, times, locations; sample results and estimated gallons discharged)

In the last month, SWD became aware of the exceedance(s) summarized in the table below.

Arsenic Loading (A90021)

Exceedance Date	Aware Date	Arsenic Concentration (mg/L)	Flow (gallons)	Arsenic Loading (lbs/day)
Permit Limit		*4.0*	*2,700,000*	*0.27*
6/2/25	07/14/25	0.0959	346,500	0.2771
6/4/25	07/14/25	0.0994	350,200	0.2903
6/9/25	07/14/25	0.1040	361,000	0.3131
6/11/25	07/14/25	0.1080	363,000	0.3270
6/23/25	07/14/25	0.1100	269,200	0.2717
6/25/25	07/14/25	0.1210	276,200	0.2833
6/30/25	07/14/25	0.1340	270,500	0.3023

2. **Cause of Non-Compliance Event**

KCSWD employs operational practices designed to minimize arsenic loading exceedances. This includes self-imposed limits on the volume of leachate discharged daily based on recent arsenic concentration data. Doing so allowed KCSWD to successfully comply with arsenic loading limits for virtually all of 2024.

Arsenic concentration tends to increase this time of year due to seasonal variations. KCSWD takes steps to balance rising concentrations by reducing discharge volumes. Despite decreasing discharge volumes, leachate levels in the onsite lagoons dropped throughout that month as lower precipitation volumes decreased the rate of leachate generation. Due to the lag between sample collection and receipt of laboratory analytical results used to estimate pumping limits, SWD must base discharge decisions on the most recent data available, although those data may not reflect conditions at the time of discharge. This is most evident when concentrations rapidly increase between sampling events, such as was the case in June 2025.

Docusign Envelope ID: C5627A82-E47A-447D-A0C1-EC9A2E69FB1F

14-Day Report for Discharge or Permit Violation

KCSWD has a service level agreement with the King County Environmental Lab (KCEL) to analyze Cedar Hills leachate samples within seven working days of receipt – accounting for weekends, the turnaround time is typically nine days from sample collection. In June 2025, samples were consistently delivered to KCEL in a timely manner, but KCEL was unable to produce analytical results within agreed upon turnaround times due to competing high priority needs. Instead, turnaround times for June 2025 samples ranged from 17 to 28 calendar days. The delayed receipt of analytical results impaired KCSWD's ability to accurately calculate compliant discharge volumes, as evidenced by the frequency of arsenic loading limit exceedances in June.

Even though steps were taken to immediately attempt to reduce discharge rates, loading calculations were not completed until July 14th due to staffing constraints.

KCSWD is obligated to implement corrective actions specified in the Revised Compliance Order for Discharge Violations issued by KCIW on 06/23/25. The development and implementation of corrective actions outlined in that document continue.

3. **Date and Time King County Notified:** (requirement is within 24 hours of learning of violation unless event was spill or slug discharge then must have notified immediately)

Arsenic

Exceedance Date	Aware Date	Notification Date & Time	Notification Method	Recipient(s)
06/02/25	07/14/25	07/14/25 @ 16:05	Email	Girard Arnaud, info.KCIW@kingcounty.gov
06/04/25	07/14/25	07/14/25 @ 16:05	Email	Girard Arnaud, info.KCIW@kingcounty.gov
06/09/25	07/14/25	07/14/25 @ 16:05	Email	Girard Arnaud, info.KCIW@kingcounty.gov
06/11/25	07/14/25	07/14/25 @ 16:05	Email	Girard Arnaud, info.KCIW@kingcounty.gov
06/23/25	07/14/25	07/14/25 @ 16:05	Email	Girard Arnaud, info.KCIW@kingcounty.gov
06/25/25	07/14/25	07/14/25 @ 16:05	Email	Girard Arnaud, info.KCIW@kingcounty.gov
06/30/25	07/14/25	07/14/25 @ 16:05	Email	Girard Arnaud, info.KCIW@kingcounty.gov

4. **Corrective Actions Taken:** (corrective actions taken to respond to the violation and ensure ongoing compliance.)

Arsenic

Docusign Envelope ID: C5627A82-E47A-447D-A0C1-EC9A2E69FB1F

14-Day Report for Discharge or Permit Violation

KCSWD is initiating conversations with KCEL to explore potential opportunities to reduce turnaround times on lab data. Expedited access to lab results could improve the quality of discharge decisions, thus improving compliance with regulatory permit limits. However, KCSWD needs to evaluate cost implications of shorter turnaround times, as well as potential unintended consequences on turnaround times for other KCSWD environmental samples analyzed by KCEL. KCSWD will also conduct a review of internal procedures for tracking receipt of lab data with the goal of ensuring receipt is within the agreed upon turnaround times with KCEL, enabling review of the data to consistently occur closer to the collection date. Additional improvements to the data receipt and review process will be implemented, as needed. We will continue to monitor arsenic concentrations closely to inform allowable discharge volumes.

The pilot-scale membrane bioreactor (MBR) was restarted on 06/09/25, at the Cedar Hills Regional Landfill, and is currently treating leachate from areas 5/6/7. As stated previously to KCIW, the pilot first commenced on 01/31/2025 and was shut down on 2/24/2025 due to equipment failure. Replacement parts were ordered and installed, improvements were made to the site controls and monitoring, and the workplan was revised. The MBR pilot system was then restarted on 6/09/2025 and will last for about 16 weeks. This pilot study will evaluate effectiveness of MBR as a pretreatment technology for landfill leachate as part of a reverse osmosis (RO) or other treatment system designed to reduce arsenic concentrations. The results will help inform any future pre-treatment system development.

5. **If discharge violation, enter follow-up sample collection date and results:** (may use subsequent self-monitoring sample if collected and analyzed within 14 days of learning of violation)

Exceedance Date	Aware Date	Resample Date(s)	Parameter	Loading Resample Result (lbs/day)	Compliant?
06/02/25	07/14/25	06/04/25	Arsenic Loading	0.2903	No
06/04/25	07/14/25	06/09/25	Arsenic Loading	0.3131	No
06/09/25	07/14/25	06/11/25	Arsenic Loading	0.3270	No
06/11/25	07/14/25	06/16/25	Arsenic Loading	0.2497	Yes
06/25/25	07/14/25	06/18/25	Arsenic Loading	0.2833	No
06/30/25	07/14/25	07/02/25	Arsenic Loading	0.3036	No
07/02/25	07/14/25	07/08/25	Arsenic Loading	N/A	N/A

Docusign Envelope ID: C5627A82-E47A-447D-A0C1-EC9A2E69FB1F

14-Day Report for Discharge or Permit Violation

ADDITIONAL SHEETS ATTACHED: **oYES** **x NO**

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME: Jennifer Keune

SIGNATURE: DocuSigned by: Jennifer Keune A70EEC0AE02F44A... DATE: Jul 15, 2025

TITLE: Supervisor

Authorized Representative / Designated Authorized Representative*

(Please circle one of the above)

**All user reports must be signed by an authorized representative of the industrial user. "Authorized representative of industrial user" is defined by King County Code 28.82.050. If you are designated, a current Delegation of Signatory Authority must be on file at King County or completed and attached to this form.*

Please return this form and attachments to:

King County Industrial Waste **201 S. Jackson Street – Suite 513**
Seattle, WA 98104-3855 **Fax: 206-263-3001**
-or- Email a signed PDF to: info.KCIW@kingcounty.gov

Docusign Envelope ID: C5627A82-E47A-447D-A0C1-EC9A2E69FB1F

14-Day Report for Discharge or Permit Violation

From general permit language

1. When monitoring data shows a violation, the permittee shall:

    a. Take immediate action to stop the violation and notify KCIW within 24 hours of learning of the violation.
    b. Collect a sample and submit new data to KCIW within 14 days of becoming aware of the violation.
    c. Submit a written report within 14 days of learning of the violation (*14-Day Report*). The report should explain the cause of the violation and corrective actions taken to respond to the violation and ensure ongoing compliance.

2. In the event the permittee is unable to comply with any of the conditions of this permit because of a breakdown of equipment or facilities, an accident caused by human error, negligence, or any other cause, such as an act of nature, the permittee shall:

    a. Take immediate action to stop, contain, and clean up the unauthorized discharges and correct the problem.
    b. Immediately notify the emergency King County contact in section S1 so steps can be taken to prevent damage to the sewerage system.
    c. Submit a written report within 14 days of the event (*14-Day Report*) describing the breakdown, the actual quantity and quality of resulting waste discharged, corrective action taken, and the steps taken to prevent a recurrence.

From Section D of Major Discharge Authorizations

1. In the event the permittee is unable to comply with any of the conditions of this discharge authorization because of breakdown of equipment or facilities, an accident caused by human error, negligence, or any other cause, such as an act of nature the company shall:

    a. Take immediate action to stop, contain, and clean up the unauthorized discharges and correct the problem
    b. Immediately notify KCIW so steps can be taken to prevent damage to the sewer system
    c. Submit a written report within 14 days describing the breakdown, the actual quantity and quality of resulting waste discharged, corrective action taken, and the steps taken to prevent recurrence

For SIU's Spills and Slug Discharges (from Permit language)

The Permittee shall notify King County Industrial Waste immediately in the event of a spill or slug discharge to the sanitary sewer. A written report regarding the cause of the spill and/or slug discharge shall be submitted to King County within five (5) days of date of occurrence. The report should explain the cause of the violation and corrective actions taken to respond to the violation and ensure ongoing compliance.

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County
Solid Waste Division
Department of Natural Resources and Parks
King Street Center
201 South Jackson Street, Suite 6400
Seattle, WA 98104-3855
206-477-4466
711 TTY Relay
kingcounty.gov/solid-waste

August 15, 2025

TO: Arnaud Girard, Industrial Waste Compliance Investigator III, Wastewater Treatment Division

FM: Aaron Copado, Environmental Scientist III, King County Solid Waste Division (KCSWD) DS AC

RE: Wastewater Discharge Permit # 7842-04 - Cedar Hills – Self-Monitoring Report

The purpose of this memorandum is to enclose the Self-Monitoring Report (SMR) for Cedar Hills (Permit # 7842-04) for the month of July 2025. Enclosed you will find:

- Industrial Waste Discharge Self-Monitoring Report for Sites A9002 & A90021
- Laboratory Test Results for CHLS-P (for samples collected 7/2/25, 7/8/25, 7/10/25, 7/15/25, 7/17/25, 7/22/25, 7/24/25, 7/29/25 and 7/31/25)
- Atmospheric Hydrogen Sulfide Data at A9002 (for 7/11-7/18 & 7/30-8/7)
- Leachate Hauling Report (for July)

The following exceedances occurred during the month of July:

Parameter	Date of Exceedance	Aware Date	Notification Date and Time
Arsenic Loading	7/02/25	7/14/25	7/14/25 @ 17:11
Arsenic Loading	7/08/25	7/21/25	7/21/25 @ 17:01
Arsenic Loading	7/10/25	7/21/25	7/21/25 @ 17:01
Total Soluble Sulfide	7/29/25	7/29/25	7/29/25 @ 12:50 & 7/30/25 @ 7:51
Total Soluble Sulfide	7/31/25	7/31/25	7/31/25 @ 15:08

All other results met permit-specified limits.

Per KCIW guidance, details regarding July's arsenic loading and dissolved sulfide exceedances are included in the appended 14-day report.

Please contact me directly if you have any questions. I can be reached at (253) 400-6532, or by e-mail at acopado@kingcounty.gov.

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Enclosures

cc: Theresa Thurlow, P.E., Section Manager, King County Solid Waste Division (KCSWD)
Jennifer Keune, Supervisor, KCSWD
Dan Swope, Supervising Engineer, KCSWD
Grant Dornfeld, Engineer II, KCSWD

Printed on recycled paper

King County

Industrial Waste Program Monthly Self-Monitoring Report

Send to: King County Industrial Waste Program
Email: info.KCIW@kingcounty.gov

Company Name: King County SWD - Cedar Hills Regional Landfill **Sample Site No.** A90021 **Permit No.:** *7842-04*

Please Specify Month & Year: **Month/Year** **July 2025** This form is available at www.kingcounty.gov/industrialwaste.

*** Sample Types (C) Composite (G) Grab (BC) Batch** **All conc. units are mg/L unless otherwise noted. Loading units are pounds per day (lbs./da**

Sample Date (circle)	Sample Type*	pH	Arsenic		Cadmium		Chromium		Copper		Lead		Daily Discharge Volume, gpd	Notes (Indicate Batch Discharge where applicable)
			Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading		
1													0	
2	C		0.1320	0.3036									275800	
3													0	
4													0	
5													0	
6													278600	
7													0	
8	C	8.66	0.1420	0.3323	<0.0005	0.0006	0.1750	0.4095	0.0133	0.0311	0.0022	0.00505	280600	
9													281800	
10	C		0.1400	0.3275									280500	
11													280900	
12													0	
13													238500	
14													240000	
15	C	8.59	0.1490	0.2405	<0.0005	0.0004	0.1800	0.2905	0.0112	0.0181	0.0018	0.00289	193500	
16													194600	
17	C		0.1490	0.2448									197000	
18													196800	
19													194100	
20													194300	
21													0	
22	C	8.64	0.1590	0.1959	<0.0005	0.0003	0.2030	0.2501	0.0067	0.0083	0.0013	0.00155	147700	
23													147800	
24	C		0.1680	0.2082									148600	
25													16300	
26													0	
27													0	
28													0	
29	C	8.60	0.1730	0.1475	<0.0005	0.0002	0.2160	0.1841	0.0097	0.0082	0.0017	0.00147	102200	
30													0	
31	C		0.1710	0.1472									103200	

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

Aug 15, 2025
Date

Jennifer Kunz
Name and Signature of Principal Executive or Authorized Agent

Monthly Min pH	8.59	7/15/2025	Total Monthly Flow (gallons) 3,992,800
Monthly Max pH	8.66	7/8/2025	Maximum Daily Flow 281,800 7/9/2025

PLEASE CIRCLE ALL PERMIT VIOLATIONS

Due Date: Monthly report is due by the 15th each month.

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County

Industrial Waste Program Monthly Self-Monitoring Report

Send to: King County Industrial Waste Program
Email: info.KCIW@kingcounty.gov

Company Name: King County SWD - Cedar Hills Regional Landfill **Sample Site No.** A90021 **Permit No.:** *7842-04*

Please Specify Month & Year: **Month/Year** **July 2025** This form is available at www.kingcounty.gov/industrialwaste.

*** Sample Types (C) Composite (G) Grab (BC) Batch** **All conc. units are mg/L unless otherwise noted. Loading units are pounds per day (lbs./da**

Sample Date (circle)	Sample Type	Mercury		Nickel		Silver		Zinc		Total Soluble Sulfides	Ammonia as N	Nitrite + Nitrate as N	Notes (Indicate Batch Discharge where applicable)
		Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading				
1													
2													
3													
4													
5													
6													
7													
8	C	<0.0001	0.00012	0.1460	0.342	<0.0004	0.0005	0.3230	0.756	<0.1 ppm	1030	<0.5	
9													
10										<0.1 ppm			
11													
12													
13													
14													
15	C	<0.0001	0.00008	0.1510	0.244	<0.0004	0.0003	0.2840	0.458	<0.1 ppm			
16													
17										<0.1 ppm			
18													
19													
20													
21													
22	C	<0.0001	0.00006	0.1610	0.198	<0.0004	0.0002	0.1880	0.232	<0.1 ppm			
23													
24										<0.1 ppm			
25													
26													
27													
28													
29	C	<0.0001	0.00004	0.1660	0.141	<0.0004	0.0002	0.2480	0.211	0.3 ppm			
30													
31										0.2 ppm			

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by Washington State Department of Ecology accredited laboratory for each parameter tested.

Aug 15, 2025

Date

Name and Signature of Principal Executive or Authorized Agent

A/DEEC0AE0274A...

PLEASE CIRCLE ALL PERMIT VIOLATIONS

Due Date: Monthly report is due by the 15th each month.

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County

Industrial Waste Program Monthly Self-Monitoring Report

Send to: King County Industrial Waste Program
Email: info.KCIW@kingcounty.gov

Atmospheric Hydrogen Sulfide (H_2S) Monitoring

Company Name: King County SWD - Cedar Hills Regional Landfill **Sample Site No.** A9002 **Permit No.:** *7842-04*

Please Specify Month & Year: **Month/Year** **July 2025**

This form is available at www.kingcounty.gov/industrialwaste.

All units are PPM unless otherwise noted.

Sample Date (circle)	Atmospheric Hydrogen Sulfide, ppmv				Notes
	Instantaneous Maximum	Maximum 15-min Average	Maximum 8-hr Average	7-day Average	
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11	8	5.37	0.33		
12	2.5	2.03	1.3		
13	8	5.77	1.11		
14	6	3.77	0.92		
15	7.5	4.67	0.34		
16	9.5	5.07	1.02		
17	7.5	4.1	0.79		
18	6.5	4.03	0.57	0.29	
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30	1	0.77	0.04	N/A	Per guidance, started H2S monitoring
31	4.5	1.63	0.07	N/A	
Monthly **MAX**	9.5	Date	7/11-7/18/25, 7/30-8/7/25		
Monthly **AVG**	6.1				

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

Aug 15, 2025
Date

Name and Signature of Principal Executive or Authorized Agent

PLEASE CIRCLE ALL PERMIT VIOLATIONS

Due Date: **Monthly report is due by the 15th each month.**

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

July 11, 2025

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P)

Sample Id.	Sample Collect Date	COC
LEPS250630P	**6/30/2025**	**18922**
LEPS250702P	**7/02/2025**	**18963**

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 2 leachate permit samples collected June 30 and Jul 2, 2025.

Sample Receiving Comments
No sample receiving anomalies were observed.

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Metals QC Information

All calculable QC results for metals parameters were within laboratory control limits with the following exceptions.

During **Total Metals** analysis of analytical batch WG201181, the recoveries of ***total tin*** from the matrix spike (MS) and MS duplicate (MSD) exceeded the lower laboratory control limit. Sample LEPS250630P was used to prepare the MS/MSD. The *total tin* result for LEPS250630P was qualified G based on these exceedances and may be biased low.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,



Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Sample Data

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 07/10/2025
Report Group: CHLS-P_070825

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250630P**
SDG / Lab Sample ID: **18922 / L86381-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **06/30/2025**
Login Date: **07/01/2025**
Matrix: **LEACHATE**

Analyses Requested:

6020B, P-ICPMS, Metals

6020B, SWD-ICPMS23, Metals

7470A, HG-CVAA-M, Metals

Client Sample ID: **LEPS250702P**
SDG / Lab Sample ID: **18963 / L86381-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **07/02/2025**
Login Date: **07/03/2025**
Matrix: **LEACHATE**

Analyses Requested:

6020B, AS-ICPMS, Metals

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 07/10/2025
Report Group: CHLS-P_070825

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250630P**
CoC / Lab Sample ID: **18922 / L86381-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **06/30/2025**
Login Date: **07/01/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Mercury, Total	2	mg/L	<.0001	U	.0001	.0001		07/02/2025	07/02/2025	WG201175
Aluminum, Total	10	mg/L	1.42		.05	.05		07/03/2025	07/07/2025	WG201181
Antimony, Total	10	mg/L	.0174		.003	.003		07/03/2025	07/07/2025	WG201181
Arsenic, Total	10	mg/L	.134		.0005	.0005	1	07/03/2025	07/07/2025	WG201181
Barium, Total	10	mg/L	.1		.005	.005		07/03/2025	07/07/2025	WG201181
Beryllium, Total	10	mg/L	<.001	U	.001	.001		07/03/2025	07/07/2025	WG201181
Cadmium, Total	10	mg/L	<.0005	U	.0005	.0005	0.5	07/03/2025	07/07/2025	WG201181
Calcium, Total	10	mg/L	67.7		.5	.5		07/03/2025	07/07/2025	WG201181
Chromium, Total	10	mg/L	.166		.002	.002	2.75	07/03/2025	07/07/2025	WG201181
Cobalt, Total	10	mg/L	.0332		.0005	.0005		07/03/2025	07/07/2025	WG201181
Copper, Total	10	mg/L	.0137		.002	.002	3	07/03/2025	07/07/2025	WG201181
Iron, Total	10	mg/L	10.5		.1	.1		07/03/2025	07/07/2025	WG201181
Lead, Total	10	mg/L	.00188		.001	.001	2	07/03/2025	07/07/2025	WG201181
Magnesium, Total	10	mg/L	77.4		.5	.5		07/03/2025	07/07/2025	WG201181
Manganese, Total	10	mg/L	.574		.001	.001		07/03/2025	07/07/2025	WG201181
Nickel, Total	10	mg/L	.133		.001	.001	2.5	07/03/2025	07/07/2025	WG201181
Phosphorus, Total	10	mg/L	9.22		1	1		07/03/2025	07/07/2025	WG201181
Potassium, Total	10	mg/L	496		1	1		07/03/2025	07/07/2025	WG201181
Selenium, Total	10	mg/L	<.005	U	.005	.005		07/03/2025	07/07/2025	WG201181
Silver, Total	10	mg/L	<.0004	U	.0004	.0004	1	07/03/2025	07/07/2025	WG201181
Sodium, Total	10	mg/L	1350		1	1		07/03/2025	07/07/2025	WG201181
Thallium, Total	10	mg/L	<.00075	U	.00075	.00075		07/03/2025	07/07/2025	WG201181
Tin, Total	10	mg/L	.0097	G	.005	.005		07/03/2025	07/07/2025	WG201181
Vanadium, Total	10	mg/L	.0489		.00075	.00075		07/03/2025	07/07/2025	WG201181
Zinc, Total	10	mg/L	.297		.005	.005	5	07/03/2025	07/07/2025	WG201181

Client Sample ID: **LEPS250702P**
CoC / Lab Sample ID: **18963 / L86381-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **07/02/2025**
Login Date: **07/03/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.132		.000503	.000503	1	07/07/2025	07/08/2025	WG201210

Target Parameter Count for Report Group: 26

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Quality Control Data

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory QC Report

CHLS-P_070825 COC 18922, 18963

Workgroup: WG201175 Total Mercury by CVAA

MB:WG201175-1 Matrix: BLANK WTR Listtype:MTHG-MID-QL Method:SW846 7470A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.025	0.05	ug/L		<QL

SB:WG201175-2 MB:WG201175-1 Matrix: BLANK WTR Listtype:MTHG-MID-QL Method:SW846 7470A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.025	0.05	ug/L	<QL	1	1.01	101		85--115

MSD:WG201175-4 MS:WG201175-3 L86381-1 Matrix: LEACHATE Listtype:MTHG-MID-QL Method:SW846 7470A Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.1	0.1	ug/L	<QL	2	1.65	83		75--125	2	1.68	84		2		0--20

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory QC Report

CHLS-P_070825 COC 18922, 18963

Workgroup: WG201181 Total Metals by ICPMS

MB:WG201181-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.05	0.1	ug/L		<QL
Sodium, Total	50	100	ug/L		<QL
Magnesium, Total	25	50	ug/L		<QL
Aluminum, Total	2.5	5	ug/L		<QL
Phosphorus, Total	50	100	ug/L		<QL
Potassium, Total	50	100	ug/L		<QL
Calcium, Total	25	50	ug/L		<QL
Vanadium, Total	0.038	0.075	ug/L		<QL
Chromium, Total	0.1	0.2	ug/L		<QL
Manganese, Total	0.05	0.1	ug/L		<QL
Iron, Total	5	10	ug/L		<QL
Cobalt, Total	0.025	0.05	ug/L		<QL
Nickel, Total	0.05	0.1	ug/L		<QL
Copper, Total	0.1	0.2	ug/L		<QL
Zinc, Total	0.25	0.5	ug/L		<QL
Arsenic, Total	0.025	0.05	ug/L		<QL
Selenium, Total	0.25	0.5	ug/L		<QL
Silver, Total	0.02	0.04	ug/L		<QL
Cadmium, Total	0.025	0.05	ug/L		<QL
Tin, Total	0.25	0.5	ug/L		<QL
Antimony, Total	0.15	0.3	ug/L		<QL
Barium, Total	0.25	0.5	ug/L		<QL
Thallium, Total	0.038	0.075	ug/L		<QL
Lead, Total	0.05	0.1	ug/L		<QL

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory QC Report

CHLS-P_070825 COC 18922, 18963

SB:WG201181-2 MB:WG201181-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.05	0.1	ug/L	<QL	20	19.5	98		85--115
Sodium, Total	50	100	ug/L	<QL	5000	5300	106		85--115
Magnesium, Total	25	50	ug/L	<QL	5000	5160	103		85--115
Aluminum, Total	2.5	5	ug/L	<QL	200	199	99		85--115
Phosphorus, Total	50	100	ug/L	<QL	5000	4960	99		85--115
Potassium, Total	50	100	ug/L	<QL	5000	5240	105		85--115
Calcium, Total	25	50	ug/L	<QL	5000	4970	99		85--115
Vanadium, Total	0.038	0.075	ug/L	<QL	20	20.4	102		85--115
Chromium, Total	0.1	0.2	ug/L	<QL	20	21.2	106		85--115
Manganese, Total	0.05	0.1	ug/L	<QL	20	20.4	102		85--115
Iron, Total	5	10	ug/L	<QL	5000	5160	103		85--115
Cobalt, Total	0.025	0.05	ug/L	<QL	20	21.1	106		85--115
Nickel, Total	0.05	0.1	ug/L	<QL	20	21.2	106		85--115
Copper, Total	0.1	0.2	ug/L	<QL	20	21.9	109		85--115
Zinc, Total	0.25	0.5	ug/L	<QL	20	21	105		85--115
Arsenic, Total	0.025	0.05	ug/L	<QL	20	20.3	102		85--115
Selenium, Total	0.25	0.5	ug/L	<QL	20	20.3	102		85--115
Silver, Total	0.02	0.04	ug/L	<QL	20	22.1	110		85--115
Cadmium, Total	0.025	0.05	ug/L	<QL	20	20.9	104		85--115
Tin, Total	0.25	0.5	ug/L	<QL	20	19.8	99		85--115
Antimony, Total	0.15	0.3	ug/L	<QL	20	20.9	105		85--115
Barium, Total	0.25	0.5	ug/L	<QL	20	21	105		85--115
Thallium, Total	0.038	0.075	ug/L	<QL	20	21.7	108		85--115
Lead, Total	0.05	0.1	ug/L	<QL	20	21.2	106		85--115

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory QC Report

CHLS-P_070825 COC 18922, 18963

MSD:WG201181-4 MS:WG201181-3 L86381-1 Matrix: LEACHATE Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	1	1	ug/L	<QL	201	185	92		75--125	200	193	96		4		0--20
Sodium, Total	1000	1000	ug/L	1350000	50200	1380000		4xRule	75--125	50100	1400000		4xRule	1		0--20
Magnesium, Total	502	502	ug/L	77400	50200	122000	89		75--125	50100	123000	91		1		0--20
Aluminum, Total	50.2	50.2	ug/L	1420	2010	3400	99		75--125	2000	3370	97		1		0--20
Phosphorus, Total	1000	1000	ug/L	9220	50200	58300	98		75--125	50100	59300	100		2		0--20
Potassium, Total	1000	1000	ug/L	496000	50200	529000		4xRule	75--125	50100	544000		4xRule	3		0--20
Calcium, Total	502	502	ug/L	67700	50200	114000	93		75--125	50100	115000	94		0		0--20
Vanadium, Total	0.752	0.752	ug/L	48.9	201	240	95		75--125	200	246	99		2		0--20
Chromium, Total	2.01	2.01	ug/L	166	201	365	99		75--125	200	359	96		2		0--20
Manganese, Total	1	1	ug/L	574	201	757	91		75--125	200	766	96		1		0--20
Iron, Total	100	100	ug/L	10500	50200	58600	96		75--125	50100	59400	98		1		0--20
Cobalt, Total	0.502	0.502	ug/L	33.2	201	238	102		75--125	200	236	101		1		0--20
Nickel, Total	1	1	ug/L	133	201	339	103		75--125	200	332	99		2		0--20
Copper, Total	2.01	2.01	ug/L	13.7	201	225	105		75--125	200	225	105		0		0--20
Zinc, Total	5.02	5.02	ug/L	297	201	505	103		75--125	200	498	100		1		0--20
Arsenic, Total	0.502	0.502	ug/L	134	201	341	103		75--125	200	341	103		0		0--20
Selenium, Total	5.02	5.02	ug/L	<QL	201	207	103		75--125	200	207	103		0		0--20
Silver, Total	0.401	0.401	ug/L	<QL	201	201	100		75--125	200	199	99		1		0--20
Cadmium, Total	0.502	0.502	ug/L	<QL	201	198	99		75--125	200	199	100		1		0--20
Tin, Total	5.02	5.02	ug/L	9.7	201	145	68	*	75--125	200	150	70	*	3		0--20
Antimony, Total	3.01	3.01	ug/L	17.4	201	223	103		75--125	200	227	104		1		0--20
Barium, Total	5.02	5.02	ug/L	100	201	309	104		75--125	200	317	108		3		0--20
Thallium, Total	0.752	0.752	ug/L	<QL	201	200	100		75--125	200	205	102		2		0--20
Lead, Total	1	1	ug/L	1.88	201	202	100		75--125	200	206	102		2		0--20

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory QC Report

CHLS-P_070825 COC 18922, 18963

Workgroup: WG201210 Total Metals & Hardness by ICPMS

MB:WG201210-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS-QL Method:EPA 200.8(MOD)/SW6020B*SM2340B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Hardness, Calc	0.165	0.331	mg CaCO3/L		<QL

MB:WG201210-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.05	0.1	ug/L		<QL
Sodium, Total	50	100	ug/L		<QL
Magnesium, Total	25	50	ug/L		<QL
Aluminum, Total	2.5	5	ug/L		<QL
Potassium, Total	50	100	ug/L		<QL
Calcium, Total	25	50	ug/L		<QL
Vanadium, Total	0.038	0.075	ug/L		<QL
Chromium, Total	0.1	0.2	ug/L		<QL
Manganese, Total	0.05	0.1	ug/L		<QL
Iron, Total	5	10	ug/L		<QL
Cobalt, Total	0.025	0.05	ug/L		<QL
Nickel, Total	0.05	0.1	ug/L		<QL
Copper, Total	0.1	0.2	ug/L		<QL
Zinc, Total	0.25	0.5	ug/L		<QL
Arsenic, Total	0.025	0.05	ug/L		<QL
Selenium, Total	0.25	0.5	ug/L		<QL
Silver, Total	0.02	0.04	ug/L		<QL
Cadmium, Total	0.025	0.05	ug/L		<QL
Tin, Total	0.25	0.5	ug/L		<QL
Antimony, Total	0.15	0.3	ug/L		<QL
Barium, Total	0.25	0.5	ug/L		<QL
Mercury, Total	0.025	0.05	ug/L		<QL
Thallium, Total	0.038	0.075	ug/L		<QL
Lead, Total	0.05	0.1	ug/L		<QL

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory QC Report

CHLS-P_070825 COC 18922, 18963

SB:WG201210-2 MB:WG201210-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS-QL Method:EPA 200.8(MOD)/SW6020B*SM2340B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Hardness, Calc	0.165	0.331	mg CaCO3/L	<QL	33.1	33.3	101		85--115

SB:WG201210-2 MB:WG201210-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.05	0.1	ug/L	<QL	20	20.1	101		85--115
Sodium, Total	50	100	ug/L	<QL	5000	5230	105		85--115
Magnesium, Total	25	50	ug/L	<QL	5000	5110	102		85--115
Aluminum, Total	2.5	5	ug/L	<QL	20	20.4	102		85--115
Potassium, Total	50	100	ug/L	<QL	5000	5250	105		85--115
Calcium, Total	25	50	ug/L	<QL	5000	4920	98		85--115
Vanadium, Total	0.038	0.075	ug/L	<QL	20	20.4	102		85--115
Chromium, Total	0.1	0.2	ug/L	<QL	20	21.3	107		85--115
Manganese, Total	0.05	0.1	ug/L	<QL	20	21	105		85--115
Iron, Total	5	10	ug/L	<QL	5000	5300	106		85--115
Cobalt, Total	0.025	0.05	ug/L	<QL	20	20.6	103		85--115
Nickel, Total	0.05	0.1	ug/L	<QL	20	21.1	106		85--115
Copper, Total	0.1	0.2	ug/L	<QL	20	21.5	107		85--115
Zinc, Total	0.25	0.5	ug/L	<QL	20	20.8	104		85--115
Arsenic, Total	0.025	0.05	ug/L	<QL	20	20.4	102		85--115
Selenium, Total	0.25	0.5	ug/L	<QL	20	20.5	103		85--115
Silver, Total	0.02	0.04	ug/L	<QL	20	20.3	101		85--115
Cadmium, Total	0.025	0.05	ug/L	<QL	20	21.1	105		85--115
Tin, Total	0.25	0.5	ug/L	<QL	20	21.5	107		85--115
Antimony, Total	0.15	0.3	ug/L	<QL	20	21.2	106		85--115
Barium, Total	0.25	0.5	ug/L	<QL	20	21	105		85--115
Mercury, Total	0.025	0.05	ug/L	<QL	0.5	0.516	103		85--115
Thallium, Total	0.038	0.075	ug/L	<QL	20	21.2	106		85--115
Lead, Total	0.05	0.1	ug/L	<QL	20	20.8	104		85--115

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory QC Report

CHLS-P_070825 COC 18922, 18963

MSD:WG201210-4 MS:WG201210-3 L86358-2 Matrix: FRESH WTR Listtype:MTHARD-ICPMS-QL Method:EPA 200.8(MOD)/SW6020B*SM2340B Project:421422-DUSW Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Hardness, Calc	0.331	0.331	mg CaCO3/L	173	33.1	206		4xRule	75--125	33.1	206		4xRule	0		0--20

MSD:WG201210-4 MS:WG201210-3 L86358-2 Matrix: FRESH WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project:421422-DUSW Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	0.1	0.1	ug/L	<QL	20	18.8	94		75--125	20	19	95		1		0--20
Sodium, Total	100	100	ug/L	7810	5000	12900	102		75--125	5000	12900	101		0		0--20
Magnesium, Total	50	50	ug/L	15100	5000	20200	102		75--125	5000	20300	103		0		0--20
Aluminum, Total	5	5	ug/L	26.5	20	48.9	112		75--125	20	48.8	111		0		0--20
Potassium, Total	100	100	ug/L	2380	5000	7600	104		75--125	5000	7460	102		2		0--20
Calcium, Total	50	50	ug/L	44300	5000	49300		4xRule	75--125	5000	48900		4xRule	1		0--20
Vanadium, Total	0.075	0.075	ug/L	0.36	20	20.8	102		75--125	20	20.6	101		1		0--20
Chromium, Total	0.2	0.2	ug/L	<QL	20	21.5	108		75--125	20	21.5	108		0		0--20
Manganese, Total	0.1	0.1	ug/L	11.1	20	32.2	106		75--125	20	32	105		1		0--20
Iron, Total	10	10	ug/L	28.2	5000	5290	105		75--125	5000	5330	106		1		0--20
Cobalt, Total	0.05	0.05	ug/L	0.0557	20	20.8	104		75--125	20	20.8	104		0		0--20
Nickel, Total	0.1	0.1	ug/L	0.754	20	21.7	104		75--125	20	22	106		2		0--20
Copper, Total	0.2	0.2	ug/L	0.767	20	22.2	107		75--125	20	22.1	107		0		0--20
Zinc, Total	0.5	0.5	ug/L	1.47	20	21.7	101		75--125	20	22	103		1		0--20
Arsenic, Total	0.05	0.05	ug/L	0.167	20	20.5	102		75--125	20	20.4	101		1		0--20
Selenium, Total	0.5	0.5	ug/L	<QL	20	19.9	99		75--125	20	19.9	99		0		0--20
Silver, Total	0.04	0.04	ug/L	<QL	20	20.4	102		75--125	20	20.8	104		2		0--20
Cadmium, Total	0.05	0.05	ug/L	<QL	20	20.6	103		75--125	20	20.7	104		1		0--20
Tin, Total	0.5	0.5	ug/L	<QL	20	21.4	107		75--125	20	21.7	108		2		0--20
Antimony, Total	0.3	0.3	ug/L	<QL	20	21.4	107		75--125	20	22.1	111		3		0--20
Barium, Total	0.5	0.5	ug/L	21	20	42	105		75--125	20	43	110		2		0--20
Mercury, Total	0.05	0.05	ug/L	<QL	0.5	0.513	103		75--125	0.5	0.523	105		2		0--20
Thallium, Total	0.075	0.075	ug/L	<QL	20	20.9	104		75--125	20	20.8	104		0		0--20
Lead, Total	0.1	0.1	ug/L	<QL	20	20.7	104		75--125	20	20.7	104		0		0--20

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4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 07/01/25

Department of
Natural Resources and Parks
Solid Waste Division

No. **18922**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25)

Lab No.	Sample ID	Date	Time
86381-1	LEPS25#630P	06/30/25	1000

| Project Site Test Reference | | |

SWD SAMPLE RECEIPT RECORD 7H2F

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 863381 -1										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)											
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	2.4 12:32.4	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 6/30/25 Project No.: 421422

VTRP Collect Date(s): 6/30/25 Project Site Test Reference: CHLS-P(25)

Receive Date: 7-1-25 COC / SDG No.: 19922

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____ Date / Time Completed: 7/1/25 1057

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Chain of Custody Record

Environmental Monitoring Program

Date: 7/3/25

Department of Natural Resources and Parks
Solid Waste Division

No. **18963**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25.2)

Lab No.	Sample ID	Date	Time
86381-2	LEPS250702P	7/2/25	1000

| Project Site Test Reference | | |

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s)										
	863881										
	2										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	0.7/0.7/0.8	Delivery Location	Y / N	

Sub-Contracting: Y (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 7/2/25 Project No.: 421422

VTRP Collect Date(s): — Project Site Test Reference: CHLS-P(25.2)

Receive Date: 7/3/25 COC / SDG No.: 189 63

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
(ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25))	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M { T / D } / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS { T / D } / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: Alex Jones

Date / Time Completed: JUL 03 '25 14:05

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

July 18, 2025

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P)

Sample Id.	Sample Collect Date	COC
LEPS250708P	**7/08/2025**	**18869**
LEPS250710P	**7/10/2025**	**18927**

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 2 leachate permit samples collected July 8 and 10, 2025.

Sample Receiving Comments
No sample receiving anomalies were observed.

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Conventionals QC Information
All calculable QC results for conventionals parameters were within laboratory control limits.

During **Dissolved Nutrient** analysis of sample LEPS250708P, the analyst noted that the pH of the sample was no longer within method specifications for preservation at the time of sample collection. Additional preservative was added before proceeding with sample analysis. The *nitrate+nitrite nitrogen* and *ammonia* results for sample LEPS250708P were qualified S due to insufficient preservation at the time of collection.

During **Nitrate+nitrite nitrogen** analysis of sample LEPS250708P, the background color of the samples interfered with the determination of nitrate+nitrite nitrogen. Sample LEPS250708P was diluted to mitigate the color interference. At the reported dilutions, any nitrate+nitrite nitrogen that may have been present in sample LEPS250708P was diluted to less than the detection limit (DL).

Metals QC Information
All calculable QC results for metals parameters were within laboratory control limits.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,



Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Sample Data

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 07/17/2025
Report Group: CHLS-P_071625

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250708P**
SDG / Lab Sample ID: **18869 / L86443-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **07/08/2025**
Login Date: **07/09/2025**
Matrix: **LEACHATE**

Analyses Requested:

4500-NO3-F NO23 Nitrite + Nitrate Nitrogen

6020B, P-ICPMS, Metals

6020B, SWD-ICPMS23, Metals

7470A, HG-CVAA-M, Metals

Kerouel & Aminot 1997 NH3 Ammonia Nitrogen

Client Sample ID: **LEPS250710P**
SDG / Lab Sample ID: **18927 / L86447-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **07/10/2025**
Login Date: **07/11/2025**
Matrix: **LEACHATE**

Analyses Requested:

6020B, AS-ICPMS, Metals

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 07/17/2025
Report Group: CHLS-P_071625

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250708P**
CoC / Lab Sample ID: **18869 / L86443-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **07/08/2025**
Login Date: **07/09/2025**
Matrix: **LEACHATE**

Conventionals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Nitrate + Nitrite as N	50	mg/L	<.5	SU	.5	2		07/11/2025	07/11/2025	WG201352
Ammonia	50	mg/L	1030	S	25	50		07/14/2025	07/14/2025	WG201354

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Mercury, Total	2	mg/L	<.0001	U	.0001	.0001		07/10/2025	07/15/2025	WG201293
Aluminum, Total	10	mg/L	1.04		.0496	.0496		07/11/2025	07/14/2025	WG201302
Antimony, Total	10	mg/L	.0158		.00298	.00298		07/11/2025	07/14/2025	WG201302
Arsenic, Total	10	mg/L	.142		.000496	.000496	1	07/11/2025	07/14/2025	WG201302
Barium, Total	10	mg/L	.0977		.00496	.00496		07/11/2025	07/14/2025	WG201302
Beryllium, Total	10	mg/L	<.000992	U	.000992	.000992		07/11/2025	07/14/2025	WG201302
Cadmium, Total	10	mg/L	<.000496	U	.000496	.000496	0.5	07/11/2025	07/14/2025	WG201302
Calcium, Total	10	mg/L	67		.496	.496		07/11/2025	07/14/2025	WG201302
Chromium, Total	10	mg/L	.175		.00198	.00198	2.75	07/11/2025	07/14/2025	WG201302
Cobalt, Total	10	mg/L	.0359		.000496	.000496		07/11/2025	07/14/2025	WG201302
Copper, Total	10	mg/L	.0133		.00198	.00198	3	07/11/2025	07/14/2025	WG201302
Iron, Total	10	mg/L	10.1		.0992	.0992		07/11/2025	07/14/2025	WG201302
Lead, Total	10	mg/L	.00216		.000992	.000992	2	07/11/2025	07/14/2025	WG201302
Magnesium, Total	10	mg/L	82.4		.496	.496		07/11/2025	07/14/2025	WG201302
Manganese, Total	10	mg/L	.554		.000992	.000992		07/11/2025	07/14/2025	WG201302
Nickel, Total	10	mg/L	.146		.000992	.000992	2.5	07/11/2025	07/14/2025	WG201302
Phosphorus, Total	10	mg/L	8.43		.992	.992		07/11/2025	07/14/2025	WG201302
Potassium, Total	10	mg/L	532		.992	.992		07/11/2025	07/14/2025	WG201302
Selenium, Total	10	mg/L	<.00496	U	.00496	.00496		07/11/2025	07/14/2025	WG201302
Silver, Total	10	mg/L	<.000397	U	.000397	.000397	1	07/11/2025	07/14/2025	WG201302
Sodium, Total	10	mg/L	1460		.992	.992		07/11/2025	07/14/2025	WG201302
Thallium, Total	10	mg/L	<.000744	U	.000744	.000744		07/11/2025	07/14/2025	WG201302
Tin, Total	10	mg/L	.0106		.00496	.00496		07/11/2025	07/14/2025	WG201302
Vanadium, Total	10	mg/L	.0528		.000744	.000744		07/11/2025	07/14/2025	WG201302
Zinc, Total	10	mg/L	.323		.00496	.00496	5	07/11/2025	07/14/2025	WG201302

Client Sample ID: **LEPS250710P**
CoC / Lab Sample ID: **18927 / L86447-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **07/10/2025**
Login Date: **07/11/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.14		.000491	.000491	1	07/11/2025	07/14/2025	WG201342

Target Parameter Count for Report Group: 28

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Quality Control Data

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory QC Report

CHLS-P_071625 COC 18869, 18927

Workgroup: WG201352 Dissolved Nutrients

MB:WG201352-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L		U

MB:WG201352-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Orthophosphate Phosphorus	0.0005	0.002	mg/L		U

SB:WG201352-3 MB:WG201352-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	U	1	0.994	99		80--120

SB:WG201352-3 MB:WG201352-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	U	0.02	0.0201	101		80--120

LCS:WG201352-4 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	1	0.943	94		85--115

LCS:WG201352-4 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0196	98		85--115

LD:WG201352-5 L86442-1 Matrix: LEACHATE Listtype:CVORTHOP Method:SM4500-P-F Project:421422-CHLS-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Orthophosphate Phosphorus	0.1	0.4	mg/L	3.86	3.85	0		0--20

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

MS:WG201352-6 L86442-1 Matrix: LEACHATE Listtype:CVORTHOP Method:SM4500-P-F Project:421422-CHLS-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.1	0.4	mg/L	3.86	0.02	7.5	91		75--125

LD:WG201352-7 L86445-1 Matrix: LEACHATE Listtype:CVNO23 Method:SM4500-NO3-F Project:421422-CHLS-M_MOD Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.2	0.8	mg/L	0.27	0.27			0--20

MS:WG201352-8 L86445-1 Matrix: LEACHATE Listtype:CVNO23 Method:SM4500-NO3-F Project:421422-CHLS-M_MOD Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.2	0.8	mg/L	0.27	1	19.1	94		75--125

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory QC Report

CHLS-P_071625 COC 18869, 18927

Workgroup: WG201354 Dissolved Nutrients

MB:WG201354-1 Matrix: BLANK WTR Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Ammonia Nitrogen	0.5	1	mg/L		U

SB:WG201354-3 MB:WG201354-1 Matrix: BLANK WTR Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.5	1	mg/L	U	10	11	110		80--120

LCS:WG201354-4 Matrix: BLANK WTR Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.5	1	mg/L	10	8.56	86		85--115

LD:WG201354-5 L86442-5 Matrix: LEACHATE Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project:421422-CHLS-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Ammonia Nitrogen	10	20	mg/L	593	599	1		0--20

MS:WG201354-6 L86442-5 Matrix: LEACHATE Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project:421422-CHLS-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	10	20	mg/L	593	10	802	105		75--125

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory QC Report

CHLS-P_071625 COC 18869, 18927

Workgroup: WG201293 Total Mercury by CVAA

MB:WG201293-1 Matrix: BLANK WTR Listtype:MTHG-MID-QL Method:SW846 7470A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.025	0.05	ug/L		<QL

SB:WG201293-2 MB:WG201293-1 Matrix: BLANK WTR Listtype:MTHG-MID-QL Method:SW846 7470A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.025	0.05	ug/L	<QL	1	0.984	98		85--115

MSD:WG201293-4 MS:WG201293-3 L86442-3 Matrix: LEACHATE Listtype:MTHG-MID-QL Method:SW846 7470A Project:421422-CHLS-M Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.1	0.1	ug/L	<QL	2	1.95	97		75--125	2	2.01	101		3		0--20

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory QC Report

CHLS-P_071625 COC 18869, 18927

Workgroup: WG201302 Total Metals by ICPMS

MB:WG201302-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.05	0.1	ug/L		<QL
Sodium, Total	50	100	ug/L		<QL
Magnesium, Total	25	50	ug/L		<QL
Aluminum, Total	2.5	5	ug/L		<QL
Phosphorus, Total	50	100	ug/L		<QL
Potassium, Total	50	100	ug/L		<QL
Calcium, Total	25	50	ug/L		<QL
Vanadium, Total	0.038	0.075	ug/L		<QL
Chromium, Total	0.1	0.2	ug/L		<QL
Manganese, Total	0.05	0.1	ug/L		<QL
Iron, Total	5	10	ug/L		<QL
Cobalt, Total	0.025	0.05	ug/L		<QL
Nickel, Total	0.05	0.1	ug/L		<QL
Copper, Total	0.1	0.2	ug/L		<QL
Zinc, Total	0.25	0.5	ug/L		<QL
Arsenic, Total	0.025	0.05	ug/L		<QL
Selenium, Total	0.25	0.5	ug/L		<QL
Silver, Total	0.02	0.04	ug/L		<QL
Cadmium, Total	0.025	0.05	ug/L		<QL
Tin, Total	0.25	0.5	ug/L		<QL
Antimony, Total	0.15	0.3	ug/L		<QL
Barium, Total	0.25	0.5	ug/L		<QL
Thallium, Total	0.038	0.075	ug/L		<QL
Lead, Total	0.05	0.1	ug/L		<QL

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory QC Report

CHLS-P_071625 COC 18869, 18927

SB:WG201302-2 MB:WG201302-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.05	0.1	ug/L	<QL	20	20.1	101		85--115
Sodium, Total	50	100	ug/L	<QL	5000	5220	104		85--115
Magnesium, Total	25	50	ug/L	<QL	5000	5270	105		85--115
Aluminum, Total	2.5	5	ug/L	<QL	200	205	102		85--115
Phosphorus, Total	50	100	ug/L	<QL	5000	4930	99		85--115
Potassium, Total	50	100	ug/L	<QL	5000	5100	102		85--115
Calcium, Total	25	50	ug/L	<QL	5000	4900	98		85--115
Vanadium, Total	0.038	0.075	ug/L	<QL	20	20.4	102		85--115
Chromium, Total	0.1	0.2	ug/L	<QL	20	21.3	106		85--115
Manganese, Total	0.05	0.1	ug/L	<QL	20	20.9	105		85--115
Iron, Total	5	10	ug/L	<QL	5000	5240	105		85--115
Cobalt, Total	0.025	0.05	ug/L	<QL	20	21.5	108		85--115
Nickel, Total	0.05	0.1	ug/L	<QL	20	21.8	109		85--115
Copper, Total	0.1	0.2	ug/L	<QL	20	22.4	112		85--115
Zinc, Total	0.25	0.5	ug/L	<QL	20	21.9	109		85--115
Arsenic, Total	0.025	0.05	ug/L	<QL	20	19.4	97		85--115
Selenium, Total	0.25	0.5	ug/L	<QL	20	20.5	103		85--115
Silver, Total	0.02	0.04	ug/L	<QL	20	20.8	104		85--115
Cadmium, Total	0.025	0.05	ug/L	<QL	20	20.4	102		85--115
Tin, Total	0.25	0.5	ug/L	<QL	20	20.1	101		85--115
Antimony, Total	0.15	0.3	ug/L	<QL	20	19.8	99		85--115
Barium, Total	0.25	0.5	ug/L	<QL	20	21	105		85--115
Thallium, Total	0.038	0.075	ug/L	<QL	20	22.2	111		85--115
Lead, Total	0.05	0.1	ug/L	<QL	20	22.2	111		85--115

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory QC Report

CHLS-P_071625 COC 18869, 18927

MSD:WG201302-4 MS:WG201302-3 L86443-1 Matrix: LEACHATE Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	0.993	0.993	ug/L	<QL	199	198	100		75--125	199	198	99		0		0--20
Sodium, Total	993	993	ug/L	1460000	49600	1520000		4xRule	75--125	49600	1500000		4xRule	1		0--20
Magnesium, Total	496	496	ug/L	82400	49600	134000	104		75--125	49600	132000	100		1		0--20
Aluminum, Total	49.6	49.6	ug/L	1040	1990	3150	106		75--125	1990	3220	110		2		0--20
Phosphorus, Total	993	993	ug/L	8430	49600	59900	104		75--125	49600	59700	103		0		0--20
Potassium, Total	993	993	ug/L	532000	49600	600000		4xRule	75--125	49600	584000		4xRule	3		0--20
Calcium, Total	496	496	ug/L	67000	49600	118000	104		75--125	49600	116000	99		2		0--20
Vanadium, Total	0.745	0.745	ug/L	52.8	199	257	103		75--125	199	254	101		1		0--20
Chromium, Total	1.99	1.99	ug/L	175	199	381	104		75--125	199	373	100		2		0--20
Manganese, Total	0.993	0.993	ug/L	554	199	767	107		75--125	199	753	100		2		0--20
Iron, Total	99.3	99.3	ug/L	10100	49600	59600	100		75--125	49600	59500	100		0		0--20
Cobalt, Total	0.496	0.496	ug/L	35.9	199	244	105		75--125	199	246	106		1		0--20
Nickel, Total	0.993	0.993	ug/L	146	199	348	102		75--125	199	343	99		1		0--20
Copper, Total	1.99	1.99	ug/L	13.3	199	230	109		75--125	199	225	107		2		0--20
Zinc, Total	4.96	4.96	ug/L	323	199	537	108		75--125	199	526	102		2		0--20
Arsenic, Total	0.496	0.496	ug/L	142	199	340	100		75--125	199	345	102		1		0--20
Selenium, Total	4.96	4.96	ug/L	<QL	199	209	105		75--125	199	209	105		0		0--20
Silver, Total	0.397	0.397	ug/L	<QL	199	192	97		75--125	199	193	97		1		0--20
Cadmium, Total	0.496	0.496	ug/L	<QL	199	195	98		75--125	199	196	99		0		0--20
Tin, Total	4.96	4.96	ug/L	10.6	199	185	88		75--125	199	179	85		3		0--20
Antimony, Total	2.98	2.98	ug/L	15.8	199	224	105		75--125	199	217	101		3		0--20
Barium, Total	4.96	4.96	ug/L	97.7	199	307	105		75--125	199	298	101		3		0--20
Thallium, Total	0.745	0.745	ug/L	<QL	199	204	103		75--125	199	200	101		2		0--20
Lead, Total	0.993	0.993	ug/L	2.16	199	205	102		75--125	199	200	100		2		0--20

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory QC Report

CHLS-P_071625 COC 18869, 18927

Workgroup: WG201342 Total Metals by ICPMS

MB:WG201342-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total	0.025	0.05	ug/L		<QL

SB:WG201342-2 MB:WG201342-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Arsenic, Total	0.025	0.05	ug/L	<QL	20	19.5	98		85--115

MSD:WG201342-4 MS:WG201342-3 L86447-1 Matrix: LEACHATE Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Arsenic, Total	0.5	0.5	ug/L	140	200	338	99		75--125	198	345	104		2		0--20

==========

4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 07/09/25

Department of Natural Resources and Parks
Solid Waste Division

No. **18869**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25.1)

Lab No.	Sample ID	Date	Time	2	2.1	4	38	5	6	7	8	9	10	12	14	16	42	49.1	17	18	21	52	53	54	56	57	58	24	23	23+	23.1	25	25.1	25.2	26	20	27	28	29	30	31	32	34	Number of Bottles	Remarks
				CHGW Cedar Hills GW Qtly	CHGW Cedar Hills EPZ GW Qtly	CHGW/VAGW Appendix III GW	CHGW-OS Cedar Hills GW Offsite	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 Sta. E-1	CHSW-P Cedar Hills SW ISGP	CHSW-TD Cedar Hills SW Top Deck	CHSW-E CH Emergency	CFSW Cedar Falls SW Qtly	DUSW Duvall SW Qtly	VASW Vashon SW Qtly-WEIRS	HTSW-P Houghton SW NPDES	SHSW-P Shoreline SW NPDES	FASW-P Factoria SW NPDES	ENSW-P Enumclaw SW NPDES	ALSW-P Algona SW NPDES	VASW-P Vashon SW NPDES	CHTW Cedar Hills Truckwash	CHLS-M Cedar Hills Leachate Mthly	CHLS-M_MOD CH Leachate Mods Mthly	CHLS-M_As CH Leachate As Semi-Ann.	CHLS-P CH L Permit (wkly, 1st)	CHLS-P CH L Permit (mnthly)	CHLS-P CH L Permit (wkly, 2nd)	ALLS Algona WW Permit	BLLS Bow Lake WW Permit	ENLS Enumclaw WW Permit	FALS Factoria WW Permit	SRLS Shoreline WW Permit	HTLS Houghton WW Permit	RELS Renton WW Permit	VALS-P Vashon WW Permit Tanker	VALS-Q Vashon Leachate Qtly		
				GROUNDWATER											SURFACE WATER							TS						LEACHATE/WASTEWATER				PERMIT											
86443-1	LEPS 25*708P	07/08/25	1000																													X												2	

Relinquished By Sampler: L	Date: 07/09/25	Received By	Date	Observations/Comments/Special Instructions: Nutrients field filtered	Total # of Bottles: 2
Sampler Signature: E. Wajda		Signature			
Sampler Printed Name: KCSWD	Time: 1229	Printed Name	Time		
Company		Company			
Relinquished By	Date	Received By: Jason Kinnard	Date: 7/9/25		
Signature		Signature			
Printed Name	Time	Printed Name: KCL	Time: 1220		
Company		Company			

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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. Receiving lab is to retain the original and create a copy for KCSWD personnel to keep.

FFB - Field Filtration Blank
FQ - Field QC

v4.00 (Rev 12/2023)

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 826493									
	-1									
40 mL clear vial (VOA)										
60 mL CWM HDPE	1									
125 mL CNM HDPE										
125 mL CWM HDPE										
125 mL GANM w/HCl										
250 mL CWM HDPE										
250 mL GAWM w/H_2SO_4										
500 mL AWM HDPE										
500 mL CWM HDPE										
500 mL CWM PP (MICRO)										
500 mL HDPE (METALS)	1									
500 mL GAWM										
1L CWM HDPE										
1L GANM										
1L GAWM w/ H_2SO_4										
2L CWM HDPE:										
Other -										
Other -										
Other -										
Other -										
Other -										
Total # of Samples	2									

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	1.6 11.5 11.5	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 7-8-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P(25.1)

Receive Date: 7-9-25 COC / SDG No.: 18869

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other: NH_4NO_3 N / H_2SO_4 : (Y)			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other: Nutrients field filtered			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____ Date / Time Completed: JUL 09 '25 12:28

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Chain of Custody Record

Environmental Monitoring Program

Date: 7/11/25

Department of Natural Resources and Parks
Solid Waste Division

No. **18927**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25.2)

Lab No.	Sample ID	Date	Time
86447-1	LEPS250710P	7/10/25	1000

| Project Site Test Reference | | |

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 86947 -1
40 mL clear vial (VOA)	
60 mL CWM HDPE	
125 mL CNM HDPE	
125 mL CWM HDPE	
125 mL GANM w/HCl	
250 mL CWM HDPE	
250 mL GAWM w/H_2SO_4	
500 mL AWM HDPE	
500 mL CWM HDPE	
500 mL CWM PP (MICRO)	
500 mL HDPE (METALS)	1
500 mL GAWM	
1L CWM HDPE	
1L GANM	
1L GAWM w/ H_2SO_4	
2L CWM HDPE:	
Other -	
Other -	
Other -	
Other -	
Other -	
Total # of Samples	1

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	2.1 122623	Delivery Location	Y / N	

Sub-Contracting: Y / N — List Product(s):

Changes: Y / N — List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 7-10-25 — Project No.: 421422

VTRP Collect Date(s): — — Project Site Test Reference: CHLS-P(25.2)

Receive Date: 7-11-25 — COC / SDG No.: 18927

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: JUL 11 '25 10:55

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

July 24, 2025

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P)

Sample Id.	Sample Collect Date	COC
LEPS250715P	**7/15/2025**	**18964**
LEPS250717P	**7/17/2025**	**18965**

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 2 leachate permit samples collected July 15 and 17, 2025.

Sample Receiving Comments
No sample receiving anomalies were observed.

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Metals QC Information

All calculable QC results for metals parameters were within laboratory control limits with the following exception.

During **Total Metals** analysis of analytical batch WG201400, the recovery of ***total tin*** from the matrix spike (MS) exceeded the lower laboratory control limit. Sample LEPS250715P was used to prepare the MS. The *total tin* result for sample LEPS250715P was qualified G based on this exceedance and may be biased low.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,



Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Sample Data

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 07/24/2025
Report Group: CHLS-P_072225

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250715P**
SDG / Lab Sample ID: **18964 / L86482-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **07/15/2025**
Login Date: **07/15/2025**
Matrix: **LEACHATE**

Analyses Requested:

6020B, P-ICPMS, Metals

6020B, SWD-ICPMS23, Metals

7470A, HG-CVAA-M, Metals

Client Sample ID: **LEPS250717P**
SDG / Lab Sample ID: **18965 / L86482-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **07/17/2025**
Login Date: **07/17/2025**
Matrix: **LEACHATE**

Analyses Requested:

6020B, AS-ICPMS, Metals

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 07/24/2025
Report Group: CHLS-P_072225

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250715P**
CoC / Lab Sample ID: **18964 / L86482-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **07/15/2025**
Login Date: **07/15/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Aluminum, Total	10	mg/L	1.17		.0486	.0486		07/16/2025	07/17/2025	WG201400
Antimony, Total	10	mg/L	.0159		.00291	.00291		07/16/2025	07/17/2025	WG201400
Arsenic, Total	10	mg/L	.149		.000486	.000486	1	07/16/2025	07/17/2025	WG201400
Barium, Total	10	mg/L	.11		.00486	.00486		07/16/2025	07/17/2025	WG201400
Beryllium, Total	10	mg/L	<.000971	U	.000971	.000971		07/16/2025	07/17/2025	WG201400
Cadmium, Total	10	mg/L	<.000486	U	.000486	.000486	0.5	07/16/2025	07/17/2025	WG201400
Calcium, Total	10	mg/L	72.7		.486	.486		07/16/2025	07/17/2025	WG201400
Chromium, Total	10	mg/L	.18		.00194	.00194	2.75	07/16/2025	07/17/2025	WG201400
Cobalt, Total	10	mg/L	.0372		.000486	.000486		07/16/2025	07/17/2025	WG201400
Copper, Total	10	mg/L	.0112		.00194	.00194	3	07/16/2025	07/17/2025	WG201400
Iron, Total	10	mg/L	9.5		.0971	.0971		07/16/2025	07/17/2025	WG201400
Lead, Total	10	mg/L	.00179		.000971	.000971	2	07/16/2025	07/17/2025	WG201400
Magnesium, Total	10	mg/L	78		.486	.486		07/16/2025	07/17/2025	WG201400
Manganese, Total	10	mg/L	.599		.000971	.000971		07/16/2025	07/17/2025	WG201400
Nickel, Total	10	mg/L	.151		.000971	.000971	2.5	07/16/2025	07/17/2025	WG201400
Phosphorus, Total	10	mg/L	8.82		.971	.971		07/16/2025	07/17/2025	WG201400
Potassium, Total	10	mg/L	567		.971	.971		07/16/2025	07/17/2025	WG201400
Selenium, Total	10	mg/L	<.00486	U	.00486	.00486		07/16/2025	07/17/2025	WG201400
Silver, Total	10	mg/L	<.000388	U	.000388	.000388	1	07/16/2025	07/17/2025	WG201400
Sodium, Total	10	mg/L	1520		.971	.971		07/16/2025	07/17/2025	WG201400
Thallium, Total	10	mg/L	<.000728	DU	.000728	.000728		07/16/2025	07/17/2025	WG201400
Tin, Total	10	mg/L	.0127	G	.00486	.00486		07/16/2025	07/17/2025	WG201400
Vanadium, Total	10	mg/L	.0561		.000728	.000728		07/16/2025	07/17/2025	WG201400
Zinc, Total	10	mg/L	.284		.00486	.00486	5	07/16/2025	07/17/2025	WG201400
Mercury, Total	2	mg/L	<.0001	U	.0001	.0001		07/17/2025	07/18/2025	WG201436

Client Sample ID: **LEPS250717P**
CoC / Lab Sample ID: **18965 / L86482-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **07/17/2025**
Login Date: **07/17/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.149		.0005	.0005	1	07/18/2025	07/21/2025	WG201442

Target Parameter Count for Report Group: 26

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Quality Control Data

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory QC Report

CHLS-P_072225 COC 18964, 18965

Workgroup: WG201400 Total Metals by ICPMS

MB:WG201400-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD (Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.05	0.1	ug/L		<QL
Sodium, Total	50	100	ug/L		<QL
Magnesium, Total	25	50	ug/L		<QL
Aluminum, Total	2.5	5	ug/L		<QL
Phosphorus, Total	50	100	ug/L		<QL
Potassium, Total	50	100	ug/L		<QL
Calcium, Total	25	50	ug/L		<QL
Vanadium, Total	0.038	0.075	ug/L		<QL
Chromium, Total	0.1	0.2	ug/L		<QL
Manganese, Total	0.05	0.1	ug/L		<QL
Iron, Total	5	10	ug/L		<QL
Cobalt, Total	0.025	0.05	ug/L		<QL
Nickel, Total	0.05	0.1	ug/L		<QL
Copper, Total	0.1	0.2	ug/L		<QL
Zinc, Total	0.25	0.5	ug/L		<QL
Arsenic, Total	0.025	0.05	ug/L		<QL
Selenium, Total	0.25	0.5	ug/L		<QL
Silver, Total	0.02	0.04	ug/L		<QL
Cadmium, Total	0.025	0.05	ug/L		<QL
Tin, Total	0.25	0.5	ug/L		<QL
Antimony, Total	0.15	0.3	ug/L		<QL
Barium, Total	0.25	0.5	ug/L		<QL
Thallium, Total	0.038	0.075	ug/L		<QL
Lead, Total	0.05	0.1	ug/L		<QL

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King County Environmental Laboratory QC Report

CHLS-P_072225 COC 18964, 18965

SB:WG201400-2 MB:WG201400-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.05	0.1	ug/L	<QL	20	19.6	98		85--115
Sodium, Total	50	100	ug/L	<QL	5000	5070	101		85--115
Magnesium, Total	25	50	ug/L	<QL	5000	4860	97		85--115
Aluminum, Total	2.5	5	ug/L	<QL	200	195	97		85--115
Phosphorus, Total	50	100	ug/L	<QL	5000	4990	100		85--115
Potassium, Total	50	100	ug/L	<QL	5000	4930	99		85--115
Calcium, Total	25	50	ug/L	<QL	5000	4850	97		85--115
Vanadium, Total	0.038	0.075	ug/L	<QL	20	20.1	100		85--115
Chromium, Total	0.1	0.2	ug/L	<QL	20	20.7	104		85--115
Manganese, Total	0.05	0.1	ug/L	<QL	20	20.1	100		85--115
Iron, Total	5	10	ug/L	<QL	5000	5180	104		85--115
Cobalt, Total	0.025	0.05	ug/L	<QL	20	21.1	106		85--115
Nickel, Total	0.05	0.1	ug/L	<QL	20	21.7	109		85--115
Copper, Total	0.1	0.2	ug/L	<QL	20	22	110		85--115
Zinc, Total	0.25	0.5	ug/L	<QL	20	21.7	108		85--115
Arsenic, Total	0.025	0.05	ug/L	<QL	20	19.8	99		85--115
Selenium, Total	0.25	0.5	ug/L	<QL	20	19.4	97		85--115
Silver, Total	0.02	0.04	ug/L	<QL	20	19.9	99		85--115
Cadmium, Total	0.025	0.05	ug/L	<QL	20	19.3	96		85--115
Tin, Total	0.25	0.5	ug/L	<QL	20	19.6	98		85--115
Antimony, Total	0.15	0.3	ug/L	<QL	20	18.6	93		85--115
Barium, Total	0.25	0.5	ug/L	<QL	20	20.1	100		85--115
Thallium, Total	0.038	0.075	ug/L	<QL	20	20.9	104		85--115
Lead, Total	0.05	0.1	ug/L	<QL	20	18.5	93		85--115

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory QC Report

CHLS-P_072225 COC 18964, 18965

MSD:WG201400-4 MS:WG201400-3 L86482-1 Matrix: LEACHATE Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	0.979	0.979	ug/L	<QL	196	187	95		75--125	195	186	96		1		0--20
Sodium, Total	979	979	ug/L	1520000	49000	1570000		4xRule	75--125	48600	1590000		4xRule	1		0--20
Magnesium, Total	490	490	ug/L	78000	49000	132000	110		75--125	48600	134000	115		2		0--20
Aluminum, Total	49	49	ug/L	1170	1960	3110	99		75--125	1950	3180	104		2		0--20
Phosphorus, Total	979	979	ug/L	8820	49000	57800	100		75--125	48600	58500	102		1		0--20
Potassium, Total	979	979	ug/L	567000	49000	619000		4xRule	75--125	48600	629000		4xRule	2		0--20
Calcium, Total	490	490	ug/L	72700	49000	120000	97		75--125	48600	121000	100		1		0--20
Vanadium, Total	0.734	0.734	ug/L	56.1	196	249	98		75--125	195	250	100		1		0--20
Chromium, Total	1.96	1.96	ug/L	180	196	372	98		75--125	195	378	101		1		0--20
Manganese, Total	0.979	0.979	ug/L	599	196	789	97		75--125	195	800	103		1		0--20
Iron, Total	97.9	97.9	ug/L	9500	49000	57800	99		75--125	48600	58600	101		1		0--20
Cobalt, Total	0.49	0.49	ug/L	37.2	196	235	101		75--125	195	235	101		0		0--20
Nickel, Total	0.979	0.979	ug/L	151	196	348	100		75--125	195	350	102		1		0--20
Copper, Total	1.96	1.96	ug/L	11.2	196	211	102		75--125	195	211	103		0		0--20
Zinc, Total	4.9	4.9	ug/L	284	196	479	99		75--125	195	479	100		0		0--20
Arsenic, Total	0.49	0.49	ug/L	149	196	345	100		75--125	195	343	100		1		0--20
Selenium, Total	4.9	4.9	ug/L	<QL	196	198	101		75--125	195	194	100		2		0--20
Silver, Total	0.392	0.392	ug/L	<QL	196	181	92		75--125	195	180	92		1		0--20
Cadmium, Total	0.49	0.49	ug/L	<QL	196	183	93		75--125	195	182	93		0		0--20
Tin, Total	4.9	4.9	ug/L	12.7	196	151	70	*	75--125	195	172	82		13		0--20
Antimony, Total	2.94	2.94	ug/L	15.9	196	199	93		75--125	195	198	94		1		0--20
Barium, Total	4.9	4.9	ug/L	110	196	312	103		75--125	195	314	105		1		0--20
Thallium, Total	0.734	0.734	ug/L	<QL	196	193	99		75--125	195	187	96		3		0--20
Lead, Total	0.979	0.979	ug/L	1.79	196	184	93		75--125	195	184	93		0		0--20

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory QC Report

CHLS-P_072225 COC 18964, 18965

Workgroup: WG201436 Total Mercury by CVAA

MB:WG201436-1 Matrix: BLANK WTR Listtype:MTHG-MID-QL Method:SW846 7470A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.025	0.05	ug/L		<QL

SB:WG201436-2 MB:WG201436-1 Matrix: BLANK WTR Listtype:MTHG-MID-QL Method:SW846 7470A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.025	0.05	ug/L	<QL	1	1.04	104		85--115

MSD:WG201436-4 MS:WG201436-3 L86445-2 Matrix: LEACHATE Listtype:MTHG-MID-QL Method:SW846 7470A Project:421422-CHLS-M_MOD Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.1	0.1	ug/L	<QL	2	2.06	103		75--125	2	2.08	104		1		0--20

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory QC Report

CHLS-P_072225 COC 18964, 18965

Workgroup: WG201442 Total Metals by ICPMS

MB:WG201442-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total	0.025	0.05	ug/L		<QL

SB:WG201442-2 MB:WG201442-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Arsenic, Total	0.025	0.05	ug/L	<QL	20	18.5	93		85--115

MSD:WG201442-4 MS:WG201442-3 L86482-2 Matrix: LEACHATE Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Arsenic, Total	0.501	0.501	ug/L	149	200	356	103		75--125	200	362	106		2		0--20

==========

4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 7/15/25

Department of Natural Resources and Parks
Solid Waste Division

No. **18964**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P(25)

Lab No.	Sample ID	Date	Time	Number of Containers	Remarks
86482-1	LEPS250715P	7/15/25	0900	1	

Project Site Test Reference

| | | |

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS		
Bottle Description	Login Number(s)	864882
40 mL clear vial (VOA)		
60 mL CWM HDPE		
125 mL CNM HDPE		
125 mL CWM HDPE		
125 mL GANM w/HCl		
250 mL CWM HDPE		
250 mL GAWM w/H_2SO_4		
500 mL AWM HDPE		
500 mL CWM HDPE		
500 mL CWM PP (MICRO)		
500 mL HDPE (METALS)		1
500 mL GAWM		
1L CWM HDPE		
1L GANM		
1L GAWM w/ H_2SO_4		
2L CWM HDPE:		
Other -		
Other -		
Other -		
Other -		
Other -		
Total # of Samples	Number of bottles per sample	1

SAMPLE RECEIPT CONDITIONS					
CONDITION	**Acceptable?**	**Comment**	**CONDITION**	**Acceptable?**	**Comment**
Labels / Fieldsheets	(Y) / N		Volumes	(Y) / N	
Container	(Y) / N		Holding Times	(Y) / N	
Cooler Temperature (° C)	(Y) / N	1.7 11.8 11.7	Delivery Location	(Y) / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 7-15-25 Project No.: 421422

VTRP Collect Date(s): ____ Project Site Test Reference: CHLS-P(25)

Receive Date: 7-19-25 COC / SDG No.: 189764

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: JUL 15'25 14:25

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Chain of Custody Record

Environmental Monitoring Program

Date: 7/17/25

Department of
Natural Resources and Parks
Solid Waste Division

No. **18965**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P(25.2)

Lab No.	Sample ID	Date	Time
0L482-2	LEPS250717P	7/17/25	0900

Project Site Test Reference

	CHGW Cedar Hills GW Qtly	CHGW Cedar Hills EPZ GW Qtly	CHGW/VAGW Appendix III GW	CHGW-OS Cedar Hills GW Offsite	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 Sta. E-1	CHSW-TD Cedar Hills SW Top Deck	CHSW-E CH Emergency	CFSW Cedar Falls SW Qtly	DUSW Duvall SW Qtly	VASW Vashon SW Qtly-WEIRS	ISGP: CHSW-P Cedar Hills SW	ISGP: HTSW-P Houghton SW	ISGP: SHSW-P Shoreline SW	ISGP: FASW-P Factoria SW	ISGP: ENSW-P Enumclaw SW	ISGP: ALSW-P Algona SW	ISGP: VASW-P Vashon SW	CHTW Cedar Hills Truckwash	CHLS-M Cedar Hills Leachate Mthly	CHLS-M_MOD CH Leachate Mods Mthly	CHLS-M_As CH Leachate As Semi-Ann.	PRETREATMENT PERMITS: CHLS-P CH L Permit (wkly, 1st)	CHLS-P CH L Permit (monthly)	CHLS-P CH L Permit (wkly, 2nd)	ALLS-P Algona WW Permit	BLLS-P Bow Lake WW Permit	ENLS-P Enumclaw WW Permit	FALS-P Factoria WW Permit	SRLS-P Shoreline WW Permit	HTLS-P Houghton WW Permit	RELS-P Renton WW Permit	VALS-P Vashon WW Permit Tanker	VALS-Q Vashon Leachate Qtly	Number of Containers	Remarks
	GROUNDWATER											SURFACE WATER													LEACHATE/WASTEWATER															
	2	2.1	4	38	5	6	7	8	9	10	12	14	42	49.1	17	18	21	16	52	53	54	56	57	58	24	23	23+	23.1	25	25.1	25.2	26	20	27	28	29	30	31	32	34		
0L482-2	LEPS250717P	7/17/25	0900																												Y									1	

Relinquished By Sampler: Hannah Spear
Sampler Signature: H. Spear
Sampler Printed Name: KCSWD
Company
Date: 7/17/25
Time: 1105

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By
Signature
Printed Name
Company
Date
Time

Received By: Jason Kinyard
Signature
Printed Name: KCEL
Company
Date: 7/17/25
Time: 1414

Observations/Comments/Special Instructions:

Arsenic Only

Custody Sealed 7/17/25 @ 1105

Total # of Containers: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v5.0 (Rev 6/2025)

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s)										
	86482 -2										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	20.1/21.9	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 7-16-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P(25.2)

Receive Date: 7-17-25 COC / SDG No.: 18965

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

JUL 17 '25 14:24

Date / Time Completed: _____

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

August 1, 2025

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P)

Sample Id.	Sample Collect Date	COC
LEPS250722P	**7/22/2025**	**19008**
LEPS250724P	**7/24/2025**	**18931**

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 2 leachate permit samples collected July 22 and 24, 2025.

Sample Receiving Comments
No sample receiving anomalies were observed.

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Metals QC Information

All calculable QC results for metals parameters were within laboratory control limits.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,



Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Sample Data

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 08/01/2025
Report Group: CHLS-P_072925

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250724P**
SDG / Lab Sample ID: **18931 / L86538-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **07/24/2025**
Login Date: **07/24/2025**
Matrix: **LEACHATE**

Analyses Requested:

6020B, AS-ICPMS, Metals

Client Sample ID: **LEPS250722P**
SDG / Lab Sample ID: **19008 / L86538-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **07/22/2025**
Login Date: **07/22/2025**
Matrix: **LEACHATE**

Analyses Requested:

6020B, P-ICPMS, Metals

6020B, SWD-ICPMS23, Metals

7470A, HG-CVAA-M, Metals

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 08/01/2025
Report Group: CHLS-P_072925

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250724P**
CoC / Lab Sample ID: **18931 / L86538-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **07/24/2025**
Login Date: **07/24/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.168		.000511	.000511	1	07/25/2025	07/28/2025	WG201581

Client Sample ID: **LEPS250722P**
CoC / Lab Sample ID: **19008 / L86538-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **07/22/2025**
Login Date: **07/22/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Aluminum, Total	10	mg/L	.707		.0497	.0497		07/25/2025	07/28/2025	WG201581
Antimony, Total	10	mg/L	.0169		.00298	.00298		07/25/2025	07/28/2025	WG201581
Arsenic, Total	10	mg/L	.159		.000497	.000497	1	07/25/2025	07/28/2025	WG201581
Barium, Total	10	mg/L	.0838		.00497	.00497		07/25/2025	07/28/2025	WG201581
Beryllium, Total	10	mg/L	<.000993	U	.000993	.000993		07/25/2025	07/28/2025	WG201581
Cadmium, Total	10	mg/L	<.000497	U	.000497	.000497	0.5	07/25/2025	07/28/2025	WG201581
Calcium, Total	10	mg/L	59.3		.497	.497		07/25/2025	07/28/2025	WG201581
Chromium, Total	10	mg/L	.203		.00199	.00199	2.75	07/25/2025	07/28/2025	WG201581
Cobalt, Total	10	mg/L	.0395		.000497	.000497		07/25/2025	07/28/2025	WG201581
Copper, Total	10	mg/L	.00674		.00199	.00199	3	07/25/2025	07/28/2025	WG201581
Iron, Total	10	mg/L	8.64		.0993	.0993		07/25/2025	07/28/2025	WG201581
Lead, Total	10	mg/L	.00126		.000993	.000993	2	07/25/2025	07/28/2025	WG201581
Magnesium, Total	10	mg/L	90.1		.497	.497		07/25/2025	07/28/2025	WG201581
Manganese, Total	10	mg/L	.323		.000993	.000993		07/25/2025	07/28/2025	WG201581
Nickel, Total	10	mg/L	.161		.000993	.000993	2.5	07/25/2025	07/28/2025	WG201581
Phosphorus, Total	10	mg/L	8.29		.993	.993		07/25/2025	07/28/2025	WG201581
Potassium, Total	10	mg/L	639		.993	.993		07/25/2025	07/28/2025	WG201581
Selenium, Total	10	mg/L	<.00497	U	.00497	.00497		07/25/2025	07/28/2025	WG201581
Silver, Total	10	mg/L	<.000397	U	.000397	.000397	1	07/25/2025	07/28/2025	WG201581
Sodium, Total	10	mg/L	1670		.993	.993		07/25/2025	07/28/2025	WG201581
Thallium, Total	10	mg/L	<.000745	U	.000745	.000745		07/25/2025	07/28/2025	WG201581
Tin, Total	10	mg/L	.0106		.00497	.00497		07/25/2025	07/28/2025	WG201581
Vanadium, Total	10	mg/L	.0617		.000745	.000745		07/25/2025	07/28/2025	WG201581
Zinc, Total	10	mg/L	.188		.00497	.00497	5	07/25/2025	07/28/2025	WG201581
Mercury, Total	2	mg/L	<.0001	U	.0001	.0001		07/29/2025	07/29/2025	WG201634

Target Parameter Count for Report Group: 26

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Quality Control Data

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory QC Report

CHLS-P_072925 COC 18931 19008

Workgroup: WG201581 Total Metals by ICPMS

MB:WG201581-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD (Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.05	0.1	ug/L		<QL
Sodium, Total	50	100	ug/L		<QL
Magnesium, Total	25	50	ug/L		<QL
Aluminum, Total	2.5	5	ug/L		<QL
Phosphorus, Total	50	100	ug/L		<QL
Potassium, Total	50	100	ug/L		<QL
Calcium, Total	25	50	ug/L		<QL
Vanadium, Total	0.038	0.075	ug/L		<QL
Chromium, Total	0.1	0.2	ug/L		<QL
Manganese, Total	0.05	0.1	ug/L		<QL
Iron, Total	5	10	ug/L		<QL
Cobalt, Total	0.025	0.05	ug/L		<QL
Nickel, Total	0.05	0.1	ug/L		<QL
Copper, Total	0.1	0.2	ug/L		<QL
Zinc, Total	0.25	0.5	ug/L		<QL
Arsenic, Total	0.025	0.05	ug/L		<QL
Selenium, Total	0.25	0.5	ug/L		<QL
Silver, Total	0.02	0.04	ug/L		<QL
Cadmium, Total	0.025	0.05	ug/L		<QL
Tin, Total	0.25	0.5	ug/L		<QL
Antimony, Total	0.15	0.3	ug/L		<QL
Barium, Total	0.25	0.5	ug/L		<QL
Thallium, Total	0.038	0.075	ug/L		<QL
Lead, Total	0.05	0.1	ug/L		<QL

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory QC Report

CHLS-P_072925 COC 18931 19008

SB:WG201581-2 MB:WG201581-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.05	0.1	ug/L	<QL	20	20.6	103		85--115
Sodium, Total	50	100	ug/L	<QL	5000	4990	100		85--115
Magnesium, Total	25	50	ug/L	<QL	5000	5420	108		85--115
Aluminum, Total	2.5	5	ug/L	<QL	200	214	107		85--115
Phosphorus, Total	50	100	ug/L	<QL	5000	5100	102		85--115
Potassium, Total	50	100	ug/L	<QL	5000	5310	106		85--115
Calcium, Total	25	50	ug/L	<QL	5000	4950	99		85--115
Vanadium, Total	0.038	0.075	ug/L	<QL	20	20.8	104		85--115
Chromium, Total	0.1	0.2	ug/L	<QL	20	21.2	106		85--115
Manganese, Total	0.05	0.1	ug/L	<QL	20	20.3	101		85--115
Iron, Total	5	10	ug/L	<QL	5000	5400	108		85--115
Cobalt, Total	0.025	0.05	ug/L	<QL	20	21.4	107		85--115
Nickel, Total	0.05	0.1	ug/L	<QL	20	21.7	109		85--115
Copper, Total	0.1	0.2	ug/L	<QL	20	21.3	106		85--115
Zinc, Total	0.25	0.5	ug/L	<QL	20	21.5	107		85--115
Arsenic, Total	0.025	0.05	ug/L	<QL	20	20.4	102		85--115
Selenium, Total	0.25	0.5	ug/L	<QL	20	20.5	103		85--115
Silver, Total	0.02	0.04	ug/L	<QL	20	20.6	103		85--115
Cadmium, Total	0.025	0.05	ug/L	<QL	20	20.7	103		85--115
Tin, Total	0.25	0.5	ug/L	<QL	20	20.3	101		85--115
Antimony, Total	0.15	0.3	ug/L	<QL	20	20.7	103		85--115
Barium, Total	0.25	0.5	ug/L	<QL	20	20.8	104		85--115
Thallium, Total	0.038	0.075	ug/L	<QL	20	21.7	108		85--115
Lead, Total	0.05	0.1	ug/L	<QL	20	21.7	108		85--115

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory QC Report

CHLS-P_072925 COC 18931 19008

MSD:WG201581-4 MS:WG201581-3 L86538-1 Matrix: LEACHATE Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	1.01	1.01	ug/L	<QL	202	214	106		75--125	195	199	102		7		0--20
Sodium, Total	1010	1010	ug/L	1670000	50600	1810000		4xRule	75--125	48700	1840000		4xRule	1		0--20
Magnesium, Total	506	506	ug/L	90100	50600	142000	103		75--125	48700	137000	97		3		0--20
Aluminum, Total	50.6	50.6	ug/L	707	2020	2880	108		75--125	1950	2830	109		2		0--20
Phosphorus, Total	1010	1010	ug/L	8290	50600	61000	104		75--125	48700	59500	105		2		0--20
Potassium, Total	1010	1010	ug/L	639000	50600	697000		4xRule	75--125	48700	696000		4xRule	0		0--20
Calcium, Total	506	506	ug/L	59300	50600	108000	96		75--125	48700	106000	96		2		0--20
Vanadium, Total	0.759	0.759	ug/L	61.7	202	274	105		75--125	195	263	103		4		0--20
Chromium, Total	2.02	2.02	ug/L	203	202	407	101		75--125	195	403	103		1		0--20
Manganese, Total	1.01	1.01	ug/L	323	202	532	103		75--125	195	521	102		2		0--20
Iron, Total	101	101	ug/L	8640	50600	61100	104		75--125	48700	58900	103		4		0--20
Cobalt, Total	0.506	0.506	ug/L	39.5	202	250	104		75--125	195	241	104		4		0--20
Nickel, Total	1.01	1.01	ug/L	161	202	364	100		75--125	195	354	99		3		0--20
Copper, Total	2.02	2.02	ug/L	6.74	202	209	100		75--125	195	200	99		4		0--20
Zinc, Total	5.06	5.06	ug/L	188	202	384	97		75--125	195	379	98		1		0--20
Arsenic, Total	0.506	0.506	ug/L	159	202	374	106		75--125	195	365	106		3		0--20
Selenium, Total	5.06	5.06	ug/L	<QL	202	218	108		75--125	195	211	109		3		0--20
Silver, Total	0.405	0.405	ug/L	<QL	202	193	95		75--125	195	185	95		4		0--20
Cadmium, Total	0.506	0.506	ug/L	<QL	202	205	101		75--125	195	196	101		4		0--20
Tin, Total	5.06	5.06	ug/L	10.6	202	196	92		75--125	195	170	82		14		0--20
Antimony, Total	3.03	3.03	ug/L	16.9	202	231	106		75--125	195	225	107		3		0--20
Barium, Total	5.06	5.06	ug/L	83.8	202	301	107		75--125	195	296	109		1		0--20
Thallium, Total	0.759	0.759	ug/L	<QL	202	210	104		75--125	195	203	104		3		0--20
Lead, Total	1.01	1.01	ug/L	1.26	202	211	104		75--125	195	205	105		3		0--20

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory QC Report

CHLS-P_072925 COC 18931 19008

Workgroup: WG201634 Total Mercury by CVAA

MB:WG201634-1 Matrix: BLANK WTR Listtype:MTHG-MID-QL Method:SW846 7470A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.025	0.05	ug/L		<QL

SB:WG201634-2 MB:WG201634-1 Matrix: BLANK WTR Listtype:MTHG-MID-QL Method:SW846 7470A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.025	0.05	ug/L	<QL	1	1.01	101		85--115

MSD:WG201634-4 MS:WG201634-3 L86538-1 Matrix: LEACHATE Listtype:MTHG-MID-QL Method:SW846 7470A Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.1	0.1	ug/L	<QL	2	1.7	85		75--125	2	1.72	86		1		0--20

==========

4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 7/22/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19008**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25)

Lab No.	Sample ID	Date	Time
86538-1	LEPS250722P	7/22/25	0830

Project Site Test Reference

	CHGW	CHGW	CHGW/AGW	CHGW-OS	CFGW	DUGW	ENGW	HOGW	HTGW	PUGW	VAGW	CHSW-Q	CHSW-TD	CHSW-E	CFSW	DUSW	VASW	CHSW-P	HTSW-P	SHSW-P	FASW-P	ENSW-P	ALSW-P	VASW-P	CHTW	CHLS-M	CHLS-M_MOD	CHLS-M_As	CHLS-P	CHLS-P	CHLS-P	ALLS-P	BLLS-P	ENLS-P	FALS-P	SRLS-P	HTLS-P	RELS-P	VALS-P	VALS-Q	Number of Containers	Remarks
	Cedar Hills GW Qlty	Cedar Hills EPZ GW Qlty	Appendix III GW	Cedar Hills GW Offsite	Cedar Falls GW Qlty	Duvall GW Qlty	Enumclaw GW Qlty	Hobart GW Qlty	Houghton GW Qlty	Puyallup GW Qlty	Vashon GW Qlty	Cedar Hills SW Sta. E-1	Cedar Hills SW Top Deck	CH Emergency	Cedar Falls SW Qlty	Duvall SW Qlty	Vashon SW Qlty-WEIRS	Cedar Hills SW	Houghton SW	Shoreline SW	Factoria SW	Enumclaw SW	Algona SW	Vashon SW	Cedar Hills Truckwash	Cedar Hills Leachate Mthly	CH Leachate Mods Mthly	CH Leachate As Semt-Ann.	CH L Permit (wkly, 1st)	CH L Permit (mnthly)	CH L Permit (wkly, 2nd)	Algona WW Permit	Bow Lake WW Permit	Enumclaw WW Permit	Factoria WW Permit	Shoreline WW Permit	Houghton WW Permit	Renton WW Permit	Vashon WW Permit Tanker	Vashon Leachate Qlty		
	ISGP																							PRETREATMENT PERMITS																		
	GROUNDWATER											SURFACE WATER						LEACHATE/WASTEWATER																										
	2	2.1	4	38	5	6	7	8	9	10	12	14	42	49.1	17	18	21	16	52	53	54	56	57	58	24	23	23+	23.1	25	25.1	25.2	26	20	27	28	29	30	31	32	34		
86538-1																													X												1	<0.1 ppm Diss. Sulfide

Relinquished By Sampler: L. Rivera
Sampler Signature: L. Rivera
Sampler Printed Name: KCSWD
Company
Date: 7/22/25
Time: 1148

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By
Signature
Printed Name
Company
Date
Time

Received By: Jason Kinnaird
Signature
Printed Name: KCEC
Company
Date: 7-22-25
Time: 1400

Observations/Comments/Special Instructions:
Samples custody sealed on 7/22 at 1148.

Total # of Containers: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v5.0 (Rev 6/2025)

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

SWD SAMPLE RECEIPT RECORD

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s)										
	865538										
	-1										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										
	Number of bottles per sample										

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	2.2 2.1 2.1	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 7-22-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P625)

Receive Date: 7-22-25 COC / SDG No.: 19008

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____ Date / Time Completed: JUL 22 25 16:13

Chain of Custody Record

Environmental Monitoring Program

Date: 7/24/25

Department of Natural Resources and Parks
Solid Waste Division

No. **18931**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P(25.2)

Lab No.	Sample ID	Date	Time	2 CHGW Cedar Hills GW Qtly	2.1 CHGW Cedar Hills EPZ GW Qtly	4 CHGW/VAGW Appendix III SW	38 CHGW-OS Cedar Hills GW Offsite	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 Sta. E-1	16 CHSW-P Cedar Hills SW ISGP	42 CHSW-TD Cedar Hills SW Top Deck	49.1 CHSW-E CH Emergency	17 CFSW Cedar Falls SW Qtly	18 DUSW Duvall SW Qtly	21 VASW Vashon SW Qtly-WEIRS	52 HTSW-P TS Houghton SW NPDES	53 SHSW-P TS Shoreline SW NPDES	54 FASW-P TS Factoria SW NPDES	56 ENSW-P TS Enumclaw SW NPDES	57 ALSW-P TS Algona SW NPDES	58 VASW-P TS Vashon SW NPDES	24 CHTW Cedar Hills Truckwash	23 CHLS-M Cedar Hills Leachate Mthly	23+ CHLS-M_MOD CH Leachate Mods Mthly	23.1 CHLS-M_As CH Leachate As Sent-Ann.	25 CHLS-P PERMIT CH L Permit (wkly, 1st)	25.1 CHLS-P CH L Permit (mnthly)	25.2 CHLS-P CH L Permit (wkly, 2nd)	26 ALLS Algona WW Permit	20 BLLS Bow Lake WW Permit	27 ENLS Enumclaw WW Permit	28 FALS Factoria WW Permit	29 SRLS Shoreline WW Permit	30 HTLS Houghton WW Permit	31 RELS Renton WW Permit	32 VALS-P Vashon WW Permit Tanker	34 VALS-Q Vashon Leachate Qtly	Number of Bottles	Remarks
86538-2	LEPS250724P	7/24/25	0830																														X												1	Diss SWRDE CD.1

Relinquished By Sampler	Date	Received By	Date	Observations/Comments/Special Instructions:	Total # of Bottles:	1
Sampler Signature: N Reber	7/24/25	Signature		Arsenic Only *Custody sealed @ NR 7/24 1550 on 7/24/25 1250		
Sampler Printed Name: KCSWD	Time: NR 7/24 1550 * 1250	Printed Name	Time			
Company		Company				
Relinquished By	Date	Received By	Date: 7/24/25			
Signature		Signature: Jason Kinnard				
Printed Name	Time	Printed Name: KCEL	Time: 1400			
Company		Company				

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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. Receiving lab is to retain the original and create a copy for KCSWD personnel to keep.

FFB - Field Filtration Blank
FQ - Field QC

v4.00 (Rev 12/2023)

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 586538 -2										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	1.9 1.7 1.7	Delivery Location	Y / N	

Sub-Contracting: Y / N List Product(s):

Changes: Y / N List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 7-24-25 Project No.: 421422

VTRP Collect Date(s): _____ Project Site Test Reference: CHLS-P (25.2)

Receive Date: 7-24-25 COC / SDG No.: 18931

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: JUL 24 '25 14:23

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

August 7, 2025

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P)

Sample Id.	Sample Collect Date	COC
LEPS250729P	**7/29/2025**	**19021**
LEPS250731P	**7/31/2025**	**19025**

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 2 leachate permit samples collected July 29 and 31, 2025.

Sample Receiving Comments
No sample receiving anomalies were observed.

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Metals QC Information

All calculable QC results for metals parameters were within laboratory control limits with the following exceptions.

During **Total Metals** analysis of analytical batch WG201643, the recovery of ***total tin*** from the matrix spike (MS) and MS duplicate (MSD) exceeded the lower laboratory control limit. Sample LEPS250729P was used to prepare the MS/MSD. The *total tin* result for sample LEPS250729P was qualified G based on these exceedances. A trace amount of ***total chromium*** was detected in the method blank (MB). The reported *total chromium* concentrations in this batch were more that ten times higher than the MB result. The *total chromium* result for the MB was qualified B based on this trace detection.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,



Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Sample Data

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 08/07/2025
Report Group: CHLS-P_080525

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250729P**
SDG / Lab Sample ID: **19021 / L86571-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **07/29/2025**
Login Date: **07/29/2025**
Matrix: **LEACHATE**

Analyses Requested:

6020B, P-ICPMS, Metals

6020B, SWD-ICPMS23, Metals

7470A, HG-CVAA-M, Metals

Client Sample ID: **LEPS250731P**
SDG / Lab Sample ID: **19025 / L86571-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **07/31/2025**
Login Date: **07/31/2025**
Matrix: **LEACHATE**

Analyses Requested:

6020B, AS-ICPMS, Metals

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 08/07/2025
Report Group: CHLS-P_080525

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250729P**
CoC / Lab Sample ID: **19021 / L86571-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **07/29/2025**
Login Date: **07/29/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Aluminum, Total	10	mg/L	1.12		.0503	.0503		07/30/2025	08/01/2025	WG201643
Antimony, Total	10	mg/L	.0183		.00302	.00302		07/30/2025	08/01/2025	WG201643
Arsenic, Total	10	mg/L	.173		.000503	.000503	1	07/30/2025	08/01/2025	WG201643
Barium, Total	10	mg/L	.114		.00503	.00503		07/30/2025	08/01/2025	WG201643
Beryllium, Total	10	mg/L	<.00101	U	.00101	.00101		07/30/2025	08/01/2025	WG201643
Cadmium, Total	10	mg/L	<.000503	U	.000503	.000503	0.5	07/30/2025	08/01/2025	WG201643
Calcium, Total	10	mg/L	70.8		.503	.503		07/30/2025	08/01/2025	WG201643
Chromium, Total	10	mg/L	.216		.00201	.00201	2.75	07/30/2025	08/01/2025	WG201643
Cobalt, Total	10	mg/L	.0408		.000503	.000503		07/30/2025	08/01/2025	WG201643
Copper, Total	10	mg/L	.00967		.00201	.00201	3	07/30/2025	08/01/2025	WG201643
Iron, Total	10	mg/L	10.6		.101	.101		07/30/2025	08/01/2025	WG201643
Lead, Total	10	mg/L	.00173		.00101	.00101	2	07/30/2025	08/01/2025	WG201643
Magnesium, Total	10	mg/L	94.8		.503	.503		07/30/2025	08/01/2025	WG201643
Manganese, Total	10	mg/L	.544		.00101	.00101		07/30/2025	08/01/2025	WG201643
Nickel, Total	10	mg/L	.166		.00101	.00101	2.5	07/30/2025	08/01/2025	WG201643
Phosphorus, Total	10	mg/L	9.41		1.01	1.01		07/30/2025	08/01/2025	WG201643
Potassium, Total	10	mg/L	658		1.01	1.01		07/30/2025	08/01/2025	WG201643
Selenium, Total	10	mg/L	<.00503	U	.00503	.00503		07/30/2025	08/01/2025	WG201643
Silver, Total	10	mg/L	<.000402	U	.000402	.000402	1	07/30/2025	08/01/2025	WG201643
Sodium, Total	10	mg/L	1700		1.01	1.01		07/30/2025	08/01/2025	WG201643
Thallium, Total	10	mg/L	<.000754	U	.000754	.000754		07/30/2025	08/01/2025	WG201643
Tin, Total	10	mg/L	.011	G	.00503	.00503		07/30/2025	08/01/2025	WG201643
Vanadium, Total	10	mg/L	.0658	D	.000754	.000754		07/30/2025	08/01/2025	WG201643
Zinc, Total	10	mg/L	.248		.00503	.00503	5	07/30/2025	08/01/2025	WG201643
Mercury, Total	2	mg/L	<.0001	U	.0001	.0001		07/30/2025	07/31/2025	WG201660

Client Sample ID: **LEPS250731P**
CoC / Lab Sample ID: **19025 / L86571-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **07/31/2025**
Login Date: **07/31/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.171		.0005	.0005	1	08/04/2025	08/06/2025	WG201713

Target Parameter Count for Report Group: 26

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Quality Control Data

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory QC Report

CHLS-P_080525 COC 19021 19025

Workgroup: WG201643 Total Metals by ICPMS

MB:WG201643-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.05	0.1	ug/L		<QL
Sodium, Total	50	100	ug/L		<QL
Magnesium, Total	25	50	ug/L		<QL
Aluminum, Total	2.5	5	ug/L		<QL
Phosphorus, Total	50	100	ug/L		<QL
Potassium, Total	50	100	ug/L		<QL
Calcium, Total	25	50	ug/L		<QL
Vanadium, Total	0.038	0.075	ug/L		<QL
Chromium, Total	0.1	0.2	ug/L	0.257	B
Manganese, Total	0.05	0.1	ug/L		<QL
Iron, Total	5	10	ug/L		<QL
Cobalt, Total	0.025	0.05	ug/L		<QL
Nickel, Total	0.05	0.1	ug/L		<QL
Copper, Total	0.1	0.2	ug/L		<QL
Zinc, Total	0.25	0.5	ug/L		<QL
Arsenic, Total	0.025	0.05	ug/L		<QL
Selenium, Total	0.25	0.5	ug/L		<QL
Silver, Total	0.02	0.04	ug/L		<QL
Cadmium, Total	0.025	0.05	ug/L		<QL
Tin, Total	0.25	0.5	ug/L		<QL
Antimony, Total	0.15	0.3	ug/L		<QL
Barium, Total	0.25	0.5	ug/L		<QL
Thallium, Total	0.038	0.075	ug/L		<QL
Lead, Total	0.05	0.1	ug/L		<QL

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory QC Report

CHLS-P_080525 COC 19021 19025

SB:WG201643-2 MB:WG201643-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.05	0.1	ug/L	<QL	20	19.9	99		85--115
Sodium, Total	50	100	ug/L	<QL	5000	5290	106		85--115
Magnesium, Total	25	50	ug/L	<QL	5000	5200	104		85--115
Aluminum, Total	2.5	5	ug/L	<QL	200	207	103		85--115
Phosphorus, Total	50	100	ug/L	<QL	5000	5080	102		85--115
Potassium, Total	50	100	ug/L	<QL	5000	5190	104		85--115
Calcium, Total	25	50	ug/L	<QL	5000	5040	101		85--115
Vanadium, Total	0.038	0.075	ug/L	<QL	20	21.3	106		85--115
Chromium, Total	0.1	0.2	ug/L	0.257	20	21	105		85--115
Manganese, Total	0.05	0.1	ug/L	<QL	20	21.7	109		85--115
Iron, Total	5	10	ug/L	<QL	5000	5490	110		85--115
Cobalt, Total	0.025	0.05	ug/L	<QL	20	21.4	107		85--115
Nickel, Total	0.05	0.1	ug/L	<QL	20	21.8	109		85--115
Copper, Total	0.1	0.2	ug/L	<QL	20	21.5	108		85--115
Zinc, Total	0.25	0.5	ug/L	<QL	20	21.9	109		85--115
Arsenic, Total	0.025	0.05	ug/L	<QL	20	20.2	101		85--115
Selenium, Total	0.25	0.5	ug/L	<QL	20	20.1	100		85--115
Silver, Total	0.02	0.04	ug/L	<QL	20	20.6	103		85--115
Cadmium, Total	0.025	0.05	ug/L	<QL	20	20	100		85--115
Tin, Total	0.25	0.5	ug/L	<QL	20	20.3	102		85--115
Antimony, Total	0.15	0.3	ug/L	<QL	20	20.1	100		85--115
Barium, Total	0.25	0.5	ug/L	<QL	20	20.4	102		85--115
Thallium, Total	0.038	0.075	ug/L	<QL	20	21.6	108		85--115
Lead, Total	0.05	0.1	ug/L	<QL	20	20.2	101		85--115

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory QC Report

CHLS-P_080525 COC 19021 19025

MSD:WG201643-4 MS:WG201643-3 L86571-1 Matrix: LEACHATE Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	0.979	0.979	ug/L	<QL	196	205	105		75--125	195	204	104		1		0--20
Sodium, Total	979	979	ug/L	1700000	49000	1770000		4xRule	75--125	48800	1780000		4xRule	1		0--20
Magnesium, Total	490	490	ug/L	94800	49000	142000	96		75--125	48800	139000	91		2		0--20
Aluminum, Total	49	49	ug/L	1120	1960	3090	100		75--125	1950	3120	102		1		0--20
Phosphorus, Total	979	979	ug/L	9410	49000	60300	104		75--125	48800	60500	105		0		0--20
Potassium, Total	979	979	ug/L	658000	49000	708000		4xRule	75--125	48800	711000		4xRule	1		0--20
Calcium, Total	490	490	ug/L	70800	49000	122000	105		75--125	48800	121000	103		1		0--20
Vanadium, Total	0.734	0.734	ug/L	65.8	196	265	102		75--125	195	268	103		1		0--20
Chromium, Total	1.96	1.96	ug/L	216	196	415	102		75--125	195	414	101		0		0--20
Manganese, Total	0.979	0.979	ug/L	544	196	749	104		75--125	195	753	107		1		0--20
Iron, Total	97.9	97.9	ug/L	10600	49000	60300	102		75--125	48800	60700	103		1		0--20
Cobalt, Total	0.49	0.49	ug/L	40.8	196	241	102		75--125	195	233	99		3		0--20
Nickel, Total	0.979	0.979	ug/L	166	196	363	101		75--125	195	360	100		1		0--20
Copper, Total	1.96	1.96	ug/L	9.67	196	205	100		75--125	195	199	97		3		0--20
Zinc, Total	4.9	4.9	ug/L	248	196	445	101		75--125	195	439	98		1		0--20
Arsenic, Total	0.49	0.49	ug/L	173	196	376	103		75--125	195	377	104		0		0--20
Selenium, Total	4.9	4.9	ug/L	<QL	196	212	108		75--125	195	214	110		1		0--20
Silver, Total	0.392	0.392	ug/L	<QL	196	184	94		75--125	195	181	93		1		0--20
Cadmium, Total	0.49	0.49	ug/L	<QL	196	187	96		75--125	195	186	95		1		0--20
Tin, Total	4.9	4.9	ug/L	11	196	141	66	*	75--125	195	139	66	*	1		0--20
Antimony, Total	2.94	2.94	ug/L	18.3	196	210	98		75--125	195	215	101		2		0--20
Barium, Total	4.9	4.9	ug/L	114	196	331	111		75--125	195	328	110		1		0--20
Thallium, Total	0.734	0.734	ug/L	<QL	196	200	102		75--125	195	200	102		0		0--20
Lead, Total	0.979	0.979	ug/L	1.73	196	207	105		75--125	195	199	101		4		0--20

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory QC Report

CHLS-P_080525 COC 19021 19025

Workgroup: WG201660 Total Mercury by CVAA

MB:WG201660-1 Matrix: BLANK WTR Listtype:MTHG-MID-QL Method:SW846 7470A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.025	0.05	ug/L		<QL

SB:WG201660-2 MB:WG201660-1 Matrix: BLANK WTR Listtype:MTHG-MID-QL Method:SW846 7470A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.025	0.05	ug/L	<QL	1	1.02	102		85--115

MSD:WG201660-4 MS:WG201660-3 L86571-1 Matrix: LEACHATE Listtype:MTHG-MID-QL Method:SW846 7470A Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.1	0.1	ug/L	<QL	2	1.67	84		75--125	2	1.68	84		0		0--20

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

King County Environmental Laboratory QC Report

CHLS-P_080525 COC 19021 19025

Workgroup: WG201713 Total Metals by ICPMS

MB:WG201713-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total	0.025	0.05	ug/L		<QL

SB:WG201713-2 MB:WG201713-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Arsenic, Total	0.025	0.05	ug/L	<QL	20	20.1	100		85--115

MSD:WG201713-4 MS:WG201713-3 L86571-2 Matrix: LEACHATE Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Arsenic, Total	0.494	0.494	ug/L	171	198	373	102		75--125	197	374	103		0		0--20

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4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 07/29/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19021**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25)

Lab No.	Sample ID	Date	Time
86571-1	LEPS250729 P	07/29/25	1000

Project Site Test Reference

GROUNDWATER											
CHGW Cedar Hills GW Qlty	CHGW Cedar Hills EPZ GW Qlty	CHGW/AGW Appendix III GW	CHGW-OS Cedar Hills GW Offsite	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	
2	2.1	4	38	5	6	7	8	9	10	12	

SURFACE WATER						
CHSW-Q Cedar Hills SW Sta. E-1	CHSW-TD Cedar Hills SW Top Deck	CHSW-E CH Emergency	CFSW Cedar Falls SW Qlty	DUSW Duvall SW Qlty	VASW Vashon SW Qlty-WEIRS	
14	42	49.1	17	18	21	

ISGP							
CHSW-P Cedar Hills SW	HTSW-P Houghton SW	SHSW-P Shoreline SW	FASW-P Factoria SW	ENSW-P Enumclaw SW	ALSW-P Algona SW	VASW-P Vashon SW	
16	52	53	54	56	57	58	

LEACHATE/WASTEWATER															
CHTW Cedar Hills Truckwash	CHLS-M Cedar Hills Leachate Mthly	CHLS-M_MOD CH Leachate Mods Mthly	CHLS-M_As CH Leachate As Semi-Ann.	PRETREATMENT PERMITS											
				CHLS-P CH L Permit (wkly, 1st)	CHLS-P CH L Permit (mnthly)	CHLS-P CH L Permit (wkly, 2nd)	ALLS-P Algona WW Permit	BLLS-P Bow Lake WW Permit	ENLS-P Enumclaw WW Permit	FALS-P Factoria WW Permit	SRLS-P Shoreline WW Permit	HTLS-P Houghton WW Permit	RELS-P Renton WW Permit	VALS-P Vashon WW Permit Tanker	VALS-Q Vashon Leachate Qlty
24	23	23+	23.1	25	25	25	26	20	27	28	29	30	31	32	34
				X											

Number of Containers	Remarks
1	Dissolved Sulfide 0.3 ppm

Relinquished By Sampler: E
Sampler Signature: E. Wajda
Sampler Printed Name: KCSWD
Company
Date: 07/29/25
Time: 1255

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By
Signature
Printed Name
Company
Date
Time

Received By: Jason Kinnard
Signature
Printed Name: KCEL
Company
Date: 7-29-25
Time: 1255

Observations/Comments/Special Instructions:

- Custody Sealed on 07/29/25 at 1255

Total # of Containers: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v5.0 (Rev 6/2025)

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 86571
40 mL clear vial (VOA)	
60 mL CWM HDPE	
125 mL CNM HDPE	
125 mL CWM HDPE	
125 mL GANM w/HCl	
250 mL CWM HDPE	
250 mL GAWM w/H_2SO_4	
500 mL AWM HDPE	
500 mL CWM HDPE	
500 mL CWM PP (MICRO)	
500 mL HDPE (METALS)	1
500 mL GAWM	
1L CWM HDPE	
1L GANM	
1L GAWM w/ H_2SO_4	
2L CWM HDPE:	
Other -	
Other -	
Other -	
Other -	
Other -	
Total # of Samples	1

Number of bottles per sample

Sample Collect Date(s):	7-29-25
VTRP Collect Date(s):	
Receive Date:	7-29-25
Project No.:	421422
Project Site Test Reference:	CHLS-P(25)
COC / SDG No.:	19021

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	2.1 R0119	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

COMMENTS / NOTIFICATIONS

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: JUL 29 '25 14:21

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Chain of Custody Record

Environmental Monitoring Program

Date: 07/31/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19025**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25.2)

Lab No.	Sample ID	Date	Time
860571-2	LEPS250731P	07/31/25	1000

Project Site Test Reference

	CHGW	CHGW	CHGW/VAGW	CHSW-OS	CFGW	DUGW	ENGW	HOGW	HTGW	PUGW	VAGW	CHSW-Q	CHSW-TD	CHSW-E	CFSW	DUSW	VASW	CHSW-P	HTSW-P	SHSW-P	FASW-P	ENSW-P	ALSW-P	VASW-P	CHTW	CHLS-M	CHLS-M_MOD	CHLS-M_As	CHLS-P	CHLS-P	CHLS-P	ALLS-P	BLLS-P	ENLS-P	FALS-P	SRLS-P	HTLS-P	RELS-P	VALS-P	VALS-Q	Number of Containers	Remarks
	Cedar Hills GW Qlty	Cedar Hills EPZ GW Qlty	Appendix III GW	Cedar Hills GW Offsite	Cedar Falls GW Qlty	Duvall GW Qlty	Enumclaw GW Qlty	Hobart GW Qlty	Houghton GW Qlty	Puyallup GW Qlty	Vashon GW Qlty	Cedar Hills SW Sta. E-1	Cedar Hills SW Top Deck	CH Emergency	Cedar Falls SW Qlty	Duvall SW Qlty	Vashon SW Qlty-WEIRS	Cedar Hills SW	Houghton SW	Shoreline SW	Factoria SW	Enumclaw SW	Algona SW	Vashon SW	Cedar Hills Truckwash	Cedar Hills Leachate Mtly	CH Leachate Mods Mtly	CH Leachate As Semi-Anl	CH L Permit (wkly, 1st)	CH L Permit (mnthly)	CH L Permit (wkly, 2nd)	Algona WW Permit	Bow Lake WW Permit	Enumclaw WW Permit	Factoria WW Permit	Shoreline WW Permit	Houghton WW Permit	Renton WW Permit	Vashon WW Permit Tanks	Vashon Leachate Qlty		
	GROUNDWATER											SURFACE WATER						ISGP							LEACHATE/WASTEWATER				PRETREATMENT PERMITS													
	2	2.1	4	38	5	6	7	8	9	10	12	14	42	49.1	17	18	21	16	52	53	54	56	57	58	24	23	23+	23.1	25	25	25.2	26	20	27	28	29	30	31	32	34		
860571-2	LEPS250731P	07/31/25	1000																												X									1	Q.2ppm

Relinquished By Sampler: E. Wajda
Sampler Signature: E. Wajda
Sampler Printed Name: KCSWD
Company
Date: 07/31/25
Time: 1205

Received By
Signature
Printed Name
Company
Date
Time

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By: Jason Kinnard
Signature
Printed Name: KCEL
Company
Date: 7/31/25
Time: 1414

Observations/Comments/Special Instructions:
- Custody Sealed on 07/31/25 at 1205

Total # of Containers: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v5.0 (Rev 6/2025)

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 826571										
	2										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	20 / 19.2.0	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 7-31-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P(35.2)

Receive Date: 7-31-25 COC / SDG No.: 19025

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: JUL 31 '25 14:19

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

HYDROGEN SULFIDE GAS AT MANHOLE R10-52

Instrument #	Serial #	Calibration Date/Time
RKI Eagle 2	E2E656	7/3/25 @ 1206
Sample Count	**Interval Time (sec)**	**Bump Test Date**
10169	60	7/11/25 @ 0607

H2S Readings

Date	Daily Average	Instantaneous Maximum	Maximum 15-min Average	Maximum 8-hr Average	7-day Average
7/11/2025	0.2683	8	5.37	0.33	-
7/12/2025	0.4444	2.5	2.03	1.30	-
7/13/2025	0.4663	8	5.77	1.11	-
7/14/2025	0.0684	6	3.77	0.92	-
7/15/2025	0.1948	7.5	4.67	0.34	-
7/16/2025	0.4094	9.5	5.07	1.02	-
7/17/2025	0.2663	7.5	4.10	0.79	-
7/18/2025	0.1944	6.5	4.03	0.57	0.29
		Limit	*15 ppm*	*10 ppm*	*3 ppm*

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

HYDROGEN SULFIDE GAS AT MANHOLE R10-52

Instrument #	Serial #	Calibration Date/Time
RKI Eagle 2	E2E656	7/30/2025 @ 0714
Sample Count	**Interval Time (sec)**	**Bump Test Date**
11765	60	7/30/2025 @ 0715

H2S Readings

Date	Daily Average	Instantaneous Maximum	Daily Maximum 15-min Rolling Average	Daily Maximum 8-hr Rolling Average	Daily Max 7-day Rolling Average
7/30/2025	0.0264	1.0	0.77	0.04	-
7/31/2025	0.0226	4.5	1.63	0.07	-
8/1/2025	0.5830	3.5	3.17	1.57	-
8/2/2025	0.6177	5.5	4.10	1.73	-
8/3/2025	0.1781	7.0	4.40	1.54	-
8/4/2025	0.1819	2.0	1.60	0.51	-
8/5/2025	0.0000	0.0	0.00	0.48	-
8/6/2025	0.0326	3.5	2.07	0.10	0.23
8/7/2025	0.0455	3.0	1.87	0.06	0.23
			15 ppm	*10 ppm*	*3 ppm*

Docusign Envelope ID: 8A36D783-4840-4424-8186-1E7DBB964026

KING COUNTY SOLID WASTE DIVISION

LEACHATE HAULING REPORT

TANKER LOADS

MONTH: JULY

YEAR: 2025

	DUVALL						VASHON				HOBART		OTHER		
DATE	BRIGHT		C.H.		SPOK.		SPOK.		C.H.		C.H.		C.H.		REMARKS
LOAD	6000	7000	6000	7000	6000	7000	6000	7000	6000	7000	6000	7000	6000	7000	
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
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22															
23															
24															
25															
26															
27															
28															
29															
30															
31															
TOTAL	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	

Certificate Of Completion

Envelope Id: 8A36D783-4840-4424-8186-1E7DBB964026
Status: Completed
Subject: Complete with Docusign: 2025.07.11_EAGLETABLE.pdf, 2025.07.30_EAGLETABLE.pdf, 7842-04_SMR_July2...
Source Envelope:
Document Pages: 92
Signatures: 3
Certificate Pages: 5
Initials: 1
AutoNav: Enabled
EnvelopeId Stamping: Enabled
Time Zone: (UTC-08:00) Pacific Time (US & Canada)

Envelope Originator:
Aaron Copado
401 5TH AVE
SEATTLE, WA 98104
acopado@kingcounty.gov
IP Address: 198.49.222.20

Record Tracking

Status: Original
8/15/2025 10:14:50 AM
Holder: Aaron Copado
acopado@kingcounty.gov
Location: DocuSign

Security Appliance Status: Connected
Pool: FedRamp

Storage Appliance Status: Connected
Pool: King County-Dept of Natural Resources-Solid Waste
Location: Docusign

Signer Events	Signature	Timestamp
Aaron Copado acopado@kingcounty.gov Environmental Scientist III KC_DNRP_SWD Security Level: Email, Account Authentication (None)	 Signature Adoption: Pre-selected Style Using IP Address: 198.49.222.20	Sent: 8/15/2025 10:21:14 AM Viewed: 8/15/2025 10:21:23 AM Signed: 8/15/2025 10:21:34 AM
Electronic Record and Signature Disclosure: Not Offered via Docusign		
Jennifer Keune jennifer.keune@kingcounty.gov Interim Supervisor KC_DNRP_SWD Security Level: Email, Account Authentication (None)	 Signature Adoption: Pre-selected Style Using IP Address: 67.160.11.161	Sent: 8/15/2025 10:21:14 AM Viewed: 8/15/2025 10:50:39 AM Signed: 8/15/2025 11:50:22 AM
Electronic Record and Signature Disclosure: Accepted: 3/31/2021 3:20:14 PM ID: 040441cf-883c-43c6-a4af-1ccb2ef73edc		

In Person Signer Events	Signature	Timestamp

Editor Delivery Events	Status	Timestamp

Agent Delivery Events	Status	Timestamp

Intermediary Delivery Events	Status	Timestamp

Certified Delivery Events	Status	Timestamp

Carbon Copy Events	Status	Timestamp

Witness Events	Signature	Timestamp

Notary Events	Signature	Timestamp

Envelope Summary Events	Status	Timestamps

Envelope Summary Events	Status	Timestamps
Envelope Sent	Hashed/Encrypted	8/15/2025 10:21:14 AM
Certified Delivered	Security Checked	8/15/2025 10:50:39 AM
Signing Complete	Security Checked	8/15/2025 11:50:22 AM
Completed	Security Checked	8/15/2025 11:50:22 AM

Payment Events	Status	Timestamps

Electronic Record and Signature Disclosure

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From time to time, King County-ZZDepartmentTemplate 03 (we, us or Company) may be required by law to provide to you certain written notices or disclosures. Described below are the terms and conditions for providing to you such notices and disclosures electronically through the DocuSign system. Please read the information below carefully and thoroughly, and if you can access this information electronically to your satisfaction and agree to this Electronic Record and Signature Disclosure (ERSD), please confirm your agreement by selecting the check-box next to 'I agree to use electronic records and signatures' before clicking 'CONTINUE' within the DocuSign system.

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If you decide to receive notices and disclosures from us electronically, you may at any time change your mind and tell us that thereafter you want to receive required notices and disclosures only in paper format. How you must inform us of your decision to receive future notices and disclosure in paper format and withdraw your consent to receive notices and disclosures electronically is described below.

Consequences of changing your mind

If you elect to receive required notices and disclosures only in paper format, it will slow the speed at which we can complete certain steps in transactions with you and delivering services to you because we will need first to send the required notices or disclosures to you in paper format, and then wait until we receive back from you your acknowledgment of your receipt of such paper notices or disclosures. Further, you will no longer be able to use the DocuSign system to receive required notices and consents electronically from us or to sign electronically documents from us.

All notices and disclosures will be sent to you electronically

Unless you tell us otherwise in accordance with the procedures described herein, we will provide electronically to you through the DocuSign system all required notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you during the course of our relationship with you. To reduce the chance of you inadvertently not receiving any notice or disclosure, we prefer to provide all of the required notices and disclosures to you by the same method and to the same address that you have given us. Thus, you can receive all the disclosures and notices electronically or in paper format through the paper mail delivery system. If you do not agree with this process, please let us know as described below. Please also see the paragraph immediately above that describes the consequences of your electing not to receive delivery of the notices and disclosures electronically from us.

How to contact King County-ZZDepartmentTemplate 03:

You may contact us to let us know of your changes as to how we may contact you electronically, to request paper copies of certain information from us, and to withdraw your prior consent to receive notices and disclosures electronically as follows:
To contact us by email send messages to: cipriano.dacanay@kingcounty.gov

To advise King County-ZZDepartmentTemplate 03 of your new email address

To let us know of a change in your email address where we should send notices and disclosures electronically to you, you must send an email message to us at cipriano.dacanay@kingcounty.gov and in the body of such request you must state: your previous email address, your new email address. We do not require any other information from you to change your email address.

If you created a DocuSign account, you may update it with your new email address through your account preferences.

To request paper copies from King County-ZZDepartmentTemplate 03

To request delivery from us of paper copies of the notices and disclosures previously provided by us to you electronically, you must send us an email to cipriano.dacanay@kingcounty.gov and in the body of such request you must state your email address, full name, mailing address, and telephone number. We will bill you for any fees at that time, if any.

To withdraw your consent with King County-ZZDepartmentTemplate 03

To inform us that you no longer wish to receive future notices and disclosures in electronic format you may:

i. decline to sign a document from within your signing session, and on the subsequent page, select the check-box indicating you wish to withdraw your consent, or you may;

ii. send us an email to cipriano.dacanay@kingcounty.gov and in the body of such request you must state your email, full name, mailing address, and telephone number. We do not need any other information from you to withdraw consent.. The consequences of your withdrawing consent for online documents will be that transactions may take a longer time to process..

Required hardware and software

The minimum system requirements for using the DocuSign system may change over time. The current system requirements are found here: https://support.docusign.com/guides/signer-guide-signing-system-requirements.

Acknowledging your access and consent to receive and sign documents electronically

To confirm to us that you can access this information electronically, which will be similar to other electronic notices and disclosures that we will provide to you, please confirm that you have read this ERSD, and (i) that you are able to print on paper or electronically save this ERSD for your future reference and access; or (ii) that you are able to email this ERSD to an email address where you will be able to print on paper or save it for your future reference and access. Further, if you consent to receiving notices and disclosures exclusively in electronic format as described herein, then select the check-box next to 'I agree to use electronic records and signatures' before clicking 'CONTINUE' within the DocuSign system.

By selecting the check-box next to 'I agree to use electronic records and signatures', you confirm that:

- You can access and read this Electronic Record and Signature Disclosure; and
- You can print on paper this Electronic Record and Signature Disclosure, or save or send this Electronic Record and Disclosure to a location where you can print it, for future reference and access; and
- Until or unless you notify King County-ZZDepartmentTemplate 03 as described above, you consent to receive exclusively through electronic means all notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you by King County-ZZDepartmentTemplate 03 during the course of your relationship with King County-ZZDepartmentTemplate 03.

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King County
Solid Waste Division
Department of Natural Resources and Parks
King Street Center
201 South Jackson Street, Suite 6400
Seattle, WA 98104-3855
206-477-4466
711 TTY Relay
kingcounty.gov/solid-waste

September 15, 2025

TO: Arnaud Girard, Industrial Waste Compliance Investigator III, Wastewater Treatment Division

FM: Aaron Copado, Environmental Scientist III, King County Solid Waste Division (KCSWD)

DS AC

RE: Wastewater Discharge Permit # 7842-04 - Cedar Hills – Self-Monitoring Report

The purpose of this memorandum is to enclose the Self-Monitoring Report (SMR) for Cedar Hills (Permit # 7842-04) for the month of August 2025. Enclosed you will find:

- Industrial Waste Discharge Self-Monitoring Report for Sites A9002 & A90021
- Laboratory Test Results for CHLS-P (for samples collected 8/7/25, 8/12/25, 8/14/25, 8/19/25, 8/21/25, 8/26/25, and 8/28/25)
- Atmospheric Hydrogen Sulfide Data at A9002 (for 8/1-8/7 & 8/19-8/26)
- Leachate Hauling Report (for August)

There were no exceedances during the month of August.

Condition S3.C.2.d states:

> *The acceptance limit for calibration verification is 90-110 percent of the reference measurement. The permittee must re-calibrate the flow meter(s) per manufacturer's specifications if the verification fails. All self-monitoring data taken with flow meters that fail verification must be noted on self-monitoring reports until the subject flow meter is back within acceptance limits.*

Flow measurements outside of acceptable limits were observed during meter verification on 8/15/2025. Therefore, KCSWD is noting a flow error that is greater than 10% as of 8/15/2025. This will continue until a new flow meter can be purchased and installed, which is expected to be completed by 11/7/2025.

Please contact me directly if you have any questions. I can be reached at (253) 400-6532, or by e-mail at acopado@kingcounty.gov.

Enclosures

cc: Theresa Thurlow, P.E., Section Manager, KCSWD

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

Jennifer Keune, Supervisor, KCSWD
Dan Swope, Supervising Engineer, KCSWD
Grant Dornfeld, Engineer II, KCSWD

Printed on recycled paper

King County

Industrial Waste Program Monthly Self-Monitoring Report

Send to: King County Industrial Waste Program
Email: info.KCIW@kingcounty.gov

Company Name: King County SWD - Cedar Hills Regional Landfill **Sample Site No.** A90021 **Permit No.:** *7842-04*

Please Specify Month & Year: **Month/Year** **August 2025**

This form is available at www.kingcounty.gov/industrialwaste.

*** Sample Types (C) Composite (G) Grab (BC) Batch** **All conc. units are mg/L unless otherwise noted. Loading units are pounds per day (lbs./da**

Sample Date (circle)	Sample Type*	pH	Arsenic		Cadmium		Chromium		Copper		Lead		Daily Discharge Volume, gpd	Notes (Indicate Batch Discharge where applicable)
			Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading		
1													0	
2													0	
3													103300	
4													1800	
5													0	
6													102700	
7	C	8.68	0.1680	0.1459	<0.0005	0.0002	0.2130	0.1849	0.0067	0.0058	0.0015	0.00130	104100	
8													0	
9													106400	
10													102000	
11													0	
12	C	8.55	0.1800	0.1599	<0.0005	0.0002	0.2240	0.1990	0.0058	0.0052	0.0013	0.00115	106500	
13													0	
14	C		0.1820	0.1885									124200	
15													16500	*Flow Meter Error >10%
16													170500	*Flow Meter Error >10%
17													171800	*Flow Meter Error >10%
18													107800	*Flow Meter Error >10%
19	C	8.67	0.1790	0.1520	<0.0005	0.0002	0.2220	0.1885	0.0059	0.0050	0.0013	0.00110	101800	*Flow Meter Error >10%
20													0	*Flow Meter Error >10%
21	C		0.1790	0.1529									102400	*Flow Meter Error >10%
22													103000	*Flow Meter Error >10%
23													0	*Flow Meter Error >10%
24													114300	*Flow Meter Error >10%
25													103600	*Flow Meter Error >10%
26	C	8.57	0.1820	0.1563	<0.0005	0.0002	0.2270	0.1950	0.0057	0.0049	0.0013	0.00112	103000	*Flow Meter Error >10%
27													103200	*Flow Meter Error >10%
28	C		0.1880	0.1612									102800	*Flow Meter Error >10%
29													97600	*Flow Meter Error >10%
30													148300	*Flow Meter Error >10%
31													102600	*Flow Meter Error >10%

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

Sep 15, 2025
Date

Docusigned by: Jennifer Hume
A70E5C0AE0254...
Name And Signature Of Principal Executive or Authorized Agent

Monthly Min pH	8.55	8/12/2025	
Monthly Max pH	8.68	8/7/2025	
Total Monthly Flow (gallons)	2,400,200		
Maximum Daily Flow	171,800	8/17/2025	

PLEASE CIRCLE ALL PERMIT VIOLATIONS

Due Date: **Monthly report is due by the 15th each month.**

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County

Industrial Waste Program Monthly Self-Monitoring Report

Send to: King County Industrial Waste Program
Email: info.KCIW@kingcounty.gov

Company Name: King County SWD - Cedar Hills Regional Landfill **Sample Site No.** A90021 **Permit No.:** *7842-04*

Please Specify Month & Year: **Month/Year** **August 2025**

This form is available at www.kingcounty.gov/industrialwaste.

*** Sample Types (C) Composite (G) Grab (BC) Batch** **All conc. units are mg/L unless otherwise noted. Loading units are pounds per day (lbs./da**

Sample Date (circle)	Sample Type	Mercury		Nickel		Silver		Zinc		Total Soluble Sulfides	Ammonia as N	Nitrite + Nitrate as N	Notes (Indicate Batch Discharge where applicable)
		Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading				
1													
2													
3													
4													
5													
6													
7	C	<0.0001	0.00004	0.1690	0.147	<0.0004	0.0002	0.1740	0.151	<0.1 ppm	1210	<0.2	
8													
9													
10													
11													
12	C	<0.0001	0.00004	0.1750	0.155	<0.0004	0.0002	0.1610	0.143	<0.1 ppm			
13													
14										<0.1 ppm			
15													
16													
17													
18													
19	C	<0.0001	0.00004	0.1750	0.149	<0.0004	0.0002	0.1550	0.132	<0.1 ppm			
20													
21										<0.1 ppm			
22													
23													
24													
25													
26	C	<0.0001	0.00004	0.1800	0.155	<0.0004	0.0002	0.1370	0.118	<0.1 ppm			
27													
28													
29													
30													
31													

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

DocuSigned by: Jennifer Yuma Sep 15, 2025

Name and Title (Principal Executive or Authorized Agent) Date

PLEASE CIRCLE ALL PERMIT VIOLATIONS

Due Date: Monthly report is due by the 15th each month.

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King County

Industrial Waste Program Monthly Self-Monitoring Report

Send to: King County Industrial Waste Program
Email: info.KCIW@kingcounty.gov

Atmospheric Hydrogen Sulfide (H_2S) Monitoring

Company Name: King County SWD - Cedar Hills Regional Landfill **Sample Site No.** A9002 **Permit No.:** *7842-04*

Please Specify Month & Year: **Month/Year** **August 2025**

This form is available at www.kingcounty.gov/industrialwaste.

All units are PPM unless otherwise noted.

Sample Date (circle)	Atmospheric Hydrogen Sulfide, ppmv				Notes
	Instantaneous Maximum	Maximum 15-min Average	Maximum 8-hr Average	7-day Average	
1	3.5	3.17	1.57	-	
2	5.5	4.1	1.73	-	
3	7	4.4	1.54	-	
4	2	1.6	0.51	-	
5	0	0	0.48	-	
6	3.5	2.07	0.1	0.23	
7	3	1.87	0.06	0.23	
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19	0	0	0	-	
20	0	0	0	-	
21	5.5	3.33	0.14	-	
22	4	1.7	0.05	-	
23	0	0	0	-	
24	5	2.97	0.12	-	
25	1.5	0.23	0.01	-	
26	2.5	1.23	0.04	0.02	
27					
28					
29					
30					
31					

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

Docusigned by: Sep 15, 2025
Name & Title: Principal Executive or Authorized Agent — Date

Monthly **MAX**	7	Date	8/1-8/7 & 8/19-8/26
Monthly **AVG**	2.87		

PLEASE CIRCLE ALL PERMIT VIOLATIONS

Due Date: Monthly report is due by the 15th each month.

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

September 4, 2025

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P) - REVISED

Sample Id.	Sample Collect Date	COC
LEPS250807P	**08/07/2025**	**19035**

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 1 leachate permit sample collected August 7, 2025. A second arsenic only sample was not collected the week of August 4, 2025.

This revised report was issued to correct the method listed for mercury analysis of sample LEPS2508007P in the report. The method listed in the EDDs in the initial reporting was correct.

Sample Receiving Comments
No sample receiving anomalies were observed.

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

Conventionals QC Information

The sample container collected for **Dissolved Nutrients** analysis for sample LEPS250807P was not adequately preserved in the field. The ***nitrate+nitrite nitrogen*** and ***ammonia*** results for sample LEPS250807M were qualified S.

Metals QC Information

All calculable QC results for metals parameters were within laboratory control limits with the following exceptions.

During **Total Metals** analysis the recovery of ***total tin*** from the matrix spike duplicate (MSD) exceeded the lower laboratory control limit. Sample LEPS25807P was used to prepare the MSD. The *total tin* result for sample LEPS250807P was qualified G based on this exceedance.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,



Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

Sample Data

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 08/15/2025
Report Group: CHLS-P_081425

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250807P**
SDG / Lab Sample ID: **19035 / L86605-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **08/07/2025**
Login Date: **08/07/2025**
Matrix: **LEACHATE**

Analyses Requested:

4500-NO3-F NO23 Nitrite + Nitrate Nitrogen

200.8, SWD-ICPMS23, Metals

245.1, HG-CVAA-M, Metals

Kerouel & Aminot 1997 NH3 Ammonia Nitrogen

200.8, P-ICPMS, Metals

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 08/15/2025
Report Group: CHLS-P_081425

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250807P**
CoC / Lab Sample ID: **19035 / L86605-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **08/07/2025**
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Matrix: **LEACHATE**

Conventionals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Nitrate + Nitrite as N	20	mg/L	<.2	SU	.2	.8		08/08/2025	08/08/2025	WG201830
Ammonia	50	mg/L	1210	S	25	50		08/08/2025	08/08/2025	WG201832

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Aluminum, Total	10	mg/L	.631		.048	.0968		08/08/2025	08/11/2025	WG201788
Antimony, Total	10	mg/L	.018		.0029	.00968		08/08/2025	08/11/2025	WG201788
Arsenic, Total	10	mg/L	.168		.00048	.00242	1	08/08/2025	08/11/2025	WG201788
Barium, Total	10	mg/L	.0876		.0048	.00484		08/08/2025	08/11/2025	WG201788
Beryllium, Total	10	mg/L	<.00097	U	.00097	.00484		08/08/2025	08/11/2025	WG201788
Cadmium, Total	10	mg/L	<.00048	U	.00048	.00242	0.5	08/08/2025	08/11/2025	WG201788
Calcium, Total	10	mg/L	52.4		.484	.484		08/08/2025	08/11/2025	WG201788
Chromium, Total	10	mg/L	.213		.0019	.00968	2.75	08/08/2025	08/11/2025	WG201788
Cobalt, Total	10	mg/L	.0421		.00048	.00242		08/08/2025	08/11/2025	WG201788
Copper, Total	10	mg/L	.0067	T	.0019	.0194	3	08/08/2025	08/11/2025	WG201788
Iron, Total	10	mg/L	9.68		.097	.484		08/08/2025	08/11/2025	WG201788
Lead, Total	10	mg/L	.0015	T	.00097	.00484	2	08/08/2025	08/11/2025	WG201788
Magnesium, Total	10	mg/L	98.7		.484	.484		08/08/2025	08/11/2025	WG201788
Manganese, Total	10	mg/L	.331		.00097	.00484		08/08/2025	08/11/2025	WG201788
Nickel, Total	10	mg/L	.169		.00097	.00484	2.5	08/08/2025	08/11/2025	WG201788
Phosphorus, Total	10	mg/L	7.77		.97	.968		08/08/2025	08/11/2025	WG201788
Potassium, Total	10	mg/L	688		.97	4.84		08/08/2025	08/11/2025	WG201788
Selenium, Total	10	mg/L	<.0048	U	.0048	.00968		08/08/2025	08/11/2025	WG201788
Silver, Total	10	mg/L	<.00039	U	.00039	.00194	1	08/08/2025	08/11/2025	WG201788
Sodium, Total	10	mg/L	1830		.968	.968		08/08/2025	08/11/2025	WG201788
Thallium, Total	10	mg/L	<.00073	DU	.00073	.00194		08/08/2025	08/12/2025	WG201788
Tin, Total	10	mg/L	.012	GT	.0048	.0145		08/08/2025	08/11/2025	WG201788
Vanadium, Total	10	mg/L	.0636		.00073	.00363		08/08/2025	08/11/2025	WG201788
Zinc, Total	10	mg/L	.174		.0048	.0242	5	08/08/2025	08/11/2025	WG201788
Mercury, Total	2	mg/L	<.0001	U	.0001	.0002		08/08/2025	08/08/2025	WG201833

Target Parameter Count for Report Group: 27

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

Quality Control Data

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory QC Report

CHLS-P_080725 COC 19035

Workgroup: WG201830 Dissolved Nutrients

MB:WG201830-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Ammonia Nitrogen	0.002	0.01	mg/L		U

MB:WG201830-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L		U

MB:WG201830-1 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Nitrate Nitrogen	0.01	0.04	mg/L		U

SB:WG201830-3 MB:WG201830-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.002	0.01	mg/L	U	0.04	0.0408	102		80--120

SB:WG201830-3 MB:WG201830-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	U	1	1.01	101		80--120

SB:WG201830-3 MB:WG201830-1 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Nitrate Nitrogen	0.01	0.04	mg/L	U	0.7	0.703	100		80--120

LCS:WG201830-4 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.05	100		85--115

LCS:WG201830-4 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	1	0.973	97		85--115

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory QC Report

CHLS-P_080725 COC 19035

LCS:WG201830-4 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.774	97		85--115

LD:WG201830-5 L86572-12 Matrix: GRND WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421422-VAGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0361	0.0316	14		0--20

LD:WG201830-5 L86572-12 Matrix: GRND WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project:421422-VAGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Nitrate Nitrogen	0.01	0.04	mg/L	U	U			0--20

MS:WG201830-6 L86572-12 Matrix: GRND WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421422-VAGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0361	0.04	0.0676	79		75--125

MS:WG201830-6 L86572-12 Matrix: GRND WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project:421422-VAGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrate Nitrogen	0.01	0.04	mg/L	U	0.7	0.673	96		75--125

LD:WG201830-7 L86606-5 Matrix: LEACHATE Listtype:CVNO23 Method:SM4500-NO3-F Project:421422-CHLS-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.05	0.2	mg/L	0.12	0.12			0--20

MS:WG201830-8 L86606-5 Matrix: LEACHATE Listtype:CVNO23 Method:SM4500-NO3-F Project:421422-CHLS-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.05	0.2	mg/L	0.12	1	4.78	93		75--125

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory QC Report

CHLS-P_080725 COC 19035

Workgroup: WG201832 Dissolved Nutrients

MB:WG201832-1 Matrix: BLANK WTR Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Ammonia Nitrogen	0.5	1	mg/L		U

SB:WG201832-3 MB:WG201832-1 Matrix: BLANK WTR Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.5	1	mg/L	U	10	10.2	102		80--120

LCS:WG201832-4 Matrix: BLANK WTR Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.5	1	mg/L	10	10.6	106		85--115

LD:WG201832-5 L86606-3 Matrix: LEACHATE Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project:421422-CHLS-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Ammonia Nitrogen	0.5	1	mg/L	5.57	5.58	0		0--20

MS:WG201832-6 L86606-3 Matrix: LEACHATE Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project:421422-CHLS-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.5	1	mg/L	5.57	10	15.7	101		75--125

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory QC Report

CHLS-P_080725 COC 19035

Workgroup: WG201788 Total Metals by ICPMS

MB:WG201788-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.1	0.5	ug/L		U
Sodium, Total	100	100	ug/L		U
Magnesium, Total	50	50	ug/L		U
Aluminum, Total	5	10	ug/L		U
Phosphorus, Total	100	100	ug/L		U
Potassium, Total	100	500	ug/L		U
Calcium, Total	50	50	ug/L		U
Vanadium, Total	0.075	0.375	ug/L		U
Chromium, Total	0.2	1	ug/L		U
Manganese, Total	0.1	0.5	ug/L		U
Iron, Total	10	50	ug/L		U
Cobalt, Total	0.05	0.25	ug/L		U
Nickel, Total	0.1	0.5	ug/L		U
Copper, Total	0.2	2	ug/L		U
Zinc, Total	0.5	2.5	ug/L		U
Arsenic, Total	0.05	0.25	ug/L		U
Selenium, Total	0.5	1	ug/L		U
Silver, Total	0.04	0.2	ug/L		U
Cadmium, Total	0.05	0.25	ug/L		U
Tin, Total	0.5	1.5	ug/L		U
Antimony, Total	0.3	1	ug/L		U
Barium, Total	0.5	0.5	ug/L		U
Thallium, Total	0.075	0.2	ug/L		U
Lead, Total	0.1	0.5	ug/L		U

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory QC Report

CHLS-P_080725 COC 19035

SB:WG201788-2 MB:WG201788-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.1	0.5	ug/L	U	20	20.5	103		85--115
Sodium, Total	100	100	ug/L	U	5000	5260	105		85--115
Magnesium, Total	50	50	ug/L	U	5000	5350	107		85--115
Aluminum, Total	5	10	ug/L	U	200	199	100		85--115
Phosphorus, Total	100	100	ug/L	U	5000	4850	97		85--115
Potassium, Total	100	500	ug/L	U	5000	5140	103		85--115
Calcium, Total	50	50	ug/L	U	5000	4800	96		85--115
Vanadium, Total	0.075	0.375	ug/L	U	20	20.2	101		85--115
Chromium, Total	0.2	1	ug/L	U	20	21.5	107		85--115
Manganese, Total	0.1	0.5	ug/L	U	20	20.8	104		85--115
Iron, Total	10	50	ug/L	U	5000	5300	106		85--115
Cobalt, Total	0.05	0.25	ug/L	U	20	21.3	106		85--115
Nickel, Total	0.1	0.5	ug/L	U	20	21.7	109		85--115
Copper, Total	0.2	2	ug/L	U	20	21.9	110		85--115
Zinc, Total	0.5	2.5	ug/L	U	20	21.4	107		85--115
Arsenic, Total	0.05	0.25	ug/L	U	20	19.7	98		85--115
Selenium, Total	0.5	1	ug/L	U	20	20.4	102		85--115
Silver, Total	0.04	0.2	ug/L	U	20	20.8	104		85--115
Cadmium, Total	0.05	0.25	ug/L	U	20	20.3	102		85--115
Tin, Total	0.5	1.5	ug/L	U	20	21.4	107		85--115
Antimony, Total	0.3	1	ug/L	U	20	20.3	102		85--115
Barium, Total	0.5	0.5	ug/L	U	20	20.7	103		85--115
Thallium, Total	0.075	0.2	ug/L	U	20	21.7	109		85--115
Lead, Total	0.1	0.5	ug/L	U	20	21.3	107		85--115

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory QC Report

CHLS-P_080725 COC 19035

MSD:WG201788-4 MS:WG201788-3 L86605-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	0.98	4.89	ug/L	U	196	187	96		75--125	194	184	95		2		0--20
Sodium, Total	979	979	ug/L	1830000	48900	1840000		4xRule	75--125	48600	1850000		4xRule	0		0--20
Magnesium, Total	489	489	ug/L	98700	48900	148000	100		75--125	48600	144000	93		3		0--20
Aluminum, Total	49	97.9	ug/L	631	1960	2670	104		75--125	1940	2670	105		0		0--20
Phosphorus, Total	980	979	ug/L	7770	48900	57600	102		75--125	48600	57000	101		1		0--20
Potassium, Total	980	4890	ug/L	688000	48900	741000		4xRule	75--125	48600	723000		4xRule	2		0--20
Calcium, Total	489	489	ug/L	52400	48900	101000	99		75--125	48600	99500	97		1		0--20
Vanadium, Total	0.73	3.67	ug/L	63.6	196	276	108		75--125	194	264	103		4		0--20
Chromium, Total	2	9.79	ug/L	213	196	410	101		75--125	194	406	99		1		0--20
Manganese, Total	0.98	4.89	ug/L	331	196	529	101		75--125	194	524	99		1		0--20
Iron, Total	98	489	ug/L	9680	48900	57900	98		75--125	48600	57200	98		1		0--20
Cobalt, Total	0.49	2.45	ug/L	42.1	196	240	101		75--125	194	239	101		0		0--20
Nickel, Total	0.98	4.89	ug/L	169	196	365	100		75--125	194	361	99		1		0--20
Copper, Total	2	19.6	ug/L	6.7	196	206	102		75--125	194	201	100		2		0--20
Zinc, Total	4.9	24.5	ug/L	174	196	370	100		75--125	194	365	98		1		0--20
Arsenic, Total	0.49	2.45	ug/L	168	196	365	101		75--125	194	361	99		1		0--20
Selenium, Total	4.9	9.79	ug/L	U	196	206	105		75--125	194	204	105		1		0--20
Silver, Total	0.39	1.96	ug/L	U	196	182	93		75--125	194	180	93		1		0--20
Cadmium, Total	0.49	2.45	ug/L	U	196	186	95		75--125	194	184	95		1		0--20
Tin, Total	4.9	14.7	ug/L	12	196	158	75		75--125	194	149	71	*	6		0--20
Antimony, Total	2.9	9.79	ug/L	18	196	212	99		75--125	194	216	102		2		0--20
Barium, Total	4.9	4.89	ug/L	87.6	196	293	105		75--125	194	294	106		0		0--20
Thallium, Total	0.73	1.96	ug/L	U	196	197	101		75--125	194	191	99		3		0--20
Lead, Total	0.98	4.89	ug/L	1.5	196	197	100		75--125	194	200	102		1		0--20

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory QC Report

CHLS-P_080725 COC 19035

Workgroup: WG201833 Total Mercury by CVAA

MB:WG201833-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.05	0.1	ug/L		U

SB:WG201833-2 MB:WG201833-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	0.984	98		85--115

MSD:WG201833-4 MS:WG201833-3 L86605-1 Matrix: LEACHATE Listtype:MTHG-MID Method:EPA 245.1 Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.1	0.2	ug/L	U	2	1.74	87		75--125	2	1.72	86		1		0--20

==========

4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 8/7/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19035**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25.1)

Lab No.	Sample ID	Date	Time
8160(D5-1	LEPS25D807P	8/7/25	1000

Project Site Test Reference

GROUNDWATER: CHGW Cedar Hills GW Qlty (2); CHGW Cedar Hills EPZ GW Qlty (2.1); CHGW/VAGW Appendix III GW (4); CHGW-OS Cedar Hills GW Offsite (38); CFGW Cedar Falls GW Qlty (5); DUGW Duvall GW Qlty (6); ENGW Enumclaw GW Qlty (7); HOGW Hobart GW Qlty (8); HTGW Houghton GW Qlty (9); PUGW Puyallup GW Qlty (10); VAGW Vashon GW Qlty (12)

SURFACE WATER: CHSW-Q Cedar Hills SW Sta. E-1 (14); CHSW-TD Cedar Hills SW Top Deck (42); CHSW-E CH Emergency (49.1); CFSW Cedar Falls SW Qlty (17); DUSW Duvall SW Qlty (18); VASW Vashon SW Qlty-WEIRS (21)

ISGP: CHSW-P Cedar Hills SW (16); HTSW-P Houghton SW (52); SHSW-P Shoreline SW (53); FASW-P Factoria SW (54); ENSW-P Enumclaw SW (56); ALSW-P Algona SW (57); VASW-P Vashon SW (58)

LEACHATE/WASTEWATER: CHTW Cedar Hills Truckwash (24); CHLS-M Cedar Hills Leachate Mthly (23); CHLS-M_MOD CH Leachate Mods Mthly (23+); CHLS-M_As CH Leachate As Semi-Ann (231)

PRETREATMENT PERMITS: CHLS-P CH L Permit (wkly, 1st) (25); CHLS-P CH L Permit (mnthly) (25.1) X; CHLS-P CH L Permit (wkly, 2nd) (25); ALLS-P Algona WW Permit (26); BLLS-P Bow Lake WW Permit (20); ENLS-P Enumclaw WW Permit (27); FALS-P Factoria WW Permit (28); SRLS-P Shoreline WW Permit (29); HTLS-P Houghton WW Permit (30); RELS-P Renton WW Permit (31); VALS-P Vashon WW Permit Tanker (32); VALS-Q Vashon Leachate Qlty (34)

Number of Containers	Remarks
2	Diss Sulfide <0.1ppm

Relinquished By Sampler: Hannah Spear	Date: 8/7/25	Received By:	Date:
Sampler Signature: H. Spear		Signature:	
Sampler Printed Name: KCSWD	Time: 1250	Printed Name:	Time:
Company		Company	
Relinquished By	Date	Received By: Alex Trejo	Date: 8/7/25
Signature		Signature: A. Trejo	
Printed Name	Time	Printed Name: KCEL	Time: 1503
Company		Company	

Observations/Comments/Special Instructions:
Custody sealed 8/7/25 @1250.

*Nutrients field filtered.

Total # of Containers: 2

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v5.0 (Rev 6/2025)

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

SWD SAMPLE RECEIPT RECORD

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 560605										
	1										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE	1										
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples 2	2										

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	2.0 1.9 1.9	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 8/7/25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHCS-P(25.1)

Receive Date: 8/7/25 COC / SDG No.: 19033

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P#25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually Inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually Inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually Inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other: Nutrients field filtered			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: Alex Rojo

Date / Time Completed: AUG 07 '25 15:38

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

September 4, 2025

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P) - REVISED

Sample Id.	Sample Collect Date	COC
LEPS250812P	**08/12/2025**	**19039**
LEPS250814P	**08/14/2025**	**19044**

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 2 leachate permit samples collected August 12 and 14, 2025.

This revised report was issued to correct the method listed for mercury analysis of sample LEPS250812P in the report. The method listed in the EDDs in the initial reporting was correct.

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

Sample Receiving Comments
No sample receiving anomalies were observed.

Metals QC Information
All calculable QC results for metals parameters were within laboratory control limits.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,



Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

Sample Data

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 08/19/2025
Report Group: CHLS-P_081925

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250812P**
SDG / Lab Sample ID: **19039 / L86696-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **08/12/2025**
Login Date: **08/12/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, P-ICPMS, Metals

200.8, SWD-ICPMS23, Metals

245.1, HG-CVAA-M, Metals

Client Sample ID: **LEPS250814P**
SDG / Lab Sample ID: **19044 / L86696-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **08/14/2025**
Login Date: **08/14/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, AS-ICPMS, Metals

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 08/19/2025
Report Group: CHLS-P_081925

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250812P**
CoC / Lab Sample ID: **19039 / L86696-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **08/12/2025**
Login Date: **08/12/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Aluminum, Total	10	mg/L	.618		.049	.0989		08/13/2025	08/18/2025	WG201874
Antimony, Total	10	mg/L	.0194		.003	.00989		08/13/2025	08/18/2025	WG201874
Arsenic, Total	10	mg/L	.18		.00049	.00247	1	08/13/2025	08/18/2025	WG201874
Barium, Total	10	mg/L	.0823		.0049	.00494		08/13/2025	08/18/2025	WG201874
Beryllium, Total	10	mg/L	<.00099	U	.00099	.00494		08/13/2025	08/18/2025	WG201874
Cadmium, Total	10	mg/L	<.00049	U	.00049	.00247	0.5	08/13/2025	08/18/2025	WG201874
Calcium, Total	10	mg/L	54.2		.494	.494		08/13/2025	08/18/2025	WG201874
Chromium, Total	10	mg/L	.224		.002	.00989	2.75	08/13/2025	08/18/2025	WG201874
Cobalt, Total	10	mg/L	.042		.00049	.00247		08/13/2025	08/18/2025	WG201874
Copper, Total	10	mg/L	.0058	T	.002	.0198	3	08/13/2025	08/18/2025	WG201874
Iron, Total	10	mg/L	9.63		.099	.494		08/13/2025	08/18/2025	WG201874
Lead, Total	10	mg/L	.0013	T	.00099	.00494	2	08/13/2025	08/18/2025	WG201874
Magnesium, Total	10	mg/L	106		.494	.494		08/13/2025	08/18/2025	WG201874
Manganese, Total	10	mg/L	.302		.00099	.00494		08/13/2025	08/18/2025	WG201874
Nickel, Total	10	mg/L	.175		.00099	.00494	2.5	08/13/2025	08/18/2025	WG201874
Phosphorus, Total	10	mg/L	7.91		.99	.989		08/13/2025	08/18/2025	WG201874
Potassium, Total	10	mg/L	724		.99	4.94		08/13/2025	08/18/2025	WG201874
Selenium, Total	10	mg/L	<.0049	U	.0049	.00989		08/13/2025	08/18/2025	WG201874
Silver, Total	10	mg/L	<.0004	U	.0004	.00198	1	08/13/2025	08/18/2025	WG201874
Sodium, Total	10	mg/L	1850		.989	.989		08/13/2025	08/18/2025	WG201874
Thallium, Total	10	mg/L	<.00074	U	.00074	.00198		08/13/2025	08/18/2025	WG201874
Tin, Total	10	mg/L	.014	T	.0049	.0148		08/13/2025	08/18/2025	WG201874
Vanadium, Total	10	mg/L	.0677		.00074	.00371		08/13/2025	08/18/2025	WG201874
Zinc, Total	10	mg/L	.161		.0049	.0247	5	08/13/2025	08/18/2025	WG201874
Mercury, Total	2	mg/L	<.0001	U	.0001	.0002		08/13/2025	08/14/2025	WG201876

Client Sample ID: **LEPS250814P**
CoC / Lab Sample ID: **19044 / L86696-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **08/14/2025**
Login Date: **08/14/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.182		.0005	.00248	1	08/15/2025	08/18/2025	WG201918

Target Parameter Count for Report Group: 26

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

Quality Control Data

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory QC Report

CHLS-P_081925 COC 19039, 19044

Workgroup: WG201874 Total Metals by ICPMS

MB:WG201874-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.1	0.5	ug/L		U
Sodium, Total	100	100	ug/L		U
Magnesium, Total	50	50	ug/L		U
Aluminum, Total	5	10	ug/L		U
Phosphorus, Total	100	100	ug/L		U
Potassium, Total	100	500	ug/L		U
Calcium, Total	50	50	ug/L		U
Vanadium, Total	0.075	0.375	ug/L		U
Chromium, Total	0.2	1	ug/L		U
Manganese, Total	0.1	0.5	ug/L		U
Iron, Total	10	50	ug/L		U
Cobalt, Total	0.05	0.25	ug/L		U
Nickel, Total	0.1	0.5	ug/L		U
Copper, Total	0.2	2	ug/L		U
Zinc, Total	0.5	2.5	ug/L		U
Arsenic, Total	0.05	0.25	ug/L		U
Selenium, Total	0.5	1	ug/L		U
Silver, Total	0.04	0.2	ug/L		U
Cadmium, Total	0.05	0.25	ug/L		U
Tin, Total	0.5	1.5	ug/L		U
Antimony, Total	0.3	1	ug/L		U
Barium, Total	0.5	0.5	ug/L		U
Thallium, Total	0.075	0.2	ug/L		U
Lead, Total	0.1	0.5	ug/L		U

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory QC Report

CHLS-P_081925 COC 19039, 19044

SB:WG201874-2 MB:WG201874-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.1	0.5	ug/L	U	20	19.3	97		85--115
Sodium, Total	100	100	ug/L	U	5000	5370	107		85--115
Magnesium, Total	50	50	ug/L	U	5000	5320	106		85--115
Aluminum, Total	5	10	ug/L	U	200	209	104		85--115
Phosphorus, Total	100	100	ug/L	U	5000	5000	100		85--115
Potassium, Total	100	500	ug/L	U	5000	5200	104		85--115
Calcium, Total	50	50	ug/L	U	5000	5060	101		85--115
Vanadium, Total	0.075	0.375	ug/L	U	20	20.5	103		85--115
Chromium, Total	0.2	1	ug/L	U	20	21.6	108		85--115
Manganese, Total	0.1	0.5	ug/L	U	20	21.1	106		85--115
Iron, Total	10	50	ug/L	U	5000	5320	106		85--115
Cobalt, Total	0.05	0.25	ug/L	U	20	20.5	102		85--115
Nickel, Total	0.1	0.5	ug/L	U	20	21.5	107		85--115
Copper, Total	0.2	2	ug/L	U	20	21.6	108		85--115
Zinc, Total	0.5	2.5	ug/L	U	20	21.1	105		85--115
Arsenic, Total	0.05	0.25	ug/L	U	20	20.5	103		85--115
Selenium, Total	0.5	1	ug/L	U	20	20.5	103		85--115
Silver, Total	0.04	0.2	ug/L	U	20	21.4	107		85--115
Cadmium, Total	0.05	0.25	ug/L	U	20	20.3	101		85--115
Tin, Total	0.5	1.5	ug/L	U	20	20.5	102		85--115
Antimony, Total	0.3	1	ug/L	U	20	20.6	103		85--115
Barium, Total	0.5	0.5	ug/L	U	20	21.1	106		85--115
Thallium, Total	0.075	0.2	ug/L	U	20	21.6	108		85--115
Lead, Total	0.1	0.5	ug/L	U	20	21.4	107		85--115

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory QC Report

CHLS-P_081925 COC 19039, 19044

MSD:WG201874-4 MS:WG201874-3 L86696-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	0.99	4.95	ug/L	U	198	207	104		75--125	198	198	100		5		0--20
Sodium, Total	991	991	ug/L	1850000	49500	1860000		4xRule	75--125	49500	1900000		4xRule	2		0--20
Magnesium, Total	495	495	ug/L	106000	49500	155000	98		75--125	49500	153000	94		1		0--20
Aluminum, Total	50	99.1	ug/L	618	1980	2630	102		75--125	1980	2640	102		0		0--20
Phosphorus, Total	990	991	ug/L	7910	49500	59800	105		75--125	49500	60300	106		1		0--20
Potassium, Total	990	4950	ug/L	724000	49500	767000		4xRule	75--125	49500	774000		4xRule	1		0--20
Calcium, Total	495	495	ug/L	54200	49500	105000	103		75--125	49500	106000	104		1		0--20
Vanadium, Total	0.74	3.72	ug/L	67.7	198	264	99		75--125	198	265	100		0		0--20
Chromium, Total	2	9.91	ug/L	224	198	424	101		75--125	198	429	104		1		0--20
Manganese, Total	0.99	4.95	ug/L	302	198	507	103		75--125	198	510	105		1		0--20
Iron, Total	99	495	ug/L	9630	49500	57900	97		75--125	49500	58500	99		1		0--20
Cobalt, Total	0.5	2.48	ug/L	42	198	235	97		75--125	198	230	95		2		0--20
Nickel, Total	0.99	4.95	ug/L	175	198	362	94		75--125	198	356	91		2		0--20
Copper, Total	2	19.8	ug/L	5.8	198	203	100		75--125	198	199	98		2		0--20
Zinc, Total	5	24.8	ug/L	161	198	357	99		75--125	198	348	94		3		0--20
Arsenic, Total	0.5	2.48	ug/L	180	198	386	104		75--125	198	386	104		0		0--20
Selenium, Total	5	9.91	ug/L	U	198	213	107		75--125	198	215	109		1		0--20
Silver, Total	0.4	1.98	ug/L	U	198	193	97		75--125	198	192	97		1		0--20
Cadmium, Total	0.5	2.48	ug/L	U	198	196	99		75--125	198	194	98		1		0--20
Tin, Total	5	14.9	ug/L	14	198	174	81		75--125	198	174	81		0		0--20
Antimony, Total	3	9.91	ug/L	19.4	198	228	105		75--125	198	231	107		2		0--20
Barium, Total	5	4.95	ug/L	82.3	198	297	108		75--125	198	304	112		2		0--20
Thallium, Total	0.74	1.98	ug/L	U	198	201	101		75--125	198	200	101		0		0--20
Lead, Total	0.99	4.95	ug/L	1.3	198	201	101		75--125	198	207	104		3		0--20

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory QC Report

CHLS-P_081925 COC 19039, 19044

Workgroup: WG201876 Total Mercury by CVAA

MB:WG201876-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.05	0.1	ug/L		U

SB:WG201876-2 MB:WG201876-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	0.932	93		85--115

MSD:WG201876-4 MS:WG201876-3 L86696-1 Matrix: LEACHATE Listtype:MTHG-MID Method:EPA 245.1 Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.1	0.2	ug/L	U	2	1.57	78		75--125	2	1.59	80		1		0--20

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory QC Report

CHLS-P_081925 COC 19039, 19044

Workgroup: WG201918 Total Metals by ICPMS

MB:WG201918-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total	0.05	0.25	ug/L		U

SB:WG201918-2 MB:WG201918-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Arsenic, Total	0.05	0.25	ug/L	U	20	20.9	104		85--115

MSD:WG201918-4 MS:WG201918-3 L86696-2 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Arsenic, Total	0.49	2.45	ug/L	182	196	389	106		75--125	196	389	106		0		0--20

==========

4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 8/12/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19039**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25)

Lab No.	Sample ID	Date	Time
86696-1	LEPS250812P	8/12/25	1000

Project Site Test Reference

| | | |

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 566960										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	2.2 2.1 2.1	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 8-12-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P (25)

Receive Date: 8-12-25 COC / SDG No.: 14039

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____ Date / Time Completed: AUG 12 '25 14:57

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

Chain of Custody Record

Environmental Monitoring Program

Date: 08/14/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19044**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25.2)

Project Site Test Reference

Lab No.	Sample ID	Date	Time	GROUNDWATER: CHGW Cedar Hills GW Qlty (2)	CHGW Cedar Hills EPZ GW Qlty (2.1)	CHGW/AGW Appendix III GW (4)	CHGW-OS Cedar Hills GW Offsite (38)	CFGW Cedar Falls GW Qlty (5)	DUGW Duvall GW Qlty (6)	ENGW Enumclaw GW Qlty (7)	HOGW Hobart GW Qlty (8)	HTGW Houghton GW Qlty (9)	PUGW Puyallup GW Qlty (10)	VAGW Vashon GW Qlty (12)	SURFACE WATER: CHSW-Q Cedar Hills SW Sta. E-1 (14)	CHSW-TD Cedar Hills SW Top Deck (42)	CHSW-E CH Emergency (491)	CFSW Cedar Falls SW Qlty (17)	DUSW Duvall SW Qlty (18)	VASW Vashon SW Qlty-WEIRS (21)	ISGP: CHSW-P Cedar Hills SW (16)	HTSW-P Houghton SW (52)	SHSW-P Shoreline SW (53)	FASW-P Factoria SW (54)	ENSW-P Enumclaw SW (56)	ALSW-P Algona SW (57)	VASW-P Vashon SW (58)	LEACHATE/WASTEWATER: CHTW Cedar Hills Truckwash (24)	CHLS-M Cedar Hills Leachate Mthly (23)	CHLS-M_MOD CH Leachate Mods Mthly (23+)	CHLS-M_As CH Leachate As Semi-Ann (231)	PRETREATMENT PERMITS: CH L Permit (wkly, 1st) (25)	CH L Permit (monthly) (25)	CH L Permit (wkly, 2nd) (25.2)	ALLS-P Algona WW Permit (26)	BLLS-P Bow Lake WW Permit (20)	ENLS-P Enumclaw WW Permit (27)	FALS-P Factoria WW Permit (28)	SRLS-P Shoreline WW Permit (29)	HTLS-P Houghton WW Permit (30)	RELS-P Renton WW Permit (31)	VALS-P Vashon WW Permit Tanks (32)	VALS-Q Vashon Leachate Qlty (34)	Number of Containers	Remarks
86696-2	LEPS250814P	08/14/25	1000																														X										1	Dissolved Sulfide > 0.1 ppm

Relinquished By Sampler: E. Wajda
Sampler Signature: E. Wajda
Sampler Printed Name: KCSWD
Company
Date: 08/14/25
Time: 1318

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By
Signature
Printed Name
Company
Date
Time

Received By: Jason Kinard
Signature
Printed Name: KCEL
Company
Date: 8-14-25
Time: 1400

Observations/Comments/Special Instructions:

- Arsenic only
- Custody sealed on 08/14/25 at 1318

Total # of Containers: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v5.0 (Rev 6/2025)

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s)
	86696 -2
40 mL clear vial (VOA)	
60 mL CWM HDPE	
125 mL CNM HDPE	
125 mL CWM HDPE	
125 mL GANM w/HCl	
250 mL CWM HDPE	
250 mL GAWM w/H_2SO_4	
500 mL AWM HDPE	
500 mL CWM HDPE	
500 mL CWM PP (MICRO)	
500 mL HDPE (METALS)	1
500 mL GAWM	
1L CWM HDPE	
1L GANM	
1L GAWM w/ H_2SO_4	
2L CWM HDPE:	
Other -	
Other -	
Other -	
Other -	
Other -	
Total # of Samples	1

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	1.6 | 1.6 | 1.6	Delivery Location	Y / N	

Sub-Contracting: Y / N — List Product(s):

Changes: Y / N — List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 8-14-25 — Project No.: 421422

VTRP Collect Date(s): — Project Site Test Reference: CHLS-P(25.2)

Receive Date: 8-14-25 — COC / SDG No.: 19044

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	Y / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: AUG 14 '25 14:05

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

September 2, 2025

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P)

Sample Id.	Sample Collect Date	COC
LEPS250819P	**08/19/2025**	**19005**
LEPS250821P	**08/21/2025**	**18967**
LEPS250821D		

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 3 leachate permit samples collected August 19 and 21, 2025.

Sample Receiving Comments
No sample receiving anomalies were observed.

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

Metals QC Information

All calculable QC results for metals parameters were within laboratory control limits with the following exception.

During **Total Metals** analysis of analytical batch WG202031, the recovery of ***total tin*** from the matrix spike duplicate (MSD) exceeded the lower laboratory control limit. Sample LEPS250819P was used to prepare the MSD. The *total tin* result for sample LEPS250819P was qualified G due to this lower MSD recovery and may be biased low.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,



Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

Sample Data

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 09/02/2025
Report Group: CHLS-P_082625

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250821P**
SDG / Lab Sample ID: **18967 / L86753-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**
Collect Date: **08/21/2025**
Login Date: **08/21/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, AS-ICPMS, Metals

Client Sample ID: **LEPS250821D**
SDG / Lab Sample ID: **18967 / L86753-3**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**
Collect Date: **08/21/2025**
Login Date: **08/21/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, AS-ICPMS, Metals

Client Sample ID: **LEPS250819P**
SDG / Lab Sample ID: **19005 / L86753-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**
Collect Date: **08/19/2025**
Login Date: **08/19/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, P-ICPMS, Metals

200.8, SWD-ICPMS23, Metals

245.1, HG-CVAA-M, Metals

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 09/02/2025
Report Group: CHLS-P_082625

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250821P**
CoC / Lab Sample ID: **18967 / L86753-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **08/21/2025**
Login Date: **08/21/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.179		.0005	.00249	1	08/22/2025	08/25/2025	WG202096

Client Sample ID: **LEPS250821D**
CoC / Lab Sample ID: **18967 / L86753-3**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **08/21/2025**
Login Date: **08/21/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.178		.00049	.00246	1	08/22/2025	08/25/2025	WG202096

Client Sample ID: **LEPS250819P**
CoC / Lab Sample ID: **19005 / L86753-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **08/19/2025**
Login Date: **08/19/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Aluminum, Total	10	mg/L	.682		.05	.1		08/20/2025	08/22/2025	WG202031
Antimony, Total	10	mg/L	.0178		.003	.01		08/20/2025	08/22/2025	WG202031
Arsenic, Total	10	mg/L	.179		.0005	.00251	1	08/20/2025	08/22/2025	WG202031
Barium, Total	10	mg/L	.086		.005	.00501		08/20/2025	08/22/2025	WG202031
Beryllium, Total	10	mg/L	<.001	U	.001	.00501		08/20/2025	08/22/2025	WG202031
Cadmium, Total	10	mg/L	<.0005	U	.0005	.00251	0.5	08/20/2025	08/22/2025	WG202031
Calcium, Total	10	mg/L	53.2		.501	.501		08/20/2025	08/22/2025	WG202031
Chromium, Total	10	mg/L	.222		.002	.01	2.75	08/20/2025	08/22/2025	WG202031
Cobalt, Total	10	mg/L	.0431		.0005	.00251		08/20/2025	08/22/2025	WG202031
Copper, Total	10	mg/L	.0059	T	.002	.02	3	08/20/2025	08/22/2025	WG202031
Iron, Total	10	mg/L	9.09		.1	.501		08/20/2025	08/22/2025	WG202031
Lead, Total	10	mg/L	.0013	T	.001	.00501	2	08/20/2025	08/22/2025	WG202031
Magnesium, Total	10	mg/L	95.3		.501	.501		08/20/2025	08/22/2025	WG202031
Manganese, Total	10	mg/L	.286		.001	.00501		08/20/2025	08/22/2025	WG202031
Nickel, Total	10	mg/L	.175		.001	.00501	2.5	08/20/2025	08/22/2025	WG202031
Phosphorus, Total	10	mg/L	7.66		1	1		08/20/2025	08/22/2025	WG202031
Potassium, Total	10	mg/L	710		1	5.01		08/20/2025	08/22/2025	WG202031
Selenium, Total	10	mg/L	<.005	U	.005	.01		08/20/2025	08/22/2025	WG202031
Silver, Total	10	mg/L	<.0004	U	.0004	.002	1	08/20/2025	08/22/2025	WG202031
Sodium, Total	10	mg/L	1860		1	1		08/20/2025	08/22/2025	WG202031
Thallium, Total	10	mg/L	<.00075	DU	.00075	.002		08/20/2025	08/25/2025	WG202031
Tin, Total	10	mg/L	.0156	DG	.005	.015		08/20/2025	08/25/2025	WG202031
Vanadium, Total	10	mg/L	.0709	D	.00075	.00376		08/20/2025	08/25/2025	WG202031
Zinc, Total	10	mg/L	.155		.005	.0251	5	08/20/2025	08/22/2025	WG202031
Mercury, Total	2	mg/L	<.0001	U	.0001	.0002		08/21/2025	08/22/2025	WG202068

Target Parameter Count for Report Group: 27

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

Quality Control Data

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory QC Report

CHLS-P_082625 COC 18967 19005

Workgroup: WG202031 Total Metals by ICPMS

MB:WG202031-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.1	0.5	ug/L		U
Sodium, Total	100	100	ug/L		U
Magnesium, Total	50	50	ug/L		U
Aluminum, Total	5	10	ug/L		U
Phosphorus, Total	100	100	ug/L		U
Potassium, Total	100	500	ug/L		U
Calcium, Total	50	50	ug/L		U
Vanadium, Total	0.075	0.375	ug/L		U
Chromium, Total	0.2	1	ug/L		U
Manganese, Total	0.1	0.5	ug/L		U
Iron, Total	10	50	ug/L		U
Cobalt, Total	0.05	0.25	ug/L		U
Nickel, Total	0.1	0.5	ug/L		U
Copper, Total	0.2	2	ug/L		U
Zinc, Total	0.5	2.5	ug/L		U
Arsenic, Total	0.05	0.25	ug/L		U
Selenium, Total	0.5	1	ug/L		U
Silver, Total	0.04	0.2	ug/L		U
Cadmium, Total	0.05	0.25	ug/L		U
Tin, Total	0.5	1.5	ug/L		U
Antimony, Total	0.3	1	ug/L		U
Barium, Total	0.5	0.5	ug/L		U
Thallium, Total	0.075	0.2	ug/L		U
Lead, Total	0.1	0.5	ug/L		U

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory QC Report

CHLS-P_082625 COC 18967 19005

SB:WG202031-2 MB:WG202031-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.1	0.5	ug/L	U	20	20.1	100		85--115
Sodium, Total	100	100	ug/L	U	5000	5110	102		85--115
Magnesium, Total	50	50	ug/L	U	5000	4830	97		85--115
Aluminum, Total	5	10	ug/L	U	200	203	102		85--115
Phosphorus, Total	100	100	ug/L	U	5000	4880	98		85--115
Potassium, Total	100	500	ug/L	U	5000	4850	97		85--115
Calcium, Total	50	50	ug/L	U	5000	4850	97		85--115
Vanadium, Total	0.075	0.375	ug/L	U	20	21.1	105		85--115
Chromium, Total	0.2	1	ug/L	U	20	20.7	103		85--115
Manganese, Total	0.1	0.5	ug/L	U	20	20.3	102		85--115
Iron, Total	10	50	ug/L	U	5000	5230	105		85--115
Cobalt, Total	0.05	0.25	ug/L	U	20	20.7	104		85--115
Nickel, Total	0.1	0.5	ug/L	U	20	21.2	106		85--115
Copper, Total	0.2	2	ug/L	U	20	21.7	108		85--115
Zinc, Total	0.5	2.5	ug/L	U	20	21.1	105		85--115
Arsenic, Total	0.05	0.25	ug/L	U	20	19.7	99		85--115
Selenium, Total	0.5	1	ug/L	U	20	19.9	99		85--115
Silver, Total	0.04	0.2	ug/L	U	20	19.7	99		85--115
Cadmium, Total	0.05	0.25	ug/L	U	20	19.4	97		85--115
Tin, Total	0.5	1.5	ug/L	U	20	20.1	101		85--115
Antimony, Total	0.3	1	ug/L	U	20	18.8	94		85--115
Barium, Total	0.5	0.5	ug/L	U	20	20	100		85--115
Thallium, Total	0.075	0.2	ug/L	U	20	19.9	99		85--115
Lead, Total	0.1	0.5	ug/L	U	20	19.4	97		85--115

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory QC Report

CHLS-P_082625 COC 18967 19005

MSD:WG202031-4 MS:WG202031-3 L86753-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	0.98	4.91	ug/L	U	196	167	85		75--125	202	184	91		10		0--20
Sodium, Total	982	982	ug/L	1860000	49100	1920000		4xRule	75--125	50600	1940000		4xRule	1		0--20
Magnesium, Total	491	491	ug/L	95300	49100	147000	105		75--125	50600	150000	109		2		0--20
Aluminum, Total	49	98.2	ug/L	682	1960	2640	100		75--125	2020	2740	102		4		0--20
Phosphorus, Total	980	982	ug/L	7660	49100	58500	104		75--125	50600	59400	102		1		0--20
Potassium, Total	980	4910	ug/L	710000	49100	767000		4xRule	75--125	50600	782000		4xRule	2		0--20
Calcium, Total	491	491	ug/L	53200	49100	103000	101		75--125	50600	105000	102		2		0--20
Vanadium, Total	0.74	3.68	ug/L	70.9	196	282	108		75--125	202	283	105		0		0--20
Chromium, Total	2	9.82	ug/L	222	196	425	103		75--125	202	430	103		1		0--20
Manganese, Total	0.98	4.91	ug/L	286	196	485	102		75--125	202	492	102		1		0--20
Iron, Total	98	491	ug/L	9090	49100	58600	101		75--125	50600	59800	100		2		0--20
Cobalt, Total	0.49	2.46	ug/L	43.1	196	242	101		75--125	202	247	101		2		0--20
Nickel, Total	0.98	4.91	ug/L	175	196	375	102		75--125	202	382	103		2		0--20
Copper, Total	2	19.6	ug/L	5.9	196	207	102		75--125	202	211	101		2		0--20
Zinc, Total	4.9	24.6	ug/L	155	196	351	100		75--125	202	358	101		2		0--20
Arsenic, Total	0.49	2.46	ug/L	179	196	380	102		75--125	202	384	101		1		0--20
Selenium, Total	4.9	9.82	ug/L	U	196	201	102		75--125	202	215	106		7		0--20
Silver, Total	0.39	1.96	ug/L	U	196	180	92		75--125	202	186	92		3		0--20
Cadmium, Total	0.49	2.46	ug/L	U	196	184	93		75--125	202	189	93		3		0--20
Tin, Total	4.9	14.7	ug/L	15.6	196	166	76		75--125	202	166	74	*	0		0--20
Antimony, Total	2.9	9.82	ug/L	17.8	196	190	88		75--125	202	211	96		10		0--20
Barium, Total	4.9	4.91	ug/L	86	196	277	97		75--125	202	311	111		12		0--20
Thallium, Total	0.74	1.96	ug/L	U	196	189	96		75--125	202	197	98		4		0--20
Lead, Total	0.98	4.91	ug/L	1.3	196	180	91		75--125	202	201	99		11		0--20

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory QC Report

CHLS-P_082625 COC 18967 19005

Workgroup: WG202068 Total Mercury by CVAA

MB:WG202068-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.05	0.1	ug/L		U

SB:WG202068-2 MB:WG202068-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	0.915	91		85--115

MSD:WG202068-4 MS:WG202068-3 L86554-1 Matrix: OTHR WTR Listtype:MTHG-MID Method:EPA 245.1 Project:421085-100 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	0.983	98		75--125	1	0.97	97		1		0--20

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory QC Report

CHLS-P_082625 COC 18967 19005

Workgroup: WG202096 Total Metals by ICPMS

MB:WG202096-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total	0.05	0.25	ug/L		U

SB:WG202096-2 MB:WG202096-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Arsenic, Total	0.05	0.25	ug/L	U	20	20.2	101		85--115

MSD:WG202096-4 MS:WG202096-3 L86753-3 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Arsenic, Total	0.49	2.43	ug/L	178	195	380	104		75--125	196	381	104		0		0--20

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4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 8/21/25

Department of Natural Resources and Parks
Solid Waste Division

No. **18967**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P(25)

Project Site Test Reference

Lab No.	Sample ID	Date	Time	GROUNDWATER: CHGW Cedar Hills GW Qtly (2)	CHGW Cedar Hills EPZ GW Qtly (2.1)	CHGW/VAGW Appendix III GW (4)	CHGW-OS Cedar Hills GW Offsite (38)	CFGW Cedar Falls GW Qtly (5)	DUGW Duvall GW Qtly (6)	ENGW Enumclaw GW Qtly (7)	HOGW Hobart GW Qtly (8)	HTGW Houghton GW Qtly (9)	PUGW Puyallup GW Qtly (10)	VAGW Vashon GW Qtly (12)	SURFACE WATER: CHSW-Q Cedar Hills SW Sta. E-1 (14)	CHSW-TD Cedar Hills SW Top Deck (42)	CHSW-E CH Emergency (49.1)	CFSW Cedar Falls SW Qtly (17)	DUSW Duvall SW Qtly (18)	VASW Vashon SW Qtly-WEIRS (21)	ISGP: CHSW-P Cedar Hills SW (16)	HTSW-P Houghton SW (52)	SHSW-P Shoreline SW (53)	FASW-P Factoria SW (54)	ENSW-P Enumclaw SW (56)	ALSW-P Algona SW (57)	VASW-P Vashon SW (58)	LEACHATE/WASTEWATER: CHTW Cedar Hills Truckwash (24)	CHLS-M Cedar Hills Leachate Mtly (23)	CHLS-M_MOD CH Leachate Mods Mtly (23+)	CHLS-M_As CH Leachate As Semi-Ann. (23.1)	PRETREATMENT PERMITS: CHLS-P CH L Permit (wkly, 1st) (25)	CHLS-P CH L Permit (monthly) (25.1)	CHLS-P CH L Permit (wkly, 2nd) (25.2)	ALLS-P Algona WW Permit (26)	BLLS-P Bow Lake WW Permit (20)	ENLS-P Enumclaw WW Permit (27)	FALS-P Factoria WW Permit (28)	SRLS-P Shoreline WW Permit (29)	HTLS-P Houghton WW Permit (30)	RELS-P Renton WW Permit (31)	VALS-P Vashon WW Permit Tanker (32)	VALS-Q Vashon Leachate Qtly (34)	Number of Containers	Remarks
86753-2	LEPS250821P	8/21/25	1000																												X										1	Diss. Sulfide <0.1 ppm
86753-3	LEPS250821D	8/21/25	1000																												X										1	NA

Relinquished By Sampler: Hannah Spear
Sampler Signature: H.Spear
Sampler Printed Name: KCSWD
Company
Date: 8/21/25
Time: 1200

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By
Signature
Printed Name
Company
Date
Time

Received By: Jason Linnell
Signature
Printed Name: KCEL
Company
Date: 8/21/25
Time: 1420

Observations/Comments/Special Instructions:
*Arsenic Only
Custody sealed 8/21/25 @ 1200

Total # of Containers: 2

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v5.0 (Rev 6/2025)

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 86753 -2	-3
40 mL clear vial (VOA)		
60 mL CWM HDPE		
125 mL CNM HDPE		
125 mL CWM HDPE		
125 mL GANM w/HCl		
250 mL CWM HDPE		
250 mL GAWM w/H_2SO_4		
500 mL AWM HDPE		
500 mL CWM HDPE		
500 mL CWM PP (MICRO)		
500 mL HDPE (METALS)	1	1
500 mL GAWM		
1L CWM HDPE		
1L GANM		
1L GAWM w/ H_2SO_4		
2L CWM HDPE:		
Other -		
Other -		
Other -		
Other -		
Other -		
Total # of Samples	2	1	1
	Number of bottles per sample		

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	2.0 | 1.8 | 1.8	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 8-21-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P(25)

Receive Date: 8-21-25 COC / SDG No.: 18967

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter "Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: AUG 21 '25 14:39

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

Chain of Custody Record

Environmental Monitoring Program

Date: 8/19/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19005**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P(25)

Lab No.	Sample ID	Date	Time	Project Site Test Reference	Number of Containers	Remarks
86753-1	LEPS250819P	8/19/25	1000	CHLS-P(25)	1	Diss Sulfide <0.1 ppm

Project Site Test Reference columns (GROUNDWATER / SURFACE WATER / LEACHATE/WASTEWATER):

GROUNDWATER											
CHGW Cedar Hills GW Qtly	CHGW Cedar Hills EPZ GW Qtly	CHGW/VAGW Appendix III GW	CHGW-OS Cedar Hills GW Offsite	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	
2	2.1	4	38	5	6	7	8	9	10	12	

SURFACE WATER						
CHSW-Q Cedar Hills SW Sta. E-1	CHSW-TD Cedar Hills SW Top Deck	CHSW-E CH Emergency	CFSW Cedar Falls SW Qtly	DUSW Duvall SW Qtly	VASW Vashon SW Qtly-WEIRS	
14	42	49.1	17	18	21	

ISGP							
CHSW-P Cedar Hills SW	HTSW-P Houghton SW	SHSW-P Shoreline SW	FASW-P Factoria SW	ENSW-P Enumclaw SW	ALSW-P Algona SW	VASW-P Vashon SW	
16	52	53	54	56	57	58	

LEACHATE/WASTEWATER																			
CHTW Cedar Hills Truckwash	CHLS-M Cedar Hills Leachate Mthly	CHLS-M_MOD CH Leachate Mods Mthly	CHLS-M_As CH Leachate As Semi-Ann.	PRETREATMENT PERMITS															
				CHLS-P CH L Permit (wkly, 1st)	CHLS-P CH L Permit (mnthly)	CHLS-P CH L Permit (wkly, 2nd)	ALLS-P Algona WW Permit	BLLS-P Bow Lake WW Permit	ENLS-P Enumclaw WW Permit	FALS-P Factoria WW Permit	SRLS-P Shoreline WW Permit	HTLS-P Houghton WW Permit	RELS-P Renton WW Permit	VALS-P Vashon WW Permit Tanker	VALS-Q Vashon Leachate Qtly			
24	23	23+	23.1	25	25.1	25.2	26	20	27	28	29	30	31	32	34			
				X															

	Relinquished By Sampler	Date	Received By	Date
	Hannah Spear	8/19/25		
	Sampler Signature: HSpear		Signature	
	Sampler Printed Name: KCSWD	Time: 1145	Printed Name	Time
	Company		Company	
	Relinquished By	Date	Received By	Date
	Signature		Signature: Jason Kinnard	8-19-25
	Printed Name	Time	Printed Name: KCEL	Time: 1350
	Company		Company	

Observations/Comments/Special Instructions:

Custody sealed 8/19/25 @1145.

Total # of Containers: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v5.0 (Rev 6/2025)

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s)										
	86753 -1										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)											
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	1.8/1.8/1.9	Delivery Location	Y / N	

Sub-Contracting: Y / N — List Product(s):

Changes: Y / N — List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 8-19-25 — Project No.: 421422

VTRP Collect Date(s): — Project Site Test Reference: CHLS-P (25)

Receive Date: 8-19-25 — COC / SDG No.: 19005

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: AUG 19 '25 13:55

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

September 3, 2025

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P)

Sample Id.	Sample Collect Date	COC
LEPS250826P	**08/26/2025**	**19066**
LEPS250828P	**08/28/2025**	**18968**

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 2 leachate permit samples collected August 26 and 28, 2025.

Sample Receiving Comments
No sample receiving anomalies were observed.

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

Metals QC Information

All calculable QC results for metals parameters were within laboratory control limits.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,



Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

Sample Data

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 09/03/2025
Report Group: CHLS-P_090225

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250826P**
SDG / Lab Sample ID: **19066 / L86797-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**
Collect Date: **08/26/2025**
Login Date: **08/26/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, P-ICPMS, Metals

200.8, SWD-ICPMS23, Metals

245.1, HG-CVAA-M, Metals

Client Sample ID: **LEPS250828P**
SDG / Lab Sample ID: **19068 / L86797-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**
Collect Date: **08/28/2025**
Login Date: **08/28/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, AS-ICPMS, Metals

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 09/03/2025
Report Group: CHLS-P_090225

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250826P**
CoC / Lab Sample ID: **19066 / L86797-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **08/26/2025**
Login Date: **08/26/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Aluminum, Total	10	mg/L	.639		.05	.1		08/27/2025	08/29/2025	WG202152
Antimony, Total	10	mg/L	.0201		.003	.01		08/27/2025	08/29/2025	WG202152
Arsenic, Total	10	mg/L	.182		.0005	.0025	1	08/27/2025	08/29/2025	WG202152
Barium, Total	10	mg/L	.0832		.005	.00501		08/27/2025	08/29/2025	WG202152
Beryllium, Total	10	mg/L	<.001	U	.001	.00501		08/27/2025	08/29/2025	WG202152
Cadmium, Total	10	mg/L	<.0005	U	.0005	.0025	0.5	08/27/2025	08/29/2025	WG202152
Calcium, Total	10	mg/L	53.5		.501	.501		08/27/2025	08/29/2025	WG202152
Chromium, Total	10	mg/L	.227		.002	.01	2.75	08/27/2025	08/29/2025	WG202152
Cobalt, Total	10	mg/L	.0435		.0005	.0025		08/27/2025	08/29/2025	WG202152
Copper, Total	10	mg/L	.0057	T	.002	.02	3	08/27/2025	08/29/2025	WG202152
Iron, Total	10	mg/L	10.1		.1	.501		08/27/2025	08/29/2025	WG202152
Lead, Total	10	mg/L	.0013	T	.001	.00501	2	08/27/2025	08/29/2025	WG202152
Magnesium, Total	10	mg/L	108		.501	.501		08/27/2025	08/29/2025	WG202152
Manganese, Total	10	mg/L	.254		.001	.00501		08/27/2025	08/29/2025	WG202152
Nickel, Total	10	mg/L	.18		.001	.00501	2.5	08/27/2025	08/29/2025	WG202152
Phosphorus, Total	10	mg/L	7.94		1	1		08/27/2025	08/29/2025	WG202152
Potassium, Total	10	mg/L	758		1	5.01		08/27/2025	08/29/2025	WG202152
Selenium, Total	10	mg/L	<.005	U	.005	.01		08/27/2025	08/29/2025	WG202152
Silver, Total	10	mg/L	<.0004	U	.0004	.002	1	08/27/2025	08/29/2025	WG202152
Sodium, Total	10	mg/L	2010		1	1		08/27/2025	08/29/2025	WG202152
Thallium, Total	10	mg/L	<.00075	U	.00075	.002		08/27/2025	08/29/2025	WG202152
Tin, Total	10	mg/L	.014	T	.005	.015		08/27/2025	08/29/2025	WG202152
Vanadium, Total	10	mg/L	.0686	D	.00075	.00375		08/27/2025	09/02/2025	WG202152
Zinc, Total	10	mg/L	.137		.005	.025	5	08/27/2025	08/29/2025	WG202152
Mercury, Total	2	mg/L	<.0001	U	.0001	.0002		08/27/2025	08/28/2025	WG202172

Client Sample ID: **LEPS250828P**
CoC / Lab Sample ID: **19068 / L86797-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **08/28/2025**
Login Date: **08/28/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.188		.0005	.0025	1	08/29/2025	09/02/2025	WG202222

Target Parameter Count for Report Group: 26

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

Quality Control Data

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory QC Report

CHLS-P_090225 COC 19066 19068

Workgroup: WG202152 Total Metals by ICPMS

MB:WG202152-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.1	0.5	ug/L		U
Sodium, Total	100	100	ug/L		U
Magnesium, Total	50	50	ug/L		U
Aluminum, Total	5	10	ug/L		U
Phosphorus, Total	100	100	ug/L		U
Potassium, Total	100	500	ug/L		U
Calcium, Total	50	50	ug/L		U
Vanadium, Total	0.075	0.375	ug/L		U
Chromium, Total	0.2	1	ug/L		U
Manganese, Total	0.1	0.5	ug/L		U
Iron, Total	10	50	ug/L		U
Cobalt, Total	0.05	0.25	ug/L		U
Nickel, Total	0.1	0.5	ug/L		U
Copper, Total	0.2	2	ug/L		U
Zinc, Total	0.5	2.5	ug/L		U
Arsenic, Total	0.05	0.25	ug/L		U
Selenium, Total	0.5	1	ug/L		U
Silver, Total	0.04	0.2	ug/L		U
Cadmium, Total	0.05	0.25	ug/L		U
Tin, Total	0.5	1.5	ug/L		U
Antimony, Total	0.3	1	ug/L		U
Barium, Total	0.5	0.5	ug/L		U
Thallium, Total	0.075	0.2	ug/L		U
Lead, Total	0.1	0.5	ug/L		U

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory QC Report

CHLS-P_090225 COC 19066 19068

SB:WG202152-2 MB:WG202152-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.1	0.5	ug/L	U	20	20.8	104		85--115
Sodium, Total	100	100	ug/L	U	5000	5220	104		85--115
Magnesium, Total	50	50	ug/L	U	5000	5190	104		85--115
Aluminum, Total	5	10	ug/L	U	200	204	102		85--115
Phosphorus, Total	100	100	ug/L	U	5000	5110	102		85--115
Potassium, Total	100	500	ug/L	U	5000	5180	104		85--115
Calcium, Total	50	50	ug/L	U	5000	5100	102		85--115
Vanadium, Total	0.075	0.375	ug/L	U	20	20.3	101		85--115
Chromium, Total	0.2	1	ug/L	U	20	21.4	107		85--115
Manganese, Total	0.1	0.5	ug/L	U	20	21.2	106		85--115
Iron, Total	10	50	ug/L	U	5000	5090	102		85--115
Cobalt, Total	0.05	0.25	ug/L	U	20	20.7	104		85--115
Nickel, Total	0.1	0.5	ug/L	U	20	21.2	106		85--115
Copper, Total	0.2	2	ug/L	U	20	21.2	106		85--115
Zinc, Total	0.5	2.5	ug/L	U	20	20.9	104		85--115
Arsenic, Total	0.05	0.25	ug/L	U	20	19.8	99		85--115
Selenium, Total	0.5	1	ug/L	U	20	20.1	100		85--115
Silver, Total	0.04	0.2	ug/L	U	20	20.8	104		85--115
Cadmium, Total	0.05	0.25	ug/L	U	20	20.1	100		85--115
Tin, Total	0.5	1.5	ug/L	U	20	20.9	105		85--115
Antimony, Total	0.3	1	ug/L	U	20	20.4	102		85--115
Barium, Total	0.5	0.5	ug/L	U	20	21.9	109		85--115
Thallium, Total	0.075	0.2	ug/L	U	20	20.9	104		85--115
Lead, Total	0.1	0.5	ug/L	U	20	21.2	106		85--115

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory QC Report

CHLS-P_090225 COC 19066 19068

MSD:WG202152-4 MS:WG202152-3 L86797-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	0.98	4.9	ug/L	U	196	209	107		75--125	197	212	108		2		0--20
Sodium, Total	981	981	ug/L	2010000	49000	2060000		4xRule	75--125	49300	2030000		4xRule	1		0--20
Magnesium, Total	490	490	ug/L	108000	49000	159000	105		75--125	49300	156000	97		2		0--20
Aluminum, Total	49	98.1	ug/L	639	1960	2750	108		75--125	1970	2720	105		1		0--20
Phosphorus, Total	980	981	ug/L	7940	49000	61800	110		75--125	49300	62400	110		1		0--20
Potassium, Total	980	4900	ug/L	758000	49000	803000		4xRule	75--125	49300	804000		4xRule	0		0--20
Calcium, Total	490	490	ug/L	53500	49000	104000	104		75--125	49300	105000	104		1		0--20
Vanadium, Total	0.74	3.68	ug/L	68.6	196	260	97		75--125	197	258	96		1		0--20
Chromium, Total	2	9.81	ug/L	227	196	432	104		75--125	197	428	102		1		0--20
Manganese, Total	0.98	4.9	ug/L	254	196	455	102		75--125	197	453	101		0		0--20
Iron, Total	98	490	ug/L	10100	49000	59500	101		75--125	49300	61000	103		3		0--20
Cobalt, Total	0.49	2.45	ug/L	43.5	196	240	100		75--125	197	245	102		2		0--20
Nickel, Total	0.98	4.9	ug/L	180	196	378	101		75--125	197	381	102		1		0--20
Copper, Total	2	19.6	ug/L	5.7	196	215	107		75--125	197	215	106		0		0--20
Zinc, Total	4.9	24.5	ug/L	137	196	332	100		75--125	197	338	102		2		0--20
Arsenic, Total	0.49	2.45	ug/L	182	196	382	102		75--125	197	392	107		2		0--20
Selenium, Total	4.9	9.81	ug/L	U	196	211	107		75--125	197	217	110		3		0--20
Silver, Total	0.39	1.96	ug/L	U	196	191	98		75--125	197	190	96		1		0--20
Cadmium, Total	0.49	2.45	ug/L	U	196	193	98		75--125	197	191	97		1		0--20
Tin, Total	4.9	14.7	ug/L	14	196	170	79		75--125	197	167	77		2		0--20
Antimony, Total	2.9	9.81	ug/L	20.1	196	234	109		75--125	197	231	107		1		0--20
Barium, Total	4.9	4.9	ug/L	83.2	196	290	105		75--125	197	304	112		5		0--20
Thallium, Total	0.74	1.96	ug/L	U	196	215	110		75--125	197	212	108		1		0--20
Lead, Total	0.98	4.9	ug/L	1.3	196	214	108		75--125	197	217	109		1		0--20

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory QC Report

CHLS-P_090225 COC 19066 19068

Workgroup: WG202172 Total Mercury by CVAA

MB:WG202172-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.05	0.1	ug/L		U

SB:WG202172-2 MB:WG202172-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	0.933	93		85--115

MSD:WG202172-4 MS:WG202172-3 L86797-1 Matrix: LEACHATE Listtype:MTHG-MID Method:EPA 245.1 Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.1	0.2	ug/L	U	2	1.51	75		75--125	2	1.54	77		2		0--20

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

King County Environmental Laboratory QC Report

CHLS-P_090225 COC 19066 19068

Workgroup: WG202222 Total Metals by ICPMS

MB:WG202222-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total	0.05	0.25	ug/L		U

SB:WG202222-2 MB:WG202222-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Arsenic, Total	0.05	0.25	ug/L	U	20	19.9	100		85--115

MSD:WG202222-4 MS:WG202222-3 L86797-2 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Arsenic, Total	0.49	2.45	ug/L	188	196	389	102		75--125	195	378	97		3		0--20

==========

4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 8/26/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19066**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25)

Lab No.	Sample ID	Date	Time
86797-1	LEPS250826P	8/26/25	1000

Project Site Test Reference

GROUNDWATER: CHGW Cedar Hills GW Qlty (2); CHGW Cedar Hills EP2 GW Qlty (2.1); CHGW/AGW Appendix III GW (4); CHGW-OS Cedar Hills GW Offsite (38); CFGW Cedar Falls GW Qlty (5); DUGW Duvall GW Qlty (6); ENGW Enumclaw GW Qlty (7); HOGW Hobart GW Qlty (8); HTGW Houghton GW Qlty (9); PUGW Puyallup GW Qlty (10); VAGW Vashon GW Qlty (12)

SURFACE WATER: CHSW-Q Cedar Hills SW Sta. E-1 (14); CHSW-TD Cedar Hills SW Top Deck (42); CHSW-E CH Emergency (49.1); CFSW Cedar Falls SW Qlty (17); DUSW Duvall SW Qlty (18); VASW Vashon SW Qlty-WEIRS (21)

ISGP: CHSW-P Cedar Hills SW (16); HTSW-P Houghton SW (52); SHSW-P Shoreline SW (53); FASW-P Factoria SW (54); ENSW-P Enumclaw SW (56); ALSW-P Algona SW (57); VASW-P Vashon SW (58)

LEACHATE/WASTEWATER: CHTW Cedar Hills Truckwash (24); CHLS-M Cedar Hills Leachate Mtly (23); CHLS-M_MOD CH Leachate Mods Mtly (23+); CHLS-M_As CH Leachate As Semi-Ann. (23.1)

PRETREATMENT PERMITS: CHLS-P CH L Permit (wkly, 1st) (25); CHLS-P CH L Permit (mnthly) (25.1); CHLS-P CH L Permit (wkly, 2nd) (25.2); ALLS-P Algona WW Permit (26); BLLS-P Bow Lake WW Permit (20); ENLS-P Enumclaw WW Permit (27); FALS-P Factoria WW Permit (28); SRLS-P Shoreline WW Permit (29); HTLS-P Houghton WW Permit (30); RELS-P Renton WW Permit (31); VALS-P Vashon WW Permit Tanker (32); VALS-Q Vashon Leachate Qlty (34)

Lab No.	Number of Containers	Remarks
86797-1	1	Diss. Sulfide <0.1 ppb

Relinquished By Sampler: L W
Sampler Signature: I. Rivera
Sampler Printed Name: KCSWD
Company
Date: 8/26/25
Time: 1310

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By
Signature
Printed Name
Company
Date
Time

Received By: Jason Kinnard
Signature
Printed Name: KCEL
Company
Date: 8/26/25
Time: 1414

Observations/Comments/Special Instructions:
Sample custody sealed on 8/26/25 at 1310.

Total # of Containers: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v5.0 (Rev 6/2025)

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 86797 -1
40 mL clear vial (VOA)	
60 mL CWM HDPE	
125 mL CNM HDPE	
125 mL CWM HDPE	
125 mL GANM w/HCl	
250 mL CWM HDPE	
250 mL GAWM w/H_2SO_4	
500 mL AWM HDPE	
500 mL CWM HDPE	
500 mL CWM PP (MICRO)	
500 mL HDPE (METALS)	1
500 mL GAWM	
1L CWM HDPE	
1L GANM	
1L GAWM w/ H_2SO_4	
2L CWM HDPE:	
Other -	
Other -	
Other -	
Other -	
Other -	
Total # of Samples	1

Number of bottles per sample

Sample Collect Date(s): 8-26-25 Project No.: 421422

VTRP Collect Date(s): — Project Site Test Reference: CHLS-P(25)

Receive Date: 8-26-25 COC / SDG No.: 190666

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	Y / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	1.6 | 1.5 | 1.5	Delivery Location	Y / N	

Sub-Contracting: Y / N List Product(s):

Changes: Y / N List Parameter(s):

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

COMMENTS / NOTIFICATIONS

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: AUG 26 '25 14:20

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

Chain of Custody Record

Environmental Monitoring Program

Date: 8/28/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19068**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25.2)

Lab No.	Sample ID	Date	Time
JK ~~86767-2~~ 86777-2	LEPS250828P	8/28/25	1000

Project Site Test Reference

	CHSW Cedar Hills GW Qlty	CHSW Cedar Hills EPZ GW Qlty	CHSWVASW Appendix III GW	CHSW-OS Cedar Hills GW Offsite	CFSW Cedar Falls GW Qlty	DUSW Duvall GW Qlty	ENSW Enumclaw GW Qlty	HOSW Hobart GW Qlty	HTSW Houghton GW Qlty	PUSW Puyallup GW Qlty	VASW Vashon GW Qlty	CHSW-Q Cedar Hills SW Sta. E-1	CHSW-TD Cedar Hills SW Top Deck	CHSW-E CH Emergency	CFSW Cedar Falls SW Qlty	DUSW Duvall SW Qlty	VASW Vashon SW Qlty-WEIRS	ISGP: CHSW-P Cedar Hills SW	ISGP: HTSW-P Houghton SW	ISGP: SHSW-P Shoreline SW	ISGP: FASW-P Factoria SW	ISGP: ENSW-P Enumclaw SW	ISGP: ALSW-P Algona SW	ISGP: VASW-P Vashon SW	CHTW Cedar Hills Truckwash	CHLS-M Cedar Hills Leachate Mthly	CHLS-M_MOD CH Leachate Mods Mthly	CHLS-M_As CH Leachate As Sent-Anm.	PRETREATMENT PERMITS: CHLS-P CH L Permit (wkly, 1st)	CHLS-P CH L Permit (monthly)	CHLS-P CH L Permit (wkly, 2nd)	ALLS-P Algona WW Permit	BLLS-P Bow Lake WW Permit	ENLS-P Enumclaw WW Permit	FALS-P Factoria WW Permit	SRLS-P Shoreline WW Permit	HTLS-P Houghton WW Permit	RELS-P Renton WW Permit	VALS-P Vashon WW Permit Tanker	VALS-Q Vashon Leachate Qlty	Number of Containers	Remarks
	GROUNDWATER 2	2.1	4	38	5	6	7	8	9	10	12	SURFACE WATER 14	42	49.1	17	18	21	16	52	53	54	56	57	58	LEACHATE/WASTEWATER 24	23	23+	23.1	25	25.1	25.2	26	20	27	28	29	30	31	32	34		
																															X									1	

Relinquished By Sampler: L. Ri
Sampler Signature: I. Rivera
Sampler Printed Name: KCSWD
Company
Date: 8/28/25
Time: 1135

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By
Signature
Printed Name
Company
Date
Time

Received By: JK
Signature: Jason Kinnard
Printed Name: KCEL
Company
Date: 8/28/25
Time: 1617

Observations/Comments/Special Instructions:

Arsenic Only

Sample custody sealed on 8/28 at 1135 hrs

Total # of Containers: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v5.0 (Rev 6/2025)

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s)										
	86797 -2										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										
	Number of bottles per sample										

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	2.1 (2019	Delivery Location	Y / N	

Sub-Contracting: Y / N List Product(s):

Changes: Y / N List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 8-28-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P(25.2)

Receive Date: 8-28-25 COC / SDG No.: 19068

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	Y / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: AUG 28 '25 16:19

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

HYDROGEN SULFIDE GAS AT MANHOLE R10-52

Instrument #	Serial #	Calibration Date/Time
RKI Eagle 2	E2E656	7/30/2025 @ 0714
Sample Count	**Interval Time (sec)**	**Bump Test Date**
11765	60	7/30/2025 @ 0715

H2S Readings

Date	Daily Average	Instantaneous Maximum	Daily Maximum 15-min Rolling Average	Daily Maximum 8-hr Rolling Average	Daily Max 7-day Rolling Average
7/30/2025	0.0264	1.0	0.77	0.04	-
7/31/2025	0.0226	4.5	1.63	0.07	-
8/1/2025	0.5830	3.5	3.17	1.57	-
8/2/2025	0.6177	5.5	4.10	1.73	-
8/3/2025	0.1781	7.0	4.40	1.54	-
8/4/2025	0.1819	2.0	1.60	0.51	-
8/5/2025	0.0000	0.0	0.00	0.48	-
8/6/2025	0.0326	3.5	2.07	0.10	0.23
8/7/2025	0.0455	3.0	1.87	0.06	0.23
			15 ppm	*10 ppm*	*3 ppm*

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

HYDROGEN SULFIDE GAS AT MANHOLE R10-52

Instrument #	Serial #	Calibration Date/Time
RKI Eagle 2	E2E656	8/19/2025 @ 1143
Sample Count	**Interval Time (sec)**	**Bump Test Date**
10089	60	8/19/2025 @ 1144

H2S Readings

Date	Daily Average	Instantaneous Maximum	Daily Maximum 15-min Rolling Average	Daily Maximum 8-hr Rolling Average	Daily Max 7-day Rolling Average
8/19/2025	0.0000	0.0	0.00	0.00	-
8/20/2025	0.0000	0.0	0.00	0.00	-
8/21/2025	0.0472	5.5	3.33	0.14	-
8/22/2025	0.0177	4.0	1.70	0.05	-
8/23/2025	0.0000	0.0	0.00	0.00	-
8/24/2025	0.0406	5.0	2.97	0.12	-
8/25/2025	0.0028	1.5	0.23	0.01	-
8/26/2025	0.0287	2.5	1.23	0.04	0.02
			15 ppm	*10 ppm*	*3 ppm*

Docusign Envelope ID: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03

KING COUNTY SOLID WASTE DIVISION

LEACHATE HAULING REPORT

TANKER LOADS

MONTH: AUGUST

YEAR: 2025

	DUVALL						VASHON				HOBART		OTHER		
DATE	BRIGHT		C.H.		SPOK.		SPOK.		C.H.		C.H.		C.H.		REMARKS
LOAD	6000	7000	6000	7000	6000	7000	6000	7000	6000	7000	6000	7000	6000	7000	
1															
2															
3															
4															
5															
6															
7															
8															
9													3.00	4.00	Factoria to CH
10															
11													3.00	6.00	Factoria to CH
12														6.00	Factoria to CH
13													3.00	6.00	Factoria to CH
14													1.00	2.00	Factoria to CH
15															
16															
17															
18													3.00	6.00	factoria to CH
19													3.00	6.00	factoria to CH
20													2.00	4.00	factoria to CH
21															
22															
23															
24															
25															
26															
27															
28															
29															
30															
31															
TOTAL	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	108000	280000.00	

Certificate Of Completion

Envelope Id: 911A60AC-E21C-4A5F-AA54-5ACA1839BB03
Status: Completed
Subject: Complete with Docusign: August2025_CoverLetter_SMR.pdf, 7842-04_SMR_August2025.pdf, August 2025...
Source Envelope:
Document Pages: 72
Signatures: 3
Certificate Pages: 5
Initials: 1
AutoNav: Enabled
EnvelopeId Stamping: Enabled
Time Zone: (UTC-08:00) Pacific Time (US & Canada)

Envelope Originator:
Aaron Copado
401 5TH AVE
SEATTLE, WA 98104
acopado@kingcounty.gov
IP Address: 198.49.222.20

Record Tracking

Status: Original
9/15/2025 8:07:45 AM
Holder: Aaron Copado
acopado@kingcounty.gov
Location: DocuSign

Security Appliance Status: Connected
Pool: FedRamp

Storage Appliance Status: Connected
Pool: King County-Dept of Natural Resources-Solid Waste
Location: Docusign

Signer Events	Signature	Timestamp
Aaron Copado acopado@kingcounty.gov Environmental Scientist III KC_DNRP_SWD Security Level: Email, Account Authentication (None)	 Signature Adoption: Pre-selected Style Using IP Address: 198.49.222.20	Sent: 9/15/2025 9:39:36 AM Viewed: 9/15/2025 9:39:48 AM Signed: 9/15/2025 9:41:11 AM
Electronic Record and Signature Disclosure: Not Offered via Docusign		
Jennifer Keune jennifer.keune@kingcounty.gov Interim Supervisor KC_DNRP_SWD Security Level: Email, Account Authentication (None)	 Signature Adoption: Pre-selected Style Using IP Address: 67.160.11.161	Sent: 9/15/2025 9:41:16 AM Viewed: 9/15/2025 9:54:22 AM Signed: 9/15/2025 9:55:15 AM
Electronic Record and Signature Disclosure: Accepted: 3/31/2021 3:20:14 PM ID: 040441cf-883c-43c6-a4af-1ccb2ef73edc		

In Person Signer Events	Signature	Timestamp

Editor Delivery Events	Status	Timestamp

Agent Delivery Events	Status	Timestamp

Intermediary Delivery Events	Status	Timestamp

Certified Delivery Events	Status	Timestamp

Carbon Copy Events	Status	Timestamp

Witness Events	Signature	Timestamp

Notary Events	Signature	Timestamp

Envelope Summary Events	Status	Timestamps

Envelope Summary Events	Status	Timestamps
Envelope Sent	Hashed/Encrypted	9/15/2025 9:39:36 AM
Certified Delivered	Security Checked	9/15/2025 9:54:22 AM
Signing Complete	Security Checked	9/15/2025 9:55:15 AM
Completed	Security Checked	9/15/2025 9:55:15 AM

Payment Events	Status	Timestamps

Electronic Record and Signature Disclosure

ELECTRONIC RECORD AND SIGNATURE DISCLOSURE

From time to time, King County-ZZDepartmentTemplate 03 (we, us or Company) may be required by law to provide to you certain written notices or disclosures. Described below are the terms and conditions for providing to you such notices and disclosures electronically through the DocuSign system. Please read the information below carefully and thoroughly, and if you can access this information electronically to your satisfaction and agree to this Electronic Record and Signature Disclosure (ERSD), please confirm your agreement by selecting the check-box next to 'I agree to use electronic records and signatures' before clicking 'CONTINUE' within the DocuSign system.

Getting paper copies

At any time, you may request from us a paper copy of any record provided or made available electronically to you by us. You will have the ability to download and print documents we send to you through the DocuSign system during and immediately after the signing session and, if you elect to create a DocuSign account, you may access the documents for a limited period of time (usually 30 days) after such documents are first sent to you. After such time, if you wish for us to send you paper copies of any such documents from our office to you, you will be charged a $0.00 per-page fee. You may request delivery of such paper copies from us by following the procedure described below.

Withdrawing your consent

If you decide to receive notices and disclosures from us electronically, you may at any time change your mind and tell us that thereafter you want to receive required notices and disclosures only in paper format. How you must inform us of your decision to receive future notices and disclosure in paper format and withdraw your consent to receive notices and disclosures electronically is described below.

Consequences of changing your mind

If you elect to receive required notices and disclosures only in paper format, it will slow the speed at which we can complete certain steps in transactions with you and delivering services to you because we will need first to send the required notices or disclosures to you in paper format, and then wait until we receive back from you your acknowledgment of your receipt of such paper notices or disclosures. Further, you will no longer be able to use the DocuSign system to receive required notices and consents electronically from us or to sign electronically documents from us.

All notices and disclosures will be sent to you electronically

Unless you tell us otherwise in accordance with the procedures described herein, we will provide electronically to you through the DocuSign system all required notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you during the course of our relationship with you. To reduce the chance of you inadvertently not receiving any notice or disclosure, we prefer to provide all of the required notices and disclosures to you by the same method and to the same address that you have given us. Thus, you can receive all the disclosures and notices electronically or in paper format through the paper mail delivery system. If you do not agree with this process, please let us know as described below. Please also see the paragraph immediately above that describes the consequences of your electing not to receive delivery of the notices and disclosures electronically from us.

How to contact King County-ZZDepartmentTemplate 03:

You may contact us to let us know of your changes as to how we may contact you electronically, to request paper copies of certain information from us, and to withdraw your prior consent to receive notices and disclosures electronically as follows:
To contact us by email send messages to: cipriano.dacanay@kingcounty.gov

To advise King County-ZZDepartmentTemplate 03 of your new email address

To let us know of a change in your email address where we should send notices and disclosures electronically to you, you must send an email message to us at cipriano.dacanay@kingcounty.gov and in the body of such request you must state: your previous email address, your new email address. We do not require any other information from you to change your email address.

If you created a DocuSign account, you may update it with your new email address through your account preferences.

To request paper copies from King County-ZZDepartmentTemplate 03

To request delivery from us of paper copies of the notices and disclosures previously provided by us to you electronically, you must send us an email to cipriano.dacanay@kingcounty.gov and in the body of such request you must state your email address, full name, mailing address, and telephone number. We will bill you for any fees at that time, if any.

To withdraw your consent with King County-ZZDepartmentTemplate 03

To inform us that you no longer wish to receive future notices and disclosures in electronic format you may:

i. decline to sign a document from within your signing session, and on the subsequent page, select the check-box indicating you wish to withdraw your consent, or you may;

ii. send us an email to cipriano.dacanay@kingcounty.gov and in the body of such request you must state your email, full name, mailing address, and telephone number. We do not need any other information from you to withdraw consent.. The consequences of your withdrawing consent for online documents will be that transactions may take a longer time to process..

Required hardware and software

The minimum system requirements for using the DocuSign system may change over time. The current system requirements are found here: https://support.docusign.com/guides/signer-guide-signing-system-requirements.

Acknowledging your access and consent to receive and sign documents electronically

To confirm to us that you can access this information electronically, which will be similar to other electronic notices and disclosures that we will provide to you, please confirm that you have read this ERSD, and (i) that you are able to print on paper or electronically save this ERSD for your future reference and access; or (ii) that you are able to email this ERSD to an email address where you will be able to print on paper or save it for your future reference and access. Further, if you consent to receiving notices and disclosures exclusively in electronic format as described herein, then select the check-box next to 'I agree to use electronic records and signatures' before clicking 'CONTINUE' within the DocuSign system.

By selecting the check-box next to 'I agree to use electronic records and signatures', you confirm that:

- You can access and read this Electronic Record and Signature Disclosure; and
- You can print on paper this Electronic Record and Signature Disclosure, or save or send this Electronic Record and Disclosure to a location where you can print it, for future reference and access; and
- Until or unless you notify King County-ZZDepartmentTemplate 03 as described above, you consent to receive exclusively through electronic means all notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you by King County-ZZDepartmentTemplate 03 during the course of your relationship with King County-ZZDepartmentTemplate 03.

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County
Solid Waste Division
Department of Natural Resources and Parks
King Street Center
201 South Jackson Street, Suite 6400
Seattle, WA 98104-3855
206-477-4466
711 TTY Relay
kingcounty.gov/solid-waste

October 15, 2025

TO: Arnaud Girard, Industrial Waste Compliance Investigator III, Wastewater Treatment Division

FM: Aaron Copado, Environmental Scientist III, King County Solid Waste Division (KCSWD) DS AC

RE: Wastewater Discharge Permit # 7842-04 - Cedar Hills – Self-Monitoring Report

The purpose of this memorandum is to enclose the Self-Monitoring Report (SMR) for Cedar Hills (Permit # 7842-04) for the month of September 2025. Enclosed you will find:

- Industrial Waste Discharge Self-Monitoring Report for Sites A9002 & A90021
- Laboratory Test Results for CHLS-P (for samples collected 9/2/25, 9/4/25, 9/9/25, 9/11/25, 9/16/25, 9/18/25, 9/23/35, 9/25/2025, and 9/29/25)
- Atmospheric Hydrogen Sulfide Data at A9002 (for 9/4 - 9/11)
- Leachate Hauling Report (for September)

There were no exceedances during the month of September.

Condition S3.C.2.d states:

> *The acceptance limit for calibration verification is 90-110 percent of the reference measurement. The permittee must re-calibrate the flow meter(s) per manufacturer's specifications if the verification fails. All self-monitoring data taken with flow meters that fail verification must be noted on self-monitoring reports until the subject flow meter is back within acceptance limits.*

Flow measurements outside of acceptable limits were observed during meter verification on 8/15/2025. Therefore, KCSWD is noting a flow error that is greater than 10% as of 8/15/2025. This will continue until a new flow meter can be purchased and installed, which is expected to be completed by 11/15/2025.

Please contact me directly if you have any questions. I can be reached at (253) 400-6532, or by e-mail at acopado@kingcounty.gov.

Enclosures

cc: Theresa Thurlow, P.E., Section Manager, KCSWD

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

Jennifer Keune, Supervisor, KCSWD
Dan Swope, Supervising Engineer, KCSWD
Grant Dornfeld, Engineer II, KCSWD

Printed on recycled paper

King County

Industrial Waste Program Monthly Self-Monitoring Report

Send to: King County Industrial Waste Program
Email: info.KCIW@kingcounty.gov

Company Name: King County SWD - Cedar Hills Regional Landfill **Sample Site No.** A90021 **Permit No.:** *7842-04*

Please Specify Month & Year: **Month/Year** September 2025

This form is available at www.kingcounty.gov/industrialwaste.

*** Sample Types (C) Composite (G) Grab (BC) Batch** **All conc. units are mg/L unless otherwise noted. Loading units are pounds per day (lbs./da**

Sample Date (circle)	Sample Type*	pH	Arsenic		Cadmium		Chromium		Copper		Lead		Daily Discharge Volume, gpd	Notes (Indicate Batch Discharge where applicable)
			Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading		
1													250000	*Flow Meter Error >10%
2	C	8.69	0.1830	0.1604	<0.0005	0.0002	0.2220	0.1946	0.0056	0.0049	0.0013	0.00114	105100	*Flow Meter Error >10%
3													125200	*Flow Meter Error >10%
4	C		0.1730	0.2163									149900	*Flow Meter Error >10%
5													148500	*Flow Meter Error >10%
6													149600	*Flow Meter Error >10%
7													162700	*Flow Meter Error >10%
8													148300	*Flow Meter Error >10%
9	C	8.66	0.2000	0.2469	<0.0005	0.0003	0.2470	0.3049	0.0069	0.0085	0.0014	0.00173	148000	*Flow Meter Error >10%
10													146900	*Flow Meter Error >10%
11	C		0.1920	0.2362									147500	*Flow Meter Error >10%
12													284700	*Flow Meter Error >10%
13													284200	*Flow Meter Error >10%
14													120600	*Flow Meter Error >10%
15													146000	*Flow Meter Error >10%
16	C	8.71	0.1930	0.2344	<0.0005	0.0003	0.2420	0.2939	0.0061	0.0074	0.0016	0.00194	145600	*Flow Meter Error >10%
17													146400	*Flow Meter Error >10%
18	C		0.1900	0.2312									145900	*Flow Meter Error >10%
19													146500	*Flow Meter Error >10%
20													145200	*Flow Meter Error >10%
21													137000	*Flow Meter Error >10%
22													139500	*Flow Meter Error >10%
23	C	8.71	0.1970	0.2368	<0.0005	0.0003	0.2440	0.2932	0.0064	0.0077	0.0016	0.00192	144100	*Flow Meter Error >10%
24													0	*Flow Meter Error >10%
25	C		0.2000	0.2427									145500	*Flow Meter Error >10%
26													144100	*Flow Meter Error >10%
27													143300	*Flow Meter Error >10%
28													143000	*Flow Meter Error >10%
29	C	8.71	0.2050	0.2435	<0.0005	0.0003	0.2640	0.3135	0.0077	0.0091	0.0017	0.00202	142400	*Flow Meter Error >10%
30													0	*Flow Meter Error >10%
31														

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

Oct 15, 2025
Date

Name and Signature of Principal Executive or Authorized Agent

Monthly Min pH	8.66	9/9/2025	
Monthly Max pH	8.71	9/16, 9/23, 9/29/25	
		Total Monthly Flow (gallons)	4,385,700
		Maximum Daily Flow	284,700
			9/12/2025

PLEASE CIRCLE ALL PERMIT VIOLATIONS

Due Date: Monthly report is due by the 15th each month.

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County

Industrial Waste Program Monthly Self-Monitoring Report

Send to: King County Industrial Waste Program
Email: info.KCIW@kingcounty.gov

Company Name: King County SWD - Cedar Hills Regional Landfill **Sample Site No.** A90021 **Permit No.:** *7842-04*

Please Specify Month & Year: **Month/Year** September 2025

This form is available at www.kingcounty.gov/industrialwaste.

*** Sample Types (C) Composite (G) Grab (BC) Batch** **All conc. units are mg/L unless otherwise noted. Loading units are pounds per day (lbs./da**

Sample Date (circle)	Sample Type	Mercury		Nickel		Silver		Zinc		Total Soluble Sulfides	Ammonia as N	Nitrite + Nitrate as N	Notes (Indicate Batch Discharge where applicable)
		Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading				
1													
2	C	<0.0001	0.00004	0.1810	0.159	<0.0004	0.0002	0.1460	0.128	<0.1 ppm			
3													
4													
5													
6													
7													
8													
9	C	<0.0001	0.00006	0.1890	0.233	<0.0004	0.0002	0.1770	0.218	<0.1 ppm	1080	<0.2	
10													
11													
12													
13													
14													
15													
16	C	<0.0001	0.00006	0.1850	0.225	<0.0004	0.0002	0.1660	0.202	<0.1 ppm			
17													
18													
19													
20													
21													
22													
23	C	<0.0001	0.00006	0.1900	0.228	<0.0004	0.0002	0.1780	0.214	<0.1 ppm			
24													
25													
26													
27													
28													
29	C	<0.0001	0.00006	0.1950	0.232	<0.0004	0.0002	0.1990	0.236	<0.1 ppm			
30													
31													

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

Docusigned by: Jennifer Tuttle A70F5C8AE1C2F4... Oct 15, 2025

Name and Title of Principal Executive or Authorized Agent Date

PLEASE CIRCLE ALL PERMIT VIOLATIONS

Due Date: Monthly report is due by the 15th each month.

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County

Industrial Waste Program Monthly Self-Monitoring Report

Send to: King County Industrial Waste Program
Email: info.KCIW@kingcounty.gov

Atmospheric Hydrogen Sulfide (H_2S) Monitoring

Company Name: King County SWD - Cedar Hills Regional Landfill **Sample Site No.** A9002 **Permit No.:** *7842-04*

Please Specify Month & Year: **Month/Year** September 2025

This form is available at www.kingcounty.gov/industrialwaste.

All units are PPM unless otherwise noted.

Sample Date (circle)	Atmospheric Hydrogen Sulfide, ppmv				Notes
	Instantaneous Maximum	Maximum 15-min Average	Maximum 8-hr Average	7-day Average	
1					
2					
3					
4	0	0	0	-	
5	6	4.17	0.16	-	
6	7	6.07	0.9	-	
7	5.5	2.97	0.71	-	
8	6	4.53	0.27	-	
9	6.5	4.57	0.21	-	
10	5.5	4.13	0.2	-	
11	6.5	4.77	0.25	0.13	
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
Monthly **MAX**	7	Date	09/04/25-09/11/25		
Monthly **AVG**	5.375				

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

Oct 15, 2025

Date

Name and Title (Principal Executive or Authorized Agent)

Docusigned by:

Signature

A70E5C0AE0F44...

PLEASE CIRCLE ALL PERMIT VIOLATIONS

Due Date: **Monthly report is due by the 15th each month.**

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

September 12, 2025

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P)

Sample Id.	Sample Collect Date	COC
LEPS250902P	**09/02/2025**	**19071**
LEPS250904P	**09/04/2025**	**19081**

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 2 leachate permit samples collected September 2 and 4, 2025.

Sample Receiving Comments
No sample receiving anomalies were observed.

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Metals QC Information

All calculable QC results for metals parameters were within laboratory control limits.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,



Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

Sample Data

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 09/12/2025
Report Group: CHLS-P_090925

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250902P**
SDG / Lab Sample ID: **19071 / L86827-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **09/02/2025**
Login Date: **09/02/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, P-ICPMS, Metals

200.8, SWD-ICPMS23, Metals

245.1, HG-CVAA-M, Metals

Client Sample ID: **LEPS250904P**
SDG / Lab Sample ID: **19081 / L86827-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **09/04/2025**
Login Date: **09/04/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, AS-ICPMS, Metals

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 09/12/2025
Report Group: CHLS-P_090925

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250902P**
CoC / Lab Sample ID: **19071 / L86827-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **09/02/2025**
Login Date: **09/02/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Aluminum, Total	10	mg/L	.731		.05	.101		09/03/2025	09/05/2025	WG202261
Antimony, Total	10	mg/L	.0189		.003	.0101		09/03/2025	09/05/2025	WG202261
Arsenic, Total	10	mg/L	.183		.0005	.00252	1	09/03/2025	09/05/2025	WG202261
Barium, Total	10	mg/L	.0862		.005	.00504		09/03/2025	09/05/2025	WG202261
Beryllium, Total	10	mg/L	<.001	U	.001	.00504		09/03/2025	09/05/2025	WG202261
Cadmium, Total	10	mg/L	<.0005	U	.0005	.00252	0.5	09/03/2025	09/05/2025	WG202261
Calcium, Total	10	mg/L	55.6		.504	.504		09/03/2025	09/05/2025	WG202261
Chromium, Total	10	mg/L	.222		.002	.0101	2.75	09/03/2025	09/05/2025	WG202261
Cobalt, Total	10	mg/L	.0451		.0005	.00252		09/03/2025	09/05/2025	WG202261
Copper, Total	10	mg/L	.0056	T	.002	.0202	3	09/03/2025	09/05/2025	WG202261
Iron, Total	10	mg/L	10.7		.1	.504		09/03/2025	09/05/2025	WG202261
Lead, Total	10	mg/L	.0013	T	.001	.00504	2	09/03/2025	09/05/2025	WG202261
Magnesium, Total	10	mg/L	105		.504	.504		09/03/2025	09/05/2025	WG202261
Manganese, Total	10	mg/L	.266		.001	.00504		09/03/2025	09/05/2025	WG202261
Nickel, Total	10	mg/L	.181		.001	.00504	2.5	09/03/2025	09/05/2025	WG202261
Phosphorus, Total	10	mg/L	7.96		1	1.01		09/03/2025	09/05/2025	WG202261
Potassium, Total	10	mg/L	763		1	5.04		09/03/2025	09/05/2025	WG202261
Selenium, Total	10	mg/L	<.005	U	.005	.0101		09/03/2025	09/05/2025	WG202261
Silver, Total	10	mg/L	<.0004	U	.0004	.00202	1	09/03/2025	09/05/2025	WG202261
Sodium, Total	10	mg/L	2040		1.01	1.01		09/03/2025	09/05/2025	WG202261
Thallium, Total	10	mg/L	<.00076	U	.00076	.00202		09/03/2025	09/05/2025	WG202261
Tin, Total	10	mg/L	.014	T	.005	.0151		09/03/2025	09/05/2025	WG202261
Vanadium, Total	10	mg/L	.0692	D	.00076	.00378		09/03/2025	09/05/2025	WG202261
Zinc, Total	10	mg/L	.146		.005	.0252	5	09/03/2025	09/05/2025	WG202261
Mercury, Total	2	mg/L	<.0001	U	.0001	.0002		09/03/2025	09/04/2025	WG202268

Client Sample ID: **LEPS250904P**
CoC / Lab Sample ID: **19081 / L86827-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **09/04/2025**
Login Date: **09/04/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	9	mg/L	.173		.00045	.00227	1	09/08/2025	09/09/2025	WG202347

Target Parameter Count for Report Group: 26

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Quality Control Data

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory QC Report

CHLS-P_090925 COC 19071 19081

Workgroup: WG202261 Total Metals by ICPMS

MB:WG202261-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.1	0.5	ug/L		U
Sodium, Total	100	100	ug/L		U
Magnesium, Total	50	50	ug/L		U
Aluminum, Total	5	10	ug/L		U
Phosphorus, Total	100	100	ug/L		U
Potassium, Total	100	500	ug/L		U
Calcium, Total	50	50	ug/L		U
Vanadium, Total	0.075	0.375	ug/L		U
Chromium, Total	0.2	1	ug/L		U
Manganese, Total	0.1	0.5	ug/L		U
Iron, Total	10	50	ug/L		U
Cobalt, Total	0.05	0.25	ug/L		U
Nickel, Total	0.1	0.5	ug/L		U
Copper, Total	0.2	2	ug/L		U
Zinc, Total	0.5	2.5	ug/L		U
Arsenic, Total	0.05	0.25	ug/L		U
Selenium, Total	0.5	1	ug/L		U
Silver, Total	0.04	0.2	ug/L		U
Cadmium, Total	0.05	0.25	ug/L		U
Tin, Total	0.5	1.5	ug/L		U
Antimony, Total	0.3	1	ug/L		U
Barium, Total	0.5	0.5	ug/L		U
Thallium, Total	0.075	0.2	ug/L		U
Lead, Total	0.1	0.5	ug/L		U

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory QC Report

CHLS-P_090925 COC 19071 19081

SB:WG202261-2 MB:WG202261-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.1	0.5	ug/L	U	20	19.6	98		85--115
Sodium, Total	100	100	ug/L	U	5000	5290	106		85--115
Magnesium, Total	50	50	ug/L	U	5000	5280	106		85--115
Aluminum, Total	5	10	ug/L	U	200	205	102		85--115
Phosphorus, Total	100	100	ug/L	U	5000	5000	100		85--115
Potassium, Total	100	500	ug/L	U	5000	5320	106		85--115
Calcium, Total	50	50	ug/L	U	5000	4670	93		85--115
Vanadium, Total	0.075	0.375	ug/L	U	20	19.7	99		85--115
Chromium, Total	0.2	1	ug/L	U	20	20.8	104		85--115
Manganese, Total	0.1	0.5	ug/L	U	20	20.2	101		85--115
Iron, Total	10	50	ug/L	U	5000	5180	104		85--115
Cobalt, Total	0.05	0.25	ug/L	U	20	21.2	106		85--115
Nickel, Total	0.1	0.5	ug/L	U	20	21.4	107		85--115
Copper, Total	0.2	2	ug/L	U	20	21.1	105		85--115
Zinc, Total	0.5	2.5	ug/L	U	20	20.7	104		85--115
Arsenic, Total	0.05	0.25	ug/L	U	20	20.1	100		85--115
Selenium, Total	0.5	1	ug/L	U	20	19.9	100		85--115
Silver, Total	0.04	0.2	ug/L	U	20	20.9	105		85--115
Cadmium, Total	0.05	0.25	ug/L	U	20	19.8	99		85--115
Tin, Total	0.5	1.5	ug/L	U	20	21.8	109		85--115
Antimony, Total	0.3	1	ug/L	U	20	20.3	102		85--115
Barium, Total	0.5	0.5	ug/L	U	20	20.3	102		85--115
Thallium, Total	0.075	0.2	ug/L	U	20	20.9	105		85--115
Lead, Total	0.1	0.5	ug/L	U	20	20.9	104		85--115

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory QC Report

CHLS-P_090925 COC 19071 19081

MSD:WG202261-4 MS:WG202261-3 L86827-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	0.98	4.92	ug/L	U	197	190	96		75--125	197	192	98		1		0--20
Sodium, Total	984	984	ug/L	2040000	49200	2100000		4xRule	75--125	49200	2110000		4xRule	0		0--20
Magnesium, Total	492	492	ug/L	105000	49200	155000	101		75--125	49200	157000	105		1		0--20
Aluminum, Total	49	98.4	ug/L	731	1970	2780	104		75--125	1970	2920	111		5		0--20
Phosphorus, Total	980	984	ug/L	7960	49200	60400	107		75--125	49200	61500	109		2		0--20
Potassium, Total	980	4920	ug/L	763000	49200	841000		4xRule	75--125	49200	840000		4xRule	0		0--20
Calcium, Total	492	492	ug/L	55600	49200	106000	102		75--125	49200	108000	106		2		0--20
Vanadium, Total	0.74	3.69	ug/L	69.2	197	262	98		75--125	197	261	98		0		0--20
Chromium, Total	2	9.84	ug/L	222	197	407	94		75--125	197	408	95		0		0--20
Manganese, Total	0.98	4.92	ug/L	266	197	456	97		75--125	197	457	97		0		0--20
Iron, Total	98	492	ug/L	10700	49200	60800	102		75--125	49200	59900	100		1		0--20
Cobalt, Total	0.49	2.46	ug/L	45.1	197	245	101		75--125	197	244	101		0		0--20
Nickel, Total	0.98	4.92	ug/L	181	197	375	98		75--125	197	373	98		0		0--20
Copper, Total	2	19.7	ug/L	5.6	197	197	97		75--125	197	197	97		0		0--20
Zinc, Total	4.9	24.6	ug/L	146	197	340	98		75--125	197	336	97		1		0--20
Arsenic, Total	0.49	2.46	ug/L	183	197	388	104		75--125	197	394	107		2		0--20
Selenium, Total	4.9	9.84	ug/L	U	197	208	106		75--125	197	216	110		4		0--20
Silver, Total	0.39	1.97	ug/L	U	197	174	89		75--125	197	177	90		2		0--20
Cadmium, Total	0.49	2.46	ug/L	U	197	189	96		75--125	197	189	96		0		0--20
Tin, Total	4.9	14.8	ug/L	14	197	167	77		75--125	197	175	81		5		0--20
Antimony, Total	3	9.84	ug/L	18.9	197	221	103		75--125	197	220	102		0		0--20
Barium, Total	4.9	4.92	ug/L	86.2	197	303	110		75--125	197	305	111		1		0--20
Thallium, Total	0.74	1.97	ug/L	U	197	195	99		75--125	197	200	101		2		0--20
Lead, Total	0.98	4.92	ug/L	1.3	197	200	101		75--125	197	203	102		1		0--20

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory QC Report

CHLS-P_090925 COC 19071 19081

Workgroup: WG202268 Total Mercury by CVAA

MB:WG202268-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.05	0.1	ug/L		U

SB:WG202268-2 MB:WG202268-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	0.949	95		85--115

MSD:WG202268-4 MS:WG202268-3 L86827-1 Matrix: LEACHATE Listtype:MTHG-MID Method:EPA 245.1 Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.1	0.2	ug/L	U	2	1.64	82		75--125	2	1.61	81		1		0--20

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory QC Report

CHLS-P_090925 COC 19071 19081

Workgroup: WG202347 Total Metals by ICPMS

MB:WG202347-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total	0.05	0.25	ug/L		U

SB:WG202347-2 MB:WG202347-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Arsenic, Total	0.05	0.25	ug/L	U	20	20.4	102		85--115

MSD:WG202347-4 MS:WG202347-3 L86827-2 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Arsenic, Total	0.49	2.44	ug/L	173	195	393	113		75--125	196	393	112		0		0--20

==========

4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 09/02/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19071**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25)

| Lab No. | Sample ID | Date | Time | Project Site Test Reference | | |

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s): 86827
40 mL clear vial (VOA)	
60 mL CWM HDPE	
125 mL CNM HDPE	
125 mL CWM HDPE	
125 mL GANM w/HCl	
250 mL CWM HDPE	
250 mL GAWM w/H_2SO_4	
500 mL AWM HDPE	
500 mL CWM HDPE	
500 mL CWM PP (MICRO)	
500 mL HDPE (METALS)	1
500 mL GAWM	
1L CWM HDPE	
1L GANM	
1L GAWM w/ H_2SO_4	
2L CWM HDPE:	
Other -	
Other -	
Other -	
Other -	
Other -	
Total # of Samples	1

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	1.8 / 1.7 / 1.7	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 9-2-25 Project No.: 421422

VTRP Collect Date(s): — Project Site Test Reference: CHLS-P(25)

Receive Date: 9-2-25 COC / SDG No.: 19077

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter "Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: SEP 02 '25 14:17

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

Chain of Custody Record

Environmental Monitoring Program

Date: 9/4/25

Department of
Natural Resources and Parks
Solid Waste Division

No. **19081**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25.2)

Lab No.	Sample ID	Date	Time
846827-2	LEPS250904P	9/4/25	1030

Project Site Test Reference

| | | |

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s)										
	86827 -2										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	2.0 / 11.8	Delivery Location	Y / N	

Sub-Contracting: Y / N List Product(s):

Changes: Y / N List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 9-4-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P (25.2)

Receive Date: 9-4-25 COC / SDG No.: 14081

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: SEP 04 '25 14:08

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

September 17, 2025

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P)

Sample Id.	Sample Collect Date	COC
LEPS250909P	**09/09/2025**	**19088**
LEPS250911P	**09/11/2025**	**18943**

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 2 leachate permit samples collected September 9 and 11, 2025.

Sample Receiving Comments
No sample receiving anomalies were observed.

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

Conventionals QC Information
All calculable QC results for conventionals parameters were within laboratory control limits.

Metals QC Information
All calculable QC results for metals parameters were within laboratory control limits.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,



Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

Sample Data

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 09/17/2025
Report Group: CHLS-P_091625

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250911P**
SDG / Lab Sample ID: **18943 / L86919-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **09/11/2025**
Login Date: **09/11/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, AS-ICPMS, Metals

Client Sample ID: **LEPS250909P**
SDG / Lab Sample ID: **19088 / L86915-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **09/09/2025**
Login Date: **09/09/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, P-ICPMS, Metals

200.8, SWD-ICPMS23, Metals

245.1, HG-CVAA-M, Metals

4500-NO3-F NO23 Nitrite + Nitrate Nitrogen

Kerouel & Aminot 1997 NH3 Ammonia Nitrogen

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 09/17/2025
Report Group: CHLS-P_091625

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250911P**
CoC / Lab Sample ID: **18943 / L86919-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **09/11/2025**
Login Date: **09/11/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.192		.0005	.00251	1	09/12/2025	09/15/2025	WG202444

Client Sample ID: **LEPS250909P**
CoC / Lab Sample ID: **19088 / L86915-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **09/09/2025**
Login Date: **09/09/2025**
Matrix: **LEACHATE**

Conventionals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Ammonia	50	mg/L	1080		25	50		09/16/2025	09/16/2025	WG202532
Nitrate + Nitrite as N	20	mg/L	<.2	U	.2	.8		09/16/2025	09/16/2025	WG202533

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Mercury, Total	2	mg/L	<.0001	U	.0001	.0002		09/10/2025	09/11/2025	WG202415
Aluminum, Total	10	mg/L	.894		.05	.0998		09/11/2025	09/15/2025	WG202417
Antimony, Total	10	mg/L	.0206		.003	.00998		09/11/2025	09/15/2025	WG202417
Arsenic, Total	10	mg/L	.2		.0005	.00249	1	09/11/2025	09/15/2025	WG202417
Barium, Total	10	mg/L	.103		.005	.00499		09/11/2025	09/15/2025	WG202417
Beryllium, Total	10	mg/L	<.001	U	.001	.00499		09/11/2025	09/15/2025	WG202417
Cadmium, Total	10	mg/L	<.0005	U	.0005	.00249	0.5	09/11/2025	09/15/2025	WG202417
Calcium, Total	10	mg/L	60.8		.499	.499		09/11/2025	09/15/2025	WG202417
Chromium, Total	10	mg/L	.247		.002	.00998	2.75	09/11/2025	09/15/2025	WG202417
Cobalt, Total	10	mg/L	.047		.0005	.00249		09/11/2025	09/15/2025	WG202417
Copper, Total	10	mg/L	.0069	T	.002	.02	3	09/11/2025	09/15/2025	WG202417
Iron, Total	10	mg/L	11.2		.1	.499		09/11/2025	09/15/2025	WG202417
Lead, Total	10	mg/L	.0014	T	.001	.00499	2	09/11/2025	09/15/2025	WG202417
Magnesium, Total	10	mg/L	111		.499	.499		09/11/2025	09/15/2025	WG202417
Manganese, Total	10	mg/L	.346		.001	.00499		09/11/2025	09/15/2025	WG202417
Nickel, Total	10	mg/L	.189		.001	.00499	2.5	09/11/2025	09/15/2025	WG202417
Phosphorus, Total	10	mg/L	8.77		1	.998		09/11/2025	09/15/2025	WG202417
Potassium, Total	10	mg/L	782		1	4.99		09/11/2025	09/15/2025	WG202417
Selenium, Total	10	mg/L	<.005	U	.005	.00998		09/11/2025	09/15/2025	WG202417
Silver, Total	10	mg/L	<.0004	U	.0004	.002	1	09/11/2025	09/15/2025	WG202417
Sodium, Total	10	mg/L	2090		.998	.998		09/11/2025	09/15/2025	WG202417
Thallium, Total	10	mg/L	<.00075	U	.00075	.002		09/11/2025	09/15/2025	WG202417
Tin, Total	10	mg/L	.011	T	.005	.015		09/11/2025	09/15/2025	WG202417
Vanadium, Total	10	mg/L	.0721		.00075	.00374		09/11/2025	09/15/2025	WG202417
Zinc, Total	10	mg/L	.177		.005	.0249	5	09/11/2025	09/15/2025	WG202417

Target Parameter Count for Report Group: 28

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

Quality Control Data

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory QC Report

CHLS-P_0091625 COC 18943, 19088

Workgroup: WG202532 Dissolved Nutrients

MB:WG202532-1 Matrix: BLANK WTR Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Ammonia Nitrogen	0.5	1	mg/L		U

SB:WG202532-3 MB:WG202532-1 Matrix: BLANK WTR Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.5	1	mg/L	U	10	10.3	103		80--120

LCS:WG202532-4 Matrix: BLANK WTR Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.5	1	mg/L	10	10.9	109		85--115

LD:WG202532-5 L86920-6 Matrix: LEACHATE Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project:421422-CHLS-M_MOD Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Ammonia Nitrogen	25	50	mg/L	794	794	0		0--20

MS:WG202532-6 L86920-6 Matrix: LEACHATE Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project:421422-CHLS-M_MOD Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	25	50	mg/L	794	10	1280	97		75--125

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory QC Report

CHLS-P_0091625 COC 18943, 19088

Workgroup: WG202533 Dissolved Nutrients

MB:WG202533-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L		U

SB:WG202533-3 MB:WG202533-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	U	1	1.01	101		80--120

LCS:WG202533-4 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	1	0.981	98		85--115

LD:WG202533-5 L86920-4 Matrix: LEACHATE Listtype:CVNO23 Method:SM4500-NO3-F Project:421422-CHLS-M_MOD Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.05	0.2	mg/L	0.425	0.43	1		0--20

MS:WG202533-6 L86920-4 Matrix: LEACHATE Listtype:CVNO23 Method:SM4500-NO3-F Project:421422-CHLS-M_MOD Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.05	0.2	mg/L	0.425	1	5.3	97		75--125

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory QC Report

CHLS-P_0091625 COC 18943, 19088

Workgroup: WG202415 Total Mercury by CVAA

MB:WG202415-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.05	0.1	ug/L		U

SB:WG202415-2 MB:WG202415-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	0.939	94		85--115

MSD:WG202415-4 MS:WG202415-3 L86899-3 Matrix: IW WTR Listtype:MTHG-MID Method:EPA 245.1 Project:421163 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	1.02	102		75--125	1	0.985	99		3		0--20

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Workgroup: WG202417 Total Metals by ICPMS

MB:WG202417-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.1	0.5	ug/L		U
Sodium, Total	100	100	ug/L		U
Magnesium, Total	50	50	ug/L		U
Aluminum, Total	5	10	ug/L		U
Phosphorus, Total	100	100	ug/L		U
Potassium, Total	100	500	ug/L		U
Calcium, Total	50	50	ug/L		U
Vanadium, Total	0.075	0.375	ug/L		U
Chromium, Total	0.2	1	ug/L		U
Manganese, Total	0.1	0.5	ug/L		U
Iron, Total	10	50	ug/L		U
Cobalt, Total	0.05	0.25	ug/L		U
Nickel, Total	0.1	0.5	ug/L		U
Copper, Total	0.2	2	ug/L		U
Zinc, Total	0.5	2.5	ug/L		U
Arsenic, Total	0.05	0.25	ug/L		U
Selenium, Total	0.5	1	ug/L		U
Silver, Total	0.04	0.2	ug/L		U
Cadmium, Total	0.05	0.25	ug/L		U
Tin, Total	0.5	1.5	ug/L		U
Antimony, Total	0.3	1	ug/L		U
Barium, Total	0.5	0.5	ug/L		U
Thallium, Total	0.075	0.2	ug/L		U
Lead, Total	0.1	0.5	ug/L		U

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SB:WG202417-2 MB:WG202417-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.1	0.5	ug/L	U	20	19.9	100		85--115
Sodium, Total	100	100	ug/L	U	5000	5570	111		85--115
Magnesium, Total	50	50	ug/L	U	5000	5460	109		85--115
Aluminum, Total	5	10	ug/L	U	200	210	105		85--115
Phosphorus, Total	100	100	ug/L	U	5000	5200	104		85--115
Potassium, Total	100	500	ug/L	U	5000	5410	108		85--115
Calcium, Total	50	50	ug/L	U	5000	5260	105		85--115
Vanadium, Total	0.075	0.375	ug/L	U	20	21.1	105		85--115
Chromium, Total	0.2	1	ug/L	U	20	22.2	111		85--115
Manganese, Total	0.1	0.5	ug/L	U	20	21.9	110		85--115
Iron, Total	10	50	ug/L	U	5000	5400	108		85--115
Cobalt, Total	0.05	0.25	ug/L	U	20	21.9	109		85--115
Nickel, Total	0.1	0.5	ug/L	U	20	22.2	111		85--115
Copper, Total	0.2	2	ug/L	U	20	22.7	113		85--115
Zinc, Total	0.5	2.5	ug/L	U	20	21.6	108		85--115
Arsenic, Total	0.05	0.25	ug/L	U	20	21.4	107		85--115
Selenium, Total	0.5	1	ug/L	U	20	21	105		85--115
Silver, Total	0.04	0.2	ug/L	U	20	21.3	106		85--115
Cadmium, Total	0.05	0.25	ug/L	U	20	20.6	103		85--115
Tin, Total	0.5	1.5	ug/L	U	20	21.3	106		85--115
Antimony, Total	0.3	1	ug/L	U	20	20.4	102		85--115
Barium, Total	0.5	0.5	ug/L	U	20	20.1	101		85--115
Thallium, Total	0.075	0.2	ug/L	U	20	22.3	111		85--115
Lead, Total	0.1	0.5	ug/L	U	20	22.9	114		85--115

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King County Environmental Laboratory QC Report

CHLS-P_0091625 COC 18943, 19088

MSD:WG202417-4 MS:WG202417-3 L86915-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	1	5.01	ug/L	U	200	205	102		75--125	200	207	104		1		0--20
Sodium, Total	1000	1000	ug/L	2090000	50100	2170000		4xRule	75--125	49900	2200000		4xRule	2		0--20
Magnesium, Total	501	501	ug/L	111000	50100	165000	108		75--125	49900	163000	104		1		0--20
Aluminum, Total	50	100	ug/L	894	2000	3110	111		75--125	2000	3140	112		1		0--20
Phosphorus, Total	1000	1000	ug/L	8770	50100	63500	109		75--125	49900	64000	111		1		0--20
Potassium, Total	1000	5010	ug/L	782000	50100	843000		4xRule	75--125	49900	852000		4xRule	1		0--20
Calcium, Total	501	501	ug/L	60800	50100	116000	110		75--125	49900	114000	106		2		0--20
Vanadium, Total	0.75	3.75	ug/L	72.1	200	276	102		75--125	200	276	102		0		0--20
Chromium, Total	2	10	ug/L	247	200	449	101		75--125	200	440	97		2		0--20
Manganese, Total	1	5.01	ug/L	346	200	553	103		75--125	200	550	102		0		0--20
Iron, Total	100	501	ug/L	11200	50100	60700	99		75--125	49900	60800	99		0		0--20
Cobalt, Total	0.5	2.5	ug/L	47	200	261	107		75--125	200	250	102		5		0--20
Nickel, Total	1	5.01	ug/L	189	200	399	105		75--125	200	387	99		3		0--20
Copper, Total	2	20	ug/L	6.9	200	223	108		75--125	200	209	101		7		0--20
Zinc, Total	5	25	ug/L	177	200	394	109		75--125	200	375	99		5		0--20
Arsenic, Total	0.5	2.5	ug/L	200	200	425	112		75--125	200	407	104		4		0--20
Selenium, Total	5	10	ug/L	U	200	223	112		75--125	200	217	109		3		0--20
Silver, Total	0.4	2	ug/L	U	200	192	96		75--125	200	188	94		2		0--20
Cadmium, Total	0.5	2.5	ug/L	U	200	197	98		75--125	200	196	98		0		0--20
Tin, Total	5	15	ug/L	11	200	170	80		75--125	200	168	79		1		0--20
Antimony, Total	3	10	ug/L	20.6	200	230	105		75--125	200	236	108		3		0--20
Barium, Total	5	5.01	ug/L	103	200	307	102		75--125	200	312	105		2		0--20
Thallium, Total	0.75	2	ug/L	U	200	211	105		75--125	200	209	105		1		0--20
Lead, Total	1	5.01	ug/L	1.4	200	213	106		75--125	200	213	106		0		0--20

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King County Environmental Laboratory QC Report

CHLS-P_0091625 COC 18943, 19088

Workgroup: WG202444 (9 12 25 SWD LV) Run ID: R282451

MB:WG202444-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total	0.05	0.25	ug/L		U

SB:WG202444-2 MB:WG202444-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Arsenic, Total	0.05	0.25	ug/L	U	20	21.1	105		85--115

MSD:WG202444-4 MS:WG202444-3 L86919-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Arsenic, Total	0.49	2.46	ug/L	192	196	406	109		75--125	198	399	105		2		0--20

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4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 9/9/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19088**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25.1)

Lab No.	Sample ID	Date	Time
86915-1	LEPS250909P	9/9/25	1030

Project Site Test Reference

	CHGW	CHGW	CHGW/WAGW	CHGW-OS	CFGW	DUGW	ENGW	HOGW	HTGW	PUGW	VAGW	CHSW-Q	CHSW-TD	CHSW-E	CFSW	DUSW	VASW	CHSW-P	HTSW-P	SHSW-P	FASW-P	ENSW-P	ALSW-P	VASW-P	CHTW	CHLS-M	CHLS-M_MOD	CHLS-M_As	CHLS-P	CHLS-P	CHLS-P	ALLS-P	BLLS-P	ENLS-P	FALS-P	SRLS-P	HTLS-P	RELS-P	VALS-P	VALS-Q
	Cedar Hills GW Qty	Cedar Hills EPZ GW Qty	Appendix III GW	Cedar Hills GW Offsite	Cedar Falls GW Qty	Duvall GW Qty	Enumclaw GW Qty	Hobart GW Qty	Houghton GW Qty	Puyallup GW Qty	Vashon GW Qty	Cedar Hills SW Sta. E-1	Cedar Hills SW Top Deck	CH Emergency	Cedar Falls SW Qty	Duvall SW Qty	Vashon SW Qty-WEIRS	Cedar Hills SW	Houghton SW	Shoreline SW	Factoria SW	Enumclaw SW	Algona SW	Vashon SW	Cedar Hills Truckwash	Cedar Hills Leachate Mtly	CH Leachate Mods Mtly	CH Leachate As Semi-Ann.	CH L Permit (wkly, 1st)	CH L Permit (mthly)	CH L Permit (wkly, 2nd)	Algona WW Permit	Bow Lake WW Permit	Enumclaw WW Permit	Factoria WW Permit	Shoreline WW Permit	Houghton WW Permit	Renton WW Permit	Vashon WW Permit Tanker	Vashon Leachate Qty
	GROUNDWATER											SURFACE WATER						ISGP							LEACHATE/WASTEWATER				PRETREATMENT PERMITS											
	2	2.1	4	38	5	6	7	8	9	10	12	14	42	49.1	17	18	21	16	52	53	54	56	57	58	24	23	23+	23.1	25	25.1	25.2	26	20	27	28	29	30	31	32	34
86915-1	LEPS250909P	9/9/25	1030																											X										

Remarks: Diss. Sulfide

Number of Containers: 2 <0.1 pp

Relinquished By Sampler: Hannah Spear	Date: 9/9/25	Received By:	Date:
Sampler Signature: H. Spear		Signature:	
Sampler Printed Name: KCSWD	Time: 1220	Printed Name:	Time:
Company		Company	
Relinquished By	Date	Received By: Jason Kinard	Date: 9-9-25
Signature		Signature	
Printed Name	Time	Printed Name: KCEL	Time: 1400
Company		Company	

Observations/Comments/Special Instructions:
Nutrients field filtered.
Custody sealed 9/9/25 @ 1220.

Total # of Containers: 2

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v5.0 (Rev 6/2025)

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 869151
40 mL clear vial (VOA)	
60 mL CWM HDPE	1
125 mL CNM HDPE	
125 mL CWM HDPE	
125 mL GANM w/HCl	
250 mL CWM HDPE	
250 mL GAWM w/H_2SO_4	
500 mL AWM HDPE	
500 mL CWM HDPE	
500 mL CWM PP (MICRO)	
500 mL HDPE (METALS)	1
500 mL GAWM	
1L CWM HDPE	
1L GANM	
1L GAWM w/ H_2SO_4	
2L CWM HDPE:	
Other -	
Other -	
Other -	
Other -	
Other -	
Total # of Samples	2 2
	Number of bottles per sample

Sample Collect Date(s): 9-9-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P (25.1)

Receive Date: 9-9-25 COC / SDG No.: 190858

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other: NH_3, NO_{23} w/ H_2SO_4 (Y)			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	2.1 / 1.7 / 1.7	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

COMMENTS / NOTIFICATIONS

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____ Date / Time Completed: SEP 09 '25 14:14

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

Chain of Custody Record

Environmental Monitoring Program

Date: 9/11/25

Department of Natural Resources and Parks
Solid Waste Division

No. **18943**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P(25.2)

Lab No.	Sample ID	Date	Time
86919-1	LEPS250911P	9/11/25	1030

Project Site Test Reference

	CHGW Cedar Hills GW Qlty	CHGW Cedar Hills EP2 GW Qlty	CHGW/VAGW Appendix III GW	CHGW-OS Cedar Hills GW Offsite	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	CHSW-Q Cedar Hills SW Sta. E-1	CHSW-P Cedar Hills SW ISGP	CHSW-TD Cedar Hills SW Top Deck	CHSW-E CH Emergency	CFSW Cedar Falls SW Qlty	DUSW Duvall SW Qlty	VASW Vashon SW Qlty-WEIRS	TS: HTSW-P Houghton SW NPDES	TS: SHSW-P Shoreline SW NPDES	TS: FASW-P Factoria SW NPDES	TS: ENSW-P Enumclaw SW NPDES	TS: ALSW-P Algona SW NPDES	TS: VASW-P Vashon SW NPDES	CHTW Cedar Hills Truckwash	CHLS-M Cedar Hills Leachate Mtly	CHLS-M_MOD CH Leachate Mods Mtly	CHLS-M_As CH Leachate As Sent-Anm.	PERMIT: CHLS-P CH L Permit (wkly, 1st)	PERMIT: CHLS-P CH L Permit (mnthly)	PERMIT: CHLS-P CH L Permit (wkly, 2nd)	PERMIT: ALLS Algona WW Permit	PERMIT: BLLS Bow Lake WW Permit	PERMIT: ENLS Enumclaw WW Permit	PERMIT: FALS Factoria WW Permit	PERMIT: SRLS Shoreline WW Permit	PERMIT: HTLS Houghton WW Permit	PERMIT: RELS Renton WW Permit	PERMIT: VALS-P Vashon WW Permit Tanker	VALS-Q Vashon Leachate Qlty	Number of Bottles	Remarks
	2	2.1	4	38	5	6	7	8	9	10	12	14	16	42	49.1	17	18	21	52	53	54	56	57	58	24	23	23+	23.1	25	25.1	25.2	26	20	27	28	29	30	31	32	34		
												GROUNDWATER							SURFACE WATER										LEACHATE/WASTEWATER														
86919-1	LEPS250911P	9/11/25	1030																												X									1	

Relinquished By Sampler: N. Reber
Sampler Signature: N. Reber
Sampler Printed Name: KCSWD
Company
Date: 9/11/25
Time: 1100

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By
Signature
Printed Name
Company
Date
Time

Received By: Jason Kinnaird
Signature
Printed Name: KCEL
Company
Date: 9-11-25
Time: 1350

Observations/Comments/Special Instructions:

Arsenic only
Custody Sealed @ 1100 on 9/11/25

Total # of Bottles: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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. Receiving lab is to retain the original and create a copy for KCSWD personnel to keep.

FFB - Field Filtration Blank
FQ - Field QC

v4.00 (Rev 12/2023)

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 86919 -1										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	1.9 1.8 1.8	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 9-11-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P(252)

Receive Date: 9-11-25 COC / SDG No.: 18943

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Other:			
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: SEP 11 '25 14:01

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Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

September 26, 2025

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P)

Sample Id.	Sample Collect Date	COC
LEPS250916P	**09/16/2025**	**19097**
LEPS250918P	**09/18/2025**	**19100**

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 2 leachate permit samples collected September 16 and 18, 2025.

Sample Receiving Comments
No sample receiving anomalies were observed.

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

Conventionals QC Information
All calculable QC results for conventionals parameters were within laboratory control limits.

Metals QC Information
All calculable QC results for metals parameters were within laboratory control limits with the following exception.

During **Total Metals** analysis of analytical batch WG202571, the recovery of ***total tin*** from the matrix spike (MS) and MS duplicate (MSD) exceeded the lower laboratory control limit. Sample LEPS250916P was used to prepare the MS/MSD. The *total tin* result for sample LEPS250916P was qualified G based on these exceedances and may be biased low.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,



Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

Sample Data

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 09/26/2025
Report Group: CHLS-P_092325

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250916P**
SDG / Lab Sample ID: **19097 / L86943-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **09/16/2025**
Login Date: **09/16/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, P-ICPMS, Metals

200.8, SWD-ICPMS23, Metals

245.1, HG-CVAA-M, Metals

Client Sample ID: **LEPS250918P**
SDG / Lab Sample ID: **19100 / L86943-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **09/18/2025**
Login Date: **09/18/2025**
Matrix: **LEACHATE**

Analyses Requested:

6020B, AS-ICPMS, Metals

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 09/26/2025
Report Group: CHLS-P_092325

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250916P**
CoC / Lab Sample ID: **19097 / L86943-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **09/16/2025**
Login Date: **09/16/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Mercury, Total	2	mg/L	<.0001	U	.0001	.0002		09/17/2025	09/18/2025	WG202563
Aluminum, Total	10	mg/L	.949		.05	.101		09/18/2025	09/19/2025	WG202571
Antimony, Total	10	mg/L	.0201		.003	.0101		09/18/2025	09/19/2025	WG202571
Arsenic, Total	10	mg/L	.193		.0005	.00252	1	09/18/2025	09/19/2025	WG202571
Barium, Total	10	mg/L	.0924		.005	.00505		09/18/2025	09/19/2025	WG202571
Beryllium, Total	10	mg/L	<.001	U	.001	.00505		09/18/2025	09/19/2025	WG202571
Cadmium, Total	10	mg/L	<.0005	U	.0005	.00252	0.5	09/18/2025	09/19/2025	WG202571
Calcium, Total	10	mg/L	50.9		.505	.505		09/18/2025	09/19/2025	WG202571
Chromium, Total	10	mg/L	.242		.002	.0101	2.75	09/18/2025	09/19/2025	WG202571
Cobalt, Total	10	mg/L	.0466		.0005	.00252		09/18/2025	09/19/2025	WG202571
Copper, Total	10	mg/L	.0061	T	.002	.0202	3	09/18/2025	09/19/2025	WG202571
Iron, Total	10	mg/L	11.2		.1	.505		09/18/2025	09/19/2025	WG202571
Lead, Total	10	mg/L	.0016	T	.001	.00505	2	09/18/2025	09/19/2025	WG202571
Magnesium, Total	10	mg/L	107		.505	.505		09/18/2025	09/19/2025	WG202571
Manganese, Total	10	mg/L	.341		.001	.00505		09/18/2025	09/19/2025	WG202571
Nickel, Total	10	mg/L	.185	D	.001	.00505	2.5	09/18/2025	09/22/2025	WG202571
Phosphorus, Total	10	mg/L	9.06		1	1.01		09/18/2025	09/19/2025	WG202571
Potassium, Total	10	mg/L	751	D	1	5.05		09/18/2025	09/22/2025	WG202571
Selenium, Total	10	mg/L	<.005	U	.005	.0101		09/18/2025	09/19/2025	WG202571
Silver, Total	10	mg/L	<.0004	U	.0004	.00202	1	09/18/2025	09/19/2025	WG202571
Sodium, Total	10	mg/L	2110		1.01	1.01		09/18/2025	09/19/2025	WG202571
Thallium, Total	10	mg/L	<.00076	U	.00076	.00202		09/18/2025	09/19/2025	WG202571
Tin, Total	10	mg/L	.012	DGT	.005	.0151		09/18/2025	09/22/2025	WG202571
Vanadium, Total	10	mg/L	.0741		.00076	.00378		09/18/2025	09/19/2025	WG202571
Zinc, Total	10	mg/L	.166		.005	.0252	5	09/18/2025	09/19/2025	WG202571

Client Sample ID: **LEPS250918P**
CoC / Lab Sample ID: **19100 / L86943-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **09/18/2025**
Login Date: **09/18/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.19		.000504	.000504	1	09/22/2025	09/24/2025	WG202617

Target Parameter Count for Report Group: 26

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

Quality Control Data

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory QC Report

CHLS-P_092325 COC 19097, 19100

Workgroup: WG202563 Total Mercury by CVAA

MB:WG202563-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.05	0.1	ug/L		U

SB:WG202563-2 MB:WG202563-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	0.96	96		85--115

MSD:WG202563-4 MS:WG202563-3 L86717-1 Matrix: OTHR WTR Listtype:MTHG-MID Method:EPA 245.1 Project:421085-100 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	1.05	105		75--125	1	1.05	105		0		0--20

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King County Environmental Laboratory QC Report

CHLS-P_092325 COC 19097, 19100

Workgroup: WG202571 Total Metals by ICPMS

MB:WG202571-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.1	0.5	ug/L		U
Sodium, Total	100	100	ug/L		U
Magnesium, Total	50	50	ug/L		U
Aluminum, Total	5	10	ug/L		U
Phosphorus, Total	100	100	ug/L		U
Potassium, Total	100	500	ug/L		U
Calcium, Total	50	50	ug/L		U
Vanadium, Total	0.075	0.375	ug/L		U
Chromium, Total	0.2	1	ug/L		U
Manganese, Total	0.1	0.5	ug/L		U
Iron, Total	10	50	ug/L		U
Cobalt, Total	0.05	0.25	ug/L		U
Nickel, Total	0.1	0.5	ug/L		U
Copper, Total	0.2	2	ug/L		U
Zinc, Total	0.5	2.5	ug/L		U
Arsenic, Total	0.05	0.25	ug/L		U
Selenium, Total	0.5	1	ug/L		U
Silver, Total	0.04	0.2	ug/L		U
Cadmium, Total	0.05	0.25	ug/L		U
Tin, Total	0.5	1.5	ug/L		U
Antimony, Total	0.3	1	ug/L		U
Barium, Total	0.5	0.5	ug/L		U
Thallium, Total	0.075	0.2	ug/L		U
Lead, Total	0.1	0.5	ug/L		U

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory QC Report

CHLS-P_092325 COC 19097, 19100

SB:WG202571-2 MB:WG202571-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.1	0.5	ug/L	U	20	18.8	94		85--115
Sodium, Total	100	100	ug/L	U	5000	5290	106		85--115
Magnesium, Total	50	50	ug/L	U	5000	5180	104		85--115
Aluminum, Total	5	10	ug/L	U	200	200	100		85--115
Phosphorus, Total	100	100	ug/L	U	5000	4840	97		85--115
Potassium, Total	100	500	ug/L	U	5000	4950	99		85--115
Calcium, Total	50	50	ug/L	U	5000	4880	98		85--115
Vanadium, Total	0.075	0.375	ug/L	U	20	20.1	100		85--115
Chromium, Total	0.2	1	ug/L	U	20	21	105		85--115
Manganese, Total	0.1	0.5	ug/L	U	20	20.5	103		85--115
Iron, Total	10	50	ug/L	U	5000	5010	100		85--115
Cobalt, Total	0.05	0.25	ug/L	U	20	20.7	104		85--115
Nickel, Total	0.1	0.5	ug/L	U	20	20.2	101		85--115
Copper, Total	0.2	2	ug/L	U	20	22	110		85--115
Zinc, Total	0.5	2.5	ug/L	U	20	21.3	107		85--115
Arsenic, Total	0.05	0.25	ug/L	U	20	20.5	103		85--115
Selenium, Total	0.5	1	ug/L	U	20	20.7	104		85--115
Silver, Total	0.04	0.2	ug/L	U	20	20.2	101		85--115
Cadmium, Total	0.05	0.25	ug/L	U	20	20	100		85--115
Tin, Total	0.5	1.5	ug/L	U	20	19.4	97		85--115
Antimony, Total	0.3	1	ug/L	U	20	19.5	98		85--115
Barium, Total	0.5	0.5	ug/L	U	20	21	105		85--115
Thallium, Total	0.075	0.2	ug/L	U	20	21.2	106		85--115
Lead, Total	0.1	0.5	ug/L	U	20	22.2	111		85--115

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King County Environmental Laboratory QC Report

CHLS-P_092325 COC 19097, 19100

MSD:WG202571-4 MS:WG202571-3 L86943-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	0.99	4.96	ug/L	U	198	190	96		75--125	197	201	102		5		0--20
Sodium, Total	991	991	ug/L	2110000	49600	2140000		4xRule	75--125	49400	2160000		4xRule	1		0--20
Magnesium, Total	496	496	ug/L	107000	49600	161000	107		75--125	49400	165000	116		2		0--20
Aluminum, Total	50	99.1	ug/L	949	1980	3020	105		75--125	1970	3130	110		3		0--20
Phosphorus, Total	990	991	ug/L	9060	49600	62100	107		75--125	49400	62300	108		0		0--20
Potassium, Total	990	4960	ug/L	751000	49600	813000		4xRule	75--125	49400	805000		4xRule	1		0--20
Calcium, Total	496	496	ug/L	50900	49600	105000	109		75--125	49400	103000	105		2		0--20
Vanadium, Total	0.74	3.72	ug/L	74.1	198	277	102		75--125	197	274	101		1		0--20
Chromium, Total	2	9.91	ug/L	242	198	435	97		75--125	197	444	102		2		0--20
Manganese, Total	0.99	4.96	ug/L	341	198	541	101		75--125	197	547	104		1		0--20
Iron, Total	99	496	ug/L	11200	49600	58800	96		75--125	49400	58900	97		0		0--20
Cobalt, Total	0.5	2.48	ug/L	46.6	198	248	101		75--125	197	248	102		0		0--20
Nickel, Total	0.99	4.96	ug/L	185	198	383	100		75--125	197	376	97		2		0--20
Copper, Total	2	19.8	ug/L	6.1	198	213	104		75--125	197	210	103		1		0--20
Zinc, Total	5	24.8	ug/L	166	198	369	102		75--125	197	367	102		1		0--20
Arsenic, Total	0.5	2.48	ug/L	193	198	408	108		75--125	197	414	112		2		0--20
Selenium, Total	5	9.91	ug/L	U	198	218	110		75--125	197	219	111		1		0--20
Silver, Total	0.4	1.98	ug/L	U	198	186	94		75--125	197	185	94		1		0--20
Cadmium, Total	0.5	2.48	ug/L	U	198	197	99		75--125	197	197	100		0		0--20
Tin, Total	5	14.9	ug/L	12	198	145	67	*	75--125	197	151	70	*	4		0--20
Antimony, Total	3	9.91	ug/L	20.1	198	218	100		75--125	197	222	102		2		0--20
Barium, Total	5	4.96	ug/L	92.4	198	298	104		75--125	197	305	108		2		0--20
Thallium, Total	0.74	1.98	ug/L	U	198	203	102		75--125	197	204	103		1		0--20
Lead, Total	0.99	4.96	ug/L	1.6	198	201	100		75--125	197	207	104		3		0--20

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King County Environmental Laboratory QC Report

CHLS-P_092325 COC 19097, 19100

Workgroup: WG202617 Total Metals by ICPMS

MB:WG202617-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total	0.025	0.05	ug/L		<QL

SB:WG202617-2 MB:WG202617-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Arsenic, Total	0.025	0.05	ug/L	<QL	20	18.6	93		85--115

MSD:WG202617-4 MS:WG202617-3 L86943-2 Matrix: LEACHATE Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Arsenic, Total	0.496	0.496	ug/L	190	199	390	101		75--125	198	391	102		0		0--20

==========

4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 09/16/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19097**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25)

Lab No.	Sample ID	Date	Time
86943-1	LEPS250916P	09/16/25	1030

Project Site Test Reference

	CHGW	CHGW	CHGWVAGW	CHGW-OS	CFGW	DUGW	ENGW	HOGW	HTGW	PUGW	VAGW	CHSW-Q	CHSW-TD	CHSW-E	CFSW	DUSW	VASW	CHSW-P	HTSW-P	SHSW-P	FASW-P	ENSW-P	ALSW-P	VASW-P	CHTW	CHLS-M	CHLS-M_MOD	CHLS-M_As	CHLS-P	CHLS-P	CHLS-P	ALLS-P	BLLS-P	ENLS-P	FALS-P	SRLS-P	HTLS-P	RELS-P	VALS-P	VALS-Q
	Cedar Hills GW Qtly	Cedar Hills EPZ GW Qtly	Appendix III GW	Cedar Hills GW Offsite	Cedar Falls GW Qtly	Duvall GW Qtly	Enumclaw GW Qtly	Hobart GW Qtly	Houghton GW Qtly	Puyallup GW Qtly	Vashon GW Qtly	Cedar Hills SW Sta. E-1	Cedar Hills SW Top Deck	CH Emergency	Cedar Falls SW Qtly	Duvall SW Qtly	Vashon SW Qtly-WEIRS	ISGP: Cedar Hills SW	ISGP: Houghton SW	ISGP: Shoreline SW	ISGP: Factoria SW	ISGP: Enumclaw SW	ISGP: Algona SW	ISGP: Vashon SW	Cedar Hills Truckwash	Cedar Hills Leachate Mthly	CH Leachate Mods Mthly	CH Leachate As Semi-Ann.	PRETREATMENT PERMITS: CH L Permit (wkly, 1st)	CH L Permit (monthly)	CH L Permit (wkly, 2nd)	Algona WW Permit	Bow Lake WW Permit	Enumclaw WW Permit	Factoria WW Permit	Shoreline WW Permit	Houghton WW Permit	Renton WW Permit	Vashon WW Permit Tanker	Vashon Leachate Qtly
	GROUNDWATER											SURFACE WATER													LEACHATE/WASTEWATER															
	2	2.1	4	38	5	6	7	8	9	10	12	14	42	49.1	17	18	21	16	52	53	54	56	57	58	24	23	23+	23.1	25	25.1	25.2	26	20	27	28	29	30	31	32	34
86943-1																													X											

Number of Containers	Remarks
1	Dissolved Sulfide <0.1ppm

Total # of Containers: 1

Observations/Comments/Special Instructions:

- Custody Sealed on 09/16/25 at 1245

Relinquished By Sampler		Date: 09/16/25	Received By:
Sampler Signature: E. Wasda			Signature:
Sampler Printed Name: KCSWD	Company	Time: 1245	Printed Name: Company
Relinquished By		Date	Received By: Jason Kinnaird
Signature			Signature
Printed Name	Company	Time	Printed Name: KCEL Company

Date	Time
9/16/25	1414

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v5.0 (Rev 6/2025)

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 56943-1
40 mL clear vial (VOA)	
60 mL CWM HDPE	
125 mL CNM HDPE	
125 mL CWM HDPE	
125 mL GANM w/HCl	
250 mL CWM HDPE	
250 mL GAWM w/H_2SO_4	
500 mL AWM HDPE	
500 mL CWM HDPE	
500 mL CWM PP (MICRO)	
500 mL HDPE (METALS)	1
500 mL GAWM	
1L CWM HDPE	
1L GANM	
1L GAWM w/ H_2SO_4	
2L CWM HDPE:	
Other -	
Other -	
Other -	
Other -	
Other -	
Total # of Samples	1

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	9 12 12.1	Delivery Location	Y / N	

Sub-Contracting: Y / N List Product(s):

Changes: Y / N List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 9-16-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P(25)

Receive Date: 9-16-25 COC / SDG No.: 19097

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	Y / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter "Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____ Date / Time Completed: SEP 16 '25 14:21

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

Chain of Custody Record

Environmental Monitoring Program

Date: 09/18/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19100**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25.2)

Project Site Test Reference

Lab No.	Sample ID	Date	Time	2 CHGW Cedar Hills GW Qtly	2.1 CHGW Cedar Hills EPZ GW Qtly	4 CHGW/VAGW Appendix III GW	38 CHGW-OS Cedar Hills GW Offsite	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 Sta. E-1	42 CHSW-TD Cedar Hills SW Top Deck	491 CHSW-E CH Emergency	17 CFSW Cedar Falls SW Qtly	18 DUSW Duvall SW Qtly	21 VASW Vashon SW Qtly-WEIRS	ISGP: 16 CHSW-P Cedar Hills SW	52 HTSW-P Houghton SW	53 SHSW-P Shoreline SW	54 FASW-P Factoria SW	56 ENSW-P Enumclaw SW	57 ALSW-P Algona SW	58 VASW-P Vashon SW	24 CHTW Cedar Hills Truckwash	23 CHLS-M Cedar Hills Leachate Mthy	23+ CHLS-M_MOD CH Leachate Mods Mthy	23.1 CHLS-M_As CH Leachate As Semi-Ann.	PRETREATMENT PERMITS: 25 CHLS-P CH L Permit (wkly, 1st)	25.1 CHLS-P CH L Permit (monthly)	25.2 CHLS-P CH L Permit (wkly, 2nd)	26 ALLS-P Algona WW Permit	20 BLLS-P Bow Lake WW Permit	27 ENLS-P Enumclaw WW Permit	28 FALS-P Factoria WW Permit	29 SRLS-P Shoreline WW Permit	30 HTLS-P Houghton WW Permit	31 RELS-P Renton WW Permit	32 VALS-P Vashon WW Permit Tanker	34 VALS-Q Vashon Leachate Qtly	Number of Containers	Remarks
86943-2	LEPSCS09I8P	09/18/25	1245																													X										1	

GROUNDWATER | SURFACE WATER | LEACHATE/WASTEWATER

Relinquished By Sampler		Date: 9/18/25	Received By	Date	Observations/Comments/Special Instructions:
Sampler Signature: E. Wajda			Signature		- Arsenic only - Custody Sealed on 09/18/25 at 1245 - No bottle set delivered so metals bottle w/ HNO_3 used from HTSW-P 859881
Sampler Printed Name: KCSWD		Time: 1245	Printed Name	Time	
Company			Company		
Relinquished By		Date	Received By	Date: 9-18-25	
Signature			Signature: Jason Kinnard		
Printed Name		Time	Printed Name: KCEL	Time: 1345	
Company			Company		

Total # of Containers: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v5.0 (Rev 6/2025)

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

SWD SAMPLE RECEIPT RECORD

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s)										
	860943 -2										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	3.9 H.O142	Delivery Location	Y / N	

Sub-Contracting: Y / N List Product(s):

Changes: Y / N List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 9-18-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P (252)

Receive Date: 9-18-25 COC / SDG No.: 19100

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	Y / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: SEP 18 '25 19:48

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

October 3, 2025

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P)

Sample Id.	Sample Collect Date	COC
LEPS250923P	**09/23/2025**	**19104**
LEPS250925P	**09/25/2025**	**19108**

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 2 leachate permit samples collected September 23 and 25, 2025.

Sample Receiving Comments
No sample receiving anomalies were observed.

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

Metals QC Information

All calculable QC results for metals parameters were within laboratory control limits with the following exception.

During **Total Metals** analysis of analytical batch WG202695, the recovery of ***total tin*** from the matrix spike (MS) and MS duplicate (MSD) exceeded the lower laboratory control limit. Sample LEPS250923P was used to prepare the MS/MSD. The *total tin* result for sample LEPS250923P was qualified G based on these exceedances and may be biased low.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,



Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

Sample Data

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 10/03/2025
Report Group: CHLS-P_093025

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250923P**
SDG / Lab Sample ID: **19104 / L87044-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **09/23/2025**
Login Date: **09/23/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, P-ICPMS, Metals

200.8, SWD-ICPMS23, Metals

245.1, HG-CVAA-M, Metals

Client Sample ID: **LEPS250925P**
SDG / Lab Sample ID: **19108 / L87044-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **09/25/2025**
Login Date: **09/25/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, AS-ICPMS, Metals

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 10/03/2025
Report Group: CHLS-P_093025

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250923P**
CoC / Lab Sample ID: **19104 / L87044-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **09/23/2025**
Login Date: **09/23/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Aluminum, Total	10	mg/L	.888		.049	.0989		09/25/2025	09/26/2025	WG202695
Antimony, Total	10	mg/L	.0205		.003	.00989		09/25/2025	09/26/2025	WG202695
Arsenic, Total	10	mg/L	.197		.00049	.00247	1	09/25/2025	09/26/2025	WG202695
Barium, Total	10	mg/L	.0971		.0049	.00494		09/25/2025	09/26/2025	WG202695
Beryllium, Total	10	mg/L	<.00099	U	.00099	.00494		09/25/2025	09/26/2025	WG202695
Cadmium, Total	10	mg/L	<.00049	U	.00049	.00247	0.5	09/25/2025	09/26/2025	WG202695
Calcium, Total	10	mg/L	53.5		.494	.494		09/25/2025	09/26/2025	WG202695
Chromium, Total	10	mg/L	.244		.002	.00989	2.75	09/25/2025	09/26/2025	WG202695
Cobalt, Total	10	mg/L	.047		.00049	.00247		09/25/2025	09/26/2025	WG202695
Copper, Total	10	mg/L	.0064	T	.002	.0198	3	09/25/2025	09/26/2025	WG202695
Iron, Total	10	mg/L	12		.099	.494		09/25/2025	09/26/2025	WG202695
Lead, Total	10	mg/L	.0016	T	.00099	.00494	2	09/25/2025	09/26/2025	WG202695
Magnesium, Total	10	mg/L	111		.494	.494		09/25/2025	09/26/2025	WG202695
Manganese, Total	10	mg/L	.302		.00099	.00494		09/25/2025	09/26/2025	WG202695
Nickel, Total	10	mg/L	.19		.00099	.00494	2.5	09/25/2025	09/26/2025	WG202695
Phosphorus, Total	10	mg/L	9.29		.99	.989		09/25/2025	09/26/2025	WG202695
Potassium, Total	10	mg/L	775		.99	4.94		09/25/2025	09/26/2025	WG202695
Selenium, Total	10	mg/L	<.0049	U	.0049	.00989		09/25/2025	09/26/2025	WG202695
Silver, Total	10	mg/L	<.0004	U	.0004	.00198	1	09/25/2025	09/26/2025	WG202695
Sodium, Total	10	mg/L	2130		.989	.989		09/25/2025	09/26/2025	WG202695
Thallium, Total	10	mg/L	<.00074	U	.00074	.00198		09/25/2025	09/26/2025	WG202695
Tin, Total	10	mg/L	.0152	DG	.0049	.0148		09/25/2025	09/29/2025	WG202695
Vanadium, Total	10	mg/L	.0784	D	.00074	.00371		09/25/2025	09/29/2025	WG202695
Zinc, Total	10	mg/L	.178		.0049	.0247	5	09/25/2025	09/26/2025	WG202695
Mercury, Total	2	mg/L	<.0001	U	.0001	.0002		09/29/2025	09/29/2025	WG202735

Client Sample ID: **LEPS250925P**
CoC / Lab Sample ID: **19108 / L87044-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **09/25/2025**
Login Date: **09/25/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.2		.0005	.00251	1	09/29/2025	09/29/2025	WG202737

Target Parameter Count for Report Group: 26

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

Quality Control Data

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory QC Report

CHLS-P_093025 COC 19104 19108

Workgroup: WG202695 Total Metals by ICPMS

MB:WG202695-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.1	0.5	ug/L		U
Sodium, Total	100	100	ug/L		U
Magnesium, Total	50	50	ug/L		U
Aluminum, Total	5	10	ug/L		U
Phosphorus, Total	100	100	ug/L		U
Potassium, Total	100	500	ug/L		U
Calcium, Total	50	50	ug/L		U
Vanadium, Total	0.075	0.375	ug/L		U
Chromium, Total	0.2	1	ug/L		U
Manganese, Total	0.1	0.5	ug/L		U
Iron, Total	10	50	ug/L		U
Cobalt, Total	0.05	0.25	ug/L		U
Nickel, Total	0.1	0.5	ug/L		U
Copper, Total	0.2	2	ug/L		U
Zinc, Total	0.5	2.5	ug/L		U
Arsenic, Total	0.05	0.25	ug/L		U
Selenium, Total	0.5	1	ug/L		U
Silver, Total	0.04	0.2	ug/L		U
Cadmium, Total	0.05	0.25	ug/L		U
Tin, Total	0.5	1.5	ug/L		U
Antimony, Total	0.3	1	ug/L		U
Barium, Total	0.5	0.5	ug/L		U
Thallium, Total	0.075	0.2	ug/L		U
Lead, Total	0.1	0.5	ug/L		U

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory QC Report

CHLS-P_093025 COC 19104 19108

SB:WG202695-2 MB:WG202695-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.1	0.5	ug/L	U	20	18.9	95		85--115
Sodium, Total	100	100	ug/L	U	5000	5340	107		85--115
Magnesium, Total	50	50	ug/L	U	5000	5320	106		85--115
Aluminum, Total	5	10	ug/L	U	200	201	101		85--115
Phosphorus, Total	100	100	ug/L	U	5000	4990	100		85--115
Potassium, Total	100	500	ug/L	U	5000	5190	104		85--115
Calcium, Total	50	50	ug/L	U	5000	4970	99		85--115
Vanadium, Total	0.075	0.375	ug/L	U	20	20.7	103		85--115
Chromium, Total	0.2	1	ug/L	U	20	21.5	107		85--115
Manganese, Total	0.1	0.5	ug/L	U	20	21.1	105		85--115
Iron, Total	10	50	ug/L	U	5000	5140	103		85--115
Cobalt, Total	0.05	0.25	ug/L	U	20	21.1	106		85--115
Nickel, Total	0.1	0.5	ug/L	U	20	21.5	107		85--115
Copper, Total	0.2	2	ug/L	U	20	22.4	112		85--115
Zinc, Total	0.5	2.5	ug/L	U	20	21.2	106		85--115
Arsenic, Total	0.05	0.25	ug/L	U	20	20.5	103		85--115
Selenium, Total	0.5	1	ug/L	U	20	20.6	103		85--115
Silver, Total	0.04	0.2	ug/L	U	20	20.9	104		85--115
Cadmium, Total	0.05	0.25	ug/L	U	20	20.5	102		85--115
Tin, Total	0.5	1.5	ug/L	U	20	20.3	101		85--115
Antimony, Total	0.3	1	ug/L	U	20	19.3	97		85--115
Barium, Total	0.5	0.5	ug/L	U	20	20.2	101		85--115
Thallium, Total	0.075	0.2	ug/L	U	20	21	105		85--115
Lead, Total	0.1	0.5	ug/L	U	20	21.1	105		85--115

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory QC Report

CHLS-P_093025 COC 19104 19108

MSD:WG202695-4 MS:WG202695-3 L87044-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	0.98	4.9	ug/L	U	196	187	95		75--125	196	190	97		2		0--20
Sodium, Total	980	980	ug/L	2130000	49000	2170000		4xRule	75--125	48900	2250000		4xRule	4		0--20
Magnesium, Total	490	490	ug/L	111000	49000	162000	103		75--125	48900	167000	113		3		0--20
Aluminum, Total	49	98	ug/L	888	1960	2930	104		75--125	1960	2980	107		2		0--20
Phosphorus, Total	980	980	ug/L	9290	49000	60200	104		75--125	48900	62300	108		3		0--20
Potassium, Total	980	4900	ug/L	775000	49000	833000		4xRule	75--125	48900	861000		4xRule	3		0--20
Calcium, Total	490	490	ug/L	53500	49000	101000	98		75--125	48900	102000	100		1		0--20
Vanadium, Total	0.73	3.67	ug/L	78.4	196	274	100		75--125	196	265	96		3		0--20
Chromium, Total	2	9.8	ug/L	244	196	433	96		75--125	196	433	97		0		0--20
Manganese, Total	0.98	4.9	ug/L	302	196	495	99		75--125	196	502	102		1		0--20
Iron, Total	98	490	ug/L	12000	49000	57400	93		75--125	48900	56800	92		1		0--20
Cobalt, Total	0.49	2.45	ug/L	47	196	244	101		75--125	196	239	98		2		0--20
Nickel, Total	0.98	4.9	ug/L	190	196	389	102		75--125	196	379	97		3		0--20
Copper, Total	2	19.6	ug/L	6.4	196	206	102		75--125	196	204	101		1		0--20
Zinc, Total	4.9	24.5	ug/L	178	196	378	102		75--125	196	365	95		3		0--20
Arsenic, Total	0.49	2.45	ug/L	197	196	404	106		75--125	196	405	107		0		0--20
Selenium, Total	4.9	9.8	ug/L	U	196	201	103		75--125	196	202	103		1		0--20
Silver, Total	0.39	1.96	ug/L	U	196	179	92		75--125	196	179	92		0		0--20
Cadmium, Total	0.49	2.45	ug/L	U	196	185	94		75--125	196	184	94		1		0--20
Tin, Total	4.9	14.7	ug/L	15.2	196	124	56	*	75--125	196	114	51	*	8		0--20
Antimony, Total	2.9	9.8	ug/L	20.5	196	219	101		75--125	196	216	100		1		0--20
Barium, Total	4.9	4.9	ug/L	97.1	196	309	108		75--125	196	303	105		2		0--20
Thallium, Total	0.73	1.96	ug/L	U	196	196	100		75--125	196	191	98		3		0--20
Lead, Total	0.98	4.9	ug/L	1.6	196	203	103		75--125	196	197	100		3		0--20

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory QC Report

CHLS-P_093025 COC 19104 19108

Workgroup: WG202735 Total Mercury by CVAA

MB:WG202735-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.05	0.1	ug/L		U

SB:WG202735-2 MB:WG202735-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	1.07	107		85--115

MSD:WG202735-4 MS:WG202735-3 L87053-2 Matrix: IW WTR Listtype:MTHG-MID Method:EPA 245.1 Project:421163 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	1.17	117		75--125	1	1.16	116		1		0--20

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory QC Report

CHLS-P_093025 COC 19104 19108

Workgroup: WG202737 Total Metals by ICPMS

MB:WG202737-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total	0.05	0.25	ug/L		U

SB:WG202737-2 MB:WG202737-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Arsenic, Total	0.05	0.25	ug/L	U	20	20	100		85--115

MSD:WG202737-4 MS:WG202737-3 L87044-2 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Arsenic, Total	0.49	2.47	ug/L	200	198	411	107		75--125	196	404	104		2		0--20

==========

4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 9/23/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19104**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P(25)

Lab No.	Sample ID	Date	Time
87044-1	LEPS250923P	9/23/25	1030

Project Site Test Reference

| GROUNDWATER | | | | | | | | | | | | SURFACE WATER | | | | | | | | | | | | LEACHATE/WASTEWATER | | | | | | | | | | | |

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 870144 -1
40 mL clear vial (VOA)	
60 mL CWM HDPE	
125 mL CNM HDPE	
125 mL CWM HDPE	
125 mL GANM w/HCl	
250 mL CWM HDPE	
250 mL GAWM w/H_2SO_4	
500 mL AWM HDPE	
500 mL CWM HDPE	
500 mL CWM PP (MICRO)	
500 mL HDPE (METALS)	1
500 mL GAWM	
1L CWM HDPE	
1L GANM	
1L GAWM w/ H_2SO_4	
2L CWM HDPE:	
Other -	
Other -	
Other -	
Other -	
Other -	
Total # of Samples	1

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	2.1 12020	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 9-23-25 Project No.: 421422

VTRP Collect Date(s): ____ Project Site Test Reference: CHLS-P(25)

Receive Date: 9-23-25 COC / SDG No.: 19104

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: SEP 23 '25 14:19

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

Chain of Custody Record

Environmental Monitoring Program

Date: 9/25/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19108**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25.2)

Lab No.	Sample ID	Date	Time
87044-2	LEPS250925P	9/25/25	1030

Project Site Test Reference

	CHGW	CHSW	CHGWA/AGW	CHGW-OS	CFGW	DUGW	ENGW	HOGW	HTGW	PUGW	VAGW	CHSW-Q	CHSW-TD	CHSW-E	CFSW	DUSW	VASW	CHSW-P	HTSW-P	SHSW-P	FASW-P	ENSW-P	ALSW-P	VASW-P	CHTW	CHLS-M	CHLS-M_MOD	CHLS-M_As	CHLS-P	CHLS-P	CHLS-P	ALLS-P	BLLS-P	ENLS-P	FALS-P	SRLS-P	HTLS-P	RELS-P	VALS-P	VALS-Q
	Cedar Hills GW Qlty	Cedar Hills EPZ GW Qlty	Appendix III GW	Cedar Hills GW Offsite	Cedar Falls GW Qlty	Duvall GW Qlty	Enumclaw GW Qlty	Hobart GW Qlty	Houghton GW Qlty	Puyallup GW Qlty	Vashon GW Qlty	Cedar Hills SW Sta. E-1	Cedar Hills SW Top Deck	CH Emergency	Cedar Falls SW Qlty	Duvall SW Qlty	Vashon SW Qlty-WEIRS	ISGP: Cedar Hills SW	ISGP: Houghton SW	ISGP: Shoreline SW	ISGP: Factoria SW	ISGP: Enumclaw SW	ISGP: Algona SW	ISGP: Vashon SW	Cedar Hills Truckwash	Cedar Hills Leachate Mthly	CH Leachate Mods Mthly	CH Leachate As Semi-Ann.	PRETREATMENT PERMITS: CH L Permit (wkly, 1st)	CH L Permit (mnthly)	CH L Permit (wkly, 2nd)	Algona WW Permit	Bow Lake WW Permit	Enumclaw WW Permit	Factoria WW Permit	Shoreline WW Permit	Houghton WW Permit	Renton WW Permit	Vashon WW Permit Tanker	Vashon Leachate Qlty
	GROUNDWATER											SURFACE WATER						ISGP							LEACHATE/WASTEWATER				PRETREATMENT PERMITS											
	2	2.1	4	38	5	6	7	8	9	10	12	14	42	49.1	17	18	21	16	52	53	54	56	57	58	24	23	23+	23.1	25	25.1	25.2	26	20	27	28	29	30	31	32	34
87044-2																															X								

Number of Containers	Remarks
1	

Relinquished By Sampler: [signature] — Date: 9/25/25 — Time: 1155
Sampler Signature: I. Rivera
Sampler Printed Name: KCSWD
Company

Relinquished By — Date — Time
Signature
Printed Name
Company

Received By — Date
Signature
Printed Name
Company

Received By: [signature] — Date: 9/25/25
Signature
Printed Name: KCEL — Time: 1440
Company

Observations/Comments/Special Instructions:

Arsenic only.
Sample custody sealed on 9/25 at 1155 hrs.

Total # of Containers: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v5.0 (Rev 6/2025)

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s)										
	87044 -2										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1	1									

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	3.1 3 3.0	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 9-25-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P(25.2)

Receive Date: 9-25-25 COC / SDG No.: 19108

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: SEP 25 '25 1:45 PM

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

October 14, 2025

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P) - Revised

Sample Id.	Sample Collect Date	COC
LEPS250929P	**09/29/2025**	**19013**
LEPS251002P	**10/02/2025**	**19119**
LEPS251002D		

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 3 leachate permit samples collected September 30 and October 2, 2025. This revision was issued to correct the sample ID and sample collect date for the sample collected 9/29/2025 under COC 19013 in this narrative. There were no changes to the sample results or EDDs.

Sample Receiving Comments

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

No sample receiving anomalies were observed.

Metals QC Information

All calculable QC results for metals parameters were within laboratory control limits with the following exception.

During **Total Metals** analysis of analytical batch WG202773, the recovery of ***total tin*** from the matrix spike (MS) and MS duplicate (MSD) exceeded the lower laboratory control limit. Sample LEPS250929P was used to prepare the MS/MSD. The *total tin* result for sample LEPS250929P was qualified G based on these exceedances and may be biased low.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,

Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

Sample Data

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 10/07/2025
Report Group: CHLS-P_100625

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250929P**
SDG / Lab Sample ID: **19013 / L87074-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**
Collect Date: **09/29/2025**
Login Date: **09/29/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, P-ICPMS, Metals

200.8, SWD-ICPMS23, Metals

245.1, HG-CVAA-M, Metals

Client Sample ID: **LEPS251002P**
SDG / Lab Sample ID: **19119 / L87084-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**
Collect Date: **10/02/2025**
Login Date: **10/02/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, AS-ICPMS, Metals

Client Sample ID: **LEPS251002D**
SDG / Lab Sample ID: **19119 / L87084-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**
Collect Date: **10/02/2025**
Login Date: **10/02/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, AS-ICPMS, Metals

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 10/07/2025
Report Group: CHLS-P_100625

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250929P**
CoC / Lab Sample ID: **19013 / L87074-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **09/29/2025**
Login Date: **09/29/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Mercury, Total	2	mg/L	<.0001	U	.0001	.0002		09/30/2025	09/30/2025	WG202765
Aluminum, Total	10	mg/L	1.14		.05	.1		10/01/2025	10/03/2025	WG202773
Antimony, Total	10	mg/L	.0215		.003	.01		10/01/2025	10/03/2025	WG202773
Arsenic, Total	10	mg/L	.205		.0005	.00251	1	10/01/2025	10/03/2025	WG202773
Barium, Total	10	mg/L	.108		.005	.00502		10/01/2025	10/03/2025	WG202773
Beryllium, Total	10	mg/L	<.001	U	.001	.00502		10/01/2025	10/03/2025	WG202773
Cadmium, Total	10	mg/L	<.0005	U	.0005	.00251	0.5	10/01/2025	10/03/2025	WG202773
Calcium, Total	10	mg/L	57.7		.502	.502		10/01/2025	10/03/2025	WG202773
Chromium, Total	10	mg/L	.264		.002	.01	2.75	10/01/2025	10/03/2025	WG202773
Cobalt, Total	10	mg/L	.0485		.0005	.00251		10/01/2025	10/03/2025	WG202773
Copper, Total	10	mg/L	.0077	T	.002	.0201	3	10/01/2025	10/03/2025	WG202773
Iron, Total	10	mg/L	13.9		.1	.502		10/01/2025	10/03/2025	WG202773
Lead, Total	10	mg/L	.0017	T	.001	.00502	2	10/01/2025	10/03/2025	WG202773
Magnesium, Total	10	mg/L	115		.502	.502		10/01/2025	10/03/2025	WG202773
Manganese, Total	10	mg/L	.357		.001	.00502		10/01/2025	10/03/2025	WG202773
Nickel, Total	10	mg/L	.195		.001	.00502	2.5	10/01/2025	10/03/2025	WG202773
Phosphorus, Total	10	mg/L	10.5		1	1		10/01/2025	10/03/2025	WG202773
Potassium, Total	10	mg/L	801		1	5.02		10/01/2025	10/03/2025	WG202773
Selenium, Total	10	mg/L	<.005	U	.005	.01		10/01/2025	10/03/2025	WG202773
Silver, Total	10	mg/L	<.0004	U	.0004	.00201	1	10/01/2025	10/03/2025	WG202773
Sodium, Total	10	mg/L	2190		1	1		10/01/2025	10/03/2025	WG202773
Thallium, Total	10	mg/L	<.00075	U	.00075	.00201		10/01/2025	10/03/2025	WG202773
Tin, Total	10	mg/L	.0157	G	.005	.0151		10/01/2025	10/03/2025	WG202773
Vanadium, Total	10	mg/L	.0778		.00075	.00376		10/01/2025	10/03/2025	WG202773
Zinc, Total	10	mg/L	.199		.005	.0251	5	10/01/2025	10/03/2025	WG202773

Client Sample ID: **LEPS251002P**
CoC / Lab Sample ID: **19119 / L87084-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **10/02/2025**
Login Date: **10/02/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.198		.00051	.00254	1	10/03/2025	10/03/2025	WG202810

Client Sample ID: **LEPS251002D**
CoC / Lab Sample ID: **19119 / L87084-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **10/02/2025**
Login Date: **10/02/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.197		.00051	.00257	1	10/03/2025	10/03/2025	WG202810

Target Parameter Count for Report Group: 27

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

Quality Control Data

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory QC Report

CHLS-P_100625 COC 19013 19119

Workgroup: WG202765 Total Mercury by CVAA

MB:WG202765-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.05	0.1	ug/L		U

SB:WG202765-2 MB:WG202765-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	0.988	99		85--115

MSD:WG202765-4 MS:WG202765-3 L87074-1 Matrix: LEACHATE Listtype:MTHG-MID Method:EPA 245.1 Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.1	0.2	ug/L	U	2	1.8	90		75--125	2	1.7	85		6		0--20

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory QC Report

CHLS-P_100625 COC 19013 19119

Workgroup: WG202773 Total Metals by ICPMS

MB:WG202773-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.1	0.5	ug/L		U
Sodium, Total	100	100	ug/L		U
Magnesium, Total	50	50	ug/L		U
Aluminum, Total	5	10	ug/L		U
Phosphorus, Total	100	100	ug/L		U
Potassium, Total	100	500	ug/L		U
Calcium, Total	50	50	ug/L		U
Vanadium, Total	0.075	0.375	ug/L		U
Chromium, Total	0.2	1	ug/L		U
Manganese, Total	0.1	0.5	ug/L		U
Iron, Total	10	50	ug/L		U
Cobalt, Total	0.05	0.25	ug/L		U
Nickel, Total	0.1	0.5	ug/L		U
Copper, Total	0.2	2	ug/L		U
Zinc, Total	0.5	2.5	ug/L		U
Arsenic, Total	0.05	0.25	ug/L		U
Selenium, Total	0.5	1	ug/L		U
Silver, Total	0.04	0.2	ug/L		U
Cadmium, Total	0.05	0.25	ug/L		U
Tin, Total	0.5	1.5	ug/L		U
Antimony, Total	0.3	1	ug/L		U
Barium, Total	0.5	0.5	ug/L		U
Thallium, Total	0.075	0.2	ug/L		U
Lead, Total	0.1	0.5	ug/L		U

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

King County Environmental Laboratory QC Report

CHLS-P_100625 COC 19013 19119

SB:WG202773-2 MB:WG202773-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.1	0.5	ug/L	U	20	19.4	97		85--115
Sodium, Total	100	100	ug/L	U	5000	5310	106		85--115
Magnesium, Total	50	50	ug/L	U	5000	5350	107		85--115
Aluminum, Total	5	10	ug/L	U	200	202	101		85--115
Phosphorus, Total	100	100	ug/L	U	5000	4910	98		85--115
Potassium, Total	100	500	ug/L	U	5000	5170	103		85--115
Calcium, Total	50	50	ug/L	U	5000	4980	100		85--115
Vanadium, Total	0.075	0.375	ug/L	U	20	20.4	102		85--115
Chromium, Total	0.2	1	ug/L	U	20	21.5	108		85--115
Manganese, Total	0.1	0.5	ug/L	U	20	21.1	106		85--115
Iron, Total	10	50	ug/L	U	5000	5380	108		85--115
Cobalt, Total	0.05	0.25	ug/L	U	20	20.3	101		85--115
Nickel, Total	0.1	0.5	ug/L	U	20	21.1	106		85--115
Copper, Total	0.2	2	ug/L	U	20	21.7	109		85--115
Zinc, Total	0.5	2.5	ug/L	U	20	21	105		85--115
Arsenic, Total	0.05	0.25	ug/L	U	20	20.2	101		85--115
Selenium, Total	0.5	1	ug/L	U	20	20.3	102		85--115
Silver, Total	0.04	0.2	ug/L	U	20	20.4	102		85--115
Cadmium, Total	0.05	0.25	ug/L	U	20	20.7	103		85--115
Tin, Total	0.5	1.5	ug/L	U	20	19.5	97		85--115
Antimony, Total	0.3	1	ug/L	U	20	20.2	101		85--115
Barium, Total	0.5	0.5	ug/L	U	20	21.2	106		85--115
Thallium, Total	0.075	0.2	ug/L	U	20	21.7	109		85--115
Lead, Total	0.1	0.5	ug/L	U	20	21.8	109		85--115

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King County Environmental Laboratory QC Report

CHLS-P_100625 COC 19013 19119

MSD:WG202773-4 MS:WG202773-3 L87074-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	1	4.99	ug/L	U	200	202	101		75--125	199	208	104		3		0--20
Sodium, Total	999	999	ug/L	2190000	49900	2230000		4xRule	75--125	49800	2230000		4xRule	0		0--20
Magnesium, Total	499	499	ug/L	115000	49900	164000	99		75--125	49800	170000	111		3		0--20
Aluminum, Total	50	99.9	ug/L	1140	2000	3190	102		75--125	1990	3190	103		0		0--20
Phosphorus, Total	1000	999	ug/L	10500	49900	61800	103		75--125	49800	63200	106		2		0--20
Potassium, Total	1000	4990	ug/L	801000	49900	850000		4xRule	75--125	49800	871000		4xRule	2		0--20
Calcium, Total	499	499	ug/L	57700	49900	106000	97		75--125	49800	110000	104		3		0--20
Vanadium, Total	0.75	3.75	ug/L	77.8	200	269	96		75--125	199	275	99		2		0--20
Chromium, Total	2	9.99	ug/L	264	200	450	93		75--125	199	460	98		2		0--20
Manganese, Total	1	4.99	ug/L	357	200	542	93		75--125	199	553	98		2		0--20
Iron, Total	100	499	ug/L	13900	49900	61000	94		75--125	49800	62500	98		3		0--20
Cobalt, Total	0.5	2.5	ug/L	48.5	200	249	100		75--125	199	247	100		1		0--20
Nickel, Total	1	4.99	ug/L	195	200	398	101		75--125	199	395	101		1		0--20
Copper, Total	2	20	ug/L	7.7	200	216	104		75--125	199	212	103		1		0--20
Zinc, Total	5	25	ug/L	199	200	401	101		75--125	199	399	100		1		0--20
Arsenic, Total	0.5	2.5	ug/L	205	200	410	103		75--125	199	418	107		2		0--20
Selenium, Total	5	9.99	ug/L	U	200	206	103		75--125	199	211	106		3		0--20
Silver, Total	0.4	2	ug/L	U	200	182	91		75--125	199	187	94		3		0--20
Cadmium, Total	0.5	2.5	ug/L	U	200	196	98		75--125	199	194	98		1		0--20
Tin, Total	5	15	ug/L	15.7	200	141	63	*	75--125	199	122	53	*	15		0--20
Antimony, Total	3	9.99	ug/L	21.5	200	221	100		75--125	199	224	102		1		0--20
Barium, Total	5	4.99	ug/L	108	200	331	112		75--125	199	335	114		1		0--20
Thallium, Total	0.75	2	ug/L	U	200	205	102		75--125	199	202	102		1		0--20
Lead, Total	1	4.99	ug/L	1.7	200	212	105		75--125	199	212	106		0		0--20

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King County Environmental Laboratory QC Report

CHLS-P_100625 COC 19013 19119

Workgroup: WG202810 Total Metals by ICPMS

MB:WG202810-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total	0.05	0.25	ug/L		U

SB:WG202810-2 MB:WG202810-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Arsenic, Total	0.05	0.25	ug/L	U	20	19.4	97		85--115

MSD:WG202810-4 MS:WG202810-3 L87084-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Arsenic, Total	0.49	2.44	ug/L	198	20	394		4xRule	75--125	20	398		4xRule	1		0--20

==========

4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 9/29/25

Department of
Natural Resources and Parks
Solid Waste Division

No. **19013**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25)

Lab No.	Sample ID	Date	Time
87074-1	LEPS250929P	9/29/25	1030

Project Site Test Reference

| GROUNDWATER | | |

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 820174 -1
40 mL clear vial (VOA)	
60 mL CWM HDPE	
125 mL CNM HDPE	
125 mL CWM HDPE	
125 mL GANM w/HCl	
250 mL CWM HDPE	
250 mL GAWM w/H_2SO_4	
500 mL AWM HDPE	
500 mL CWM HDPE	
500 mL CWM PP (MICRO)	
500 mL HDPE (METALS)	1
500 mL GAWM	
1L CWM HDPE	
1L GANM	
1L GAWM w/ H_2SO_4	
2L CWM HDPE:	
Other -	
Other -	
Other -	
Other -	
Other -	
Total # of Samples	1

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	3.6 / 3.5 / 3.5	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 9-29-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P (25)

Receive Date: 9-29-25 COC / SDG No.: 19013

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____ Date / Time Completed: SEP 29 '25 14:48

Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

Chain of Custody Record

Environmental Monitoring Program

Date: 10/02/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19119**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25.2)

Lab No.	Sample ID	Date	Time
87084-1	LEPS251002P	10/2/25	1030
87084-2	LEPS251002D	10/2/25	1030

Project Site Test Reference

| GROUNDWATER | | | | | | | | | | | | | SURFACE WATER | | | | | | | ISGP | | | | | | | LEACHATE/WASTEWATER | | | | PRETREATMENT PERMITS | | | | | | | | | | | | |

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 87084 -1	-2
40 mL clear vial (VOA)		
60 mL CWM HDPE		
125 mL CNM HDPE		
125 mL CWM HDPE		
125 mL GANM w/HCl		
250 mL CWM HDPE		
250 mL GAWM w/H_2SO_4		
500 mL AWM HDPE		
500 mL CWM HDPE		
500 mL CWM PP (MICRO)		
500 mL HDPE (METALS)	1	1
500 mL GAWM		
1L CWM HDPE		
1L GANM		
1L GAWM w/ H_2SO_4		
2L CWM HDPE:		
Other -		
Other -		
Other -		
Other -		
Other -		
Total # of Samples 2	1	1

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	3.9 3.8 3.8	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 10-2-25 Project No.: 421422

VTRP Collect Date(s): ____ Project Site Test Reference: CHLS-P (25.2)

Receive Date: 10-2-25 COC / SDG No.: 19119

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

OCT 02 '25 14:35

Date / Time Completed: _____

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Docusign Envelope ID: FF342A99-2435-4AF6-8C58-BADB66F844D3

HYDROGEN SULFIDE GAS AT MANHOLE R10-52

Instrument #	Serial #	Calibration Date/Time
RKI Eagle 2	E2E656	8/27/2025 @ 0832
Sample Count	**Interval Time (sec)**	**Bump Test Date**
10088	60	9/4/2025 @ 0748

H2S Readings

Date	Daily Average	Instantaneous Maximum	Daily Maximum 15-min Rolling Average	Daily Maximum 8-hr Rolling Average	Daily Max 7-day Rolling Average
9/4/2025	0.0000	0.0	0.00	0.00	-
9/5/2025	0.0795	6.0	4.17	0.16	-
9/6/2025	0.4281	7.0	6.07	0.90	-
9/7/2025	0.0913	5.5	2.97	0.71	-
9/8/2025	0.0983	6.0	4.53	0.27	-
9/9/2025	0.0694	6.5	4.57	0.21	-
9/10/2025	0.0660	5.5	4.13	0.20	-
9/11/2025	0.2558	6.5	4.77	0.25	0.13
			15 ppm	*10 ppm*	*3 ppm*

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KING COUNTY SOLID WASTE DIVISION

LEACHATE HAULING REPORT

TANKER LOADS

MONTH: SEPTEMBER
YEAR: 2025

	DUVALL						VASHON				HOBART		OTHER		
DATE	BRIGHT		C.H.		SPOK.		SPOK.		C.H.		C.H.		C.H.		REMARKS
LOAD	6000	7000	6000	7000	6000	7000	6000	7000	6000	7000	6000	7000	6000	7000	
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11									1						
12															
13															
14															
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21															
22															
23															
24															
25															
26															
27															
28															
29															
30															
31															
TOTAL	0	0	0	0	0	0	0	0	6000	0	0	0	0	0	

Certificate Of Completion

Envelope Id: FF342A99-2435-4AF6-8C58-BADB66F844D3 Status: Completed

Subject: Complete with Docusign: 2025.09.04_EAGLETABLE.pdf, 7842-04_SMR_September2025.pdf, CHLS-P_090925...

Source Envelope:

Document Pages: 89 Signatures: 3 Envelope Originator:

Certificate Pages: 5 Initials: 1 Aaron Copado

AutoNav: Enabled 401 5TH AVE

EnvelopeId Stamping: Enabled SEATTLE, WA 98104

Time Zone: (UTC-08:00) Pacific Time (US & Canada) acopado@kingcounty.gov

IP Address: 198.49.222.20

Record Tracking

Status: Original Holder: Aaron Copado Location: DocuSign

10/15/2025 8:21:21 AM acopado@kingcounty.gov

Security Appliance Status: Connected Pool: FedRamp

Storage Appliance Status: Connected Pool: King County-Dept of Natural Resources-Solid Waste Location: Docusign

Signer Events	Signature	Timestamp
Aaron Copado acopado@kingcounty.gov Environmental Scientist III KC_DNRP_SWD Security Level: Email, Account Authentication (None)	DS  Signature Adoption: Pre-selected Style Using IP Address: 198.49.222.20	Sent: 10/15/2025 8:28:04 AM Viewed: 10/15/2025 8:28:11 AM Signed: 10/15/2025 8:28:22 AM
Electronic Record and Signature Disclosure: Not Offered via Docusign		
Jennifer Keune jennifer.keune@kingcounty.gov Interim Supervisor KC_DNRP_SWD Security Level: Email, Account Authentication (None)	DocuSigned by:  A70EEC0AE02F44A... Signature Adoption: Pre-selected Style Using IP Address: 67.160.11.161	Sent: 10/15/2025 8:28:25 AM Viewed: 10/15/2025 8:37:31 AM Signed: 10/15/2025 8:39:05 AM
Electronic Record and Signature Disclosure: Accepted: 3/31/2021 3:20:14 PM ID: 040441cf-883c-43c6-a4af-1ccb2ef73edc		

In Person Signer Events	Signature	Timestamp

Editor Delivery Events	Status	Timestamp

Agent Delivery Events	Status	Timestamp

Intermediary Delivery Events	Status	Timestamp

Certified Delivery Events	Status	Timestamp

Carbon Copy Events	Status	Timestamp

Witness Events	Signature	Timestamp

Notary Events	Signature	Timestamp

Envelope Summary Events	Status	Timestamps

Envelope Summary Events	Status	Timestamps
Envelope Sent	Hashed/Encrypted	10/15/2025 8:28:04 AM
Certified Delivered	Security Checked	10/15/2025 8:37:31 AM
Signing Complete	Security Checked	10/15/2025 8:39:05 AM
Completed	Security Checked	10/15/2025 8:39:05 AM

Payment Events	Status	Timestamps

Electronic Record and Signature Disclosure

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If you elect to receive required notices and disclosures only in paper format, it will slow the speed at which we can complete certain steps in transactions with you and delivering services to you because we will need first to send the required notices or disclosures to you in paper format, and then wait until we receive back from you your acknowledgment of your receipt of such paper notices or disclosures. Further, you will no longer be able to use the DocuSign system to receive required notices and consents electronically from us or to sign electronically documents from us.

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Unless you tell us otherwise in accordance with the procedures described herein, we will provide electronically to you through the DocuSign system all required notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you during the course of our relationship with you. To reduce the chance of you inadvertently not receiving any notice or disclosure, we prefer to provide all of the required notices and disclosures to you by the same method and to the same address that you have given us. Thus, you can receive all the disclosures and notices electronically or in paper format through the paper mail delivery system. If you do not agree with this process, please let us know as described below. Please also see the paragraph immediately above that describes the consequences of your electing not to receive delivery of the notices and disclosures electronically from us.

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You may contact us to let us know of your changes as to how we may contact you electronically, to request paper copies of certain information from us, and to withdraw your prior consent to receive notices and disclosures electronically as follows:
To contact us by email send messages to: cipriano.dacanay@kingcounty.gov

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ii. send us an email to cipriano.dacanay@kingcounty.gov and in the body of such request you must state your email, full name, mailing address, and telephone number. We do not need any other information from you to withdraw consent.. The consequences of your withdrawing consent for online documents will be that transactions may take a longer time to process..

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The minimum system requirements for using the DocuSign system may change over time. The current system requirements are found here: https://support.docusign.com/guides/signer-guide-signing-system-requirements.

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To confirm to us that you can access this information electronically, which will be similar to other electronic notices and disclosures that we will provide to you, please confirm that you have read this ERSD, and (i) that you are able to print on paper or electronically save this ERSD for your future reference and access; or (ii) that you are able to email this ERSD to an email address where you will be able to print on paper or save it for your future reference and access. Further, if you consent to receiving notices and disclosures exclusively in electronic format as described herein, then select the check-box next to 'I agree to use electronic records and signatures' before clicking 'CONTINUE' within the DocuSign system.

By selecting the check-box next to 'I agree to use electronic records and signatures', you confirm that:

- You can access and read this Electronic Record and Signature Disclosure; and
- You can print on paper this Electronic Record and Signature Disclosure, or save or send this Electronic Record and Disclosure to a location where you can print it, for future reference and access; and
- Until or unless you notify King County-ZZDepartmentTemplate 03 as described above, you consent to receive exclusively through electronic means all notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you by King County-ZZDepartmentTemplate 03 during the course of your relationship with King County-ZZDepartmentTemplate 03.

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14-Day Report for Discharge or Permit Violation

For more information on reporting requirements refer to your Permit, Section S4.D. If you have a Major/Minor Discharge Authorization refer to General Conditions D

Date: 10/02/25 **Company Name:** **King County Solid Waste Division (KCSWD)**

Permit/Authorization Number: 7842-04 **Sample Site Number: A90021**

1. **Description and Cause of Non-Compliance Event:** (include dates, times, locations; sample results and estimated gallons discharged)

Permit condition S4.A.1 requires sampling twice per week at the Leachate Effluent Pump Station (LEPS) for total arsenic. During the week of August 3-9, KCSWD collected one sample but inadvertently failed to collect a second sample.

2. **Cause of Non-Compliance Event**

Sampling Non-Compliance

On September 18, KCIW asked KCSWD why the Self-Monitoring Report for August 2025 reported only one arsenic data point for the week of August 3-9. KCSWD initiated an investigation as to why the non-compliance event occurred. Information obtained through that investigation is summarized below.

In response to a failed aerator in the west lagoon (previously reported to KCIW), KCSWD took measures to achieve sufficient aeration of industrial wastewater prior to discharge. When soluble sulfide screening indicated additional aeration was needed, KCSWD modified the discharge schedule to bolster aeration. However, internal communication of the non-routine plan was ineffective, resulting in active discharges on days when they were not expected/planned. Furthermore, the realization and internal notification that unplanned discharges had occurred was delayed. Without awareness of the unplanned discharges, the KCSWD sampling team was not aware of the need to collect a second sample for the week of August 3-9.

KCSWD has consistently met the permit requirement to collect two samples per week since the current permit was issued in October of 2023. However, this instance of noncompliance involved circumstances that differed from routine procedures. KCSWD attributes the cause of this noncompliance to ineffective communication and acknowledges operating in a non-standard manner at the time may have been a contributing factor.

KCSWD has effective internal processes to identify and report permit violations in a timely manner, as evidenced by KCSWD's history of 14-Day Report submittals.

3. **Date and Time King County Notified:** (requirement is within 24 hours of learning of violation unless event was spill or slug discharge then must have notified immediately)

   September 26, 2025 7:48 am via communication to Arnaud Girard.

Docusign Envelope ID: 5E3327FE-1267-480A-8998-0D508ACF683D

14-Day Report for Discharge or Permit Violation

4. **Corrective Actions Taken:** (corrective actions taken to respond to the violation and ensure ongoing compliance.)

Sampling Non-Compliance

Corrective actions taken or planned include.

i. KCSWD recently completed an upgrade to its SCADA network which enables technology upgrades for flow monitoring and data accessibility. Collectively, these actions will improve the quality and availability of information used by internal stakeholders to make day-to-day decisions related to the permit.
   a. KCSWD plans to install a new flowmeter to get near real-time discharge data. Installation is expected in November 2025.
   b. KCSWD is in the process of expanding access to flow monitoring data. Once complete, operations, compliance, and sampling leads will have near-real time access to flow data at LEPS. This effort is underway.

ii. KCSWD is reviewing and improving internal communication processes for planning discharges throughout the week. The expectation is for internal stakeholders to have a common understanding of planned discharges throughout the week and to notify others if/when the plan changes. Preliminary changes have been implemented and KCSWD will continue to consider additional improvements over time.

iii. KCSWD plans to explore real-time control and programming of automated sampling equipment that would enable *ad hoc* sampling should an unplanned discharge event occur. This is a longer-term effort and no schedule has been developed yet.

5. **If discharge violation, enter follow-up sample collection date and results:** (may use subsequent self-monitoring sample if collected and analyzed within 14 days of learning of violation)
N/A

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14-Day Report for Discharge or Permit Violation

ADDITIONAL SHEETS ATTACHED: **oYES** **x NO**

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME: Jennifer Keune

SIGNATURE: DocuSigned by: Jennifer Keune A70EEC0AE02F44A... DATE: Oct 2, 2025

TITLE: Supervisor

Authorized Representative / Designated Authorized Representative*

(Please circle one of the above)

**All user reports must be signed by an authorized representative of the industrial user. "Authorized representative of industrial user" is defined by King County Code 28.82.050. If you are designated, a current Delegation of Signatory Authority must be on file at King County or completed and attached to this form.*

Please return this form and attachments to:

King County Industrial Waste **201 S. Jackson Street – Suite 513**
Seattle, WA 98104-3855 **Fax: 206-263-3001**
-or- Email a signed PDF to: info.KCIW@kingcounty.gov

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14-Day Report for Discharge or Permit Violation

From general permit language

1. When monitoring data shows a violation, the permittee shall:

    a. Take immediate action to stop the violation and notify KCIW within 24 hours of learning of the violation.
    b. Collect a sample and submit new data to KCIW within 14 days of becoming aware of the violation.
    c. Submit a written report within 14 days of learning of the violation (*14-Day Report*). The report should explain the cause of the violation and corrective actions taken to respond to the violation and ensure ongoing compliance.

2. In the event the permittee is unable to comply with any of the conditions of this permit because of a breakdown of equipment or facilities, an accident caused by human error, negligence, or any other cause, such as an act of nature, the permittee shall:

    a. Take immediate action to stop, contain, and clean up the unauthorized discharges and correct the problem.
    b. Immediately notify the emergency King County contact in section S1 so steps can be taken to prevent damage to the sewerage system.
    c. Submit a written report within 14 days of the event (*14-Day Report*) describing the breakdown, the actual quantity and quality of resulting waste discharged, corrective action taken, and the steps taken to prevent a recurrence.

From Section D of Major Discharge Authorizations

1. In the event the permittee is unable to comply with any of the conditions of this discharge authorization because of breakdown of equipment or facilities, an accident caused by human error, negligence, or any other cause, such as an act of nature the company shall:

    a. Take immediate action to stop, contain, and clean up the unauthorized discharges and correct the problem
    b. Immediately notify KCIW so steps can be taken to prevent damage to the sewer system
    c. Submit a written report within 14 days describing the breakdown, the actual quantity and quality of resulting waste discharged, corrective action taken, and the steps taken to prevent recurrence

For SIU's Spills and Slug Discharges (from Permit language)

The Permittee shall notify King County Industrial Waste immediately in the event of a spill or slug discharge to the sanitary sewer. A written report regarding the cause of the spill and/or slug discharge shall be submitted to King County within five (5) days of date of occurrence. The report should explain the cause of the violation and corrective actions taken to respond to the violation and ensure ongoing compliance.

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County
Solid Waste Division
Department of Natural Resources and Parks
King Street Center
201 South Jackson Street, Suite 6400
Seattle, WA 98104-3855
206-477-4466
711 TTY Relay
kingcounty.gov/solid-waste

November 13, 2025

TO: Arnaud Girard, Industrial Waste Compliance Investigator III, Wastewater Treatment Division

FM: Aaron Copado, Environmental Scientist III, King County Solid Waste Division (KCSWD)

DS AC

RE: Wastewater Discharge Permit # 7842-04 - Cedar Hills – Self-Monitoring Report

The purpose of this memorandum is to enclose the Self-Monitoring Report (SMR) for Cedar Hills (Permit # 7842-04) for the month of October 2025. Enclosed you will find:

- Industrial Waste Discharge Self-Monitoring Report for Sites A9002 & A90021
- Laboratory Test Results for CHLS-P (for samples collected 10/2/25, 10/7/25, 10/8/25, 10/9/25, 10/10/25, 10/14/25, 10/16/35, 10/21/2025, 10/23/25, 10/28/25 and 10/30/25)
- Atmospheric Hydrogen Sulfide Data at A9002 (for 10/7 - 10/14)
- Leachate Hauling Report (for October)

The following exceedances occurred during the month of October:

Parameter	Date of Exceedance	Aware Date	Notification Date and Time
Arsenic Loading	10/28/25	11/5/25	11/5/25 @ 18:28
Arsenic Loading	10/30/25	11/5/25	11/5/25 @ 18:28

King County Industrial Waste (KCIW) sent a warning letter to King County Solid Waste Division (KCSWD) on October 7, 2025 directing KCSWD to collect four effluent samples within a one-week time period and have them analyzed for arsenic concentration. These extra effluent samples were taken and are noted on the enclosed SMR. The samples were collected daily October 7 through October 10, 2025.

KCSWD also took additional measures to collect an extra soluble sulfide sample during the week of 10/19-10/25 while discharging. This coincided with the replacement of one aerator which went offline 10/17 and was back online as of 10/28.

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KCSWD previously reported flow measurements outside the acceptable limits established in section S3.C.2.d of Permit #7842-04 and shared our plan to replace the existing flow meter. KCIW requested information about the new proposed effluent flow meter, including meter type, manufacturer and model, and specifications. This information was sent to Bruce Tiffany and Arnaud Girard via email on October 15, 2025 at 14:35. KCIW subsequently approved installation of the proposed flow meter and KCSWD is working to have it installed by December 3, 2025.

Please contact me directly if you have any questions. I can be reached at (253) 400-6532, or by e-mail at acopado@kingcounty.gov.

Enclosures

cc: Theresa Thurlow, P.E., Engineering Services Manager, KCSWD
Jennifer Keune, Supervisor, KCSWD
Dan Swope, Supervising Engineer, KCSWD
Grant Dornfeld, Engineer II, KCSWD

Printed on recycled paper

King County

Industrial Waste Program Monthly Self-Monitoring Report

Send to: King County Industrial Waste Program
Email: info.KCIW@kingcounty.gov

Company Name: King County SWD - Cedar Hills Regional Landfill **Sample Site No.** A90021 **Permit No.:** *7842-04*

Please Specify Month & Year: **Month/Year** October 2025

This form is available at www.kingcounty.gov/industrialwaste.

*** Sample Types (C) Composite (G) Grab (BC) Batch**

All conc. units are mg/L unless otherwise noted. Loading units are pounds per day (lbs./day)

Sample Date (circle)	Sample Type*	pH	Arsenic		Cadmium		Chromium		Copper		Lead		Daily Discharge Volume, gpd	Notes (Indicate Batch Discharge where applicable)
			Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading		
1													143100	*Flow Meter Error >10%
2	C		0.1980	0.2358									142800	*Flow Meter Error >10%
3													143200	*Flow Meter Error >10%
4													142900	*Flow Meter Error >10%
5													143000	*Flow Meter Error >10%
6													141000	*Flow Meter Error >10%
7	C	8.66	0.2070	0.1702	<0.0005	0.0002	0.2650	0.2179	0.0081	0.0067	0.0021	0.00173	98600	*Flow Meter Error >10%
8	C		0.2200	0.1783									97200	*Flow Meter Error >10%
9	C		0.2150	0.1741									97100	*Flow Meter Error >10%
10	C		0.2100	0.1699									97000	*Flow Meter Error >10%
11													101000	*Flow Meter Error >10%
12													135400	*Flow Meter Error >10%
13													93600	*Flow Meter Error >10%
14	C	8.78	0.2060	0.1648	<0.0005	0.0002	0.2680	0.2143	0.0078	0.0062	0.0021	0.00168	95900	*Flow Meter Error >10%
15													95500	*Flow Meter Error >10%
16	C		0.2050	0.1621									94800	*Flow Meter Error >10%
17													95400	*Flow Meter Error >10%
18													94200	*Flow Meter Error >10%
19													95900	*Flow Meter Error >10%
20													95200	*Flow Meter Error >10%
21	C	8.83	0.1990	0.1592	<0.0005	0.0002	0.2590	0.2071	0.0062	0.0050	0.0018	0.00144	95900	*Flow Meter Error >10%
22													94500	*Flow Meter Error >10%
23	C		0.2030	0.1598									94400	*Flow Meter Error >10%
24													512000	*Flow Meter Error >10%
25													520400	*Flow Meter Error >10%
26													521900	*Flow Meter Error >10%
27													534200	*Flow Meter Error >10%
28	C	8.50	0.1860	0.5425	<0.0005	0.0007	0.2490	0.7262	0.0077	0.0225	0.0021	0.00612	349700	*Flow Meter Error >10%
29													349100	*Flow Meter Error >10%
30	C		0.1700	0.5028									354600	*Flow Meter Error >10%
31													344600	*Flow Meter Error >10%

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

DocuSigned by: Jonathan Hunt 7A1EC0D07A1...

Name and Signature of Principal Executive or Authorized Agent

Nov 13, 2025

Date

Monthly Min pH	8.50	10/28/2025	
Monthly Max pH	8.83	10/21/2025	
Total Monthly Flow (gallons)	6,014,100		
Maximum Daily Flow	534,200	10/27/2025	

PLEASE CIRCLE ALL PERMIT VIOLATIONS

Due Date: **Monthly report is due by the 15th each month.**

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County

Industrial Waste Program Monthly Self-Monitoring Report

Send to: King County Industrial Waste Program
Email: info.KCIW@kingcounty.gov

Company Name: King County SWD - Cedar Hills Regional Landfill **Sample Site No.** A90021 **Permit No.:** *7842-04*

Please Specify Month & Year: **Month/Year** October 2025

This form is available at www.kingcounty.gov/industrialwaste.

*** Sample Types (C) Composite (G) Grab (BC) Batch**

All conc. units are mg/L unless otherwise noted. Loading units are pounds per day (lbs./day)

Sample Date (circle)	Sample Type	Mercury		Nickel		Silver		Zinc		Total Soluble Sulfides	Ammonia as N	Nitrite + Nitrate as N	Notes (Indicate Batch Discharge where applicable)
		Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading				
1													
2													
3													
4													
5													
6													
7	C	<0.0001	0.00004	0.1990	0.164	<0.0004	0.0002	0.2110	0.174	<0.1 ppm	1340	<0.5	
8													
9													
10													
11													
12													
13													
14	C	<0.0001	0.00004	0.1990	0.159	<0.0004	0.0002	0.1980	0.158	<0.1 ppm			
15													
16													
17													
18													
19													
20													
21	C	<0.0001	0.00004	0.1930	0.154	<0.0004	0.0002	0.1930	0.154	<0.1 ppm			
22													
23										<0.1 ppm			
24													
25													
26													
27													
28	C	<0.0001	0.00015	0.1870	0.545	<0.0004	0.0006	0.2210	0.645	<0.1 ppm			
29													
30													
31													

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

DocuSigned by: [signature] Nov 13, 2025

Name and Signature of Principal Executive or Authorized Agent — Date

PLEASE CIRCLE ALL PERMIT VIOLATIONS

Due Date: Monthly report is due by the 15th each month.

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County

Industrial Waste Program Monthly Self-Monitoring Report

Send to: King County Industrial Waste Program
Email: info.KCIW@kingcounty.gov

Atmospheric Hydrogen Sulfide (H_2S) Monitoring

Company Name: King County SWD - Cedar Hills Regional Landfill **Sample Site No.** A9002 **Permit No.:** *7842-04*

Please Specify Month & Year: **Month/Year** October 2025

This form is available at www.kingcounty.gov/industrialwaste.

All units are PPM unless otherwise noted.

Sample Date (circle)	Atmospheric Hydrogen Sulfide, ppmv				Notes
	Instantaneous Maximum	Maximum 15-min Average	Maximum 8-hr Average	7-day Average	
1					
2					
3					
4					
5					
6					
7	0	0	0	-	
8	2	0.37	0.01	-	
9	1	0.3	0.01	-	
10	0	0	0	-	
11	0.5	0.1	0	-	
12	0	0	0	-	
13	0	0	0	-	
14	1	0.3	0.01	0.0016	
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
Monthly **MAX**	2	Date	10/07/25-10/14/25		
Monthly **AVG**	0.5625				

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

DocuSigned by: [signature] 11/13/2025
Name and Signature of Principal Executive or Authorized Agent — Date

PLEASE CIRCLE ALL PERMIT VIOLATIONS

Due Date: Monthly report is due by the 15th each month.

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

October 14, 2025

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P) - Revised

Sample Id.	Sample Collect Date	COC
LEPS250929P	**09/29/2025**	**19013**
LEPS251002P	**10/02/2025**	**19119**
LEPS251002D		

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 3 leachate permit samples collected September 30 and October 2, 2025. This revision was issued to correct the sample ID and sample collect date for the sample collected 9/29/2025 under COC 19013 in this narrative. There were no changes to the sample results or EDDs.

Sample Receiving Comments

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

No sample receiving anomalies were observed.

Metals QC Information

All calculable QC results for metals parameters were within laboratory control limits with the following exception.

During **Total Metals** analysis of analytical batch WG202773, the recovery of ***total tin*** from the matrix spike (MS) and MS duplicate (MSD) exceeded the lower laboratory control limit. Sample LEPS250929P was used to prepare the MS/MSD. The *total tin* result for sample LEPS250929P was qualified G based on these exceedances and may be biased low.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,

Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Sample Data

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 10/07/2025
Report Group: CHLS-P_100625

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250929P**
SDG / Lab Sample ID: **19013 / L87074-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**
Collect Date: **09/29/2025**
Login Date: **09/29/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, P-ICPMS, Metals

200.8, SWD-ICPMS23, Metals

245.1, HG-CVAA-M, Metals

Client Sample ID: **LEPS251002P**
SDG / Lab Sample ID: **19119 / L87084-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**
Collect Date: **10/02/2025**
Login Date: **10/02/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, AS-ICPMS, Metals

Client Sample ID: **LEPS251002D**
SDG / Lab Sample ID: **19119 / L87084-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**
Collect Date: **10/02/2025**
Login Date: **10/02/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, AS-ICPMS, Metals

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 10/07/2025
Report Group: CHLS-P_100625

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS250929P**
CoC / Lab Sample ID: **19013 / L87074-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **09/29/2025**
Login Date: **09/29/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Mercury, Total	2	mg/L	<.0001	U	.0001	.0002		09/30/2025	09/30/2025	WG202765
Aluminum, Total	10	mg/L	1.14		.05	.1		10/01/2025	10/03/2025	WG202773
Antimony, Total	10	mg/L	.0215		.003	.01		10/01/2025	10/03/2025	WG202773
Arsenic, Total	10	mg/L	.205		.0005	.00251	1	10/01/2025	10/03/2025	WG202773
Barium, Total	10	mg/L	.108		.005	.00502		10/01/2025	10/03/2025	WG202773
Beryllium, Total	10	mg/L	<.001	U	.001	.00502		10/01/2025	10/03/2025	WG202773
Cadmium, Total	10	mg/L	<.0005	U	.0005	.00251	0.5	10/01/2025	10/03/2025	WG202773
Calcium, Total	10	mg/L	57.7		.502	.502		10/01/2025	10/03/2025	WG202773
Chromium, Total	10	mg/L	.264		.002	.01	2.75	10/01/2025	10/03/2025	WG202773
Cobalt, Total	10	mg/L	.0485		.0005	.00251		10/01/2025	10/03/2025	WG202773
Copper, Total	10	mg/L	.0077	T	.002	.0201	3	10/01/2025	10/03/2025	WG202773
Iron, Total	10	mg/L	13.9		.1	.502		10/01/2025	10/03/2025	WG202773
Lead, Total	10	mg/L	.0017	T	.001	.00502	2	10/01/2025	10/03/2025	WG202773
Magnesium, Total	10	mg/L	115		.502	.502		10/01/2025	10/03/2025	WG202773
Manganese, Total	10	mg/L	.357		.001	.00502		10/01/2025	10/03/2025	WG202773
Nickel, Total	10	mg/L	.195		.001	.00502	2.5	10/01/2025	10/03/2025	WG202773
Phosphorus, Total	10	mg/L	10.5		1	1		10/01/2025	10/03/2025	WG202773
Potassium, Total	10	mg/L	801		1	5.02		10/01/2025	10/03/2025	WG202773
Selenium, Total	10	mg/L	<.005	U	.005	.01		10/01/2025	10/03/2025	WG202773
Silver, Total	10	mg/L	<.0004	U	.0004	.00201	1	10/01/2025	10/03/2025	WG202773
Sodium, Total	10	mg/L	2190		1	1		10/01/2025	10/03/2025	WG202773
Thallium, Total	10	mg/L	<.00075	U	.00075	.00201		10/01/2025	10/03/2025	WG202773
Tin, Total	10	mg/L	.0157	G	.005	.0151		10/01/2025	10/03/2025	WG202773
Vanadium, Total	10	mg/L	.0778		.00075	.00376		10/01/2025	10/03/2025	WG202773
Zinc, Total	10	mg/L	.199		.005	.0251	5	10/01/2025	10/03/2025	WG202773

Client Sample ID: **LEPS251002P**
CoC / Lab Sample ID: **19119 / L87084-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **10/02/2025**
Login Date: **10/02/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.198		.00051	.00254	1	10/03/2025	10/03/2025	WG202810

Client Sample ID: **LEPS251002D**
CoC / Lab Sample ID: **19119 / L87084-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **10/02/2025**
Login Date: **10/02/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.197		.00051	.00257	1	10/03/2025	10/03/2025	WG202810

Target Parameter Count for Report Group: 27

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Quality Control Data

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory QC Report

CHLS-P_100625 COC 19013 19119

Workgroup: WG202765 Total Mercury by CVAA

MB:WG202765-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.05	0.1	ug/L		U

SB:WG202765-2 MB:WG202765-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	0.988	99		85--115

MSD:WG202765-4 MS:WG202765-3 L87074-1 Matrix: LEACHATE Listtype:MTHG-MID Method:EPA 245.1 Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.1	0.2	ug/L	U	2	1.8	90		75--125	2	1.7	85		6		0--20

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory QC Report

CHLS-P_100625 COC 19013 19119

Workgroup: WG202773 Total Metals by ICPMS

MB:WG202773-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.1	0.5	ug/L		U
Sodium, Total	100	100	ug/L		U
Magnesium, Total	50	50	ug/L		U
Aluminum, Total	5	10	ug/L		U
Phosphorus, Total	100	100	ug/L		U
Potassium, Total	100	500	ug/L		U
Calcium, Total	50	50	ug/L		U
Vanadium, Total	0.075	0.375	ug/L		U
Chromium, Total	0.2	1	ug/L		U
Manganese, Total	0.1	0.5	ug/L		U
Iron, Total	10	50	ug/L		U
Cobalt, Total	0.05	0.25	ug/L		U
Nickel, Total	0.1	0.5	ug/L		U
Copper, Total	0.2	2	ug/L		U
Zinc, Total	0.5	2.5	ug/L		U
Arsenic, Total	0.05	0.25	ug/L		U
Selenium, Total	0.5	1	ug/L		U
Silver, Total	0.04	0.2	ug/L		U
Cadmium, Total	0.05	0.25	ug/L		U
Tin, Total	0.5	1.5	ug/L		U
Antimony, Total	0.3	1	ug/L		U
Barium, Total	0.5	0.5	ug/L		U
Thallium, Total	0.075	0.2	ug/L		U
Lead, Total	0.1	0.5	ug/L		U

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory QC Report

CHLS-P_100625 COC 19013 19119

SB:WG202773-2 MB:WG202773-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.1	0.5	ug/L	U	20	19.4	97		85--115
Sodium, Total	100	100	ug/L	U	5000	5310	106		85--115
Magnesium, Total	50	50	ug/L	U	5000	5350	107		85--115
Aluminum, Total	5	10	ug/L	U	200	202	101		85--115
Phosphorus, Total	100	100	ug/L	U	5000	4910	98		85--115
Potassium, Total	100	500	ug/L	U	5000	5170	103		85--115
Calcium, Total	50	50	ug/L	U	5000	4980	100		85--115
Vanadium, Total	0.075	0.375	ug/L	U	20	20.4	102		85--115
Chromium, Total	0.2	1	ug/L	U	20	21.5	108		85--115
Manganese, Total	0.1	0.5	ug/L	U	20	21.1	106		85--115
Iron, Total	10	50	ug/L	U	5000	5380	108		85--115
Cobalt, Total	0.05	0.25	ug/L	U	20	20.3	101		85--115
Nickel, Total	0.1	0.5	ug/L	U	20	21.1	106		85--115
Copper, Total	0.2	2	ug/L	U	20	21.7	109		85--115
Zinc, Total	0.5	2.5	ug/L	U	20	21	105		85--115
Arsenic, Total	0.05	0.25	ug/L	U	20	20.2	101		85--115
Selenium, Total	0.5	1	ug/L	U	20	20.3	102		85--115
Silver, Total	0.04	0.2	ug/L	U	20	20.4	102		85--115
Cadmium, Total	0.05	0.25	ug/L	U	20	20.7	103		85--115
Tin, Total	0.5	1.5	ug/L	U	20	19.5	97		85--115
Antimony, Total	0.3	1	ug/L	U	20	20.2	101		85--115
Barium, Total	0.5	0.5	ug/L	U	20	21.2	106		85--115
Thallium, Total	0.075	0.2	ug/L	U	20	21.7	109		85--115
Lead, Total	0.1	0.5	ug/L	U	20	21.8	109		85--115

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory QC Report

CHLS-P_100625 COC 19013 19119

MSD:WG202773-4 MS:WG202773-3 L87074-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	1	4.99	ug/L	U	200	202	101		75--125	199	208	104		3		0--20
Sodium, Total	999	999	ug/L	2190000	49900	2230000		4xRule	75--125	49800	2230000		4xRule	0		0--20
Magnesium, Total	499	499	ug/L	115000	49900	164000	99		75--125	49800	170000	111		3		0--20
Aluminum, Total	50	99.9	ug/L	1140	2000	3190	102		75--125	1990	3190	103		0		0--20
Phosphorus, Total	1000	999	ug/L	10500	49900	61800	103		75--125	49800	63200	106		2		0--20
Potassium, Total	1000	4990	ug/L	801000	49900	850000		4xRule	75--125	49800	871000		4xRule	2		0--20
Calcium, Total	499	499	ug/L	57700	49900	106000	97		75--125	49800	110000	104		3		0--20
Vanadium, Total	0.75	3.75	ug/L	77.8	200	269	96		75--125	199	275	99		2		0--20
Chromium, Total	2	9.99	ug/L	264	200	450	93		75--125	199	460	98		2		0--20
Manganese, Total	1	4.99	ug/L	357	200	542	93		75--125	199	553	98		2		0--20
Iron, Total	100	499	ug/L	13900	49900	61000	94		75--125	49800	62500	98		3		0--20
Cobalt, Total	0.5	2.5	ug/L	48.5	200	249	100		75--125	199	247	100		1		0--20
Nickel, Total	1	4.99	ug/L	195	200	398	101		75--125	199	395	101		1		0--20
Copper, Total	2	20	ug/L	7.7	200	216	104		75--125	199	212	103		1		0--20
Zinc, Total	5	25	ug/L	199	200	401	101		75--125	199	399	100		1		0--20
Arsenic, Total	0.5	2.5	ug/L	205	200	410	103		75--125	199	418	107		2		0--20
Selenium, Total	5	9.99	ug/L	U	200	206	103		75--125	199	211	106		3		0--20
Silver, Total	0.4	2	ug/L	U	200	182	91		75--125	199	187	94		3		0--20
Cadmium, Total	0.5	2.5	ug/L	U	200	196	98		75--125	199	194	98		1		0--20
Tin, Total	5	15	ug/L	15.7	200	141	63	*	75--125	199	122	53	*	15		0--20
Antimony, Total	3	9.99	ug/L	21.5	200	221	100		75--125	199	224	102		1		0--20
Barium, Total	5	4.99	ug/L	108	200	331	112		75--125	199	335	114		1		0--20
Thallium, Total	0.75	2	ug/L	U	200	205	102		75--125	199	202	102		1		0--20
Lead, Total	1	4.99	ug/L	1.7	200	212	105		75--125	199	212	106		0		0--20

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory QC Report

CHLS-P_100625 COC 19013 19119

Workgroup: WG202810 Total Metals by ICPMS

MB:WG202810-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total	0.05	0.25	ug/L		U

SB:WG202810-2 MB:WG202810-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Arsenic, Total	0.05	0.25	ug/L	U	20	19.4	97		85--115

MSD:WG202810-4 MS:WG202810-3 L87084-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Arsenic, Total	0.49	2.44	ug/L	198	20	394		4xRule	75--125	20	398		4xRule	1		0--20

==========

4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 9/29/25

Department of
Natural Resources and Parks
Solid Waste Division

No. **19013**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25)

Project Site Test Reference

	Lab No.	Sample ID	Date	Time	CHGW Cedar Hills GW Qtly	CHGW Cedar Hills EPZ GW Qtly	CHGW/VAGW Appendix III GW	CHGW-OS Cedar Hills GW Offsite	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 Sta. E-1	CHSW-TD Cedar Hills SW Top Deck	CHSW-E CH Emergency	CFSW Cedar Falls SW Qtly	DUSW Duvall SW Qtly	VASW Vashon SW Qtly-MEIRS	ISGP: CHSW-P Cedar Hills SW	ISGP: HTSW-P Houghton SW	ISGP: SHSW-P Shoreline SW	ISGP: FASW-P Factoria SW	ISGP: ENSW-P Enumclaw SW	ISGP: ALSW-P Algona SW	ISGP: VASW-P Vashon SW	CHTW Cedar Hills Truckwash	CHLS-M Cedar Hills Leachate Mtly	CHLS-M_MOD CH Leachate Mods Mtly	CHLS-M_As CH Leachate As Semi-Ann.	PRETREATMENT PERMITS: CHLS-P CH L Permit (wkly, 1st)	CHLS-P CH L Permit (mnthly)	CHLS-P CH L Permit (wkly, 2nd)	ALLS-P Algona WW Permit	BLLS-P Bow Lake WW Permit	ENLS-P Enumclaw WW Permit	FALS-P Factoria WW Permit	SRLS-P Shoreline WW Permit	HTLS-P Houghton WW Permit	RELS-P Renton WW Permit	VALS-P Vashon WW Permit Tanks	VALS-Q Vashon Leachate Qtly	Number of Containers	Remarks
					GROUNDWATER											SURFACE WATER													LEACHATE/WASTEWATER														
					2	2.1	4	38	5	6	7	8	9	10	12	14	42	491	17	18	21	16	52	53	54	56	57	58	24	23	23+	23.1	25	25	25	26	20	27	28	29	30	31	32	34		
1	87074-1	LEPS250929P	9/29/25	1030																												X											1	401 ppm Diss Sulfide?
2																																										
3																																										
4																																										
5																																										
6																																										
7																																										
8																																										
9																																										
10																																										

Relinquished By Sampler: E R
Sampler Signature: I. Rivera
Sampler Printed Name: KCSWD
Company
Date: 9/29/25
Time: 1440

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By
Signature
Printed Name
Company
Date
Time

Received By: Jason Kinnard
Signature
Printed Name: KCEL
Company
Date: 9-29-25
Time: 1440

Observations/Comments/Special Instructions:

Total # of Containers: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v5.0 (Rev 6/2025)

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 820174 -1
40 mL clear vial (VOA)	
60 mL CWM HDPE	
125 mL CNM HDPE	
125 mL CWM HDPE	
125 mL GANM w/HCl	
250 mL CWM HDPE	
250 mL GAWM w/H_2SO_4	
500 mL AWM HDPE	
500 mL CWM HDPE	
500 mL CWM PP (MICRO)	
500 mL HDPE (METALS)	1
500 mL GAWM	
1L CWM HDPE	
1L GANM	
1L GAWM w/ H_2SO_4	
2L CWM HDPE:	
Other -	
Other -	
Other -	
Other -	
Other -	
Total # of Samples	1

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	3.6 / 3.5 / 3.5	Delivery Location	Y / N	

Sub-Contracting: Y / N List Product(s):

Changes: Y / N List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 9-29-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P (25)

Receive Date: 9-29-25 COC / SDG No.: 19013

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____ Date / Time Completed: SEP 29 '25 14:48

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Chain of Custody Record

Environmental Monitoring Program

Date: 10/02/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19119**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25.2)

Lab No.	Sample ID	Date	Time
87084-1	LEPS251002P	10/2/25	1030
87084-2	LEPS251002D	10/2/25	1030

Project Site Test Reference

| | | |

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 87084 -1	-2
40 mL clear vial (VOA)		
60 mL CWM HDPE		
125 mL CNM HDPE		
125 mL CWM HDPE		
125 mL GANM w/HCl		
250 mL CWM HDPE		
250 mL GAWM w/H_2SO_4		
500 mL AWM HDPE		
500 mL CWM HDPE		
500 mL CWM PP (MICRO)		
500 mL HDPE (METALS)	1	1
500 mL GAWM		
1L CWM HDPE		
1L GANM		
1L GAWM w/ H_2SO_4		
2L CWM HDPE:		
Other -		
Other -		
Other -		
Other -		
Other -		
Total # of Samples 2	1	1
Number of bottles per sample		

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	3.9 3.8 3.8	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 10-2-25 Project No.: 421422

VTRP Collect Date(s): ____ Project Site Test Reference: CHLS-P (25.2)

Receive Date: 10-2-25 COC / SDG No.: 19119

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

OCT 02 '25 14:35

Date / Time Completed: _____

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

October 17, 2025

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P)

Sample Id.	Sample Collect Date	COC
LEPS251007P	**10/7/2025**	**18970**
LEPS251008P	**10/8/2025**	**19127**
LEPS251009P	**10/9/2025**	**19131**
LEPS251010P	**10/10/2025**	**18946**

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 4 leachate permit samples collected October 7 through 10, 2025.

Sample Receiving Comments
The container collected for **Dissolved Nutrient** analysis was inadequately preserved in the field. Additional preservative was added upon receipt.

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

No other sample receiving anomalies were observed.

Conventionals QC Information

All calculable QC results for conventionals parameters were within laboratory control limits.

The **ammonia** and **nitrite+nitrate nitrogen** results for sample LEPS251007P were qualified S due to inadequate preservation at the time of collection.

Metals QC Information

All calculable QC results for metals parameters were within laboratory control limits with the following exception.

During **Total Metals** analysis of analytical batch WG202854, the recovery of ***total tin*** from the matrix spike (MS) and MS duplicate (MSD) exceeded the lower laboratory control limit. Sample LEPS251007P was used to prepare the MS/MSD. The *total tin* result for sample LEPS251007P was qualified G based on these exceedances and may be biased low.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,



Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Sample Data

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 10/16/2025
Report Group: CHLS-P_101425

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS251010P**
SDG / Lab Sample ID: **18946 / L87122-4**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**
Collect Date: **10/10/2025**
Login Date: **10/10/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, AS-ICPMS, Metals

Client Sample ID: **LEPS251007P**
SDG / Lab Sample ID: **18970 / L87122-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**
Collect Date: **10/07/2025**
Login Date: **10/07/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, P-ICPMS, Metals

200.8, SWD-ICPMS23, Metals

245.1, HG-CVAA-M, Metals

4500-NO3-F NO23 Nitrite + Nitrate Nitrogen

Kerouel & Aminot 1997 NH3 Ammonia Nitrogen

Client Sample ID: **LEPS251008P**
SDG / Lab Sample ID: **19127 / L87122-3**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**
Collect Date: **10/08/2025**
Login Date: **10/09/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, AS-ICPMS, Metals

Client Sample ID: **LEPS251009P**
SDG / Lab Sample ID: **19131 / L87122-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**
Collect Date: **10/09/2025**
Login Date: **10/09/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, AS-ICPMS, Metals

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 10/16/2025
Report Group: CHLS-P_101425

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS251010P**
CoC / Lab Sample ID: **18946 / L87122-4**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **10/10/2025**
Login Date: **10/10/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.21		.0005	.0025	1	10/14/2025	10/15/2025	WG202925

Client Sample ID: **LEPS251007P**
CoC / Lab Sample ID: **18970 / L87122-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **10/07/2025**
Login Date: **10/07/2025**
Matrix: **LEACHATE**

Conventionals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Nitrate + Nitrite as N	50	mg/L	<.5	SU	.5	2		10/09/2025	10/09/2025	WG202908
Ammonia	50	mg/L	1340	S	25	50		10/10/2025	10/10/2025	WG202921

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Aluminum, Total	10	mg/L	1.11		.051	.102		10/08/2025	10/10/2025	WG202854
Antimony, Total	10	mg/L	.0213		.0031	.0102		10/08/2025	10/10/2025	WG202854
Arsenic, Total	10	mg/L	.207		.00051	.00256	1	10/08/2025	10/10/2025	WG202854
Barium, Total	10	mg/L	.12		.0051	.00511		10/08/2025	10/10/2025	WG202854
Beryllium, Total	10	mg/L	<.001	U	.001	.00511		10/08/2025	10/10/2025	WG202854
Cadmium, Total	10	mg/L	<.00051	U	.00051	.00256	0.5	10/08/2025	10/10/2025	WG202854
Calcium, Total	10	mg/L	56.7		.511	.511		10/08/2025	10/10/2025	WG202854
Chromium, Total	10	mg/L	.265		.002	.0102	2.75	10/08/2025	10/10/2025	WG202854
Cobalt, Total	10	mg/L	.0492		.00051	.00256		10/08/2025	10/10/2025	WG202854
Copper, Total	10	mg/L	.0081	T	.002	.0204	3	10/08/2025	10/10/2025	WG202854
Iron, Total	10	mg/L	14.1		.1	.511		10/08/2025	10/10/2025	WG202854
Lead, Total	10	mg/L	.0021	T	.001	.00511	2	10/08/2025	10/10/2025	WG202854
Magnesium, Total	10	mg/L	112		.511	.511		10/08/2025	10/10/2025	WG202854
Manganese, Total	10	mg/L	.377		.001	.00511		10/08/2025	10/10/2025	WG202854
Nickel, Total	10	mg/L	.199		.001	.00511	2.5	10/08/2025	10/10/2025	WG202854
Phosphorus, Total	10	mg/L	9.82		1	1.02		10/08/2025	10/10/2025	WG202854
Potassium, Total	10	mg/L	813		1	5.11		10/08/2025	10/10/2025	WG202854
Selenium, Total	10	mg/L	<.0051	U	.0051	.0102		10/08/2025	10/10/2025	WG202854
Silver, Total	10	mg/L	<.00041	U	.00041	.00204	1	10/08/2025	10/10/2025	WG202854
Sodium, Total	10	mg/L	2170		1.02	1.02		10/08/2025	10/10/2025	WG202854
Thallium, Total	10	mg/L	<.00077	U	.00077	.00204		10/08/2025	10/10/2025	WG202854
Tin, Total	10	mg/L	.014	GT	.0051	.0153		10/08/2025	10/10/2025	WG202854
Vanadium, Total	10	mg/L	.0808		.00077	.00383		10/08/2025	10/10/2025	WG202854
Zinc, Total	10	mg/L	.211		.0051	.0256	5	10/08/2025	10/10/2025	WG202854
Mercury, Total	2	mg/L	<.0001	U	.0001	.0002		10/08/2025	10/09/2025	WG202868

Client Sample ID: **LEPS251008P**
CoC / Lab Sample ID: **19127 / L87122-3**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **10/08/2025**
Login Date: **10/09/2025**
Matrix: **LEACHATE**

Metals

Client Sample ID: **LEPS251008P** Collect Date: **10/08/2025**
CoC / Lab Sample ID: **19127 / L87122-3** Login Date: **10/09/2025**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit** Matrix: **LEACHATE**

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	**10**	**mg/L**	**.22**		**.0005**	**.00249**	**1**	**10/14/2025**	**10/15/2025**	**WG202925**

Client Sample ID: **LEPS251009P** Collect Date: **10/09/2025**
CoC / Lab Sample ID: **19131 / L87122-2** Login Date: **10/09/2025**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit** Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	**10**	**mg/L**	**.215**		**.0005**	**.00249**	**1**	**10/14/2025**	**10/15/2025**	**WG202925**

Target Parameter Count for Report Group: 30

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Quality Control Data

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory QC Report

CHLS-P_101425 COC 18946, 18970, 19127, 19131

Workgroup: WG202908 Dissolved Nutrients

MB:WG202908-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L		U

SB:WG202908-3 MB:WG202908-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	U	1	1.03	103		80--120

LCS:WG202908-4 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	1	0.994	99		85--115

LD:WG202908-5 L87122-1 Matrix: LEACHATE Listtype:CVNO23 Method:SM4500-NO3-F Project:421422-CHLS-P Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.5	2	mg/L	U	U			0--20

MS:WG202908-6 L87122-1 Matrix: LEACHATE Listtype:CVNO23 Method:SM4500-NO3-F Project:421422-CHLS-P Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.5	2	mg/L	U	1	50.3	101		75--125

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory QC Report

CHLS-P_101425 COC 18946, 18970, 19127, 19131

Workgroup: WG202921 Dissolved Nutrients

MB:WG202921-1 Matrix: BLANK WTR Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Ammonia Nitrogen	0.5	1	mg/L		U

SB:WG202921-3 MB:WG202921-1 Matrix: BLANK WTR Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.5	1	mg/L	U	10	9.7	97		80--120

LCS:WG202921-4 Matrix: BLANK WTR Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.5	1	mg/L	10	10.3	103		85--115

LD:WG202921-5 L87122-1 Matrix: LEACHATE Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project:421422-CHLS-P Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Ammonia Nitrogen	25	50	mg/L	1340	1320	2		0--20

MS:WG202921-6 L87122-1 Matrix: LEACHATE Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project:421422-CHLS-P Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	25	50	mg/L	1340	10	1810	95		75--125

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory QC Report

CHLS-P_101425 COC 18946, 18970, 19127, 19131

Workgroup: WG202854 Total Metals by ICPMS

MB:WG202854-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.1	0.5	ug/L		U
Sodium, Total	100	100	ug/L		U
Magnesium, Total	50	50	ug/L		U
Aluminum, Total	5	10	ug/L		U
Phosphorus, Total	100	100	ug/L		U
Potassium, Total	100	500	ug/L		U
Calcium, Total	50	50	ug/L		U
Vanadium, Total	0.075	0.375	ug/L		U
Chromium, Total	0.2	1	ug/L		U
Manganese, Total	0.1	0.5	ug/L		U
Iron, Total	10	50	ug/L		U
Cobalt, Total	0.05	0.25	ug/L		U
Nickel, Total	0.1	0.5	ug/L		U
Copper, Total	0.2	2	ug/L		U
Zinc, Total	0.5	2.5	ug/L		U
Arsenic, Total	0.05	0.25	ug/L		U
Selenium, Total	0.5	1	ug/L		U
Silver, Total	0.04	0.2	ug/L		U
Cadmium, Total	0.05	0.25	ug/L		U
Tin, Total	0.5	1.5	ug/L		U
Antimony, Total	0.3	1	ug/L		U
Barium, Total	0.5	0.5	ug/L		U
Thallium, Total	0.075	0.2	ug/L		U
Lead, Total	0.1	0.5	ug/L		U

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory QC Report

CHLS-P_101425 COC 18946, 18970, 19127, 19131

SB:WG202854-2 MB:WG202854-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.1	0.5	ug/L	U	20	19.6	98		85--115
Sodium, Total	100	100	ug/L	U	5000	5160	103		85--115
Magnesium, Total	50	50	ug/L	U	5000	5190	104		85--115
Aluminum, Total	5	10	ug/L	U	200	198	99		85--115
Phosphorus, Total	100	100	ug/L	U	5000	4880	98		85--115
Potassium, Total	100	500	ug/L	U	5000	5190	104		85--115
Calcium, Total	50	50	ug/L	U	5000	4770	95		85--115
Vanadium, Total	0.075	0.375	ug/L	U	20	19.8	99		85--115
Chromium, Total	0.2	1	ug/L	U	20	20.5	102		85--115
Manganese, Total	0.1	0.5	ug/L	U	20	20.1	101		85--115
Iron, Total	10	50	ug/L	U	5000	5200	104		85--115
Cobalt, Total	0.05	0.25	ug/L	U	20	20.5	102		85--115
Nickel, Total	0.1	0.5	ug/L	U	20	20.8	104		85--115
Copper, Total	0.2	2	ug/L	U	20	21.3	107		85--115
Zinc, Total	0.5	2.5	ug/L	U	20	20.2	101		85--115
Arsenic, Total	0.05	0.25	ug/L	U	20	19.9	99		85--115
Selenium, Total	0.5	1	ug/L	U	20	19.8	99		85--115
Silver, Total	0.04	0.2	ug/L	U	20	19.8	99		85--115
Cadmium, Total	0.05	0.25	ug/L	U	20	19.5	97		85--115
Tin, Total	0.5	1.5	ug/L	U	20	19.2	96		85--115
Antimony, Total	0.3	1	ug/L	U	20	19.7	98		85--115
Barium, Total	0.5	0.5	ug/L	U	20	20.3	101		85--115
Thallium, Total	0.075	0.2	ug/L	U	20	21	105		85--115
Lead, Total	0.1	0.5	ug/L	U	20	21.3	107		85--115

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory QC Report

CHLS-P_101425 COC 18946, 18970, 19127, 19131

MSD:WG202854-4 MS:WG202854-3 L87122-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	1	4.99	ug/L	U	199	191	96		75--125	197	184	93		4		0--20
Sodium, Total	997	997	ug/L	2170000	49900	2260000		4xRule	75--125	49200	2210000		4xRule	3		0--20
Magnesium, Total	499	499	ug/L	112000	49900	160000	96		75--125	49200	157000	93		2		0--20
Aluminum, Total	50	99.7	ug/L	1110	1990	3160	103		75--125	1970	3070	100		3		0--20
Phosphorus, Total	1000	997	ug/L	9820	49900	60200	101		75--125	49200	58300	98		3		0--20
Potassium, Total	1000	4990	ug/L	813000	49900	879000		4xRule	75--125	49200	864000		4xRule	2		0--20
Calcium, Total	499	499	ug/L	56700	49900	106000	99		75--125	49200	103000	94		3		0--20
Vanadium, Total	0.75	3.74	ug/L	80.8	199	278	99		75--125	197	269	96		3		0--20
Chromium, Total	2	9.97	ug/L	265	199	464	100		75--125	197	453	95		2		0--20
Manganese, Total	1	4.99	ug/L	377	199	577	100		75--125	197	564	95		2		0--20
Iron, Total	100	499	ug/L	14100	49900	62900	98		75--125	49200	61200	96		3		0--20
Cobalt, Total	0.5	2.49	ug/L	49.2	199	253	102		75--125	197	247	101		2		0--20
Nickel, Total	1	4.99	ug/L	199	199	401	101		75--125	197	393	99		2		0--20
Copper, Total	2	19.9	ug/L	8.1	199	213	103		75--125	197	207	101		3		0--20
Zinc, Total	5	24.9	ug/L	211	199	410	99		75--125	197	402	97		2		0--20
Arsenic, Total	0.5	2.49	ug/L	207	199	413	103		75--125	197	407	102		1		0--20
Selenium, Total	5	9.97	ug/L	U	199	209	105		75--125	197	204	103		3		0--20
Silver, Total	0.4	1.99	ug/L	U	199	186	93		75--125	197	181	92		3		0--20
Cadmium, Total	0.5	2.49	ug/L	U	199	191	96		75--125	197	185	94		3		0--20
Tin, Total	5	15	ug/L	14	199	123	54	*	75--125	197	137	62	*	11		0--20
Antimony, Total	3	9.97	ug/L	21.3	199	221	100		75--125	197	216	99		2		0--20
Barium, Total	5	4.99	ug/L	120	199	317	99		75--125	197	316	100		0		0--20
Thallium, Total	0.75	1.99	ug/L	U	199	198	99		75--125	197	196	99		1		0--20
Lead, Total	1	4.99	ug/L	2.1	199	202	100		75--125	197	199	100		1		0--20

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory QC Report

CHLS-P_101425 COC 18946, 18970, 19127, 19131

Workgroup: WG202868 Total Mercury by CVAA

MB:WG202868-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.05	0.1	ug/L		U

SB:WG202868-2 MB:WG202868-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	0.932	93		85--115

MSD:WG202868-4 MS:WG202868-3 L87113-2 Matrix: IW WTR Listtype:MTHG-MID Method:EPA 245.1 Project:421163 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	0.924	92		75--125	1	0.947	95		2		0--20

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory QC Report

CHLS-P_101425 COC 18946, 18970, 19127, 19131

Workgroup: WG202925 Total Metals by ICPMS

MB:WG202925-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total	0.05	0.25	ug/L		U

SB:WG202925-2 MB:WG202925-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Arsenic, Total	0.05	0.25	ug/L	U	20	21.5	107		85--115

MSD:WG202925-4 MS:WG202925-3 L87122-2 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Arsenic, Total	0.5	2.49	ug/L	215	200	432	109		75--125	200	436	111		1		0--20

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4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 10/10/25

Department of Natural Resources and Parks
Solid Waste Division

No. **18946**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P

Lab No.	Sample ID	Date	Time
S7122-4	LEPS2510100 P	10/10/25	1000

Project Site Test Reference

| | | |

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s)										
	87122 4										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples 1	1										

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	5.3 5.3 5.4	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 10-10-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P(252)

Receive Date: 10-10-25 COC / SDG No.: 18946

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter "Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: Alex

Date / Time Completed: OCT 10 '25 11:45

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Chain of Custody Record

Environmental Monitoring Program

Date: 10/07/25

Department of Natural Resources and Parks
Solid Waste Division

No. **18970**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25.1)

Lab No.	Sample ID	Date	Time	Number of Containers	Remarks
87122-1	~~LEPS211~~ EB 10/07	10/07/25	1000	2	Diss. Sulfide <0.1
	LEPS251007P				

Project Site Test Reference

GROUNDWATER

2	2.1	4	38	5	6	7	8	9	10	12
CHGW Cedar Hills GW Qlty	CHGW Cedar Hills EPZ GW Qlty	CHGW/VAGW Appendix III GW	CHGW-OS Cedar Hills GW Offsite	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

14	42	49.1	17	18	21
CHSW-Q Cedar Hills SW Sta. E-1	CHSW-TD Cedar Hills SW Top Deck	CHSW-E CH Emergency	CFSW Cedar Falls SW Qlty	DUSW Duvall SW Qlty	VASW Vashon SW Qlty-MEIRS

ISGP

16	52	53	54	56	57	58
CHSW-P Cedar Hills SW	HTSW-P Houghton SW	SHSW-P Shoreline SW	FASW-P Factoria SW	ENSW-P Enumclaw SW	ALSW-P Algona SW	VASW-P Vashon SW

LEACHATE/WASTEWATER

24	23	23+	23.1
CHTW Cedar Hills Truckwash	CHLS-M Cedar Hills Leachate Mfty	CHLS-M_MOD CH Leachate Mods Mfty	CHLS-M_As CH Leachate As Sent-Ann.

PRETREATMENT PERMITS

25	25.1	25.2	26	20	27	28	29	30	31	32	34
CHLS-P CH L Permit (wkly, 1st)	CHLS-P CH L Permit (mnthly)	CHLS-P CH L Permit (wkly, 2nd)	ALLS-P Algona WW Permit	BLLS-P Bow Lake WW Permit	ENLS-P Enumclaw WW Permit	FALS-P Factoria WW Permit	SRLS-P Shoreline WW Permit	HTLS-P Houghton WW Permit	RELS-P Renton WW Permit	VALS-P Vashon WW Permit Tanker	VALS-Q Vashon Leachate Qlty
	X										

Relinquished By Sampler:	Date: 10/07/25	Received By:	Date:
Sampler Signature: E. Wajda		Signature:	
Sampler Printed Name: KCSWD	Time: 1300	Printed Name:	Time:
Company		Company	
Relinquished By:	Date:	Received By: Jason Kinnard	Date: 10/7/25
Signature:		Signature:	
Printed Name:	Time:	Printed Name: KCEL	Time: 1400
Company		Company	

Observations/Comments/Special Instructions:

- Nutrients field filtered
- Custody sealed on 10/07/25 at 1300

Total # of Containers: 2

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v5.0 (Rev 6/2025)

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 87122 -1
40 mL clear vial (VOA)	
60 mL CWM HDPE	
125 mL CNM HDPE	
125 mL CWM HDPE	1
125 mL GANM w/HCl	
250 mL CWM HDPE	
250 mL GAWM w/H_2SO_4	
500 mL AWM HDPE	
500 mL CWM HDPE	
500 mL CWM PP (MICRO)	
500 mL HDPE (METALS)	1
500 mL GAWM	
1L CWM HDPE	
1L GANM	
1L GAWM w/ H_2SO_4	
2L CWM HDPE:	
Other -	
Other -	
Other -	
Other -	
Other -	
Total # of Samples	2
Number of bottles per sample	2

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	3.1 13.02.1	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

① pH = 2, added 0.5 mL H_2SO_4

Sample Collect Date(s): 10-7-25 Project No.: 421422

VTRP Collect Date(s): — Project Site Test Reference: CHLS-P(251)

Receive Date: 10-7-25 COC / SDG No.: 18970

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) N	☐ Preserve By SM
Other: NH_3, NO_23 w/ H_2SO_4 : (N) ①			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	(Y) / N	Y / (N)	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____ Date / Time Completed: OCT 07 '25 14:16

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Chain of Custody Record

Environmental Monitoring Program

Date: 10/8/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19127**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25.2)

Lab No.	Sample ID	Date	Time
87122-3	LEPS251008P	10/8/25	1000

Project Site Test Reference

| | | |

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 87122 -3
40 mL clear vial (VOA)	
60 mL CWM HDPE	
125 mL CNM HDPE	
125 mL CWM HDPE	
125 mL GANM w/HCl	
250 mL CWM HDPE	
250 mL GAWM w/H_2SO_4	
500 mL AWM HDPE	
500 mL CWM HDPE	
500 mL CWM PP (MICRO)	
500 mL HDPE (METALS)	1
500 mL GAWM	
1L CWM HDPE	
1L GANM	
1L GAWM w/ H_2SO_4	
2L CWM HDPE:	
Other -	
Other -	
Other -	
Other -	
Other -	
Total # of Samples	1

Number of bottles per sample

Sample Collect Date(s): 10-8-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P (25)

Receive Date: 10-9-25 COC / SDG No.: 19127

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	3 / 0.2 / 2.9	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually Inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually Inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually Inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

COMMENTS / NOTIFICATIONS

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: 10/09/25 14:12

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Chain of Custody Record

Environmental Monitoring Program

Date: 10/9/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19131**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P(25.2)

Lab No.	Sample ID	Date	Time
87122-2	LEPS2510099P	10/9/25	10000

Project Site Test Reference

	CHGW	CHGW	CHGW/AGW	CHGW-OS	CFGW	DUGW	ENGW	HOGW	HTGW	PUGW	VAGW	CHSW-Q	CHSW-TD	CHSW-E	CFSW	DUSW	VASW	CHSW-P	HTSW-P	SHSW-P	FASW-P	ENSW-P	ALSW-P	VASW-P	CHTW	CHLS-M	CHLS-M_MOD	CHLS-M_As	CHLS-P	CHLS-P	CHLS-P	CHLS-P	BLLS-P	ENLS-P	FALS-P	SRLS-P	HTLS-P	RELS-P	VALS-P	VALS-Q	Number of Containers	Remarks
	Cedar Hills GW Qlty	Cedar Hills EP2 GW Qlty	Appendix III GW	Cedar Hills GW Offsite	Cedar Falls GW Qlty	Duvall GW Qlty	Enumclaw GW Qlty	Hobart GW Qlty	Houghton GW Qlty	Puyallup GW Qlty	Vashon GW Qlty	Cedar Hills SW Sta. E-1	Cedar Hills SW Top Deck	CH Emergency	Cedar Falls SW Qlty	Duvall SW Qlty	Vashon SW Qlty-WEIRS	Cedar Hills SW	Houghton SW	Shoreline SW	Factoria SW	Enumclaw SW	Algona SW	Vashon SW	Cedar Hills Truckwash	Cedar Hills Leachate Mlty	CH Leachate Mods Mlty	CH Leachate As Semi-Ann.	CH L Permit (wkly, 1st)	CH L Permit (mnthly)	CH L Permit (wkly, 2nd)	Algona WW Permit	Bow Lake WW Permit	Enumclaw WW Permit	Factoria WW Permit	Shoreline WW Permit	Houghton WW Permit	Renton WW Permit	Vashon WW Permit Tanker	Vashon Leachate Qlty		
	GROUNDWATER											SURFACE WATER						ISGP							LEACHATE/WASTEWATER				PRETREATMENT PERMITS													
	2	2.1	4	38	5	6	7	8	9	10	12	14	42	49.1	17	18	21	16	52	53	54	56	57	58	24	23	23+	23.1	25	25.1	25.2	26	20	27	28	29	30	31	32	34		
87122-2	LEPS2510099P	10/9/25	10000																																						1	

Relinquished By Sampler: [signature]
Sampler Signature: D. Reiber
Sampler Printed Name: KCSWD
Company
Date: 10/9/25
Time: 1130

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By
Signature
Printed Name
Company
Date
Time

Received By: [signature] Jason Kinnard
Signature
Printed Name: KCEL
Company
Date: 10-9-25
Time: 1400

Observations/Comments/Special Instructions:

Arsenic only

Total # of Containers: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v5.0 (Rev 6/2025)

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s)										
	87122 -2										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	3.6 135135	Delivery Location	Y / N	

Sub-Contracting: Y / N List Product(s):

Changes: Y / N List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 10-9-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P (257)

Receive Date: 10-9-25 COC / SDG No.: 1913

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____ Date / Time Completed: OCT 09 '25 14:12

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

October 24, 2025

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P)

Sample Id.	Sample Collect Date	COC
LEPS251014P	**10/14/2025**	**19136**
LEPS251016P	**10/16/2025**	**19142**

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 2 leachate permit samples collected October 14 and 16, 2025.

Sample Receiving Comments
No sample receiving anomalies were observed.

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Metals QC Information

All calculable QC results for metals parameters were within laboratory control limits with the following exception.

During **Total Metals** analysis of analytical batch WG202854, the recovery of ***total tin*** from the matrix spike (MS) and MS duplicate (MSD) exceeded the lower laboratory control limit. Sample LEPS251014P was used to prepare the MS/MSD. The *total tin* result for sample LEPS251014P was qualified G based on these exceedances and may be biased low.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,

Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Sample Data

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 10/24/2025
Report Group: CHLS-P_102125

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS251014P**
SDG / Lab Sample ID: **19136 / L87152-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**
Collect Date: **10/14/2025**
Login Date: **10/14/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, P-ICPMS, Metals

200.8, SWD-ICPMS23, Metals

245.1, HG-CVAA-M, Metals

Client Sample ID: **LEPS251016P**
SDG / Lab Sample ID: **19142 / L87152-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**
Collect Date: **10/16/2025**
Login Date: **10/16/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, AS-ICPMS, Metals

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 10/24/2025
Report Group: CHLS-P_102125

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS251014P**
CoC / Lab Sample ID: **19136 / L87152-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **10/14/2025**
Login Date: **10/14/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Aluminum, Total	10	mg/L	.848		.051	.103		10/15/2025	10/17/2025	WG202953
Antimony, Total	10	mg/L	.0223		.0031	.0103		10/15/2025	10/17/2025	WG202953
Arsenic, Total	10	mg/L	.206		.00051	.00257	1	10/15/2025	10/17/2025	WG202953
Barium, Total	10	mg/L	.0966		.0051	.00514		10/15/2025	10/17/2025	WG202953
Beryllium, Total	10	mg/L	<.001	U	.001	.00514		10/15/2025	10/17/2025	WG202953
Cadmium, Total	10	mg/L	<.00051	U	.00051	.00257	0.5	10/15/2025	10/17/2025	WG202953
Calcium, Total	10	mg/L	44.9		.514	.514		10/15/2025	10/17/2025	WG202953
Chromium, Total	10	mg/L	.268		.0021	.0103	2.75	10/15/2025	10/17/2025	WG202953
Cobalt, Total	10	mg/L	.0492		.00051	.00257		10/15/2025	10/17/2025	WG202953
Copper, Total	10	mg/L	.0078	T	.0021	.0206	3	10/15/2025	10/17/2025	WG202953
Iron, Total	10	mg/L	12.3		.1	.514		10/15/2025	10/17/2025	WG202953
Lead, Total	10	mg/L	.0021	T	.001	.00514	2	10/15/2025	10/17/2025	WG202953
Magnesium, Total	10	mg/L	111		.514	.514		10/15/2025	10/17/2025	WG202953
Manganese, Total	10	mg/L	.268		.001	.00514		10/15/2025	10/17/2025	WG202953
Nickel, Total	10	mg/L	.199		.001	.00514	2.5	10/15/2025	10/17/2025	WG202953
Phosphorus, Total	10	mg/L	9.21		1	1.03		10/15/2025	10/17/2025	WG202953
Potassium, Total	10	mg/L	798		1	5.14		10/15/2025	10/17/2025	WG202953
Selenium, Total	10	mg/L	<.0051	U	.0051	.0103		10/15/2025	10/17/2025	WG202953
Silver, Total	10	mg/L	<.00041	U	.00041	.00206	1	10/15/2025	10/17/2025	WG202953
Sodium, Total	10	mg/L	2220		1.03	1.03		10/15/2025	10/17/2025	WG202953
Thallium, Total	10	mg/L	<.00077	U	.00077	.00206		10/15/2025	10/17/2025	WG202953
Tin, Total	10	mg/L	.015	GT	.0051	.0154		10/15/2025	10/17/2025	WG202953
Vanadium, Total	10	mg/L	.0813	D	.00077	.00386		10/15/2025	10/17/2025	WG202953
Zinc, Total	10	mg/L	.198		.0051	.0257	5	10/15/2025	10/17/2025	WG202953
Mercury, Total	2	mg/L	<.0001	U	.0001	.0002		10/15/2025	10/16/2025	WG202967

Client Sample ID: **LEPS251016P**
CoC / Lab Sample ID: **19142 / L87152-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **10/16/2025**
Login Date: **10/16/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.205		.00051	.00253	1	10/17/2025	10/20/2025	WG203022

Target Parameter Count for Report Group: 26

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Quality Control Data

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory QC Report

CHLS-P_102125 COC 19136 19142

Workgroup: WG202953 Total Metals by ICPMS

MB:WG202953-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.1	0.5	ug/L		U
Sodium, Total	100	100	ug/L		U
Magnesium, Total	50	50	ug/L		U
Aluminum, Total	5	10	ug/L		U
Phosphorus, Total	100	100	ug/L		U
Potassium, Total	100	500	ug/L		U
Calcium, Total	50	50	ug/L		U
Vanadium, Total	0.075	0.375	ug/L		U
Chromium, Total	0.2	1	ug/L		U
Manganese, Total	0.1	0.5	ug/L		U
Iron, Total	10	50	ug/L		U
Cobalt, Total	0.05	0.25	ug/L		U
Nickel, Total	0.1	0.5	ug/L		U
Copper, Total	0.2	2	ug/L		U
Zinc, Total	0.5	2.5	ug/L		U
Arsenic, Total	0.05	0.25	ug/L		U
Selenium, Total	0.5	1	ug/L		U
Silver, Total	0.04	0.2	ug/L		U
Cadmium, Total	0.05	0.25	ug/L		U
Tin, Total	0.5	1.5	ug/L		U
Antimony, Total	0.3	1	ug/L		U
Barium, Total	0.5	0.5	ug/L		U
Thallium, Total	0.075	0.2	ug/L		U
Lead, Total	0.1	0.5	ug/L		U

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory QC Report

CHLS-P_102125 COC 19136 19142

SB:WG202953-2 MB:WG202953-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.1	0.5	ug/L	U	20	19.5	98		85--115
Sodium, Total	100	100	ug/L	U	5000	5270	105		85--115
Magnesium, Total	50	50	ug/L	U	5000	5230	105		85--115
Aluminum, Total	5	10	ug/L	U	200	202	101		85--115
Phosphorus, Total	100	100	ug/L	U	5000	4840	97		85--115
Potassium, Total	100	500	ug/L	U	5000	5060	101		85--115
Calcium, Total	50	50	ug/L	U	5000	4930	99		85--115
Vanadium, Total	0.075	0.375	ug/L	U	20	20.1	100		85--115
Chromium, Total	0.2	1	ug/L	U	20	22	110		85--115
Manganese, Total	0.1	0.5	ug/L	U	20	21.4	107		85--115
Iron, Total	10	50	ug/L	U	5000	5240	105		85--115
Cobalt, Total	0.05	0.25	ug/L	U	20	21	105		85--115
Nickel, Total	0.1	0.5	ug/L	U	20	21.4	107		85--115
Copper, Total	0.2	2	ug/L	U	20	22.5	112		85--115
Zinc, Total	0.5	2.5	ug/L	U	20	21.5	108		85--115
Arsenic, Total	0.05	0.25	ug/L	U	20	20	100		85--115
Selenium, Total	0.5	1	ug/L	U	20	20	100		85--115
Silver, Total	0.04	0.2	ug/L	U	20	20.7	103		85--115
Cadmium, Total	0.05	0.25	ug/L	U	20	20.1	100		85--115
Tin, Total	0.5	1.5	ug/L	U	20	20.5	102		85--115
Antimony, Total	0.3	1	ug/L	U	20	20.6	103		85--115
Barium, Total	0.5	0.5	ug/L	U	20	20.4	102		85--115
Thallium, Total	0.075	0.2	ug/L	U	20	21.5	107		85--115
Lead, Total	0.1	0.5	ug/L	U	20	21.5	107		85--115

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory QC Report

CHLS-P_102125 COC 19136 19142

MSD:WG202953-4 MS:WG202953-3 L87152-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	1	4.99	ug/L	U	200	198	99		75--125	199	191	96		3		0--20
Sodium, Total	998	998	ug/L	2220000	49900	2350000		4xRule	75--125	49800	2230000		4xRule	5		0--20
Magnesium, Total	499	499	ug/L	111000	49900	165000	108		75--125	49800	164000	105		1		0--20
Aluminum, Total	50	99.8	ug/L	848	2000	2990	107		75--125	1990	2880	102		4		0--20
Phosphorus, Total	1000	998	ug/L	9210	49900	62600	107		75--125	49800	61300	105		2		0--20
Potassium, Total	1000	4990	ug/L	798000	49900	885000		4xRule	75--125	49800	871000		4xRule	2		0--20
Calcium, Total	499	499	ug/L	44900	49900	96500	103		75--125	49800	93900	98		3		0--20
Vanadium, Total	0.75	3.74	ug/L	81.3	200	276	97		75--125	199	270	95		2		0--20
Chromium, Total	2	9.98	ug/L	268	200	470	101		75--125	199	452	92		4		0--20
Manganese, Total	1	4.99	ug/L	268	200	471	102		75--125	199	452	92		4		0--20
Iron, Total	100	499	ug/L	12300	49900	60000	96		75--125	49800	58800	93		2		0--20
Cobalt, Total	0.5	2.5	ug/L	49.2	200	244	97		75--125	199	242	97		1		0--20
Nickel, Total	1	4.99	ug/L	199	200	389	95		75--125	199	383	92		2		0--20
Copper, Total	2	20	ug/L	7.8	200	210	101		75--125	199	203	98		4		0--20
Zinc, Total	5	25	ug/L	198	200	390	96		75--125	199	382	93		2		0--20
Arsenic, Total	0.5	2.5	ug/L	206	200	415	105		75--125	199	408	101		2		0--20
Selenium, Total	5	9.98	ug/L	U	200	214	107		75--125	199	208	104		3		0--20
Silver, Total	0.4	2	ug/L	U	200	182	91		75--125	199	176	88		3		0--20
Cadmium, Total	0.5	2.5	ug/L	U	200	188	94		75--125	199	186	94		1		0--20
Tin, Total	5	15	ug/L	15	200	144	65	*	75--125	199	135	60	*	7		0--20
Antimony, Total	3	9.98	ug/L	22.3	200	223	101		75--125	199	216	97		3		0--20
Barium, Total	5	4.99	ug/L	96.6	200	300	102		75--125	199	294	99		2		0--20
Thallium, Total	0.75	2	ug/L	U	200	204	102		75--125	199	202	101		1		0--20
Lead, Total	1	4.99	ug/L	2.1	200	208	103		75--125	199	201	100		4		0--20

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory QC Report

CHLS-P_102125 COC 19136 19142

Workgroup: WG202967 Total Mercury by CVAA

MB:WG202967-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.05	0.1	ug/L		U

SB:WG202967-2 MB:WG202967-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	0.95	95		85--115

MSD:WG202967-4 MS:WG202967-3 L87141-3 Matrix: IW WTR Listtype:MTHG-MID Method:EPA 245.1 Project:421163 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	0.953	95		75--125	1	1.01	101		6		0--20

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory QC Report

CHLS-P_102125 COC 19136 19142

Workgroup: WG203022 Total Metals by ICPMS

MB:WG203022-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total	0.05	0.25	ug/L		U

SB:WG203022-2 MB:WG203022-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Arsenic, Total	0.05	0.25	ug/L	U	20	19.9	100		85--115

MSD:WG203022-4 MS:WG203022-3 L87152-2 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Arsenic, Total	0.52	2.58	ug/L	205	207	419	104		75--125	200	412	103		2		0--20

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4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 10/14/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19136**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25)

Lab No.	Sample ID	Date	Time
87152-1	LEPS2510I4P	10/14/25	1000

Project Site Test Reference

	CHGW	CHGW	CHGW/VAGW	CHGW-OS	CFGW	DUGW	ENGW	HOGW	HTSW	PUGW	VAGW	CHSW-Q	CHSW-TD	CHSW-E	CFSW	DUSW	VASW	CHSW-P	HTSW-P	SHSW-P	FASW-P	ENSW-P	ALSW-P	VASW-P	CHTW	CHLS-M	CHLS-M_MOD	CHLS-M_As	CHLS-P	CHLS-P	CHLS-P	ALLS-P	BLLS-P	ENLS-P	FALS-P	SRLS-P	HTLS-P	RELS-P	VALS-P	VALS-Q
	Cedar Hills GW Qtly	Cedar Hills EP2 GW Qtly	Appendix III GW	Cedar Hills GW Offsite	Cedar Falls GW Qtly	Duvall GW Qtly	Enumclaw GW Qtly	Hobart GW Qtly	Houghton GW Qtly	Puyallup GW Qtly	Vashon GW Qtly	Cedar Hills SW Sta. E-1	Cedar Hills SW Top Deck	CH Emergency	Cedar Falls SW Qtly	Duvall SW Qtly	Vashon SW Qtly-WEIRS	ISGP: Cedar Hills SW	ISGP: Houghton SW	ISGP: Shoreline SW	ISGP: Factoria SW	ISGP: Enumclaw SW	ISGP: Algona SW	ISGP: Vashon SW	Cedar Hills Truckwash	Cedar Hills Leachate Mthly	CH Leachate Mods Mthly	CH Leachate As Semi-Anm.	PRETREATMENT PERMITS: CH L Permit (wkly, 1st)	CH L Permit (monthly)	CH L Permit (wkly, 2nd)	Algona WW Permit	Bow Lake WW Permit	Enumclaw WW Permit	Factoria WW Permit	Shoreline WW Permit	Houghton WW Permit	Renton WW Permit	Vashon WW Permit Tanker	Vashon Leachate Qtly
	GROUNDWATER											SURFACE WATER													LEACHATE/WASTEWATER															
	2	2.1	4	38	5	6	7	8	9	10	12	14	42	49.1	17	18	21	16	52	53	54	56	57	58	24	23	23+	23.1	25	25.1	25.2	26	20	27	28	29	30	31	32	34
87152-1																													X											

Number of Containers	Remarks
1	Diss. Sulfide <0.1 ppm

Relinquished By Sampler: E Ri
Sampler Signature: I. Rivera
Sampler Printed Name: KCSWD
Company
Date: 10/14/25
Time: 1310

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By
Signature
Printed Name
Company
Date
Time

Received By: Jason Kinnard
Company: KCEL
Date: 10/14/25
Time: 1486

Observations/Comments/Special Instructions:
Samples custody sealed on 10/14 at 1310 hrs.

Total # of Containers: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v5.0 (Rev 6/2025)

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s)										
	87152										
	-1										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	2.4 & 2.6	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 10-14-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P (25)

Receive Date: 10-14-25 COC / SDG No.: 19136

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____ Date / Time Completed: 10/14/25 1442

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Chain of Custody Record

Environmental Monitoring Program

Date: 10/16/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19142**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25,2)

Lab No.	Sample ID	Date	Time	2	2.1	4	38	5	6	7	8	9	10	12	14	42	49.1	17	18	21	16	52	53	54	56	57	58	24	23	23+	23.1	25	25.1	25.2	26	20	27	28	29	30	31	32	34	Number of Containers	Remarks
87152-2	LEPS251016P	10/16/25	1000																															X										1	

Project Site Test Reference

GROUNDWATER: CHGW Cedar Hills GW Qlty; CHGW Cedar Hills EPZ GW Qlty; CHGW/VAGW Appendix III GW; CHGW-OS Cedar Hills GW Offsite; 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 Sta. E-1; CHSW-TD Cedar Hills SW Top Deck; CHSW-E CH Emergency; CFSW Cedar Falls SW Qlty; DUSW Duvall SW Qlty; VASW Vashon SW Qlty-MEIRS

ISGP: CHSW-P Cedar Hills SW; HTSW-P Houghton SW; SHSW-P Shoreline SW; FASW-P Factoria SW; ENSW-P Enumclaw SW; ALSW-P Algona SW; VASW-P Vashon SW

LEACHATE/WASTEWATER: CHTW Cedar Hills Truckwash; CHLS-M Cedar Hills Leachate Mthly; CHLS-M_MOD CH Leachate Mods Mthly; CHLS-M_As CH Leachate As Semi-Ann.

PRETREATMENT PERMITS: CHLS-P CH L Permit (wkly, 1st); CHLS-P CH L Permit (mnthly); CHLS-P CH L Permit (wkly, 2nd); ALLS-P Algona WW Permit; BLLS-P Bow Lake WW Permit; ENLS-P Enumclaw WW Permit; FALS-P Factoria WW Permit; SRLS-P Shoreline WW Permit; HTLS-P Houghton WW Permit; RELS-P Renton WW Permit; VALS-P Vashon WW Permit Tanker; VALS-Q Vashon Leachate Qlty

Relinquished By Sampler	Date 10/16/25	Received By	Date
Sampler Signature: I. Rivera		Signature	
Sampler Printed Name: KCSWD	Time 1225	Printed Name	Time
Company		Company	
Relinquished By	Date	Received By	Date 11-16-25
Signature		Signature	
Printed Name	Time	Printed Name: Jason Kinnaird	Time 1350
Company		Company: KCEL	

Observations/Comments/Special Instructions:

Arsenic ONLY.
Sample custody sealed on 10/16 at 1225.

Total # of Containers: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v5.0 (Rev 6/2025)

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 87152 -2
40 mL clear vial (VOA)	
60 mL CWM HDPE	
125 mL CNM HDPE	
125 mL CWM HDPE	
125 mL GANM w/HCl	
250 mL CWM HDPE	
250 mL GAWM w/H_2SO_4	
500 mL AWM HDPE	
500 mL CWM HDPE	
500 mL CWM PP (MICRO)	
500 mL HDPE (METALS)	1
500 mL GAWM	
1L CWM HDPE	
1L GANM	
1L GAWM w/ H_2SO_4	
2L CWM HDPE:	
Other -	
Other -	
Other -	
Other -	
Other -	
Total # of Samples	1

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	2.3 | 2.1 | 2.1	Delivery Location	Y / N	

Sub-Contracting: Y / N — List Product(s):

Changes: Y / N — List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 10-16-25 — Project No.: 421422

VTRP Collect Date(s): — Project Site Test Reference: CHLS-P (25.2)

Receive Date: 10-16-25 — COC / SDG No.: 19147

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	Y / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: OCT 16 '25 19:56

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

October 31, 2025

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P)

Sample Id.	Sample Collect Date	COC
LEPS251021P	**10/21/2025**	**19148**
LEPS251023P	**10/23/2025**	**19156**

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 2 leachate permit samples collected October 21 and 23, 2025.

Sample Receiving Comments
No sample receiving anomalies were observed.

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Metals QC Information

All calculable QC results for metals parameters were within laboratory control limits with the following exception.

During **Total Metals** analysis, the recovery of ***total tin*** from the matrix spike duplicate (MSD) exceeded the lower laboratory control limit. Sample LEPS251021P was used to prepare the MSD. The *total tin* result for sample LEPS251021P was qualified G based on these exceedances and may be biased low.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,



Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Sample Data

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 10/31/2025
Report Group: CHLS-P_103125

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS251021P**
SDG / Lab Sample ID: **19148 / L87174-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**
Collect Date: **10/21/2025**
Login Date: **10/23/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, P-ICPMS, Metals

200.8, SWD-ICPMS23, Metals

245.1, HG-CVAA-M, Metals

Client Sample ID: **LEPS251023P**
SDG / Lab Sample ID: **19156 / L87174-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**
Collect Date: **10/23/2025**
Login Date: **10/23/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, AS-ICPMS, Metals

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 10/31/2025
Report Group: CHLS-P_103125

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS251021P**
CoC / Lab Sample ID: **19148 / L87174-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **10/21/2025**
Login Date: **10/23/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Aluminum, Total	10	mg/L	.745		.051	.101		10/24/2025	10/27/2025	WG203171
Antimony, Total	10	mg/L	.0199		.003	.0101		10/24/2025	10/27/2025	WG203171
Arsenic, Total	10	mg/L	.199		.00051	.00253	1	10/24/2025	10/27/2025	WG203171
Barium, Total	10	mg/L	.0788		.0051	.00506		10/24/2025	10/27/2025	WG203171
Beryllium, Total	10	mg/L	<.001	U	.001	.00506		10/24/2025	10/27/2025	WG203171
Cadmium, Total	10	mg/L	<.00051	U	.00051	.00253	0.5	10/24/2025	10/27/2025	WG203171
Calcium, Total	10	mg/L	36.8		.506	.506		10/24/2025	10/27/2025	WG203171
Chromium, Total	10	mg/L	.259		.002	.0101	2.75	10/24/2025	10/27/2025	WG203171
Cobalt, Total	10	mg/L	.0479		.00051	.00253		10/24/2025	10/27/2025	WG203171
Copper, Total	10	mg/L	.0062	T	.002	.0202	3	10/24/2025	10/27/2025	WG203171
Iron, Total	10	mg/L	11.1		.1	.506		10/24/2025	10/27/2025	WG203171
Lead, Total	10	mg/L	.0018	T	.001	.00506	2	10/24/2025	10/27/2025	WG203171
Magnesium, Total	10	mg/L	104		.506	.506		10/24/2025	10/27/2025	WG203171
Manganese, Total	10	mg/L	.201		.001	.00506		10/24/2025	10/27/2025	WG203171
Nickel, Total	10	mg/L	.193		.001	.00506	2.5	10/24/2025	10/27/2025	WG203171
Phosphorus, Total	10	mg/L	7.9		1	1.01		10/24/2025	10/27/2025	WG203171
Potassium, Total	10	mg/L	781		1	5.06		10/24/2025	10/27/2025	WG203171
Selenium, Total	10	mg/L	<.0051	U	.0051	.0101		10/24/2025	10/27/2025	WG203171
Silver, Total	10	mg/L	<.0004	U	.0004	.00202	1	10/24/2025	10/27/2025	WG203171
Sodium, Total	10	mg/L	2120		1.01	1.01		10/24/2025	10/27/2025	WG203171
Thallium, Total	10	mg/L	<.00076	U	.00076	.00202		10/24/2025	10/27/2025	WG203171
Tin, Total	10	mg/L	.0153	G	.0051	.0152		10/24/2025	10/27/2025	WG203171
Vanadium, Total	10	mg/L	.0794		.00076	.00379		10/24/2025	10/27/2025	WG203171
Zinc, Total	10	mg/L	.193		.0051	.0253	5	10/24/2025	10/27/2025	WG203171
Mercury, Total	2	mg/L	<.0001	U	.0001	.0002		10/27/2025	10/29/2025	WG203204

Client Sample ID: **LEPS251023P**
CoC / Lab Sample ID: **19156 / L87174-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **10/23/2025**
Login Date: **10/23/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.203		.00051	.00254	1	10/24/2025	10/27/2025	WG203171

Target Parameter Count for Report Group: 26

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Quality Control Data

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory QC Report

CHLS-P_103125 COC 19148 19156

Workgroup: WG203171 Total Metals by ICPMS

MB:WG203171-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.1	0.5	ug/L		U
Sodium, Total	100	100	ug/L		U
Magnesium, Total	50	50	ug/L		U
Aluminum, Total	5	10	ug/L		U
Phosphorus, Total	100	100	ug/L		U
Potassium, Total	100	500	ug/L		U
Calcium, Total	50	50	ug/L		U
Vanadium, Total	0.075	0.375	ug/L		U
Chromium, Total	0.2	1	ug/L		U
Manganese, Total	0.1	0.5	ug/L		U
Iron, Total	10	50	ug/L		U
Cobalt, Total	0.05	0.25	ug/L		U
Nickel, Total	0.1	0.5	ug/L		U
Copper, Total	0.2	2	ug/L		U
Zinc, Total	0.5	2.5	ug/L		U
Arsenic, Total	0.05	0.25	ug/L		U
Selenium, Total	0.5	1	ug/L		U
Silver, Total	0.04	0.2	ug/L		U
Cadmium, Total	0.05	0.25	ug/L		U
Tin, Total	0.5	1.5	ug/L		U
Antimony, Total	0.3	1	ug/L		U
Barium, Total	0.5	0.5	ug/L		U
Thallium, Total	0.075	0.2	ug/L		U
Lead, Total	0.1	0.5	ug/L		U

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory QC Report

CHLS-P_103125 COC 19148 19156

SB:WG203171-2 MB:WG203171-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.1	0.5	ug/L	U	20	19.7	99		85--115
Sodium, Total	100	100	ug/L	U	5000	5100	102		85--115
Magnesium, Total	50	50	ug/L	U	5000	5100	102		85--115
Aluminum, Total	5	10	ug/L	U	200	199	99		85--115
Phosphorus, Total	100	100	ug/L	U	5000	4880	98		85--115
Potassium, Total	100	500	ug/L	U	5000	5080	102		85--115
Calcium, Total	50	50	ug/L	U	5000	4850	97		85--115
Vanadium, Total	0.075	0.375	ug/L	U	20	20.2	101		85--115
Chromium, Total	0.2	1	ug/L	U	20	21.1	106		85--115
Manganese, Total	0.1	0.5	ug/L	U	20	20.6	103		85--115
Iron, Total	10	50	ug/L	U	5000	5190	104		85--115
Cobalt, Total	0.05	0.25	ug/L	U	20	20.9	105		85--115
Nickel, Total	0.1	0.5	ug/L	U	20	20.8	104		85--115
Copper, Total	0.2	2	ug/L	U	20	21.2	106		85--115
Zinc, Total	0.5	2.5	ug/L	U	20	20.5	102		85--115
Arsenic, Total	0.05	0.25	ug/L	U	20	19.9	99		85--115
Selenium, Total	0.5	1	ug/L	U	20	19.8	99		85--115
Silver, Total	0.04	0.2	ug/L	U	20	19.6	98		85--115
Cadmium, Total	0.05	0.25	ug/L	U	20	19.9	99		85--115
Tin, Total	0.5	1.5	ug/L	U	20	19.9	99		85--115
Antimony, Total	0.3	1	ug/L	U	20	20.4	102		85--115
Barium, Total	0.5	0.5	ug/L	U	20	20.1	101		85--115
Thallium, Total	0.075	0.2	ug/L	U	20	20.7	103		85--115
Lead, Total	0.1	0.5	ug/L	U	20	21.4	107		85--115

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory QC Report

CHLS-P_103125 COC 19148 19156

MSD:WG203171-4 MS:WG203171-3 L87174-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	0.99	4.93	ug/L	U	197	184	93		75--125	198	186	94		1		0--20
Sodium, Total	987	987	ug/L	2120000	49300	2150000		4xRule	75--125	49600	2130000		4xRule	1		0--20
Magnesium, Total	493	493	ug/L	104000	49300	154000	100		75--125	49600	151000	95		2		0--20
Aluminum, Total	49	98.7	ug/L	745	1970	2750	102		75--125	1980	2760	101		0		0--20
Phosphorus, Total	990	987	ug/L	7900	49300	57600	101		75--125	49600	57900	101		0		0--20
Potassium, Total	990	4930	ug/L	781000	49300	831000		4xRule	75--125	49600	847000		4xRule	2		0--20
Calcium, Total	493	493	ug/L	36800	49300	84200	96		75--125	49600	85500	98		2		0--20
Vanadium, Total	0.74	3.7	ug/L	79.4	197	274	99		75--125	198	275	99		0		0--20
Chromium, Total	2	9.87	ug/L	259	197	458	101		75--125	198	456	99		0		0--20
Manganese, Total	0.99	4.93	ug/L	201	197	392	97		75--125	198	396	98		1		0--20
Iron, Total	99	493	ug/L	11100	49300	59000	97		75--125	49600	58600	96		1		0--20
Cobalt, Total	0.49	2.47	ug/L	47.9	197	252	103		75--125	198	251	102		1		0--20
Nickel, Total	0.99	4.93	ug/L	193	197	391	100		75--125	198	389	99		0		0--20
Copper, Total	2	19.7	ug/L	6.2	197	206	101		75--125	198	205	100		0		0--20
Zinc, Total	4.9	24.7	ug/L	193	197	388	99		75--125	198	387	98		0		0--20
Arsenic, Total	0.49	2.47	ug/L	199	197	405	104		75--125	198	403	103		0		0--20
Selenium, Total	4.9	9.87	ug/L	U	197	204	103		75--125	198	205	103		1		0--20
Silver, Total	0.39	1.97	ug/L	U	197	180	91		75--125	198	181	91		0		0--20
Cadmium, Total	0.49	2.47	ug/L	U	197	189	96		75--125	198	190	96		0		0--20
Tin, Total	4.9	14.8	ug/L	15.3	197	170	78		75--125	198	145	65	*	16		0--20
Antimony, Total	3	9.87	ug/L	19.9	197	224	103		75--125	198	223	102		0		0--20
Barium, Total	4.9	4.93	ug/L	78.8	197	269	96		75--125	198	278	100		3		0--20
Thallium, Total	0.74	1.97	ug/L	U	197	189	96		75--125	198	196	99		3		0--20
Lead, Total	0.99	4.93	ug/L	1.8	197	195	98		75--125	198	203	102		4		0--20

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory QC Report

CHLS-P_103125 COC 19148 19156

Workgroup: WG203204 Total Mercury by CVAA

MB:WG203204-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.05	0.1	ug/L		U

SB:WG203204-2 MB:WG203204-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	0.995	100		85--115

MSD:WG203204-4 MS:WG203204-3 L87117-1 Matrix: OTHR WTR Listtype:MTHG-MID Method:EPA 245.1 Project:421085-100 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	1.25	125		75--125	1	1.21	121		3		0--20

==========

4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 10/21/25

Department of
Natural Resources and Parks
Solid Waste Division

No. **19148**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25)

Project Site Test Reference

Lab No.	Sample ID	Date	Time	2 CHGW Cedar Hills GW Qtly	2.1 CHGW Cedar Hills EPZ GW Qtly	4 CHGW/VAGW Appendix III GW	38 CHGW-OS Cedar Hills GW Offsite	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 Sta. E-1	42 CHSW-TD Cedar Hills SW Top Deck	49.1 CHSW-E CH Emergency	17 CFSW Cedar Falls SW Qtly	18 DUSW Duvall SW Qtly	21 VASW Vashon SW Qtly-MEIRS	16 CHSW-P Cedar Hills SW (ISGP)	52 HTSW-P Houghton SW (ISGP)	53 SHSW-P Shoreline SW (ISGP)	54 FASW-P Factoria SW (ISGP)	56 ENSW-P Enumclaw SW (ISGP)	57 ALSW-P Algona SW (ISGP)	58 VASW-P Vashon SW (ISGP)	24 CHTW Cedar Hills Truckwash	23 CHLS-M Cedar Hills Leachate Mtly	23+ CHLS-M_MOD CH Leachate Mods Mtly	23.1 CHLS-M_As CH Leachate As Semi-Ann.	25 CHLS-P CH L Permit (wkly, 1st)	25.1 CHLS-P CH L Permit (mnthly)	25.2 CHLS-P CH L Permit (wkly, 2nd)	26 ALLS-P Algona WW Permit	20 BLLS-P Bow Lake WW Permit	27 ENLS-P Enumclaw WW Permit	28 FALS-P Factoria WW Permit	29 SRLS-P Shoreline WW Permit	30 HTLS-P Houghton WW Permit	31 RELS-P Renton WW Permit	32 VALS-P Vashon WW Permit Tanker	34 VALS-Q Vashon Leachate Qtly	Number of Containers	Remarks
87174-1	LEPS251021P	10/21/25	10000																																					1	Diss Sulfide <0.1

GROUNDWATER | SURFACE WATER | LEACHATE/WASTEWATER | PRETREATMENT PERMITS | ISGP

Relinquished By Sampler	Date	Received By	Date
Sampler Signature: N. Reiber	10/21/25	Signature	
Sampler Printed Name: KCSWD	Time: 1410	Printed Name	Time
Company		Company	
Relinquished By	Date	Received By	Date: 10-23-25
Signature		Signature: Jason Linnard	
Printed Name	Time	Printed Name: KCEL	Time: 1414
Company		Company	

Observations/Comments/Special Instructions:

Custody Sealed @1410 on 10/21/25

Total # of Containers: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v5.0 (Rev 6/2025)

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s)										
	87174										
	-1										
40 mL clear vial (VOA)	12										
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										
	Number of bottles per sample										

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	2.5 2.4 2.3	Delivery Location	Y / N	

Sub-Contracting: Y / N List Product(s):

Changes: Y / N List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 10-21-25 Project No.: 421422

VTRP Collect Date(s): ____ Project Site Test Reference: CHLS-P(25)

Receive Date: 10-23-25 COC / SDG No.: 19148

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	Y / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: OCT 28 '25 14:32

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Chain of Custody Record

Environmental Monitoring Program

Date: 10/23/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19156**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P(25.2)

Lab No.	Sample ID	Date	Time
87174-2	LEPS251023P	10/23/25	1000

Project Site Test Reference

	CHGW	CHGW	CHGW/AGW	CHGW-DS	CFGW	DUGW	ENGW	HOGW	HTGW	PUGW	VAGW	CHSW-Q	CFSW	DUSW	VASW	CHSW-P	CHSW-P	HTSW-P	SHSW-P	SHSW-P	FASW-P	ENSW-P	ALSW-P	VASW-P	RMSW-P	CHTW	CHLS-M	CHLS-M MOD	CHLS-P	CHLS-P	CHLS-P	ALLS-P	BLLS-P	ENLS-P	FALS-P	SRLS-P	HTLS-P	RELS-P	VALS-P	VALS-Q
	Cedar Hills GW Qlty	Cedar Hills EPZ GW Qlty	Appendix III GW	Cedar Hills GW Offsite	Cedar Falls GW Qlty	Duvall GW Qlty	Enumclaw GW Qlty	Hobart GW Qlty	Houghton GW Qlty	Puyallup GW Qlty	Vashon GW Qlty	Cedar Hills SW Sta. E-1	Cedar Falls SW Qlty	Duvall SW Qlty	Vashon SW Qlty-WEIRS	Cedar Hills SW	Cedar Hills SW - Infiltration	Houghton SW	Shoreline SW	Shoreline SW - Infiltration	Factoria SW	Enumclaw SW - Infiltration	Algona SW	Vashon SW	Renton Maint. Facility SW	Cedar Hills Truckwash	Cedar Hills Leachate Mtly	CHLS-M MOD	CH L Permit (wkly, 1st)	CH L Permit (mnthly)	CH L Permit (wkly, 2nd)	Algona WW Permit	Bow Lake WW Permit	Enumclaw WW Permit	Factoria WW Permit	Shoreline WW Permit	Houghton WW Permit	Renton WW Permit	Vashon WW Permit Tanker	Vashon Leachate Qlty
	GROUNDWATER											SURFACE/STORM WATER				ISGP										LEACHATE/WASTEWATER			PRETREATMENT PERMITS											
	2	2.1	4	38	5	6	7	8	9	10	12	14	17	18	21	16	16.1	52	53	53.1	54	56.1	57	58	60	24	23	23+	25	25.1	25.2	26	20	27	28	29	30	31	32	34
87174-2																															X									

Remarks: Diss Sulfide

Number of Containers: 1 <0.1ppm

Total # of Containers: 1

Observations/Comments/Special Instructions:
Arsenic Only
Custody sealed 10/23/25 @1200

Relinquished By Sampler: Hannah Spear	Date: 10/23/25	Received By:	Date:
Sampler Signature: H. Spear		Signature:	
Sampler Printed Name: KCSWD	Time: 1200	Printed Name:	Time:
Company		Company	
Relinquished By	Date	Received By: Jason Kinnard	Date: 11/23/25
Signature		Signature	
Printed Name	Time	Printed Name: KCEL	Time: 1414
Company		Company	

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v6.0 (Rev 10/2025)

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 57174-2
	-1
40 mL clear vial (VOA)	
60 mL CWM HDPE	
125 mL CNM HDPE	
125 mL CWM HDPE	
125 mL GANM w/HCl	
250 mL CWM HDPE	
250 mL GAWM w/H_2SO_4	
500 mL AWM HDPE	
500 mL CWM HDPE	
500 mL CWM PP (MICRO)	
500 mL HDPE (METALS)	1
500 mL GAWM	
1L CWM HDPE	
1L GANM	
1L GAWM w/ H_2SO_4	
2L CWM HDPE:	
Other -	
Other -	
Other -	
Other -	
Other -	
Total # of Samples	1

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	1.1 11.21.1	Delivery Location	Y / N	

Sub-Contracting: Y / N List Product(s):

Changes: Y / N List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 10-23-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-V125.21

Receive Date: 10-23-25 COC / SDG No.: 19156

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	Y / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: _____

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

November 5, 2025

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P)

Sample Id.	Sample Collect Date	COC
LEPS251028P	**10/28/2025**	**19164**
LEPS251030P	**10/30/2025**	**19168**

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 2 leachate permit samples collected October 28 and 30, 2025.

Sample Receiving Comments
No sample receiving anomalies were observed.

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Metals QC Information

All calculable QC results for metals parameters were within laboratory control limits with the following exception.

During **Total Metals** analysis of analytical batch WG203233, the recovery of ***total tin*** from the matrix spike (MS) and MS duplicate (MSD) exceeded the lower laboratory control limit. Sample LEPS251028P was used to prepare the MSD. The *total tin* result for sample LEPS251028P was qualified G based on these exceedances and may be biased low. Additionally, a trace amount of ***total chromium*** was detected in the method blank (MB). Sample results were not qualified based on this trace detection.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,

Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Sample Data

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 11/05/2025
Report Group: CHLS-P_110425

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS251028P**
SDG / Lab Sample ID: **19164 / L87226-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **10/28/2025**
Login Date: **10/28/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, P-ICPMS, Metals

200.8, SWD-ICPMS23, Metals

245.1, HG-CVAA-M, Metals

Client Sample ID: **LEPS251030P**
SDG / Lab Sample ID: **19168 / L87226-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **10/30/2025**
Login Date: **10/30/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, AS-ICPMS, Metals

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 11/05/2025
Report Group: CHLS-P_110425

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS251028P**
CoC / Lab Sample ID: **19164 / L87226-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **10/28/2025**
Login Date: **10/28/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Aluminum, Total	10	mg/L	1.31		.05	.0999		10/29/2025	11/03/2025	WG203233
Antimony, Total	10	mg/L	.0189		.003	.00999		10/29/2025	11/03/2025	WG203233
Arsenic, Total	10	mg/L	.186		.0005	.0025	1	10/29/2025	11/03/2025	WG203233
Barium, Total	10	mg/L	.097		.005	.005		10/29/2025	11/03/2025	WG203233
Beryllium, Total	10	mg/L	<.001	U	.001	.005		10/29/2025	11/03/2025	WG203233
Cadmium, Total	10	mg/L	<.0005	U	.0005	.0025	0.5	10/29/2025	11/03/2025	WG203233
Calcium, Total	10	mg/L	38.8		.5	.5		10/29/2025	11/03/2025	WG203233
Chromium, Total	10	mg/L	.249		.002	.00999	2.75	10/29/2025	11/03/2025	WG203233
Cobalt, Total	10	mg/L	.0464		.0005	.0025		10/29/2025	11/03/2025	WG203233
Copper, Total	10	mg/L	.0077	T	.002	.02	3	10/29/2025	11/03/2025	WG203233
Iron, Total	10	mg/L	9.9		.1	.5		10/29/2025	11/03/2025	WG203233
Lead, Total	10	mg/L	.0021	T	.001	.005	2	10/29/2025	11/03/2025	WG203233
Magnesium, Total	10	mg/L	99.8		.5	.5		10/29/2025	11/03/2025	WG203233
Manganese, Total	10	mg/L	.234		.001	.005		10/29/2025	11/03/2025	WG203233
Nickel, Total	10	mg/L	.187		.001	.005	2.5	10/29/2025	11/03/2025	WG203233
Phosphorus, Total	10	mg/L	8.69		1	.999		10/29/2025	11/03/2025	WG203233
Potassium, Total	10	mg/L	744		1	5		10/29/2025	11/03/2025	WG203233
Selenium, Total	10	mg/L	<.005	U	.005	.00999		10/29/2025	11/03/2025	WG203233
Silver, Total	10	mg/L	<.0004	U	.0004	.002	1	10/29/2025	11/03/2025	WG203233
Sodium, Total	10	mg/L	1990		.999	.999		10/29/2025	11/03/2025	WG203233
Thallium, Total	10	mg/L	<.00075	DU	.00075	.002		10/29/2025	11/04/2025	WG203233
Tin, Total	10	mg/L	.02	G	.005	.015		10/29/2025	11/03/2025	WG203233
Vanadium, Total	10	mg/L	.0782		.00075	.00375		10/29/2025	11/03/2025	WG203233
Zinc, Total	10	mg/L	.221		.005	.025	5	10/29/2025	11/03/2025	WG203233
Mercury, Total	2	mg/L	<.0001	U	.0001	.0002		10/29/2025	10/29/2025	WG203249

Client Sample ID: **LEPS251030P**
CoC / Lab Sample ID: **19168 / L87226-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **10/30/2025**
Login Date: **10/30/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.17		.0005	.00251	1	11/03/2025	11/03/2025	WG203299

Target Parameter Count for Report Group: 26

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Quality Control Data

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory QC Report

CHLS-P_110425 COC 19164 19168

Workgroup: WG203233 Total Metals by ICPMS

MB:WG203233-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.1	0.5	ug/L		U
Sodium, Total	100	100	ug/L		U
Magnesium, Total	50	50	ug/L		U
Aluminum, Total	5	10	ug/L		U
Phosphorus, Total	100	100	ug/L		U
Potassium, Total	100	500	ug/L		U
Calcium, Total	50	50	ug/L		U
Vanadium, Total	0.075	0.375	ug/L		U
Chromium, Total	0.2	1	ug/L	0.29	<RDL,B
Manganese, Total	0.1	0.5	ug/L		U
Iron, Total	10	50	ug/L		U
Cobalt, Total	0.05	0.25	ug/L		U
Nickel, Total	0.1	0.5	ug/L		U
Copper, Total	0.2	2	ug/L		U
Zinc, Total	0.5	2.5	ug/L		U
Arsenic, Total	0.05	0.25	ug/L		U
Selenium, Total	0.5	1	ug/L		U
Silver, Total	0.04	0.2	ug/L		U
Cadmium, Total	0.05	0.25	ug/L		U
Tin, Total	0.5	1.5	ug/L		U
Antimony, Total	0.3	1	ug/L		U
Barium, Total	0.5	0.5	ug/L		U
Thallium, Total	0.075	0.2	ug/L		U
Lead, Total	0.1	0.5	ug/L		U

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory QC Report

CHLS-P_110425 COC 19164 19168

SB:WG203233-2 MB:WG203233-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.1	0.5	ug/L	U	20	19.9	99		85--115
Sodium, Total	100	100	ug/L	U	5000	5070	101		85--115
Magnesium, Total	50	50	ug/L	U	5000	5100	102		85--115
Aluminum, Total	5	10	ug/L	U	200	198	99		85--115
Phosphorus, Total	100	100	ug/L	U	5000	4800	96		85--115
Potassium, Total	100	500	ug/L	U	5000	5000	100		85--115
Calcium, Total	50	50	ug/L	U	5000	4770	95		85--115
Vanadium, Total	0.075	0.375	ug/L	U	20	20.3	101		85--115
Chromium, Total	0.2	1	ug/L	0.29	20	20.8	102		85--115
Manganese, Total	0.1	0.5	ug/L	U	20	20.5	103		85--115
Iron, Total	10	50	ug/L	U	5000	5120	102		85--115
Cobalt, Total	0.05	0.25	ug/L	U	20	20.7	103		85--115
Nickel, Total	0.1	0.5	ug/L	U	20	20.8	104		85--115
Copper, Total	0.2	2	ug/L	U	20	21.4	107		85--115
Zinc, Total	0.5	2.5	ug/L	U	20	20.8	104		85--115
Arsenic, Total	0.05	0.25	ug/L	U	20	20.1	101		85--115
Selenium, Total	0.5	1	ug/L	U	20	20.2	101		85--115
Silver, Total	0.04	0.2	ug/L	U	20	19.5	98		85--115
Cadmium, Total	0.05	0.25	ug/L	U	20	19.9	99		85--115
Tin, Total	0.5	1.5	ug/L	U	20	19.4	97		85--115
Antimony, Total	0.3	1	ug/L	U	20	20.1	100		85--115
Barium, Total	0.5	0.5	ug/L	U	20	20.2	101		85--115
Thallium, Total	0.075	0.2	ug/L	U	20	21.6	108		85--115
Lead, Total	0.1	0.5	ug/L	U	20	21.5	107		85--115

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory QC Report

CHLS-P_110425 COC 19164 19168

MSD:WG203233-4 MS:WG203233-3 L87226-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	0.99	4.95	ug/L	U	198	188	95		75--125	198	184	93		2		0--20
Sodium, Total	991	991	ug/L	1990000	49500	2040000		4xRule	75--125	49500	2070000		4xRule	2		0--20
Magnesium, Total	495	495	ug/L	99800	49500	149000	100		75--125	49500	149000	99		0		0--20
Aluminum, Total	50	99.1	ug/L	1310	1980	3190	95		75--125	1980	3420	107		7		0--20
Phosphorus, Total	990	991	ug/L	8690	49500	57700	99		75--125	49500	57600	99		0		0--20
Potassium, Total	990	4950	ug/L	744000	49500	787000		4xRule	75--125	49500	791000		4xRule	1		0--20
Calcium, Total	495	495	ug/L	38800	49500	86800	97		75--125	49500	86700	97		0		0--20
Vanadium, Total	0.74	3.72	ug/L	78.2	198	274	99		75--125	198	275	100		0		0--20
Chromium, Total	2	9.91	ug/L	249	198	444	98		75--125	198	445	99		0		0--20
Manganese, Total	0.99	4.95	ug/L	234	198	427	98		75--125	198	430	99		1		0--20
Iron, Total	99	495	ug/L	9900	49500	57600	96		75--125	49500	58300	98		1		0--20
Cobalt, Total	0.5	2.48	ug/L	46.4	198	248	102		75--125	198	246	101		1		0--20
Nickel, Total	0.99	4.95	ug/L	187	198	383	99		75--125	198	381	98		0		0--20
Copper, Total	2	19.8	ug/L	7.7	198	209	102		75--125	198	208	101		0		0--20
Zinc, Total	5	24.8	ug/L	221	198	419	100		75--125	198	416	98		1		0--20
Arsenic, Total	0.5	2.48	ug/L	186	198	393	105		75--125	198	391	104		1		0--20
Selenium, Total	5	9.91	ug/L	U	198	205	103		75--125	198	206	104		1		0--20
Silver, Total	0.4	1.98	ug/L	U	198	181	91		75--125	198	180	91		1		0--20
Cadmium, Total	0.5	2.48	ug/L	U	198	190	96		75--125	198	190	96		0		0--20
Tin, Total	5	14.9	ug/L	20	198	134	57	*	75--125	198	146	64	*	9		0--20
Antimony, Total	3	9.91	ug/L	18.9	198	218	100		75--125	198	212	98		3		0--20
Barium, Total	5	4.95	ug/L	97	198	298	101		75--125	198	297	101		0		0--20
Thallium, Total	0.74	1.98	ug/L	U	198	204	103		75--125	198	198	100		3		0--20
Lead, Total	0.99	4.95	ug/L	2.1	198	207	103		75--125	198	206	103		1		0--20

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory QC Report

CHLS-P_110425 COC 19164 19168

Workgroup: WG203249 Total Mercury by CVAA

MB:WG203249-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.05	0.1	ug/L		U

SB:WG203249-2 MB:WG203249-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	1.14	114		85--115

MSD:WG203249-4 MS:WG203249-3 L87226-1 Matrix: LEACHATE Listtype:MTHG-MID Method:EPA 245.1 Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.1	0.2	ug/L	U	2	2.02	101		75--125	2	2.06	103		2		0--20

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

King County Environmental Laboratory QC Report

CHLS-P_110425 COC 19164 19168

Workgroup: WG203299 Total Metals by ICPMS

MB:WG203299-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total	0.05	0.25	ug/L		U

SB:WG203299-2 MB:WG203299-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Arsenic, Total	0.05	0.25	ug/L	U	20	19.9	100		85--115

MSD:WG203299-4 MS:WG203299-3 L87226-2 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Arsenic, Total	0.49	2.47	ug/L	170	198	371	102		75--125	200	379	105		2		0--20

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4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 10/28/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19164**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25)

Lab No.	Sample ID	Date	Time
87226-1	LEPS251028P	10/28/25	1200

Project Site Test Reference

GROUNDWATER											
CHGW Cedar Hills GW Qlty	CHGW Cedar Hills EPZ GW Qlty	CHGW/VAGW Appendix III GW	CHGW-OS Cedar Hills GW Offsite	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	
2	2.1	4	38	5	6	7	8	9	10	12	

SURFACE/STORM WATER															
CHSW-Q Cedar Hills SW Sta. E-1	CFSW Cedar Falls SW Qlty	DUSW Duvall SW Qlty	VASW Vashon SW Qlty-WEIRS	ISGP: CHSW-P Cedar Hills SW	CHSW-P Cedar Hills SW - Infiltration	HTSW-P Houghton SW	ISHSW-P Shoreline SW	SHSW-P Shoreline SW - Infiltration	FASW-P Factoria SW	ENSW-P Enumclaw SW - Infiltration	ALSW-P Algona SW	VASW-P Vashon SW	RMSW-P Renton Maint. Facility SW	
14	17	18	21	16	16.1	52	53	53.1	54	56.1	57	58	60	

LEACHATE/WASTEWATER																
CHTW Cedar Hills Truckwash	CHLS-M Cedar Hills Leachate Mthly	CHLS-M_MOD CH Leachate Mods Mthly	PRETREATMENT PERMITS: CHLS-P CH L Permit (Wkly, 1st)	CHLS-P CH L Permit (monthly)	CHLS-P CH L Permit (Wkly, 2nd)	ALLS-P Algona WW Permit	BLLS-P Bow Lake WW Permit	ENLS-P Enumclaw WW Permit	FALS-P Factoria WW Permit	SRLS-P Shoreline WW Permit	HTLS-P Houghton WW Permit	RELS-P Renton WW Permit	VALS-P Vashon WW Permit Tanker	VALS-Q Vashon Leachate Qlty	
24	23	23+	25	25.1	25.2	26	20	27	28	29	30	31	32	34	
			X												

Number of Containers	Remarks
1	Diss Sulfide <0.1ppm

Relinquished By Sampler: Hannah Spear
Sampler Signature: H. Spear
Sampler Printed Name: KCSWD
Company
Date: 10/28/25
Time: 1440

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By
Signature
Printed Name
Company
Date
Time

Received By: Jason Kinnard
Signature
Printed Name: KCEL
Company
Date: 10/28/25
Time: 1604

Observations/Comments/Special Instructions:
Custody sealed 10/28/25 @ 1440.

Total # of Containers: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v6.0 (Rev 10/2025)

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s): 577226										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	2.4 Q3123	Delivery Location	Y / N	

Sub-Contracting: Y / N — List Product(s):

Changes: Y / N — List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 10-28-25 — Project No.: 421422

VTRP Collect Date(s): — Project Site Test Reference: CHLS-P(25)

Receive Date: 10-28-25 — COC / SDG No.: 19164

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P#25)	Check documentation	Y / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually Inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: OCT 28 '25 16:19

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Chain of Custody Record

Environmental Monitoring Program

Date: 10/30/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19168**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P(25.2)

Lab No.	Sample ID	Date	Time
87226-2	LEPS251030P	10/30/25	1200

Project Site Test Reference

| | | |

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s)										
	87226 -2										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	2.3 R 3 2.7	Delivery Location	Y / N	

Sub-Contracting: Y / N — List Product(s):

Changes: Y / N — List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 10-30-25 — Project No.: 421422

VTRP Collect Date(s): — Project Site Test Reference: CHLS-P(25.2)

Receive Date: 10-30-25 — COC / SDG No.: 19168

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: OCT 30 '25 14:08

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

HYDROGEN SULFIDE GAS AT MANHOLE R10-52

Instrument #	Serial #	Calibration Date/Time
RKI Eagle 2	E2E656	10/3/2025 @ 0921
Sample Count	**Interval Time (sec)**	**Bump Test Date**
10092	60	10/7/2025 @ 0934

H2S Readings

Date	Daily Average	Instantaneous Maximum	Daily Maximum 15-min Rolling Average	Daily Maximum 8-hr Rolling Average	Daily Max 7-day Rolling Average
10/7/2025	0.0000	0.0	0.00	0.00	-
10/8/2025	0.0038	2.0	0.37	0.01	-
10/9/2025	0.0031	1.0	0.30	0.01	-
10/10/2025	0.0000	0.0	0.00	0.00	-
10/11/2025	0.0010	0.5	0.10	0.00	-
10/12/2025	0.0000	0.0	0.00	0.00	-
10/13/2025	0.0000	0.0	0.00	0.00	-
10/14/2025	0.0076	1.0	0.30	0.01	0.0016
			15 ppm	*10 ppm*	*3 ppm*

Docusign Envelope ID: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846

KING COUNTY SOLID WASTE DIVISION

LEACHATE HAULING REPORT

TANKER LOADS

MONTH: OCTOBER

YEAR: 2025

	DUVALL						VASHON				HOBART		OTHER		
DATE	BRIGHT		C.H.		SPOK.		SPOK.		C.H.		C.H.		C.H.		REMARKS
LOAD	6000	7000	6000	7000	6000	7000	6000	7000	6000	7000	6000	7000	6000	7000	
1															
2															
3															
4															
5															
6															
7															
8															
9															
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22															
23															
24															
25															
26															
27															
28															
29															
30															
31															
TOTAL	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	

Certificate Of Completion

Envelope Id: 624EAF15-E2C2-46CA-9D7C-E34CBE98A846
Status: Completed
Subject: Complete with Docusign: Please sign CHRLF October SMR by COB 11/13/25
Source Envelope:
Document Pages: 93
Signatures: 3
Certificate Pages: 4
Initials: 0
AutoNav: Enabled
EnvelopeId Stamping: Enabled
Time Zone: (UTC-08:00) Pacific Time (US & Canada)

Envelope Originator:
Terri Barker
401 5TH AVE
SEATTLE, WA 98104
terri.barker@kingcounty.gov
IP Address: 198.49.222.20

Record Tracking

Status: Original
11/13/2025 1:06:31 PM
Holder: Terri Barker
terri.barker@kingcounty.gov
Location: DocuSign

Security Appliance Status: Connected
Pool: FedRamp

Storage Appliance Status: Connected
Pool: King County-Dept of Natural Resources-Solid Waste
Location: Docusign

Signer Events	Signature	Timestamp
Jennifer Keune jennifer.keune@kingcounty.gov Interim Supervisor KC_DNRP_SWD Security Level: Email, Account Authentication (None)	DocuSigned by:  A70EEC0AE02F44A... Signature Adoption: Pre-selected Style Using IP Address: 67.160.11.161	Sent: 11/13/2025 1:23:35 PM Viewed: 11/13/2025 4:37:27 PM Signed: 11/13/2025 4:38:02 PM

Electronic Record and Signature Disclosure:
Accepted: 3/31/2021 3:20:14 PM
ID: 040441cf-883c-43c6-a4af-1ccb2ef73edc

In Person Signer Events	Signature	Timestamp

Editor Delivery Events	Status	Timestamp

Agent Delivery Events	Status	Timestamp

Intermediary Delivery Events	Status	Timestamp

Certified Delivery Events	Status	Timestamp

Carbon Copy Events	Status	Timestamp

Witness Events	Signature	Timestamp

Notary Events	Signature	Timestamp

Envelope Summary Events	Status	Timestamps
Envelope Sent	Hashed/Encrypted	11/13/2025 1:23:35 PM
Certified Delivered	Security Checked	11/13/2025 4:37:27 PM
Signing Complete	Security Checked	11/13/2025 4:38:02 PM
Completed	Security Checked	11/13/2025 4:38:02 PM

Payment Events	Status	Timestamps

Electronic Record and Signature Disclosure

ELECTRONIC RECORD AND SIGNATURE DISCLOSURE

From time to time, King County-ZZDepartmentTemplate 03 (we, us or Company) may be required by law to provide to you certain written notices or disclosures. Described below are the terms and conditions for providing to you such notices and disclosures electronically through the DocuSign system. Please read the information below carefully and thoroughly, and if you can access this information electronically to your satisfaction and agree to this Electronic Record and Signature Disclosure (ERSD), please confirm your agreement by selecting the check-box next to 'I agree to use electronic records and signatures' before clicking 'CONTINUE' within the DocuSign system.

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At any time, you may request from us a paper copy of any record provided or made available electronically to you by us. You will have the ability to download and print documents we send to you through the DocuSign system during and immediately after the signing session and, if you elect to create a DocuSign account, you may access the documents for a limited period of time (usually 30 days) after such documents are first sent to you. After such time, if you wish for us to send you paper copies of any such documents from our office to you, you will be charged a $0.00 per-page fee. You may request delivery of such paper copies from us by following the procedure described below.

Withdrawing your consent

If you decide to receive notices and disclosures from us electronically, you may at any time change your mind and tell us that thereafter you want to receive required notices and disclosures only in paper format. How you must inform us of your decision to receive future notices and disclosure in paper format and withdraw your consent to receive notices and disclosures electronically is described below.

Consequences of changing your mind

If you elect to receive required notices and disclosures only in paper format, it will slow the speed at which we can complete certain steps in transactions with you and delivering services to you because we will need first to send the required notices or disclosures to you in paper format, and then wait until we receive back from you your acknowledgment of your receipt of such paper notices or disclosures. Further, you will no longer be able to use the DocuSign system to receive required notices and consents electronically from us or to sign electronically documents from us.

All notices and disclosures will be sent to you electronically

Unless you tell us otherwise in accordance with the procedures described herein, we will provide electronically to you through the DocuSign system all required notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you during the course of our relationship with you. To reduce the chance of you inadvertently not receiving any notice or disclosure, we prefer to provide all of the required notices and disclosures to you by the same method and to the same address that you have given us. Thus, you can receive all the disclosures and notices electronically or in paper format through the paper mail delivery system. If you do not agree with this process, please let us know as described below. Please also see the paragraph immediately above that describes the consequences of your electing not to receive delivery of the notices and disclosures electronically from us.

How to contact King County-ZZDepartmentTemplate 03:

You may contact us to let us know of your changes as to how we may contact you electronically, to request paper copies of certain information from us, and to withdraw your prior consent to receive notices and disclosures electronically as follows:
To contact us by email send messages to: cipriano.dacanay@kingcounty.gov

To advise King County-ZZDepartmentTemplate 03 of your new email address

To let us know of a change in your email address where we should send notices and disclosures electronically to you, you must send an email message to us at cipriano.dacanay@kingcounty.gov and in the body of such request you must state: your previous email address, your new email address. We do not require any other information from you to change your email address.

If you created a DocuSign account, you may update it with your new email address through your account preferences.

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To request delivery from us of paper copies of the notices and disclosures previously provided by us to you electronically, you must send us an email to cipriano.dacanay@kingcounty.gov and in the body of such request you must state your email address, full name, mailing address, and telephone number. We will bill you for any fees at that time, if any.

To withdraw your consent with King County-ZZDepartmentTemplate 03

To inform us that you no longer wish to receive future notices and disclosures in electronic format you may:

i. decline to sign a document from within your signing session, and on the subsequent page, select the check-box indicating you wish to withdraw your consent, or you may;

ii. send us an email to cipriano.dacanay@kingcounty.gov and in the body of such request you must state your email, full name, mailing address, and telephone number. We do not need any other information from you to withdraw consent.. The consequences of your withdrawing consent for online documents will be that transactions may take a longer time to process..

Required hardware and software

The minimum system requirements for using the DocuSign system may change over time. The current system requirements are found here: https://support.docusign.com/guides/signer-guide-signing-system-requirements.

Acknowledging your access and consent to receive and sign documents electronically

To confirm to us that you can access this information electronically, which will be similar to other electronic notices and disclosures that we will provide to you, please confirm that you have read this ERSD, and (i) that you are able to print on paper or electronically save this ERSD for your future reference and access; or (ii) that you are able to email this ERSD to an email address where you will be able to print on paper or save it for your future reference and access. Further, if you consent to receiving notices and disclosures exclusively in electronic format as described herein, then select the check-box next to 'I agree to use electronic records and signatures' before clicking 'CONTINUE' within the DocuSign system.

By selecting the check-box next to 'I agree to use electronic records and signatures', you confirm that:

- You can access and read this Electronic Record and Signature Disclosure; and
- You can print on paper this Electronic Record and Signature Disclosure, or save or send this Electronic Record and Disclosure to a location where you can print it, for future reference and access; and
- Until or unless you notify King County-ZZDepartmentTemplate 03 as described above, you consent to receive exclusively through electronic means all notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you by King County-ZZDepartmentTemplate 03 during the course of your relationship with King County-ZZDepartmentTemplate 03.

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14-Day Report for Discharge or Permit Violation

For more information on reporting requirements refer to your Permit, Section S4.D. If you have a Major/Minor Discharge Authorization refer to General Conditions D

Date: 11/12/25 **Company Name:** **King County Solid Waste Division (KCSWD)**

Permit/Authorization Number: 7842-04 **Sample Site Number: A90021**

1. **Description and Cause of Non-Compliance Event:** (include dates, times, locations; sample results and estimated gallons discharged)

In the last month, SWD became aware of the exceedances summarized in the table below.

Arsenic Loading (A90021)

Exceedance Date	Aware Date	Arsenic Concentration (mg/L)	Flow (gallons)	Arsenic Loading (lbs/day)
Permit Limit		*4.0*	*2,700,000*	*0.27*
10/28/25	11/05/25	0.1860	349,700	0.5425
10/30/25	11/05/25	0.1700	354,600	0.5028

KCSWD employs operational practices designed to minimize arsenic loading exceedances. This includes self-imposed limits on the volume of leachate discharged daily based on recent arsenic concentration data. Doing so allowed KCSWD to successfully comply with arsenic loading limits for virtually all of 2024. Seasonal variations in precipitation greatly affect KCSWD's ability to manage wastewater on-site using existing capacity, which increases the risk of exceeding the arsenic loading limit during wet periods.

During the months of September and October, KCSWD employed practices to ensure the lagoons were not in danger of overtopping. However, leachate levels in the onsite lagoons rose throughout those months as precipitation increased the rate of leachate generation. During the month of October, multiple heavy rain events made it difficult to manage our onsite lagoon levels. This additional level of flow prompted KCSWD to discharge volumes in excess of those prescribed by self-imposed pumping limits designed to maintain compliance with arsenic loading limits. Based on laboratory analytical results, the larger volumes of wastewater discharged at the end of October resulted in arsenic loading limit exceedances on two sampling days: 10/28/25 and 10/30/25.

KCSWD is obligated to implement corrective actions specified in the Revised Compliance Order for Discharge Violations issued by KCIW on 06/23/25. The development and implementation of corrective actions outlined in that document continue.

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14-Day Report for Discharge or Permit Violation

2. Date and Time King County Notified: (requirement is within 24 hours of learning of violation unless event was spill or slug discharge then must have notified immediately)

Arsenic

Exceedance Date	Aware Date	Notification Date & Time	Notification Method	Recipient(s)
10/28/25	11/05/25	11/05/25 @ 18:28	Email	Girard Arnaud, info.KCIW@kingcounty.gov
10/30/25	11/05/25	11/05/25 @ 18:28	Email	Girard Arnaud, info.KCIW@kingcounty.gov

3. Corrective Actions Taken: (corrective actions taken to respond to the violation and ensure ongoing compliance.)

Arsenic

Discharges in excess of self-imposed pumping limits continued through 11/14/2025 to manage levels in the leachate lagoons. We will continue to monitor arsenic concentrations closely to inform allowable discharge volumes.

KCSWD will continue to communicate circumstances that deviate from our routine discharge procedures to ensure there is no release (overtop) from our leachate lagoons and other secondary onsite storage. KCSWD relies on constant management of discharge volume and storage capacity to ensure no overtopping due to precipitation and to minimize loading limit exceedances. Although the ability to consistently reduce arsenic loading and ensure permit compliance relies upon an engineered pre-treatment system, KCSWD will continue to monitor and manage our effluent to minimize loading exceedances.

4. If discharge violation, enter follow-up sample collection date and results: (may use subsequent self-monitoring sample if collected and analyzed within 14 days of learning of violation)

Exceedance Date	Aware Date	Resample Date(s)	Parameter	Loading Resample Result (lbs/day)	Compliant?
10/28/25	11/05/25	10/30/25	Arsenic Loading	0.5028	No
10/30/25	11/05/25	11/04/25	Arsenic Loading	N/A	N/A

Additional information regarding resampling results will be reported as part of the November 2025 Self-Monitoring Report for Cedar Hills.

ADDITIONAL SHEETS ATTACHED: oYES x NO

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14-Day Report for Discharge or Permit Violation

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME: Jennifer Keune

SIGNATURE: DocuSigned by: Jennifer Keune A70EEC0AE02F44A... DATE: Nov 13, 2025

TITLE: KCSWD Supervisor

Authorized Representative / Designated Authorized Representative*

(Please circle one of the above)

**All user reports must be signed by an authorized representative of the industrial user. "Authorized representative of industrial user" is defined by King County Code 28.82.050. If you are designated, a current Delegation of Signatory Authority must be on file at King County or completed and attached to this form.*

Please return this form and attachments to:

King County Industrial Waste
130 Nickerson Street – Suite 200
Seattle, WA 98109-1658 **Fax: 206-263-3001**
-or- Email a signed PDF to: info.KCIW@kingcounty.gov

Docusign Envelope ID: 4D4684E2-3BF5-4EBE-B531-7737DA6AA955

14-Day Report for Discharge or Permit Violation

From general permit language

1. When monitoring data shows a violation, the permittee shall:

    a. Take immediate action to stop the violation and notify KCIW within 24 hours of learning of the violation.
    b. Collect a sample and submit new data to KCIW within 14 days of becoming aware of the violation.
    c. Submit a written report within 14 days of learning of the violation (*14-Day Report*). The report should explain the cause of the violation and corrective actions taken to respond to the violation and ensure ongoing compliance.

2. In the event the permittee is unable to comply with any of the conditions of this permit because of a breakdown of equipment or facilities, an accident caused by human error, negligence, or any other cause, such as an act of nature, the permittee shall:

    a. Take immediate action to stop, contain, and clean up the unauthorized discharges and correct the problem.
    b. Immediately notify the emergency King County contact in section S1 so steps can be taken to prevent damage to the sewerage system.
    c. Submit a written report within 14 days of the event (*14-Day Report*) describing the breakdown, the actual quantity and quality of resulting waste discharged, corrective action taken, and the steps taken to prevent a recurrence.

From Section D of Major Discharge Authorizations

1. In the event the permittee is unable to comply with any of the conditions of this discharge authorization because of breakdown of equipment or facilities, an accident caused by human error, negligence, or any other cause, such as an act of nature the company shall:

    a. Take immediate action to stop, contain, and clean up the unauthorized discharges and correct the problem
    b. Immediately notify KCIW so steps can be taken to prevent damage to the sewer system
    c. Submit a written report within 14 days describing the breakdown, the actual quantity and quality of resulting waste discharged, corrective action taken, and the steps taken to prevent recurrence

For SIU's Spills and Slug Discharges (from Permit language)

The Permittee shall notify King County Industrial Waste immediately in the event of a spill or slug discharge to the sanitary sewer. A written report regarding the cause of the spill and/or slug discharge shall be submitted to King County within five (5) days of date of occurrence. The report should explain the cause of the violation and corrective actions taken to respond to the violation and ensure ongoing compliance.

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King County
Solid Waste Division
Department of Natural Resources and Parks
King Street Center
201 South Jackson Street, Suite 6400
Seattle, WA 98104-3855
206-477-4466
711 TTY Relay
kingcounty.gov/solid-waste

December 11, 2025

TO: Arnaud Girard, Industrial Waste Compliance Investigator III, Wastewater Treatment Division

FM: Aaron Copado, Environmental Scientist III, King County Solid Waste Division (KCSWD) DS AC

RE: Wastewater Discharge Permit # 7842-04 - Cedar Hills – Self-Monitoring Report

The purpose of this memorandum is to enclose the Self-Monitoring Report (SMR) for Cedar Hills (Permit # 7842-04) for the month of November 2025. Enclosed you will find:

- Industrial Waste Discharge Self-Monitoring Report for Sites A9002 & A90021
- Laboratory Test Results for CHLS-P (for samples collected 11/4/25, 11/5/25, 11/12/25, 11/14/25, 11/17/25, 11/19/25, 11/24/35, and 11/26/25)
- Atmospheric Hydrogen Sulfide Data at A9002 (for 11/5 - 11/12)
- Leachate Hauling Report (for November)

The following exceedances occurred during the month of November:

Parameter	Date of Exceedance	Aware Date	Notification Date and Time
Arsenic Loading	11/04/25	11/25/25	11/5/25 @ 16:53
Arsenic Loading	11/05/25	11/25/25	11/5/25 @ 16:53
Arsenic Loading	11/12/25	11/25/25	11/5/25 @ 16:53
Arsenic Loading	11/14/25	12/08/25	12/8/25 @ 16:41
Arsenic Loading	11/17/25	12/08/25	12/8/25 @ 16:41

KCSWD previously reported flow measurements outside the acceptable limits established in section S3.C.2.d of Permit #7842-04 and shared our plan to replace the existing flow meter. KCIW requested information about the new proposed effluent flow meter, including meter type, manufacturer and model, and specifications. This information was sent to Bruce Tiffany and Arnaud Girard via email on October 15, 2025 at 14:35. KCIW subsequently approved installation of the proposed flow meter and KCSWD completed installation on December 3, 2025.

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

Please contact me directly if you have any questions. I can be reached at (253) 400-6532, or by e-mail at acopado@kingcounty.gov.

Enclosures

cc: Theresa Thurlow, P.E., Engineering Services Manager, KCSWD
Jennifer Keune, Supervisor, KCSWD
Dan Swope, Supervising Engineer, KCSWD
Ifeanyi Isigwe, P.E., Engineer III, KCSWD
Grant Dornfeld, Engineer II, KCSWD

Printed on recycled paper

King County

Industrial Waste Program Monthly Self-Monitoring Report

Send to: King County Industrial Waste Program
Email: info.KCIW@kingcounty.gov

Company Name: King County SWD - Cedar Hills Regional Landfill **Sample Site No.** A90021 **Permit No.:** *7842-04*

Please Specify Month & Year: **Month/Year** November 2025

This form is available at www.kingcounty.gov/industrialwaste.

*** Sample Types (C) Composite (G) Grab (BC) Batch** **All conc. units are mg/L unless otherwise noted. Loading units are pounds per day (lbs./da**

Sample Date (circle)	Sample Type*	pH	Arsenic		Cadmium		Chromium		Copper		Lead		Daily Discharge Volume, gpd	Notes (Indicate Batch Discharge where applicable)
			Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading		
1													848900	*Flow Meter Error >10%
2													859100	*Flow Meter Error >10%
3													689000	*Flow Meter Error >10%
4	C	8.62	0.1080	0.6156	<0.0005	0.0014	0.1480	0.8435	0.0088	0.0502	0.0017	0.00969	683400	*Flow Meter Error >10%
5	C		0.1030	0.5779									672700	*Flow Meter Error >10%
6													668500	*Flow Meter Error >10%
7													1011300	*Flow Meter Error >10%
8													751900	*Flow Meter Error >10%
9													834500	*Flow Meter Error >10%
10													824800	*Flow Meter Error >10%
11													815000	*Flow Meter Error >10%
12	C	8.43	0.0603	0.4110	<0.0005	0.0017	0.0763	0.5200	0.0095	0.0647	0.0013	0.00886	817200	*Flow Meter Error >10%
13													814800	*Flow Meter Error >10%
14	C		0.0537	0.3563									795600	*Flow Meter Error >10%
15													810200	*Flow Meter Error >10%
16													813000	*Flow Meter Error >10%
17	C	8.36	0.0435	0.2913	<0.0005	0.0017	0.0557	0.3730	0.0097	0.0650	0.0012	0.00804	802900	*Flow Meter Error >10%
18													800200	*Flow Meter Error >10%
19	C		0.0399	0.2603									782200	*Flow Meter Error >10%
20													786600	*Flow Meter Error >10%
21													767300	*Flow Meter Error >10%
22													662900	*Flow Meter Error >10%
23													789600	*Flow Meter Error >10%
24	C	8.30	0.0408	0.2296	<0.0005	0.0014	0.0553	0.3113	0.0080	0.0450	<0.001	0.00281	674900	*Flow Meter Error >10%
25													0	*Flow Meter Error >10%
26	C		0.0407	0.1080									318100	*Flow Meter Error >10%
27													323500	*Flow Meter Error >10%
28													315100	*Flow Meter Error >10%
29													313900	*Flow Meter Error >10%
30													628000	*Flow Meter Error >10%
31														

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

Dec 11, 2025
Date

Name and Signature of Principal Executive or Authorized Agent

Monthly Min pH	8.30	11/24/2025	
Monthly Max pH	8.62	11/4/2025	
Total Monthly Flow (gallons)	20,675,100		
Maximum Daily Flow	1,011,300	11/7/2025	

PLEASE CIRCLE ALL PERMIT VIOLATIONS

Due Date: Monthly report is due by the 15th each month.

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County

Industrial Waste Program Monthly Self-Monitoring Report

Send to: King County Industrial Waste Program
Email: info.KCIW@kingcounty.gov

Company Name: King County SWD - Cedar Hills Regional Landfill **Sample Site No.** A90021 **Permit No.:** *7842-04*

Please Specify Month & Year: **Month/Year** November 2025

This form is available at www.kingcounty.gov/industrialwaste.

*** Sample Types (C) Composite (G) Grab (BC) Batch** **All conc. units are mg/L unless otherwise noted. Loading units are pounds per day (lbs./da**

Sample Date (circle)	Sample Type	Mercury		Nickel		Silver		Zinc		Total Soluble Sulfides	Ammonia as N	Nitrite + Nitrate as N	Notes (Indicate Batch Discharge where applicable)
		Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading				
1													
2													
3													
4	C	<0.0001	0.00028	0.1140	0.650	<0.0004	0.0011	0.1720	0.980	<0.1 ppm			
5													
6													
7													
8													
9													
10													
11													
12	C	<0.0001	0.00034	0.0675	0.460	<0.0004	0.0013	0.1610	1.097	<0.1 ppm			
13													
14													
15													
16													
17	C	<0.0001	0.00033	0.0477	0.319	<0.0004	0.0013	0.1400	0.937	<0.1 ppm	393	<0.05	
18													
19													
20													
21													
22													
23													
24	C	<0.0001	0.00028	0.0472	0.266	<0.0004	0.0011	0.1350	0.760	<0.1 ppm			
25													
26													
27													
28													
29													
30													
31													

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

Dec 11, 2025

Date

Name and Signature of Principal Executive or Authorized Agent

A01E6DAE02544...

PLEASE CIRCLE ALL PERMIT VIOLATIONS

Due Date: Monthly report is due by the 15th each month.

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County

Industrial Waste Program Monthly Self-Monitoring Report

Send to: King County Industrial Waste Program
Email: info.KCIW@kingcounty.gov

Atmospheric Hydrogen Sulfide (H_2S) Monitoring

Company Name: King County SWD - Cedar Hills Regional Landfill **Sample Site No.** A9002 **Permit No.:** *7842-04*

Please Specify Month & Year: **Month/Year** November 2025

This form is available at www.kingcounty.gov/industrialwaste.

All units are PPM unless otherwise noted.

Sample Date (circle)	Atmospheric Hydrogen Sulfide, ppmv				Notes
	Instantaneous Maximum	Maximum 15-min Average	Maximum 8-hr Average	7-day Average	
1					
2					
3					
4					
5	0	0	0	-	
6	0	0	0	-	
7	0	0	0	-	
8	0	0	0	-	
9	1.5	0.8	0.025	-	
10	0	0	0	-	
11	0	0	0	-	
12	0	0	0	0.00119	
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
Monthly **MAX**	1.5	Date	11/05/25-11/12/25		
Monthly **AVG**	0.1875				

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

Dec 11, 2025

Date

Name and Signature of Principal Executive or Authorized Agent

A70EC0AE02144A...

PLEASE CIRCLE ALL PERMIT VIOLATIONS

Due Date: **Monthly report is due by the 15th each month.**

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

November 14, 2025

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P)

Sample Id.	Sample Collect Date	COC
LEPS251104P	**11/04/2025**	**19176**
LEPS251105P	**11/05/2025**	**19078**

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 2 leachate permit samples collected November 4 and 5 2025.

Sample Receiving Comments
No sample receiving anomalies were observed.

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

Metals QC Information

All calculable QC results for metals parameters were within laboratory control limits with the following exception.

During **Total Metals** analysis of analytical batch WG203402, the recovery of ***total tin*** from the matrix spike duplicate (MSD) exceeded the lower laboratory control limit. Sample LEPS251104P was used to prepare the MSD. The *total tin* result for sample LEPS251104P was qualified G based on this exceedance and may be biased low.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,



Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

Sample Data

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 11/13/2025
Report Group: CHLS-P_111225

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS251105P**
SDG / Lab Sample ID: **19078 / L87288-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **11/05/2025**
Login Date: **11/07/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, AS-ICPMS, Metals

Client Sample ID: **LEPS251104P**
SDG / Lab Sample ID: **19176 / L87288-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **11/04/2025**
Login Date: **11/05/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, P-ICPMS, Metals

200.8, SWD-ICPMS23, Metals

245.1, HG-CVAA-M, Metals

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 11/13/2025
Report Group: CHLS-P_111225

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS251105P**
CoC / Lab Sample ID: **19078 / L87288-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **11/05/2025**
Login Date: **11/07/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.103		.0005	.0025	1	11/10/2025	11/12/2025	WG203422

Client Sample ID: **LEPS251104P**
CoC / Lab Sample ID: **19176 / L87288-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **11/04/2025**
Login Date: **11/05/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Mercury, Total	2	mg/L	<.0001	U	.0001	.0002		11/06/2025	11/10/2025	WG203396
Aluminum, Total	10	mg/L	1.31		.05	.1		11/07/2025	11/10/2025	WG203402
Antimony, Total	10	mg/L	.0116		.003	.01		11/07/2025	11/10/2025	WG203402
Arsenic, Total	10	mg/L	.108		.0005	.0025	1	11/07/2025	11/10/2025	WG203402
Barium, Total	10	mg/L	.0789		.005	.005		11/07/2025	11/10/2025	WG203402
Beryllium, Total	10	mg/L	<.001	U	.001	.005		11/07/2025	11/10/2025	WG203402
Cadmium, Total	10	mg/L	<.0005	U	.0005	.0025	0.5	11/07/2025	11/10/2025	WG203402
Calcium, Total	10	mg/L	42.7		.5	.5		11/07/2025	11/10/2025	WG203402
Chromium, Total	10	mg/L	.148		.002	.01	2.75	11/07/2025	11/10/2025	WG203402
Cobalt, Total	10	mg/L	.0286		.0005	.0025		11/07/2025	11/10/2025	WG203402
Copper, Total	10	mg/L	.0088	T	.002	.02	3	11/07/2025	11/10/2025	WG203402
Iron, Total	10	mg/L	6.72		.1	.5		11/07/2025	11/10/2025	WG203402
Lead, Total	10	mg/L	.0017	T	.001	.005	2	11/07/2025	11/10/2025	WG203402
Magnesium, Total	10	mg/L	63		.5	.5		11/07/2025	11/10/2025	WG203402
Manganese, Total	10	mg/L	.292		.001	.005		11/07/2025	11/10/2025	WG203402
Nickel, Total	10	mg/L	.114		.001	.005	2.5	11/07/2025	11/10/2025	WG203402
Phosphorus, Total	10	mg/L	5.34		1	1		11/07/2025	11/10/2025	WG203402
Potassium, Total	10	mg/L	441		1	5		11/07/2025	11/10/2025	WG203402
Selenium, Total	10	mg/L	<.005	U	.005	.01		11/07/2025	11/10/2025	WG203402
Silver, Total	10	mg/L	<.0004	U	.0004	.002	1	11/07/2025	11/10/2025	WG203402
Sodium, Total	10	mg/L	1170		1	1		11/07/2025	11/10/2025	WG203402
Thallium, Total	10	mg/L	<.00075	U	.00075	.002		11/07/2025	11/10/2025	WG203402
Tin, Total	10	mg/L	.0093	GT	.005	.015		11/07/2025	11/10/2025	WG203402
Vanadium, Total	10	mg/L	.0471		.00075	.00375		11/07/2025	11/10/2025	WG203402
Zinc, Total	10	mg/L	.172		.005	.025	5	11/07/2025	11/10/2025	WG203402

Target Parameter Count for Report Group: 26

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

Quality Control Data

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory QC Report

CHLS-P_111225 COC 19078, 19176

Workgroup: WG203396 Total Mercury by CVAA

MB:WG203396-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.05	0.1	ug/L		U

SB:WG203396-2 MB:WG203396-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	1.04	104		85--115

MSD:WG203396-4 MS:WG203396-3 L87301-4 Matrix: IW WTR Listtype:MTHG-MID Method:EPA 245.1 Project:421163 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	1.06	106		75--125	1	1.05	105		1		0--20

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory QC Report

CHLS-P_111225 COC 19078, 19176

Workgroup: WG203402 Total Metals by ICPMS

MB:WG203402-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.1	0.5	ug/L		U
Sodium, Total	100	100	ug/L		U
Magnesium, Total	50	50	ug/L		U
Aluminum, Total	5	10	ug/L		U
Phosphorus, Total	100	100	ug/L		U
Potassium, Total	100	500	ug/L		U
Calcium, Total	50	50	ug/L		U
Vanadium, Total	0.075	0.375	ug/L		U
Chromium, Total	0.2	1	ug/L		U
Manganese, Total	0.1	0.5	ug/L		U
Iron, Total	10	50	ug/L		U
Cobalt, Total	0.05	0.25	ug/L		U
Nickel, Total	0.1	0.5	ug/L		U
Copper, Total	0.2	2	ug/L		U
Zinc, Total	0.5	2.5	ug/L		U
Arsenic, Total	0.05	0.25	ug/L		U
Selenium, Total	0.5	1	ug/L		U
Silver, Total	0.04	0.2	ug/L		U
Cadmium, Total	0.05	0.25	ug/L		U
Tin, Total	0.5	1.5	ug/L		U
Antimony, Total	0.3	1	ug/L		U
Barium, Total	0.5	0.5	ug/L		U
Thallium, Total	0.075	0.2	ug/L		U
Lead, Total	0.1	0.5	ug/L		U

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory QC Report

CHLS-P_111225 COC 19078, 19176

SB:WG203402-2 MB:WG203402-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.1	0.5	ug/L	U	20	19.9	99		85--115
Sodium, Total	100	100	ug/L	U	5000	5070	101		85--115
Magnesium, Total	50	50	ug/L	U	5000	5090	102		85--115
Aluminum, Total	5	10	ug/L	U	200	199	99		85--115
Phosphorus, Total	100	100	ug/L	U	5000	4870	97		85--115
Potassium, Total	100	500	ug/L	U	5000	5020	100		85--115
Calcium, Total	50	50	ug/L	U	5000	4770	95		85--115
Vanadium, Total	0.075	0.375	ug/L	U	20	20	100		85--115
Chromium, Total	0.2	1	ug/L	U	20	20.5	102		85--115
Manganese, Total	0.1	0.5	ug/L	U	20	20.5	102		85--115
Iron, Total	10	50	ug/L	U	5000	5130	103		85--115
Cobalt, Total	0.05	0.25	ug/L	U	20	20.8	104		85--115
Nickel, Total	0.1	0.5	ug/L	U	20	20.3	101		85--115
Copper, Total	0.2	2	ug/L	U	20	21.2	106		85--115
Zinc, Total	0.5	2.5	ug/L	U	20	20.3	102		85--115
Arsenic, Total	0.05	0.25	ug/L	U	20	19.7	98		85--115
Selenium, Total	0.5	1	ug/L	U	20	19.8	99		85--115
Silver, Total	0.04	0.2	ug/L	U	20	19.7	99		85--115
Cadmium, Total	0.05	0.25	ug/L	U	20	19.4	97		85--115
Tin, Total	0.5	1.5	ug/L	U	20	20.2	101		85--115
Antimony, Total	0.3	1	ug/L	U	20	20.4	102		85--115
Barium, Total	0.5	0.5	ug/L	U	20	21	105		85--115
Thallium, Total	0.075	0.2	ug/L	U	20	22	110		85--115
Lead, Total	0.1	0.5	ug/L	U	20	21	105		85--115

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory QC Report

CHLS-P_111225 COC 19078, 19176

MSD:WG203402-4 MS:WG203402-3 L87288-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	1	5.02	ug/L	U	201	192	96		75--125	201	190	95		1		0--20
Sodium, Total	1000	1000	ug/L	1170000	50200	1230000		4xRule	75--125	50100	1230000		4xRule	0		0--20
Magnesium, Total	502	502	ug/L	63000	50200	115000	103		75--125	50100	111000	96		3		0--20
Aluminum, Total	50	100	ug/L	1310	2010	3420	105		75--125	2010	3320	100		3		0--20
Phosphorus, Total	1000	1000	ug/L	5340	50200	55100	99		75--125	50100	55000	99		0		0--20
Potassium, Total	1000	5020	ug/L	441000	50200	492000		4xRule	75--125	50100	485000		4xRule	1		0--20
Calcium, Total	502	502	ug/L	42700	50200	91100	97		75--125	50100	90800	96		0		0--20
Vanadium, Total	0.75	3.76	ug/L	47.1	201	247	100		75--125	201	247	99		0		0--20
Chromium, Total	2	10	ug/L	148	201	350	101		75--125	201	348	100		1		0--20
Manganese, Total	1	5.02	ug/L	292	201	498	102		75--125	201	495	101		0		0--20
Iron, Total	100	502	ug/L	6720	50200	56000	98		75--125	50100	56100	99		0		0--20
Cobalt, Total	0.5	2.51	ug/L	28.6	201	234	102		75--125	201	231	101		1		0--20
Nickel, Total	1	5.02	ug/L	114	201	312	99		75--125	201	307	96		2		0--20
Copper, Total	2	20.1	ug/L	8.8	201	217	104		75--125	201	214	102		1		0--20
Zinc, Total	5	25.1	ug/L	172	201	372	100		75--125	201	369	98		1		0--20
Arsenic, Total	0.5	2.51	ug/L	108	201	312	102		75--125	201	311	101		0		0--20
Selenium, Total	5	10	ug/L	U	201	205	102		75--125	201	207	103		1		0--20
Silver, Total	0.4	2.01	ug/L	U	201	188	94		75--125	201	187	93		1		0--20
Cadmium, Total	0.5	2.51	ug/L	U	201	192	96		75--125	201	190	95		1		0--20
Tin, Total	5	15	ug/L	9.3	201	159	75		75--125	201	159	74	*	1		0--20
Antimony, Total	3	10	ug/L	11.6	201	217	102		75--125	201	209	98		4		0--20
Barium, Total	5	5.02	ug/L	78.9	201	285	103		75--125	201	279	100		2		0--20
Thallium, Total	0.75	2.01	ug/L	U	201	207	103		75--125	201	203	101		2		0--20
Lead, Total	1	5.02	ug/L	1.7	201	207	102		75--125	201	207	102		0		0--20

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory QC Report

CHLS-P_111225 COC 19078, 19176

Workgroup: WG203422 Total Metals by ICPMS

MB:WG203422-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total	0.05	0.25	ug/L		U

SB:WG203422-2 MB:WG203422-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Arsenic, Total	0.05	0.25	ug/L	U	20	20.3	102		85--115

MSD:WG203422-4 MS:WG203422-3 L87288-2 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Arsenic, Total	0.49	2.46	ug/L	103	197	306	103		75--125	197	306	103		0		0--20

==========

4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 11/7/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19078**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P(25.2)

Lab No.	Sample ID	Date	Time
87288-2	LEPS251105P	11/5/25	1500

Project Site Test Reference

GROUNDWATER											
CHGW Cedar Hills GW Qlty	2	X									
CHGW Cedar Hills EPZ GW Qlty	2.1										
CHGW/VAGW Appendix III GW	4										
CHGW-OS Cedar Hills GW Offsite	38										
CFGW Cedar Falls GW Qlty	5										
DUGW Duvall GW Qlty	6										
ENGW Enumclaw GW Qlty	7										
HOGW Hobart GW Qlty	8										
HTGW Houghton GW Qlty	9										
PUGW Puyallup GW Qlty	10										
VAGW Vashon GW Qlty	12										

SURFACE WATER											
CHSW-Q Cedar Hills SW Sta. E-1	14										
CHSW-TD Cedar Hills SW Top Deck	42										
CHSW-E CH Emergency	49.1										
CFSW Cedar Falls SW Qlty	17										
DUSW Duvall SW Qlty	18										
VASW Vashon SW Qlty-WEIRS	21										
ISGP											
CHSW-P Cedar Hills SW	16										
HTSW-P Houghton SW	52										
SHSW-P Shoreline SW	53										
FASW-P Factoria SW	54										
ENSW-P Enumclaw SW	56										
ALSW-P Algona SW	57										
VASW-P Vashon SW	58										

LEACHATE/WASTEWATER											
CHTW Cedar Hills Truckwash	24										
CHLS-M Cedar Hills Leachate Mthly	23										
CHLS-M_MOD CH Leachate Mods Mthly	23+										
CHLS-M_As CH Leachate As Semi-Ann.	23.1										
PRETREATMENT PERMITS											
CHLS-P CH L Permit (wkly, 1st)	25										
CHLS-P CH L Permit (mnthly)	25.1										
CHLS-P CH L Permit (wkly, 2nd)	25.2	X									
ALLS-P Algona WW Permit	26										
BLLS-P Bow Lake WW Permit	20										
ENLS-P Enumclaw WW Permit	27										
FALS-P Factoria WW Permit	28										
SRLS-P Shoreline WW Permit	29										
HTLS-P Houghton WW Permit	30										
RELS-P Renton WW Permit	31										
VALS-P Vashon WW Permit Tanker	32										
VALS-Q Vashon Leachate Qlty	34										

Lab No.	Number of Containers	Remarks
87288-2	1	

Relinquished By Sampler: Hannah Spear
Sampler Signature: H. Spear
Date: 11/7/25
Sampler Printed Name: KCSWD
Company
Time: 1207

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By
Signature
Printed Name
Company
Date
Time

Received By: Jue Nguyen
Signature: Jue Nguyen
Printed Name: KCEL
Company
Date: 11/7/25
Time: 12:07

Observations/Comments/Special Instructions:
Arsenic Only

Total # of Containers: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v5.0 (Rev 6/2025)

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) L57288--										
	2										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples (1)	1										

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	(Y) / N		Volumes	Y / N	
Container	(Y) / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	4.1 13.8 / 5.9	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 11/5/25 Project No.: 421422

VTRP Collect Date(s): NA Project Site Test Reference: CHLS-P (25.2)

Receive Date: 11/7/25 COC / SDG No.: 19078

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____ Date / Time Completed: NOV 07 '25 12:17

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

Chain of Custody Record

Environmental Monitoring Program

Date: 11/5/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19176**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P(25)

Lab No.	Sample ID	Date	Time
87288-1	LEPS251104P	11/4/25	1500

| Project Site Test Reference | | |

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 87288 -1
40 mL clear vial (VOA)	
60 mL CWM HDPE	
125 mL CNM HDPE	
125 mL CWM HDPE	
125 mL GANM w/HCl	
250 mL CWM HDPE	
250 mL GAWM w/H_2SO_4	
500 mL AWM HDPE	
500 mL CWM HDPE	
500 mL CWM PP (MICRO)	
500 mL HDPE (METALS)	1
500 mL GAWM	
1L CWM HDPE	
1L GANM	
1L GAWM w/ H_2SO_4	
2L CWM HDPE:	
Other -	
Other -	
Other -	
Other -	
Other -	
Total # of Samples	1

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	1.9 B.L.R.I	Delivery Location	Y / N	

Sub-Contracting: Y / N List Product(s):

Changes: Y / N List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 11-4-25 Project No.: 421422

VTRP Collect Date(s): ____ Project Site Test Reference: CHLS-P(25)

Receive Date: 11-4-25 1535 COC / SDG No.: 19176

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ ____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: NOV 05 2025 15:46

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

November 20, 2025

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P)

Sample Id.	Sample Collect Date	COC
LEPS251112P	**11/12/2025**	**19172**

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 1 leachate permit sample collected November 12, 2025.

Sample Receiving Comments
No sample receiving anomalies were observed.

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

Metals QC Information

All calculable QC results for metals parameters were within laboratory control limits.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,



Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

Sample Data

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 11/20/2025
Report Group: CHLS-P_112025

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS251112P**
SDG / Lab Sample ID: **19172 / L87331-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **11/12/2025**
Login Date: **11/13/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, P-ICPMS, Metals

200.8, SWD-ICPMS23, Metals

245.1, HG-CVAA-M, Metals

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 11/20/2025
Report Group: CHLS-P_112025

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS251112P**
CoC / Lab Sample ID: **19172 / L87331-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **11/12/2025**
Login Date: **11/13/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Mercury, Total	2	mg/L	<.0001	U	.0001	.0002		11/13/2025	11/14/2025	WG203515
Aluminum, Total	10	mg/L	1.07		.049	.0978		11/14/2025	11/17/2025	WG203521
Antimony, Total	10	mg/L	.0073	T	.0029	.00978		11/14/2025	11/17/2025	WG203521
Arsenic, Total	10	mg/L	.0603		.00049	.00244	1	11/14/2025	11/17/2025	WG203521
Barium, Total	10	mg/L	.0752		.0049	.00489		11/14/2025	11/17/2025	WG203521
Beryllium, Total	10	mg/L	<.00098	U	.00098	.00489		11/14/2025	11/17/2025	WG203521
Cadmium, Total	10	mg/L	<.00049	U	.00049	.00244	0.5	11/14/2025	11/17/2025	WG203521
Calcium, Total	10	mg/L	49.8		.489	.489		11/14/2025	11/17/2025	WG203521
Chromium, Total	10	mg/L	.0763		.002	.00978	2.75	11/14/2025	11/17/2025	WG203521
Cobalt, Total	10	mg/L	.0163		.00049	.00244		11/14/2025	11/17/2025	WG203521
Copper, Total	10	mg/L	.0095	T	.002	.0196	3	11/14/2025	11/17/2025	WG203521
Iron, Total	10	mg/L	4.77		.098	.489		11/14/2025	11/17/2025	WG203521
Lead, Total	10	mg/L	.0013	T	.00098	.00489	2	11/14/2025	11/17/2025	WG203521
Magnesium, Total	10	mg/L	34.2		.489	.489		11/14/2025	11/17/2025	WG203521
Manganese, Total	10	mg/L	.361		.00098	.00489		11/14/2025	11/17/2025	WG203521
Nickel, Total	10	mg/L	.0675		.00098	.00489	2.5	11/14/2025	11/17/2025	WG203521
Phosphorus, Total	10	mg/L	3.66		.98	.978		11/14/2025	11/17/2025	WG203521
Potassium, Total	10	mg/L	246	D	.98	4.89		11/14/2025	11/18/2025	WG203521
Selenium, Total	10	mg/L	<.0049	U	.0049	.00978		11/14/2025	11/17/2025	WG203521
Silver, Total	10	mg/L	<.00039	U	.00039	.00196	1	11/14/2025	11/17/2025	WG203521
Sodium, Total	10	mg/L	670		.978	.978		11/14/2025	11/17/2025	WG203521
Thallium, Total	10	mg/L	<.00073	U	.00073	.00196		11/14/2025	11/17/2025	WG203521
Tin, Total	10	mg/L	.0066	T	.0049	.0147		11/14/2025	11/17/2025	WG203521
Vanadium, Total	10	mg/L	.0268	D	.00073	.00367		11/14/2025	11/18/2025	WG203521
Zinc, Total	10	mg/L	.161		.0049	.0244	5	11/14/2025	11/17/2025	WG203521

Target Parameter Count for Report Group: 25

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

Quality Control Data

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory QC Report

CHLS-P_112025 COC 19172

Workgroup: WG203515 Total Mercury by CVAA

MB:WG203515-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.05	0.1	ug/L		U

SB:WG203515-2 MB:WG203515-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	0.975	98		85--115

MSD:WG203515-4 MS:WG203515-3 L87347-2 Matrix: IW WTR Listtype:MTHG-MID Method:EPA 245.1 Project:421163 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	0.968	97		75--125	1	1.03	103		6		0--20

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory QC Report

CHLS-P_112025 COC 19172

Workgroup: WG203521 Total Metals by ICPMS

MB:WG203521-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.1	0.5	ug/L		U
Sodium, Total	100	100	ug/L		U
Magnesium, Total	50	50	ug/L		U
Aluminum, Total	5	10	ug/L		U
Phosphorus, Total	100	100	ug/L		U
Potassium, Total	100	500	ug/L		U
Calcium, Total	50	50	ug/L		U
Vanadium, Total	0.075	0.375	ug/L		U
Chromium, Total	0.2	1	ug/L		U
Manganese, Total	0.1	0.5	ug/L		U
Iron, Total	10	50	ug/L		U
Cobalt, Total	0.05	0.25	ug/L		U
Nickel, Total	0.1	0.5	ug/L		U
Copper, Total	0.2	2	ug/L		U
Zinc, Total	0.5	2.5	ug/L		U
Arsenic, Total	0.05	0.25	ug/L		U
Selenium, Total	0.5	1	ug/L		U
Silver, Total	0.04	0.2	ug/L		U
Cadmium, Total	0.05	0.25	ug/L		U
Tin, Total	0.5	1.5	ug/L		U
Antimony, Total	0.3	1	ug/L		U
Barium, Total	0.5	0.5	ug/L		U
Thallium, Total	0.075	0.2	ug/L		U
Lead, Total	0.1	0.5	ug/L		U

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory QC Report

CHLS-P_112025 COC 19172

SB:WG203521-2 MB:WG203521-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.1	0.5	ug/L	U	20	18.8	94		85--115
Sodium, Total	100	100	ug/L	U	5000	5270	105		85--115
Magnesium, Total	50	50	ug/L	U	5000	5160	103		85--115
Aluminum, Total	5	10	ug/L	U	200	187	94		85--115
Phosphorus, Total	100	100	ug/L	U	5000	4900	98		85--115
Potassium, Total	100	500	ug/L	U	5000	4810	96		85--115
Calcium, Total	50	50	ug/L	U	5000	4930	99		85--115
Vanadium, Total	0.075	0.375	ug/L	U	20	20.7	103		85--115
Chromium, Total	0.2	1	ug/L	U	20	19.4	97		85--115
Manganese, Total	0.1	0.5	ug/L	U	20	20.6	103		85--115
Iron, Total	10	50	ug/L	U	5000	5210	104		85--115
Cobalt, Total	0.05	0.25	ug/L	U	20	19.9	100		85--115
Nickel, Total	0.1	0.5	ug/L	U	20	20.5	102		85--115
Copper, Total	0.2	2	ug/L	U	20	20	100		85--115
Zinc, Total	0.5	2.5	ug/L	U	20	20.3	102		85--115
Arsenic, Total	0.05	0.25	ug/L	U	20	19.6	98		85--115
Selenium, Total	0.5	1	ug/L	U	20	19.5	97		85--115
Silver, Total	0.04	0.2	ug/L	U	20	19.7	98		85--115
Cadmium, Total	0.05	0.25	ug/L	U	20	19.8	99		85--115
Tin, Total	0.5	1.5	ug/L	U	20	18.1	91		85--115
Antimony, Total	0.3	1	ug/L	U	20	19.5	97		85--115
Barium, Total	0.5	0.5	ug/L	U	20	20.6	103		85--115
Thallium, Total	0.075	0.2	ug/L	U	20	20.2	101		85--115
Lead, Total	0.1	0.5	ug/L	U	20	20.4	102		85--115

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory QC Report

CHLS-P_112025 COC 19172

MSD:WG203521-4 MS:WG203521-3 L87331-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	0.99	4.93	ug/L	U	197	184	93		75--125	198	193	98		5		0--20
Sodium, Total	986	986	ug/L	670000	49300	695000		4xRule	75--125	49400	702000		4xRule	1		0--20
Magnesium, Total	493	493	ug/L	34200	49300	85100	103		75--125	49400	86500	106		2		0--20
Aluminum, Total	49	98.6	ug/L	1070	1970	2940	95		75--125	1980	2940	94		0		0--20
Phosphorus, Total	990	986	ug/L	3660	49300	52800	100		75--125	49400	52200	98		1		0--20
Potassium, Total	990	4930	ug/L	246000	49300	297000		4xRule	75--125	49400	292000		4xRule	2		0--20
Calcium, Total	493	493	ug/L	49800	49300	96100	94		75--125	49400	97300	96		1		0--20
Vanadium, Total	0.74	3.7	ug/L	26.8	197	227	102		75--125	198	231	103		1		0--20
Chromium, Total	2	9.86	ug/L	76.3	197	258	92		75--125	198	260	93		1		0--20
Manganese, Total	0.99	4.93	ug/L	361	197	555	99		75--125	198	556	99		0		0--20
Iron, Total	99	493	ug/L	4770	49300	54300	100		75--125	49400	54100	100		0		0--20
Cobalt, Total	0.49	2.47	ug/L	16.3	197	210	98		75--125	198	211	98		0		0--20
Nickel, Total	0.99	4.93	ug/L	67.5	197	259	97		75--125	198	263	99		2		0--20
Copper, Total	2	19.7	ug/L	9.5	197	205	99		75--125	198	202	97		2		0--20
Zinc, Total	4.9	24.7	ug/L	161	197	353	98		75--125	198	351	96		1		0--20
Arsenic, Total	0.49	2.47	ug/L	60.3	197	256	99		75--125	198	257	99		0		0--20
Selenium, Total	4.9	9.86	ug/L	U	197	202	102		75--125	198	203	103		1		0--20
Silver, Total	0.39	1.97	ug/L	U	197	181	92		75--125	198	182	92		0		0--20
Cadmium, Total	0.49	2.47	ug/L	U	197	189	96		75--125	198	190	96		1		0--20
Tin, Total	4.9	14.8	ug/L	6.6	197	162	79		75--125	198	167	81		3		0--20
Antimony, Total	3	9.86	ug/L	7.3	197	199	97		75--125	198	201	98		1		0--20
Barium, Total	4.9	4.93	ug/L	75.2	197	273	100		75--125	198	277	102		1		0--20
Thallium, Total	0.74	1.97	ug/L	U	197	184	94		75--125	198	193	97		4		0--20
Lead, Total	0.99	4.93	ug/L	1.3	197	195	98		75--125	198	196	98		0		0--20

==========

4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 11/13/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19172**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25)

Lab No.	Sample ID	Date	Time
87331-1	LEPS251112P	11/12/25	1700

Project Site Test Reference

GROUNDWATER											
CHGW Cedar Hills GW Qlty	CHGW Cedar Hills EP2 GW Qlty	CHGWVAGW Appendix III GW	CHGW-OS Cedar Hills GW Offsite	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	
2	2.1	4	38	5	6	7	8	9	10	12	

SURFACE/STORM WATER															
CHSW-Q Cedar Hills SW Sta. E-1	CFSW Cedar Falls SW Qlty	DUSW Duvall SW Qlty	VASW Vashon SW Qlty-WEIRS	ISGP: CHSW-P Cedar Hills SW	ISGP: CHSW-P Cedar Hills SW - Infiltration	ISGP: HTSW-P Houghton SW	ISGP: SHSW-P Shoreline SW	ISGP: SHSW-P Shoreline SW - Infiltration	ISGP: FASW-P Factoria SW	ISGP: ENSW-P Enumclaw SW - Infiltration	ISGP: ALSW-P Algona SW	ISGP: VASW-P Vashon SW	ISGP: RMSW-P Renton Maint. Facility SW	
14	17	18	21	16	16.1	52	53	53.1	54	56.1	57	58	60	

LEACHATE/WASTEWATER																
CHTW Cedar Hills Truckwash	CHLS-M Cedar Hills Leachate Mthly	CHLS-M_MOD Cedar Hills Leachate Mods Mthly	CH Leachate Mods Mthly	PRETREATMENT PERMITS: CHLS-P CH L Permit (wkly, 1st)	CH L Permit (monthly)	CH L Permit (wkly, 2nd)	ALLS-P Algona WW Permit	BLLS-P Bow Lake WW Permit	ENLS-P Enumclaw WW Permit	FALS-P Factoria WW Permit	SRLS-P Shoreline WW Permit	HTLS-P Houghton WW Permit	RELS-P Renton WW Permit	VALS-P Vashon WW Permit Tanker	VALS-Q Vashon Leachate Qlty	
24	23	23+	25	25.1	25.2	26	20	27	28	29	30	31	32	34		
		X														

Number of Containers	Remarks
1	Diss Sulfide PPM
	CO.1

	Relinquished By Sampler	Date	Received By	Date
	G. Wajda	11/13/25	Hannah Spear	11/13/25
Signature	G. Wajda		H. Spear	
Printed Name	KCSWD	Time 1320	KCSWD	Time 1320
Company				
Relinquished By	Hannah Spear	Date 11/13/25	Received By	Date 11-13-25
Signature	H. Spear		Jason Kinnard	
Printed Name	KCSWD	Time 1450	KCEL	Time 1450
Company				

Observations/Comments/Special Instructions:

- Collected with CHLS-M (23)

Total # of Containers: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v6.0 (Rev 10/2025)

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

SWD SAMPLE RECEIPT RECORD

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 87331 -1
40 mL clear vial (VOA)	
60 mL CWM HDPE	
125 mL CNM HDPE	
125 mL CWM HDPE	
125 mL GANM w/HCl	
250 mL CWM HDPE	
250 mL GAWM w/H_2SO_4	
500 mL AWM HDPE	
500 mL CWM HDPE	
500 mL CWM PP (MICRO)	
500 mL HDPE (METALS)	1
500 mL GAWM	
1L CWM HDPE	
1L GANM	
1L GAWM w/ H_2SO_4	
2L CWM HDPE:	
Other -	
Other -	
Other -	
Other -	
Other -	
Total # of Samples	1

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	1.4 1.3 1.3	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 11-12-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P(25)

Receive Date: 11-13-25 COC / SDG No.: 19172

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: NOV 13 '25 15:04

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

November 26, 2025

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P)

Sample Id.	Sample Collect Date	COC
LEPS251114P	**11/14/2025**	**19185**
LEPS251117P	**11/17/2025**	**18917**
LEPS251119P	**11/19/2025**	**18701**

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 3 leachate permit samples collected November 14, 17 and 19, 2025 and delivered to KCEL on November 18 and 20, 2025.

Sample Receiving Comments
No sample receiving anomalies were observed.

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

Conventionals QC Information
All calculable QC results for conventionals parameters were within laboratory control limits with the following exception.

During **Nitrate+Nitrite Nitrogen** analysis of sample LEPS251117P, the background color of the sample interfered with the determination of nitrate+nitrite nitrogen. Sample LEPS251117P was diluted to mitigate the color interference. At the reported dilution, any nitrate+nitrite nitrogen that may have been present in sample LEPS251117P was diluted to less than the DL.

Metals QC Information
All calculable QC results for metals parameters were within laboratory control limits.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,



Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

Sample Data

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 11/26/2025
Report Group: CHLS-P_112425

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS251119P**
SDG / Lab Sample ID: **18701 / L87404-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**
Collect Date: **11/19/2025**
Login Date: **11/20/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, AS-ICPMS, Metals

Client Sample ID: **LEPS251117P**
SDG / Lab Sample ID: **18917 / L87376-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**
Collect Date: **11/17/2025**
Login Date: **11/18/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, P-ICPMS, Metals

200.8, SWD-ICPMS23, Metals

245.1, HG-CVAA-M, Metals

4500-NO3-F NO23 Nitrite + Nitrate Nitrogen

Kerouel & Aminot 1997 NH3 Ammonia Nitrogen

Client Sample ID: **LEPS251114P**
SDG / Lab Sample ID: **19185 / L87334-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**
Collect Date: **11/14/2025**
Login Date: **11/18/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, AS-ICPMS, Metals

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 11/26/2025
Report Group: CHLS-P_112425

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS251119P**
CoC / Lab Sample ID: **18701 / L87404-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **11/19/2025**
Login Date: **11/20/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.0399		.00051	.00253	1	11/21/2025	11/24/2025	WG203662

Client Sample ID: **LEPS251117P**
CoC / Lab Sample ID: **18917 / L87376-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **11/17/2025**
Login Date: **11/18/2025**
Matrix: **LEACHATE**

Conventionals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Ammonia	50	mg/L	393		25	50		11/24/2025	11/24/2025	WG203704
Nitrate + Nitrite as N	5	mg/L	<.05	U	.05	.2		11/24/2025	11/24/2025	WG203705

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Aluminum, Total	10	mg/L	1.36		.05	.101		11/19/2025	11/20/2025	WG203614
Antimony, Total	10	mg/L	.0055	T	.003	.0101		11/19/2025	11/20/2025	WG203614
Arsenic, Total	10	mg/L	.0435		.0005	.00252	1	11/19/2025	11/20/2025	WG203614
Barium, Total	10	mg/L	.0713		.005	.00505		11/19/2025	11/20/2025	WG203614
Beryllium, Total	10	mg/L	<.001	U	.001	.00505		11/19/2025	11/20/2025	WG203614
Cadmium, Total	10	mg/L	<.0005	U	.0005	.00252	0.5	11/19/2025	11/20/2025	WG203614
Calcium, Total	10	mg/L	47.6		.505	.505		11/19/2025	11/20/2025	WG203614
Chromium, Total	10	mg/L	.0557		.002	.0101	2.75	11/19/2025	11/20/2025	WG203614
Cobalt, Total	10	mg/L	.0122		.0005	.00252		11/19/2025	11/20/2025	WG203614
Copper, Total	10	mg/L	.0097	T	.002	.0202	3	11/19/2025	11/20/2025	WG203614
Iron, Total	10	mg/L	4.61		.1	.505		11/19/2025	11/20/2025	WG203614
Lead, Total	10	mg/L	.0012	T	.001	.00505	2	11/19/2025	11/20/2025	WG203614
Magnesium, Total	10	mg/L	28.9		.505	.505		11/19/2025	11/20/2025	WG203614
Manganese, Total	10	mg/L	.397		.001	.00505		11/19/2025	11/20/2025	WG203614
Nickel, Total	10	mg/L	.0477		.001	.00505	2.5	11/19/2025	11/20/2025	WG203614
Phosphorus, Total	10	mg/L	2.7		1	1.01		11/19/2025	11/20/2025	WG203614
Potassium, Total	10	mg/L	165		1	5.05		11/19/2025	11/20/2025	WG203614
Selenium, Total	10	mg/L	<.005	U	.005	.0101		11/19/2025	11/20/2025	WG203614
Silver, Total	10	mg/L	<.0004	U	.0004	.00202	1	11/19/2025	11/20/2025	WG203614
Sodium, Total	10	mg/L	443		1.01	1.01		11/19/2025	11/20/2025	WG203614
Thallium, Total	10	mg/L	<.00076	U	.00076	.00202		11/19/2025	11/20/2025	WG203614
Tin, Total	10	mg/L	.0056	T	.005	.0151		11/19/2025	11/20/2025	WG203614
Vanadium, Total	10	mg/L	.0186	D	.00076	.00379		11/19/2025	11/20/2025	WG203614
Zinc, Total	10	mg/L	.14		.005	.0252	5	11/19/2025	11/20/2025	WG203614
Mercury, Total	2	mg/L	<.0001	U	.0001	.0002		11/19/2025	11/21/2025	WG203632

Client Sample ID: **LEPS251114P**
CoC / Lab Sample ID: **19185 / L87334-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **11/14/2025**
Login Date: **11/18/2025**
Matrix: **LEACHATE**

Metals

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

Client Sample ID: **LEPS251114P**
CoC / Lab Sample ID: **19185 / L87334-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **11/14/2025**
Login Date: **11/18/2025**
Matrix: **LEACHATE**

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	**10**	**mg/L**	**.0537**		**.0005**	**.0025**	**1**	**11/19/2025**	**11/20/2025**	**WG203614**

Target Parameter Count for Report Group: 29

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

Quality Control Data

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory QC Report

CHLS-P_112425 COC 18701, 18917 19185

Workgroup: WG203704 Dissolved Nutrients

MB:WG203704-1 Matrix: BLANK WTR Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Ammonia Nitrogen	0.5	1	mg/L		U

SB:WG203704-3 MB:WG203704-1 Matrix: BLANK WTR Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.5	1	mg/L	U	10	10.5	105		80--120

LCS:WG203704-4 Matrix: BLANK WTR Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.5	1	mg/L	10	9.6	96		85--115

LD:WG203704-5 L87329-1 Matrix: LEACHATE Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project:421422-CHLS-M_MOD Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Ammonia Nitrogen	0.5	1	mg/L	5.46	5.5	1		0--20

MS:WG203704-6 L87329-1 Matrix: LEACHATE Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project:421422-CHLS-M_MOD Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.5	1	mg/L	5.46	10	15.5	100		75--125

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory QC Report

CHLS-P_112425 COC 18701, 18917 19185

Workgroup: WG203705 Dissolved Nutrients

MB:WG203705-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Ammonia Nitrogen	0.002	0.01	mg/L		U

MB:WG203705-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L		U

SB:WG203705-3 MB:WG203705-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.002	0.01	mg/L	U	0.04	0.0462	116		80--120

SB:WG203705-3 MB:WG203705-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	U	1	1.01	101		80--120

LCS:WG203705-4 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0491	98		85--115

LCS:WG203705-4 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	1	1.01	101		85--115

LD:WG203705-5 L87330-1 Matrix: GRND WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421422-VAGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Ammonia Nitrogen	0.02	0.1	mg/L	0.262	0.282	7		0--20

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory QC Report

CHLS-P_112425 COC 18701, 18917 19185

MS:WG203705-6 L87330-1 Matrix: GRND WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421422-VAGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.02	0.1	mg/L	0.262	0.04	0.725	116		75--125

LD:WG203705-7 L87376-1 Matrix: LEACHATE Listtype:CVNO23 Method:SM4500-NO3-F Project:421422-CHLS-P Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.05	0.2	mg/L	U	U			0--20

MS:WG203705-8 L87376-1 Matrix: LEACHATE Listtype:CVNO23 Method:SM4500-NO3-F Project:421422-CHLS-P Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.05	0.2	mg/L	U	1	5.21	104		75--125

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory QC Report

Workgroup: WG203614 Total Metals by ICPMS

MB:WG203614-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.1	0.5	ug/L		U
Sodium, Total	100	100	ug/L		U
Magnesium, Total	50	50	ug/L		U
Aluminum, Total	5	10	ug/L		U
Phosphorus, Total	100	100	ug/L		U
Potassium, Total	100	500	ug/L		U
Calcium, Total	50	50	ug/L		U
Vanadium, Total	0.075	0.375	ug/L		U
Chromium, Total	0.2	1	ug/L		U
Manganese, Total	0.1	0.5	ug/L		U
Iron, Total	10	50	ug/L		U
Cobalt, Total	0.05	0.25	ug/L		U
Nickel, Total	0.1	0.5	ug/L		U
Copper, Total	0.2	2	ug/L		U
Zinc, Total	0.5	2.5	ug/L		U
Arsenic, Total	0.05	0.25	ug/L		U
Selenium, Total	0.5	1	ug/L		U
Silver, Total	0.04	0.2	ug/L		U
Cadmium, Total	0.05	0.25	ug/L		U
Tin, Total	0.5	1.5	ug/L		U
Antimony, Total	0.3	1	ug/L		U
Barium, Total	0.5	0.5	ug/L		U
Thallium, Total	0.075	0.2	ug/L		U
Lead, Total	0.1	0.5	ug/L		U

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory QC Report

CHLS-P_112425 COC 18701, 18917 19185

SB:WG203614-2 MB:WG203614-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.1	0.5	ug/L	U	20	19.2	96		85--115
Sodium, Total	100	100	ug/L	U	5000	4890	98		85--115
Magnesium, Total	50	50	ug/L	U	5000	4810	96		85--115
Aluminum, Total	5	10	ug/L	U	200	187	93		85--115
Phosphorus, Total	100	100	ug/L	U	5000	4630	93		85--115
Potassium, Total	100	500	ug/L	U	5000	4830	97		85--115
Calcium, Total	50	50	ug/L	U	5000	4700	94		85--115
Vanadium, Total	0.075	0.375	ug/L	U	20	20.3	102		85--115
Chromium, Total	0.2	1	ug/L	U	20	20.2	101		85--115
Manganese, Total	0.1	0.5	ug/L	U	20	20	100		85--115
Iron, Total	10	50	ug/L	U	5000	4990	100		85--115
Cobalt, Total	0.05	0.25	ug/L	U	20	20.8	104		85--115
Nickel, Total	0.1	0.5	ug/L	U	20	20.7	104		85--115
Copper, Total	0.2	2	ug/L	U	20	21.6	108		85--115
Zinc, Total	0.5	2.5	ug/L	U	20	20.5	103		85--115
Arsenic, Total	0.05	0.25	ug/L	U	20	20	100		85--115
Selenium, Total	0.5	1	ug/L	U	20	19.8	99		85--115
Silver, Total	0.04	0.2	ug/L	U	20	19.9	99		85--115
Cadmium, Total	0.05	0.25	ug/L	U	20	19.6	98		85--115
Tin, Total	0.5	1.5	ug/L	U	20	19.8	99		85--115
Antimony, Total	0.3	1	ug/L	U	20	19.6	98		85--115
Barium, Total	0.5	0.5	ug/L	U	20	20.9	105		85--115
Thallium, Total	0.075	0.2	ug/L	U	20	20.8	104		85--115
Lead, Total	0.1	0.5	ug/L	U	20	21.5	108		85--115

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory QC Report

CHLS-P_112425 COC 18701, 18917 19185

MSD:WG203614-4 MS:WG203614-3 L87376-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	1	5.01	ug/L	U	200	197	98		75--125	201	200	100		2		0--20
Sodium, Total	1000	1000	ug/L	443000	50100	500000		4xRule	75--125	50100	507000		4xRule	1		0--20
Magnesium, Total	501	501	ug/L	28900	50100	79300	101		75--125	50100	81800	106		3		0--20
Aluminum, Total	50	100	ug/L	1360	2000	3390	101		75--125	2010	3410	103		1		0--20
Phosphorus, Total	1000	1000	ug/L	2700	50100	53300	101		75--125	50100	54200	103		2		0--20
Potassium, Total	1000	5010	ug/L	165000	50100	217000	104		75--125	50100	224000	117		3		0--20
Calcium, Total	501	501	ug/L	47600	50100	99100	103		75--125	50100	101000	106		2		0--20
Vanadium, Total	0.75	3.76	ug/L	18.6	200	223	102		75--125	201	218	100		2		0--20
Chromium, Total	2	10	ug/L	55.7	200	261	103		75--125	201	263	103		1		0--20
Manganese, Total	1	5.01	ug/L	397	200	613	108		75--125	201	604	103		2		0--20
Iron, Total	100	501	ug/L	4610	50100	53500	98		75--125	50100	54900	100		3		0--20
Cobalt, Total	0.5	2.5	ug/L	12.2	200	214	101		75--125	201	217	102		1		0--20
Nickel, Total	1	5.01	ug/L	47.7	200	253	102		75--125	201	256	104		1		0--20
Copper, Total	2	20	ug/L	9.7	200	221	105		75--125	201	223	107		1		0--20
Zinc, Total	5	25	ug/L	140	200	344	102		75--125	201	342	101		1		0--20
Arsenic, Total	0.5	2.5	ug/L	43.5	200	245	100		75--125	201	246	101		1		0--20
Selenium, Total	5	10	ug/L	U	200	201	100		75--125	201	203	101		1		0--20
Silver, Total	0.4	2	ug/L	U	200	190	95		75--125	201	194	97		2		0--20
Cadmium, Total	0.5	2.5	ug/L	U	200	191	95		75--125	201	193	96		1		0--20
Tin, Total	5	15	ug/L	5.6	200	191	92		75--125	201	187	91		2		0--20
Antimony, Total	3	10	ug/L	5.5	200	203	99		75--125	201	201	97		1		0--20
Barium, Total	5	5.01	ug/L	71.3	200	278	103		75--125	201	276	102		1		0--20
Thallium, Total	0.75	2	ug/L	U	200	199	99		75--125	201	199	99		0		0--20
Lead, Total	1	5.01	ug/L	1.2	200	205	102		75--125	201	201	99		2		0--20

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory QC Report

CHLS-P_112425 COC 18701, 18917 19185

Workgroup: WG203632 Total Mercury by CVAA

MB:WG203632-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.05	0.1	ug/L		U

SB:WG203632-2 MB:WG203632-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	0.938	94		85--115

MSD:WG203632-4 MS:WG203632-3 L87376-1 Matrix: LEACHATE Listtype:MTHG-MID Method:EPA 245.1 Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.1	0.2	ug/L	U	2	1.75	88		75--125	2	1.89	94		7		0--20

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory QC Report

CHLS-P_112425 COC 18701, 18917 19185

Workgroup: WG203662 Total Metals by ICPMS

MB:WG203662-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total	0.05	0.25	ug/L		U

SB:WG203662-2 MB:WG203662-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Arsenic, Total	0.05	0.25	ug/L	U	20	19.6	98		85--115

MSD:WG203662-4 MS:WG203662-3 L87404-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Arsenic, Total	0.5	2.5	ug/L	39.9	200	245	102		75--125	199	237	99		3		0--20

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4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 11/20/25

Department of Natural Resources and Parks
Solid Waste Division

No. **18701**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P(25.2)

Lab No.	Sample ID	Date	Time
87404-1	LEPS251119P	11/14/25	1700

Project Site Test Reference

| | | |

SWD SAMPLE RECEIPT RECORD

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 87404
	1
40 mL clear vial (VOA)	
60 mL CWM HDPE	
125 mL CNM HDPE	
125 mL CWM HDPE	
125 mL GANM w/HCl	
250 mL CWM HDPE	
250 mL GAWM w/H_2SO_4	
500 mL AWM HDPE	
500 mL CWM HDPE	
500 mL CWM PP (MICRO)	
500 mL HDPE (METALS)	1
500 mL GAWM	
1L CWM HDPE	
1L GANM	
1L GAWM w/ H_2SO_4	
2L CWM HDPE:	
Other -	
Other -	
Other -	
Other -	
Other -	
Total # of Samples 1	1
	Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	1 / /	Delivery Location	Y / N	

Sub-Contracting: Y / N List Product(s):

Changes: Y / N List Parameter(s):

COMMENTS / NOTIFICATIONS

1) Samples arrived in coolers full of ice and

Sample Collect Date(s): 11/19/25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P#25.2

Receive Date: 11/20/25 COC / SDG No.: 19701

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____ Date / Time Completed: _____

Chain of Custody Record

Environmental Monitoring Program

Date: 11/18/25

Department of Natural Resources and Parks
Solid Waste Division

No. **18917**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25.1)

Lab No.	Sample ID	Date	Time	2	2.1	4	38	5	6	7	8	9	10	12	14	16	42	49.1	17	18	21	52	53	54	56	57	58	24	23	23+	23.1	25	25.1	25.2	26	20	27	28	29	30	31	32	34	Number of Bottles	Remarks
873760-1	LEPS251117P	11/17/25	1700																														X										2	<0.1 DISS SULFIDE

GROUNDWATER: CHGW Cedar Hills GW Qlty; CHGW Cedar Hills EPZ GW Qlty; CHGWV/AGW Appendix III GW; CHGW-OS Cedar Hills GW Offsite; 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 Sta. E-1; CHSW-P Cedar Hills SW ISGP; CHSW-TD Cedar Hills SW Top Deck; CHSW-E CH Emergency; CFSW Cedar Falls SW Qlty; DUSW Duvall SW Qlty; VASW Vashon SW Qlty-WEIRS

TS: HTSW-P Houghton SW NPDES; SHSW-P Shoreline SW NPDES; FASW-P Factoria SW NPDES; ENSW-P Enumclaw SW NPDES; ALSW-P Algona SW NPDES; VASW-P Vashon SW NPDES

LEACHATE/WASTEWATER: CHTW Cedar Hills Truckwash; CHLS-M Cedar Hills Leachate Mby; CHLS-M_MOD CH Leachate Mods Mby; CHLS-M_As CH Leachate As Semi-Ann.

PERMIT: CHLS-P CH L Permit (wkly, 1st); CHLS-P CH L Permit (mnthly); CHLS-P CH L Permit (wkly, 2nd); ALLS Algona WW Permit; BLLS Bow Lake WW Permit; ENLS Enumclaw WW Permit; FALS Factoria WW Permit; SRLS Shoreline WW Permit; HTLS Houghton WW Permit; RELS Renton WW Permit; VALS-P Vashon WW Permit Tanker; VALS-Q Vashon Leachate Qlty

Relinquished By Sampler	Date	Received By	Date
J. Patten	11/18/25	Monique Reese	11/18/25
Sampler Signature		Signature	
Sampler Printed Name: KCSWD	Time: 1300 *	Printed Name: KCEL	Time: 1300 1420 1500
Company		Company	
Relinquished By	Date	Received By	Date
Signature		Signature	
Printed Name	Time	Printed Name	Time
Company		Company	

Observations/Comments/Special Instructions:
* Custody sealed 11/18/25 @ 1300

Total # of Bottles: 2

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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. Receiving lab is to retain the original and create a copy for KCSWD personnel to keep.

FFB - Field Filtration Blank
FQ - Field QC

v4.00 (Rev 12/2023)

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

SWD SAMPLE RECEIPT RECORD

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 873760
40 mL clear vial (VOA)	
60 mL CWM HDPE	
125 mL CNM HDPE	
125 mL CWM HDPE	
125 mL GANM w/HCl	
250 mL CWM HDPE	1
250 mL GAWM w/H_2SO_4	
500 mL AWM HDPE	
500 mL CWM HDPE	
500 mL CWM PP (MICRO)	
500 mL HDPE (METALS)	1
500 mL GAWM	
1L CWM HDPE	
1L GANM	
1L GAWM w/ H_2SO_4	
2L CWM HDPE:	
Other -	
Other -	
Other -	
Other -	
Other -	
Total # of Samples 2	2

Number of bottles per sample

Sample Collect Date(s): 11/17/25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P(25.1)

Receive Date: 11/18/25 COC / SDG No.: 18917

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	Y / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☑ Preserve & deliver	NA	NA
Other:			

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N (1) / /		Delivery Location	Y / N	

Sub-Contracting: Y (N) List Product(s):

Changes: Y / (N) List Parameter(s):

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

COMMENTS / NOTIFICATIONS

(1) 2 samples arrived in coolers w/ice. wa

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: NOV 18 '25 17:07

Chain of Custody Record

Environmental Monitoring Program

Date: 11/15/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19185**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25.2)

Lab No.	Sample ID	Date	Time	2	2.1	4	38	5	6	7	8	9	10	12	14	17	18	21	16	16.1	52	53	53.1	54	56.1	57	58	60	24	23	23+	25	25.1	25.2	26	20	27	28	29	30	31	32	34	Number of Containers	Remarks
87334-1	LEPS251114P	11/14/25	1700																														X										1	

GROUNDWATER | SURFACE/STORM WATER | LEACHATE/WASTEWATER

Project Site Test Reference

CHGW	Cedar Hills GW Qlty
CHGW	Cedar Hills EPZ GW Qlty
CHGW/VAGW	Appendix III GW
CHGW-OS	Cedar Hills GW Offsite
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
CHSW-Q	Cedar Hills SW Sta. E-1
CFSW	Cedar Falls SW Qlty
DUSW	Duvall SW Qlty
VASW	Vashon SW Qlty-WEIRS

ISGP

CHSW-P	Cedar Hills SW
CHSW-P	Cedar Hills SW - Infiltration
HTSW-P	Houghton SW
SHSW-P	Shoreline SW
SHSW-P	Shoreline SW - Infiltration
FASW-P	Factoria SW
ENSW-P	Enumclaw SW - Infiltration
ALSW-P	Algona SW
VASW-P	Vashon SW
RMSW-P	Renton Maint. Facility SW

CHTW	Cedar Hills Truckwash
CHLS-M	Cedar Hills Leachate Mtly
CHLS-M_MOD	CH Leachate Mods Mtly

PRETREATMENT PERMITS

CHLS-P	CH L Permit (wkly, 1st)
CHLS-P	CH L Permit (mnthly)
CHLS-P	CH L Permit (wkly, 2nd)
ALLS-P	Algona WW Permit
BLLS-P	Bow Lake WW Permit
ENLS-P	Enumclaw WW Permit
FALS-P	Factoria WW Permit
SRLS-P	Shoreline WW Permit
HTLS-P	Houghton WW Permit
RELS-P	Renton WW Permit
VALS-P	Vashon WW Permit Tanker
VALS-Q	Vashon Leachate Qlty

Relinquished By Sampler	Date	Received By	Date
E. Wajda	11/15/25	Monique Reese	11/18/25
Sampler Signature		Signature	
Sampler Printed Name: KCSWD	Time: 1135	Printed Name: KCEL	Time: 1430
Company		Company	
Relinquished By	Date	Received By	Date
Signature		Signature	
Printed Name	Time	Printed Name	Time
Company		Company	

Observations/Comments/Special Instructions:
- Arsenic Only
- Custody Sealed on 11/15/25 at 1135

Total # of Containers: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v6.0 (Rev 10/2025)

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 873314 -1
40 mL clear vial (VOA)	
60 mL CWM HDPE	
125 mL CNM HDPE	
125 mL CWM HDPE	
125 mL GANM w/HCl	
250 mL CWM HDPE	
250 mL GAWM w/H_2SO_4	
500 mL AWM HDPE	
500 mL CWM HDPE	
500 mL CWM PP (MICRO)	
500 mL HDPE (METALS)	1
500 mL GAWM	
1L CWM HDPE	
1L GANM	
1L GAWM w/ H_2SO_4	
2L CWM HDPE:	
Other -	
Other -	
Other -	
Other -	
Other -	
Total # of Samples	1

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	1 / /	Delivery Location	Y / N	

Sub-Contracting: Y / N List Product(s):

Changes: Y / N List Parameter(s):

COMMENTS / NOTIFICATIONS

1) Samples arrived in coolers on ice. WP

Sample Collect Date(s): 11/14/25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P (25.2)

Receive Date: COC / SDG No.:

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____ Date / Time Completed: NOV 18 '25 15:57

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

December 5, 2025

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P)

Sample Id.	Sample Collect Date	COC
LEPS251124P	**11/24/2025**	**19206**
LEPS251126P	**11/26/2025**	**19198**

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 2 leachate permit samples collected November 24 and 26, 2025.

Sample Receiving Comments
No sample receiving anomalies were observed.

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

Metals QC Information

All calculable QC results for metals parameters were within laboratory control limits.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,



Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

Sample Data

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 12/05/2025
Report Group: CHLS-P_120225

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS251126P**
SDG / Lab Sample ID: **19198 / L87422-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **11/26/2025**
Login Date: **11/26/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, AS-ICPMS, Metals

Client Sample ID: **LEPS251124P**
SDG / Lab Sample ID: **19206 / L87422-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **11/24/2025**
Login Date: **11/25/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, P-ICPMS, Metals

200.8, SWD-ICPMS23, Metals

245.1, HG-CVAA-M, Metals

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 12/05/2025
Report Group: CHLS-P_120225

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS251126P**
CoC / Lab Sample ID: **19198 / L87422-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **11/26/2025**
Login Date: **11/26/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.0407		.0005	.0025	1	12/01/2025	12/01/2025	WG203747

Client Sample ID: **LEPS251124P**
CoC / Lab Sample ID: **19206 / L87422-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **11/24/2025**
Login Date: **11/25/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Aluminum, Total	10	mg/L	.856		.05	.1		11/26/2025	12/01/2025	WG203732
Antimony, Total	10	mg/L	.005	T	.003	.01		11/26/2025	12/01/2025	WG203732
Arsenic, Total	10	mg/L	.0408		.0005	.00251	1	11/26/2025	12/01/2025	WG203732
Barium, Total	10	mg/L	.0697		.005	.00502		11/26/2025	12/01/2025	WG203732
Beryllium, Total	10	mg/L	<.001	U	.001	.00502		11/26/2025	12/01/2025	WG203732
Cadmium, Total	10	mg/L	<.0005	U	.0005	.00251	0.5	11/26/2025	12/01/2025	WG203732
Calcium, Total	10	mg/L	51.8		.502	.502		11/26/2025	12/01/2025	WG203732
Chromium, Total	10	mg/L	.0553		.002	.01	2.75	11/26/2025	12/01/2025	WG203732
Cobalt, Total	10	mg/L	.0117		.0005	.00251		11/26/2025	12/01/2025	WG203732
Copper, Total	10	mg/L	.008	T	.002	.0201	3	11/26/2025	12/01/2025	WG203732
Iron, Total	10	mg/L	4.34		.1	.502		11/26/2025	12/01/2025	WG203732
Lead, Total	10	mg/L	<.001	U	.001	.00502	2	11/26/2025	12/01/2025	WG203732
Magnesium, Total	10	mg/L	29.9		.502	.502		11/26/2025	12/01/2025	WG203732
Manganese, Total	10	mg/L	.436		.001	.00502		11/26/2025	12/01/2025	WG203732
Nickel, Total	10	mg/L	.0472		.001	.00502	2.5	11/26/2025	12/01/2025	WG203732
Phosphorus, Total	10	mg/L	2.47		1	1		11/26/2025	12/01/2025	WG203732
Potassium, Total	10	mg/L	165		1	5.02		11/26/2025	12/01/2025	WG203732
Selenium, Total	10	mg/L	<.005	U	.005	.01		11/26/2025	12/01/2025	WG203732
Silver, Total	10	mg/L	<.0004	U	.0004	.00201	1	11/26/2025	12/01/2025	WG203732
Sodium, Total	10	mg/L	440		1	1		11/26/2025	12/01/2025	WG203732
Thallium, Total	10	mg/L	<.00075	U	.00075	.00201		11/26/2025	12/01/2025	WG203732
Tin, Total	10	mg/L	<.005	U	.005	.0151		11/26/2025	12/01/2025	WG203732
Vanadium, Total	10	mg/L	.0172		.00075	.00376		11/26/2025	12/01/2025	WG203732
Zinc, Total	10	mg/L	.135		.005	.0251	5	11/26/2025	12/01/2025	WG203732
Mercury, Total	2	mg/L	<.0001	U	.0001	.0002		12/01/2025	12/02/2025	WG203774

Target Parameter Count for Report Group: 26

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

Quality Control Data

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory QC Report

CHLS-P_120225 COC 19198 19206

Workgroup: WG203732 Total Metals by ICPMS

MB:WG203732-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.1	0.5	ug/L		U
Sodium, Total	100	100	ug/L		U
Magnesium, Total	50	50	ug/L		U
Aluminum, Total	5	10	ug/L		U
Phosphorus, Total	100	100	ug/L		U
Potassium, Total	100	500	ug/L		U
Calcium, Total	50	50	ug/L		U
Vanadium, Total	0.075	0.375	ug/L		U
Chromium, Total	0.2	1	ug/L		U
Manganese, Total	0.1	0.5	ug/L		U
Iron, Total	10	50	ug/L		U
Cobalt, Total	0.05	0.25	ug/L		U
Nickel, Total	0.1	0.5	ug/L		U
Copper, Total	0.2	2	ug/L		U
Zinc, Total	0.5	2.5	ug/L		U
Arsenic, Total	0.05	0.25	ug/L		U
Selenium, Total	0.5	1	ug/L		U
Silver, Total	0.04	0.2	ug/L		U
Cadmium, Total	0.05	0.25	ug/L		U
Tin, Total	0.5	1.5	ug/L		U
Antimony, Total	0.3	1	ug/L		U
Barium, Total	0.5	0.5	ug/L		U
Thallium, Total	0.075	0.2	ug/L		U
Lead, Total	0.1	0.5	ug/L		U

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory QC Report

CHLS-P_120225 COC 19198 19206

SB:WG203732-2 MB:WG203732-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.1	0.5	ug/L	U	20	20.1	100		85--115
Sodium, Total	100	100	ug/L	U	5000	5270	105		85--115
Magnesium, Total	50	50	ug/L	U	5000	5150	103		85--115
Aluminum, Total	5	10	ug/L	U	200	202	101		85--115
Phosphorus, Total	100	100	ug/L	U	5000	4990	100		85--115
Potassium, Total	100	500	ug/L	U	5000	5210	104		85--115
Calcium, Total	50	50	ug/L	U	5000	5000	100		85--115
Vanadium, Total	0.075	0.375	ug/L	U	20	20	100		85--115
Chromium, Total	0.2	1	ug/L	U	20	21.5	108		85--115
Manganese, Total	0.1	0.5	ug/L	U	20	21.2	106		85--115
Iron, Total	10	50	ug/L	U	5000	5210	104		85--115
Cobalt, Total	0.05	0.25	ug/L	U	20	21.2	106		85--115
Nickel, Total	0.1	0.5	ug/L	U	20	21.7	108		85--115
Copper, Total	0.2	2	ug/L	U	20	22.1	111		85--115
Zinc, Total	0.5	2.5	ug/L	U	20	21.2	106		85--115
Arsenic, Total	0.05	0.25	ug/L	U	20	20.3	102		85--115
Selenium, Total	0.5	1	ug/L	U	20	20.4	102		85--115
Silver, Total	0.04	0.2	ug/L	U	20	20.6	103		85--115
Cadmium, Total	0.05	0.25	ug/L	U	20	20.1	100		85--115
Tin, Total	0.5	1.5	ug/L	U	20	19.6	98		85--115
Antimony, Total	0.3	1	ug/L	U	20	19.9	100		85--115
Barium, Total	0.5	0.5	ug/L	U	20	20.5	103		85--115
Thallium, Total	0.075	0.2	ug/L	U	20	20.8	104		85--115
Lead, Total	0.1	0.5	ug/L	U	20	20.9	105		85--115

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory QC Report

CHLS-P_120225 COC 19198 19206

MSD:WG203732-4 MS:WG203732-3 L87422-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	1	4.98	ug/L	U	199	203	102		75--125	200	204	102		1		0--20
Sodium, Total	996	996	ug/L	440000	49800	480000		4xRule	75--125	50000	483000		4xRule	1		0--20
Magnesium, Total	498	498	ug/L	29900	49800	80200	101		75--125	50000	80800	102		1		0--20
Aluminum, Total	50	99.6	ug/L	856	1990	3090	112		75--125	2000	3080	111		0		0--20
Phosphorus, Total	1000	996	ug/L	2470	49800	53500	102		75--125	50000	54200	103		1		0--20
Potassium, Total	1000	4980	ug/L	165000	49800	215000	100		75--125	50000	215000	100		0		0--20
Calcium, Total	498	498	ug/L	51800	49800	102000	101		75--125	50000	102000	101		1		0--20
Vanadium, Total	0.75	3.74	ug/L	17.2	199	213	98		75--125	200	216	99		1		0--20
Chromium, Total	2	9.96	ug/L	55.3	199	264	105		75--125	200	264	104		0		0--20
Manganese, Total	1	4.98	ug/L	436	199	640	102		75--125	200	635	99		1		0--20
Iron, Total	100	498	ug/L	4340	49800	55700	103		75--125	50000	55000	101		1		0--20
Cobalt, Total	0.5	2.49	ug/L	11.7	199	222	106		75--125	200	223	106		0		0--20
Nickel, Total	1	4.98	ug/L	47.2	199	260	107		75--125	200	263	108		1		0--20
Copper, Total	2	19.9	ug/L	8	199	228	110		75--125	200	229	110		0		0--20
Zinc, Total	5	24.9	ug/L	135	199	347	107		75--125	200	344	105		1		0--20
Arsenic, Total	0.5	2.49	ug/L	40.8	199	245	103		75--125	200	245	102		0		0--20
Selenium, Total	5	9.96	ug/L	U	199	208	104		75--125	200	209	104		0		0--20
Silver, Total	0.4	1.99	ug/L	U	199	204	103		75--125	200	199	99		3		0--20
Cadmium, Total	0.5	2.49	ug/L	U	199	201	101		75--125	200	196	98		2		0--20
Tin, Total	5	14.9	ug/L	U	199	176	88		75--125	200	171	86		3		0--20
Antimony, Total	3	9.96	ug/L	5	199	210	103		75--125	200	207	101		2		0--20
Barium, Total	5	4.98	ug/L	69.7	199	276	104		75--125	200	284	107		3		0--20
Thallium, Total	0.75	1.99	ug/L	U	199	202	102		75--125	200	200	100		1		0--20
Lead, Total	1	4.98	ug/L	U	199	205	103		75--125	200	208	104		1		0--20

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory QC Report

CHLS-P_120225 COC 19198 19206

Workgroup: WG203747 Total Metals by ICPMS

MB:WG203747-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total	0.05	0.25	ug/L		U

SB:WG203747-2 MB:WG203747-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Arsenic, Total	0.05	0.25	ug/L	U	20	20.1	100		85--115

MSD:WG203747-4 MS:WG203747-3 L87422-2 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Arsenic, Total	0.5	2.51	ug/L	40.7	201	244	101		75--125	201	247	103		1		0--20

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

King County Environmental Laboratory QC Report

CHLS-P_120225 COC 19198 19206

Workgroup: WG203774 Total Mercury by CVAA

MB:WG203774-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.05	0.1	ug/L		U

SB:WG203774-2 MB:WG203774-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	1.04	104		85--115

MSD:WG203774-4 MS:WG203774-3 L87451-6 Matrix: IW WTR Listtype:MTHG-MID Method:EPA 245.1 Project:421163 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	1.03	103		75--125	1	1.05	105		2		0--20

==========

4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 11/25/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19206**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P(25)

Lab No.	Sample ID	Date	Time
87422-1	LEPS251124P	11/24/25	1700

Project Site Test Reference

GROUNDWATER: CHGW Cedar Hills GW Qlty (2); CHGW Cedar Hills EPZ GW Qlty (2.1); CHGW/AGW Appendix III GW (4); CHGW-OS Cedar Hills GW Offsite (38); CFGW Cedar Falls GW Qlty (5); DJGW Duvall GW Qlty (6); ENGW Enumclaw GW Qlty (7); HOGW Hobart GW Qlty (8); HTGW Houghton GW Qlty (9); PUGW Puyallup GW Qlty (10); VAGW Vashon GW Qlty (12)

SURFACE/STORM WATER: CHSW-Q Cedar Hills SW Sta. E-1 (14); CFSW Cedar Falls SW Qlty (17); DJSW Duvall SW Qlty (18); VASW Vashon SW Qlty-WEIRS (21)

ISGP: CHSW-P Cedar Hills SW (16); CHSW-P Cedar Hills SW - Infiltration (16.1); HTSW-P Houghton SW (52); SHSW-P Shoreline SW (53); SHSW-P Shoreline SW - Infiltration (53.1); FASW-P Factoria SW (54); ENSW-P Enumclaw SW - Infiltration (56.1); ALSW-P Algona SW (57); VASW-P Vashon SW (58); RMSW-P Renton Maint. Facility SW (60)

LEACHATE/WASTEWATER: CHTW Cedar Hills Truckwash (24); CHLS-M Cedar Hills Leachate Mthly (23); CHLS-M_MOD CH Leachate Mods Mthly (23+)

PRETREATMENT PERMITS: CHLS-P CH L Permit (wkly, 1st) (25); CHLS-P CH L Permit (mnthly) (25.1); CHLS-P CH L Permit (wkly, 2nd) (25.2); ALLS-P Algona WW Permit (26); BLLS-P Bow Lake WW Permit (20); ENLS-P Enumclaw WW Permit (27); FALS-P Factoria WW Permit (28); SRLS-P Shoreline WW Permit (29); HTLS-P Houghton WW Permit (30); RELS-P Renton WW Permit (31); VALS-P Vashon WW Permit Tanker (32); VALS-Q Vashon Leachate Qlty (34)

Number of Containers	Remarks
1	Diss Sulfide <0.1 ppm

X = CHLS-P CH L Permit (wkly, 1st) (25) for Lab No. 87422-1

Relinquished By Sampler: Hannah Spear
Sampler Signature: H. Spear
Sampler Printed Name: KCSWD
Company
Date: 11/25/25
Time: 1240

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By
Signature
Printed Name
Company
Date
Time

Received By: Monique Reese
Signature: Monique Reese
Printed Name: KCEL
Company
Date: 11/25/25
Time: 1440

Observations/Comments/Special Instructions:

Custody sealed 11/25/25 @ 1240.

Total # of Containers: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v6.0 (Rev 10/2025)

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

SWD SAMPLE RECEIPT RECORD

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 87422										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	0.5 10.6 0.5	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 11/24/25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P(25)

Receive Date: 11/25/25 COC / SDG No.: 19206

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

NOV 25 '25 14:57

Date / Time Completed: _____

Chain of Custody Record

Environmental Monitoring Program

Date: 11/26/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19198**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25.2)

| Lab No. | Sample ID | Date | Time | Project Site Test Reference | | |

SWD SAMPLE RECEIPT RECORD

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 87422										
	2										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										
	Number of bottles per sample										

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	3.1 / 2.9 / 3.0	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 11/26/25 Project No.: 421422

VTRP Collect Date(s): — Project Site Test Reference: CHLS-P 252

Receive Date: 11/26/25 COC / SDG No.: 19198

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: NOV 26 '25 14:28

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

HYDROGEN SULFIDE GAS AT MANHOLE R10-52

Instrument #	Serial #	Calibration Date/Time
RKI Eagle 2	E2E656	10/3/25 @ 0921
Sample Count	**Interval Time (sec)**	**Bump Test Date**
10431	60	11/5/25 @ 0537

H2S Readings

Date	Daily Average	Instantaneous Maximum	Maximum 15-min Average	Maximum 8-hr Average	7-day Average
11/5/2025	0.0	0.0	0	0	-
11/6/2025	0.0	0.0	0	0	-
11/7/2025	0.0	0.0	0	0	-
11/8/2025	0.0	0.0	0	0	-
11/9/2025	0.0083	1.5	0.8	0.025	-
11/10/2025	0.0	0.0	0	0	-
11/11/2025	0.0	0.0	0	0	-
11/12/2025	0.0	0.0	0	0	0.00119
		Limit	*15 ppm*	*10 ppm*	*3 ppm*

Docusign Envelope ID: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5

KING COUNTY SOLID WASTE DIVISION

LEACHATE HAULING REPORT

TANKER LOADS

MONTH: NOVEMBER

YEAR: 2025

	DUVALL						VASHON				HOBART		OTHER		
DATE	BRIGHT		C.H.		SPOK.		SPOK.		C.H.		C.H.		C.H.		REMARKS
LOAD	6000	7000	6000	7000	6000	7000	6000	7000	6000	7000	6000	7000	6000	7000	
1															
2															
3															
4															
5															
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30															
31															
TOTAL	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	

Certificate Of Completion

Envelope Id: 5C3DAA2C-4B3D-414D-9DDC-DCEAC9930AE5 Status: Completed

Subject: Complete with Docusign: 2025.11.05_EAGLETABLE.pdf, 7842-04_SMR_November2025.pdf, CHLS-P_111225 ...

Source Envelope:

Document Pages: 74 Signatures: 3 Envelope Originator:

Certificate Pages: 5 Initials: 1 Aaron Copado

AutoNav: Enabled 401 5TH AVE

EnvelopeId Stamping: Enabled SEATTLE, WA 98104

Time Zone: (UTC-08:00) Pacific Time (US & Canada) acopado@kingcounty.gov

IP Address: 198.49.222.20

Record Tracking

Status: Original Holder: Aaron Copado Location: DocuSign

12/11/2025 7:43:32 AM acopado@kingcounty.gov

Security Appliance Status: Connected Pool: FedRamp

Storage Appliance Status: Connected Pool: King County-Dept of Natural Resources-Solid Waste Location: Docusign

Signer Events	Signature	Timestamp
Aaron Copado acopado@kingcounty.gov Environmental Scientist III KC_DNRP_SWD Security Level: Email, Account Authentication (None)	DS  Signature Adoption: Pre-selected Style Using IP Address: 198.49.222.20	Sent: 12/11/2025 7:47:45 AM Viewed: 12/11/2025 7:47:54 AM Signed: 12/11/2025 7:48:05 AM
Electronic Record and Signature Disclosure: Not Offered via Docusign		
Jennifer Keune jennifer.keune@kingcounty.gov Interim Supervisor KC_DNRP_SWD Security Level: Email, Account Authentication (None)	DocuSigned by:  A70EEC0AE02F44A... Signature Adoption: Pre-selected Style Using IP Address: 2600:100f:b031:eaf0:9cbe:b41:5498:4f3c Signed using mobile	Sent: 12/11/2025 7:48:07 AM Viewed: 12/11/2025 8:30:33 AM Signed: 12/11/2025 8:30:56 AM
Electronic Record and Signature Disclosure: Accepted: 3/31/2021 3:20:14 PM ID: 040441cf-883c-43c6-a4af-1ccb2ef73edc		

In Person Signer Events	Signature	Timestamp

Editor Delivery Events	Status	Timestamp

Agent Delivery Events	Status	Timestamp

Intermediary Delivery Events	Status	Timestamp

Certified Delivery Events	Status	Timestamp

Carbon Copy Events	Status	Timestamp

Witness Events	Signature	Timestamp

Notary Events	Signature	Timestamp

Envelope Summary Events	Status	Timestamps
Envelope Sent	Hashed/Encrypted	12/11/2025 7:47:45 AM
Certified Delivered	Security Checked	12/11/2025 8:30:33 AM
Signing Complete	Security Checked	12/11/2025 8:30:56 AM
Completed	Security Checked	12/11/2025 8:30:56 AM

Payment Events	Status	Timestamps

Electronic Record and Signature Disclosure

ELECTRONIC RECORD AND SIGNATURE DISCLOSURE

From time to time, King County-ZZDepartmentTemplate 03 (we, us or Company) may be required by law to provide to you certain written notices or disclosures. Described below are the terms and conditions for providing to you such notices and disclosures electronically through the DocuSign system. Please read the information below carefully and thoroughly, and if you can access this information electronically to your satisfaction and agree to this Electronic Record and Signature Disclosure (ERSD), please confirm your agreement by selecting the check-box next to 'I agree to use electronic records and signatures' before clicking 'CONTINUE' within the DocuSign system.

Getting paper copies

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If you decide to receive notices and disclosures from us electronically, you may at any time change your mind and tell us that thereafter you want to receive required notices and disclosures only in paper format. How you must inform us of your decision to receive future notices and disclosure in paper format and withdraw your consent to receive notices and disclosures electronically is described below.

Consequences of changing your mind

If you elect to receive required notices and disclosures only in paper format, it will slow the speed at which we can complete certain steps in transactions with you and delivering services to you because we will need first to send the required notices or disclosures to you in paper format, and then wait until we receive back from you your acknowledgment of your receipt of such paper notices or disclosures. Further, you will no longer be able to use the DocuSign system to receive required notices and consents electronically from us or to sign electronically documents from us.

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Unless you tell us otherwise in accordance with the procedures described herein, we will provide electronically to you through the DocuSign system all required notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you during the course of our relationship with you. To reduce the chance of you inadvertently not receiving any notice or disclosure, we prefer to provide all of the required notices and disclosures to you by the same method and to the same address that you have given us. Thus, you can receive all the disclosures and notices electronically or in paper format through the paper mail delivery system. If you do not agree with this process, please let us know as described below. Please also see the paragraph immediately above that describes the consequences of your electing not to receive delivery of the notices and disclosures electronically from us.

How to contact King County-ZZDepartmentTemplate 03:

You may contact us to let us know of your changes as to how we may contact you electronically, to request paper copies of certain information from us, and to withdraw your prior consent to receive notices and disclosures electronically as follows:
To contact us by email send messages to: cipriano.dacanay@kingcounty.gov

To advise King County-ZZDepartmentTemplate 03 of your new email address

To let us know of a change in your email address where we should send notices and disclosures electronically to you, you must send an email message to us at cipriano.dacanay@kingcounty.gov and in the body of such request you must state: your previous email address, your new email address. We do not require any other information from you to change your email address.

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To request delivery from us of paper copies of the notices and disclosures previously provided by us to you electronically, you must send us an email to cipriano.dacanay@kingcounty.gov and in the body of such request you must state your email address, full name, mailing address, and telephone number. We will bill you for any fees at that time, if any.

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To inform us that you no longer wish to receive future notices and disclosures in electronic format you may:

i. decline to sign a document from within your signing session, and on the subsequent page, select the check-box indicating you wish to withdraw your consent, or you may;

ii. send us an email to cipriano.dacanay@kingcounty.gov and in the body of such request you must state your email, full name, mailing address, and telephone number. We do not need any other information from you to withdraw consent.. The consequences of your withdrawing consent for online documents will be that transactions may take a longer time to process..

Required hardware and software

The minimum system requirements for using the DocuSign system may change over time. The current system requirements are found here: https://support.docusign.com/guides/signer-guide-signing-system-requirements.

Acknowledging your access and consent to receive and sign documents electronically

To confirm to us that you can access this information electronically, which will be similar to other electronic notices and disclosures that we will provide to you, please confirm that you have read this ERSD, and (i) that you are able to print on paper or electronically save this ERSD for your future reference and access; or (ii) that you are able to email this ERSD to an email address where you will be able to print on paper or save it for your future reference and access. Further, if you consent to receiving notices and disclosures exclusively in electronic format as described herein, then select the check-box next to 'I agree to use electronic records and signatures' before clicking 'CONTINUE' within the DocuSign system.

By selecting the check-box next to 'I agree to use electronic records and signatures', you confirm that:

- You can access and read this Electronic Record and Signature Disclosure; and
- You can print on paper this Electronic Record and Signature Disclosure, or save or send this Electronic Record and Disclosure to a location where you can print it, for future reference and access; and
- Until or unless you notify King County-ZZDepartmentTemplate 03 as described above, you consent to receive exclusively through electronic means all notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you by King County-ZZDepartmentTemplate 03 during the course of your relationship with King County-ZZDepartmentTemplate 03.

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14-Day Report for Discharge or Permit Violation

For more information on reporting requirements refer to your Permit, Section S4.D. If you have a Major/Minor Discharge Authorization refer to General Conditions D

Date: 12/11/25 **Company Name:** **King County Solid Waste Division (KCSWD)**

Permit/Authorization Number: 7842-04 **Sample Site Number: A90021**

1. **Description and Cause of Non-Compliance Event:** (include dates, times, locations; sample results and estimated gallons discharged)

In the last month, SWD became aware of the exceedances summarized in the table below.

Arsenic Loading (A90021)

Exceedance Date	Aware Date	Arsenic Concentration (mg/L)	Flow (gallons)	Arsenic Loading (lbs/day)
Permit Limit		*4.0*	*2,700,000*	*0.27*
11/04/25	11/25/25	0.1080	683,400	0.6156
11/05/25	11/25/25	0.1030	672,700	0.5779
11/12/25	11/25/25	0.0603	817,200	0.4110
11/14/25	12/08/25	0.0537	795,600	0.3563
11/17/25	12/08/25	0.0435	802,900	0.2913

KCSWD employs operational practices designed to minimize arsenic loading exceedances. This includes self-imposed limits on the volume of leachate discharged daily based on recent arsenic concentration data. Doing so allowed KCSWD to successfully comply with arsenic loading limits for virtually all of 2024. Seasonal variations in precipitation greatly affect KCSWD's ability to manage wastewater on-site using existing capacity, which increases the risk of exceeding the arsenic loading limit during wet periods.

During the months of September, October, and November, KCSWD employed practices to ensure the lagoons were not in danger of overtopping. However, leachate levels in the onsite lagoons rose throughout those months as precipitation increased the rate of leachate generation. During the month of November, multiple heavy rain events made it difficult to manage onsite lagoon levels. This increased rate of leachate generation prompted KCSWD to discharge volumes in excess of those prescribed by self-imposed pumping limits designed to maintain compliance with arsenic loading limits. Based on laboratory analytical results, the larger volumes of wastewater discharged at the start of November resulted in arsenic loading limit exceedances on five sampling days: 11/04/25, 11/05/25, 11/12/25, 11/14,25, and 11/17/25.

KCSWD is obligated to implement corrective actions specified in the Revised Compliance Order for Discharge Violations issued by KCIW on 06/23/25. The development and implementation of corrective actions outlined in that document continue.

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14-Day Report for Discharge or Permit Violation

2. Date and Time King County Notified: (requirement is within 24 hours of learning of violation unless event was spill or slug discharge then must have notified immediately)

Arsenic

Exceedance Date	Aware Date	Notification Date & Time	Notification Method	Recipient(s)
11/04/25	11/25/25	11/25/25 @ 16:53	Email	Girard Arnaud, info.KCIW@kingcounty.gov
11/05/25	11/25/25	11/25/25 @ 16:53	Email	Girard Arnaud, info.KCIW@kingcounty.gov
11/12/25	11/25/25	11/25/25 @ 16:53	Email	Girard Arnaud, info.KCIW@kingcounty.gov
11/14/25	12/08/25	12/08/25 @ 16:41	Email	Girard Arnaud, info.KCIW@kingcounty.gov
11/17/25	12/08/25	12/08/25 @ 16:41	Email	Girard Arnaud, info.KCIW@kingcounty.gov

3. Corrective Actions Taken: (corrective actions taken to respond to the violation and ensure ongoing compliance.)

Arsenic

Discharges in excess of self-imposed pumping limits continued through 11/17/2025 to manage levels in the leachate lagoons. We will continue to monitor arsenic concentrations closely to inform allowable discharge volumes.

KCSWD will continue to communicate circumstances that deviate from our routine discharge procedures to ensure there is no release (overtop) from our leachate lagoons and other secondary onsite storage. KCSWD relies on constant management of discharge volume and storage capacity to ensure no overtopping due to precipitation and to minimize loading limit exceedances. Although the ability to consistently reduce arsenic loading and ensure permit compliance relies upon an engineered pre-treatment system, KCSWD will continue to monitor and manage our effluent to minimize loading exceedances. Continued decreasing arsenic concentrations and reduced pumping times allowed KCSWD to stay in compliance for arsenic loading the last twelve days of November.

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14-Day Report for Discharge or Permit Violation

4. If discharge violation, enter follow-up sample collection date and results: (may use subsequent self-monitoring sample if collected and analyzed within 14 days of learning of violation)

Exceedance Date	Aware Date	Resample Date(s)	Parameter	Loading Resample Result (lbs/day)	Compliant?
11/04/25	11/25/25	11/05/25	Arsenic Loading	0.5779	No
11/05/25	11/25/25	11/12/25	Arsenic Loading	0.4110	No
11/12/25	12/08/25	11/14/25	Arsenic Loading	0.3563	No
11/14/25	12/08/25	11/17/25	Arsenic Loading	0.2913	No
11/17/25	12/08/25	11/19/25	Arsenic Loading	0.2603	Yes

ADDITIONAL SHEETS ATTACHED: **oYES x NO**

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME: Jennifer Keune

SIGNATURE: DocuSigned by: Jennifer Keune A70EEC0AE02F44A... DATE: Dec 11, 2025

TITLE: KCSWD Supervisor

Authorized Representative / Designated Authorized Representative*

(Please circle one of the above)

**All user reports must be signed by an authorized representative of the industrial user. "Authorized representative of industrial user" is defined by King County Code 28.82.050. If you are designated, a current Delegation of Signatory Authority must be on file at King County or completed and attached to this form.*

Please return this form and attachments to:

King County Industrial Waste **130 Nickerson Street – Suite 200**
Seattle, WA 98109-1658 **Fax: 206-263-3001**
-or- Email a signed PDF to: info.KCIW@kingcounty.gov

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14-Day Report for Discharge or Permit Violation

From general permit language

1. When monitoring data shows a violation, the permittee shall:

    a. Take immediate action to stop the violation and notify KCIW within 24 hours of learning of the violation.
    b. Collect a sample and submit new data to KCIW within 14 days of becoming aware of the violation.
    c. Submit a written report within 14 days of learning of the violation (*14-Day Report*). The report should explain the cause of the violation and corrective actions taken to respond to the violation and ensure ongoing compliance.

2. In the event the permittee is unable to comply with any of the conditions of this permit because of a breakdown of equipment or facilities, an accident caused by human error, negligence, or any other cause, such as an act of nature, the permittee shall:

    a. Take immediate action to stop, contain, and clean up the unauthorized discharges and correct the problem.
    b. Immediately notify the emergency King County contact in section S1 so steps can be taken to prevent damage to the sewerage system.
    c. Submit a written report within 14 days of the event (*14-Day Report*) describing the breakdown, the actual quantity and quality of resulting waste discharged, corrective action taken, and the steps taken to prevent a recurrence.

From Section D of Major Discharge Authorizations

1. In the event the permittee is unable to comply with any of the conditions of this discharge authorization because of breakdown of equipment or facilities, an accident caused by human error, negligence, or any other cause, such as an act of nature the company shall:

    a. Take immediate action to stop, contain, and clean up the unauthorized discharges and correct the problem
    b. Immediately notify KCIW so steps can be taken to prevent damage to the sewer system
    c. Submit a written report within 14 days describing the breakdown, the actual quantity and quality of resulting waste discharged, corrective action taken, and the steps taken to prevent recurrence

For SIU's Spills and Slug Discharges (from Permit language)

The Permittee shall notify King County Industrial Waste immediately in the event of a spill or slug discharge to the sanitary sewer. A written report regarding the cause of the spill and/or slug discharge shall be submitted to King County within five (5) days of date of occurrence. The report should explain the cause of the violation and corrective actions taken to respond to the violation and ensure ongoing compliance.

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King County
Solid Waste Division
Department of Natural Resources and Parks
King Street Center
201 South Jackson Street, Suite 6400
Seattle, WA 98104-3855
206-477-4466
711 TTY Relay
kingcounty.gov/solid-waste

January 15, 2026

TO: Arnaud Girard, Industrial Waste Compliance Investigator III, Wastewater Treatment Division

FM: Aaron Copado, Environmental Scientist III, King County Solid Waste Division (KCSWD)

DS AC

RE: Wastewater Discharge Permit # 7842-04 - Cedar Hills – Self-Monitoring Report

The purpose of this memorandum is to enclose the Self-Monitoring Report (SMR) for Cedar Hills (Permit # 7842-04) for the month of December 2025. Enclosed you will find:

- Industrial Waste Discharge Self-Monitoring Report for Sites A9002 & A90021
- Laboratory Test Results for CHLS-P (for samples collected 12/2/25, 12/4/25, 12/9/25, 12/13/25, 12/15/25, 12/18/25, 12/22/35, 12/24/2025, 12/29/2025 and 12/31/25)
- Atmospheric Hydrogen Sulfide Data at A9002 (for 12/2 - 12/23)
- Leachate Hauling Report (for December)

The following exceedances occurred during the month of December:

Parameter	Date of Exceedance	Aware Date	Notification Date and Time
Arsenic Loading	12/09/25	1/12/26	1/12/26 @ 16:32
Arsenic Loading	12/13/25	1/12/26	1/12/26 @ 16:32
Arsenic Loading	12/15/25	1/12/26	1/12/26 @ 16:32
Arsenic Loading	12/18/25	1/12/26	1/12/26 @ 16:32
Arsenic Loading	12/22/25	1/12/26	1/12/26 @ 16:32
Arsenic Loading	12/29/25	1/12/26	1/12/26 @ 16:32
Arsenic Loading	12/31/25	1/12/26	1/12/26 @ 16:32

KCSWD previously reported flow measurements outside the acceptable limits established in section S3.C.2.d of Permit #7842-04 and shared our plan to replace the existing flow meter. KCIW requested information about the new proposed effluent flow meter, including meter type, manufacturer and model, and specifications. This information was sent to Bruce Tiffany and Arnaud Girard via email on October 15, 2025 at 14:35. KCIW subsequently approved installation of the proposed flow meter and KCSWD completed installation on December 3,

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2025. After installation, the flow totalizer went offline and repairs were completed December 30, 2025. Flow volumes were estimated during this time period.

Please contact me directly if you have any questions. I can be reached at (253) 400-6532, or by e-mail at acopado@kingcounty.gov.

Enclosures

cc: Theresa Thurlow, P.E., Engineering Services Manager, KCSWD
Jennifer Keune, Supervisor, KCSWD
Dan Swope, Supervising Engineer, KCSWD
Ifeanyi Isigwe, P.E., Engineer III, KCSWD
Grant Dornfeld, Engineer II, KCSWD

Printed on recycled paper

King County

Industrial Waste Program Monthly Self-Monitoring Report

Send to: King County Industrial Waste Program
Email: info.KCIW@kingcounty.gov

Company Name: King County SWD - Cedar Hills Regional Landfill **Sample Site No.** A90021 **Permit No.:** *7842-04*

Please Specify Month & Year: **Month/Year** December 2025 This form is available at www.kingcounty.gov/industrialwaste.

*** Sample Types (C) Composite (G) Grab (BC) Batch** **All conc. units are mg/L unless otherwise noted. Loading units are pounds per day (lbs./da**

Sample Date (circle)	Sample Type*	pH	Arsenic		Cadmium		Chromium		Copper		Lead		Daily Discharge Volume, gpd	Notes (Indicate Batch Discharge where applicable)
			Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading		
1													432000	*Flow Meter Error >10%
2	C	8.53	0.0419	0.1510	<0.0005	0.0009	0.0557	0.2007	0.0068	0.0245	0.0011	0.00396	432000	*Flow Meter Error >10%
3													0	*Flow Meter Error >10%
4	C		0.0440	0.1585									432000	*Estimated Flow
5													432000	*Estimated Flow
6													810000	*Estimated Flow
7													1080000	*Estimated Flow
8													1080000	*Estimated Flow
9	C	8.40	0.0485	0.5242									1296000	*Estimated Flow
10													1998000	*Estimated Flow
11													2397600	*Estimated Flow
12													1296000	*Estimated Flow
13	C		0.0368	0.4972	<0.0005	0.0034	0.0483	0.6526	0.0094	0.1270	0.0014	0.01892	1620000	*Estimated Flow
14													1792800	*Estimated Flow
15	C	8.27	0.0348	0.6112	<0.0005	0.0044	0.0449	0.7886	0.0094	0.1651	0.0013	0.02283	2106000	*Estimated Flow
16													1998000	*Estimated Flow
17													1998000	*Estimated Flow
18	C	8.18	0.0316	0.5266	<0.0005	0.0042	0.0401	0.6682	0.0074	0.1233	<0.001	0.00833	1998000	*Estimated Flow
19													918000	*Estimated Flow
20													2268000	*Estimated Flow
21													1944000	*Estimated Flow
22	C	8.19	0.0303	0.3275	<0.0005	0.0027	0.0380	0.4107	0.0099	0.1070	0.0014	0.01513	1296000	*Estimated Flow
23													1296000	*Estimated Flow
24	C		0.0320	0.2306									864000	*Estimated Flow
25													399600	*Estimated Flow
26													1296000	*Estimated Flow
27													1058400	*Estimated Flow
28													1026000	*Estimated Flow
29	C		0.0386	0.3477	<0.0005	0.0023	0.0540	0.4864	0.0099	0.0892	0.0013	0.01171	1080000	*Estimated Flow
30													0	*Estimated Flow
31	C	8.45	0.0391	0.3205									982800	*Estimated Flow

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

DocuSigned by: Jennifer Yuen — Jan 15, 2026

Name and Title (Principal Executive or Authorized Agent) — Date

Monthly Min pH	8.18	12/18/2025	
Monthly Max pH	8.53	12/2/2025	
Total Monthly Flow (gallons)	37,627,200		
Maximum Daily Flow	2,397,600	12/11/2025	

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Due Date: Monthly report is due by the 15th each month.

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King County

Industrial Waste Program Monthly Self-Monitoring Report

Send to: King County Industrial Waste Program
Email: info.KCIW@kingcounty.gov

Company Name: King County SWD - Cedar Hills Regional Landfill **Sample Site No.** A90021 **Permit No.:** *7842-04*

Please Specify Month & Year: **Month/Year** December 2025 This form is available at www.kingcounty.gov/industrialwaste.

*** Sample Types (C) Composite (G) Grab (BC) Batch** **All conc. units are mg/L unless otherwise noted. Loading units are pounds per day (lbs./da**

Sample Date (circle)	Sample Type	Mercury		Nickel		Silver		Zinc		Total Soluble Sulfides	Ammonia as N	Nitrite + Nitrate as N	Notes (Indicate Batch Discharge where applicable)
		Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading	Daily Average	Mass Loading				
1													
2	C	<0.0001	0.00018	0.0490	0.177	<0.0004	0.0007	0.1230	0.443	<0.1 ppm			
3													
4													
5													
6													
7													
8													
9										<0.1 ppm			
10													
11													
12													
13	C	<0.0001	0.00068	0.0414	0.559	<0.0004	0.0027	0.1350	1.824				
14													
15	C	<0.0001	0.00088	0.0386	0.678	<0.0004	0.0035	0.1310	2.301	<0.1 ppm			
16													
17													
18	C	<0.0001	0.00083	0.0351	0.585	<0.0004	0.0033	0.1030	1.716	<0.1 ppm	303	0.02	
19													
20													
21													
22	C	<0.0001	0.00054	0.0344	0.372	<0.0004	0.0022	0.1550	1.675	<0.1 ppm			
23													
24													
25													
26													
27													
28													
29	C	<0.0001	0.00045	0.0449	0.404	<0.0004	0.0018	0.1680	1.513				
30													
31										<0.1 ppm			

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

DocuSigned by: Jennifer Kunz Jan 15, 2026

Name and Title of Principal Executive or Authorized Agent Date

PLEASE CIRCLE ALL PERMIT VIOLATIONS

Due Date: Monthly report is due by the 15th each month.

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County

Industrial Waste Program Monthly Self-Monitoring Report

Send to: King County Industrial Waste Program
Email: info.KCIW@kingcounty.gov

Atmospheric Hydrogen Sulfide (H_2S) Monitoring

Company Name: King County SWD - Cedar Hills Regional Landfill **Sample Site No.** A9002 **Permit No.:** *7842-04*

Please Specify Month & Year: **Month/Year** December 2025

This form is available at www.kingcounty.gov/industrialwaste.

All units are PPM unless otherwise noted.

Sample Date (circle)	Atmospheric Hydrogen Sulfide, ppmv				Notes
	Instantaneous Maximum	Maximum 15-min Average	Maximum 8-hr Average	7-day Average	
1					
2	0	0	0		
3	0	0	0		
4	0	0	0		
5	0	0	0		
6	0	0	0		
7	0	0	0		
8	0	0	0		
9	0	0	0	0	
10	0	0	0	0	
11	0	0	0	0	
12	0	0	0	0	
13	0	0	0	0	
14	0	0	0	0	
15	0	0	0	0	
16	0	0	0	0	
17	0	0	0	0	
18	0	0	0	0	
19	0	0	0	0	
20	0	0	0	0	
21	0	0	0	0	
22	0	0	0	0	
23	0	0	0	0	
24					
25					
26					
27					
28					
29					
30					
31					
Monthly **MAX**	0	Date	12/02/25-12/23/25		
Monthly **AVG**	0				

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

Docusigned by: Jan 15, 2026

Name and Title of Principal Executive or Authorized Agent — Date

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King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

December 12, 2025

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P)

Sample Id.	Sample Collect Date	COC
LEPS251202P	**12/02/2025**	**19213**
LEPS251204P	**12/04/2025**	**18703**

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 2 leachate permit samples collected December 2 and 4, 2025.

Sample Receiving Comments
No sample receiving anomalies were observed.

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

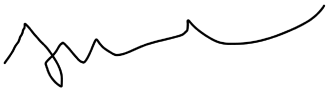
Metals QC Information

All calculable QC results for metals parameters were within laboratory control limits.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,



Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

Sample Data

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 12/12/2025
Report Group: CHLS-P_120925

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS251204P**
SDG / Lab Sample ID: **18703 / L87428-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **12/04/2025**
Login Date: **12/04/2025**
Matrix: **LEACHATE**

Analyses Requested:

6020B, AS-ICPMS, Metals

Client Sample ID: **LEPS251202P**
SDG / Lab Sample ID: **19213 / L87428-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **12/02/2025**
Login Date: **12/02/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, P-ICPMS, Metals

200.8, SWD-ICPMS23, Metals

245.1, HG-CVAA-M, Metals

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 12/12/2025
Report Group: CHLS-P_120925

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS251204P**
CoC / Lab Sample ID: **18703 / L87428-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **12/04/2025**
Login Date: **12/04/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.044		.000499	.000499	1	12/05/2025	12/05/2025	WG203842

Client Sample ID: **LEPS251202P**
CoC / Lab Sample ID: **19213 / L87428-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **12/02/2025**
Login Date: **12/02/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Aluminum, Total	10	mg/L	.614		.05	.101		12/03/2025	12/04/2025	WG203804
Antimony, Total	10	mg/L	.0054	T	.003	.0101		12/03/2025	12/04/2025	WG203804
Arsenic, Total	10	mg/L	.0419		.0005	.00252	1	12/03/2025	12/04/2025	WG203804
Barium, Total	10	mg/L	.0736		.005	.00504		12/03/2025	12/04/2025	WG203804
Beryllium, Total	10	mg/L	<.001	U	.001	.00504		12/03/2025	12/04/2025	WG203804
Cadmium, Total	10	mg/L	<.0005	U	.0005	.00252	0.5	12/03/2025	12/04/2025	WG203804
Calcium, Total	10	mg/L	53.6		.504	.504		12/03/2025	12/04/2025	WG203804
Chromium, Total	10	mg/L	.0557		.002	.0101	2.75	12/03/2025	12/04/2025	WG203804
Cobalt, Total	10	mg/L	.012		.0005	.00252		12/03/2025	12/04/2025	WG203804
Copper, Total	10	mg/L	.0068	T	.002	.0202	3	12/03/2025	12/04/2025	WG203804
Iron, Total	10	mg/L	4.61		.1	.504		12/03/2025	12/04/2025	WG203804
Lead, Total	10	mg/L	.0011	T	.001	.00504	2	12/03/2025	12/04/2025	WG203804
Magnesium, Total	10	mg/L	31		.504	.504		12/03/2025	12/04/2025	WG203804
Manganese, Total	10	mg/L	.458		.001	.00504		12/03/2025	12/04/2025	WG203804
Nickel, Total	10	mg/L	.049		.001	.00504	2.5	12/03/2025	12/04/2025	WG203804
Phosphorus, Total	10	mg/L	2.28		1	1.01		12/03/2025	12/04/2025	WG203804
Potassium, Total	10	mg/L	169		1	5.04		12/03/2025	12/04/2025	WG203804
Selenium, Total	10	mg/L	<.005	U	.005	.0101		12/03/2025	12/04/2025	WG203804
Silver, Total	10	mg/L	<.0004	U	.0004	.00202	1	12/03/2025	12/04/2025	WG203804
Sodium, Total	10	mg/L	453		1.01	1.01		12/03/2025	12/04/2025	WG203804
Thallium, Total	10	mg/L	<.00076	U	.00076	.00202		12/03/2025	12/04/2025	WG203804
Tin, Total	10	mg/L	.0051	T	.005	.0151		12/03/2025	12/04/2025	WG203804
Vanadium, Total	10	mg/L	.0171		.00076	.00378		12/03/2025	12/04/2025	WG203804
Zinc, Total	10	mg/L	.123		.005	.0252	5	12/03/2025	12/04/2025	WG203804
Mercury, Total	2	mg/L	<.0001	U	.0001	.0002		12/03/2025	12/04/2025	WG203819

Target Parameter Count for Report Group: 26

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

Quality Control Data

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory QC Report

CHLS-P_120925 COC 18703 19213

Workgroup: WG203804 Total Metals by ICPMS

MB:WG203804-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.1	0.5	ug/L		U
Sodium, Total	100	100	ug/L		U
Magnesium, Total	50	50	ug/L		U
Aluminum, Total	5	10	ug/L		U
Phosphorus, Total	100	100	ug/L		U
Potassium, Total	100	500	ug/L		U
Calcium, Total	50	50	ug/L		U
Vanadium, Total	0.075	0.375	ug/L		U
Chromium, Total	0.2	1	ug/L		U
Manganese, Total	0.1	0.5	ug/L		U
Iron, Total	10	50	ug/L		U
Cobalt, Total	0.05	0.25	ug/L		U
Nickel, Total	0.1	0.5	ug/L		U
Copper, Total	0.2	2	ug/L		U
Zinc, Total	0.5	2.5	ug/L		U
Arsenic, Total	0.05	0.25	ug/L		U
Selenium, Total	0.5	1	ug/L		U
Silver, Total	0.04	0.2	ug/L		U
Cadmium, Total	0.05	0.25	ug/L		U
Tin, Total	0.5	1.5	ug/L		U
Antimony, Total	0.3	1	ug/L		U
Barium, Total	0.5	0.5	ug/L		U
Thallium, Total	0.075	0.2	ug/L		U
Lead, Total	0.1	0.5	ug/L		U

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory QC Report

CHLS-P_120925 COC 18703 19213

SB:WG203804-2 MB:WG203804-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.1	0.5	ug/L	U	20	19.6	98		85--115
Sodium, Total	100	100	ug/L	U	5000	5180	104		85--115
Magnesium, Total	50	50	ug/L	U	5000	5110	102		85--115
Aluminum, Total	5	10	ug/L	U	200	200	100		85--115
Phosphorus, Total	100	100	ug/L	U	5000	5000	100		85--115
Potassium, Total	100	500	ug/L	U	5000	5170	103		85--115
Calcium, Total	50	50	ug/L	U	5000	5010	100		85--115
Vanadium, Total	0.075	0.375	ug/L	U	20	20	100		85--115
Chromium, Total	0.2	1	ug/L	U	20	21.4	107		85--115
Manganese, Total	0.1	0.5	ug/L	U	20	21	105		85--115
Iron, Total	10	50	ug/L	U	5000	5190	104		85--115
Cobalt, Total	0.05	0.25	ug/L	U	20	20.7	103		85--115
Nickel, Total	0.1	0.5	ug/L	U	20	21.5	107		85--115
Copper, Total	0.2	2	ug/L	U	20	22	110		85--115
Zinc, Total	0.5	2.5	ug/L	U	20	21.1	105		85--115
Arsenic, Total	0.05	0.25	ug/L	U	20	18.9	94		85--115
Selenium, Total	0.5	1	ug/L	U	20	20.6	103		85--115
Silver, Total	0.04	0.2	ug/L	U	20	19.5	97		85--115
Cadmium, Total	0.05	0.25	ug/L	U	20	19.8	99		85--115
Tin, Total	0.5	1.5	ug/L	U	20	20	100		85--115
Antimony, Total	0.3	1	ug/L	U	20	19.6	98		85--115
Barium, Total	0.5	0.5	ug/L	U	20	20.3	102		85--115
Thallium, Total	0.075	0.2	ug/L	U	20	21	105		85--115
Lead, Total	0.1	0.5	ug/L	U	20	21.2	106		85--115

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory QC Report

CHLS-P_120925 COC 18703 19213

MSD:WG203804-4 MS:WG203804-3 L87428-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	1	5	ug/L	U	200	198	99		75--125	201	200	99		1		0--20
Sodium, Total	1000	1000	ug/L	453000	50000	500000		4xRule	75--125	50200	498000		4xRule	0		0--20
Magnesium, Total	500	500	ug/L	31000	50000	81100	100		75--125	50200	82000	102		1		0--20
Aluminum, Total	50	100	ug/L	614	2000	2690	104		75--125	2010	2750	106		2		0--20
Phosphorus, Total	1000	1000	ug/L	2280	50000	53700	103		75--125	50200	54000	103		1		0--20
Potassium, Total	1000	5000	ug/L	169000	50000	221000	104		75--125	50200	220000	101		1		0--20
Calcium, Total	500	500	ug/L	53600	50000	104000	102		75--125	50200	105000	102		0		0--20
Vanadium, Total	0.75	3.75	ug/L	17.1	200	213	98		75--125	201	219	100		3		0--20
Chromium, Total	2	10	ug/L	55.7	200	262	103		75--125	201	263	103		0		0--20
Manganese, Total	1	5	ug/L	458	200	663	103		75--125	201	671	106		1		0--20
Iron, Total	100	500	ug/L	4610	50000	54900	101		75--125	50200	55700	102		1		0--20
Cobalt, Total	0.5	2.5	ug/L	12	200	218	103		75--125	201	220	104		1		0--20
Nickel, Total	1	5	ug/L	49	200	261	106		75--125	201	262	106		0		0--20
Copper, Total	2	20	ug/L	6.8	200	225	109		75--125	201	227	110		1		0--20
Zinc, Total	5	25	ug/L	123	200	333	105		75--125	201	335	106		1		0--20
Arsenic, Total	0.5	2.5	ug/L	41.9	200	238	98		75--125	201	244	100		2		0--20
Selenium, Total	5	10	ug/L	U	200	207	104		75--125	201	207	103		0		0--20
Silver, Total	0.4	2	ug/L	U	200	186	93		75--125	201	189	94		2		0--20
Cadmium, Total	0.5	2.5	ug/L	U	200	194	97		75--125	201	199	99		2		0--20
Tin, Total	5	15	ug/L	5.1	200	189	92		75--125	201	189	92		0		0--20
Antimony, Total	3	10	ug/L	5.4	200	207	101		75--125	201	207	100		0		0--20
Barium, Total	5	5	ug/L	73.6	200	282	104		75--125	201	291	108		3		0--20
Thallium, Total	0.75	2	ug/L	U	200	214	107		75--125	201	213	106		1		0--20
Lead, Total	1	5	ug/L	1.1	200	213	106		75--125	201	219	108		3		0--20

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory QC Report

CHLS-P_120925 COC 18703 19213

Workgroup: WG203819 Total Mercury by CVAA

MB:WG203819-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.05	0.1	ug/L		U

SB:WG203819-2 MB:WG203819-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	0.864	86		85--115

MSD:WG203819-4 MS:WG203819-3 L87428-1 Matrix: LEACHATE Listtype:MTHG-MID Method:EPA 245.1 Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.1	0.2	ug/L	U	2	1.72	86		75--125	2	1.67	83		3		0--20

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory QC Report

CHLS-P_120925 COC 18703 19213

Workgroup: WG203842 Total Metals by ICPMS

MB:WG203842-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total	0.025	0.05	ug/L		<QL

SB:WG203842-2 MB:WG203842-1 Matrix: BLANK WTR Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Arsenic, Total	0.025	0.05	ug/L	<QL	20	20	100		85--115

MSD:WG203842-4 MS:WG203842-3 L87428-2 Matrix: LEACHATE Listtype:MTICPMS-QL Method:EPA 200.8 (MOD)*SW846 6020B Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Arsenic, Total	0.496	0.496	ug/L	44	198	250	104		75--125	200	247	101		1		0--20

==========

4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 12/02/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19213**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25)

Lab No.	Sample ID	Date	Time
87428-1	LEPS251202P	12/02/25	1100

Project Site Test Reference

	CHGW	CHGW	CHGW/VASW	CHGW-OS	CFGW	DUGW	ENGW	HOGW	HTGW	PUGW	VAGW	CHSW-Q	CFSW	DUSW	VASW	CHSW-P	CHSW-P	HTSW-P	SHSW-P	SHSW-P	FASW-P	ENSW-P	ALSW-P	VASW-P	RMSW-P	CHTW	CHLS-M	CHLS-M MOD	CHLS-P	CHLS-P	CHLS-P	CHLS-P	ALLS-P	BLLS-P	ENLS-P	FALS-P	SRLS-P	HTLS-P	RELS-P	VALS-P	VALS-Q
	Cedar Hills GW Qlty	Cedar Hills EPZ GW Qlty	Appendix III GW	Cedar Hills GW Offsite	Cedar Falls GW Qlty	Duvall GW Qlty	Enumclaw GW Qlty	Hobart GW Qlty	Houghton GW Qlty	Puyallup GW Qlty	Vashon GW Qlty	Cedar Hills SW Sta. E-1	Cedar Falls SW Qlty	Duvall SW Qlty	Vashon SW Qlty-WEIRS	Cedar Hills SW	Cedar Hills SW - Infiltration	Houghton SW	Shoreline SW	Shoreline SW - Infiltration	Factoria SW	Enumclaw SW - Infiltration	Algona SW	Vashon SW	Renton Maint. Facility SW	Cedar Hills Truckwash	Cedar Hills Leachate Mtly	CH Leachate Mods Mtly	CH L Permit (wkly, 1st)	CH L Permit (mnthly)	CH L Permit (wkly, 2nd)	Algona WW Permit	Bow Lake WW Permit	Enumclaw WW Permit	Factoria WW Permit	Shoreline WW Permit	Houghton WW Permit	Renton WW Permit	Vashon WW Permit Tanker	Vashon Leachate Qlty
	GROUNDWATER											SURFACE/STORM WATER				ISGP										LEACHATE/WASTEWATER			PRETREATMENT PERMITS												
	2	2.1	4	38	5	6	7	8	9	10	12	14	17	18	21	16	16.1	52	53	53.1	54	54.1	57	58	60	24	23	23+	25	25.1	25.2	26	20	27	28	29	30	31	32	34
87428-1																													X											

Lab No.	Number of Containers	Remarks
87428-1	1	Diss Sulfide ppm <0.1

Relinquished By Sampler: E. Wajda
Sampler Signature: E. Wajda
Sampler Printed Name: KCSWD
Company
Date: 12/02/25
Time: 1240

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By
Signature
Printed Name
Company
Date
Time

Received By: Jason Kinnard
Signature: Jason Kinnard
Printed Name: KCEL
Company
Date: 12/2/25
Time: 1414

Observations/Comments/Special Instructions:

- Custody Sealed on 12/02/25 at 1240

Total # of Containers: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v6.0 (Rev 10/2025)

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

SWD SAMPLE RECEIPT RECORD

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 87428-1										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	29.1, 12.7	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 12-2-25 Project No.: 421422

VTRP Collect Date(s): ____ Project Site Test Reference: CHLS-P(25)

Receive Date: 12-2-25 COC / SDG No.: 19213

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: DEC 02 '25 1405

Chain of Custody Record

Environmental Monitoring Program

Date: 12/04/25

Department of Natural Resources and Parks
Solid Waste Division

No. **18703**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25.2)

Lab No.	Sample ID	Date	Time
87428-2	LEPS25104P	12/04/25	1100

Project Site Test Reference

	CHGW	Cedar Hills GW Qtly	2
	CHGW	Cedar Hills EP2 GW Qtly	2.1
	CHGW/AGW	Appendix III GW	4
	CHGW-OS	Cedar Hills GW Offsite	38
	CFGW	Cedar Falls GW Qtly	5
GROUNDWATER	DUGW	Duvall GW Qtly	6
	ENGW	Enumclaw GW Qtly	7
	HOGW	Hobart GW Qtly	8
	HTGW	Houghton GW Qtly	9
	PUGW	Puyallup GW Qtly	10
	VAGW	Vashon GW Qtly	12
	CHSW-Q	Cedar Hills SW Sta. E-1	14
	CHSW-P	Cedar Hills SW ISGP	16
	CHSW-TD	Cedar Hills SW Top Deck	42
	CHSW-E	CH Emergency	49.1
SURFACE WATER	CFSW	Cedar Falls SW Qtly	17
	DUSW	Duvall SW Qtly	18
	VASW	Vashon SW Qtly-WEIRS	21
	HTSW-P	Houghton SW NPDES	52
	SHSW-P	Shoreline SW NPDES	53
	FASW-P	Factoria SW NPDES	54
TS	ENSW-P	Enumclaw SW NPDES	56
	ALSW-P	Algona SW NPDES	57
	VASW-P	Vashon SW NPDES	58
	CHTW	Cedar Hills Truckwash	24
	CHLS-M	Cedar Hills Leachate Mthly	23
	CHLS-M_MOD	CH Leachate Mods Mthly	23+
	CHLS-M_As	CH Leachate As Semi-Ann.	23.1
	CHLS-P	OH L Permit (wkly, 1st)	25
	CHLS-P	CH L Permit (mnthly)	25.1
LEACHATE/WASTEWATER	CHLS-P	CH L Permit (wkly, 2nd)	25.2
	ALLS	Algona WW Permit	26
	BLLS	Bow Lake WW Permit	20
	ENLS	Enumclaw WW Permit	27
	FALS	Factoria WW Permit	28
	SRLS	Shoreline WW Permit	29
	HTLS	Houghton WW Permit	30
	RELS	Renton WW Permit	31
	VALS-P	Vashon WW Permit Tanker	32
	VALS-Q	Vashon Leachate Qtly	34
PERMIT			

Lab No.	Sample ID	Date	Time	Number of Bottles	Remarks
87428-2	LEPS25104P	12/04/25	1100	1	

Relinquished By Sampler	Date	Received By	Date
Sampler Signature: G. Wajda	12/04/25	Signature	
Sampler Printed Name: KCSWD	Time: 1300	Printed Name	Time
Company		Company	
Relinquished By	Date	Received By	Date: 12/4/25
Signature		Signature: Jason Kinnard	
Printed Name	Time	Printed Name	Time: 1429
Company		Company: KCEL	

Observations/Comments/Special Instructions:

- Arsenic only
- Custody sealed on 12/04/25 at 1300

Total # of Bottles: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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. Receiving lab is to retain the original and create a copy for KCSWD personnel to keep.

FFB - Field Filtration Blank
FQ - Field QC

v4.00 (Rev 12/2023)

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

SWD SAMPLE RECEIPT RECORD

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s)										
	874428-2										
	-2										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										
	Number of bottles per sample										

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	2.4 D.312.3	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 12-4-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P(25.2)

Receive Date: 12-4-25 COC / SDG No.: 185703

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	Y / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: DEC 04 '25 14:22

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

January 12, 2026

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P)

Sample Id.	Sample Collect Date	COC
LEPS251209P	**12/09/2025**	**19201**

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 1 leachate permit sample collected December 9, 2025.

Please note, the COC indicates this sample was collected as CHLS-P #25.1 – this sample was analyzed as a 25.2 for total arsenic only. The 25.1 for December was collected December 18, 2025 under COC 19240 and is included in report group CHLS-P_122325.

Sample Receiving Comments
No sample receiving anomalies were observed.

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

Metals QC Information

All calculable QC results for metals parameters were within laboratory control limits.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,



Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

Sample Data

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 12/19/2025
Report Group: CHLS-P_121725

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS251209P**
SDG / Lab Sample ID: **19201 / L87504-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **12/09/2025**
Login Date: **12/10/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, AS-ICPMS, Metals

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 12/19/2025
Report Group: CHLS-P_121725

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS251209P**
CoC / Lab Sample ID: **19201 / L87504-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **12/09/2025**
Login Date: **12/10/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	**10**	**mg/L**	**.0485**		**.0005**	**.0025**	**1**	**12/11/2025**	**12/11/2025**	**WG203945**

Target Parameter Count for Report Group: 1

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

Quality Control Data

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory QC Report

CHLS-P_121725 COC 19201

Workgroup: WG203945 Total Metals by ICPMS

MB:WG203945-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total	0.05	0.25	ug/L		U

SB:WG203945-2 MB:WG203945-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Arsenic, Total	0.05	0.25	ug/L	U	20	19.6	98		85--115

MSD:WG203945-4 MS:WG203945-3 L87504-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Arsenic, Total	0.5	2.5	ug/L	48.5	200	248	100		75--125	200	244	98		2		0--20

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 12/10/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19201**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHCS-P (25.1)

Project Site Test Reference

Lab No.	Sample ID	Date	Time
87504-1	LEB251209P	12/9/25	1900

	CHGW	Cedar Hills GW Qlty	2
GROUNDWATER	CHGW	Cedar Hills EPZ GW Qlty	2.1
	CHGW/VASW	Appendix III GW	4
	CHGW-OS	Cedar Hills GW Offsite	38
	CFGW	Cedar Falls GW Qlty	5
	DUGW	Duvall GW Qlty	6
	ENGW	Enumclaw GW Qlty	7
	HOGW	Hobart GW Qlty	8
	HTGW	Houghton GW Qlty	9
	PUGW	Puyallup GW Qlty	10
	VAGW	Vashon GW Qlty	12
SURFACE/STORM WATER	CHSW-Q	Cedar Hills SW Sta. E-1	14
	CFSW	Cedar Falls SW Qlty	17
	DUSW	Duvall SW Qlty	18
	VASW	Vashon SW Qlty-WEIRS	21
ISGP	CHSW-P	Cedar Hills SW	16
	CHSW-P	Cedar Hills SW - Infiltration	16.1
	HTSW-P	Houghton SW	52
	SHSW-P	Shoreline SW	53
	SHSW-P	Shoreline SW - Infiltration	53.1
	FASW-P	Factoria SW	54
	ENSW-P	Enumclaw SW - Infiltration	56.1
	ALSW-P	Algona SW	57
	VASW-P	Vashon SW	58
	RMSW-P	Renton Maint. Facility SW	60
LEACHATE/WASTEWATER	CHTW	Cedar Hills Truckwash	24
	CHLS-M	Cedar Hills Leachate Mthly	23
	CHLS-M MOD	CH Leachate Mods Mthly	23+
PRETREATMENT PERMITS	CHLS-P	CH L Permit (wkly, 1st)	25
	CHLS-P	CH L Permit (mnthly)	25.1
	CHLS-P	CH L Permit (wkly, 2nd)	25.2
	ALLS-P	Algona WW Permit	26
	BLLS-P	Bow Lake WW Permit	20
	ENLS-P	Enumclaw WW Permit	27
	FALS-P	Factoria WW Permit	28
	SRLS-P	Shoreline WW Permit	29
	HTLS-P	Houghton WW Permit	30
	RELS-P	Renton WW Permit	31
	VALS-P	Vashon WW Permit Tanker	32
	VALS-Q	Vashon Leachate Qlty	34

Lab No.	Number of Containers	Remarks
87504-1	2	<0.1

Remarks: DISS Sulfide

Relinquished By Sampler: E. Wajda
Sampler Signature: E. Wajda
Sampler Printed Name: KCSWD
Company
Date: 12/10/25
Time: 1440

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By
Signature
Printed Name
Company
Date
Time

Received By: J. Kimball
Signature
Printed Name: KCEC
Company
Date: 12-10-25
Time: 1440

Observations/Comments/Special Instructions:

Total # of Containers: 2 KV

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v6.0 (Rev 10/2025)

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s): 87504									
	-1									
40 mL clear vial (VOA)										
60 mL CWM HDPE										
125 mL CNM HDPE										
125 mL CWM HDPE										
125 mL GANM w/HCl										
250 mL CWM HDPE										
250 mL GAWM w/H_2SO_4										
500 mL AWM HDPE										
500 mL CWM HDPE										
500 mL CWM PP (MICRO)										
500 mL HDPE (METALS)	1									
500 mL GAWM										
1L CWM HDPE										
1L GANM										
1L GAWM w/ H_2SO_4										
2L CWM HDPE:										
Other -										
Other -										
Other -										
Other -										
Other -										
Total # of Samples	1									

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	3.7, 3.7, 3.7	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 12/9/25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P (25.1)

Receive Date: 12/10/25 COC / SDG No.: 19201

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other: N			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____ Date / Time Completed: DEC 10 '25 15:54

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

December 26, 2025

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P)

Sample Id.	Sample Collect Date	COC
LEPS251213P	**12/13/2025**	**19226**
LEPS251215D	**12/15/2025**	**19233**
LEPS251215P	**12/15/2025**	**19233**
LEPS251218P	**12/18/2025**	**19240**

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 4 leachate permit samples collected December 13, 15 and 18, 2025.

Sample Receiving Comments
No sample receiving anomalies were observed.

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

Conventionals QC Information
All calculable QC results for conventionals parameters were within laboratory control limits.

Metals QC Information
All calculable QC results for metals parameters were within laboratory control limits.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,



Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

Sample Data

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 12/26/2025
Report Group: CHLS-P_122325

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS251213P**
SDG / Lab Sample ID: **19226 / L87502-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**
Collect Date: **12/13/2025**
Login Date: **12/16/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, P-ICPMS, Metals
200.8, SWD-ICPMS23, Metals
245.1, HG-CVAA-M, Metals

Client Sample ID: **LEPS251215P**
SDG / Lab Sample ID: **19233 / L87564-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**
Collect Date: **12/15/2025**
Login Date: **12/16/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, P-ICPMS, Metals
200.8, SWD-ICPMS23, Metals
245.1, HG-CVAA-M, Metals

Client Sample ID: **LEPS251215D**
SDG / Lab Sample ID: **19233 / L87564-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**
Collect Date: **12/15/2025**
Login Date: **12/16/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, P-ICPMS, Metals
200.8, SWD-ICPMS23, Metals
245.1, HG-CVAA-M, Metals

Client Sample ID: **LEPS251218P**
SDG / Lab Sample ID: **19240 / L87564-3**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**
Collect Date: **12/18/2025**
Login Date: **12/19/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, P-ICPMS, Metals
200.8, SWD-ICPMS23, Metals
245.1, HG-CVAA-M, Metals
4500-NO3-F NO23 Nitrite + Nitrate Nitrogen
Kerouel & Aminot 1997 NH3 Ammonia Nitrogen

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 12/26/2025
Report Group: CHLS-P_122325

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS251213P**
CoC / Lab Sample ID: **19226 / L87502-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **12/13/2025**
Login Date: **12/16/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Mercury, Total	2	mg/L	<.0001	U	.0001	.0002		12/17/2025	12/17/2025	WG204071
Aluminum, Total	10	mg/L	1.34		.051	.101		12/18/2025	12/19/2025	WG204079
Antimony, Total	10	mg/L	.0044	T	.003	.0101		12/18/2025	12/19/2025	WG204079
Arsenic, Total	10	mg/L	.0368		.00051	.00253	1	12/18/2025	12/19/2025	WG204079
Barium, Total	10	mg/L	.0669		.0051	.00506		12/18/2025	12/19/2025	WG204079
Beryllium, Total	10	mg/L	<.001	U	.001	.00506		12/18/2025	12/19/2025	WG204079
Cadmium, Total	10	mg/L	<.00051	U	.00051	.00253	0.5	12/18/2025	12/19/2025	WG204079
Calcium, Total	10	mg/L	54.5		.506	.506		12/18/2025	12/19/2025	WG204079
Chromium, Total	10	mg/L	.0483		.002	.0101	2.75	12/18/2025	12/19/2025	WG204079
Cobalt, Total	10	mg/L	.0105		.00051	.00253		12/18/2025	12/19/2025	WG204079
Copper, Total	10	mg/L	.0094	T	.002	.0202	3	12/18/2025	12/19/2025	WG204079
Iron, Total	10	mg/L	5.1		.1	.506		12/18/2025	12/19/2025	WG204079
Lead, Total	10	mg/L	.0014	T	.001	.00506	2	12/18/2025	12/19/2025	WG204079
Magnesium, Total	10	mg/L	28.3		.506	.506		12/18/2025	12/19/2025	WG204079
Manganese, Total	10	mg/L	.582		.001	.00506		12/18/2025	12/19/2025	WG204079
Nickel, Total	10	mg/L	.0414		.001	.00506	2.5	12/18/2025	12/19/2025	WG204079
Phosphorus, Total	10	mg/L	2.45		1	1.01		12/18/2025	12/19/2025	WG204079
Potassium, Total	10	mg/L	140		1	5.06		12/18/2025	12/19/2025	WG204079
Selenium, Total	10	mg/L	<.0051	U	.0051	.0101		12/18/2025	12/19/2025	WG204079
Silver, Total	10	mg/L	<.0004	U	.0004	.00202	1	12/18/2025	12/19/2025	WG204079
Sodium, Total	10	mg/L	388		1.01	1.01		12/18/2025	12/19/2025	WG204079
Thallium, Total	10	mg/L	<.00076	U	.00076	.00202		12/18/2025	12/19/2025	WG204079
Tin, Total	10	mg/L	<.0051	U	.0051	.0152		12/18/2025	12/19/2025	WG204079
Vanadium, Total	10	mg/L	.016		.00076	.00379		12/18/2025	12/19/2025	WG204079
Zinc, Total	10	mg/L	.135		.0051	.0253	5	12/18/2025	12/19/2025	WG204079

Client Sample ID: **LEPS251215P**
CoC / Lab Sample ID: **19233 / L87564-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **12/15/2025**
Login Date: **12/16/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Mercury, Total	2	mg/L	<.0001	U	.0001	.0002		12/17/2025	12/17/2025	WG204071
Aluminum, Total	10	mg/L	1.25		.05	.101		12/18/2025	12/19/2025	WG204079
Antimony, Total	10	mg/L	.0045	T	.003	.0101		12/18/2025	12/19/2025	WG204079
Arsenic, Total	10	mg/L	.0348		.0005	.00252	1	12/18/2025	12/19/2025	WG204079
Barium, Total	10	mg/L	.0658		.005	.00504		12/18/2025	12/19/2025	WG204079
Beryllium, Total	10	mg/L	<.001	U	.001	.00504		12/18/2025	12/19/2025	WG204079
Cadmium, Total	10	mg/L	<.0005	U	.0005	.00252	0.5	12/18/2025	12/19/2025	WG204079
Calcium, Total	10	mg/L	53.2		.504	.504		12/18/2025	12/19/2025	WG204079
Chromium, Total	10	mg/L	.0449		.002	.0101	2.75	12/18/2025	12/19/2025	WG204079
Cobalt, Total	10	mg/L	.00977		.0005	.00252		12/18/2025	12/19/2025	WG204079
Copper, Total	10	mg/L	.0094	T	.002	.0202	3	12/18/2025	12/19/2025	WG204079
Iron, Total	10	mg/L	4.79		.1	.504		12/18/2025	12/19/2025	WG204079
Lead, Total	10	mg/L	.0013	T	.001	.00504	2	12/18/2025	12/19/2025	WG204079

Client Sample ID: **LEPS251215P** | Collect Date: **12/15/2025**
CoC / Lab Sample ID: **19233 / L87564-1** | Login Date: **12/16/2025**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit** | Matrix: **LEACHATE**

Magnesium, Total	**10**	**mg/L**	**26.8**		**.504**	**.504**		**12/18/2025**	**12/19/2025**	**WG204079**
Manganese, Total	**10**	**mg/L**	**.544**		**.001**	**.00504**		**12/18/2025**	**12/19/2025**	**WG204079**
Nickel, Total	**10**	**mg/L**	**.0386**		**.001**	**.00504**	**2.5**	**12/18/2025**	**12/19/2025**	**WG204079**
Phosphorus, Total	**10**	**mg/L**	**2.48**		**1**	**1.01**		**12/18/2025**	**12/19/2025**	**WG204079**
Potassium, Total	**10**	**mg/L**	**131**		**1**	**5.04**		**12/18/2025**	**12/19/2025**	**WG204079**
Selenium, Total	**10**	**mg/L**	**<.005**	**U**	**.005**	**.0101**		**12/18/2025**	**12/19/2025**	**WG204079**
Silver, Total	**10**	**mg/L**	**<.0004**	**U**	**.0004**	**.00202**	**1**	**12/18/2025**	**12/19/2025**	**WG204079**
Sodium, Total	**10**	**mg/L**	**364**		**1.01**	**1.01**		**12/18/2025**	**12/19/2025**	**WG204079**
Thallium, Total	**10**	**mg/L**	**<.00076**	**U**	**.00076**	**.00202**		**12/18/2025**	**12/19/2025**	**WG204079**
Tin, Total	**10**	**mg/L**	**<.005**	**U**	**.005**	**.0151**		**12/18/2025**	**12/19/2025**	**WG204079**
Vanadium, Total	**10**	**mg/L**	**.0149**		**.00076**	**.00378**		**12/18/2025**	**12/19/2025**	**WG204079**
Zinc, Total	**10**	**mg/L**	**.131**		**.005**	**.0252**	**5**	**12/18/2025**	**12/19/2025**	**WG204079**

Client Sample ID: **LEPS251215D** | Collect Date: **12/15/2025**
CoC / Lab Sample ID: **19233 / L87564-2** | Login Date: **12/16/2025**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit** | Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Mercury, Total	**2**	**mg/L**	**<.0001**	**U**	**.0001**	**.0002**		**12/17/2025**	**12/17/2025**	**WG204071**
Aluminum, Total	**10**	**mg/L**	**1.22**		**.051**	**.101**		**12/18/2025**	**12/19/2025**	**WG204079**
Antimony, Total	**10**	**mg/L**	**.0043**	**T**	**.003**	**.0101**		**12/18/2025**	**12/19/2025**	**WG204079**
Arsenic, Total	**10**	**mg/L**	**.0345**		**.00051**	**.00253**	**1**	**12/18/2025**	**12/19/2025**	**WG204079**
Barium, Total	**10**	**mg/L**	**.0639**		**.0051**	**.00505**		**12/18/2025**	**12/19/2025**	**WG204079**
Beryllium, Total	**10**	**mg/L**	**<.001**	**U**	**.001**	**.00505**		**12/18/2025**	**12/19/2025**	**WG204079**
Cadmium, Total	**10**	**mg/L**	**<.00051**	**U**	**.00051**	**.00253**	**0.5**	**12/18/2025**	**12/19/2025**	**WG204079**
Calcium, Total	**10**	**mg/L**	**53.1**		**.505**	**.505**		**12/18/2025**	**12/19/2025**	**WG204079**
Chromium, Total	**10**	**mg/L**	**.0443**		**.002**	**.0101**	**2.75**	**12/18/2025**	**12/19/2025**	**WG204079**
Cobalt, Total	**10**	**mg/L**	**.00972**		**.00051**	**.00253**		**12/18/2025**	**12/19/2025**	**WG204079**
Copper, Total	**10**	**mg/L**	**.0098**	**T**	**.002**	**.0202**	**3**	**12/18/2025**	**12/19/2025**	**WG204079**
Iron, Total	**10**	**mg/L**	**4.66**		**.1**	**.505**		**12/18/2025**	**12/19/2025**	**WG204079**
Lead, Total	**10**	**mg/L**	**.0012**	**T**	**.001**	**.00505**	**2**	**12/18/2025**	**12/19/2025**	**WG204079**
Magnesium, Total	**10**	**mg/L**	**25.8**		**.505**	**.505**		**12/18/2025**	**12/19/2025**	**WG204079**
Manganese, Total	**10**	**mg/L**	**.535**		**.001**	**.00505**		**12/18/2025**	**12/19/2025**	**WG204079**
Nickel, Total	**10**	**mg/L**	**.0382**		**.001**	**.00505**	**2.5**	**12/18/2025**	**12/19/2025**	**WG204079**
Phosphorus, Total	**10**	**mg/L**	**2.41**		**1**	**1.01**		**12/18/2025**	**12/19/2025**	**WG204079**
Potassium, Total	**10**	**mg/L**	**130**		**1**	**5.05**		**12/18/2025**	**12/19/2025**	**WG204079**
Selenium, Total	**10**	**mg/L**	**<.0051**	**U**	**.0051**	**.0101**		**12/18/2025**	**12/19/2025**	**WG204079**
Silver, Total	**10**	**mg/L**	**<.0004**	**U**	**.0004**	**.00202**	**1**	**12/18/2025**	**12/19/2025**	**WG204079**
Sodium, Total	**10**	**mg/L**	**361**		**1.01**	**1.01**		**12/18/2025**	**12/19/2025**	**WG204079**
Thallium, Total	**10**	**mg/L**	**<.00076**	**U**	**.00076**	**.00202**		**12/18/2025**	**12/19/2025**	**WG204079**
Tin, Total	**10**	**mg/L**	**<.0051**	**U**	**.0051**	**.0152**		**12/18/2025**	**12/19/2025**	**WG204079**
Vanadium, Total	**10**	**mg/L**	**.0149**		**.00076**	**.00379**		**12/18/2025**	**12/19/2025**	**WG204079**
Zinc, Total	**10**	**mg/L**	**.131**		**.0051**	**.0253**	**5**	**12/18/2025**	**12/19/2025**	**WG204079**

Client Sample ID: **LEPS251218P** | Collect Date: **12/18/2025**
CoC / Lab Sample ID: **19240 / L87564-3** | Login Date: **12/19/2025**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit** | Matrix: **LEACHATE**

Conventionals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Nitrate + Nitrite as N	**2**	**mg/L**	**.022**	**T**	**.02**	**.08**		**12/19/2025**	**12/19/2025**	**WG204143**
Ammonia	**100**	**mg/L**	**303**		**50**	**100**		**12/22/2025**	**12/22/2025**	**WG204144**

Client Sample ID: **LEPS251218P**
CoC / Lab Sample ID: **19240 / L87564-3**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **12/18/2025**
Login Date: **12/19/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Aluminum, Total	10	mg/L	.89		.05	.1		12/22/2025	12/23/2025	WG204104
Antimony, Total	10	mg/L	.004	T	.003	.01		12/22/2025	12/23/2025	WG204104
Arsenic, Total	10	mg/L	.0316		.0005	.00251	1	12/22/2025	12/23/2025	WG204104
Barium, Total	10	mg/L	.0611		.005	.00502		12/22/2025	12/23/2025	WG204104
Beryllium, Total	10	mg/L	<.001	U	.001	.00502		12/22/2025	12/23/2025	WG204104
Cadmium, Total	10	mg/L	<.0005	U	.0005	.00251	0.5	12/22/2025	12/23/2025	WG204104
Calcium, Total	10	mg/L	52.2		.502	.502		12/22/2025	12/23/2025	WG204104
Chromium, Total	10	mg/L	.0401		.002	.01	2.75	12/22/2025	12/23/2025	WG204104
Cobalt, Total	10	mg/L	.00872		.0005	.00251		12/22/2025	12/23/2025	WG204104
Copper, Total	10	mg/L	.0074	T	.002	.0201	3	12/22/2025	12/23/2025	WG204104
Iron, Total	10	mg/L	3.95		.1	.502		12/22/2025	12/23/2025	WG204104
Lead, Total	10	mg/L	<.001	U	.001	.00502	2	12/22/2025	12/23/2025	WG204104
Magnesium, Total	10	mg/L	24.1		.502	.502		12/22/2025	12/23/2025	WG204104
Manganese, Total	10	mg/L	.529		.001	.00502		12/22/2025	12/23/2025	WG204104
Nickel, Total	10	mg/L	.0351		.001	.00502	2.5	12/22/2025	12/23/2025	WG204104
Phosphorus, Total	10	mg/L	2.09		1	1		12/22/2025	12/23/2025	WG204104
Potassium, Total	10	mg/L	121		1	5.02		12/22/2025	12/23/2025	WG204104
Selenium, Total	10	mg/L	<.005	U	.005	.01		12/22/2025	12/23/2025	WG204104
Silver, Total	10	mg/L	<.0004	U	.0004	.00201	1	12/22/2025	12/23/2025	WG204104
Sodium, Total	10	mg/L	323		1	1		12/22/2025	12/23/2025	WG204104
Thallium, Total	10	mg/L	<.00075	U	.00075	.00201		12/22/2025	12/23/2025	WG204104
Tin, Total	10	mg/L	<.005	U	.005	.0151		12/22/2025	12/23/2025	WG204104
Vanadium, Total	10	mg/L	.0132		.00075	.00376		12/22/2025	12/23/2025	WG204104
Zinc, Total	10	mg/L	.103		.005	.0251	5	12/22/2025	12/23/2025	WG204104
Mercury, Total	2	mg/L	<.0001	U	.0001	.0002		12/22/2025	12/22/2025	WG204117

Target Parameter Count for Report Group: 102

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

Quality Control Data

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory QC Report

CHLS-P_122325 COC 19226, 19233, 19240

Workgroup: WG204143 Dissolved Nutrients

MB:WG204143-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Ammonia Nitrogen	0.002	0.01	mg/L		U

MB:WG204143-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L		U

SB:WG204143-3 MB:WG204143-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.002	0.01	mg/L	U	0.04	0.0393	98		80--120

SB:WG204143-3 MB:WG204143-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	U	1	0.973	97		80--120

LCS:WG204143-4 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0439	88		85--115

LCS:WG204143-4 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	1	0.956	96		85--115

LD:WG204143-5 L87498-9 Matrix: GRND WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421422-DUGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Ammonia Nitrogen	0.002	0.01	mg/L	U	U			0--20

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

MS:WG204143-6 L87498-9 Matrix: GRND WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421422-DUGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.002	0.01	mg/L	U	0.04	0.0449	112		75--125

LD:WG204143-7 L87564-3 Matrix: LEACHATE Listtype:CVNO23 Method:SM4500-NO3-F Project:421422-CHLS-P Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.02	0.08	mg/L	0.022	0.022			0--20

MS:WG204143-8 L87564-3 Matrix: LEACHATE Listtype:CVNO23 Method:SM4500-NO3-F Project:421422-CHLS-P Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.02	0.08	mg/L	0.022	2	1.94	96		75--125

LD:WG204143-9 L87576-2 Matrix: IW WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421161 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.013	0.013			0--20

MS:WG204143-10 L87576-2 Matrix: IW WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421161 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.013	1	0.993	98		75--125

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory QC Report

CHLS-P_122325 COC 19226, 19233, 19240

Workgroup: WG204144 Dissolved Nutrients

MB:WG204144-1 Matrix: BLANK WTR Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Ammonia Nitrogen	0.5	1	mg/L		U

SB:WG204144-3 MB:WG204144-1 Matrix: BLANK WTR Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.5	1	mg/L	U	10	10.8	108		80--120

LCS:WG204144-4 Matrix: BLANK WTR Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.5	1	mg/L	10	10.7	107		85--115

LD:WG204144-5 L87564-3 Matrix: LEACHATE Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project:421422-CHLS-P Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Ammonia Nitrogen	50	100	mg/L	303	291	4		0--20

MS:WG204144-6 L87564-3 Matrix: LEACHATE Listtype:CVNH3-HACH-H Method:SM4500-NH3-F Project:421422-CHLS-P Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	50	100	mg/L	303	1000	1330	103		75--125

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory QC Report

CHLS-P_122325 COC 19226, 19233, 19240

Workgroup: WG204071 Total Mercury by CVAA

MB:WG204071-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.05	0.1	ug/L		U

SB:WG204071-2 MB:WG204071-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	0.965	97		85--115

MSD:WG204071-4 MS:WG204071-3 L87502-1 Matrix: LEACHATE Listtype:MTHG-MID Method:EPA 245.1 Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.1	0.2	ug/L	U	2	1.85	93		75--125	2	1.85	93		0		0--20

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory QC Report

CHLS-P_122325 COC 19226, 19233, 19240

Workgroup: WG204079 Total Metals by ICPMS

MB:WG204079-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.1	0.5	ug/L		U
Sodium, Total	100	100	ug/L		U
Magnesium, Total	50	50	ug/L		U
Aluminum, Total	5	10	ug/L		U
Phosphorus, Total	100	100	ug/L		U
Potassium, Total	100	500	ug/L		U
Calcium, Total	50	50	ug/L		U
Vanadium, Total	0.075	0.375	ug/L		U
Chromium, Total	0.2	1	ug/L		U
Manganese, Total	0.1	0.5	ug/L		U
Iron, Total	10	50	ug/L		U
Cobalt, Total	0.05	0.25	ug/L		U
Nickel, Total	0.1	0.5	ug/L		U
Copper, Total	0.2	2	ug/L		U
Zinc, Total	0.5	2.5	ug/L		U
Arsenic, Total	0.05	0.25	ug/L		U
Selenium, Total	0.5	1	ug/L		U
Silver, Total	0.04	0.2	ug/L		U
Cadmium, Total	0.05	0.25	ug/L		U
Tin, Total	0.5	1.5	ug/L		U
Antimony, Total	0.3	1	ug/L		U
Barium, Total	0.5	0.5	ug/L		U
Thallium, Total	0.075	0.2	ug/L		U
Lead, Total	0.1	0.5	ug/L		U

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory QC Report

CHLS-P_122325 COC 19226, 19233, 19240

SB:WG204079-2 MB:WG204079-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.1	0.5	ug/L	U	20	19.1	95		85--115
Sodium, Total	100	100	ug/L	U	5000	5450	109		85--115
Magnesium, Total	50	50	ug/L	U	5000	5350	107		85--115
Aluminum, Total	5	10	ug/L	U	200	203	101		85--115
Phosphorus, Total	100	100	ug/L	U	5000	5020	100		85--115
Potassium, Total	100	500	ug/L	U	5000	5200	104		85--115
Calcium, Total	50	50	ug/L	U	5000	5000	100		85--115
Vanadium, Total	0.075	0.375	ug/L	U	20	20.1	100		85--115
Chromium, Total	0.2	1	ug/L	U	20	21.3	107		85--115
Manganese, Total	0.1	0.5	ug/L	U	20	20.8	104		85--115
Iron, Total	10	50	ug/L	U	5000	5260	105		85--115
Cobalt, Total	0.05	0.25	ug/L	U	20	21.1	105		85--115
Nickel, Total	0.1	0.5	ug/L	U	20	20.7	104		85--115
Copper, Total	0.2	2	ug/L	U	20	21.6	108		85--115
Zinc, Total	0.5	2.5	ug/L	U	20	21.1	106		85--115
Arsenic, Total	0.05	0.25	ug/L	U	20	20.1	100		85--115
Selenium, Total	0.5	1	ug/L	U	20	19.9	99		85--115
Silver, Total	0.04	0.2	ug/L	U	20	20.6	103		85--115
Cadmium, Total	0.05	0.25	ug/L	U	20	20.2	101		85--115
Tin, Total	0.5	1.5	ug/L	U	20	19.5	97		85--115
Antimony, Total	0.3	1	ug/L	U	20	19.9	99		85--115
Barium, Total	0.5	0.5	ug/L	U	20	20	100		85--115
Thallium, Total	0.075	0.2	ug/L	U	20	20.9	105		85--115
Lead, Total	0.1	0.5	ug/L	U	20	21.3	106		85--115

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory QC Report

CHLS-P_122325 COC 19226, 19233, 19240

MSD:WG204079-4 MS:WG204079-3 L87502-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	1	5	ug/L	U	199.8	198	99		75--125	199.46	188	94		5		0--20
Sodium, Total	999	999	ug/L	388000	49950	436000		4xRule	75--125	49865	429000		4xRule	2		0--20
Magnesium, Total	500	500	ug/L	28300	49950	79800	103		75--125	49865	79600	103		0		0--20
Aluminum, Total	50	99.9	ug/L	1340	1998	3500	108		75--125	1994.6	3400	103		3		0--20
Phosphorus, Total	1000	999	ug/L	2450	49950	53100	101		75--125	49865	53300	102		0		0--20
Potassium, Total	1000	5000	ug/L	140000	49950	188000	96		75--125	49865	191000	102		2		0--20
Calcium, Total	500	500	ug/L	54500	49950	104000	98		75--125	49865	105000	100		1		0--20
Vanadium, Total	0.75	3.75	ug/L	16	199.8	217	100		75--125	199.46	216	100		0		0--20
Chromium, Total	2	9.99	ug/L	48.3	199.8	256	104		75--125	199.46	257	105		0		0--20
Manganese, Total	1	5	ug/L	582	199.8	780	99		75--125	199.46	779	99		0		0--20
Iron, Total	100	500	ug/L	5100	49950	56300	103		75--125	49865	56000	102		1		0--20
Cobalt, Total	0.5	2.5	ug/L	10.5	199.8	220	105		75--125	199.46	220	105		0		0--20
Nickel, Total	1	5	ug/L	41.4	199.8	246	102		75--125	199.46	245	102		0		0--20
Copper, Total	2	20	ug/L	9.4	199.8	223	107		75--125	199.46	223	107		0		0--20
Zinc, Total	5	25	ug/L	135	199.8	345	105		75--125	199.46	346	106		0		0--20
Arsenic, Total	0.5	2.5	ug/L	36.8	199.8	239	101		75--125	199.46	237	101		1		0--20
Selenium, Total	5	9.99	ug/L	U	199.8	203	102		75--125	199.46	202	101		0		0--20
Silver, Total	0.4	2	ug/L	U	199.8	202	101		75--125	199.46	201	101		0		0--20
Cadmium, Total	0.5	2.5	ug/L	U	199.8	199	100		75--125	199.46	203	102		2		0--20
Tin, Total	5	15	ug/L	U	199.8	192	96		75--125	199.46	190	95		1		0--20
Antimony, Total	3	9.99	ug/L	4.4	199.8	203	100		75--125	199.46	203	99		0		0--20
Barium, Total	5	5	ug/L	66.9	199.8	270	101		75--125	199.46	274	104		1		0--20
Thallium, Total	0.75	2	ug/L	U	199.8	212	106		75--125	199.46	213	107		0		0--20
Lead, Total	1	5	ug/L	1.4	199.8	213	106		75--125	199.46	216	108		2		0--20

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory QC Report

CHLS-P_122325 COC 19226, 19233, 19240

Workgroup: WG204104 Total Metals by ICPMS

MB:WG204104-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.1	0.5	ug/L		U
Sodium, Total	100	100	ug/L		U
Magnesium, Total	50	50	ug/L		U
Aluminum, Total	5	10	ug/L		U
Phosphorus, Total	100	100	ug/L		U
Potassium, Total	100	500	ug/L		U
Calcium, Total	50	50	ug/L		U
Vanadium, Total	0.075	0.375	ug/L		U
Chromium, Total	0.2	1	ug/L		U
Manganese, Total	0.1	0.5	ug/L		U
Iron, Total	10	50	ug/L		U
Cobalt, Total	0.05	0.25	ug/L		U
Nickel, Total	0.1	0.5	ug/L		U
Copper, Total	0.2	2	ug/L		U
Zinc, Total	0.5	2.5	ug/L		U
Arsenic, Total	0.05	0.25	ug/L		U
Selenium, Total	0.5	1	ug/L		U
Silver, Total	0.04	0.2	ug/L		U
Cadmium, Total	0.05	0.25	ug/L		U
Tin, Total	0.5	1.5	ug/L		U
Antimony, Total	0.3	1	ug/L		U
Barium, Total	0.5	0.5	ug/L		U
Thallium, Total	0.075	0.2	ug/L		U
Lead, Total	0.1	0.5	ug/L		U

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory QC Report

CHLS-P_122325 COC 19226, 19233, 19240

SB:WG204104-2 MB:WG204104-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.1	0.5	ug/L	U	20	19.6	98		85--115
Sodium, Total	100	100	ug/L	U	5000	5120	102		85--115
Magnesium, Total	50	50	ug/L	U	5000	5100	102		85--115
Aluminum, Total	5	10	ug/L	U	200	199	99		85--115
Phosphorus, Total	100	100	ug/L	U	5000	4930	99		85--115
Potassium, Total	100	500	ug/L	U	5000	5090	102		85--115
Calcium, Total	50	50	ug/L	U	5000	4920	98		85--115
Vanadium, Total	0.075	0.375	ug/L	U	20	19.4	97		85--115
Chromium, Total	0.2	1	ug/L	U	20	20.2	101		85--115
Manganese, Total	0.1	0.5	ug/L	U	20	20.1	100		85--115
Iron, Total	10	50	ug/L	U	5000	5110	102		85--115
Cobalt, Total	0.05	0.25	ug/L	U	20	20.1	101		85--115
Nickel, Total	0.1	0.5	ug/L	U	20	20.2	101		85--115
Copper, Total	0.2	2	ug/L	U	20	20.9	105		85--115
Zinc, Total	0.5	2.5	ug/L	U	20	19.9	100		85--115
Arsenic, Total	0.05	0.25	ug/L	U	20	19.8	99		85--115
Selenium, Total	0.5	1	ug/L	U	20	19.8	99		85--115
Silver, Total	0.04	0.2	ug/L	U	20	19.8	99		85--115
Cadmium, Total	0.05	0.25	ug/L	U	20	19.6	98		85--115
Tin, Total	0.5	1.5	ug/L	U	20	19.3	97		85--115
Antimony, Total	0.3	1	ug/L	U	20	19.5	97		85--115
Barium, Total	0.5	0.5	ug/L	U	20	20	100		85--115
Thallium, Total	0.075	0.2	ug/L	U	20	21.2	106		85--115
Lead, Total	0.1	0.5	ug/L	U	20	20.9	105		85--115

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory QC Report

CHLS-P_122325 COC 19226, 19233, 19240

MSD:WG204104-4 MS:WG204104-3 L87564-3 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	1	4.99	ug/L	U	199.54	199	100		75--125	199.44	202	101		2		0--20
Sodium, Total	998	998	ug/L	323000	49885	373000		4xRule	75--125	49860	370000		4xRule	1		0--20
Magnesium, Total	499	499	ug/L	24100	49885	76000	104		75--125	49860	74100	100		2		0--20
Aluminum, Total	50	99.8	ug/L	890	1995.4	2910	101		75--125	1994.4	2880	100		1		0--20
Phosphorus, Total	1000	998	ug/L	2090	49885	52700	101		75--125	49860	52200	101		1		0--20
Potassium, Total	1000	4990	ug/L	121000	49885	170000	99		75--125	49860	171000	99		0		0--20
Calcium, Total	499	499	ug/L	52200	49885	102000	99		75--125	49860	101000	99		0		0--20
Vanadium, Total	0.75	3.74	ug/L	13.2	199.54	211	99		75--125	199.44	208	98		2		0--20
Chromium, Total	2	9.98	ug/L	40.1	199.54	242	101		75--125	199.44	240	100		1		0--20
Manganese, Total	1	4.99	ug/L	529	199.54	733	102		75--125	199.44	727	99		1		0--20
Iron, Total	100	499	ug/L	3950	49885	54800	102		75--125	49860	54400	101		1		0--20
Cobalt, Total	0.5	2.49	ug/L	8.72	199.54	212	102		75--125	199.44	212	102		0		0--20
Nickel, Total	1	4.99	ug/L	35.1	199.54	237	101		75--125	199.44	239	102		1		0--20
Copper, Total	2	20	ug/L	7.4	199.54	217	105		75--125	199.44	218	105		0		0--20
Zinc, Total	5	24.9	ug/L	103	199.54	303	100		75--125	199.44	306	101		1		0--20
Arsenic, Total	0.5	2.49	ug/L	31.6	199.54	231	100		75--125	199.44	231	100		0		0--20
Selenium, Total	5	9.98	ug/L	U	199.54	201	101		75--125	199.44	201	101		0		0--20
Silver, Total	0.4	2	ug/L	U	199.54	193	97		75--125	199.44	192	96		0		0--20
Cadmium, Total	0.5	2.49	ug/L	U	199.54	196	98		75--125	199.44	195	98		1		0--20
Tin, Total	5	15	ug/L	U	199.54	192	96		75--125	199.44	187	94		3		0--20
Antimony, Total	3	9.98	ug/L	4	199.54	204	100		75--125	199.44	200	98		2		0--20
Barium, Total	5	4.99	ug/L	61.1	199.54	259	99		75--125	199.44	259	99		0		0--20
Thallium, Total	0.75	2	ug/L	U	199.54	205	103		75--125	199.44	204	102		1		0--20
Lead, Total	1	4.99	ug/L	U	199.54	205	103		75--125	199.44	203	102		1		0--20

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory QC Report

CHLS-P_122325 COC 19226, 19233, 19240

Workgroup: WG204117 Total Mercury by CVAA

MB:WG204117-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.05	0.1	ug/L		U

SB:WG204117-2 MB:WG204117-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	0.965	97		85--115

MSD:WG204117-4 MS:WG204117-3 L87564-3 Matrix: LEACHATE Listtype:MTHG-MID Method:EPA 245.1 Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.1	0.2	ug/L	U	2	1.88	94		75--125	2	1.86	93		1		0--20

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4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 12/14/25

Department of
Natural Resources and Parks
Solid Waste Division

No. **19226**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25.2)

Lab No.	Sample ID	Date	Time
87502-1	LEPS251213P	12/13/25	2000

Project Site Test Reference

	CHGW	CHGW	CHGW/VAGW	CHGW-OS	CFGW	DUGW	ENGW	HOGW	HTGW	PUGW	VAGW	CHSW-Q	CFSW	DUSW	VASW	CHSW-P	CHSW-P	HTSW-P	SHSW-P	SHSW-P	FASW-P	ENSW-P	ALSW-P	VASW-P	RMSW-P	CHTW	CHLS-M	CHLS-M MOD	CHLS-P	CHLS-P	CHLS-P	ALLS-P	BLLS-P	ENLS-P	FALS-P	SRLS-P	HTLS-P	RELS-P	VALS-P	VALS-Q	Number of Containers	Remarks
	Cedar Hills GW Qlty	Cedar Hills EP2 GW Qlty	Appendix III GW	Cedar Hills GW Offsite	Cedar Falls GW Qlty	Duvall GW Qlty	Enumclaw GW Qlty	Hobart GW Qlty	Houghton GW Qlty	Puyallup GW Qlty	Vashon GW Qlty	Cedar Hills SW Sta. E-1	Cedar Falls SW Qlty	Duvall SW Qlty	Vashon SW Qlty-WEIRS	Cedar Hills SW	Cedar Hills SW - Infiltration	Houghton SW	Shoreline SW	Shoreline SW - Infiltration	Factoria SW	Enumclaw SW - Infiltration	Algona SW	Vashon SW	Renton Maint. Facility SW	Cedar Hills Truckwash	Cedar Hills Leachate Mthly	CH Leachate Mods Mthly	CH L Permit (wkly, 1st)	CH L Permit (mnthly)	CH L Permit (wkly, 2nd)	Algona WW Permit	Bow Lake WW Permit	Enumclaw WW Permit	Factoria WW Permit	Shoreline WW Permit	Houghton WW Permit	Renton WW Permit	Vashon WW Permit Tanker	Vashon Leachate Qlty		
	GROUNDWATER											SURFACE/STORM WATER				ISGP										LEACHATE/WASTEWATER			PRETREATMENT PERMITS												
	2	2.1	4	38	5	6	7	8	9	10	12	14	17	18	21	16	16.1	52	53	53.1	54	56.1	57	58	60	24	23	23+	25	25.1	25.2	26	20	27	28	29	30	31	32	34		
87502-1																															X										1	

Relinquished By Sampler: [signature] — Date: 12/14/25
Sampler Signature: I. Rivers
Sampler Printed Name: KCSWD — Company — Time: 1230

Relinquished By — Date
Signature
Printed Name — Company — Time

Received By — Date
Signature
Printed Name — Company — Time

Received By: [signature] — Date: 12-16-25
Signature: Jason Kinney
Printed Name: KEL — Company — Time: 1430

Observations/Comments/Special Instructions:

Arsenic ONLY.

Sample custody sealed on 12/14 at 1230 hrs.

Total # of Containers: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v6.0 (Rev 10/2025)

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 87502-										
	-1										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	(Y) / N		Volumes	(Y) / N	
Container	(Y) / N		Holding Times	(Y) / N	
Cooler Temperature (° C)	(Y) / N	12/12/2.0	Delivery Location	(Y) / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 12/13/25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P (25.2)

Receive Date: 12/16/25 COC / SDG No.: 19226

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____ Date / Time Completed: DEC 16 '25 15:19

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

Chain of Custody Record

Environmental Monitoring Program

Date: 12/16/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19233**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25)

Project Site Test Reference

| | | |

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 87564 -1	-2
40 mL clear vial (VOA)		
60 mL CWM HDPE		
125 mL CNM HDPE		
125 mL CWM HDPE		
125 mL GANM w/HCl		
250 mL CWM HDPE		
250 mL GAWM w/H_2SO_4		
500 mL AWM HDPE		
500 mL CWM HDPE		
500 mL CWM PP (MICRO)		
500 mL HDPE (METALS)	1	1
500 mL GAWM		
1L CWM HDPE		
1L GANM		
1L GAWM w/ H_2SO_4		
2L CWM HDPE:		
Other -		
Other -		
Other -		
Other -		
Other -		
Total # of Samples 2	1	1
	Number of bottles per sample	

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	(Y) / N		Volumes	(Y) / N	
Container	(Y) / N		Holding Times	(Y) / N	
Cooler Temperature (° C)	(Y) / N	0.5 / 0 / 1.2	Delivery Location	(Y) / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 12/15/25 Project No.: 421422

VTRP Collect Date(s): — Project Site Test Reference: CHLS-P (25)

Receive Date: 12/16/25 COC / SDG No.: 19233

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____ Date / Time Completed: DEC 16 '25 15:11

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

Chain of Custody Record

Environmental Monitoring Program

Date: 12/18/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19240**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25.1)

Lab No.	Sample ID	Date	Time
87654-3	LEPS251218P	12/18/25	0130

Project Site Test Reference

| GROUNDWATER | | | | | | | | | | | | SURFACE/STORM WATER | | | | ISGP | | | | | | | | | | | | LEACHATE/WASTEWATER | | | | PRETREATMENT PERMITS | | | | | | | | | | | |

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 87564 Save 12/18/25 87564
	3
40 mL clear vial (VOA)	
60 mL CWM HDPE	
125 mL CNM HDPE	
125 mL CWM HDPE	
125 mL GANM w/HCl	
250 mL CWM HDPE	
250 mL GAWM w/H_2SO_4	1
500 mL AWM HDPE	
500 mL CWM HDPE	
500 mL CWM PP (MICRO)	
500 mL HDPE (METALS)	1
500 mL GAWM	
1L CWM HDPE	
1L GANM	
1L GAWM w/ H_2SO_4	
2L CWM HDPE:	
Other -	
Other -	
Other -	
Other -	
Other -	
Total # of Samples	2

Number of bottles per sample

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	2-2.1 2.0 1.8	Delivery Location	Y / N	

Sub-Contracting: Y / N — List Product(s):

Changes: Y / N — List Parameter(s):

COMMENTS / NOTIFICATIONS

Sample Collect Date(s): 12/18/25 — Project No.: 421422

VTRP Collect Date(s): — Project Site Test Reference: CHLS-P(25.1)

Receive Date: 12/18/25 — COC / SDG No.: 19240

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #28)	Check documentation	Y / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☑ Deliver to CONV
Other:			

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: DEC 18 '25 15:02

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

January 2, 2026

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P)

Sample Id.	Sample Collect Date	COC
LEPS251222P	**12/22/2025**	**19243**
LEPS251224P	**12/24/2025**	**19244**

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 2 leachate permit samples collected December 22 and 24, 2025.

Sample Receiving Comments
No sample receiving anomalies were observed.

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

Conventionals QC Information
All calculable QC results for conventionals parameters were within laboratory control limits.

Metals QC Information
All calculable QC results for metals parameters were within laboratory control limits.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,



Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

Sample Data

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 01/02/2026
Report Group: CHLS-P_123025

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS251222P**
SDG / Lab Sample ID: **19243 / L87602-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **12/22/2025**
Login Date: **12/23/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, P-ICPMS, Metals

200.8, SWD-ICPMS23, Metals

245.1, HG-CVAA-M, Metals

Client Sample ID: **LEPS251224P**
SDG / Lab Sample ID: **19244 / L87602-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **12/24/2025**
Login Date: **12/26/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, AS-ICPMS, Metals

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 01/02/2026
Report Group: CHLS-P_123025

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS251222P**
CoC / Lab Sample ID: **19243 / L87602-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **12/22/2025**
Login Date: **12/23/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Aluminum, Total	10	mg/L	1.62		.05	.0999		12/24/2025	12/26/2025	WG204140
Antimony, Total	10	mg/L	.0038	T	.003	.00999		12/24/2025	12/26/2025	WG204140
Arsenic, Total	10	mg/L	.0303		.0005	.0025	1	12/24/2025	12/26/2025	WG204140
Barium, Total	10	mg/L	.0633		.005	.005		12/24/2025	12/26/2025	WG204140
Beryllium, Total	10	mg/L	<.001	U	.001	.005		12/24/2025	12/26/2025	WG204140
Cadmium, Total	10	mg/L	<.0005	U	.0005	.0025	0.5	12/24/2025	12/26/2025	WG204140
Calcium, Total	10	mg/L	55.3		.5	.5		12/24/2025	12/26/2025	WG204140
Chromium, Total	10	mg/L	.038		.002	.00999	2.75	12/24/2025	12/26/2025	WG204140
Cobalt, Total	10	mg/L	.00877		.0005	.0025		12/24/2025	12/26/2025	WG204140
Copper, Total	10	mg/L	.0099	T	.002	.02	3	12/24/2025	12/26/2025	WG204140
Iron, Total	10	mg/L	4.85		.1	.5		12/24/2025	12/26/2025	WG204140
Lead, Total	10	mg/L	.0014	T	.001	.005	2	12/24/2025	12/26/2025	WG204140
Magnesium, Total	10	mg/L	24.3		.5	.5		12/24/2025	12/26/2025	WG204140
Manganese, Total	10	mg/L	.591		.001	.005		12/24/2025	12/26/2025	WG204140
Nickel, Total	10	mg/L	.0344		.001	.005	2.5	12/24/2025	12/26/2025	WG204140
Phosphorus, Total	10	mg/L	2.11		1	.999		12/24/2025	12/26/2025	WG204140
Potassium, Total	10	mg/L	110		1	5		12/24/2025	12/26/2025	WG204140
Selenium, Total	10	mg/L	<.005	U	.005	.00999		12/24/2025	12/26/2025	WG204140
Silver, Total	10	mg/L	<.0004	U	.0004	.002	1	12/24/2025	12/26/2025	WG204140
Sodium, Total	10	mg/L	297		.999	.999		12/24/2025	12/26/2025	WG204140
Thallium, Total	10	mg/L	<.00075	U	.00075	.002		12/24/2025	12/26/2025	WG204140
Tin, Total	10	mg/L	<.005	U	.005	.015		12/24/2025	12/26/2025	WG204140
Vanadium, Total	10	mg/L	.0139		.00075	.00375		12/24/2025	12/26/2025	WG204140
Zinc, Total	10	mg/L	.155		.005	.025	5	12/24/2025	12/26/2025	WG204140
Mercury, Total	2	mg/L	<.0001	U	.0001	.0002		12/24/2025	12/29/2025	WG204145

Client Sample ID: **LEPS251224P**
CoC / Lab Sample ID: **19244 / L87602-2**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **12/24/2025**
Login Date: **12/26/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.032		.0005	.00251	1	12/29/2025	12/30/2025	WG204163

Target Parameter Count for Report Group: 26

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

Quality Control Data

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory QC Report

CHLS-P_123025 COC 19243 19244

Workgroup: WG204140 Total Metals by ICPMS

MB:WG204140-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.1	0.5	ug/L		U
Sodium, Total	100	100	ug/L		U
Magnesium, Total	50	50	ug/L		U
Aluminum, Total	5	10	ug/L		U
Phosphorus, Total	100	100	ug/L		U
Potassium, Total	100	500	ug/L		U
Calcium, Total	50	50	ug/L		U
Vanadium, Total	0.075	0.375	ug/L		U
Chromium, Total	0.2	1	ug/L		U
Manganese, Total	0.1	0.5	ug/L		U
Iron, Total	10	50	ug/L		U
Cobalt, Total	0.05	0.25	ug/L		U
Nickel, Total	0.1	0.5	ug/L		U
Copper, Total	0.2	2	ug/L		U
Zinc, Total	0.5	2.5	ug/L		U
Arsenic, Total	0.05	0.25	ug/L		U
Selenium, Total	0.5	1	ug/L		U
Silver, Total	0.04	0.2	ug/L		U
Cadmium, Total	0.05	0.25	ug/L		U
Tin, Total	0.5	1.5	ug/L		U
Antimony, Total	0.3	1	ug/L		U
Barium, Total	0.5	0.5	ug/L		U
Thallium, Total	0.075	0.2	ug/L		U
Lead, Total	0.1	0.5	ug/L		U

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory QC Report

CHLS-P_123025 COC 19243 19244

SB:WG204140-2 MB:WG204140-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.1	0.5	ug/L	U	20	19.7	98		85--115
Sodium, Total	100	100	ug/L	U	5000	5150	103		85--115
Magnesium, Total	50	50	ug/L	U	5000	5300	106		85--115
Aluminum, Total	5	10	ug/L	U	200	201	100		85--115
Phosphorus, Total	100	100	ug/L	U	5000	4870	97		85--115
Potassium, Total	100	500	ug/L	U	5000	5210	104		85--115
Calcium, Total	50	50	ug/L	U	5000	4870	97		85--115
Vanadium, Total	0.075	0.375	ug/L	U	20	20	100		85--115
Chromium, Total	0.2	1	ug/L	U	20	20.7	103		85--115
Manganese, Total	0.1	0.5	ug/L	U	20	20.5	102		85--115
Iron, Total	10	50	ug/L	U	5000	5310	106		85--115
Cobalt, Total	0.05	0.25	ug/L	U	20	20.6	103		85--115
Nickel, Total	0.1	0.5	ug/L	U	20	20.7	104		85--115
Copper, Total	0.2	2	ug/L	U	20	20.2	101		85--115
Zinc, Total	0.5	2.5	ug/L	U	20	20.5	103		85--115
Arsenic, Total	0.05	0.25	ug/L	U	20	20.1	101		85--115
Selenium, Total	0.5	1	ug/L	U	20	20.5	103		85--115
Silver, Total	0.04	0.2	ug/L	U	20	19.6	98		85--115
Cadmium, Total	0.05	0.25	ug/L	U	20	19.9	99		85--115
Tin, Total	0.5	1.5	ug/L	U	20	19.8	99		85--115
Antimony, Total	0.3	1	ug/L	U	20	19.9	99		85--115
Barium, Total	0.5	0.5	ug/L	U	20	20.3	101		85--115
Thallium, Total	0.075	0.2	ug/L	U	20	21.5	107		85--115
Lead, Total	0.1	0.5	ug/L	U	20	21.6	108		85--115

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory QC Report

CHLS-P_123025 COC 19243 19244

MSD:WG204140-4 MS:WG204140-3 L87602-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	1	4.99	ug/L	U	199.72	194	97		75--125	198.8	190	96		2		0--20
Sodium, Total	999	999	ug/L	297000	49930	343000		4xRule	75--125	49700	344000		4xRule	0		0--20
Magnesium, Total	499	499	ug/L	24300	49930	76100	104		75--125	49700	76000	104		0		0--20
Aluminum, Total	50	99.9	ug/L	1620	1997.2	3680	103		75--125	1988	3710	106		1		0--20
Phosphorus, Total	1000	999	ug/L	2110	49930	50700	97		75--125	49700	50700	98		0		0--20
Potassium, Total	1000	4990	ug/L	110000	49930	161000	102		75--125	49700	161000	102		0		0--20
Calcium, Total	499	499	ug/L	55300	49930	104000	97		75--125	49700	104000	98		0		0--20
Vanadium, Total	0.75	3.74	ug/L	13.9	199.72	215	101		75--125	198.8	215	101		0		0--20
Chromium, Total	2	9.99	ug/L	38	199.72	243	103		75--125	198.8	243	103		0		0--20
Manganese, Total	1	4.99	ug/L	591	199.72	797	103		75--125	198.8	803	107		1		0--20
Iron, Total	100	499	ug/L	4850	49930	56800	104		75--125	49700	57400	106		1		0--20
Cobalt, Total	0.5	2.5	ug/L	8.77	199.72	217	104		75--125	198.8	218	105		1		0--20
Nickel, Total	1	4.99	ug/L	34.4	199.72	242	104		75--125	198.8	244	106		1		0--20
Copper, Total	2	20	ug/L	9.9	199.72	212	101		75--125	198.8	213	102		0		0--20
Zinc, Total	5	25	ug/L	155	199.72	361	103		75--125	198.8	361	104		0		0--20
Arsenic, Total	0.5	2.5	ug/L	30.3	199.72	235	103		75--125	198.8	235	103		0		0--20
Selenium, Total	5	9.99	ug/L	U	199.72	206	103		75--125	198.8	206	104		0		0--20
Silver, Total	0.4	2	ug/L	U	199.72	194	97		75--125	198.8	194	97		0		0--20
Cadmium, Total	0.5	2.5	ug/L	U	199.72	199	100		75--125	198.8	199	100		0		0--20
Tin, Total	5	15	ug/L	U	199.72	191	96		75--125	198.8	186	94		3		0--20
Antimony, Total	3	9.99	ug/L	3.8	199.72	209	103		75--125	198.8	203	100		3		0--20
Barium, Total	5	4.99	ug/L	63.3	199.72	261	99		75--125	198.8	257	97		2		0--20
Thallium, Total	0.75	2	ug/L	U	199.72	213	106		75--125	198.8	208	104		2		0--20
Lead, Total	1	4.99	ug/L	1.4	199.72	214	106		75--125	198.8	210	105		2		0--20

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory QC Report

CHLS-P_123025 COC 19243 19244

Workgroup: WG204145 Total Mercury by CVAA

MB:WG204145-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.05	0.1	ug/L		U

SB:WG204145-2 MB:WG204145-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	0.948	95		85--115

MSD:WG204145-4 MS:WG204145-3 L87602-1 Matrix: LEACHATE Listtype:MTHG-MID Method:EPA 245.1 Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.1	0.2	ug/L	U	2	1.83	91		75--125	2	1.91	96		4		0--20

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory QC Report

CHLS-P_123025 COC 19243 19244

Workgroup: WG204163 Total Metals by ICPMS

MB:WG204163-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total	0.05	0.25	ug/L		U

SB:WG204163-2 MB:WG204163-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Arsenic, Total	0.05	0.25	ug/L	U	20	20.6	103		85--115

MSD:WG204163-4 MS:WG204163-3 L87602-2 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Arsenic, Total	0.5	2.49	ug/L	32	199.52	234	101		75--125	198.56	233	101		1		0--20

==========

4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 12/23/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19243**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P(25)

Lab No.	Sample ID	Date	Time
87602-1	~~LEPS251222P~~	12/22/25	1900
	LEPS251222P JP 12/23		

Project Site Test Reference

	CHGW	Cedar Hills GW Qtly	2
	CHGW	Cedar Hills EPZ GW Qtly	2.1
	CHGW/AGW	Appendix III GW	4
	CHGW-OS	Cedar Hills GW Offsite	38
	CFGW	Cedar Falls GW Qtly	5
GROUNDWATER	DUGW	Duvall GW Qtly	6
	ENGW	Enumclaw GW Qtly	7
	HOGW	Hobart GW Qtly	8
	HTGW	Houghton GW Qtly	9
	PUGW	Puyallup GW Qtly	10
	VAGW	Vashon GW Qtly	12
	CHSW-Q	Cedar Hills SW Sta. E-1	14
	CFSW	Cedar Falls SW Qtly	17
	DUSW	Duvall SW Qtly	18
SURFACE/STORM WATER	VASW	Vashon SW Qtly-WEIRS	21
ISGP	CHSW-P	Cedar Hills SW	16
	CHSW-P	Cedar Hills SW - Infiltration	16.1
	HTSW-P	Houghton SW	52
	SHSW-P	Shoreline SW	53
	SHSW-P	Shoreline SW - Infiltration	53.1
	FASW-P	Factoria SW	54
	ENSW-P	Enumclaw SW - Infiltration	56.1
	ALSW-P	Algona SW	57
	VASW-P	Vashon SW	58
	RMSW-P	Renton Maint. Facility SW	60
	CHTW	Cedar Hills Truckwash	24
LEACHATE/WASTEWATER	CHLS-M	Cedar Hills Leachate Mtly	23
	CRLS-M_MOD	CH Leachate Mods Mtly	23+
PRETREATMENT PERMITS	CHLS-P	CH L Permit (wkly, 1st)	25
	CHLS-P	CH L Permit (mnthly)	25.1
	CHLS-P	CH L Permit (wkly, 2nd)	25.2
	ALLS-P	Algona WW Permit	26
	BLLS-P	Bow Lake WW Permit	20
	ENLS-P	Enumclaw WW Permit	27
	FALS-P	Factoria WW Permit	28
	SRLS-P	Shoreline WW Permit	29
	HTLS-P	Houghton WW Permit	30
	RELS-P	Renton WW Permit	31
	VALS-P	Vashon WW Permit Tanker	32
	VALS-Q	Vashon Leachate Qtly	34

Lab No.	Number of Containers	Remarks
87602-1	1	DISS. SULFIDE <0.1 ppm

	Relinquished By Sampler	Date	Received By	Date
	Sampler Signature: J Patten	12/23/25	Signature	
	Sampler Printed Name: KCSWD	Time: 1220*	Printed Name	Time
	Company		Company	
	Relinquished By	Date	Received By: Jason Ginnard	Date: 122325
	Signature		Signature	
	Printed Name	Time	Printed Name: KCEC	Time: 1335
	Company		Company	

Observations/Comments/Special Instructions:

* Custody sealed 12/23/25 @ 1220

Total # of Containers: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v6.0 (Rev 10/2025)

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 876082 -1
40 mL clear vial (VOA)	
60 mL CWM HDPE	
125 mL CNM HDPE	
125 mL CWM HDPE	
125 mL GANM w/HCl	
250 mL CWM HDPE	
250 mL GAWM w/H_2SO_4	
500 mL AWM HDPE	
500 mL CWM HDPE	
500 mL CWM PP (MICRO)	
500 mL HDPE (METALS)	1
500 mL GAWM	
1L CWM HDPE	
1L GANM	
1L GAWM w/ H_2SO_4	
2L CWM HDPE:	
Other -	
Other -	
Other -	
Other -	
Other -	
Total # of Samples	1

Number of bottles per sample

Sample Collect Date(s): 12-22-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P (25)

Receive Date: 12-23-25 COC / SDG No.: 19293

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	Y / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	2.0 1.7 1.7	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

COMMENTS / NOTIFICATIONS

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____ Date / Time Completed: DEC 23 '25 13:57

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

Chain of Custody Record

Environmental Monitoring Program

Date: 12/26/25

Department of
Natural Resources and Parks
Solid Waste Division

No. **19244**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25.2)

Lab No.	Sample ID	Date	Time
876002-2	LEPS251224P	12/24/25	1900

Project Site Test Reference

| | | |

SWD SAMPLE RECEIPT RECORD

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s)										
	87602										
	2										
40 mL clear vial (VOA)											
60 mL CWM HDPE											
125 mL CNM HDPE											
125 mL CWM HDPE											
125 mL GANM w/HCl											
250 mL CWM HDPE											
250 mL GAWM w/H_2SO_4											
500 mL AWM HDPE											
500 mL CWM HDPE											
500 mL CWM PP (MICRO)											
500 mL HDPE (METALS)	1										
500 mL GAWM											
1L CWM HDPE											
1L GANM											
1L GAWM w/ H_2SO_4											
2L CWM HDPE:											
Other -											
Other -											
Other -											
Other -											
Other -											
Total # of Samples	1										

Number of bottles per sample

Sample Collect Date(s): 12/24/25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P (25.2)

Receive Date: 12/26/25 COC / SDG No.: 19249

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	20.1-6.1.4	Delivery Location	Y / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

COMMENTS / NOTIFICATIONS

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: Alex Jay

Date / Time Completed: DEC 26 25 1725

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County
Department of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory
LAB-NR0100
322 West Ewing Street
Seattle, WA 98119-1507
206-477-7200 Fax 206-684-2395
TTY Relay: 711

Susannah Rowles
Phone: 206.477.7158
Fax: 206.684.9123

King County Environmental Laboratory

January 9, 2026

Grant Dornfeld
King County Department of Natural Resources
Solid Waste Division
King Street Center
201 S. Jackson Street, Suite 701
Seattle, Washington 98104-3855

RE: Cedar Hills Leachate Permit (CHLS-P)

Sample Id.	Sample Collect Date	COC
LEPS251229P	**12/29/2025**	**19246**
LEPS251231P	**12/31/25**	**19219**

Dear Grant Dornfeld,

Enclosed please find a laboratory data deliverables package for 2 leachate permit samples collected December 29 and 31 2025.

Sample Receiving Comments
No sample receiving anomalies were observed.

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

Metals QC Information

All calculable QC results for metals parameters were within laboratory control limits.

This package includes sample and laboratory Quality Control data, and copies of sample receipt and chain of custody records. Electronic Data Delivery (EDD) files have been separately transmitted.

Please let me know if you have any questions regarding this report.

Sincerely,



Susannah Rowles
Laboratory Project Manager/Water Quality Planner III
King County Environmental Laboratory
206.477.7158

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

Sample Data

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 01/06/2026
Report Group: CHLS-P_010626

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS251231P**
SDG / Lab Sample ID: **19219 / L87647-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **12/31/2025**
Login Date: **01/02/2026**
Matrix: **LEACHATE**

Analyses Requested:

200.8, AS-ICPMS, Metals

Client Sample ID: **LEPS251229P**
SDG / Lab Sample ID: **19246 / L87605-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **12/29/2025**
Login Date: **12/30/2025**
Matrix: **LEACHATE**

Analyses Requested:

200.8, P-ICPMS, Metals

200.8, SWD-ICPMS23, Metals

245.1, HG-CVAA-M, Metals

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory

Client: King County Division of Solid Waste
Date Reported: 01/06/2026
Report Group: CHLS-P_010626

Report To: Natalya Usova
201 S Jackson St, Suite 701
Seattle, WA 98104-3855

Client Sample ID: **LEPS251231P**
CoC / Lab Sample ID: **19219 / L87647-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **12/31/2025**
Login Date: **01/02/2026**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Arsenic, Total	10	mg/L	.0391		.00049	.00247	1	01/05/2026	01/06/2026	WG204223

Client Sample ID: **LEPS251229P**
CoC / Lab Sample ID: **19246 / L87605-1**
Project Name: **SWD-CHLS-P Cedar Hills Leachate Permit**

Collect Date: **12/29/2025**
Login Date: **12/30/2025**
Matrix: **LEACHATE**

Metals

Constituent	D.F.	Unit	Results	Q	MDL	RDL	Reg Limit	Prep Date	Run Date	Run
Mercury, Total	2	mg/L	<.0001	U	.0001	.0002		12/30/2025	12/31/2025	WG204184
Aluminum, Total	10	mg/L	1.4		.051	.102		12/31/2025	01/05/2026	WG204185
Antimony, Total	10	mg/L	.0048	T	.0031	.0102		12/31/2025	01/05/2026	WG204185
Arsenic, Total	10	mg/L	.0386		.00051	.00255	1	12/31/2025	01/05/2026	WG204185
Barium, Total	10	mg/L	.0715		.0051	.0051		12/31/2025	01/05/2026	WG204185
Beryllium, Total	10	mg/L	<.001	U	.001	.0051		12/31/2025	01/05/2026	WG204185
Cadmium, Total	10	mg/L	<.00051	U	.00051	.00255	0.5	12/31/2025	01/05/2026	WG204185
Calcium, Total	10	mg/L	58.7		.51	.51		12/31/2025	01/05/2026	WG204185
Chromium, Total	10	mg/L	.054		.002	.0102	2.75	12/31/2025	01/05/2026	WG204185
Cobalt, Total	10	mg/L	.011		.00051	.00255		12/31/2025	01/05/2026	WG204185
Copper, Total	10	mg/L	.0099	T	.002	.0204	3	12/31/2025	01/05/2026	WG204185
Iron, Total	10	mg/L	4.56		.1	.51		12/31/2025	01/05/2026	WG204185
Lead, Total	10	mg/L	.0013	T	.001	.0051	2	12/31/2025	01/05/2026	WG204185
Magnesium, Total	10	mg/L	28.8		.51	.51		12/31/2025	01/05/2026	WG204185
Manganese, Total	10	mg/L	.589		.001	.0051		12/31/2025	01/05/2026	WG204185
Nickel, Total	10	mg/L	.0449		.001	.0051	2.5	12/31/2025	01/05/2026	WG204185
Phosphorus, Total	10	mg/L	2.74		1	1.02		12/31/2025	01/05/2026	WG204185
Potassium, Total	10	mg/L	149		1	5.1		12/31/2025	01/05/2026	WG204185
Selenium, Total	10	mg/L	<.0051	U	.0051	.0102		12/31/2025	01/05/2026	WG204185
Silver, Total	10	mg/L	<.00041	U	.00041	.00204	1	12/31/2025	01/05/2026	WG204185
Sodium, Total	10	mg/L	395		1.02	1.02		12/31/2025	01/05/2026	WG204185
Thallium, Total	10	mg/L	<.00076	U	.00076	.00204		12/31/2025	01/05/2026	WG204185
Tin, Total	10	mg/L	<.0051	U	.0051	.0153		12/31/2025	01/05/2026	WG204185
Vanadium, Total	10	mg/L	.0174	D	.00076	.00382		12/31/2025	01/05/2026	WG204185
Zinc, Total	10	mg/L	.168		.0051	.0255	5	12/31/2025	01/05/2026	WG204185

Target Parameter Count for Report Group: 26

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

Quality Control Data

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory QC Report

CHLS-P_010626 COC 19219 19246

Workgroup: WG204184 Total Mercury by CVAA

MB:WG204184-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total	0.05	0.1	ug/L		U

SB:WG204184-2 MB:WG204184-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total	0.05	0.1	ug/L	U	1	1	100		85--115

MSD:WG204184-4 MS:WG204184-3 L87605-1 Matrix: LEACHATE Listtype:MTHG-MID Method:EPA 245.1 Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total	0.1	0.2	ug/L	U	2	1.9	95		75--125	2	1.87	94		1		0--20

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory QC Report

CHLS-P_010626 COC 19219 19246

Workgroup: WG204185 Total Metals by ICPMS

MB:WG204185-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total	0.1	0.5	ug/L		U
Sodium, Total	100	100	ug/L		U
Magnesium, Total	50	50	ug/L		U
Aluminum, Total	5	10	ug/L		U
Phosphorus, Total	100	100	ug/L		U
Potassium, Total	100	500	ug/L		U
Calcium, Total	50	50	ug/L		U
Vanadium, Total	0.075	0.375	ug/L		U
Chromium, Total	0.2	1	ug/L		U
Manganese, Total	0.1	0.5	ug/L		U
Iron, Total	10	50	ug/L		U
Cobalt, Total	0.05	0.25	ug/L		U
Nickel, Total	0.1	0.5	ug/L		U
Copper, Total	0.2	2	ug/L		U
Zinc, Total	0.5	2.5	ug/L		U
Arsenic, Total	0.05	0.25	ug/L		U
Selenium, Total	0.5	1	ug/L		U
Silver, Total	0.04	0.2	ug/L		U
Cadmium, Total	0.05	0.25	ug/L		U
Tin, Total	0.5	1.5	ug/L		U
Antimony, Total	0.3	1	ug/L		U
Barium, Total	0.5	0.5	ug/L		U
Thallium, Total	0.075	0.2	ug/L		U
Lead, Total	0.1	0.5	ug/L		U

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory QC Report

CHLS-P_010626 COC 19219 19246

SB:WG204185-2 MB:WG204185-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total	0.1	0.5	ug/L	U	20	19.9	100		85--115
Sodium, Total	100	100	ug/L	U	5000	5240	105		85--115
Magnesium, Total	50	50	ug/L	U	5000	5190	104		85--115
Aluminum, Total	5	10	ug/L	U	200	207	104		85--115
Phosphorus, Total	100	100	ug/L	U	5000	5030	101		85--115
Potassium, Total	100	500	ug/L	U	5000	5160	103		85--115
Calcium, Total	50	50	ug/L	U	5000	5020	100		85--115
Vanadium, Total	0.075	0.375	ug/L	U	20	20.5	103		85--115
Chromium, Total	0.2	1	ug/L	U	20	21.9	109		85--115
Manganese, Total	0.1	0.5	ug/L	U	20	21.9	110		85--115
Iron, Total	10	50	ug/L	U	5000	5330	107		85--115
Cobalt, Total	0.05	0.25	ug/L	U	20	21.2	106		85--115
Nickel, Total	0.1	0.5	ug/L	U	20	21.6	108		85--115
Copper, Total	0.2	2	ug/L	U	20	22.3	111		85--115
Zinc, Total	0.5	2.5	ug/L	U	20	21.2	106		85--115
Arsenic, Total	0.05	0.25	ug/L	U	20	20.4	102		85--115
Selenium, Total	0.5	1	ug/L	U	20	20.6	103		85--115
Silver, Total	0.04	0.2	ug/L	U	20	20.8	104		85--115
Cadmium, Total	0.05	0.25	ug/L	U	20	20.6	103		85--115
Tin, Total	0.5	1.5	ug/L	U	20	20.2	101		85--115
Antimony, Total	0.3	1	ug/L	U	20	21.8	109		85--115
Barium, Total	0.5	0.5	ug/L	U	20	20.6	103		85--115
Thallium, Total	0.075	0.2	ug/L	U	20	22.1	110		85--115
Lead, Total	0.1	0.5	ug/L	U	20	21.7	109		85--115

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory QC Report

CHLS-P_010626 COC 19219 19246

MSD:WG204185-4 MS:WG204185-3 L87605-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Beryllium, Total	1	5.09	ug/L	U	203.72	205	101		75--125	202.72	206	102		0		0--20
Sodium, Total	1020	1020	ug/L	395000	50930	440000		4xRule	75--125	50680	441000		4xRule	0		0--20
Magnesium, Total	509	509	ug/L	28800	50930	80700	102		75--125	50680	79900	101		1		0--20
Aluminum, Total	51	102	ug/L	1400	2037.2	3900	123		75--125	2027.2	3590	108		8		0--20
Phosphorus, Total	1000	1020	ug/L	2740	50930	54400	101		75--125	50680	54000	101		1		0--20
Potassium, Total	1000	5090	ug/L	149000	50930	201000	102		75--125	50680	199000	99		1		0--20
Calcium, Total	509	509	ug/L	58700	50930	111000	102		75--125	50680	110000	101		1		0--20
Vanadium, Total	0.76	3.82	ug/L	17.4	203.72	229	104		75--125	202.72	229	104		0		0--20
Chromium, Total	2	10.2	ug/L	54	203.72	275	108		75--125	202.72	272	108		1		0--20
Manganese, Total	1	5.09	ug/L	589	203.72	813	110		75--125	202.72	808	108		1		0--20
Iron, Total	100	509	ug/L	4560	50930	57800	104		75--125	50680	57300	104		1		0--20
Cobalt, Total	0.51	2.55	ug/L	11	203.72	229	107		75--125	202.72	227	107		1		0--20
Nickel, Total	1	5.09	ug/L	44.9	203.72	266	108		75--125	202.72	264	108		1		0--20
Copper, Total	2	20.4	ug/L	9.9	203.72	238	112		75--125	202.72	236	111		1		0--20
Zinc, Total	5.1	25.5	ug/L	168	203.72	383	106		75--125	202.72	382	105		0		0--20
Arsenic, Total	0.51	2.55	ug/L	38.6	203.72	252	105		75--125	202.72	251	105		0		0--20
Selenium, Total	5.1	10.2	ug/L	U	203.72	216	106		75--125	202.72	215	106		0		0--20
Silver, Total	0.41	2.04	ug/L	U	203.72	203	100		75--125	202.72	200	99		1		0--20
Cadmium, Total	0.51	2.55	ug/L	U	203.72	208	102		75--125	202.72	209	103		0		0--20
Tin, Total	5.1	15.3	ug/L	U	203.72	207	102		75--125	202.72	200	99		3		0--20
Antimony, Total	3.1	10.2	ug/L	4.8	203.72	228	110		75--125	202.72	228	110		0		0--20
Barium, Total	5.1	5.09	ug/L	71.5	203.72	289	107		75--125	202.72	286	106		1		0--20
Thallium, Total	0.76	2.04	ug/L	U	203.72	218	107		75--125	202.72	226	111		3		0--20
Lead, Total	1	5.09	ug/L	1.3	203.72	218	106		75--125	202.72	219	107		0		0--20

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

King County Environmental Laboratory QC Report

CHLS-P_010626 COC 19219 19246

Workgroup: WG204223 Total Metals by ICPMS

MB:WG204223-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total	0.05	0.25	ug/L		U

SB:WG204223-2 MB:WG204223-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Arsenic, Total	0.05	0.25	ug/L	U	20	20.5	102		85--115

MSD:WG204223-4 MS:WG204223-3 L87647-1 Matrix: LEACHATE Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421422-CHLS-P Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Arsenic, Total	0.49	2.44	ug/L	39.1	195.06	241	104		75--125	195.88	243	104		1		0--20

==========

4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

Sample Receipt and Chain of Custody Records

Chain of Custody Record

Environmental Monitoring Program

Date: 1/2/26

Department of Natural Resources and Parks
Solid Waste Division

No. **19219**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25)

Lab No.	Sample ID	Date	Time
87647-1	LEPS251231P	12/31/25	1630

Project Site Test Reference

	CHGW	CEGW	CHGWN/AGW	CHGW-OS	CFGW	DUGW	ENGW	HOGW	HTGW	PUGW	VAGW	CHSW-Q	CFSW	DUSW	VASW	CHSW-P	CHSW-P	HTSW-P	SHSW-P	SHSW-P	FASW-P	ENSW-P	ALSW-P	VASW-P	RMSW-P	CHTW	CHLS-M	CHLS-M_MOD	CHLS-P	CHLS-P	CHLS-P	ALLS-P	BLLS-P	ENLS-P	FALS-P	SRLS-P	HTLS-P	RELS-P	VALS-P	VALS-Q
	Cedar Hills GW Qlty	Cedar Hills EPZ GW Qlty	Appendix III GW	Cedar Hills GW Offsite	Cedar Falls GW Qlty	Duvall GW Qlty	Enumclaw GW Qlty	Hobart GW Qlty	Houghton GW Qlty	Puyallup GW Qlty	Vashon GW Qlty	Cedar Hills SW Sta. E-1	Cedar Falls SW Qlty	Duvall SW Qlty	Vashon SW Qlty-WEIRS	Cedar Hills SW	Cedar Hills SW - Infiltration	Houghton SW	Shoreline SW	Shoreline SW - Infiltration	Factoria SW	Enumclaw SW - Infiltration	Algona SW	Vashon SW	Renton Maint. Facility SW	Cedar Hills Truckwash	Cedar Hills Leachate Mtly	CH Leachate Mods Mtly	CH L Permit (wkly, 1st)	CH L Permit (mnthly)	CH L Permit (wkly, 2nd)	Algona WW Permit	Bow Lake WW Permit	Enumclaw WW Permit	Factoria WW Permit	Shoreline WW Permit	Houghton WW Permit	Renton WW Permit	Vashon WW Permit Tanker	Vashon Leachate Qlty
	GROUNDWATER											SURFACE/STORM WATER				ISGP										LEACHATE/WASTEWATER			PRETREATMENT PERMITS											
	2	2.1	4	38	5	6	7	8	9	10	12	14	17	18	21	16	16.1	52	53	53.1	54	56.1	57	58	60	24	23	23+	25	25.1	25.2	26	20	27	28	29	30	31	32	34
87647-1	LEPS251231P	12/31/25	1630																										X											

Lab No.	Number of Containers	Remarks
87647-1	1	Diss Sulfide <0.1ppm

Relinquished By Sampler: Hannah Spear
Sampler Signature: H. Spear
Sampler Printed Name: KCSWD
Company
Date: 1/2/26
Time: 1205

Received By: KV
Signature
Printed Name
Company
Date
Time

Relinquished By
Signature
Printed Name
Company
Date
Time

Received By: Khang Vuong
Signature
Printed Name: KCEL
Company
Date: 1/2/26
Time: 1205

Observations/Comments/Special Instructions:

Total # of Containers: 1

Instructions:
1. Complete in ballpoint pen. Draw one line through errors then initial and date.
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 is to retain the original COC and create a copy for receiving lab to keep.
5. Samples with a "-P" suffix are meant to support KCSWD's NPDES permits and are to be analyzed in accordance with *40 CFR 136*.

FFB - Field Filtration Blank
FQ - Field QC

v6.0 (Rev 10/2025)

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

SWD SAMPLE RECEIPT RECORD

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s): 87647 -1
40 mL clear vial (VOA)	
60 mL CWM HDPE	
125 mL CNM HDPE	
125 mL CWM HDPE	
125 mL GANM w/HCl	
250 mL CWM HDPE	
250 mL GAWM w/H_2SO_4	
500 mL AWM HDPE	
500 mL CWM HDPE	
500 mL CWM PP (MICRO)	
500 mL HDPE (METALS)	1
500 mL GAWM	
1L CWM HDPE	
1L GANM	
1L GAWM w/ H_2SO_4	
2L CWM HDPE:	
Other -	
Other -	
Other -	
Other -	
Other -	
Total # of Samples	1

Number of bottles per sample

Sample Collect Date(s): 12/31/25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P(25)

Receive Date: 1/2/26 COC / SDG No.: 19219

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	(Y) / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	(Y) / N		Volumes	(Y) / N	
Container	(Y) / N		Holding Times	(Y) / N	
Cooler Temperature (° C)	(Y) / N	1.3 / 1.6 / 1.6	Delivery Location	(Y) / N	

Sub-Contracting: Y / (N) List Product(s):

Changes: Y / (N) List Parameter(s):

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

COMMENTS / NOTIFICATIONS

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

JHA 02/26 12:15

SM Signature: _____ Date / Time Completed: _____

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

Chain of Custody Record

Environmental Monitoring Program

Date: 12/30/25

Department of Natural Resources and Parks
Solid Waste Division

No. **19246**

Name: King County Solid Waste Division
Address: 201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
Attention: Grant Dornfeld (206) 263-3333
Authorization: KCEL Lab Services to KCSWD

Project Site Test: CHLS-P (25.2)

Lab No.	Sample ID	Date	Time
87605-1	LEPS251229P	12/29/25	1900

Project Site Test Reference

| GROUNDWATER | | | | | | | | | | | | SURFACE/STORM WATER | | | | | | | | | | | | LEACHATE/WASTEWATER | | | | | | | | | | | |

SWD SAMPLE RECEIPT RECORD

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

BOTTLE COUNT (#) AND DESCRIPTION and SAMPLE NUMBERS

Bottle Description	Login Number(s) 87605
40 mL clear vial (VOA)	
60 mL CWM HDPE	
125 mL CNM HDPE	
125 mL CWM HDPE	
125 mL GANM w/HCl	
250 mL CWM HDPE	
250 mL GAWM w/H_2SO_4	
500 mL AWM HDPE	
500 mL CWM HDPE	
500 mL CWM PP (MICRO)	
500 mL HDPE (METALS)	1
500 mL GAWM	
1L CWM HDPE	
1L GANM	
1L GAWM w/ H_2SO_4	
2L CWM HDPE:	
Other -	
Other -	
Other -	
Other -	
Other -	
Total # of Samples	1

Number of bottles per sample

Sample Collect Date(s): 12-29-25 Project No.: 421422

VTRP Collect Date(s): Project Site Test Reference: CHLS-P(2)

Receive Date: 12-30-25 COC / SDG No.: 19246

FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Notify ORG
CN / pH > 12 w/ NaOH within 15 min	☐ Check pH	Y / N	☐ Deliver to CONV
COD / TKN / pH < 2 w/ H_2SO_4 within 15 min	☐ Check pH	Y / N	☐ Preserve By SM
MICRO / $Na_2S_2O_3$	Check documentation	Y / N / NA	☐ Deliver to MICRO
O&G / HEM / PHENOL / pH < 2 w/ H_2SO_4	Check documentation	Y / N	☐ Preserve By SM
TOC / pH < 2 w/ HCl	☐ Check pH	Y / N	☐ Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	☐ Deliver to CONV
VOA / HCl	Check documentation	Y / N	☐ Deliver to ORG
ICPMS/CVAA / pH < 2 w/ HNO_3 (CHLS-P #25)	Check documentation	Y / N	☐ Preserve By SM
Other:			
Other:			
Other:			
Other:			
Other:			

ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)

PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H_2SO_4 or NaOH	√ field sheet for F. pH	Y / N	☐ Adjust pH
HG-CVAA-M (T / D) / pH < 2 w/ HNO_3	☐ Preserve & deliver	NA	NA
ICPMS (T / D) / pH < 2 w/ ULTRA HNO_3	☐ Preserve & deliver	NA	NA
Other:			

SAMPLE RECEIPT CONDITIONS

CONDITION	Acceptable?	Comment	CONDITION	Acceptable?	Comment
Labels / Fieldsheets	Y / N		Volumes	Y / N	
Container	Y / N		Holding Times	Y / N	
Cooler Temperature (° C)	Y / N	1.6 1.4 1.4	Delivery Location	Y / N	

Sub-Contracting: Y / N List Product(s):

Changes: Y / N List Parameter(s):

INTERFERENCE TEST (Circle and/or check applicable selections)

Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
CN / Sulfide (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	☐ Deliver to ORG
Other:			

HEADSPACE CHECK

PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	☐ Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	☐ Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	☐ Notify ORG
Other:			
Other:			

FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)

Product (SM Action)	Field Filtered	Field Blank	Corrective Action
Dissolved Metals (Check Field Sheet)	Y / N	Y / N	☐ Deliver to Metals
Dissolved ORTHOP (Check Field Sheet)	Y (within 15 min y / n) / N	Y / N	☐ Deliver to CONV
Dissolved Nutrients (Check Field Sheet)	Y / N	Y / N	☐ Deliver to CONV
Other:			

COMMENTS / NOTIFICATIONS

CC: ☐ CONV, ☐ METALS, ☐ MICRO, ☐ ORG, ☐ _____

NOTES

1. Deliver dissolved Hg-CVAF samples to METALS for filtration.
2. Deliver double-bagged metals samples to METALS section for preservation.
3. Do not test pH for preserved BNA and TOTSULFIDE samples.
4. Deliver all MICRO samples ASAP to appropriate section for immediate processing.
5. Enter " Time Span" for composite samples during sample login.
6. Create SDG No. and update LOCATOR information during LIMS login.

SM Signature: _____

Date / Time Completed: DEC 30 '25 14:29

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

HYDROGEN SULFIDE GAS AT MANHOLE R10-52

Instrument #	Serial #	Calibration Date/Time
RKI Eagle 2	E2E656	10/3/25 @ 0921
Sample Count	**Interval Time (sec)**	**Bump Test Date**
30140	60	12/2/2025 @ 0808

H2S Readings

Date	Daily Average	Instantaneous Maximum	Maximum 15-min Average	Maximum 8-hr Average	7-day Average
12/2/2025	0.0	0.0	0.0	0.0	-
12/3/2025	0.0	0.0	0.0	0.0	-
12/4/2025	0.0	0.0	0.0	0.0	-
12/5/2025	0.0	0.0	0.0	0.0	-
12/6/2025	0.0	0.0	0.0	0.0	-
12/7/2025	0.0	0.0	0.0	0.0	-
12/8/2025	0.0	0.0	0.0	0.0	-
12/9/2025	0.0	0.0	0.0	0.0	0.0
12/10/2025	0.0	0.0	0.0	0.0	0.0
12/11/2025	0.0	0.0	0.0	0.0	0.0
12/12/2025	0.0	0.0	0.0	0.0	0.0
12/13/2025	0.0	0.0	0.0	0.0	0.0
12/14/2025	0.0	0.0	0.0	0.0	0.0
12/15/2025	0.0	0.0	0.0	0.0	0.0
12/16/2025	0.0	0.0	0.0	0.0	0.0
12/17/2025	0.0	0.0	0.0	0.0	0.0
12/18/2025	0.0	0.0	0.0	0.0	0.0
12/19/2025	0.0	0.0	0.0	0.0	0.0
12/20/2025	0.0	0.0	0.0	0.0	0.0
12/21/2025	0.0	0.0	0.0	0.0	0.0
12/22/2025	0.0	0.0	0.0	0.0	0.0
12/23/2025	0.0	0.0	0.0	0.0	0.0
		Limit	*15 ppm*	*10 ppm*	*3 ppm*

Docusign Envelope ID: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5

KING COUNTY SOLID WASTE DIVISION

LEACHATE HAULING REPORT

TANKER LOADS

MONTH: DECEMBER

YEAR: 2025

	DUVALL						VASHON				HOBART		OTHER		
DATE	BRIGHT		C.H.		SPOK.		SPOK.		C.H.		C.H.		C.H.		REMARKS
LOAD	6000	7000	6000	7000	6000	7000	6000	7000	6000	7000	6000	7000	6000	7000	
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11		2						2							
12								3							
13								2							
14								2							
15								2							
16				2				2							
17								2							
18								2							
19		3						2							
20								2							
21								2							
22		1		1				1							
23															
24															
25															
26															
27															
28															
29															
30		3													
31															
TOTAL	0	63000	0	21000	0	0	0	168000	0	0	0	0	0	0	

Certificate Of Completion

Envelope Id: A5D4A03E-B563-438B-B5DC-C3CCCF4EA5C5
Status: Completed
Subject: Complete with Docusign: 7842-04_SMR_December2025.pdf, CHLS-P_120925 Report Read Only.pdf, CHLS-...
Source Envelope:
Document Pages: 91
Signatures: 3
Certificate Pages: 5
Initials: 1
AutoNav: Enabled
EnvelopeId Stamping: Enabled
Time Zone: (UTC-08:00) Pacific Time (US & Canada)

Envelope Originator:
Aaron Copado
401 5TH AVE
SEATTLE, WA 98104
acopado@kingcounty.gov
IP Address: 198.49.222.20

Record Tracking

Status: Original
1/15/2026 1:47:09 PM
Holder: Aaron Copado
acopado@kingcounty.gov
Location: DocuSign

Security Appliance Status: Connected
Pool: FedRamp

Storage Appliance Status: Connected
Pool: King County-Dept of Natural Resources-Solid Waste
Location: Docusign

Signer Events	Signature	Timestamp
Aaron Copado acopado@kingcounty.gov Environmental Scientist III KC_DNRP_SWD Security Level: Email, Account Authentication (None)	 Signature Adoption: Pre-selected Style Using IP Address: 198.49.222.20	Sent: 1/15/2026 1:54:33 PM Viewed: 1/15/2026 1:54:41 PM Signed: 1/15/2026 1:54:49 PM
Electronic Record and Signature Disclosure: Not Offered via Docusign		
Jennifer Keune jennifer.keune@kingcounty.gov Interim Supervisor KC_DNRP_SWD Security Level: Email, Account Authentication (None)	 Signature Adoption: Pre-selected Style Using IP Address: 67.160.11.161	Sent: 1/15/2026 1:54:33 PM Viewed: 1/15/2026 2:38:17 PM Signed: 1/15/2026 2:39:22 PM
Electronic Record and Signature Disclosure: Accepted: 3/31/2021 3:20:14 PM ID: 040441cf-883c-43c6-a4af-1ccb2ef73edc		

In Person Signer Events	Signature	Timestamp

Editor Delivery Events	Status	Timestamp

Agent Delivery Events	Status	Timestamp

Intermediary Delivery Events	Status	Timestamp

Certified Delivery Events	Status	Timestamp

Carbon Copy Events	Status	Timestamp

Witness Events	Signature	Timestamp

Notary Events	Signature	Timestamp

Envelope Summary Events	Status	Timestamps

Envelope Summary Events	Status	Timestamps
Envelope Sent	Hashed/Encrypted	1/15/2026 1:54:33 PM
Certified Delivered	Security Checked	1/15/2026 2:38:17 PM
Signing Complete	Security Checked	1/15/2026 2:39:22 PM
Completed	Security Checked	1/15/2026 2:39:22 PM

Payment Events	Status	Timestamps

Electronic Record and Signature Disclosure

ELECTRONIC RECORD AND SIGNATURE DISCLOSURE

From time to time, King County-ZZDepartmentTemplate 03 (we, us or Company) may be required by law to provide to you certain written notices or disclosures. Described below are the terms and conditions for providing to you such notices and disclosures electronically through the DocuSign system. Please read the information below carefully and thoroughly, and if you can access this information electronically to your satisfaction and agree to this Electronic Record and Signature Disclosure (ERSD), please confirm your agreement by selecting the check-box next to 'I agree to use electronic records and signatures' before clicking 'CONTINUE' within the DocuSign system.

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Withdrawing your consent

If you decide to receive notices and disclosures from us electronically, you may at any time change your mind and tell us that thereafter you want to receive required notices and disclosures only in paper format. How you must inform us of your decision to receive future notices and disclosure in paper format and withdraw your consent to receive notices and disclosures electronically is described below.

Consequences of changing your mind

If you elect to receive required notices and disclosures only in paper format, it will slow the speed at which we can complete certain steps in transactions with you and delivering services to you because we will need first to send the required notices or disclosures to you in paper format, and then wait until we receive back from you your acknowledgment of your receipt of such paper notices or disclosures. Further, you will no longer be able to use the DocuSign system to receive required notices and consents electronically from us or to sign electronically documents from us.

All notices and disclosures will be sent to you electronically

Unless you tell us otherwise in accordance with the procedures described herein, we will provide electronically to you through the DocuSign system all required notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you during the course of our relationship with you. To reduce the chance of you inadvertently not receiving any notice or disclosure, we prefer to provide all of the required notices and disclosures to you by the same method and to the same address that you have given us. Thus, you can receive all the disclosures and notices electronically or in paper format through the paper mail delivery system. If you do not agree with this process, please let us know as described below. Please also see the paragraph immediately above that describes the consequences of your electing not to receive delivery of the notices and disclosures electronically from us.

How to contact King County-ZZDepartmentTemplate 03:

You may contact us to let us know of your changes as to how we may contact you electronically, to request paper copies of certain information from us, and to withdraw your prior consent to receive notices and disclosures electronically as follows:
To contact us by email send messages to: cipriano.dacanay@kingcounty.gov

To advise King County-ZZDepartmentTemplate 03 of your new email address

To let us know of a change in your email address where we should send notices and disclosures electronically to you, you must send an email message to us at cipriano.dacanay@kingcounty.gov and in the body of such request you must state: your previous email address, your new email address. We do not require any other information from you to change your email address.

If you created a DocuSign account, you may update it with your new email address through your account preferences.

To request paper copies from King County-ZZDepartmentTemplate 03

To request delivery from us of paper copies of the notices and disclosures previously provided by us to you electronically, you must send us an email to cipriano.dacanay@kingcounty.gov and in the body of such request you must state your email address, full name, mailing address, and telephone number. We will bill you for any fees at that time, if any.

To withdraw your consent with King County-ZZDepartmentTemplate 03

To inform us that you no longer wish to receive future notices and disclosures in electronic format you may:

i. decline to sign a document from within your signing session, and on the subsequent page, select the check-box indicating you wish to withdraw your consent, or you may;

ii. send us an email to cipriano.dacanay@kingcounty.gov and in the body of such request you must state your email, full name, mailing address, and telephone number. We do not need any other information from you to withdraw consent.. The consequences of your withdrawing consent for online documents will be that transactions may take a longer time to process..

Required hardware and software

The minimum system requirements for using the DocuSign system may change over time. The current system requirements are found here: https://support.docusign.com/guides/signer-guide-signing-system-requirements.

Acknowledging your access and consent to receive and sign documents electronically

To confirm to us that you can access this information electronically, which will be similar to other electronic notices and disclosures that we will provide to you, please confirm that you have read this ERSD, and (i) that you are able to print on paper or electronically save this ERSD for your future reference and access; or (ii) that you are able to email this ERSD to an email address where you will be able to print on paper or save it for your future reference and access. Further, if you consent to receiving notices and disclosures exclusively in electronic format as described herein, then select the check-box next to 'I agree to use electronic records and signatures' before clicking 'CONTINUE' within the DocuSign system.

By selecting the check-box next to 'I agree to use electronic records and signatures', you confirm that:

- You can access and read this Electronic Record and Signature Disclosure; and
- You can print on paper this Electronic Record and Signature Disclosure, or save or send this Electronic Record and Disclosure to a location where you can print it, for future reference and access; and
- Until or unless you notify King County-ZZDepartmentTemplate 03 as described above, you consent to receive exclusively through electronic means all notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you by King County-ZZDepartmentTemplate 03 during the course of your relationship with King County-ZZDepartmentTemplate 03.

Docusign Envelope ID: 0C0D7EAC-6CDF-4F17-A88E-9D17C1FC3E50

14-Day Report for Discharge or Permit Violation

For more information on reporting requirements refer to your Permit, Section S4.D. If you have a Major/Minor Discharge Authorization refer to General Conditions D

Date: 1/15/26 Company Name: King County Solid Waste Division (KCSWD)

Permit/Authorization Number: 7842-04 Sample Site Number: A90021

1. **Description and Cause of Non-Compliance Event:** (include dates, times, locations; sample results and estimated gallons discharged)

In the last month, SWD became aware of the exceedances summarized in the table below.

Arsenic Loading (A90021)

Exceedance Date	Aware Date	Arsenic Concentration (mg/L)	Flow (gallons)	Arsenic Loading (lbs/day)
Permit Limit		*4.0*	*2,700,000*	*0.27*
12/09/25	1/12/26	0.0485	1,296,000	0.5242
12/13/25	1/12/26	0.0368	1,620,000	0.4972
12/15/25	1/12/26	0.0348	2,106,000	0.6112
12/18/25	1/12/26	0.0316	1,998,000	0.5266
12/22/25	1/12/26	0.0303	1,296,000	0.3275
12/29/25	1/12/26	0.0386	1,080,000	0.3477
12/31/25	1/12/26	0.0391	982,800	0.3205

KCSWD employs operational practices designed to minimize arsenic loading exceedances. This includes self-imposed limits on the volume of leachate discharged daily based on recent arsenic concentration data. Doing so allowed KCSWD to successfully comply with arsenic loading limits for virtually all of 2024. Seasonal variations in precipitation greatly affect KCSWD's ability to manage wastewater on-site using existing capacity, which increases the risk of exceeding the arsenic loading limit during wet periods.

During the months of September, October, November, and December, KCSWD employed practices to ensure the lagoons were not in danger of overtopping. However, leachate levels in the onsite lagoons rose throughout those months as precipitation increased the rate of leachate generation. During the month of December, multiple historic heavy rain events made it difficult to manage onsite lagoon levels. This increased rate of leachate generation prompted KCSWD to discharge volumes in excess of those prescribed by self-imposed pumping limits designed to maintain compliance with arsenic loading limits. Based on laboratory analytical results, the larger volumes of wastewater discharged at the start of November resulted in arsenic loading limit exceedances on seven sampling days: 12/09/25, 12/13/25, 12/15/25, 12/18/25, 12/22/25, 12/29/25 and 12/31/25. KCSWD is obligated to implement corrective actions specified in the Revised Compliance Order for Discharge Violations issued by KCIW on 06/23/25. The development and implementation of corrective actions outlined in that document continue.

Docusign Envelope ID: 0C0D7EAC-6CDF-4F17-A88E-9D17C1FC3E50

14-Day Report for Discharge or Permit Violation

2. Date and Time King County Notified: (requirement is within 24 hours of learning of violation unless event was spill or slug discharge then must have notified immediately)

Arsenic

Exceedance Date	Aware Date	Notification Date & Time	Notification Method	Recipient(s)
12/09/25	1/12/26	1/12/26 @ 16:53	Email	Girard Arnaud, info.KCIW@kingcounty.gov
12/13/25	1/12/26	1/12/26 @ 16:53	Email	Girard Arnaud, info.KCIW@kingcounty.gov
12/15/25	1/12/26	1/12/26 @ 16:53	Email	Girard Arnaud, info.KCIW@kingcounty.gov
12/18/25	1/12/26	1/12/26 @ 16:41	Email	Girard Arnaud, info.KCIW@kingcounty.gov
12/22/25	1/12/26	1/12/26 @ 16:41	Email	Girard Arnaud, info.KCIW@kingcounty.gov
12/29/25	1/12/26	1/12/26 @ 16:41	Email	Girard Arnaud, info.KCIW@kingcounty.gov
12/31/25	1/12/26	1/12/26 @ 16:41	Email	Girard Arnaud, info.KCIW@kingcounty.gov

3. Corrective Actions Taken: (corrective actions taken to respond to the violation and ensure ongoing compliance.)

Arsenic

Discharges in excess of self-imposed pumping limits continued through 12/31/2025 to manage levels in the leachate lagoons. We will continue to monitor arsenic concentrations closely to inform allowable discharge volumes.

KCSWD will continue to communicate circumstances that deviate from our routine discharge procedures to ensure there is no release (overtop) from our leachate lagoons and other secondary onsite storage. KCSWD relies on constant management of discharge volume and storage capacity to ensure no overtopping due to precipitation and to minimize loading limit exceedances. Reduced pumping times allowed KCSWD to stay in compliance for arsenic loading on the sampling day of the 12/24/2025, but as leachate levels in the pond rose, the pumping hours once again increased. Although the ability to consistently reduce arsenic loading and ensure permit compliance relies upon an engineered pre-treatment system, KCSWD will continue to monitor and manage our effluent to minimize loading exceedances.

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14-Day Report for Discharge or Permit Violation

4. If discharge violation, enter follow-up sample collection date and results: (may use subsequent self-monitoring sample if collected and analyzed within 14 days of learning of violation)

Exceedance Date	Aware Date	Resample Date(s)	Parameter	Loading Resample Result (lbs/day)	Compliant?
12/09/25	1/12/26	12/13/25	Arsenic Loading	0.4972	No
12/13/25	1/12/26	12/15/25	Arsenic Loading	0.6112	No
12/15/25	1/12/26	12/18/25	Arsenic Loading	0.5266	No
12/18/25	1/12/26	12/22/25	Arsenic Loading	0.3275	No
12/22/25	1/12/26	12/25/25	Arsenic Loading	0.2306	Yes
12/29/25	1/12/26	12/31/25	Arsenic Loading	0.3205	No
12/31/25	1/12/26	1/05/26	Arsenic Loading	N/A	N/A

ADDITIONAL SHEETS ATTACHED: oYES x NO

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME: Jennifer Keune

SIGNATURE: DocuSigned by: Jennifer Keune A70EEC0AE02F44A... DATE: Jan 15, 2026

TITLE: KCSWD Supervisor

Authorized Representative / Designated Authorized Representative*

(Please circle one of the above)

**All user reports must be signed by an authorized representative of the industrial user. "Authorized representative of industrial user" is defined by King County Code 28.82.050. If you are designated, a current Delegation of Signatory Authority must be on file at King County or completed and attached to this form.*

Please return this form and attachments to:

King County Industrial Waste **130 Nickerson Street – Suite 200**

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14-Day Report for Discharge or Permit Violation

Seattle, WA 98109-1658 Fax: 206-263-3001
-or- Email a signed PDF to: info.KCIW@kingcounty.gov

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14-Day Report for Discharge or Permit Violation

From general permit language

1. When monitoring data shows a violation, the permittee shall:

    a. Take immediate action to stop the violation and notify KCIW within 24 hours of learning of the violation.
    b. Collect a sample and submit new data to KCIW within 14 days of becoming aware of the violation.
    c. Submit a written report within 14 days of learning of the violation (*14-Day Report*). The report should explain the cause of the violation and corrective actions taken to respond to the violation and ensure ongoing compliance.

2. In the event the permittee is unable to comply with any of the conditions of this permit because of a breakdown of equipment or facilities, an accident caused by human error, negligence, or any other cause, such as an act of nature, the permittee shall:

    a. Take immediate action to stop, contain, and clean up the unauthorized discharges and correct the problem.
    b. Immediately notify the emergency King County contact in section S1 so steps can be taken to prevent damage to the sewerage system.
    c. Submit a written report within 14 days of the event (*14-Day Report*) describing the breakdown, the actual quantity and quality of resulting waste discharged, corrective action taken, and the steps taken to prevent a recurrence.

From Section D of Major Discharge Authorizations

1. In the event the permittee is unable to comply with any of the conditions of this discharge authorization because of breakdown of equipment or facilities, an accident caused by human error, negligence, or any other cause, such as an act of nature the company shall:

    a. Take immediate action to stop, contain, and clean up the unauthorized discharges and correct the problem
    b. Immediately notify KCIW so steps can be taken to prevent damage to the sewer system
    c. Submit a written report within 14 days describing the breakdown, the actual quantity and quality of resulting waste discharged, corrective action taken, and the steps taken to prevent recurrence

For SIU's Spills and Slug Discharges (from Permit language)

The Permittee shall notify King County Industrial Waste immediately in the event of a spill or slug discharge to the sanitary sewer. A written report regarding the cause of the spill and/or slug discharge shall be submitted to King County within five (5) days of date of occurrence. The report should explain the cause of the violation and corrective actions taken to respond to the violation and ensure ongoing compliance.