AUXIER & ASSOCIATES, INC.

PAP-KAN

1428

STANDARD LEVEL IV
REPORT OF ANALYSIS

WORK ORDER #15-09123-OR

September 30, 2015

EBERLINE ANALYTICAL/OAK RIDGE LABORATORY
OAK RIDGE, TN

TABLE OF CONTENTS

Eberline Services – Oak Ridge Laboratory

LABORATORY DATA SUPPORT CHECKLIST

MP-001-3

Eberline Services Work Order # 15-09123

The checklist items listed below are to be initialed by appropriate staff upon completion/verification.

Date for Partial	Initials	Date	Initials	Checklist Items
		9-22-15	JEB	Sample Log-In
		09/23/15	EyT	Data Compilation
		9-23-15	MKT	First Technical Data Review
		9/23/15	MKT	Second Technical Data Review
		09/29/15	EyT	Data Entry/Electronic Deliverable
		09/29/15	EyT	Case Narrative
		9/29/15	KBS	Electronic Deliverable Proof
		9/30/15	MKT	Samples Analyzed within Holding Time Yes? [✓] No? [ ]
		9/30/15	MQA	QA/QC Review
		09/23/15	EyT	Client in Possession of Data Electronic or Hard Copy
				Invoiced by Laboratory

Technical/Clerical Corrections, Signatures Needed, Problems, Etc	Date/Initials

Date package approved by: _____ 9/30/15

Laboratory Manager Date

SECTION I

CHAIN OF CUSTODY
&
pH CHECK SHEET

#2

Chain of Custody Record

№ 1604

Eberline Services
601 Scarboro Road
Oak Ridge, TN 37830
(865) 481-0683 Phone • (865) 483-4621 Fax

EBERLINE SERVICES

Project Name: PAP/KAN	Project Number: 1428
Send Report To: Cecilia Green/Auxier & Assoc.	Sampler (Print Name):
Address:	Sampler (Print Name):
9821 Cogdill Road, Suite 1	Shipment Method: Federal Express
Knoxville, TN 37932	Airbill Number:
Phone: 865-675-3669	Laboratory Receiving:
Fax: 865-675-3677	

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15-09123
REC'D SEP 22 2015

Purchase Order #:

Field Sample ID	Sample Date	Sample Time	Sample Matrix	Number of Containers	Analysis Requested: Total Suspended Solids (TSS)	Total Dissolved Solids (TDS)	Gross Alpha	Gross Beta	Isotopic Uranium	Isotopic Thorium	Comments, Special Instructions, etc.	Lab Sample ID (to be completed by lab)
KC85-035-L 4	9/17/15	16:32	Water	1	X	X	X	X	X	X	Analyze TSS+TDS	
KC92-185-L 5	9/18/15	13:39	water	1	X	X	X	X	X	X	contact cecilia	
KC85-035-U 6	9/18/15	8:42	water	1	X	X	X	X	X	X	filter as directed	
KC85-032-L 7	9/21/15	14:42	water	1	X	X	X	X	X	X	Analyse GA+GB	
KC85-032-M 8	9/21/15	13:25	water	1	X	X	X	X	X	X	contact cecilia	
											Proceed as directed	

		Date:	Time:
Relinquished by: (Signature)	Received by: (Signature) FedEx	9/21/15	6:30pm
Relinquished by: (Signature)	Received by: (Signature)	9-22-15	1100
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Sample Custodian Remarks (Completed By Laboratory):

QA/QC Level	Turnaround	Sample Receipt	
Level I ☐	Routine ☐	Total # Containers Received?	
Level II ☐	24 Hour ☐	COC Seals Present?	
Level III ☐	1 Week ☐	COC Seals Intact?	
Other ☐	Other ____	Received Containers Intact?	
		Temperature?	

Chain of Custody Record

№ 1604

Eberline Services
601 Scarboro Road
Oak Ridge, TN 37830
(865) 481-0683 Phone • (865) 483-4621 Fax

EBERLINE SERVICES

#4

15-09123
REC'D SEP 22 2015

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Project Name: PAP/KAN	Project Number: 1428
Send Report To: Cecilia Green/Auxier & Assoc.	Sampler (Print Name):
Address:	Sampler (Print Name):
9821 Cogdill Road, Suite 1	Shipment Method: Federal Express
Knoxville, TN 37932	Airbill Number:
Phone: 865-675-3669	Laboratory Receiving:
Fax: 865-675-3677	

Purchase Order #:

Analysis Requested

Field Sample ID	Sample Date	Sample Time	Sample Matrix	Number of Containers	Total Suspended Solids (TSS)	Total Dissolved Solids (TDS)	Gross Alpha	Gross Beta	Isotopic Uranium	Isotopic Thorium						Comments, Special Instructions, etc.	Lab Sample ID (to be completed by lab)
KC86-047-L 9	9/21/15	15:40	Water	1	X	X	X	X	X	X						Analyze TSS+TDS	
KC90-140-L 10	9/21/15	16:51	Water	1	X	X	X	X	X	X						contact cecilia	
KC90-140-U 11	9/21/15	16:21	Water	1	X	X	X	X	X	X						filter as directed	
																Analyse GA+GB	
																contact cecilia	
																Proceed as directed	

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
[signature]	FedEx	9/21/15	6:30pm
Relinquished by: (Signature)	Received by: (Signature) [signature]	Date: 9-22-15	Time: 11:00
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Sample Custodian Remarks (Completed By Laboratory):

QA/QC Level	Turnaround	Sample Receipt	
Level I ☐	Routine ☐	Total # Containers Received?	
Level II ☐	24 Hour ☐	COC Seals Present?	
Level III ☐	1 Week ☐	COC Seals Intact?	
Other ☐	Other ______	Received Containers Intact?	
		Temperature?	

#3

Chain of Custody Record

№ 1604

Eberline Services
601 Scarboro Road
Oak Ridge, TN 37830
(865) 481-0683 Phone • (865) 483-4621 Fax

EBERLINE SERVICES

Project Name: PAP/KAN	Project Number: 1428
Send Report To: Cecilia Green/Auxier & Assoc.	Sampler (Print Name):
Address:	Sampler (Print Name):
9821 Cogdill Road, Suite 1	Shipment Method: Federal Express
Knoxville, TN 37932	Airbill Number:
Phone: 865-675-3669	Laboratory Receiving:
Fax: 865-675-3677	

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REC'D SEP 22 2015

15-09123

Purchase Order #:

Field Sample ID	Sample Date	Sample Time	Sample Matrix	Number of Containers	Total Suspended Solids (TSS)	Total Dissolved Solids (TDS)	Gross Alpha	Gross Beta	Isotopic Uranium	Isotopic Thorium	Comments, Special Instructions, etc.	Lab Sample ID (to be completed by lab)
Outfall001 12	9/21/15	14:56	Water	1	X	X	X	X	X	X	Analyze TSS+TDS	
KC-279 13	9/21/15	14:49	water	1	X	X	X	X	X	X	contact cecilia	
KC85-032-U 14	9/21/15	12:53	water	1	X	X	X	X	X	X	filter as directed	
KC86-047-U 15	9/21/15	15:05	water	1	X	X	X	X	X	X	Analyse GA+GB	
											contact cecilia	
											Proceed as directed	

Relinquished by: (Signature)	Received by: (Signature) FedEx	Date: 9/21/15	Time: 6:30pm
Relinquished by: (Signature)	Received by: (Signature)	Date: 9-22-15	Time: 1100
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Sample Custodian Remarks (Completed By Laboratory):

QA/QC Level	Turnaround	Sample Receipt	
Level I ☐	Routine ☐	Total # Containers Received?	
Level II ☐	24 Hour ☐	COC Seals Present?	
Level III ☐	1 Week ☐	COC Seals Intact?	
Other ☐	Other ____	Received Containers Intact?	
		Temperature?	

10000

Chain of Custody Record

№ 1604

#1

Eberline Services
601 Scarboro Road
Oak Ridge, TN 37830
(865) 481-0683 Phone • (865) 483-4621 Fax

EBERLINE SERVICES

Project Name: PAP/KAN	Project Number: 1428
Send Report To: Cecilia Green/Auxier & Assoc.	Sampler (Print Name):
Address:	Sampler (Print Name):
9821 Cogdill Road, Suite 1	Shipment Method: Federal Express
Knoxville, TN 37932	Airbill Number:
Phone: 865-675-3669	Laboratory Receiving:
Fax: 865-675-3677	

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REC'D SEP 22 2015
15-09123

Purchase Order #:

Field Sample ID	Sample Date	Sample Time	Sample Matrix	Number of Containers	Total Suspended Solids (TSS)	Total Dissolved Solids (TDS)	Gross Alpha	Gross Beta	Isotopic Uranium	Isotopic Thorium	Comments, Special Instructions, etc.	Lab Sample ID (to be completed by lab)
KC94-199-U 16	9/18/15	9:56	Water	1	X	X	X	X	X	X	Analyze TSS+TDS	
KC94-199-L 17	9/18/15	10:44	Water	1	X	X	X	X	X	X	contact cecilia	
KC97-209-L 18	9/18/15	16:42	Water	1	X	X	X	X	X	X	Filter as directed	
KC97-209-U 19	9/19/15	11:15	Water	1	X	X	X	X	X	X	Analyse GA+GB	
KC-185-U 20	9/18/15	12:50	Water	1	X	X	X	X	X	X	contact cecilia	
											Proceed as directed	

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
[signature]	fedex	9/21/15	6:30pm
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
	[signature]	9-22-15	1100
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Sample Custodian Remarks (Completed By Laboratory):

QA/QC Level	Turnaround
Level I ☐	Routine ☐
Level II ☐	24 Hour ☐
Level III ☐	1 Week ☐
Other ☐	Other _____

Sample Receipt	
Total # Containers Received?	
COC Seals Present?	
COC Seals Intact?	
Received Containers Intact?	
Temperature?	

EBERLINE SERVICES Oak Ridge Laboratory	Internal Chain of Custody	Work Order #	15-09123
		Lab Deadline	9/24/2015
		Analysis	TDS - Level 4
		Sample Matrix	Water

Comments	Sample Fraction	HP 210 / 270 Detector Activity	Storage Location
	04	34	U1.1
	05	37	U1.1
	06	32	U1.1
	07	35	U1.1
	08	31	U1.1
	09	35	U1.1
	10	36	U1.1
	11	34	U1.1
	12	34	U1.1
	13	36	U1.1
	14	35	U1.1
	15	33	U1.1
	16	37	U1.1
	17	31	U1.1
	18	31	U1.1
	19	35	U1.1
	20	32	U1.1

	Location (circle one)					Initials	Date
Received by	(Sample Storage)	Rough Prep	Prep	Separations	Count Room	MK	23SEP15
Relinquished by	Sample Storage	Rough Prep	(Prep)	Separations	Count Room	MK	23SEP15 1600
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room		

EBERLINE SERVICES Oak Ridge Laboratory	Internal Chain of Custody	Work Order #	15-09123
		Lab Deadline	9/24/2015
		Analysis	TSS - Level 4
		Sample Matrix	Water

Comments	Sample Fraction	HP 210 / 270 Detector Activity	Storage Location
	04	34	U1.1
	05	37	U1.1
	06	32	U1.1
	07	35	U1.1
	08	31	U1.1
	09	35	U1.1
	10	36	U1.1
	11	34	U1.1
	12	34	U1.1
	13	36	U1.1
	14	35	U1.1
	15	33	U1.1
	16	37	U1.1
	17	31	U1.1
	18	31	U1.1
	19	35	U1.1
	20	32	U1.1

	Location (circle one)					Initials	Date
Received by	Sample Storage (circled)	Rough Prep	Prep	Separations	Count Room	MY	23SEP15
Relinquished by	Sample Storage	Rough Prep	Prep (circled)	Separations	Count Room	MY	23SEP15 1000
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room		

EBERLINE SERVICES

Sample Receiving Report
(Volumes, pH, & CPM)

Internal Work Order
15-09123
Received By
JBAILEY

FR	ClientID	# Btls	Comments	Matrix	Storage	Rec Vol Ttl	CPM Max
01	LCS	0		WA	U1.1		
02	BLANK	0		WA	U1.1		
03	DUP	0		WA	U1.1		
04	KC85-035-L	1		WA	U1.1	3.76	34
			Container Number	pH Orig	pH Final	Volume (L)	CPM
			1	7	7	3.7600	34
05	KC92-185-L	1		WA	U1.1	3.76	37
			Container Number	pH Orig	pH Final	Volume (L)	CPM
			1	7	7	3.7600	37
06	KC85-035-U	1		WA	U1.1	3.76	32
			Container Number	pH Orig	pH Final	Volume (L)	CPM
			1	7	7	3.7600	32
07	KC85-032-L	1		WA	U1.1	3.76	35
			Container Number	pH Orig	pH Final	Volume (L)	CPM
			1	7	7	3.7600	35
08	KC85-032-M	1		WA	U1.1	3.76	31
			Container Number	pH Orig	pH Final	Volume (L)	CPM
			1	7	7	3.7600	31
09	KC86-047-L	1		WA	U1.1	3.76	35
			Container Number	pH Orig	pH Final	Volume (L)	CPM
			1	7	7	3.7600	35
10	KC90-140-L	1		WA	U1.1	3.76	36
			Container Number	pH Orig	pH Final	Volume (L)	CPM
			1	7	7	3.7600	36
11	KC90-140-U	1		WA	U1.1	3.76	34
			Container Number	pH Orig	pH Final	Volume (L)	CPM
			1	7	7	3.7600	34
12	OUTFALL001	1		WA	U1.1	3.76	34
			Container Number	pH Orig	pH Final	Volume (L)	CPM
			1	7	7	3.7600	34
13	KC-279	1		WA	U1.1	3.76	36
			Container Number	pH Orig	pH Final	Volume (L)	CPM
			1	7	7	3.7600	36
14	KC85-032-U	1		WA	U1.1	3.76	35
			Container Number	pH Orig	pH Final	Volume (L)	CPM
			1	7	7	3.7600	35
15	KC86-047-U	1		WA	U1.1	3.76	33
			Container Number	pH Orig	pH Final	Volume (L)	CPM
			1	7	7	3.7600	33
16	KC94-199-U	1		WA	U1.1	3.76	37
			Container Number	pH Orig	pH Final	Volume (L)	CPM
			1	7	7	3.7600	37
17	KC94-199-L	1		WA	U1.1	3.76	31
			Container Number	pH Orig	pH Final	Volume (L)	CPM
			1	7	7	3.7600	31
18	KC97-209-L	1		WA	U1.1	3.76	31
			Container Number	pH Orig	pH Final	Volume (L)	CPM
			1	7	7	3.7600	31
19	KC97-209-U	1		WA	U1.1	3.76	35
			Container Number	pH Orig	pH Final	Volume (L)	CPM
			1	7	7	3.7600	35
20	KC-185-U	1		WA	U1.1	3.76	32
			Container Number	pH Orig	pH Final	Volume (L)	CPM
			1	7	7	3.7600	32

EVT 09/22/15

Received by: James E Bailey Date: 9-22-15

SECTION II

SAMPLE ACKNOWLEDGEMENT

Client Name	Contract/PO	Project Type	Date Received	Required Turnaround Days	Eberline Services Work Order
Auxier & Associates, Inc.	PAP-KAN	Environmental	09/22/2015	7	15-09123
Project Name	**Client WO**	**Sample Disp**	**Lab Deadline**	**Internal Deadline**	**Client Deadline**
PAP-KAN	1428	W	09/28/2015	09/29/2015	09/29/2015

Internal ID	Client ID	Sample Date	Matrix	Storage	TDS	TSS																							Ttl
01	LCS	09/22/15	WA	U1.1	X	X																							2
02	BLANK	09/22/15	WA	U1.1	X	X																							2
03	DUP	09/22/15	WA	U1.1	X	X																							2
04	KC85-035-L	09/17/15 16:32	WA	U1.1	X	X																							2
05	KC92-185-L	09/18/15 13:39	WA	U1.1	X	X																							2
06	KC85-035-U	09/18/15 08:42	WA	U1.1	X	X																							2
07	KC85-032-L	09/21/15 14:42	WA	U1.1	X	X																							2
08	KC85-032-M	09/21/15 13:25	WA	U1.1	X	X																							2
09	KC86-047-L	09/21/15 15:40	WA	U1.1	X	X																							2
10	KC90-140-L	09/21/15 16:51	WA	U1.1	X	X																							2
11	KC90-140-U	09/21/15 16:21	WA	U1.1	X	X																							2
12	OUTFALL001	09/21/15 14:56	WA	U1.1	X	X																							2
13	KC-279	09/21/15 14:49	WA	U1.1	X	X																							2
14	KC85-032-U	09/21/15 12:53	WA	U1.1	X	X																							2
15	KC86-047-U	09/21/15 15:05	WA	U1.1	X	X																							2
16	KC94-199-U	09/18/15 09:56	WA	U1.1	X	X																							2
17	KC94-199-L	09/18/15 10:44	WA	U1.1	X	X																							2
18	KC97-209-L	09/18/15 16:42	WA	U1.1	X	X																							2
19	KC97-209-U	09/19/15 11:15	WA	U1.1	X	X																							2
20	KC-185-U	09/18/15 12:50	WA	U1.1	X	X																							2
		Totals Per Analysis (non QA samples)			17	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

EBERLINE SERVICES

Sample Log In Report

Oak Ridge Laboratory
601 Scarboro Rd.
Oak Ridge, TN 37830

Voice: (865) 481-0683
Fax: (865) 483-4621

Invoice	
	Accounts Payable
	Auxier & Associates, Inc.
	9821 Cogdill Drive #1
	Knoxville, TN 37932
Voice	865-675-3669
Fax	865-675-3677
Contact	Harvey Cohen
Voice	301-718-8900
Fax	301-718-8909

Report Data	
	Cecilia Greene
	Auxier & Associates, Inc.
	9821 Cogdill Road, Suite 1
	Knoxville, TN 37830
Voice	865-675-3669
Fax	865-675-3677

Printed: 9/22/2015 4:47 PM

Eberline Services – Oak Ridge Laboratory

SAMPLE RECEIPT CHECKLIST
MP-001-2

WORK ORDER # 15-09123

SAMPLE MATRIX/MATRICES: (CIRCLE ONE OR BOTH)

(AQUEOUS) NON-AQUEOUS

(CIRCLE EITHER YES, NO, OR N/A)

WERE SAMPLES:

Received in good condition?	(Y)	N	
If aqueous, properly preserved	(Y)	N	N/A

WERE CHAIN OF CUSTODY SEALS:

Present on outside of package?	(Y)	N
Unbroken on outside of package?	(Y)	N
Present on samples?	(Y)	N
Unbroken on samples?	(Y)	N
Was chain of custody present upon sample receipt?	(Y)	N

IF THE RESPONSE TO ANY OF THE ABOVE IS **NO**, A DISCREPANT SAMPLE RECEIPT REPORT (DSR) HAS BEEN ISSUED.

REMARKS: _____

SIGNATURE: James E Bailey DATE: 9-22-15

SECTION III

CASE NARRATIVE

EBERLINE SERVICES

EBERLINE ANALYTICAL CORPORATION
601 SCARBORO ROAD
OAK RIDGE, TENNESSEE 37830
PHONE (865) 481-0683
FAX (865) 483-4621

EBS-OR-39725

September 30, 2015

Cecilia Greene
USA ENV LP/Auxier & Associates, Inc.
9821 Cogdill Road, Suite 1
Knoxville, TN 37932

CASE NARRATIVE
Work Order# 15-09123-OR

SAMPLE RECEIPT

This work order contains seventeen water samples received 09/22/2015. These samples were analyzed for Total Dissolved Solids (TDS) and Total Suspended Solids (TSS).

CLIENT ID	LAB ID	CLIENT ID	LAB ID
KC85-035-L	15-09123-04	KC-279	15-09123-13
KC92-185-L	15-09123-05	KC85-032-U	15-09123-14
KC85-035-U	15-09123-06	KC86-047-U	15-09123-15
KC85-032-L	15-09123-07	KC94-199-U	15-09123-16
KC85-032-M	15-09123-08	KC94-199-L	15-09123-17
KC86-047-L	15-09123-09	KC97-209-L	15-09123-18
KC90-140-L	15-09123-10	KC97-209-U	15-09123-19
KC90-140-U	15-09123-11	KC-185-U	15-09123-20
OUTFALL001	15-09123-12		

ANALYTICAL METHODS

Total Dissolved Solids was analyzed using Standard Methods 2540C. Total Suspended Solids was analyzed using Standard Methods 2540D.

ANALYTICAL RESULTS

Combined Standard Uncertainty is reported at 2-sigma value.

Minimum Detectable Activity (MDA) values for data represented in this report are sample-specific. MDA measurements are determined based on factors and conditions including instrument settings, aliquot size and matrix type.

ANALYTICAL RESULTS CONTINUED

TOTAL DISSOLVED SOLIDS (TDS)

A volumetric aliquot of each sample was filtered through a tared 0.45µm filter media into a tared 250ml beaker. Samples were then dried on a hot plate and were allowed to cool. The TDS content was determined by reweighing tared beakers.

Samples demonstrated Total Dissolved Solids content that ranged from 262.0 to 3,800.0 mg/L.

TOTAL SUSPENDED SOLIDS (TSS)

A volumetric aliquot of each sample was filtered through tared 0.45µm filter media. Filter media was then dried and reweighed for determination of TSS content.

Samples demonstrated Total Suspended Solids content that ranged from 3.0 to 286.0 mg/L.

CERTIFICATION OF ACCURACY

I certify that this data report is in compliance with the terms and conditions of the Purchase Order, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the cognizant project manager or his/her designee to be accurate as verified by the following signature.

M.R. McDougall
Laboratory Manager

Date: 9/30/2015

Eberline Analytical wants and encourages your feedback regarding our performance providing radioanalytical services. Please visit http://www.eberlineservices.com/client.htm to provide us with feedback on our services.

SECTION IV

ANALYTICAL RESULTS SUMMARY

Eberline Analytical
Final Report of Analysis

Report To:
Cecilia Greene
Auxier & Associates, Inc.
9821 Cogdill Road, Suite 1
Knoxville, TN 37830

Work Order Details:
SDG: 15-09123
Purchase Order: PAP-KAN
Analysis Category: ENVIRONMENTAL
Sample Matrix: WA

Lab ID	Sample Type	Client ID	Sample Date	Receipt Date	Analysis Date	Batch ID	Analyte	Method	Result	CU	CSU	MDA	CV	Report Units
15-09123-04	TRG	KC85-035-L	09/17/15 16:32	9/22/2015	9/23/2015	15-09123	TDS	SM 2540C	1.11E+03					mg/l
15-09123-05	TRG	KC92-185-L	09/18/15 13:39	9/22/2015	9/23/2015	15-09123	TDS	SM 2540C	5.79E+02					mg/l
15-09123-06	TRG	KC85-035-U	09/18/15 08:42	9/22/2015	9/23/2015	15-09123	TDS	SM 2540C	7.18E+02					mg/l
15-09123-07	TRG	KC85-032-L	09/21/15 14:42	9/22/2015	9/23/2015	15-09123	TDS	SM 2540C	8.41E+02					mg/l
15-09123-08	TRG	KC85-032-M	09/21/15 13:25	9/22/2015	9/23/2015	15-09123	TDS	SM 2540C	1.23E+03					mg/l
15-09123-09	TRG	KC86-047-L	09/21/15 15:40	9/22/2015	9/23/2015	15-09123	TDS	SM 2540C	3.28E+02					mg/l
15-09123-10	TRG	KC90-140-L	09/21/15 16:51	9/22/2015	9/23/2015	15-09123	TDS	SM 2540C	3.44E+02					mg/l
15-09123-11	TRG	KC90-140-U	09/21/15 16:21	9/22/2015	9/23/2015	15-09123	TDS	SM 2540C	2.62E+02					mg/l
15-09123-12	TRG	OUTFALL001	09/21/15 14:56	9/22/2015	9/23/2015	15-09123	TDS	SM 2540C	9.10E+02					mg/l
15-09123-13	TRG	KC-279	09/21/15 14:49	9/22/2015	9/23/2015	15-09123	TDS	SM 2540C	1.82E+03					mg/l
15-09123-14	TRG	KC85-032-U	09/21/15 12:53	9/22/2015	9/23/2015	15-09123	TDS	SM 2540C	2.94E+03					mg/l
15-09123-15	TRG	KC86-047-U	09/21/15 15:05	9/22/2015	9/23/2015	15-09123	TDS	SM 2540C	5.43E+02					mg/l
15-09123-16	TRG	KC94-199-U	09/18/15 09:56	9/22/2015	9/23/2015	15-09123	TDS	SM 2540C	1.67E+03					mg/l
15-09123-17	TRG	KC94-199-L	09/18/15 10:44	9/22/2015	9/23/2015	15-09123	TDS	SM 2540C	2.23E+03					mg/l
15-09123-18	TRG	KC97-209-L	09/18/15 16:42	9/22/2015	9/23/2015	15-09123	TDS	SM 2540C	1.79E+03					mg/l
15-09123-19	TRG	KC97-209-U	09/19/15 11:15	9/22/2015	9/23/2015	15-09123	TDS	SM 2540C	3.80E+03					mg/l
15-09123-20	TRG	KC-185-U	09/18/15 12:50	9/22/2015	9/23/2015	15-09123	TDS	SM 2540C	3.12E+02					mg/l
15-09123-04	TRG	KC85-035-L	09/17/15 16:32	9/22/2015	9/23/2015	15-09123	TSS	SM 2540D	3.00E+00					mg/l
15-09123-05	TRG	KC92-185-L	09/18/15 13:39	9/22/2015	9/23/2015	15-09123	TSS	SM 2540D	9.70E+01					mg/l
15-09123-06	TRG	KC85-035-U	09/18/15 08:42	9/22/2015	9/23/2015	15-09123	TSS	SM 2540D	1.10E+01					mg/l
15-09123-07	TRG	KC85-032-L	09/21/15 14:42	9/22/2015	9/23/2015	15-09123	TSS	SM 2540D	5.00E+00					mg/l
15-09123-08	TRG	KC85-032-M	09/21/15 13:25	9/22/2015	9/23/2015	15-09123	TSS	SM 2540D	1.30E+01					mg/l
15-09123-09	TRG	KC86-047-L	09/21/15 15:40	9/22/2015	9/23/2015	15-09123	TSS	SM 2540D	1.16E+02					mg/l
15-09123-10	TRG	KC90-140-L	09/21/15 16:51	9/22/2015	9/23/2015	15-09123	TSS	SM 2540D	4.90E+01					mg/l
15-09123-11	TRG	KC90-140-U	09/21/15 16:21	9/22/2015	9/23/2015	15-09123	TSS	SM 2540D	2.86E+02					mg/l
15-09123-12	TRG	OUTFALL001	09/21/15 14:56	9/22/2015	9/23/2015	15-09123	TSS	SM 2540D	3.10E+01					mg/l
15-09123-13	TRG	KC-279	09/21/15 14:49	9/22/2015	9/23/2015	15-09123	TSS	SM 2540D	8.70E+01					mg/l
15-09123-14	TRG	KC85-032-U	09/21/15 12:53	9/22/2015	9/23/2015	15-09123	TSS	SM 2540D	1.50E+01					mg/l
15-09123-15	TRG	KC86-047-U	09/21/15 15:05	9/22/2015	9/23/2015	15-09123	TSS	SM 2540D	4.20E+01					mg/l
15-09123-16	TRG	KC94-199-U	09/18/15 09:56	9/22/2015	9/23/2015	15-09123	TSS	SM 2540D	8.00E+00					mg/l
15-09123-17	TRG	KC94-199-L	09/18/15 10:44	9/22/2015	9/23/2015	15-09123	TSS	SM 2540D	7.70E+01					mg/l
15-09123-18	TRG	KC97-209-L	09/18/15 16:42	9/22/2015	9/23/2015	15-09123	TSS	SM 2540D	1.42E+02					mg/l
15-09123-19	TRG	KC97-209-U	09/19/15 11:15	9/22/2015	9/23/2015	15-09123	TSS	SM 2540D	7.60E+01					mg/l
15-09123-20	TRG	KC-185-U	09/18/15 12:50	9/22/2015	9/23/2015	15-09123	TSS	SM 2540D	6.00E+01					mg/l

CU=Counting Uncertainty;CSU=Combined Standard Uncertainty (2-sigma);MDA=Minimal Detected Activity;LCS=Laboratory Control Sample; MBL=Blank; DUP=Duplicate; TRG=Normal Sample; DO=Duplicate Original; CV=Critical Value

EBERLINE SERVICES
EBERLINE ANALYTICAL CORPORATION
601 SCARBORO ROAD OAK RIDGE, TN 37830 865/481-0683 FAX 865/483-4621

SECTION V

LABORATORY TECHNICIAN'S NOTES

TDS NOTES

EBERLINE SERVICES

Work Order Analysis Notes

Oak Ridge Laboratory
601 Scarboro Rd.
Oak Ridge, TN 37830
Voice: 865.481.0683
www.eberlineservices.com

Internal Work Order	15-09123
Analysis Code	TDS
Run Number	1

#	Date	Dept	User	Notes
1	09/23/15 09:28	PREP	MHIGHTOWER	Filtered sample into tared beaker, dried, re-weighed

Mh 23SEP15

TSS NOTES

EBERLINE SERVICES

Work Order Analysis Notes

Oak Ridge Laboratory
601 Scarboro Rd.
Oak Ridge, TN 37830
Voice: 865.481.0683
www.eberlineservices.com

Internal Work Order	15-09123
Analysis Code	TSS
Run Number	1

#	Date	Dept	User	Notes
1	09/23/15 09:29	PREP	MHIGHTOWER	Captured suspended particles on tared filters, dried, re-weighed

MH 23SEP15

SECTION VI

ANALYTICAL DATA (TOTAL DISSOLVED SOLIDS)

Eberline Services - Oak Ridge
Version 1.0 9/1999

TDS / TSS Worksheet

Work Order	Run	Analysis Code	Technician
15-09123	1	TDS	MHIGHTOWER

TRetec	Auxier & Associates, Inc.		Filter Data			TDS/TSS	Maximum Aliq
Fraction	Client ID	Aliquot ml	Filter Tare (g)	Filter Final (g)	Filter Net (g)	(mg/L)	(mL)
04	KC85-035-L	100.0000	99.7625	99.8739	0.1114	1114.0000	89.77
05	KC92-185-L	100.0000	109.6636	109.7215	0.0579	579.0000	172.71
06	KC85-035-U	100.0000	101.1659	101.2377	0.0718	718.0000	139.28
07	KC85-032-L	100.0000	110.1537	110.2378	0.0841	841.0000	118.91
08	KC85-032-M	100.0000	109.4623	109.5850	0.1227	1227.0000	81.50
09	KC86-047-L	100.0000	100.8378	100.8706	0.0328	328.0000	304.88
10	KC90-140-L	100.0000	111.1003	111.1347	0.0344	344.0000	290.70
11	KC90-140-U	100.0000	109.9871	110.0133	0.0262	262.0000	381.68
12	OUTFALL001	100.0000	122.8197	122.9107	0.0910	910.0000	109.89
13	KC-279	100.0000	113.3657	113.5480	0.1823	1823.0000	54.85
14	KC85-032-U	100.0000	108.5756	108.8692	0.2936	2936.0000	34.06
15	KC86-047-U	100.0000	103.4616	103.5159	0.0543	543.0000	184.16
16	KC94-199-U	100.0000	104.1446	104.3118	0.1672	1672.0000	59.81
17	KC94-199-L	100.0000	109.4317	109.6544	0.2227	2227.0000	44.90
18	KC97-209-L	100.0000	110.4082	110.5868	0.1786	1786.0000	55.99
19	KC97-209-U	100.0000	110.5160	110.8960	0.3800	3800.0000	26.32
20	KC-185-U	100.0000	104.5495	104.5807	0.0312	312.0000	320.51

Technician: MW Date: 9/23/15

Eberline Analytical
Oak Ridge Laboratory

Aliquot Worksheet

Printed: 9/23/2015 9:27 AM

Work Order	Run	Analysis Code	Rpt Units	Lab Deadline	Technician
15-09123	1	TDS	liters	9/28/2015	MHIGHTOWER

Lab Fraction	Auxier & Associates, Inc. Client ID	Sample Type	Muffle Data	Dilution Data			Aliquot Data		MS Aliquot Data		H-3 Solids Only	
			Ratio Post/Pre	No of Dils	Dil Factor	Ratio	Aliquot	Net Equiv	Aliquot	Net Equiv	Water Added (ml)	H3 Dist Aliq
01	LCS	LCS					1.0000E+00	1.0000E+00				
02	BLANK	MBL					1.0000E+00	1.0000E+00				
03	KC85-035-L	DUP					1.0000E-01	1.0000E-01				
04	KC85-035-L	DO					1.0000E-01	1.0000E-01				
05	KC92-185-L	TRG					1.0000E-01	1.0000E-01				
06	KC85-035-U	TRG					1.0000E-01	1.0000E-01				
07	KC85-032-L	TRG					1.0000E-01	1.0000E-01				
08	KC85-032-M	TRG					1.0000E-01	1.0000E-01				
09	KC86-047-L	TRG					1.0000E-01	1.0000E-01				
10	KC90-140-L	TRG					1.0000E-01	1.0000E-01				
11	KC90-140-U	TRG					1.0000E-01	1.0000E-01				
12	OUTFALL001	TRG					1.0000E-01	1.0000E-01				
13	KC-279	TRG					1.0000E-01	1.0000E-01				
14	KC85-032-U	TRG					1.0000E-01	1.0000E-01				
15	KC86-047-U	TRG					1.0000E-01	1.0000E-01				
16	KC94-199-U	TRG					1.0000E-01	1.0000E-01				
17	KC94-199-L	TRG					1.0000E-01	1.0000E-01				
18	KC97-209-L	TRG					1.0000E-01	1.0000E-01				
19	KC97-209-U	TRG					1.0000E-01	1.0000E-01				
20	KC-185-U	TRG					1.0000E-01	1.0000E-01				

Comments	

12906

Technician: MH Date: 9/23/15

SECTION VII

ANALYTICAL DATA (TOTAL SUSPENDED SOLIDS)

Eberline Services - Oak Ridge
Version 1.0 9/1999

TDS / TSS Worksheet

Printed: 9/23/2015 9:56 AM

Work Order	Run	Analysis Code	Technician
15-09123	1	TSS	MHIGHTOWER

TRetec	Auxier & Associates, Inc.		Filter Data			TDS/TSS	Maximum Aliq
Fraction	Client ID	Aliquot ml	Filter Tare (g)	Filter Final (g)	Filter Net (g)	(mg/L)	(mL)
04	KC85-035-L	100.0000	0.0728	0.0731	0.0003	3.0000	33333.33
05	KC92-185-L	100.0000	0.0731	0.0828	0.0097	97.0000	1030.93
06	KC85-035-U	100.0000	0.0734	0.0745	0.0011	11.0000	9090.91
07	KC85-032-L	100.0000	0.0734	0.0739	0.0005	5.0000	20000.00
08	KC85-032-M	100.0000	0.0705	0.0718	0.0013	13.0000	7692.31
09	KC86-047-L	100.0000	0.0697	0.0813	0.0116	116.0000	862.07
10	KC90-140-L	100.0000	0.0697	0.0746	0.0049	49.0000	2040.82
11	KC90-140-U	100.0000	0.0696	0.0982	0.0286	286.0000	349.65
12	OUTFALL001	100.0000	0.0697	0.0728	0.0031	31.0000	3225.81
13	KC-279	100.0000	0.0708	0.0795	0.0087	87.0000	1149.43
14	KC85-032-U	100.0000	0.0701	0.0716	0.0015	15.0000	6666.67
15	KC86-047-U	100.0000	0.0704	0.0746	0.0042	42.0000	2380.95
16	KC94-199-U	100.0000	0.0706	0.0714	0.0008	8.0000	12500.00
17	KC94-199-L	100.0000	0.0696	0.0773	0.0077	77.0000	1298.70
18	KC97-209-L	100.0000	0.0697	0.0839	0.0142	142.0000	704.23
19	KC97-209-U	100.0000	0.0701	0.0777	0.0076	76.0000	1315.79
20	KC-185-U	100.0000	0.0695	0.0755	0.0060	60.0000	1666.67

G2009

Technician: MH Date: 9/23/15

Eberline Analytical
Oak Ridge Laboratory

Aliquot Worksheet

Work Order	Run	Analysis Code	Rpt Units	Lab Deadline	Technician
15-09123	1	TSS	liters	9/28/2015	MHIGHTOWER

Lab Fraction	Auxier & Associates, Inc. Client ID	Sample Type	Muffle Data Ratio Post/Pre	Dilution Data No of Dils	Dil Factor	Ratio	Aliquot Data Aliquot	Net Equiv	MS Aliquot Data Aliquot	Net Equiv	H-3 Solids Only Water Added (ml)	H3 Dist Aliq
01	LCS	LCS					1.0000E+00	1.0000E+00				
02	BLANK	MBL					1.0000E+00	1.0000E+00				
03	KC85-035-L	DUP					1.0000E-01	1.0000E-01				
04	KC85-035-L	DO					1.0000E-01	1.0000E-01				
05	KC92-185-L	TRG					1.0000E-01	1.0000E-01				
06	KC85-035-U	TRG					1.0000E-01	1.0000E-01				
07	KC85-032-L	TRG					1.0000E-01	1.0000E-01				
08	KC85-032-M	TRG					1.0000E-01	1.0000E-01				
09	KC86-047-L	TRG					1.0000E-01	1.0000E-01				
10	KC90-140-L	TRG					1.0000E-01	1.0000E-01				
11	KC90-140-U	TRG					1.0000E-01	1.0000E-01				
12	OUTFALL001	TRG					1.0000E-01	1.0000E-01				
13	KC-279	TRG					1.0000E-01	1.0000E-01				
14	KC85-032-U	TRG					1.0000E-01	1.0000E-01				
15	KC86-047-U	TRG					1.0000E-01	1.0000E-01				
16	KC94-199-U	TRG					1.0000E-01	1.0000E-01				
17	KC94-199-L	TRG					1.0000E-01	1.0000E-01				
18	KC97-209-L	TRG					1.0000E-01	1.0000E-01				
19	KC97-209-U	TRG					1.0000E-01	1.0000E-01				
20	KC-185-U	TRG					1.0000E-01	1.0000E-01				

Comments	

Technician: MQ Date: 9/23/15

00030