

**AUXIER & ASSOCIATES, INC.**

**PAP-KAN**

**1428**

**STANDARD LEVEL IV  
REPORT OF ANALYSIS**

**WORK ORDER #15-10065-OR**

**October 27, 2015**

**EBERLINE ANALYTICAL/OAK RIDGE LABORATORY  
OAK RIDGE, TN**

## TABLE OF CONTENTS

SECTION	DESCRIPTION	PAGE
I	Chain of Custody & pH Check Sheet	0004
II	Sample Acknowledgement	0009
III	Case Narrative	0012
IV	Analytical Results Summary	0015
V	Laboratory Technician's Notes	0017
VI	Analytical Data (Total Dissolved Solids)	0022
VII	Analytical Data (Total Suspended Solids)	0025
	Last Page Number	0027



# STANDARD OPERATING PROCEDURE

MP-001, Rev. 15  
Effective: 2/2/15  
Page 14 of 15

Sample Receiving

## Eberline Services – Oak Ridge Laboratory LABORATORY DATA SUPPORT CHECKLIST

MP-001-3

# 15 - 10065

Eberline Services Work Order # \_\_\_\_\_

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

Date for Partial	Initials	Date	Initials	Checklist Items
		10-12-15	JED	Sample Log-In
		10/13/15	EJT	Data Compilation
		10-14-15	M LF	First Technical Data Review
		10/14/15	MSA	Second Technical Data Review
		10/20/15	EJT	Data Entry/Electronic Deliverable
		10/20/15	EJT	Case Narrative
		10/20/15	MSA	Electronic Deliverable Proof
		10/27/15	MSA	Samples Analyzed within Holding Time Yes? <input checked="" type="checkbox"/> No? <input type="checkbox"/>
		10/27/15	MSA	QA/QC/Review
		10/30/15	EJT	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:

Laboratory Manager

Date

Copy No. \_\_\_\_\_

Radiochemistry Services


: 00003

**SECTION I**  
**CHAIN OF CUSTODY**  
**&**  
**pH CHECK SHEET**



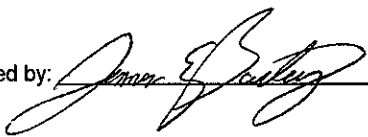




	<b>Sample Receiving Report</b> (Volumes, pH, & CPM)	Internal Work Order
		<b>15-10065</b>
		Received By <b>JBAILEY</b>

FR	ClientID	# Btls	Comments	Matrix	Storage	Rec Vol Ttl	CPM Max	
01	LCS	0		WA	NN1.1			
02	BLANK	0		WA	NN1.1			
03	DUP	0		WA	NN1.1			
04	KC91-159-L ✓	1		WA	NN1.1	3.76	37	
				Container Number:	pH Orig	pH Final	Volume (L)	CPM
				1	7	7	3.7600	37
05	KC91-159-U ✓	1		WA	NN1.1	3.76	39	
				Container Number:	pH Orig	pH Final	Volume (L)	CPM
				1	7	7	3.7600	39
06	OW-008-L ✓	1		WA	NN1.1	3.76	37	
				Container Number:	pH Orig	pH Final	Volume (L)	CPM
				1	7	7	3.7600	37
07	KC-90-137-U ✓	1		WA	NN1.1	3.76	35	
				Container Number:	pH Orig	pH Final	Volume (L)	CPM
				1	7	7	3.7600	35
08	KC-90-137-L ✓	1		WA	NN1.1	3.76	32	
				Container Number:	pH Orig	pH Final	Volume (L)	CPM
				1	7	7	3.7600	32
09	RB-01-09 21 15 ✓	1		WA	NN1.1	1.00	36	
				Container Number:	pH Orig	pH Final	Volume (L)	CPM
				1	7	7	1.0000	36

*VEYT  
10/12/15*

Received by:  Date: 10-12-15



**SECTION II**  
**SAMPLE ACKNOWLEDGEMENT**





**Eberline Services – Oak Ridge Laboratory**

**SAMPLE RECEIPT CHECKLIST**  
MP-001-2

WORK ORDER # 15 - 10065

SAMPLE MATRIX/MATRICES:

(CIRCLE ONE OR BOTH)

AQUEOUS NON-AQUEOUS

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

WERE SAMPLES:

Received in good condition?	<input checked="" type="radio"/> Y	N	
If aqueous, properly preserved	<input checked="" type="radio"/> Y	N	N/A

WERE CHAIN OF CUSTODY SEALS:

Present on outside of package?	<input checked="" type="radio"/> Y	N
Unbroken on outside of package?	<input checked="" type="radio"/> Y	N
Present on samples?	<input checked="" type="radio"/> Y	N
Unbroken on samples?	<input checked="" type="radio"/> Y	N
Was chain of custody present upon sample receipt?	<input checked="" type="radio"/> Y	N

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

REMARKS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

SIGNATURE: *James Bailey* DATE: 10-12-15

**SECTION III**  
**CASE NARRATIVE**



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

EBS-OR-39853

October 27, 2015

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

CASE NARRATIVE  
Work Order# 15-10065-OR

SAMPLE RECEIPT

This work order contains six water samples received 10/12/2015. These samples were analyzed for Total Dissolved Solids (TDS) and Total Suspended Solids (TSS).

<u>CLIENT ID</u>	<u>LAB ID</u>
KC91-159-L	15-10065-04
KC91-159-U	15-10065-05
OW-008-L	15-10065-06
KC-90-137-U	15-10065-07
KC-90-137-L	15-10065-08
RB-01-09 21 15	15-10065-09

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.

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 54.0 to 780.0 mg/L.

ANALYTICAL RESULTS CONTINUED

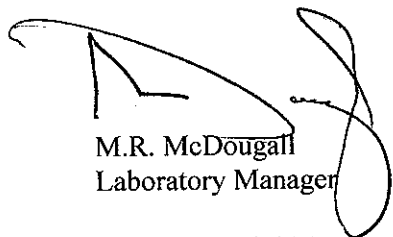
TOTAL SUSPENDED SOLIDS (TSS)

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

Samples demonstrated Total Suspended Solids content that ranged from 1.0 to 119.0 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: 10/27/2015

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

Work Order Details:

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

SDG: **15-10065**  
 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
15-10065-04	TRG	KC91-159-L	09/26/15 09:25	10/12/2015	10/13/2015	15-10065	TDS	SM 2540C	7.80E+02					mg/l
15-10065-05	TRG	KC91-159-U	09/26/15 10:10	10/12/2015	10/13/2015	15-10065	TDS	SM 2540C	7.50E+02					mg/l
15-10065-06	TRG	OW-008-L	09/22/15 10:51	10/12/2015	10/13/2015	15-10065	TDS	SM 2540C	4.50E+02					mg/l
15-10065-07	TRG	KC-90-137-U	09/26/15 12:05	10/12/2015	10/13/2015	15-10065	TDS	SM 2540C	4.43E+02					mg/l
15-10065-08	TRG	KC-90-137-L	09/26/15 12:40	10/12/2015	10/13/2015	15-10065	TDS	SM 2540C	4.18E+02					mg/l
15-10065-09	TRG	RB-01-09 21 15	09/21/15 11:20	10/12/2015	10/13/2015	15-10065	TDS	SM 2540C	5.40E+01					mg/l
15-10065-04	TRG	KC91-159-L	09/26/15 09:25	10/12/2015	10/13/2015	15-10065	TSS	SM 2540D	8.30E+01					mg/l
15-10065-05	TRG	KC91-159-U	09/26/15 10:10	10/12/2015	10/13/2015	15-10065	TSS	SM 2540D	9.80E+01					mg/l
15-10065-06	TRG	OW-008-L	09/22/15 10:51	10/12/2015	10/13/2015	15-10065	TSS	SM 2540D	1.19E+02					mg/l
15-10065-07	TRG	KC-90-137-U	09/26/15 12:05	10/12/2015	10/13/2015	15-10065	TSS	SM 2540D	9.70E+01					mg/l
15-10065-08	TRG	KC-90-137-L	09/26/15 12:40	10/12/2015	10/13/2015	15-10065	TSS	SM 2540D	7.00E+01					mg/l
15-10065-09	TRG	RB-01-09 21 15	09/21/15 11:20	10/12/2015	10/13/2015	15-10065	TSS	SM 2540D	1.00E+00					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**

 <b>EBERLINE</b> SERVICES <b>Work Order Analysis Notes</b>	<b>Oak Ridge Laboratory</b> 601 Scarboro Rd. Oak Ridge, TN 37830 Voice: 865.481.0683 www.eberlineservices.com	Internal Work Order	15-10065
		Analysis Code	TDS
		Run Number	1

#	Date	Dept	User	Notes
1	10/13/15 03:32	PREP	MHIGHTOWER	Filtered sample into tared beaker, dried, re-weighed

*MH 13 OCT 15*

**TSS NOTES**

 <b>EBERLINE</b> SERVICES <b>Work Order Analysis Notes</b>	<b>Oak Ridge Laboratory</b> 601 Scarboro Rd. Oak Ridge, TN 37830 Voice: 865.481.0683 www.eberlineservices.com	Internal Work Order	15-10065
		Analysis Code	TSS
		Run Number	1

#	Date	Dept	User	Notes
1	10/13/15 03:32	PREP	MHIGHTOWER	Captured suspended particles on tared filters, dried, re-weighed

*Mg 13 OCT 15*

**SECTION VI**  
**ANALYTICAL DATA (TOTAL DISSOLVED SOLIDS)**







**SECTION VII**  
**ANALYTICAL DATA (TOTAL SUSPENDED SOLIDS)**



