



Catherine E. Heigel, Director

*Promoting and protecting the health of the public and the environment*

Date: August 20, 2015

To: James C. Berry  
Office of Environmental Laboratory Certification  
Bureau of Environmental Health Services

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**AUG 27 2015**

From: Betsy B. Carter, Lab Assistant  
Midlands Region-Lancaster Laboratory

**LAB CERTIFICATION**

Re: Laboratory I.D. # 29206  
Certificate # 29206001

Subject: Response to the report of the On-Site Laboratory Certification Evaluation of the  
Midlands-Lancaster Laboratory

This response is in regards to the on-site laboratory evaluation of the Midlands Region-Lancaster Laboratory conducted on June 22, 2015 by James Berry and Susan Butts.

**TEMPERATURE-SM 2550 B-2010**

Finding: The thermometer in the spore ampule incubator has not been verified for accuracy since 3/2014.

Response The thermometer calibration for the thermometer used in the spore ampule incubator is now current. See attached record DHEC form 2167, thermometer serial # 15-021-5B.

**RESIDUAL CHLORINE – SM 4500 – CL G – 2011**

Finding: The laboratory is not analyzing a 0.05mg/L (Reporting Limit RL) standard with the daily calibration check.

Response: Section 14 of the field SOP has recently been updated to reflect this requirement. The laboratory and drinking water staff have been analyzing the required 0.05mg/L. See attached field logbook sheets. The waste water sampler was unaware of the 0.05 mg/L requirement. He is now aware and will be analyzing a 0.05 mg/L for the daily calibration check. No samples requiring chlorine to be checked have been collected by waste water sampler since the audit. A chlorine audit sample will be analyzed before September 24, 2015. A Calibration record will be available at that time.

Conclusion

The Laboratory has been working in conjunction with the other Regional Laboratories and Central Laboratory to update our SOP, workbooks and data sheets to include current requirements. Thank you for your comments and suggestions.



Betsy B. Carter  
Laboratory Assistant  
EQC Region 3 Lancaster

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**Annual Thermometer Calibration**  
**Analytical & Radiological Environmental Services Division**

Fiscal Year: 2016

Thermometer Tested By: Date & Initials	Information Recorded By: Date & Initials	Thermometer Tested		Thermometer Location (Equipment ID)	NIST Thermometer Serial #	Reading A (NIST) °C	Reading B (Thermometer Tested) °C	A-B (Correction Factor)
		Serial #	* ID					
7/14/15 BC	7/14/15 BC	7035	N/A	Air Incubator - Top shelf 05044310	4T7640	34.4	34.3	+0.1
7/14/15 BC	7/14/15 BC	4953		bottom shelf		33.8	34.2	-0.4
7/15/15 BC	7/15/15 BC	171142578		Small waterbath 209056-545		43.7	44.1	-0.4
7/16/15 BC	7/16/15 BC	2832 3.16 + BC	7/16/15	Large waterbath 3.16		44.5	44.8	-0.3
7/17/15 BC	7/17/15 BC	15-041-4D		chemistry Lab thermometer holder		21.7	22.0	-0.3
7/17/15 BC	7/17/15 BC	4605		Refrigerator - Sample login 17B201002-00085		3.3	3.0	+0.3
7/21/15 BC	7/21/15 BC	076100132		D.C. Meter. YSI 5100 05m1900 AA		21.9	21.96	-0.06
7/22/15 BC	7/22/15 BC	CT 15		Refrigerator 8451816		2.2	2.0	+0.2
8/4/15 BC	8/4/15 BC	15-021-59 <sup>B</sup>	8/4/15	Spre Incubator Autoclave room		34.2	34.0 33.82/46	+0.2
8/6/15 BC	8/6/15 BC	16928		spare Chem Lab		2.1	1.5	+0.6
		1943				2.1	2.0	+0.1
8/20/15 BC	8/20/15 BC	CP15 #2		spare Chem Lab		22.5	23.0	-0.5

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\*ID=Instrument Services Identification Number



## Drinking Water Sample Collection and Field Analysis

Date: 7/13/15 (Calibration, sample analysis, and sample collection are all performed on the same day)

pH Meter Calibration Beginning Time	pH Meter Check End Time	Total Residual Chlorine Calibration	Free Residual Chlorine Calibration	Cl2 Present/ Absence/ DPD Meter ID:	Check Meter ID:
Analyst Initials:		Blank (mg/L): <u>0.00</u>	Blank (mg/L):	Gel	Tap Water
pH 4 reading (s.u.):	pH 4 reading (s.u.):	0.5mg/L standard: <u>0.55</u>	0.5mg/L standard:	Lot:	Tap H2O Blank:
pH 7 reading (s.u.):	pH 7 reading (s.u.):	<del>1.0mg/L standard:</del>	1.0mg/L standard:	Blank:	Tap H2O W/ DPD:
pH 10 reading (s.u.):	pH 10 reading (s.u.):	DPD Lot# <u>A4309</u>	DPD Lot#	STD1:	DPD Lot#
Slope Reading:		Meter ID: <u>18020PLII</u>	Time: <u>945</u>	STD2:	Time:
Meter ID:				STD3:	

\*Samples analyzed within 15 minutes of collection    Sample Collector's Signature: Samantha Burch

0.05 std → 0.06

Sample ID/Location	*Time Collected	pH Result (s.u.)	7.00 Buffer Check	Free Chlorine Result (mg/L)	Total Chlorine Result (mg/L)	Present (P) or Absent (A)	Analyst's Initials	Comments
Bush-N-Vine - 01SSP	1135				<0.05		SBP	
↓	↓				<0.05		SBP	duplicate
Kings Mtn. SP - Shop 01SSP	1210				<0.05		SBP	
↓	↓				<0.05		SBP	
Linghistey - PR	1215				<0.05		SBP	
↓	↓				<0.05		SBP	
Camp Cherokee - 01SSP	1230				<0.05		SBP	
↓	↓				<0.05		SBP	
Camp York - 01SSP	1245				<0.05		SBP	
Kings Mtn Nat PK - 01SSP	1315				0.73		SBP	#Chlorinator
↓	↓				<0.05		SBP	
Tie Peach Deo - 01SSP	1355						SBP	

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