

6390 Joyce Drive # 100 Golden, CO 80403 Phone 303-940-0033 Fax 866-283-0269 www.phenova.com

February 25, 2015

Ms. Kelley Keenan Environmental Testing Solutions, Inc. 351 Depot Street Asheville, NC 28801 USA

Dear Kelley,

Thank you for participating in the WSM0115 Water Supply Proficiency Testing Study. Enclosed is your final report, which has been carefully reviewed by the PT specialists at Phenova. This report presents some additional sections and features which will give you more information on the study data for the standards that were reported by your laboratory and more information regarding the overall performance of your laboratory in relation to other study participants.

The enclosed report is in two sections, the "Evaluation Report" and the "Statistical Report". The "Evaluation Report" contains the evaluation of your reported data as well the reported method, analysis date and analyst. The "Evaluation Report" is an updated and enhanced version of the reports you previously received at the conclusion of our PT studies. The "Statistical Report" contains your passing percentage as well as statistics from the study for the analytes reported by your laboratory.

For any analyte falling outside the established acceptance limits, our PT management staff would like to assist you in determining the most appropriate course of corrective action for your facility. Please contact us at any time if we may be of service to you.

Thank you again for participating in the WSM0115 Water Supply Proficiency Testing Study. We appreciate working with you and look forward to our next study. If you have any questions, please call us at 866-942-2978.

Report Issue Date - 2/25/2015 Report Page - 1 of 10





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#### **Report Definitions:**

Assigned Value The Assigned Value is determined from the study mean, gravimetric

and volumetric true concentration of an analyte to be analyzed, calculation and/or an appropriate reference value as stipulated in the

EPA National Standards for Water Proficiency Testing Studies Criteria Document (current version), the National Environmental Laboratory Accreditation Conference (NELAC) criteria (ref: NELAC FOT tables, NELAC PT Committee) and other documents distributed by accrediting

agencies as applicable.

**Evaluation Limits** Acceptance Limits are derived from fixed limits, coefficients, constants

and calculations stipulated in the EPA National Standards for Water Proficiency Testing Studies Criteria Documents (current version), the National Environmental Laboratory Accreditation Conference (NELAC) criteria (ref: NELAC PT FOT tables, NELAC PT Committee) and other

documents distributed by accrediting agencies as applicable.

Evaluation

Acceptable The reported value falls within the Acceptance Limits.

Not Acceptable The reported value falls outside the Acceptance Limits.

No Evaluation The reported value is non-numeric and can not be evaluated.

NR As required by the NELAC standards and requested by state

authorities, any analyte purchased but not reported by your facility is

listed as NR (Not Reported).

Study Mean and Standard Deviation

The mean and standard deviation are calculated from the study data using robust statistical calculations when possible. Other statistical calculations may be used if robust statistical calculations are not possible. The displayed values are independent of any statistical calculations required for the calculation of the analyte evaluation

limits.





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State Regulatory Agency Request(s):

Phenova has been authorized to send a copy of your WSM0115 final results to the following state agencies:

NC

Other Regulatory Agency Request(s):

No requests were made to send a copy of your WSM0115 final results to an agency.

Third Party Request(s):

No requests were made to send a copy of your WSM0115 final results to a third party.

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### **Final Report - Water Supply Proficiency Testing**

Study: WSM0115

Opening Date: January 27, 2015 - Closing Date: February 18, 2015

Laboratory: Environmental Testing Solutions, Inc.

351 Depot Street Asheville, NC 28801

EPA Lab ID: NC01230 USA

MICIO	(Presence/Absence)	(1 1-MIO-113)						LOU	<del>‡:</del> 5205-0	
			Complete /	Analyte Eval	uation					
Th	e complete analyte evaluation(s) are b	pased on the results for t		mples. The Eva		Acceptable" if nine of ten	samples are A	cceptable, and r	no false	
NELAC		Analyte		<u> </u>		Evaluation				
Code		Free Orlife and								
2530	Fecal Coliform						NR			
2525	E.Coli						Accepta	able		
2500	Total Coliform					Acceptable				
			Individual S	Sample Eval	uation					
IELAC Code	Analyte	Analysis Date	Analyst	Method Code	Met	thod Description	Assigned Value	Result	Evaluation	
Sample 1										
2530 F	ecal Coliform						Absence		NR	
2525 E	Coli	1/28/2015	KEK	20212402	SM 9223 B (Colilert®) Rev.21st ED 2005		Absence	Absence	Acceptable	
2500 T	otal Coliform	1/28/2015	KEK	20212402	SM 9223 B (Colilert®) Rev.21st ED 2005		Absence	Absence	Acceptable	
Sample 2										
2530 F	ecal Coliform						Absence		NR	
2525 E	Coli	1/28/2015	KEK	20212402	SM 9223	B (Colilert®) Rev.21st ED 2005	Absence	Absence	Acceptable	
2500 T	otal Coliform	1/28/2015	KEK	20212402	SM 9223 B (Colilert®) Rev.21st ED 2005		Presence	Presence	Acceptable	
Sample 3										
2530 F	ecal Coliform						Presence		NR	
2525 E	Coli	1/28/2015	KEK	20212402	SM 9223 B (Colilert®) Rev.21st ED 2005		Presence	Presence	Acceptable	
2500 T	otal Coliform	1/28/2015	KEK	20212402	SM 9223	B (Colilert®) Rev.21st ED 2005	Presence	Presence	Acceptable	

Ms. Kelley Keenan

828-350-9364





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Laboratory: Environmental Testing Solutions, Inc.

351 Depot Street Asheville, NC 28801 USA

ineville, NC 28801 EPA Lab ID: NC01230

NELAC	Analyte	Analysis	Analyst	Method	Method Description	Assigned	Result	Evaluation
Code	Analyte	Date	Allalyst	Code	Method Description	Value	Result	Evaluation
Sample	1	Date		Code		value		
2530	Fecal Coliform					Absence		NR
2525	E.Coli	1/28/2015	KEK	20212402	SM 9223 B (Colilert®) Rev.21st ED 2005	Absence	Absence	Acceptable
2500	Total Coliform	1/28/2015	KEK	20212402	SM 9223 B (Colilert®) Rev.21st ED 2005	Absence	Absence	Acceptable
Sample	: 5							
2530	Fecal Coliform					Absence		NR
2525	E.Coli	1/28/2015	KEK	20212402	SM 9223 B (Colilert®) Rev.21st ED 2005	Absence	Absence	Acceptable
2500	Total Coliform	1/28/2015	KEK	20212402	SM 9223 B (Colilert®) Rev.21st ED 2005	Presence	Presence	Acceptable
Sample	: 6				22 2000			
2530	Fecal Coliform					Absence		NR
2525	E.Coli	1/28/2015	KEK	20212402	SM 9223 B (Colilert®) Rev.21st ED 2005	Absence	Absence	Acceptable
2500	Total Coliform	1/28/2015	KEK	20212402	SM 9223 B (Colilert®) Rev.21st ED 2005	Presence	Presence	Acceptable
Sample	7							
2530	Fecal Coliform					Presence		NR
2525	E.Coli	1/28/2015	KEK	20212402	SM 9223 B (Colilert®) Rev.21st ED 2005	Presence	Presence	Acceptable
2500	Total Coliform	1/28/2015	KEK	20212402	SM 9223 B (Colilert®) Rev.21st ED 2005	Presence	Presence	Acceptable
Sample	8							
2530	Fecal Coliform					Absence		NR
2525	E.Coli	1/28/2015	KEK	20212402	SM 9223 B (Colilert®) Rev.21st ED 2005	Absence	Absence	Acceptable
2500	Total Coliform	1/28/2015	KEK	20212402	SM 9223 B (Colilert®) Rev.21st ED 2005	Absence	Absence	Acceptable

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Opening Date: January 27, 2015 - Closing Date: February 18, 2015

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351 Depot Street Asheville, NC 28801

020-000-000

USA EPA Lab ID: NC01230

WIICI	o (Presence/Absence)	) (F 1-WIC-VV3)	Cont u				LUL #	<b>#:</b> 5205-0
NELAC	Analyte	Analysis	Analyst	Method	Method Description	Assigned	Result	Evaluation
Code		Date		Code		Value		
Sample	9							
2530	Fecal Coliform					Absence		NR
2525	E.Coli	1/28/2015	KEK	20212402	SM 9223 B (Colilert®) Rev.21st	Absence	Absence	Acceptable
2500	Total Coliform	4/00/0045	VEV	20212402	ED 2005	A h = = = = =	A b	A
2500	rotal Collform	1/28/2015	KEK	20212402	SM 9223 B (Colilert®) Rev.21st ED 2005	Absence	Absence	Acceptable
Sample	10							
2530	Fecal Coliform					Presence		NR
2525	E.Coli	1/28/2015	KEK	20212402	SM 9223 B (Colilert®) Rev.21st	Presence	Presence	Acceptable
					ED 2005			
2500	Total Coliform	1/28/2015	KEK	20212402	SM 9223 B (Colilert®) Rev.21st	Presence	Presence	Acceptable
					ED 2005			





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Laboratory: Environmental Testing Solutions, Inc.

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828-350-9364

Asheville, NC 28801 USA

EPA Lab ID: NC01230

Source Water Micro (PT-SW-WS)									Lot #: 5205-14	
NELAC Code	Analyte	Analysis Date	Analyst	Method Code	Method Description	Units	Assigned Value	Result	Acceptance Limits	Evaluation
2530	Fecal Coliform, MF					CFU/100 mL	95		56 - 164	NR
2525	E. Coli, MF					CFU/100 mL	113		81 - 159	NR
2500	Total Coliform, MF					CFU/100 mL	120		87 - 164	NR
2530	Fecal Coliform, MPN					MPN/100 mL	118		70.2 - 198	NR
2525	E. Coli, MPN	1/29/2015	KEK	20211409	SM 9223 B (Colilert® Quanti-Tray®) Rev.21st ED 2005	MPN/100 mL	121	131.4	78.4 - 186	Acceptable
2500	Total Coliform, MPN					MPN/100 mL	124		80.2 - 190	NR





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## **PT Study Score Report**

EPA ID: NC01230

Laboratory: Environmental Testing Solutions, Inc.

351 Depot Street Asheville, NC 28801

USA

	Number of	Number of	
Study Number	Reported Results	Passing Results	Percent Passing
WSM0115	23	23	100%

#### Report Definitions:

Number of Reported Results The number of results reported which could be evaluated. Results receiving an

evaluation of "NR" or "No Evaluation" are not included.

"Check for Error".

Percent Passing The percentage of results reported receiving an evaluation of "Acceptable" or

"Check for Error".





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# **Statistical Summary Report - Water Supply Proficiency Testing**

Study: WSM0115

Opening Date: January 27, 2015 - Closing Date: February 18, 2015

Laboratory: Environmental Testing Solutions, Inc.

351 Depot Street
Asheville, NC 28801

USA EPA Lab ID: NC01230

	ro (Presence/Absence) (		C44	Ctd		#: 5205-05
NELAC Code	Analyte	Units	Study Mean	Study Standard Deviation	Low Acceptance Limit %	High Acceptance Limit %
Sample						
2530	Fecal Coliform		N/A	N/A	N/A	N/A
2525	E.Coli		N/A	N/A	N/A	N/A
2500	Total Coliform		N/A	N/A	N/A	N/A
Sample						
2530	Fecal Coliform		N/A	N/A	N/A	N/A
2525	E.Coli		N/A	N/A	N/A	N/A
2500	Total Coliform		N/A	N/A	N/A	N/A
Sample						
2530	Fecal Coliform		N/A	N/A	N/A	N/A
2525	E.Coli		N/A	N/A	N/A	N/A
2500	Total Coliform		N/A	N/A	N/A	N/A
Sample	1			1		
2530	Fecal Coliform		N/A	N/A	N/A	N/A
2525	E.Coli		N/A	N/A	N/A	N/A
2500	Total Coliform		N/A	N/A	N/A	N/A
Sample			1 21/2		1	1
2530	Fecal Coliform		N/A	N/A	N/A	N/A
2525	E.Coli		N/A	N/A	N/A	N/A
2500	Total Coliform		N/A	N/A	N/A	N/A
Sample			1	1	1	1
2530	Fecal Coliform		N/A	N/A	N/A	N/A
2525	E.Coli		N/A	N/A	N/A	N/A
2500	Total Coliform		N/A	N/A	N/A	N/A
Sample			1 21/2	1 1/4	1 21/2	1 21/2
2530	Fecal Coliform		N/A	N/A	N/A	N/A
2525	E.Coli		N/A	N/A	N/A	N/A
2500	Total Coliform		N/A	N/A	N/A	N/A
Sample 2530	Fecal Coliform		N/A	N/A	N/A	N/A
2525	E.Coli		N/A	N/A N/A	N/A N/A	N/A
2500	Total Coliform		N/A	N/A	N/A	N/A
Sample 2530	: 9 Fecal Coliform		N/A	N/A	N/A	N/A
2525	E.Coli		N/A	N/A	N/A N/A	N/A N/A
2525	Total Coliform		N/A	N/A	N/A N/A	N/A N/A
			IN/A	IN/A	IN/A	IN/A
Sample 2530	Fecal Coliform		N/A	N/A	N/A	N/A
2525	E.Coli		N/A	N/A	N/A	N/A
2525	Total Coliform		N/A	N/A	N/A N/A	N/A N/A
2500	TOTAL COMOTTI		IN/A	IN/A	IN/A	IN/A





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## **Statistical Summary Report - Water Supply Proficiency Testing**

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Laboratory: Environmental Testing Solutions, Inc.

Contact: Ms. Kelley Keenan

351 Depot Street 828-350-9364 Asheville, NC 28801

USA EPA Lab ID: NC01230

Sou	rce Water Micro (PT-SW-W	Lot	#: 5205-14			
NELAC Code	Analyte	Units	Study Mean	Study Standard Deviation	Low Acceptance Limit %	High Acceptance Limit %
2530	Fecal Coliform, MF	CFU/100 mL	96.0	30.9	58.9	173
2525	E. Coli, MF	CFU/100 mL	112	26.3	71.7	141
2500	Total Coliform, MF	CFU/100 mL	119	25.5	72.5	137
2530	Fecal Coliform, MPN	MPN/100 mL	121	41.9	59.5	168
2525	E. Coli, MPN	MPN/100 mL	121	25.8	64.8	154
2500	Total Coliform, MPN	MPN/100 mL	124	26.5	64.7	153