



6390 Joyce Drive Ph # 100 Fa Golden, CO 80403 ww

 Phone
 303-940-0033

 Fax
 866-283-0269

 www.phenova.com

February 21, 2014

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

Dear Kelley,

Thank you for participating in the WSM0114 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 WSM0114 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 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. The reported value falls outside the Acceptance Limits. Not Acceptable The reported value is non-numeric and can not be evaluated. No Evaluation 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 The mean and standard deviation are calculated from the study data **Standard Deviation** 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.

This report must not be reproduced except in full, without the written approval of Phenova.

This report must not be used to claim product certification, approval, or endorsement by the American Association for Laboratory

Accreditation (A2LA) or any agency of the federal government.





State Regulatory Agency Request(s):

Phenova has been authorized to send a copy of your WSM0114 final results to the following state agencies: NC

Other Regulatory Agency Request(s):

No requests were made to send a copy of your WSM0114 final results to an agency.

Third Party Request(s):

No requests were made to send a copy of your WSM0114 final results to a third party.





Final Report - Water Supply Proficiency Testing

Study: WSM0114

Opening Date: January 21, 2014 - Closing Date: February 14, 2014

Laboratory:	Environmental Testing Solutions, Inc. 351 Depot Street	-	Contact:	Ms. Kelley Keenan 828-350-9364
	Asheville, NC 28801 USA		EPA Lab ID:	NC01230

wiich		resence/Absence)								: 5181- 0
				Complete	Analyte Eval	uation				
	The co	mplete analyte evaluation(s) are	based on the results for t		mples. The Eva ves are reported		Acceptable" if nine of ten	samples are A	cceptable, and r	no false
NEL/ Cod	-		Analyte					Evaluati	on	
253	30	Fecal Coliform						NR		
252	25	E.Coli						Accepta	able	
250	00	Total Coliform						Accepta	able	
				Individual	Sample Eval	uation				
IELAC Code		Analyte	Analysis Date	Analyst	Method Code	Ме	thod Description	Assigned Value	Result	Evaluation
Sample					-	[1	
2530		Coliform						Presence		NR
2525	E.Coli		1/22/2014	KEK	20212402	SM 9223	B (Colilert®) Rev.21st ED 2005	Presence	Presence	Acceptable
2500	Total (Coliform	1/22/2014	KEK	20212402	SM 9223	B (Colilert®) Rev.21st ED 2005	Presence	Presence	Acceptable
Sample			TT		-	1		1	1 1	
2530		Coliform						Absence		NR
2525	E.Coli		1/22/2014	KEK	20212402		B (Colilert®) Rev.21st ED 2005	Absence	Absence	Acceptable
2500	Total (Coliform	1/22/2014	KEK	20212402	SM 9223 B (Colilert®) Rev.21st ED 2005		Absence	Absence	Acceptable
Sample										
2530	Fecal	Coliform						Absence		NR
2525	E.Coli		1/22/2014	KEK	20212402	SM 9223	B (Colilert®) Rev.21st ED 2005	Absence	Absence	Acceptable
2500	Total (Coliform	1/22/2014	KEK	20212402	SM 9223	B (Colilert®) Rev.21st ED 2005	Absence	Absence	Acceptable





Final Report - Water Supply Proficiency Testing

Study: WSM0114

Opening Date: January 21, 2014 - Closing Date: February 14, 2014

Laboratory:	Environmental Testing Solutions, Inc.
	351 Depot Street
	Asheville, NC 28801
	USA

Ms. Kelley Keenan 828-350-9364

EPA Lab ID: NC01230

Contact:

Micr	o (Presence/Absence)	(PT-MIC-WS)	cont'd				Lot #	#: 5181-0
NELAC Code	Analyte	Analysis Date	Analyst	Method Code	Method Description	Assigned Value	Result	Evaluation
Sample	4						II	
2530	Fecal Coliform					Presence		NR
2525	E.Coli	1/22/2014	KEK	20212402	SM 9223 B (Colilert®) Rev.21st ED 2005	Presence	Presence	Acceptable
2500	Total Coliform	1/22/2014	KEK	20212402	SM 9223 B (Colilert®) Rev.21st ED 2005	Presence	Presence	Acceptable
Sample	5							
2530	Fecal Coliform					Absence		NR
2525	E.Coli	1/22/2014	KEK	20212402	SM 9223 B (Colilert®) Rev.21st ED 2005	Absence	Absence	Acceptable
2500	Total Coliform	1/22/2014	KEK	20212402	SM 9223 B (Colilert®) Rev.21st ED 2005	Presence	Presence	Acceptable
Sample	6							
2530	Fecal Coliform					Absence		NR
2525	E.Coli	1/22/2014	KEK	20212402	SM 9223 B (Colilert®) Rev.21st ED 2005	Absence	Absence	Acceptable
2500	Total Coliform	1/22/2014	KEK	20212402	SM 9223 B (Colilert®) Rev.21st ED 2005	Presence	Presence	Acceptable
Sample	7							
2530	Fecal Coliform					Absence		NR
2525	E.Coli	1/22/2014	KEK	20212402	SM 9223 B (Colilert®) Rev.21st ED 2005	Absence	Absence	Acceptable
2500	Total Coliform	1/22/2014	KEK	20212402	SM 9223 B (Colilert®) Rev.21st ED 2005	Presence	Presence	Acceptable
Sample	8							
2530	Fecal Coliform					Absence		NR
2525	E.Coli	1/22/2014	KEK	20212402	SM 9223 B (Colilert®) Rev.21st ED 2005	Absence	Absence	Acceptable
2500	Total Coliform	1/22/2014	KEK	20212402	SM 9223 B (Colilert®) Rev.21st ED 2005	Presence	Presence	Acceptable





Final Report - Water Supply Proficiency Testing

Study: WSM0114

Opening Date: January 21, 2014 - Closing Date: February 14, 2014

Laboratory:	Environmental Testing Solutions, Inc. 351 Depot Street	Contact:	Ms. Kelley Keenan 828-350-9364
	Asheville, NC 28801 USA	EPA Lab ID:	NC01230

Micr	o (Presence/Absence) (PT-	-MIC-WS)	cont'd				Lot #	t: 5181-06
NELAC	Analyte	Analysis	Analyst	Method	Method Description	Assigned	Result	Evaluation
Code		Date		Code		Value		
Sample	9							
2530	Fecal Coliform					Presence		NR
2525	E.Coli	1/22/2014	KEK	20212402	SM 9223 B (Colilert®) Rev.21st	Presence	Presence	Acceptable
					ED 2005			
2500	Total Coliform	1/22/2014	KEK	20212402	SM 9223 B (Colilert®) Rev.21st	Presence	Presence	Acceptable
					ED 2005			
Sample	10							
2530	Fecal Coliform					Absence		NR
2525	E.Coli	1/22/2014	KEK	20212402	SM 9223 B (Colilert®) Rev.21st	Absence	Absence	Acceptable
					ED 2005			
2500	Total Coliform	1/22/2014	KEK	20212402	SM 9223 B (Colilert®) Rev.21st	Absence	Absence	Acceptable
					ED 2005			





Final Report - Water Supply Proficiency Testing

Study: WSM0114

Opening Date: January 21, 2014 - Closing Date: February 14, 2014

Laboratory:	Environmental Testing Solutions, Inc. 351 Depot Street	Contact:	Ms. Kelley Keenan 828-350-9364
	Asheville, NC 28801 USA	EPA Lab ID:	NC01230

Source Water Micro (PT-SW-WS)							Lot #	#: 5181-14		
NELAC Code	Analyte	Analysis Date	Analyst	Method Code	Method Description	Units	Assigned Value	Result	Acceptance Limits	Evaluation
2530	Fecal Coliform, MF					CFU/100 mL	110		66 - 184	NR
2525	E. Coli, MF					CFU/100 mL	116		80 - 167	NR
2500	Total Coliform, MF					CFU/100 mL	118		79 - 177	NR
2530	Fecal Coliform, MPN					MPN/100 mL	117		32.8 - 419	NR
2525	E. Coli, MPN	1/22/2014	KEK	20211409	SM 9223 B (Colilert® Quanti-Tray®) Rev.21st ED 2005	MPN/100 mL	134	145	81.9 - 219	Acceptable
2500	Total Coliform, MPN					MPN/100 mL	133		77.1 - 228	NR





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
WSM0114	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.
Number of Passing Results	The number of results reported receiving an evaluation of "Acceptable" or "Check for Error".
Percent Passing	The percentage of results reported receiving an evaluation of "Acceptable" or "Check for Error".





6390 Joyce Drive # 100 Golden, CO 80403
 Phone
 303-940-0033

 Fax
 866-283-0269

 www.phenova.com

Statistical Summary Report - Water Supply Proficiency Testing

Study: WSM0114

Opening Date: January 21, 2014 - Closing Date: February 14, 2014 Laboratory: Environmental Testing Solutions, Inc. Contact:

Laboratory: Environmental Testing Solutions, Inc. 351 Depot Street Asheville, NC 28801

USA

Ms. Kelley Keenan 828-350-9364

EPA Lab ID: NC01230

	o (Presence/Absence)			01		#: 5181-06
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			T	T	T	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	r
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		T.	T.
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			N1/A	N1/A	N 1/A	DI/A
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	9 Fecal Coliform		N/A	N/A	N/A	N/A
2530	E.Coli					
			N/A	N/A	N/A	N/A
2500	Total Coliform		N/A	N/A	N/A	N/A
Sample			N1/A	NI/A	N1/A	N1/A
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





6390 Joyce Drive # 100 Golden, CO 80403
 Phone
 303-940-0033

 Fax
 866-283-0269

 www.phenova.com

Statistical Summary Report - Water Supply Proficiency Testing

Opening Date: January 21, 2014 - Closing Date: February 14, 2014

Laboratory: Environmental Testing Solutions, Inc. 351 Depot Street

Asheville, NC 28801

USA

Ms. Kelley Keenan 828-350-9364

EPA Lab ID: NC01230

Contact:

Source Water Micro (PT-SW-WS) Lot #: 5181-1						#: 5181-14
NELAC Code	Analyte	Units	Study Mean	Study Standard Deviation	Low Acceptance Limit %	High Acceptance Limit %
2530	Fecal Coliform, MF	CFU/100 mL	114	31.3	60.0	167
2525	E. Coli, MF	CFU/100 mL	118	23.2	69.0	144
2500	Total Coliform, MF	CFU/100 mL	121	24.8	66.9	150
2530	Fecal Coliform, MPN	MPN/100 mL	137	89.6	28.0	358
2525	E. Coli, MPN	MPN/100 mL	133	34.1	61.1	163
2500	Total Coliform, MPN	MPN/100 mL	132	36.6	58.0	171