

NC DEQ/DWR WASTEWATER/GROUNDWATER LABORATORY CERTIFICATION BRANCH

LABORATORY NAME:		CERT #:	
PRIMARY ANALYST:		DATE:	
NAME OF PERSON COMPLETING CHECKLIST (PRINT):			
SIGNATURE OF PERSON COMPLETING CHECKLIST:			

Parameter: **Specific Conductance (Conductivity)**
Method: **SM 2510 B-2011**

Equipment:

Conductivity meter (type): _____	Conductivity standards: Value: _____ Exp: _____ Value: _____ Exp: _____ (if needed) Value: _____ Exp: _____	
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PLEASE COMPLETE CHECKLIST IN INDELIBLE INK
Please mark Y, N or NA in the column labeled LAB to indicate the common lab practice and in the column labeled SOP to indicate whether it is addressed in the SOP.

	GENERAL	L A B	S O P	EXPLANATION
1	Is the SOP reviewed at least every 2 years? What is the most recent review/revision date of the SOP? [15A NCAC 02H .0805 (g) (4)] Date:			Quality assurance, quality control, and Standard Operating Procedure documentation shall indicate the effective date of the document and be reviewed every two years and updated if changes in procedures are made. Verify proper method reference. During review notate deviations from the approved method and SOP.
2	Are all review/revision dates and procedural edits tracked and documented? [15A NCAC 02H .0805 (g) (4)]			Each laboratory shall have a formal process to track and document review dates and any revisions made in all quality assurance, quality control and SOP documents.
3	Is there North Carolina data available for review?			If not, review PT data
4	Are the following items documented with each analysis? [15A NCAC 02H .0805 (g) (2)]			
	The method or SOP reference			
	Laboratory identification			
	Instrument identification			
	Sample collector			
	Signature or initials of the analyst			
	Date of sample collection			
	Time of sample collection			
	Date of sample analysis			
	Sample identification			
	Proper units of measure			
	Final value to be reported			
	Facility ID or Permit number [NC WW/GW LCB Approved Procedure for the Analysis of Specific Conductance]			If different than the Laboratory ID
	Parameter analyzed [NC WW/GW LCB Approved Procedure for the Analysis of Specific Conductance]			
	PRESERVATION and STORAGE	L A B	S O P	EXPLANATION
5	If not analyzed within 15 minutes, is the sample transported on ice and stored at ≤ 6°C, without freezing? [40 CFR Part 136.3, Table II and footnote 2]			
6	Is the sample analyzed within 28 days of collection? [40 CFR Part 136.3, Table II and footnote 2]			

PROCEDURE – Meter Calibration		L A B	S O P	EXPLANATION
7	Is the meter calibrated daily before sample analysis? [NC WW/GW LCB Approved Procedure for the Analysis of Specific Conductance]			Use manufacturer instructions, but at least one standard must be used for calibration
8	What standard concentration is used for meter calibration? Standard:			
PROCEDURE – Sample Analysis		L A B	S O P	EXPLANATION
9	Is the conductivity cell thoroughly rinsed with one or more portions of sample before sample measurements? [NC WW/GW LCB Approved Procedure for the Analysis of Specific Conductance]			
10	Are conductivity samples ever diluted? [NC WW/GW LCB Approved Procedure for the Analysis of Specific Conductance]			Conductivity samples must not be diluted
QUALITY ASSURANCE		L A B	S O P	EXPLANATION
11	Is a second-source calibration verification check standard analyzed after meter calibration, before sample analysis? [NC WW/GW LCB Approved Procedure for the Analysis of Specific Conductance]			
12	What is the true value of the check standard? Check standard value:			
13	Is the acceptance criterion for the calibration verification check standard $\pm 10\%$ of true value? [NC WW/GW LCB Approved Procedure for the Analysis of Specific Conductance]			
14	What corrective action is taken if the check standard does not meet the acceptance criterion? [15A NCAC 02H .0805 (g) (8)] Answer:			
15	If multiple samples are analyzed, is a post-analysis calibration verification check standard analyzed following the last sample? [NC WW/GW LCB Approved Procedure for the Analysis of Specific Conductance]			
16	Is the acceptance criterion for the calibration verification check standard $\pm 10\%$ of the true value? [NC WW/GW LCB Approved Procedure for the Analysis of Specific Conductance]			
17	What corrective action is taken if the post-analysis calibration verification check standard does not meet the acceptance criterion? [15A NCAC 02H .0805 (g) (8)] Answer:			
18	Is the Automatic Temperature Compensator (ATC) checked initially and every 12 months? [NC WW/GW LCB Approved Procedure for the Analysis of Specific Conductance]			
19	What temperatures are used for the (ATC) verification? [NC WW/GW LCB Approved Procedure for the Analysis of Specific Conductance] Temperatures:			One sample or standard must be measured at 25 °C. The other temperature(s) must bracket the range of temperatures of compliance samples throughout the year. This means a third temperature above 25 °C may be necessary.

20	What were the values for the standard or sample during the ATC verification? Standard/sample values:			
21	What is the acceptance criterion for the standard or sample during the ATC verification? [NC WW/GW LCB Approved Procedure for the Analysis of Specific Conductance] Acceptance criterion:			As the temperature increases or decreases, the value of the conductivity standard or sample must be within $\pm 10\%$ of the true value of the standard or $\pm 10\%$ of the value of the sample at 25°C.
22	Are results qualified to indicate quality control failures or sample anomalies when reporting results? [15A NCAC 02H .0805 (e) (5)]			Reported data associated with Quality Control failures, improper sample collection, holding time exceedances, or improper preservation shall be qualified as such.

Additional Comments:

Inspector: _____ Date: _____