

Learning	Reason for learning	Method	Recommendation	Action	Person	Status	Questions
Air Nozzle changes		20.4	Revise method to clarify reamer is not always needed. Wording from Tom	Revise method	Thomas/Schofield/Gaal/Birke	Ongoing	
Ream from top or bottom of lid	Video	20.4	Ream from top. Add to revised wording on air nozzle	Revise method	Thomas/Schofield/Gaal/Birke	Ongoing	
Change size of reamers in method	Discussion	16.4	None, as limits not specified in method	None		Closed	
Cleaning of air hole nozzle	Discussion	20.4	PAC provide size and tolerance of air nozzle to TMC. Add to method	Revise method	Chirk/Thomas/Gaal/Schofield/Birke	Ongoing	
Cleaning of air hole nozzle	Discussion	20.4	Add statement to method about labs checking that size is within tolerances. How to check? Check once a year	Revise method; determine wording	Thomas/Schofield/Gaal/Birke	Ongoing	
Spring or screw clamp to connect extraction tube	Instrument		None. Either method is satisfactory	None		Closed	
Electronic version of pressure/temperature plots	Discussion	20.18	Available in optional software for 5G and newer models	SP: Do we want to require this data for reference runs	Gaal/Schofield	Ongoing	
Pressure spike during initial ramp up of test	Questionnaire/discussion	10.10	About 10-15 minutes for warmup. One point above limits is acceptable in this period	Revise method; determine wording	Thomas/Schofield/Gaal/Birke	Ongoing	
Temperature graph limits		20.18	Excursions before 60 minute timer begins are acceptable. Not when start button has been pushed. Starts at 240ish C.	Revise method. Request a statement from PAC to revise 20.18.	Chirk/Thomas/Gaal/Schofield/Birke	Ongoing	Does the printout need to be checked at each run? 16.8, 16.9 - printer
Calibration of temperature probe needed before each run?	Discussion	20.6	Rewrite method to clarify	Revise method	Thomas/Schofield/Gaal/Birke	Ongoing	20.18 - plotted graph

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Unit temperature calibration recommendation	Discussion	X1.22	Revise X1.22 from monthly to daily	Revise method. Already in Appendix	Thomas/Schofield/ Gaal/Birke	Ongoing	
Calibration for atmospheric pressure	Discussion		Check calibration for instrument on and off. If instrument remains on, recommend daily. Measurement done at instrument or in room.	Revise method. Add to Appendix	Thomas/Schofield/ Gaal/Birke	Ongoing	
No PAC recommendation on coalescing filter cleaning/replacement	Questionnaire/discussion		Wording to follow manufacturer's recommended practices	Revise method. Add to Appendix	Thomas/Schofield/ Gaal/Birke	Ongoing	
Turning off analyzer once a week - 5G	Discussion		For ISL NCK2 5G and newer models, analyzer should be turned off once a week for temperature drift	Revise method. Add to Appendix with other temperature calibrations. Recommend to verify calibration as well if turn on and off.	Thomas/Schofield/ Gaal/Birke	Ongoing	
Remove diagrams of equipment	Discussion		Diagrams can be removed with specs being included elsewhere in method	Revise method	Birke	Ongoing	
Correct units in method	Discussion		Revise for proper units, but understand this cannot be done without original diagrams, which are unavailable. Can be corrected if diagrams are removed.	Revise method	Thomas/Schofield/ Gaal/Birke	Ongoing	
Use of same QC oils for TMC labs?	Discussion		Discussion for SP	Best practices	SP topic	Ongoing	
New fields for TMC test forms	Discussion		Possible for action items/ Add model, lid serial number.	Revise TMC test forms, if needed	SP topic	Ongoing	
Update on vacuum pump cleaning (or lack thereof) to method	Discussion	X1.9	Update wording to follow manufacturer's instructions, rather than daily cleaning	Revise method	Thomas/Schofield/ Gaal/Birke	Ongoing	

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Additional information on cleaning process for extraction tube (size of ball bearing, how often?)	Email/discussion	16.5;20.5	Ball bearing size - 4 mm +/- ? Tolerance to be confirmed by PAC	Revise method	Chirk/Thomas/Gaal /Schofield/Birke	Ongoing	
Internal diameter specification for extraction tube in method	PAC presentation		Update I.D. specification to 4.20 +/- 0.05 mm; Tubes manufactured before TBD may not meet this tolerance. PAC to inform about date and change to specification in method	Revise method	Chirk/Thomas/Gaal /Schofield/Birke	Ongoing	
Flow rate monitoring	PAC presentation/discussion		Discussion for .06B and extensive revision of method	Method revision	PAC- go to 06B to request taskgroup	Ongoing	
Equivalency data between NCK2 and NCK2 5G	Discussion		PAC to provide data to TMC for discussion at .06B		Chirk	Ongoing	
Round robin to confirm equivalency of NCK2 and NCK2 5G			Activity for labs with both instruments - discussion for SP		SP topic	Ongoing	
Running of "dummy" sample to heat block before running QC	Discussion	16.8	Run a dummy sample and ignore result. Run QC afterward while block is hot, so QC run is similar to candidate oil runs. Expected to be more severe for QC run. Best practice intended for relevant unit operation.	Revise method. Add to Appendix; wording to be finalized offline	Gaal/Schofield/Matt/Grant	Ongoing	
Check firmware of units	Discussion		Update firmware to latest version (v2.0), has time compensation factor to adjust for block temperature		All	Ongoing	
Changes in firmware for v2.0	Discussion		Better control of pressure		PAC	Done	

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Cleaning of crucible by a degreasing agent	Discussion	17.1/20.3	Revise method on use of degreasing agent as a cleaning method. Provide examples in best practices. Provide reasoning for difference from CEC method. Any solvent which does not create clogging by leaving residue.	Revise method. In-between runs - keep same procedure. Revise 20.3 to remove abrasive. Add use of degreaser chemical	Thomas/Schofield/ Gaal/Birke	Ongoing	
Mass differences between cups	Discussion		PAC to check if this difference is impactful on test		Chirk	Ongoing	
Temperature amplitude changes during test	Discussion				Under taskgroup looking at flowrate	Ongoing	
Sample loading in unit	Discussion		Sample should be loaded into unit to feel even pushback from unit	Revise method. Add to Appendix	Thomas/Schofield/ Gaal/Birke	Ongoing	
Temperature probe calibration		16.1.3	Oil bath to be used. Dry bath is not to be used.	Revise method	Thomas/Schofield/ Gaal/Birke	Ongoing	