Cannabis Compliance Board
Laboratory Inspection Checklist

REFERENCE	IN	OUT	General Building Requirements/ Licensure/ Handwashing
NCCR 6.050			✓ Licenses and authorizations to conduct a cannabis business are current and posted in public view in the cannabis testing laboratory.
NCCR 11.020			✓ Scope of ISO accreditation covers all required testing ✓ Laboratory has provided annual ISO inspection documentation, including all deficiencies and the resulting plan of correction.
NCCR 6.060			✓ The laboratory has not made unauthorized facility modifications.
NCCR 6.095			✓ The laboratory has at least one restroom with a flushable toilet, mounted toilet tissue, a hand washing sink with hot water, soap in a dispenser, mounted disposable paper towels and a conveniently located trash can. ✓ There is at least one fully stocked sink for handwashing only which isn't located in a toilet facility. Hand sinks are used for washing hands only. ✓ The number and placement of hand sinks in the facility is sufficient for proper handwashing. The CCB can request the addition of additional sinks as necessary. ✓ At least one mop or dump sink. Cannot be used for any other purpose.
NCCR 10.055			✓ The laboratory is of appropriate size and construction for its operations. ✓ The laboratory has the space required to keep things orderly, and to maintain proper operations without risk of contamination of work areas. Laboratory can properly accommodate all operations from sample receipt to sample processing/testing, then to final storage and destruction. No drinking or eating in the lab operational areas. Drinks may be stored in break areas or other areas specifically designated as clean. ✓ All items are being stored at least 6 inches from the floor. ✓ Access points to the outside are sealed, i.e., with intact door sweeps. The periphery of sally port doors are sealed. ✓ Floors, walls, and ceilings are smooth and easily cleanable. ✓ Interior surfaces are not comprised of wood unless sealed with epoxy paint. ✓ Rooms and benchtops are being cleaned at appropriate intervals, with documentation.
NCCR 10.060			✓ Building is being maintained in a good state of repair.
NCCR 10.065			✓ Drains are of adequate size and provided with an air break or other device to prevent back siphonage.
NCCR 10.070			✓ Lighting is adequate in all areas. Any requirements for dim/no lighting are defined in a procedure.
NCCR 6.090			✓ Employees are washing hands at the required times.
NCCR 6.092			✓ Employees are washing hands using correct procedures for at least 15-20 seconds.
REFERENCE	**IN**	**OUT**	**Agent Cards/ Inventory/ Security Requirements**
NCCR 6.070			✓ All individuals in the lab have a valid agent card or temporary letter on their person. ✓ Anyone other than a registered laboratory agent or a state/local government authority signs the visitor log, wears a visitor badge, and is escorted by a laboratory agent at all times. ✓ Individuals with only a visitor badge are not permitted to handle cannabis
NCCR 6.082			✓ All cannabis test packages are tagged or traceable to the correct Metrc tag (i.e., with an accession number)
NCCR 6.085			✓ Alarm to detect unauthorized intrusion is functional. ✓ Exterior lighting is present to facilitate surveillance. ✓ There is at least one 55" monitor, and a printer capable of a clear photo from any camera. ✓ Cameras include a date and time generator which possesses the capability to display the date and time of recorded events on the recording in a manner that does not significantly obstruct the recorded view. ✓ Security footage is being stored for at least 30 days and is accessible upon request. ✓ Adequately sized portable, external drives are immediately available to store a minimum of seven days (168 Hours) of video from a minimum of seven cameras. External drives must be USB 3.0 or greater and formatted with FAT32 or exFAT. Drives will not be returned by the CCB. ✓ There is automatic audio/visual notification for failures of the electronic monitoring system. ✓ A log that documents security system malfunctions is being maintained. Log contains all required elements and is maintained for at least one year after the last entry in the log. ✓ Employees are not consuming cannabis while on duty/ at work.
NCCR 10.080			✓ Lab samples are being marked as destroyed in Metrc as required, and in a timely manner.
NCCR 11.070			✓ Failed samples are retained for 30 days. (Labs may keep all samples for 30 days for a more streamlined process.)

REFERENCE	IN	OUT	Vehicles/ Transportation of Samples
NCCR 13.030			✓ The laboratory has CCB approval for each vehicle that is being used to transport test samples.
REFERENCE	**IN**	**OUT**	**Required Policies and Procedures (Non-Technical)**
NCCR 14.010			✓ Policies prohibiting workplace discrimination or harassment (for labs with >15 employees.) To include procedures for a person seeking to report workplace discrimination or harassment, and procedures the lab will follow for investigation of such reports.
NCCR 10.075			✓ Written procedures for sanitation and cleaning of the laboratory facilities, including cleaning schedules and the use of bug/rodent sprays within the building (i.e., contract with exterminator.)
NCCR 6.075			✓ Lab has the following policies/procedures: • The duties, authority, responsibilities, qualifications, and supervision of personnel • Confidentiality requirements • Employee performance evaluations. • Disciplinary action policy • Disclosure of potential health risks involved with the performance of job duties (may be captured in safety policies, etc.) • Policies and procedures for business records (all records must be retained for at least 5 years) • Inventory control policy, to include at least tracking and disposal
			Sample Collection and Labeling
NCCR 11.025			✓ Collection kits are maintained in a clean and sanitary condition. ✓ Balance in collection kit is being calibrated/checked using certified/traceable reference weights
NCCR 11.025			✓ Sample collection procedure adequately describes a statistically valid collection process that is representative of the lot or production run. ✓ The sample collection procedure is available to the collection analyst at the point of collection.
NCCR 11.050			✓ The lab is collecting the appropriate sample sizes for usable cannabis, concentrates and infused items. The minimum test sample sizes (the amount required to be brought to the lab) are: o Usable cannabis (including pre-rolls and infused cannabis/pre-rolls): ≥10g o Concentrate (oil, shatter, crumble, etc.): ≥5g o Edibles: Minimum of 2 units, up to 10 units. Lab calculates 1% of production run, and collects that number of edible units, up to 25 units. Lab brings all units to the lab, up to 10 units. Anything over 10 units (up to 25 units) is left in a secured package in the client's vault. o Liquids/ drinks: 2 units. Lab calculates 1% of production run and collects that number of units. Only 2 units is taken to the lab, remaining units (up to 25 units) are secured in the client vault. o Transdermal patches: Minimum of 3 units. Lab calculates 1% of production run and collects that number of units. Anything over 3 units (up to 25 units) is left secure in the client vault.
NCCR 11.070			✓ Test samples are collected in a tamper-resistant package, and Metrc tag is attached upon collection. ✓ Batch/lot or production run # and the weight/quantity of the sample are indicated on the package and on the chain of custody (COC.)
			Chain of Custody
NCCR 11.030			✓ Laboratory is following proper chain of custody requirements. ✓ Chain of custody documentation is complete, and documents all required elements: • The condition of the external package and integrity seals for the secured sample • The condition and amount of sample at the time of collection. • All pertinent sample identifiers, such as product type, product name, strain name, Metrc tag number, batch/lot/production run number. • All persons handling the sample and aliquots ✓ Metrc manifests are being verified for accuracy before transport to the lab
NCCR 11.030			✓ The lab has an adequate system for the unique identification of samples, including all primary and secondary containers, aliquots, plates, etc. Adequate sample identification is provided throughout all phases of testing. ✓ The identifiers on the samples are indelible, legible, and able to withstand all stages of processing and storage.
			Results Reporting/ Certificates of Analysis
NCCR 11.050			✓ Laboratory is performing all required testing on all product types in accordance with 11.050(2). ✓ All tolerance limits are correct.

			✓ Laboratory tests samples "as received." Results for useable cannabis are not being reported on a dry weight basis. Lab is not destemming flower samples prior to testing. ✓ Laboratory provides final CoA to the CCB and the client within 2 business days after obtaining the results. ✓ All CoAs include a photo of the product, as received.
NCCR 11.055			✓ Results for potency and terpenes include all required cannabinoids and terpenoids.
NCCR 11.065			✓ Testing is being performed for all required pesticides/ growth regulators.
NCCR 11.025			✓ CoAs identify the methods used for each test.
NCCR 11.070			✓ Lab is providing all results via CoA to the CCB and the client at the same time (same day is acceptable.) ✓ CoAs are being uploaded to Metrc. ✓ CoA pdf files are being named correctly. ✓ Amended CoAs are formatted and named correctly, contain reason for change. ✓ Retest CoAs are named with the word "retest" appended to the file name
			Research and Development
NCCR 11.045			✓ Lab is verifying R&D has been approved before performing limited testing for a cultivator or producer and is only performing tests which are specifically approved as part of the study. ✓ "R&D TESTING ONLY—NOT FOR RESALE" in 20-point white font and a red background is present in the header of R&D CoAs.
			Records
NCCR 6.130			✓ All documentation is being maintained for at least 5 years.
			Laboratory Management
NCCR 11.015			✓ No conflicts of interest exist regarding involvement with other facility types, impartiality is being maintained.
NCCR 11.025			✓ There is a current organizational chart(s) which defines the structure and reporting relationships of management, quality management, technical operations, and support services
NCCR 11.025			✓ Testing is being performed impartially, regardless of financial or other pressures.
NCCR 11.025			✓ Performance of management review meets the requirements of ISO 17025:2017.
NCCR 11.025			✓ There is a process for documenting feedback from customers.
			Scientific Director
NCCR 11.010			✓ The Scientific Director is present in the laboratory at least 5 working days each month. Director is always available in person or by telephone during testing operations. ✓ The Scientific Director is maintaining a quality control/ quality assurance program that ensures quality of results, and that can identify quality issues when they occur. ✓ The Director ensures adequate supervision of all laboratory staff. ✓ Scientific Director meets requirements for education and experience.
			Personnel
NCCR 6.075			✓ The education, training and technical knowledge required for each laboratory function/area is defined (i.e., a job description.) ✓ The duties, authority, responsibilities, and required qualifications for each job title (i.e. job descriptions) ✓ The supervision required for each job title (may also be included in a job descriptions)
NCCR 11.025			✓ Training and competency assessment are being performed according to a written procedure
NCCR 11.025			✓ Competency requirements for bench testing include a test performance component
NCCR 11.025			✓ Employee competency is demonstrated as acceptable prior to working independently
NCCR 11.025			✓ Ongoing competency is demonstrated every 6 months for the first year, and at least annually thereafter.
NCCR 11.025			✓ Competency is reassessed after issues with test performance that require remedial training, or after prolonged periods of test nonperformance
NCCR 11.025			✓ Employee records are complete
NCCR 11.025			✓ Appropriate supervision is provided for individuals who are undergoing training. o Trainee is not unsupervised when performing procedures that may impact the analysis. o Trainees may be unsupervised when performing processes that have a distinct endpoint that can be verified afterwards (such as simple grinding of plant material).
			Quality Assurance Program
NCCR 11.025			✓ There is a written quality assurance program, and it is being implemented as designed.
NCCR 11.025			✓ The laboratory has appointed a member of staff as quality manager (however named), who is responsible for ensuring the quality system is implemented and followed at all times.

NCCR 11.025			✓ Internal QA audits are performed and documented at least annually
NCCR 11.025			✓ QA audits are performed by individuals who are independent of the activities they are inspecting. Note that the scientific director may not also serve as the person in charge of quality assurance, as the director is not independent of any activity in the laboratory.
NCCR 11.025			✓ QA audits are performed in a manner that captures key preanalytical, analytical, and postanalytical aspects of the testing process.
NCCR 11.025			✓ QA audits include a review of SOPs to ensure they are readily available to personnel and match current practice.
NCCR 11.025			✓ QA audits consist of horizontal (across a process) and vertical (a single sample through all processes) investigations
NCCR 11.025			✓ When audit findings cast doubt on testing operations, the laboratory implements timely corrective action
			Proficiency Testing
NCCR 11.040			✓ PT is successfully completed for all required analytes at least once every 12 months. ✓ PT samples are being analyzed in the same manner as cannabis samples (same number of replicates, same reference standards.) ✓ PT samples are integrated into the routine workload as much as possible. ✓ Attestation statements are being signed by the director and the analysts who performed the PT. ✓ Graded results from the PT provider are being reviewed by the director and appropriate staff members. ✓ The CCB is notified of any unacceptable PT results within 24 hours. Unacceptable PT is repeated within 30 days. ✓ In the event of unacceptable PT, retrospective sample assessment is performed when applicable. ✓ PT providers must submit the PT reports directly to the CCB.
			Procedures and Document Control
NCCR 11.025			The laboratory must have the following non-technical/administrative policies in place. Some may be sections within larger, more general procedures. o Complaint resolution o Employee training and authorization o Employee competency (initial and ongoing) o Employee safety o Selection and purchasing, receipt and storage of supplies and reagents o Sample collection procedures, including labeling of samples and aliquots, transport, and use of chain of custody forms o Handling, transport, storage, and use of measuring equipment used in sampling o Method development, validation, and verification o Change control procedures o Estimation of uncertainty o Document control system procedures o Hand correction of documents. (Corrections must include the date and identify of the individual making the correction.) o Record and sample retention policies o Proficiency testing and result handling o Equipment cleaning and maintenance (instrument maintenance may be within the test method procedure) o Equipment instructions for use (may be in test method procedures) o Monitoring and recording environmental conditions o Thermometer calibration (some labs may just purchase new thermometers, which is acceptable as long as they are certified to NIST standards) o Corrective action/ preventative action procedures o Report issuance, including the use of electronic signature o Amendment of reports o Protection and backup of electronic records o Research and development
NCCR 11.025			✓ There is a document control policy that provides instruction for managing important documents related to all the aspects of its operations and management
NCCR 11.025			✓ There is a master list that identifies the current revision status and distribution of all controlled documents to ensure only current revisions are in use.
NCCR 11.025			✓ All controlled documents have a unique identifier

NCCR 11.025			✓ Any handwritten changes to controlled documents are clearly marked, initialed, and dated by the individual making the change.
NCCR 11.025			✓ Relevant personnel are trained on changes to controlled documents, with documentation.
NCCR 11.025			✓ All relevant procedures are available at the workbench or work area. Electronic means is acceptable., provided they can be accessed at the workbench or work area. Obsolete versions are not in use.
NCCR 11.025			✓ When a procedure is changed, the reasons for change are clearly indicated in the revision history of the controlled document
NCCR 11.025			✓ Pages of controlled documents are numbered, including the total number of pages or a mark to signify the document's end
NCCR 11.025			✓ Retired procedures and/or older revisions of controlled documents are retained and marked to prevent their unintended use.
NCCR 11.025			✓ Any excel-based calculators in use are validated before use and protected and locked.
			Corrective Action/ Preventative Action
NCCR 11.025			✓ Corrective actions are appropriate for the magnitude of the non-conformance
NCCR 11.025			✓ Corrective action measures include an assessment of sample impact whenever applicable.
NCCR 11.025			✓ Corrective actions are monitored for effectiveness according to a written procedure.
			Thermometers/ Temperature-Dependent Equipment
NCCR 11.025			✓ Thermometers in use have current certificates of accuracy traceable to NIST standards. ✓ Any thermometers with expired certificates have been verified for accuracy using a certified thermometer prior to implementing as a working thermometer. (Note that many labs simply purchase a new certified thermometer.) ✓ Working thermometers are verified for accuracy using a certified thermometer at least annually.
NCCR 11.025			✓ Temperatures are checked and recorded each day of use for all temperature-dependent equipment and environments using a calibrated thermometer.
NCCR 11.025			✓ If using a min/max thermometer, both the min and max values are recorded, and the min/max thermometer is being reset prior to the next monitoring period.
NCCR 11.025			✓ The laboratory is monitoring the ambient temperature of rooms where temperature-dependent instruments, equipment and/or room-temperature reagents are located. ✓ The allowable temperature range meets the requirements for any instruments/equipment and room temperature reagents in that location.
NCCR 11.025			✓ Refrigerators and freezers containing reagents are either monitored continuously with an automated system (i.e., data logger), or manually monitored daily.
NCCR 11.025			✓ Reagents in refrigerators/freezers are being stored in accordance with manufacturer's storage temperature requirements.
NCCR 11.025			✓ Manual temperature monitoring is documented with the temperature, date, and identity of the person recording the temperature. ✓ Automated temperature monitoring (i.e., a data logger system) allows for ongoing immediate access to data so that personnel can monitor functionality.
NCCR 11.025			✓ When temperature monitoring exceeds tolerance, corrective action is documented according to a written procedure. ✓ If the temperature is exceeded for reagents, controls, calibrators, etc., there is a process to ensure quality of the material prior to use.
NCCR 11.025			✓ Water baths, heat blocks and ovens used for NON-INCUBATING procedures are checked prior to use on days of testing.
NCCR 11.025			✓ Incubators and water baths used for INCUBATING procedures are checked twice per day (am and pm) each day of use.
			Pipettors/ Volumetric Delivery Devices
NCCR 11.025			✓ Accuracy and precision of pipetting devices (i.e., mechanical pipettes / micro-pipettors / bottle top dispensers)are verified at least every 6 months using mass of water. Pipetting devices are verified before being returned to service.
NCCR 11.025			✓ There is a written procedure for pipette accuracy and precision checks.
NCCR 11.025			✓ The device is either marked or easily traceable to a log so the user can readily identify calibration status
NCCR 11.025			✓ Pipetting devices which do not meet performance expectations are marked as "do not use" and segregated from those in use.
			Reagents/ Standards/ Consumables

NCCR 11.025			✓ The laboratory ensures new lots and shipments of reagents are acceptable prior to use.
NCCR 11.025			✓ Certified reference standards are in use.
NCCR 11.025			✓ The lot of reagent(s) used must be traceable in the test record
NCCR 11.025			✓ Reagents/standards are labeled as applicable and appropriate with the following elements, at minimum: o Identity and concentration (if applicable) o Expiration date o Storage instructions o Date prepared and initials of the person who prepared ✓ Labels are identifiable so they are traceable to the appropriate data in the reagent log.
NCCR 11.025			✓ All reagents/standards are unexpired, or otherwise sequestered in a designated area clearly labeled for research use only
			Equipment Maintenance and Function Checks/Ancillary Equipment/Balances/ Certified Weights
NCCR 11.025			✓ Equipment checks are documented at least at the frequency specified in Appendix A of AOAC's *Guidelines for Laboratories Performing Microbiological and Chemical Analyses of Food, Dietary Supplements, and Pharmaceuticals*
NCCR 11.025			✓ Equipment such as moisture analyzers and pH meters are verified before use.
NCCR 11.025			✓ Equipment with questionable results or that has been shown to be out of specified requirements is taken out of service and clearly marked as such.
NCCR 11.025			✓ Equipment/instrument maintenance and repair records are retained and readily available to personnel
NCCR 11.025			✓ When acceptable ranges are exceeded for equipment/instrument QC and function checks, the laboratory performs corrective action, including evaluation for adverse effect on samples.
NCCR 11.025			✓ The laboratory has adequate instruments and equipment available to ensure proper test performance, and they are of appropriate design and adequate capacity for operations
NCCR 11.025			✓ The laboratory has a certified reference weight set for the purpose of ensuring accuracy of balances.
NCCR 11.025			✓ Certified weight sets are calibrated at least every 5 years
NCCR 11.025			✓ Analytical balances are checked prior to use each day of testing.
NCCR 11.025			✓ Analytical balances are calibrated annually.
NCCR 11.025			✓ There is evidence of corrective action when recorded weights for balance checks exceed tolerance
NCCR 11.025			Autoclaves: ✓ The accuracy of the temperature sensing system for autoclaves is being verified annually. ✓ Temperature and pressure are verified with each load ✓ Timers are certified or are being verified annually with a certified timer or other NIST traceable time device.
NCCR 11.025			Safety/ laminar air flow cabinets ✓ Magnehelic gauge is verified each day of use. ✓ Open media control (sterility check) is conducted with each use ✓ Service occurs as frequently as recommended by the manufacturer
NCCR 11.025			✓ Timers which are used in steps that are critically timed processes are verified/calibrated.
	IN	**OUT**	**Microbiological Testing**
NCCR 11.025			✓ Reagents and media are being stored in accordance with the manufacturer's storage requirements.
NCCR 11.025			✓ Type I water is in use for PCR operations.
NCCR 11.025			✓ All reagents and media are used within the manufacturer's-specified expiration date
NCCR 11.025			✓ There are sufficient, clean, and well-maintained incubators available at the required temperature ranges. ✓ The incubation requirements in each SOP comport with manufacturer's IFU.
NCCR 11.025			✓ Incubator temperatures are being recorded am and pm daily when in use.
NCCR 11.025			✓ Mapping of the incubator's chamber was conducted initially and is being verified annually, or whenever repairs may have affected the inner chamber.
NCCR 11.025			✓ Time in and out of incubators are being recorded for each test, so as to allow repetition of the test under same conditions.
NCCR 11.025			✓ If used, automated colony counters are being verified for accuracy at least annually
NCCR 11.025			✓ DI systems are checked for conductivity at least weekly
NCCR 11.025			✓ Microbiology dispensers and vial fillers are verified daily by mass of water for each volume dispensed
NCCR 11.025			✓ Pipettes, microtiter diluters or automatic dispensers that are used for quantitative dispensing of material are checked for accuracy and reproducibility at defined intervals (at least annually.)
NCCR 11.025			✓ There are records of daily decontamination of bench tops.

NCCR 11.025			✓ All media are in visibly satisfactory condition (with expiration date, plates smooth, adequately hydrated, uncontaminated, appropriate color and thickness
NCCR 11.025			✓ The laboratory examines each shipment of purchased media for breakage, contamination, appearance, and evidence of freezing or overheating.
NCCR 11.025			✓ The lab checks each shipment or lot of media (purchased and prepared) before or concurrent with use, verifying the following: • Sterility • Ability to support growth as specified (i.e., by means of stock cultures or parallel testing) • Biochemical reactivity, where appropriate
NCCR 11.025			✓ The laboratory is using an AOAC PTM method for cannabis. If an AOAC PTM method does not exist, they are using a method from the AOAC OMA, the International Organization for Standardization, the United States Pharmacopeia, the Microbiology Laboratory Guidebook of the Food Safety and Inspection Service of the United States Department of Agriculture or from the FDA BAM. ✓ AOAC PTM methods in use for cannabis have been verified by the laboratory in accordance with ISO 16140-3. Samples used for such verification demonstrate the method is able to detect levels at an appropriate sensitivity (i.e., down to one CFU in one gram for pass/fail organisms.) Tests are being performed and results reported as specified in the manufacturer's instructions for use, without substitution of reagents or modification of testing protocol. ✓ If an AOAC PTM method is altered, validation is performed according to the requirements of ASTM D8282: "Standard Practice for Laboratory Test Method Validation and Method Development" or in accordance with the AOAC SMPR for cannabis matrix.
NCCR 11.025			✓ The laboratory's method (including the SOP, specs for calibration and quality control) comports with the vendor IFU, or with the method validation if they are using an in-house developed method or AOAC PTM method that was changed. Procedures match practice.
NCCR 11.025			✓ Policies and procedures have been developed to minimize the occupational risk of exposure to infectious agents handled in the microbiology laboratory. Appropriate PPE are in use, appropriate disposal of biohazards are implemented.
NCCR 11.050			✓ Samples are being adequately homogenized, and in an aseptic manner that prevents cross-contamination.
NCCR 11.025			✓ Dilutions are being performed properly and are adequately mixed at the proper times. Calculations of CFU/g results are appropriate for the dilution used.
NRS 678B.290			✓ Plates are being read accurately, with correct CFU/gram being reported.
NCCR 11.050			✓ Correct microbial tolerance limits per product type are being used.
NCCR 11.075			✓ No unapproved retesting is occurring- any valid results obtained are being reported to the CCB, including failing results.
NRS 678B.290			✓ Results in raw data match those reported in Metrc and on the CoA (results reported accurately)
NCCR 11.025			Reporting of results from quantitative microbial plating procedures: ✓ For duplicate plates, only counts that fall within the countable range are used. ✓ Results are reported in CFU/g and are rounded to 2 significant figures (per the BAM). For example, a plate count of 12,700 should be rounded up to 13,000. A count of 12,300 would be 12,000.
NCCR 11.025			✓ Negative and positive controls are included for each plating run.
NCCR 11.025			✓ For PCR procedures, controls are in place to assess the adequacy of extraction and amplification. This must include positive and negative controls that go through the entire testing process, as well as internal control assessment for each sample.
NCCR 11.025			✓ Technical records are complete. Records contain all results and enough information to identify factors affecting the results. There should be enough information to allow for duplication of the analysis as close as possible to the original.
NCCR 11.025			✓ There are records of corrective action when quality control results exceed the acceptable range
NCCR 11.025			✓ When acceptable ranges are exceeded for QC and function checks, the laboratory performs corrective action, including evaluation for adverse effect on samples.
NCCR 11.025			✓ Mistakes in technical records are corrected in a manner that does not obscure or erase the original entry
NCCR 11.025			✓ Instrument maintenance and function checks are documented at least at the frequency specified in the manufacturer's manual or in Appendix A of the AOAC International, whichever is more stringent. .
NCCR 11.025			✓ Equipment with questionable results or that has been shown to be out of specified requirements is taken out of service and clearly marked as such.
NCCR 11.025			✓ The performance of all equipment is verified upon installation and after major maintenance or service to ensure that they run according to expectations

	IN	OUT	THC POTENCY
NCCR 11.025			Potency method in use is approved for use in cannabis by a certifying body such as AOAC or has been appropriately validated by the laboratory as an in-house developed method. ✓ Standard methods (methods approved specifically for cannabis) have been verified by the laboratory ✓ Accuracy, precision, and reportable range (for quantitative tests) at minimum. Minimum of three runs per the ASTM D8282. ✓ For quantitative methods, results of validation samples are at values which correspond to the low, mid, and high range of the AMR. ✓ Tests are being performed and results reported as specified in the manufacturer's instructions for use, without substitution of reagents or modification of testing protocol. ✓ In-house developed methods: ✓ Must be fully validated by the laboratory prior to implementation, including all applicable performance characteristics (accuracy, analytical sensitivity, analytical specificity, precision, potential interferences, and linear range.) ✓ Validation is performed according to the requirements of ASTM D8282: "Standard Practice for Laboratory Test Method Validation and Method Development" or in accordance with the AOAC SMPR for cannabis matrix. ✓ If a standard method is changed it becomes an in-house method, and the laboratory must fully validate.
NCCR 11.025			✓ All applicable matrices were included in the validation. At minimum useable, concentrates, and representative infused products.
NCCR 11.025			✓ The laboratory's method (including the SOP, specs for calibration and quality control) is based on the method validation. Procedures match practice.
NCCR 11.025			✓ Instrument maintenance and function checks are documented at least at the frequency specified in the manufacturer's manual or in Appendix A of the AOAC's *Guidelines for Laboratories Performing Microbiological and Chemical Analyses of Food, Dietary Supplements, and Pharmaceuticals — An Aid to the Interpretation of ISO/IEC 17025:2005* (2015), whichever is more stringent. .
NCCR 11.025			✓ The instrument is being tuned in accordance with the guidelines in the manufacturer's tuning guide.
NCCR 11.025			✓ Equipment with questionable results or that has been shown to be out of specified requirements is taken out of service and clearly marked as such.
NCCR 11.025			✓ Calibration curve contains at least 5 calibration points.
NCCR 11.025			✓ Calibration correlation coefficient r>0.995.
NCCR 11.025			✓ Calibration points are not being removed from within the curve (only lowest and/or highest calibrator may be removed.)
NCCR 11.025			✓ Calibration curve is being verified with a different source or lot of reference standard
NCCR 11.025			✓ Instrument check standards concentrations are at the lowest and midrange point of the analytical range, at minimum.
NCCR 11.025			✓ Chromatogram peaks are being marked and identified correctly by the instrument.
NCCR 11.025			✓ The laboratory is analyzing samples for the presence of all required cannabinoids.
NCCR 11.025			✓ Acceptability limits are defined for all control materials and standards
NCCR 11.025			✓ Acceptance criteria for quality control does not exceed +/- 25%
NCCR 11.025			✓ When acceptable ranges are exceeded for equipment/instrument QC and function checks, the laboratory performs corrective action, including evaluation for adverse effect on samples.
NCCR 11.025			✓ Corrective action is enacted if a blank included in the analytical batch shows a result that is greater than the LOQ.
NCCR 11.025			✓ Results are not reported when quality control fails, unless in accordance with a CCB-approved process.
NCCR 11.025			✓ No alternate methods/calibration in use for specific samples.
NCCR 11.050			✓ Samples are being adequately homogenized in an approved manner that prevents cross-contamination. Techniques which generate high heat are avoided.
NCCR 11.025			✓ Controls are in place within an analytical batch which are extracted and run through the entire procedure to assess extraction efficiency. For instance, a matrix spike or other laboratory control, or the use of a surrogate or internal standard.
NCCR 11.025			✓ Technical records are complete. Records contain all results and enough information to identify factors affecting the results. There should be enough information to allow for duplication of the analysis as close as possible to the original.
NCCR 11.025			✓ Mistakes in technical records are corrected in a manner that does not obscure or erase the original entry

NCCR 11.075			✓ No unapproved retesting is occurring. Any retesting of potency samples is in accordance with the laboratory's approved SOP. Any retesting language in the SOP has been approved by the CCB.
NCCR 11.025			✓ Chromatographic issues are identified and addressed if/when present, i.e., a split peak, coeluting peaks, retention time shift, fronting, tailing, mis-identified peak, baseline drift, etc.
NCCR 11.025			✓ Manual peak integration is fully documented according to an SOP and is not a regular occurrence.
NCCR 11.025			✓ The analyst can demonstrate the calculations used to determine the final reported concentration from the raw data in the chromatograms
NRS 678B.290			✓ Results in raw data comport with those reported in Metrc and on the CoA (results reported accurately)
NCCR 11.025			✓ Results are not reported which are outside the reportable range of the calibration curve.
NCCR 11.025			✓ The instrument has an audit trail which documents any changes to data, including who and when
NCCR 11.025			✓ Instrument conditions, methods used for acquisition and processing of chromatographic data must be available for review and inspection.
NCCR 11.025			✓ QC data is monitored in a way that allows for detection of trends, such as with control charts.
NCCR 11.060			✓ Laboratory is performing initial homogeneity studies using the approved form. ✓ Laboratory performs homogeneity verification as part of routine potency of edibles. ✓ If the laboratory does not have a copy of the approved homogeneity study on file, they obtain a copy to verify the THC target for routine testing.
NCCR 11.025			✓ Proficiency testing samples are analyzed in the same manner and using the same standards as routine cannabis samples.
	IN	**OUT**	**HEAVY METALS**
NCCR 11.025			✓ Standard methods (methods approved specifically for cannabis and/or cannabis-derived products by a certifying body such as AOAC or ASTM) have been verified by the laboratory per ASTM D8282. ✓ Tests are being performed and results reported as specified in the manufacturer's instructions for use, without substitution of reagents or modification of testing protocol. ✓ Verification studies included an adequate number of positive and negative samples that represent the relevant matrices. ✓ If a standard method is changed, it becomes an in-house method and must be fully validated according to the requirements of ASTM D8282. ✓ In-house developed methods have been fully validated by the laboratory prior to implementation, including all applicable performance characteristics according to the requirements of ASTM D8282 for relevant matrices. ✓ Validation/verification samples are at values which correspond to the low, mid, and high range of the AMR. ✓ All applicable matrices were included in the validation/verification.
NCCR 11.025			✓ The laboratory's method (including SOPs, specifications, and criteria for calibration and quality control) is based on the method validation. Practice matches written procedures.
NCCR 11.025			✓ Equipment maintenance and function checks are documented at least at the frequency specified in the manufacturer's manual or in Appendix A of the AOAC's *Guidelines for Laboratories Performing Microbiological and Chemical Analyses of Food, Dietary Supplements, and Pharmaceuticals — An Aid to the Interpretation of ISO/IEC 17025:2005* (2015), whichever is more stringent.
NCCR 11.025			✓ Fume hood is being serviced at least annually.
NCCR 11.025			✓ For ICP-MS, the instrument is being tuned in accordance with the guidelines in the manufacturer's tuning guide.
NCCR 11.025			✓ For ICP-MS, a collisional mechanism combined with kinetic energy discrimination is used. Reaction gasses are not permitted.
NCCR 11.025			✓ Equipment with questionable results or that has been shown to be out of specified requirements is taken out of service and clearly marked as such.
NCCR 11.025			✓ Digestion vessels are either PFA, TFM Teflon® lined or quartz. Glass is not acceptable.
NCCR 11.025			✓ Labware is comprised of virgin (non-recycled) Teflon® FEP, PFA, PP, LDPE, or HDPE. Labware is not made of glass.
NCCR 11.025			✓ Non-metal spatulas are used for sampling analytical portions.
NCCR 11.025			✓ Powdered or latex gloves are not being used.
NCCR 11.025			✓ Pipettes with metal-free colorless disposable tips are in use.
NCCR 11.025			✓ Pipettes do not have metal tip ejectors.

NCCR 11.025			✓ Ultra-high purity (≥99.99%) standards for stock solutions are used.
NCCR 11.025			✓ High purity or trace metals grade reagents are being used.
NCCR 11.025			✓ Water meeting specifications for ASTM Type-I water is in use.
NCCR 11.025			✓ High purity (99.99%) argon.
NCCR 11.025			✓ Ultra-high purity (99.999%) helium.
NCCR 11.025			✓ High purity nitric acid—double distilled, ultra-pure, trace metals grade or equivalent.
NCCR 11.025			✓ High purity hydrochloric acid—double distilled, ultra-pure, trace metals grade or equivalent.
NCCR 11.025			✓ High purity isopropanol—electronic grade or equivalent.
NCCR 11.025			✓ Hydrogen Peroxide—high purity or trace metals grade.
NCCR 11.025			✓ Internal Standards (IS) should be chosen appropriately with regard to analyte and analytical method. • For ICP-MS, an element not present in the sample matrix and close in mass to the analyte element is chosen. Generally, an IS element should be not more than 50 u removed from the analyte. • For spectral methods, such as ICP-OES, refer to the instrument manufacturer's instructions.
NCCR 11.025			✓ Calibration points are not being removed from within the curve; only lowest and/or highest calibrator may be removed.
NCCR 11.025			✓ Calibration curve is verified with an ICV made from a different source of reference standard, not the same standard as was used to create the curve.
NCCR 11.025			✓ The concentration of at least one CCV/ICV is at the approximate midpoint of curve.
NCCR 11.025			✓ Acceptability limits are defined for all control materials and standards in validation materials and SOPs. If an existing non-cannabis standard method is adapted for use (e.g., FDA EAM, EPA 6020A, etc.) the QC acceptability criteria defined in the adapted method will apply.
NCCR 11.025			✓ Minimum QC acceptance criteria include the following. This list does not represent all required QC, and additional types of QC and/or more stringent criteria apply where required by method: • All blanks <LOQ. Subtraction of blank(s) from sample results is not permitted. Continuing calibration blank (CCB) run at a frequency of every 10 samples. • ICVs and CCVs within ±10%. (For ICV and CCV at/near LOQ, ±30% may be used.) ICV analyzed after calibration and before samples. CCVs run at a frequency of every 10 samples. • Laboratory control sample (LCS)/fortified analytical portion (FAP): within ±20%. • IS response is within ±30% of IS intensity during calibration. • Calibration correlation coefficient r must be at least ≥0.9975 for ICP-MS, if a higher value of r is not already required by standard method used or by laboratory validation and SOP. For ICP-OES, r must be ≥0.995 at minimum. • If Relative Standard Deviation (RSD) is used to evaluate calibrator acceptance, RSD must be ≤20% at minimum.
NCCR 11.025			✓ Calibration blanks, method blanks, and rinses are used.
NCCR 11.025			✓ At least one (or more, as required by standardized method) method blank is included in a random vessel in each digestion batch to verify absence of contamination from the vessels.
NCCR 11.025			✓ Duplicate analytical samples are included, with results < 20% RPD when >LOQ. Because samples tested for elemental impurities are not expected to contain target analytes above LOQ, a matrix spike/matrix spike duplicate sample pair may be more informative than unspiked duplicate samples; when used, both matrix spiked duplicates must also be within ±25% of the spike value, as well as meeting the RPD criteria for duplicates.
NCCR 11.025			✓ A certified reference material (CRM) matching sample matrix is included if available. If in-house reference material (RM) is used, it is well-characterized.
NCCR 11.050			✓ Samples are being adequately homogenized in a manner that prevents cross-contamination and prevents potential trace metals contamination.
NCCR 11.025			✓ Analyte isotopes being monitored and calculations used for reporting quantitative results are documented. Reported values can be traced from raw signal data through calculations; where done automatically by software, the calculations are in written documentation and available for review.
NCCR 11.025			✓ Any additional calculations used (signal corrections, interferences, etc.) are documented and available for review.
NCCR 11.025			✓ The laboratory performs corrective action whenever QC in the analytical run to not meet acceptance criteria, the instrument does not pass function checks, or other problems with sample preparation and

			analysis are suspected. Root cause, evaluation of the impact on the reliability of sample results, and the corrective action taken are all well-documented.
NCCR 11.025			✓ Results are not reported when quality control fails.
NCCR 11.025			✓ Technical records are complete. Records contain all results and enough information to identify factors affecting the results. There should be enough information to allow for duplication of the analysis as close as possible to the original. This includes testing information, notes and directives provided on notes. Any deviations from procedure follow lab protocols and are documented, including when, how, and why the deviation occurred and who approved the deviation.
NCCR 11.025			✓ Mistakes in technical records are corrected in a manner that does not obscure or erase the original entry.
NCCR 11.075			✓ No unapproved retesting is occurring.
NCCR 11.025			✓ The analyst can demonstrate any calculations used to determine the final reported concentration from the raw data (if applicable).
NRS 678B.290			✓ Results are reported accurately: results reported in Metrc and on the CoA can be traced directly, back through documented calculations, to raw instrument data.
NCCR 11.025			✓ Quantitative results outside the range of the calibration curve are not reported.
NCCR 11.025			✓ Results are reported to no more than 3 significant figures.
NCCR 11.025			✓ The instrument has an audit trail which documents any changes to data, including who made the change and when.
NCCR 11.025			✓ QC data is continuously monitored in a way that allows for detection of trends, such as with control charts or QC logs.
NCCR 11.025			✓ Proficiency testing samples are analyzed in the same manner and using the same standards as routine cannabis samples.
	IN	**OUT**	**RESIDUAL SOLVENTS**
NCCR 11.025			✓ Standard methods (methods approved specifically for cannabis and/or cannabis-derived products by a certifying body such as AOAC or ASTM) have been verified by the laboratory per ASTM D8282. ✓ Tests are being performed and results reported as specified in the manufacturer's instructions for use, without substitution of reagents or modification of testing protocol. ✓ Verification studies included an adequate number of positive and negative samples that represent the relevant matrices. ✓ If a standard method is changed, it becomes an in-house method and must be fully validated according to the requirements of ASTM D8282. ✓ In-house developed methods have been fully validated by the laboratory prior to implementation, including all applicable performance characteristics according to the requirements of ASTM D8282 for relevant matrices. ✓ Validation/verification samples are at values which correspond to the low, mid, and high range of the AMR. ✓ All applicable matrices were included in the validation/verification.
NCCR 11.025			✓ The laboratory's method (including SOPs, specifications, and criteria for calibration and quality control) is based on the method validation. Practice matches written procedures.
NCCR 11.025			✓ Instrument maintenance and function checks are documented at least at the frequency specified in the manufacturer's manual or in Appendix A of the AOAC's *Guidelines for Laboratories Performing Microbiological and Chemical Analyses of Food, Dietary Supplements, and Pharmaceuticals — An Aid to the Interpretation of ISO/IEC 17025:2005* (2015), whichever is more stringent. .
NCCR 11.025			✓ If MS detector is used, all positive analyte identifications are being confirmed by retention time and Ion Profile match. All parent and transition ions are defined for analytes and their isomers. ✓ If a single FID detector is used, identification is based solely on retention time and chromatographic separation. Well-established criteria for evaluating retention times and identifying when instrument performance is out of specification must be defined. Performance monitoring and corrective actions will be defined in SOP(s) and documented in instrument maintenance logs. ✓ Other detectors configurations will be thoroughly documented throughout validation and SOPs to demonstrate their suitability and efficacy for quantitation and/or identification of residual solvents and volatiles. Performance monitoring and corrective actions will be defined in SOP(s) and documented in instrument maintenance logs.
NCCR 11.025			✓ MS detectors pass an instrument tune immediately before an analytical run and are tuned in accordance with the guidelines in the manufacturer's tuning guide.

NCCR 11.025			✓ Equipment with questionable results or that has been shown to be out of specified requirements is taken out of service and clearly marked as such.
NCCR 11.025			✓ Calibration curve contains at least five (5) calibration points.
NCCR 11.025			✓ Calibration correlation coefficient r>0.995. If Relative Standard Deviation (RSD) is used to evaluate calibrator acceptance, RSD must be ≤20%, or less if required by standard method and/or SOP.
NCCR 11.025			✓ Calibration points are not being removed from within the curve; only lowest and/or highest calibrator may be removed. Five (5) calibration points are still required.
NCCR 11.025			✓ Calibration curve is being verified with a different source of reference standard, not the same standard as was used to create the curve.
NCCR 11.025			✓ A minimum of two instrument check standards (CCV/ICV) are used: one at or near the lowest concentration and one near the midrange point of the AMR.
NCCR 11.025			✓ Chromatogram peaks are being marked and identified correctly by the instrument.
NCCR 11.025			✓ Manual peak integration is fully documented according to a written procedure and is not a regular occurrence.
NCCR 11.025			✓ If/when present, chromatographic issues are identified and addressed per laboratory SOP/manual integration policy, i.e., a split peak, coeluting peaks, retention time shift, fronting, tailing, mis-identified peak, baseline drift, etc.
NCCR 11.025			✓ SOPs include evaluation of retention times, defined retention time windows and relative retention times, and acceptance criteria for identification of compounds using retention times (if using FID or other non-identifying detector). Procedures include corrective action steps.
NCCR 11.025			✓ The laboratory is analyzing samples for the presence of all required residual solvents.
NCCR 11.025			✓ Acceptability limits are defined for all control materials and standards.
NCCR 11.025			✓ Controls are in place within an analytical batch which are extracted and run through the entire procedure in order to assess extraction efficiency and effect of matrix on method performance. For example: a matrix spike or other laboratory control, or the use of a surrogate or internal standard.
NCCR 11.025			✓ Controls analyzed in each analytical batch include, but are not limited to, a method blank, a laboratory control sample, a second-source ICV, and CCVs.
NCCR 11.025			✓ Duplicate analytical samples are included, with results <30% RPD when >LOQ. Because samples tested for elemental impurities are not expected to contain target analytes above LOQ, a matrix spike/matrix spike duplicate sample pair may be more informative than unspiked duplicate samples; when used, both matrix spiked duplicates must also be within ±25% of the spike value, as well as meeting the RPD criteria for duplicates.
NCCR 11.025			✓ Acceptance criteria for quality control does not exceed ±25%.
NCCR 11.025			✓ When acceptable ranges are exceeded for equipment/instrument QC and function checks, the laboratory performs corrective action, including evaluation for adverse effect on samples. Root cause, evaluation of the impact on the reliability of sample results, and the corrective action taken are all well-documented.
NCCR 11.025			✓ Corrective action is enacted if a blank is >LOQ. Blanks are never subtracted from sample results.
NCCR 11.025			✓ Results are not reported when quality control fails.
NCCR 11.025			✓ The same method and calibration are used for all samples and controls in the analytical run. No alternate methods/calibration in use for specific samples.
NCCR 11.025			✓ Headspace methods use crimped (not screw-cap) headspace vials.
NCCR 11.025			✓ The use of a surrogate volatile or quantitation using an internal standard (IS) to continuously monitor instrument & method performance and identify any sample problems is recommended for headspace mehods; when used, an acceptance range for surrogate/IS recovery must be defined.
NCCR 11.025			✓ Homogenization is performed immediately when the sample is introduced into the sample solvent or matrix modifying solution. Vials and sample containers are capped quickly to prevent loss of analytes and samples changes.
NCCR 11.025			✓ Technical records are complete. Records contain all results and enough information to identify factors affecting the results. There should be enough information to allow for duplication of the analysis as close as possible to the original. This includes testing information, notes and directives provided on notes. Any deviations from procedure follow lab protocols and are documented, including when, how, and why the deviation occurred and who approved the deviation.
NCCR 11.025			✓ Mistakes in technical records are corrected in a manner that does not obscure or erase the original entry.
NCCR 11.075			✓ No unapproved retesting is occurring. Any retesting language in the SOP has been approved by the CCB.

NCCR 11.025			✓ The analyst can demonstrate the calculations used to determine the final reported concentration from the raw data in the chromatograms.
NCCR 11.025			✓ Calculations necessary to produce reportable results from raw data are documented in SOPs.
NRS 678B.290			✓ Results are reported accurately: results reported in Metrc and on the CoA can be traced directly, back through documented calculations, to raw instrument data.
NCCR 11.025			✓ Quantitative results outside the range of the calibration curve are not reported.
NCCR 11.025			✓ Isomers of analytes (if any) are summed to determine analyte results, unless otherwise specified by the CCB; the total cannot exceed tolerance limit. Example: Butanes = n-Butane + Isobutane
NCCR 11.025			✓ The instrument has an audit trail which documents any changes to data, including who made the change and when.
NCCR 11.025			✓ Instrument conditions, methods used for acquisition and processing of chromatographic data must be available for review and inspection.
NCCR 11.025			✓ QC data is continuously monitored in a way that allows for detection of trends, such as with control charts or QC logs.
NCCR 11.025			✓ Proficiency testing samples are analyzed in the same manner and using the same standards as routine cannabis samples.
	IN	**OUT**	**PESTICIDES AND MYCOTOXINS**
NCCR 11.025			Pesticides/Mycotoxins method in use is approved for use in cannabis by a certifying body such as AOAC or has been appropriately validated by the laboratory as an in-house developed method. The PAM is designed to be used by analysts experiences in trace residue analysis. ✓ Standard methods (methods approved specifically for cannabis.) ✓ The laboratory has performed a verification study prior to reporting results. They have verified, at minimum, accuracy, and precision, as well as reportable range (for quantitative tests). Minimum of three runs per the ASTM D8282. ✓ Verification studies included an adequate number of positive and negative samples that represent the relevant product types. ✓ For quantitative methods, results of known samples or spiked samples are at values which correspond to the low, mid, and high range of the analytical measurement range. The AMR is the range of values that a method can directly measure on the sample without dilution, concentration, or other pretreatment that is not part of the usual testing process. ✓ Matrix samples are fortified at the tolerance limit and 10x the tolerance limit. If there isn't a tolerance limit, then they fortify at 0.05ppm and 0.5ppm. ✓ Tests are being performed and results reported as specified in the manufacturer's instructions for use, without substitution of reagents or modification of testing protocol. ✓ In-house developed methods: ✓ Must be fully validated by the laboratory prior to implementation ✓ Validation studies evaluate accuracy, analytical sensitivity, analytical specificity, precision, potential interferences and linear range (quantitative tests only). ✓ Validation is performed according to the requirements of ASTM D8282: "Standard Practice for Laboratory Test Method Validation and Method Development" or in accordance with the AOAC SMPR for cannabis matrix. ✓ If a standard method is changed it becomes an in-house method, and the laboratory must fully validate.
NCCR 11.025			✓ All applicable matrices were included in the validation.
NCCR 11.025			✓ The laboratory's method (including the SOP, specs for calibration and quality control) is based on the method validation. Procedures match practice.
NCCR 11.025			✓ Instrument maintenance and function checks are documented at least at the frequency specified in the manufacturer's manual or in Appendix A of the AOAC's *Guidelines for Laboratories Performing Microbiological and Chemical Analyses of Food, Dietary Supplements, and Pharmaceuticals — An Aid to the Interpretation of ISO/IEC 17025:2005* (2015), whichever is more stringent. .
NCCR 11.025			✓ The instrument is being tuned in accordance with the guidelines in the manufacturer's tuning guide.
NCCR 11.025			✓ Equipment with questionable results or that has been shown to be out of specified requirements is taken out of service and clearly marked as such.
NCCR 11.025			✓ Calibration curve contains at least 5 calibration points.
NCCR 11.025			✓ Calibration correlation coefficient r>0.995.
NCCR 11.025			✓ Calibration points are not being removed from within the curve (only lowest and/or highest calibrator may be removed.)

NCCR 11.025			✓ Calibration curve is being verified with a different source of reference standard (not the same standard as was used to create the curve.)
NCCR 11.025			✓ Instrument check standards concentrations are at the lowest and midrange point of the analytical range, at minimum.
NCCR 11.025			✓ Chromatogram peaks are being marked and identified correctly by the instrument.
NCCR 11.025			✓ Chromatogram peaks have clear separation, no coelution.
NCCR 11.025			✓ All positive analyte identifications are being confirmed by a means other than retention time, i.e., an ion profile match in a mass spectrometer.
NCCR 11.025			✓ The laboratory is analyzing samples for the presence of all required pesticides/mycotoxins.
NCCR 11.025			✓ Acceptability limits are defined for all control materials and standards
NCCR 11.025			✓ Acceptance criteria for quality control does not exceed +/- 25%. QC limits are defined for all QC.
NCCR 11.025			✓ Chromatographic sequence must begin and end with quality control.
NCCR 11.025			✓ When acceptable ranges are exceeded for equipment/instrument QC and function checks, the laboratory performs corrective action, including evaluation for adverse effect on samples.
NCCR 11.025			✓ Reagent blank and matrix blank are both required. Corrective action is enacted if a blank included in the analytical batch shows a result that is greater than the LOQ.
NCCR 11.025			✓ Results are not reported when quality control fails, unless in accordance with a CCB-approved process.
NCCR 11.025			✓ No alternate methods/calibration in use for specific samples.
NCCR 11.050			✓ Samples are being adequately homogenized in a manner that prevents cross-contamination. Techniques which generate high heat are avoided.
NCCR 11.025			✓ Controls are in place within an analytical batch which are extracted and run through the entire procedure in order to assess extraction efficiency. For instance, a matrix spike or other laboratory control, or the use of a surrogate or internal standard.
NCCR 11.025			✓ Technical records are complete. Records contain all results and enough information to identify factors affecting the results. There should be enough information to allow for duplication of the analysis as close as possible to the original. This includes testing information, notes and directives provided on notes. All weights and volumes of samples and reagents/standards are documented.
NCCR 11.025			✓ Mistakes in technical records are corrected in a manner that does not obscure or erase the original entry
NCCR 11.075			✓ No unapproved retesting is occurring. Any retesting of samples is in accordance with the laboratory's approved SOP. Any retesting language in the SOP has been approved by the CCB.
NCCR 11.025			✓ Chromatographic issues are identified and addressed if/when present, i.e., a split peak, coeluting peaks, retention time shift, fronting, tailing, mis-identified peak, baseline drift, etc.
NCCR 11.025			✓ All parent and transition ions are defined for analytes and their isomers
NCCR 11.025			✓ Mass spectrometer detector issues are identified and addressed if/when present, i.e., ionization failures, tune failures, electrical/current problems, etc.
NCCR 11.025			✓ Manual peak integration is fully documented according to a written procedure and is not a regular occurrence.
NCCR 11.025			✓ The analyst can demonstrate the calculations used to determine the final reported concentration from the raw data in the chromatograms
NRS 678B.290			✓ Results in raw data match those reported in Metrc and on the CoA (results reported accurately)
NCCR 11.025			✓ Results are not reported which are outside the reportable range of the calibration curve.
NCCR 11.025			✓ Residues are calculated and reported in ppm • ≥100 ppm to nearest ppm • 10 to 99.9 ppm to nearest 0.1 ppm • 1 to 9.99 ppm to nearest 0.01 ppm • 0.010 to 0.999 ppm to nearest 0.001 ppm
NCCR 11.025			✓ Residues that are detectable by the method but present at less than the limit of quantitation are reported as "Detected."
NCCR 11.025			✓ Isomers of analytes are summed to determine failure of the analyte; total cannot exceed tolerance limit
NCCR 11.025			✓ The instrument has an audit trail which documents any changes to data, including who made the change and when.
			✓ Instrument conditions, methods used for acquisition and processing of chromatographic data must be available for review and inspection.
NCCR 11.025			✓ QC data is monitored in a way that allows for detection of trends, such as with control charts.

NCCR 11.025			✓ Proficiency testing samples are analyzed in the same manner and using the same standards as routine cannabis samples. Review the most recent PT, find the analysis date, and review pertinent instrument raw data.
	IN	**OUT**	**TECHNICAL PROCEDURE REQUIREMENTS (FOR EACH METHOD)**
NCCR 11.025			✓ Standard operating procedures contains all required elements. SOPs should be reproducible under the same conditions by a different analyst working in a different laboratory (per ASTM D8282). Some elements may be contained within a separate SOP from the test method SOP (i.e., instrument maintenance.) • Title, author, and effective date • Document control number and version • Document approvals, dated. • Scope of application • Background/ description of test • Terminology/ definitions • Allowable sample types • Analyte list, to include isomers if applicable (i.e., pesticides) • Instrumentation list, including vendor and model/part number • Reagent/standards list, including vendor and part number • Consumables list, including vendor and part number • Standard safety precautions (i.e., PPE, use of laminar flow hood, etc.) • Limitations of the methodology, including interfering substances • Sample collection procedure (may be separate from method procedure) • Sample transportation procedure (including storage requirements during transport.) • Sample acceptance/ rejection criteria • Sample receiving/accessioning procedures • Sample storage requirements prior to and after testing • Required instrument conditions (settings/parameters) • Reportable range (except for qualitative methods) • For microbiological procedures, temperature requirements for incubation of inoculated media • Instructions for preparation and handling of reagents/standards • Step-by-step performance of all aspects of the procedure, including sample homogenization, sample preparation/extraction and any calculations used. • Instructions for recording observations and aliquot weights, to include the use of any logbooks or other laboratory notebooks used for recording such information. • Instructions for instrument set-up, maintenance, and function checks. Must comport with vendor requirements (i.e., instrument stabilization., etc.) • Calibration, calibration verification and all other quality control procedures o Instructions for preparation and assessment, including reportable range, acceptability criteria and type of calibration used (i.e., linear v quadratic) o Defined remedial action to be taken when calibration or control results fail to meet the acceptability criteria. • Instructions for set up of instrument sequence table, including the selection of the appropriate acquisition/processing method to use (by name). • Results review and interpretation • Applicable state tolerance limits • Results reporting (including sending CoAs, upload to Metrc, use of Confident Cannabis/LIS • Instrument preventative maintenance • Defined instructions for performing and documenting manual integrations. • Rerun/retest policies. Must be scientifically sound, CCB approved. • Corrective action/Preventative Action

			• Calculation of Measurement Uncertainty • Waste disposal • References • Revision description