WAC 314-55-103 Good laboratory practice checklist. A third-party testing lab must be certified by the WSLCB or its vendor as meeting the WSLCB's accreditation and other requirements prior to conducting required quality assurance tests. The following checklist will be used by the WSLCB or its vendor to certify third-party testing labs:

ORGANIZATION Completed by: Reviewed by:	**Document Reference**	**Y**	**N**	**NA**	**Comments**
1. The laboratory or the organization of which it is a part of shall be an entity that can be held legally responsible.	-	-	-	-	-
2. The laboratory conducting third-party testing shall have no financial interest in a licensed producer or processor for which testing is being conducted.	-	-	-	-	-
If the laboratory is part of an organization performing activities other than testing, the responsibilities of key personnel in the organization that have an involvement or influence on the testing activities of the laboratory shall be defined in order to identify potential conflicts of interest.	-	-	-	-	-
3. The laboratory shall have policies and procedures to ensure the protection of its client's confidential information and proprietary rights, including procedures for protecting the electronic storage and transmission of results.	-	-	-	-	-
4. In every instance where the lab references certification status they shall clearly indicate which tests they are currently certified for.	-	-	-	-	-
5. The laboratory is responsible for all costs of initial certification and ongoing site assessments.	-	-	-	-	-
6. The laboratory must agree to site assessments every year for the first three years to maintain certification. Beginning year four of certification, on-site assessments will occur every two years to maintain certification.	-	-	-	-	-
7. The laboratory must allow WSLCB staff or their representative to conduct physical visits and check I-502 related laboratory activities at any time.	-	-	-	-	-
8. The laboratory must report all test results directly into WSLCB's traceability system within twenty-four hours of completion. Labs must also record in the traceability system an acknowledgment of the receipt of samples from producers or processors and verify if any unused portion of the sample was destroyed or returned to the customer.	-	-	-	-	-

HUMAN RESOURCES Completed by: Reviewed by:	**Document Reference**	**Y**	**N**	**NA**	**Comments**
9a. Job descriptions for owners and all employees. A written and documented system detailing the qualifications of each member of the staff including any specific training requirements applicable to analytical methods.	-	-	-	-	-
b. Specialized training such as by vendors, classes granting CEUs, etc., shall be documented in each training file.	-	-	-	-	-
10. Qualifications of owners and staff: CVs for staff on file.	-	-	-	-	-
a. Have technical management which has overall responsibility for the technical operations and the provision of the resources needed to ensure the required quality of laboratory operations.	-	-	-	-	-
b. Documentation that the scientific director meets the requirements of WSLCB rules.	-	-	-	-	-
c. Chain of command, personnel organization/flow chart, dated and signed by the laboratory director.	-	-	-	-	-

HUMAN RESOURCES Completed by: Reviewed by:		**Document Reference**	**Y**	**N**	**NA**	**Comments**
d.	Written documentation of delegation of responsibilities in the absence of the scientific director and management staff (assigned under chapter 314-55 WAC as related to quality assurance testing).	-	-	-	-	-
e.	Documentation of employee competency (DOC): Prior to independently analyzing samples, and on an annual, ongoing basis, testing personnel must demonstrate acceptable performance on precision, accuracy, specificity, reportable ranges, blanks, and unknown challenge samples (proficiency samples or internally generated quality controls). Dated and signed by the laboratory director.	-	-	-	-	-
f.	The laboratory management shall ensure the competence of all who operate specific equipment, perform tests and/or calibrations, evaluate results, and sign test reports and calibration certificates.	-	-	-	-	-
g.	When using staff who are undergoing training, appropriate supervision shall be provided.	-	-	-	-	-
h.	Personnel performing specific tasks shall be qualified on the basis of appropriate education, training, experience and/or demonstrated skills, as necessary.	-	-	-	-	-
i.	The management shall authorize specific personnel to perform particular types of sampling, test and/or calibration, to issue test reports and calibration certificates, to give opinions and interpretations and to operate particular types of equipment.	-	-	-	-	-
j.	The laboratory shall maintain records of the relevant authorization(s), competence, educational and professional qualifications, training, skills and experience of all technical personnel, including contracted personnel.	-	-	-	-	-
k.	Successful training (in-house courses are acceptable) in specific methodologies used in the laboratory shall be documented.	-	-	-	-	-
l.	Designate a quality manager (however named) who, irrespective of other duties and responsibilities, shall have defined responsibility and authority for ensuring that the quality system is implemented and followed; the quality manager shall have direct access to the highest level of management at which decisions are made on laboratory policy or resources.	-	-	-	-	-
m.	The laboratory shall delegate responsibilities for key managerial personnel to be acted upon in cases of absence or unavailability.	-	-	-	-	-
n.	The laboratory shall provide adequate supervision of testing staff, including trainees, by persons familiar with methods and procedures, purpose of each test and/or calibration, and with the assessment of the test or calibration results.	-	-	-	-	-
11.	Standard operating procedure for the following:	-	-	-	-	-
a.	Instructions on regulatory inspection and preparedness.	-	-	-	-	-
b.	Instruction on law enforcement interactions.	-	-	-	-	-
c.	Information on U.S. federal laws, regulations, and policies relating to individuals employed in these operations, and the implications of these for such employees.	-	-	-	-	-
d.	Written and documented system of employee training on hazards (physical and health) of chemicals in the workplace, including prominent location of MSDS or SDS sheets and the use of appropriate PPE.	-	-	-	-	-

HUMAN RESOURCES Completed by: Reviewed by:	Document Reference	Y	N	NA	Comments
e. Written and documented system on the competency of personnel on how to handle chemical spills and appropriate action; spill kit on-site and well-labeled, all personnel know the location and procedure.	-	-	-	-	-
f. Information on how employees can access medical attention for chemical or other exposures, including follow-up examinations without cost or loss of pay.	-	-	-	-	-
g. Biosafety at a minimum covering sterilization and disinfection procedures and sterile technique training.	-	-	-	-	-

STANDARD OPERATING PROCEDURES	Document Reference	Y	N	NA	Comments
12. As appropriate, laboratory operations covered by procedures shall include, but not be limited to, the following:	-	-	-	-	-
a. Environmental, safety and health activities;	-	-	-	-	-
b. Sample shipping and receipt;	-	-	-	-	-
c. Laboratory sample chain of custody and material control;	-	-	-	-	-
d. Notebooks/logbooks;	-	-	-	-	-
e. Sample storage;	-	-	-	-	-
f. Sample preparation;	-	-	-	-	-
g. Sample analysis;	-	-	-	-	-
h. Standard preparation and handling;	-	-	-	-	-
i. Postanalysis sample handling;	-	-	-	-	-
j. Control of standards, reagents and water quality;	-	-	-	-	-
k. Cleaning of glassware;	-	-	-	-	-
l. Waste minimization and disposition.	-	-	-	-	-
13. The following information is required for procedures as appropriate to the scope and complexity of the procedures or work requested:	-	-	-	-	-
a. Scope (e.g., parameters measured, range, matrix, expected precision, and accuracy);	-	-	-	-	-
b. Unique terminology used;	-	-	-	-	-
c. Summary of method;	-	-	-	-	-
d. Interferences/limitations;	-	-	-	-	-
e. Approaches to address background corrections;	-	-	-	-	-
f. Apparatus and instrumentation;	-	-	-	-	-
g. Reagents and materials;	-	-	-	-	-
h. Hazards and precautions;	-	-	-	-	-
i. Sample preparation;	-	-	-	-	-
j. Apparatus and instrumentation setup;	-	-	-	-	-
k. Data acquisition system operation;	-	-	-	-	-
l. Calibration and standardization;	-	-	-	-	-
m. Procedural steps;	-	-	-	-	-
n. QC parameters and criteria;	-	-	-	-	-
o. Statistical methods used;	-	-	-	-	-
p. Calculations;	-	-	-	-	-
q. Assignment of uncertainty;	-	-	-	-	-
r. Forms used in the context of the procedure.	-	-	-	-	-

	STANDARD OPERATING PROCEDURES	Document Reference	Y	N	NA	Comments
s.	Document control with master list identifying the current revision status of documents.	-	-	-	-	-

	FACILITIES AND EQUIPMENT	Document Reference	Y	N	NA	Comments
14.	Allocation of space: Adequate for number of personnel and appropriate separation of work areas.	-	-	-	-	-
15.	Arrangement of space.	-	-	-	-	-
a.	Allows for appropriate work flow, sampling, lab space separate from office and break areas.	-	-	-	-	-
b.	Employee bathroom is separate from any laboratory area.	-	-	-	-	-
16.	Adequate eyewash/safety showers/sink.	-	-	-	-	-
17.	Procurement controls.	-	-	-	-	-
a.	The laboratory shall have procedure(s) for the selection and purchasing of services and supplies it uses that affect the quality of the tests and/or calibrations. Procedures covering reagents and laboratory consumables shall exist for the purchase, receipt, storage, and disposition of expired materials.	-	-	-	-	-
b.	The laboratory shall ensure that purchased supplies and reagents and consumable materials that affect the quality of tests and/or calibrations are inspected or otherwise verified as complying with standard specifications or requirements defined in the methods for the tests and/or calibrations concerned.	-	-	-	-	-
i.	Reagents and standards shall be inspected, dated and initialed upon receipt, and upon opening.	-	-	-	-	-
ii.	Calibration standards and analytical reagents shall have an expiration or reevaluation date assigned.	-	-	-	-	-
iii.	Solutions shall be adequately identified to trace back to preparation documentation.	-	-	-	-	-
c.	Prospective suppliers shall be evaluated and selected on the basis of specified criteria.	-	-	-	-	-
d.	Processes to ensure that approved suppliers continue to provide acceptable items and services shall be established and implemented.	-	-	-	-	-
18.	Subcontracting.	-	-	-	-	-
a.	The laboratory shall advise the customer of the subcontract arrangement in writing, including the subcontractors' accreditation credentials under chapters 69.50 RCW and 314-55 WAC.	-	-	-	-	-
b.	The laboratory shall maintain a register of all subcontractors that it uses for tests and/or calibrations and a record of the evidence of compliance with chapter 314-55 WAC for the work in question.	-	-	-	-	-
c.	When there are indications that subcontractors knowingly supplied items or services of substandard quality, this information shall be forwarded to appropriate management for action.	-	-	-	-	-
19.	Utilities (items verified upon on-site inspection).	-	-	-	-	-
a.	Electrical:	-	-	-	-	-
i.	Outlets: Adequate, unobstructed, single-use, multiplug adaptors with surge control;	-	-	-	-	-
ii.	Single-use extension cords;	-	-	-	-	-
iii.	Ground fault circuit interrupters near wet areas.	-	-	-	-	-

FACILITIES AND EQUIPMENT	Document Reference	Y	N	NA	Comments
b. Plumbing:	-	-	-	-	-
i. Appropriateness of sink usage: Separate sinks for work/ personal use;	-	-	-	-	-
ii. Adequate drainage from sinks or floor drains;	-	-	-	-	-
iii. Hot and cold running water.	-	-	-	-	-
c. Ventilation:	-	-	-	-	-
i. Areas around solvent use or storage of solvents or waste solvents;	-	-	-	-	-
ii. Vented hood for any microbiological analysis - Class II Type A biosafety cabinet as applicable.	-	-	-	-	-
iii. Fume hood with appropriate ventilation.	-	-	-	-	-
d. Vacuum: Appropriate utilities/traps for prevention of contamination (as applicable).	-	-	-	-	-
e. Shut-off controls: Located outside of the laboratory.	-	-	-	-	-
20. Waste disposal: Appropriate for the type of waste and compliant with WAC 314-55-097 Marijuana waste disposal —Liquids and solids.	-	-	-	-	-
21. Equipment. Equipment and/or systems requiring periodic maintenance shall be identified and records of major equipment shall include:	-	-	-	-	-
a. Name;	-	-	-	-	-
b. Serial number or unique identification from name plate;	-	-	-	-	-
c. Date received and placed in service;	-	-	-	-	-
d. Current location;	-	-	-	-	-
e. Condition at receipt;	-	-	-	-	-
f. Manufacturer's instructions;	-	-	-	-	-
g. Date of calibration or date of next calibration;	-	-	-	-	-
h. Maintenance;	-	-	-	-	-
i. History of malfunction.	-	-	-	-	-
22. Maintenance.	-	-	-	-	-
a. Documented evidence of routine preventive maintenance and calibration of equipment including, but not limited to: Thermometer, pipette, analytical balances, and additional analytical equipment.	-	-	-	-	-
i. Calibration programs shall be established for key quantities or values of the instruments where these properties have a significant effect on the results.	-	-	-	-	-
ii. Before being placed into service, equipment, including equipment used for sampling, shall be calibrated or checked to establish that it meets the laboratory's specification requirements and complies with the relevant standard specifications.	-	-	-	-	-
iii. Equipment that has been subjected to overloading or mishandling, gives suspect results, or has been shown to be defective or outside of specified limits, shall be taken out of service. Such equipment shall be isolated to prevent its use or clearly labeled or marked as being out-of-service until it has been repaired and shown by calibration or test to perform correctly.	-	-	-	-	-
b. Documentation of a maintenance schedule and reviewed by the laboratory director.	-	-	-	-	-
i. Calibration procedures shall specify frequency of calibration checks.	-	-	-	-	-

	FACILITIES AND EQUIPMENT	Document Reference	Y	N	NA	Comments
ii.	Instruments that are routinely calibrated shall be verified daily or prior to analyzing samples (as applicable).	-	-	-	-	-
iii.	Acceptance criteria shall be determined, documented and used.	-	-	-	-	-
iv.	When possible, any external calibration service (metrological laboratory) used shall be a calibration laboratory accredited to ISO/IEC 17025:2005 by a recognized accreditation body.	-	-	-	-	-
v.	Laboratories shall demonstrate, when possible, that calibrations of critical equipment and hence the measurement results generated by that equipment, relevant to their scope of accreditation, are traceable to the SI through an unbroken chain of calibrations.	-	-	-	-	-
vi.	External calibration services shall, wherever possible, be obtained from providers accredited to one of the following: ISO/IEC 17025, ISO Guide 34, an ILAC recognized signatory, a CIPM recognized National Metrology Institute (NMI), or a state weights and measures facility that is part of the NIST laboratory metrology program. Calibration certificates shall be endorsed by a recognized accreditation body symbol or otherwise make reference to accredited status by a specific, recognized accreditation body, or contain endorsement by the NMI. Certificates shall indicate traceability to the SI or reference standard and include the measurement result with the associated uncertainty of measurement.	-	-	-	-	-
vii.	Where traceability to the SI is not technically possible or reasonable, the laboratory shall use certified reference materials provided by a competent supplier.	-	-	-	-	-
viii.	Calibrations performed in-house shall be documented in a manner that demonstrates traceability via an unbroken chain of calibrations regarding the reference standard/material used, allowing for an overall uncertainty to be estimated for the in-house calibration.	-	-	-	-	-
ix.	Calibrations shall be repeated at appropriate intervals, the length of which can be dependent on the uncertainty required, the frequency of use and verification, the manner of use, stability of the equipment, and risk of failure considerations.	-	-	-	-	-
x.	Periodic verifications shall be performed to demonstrate the continued validity of the calibration at specified intervals between calibrations. The frequency of verifications can be dependent on the uncertainty required, the frequency of use, the manner of use, stability of the equipment, and risk of failure considerations.	-	-	-	-	-
c.	Documentation of curative maintenance in logbook, signed and dated by laboratory director.	-	-	-	-	-
d.	Evidence of temperature monitoring for equipment requiring specific temperature ranges.	-	-	-	-	-
e.	Test and calibration equipment, including both hardware and software, shall be safeguarded from adjustments which would invalidate the test and/or calibration results.	-	-	-	-	-
f.	Decontamination and cleaning procedures for:	-	-	-	-	-
i.	Instruments;	-	-	-	-	-
ii.	Bench space; and	-	-	-	-	-
iii.	Ventilation hood/microbial hood.	-	-	-	-	-
g.	Documentation of adequacy of training of personnel and responsibility for each maintenance task.	-	-	-	-	-

FACILITIES AND EQUIPMENT		Document Reference	Y	N	NA	Comments
h.	The organization shall describe or reference how periodic preventive and corrective maintenance of measurement or test equipment shall be performed to ensure availability and satisfactory performance of the systems.	-	-	-	-	-
23.	Computer systems (items verified upon on-site inspection).	-	-	-	-	-
a.	Adequate for sample tracking.	-	-	-	-	-
b.	Adequate for analytical equipment software.	-	-	-	-	-
c.	Software control requirements applicable to both commercial and laboratory developed software shall be developed, documented, and implemented.	-	-	-	-	-
d.	In addition, procedures for software control shall address the security systems for the protection of applicable software.	-	-	-	-	-
e.	For laboratory-developed software, a copy of the original program code shall be:	-	-	-	-	-
i.	Maintained;	-	-	-	-	-
ii.	All changes shall include a description of the change, authorization for the change;	-	-	-	-	-
iii.	Test data that validates the change.	-	-	-	-	-
f.	Software shall be acceptance tested when installed, after changes, and periodically during use, as appropriate.	-	-	-	-	-
g.	Software testing shall include performing manual calculations or checking against another software product that has been previously tested, or by analysis of standards.	-	-	-	-	-
h.	The version and manufacturer of the software shall be documented.	-	-	-	-	-
i.	Commercially available software may be accepted as supplied by the vendor. For vendor supplied instrument control/data analysis software, acceptance testing may be performed by the laboratory.	-	-	-	-	-
24.	Security.	-	-	-	-	-
a.	Written facility security procedures during operating and nonworking hours.	-	-	-	-	-
b.	Roles of personnel in security.	-	-	-	-	-
c.	SOP for controlled access areas and personnel who can access.	-	-	-	-	-
25.	Control of records.	-	-	-	-	-
a.	The laboratory shall establish and maintain procedures for identification, collection, indexing, access, filing, storage, maintenance and disposal of quality and technical records.	-	-	-	-	-
b.	All records shall be legible and shall be stored and retained in such a way that they are readily retrievable in facilities that provide a suitable environment to prevent damage or deterioration and to prevent loss.	-	-	-	-	-
c.	Records must be retained for a period of three years.	-	-	-	-	-
d.	All records shall be held secure and in confidence.	-	-	-	-	-
e.	The laboratory shall have procedures to protect and back-up records stored electronically and to prevent unauthorized access to or amendment of these records.	-	-	-	-	-
f.	The laboratory shall retain records of original observations, derived data and sufficient information to establish an audit trail, calibration records, staff records and a copy of each test report or calibration certificate issued, for a defined period.	-	-	-	-	-

FACILITIES AND EQUIPMENT		Document Reference	Y	N	NA	Comments
g.	The records for each test or calibration shall contain sufficient information to facilitate, if possible, identification of factors affecting the uncertainty and to enable the test or calibration to be repeated under conditions as close as possible to the original.	-	-	-	-	-
h.	The records shall include the identity of personnel responsible for the sampling, performance of each test and/or calibration and checking of results.	-	-	-	-	-
i.	Observations, data and calculations shall be recorded at the time they are made and shall be identifiable to the specific task.	-	-	-	-	-
j.	When mistakes occur in records, each mistake shall be lined out, not erased or made illegible or deleted, and the correct value entered alongside.	-	-	-	-	-
k.	All such alterations or corrections to records shall be signed or initialed and dated by the person making the correction.	-	-	-	-	-
l.	In the case of records stored electronically, equivalent measures shall be taken to avoid loss or change of original data.	-	-	-	-	-
m.	All entries to hard copy laboratory records shall be made using indelible ink. No correction fluid may be used on original laboratory data records.	-	-	-	-	-
n.	Laboratories shall establish and maintain a data review process beginning at sample receipt and extending through the report process. The data review process shall be an independent review, conducted by a qualified individual other than the analyst.	-	-	-	-	-
o.	The review process shall be documented before data are reported.	-	-	-	-	-
26.	Storage.	-	-	-	-	-
a.	Appropriate and adequate for sample storage over time. The laboratory shall monitor, control and record environmental conditions as required by the relevant specifications, methods and procedures or where they influence the quality of the results. Due attention shall be paid, for example, to biological sterility, dust, electromagnetic disturbances, humidity, electrical supply, temperature, and sound and vibration levels, as appropriate to the technical activities concerned.	-	-	-	-	-
b.	Adequate storage of chemical reference standards.	-	-	-	-	-
c.	Appropriate storage of any reagents: Fireproof cabinet, separate cabinet for storage of any acids.	-	-	-	-	-
d.	Appropriate safe and secure storage of documents etc., archiving, retrieval of, maintenance of and security of data for a period of three years.	-	-	-	-	-

QA PROGRAM AND TESTING		Document Reference	Y	N	NA	Comments
27.	Sampling/sample protocols must be consistent with chapter 314-55 WAC, written and approved by the laboratory director, and must include documented training.	-	-	-	-	-
a.	Demonstrate adequacy of the chain-of-custody, including: Tracking upon receipt of sample including all personnel handling the sample and documenting condition of the sample through a macroscopic and foreign matter inspection.	-	-	-	-	-
b.	Macroscopic and foreign matter inspection - Fit for purpose test. Scientifically valid testing methodology: Either AHP monograph compliant or other third-party validation.	-	-	-	-	-

	QA PROGRAM AND TESTING	Document Reference	Y	N	NA	Comments
c.	Failed inspection of product: Tracking and reporting.	-	-	-	-	-
d.	Return of failed product documentation and tracking.	-	-	-	-	-
e.	Disposal of used/unused samples documentation.	-	-	-	-	-
f.	Sample preparation, extraction and dilution SOP.	-	-	-	-	-
g.	Demonstration of recovery for samples in various matrices (SOPs):	-	-	-	-	-
i.	Plant material - Flower;	-	-	-	-	-
ii.	Edibles (solid and liquid meant to be consumed orally);	-	-	-	-	-
iii.	Topical;	-	-	-	-	-
iv.	Concentrates.	-	-	-	-	-
28.	Data protocols.	-	-	-	-	-
a.	Calculations for quantification of cannabinoid content in various matrices - SOPs.	-	-	-	-	-
b.	Determination of the range for reporting the quantity (LOD/LOQ) data review or generation.	-	-	-	-	-
c.	Reporting of data: Certificates of analysis (CA) - Clear and standardized format for consumer reporting.	-	-	-	-	-
d.	Each test report shall include at least the following information, unless the laboratory has valid reasons for not doing so:	-	-	-	-	-
i.	A title (e.g., "Test Report" or "Certificate of Analysis");	-	-	-	-	-
ii.	The name and address of the laboratory, and the location where the tests were carried out, if different from the address of the laboratory;	-	-	-	-	-
iii.	Unique identification of the test report certificate (such as the serial number), and on each page an identification in order to ensure that the page is recognized as a part of the test report or calibration certificate, and a clear identification of the end of the test report or calibration certificate;	-	-	-	-	-
iv.	The name and address of the customer;	-	-	-	-	-
v.	Identification of the method used;	-	-	-	-	-
vi.	A description of, the condition of, and unambiguous identification of the item(s) tested;	-	-	-	-	-
vii.	The date of receipt of the test item(s) where this is critical to the validity and application of the results, and the date(s) of performance of the test or calibration;	-	-	-	-	-
viii.	Reference to the sampling plan and procedures used by the laboratory or other bodies where these are relevant to the validity or application of the results;	-	-	-	-	-
ix.	The test results with, where appropriate, the units of measurement;	-	-	-	-	-
x.	The name(s), function(s) and signature(s) or equivalent identification of person(s) authorizing the test report or certificate; and	-	-	-	-	-
xi.	Where relevant, a statement to the effect that the results relate only to the items tested or calibrated.	-	-	-	-	-
e.	Material amendments to a test report or calibration certificate after issue shall be made only in the form of a further document, or data transfer, which includes the statement: "Supplement to Test Report (or Calibration Certificate), serial number... (or as otherwise identified)," or an equivalent form of wording.	-	-	-	-	-

QA PROGRAM AND TESTING		Document Reference	Y	N	NA	Comments
f.	When it is necessary to issue a complete new test report or calibration certificate, this shall be uniquely identified and shall contain a reference to the original that it replaces.	-	-	-	-	-
g.	If the laboratory chooses to include a reference to their I-502 certification on their test report, any test results not covered under I-502 certification shall be clearly identified on the report.	-	-	-	-	-
h.	Documentation that the value reported in the CA is within the range and limitations of the analytical method.	-	-	-	-	-
i.	Documentation that qualitative results (those below the LOQ but above the LOD) are reported as "trace," or with a nonspecific (numerical) designation.	-	-	-	-	-
j.	Documentation that the methodology has the specificity for the degree of quantitation reported. Final reports are not quantitative to any tenths or hundredths of a percent.	-	-	-	-	-
k.	Use of appropriate "controls": Documentation of daily use of positive and negative controls that challenge the linearity of the curve; and/or an appropriate "matrix blank" and control with documentation of the performance for each calibration run.	-	-	-	-	-
29.	Chemical assay procedure/methodology.	-	-	-	-	-
30.	Quality Control (QC):	-	-	-	-	-
a.	Documentation of use of an appropriate internal standard for any quantitative measurements as applicable to the method.	-	-	-	-	-
b.	Appropriate reference standards for quantification of analytes, performing and documenting a calibration curve with each analysis.	-	-	-	-	-
i.	Reference materials shall, where possible, be traceable to SI units of measurement, or to certified reference materials. Internal reference materials shall be checked for accuracy as far as is technically and economically practicable.	-	-	-	-	-
ii.	The laboratory shall create and follow procedures for safe handling, transport, storage and use of reference standards and reference materials in order to prevent contamination or deterioration and in order to protect their integrity.	-	-	-	-	-
iii.	Reference materials shall have a certificate of analysis that documents traceability to a primary standard or certified reference material and associated uncertainty, when possible. When applicable, the certificate must document the specific NIST SRM® or NMI certified reference material used for traceability.	-	-	-	-	-
c.	Demonstration of calibration curve r^2 value of no less than 0.995 with a minimum of four points which bracket the expected sample concentration range.	-	-	-	-	-
i.	The calibration curve shall be verified by preparing an independently prepared calibration standard (from neat materials) or with a standard from an independent source. Acceptance criteria for the standard calibration curve and the independent calibration verification standard shall be documented.	-	-	-	-	-
ii.	Instrument calibration/standardization shall be verified each 24-hour period of use, or at each instrument start-up if the instrument is restarted during the 24-hour period, by analysis of a continuing calibration verification standard. Acceptance criteria shall be documented.	-	-	-	-	-

	QA PROGRAM AND TESTING	Document Reference	Y	N	NA	Comments
iii.	Calibration or working quantification ranges shall encompass the concentrations reported by the laboratory. Continuing calibration verification standards and continuing calibration blanks shall be analyzed in accordance with the specified test methods. Acceptance criteria shall be documented.	-	-	-	-	-
d.	Assuring the quality of test results.	-	-	-	-	-
i.	The laboratory shall have quality control procedures for monitoring the validity of tests and calibrations undertaken.	-	-	-	-	-
ii.	The resulting data shall be recorded in such a way that trends are detectable and, where practicable, statistical techniques shall be applied to the reviewing of the results.	-	-	-	-	-
iii.	This monitoring shall be planned and reviewed and may include, but not be limited to, the following:	-	-	-	-	-
A.	Regular use of certified reference materials and/or internal quality control using secondary reference materials;	-	-	-	-	-
B.	Participation in interlaboratory comparison or proficiency-testing programs;	-	-	-	-	-
C.	Replicate tests or calibrations using the same or different methods;	-	-	-	-	-
D.	Retesting or recalibration of retained items;	-	-	-	-	-
E.	Correlation of results for different characteristics of an item.	-	-	-	-	-
iv.	Quality control data shall be analyzed and, where they are found to be outside predefined criteria, planned actions shall be taken to correct the problem and to prevent incorrect results from occurring.	-	-	-	-	-
v.	The laboratory shall determine, where feasible, the accuracy and precision of all analyses performed.	-	-	-	-	-
vi.	Acceptance limits for each method shall be established based on statistical evaluation of the data generated by the analysis of quality control check samples, unless specific acceptance limits are established by the method.	-	-	-	-	-
vii.	Control charts or quality control data bases shall be used to record quality control data and compare them with acceptance limits.	-	-	-	-	-
viii.	Procedures shall be used to monitor trends and the validity of test results.	-	-	-	-	-
31.	Proficiency.	-	-	-	-	-
a.	Participation in approved PT programs for each field of testing.	-	-	-	-	-
b.	Passing PT results for two consecutive PTs.	-	-	-	-	-
c.	Documentation of investigation for all failed PTs.	-	-	-	-	-
32.	Method validation: Scientifically valid testing methodology: AHP monograph compliant, other third-party validation **or** the current version of a standard method. The following requirements are applied to other third-party validation:	-	-	-	-	-
a.	The laboratory shall validate nonstandard methods, laboratory-designed/developed methods, standard methods used outside their intended scope, and amplifications and modifications of standard methods to confirm that the methods are fit for the intended use.	-	-	-	-	-
b.	The validation shall be as extensive as is necessary to meet the needs of a given application or field of application.	-	-	-	-	-

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c. The laboratory shall record the results obtained, the procedure used for the validation, and a statement as to whether the method is fit for the intended use.	-	-	-	-	-
d. The customer shall be informed as to the method chosen.	-	-	-	-	-
e. The laboratory shall confirm that it can properly operate standard methods before introducing the tests or calibrations. If the standard method changes, the confirmation shall be repeated.	-	-	-	-	-
f. Deviation from test and calibration methods shall occur only if the deviation has been documented, technically justified, authorized, and accepted by the customer.	-	-	-	-	-
g. Validation shall be documented and include the following elements as applicable:	-	-	-	-	-
i. Minimum acceptance criteria;	-	-	-	-	-
ii. Analyte specificity;	-	-	-	-	-
iii. Linearity;	-	-	-	-	-
iv. Range;	-	-	-	-	-
v. Accuracy;	-	-	-	-	-
vi. Precision;	-	-	-	-	-
vii. Detection limit;	-	-	-	-	-
viii. Quantification limit;	-	-	-	-	-
ix. Stability of samples and reagents interlaboratory precision;	-	-	-	-	-
x. Analysis robustness;	-	-	-	-	-
xi. Presence of QC samples;	-	-	-	-	-
xii. Use of appropriate internal reference standard;	-	-	-	-	-
xiii. Daily monitoring of the response of the instrument;	-	-	-	-	-
h. Validation shall be performed for matrix extensions for each type of product tested, including data review of recovery for:	-	-	-	-	-
i. Solvent-based extract;	-	-	-	-	-
ii. CO_2 extraction or other "hash oil";	-	-	-	-	-
iii. Extract made with food grade ethanol;	-	-	-	-	-
iv. Extract made with food grade glycerin or propylene glycol;	-	-	-	-	-
v. Infused liquids;	-	-	-	-	-
vi. Infused solids;	-	-	-	-	-
vii. Infused topical preparations;	-	-	-	-	-
viii. Other oils, butter or fats.	-	-	-	-	-
33. Estimation of uncertainty of measurement.	-	-	-	-	-
a. Testing laboratories shall have and shall apply procedures for estimating uncertainty of measurement. The laboratory shall at least attempt to identify all the components of uncertainty and make a reasonable estimation, and shall ensure that the form of reporting of the result does not give a wrong impression of the uncertainty. Reasonable estimation shall be based on knowledge of the performance of the method and on the measurement scope and shall make use of, for example, previous experience and validation data.	-	-	-	-	-
b. In those cases where a well-recognized test method specifies limits to the values of the major sources of uncertainty of measurement and specifies the form of presentation of calculated results, the laboratory is considered to have satisfied this clause by following the test method and reporting instructions.	-	-	-	-	-

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c.	When estimating the uncertainty of measurement, all uncertainty components which are of importance in the given situation shall be taken into account using appropriate methods of analysis.	-	-	-	-	-
d.	Sources contributing to the uncertainty include, but are not necessarily limited to, the reference standards and reference materials used, methods and equipment used, environmental conditions, properties and condition of the item being tested or calibrated, and the operator.	-	-	-	-	-
e.	Test methods are classified as either qualitative or quantitative. Qualitative tests are defined as having nonnumerical results. Although estimation of measurement uncertainty is not needed for these tests, laboratories are expected to have an understanding of the contributors to variability of the results. For quantitative tests, laboratories shall determine measurement uncertainty using appropriate statistical techniques.	-	-	-	-	-
f.	Laboratories shall make independent estimations of uncertainty for tests performed on samples with significantly different matrices.	-	-	-	-	-
g.	Laboratories are required to re-estimate measurement uncertainty when changes to their operations are made that may affect sources of uncertainty.	-	-	-	-	-
h.	When reporting measurement uncertainty, the test report shall include the coverage factor and confidence level used in the estimations (typically k = approximately 2 at the 95% confidence level).	-	-	-	-	-
34.	Other methods.	-	-	-	-	-
a.	Validated microbiological methods fit for purpose.	-	-	-	-	-
b.	Microbial contaminants within limits as directed by WSLCB.	-	-	-	-	-
c.	Moisture content testing fit for purpose. Scientifically valid testing methodology: AHP monograph compliant, or other third-party validation.	-	-	-	-	-
d.	Solvent residuals testing fit for purpose; solvent extracted products made with class 3 or other solvents used are not to exceed 500 parts per million (PPM) per one gram of solvent based product and are to be tested.	-	-	-	-	-
e.	Any other QA/QC methods is proven to be fit for purpose.	-	-	-	-	-
35.	Laboratory records.	-	-	-	-	-
a.	Legible and in ink (or computerized system).	-	-	-	-	-
b.	Signed and dated.	-	-	-	-	-
c.	Changes initialed and dated.	-	-	-	-	-
d.	Evidence of periodic review and signed by a management representative.	-	-	-	-	-
36.	Preventive/corrective action.	-	-	-	-	-
	The laboratory shall establish a policy and procedure and shall designate appropriate authorities for implementing corrective action when nonconforming work or departures from the policies and procedures in the management system or technical operations are identified.	-	-	-	-	-
a.	The procedure for corrective action shall start with an investigation to determine the root cause(s) of the problem.	-	-	-	-	-

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b.	Where corrective action is needed, the laboratory shall identify potential corrective actions. It shall select and implement the action(s) most likely to eliminate the problem and to prevent recurrence.	-	-	-	-	-
c.	The laboratory shall document and implement any required changes resulting from corrective action investigations.	-	-	-	-	-
d.	Any PT round that leads to the nonproficient status of a laboratory shall be addressed by the corrective action process.	-	-	-	-	-
e.	The laboratory shall monitor the results to ensure that the corrective actions taken have been effective.	-	-	-	-	-
f.	When improvement opportunities are identified or if preventive action is required, action plans shall be developed, implemented and monitored to reduce the likelihood of the occurrence of such nonconformities and to take advantage of the opportunities for improvement.	-	-	-	-	-
37.	Complaints.	-	-	-	-	-
a.	The laboratory shall have a policy and procedure for the resolution of complaints received from customers or other parties.	-	-	-	-	-
b.	Records shall be maintained of all complaints and of the investigations and corrective actions taken by the laboratory.	-	-	-	-	-
c.	Test reports.	-	-	-	-	-
d.	Each test report or calibration certificate shall include at least the following information, unless otherwise justified:	-	-	-	-	-
i.	A title (e.g., "Test Report" or "Calibration Certificate");	-	-	-	-	-
ii.	The name and address of the laboratory, and the location where the tests and/or calibrations were carried out, if different from the address of the laboratory;	-	-	-	-	-
iii.	Unique identification of the test report or calibration certificate (such as the serial number), and on each page an identification in order to ensure that the page is recognized as a part of the test report or calibration certificate, and a clear identification of the end of the test report or calibration certificate;	-	-	-	-	-
iv.	The name and address of the customer;	-	-	-	-	-
v.	Identification of the method used;	-	-	-	-	-
vi.	A description of, the condition of, and unambiguous identification of the item(s) tested or calibrated;	-	-	-	-	-
vii.	The date of receipt of the test or calibration item(s) where this is critical to the validity and application of the results, and the date(s) of performance of the test or calibration;	-	-	-	-	-
viii.	Reference to the sampling plan and procedures used by the laboratory or other bodies where these are relevant to the validity or application of the results;	-	-	-	-	-
ix.	The test or calibration results with, where appropriate, the units of measurement;	-	-	-	-	-
x.	The name(s), function(s) and signature(s) or equivalent identification of person(s) authorizing the test report or calibration certificate; and	-	-	-	-	-
xi.	Where relevant, a statement to the effect that the results relate only to the items tested or calibrated.	-	-	-	-	-
38.	Periodic management review and internal audit.	-	-	-	-	-

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a. Laboratory management shall annually review its quality system and associated procedures to evaluate continued adequacy. This review shall be documented.	-	-	-	-	-
b. Periodically and in accordance with a predetermined schedule perform an internal audit of laboratory operations to verify compliance to the GLP checklist.	-	-	-	-	-

[Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 17-12-032, § 314-55-103, filed 5/31/17, effective 8/31/17; WSR 16-11-110, § 314-55-103, filed 5/18/16, effective 6/18/16; WSR 15-11-107, § 314-55-103, filed 5/20/15, effective 6/20/15.]