

Electronic Submittal Requirements for Water/Sediment Chemistry Analyses CHECKLIST

Item No.	Component Name	Reference Table / Worksheet	Step	Instructions	Notes
1.00 SAMPLE INFORMATION					
1A	Coalition/Third Party Samples (Grab, field duplicates, field blanks, matrix spikes).	ChemResults	1)	Clear all filters and refresh all pivot tables.	
1A.01	StationCode is correct format and within Stationlookup lists.	ChemResults	2)	Select the filter drop down menu for StationCode. Exclude '000NONPJ' and 'LABQA' from the selection.	
			3)	View the StationCode column and ensure that those cell entries match the data in the CEDEN Lookup List.	Reference Coalition eQAPP for all applicable codes.
1A.02	SampleDate is formatted as dd/mmm/yyyy (Note: in text box looks like mm/dd/yyyy).	ChemResults	4)	Verify that the dates are formatted as dd/mmm/yyyy (Note: in text box looks like mm/dd/yyyy).	
1A.03	ProjectCode is within the ProjectCodeLookup list.	ChemResults	6)	View the ProjectCode column and ensure that those cells entries match the data in the CEDEN Lookup List.	Reference Coalition eQAPP for all applicable codes.
1A.04	EventCode = "WQ".	ChemResults	7)	Verify that EventCode data is "WQ".	If samples were collected for water quality only, code = "WQ". For samples collected for bioassessment or tissue on top of any other analysis, the codes = "BA" or "TI" respectively.
1A.05	ProtocolCode is in Protocollookup list.	ChemResults	8)	View the ProtocolCode column and ensure that those cell entries match the data in the CEDEN Lookup List.	Reference Coalition eQAPP for all applicable codes.
1A.06	AgencyCode is within the AgencyCodeLookup list and is the Agency that collected the sample.	ChemResults	9)	View the AgencyCode column and ensure that those cell entries match the data in the CEDEN Lookup List.	Reference Coalition eQAPP for all applicable codes.
1A.07	LocationCode = "Bank", "MiddleChannel", or "Thalweg".	ChemResults	10)	Verify that the LocationCode entries are "Bank", "MiddleChannel", or "Thalweg" and that they match the respective field sheets and chain of custody (COC) forms.	
1A.08	Collection time is formatted as xx:xx (24 hour) (Note: text box looks like xx:xx PM or AM).	ChemResults	11)	Verify that the CollectionTime data is entered as xx:xx (24 hour) and has identical formatting.	All cells should follow one format (numeric or text).
1A.09	CollectionMethodCode for Environmental Samples = "Water_Grab" or "Sed_Grab"; for field blanks = "Not Applicable".	ChemResults	12)	Verify that the CollectionMethodCode data is "Water_Grab", "Sed_Grab", or "Not Applicable".	Reference Coalition eQAPP for all applicable codes. Environmental samples include Field Duplicates and Matrix Spike samples. Apply "Not Applicable" to FieldQA samples such as FieldBlanks, EquipmentBlanks, etc.
1A.10	SampleTypeCode = "Grab", "FieldBlank", "Integrated" or "MS1".	ChemResults	13)	Verify that the SampleTypeCode data is "Grab", "FieldBlank", "Integrated" or "MS1".	
1A.11	Replicate = "1", "2" or "3" ("2" and "3" for field duplicates).	ChemResults	14)	Verify that all normal environmental samples have a Replicate of "1" and all field duplicates have a replicate of "2" or "3". If a SampleTypeCode of "FieldBLDup" is used, then the Replicate should be "1".	Often, sample IDs indicate where replicates have been collected and can be used to ensure replicates are assigned correctly. Staff should not utilize resources verifying if replicate codes are applied correctly unless they are easily identified through the pivot review or loading processes.
1A.12	CollectionDepth matches Chain of Custody or Default of "0.1" for Environmental Samples, and "-88" for Field blanks	ChemResults	15)	Verify that the applied CollectionDepth is appropriate for the SampleTypeCode and matches the field sheet or COC.	Default values are 0.1 m for subsurface water samples and 2 cm for sediment samples.
1A.13	UnitCollectionDepth = "m" or "cm" (for sediment).	ChemResults	16)	Verify that the UnitCollectionDepth data is "m" for water and "cm" for sediment.	
1A.14	"FieldDup" (Grab rep 2 in most cases) samples have the same Sample information, i.e. sample date, time, depth etc.	PT_1A.14	17)	Verify that samples with Replicate "2" have identical sample information across the pivot table.	
1B Laboratory Quality Assurance Samples (LabBlank or LCS or CRM)					
1B.01	StationCode= "LABQA".	ChemResults	2)	Select the filter drop down menu for StationCode. Exclude all StationCodes except for "LABQA" from the selection.	
1B.02	Sample date should match the preparation date, extraction date, or analysis date; whichever comes first and is applicable. Formatted as dd/mmm/yyyy (Note: in text box looks like mm/dd/yyyy).	ChemResults	3)	Verify that the sample date for each analyte matches the preparation date, extraction date, or analysis date; whichever comes first and is applicable.	
1B.03	ProjectCode = "Not Applicable".	ChemResults	4)	Verify that the ProjectCode data is "Not Applicable".	
1B.04	EventCode = "WQ".	ChemResults	5)	Verify that the EventCode data is "WQ".	
1B.05	ProtocolCode = "Not Applicable".	ChemResults	6)	Verify that the ProtocolCode data is "Not Applicable".	
1B.06	AgencyCode is within AgencyCodeLookup list and is the Laboratory that created the sample.	ChemResults	7)	View the AgencyCode column and ensure that those cell entries match the data in the CEDEN Lookup List.	
1B.07	LocationCode = "Not Applicable".	ChemResults	8)	Verify that the LocationCode data is "Not Applicable".	
1B.08	Collection time = "0:00". When multiple controls are performed, but are not duplicates, a 15 min time interval should be used. (e.g. 0:15, 0:30). Formatted as xx:xx (24 hour) (Note: in text box looks like xx:xx PM or AM).	ChemResults	9)	Verify that the CollectionTime data is entered as xx:xx (24 hour) and has identical formatting.	
1B.09	CollectionMethodCode = "Not Applicable".	ChemResults	10)	Verify that the CollectionMethodCode data is "Not Applicable".	
1B.10	SampleTypeCode = "LabBlank", "LCS" or "CRM".	ChemResults	11)	Verify that the SampleTypeCode data is "LabBlank", "LCS" or "CRM".	
1B.11	Replicate = "1".	ChemResults	12)	Verify that the Replicate data is "1".	
1B.12	CollectionDepth = "-88".	ChemResults	13)	Verify that the CollectionDepth data is "-88".	
1B.13	UnitCollectionDepth = "m" or "cm" (for sediment).	ChemResults	14)	Verify that the UnitCollectionDepth data is "m" for water and "cm" for sediment.	
1C Non Project Samples (MS or duplicates used from other sample sets for QA)					
1C.01	StationCode = "000NONPJ".	ChemResults	2)	Select the filter drop down menu for StationCode. Exclude all StationCodes except for "000NONPJ" from the selection.	
1C.02	Sample Date should precede or match the preparation date, extraction date, or analysis date; whichever comes first and is applicable. Formatted as dd/mmm/yyyy (Note: in text box looks like mm/dd/yyyy).	ChemResults	3)	Verify that the sample date for each analyte matches the preparation date, extraction date, or analysis date; whichever comes first and is applicable.	
1C.03	ProjectCode = "Not Applicable".	ChemResults	4)	Verify that the ProjectCode data is "Not Applicable".	
1C.04	EventCode = "WQ".	ChemResults	5)	Verify that the EventCode data is "WQ".	
1C.05	ProtocolCode = "Not Applicable".	ChemResults	6)	Verify that the ProtocolCode data is "Not Applicable".	
1C.06	AgencyCode = "Not Recorded".	ChemResults	7)	Verify that the AgencyCode data is "Not Recorded".	
1C.07	LocationCode = "Not Recorded".	ChemResults	8)	Verify that the LocationCode data is "Not Recorded".	
1C.08	Collection time = "0:00". When multiple samples are measured, but are not duplicates, a 15 min time interval should be used. (e.g. "0:15", "0:30"). Formatted as xx:xx (24 hour) (Note: in text box looks like xx:xx PM or AM).	ChemResults	9)	Verify that the CollectionTime data is entered as xx:xx (24 hour) and has identical formatting.	
1C.09	CollectionMethodCode = Not Recorded.	ChemResults	10)	Verify that the CollectionMethodCode data is "Not Recorded".	
1C.10	SampleTypeCode = "MS1" (for matrix spikes. MS = a lab replicate of 1, MSD = lab replicate of 2) or "Not Recorded" (For lab duplicate).	ChemResults	11)	Verify that the SampleTypeCode data is "MS1" or "Not Recorded".	
1C.11	Replicate = "1".	ChemResults	12)	Verify that the Replicate data is "1".	
1C.12	CollectionDepth = "-88".	ChemResults	13)	Verify that the CollectionDepth data is "-88".	
1C.13	UnitCollectionDepth = "m" or "cm" (for sediment).	ChemResults	14)	Verify that the UnitCollectionDepth data is "m" for water and "cm" for sediment.	
2.00 ANALYSIS INFORMATION					
2.01	LabBatch conforms to batch naming guidelines.	ChemResults	1)	Clear all filters.	
		ChemResults	2)	Verify that each LabBatch conforms to naming guidelines.	See File and Batch Naming Convention.
	Analysis Date Formatted as dd/mmm/yyyy hh:mm. AnalysisDate for		3)	Verify that the AnalysisDate column is formatted as dd/mmm/yyyy hh:mm (24 hours).	For bacteria, only the AnalysisDate should be reported and that date should be the day/time the samples were placed in the

Item No.	Component Name	Reference Table / Worksheet	Step	Instructions	Notes
2.02	bacteria/pathogen samples is the date and time that the samples are put into the incubator not when counts are made or pulled from incubator. The preparation method and date columns should reflect the addition of any pre-processing agents such as antifoam, buffering medium, or de-chlorination.	ChemResults	4)	For bacteria samples, filter on the "UnitName" column and exclude all units except for "MPN/100mL" from the selection. Ensure that the analysis date is less than 24 hours from the same date. Clear all filters.	incubator. If the PrepPreservationDate does not have a null value, replace the AnalysisDate with the PrepPreservationDate and place a null value for the PrepPreservationDate. A verification with the hardcopy is required when performing this fix.
2.03	Matrix Name is appropriate for SampleType. LABQA = "blankwater" (water analysis), blankmatrix (sediment analysis). Environmental samples = "samplewater" or "sediment" (Grab, Integrated, MS1) or "blankwater" (FieldBlank).	ChemResults	5)	Filter StationCode and include only 'LABQA'. Then verify MatrixName column is 'blankwater' (for water analysis) or 'blankmatrix' (for sediment analysis). Clear all filters.	
			6)	Filter StationCode and exclude 'LABQA'. Then verify MatrixName column is 'samplewater', 'sediment' (SampleTypeCode of grab, integrated, or MS1) or 'blankwater' (SampleTypeCode of FieldBlank). Clear all filters.	
2.04	Method Name is within MethodLookup list.	ChemResults	7)	View the MethodName column and ensure that those cell entries match the data in the CEDEN Lookup List.	
2.05	Analyte Name within AnalyteLookup.	ChemResults	8)	View the Analyte Name column and ensure that those cell entries match the data in the CEDEN Lookup List.	
2.06	Fractions are appropriate for the Analyte, Units and Preparation reported (a preparation of "Filtered" usually results in a fraction of "dissolved", etc.).	ChemResults	9)	Verify that the FractionName is correct for the given Analyte, Units and Preparation reported.	Staff will utilize the project's eQAPP when verifying that each AnalyteName has the correct FractionName.
2.07	UnitName is appropriate for analysis and match LookupList.	ChemResults	10)	View the UnitName column and ensure that those cell entries match the data in the CEDEN Lookup List.	
2.08	LabReplicate is appropriate. LabReplicate = "1" for all primary samples. LabReplicate = "2" for MatrixSpike Duplicate and laboratory performed duplicates (not field duplicates).	ChemResults	11)	View the LabReplicate column and verify that all normal environmental samples and field duplicates have a LabReplicate of "1". All laboratory duplicates (MSD or LCSD) will have a LabReplicate of "2".	
3.00	RESULTS AND CODING				
3.01	Result is a numeric value with no symbols or text attached to the value.	ChemResults	1)	Verify that the Result column consists of numeric entries only.	
3.02	All regular measured values have a blank or "=" ResQualCode.	ChemResults	2)	For all regular values, verify that the ResQualCode column entries values are blank or "=".	Non-regular measured values consists of non-detects, detected not quantified, and failed results.
3.03	Non-Detect Results = negative the method detection limit (MDL)(e.g. -0.2), and a ResultQualCode of "ND".	ChemResults	3)	For non-detects, verify that the Result column entries are negative the MDL (-MDL).	
			4)	For non-detects, verify that the ResQualCode column entries are "ND".	
3.04	Results between RL and MDL have a ResultQualCode of "DNQ" (Detected not quantified).	ChemResults	5)	For detected not quantified results, verify that the Result column entries are values between the RL and MDL.	
			6)	For detected not quantified results, verify that the ResQualCode column entries are "DNQ".	
3.05	Failed Results = "-88" (Default null) and a ResultQualCode of "NR". An appropriate QACode must be included as well as comments within the LabResultComments column.	ChemResults	7)	For failed results, verify that the Result column entries are "-88".	
			8)	For failed results, verify that the ResQualCode column entries are "NR".	
			9)	For failed results, verify that the QACode entry is appropriate and listed on the CEDEN Lookup List.	
			10)	For failed results, verify that the LabResultComments entry details the reason for the failed results.	
3.06	Bacterial analysis results that exceed the upper limit have ">" ResQualCode symbol used to communicate the upper method detection level and -MDL with a ResQualCode of "ND" to communicate the lower detection level.	ChemResults	11)	Filter on the UnitName column and exclude all units except for "MPN/100mL" from the selection. Then verify that all Result entries that exceed the upper level have a ResQualCode of ">". All entries that exceed the lower detection level have a Result entry of negative the MDL and a ResQualCode entry of "ND". Clear all filters.	
3.07	Surrogates have an MDL and RL of "-88".	ChemResults	12)	Filter on the UnitName column and exclude all units except for "% recovery" from the selection. Then view the MDL column and RL column to ensure that all values are "-88". Clear all filters.	
3.08	If no MDL is listed and the record is not for a surrogate, then a QACode of "NMDL" must be applied.	ChemResults	13)	Filter on the MDL column and exclude all values except for "-88". Then view the AnalyteName column and ensure that all entries are surrogates. Any non-surrogate entry that has a MDL of -88 receives a QACode of "NMDL".	
3.09	The RL must be greater than the MDL.	ChemResults	14)	Use the RL>=MDL? column within the ChemResults Worksheet. Fill in all rows of the column 'AP' with the equation in cell 'AP2' but with their respective row cells (ie cell AP3 should be '=AD3>=AC3', cell AP4 should be '=AD4>=AC4', etc.). After all cells for column AP are filled, filter on the RL>=MDL? column and exclude 'True' from the selection. Verify that all 'RL' values are greater than 'MDL' values. Clear all filters and delete column AP when done.	The RL>=MDL? column and its contents were added by the ILRP DMT for the purpose of performing this check. The column is not a requirement for the chemistry data submission.
3.10	QACodes are within the QACodeLookup list and applied appropriately. If multiple codes are applied, they are applied in alphabetical order with commas separating them (and no spaces). Example: "D,EUM,IL,NMDL".	ChemResults	15)	View the QACodes column and verify that all codes match the data in the CEDEN Lookup List. If multiple codes are applied, they are applied in alphabetical order with commas separating them (and no spaces).	
4.00	SAMPLE PROCESSING INFORMATION				
4.01	A default of "1" is used for samples not diluted. If dilution occurred, then the factor is reported and a QACode of "D" is applied.	ChemResults	1)	View the DilutionFactor column and ensure that all cells are integers.	
			2)	Filter on the DilutionFactor column and exclude all values of '1'. Then view the QACodes column and verify that all rows where a dilution occurred have a QACode of 'D' applied. Clear all filters.	
4.02	All MS, LCS, CRM or Surrogate samples have an expected value.	ChemResults	3)	Filter on the SampleTypeCode column and exclude all entries except for 'MS', 'LCS', and 'CRM'. Then view the ExpectedValue column and verify that those cells contains a numeric value. Clear all filters.	
			4)	Filter on the UnitName column and exclude all units except for '% recovery'. Then view the ExpectedValue column and verify that those cells contains a numeric value. Clear all filters.	
4.03	PrepPreservationName is within the lookup list.	ChemResults	5)	View the PrepPreservationName column and ensure that those cell entries match the data in the CEDEN Lookup List.	
4.04	PrepPreservationDate is formatted as dd/mmm/yyyy hh:mm.	ChemResults	6)	View the PrepPreservationDate column and ensure that those cell entries are formatted as dd/mmm/yyyy hh:mm.	
4.05	If no preparation was done, the date should = 01/Jan/1950 00:00 (the default value for none).	ChemResults	7)	View the PrepPreservationDate column and ensure that all entries are dates formatted as dd/mmm/yyyy hh:mm. If no preparation was done, the date should be '01/Jan/1950 00:00'.	

Item No.	Component Name	Reference Table / Worksheet	Step	Instructions	Notes
4.06	DigestExtractMethod is within the lookup list.	ChemResults	8)	View the DigestExtractMethod column and ensure that those cell entries match the data in the CEDEN Lookup List.	
4.07	DigestExtractDate is formatted as dd/mmm/yyyy hh:mm.	ChemResults	9)	View the DigestExtractDate column and ensure that those cell entries are formatted as dd/mmm/yyyy hh:mm.	
4.08	If no digestion was done, the date should = "01/Jan/1950 00:00" (the default value for none).	ChemResults	10)	View the DigestExtractDate column and ensure that all entries are dates formatted as dd/mmm/yyyy hh:mm. If no preparation was done, the date should be null, e.g. '01/Jan/1950 00:00'.	
5.00	LAB RESULT COMMENTS				
5.01	All LCS and MS1 have a PR (Percent Recovery) recorded.	ChemResults	1)	Filter on the SampleTypeCode column and exclude all entries except for 'LCS' and 'MS1'. Then view the LabResultComments and verify that every row has a PR recorded. Clear all filters.	
5.02	LabReplicate of 2 have RPD (Relative Percent Difference) recorded (Excluding Surrogate samples)	ChemResults	2)	Filter on the LabReplicate column and exclude all values except for '2'. Then filter on the UnitName column and exclude only '% recovery'. View the LabResultComments and verify that every row has a RPD recorded. Clear all filters.	If the project results are "ND" or under the MDL then they are not calculated and are given an "RPD NA" within the LabResultComments column.
5.03	"FieldDup" (Grab rep 2 in most cases) have RPD recorded (Excluding Surrogate samples).	ChemResults	3)	Filter on the Replicate column and exclude all values except for '2'. Then filter on the UnitName column and exclude only '% recovery'. View the LabResultComments and verify that every row has a RPD recorded. Clear all filters.	
5.04	The correct format for PR and RPD was applied i.e. use PR xx or RPD xx or when in combination, ex for a MSD, use PR xx, RPD xx (e.g. PR 99, RPD 5).	ChemResults	4)	View the LabResultComments column and verify that the PR and RPD calculations are in the correct format.	For the LabResultComments column, PR and RPD calculations should be listed before any comments associated with the sample.
6.00	BATCH WORKSHEET				
6.01	Batch names match those within the ChemResults worksheet.	ChemResults & LabBatch	1)	View and verify that the LabBatch column from both the ChemResults worksheet and LabBatch worksheet contain the same names.	Use the Excel 'match' function.
6.02	Laboratory Agency is the laboratory that performed the analysis and is within the AgencyLookup lists.	LabBatch	2)	View the LabAgencyCode column and ensure that those cell entries match the data in the CEDEN Lookup List.	
6.03	Submission code is within the LabSubmissionLookup and appropriately applied. (See Section 7 below)	LabBatch	3)	View the LabSubmissionCode column and ensure that those cell entries match the data in the CEDEN Lookup List and applied appropriately.	
6.04	Submitting Agency is the Coalition/Third-Party submitting data to the Waterboard and is within the AgencyLookup lists.	LabBatch	4)	View the SubmittingAgencyCode column and ensure that those cell entries match the data in the CEDEN Lookup List.	
6.05	LabBatchComments are included when appropriate (see Section 7 below).	LabBatch	5)	Filter on the LabSubmissionCode column and exclude 'A' from the selection. Then view the LabBatchComments column and ensure that those cells contain comments detailing the QACodes applied to that batch. Clear all filters.	
7.00	ACCURACY AND QUALITY ASSURANCE/CONTROL REVIEW				
7.01	Batches are grouped by method and preparation/digestion/analysis date.	PT_7.01	1)	View the pivot table on PT_7.01 worksheet and ensure that each batch is grouped appropriately by method and preparation / digestion / analysis date.	
			2)	Verify that there is a single digest/extract date for a given batch. If not then split the batch into multiple batches, based on digest/extract date.	
			3)	If there are no digest/extract dates in the batch then view the batch in the pivot table and ensure that the batch has all of its analysis done within 24 hours.	Any batch that exceed the 24 hour time frame should be inspected. A LabSubmissionCode of 'QI' should be used if flag is needed.
7.02	Units are consistent within a batch (excluding Surrogate %).	PT_7.02	4)	Filter on the UnitName column of the pivot table and exclude '% recovery'. Then view and ensure that all batches have identical units within the given batch. Clear all filters.	
7.03	SampleDate, PrepPreservationDate, DigestExtractionDate and AnalysisDate are sequential or make sense for the method.	PT_7.03-4	5)	View the pivot table and ensure that all dates for each batch are sequential or appropriate for the method.	
7.04	Each batch has been evaluated and flagged for appropriate Holding Time. If the holding time was exceeded, all the samples affected are flagged with the QACode of "H" and LabBatchComment is included in the LabBatch worksheet indicating the issue.	PT_7.03-4	6)	View each batch in the pivot table and ensure that all analytes within each batch have met their respective holding times or are flagged appropriately with a QACode of H.	Any flags applied by the ILRP DMT should always have a 'V' placed in front of it, such as 'VH' for holding time violation. To determine the holding times, use the following equations: PrepPreservationDate - SampleDate, DigestExtractDate - SampleDate, AnalysisDate - SampleDate, AnalysisDate - PrepPreservationDate, SampleDate - DigestExtractDate.
7.05	Each LCS or CRM has been evaluated for recovery within the allowable range. Those that fell outside of that range have been flagged with a QACode of EUM.	ChemResults	7)	Filter on the SampleTypeCode column and exclude all entries except for 'LCS' and 'CRM'. Then view the LabResultComments column and verify that all PR values meet the QAPP requirements. Clear all filters.	Any flags applied by the ILRP DMT should always have a 'V' placed in front of it, such as 'VEUM'.
7.06	Each Matrix Spike (MS1) has been evaluated for recovery within the allowable range. Those that fell outside of that range have been flagged with a QACode of GB.	ChemResults	8)	Filter on the SampleTypeCode column and exclude all entries except for 'MS1'. Then view the LabResultComments column and verify that all PR values meet the QAPP requirements. Clear all filters.	Any flags applied by the ILRP DMT should always have a 'V' placed in front of it, such as 'VGB'.
7.07	Each Surrogate has been evaluated for recovery within the allowable range. Those that fell outside of that range and ALL applicable analytes for that sample have been flagged with a QACode of GN.	ChemResults	9)	Filter on the UnitName column and exclude all entries except for '% recovery'. Then view the Result column and verify that all values meet the % recovery (PR) QAPP requirements. Clear all filters.	Any flags applied by the ILRP DMT should always have a 'V' placed in front of it, such as 'VGN'.
7.08	Each Blank (FieldBlank, LabBlank, TravelBlank, FilterBlank) has been evaluated for allowable detection levels. Those that exceeded that level are flagged with IP or IPRL (when level exceeds the RL).	ChemResults	10)	Filter on the SampleTypeCode column and exclude all entries except for 'FieldBlank', 'LabBlank', 'TravelBlank' and 'FilterBlank'. Then filter on the UnitName column and exclude '% recovery'. View the Result column and verify that all values are lower than their requirement for the respective analyte based on the QAPP.	All blanks should have a ResQualCode of 'ND' if the QAPP requirement is that the results are less than the MDL.
7.09	Each Lab Duplicate RPD has been evaluated for the allowable limit. Those that exceeded the limit are flagged with IL.	ChemResults	11)	Filter on the LabReplicate column and exclude '1'. View the LabResultComments and ensure that all RPDs meet the QAPP requirements (usually <= 25). Clear all filters.	Any flags applied by the ILRP DMT should always have a 'V' placed in front of it, such as 'VIL'.
7.10	Each Field Duplicate RPD has been evaluated for the allowable limit. Those that exceeded the limit are flagged with FDP.	ChemResults	12)	Filter on the Replicate column and exclude '1'. View the LabResultComments and ensure that all RPDs meet the QAPP requirements (usually <= 25). Clear all filters.	Any flags applied by the ILRP DMT should always have a 'V' placed in front of it, such as 'VFDP'.
7.11	Each Laboratory Batch has been evaluated for the correct amount of QC required by the QAPP. If quality control samples are missing from the batch, a LabSubmissionCode of "QI" is applied within the LabBatch worksheet and LabBatchComments are included detailing which samples are missing. A LabSubmissionCode of "QI" supersedes a code of "A,MD" due to the impact of missing information in the batch.	PT_7.11	13)	View each batch in the pivot table and ensure that each batch has the correct amount of QC required by the QAPP. Each empty cell represents the missing sample type or lab replicate. Refer to the QAPP to ensure that no QC is missing.	From the pivot table, fill the empty cells with a color to help locate and keep track of empty cells.
7.12	Each batch has been evaluated for QACodes applied to records within the batch. If any QACodes were applied, then, within the LabBatch worksheet, a LabSubmission Code of "A,MD" or other appropriate code is applied and LabBatchComments detail each code applied in general terms. If no QACodes were applied, then a	PT_7.12 & LabBatch	14)	View each batch in the pivot table and ensure that each batch with at least one QACode has a LabSubmissionCode of 'A,MD' (LabBatch worksheet).	

Item No.	Component Name	Reference Table / Worksheet	Step	Instructions	Notes
	each code applied in general terms. If no QACodes were applied, then a LabSubmissionCode of "A" is applied.		15)	View each batch in the pivot table and ensure that the QACodes listed for the given batch are communicated in the LabBatchComments of the LabBatch worksheet.	
8.00	QUALITY ASSURANCE COMPLETENESS ASSESSMENT *NEW*				
8.01	Batch Completeness: What was the percentage of completeness achieved by this lab for this submission period and did it reach the completeness goal of 90%? (Yes = A, No= U) From the LabBatch tab, add up the total number of batches. Add up the total number of incomplete batches (batches with QI LabSubmission Code and/or VAC,VQI BatchVerification/codes). Divide the number of incomplete batches by the total number of batches and multiply by 100. Subtract this value from 100 to get answer.	LabBatch	1)	From the LabBatch worksheet, add up the total number of batches. Add up the total number of incomplete batches (batches with QI LabSubmission Code and VAC,VQI BatchVerification/codes). Divide the number of incomplete batches by the total number of batches and multiply by 100. Subtract this value from 100 to get answer.	
8.02	Lab Accuracy Completeness: What was the percentage of completeness achieved by this lab for this submission period and did it reach the completeness goal of 90%? (Yes = A, No= U) Using a Pivot of the results, add up the total number of LCSs performed. Add up the total number of LCSs that were flagged for falling outside of the acceptable range of percent recovery (EUM/VEUM). Divide the number of EUMs by the total number of LCSs and multiply by 100. subtract this value from 100 to get answer.	PT_8.02-3	2)	Using the pivot table, add up the total number of LCSs performed. Add up the total number of LCSs that were flagged for falling outside of the acceptable range of percent recovery (EUM/VEUM). Divide the number of EUMs by the total number of LCSs and multiply by 100. Subtract this value from 100 to get answer.	
8.03	Lab Precision Completeness: What was the percentage of completeness achieved by this lab for this submission period and did it reach the completeness goal of 90%? (Yes = A, No= U) Using a Pivot of the results, add up the total number of Lab duplicates performed. Add up the total number of lab replicates that were flagged for falling outside of the acceptable range of relative percent difference (IL/VIL). Divide the number of ILs by the total number of lab replicates and multiply by 100. subtract this value from 100 to get answer.	PT_8.02-3	3)	Using the pivot table, add up the total number of Lab duplicates performed. Add up the total number of lab replicates that were flagged for falling outside of the acceptable range of relative percent difference (IL/VIL). Divide the number of ILs by the total number of lab replicates and multiply by 100. Subtract this value from 100 to get answer.	