

Updating Excel Templates from MSC-LIMS v4 to MSC-LIMS v5 & J Street LIMS v6

You must update your custom Excel templates as part of migrating to a new version of the LIMS software.

This is a technical process that requires careful attention to detail and experience editing VBA code. If you are not comfortable editing VBA code, we highly recommend working with J Street LIMS support to upgrade your custom Excel templates.

The exact steps may vary among templates. The goal of this document is to provide all the possible changes that MAY be necessary to upgrade a custom Excel template. Not all steps will be required for every template.

A small number of highly-customized templates may require more extensive changes beyond what is outlined here. This applies to only 1-2% of templates based on our experience with other customers. Such work would be billed hourly, but only after getting your approval first.

If you have Full System Licenses to MSC-LIMS and have customized your LIMS database or application (outside of Excel templates), your templates will likely need additional changes beyond what's included in this document. If this applies to you and you have not already, contact J Street LIMS support for further assistance.

When upgrading MSC-LIMS Excel templates from MSC-LIMS v4 to J Street LIMS v6, some of the changes will depend on the version of Microsoft Access you will be using. This document will cover the most common changes that are required in Access 2010, then again for Access 365. In complex templates you may have to copy VBA code from the example templates that are added to your system when you install a newer LIMS application. To determine whether any VBA code in your custom templates must be updated, please reference the chart in the "Example Templates" section below.

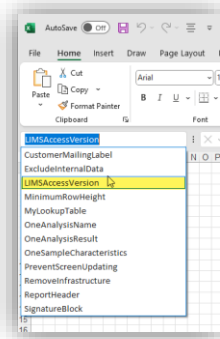
If copying VBA code from example templates is required, J Street recommends either installing the upgraded application or downloading the file "[J Street LIMS v6 Excel Example Templates.zip](#)" from our J Street LIMS Knowledge Base in order to access these example templates. In extreme cases it may be easier to copy your 'report worksheet' to the example template and adjust your field names to match the newer version.

IMPORTANT: Any updates made to your templates will make them incompatible with your current MSC-LIMS software. Before making any changes to your templates or the example templates, make copies of each template you're working with and save them to a folder you can work out of, while preserving the original templates.

Find LIMS Access Version

Open your first template that needs to be updated. "LIMSAccessVersion" is a named range for the Access Version on the Settings worksheet. To quickly find if there is a version named range, click the down arrow in the Name Box at the top left of the screen. Scan down the list until you find LIMSAccessVersion. When you select it, Excel will take you to the named cell.

***NOTE:** If "LIMSAccessVersion" does not appear in the Name Box, then there is nothing to update for this step and you may proceed to the "Update References" step below.*

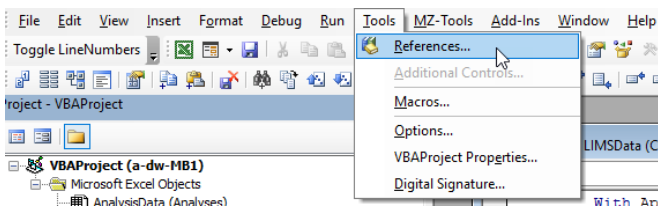


LIMSAccessVersion													
	A	B	C	D	E	F	G	H	I	J	K	L	M
1	LIMSAccessVersion:									14			
2	RemoveInfrastructure:									Yes			
3	PreventScreenUpdating:									Yes			
4	Exclude "Internal Data":									Yes			
5	Minimum Row Height:									15			
6	SignatureBlock:												
7													

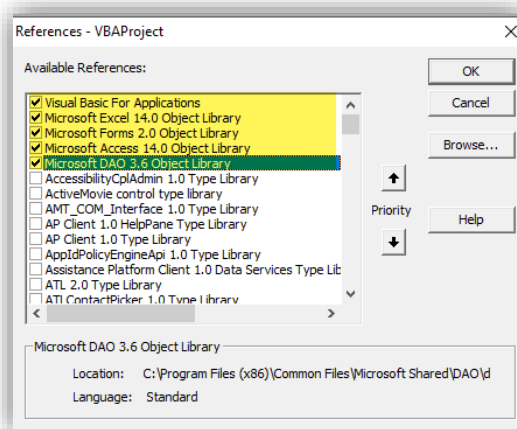
- ***If Access 2010: No change if the version number is 14.
- ***Access 365: Change the version number from 14 to 16.

Update References

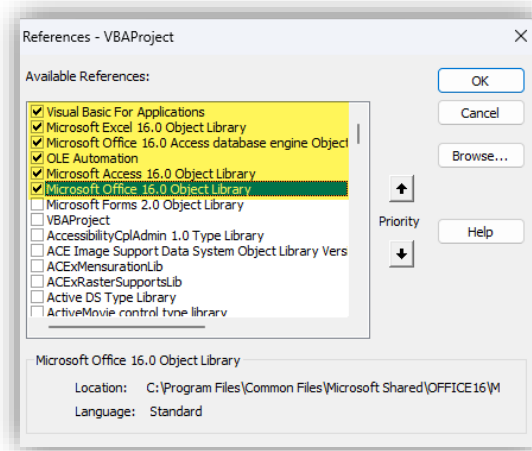
References are code libraries that Excel pulls code from for specific uses. If you are not in the code window, press Alt + F11 to go to the code window. Once there, from the menu click Tools > References... to view the current references. To remove a reference uncheck the box in front of the reference. To add a reference scroll down the list of references and check the box in front of the reference to be added.



For Access 2010 the references should look like:



For Access 365 the references should look like:



Add new VBA Function: WhereFormUserComputer()

Open the VBA Editor by pressing Alt + F11. Double-click on the LIMSDData worksheet from the Project Explorer on the left side of the code window.

Copy and paste the following code at the bottom of the LIMSDData code module (the main code window):

```
Public Function WhereFormUserComputer(db As Database, Optional sFormName As String = "") As String

    ' Build a WHERE clause for table SampleQuerySelect

    On Error GoTo WhereFormUserComputerErr
    Dim rs As Recordset
    Dim sSQL As String, sWhere As String

    sSQL = "SELECT CurrentLimsUser() AS UserName, ComputerName() AS ComputerName FROM SystemConfiguration;"
    Set rs = db.OpenRecordset(sSQL, dbOpenSnapshot)
    If rs.BOF And rs.EOF Then
        WhereFormUserComputer = ""
    Else
        sWhere = ""
        If Len(sFormName) > 0 Then
            sWhere = "FormName = '" & sFormName & "' AND "
        Else
            sWhere = "FormName = '" & IIf(InStr(db.Name, "LimsMapi"), "LimsMapi", "frmSampleSummarySetup") & "' AND "
        End If
        sWhere = sWhere & "UserName = '" & rs!UserName & "' AND ComputerName = '" & rs!ComputerName & "'"
        WhereFormUserComputer = sWhere
    End If
    Exit Function

WhereFormUserComputerErr:
    MsgBox "Error " & Err.Number & " in WhereFormUserComputer: " & Err.Description, vbCritical, ActiveWorkbook.Name
    Exit Function

End Function
```

Check for VBA Code That May Need Updating

When migrating from v4 to v5/v6, search the VBA code from the Excel template's LIMSDData worksheet. It is highly important that you test your custom Excel templates with your upgraded LIMS software before moving to production, as below is not an exhaustive list of VBA Code that may need to be updated. If you encounter issues or error messages during testing, please contact J Street LIMS Support so we can evaluate if there is additional VBA Code that may need updating. Because custom templates have often been modified by LIMS clients, we can't account for all possible scenarios in these instructions.

If you have Full System Licenses to MSC-LIMS and have customized your LIMS database or application (outside of Excel templates), your templates will likely need additional changes beyond what's included in this document. If this applies to you and you have not already, contact J Street LIMS support for further assistance.

IMPORTANT: If you do have to update the VBA Code in your template, you should recompile after EACH step by clicking Debug > Compile VBAProject from the Main Menu. This will alert you to any typos or issues with your copied code. **ALSO**, if you copy and paste from this Word document, you will have to replace the double quotes, since Word's quote formatting will cause an error.

To open the VBA editor, press Alt + F11. Change the following in the VBA code:

Add dbSeeChanges to all OpenRecordSet Method Calls

Change: *Set rs = db.OpenRecordSet (sSQL, dbOpenDynaset, dbOpenSnapShot)*

To: *Set rs = db.OpenRecordSet (sSQL, dbOpenDynaset, dbOpenSnapShot, dbSeeChanges)*

Then recompile. From the menu, select Debug > Compile VBAProject.

Replace WHERE SampleID IN... with WhereFormUserComputer

Change: *"WHERE Sample.SampleID IN (SELECT SampleID FROM sysSampleSummarySelect WHERE Selected=True) "* & *sInternalData & _*

To: *WHERE "* & *WhereFormUserComputer(db) & sInternalData & _*

Then add Rpt to qrySampleSummaryAnalysis in the FROM clause

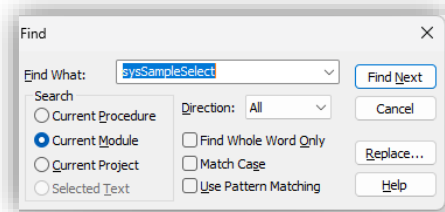
Change: *"FROM qrySampleSummaryAnalysis "* & *_*

To: *"FROM qrySampleSummaryAnalysisRpt "* & *_*

Then recompile. From the menu, select Debug > Compile VBAProject.

Change sysSampleSelect to SampleQuerySelect:

Either from the Menu Edit > Find or pressing Ctrl + F. Enter *sysSampleSelect* in the Find What text box and click **Find Next**:

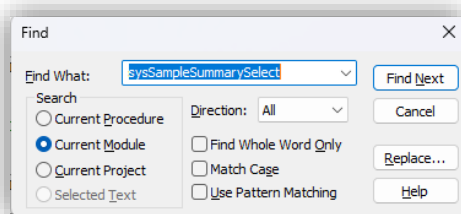


```
sSQL =  
"SELECT SampleID " & _  
"FROM sysSampleSelect " & _  
"WHERE FormName = 'frmResultsByAnalyteSetup' AND Selected=True " & _  
"ORDER BY SampleID;"
```

Replace *sysSampleSelect* with *SampleQuerySelect*. Then recompile from the Menu by clicking Debug > Compile VBAProject.

Change sysSampleSummarySelect to qrySampleSummaryAnalysis:

Either from the Menu, click Edit > Find or press Ctrl + F. Enter *"sysSampleSummarySelect"* in the Find What text box and click **Find Next**:



```
sSQL = "SELECT SampleID & "" & Analyte & "" & " & _  
"DCount("[AnalysisID]", "[SampleAnalysis]", " & _  
""SampleID="" & [SampleID] & "" AND AnalysisID="" & _  
" & [AnalysisID] & "" AND SampleAnalysisID="" & [SampleAnalysisID])" & _  
"AS [SampleID:Analyte:Duplicate], AnalysisResultFormatted, " & _  
"Units.Abbreviation, AnalysisDate, ReportName, Analysis.SortOrder, Method.Name " & _  
"FROM qrySampleSummaryAnalysis " & _  
"WHERE SampleID IN (SELECT SampleID FROM " & _  
"sysSampleSummarySelect WHERE Selected=True) " & sInternalData & _  
"ORDER BY SampleID, Analyte, SampleAnalysisID;"
```

At this point you will have to compare your VBA code in your old templates with the code in the new Example Templates. With each new LIMS version, the example templates had small changes to certain functions in their VBA code. In order to update your templates for your new LIMS version, those functions must be updated to align with the example templates of the version you're upgrading to.

- Start by identifying the example template that most closely matches your custom template.
 - Your template may have the same name as the example template.
 - You may have to refer to the ‘Read Me’ tab to narrow down which example template to use.
 - Another aid to finding the correct Example Template is to match the tabs of your template to the tabs in the Example Templates, then refer to the Read Me text for more details.
- Further down in the Example Templates section of this document, there is a table listing the Example Templates that you can match your template’s name to for code comparison.
 - In some cases, you may only have to change a query name, but in others you should copy the sample’s entire SQL statement and replace the code in your template at a minimum.
 - If there are extensive changes you will need to decide if it is easier to copy your ‘report’ worksheet to a copy of the example template and then make changes to your report’s fields.

Templates with more worksheets than the LIMSDData worksheet

The following may not be necessary for your template updates. If your template has Code Modules other than the LIMSDData module (for example, templates with charts or graphs), you will need to further review the code and see if it needs to be updated in your template.

For the template that is being updated, if it has more than just the LIMSDData worksheet that has a code module, for each worksheet’s VBA code note the last update date at the top of the VBA screen. In the screenshot below the comments are for the Worksheet ‘Results’ VBA code module.

```

Module Name.... Results (Code)
' Author..... Rick Collard
'              Mountain States Consulting, LLC
'              970 West Broadway #471
'              PO Box 30000
'              Jackson, WY 83002 USA
'              307-733-1442
' Description... Code to import ICP data files
' Revisions..... 28Aug07 rdc Original
'                26Aug16 rdc Disable error handling before WorksheetFunction.Vlookup
'                07Jun19 rdc Updated for
'                29Apr22 rdc Updated for
Option Explicit

Public Sub cmdImportInstrumentFile_Click()

```

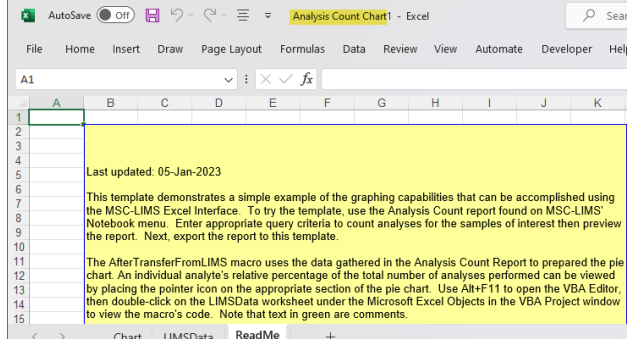
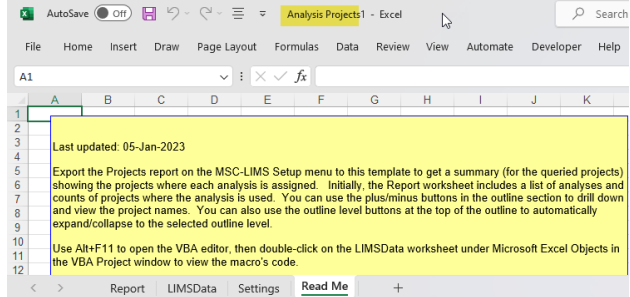
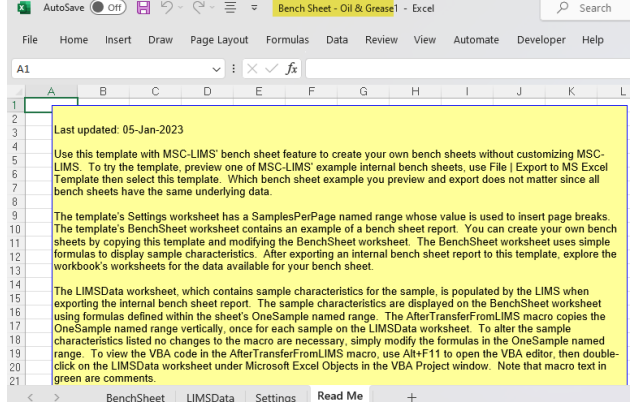
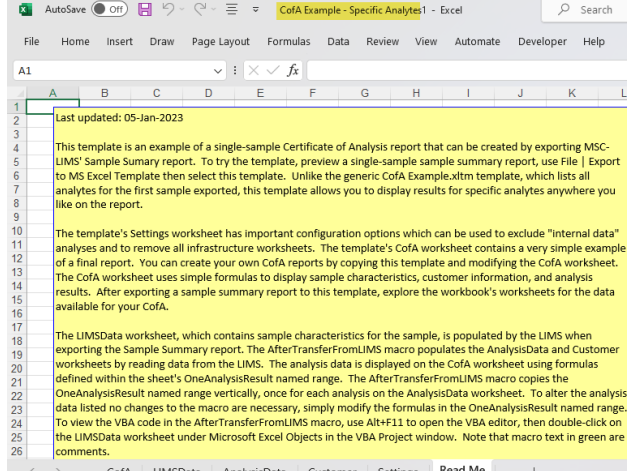
Navigate to where **J Street LIMS v6 Excel Example Templates.zip** is saved. Find the v6 version of the template you’re updating in the folder you saved it in and open it. Now, open the template you’re updating side by side to the v6 version. In both templates, go to the Worksheet tab and open the VBA window to check the **Revisions** (AKA the last Change Dates).

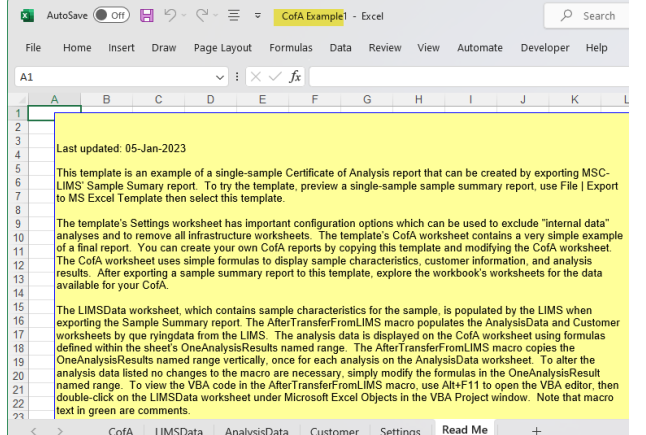
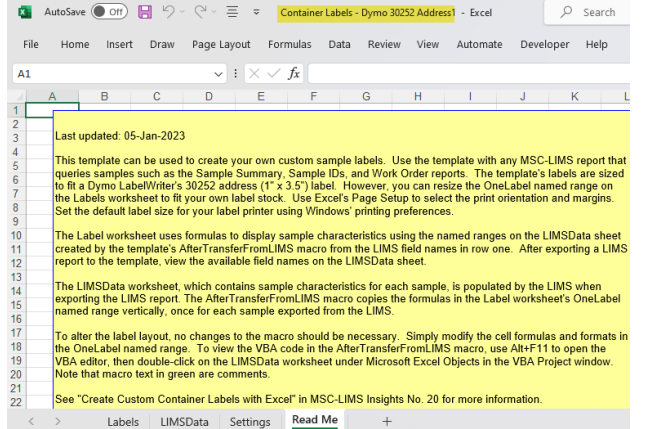
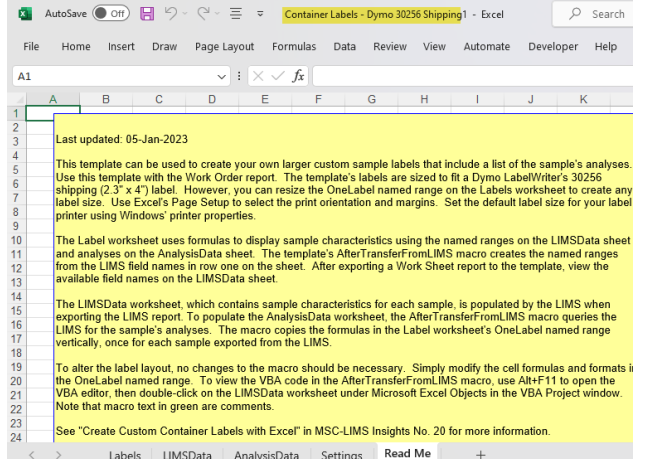
IMPORTANT: If you **do not** see additional Revisions/Change Date entries following the template’s Original published date, copy the v6 template’s code and replace the old code in the template being updated. If you **do** see additional Revisions/Change Date entries following the Original published date, STOP what you are doing, save your progress, and contact our Support team Support@JStreetLIMS.com. This indicates you have additional VBA code customizations in your template, and replacing this code will get rid of your customizations. J Street may need to charge for “white glove” template updates to preserve these customizations.

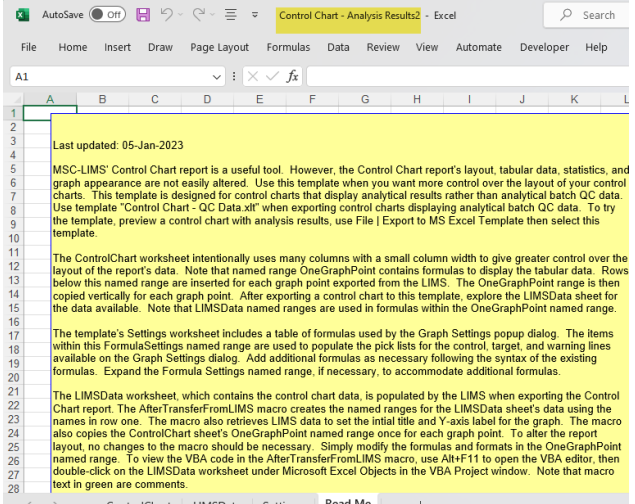
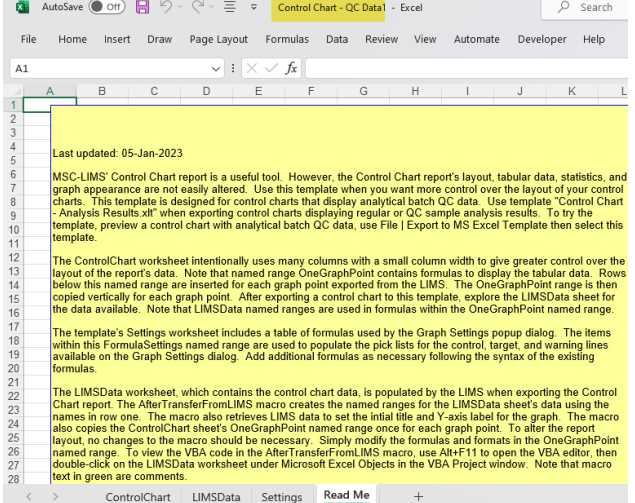
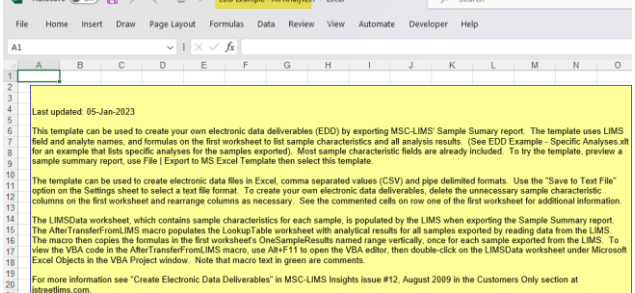
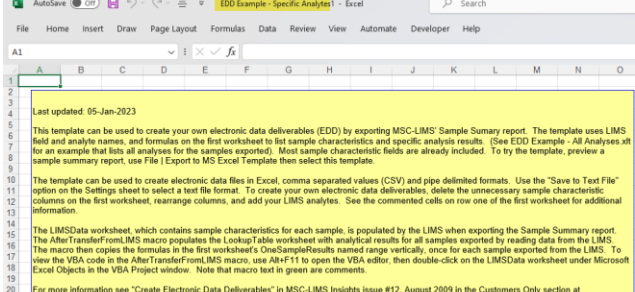
If there were no additional Revisions/Change Dates and you were able to copy the v6 template’s code and replace the old code in the template being updated, next you will recompile again. From the Main Menu, click Debug > Compile VBAProject.

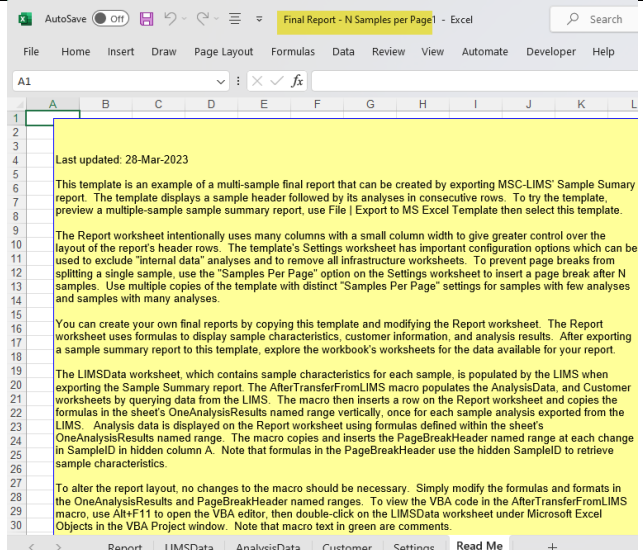
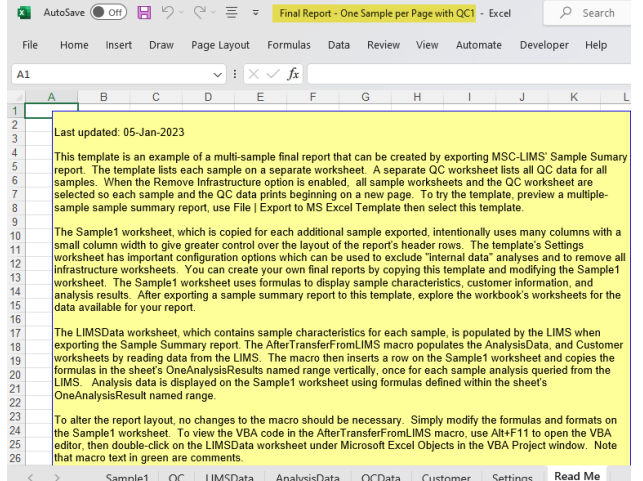
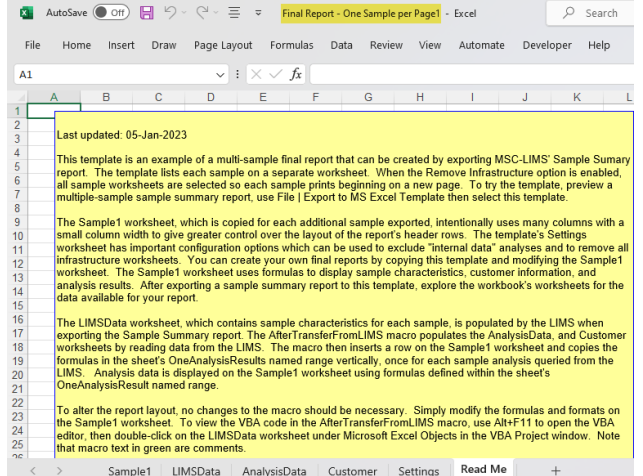
Example Templates

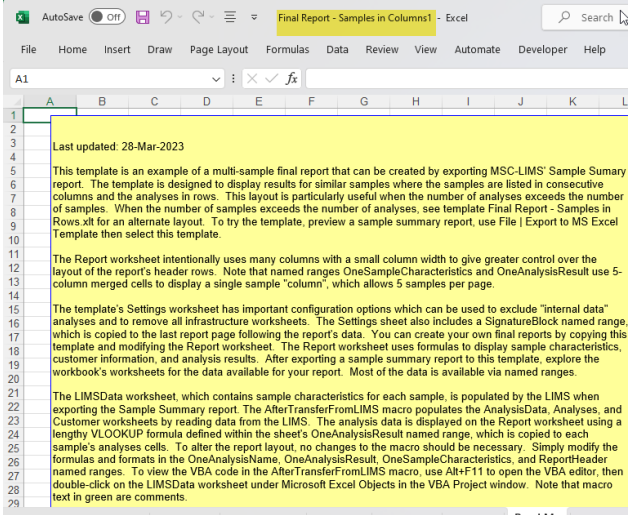
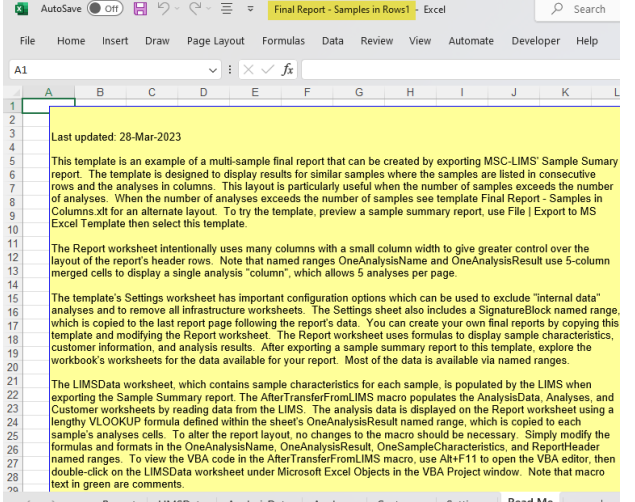
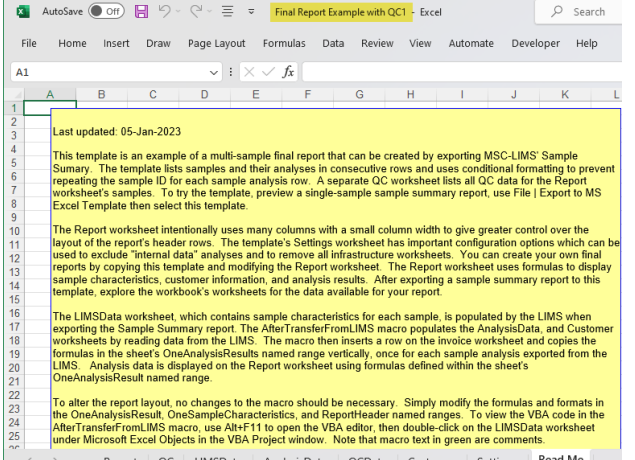
Below is a table that shows screenshots of the ReadMe tab (if the template had one) for the example templates installed with J Street LIMS v6. You will now need to replace all instances of the following query & table names (**sysSampleSummarySelect** and/or **sysSampleSelect**) in the template you are updating with the SQL Code in the new example templates.

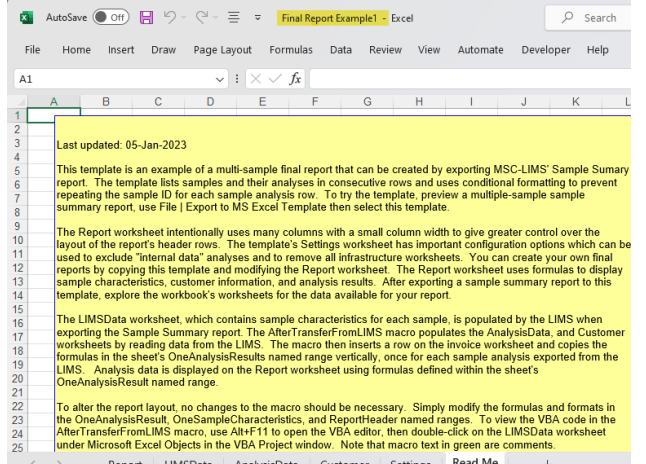
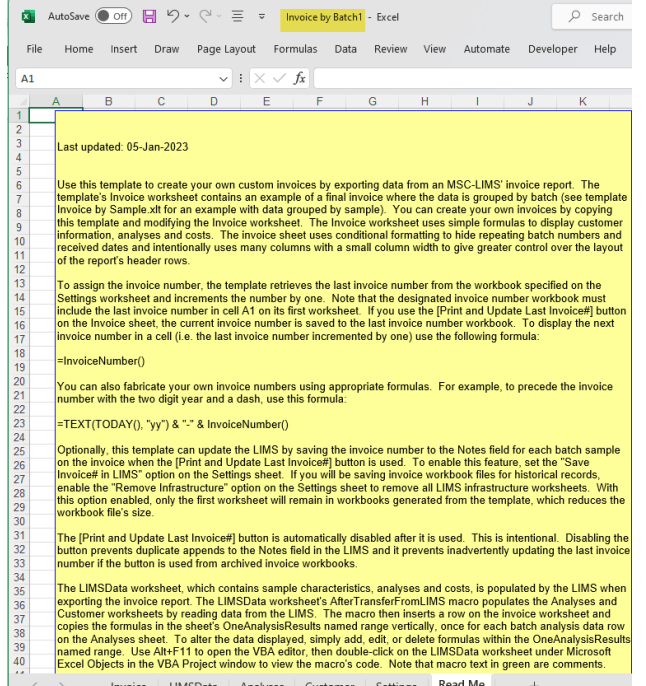
Template Name	ReadMe Tab	Change To
Analysis Count Chart.xltm	 <p>AutoSave Off Analysis Count Chart1 - Excel</p> <p>File Home Insert Draw Page Layout Formulas Data Review View Automate Developer Help</p> <p>A1</p> <p>Last updated: 05-Jan-2023</p> <p>This template demonstrates a simple example of the graphing capabilities that can be accomplished using the MSC-LIMS Excel Interface. To try the template, use the Analysis Count report found on MSC-LIMS' Notebook menu. Enter appropriate query criteria to count analyses for the samples of interest then preview the report. Next, export the report to this template.</p> <p>The AfterTransferFromLIMS macro uses the data gathered in the Analysis Count Report to prepared the pie chart. An individual analyte's relative percentage of the total number of analyses performed can be viewed by placing the pointer icon on the appropriate section of the pie chart. Use Alt+F11 to open the VBA Editor, then double-click on the LIMSData worksheet under the Microsoft Excel Objects in the VBA Project window to view the macro's code. Note that text in green are comments.</p> <p>Chart LIMSData ReadMe</p>	No VBA Code to change.
Analysis Projects.xltm	 <p>AutoSave Off Analysis Projects1 - Excel</p> <p>File Home Insert Draw Page Layout Formulas Data Review View Automate Developer Help</p> <p>A1</p> <p>Last updated: 05-Jan-2023</p> <p>Export the Projects report on the MSC-LIMS Setup menu to this template to get a summary (for the queried projects) showing the projects where each analysis is assigned. Initially, the Report worksheet includes a list of analyses and counts of projects where the analysis is used. You can use the plus/minus buttons in the outline section to drill down and view the project names. You can also use the outline level buttons at the top of the outline to automatically expand/collapse to the selected outline level.</p> <p>Use Alt+F11 to open the VBA editor, then double-click on the LIMSData worksheet under Microsoft Excel Objects in the VBA Project window to view the macro's code.</p> <p>Report LIMSData Settings Read Me</p>	No VBA Code to change.
Bench Sheet - Oil & Grease.xltm	 <p>AutoSave Off Bench Sheet - Oil & Grease1 - Excel</p> <p>File Home Insert Draw Page Layout Formulas Data Review View Automate Developer Help</p> <p>A1</p> <p>Last updated: 05-Jan-2023</p> <p>Use this template with MSC-LIMS' bench sheet feature to create your own bench sheets without customizing MSC-LIMS. To try the template, preview one of MSC-LIMS' example internal bench sheets, use File Export to MS Excel Template then select this template. Which bench sheet example you preview and export does not matter since all bench sheets have the same underlying data.</p> <p>The template's Settings worksheet has a SamplesPerPage named range whose value is used to insert page breaks. The template's BenchSheet worksheet contains an example of a bench sheet report. You can create your own bench sheets by copying this template and modifying the BenchSheet worksheet. The BenchSheet worksheet uses simple formulas to display sample characteristics. After exporting an internal bench sheet report to this template, explore the workbook's worksheets for the data available for your bench sheet.</p> <p>The LIMSData worksheet, which contains sample characteristics for the sample, is populated by the LIMS when exporting the internal bench sheet report. The sample characteristics are displayed on the BenchSheet worksheet using formulas defined within the sheet's OneSample named range. The AfterTransferFromLIMS macro copies the OneSample named range vertically, once for each sample on the LIMSData worksheet. To alter the sample characteristics listed no changes to the macro are necessary, simply modify the formulas in the OneSample named range. To view the VBA code in the AfterTransferFromLIMS macro, use Alt+F11 to open the VBA editor, then double-click on the LIMSData worksheet under Microsoft Excel Objects in the VBA Project window. Note that macro text in green are comments.</p> <p>BenchSheet LIMSData Settings Read Me</p>	No VBA Code to change.
CofA Example - Specific Analytes.xltm	 <p>AutoSave Off CofA Example - Specific Analytes1 - Excel</p> <p>File Home Insert Draw Page Layout Formulas Data Review View Automate Developer Help</p> <p>A1</p> <p>Last updated: 05-Jan-2023</p> <p>This template is an example of a single-sample Certificate of Analysis report that can be created by exporting MSC-LIMS' Sample Summary report. To try the template, preview a single-sample sample summary report, use File Export to MS Excel Template then select this template. Unlike the generic CofA Example.xltm template, which lists all analytes for the first sample exported, this template allows you to display results for specific analytes anywhere you like on the report.</p> <p>The template's Settings worksheet has important configuration options which can be used to exclude "internal data" analyses and to remove all infrastructure worksheets. The template's CofA worksheet contains a very simple example of a final report. You can create your own CofA reports by copying this template and modifying the CofA worksheet. The CofA worksheet uses simple formulas to display sample characteristics, customer information, and analysis results. After exporting a sample summary report to this template, explore the workbook's worksheets for the data available for your CofA.</p> <p>The LIMSData worksheet, which contains sample characteristics for the sample, is populated by the LIMS when exporting the Sample Summary report. The AfterTransferFromLIMS macro populates the AnalysisData and Customer worksheets by reading data from the LIMS. The analysis data is displayed on the CofA worksheet using formulas defined within the sheet's OneAnalysisResult named range. The AfterTransferFromLIMS macro copies the OneAnalysisResult named range vertically, once for each analysis on the AnalysisData worksheet. To alter the analysis data listed no changes to the macro are necessary, simply modify the formulas in the OneAnalysisResult named range. To view the VBA code in the AfterTransferFromLIMS macro, use Alt+F11 to open the VBA editor, then double-click on the LIMSData worksheet under Microsoft Excel Objects in the VBA Project window. Note that macro text in green are comments.</p> <p>CofA LIMSData AnalysisData Customer Settings Read Me</p>	qrySampleSummaryAnalysis,

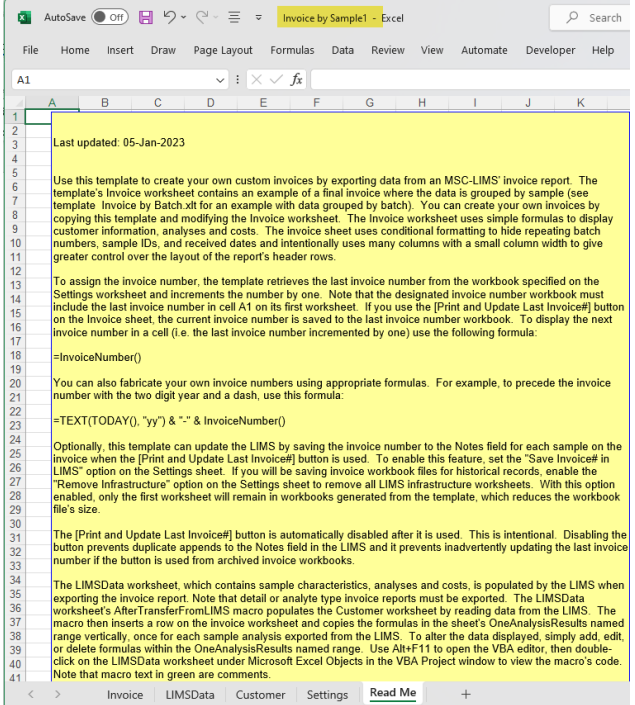
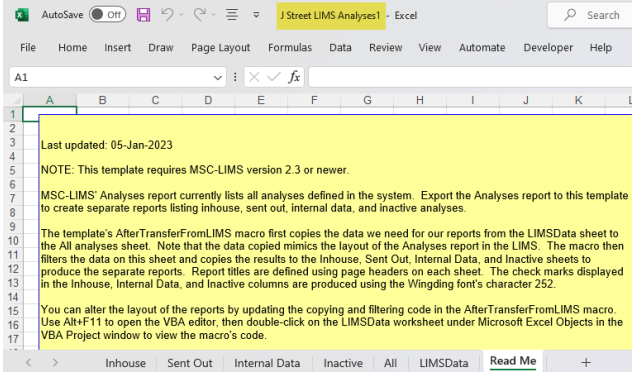
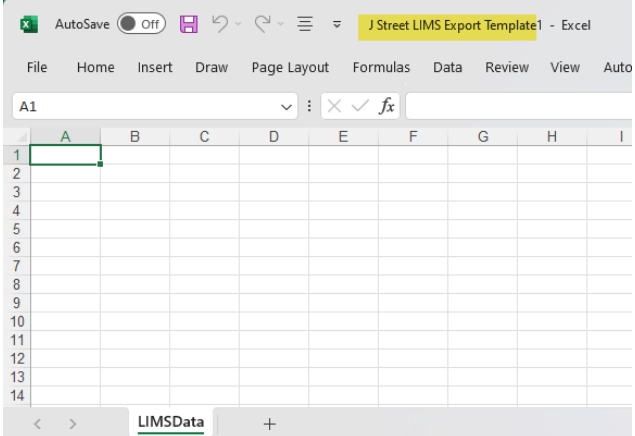
Template Name	ReadMe Tab	Change To
CofA Example.xltm		qrySampleSummaryAnalysis
Container Labels - Dymo 30252 Address.xltm		No VBA Code to change.
Container Labels - Dymo 30256 Shipping.xltm		qrySelectedSampleAnalysis

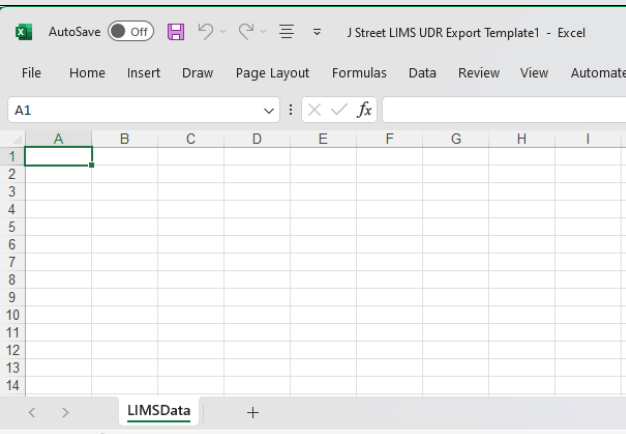
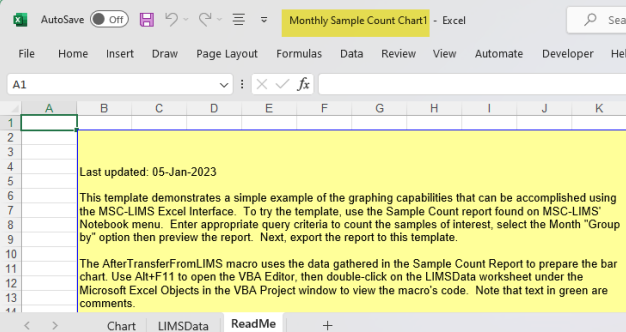
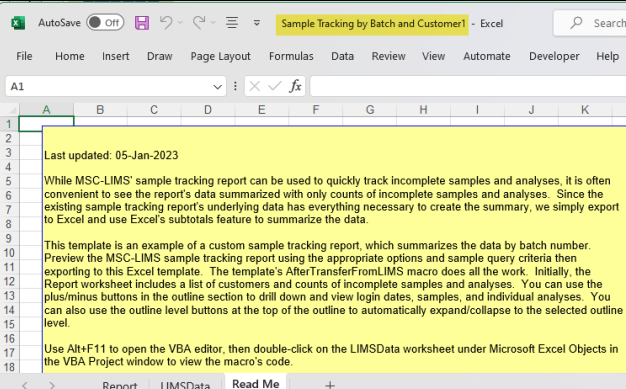
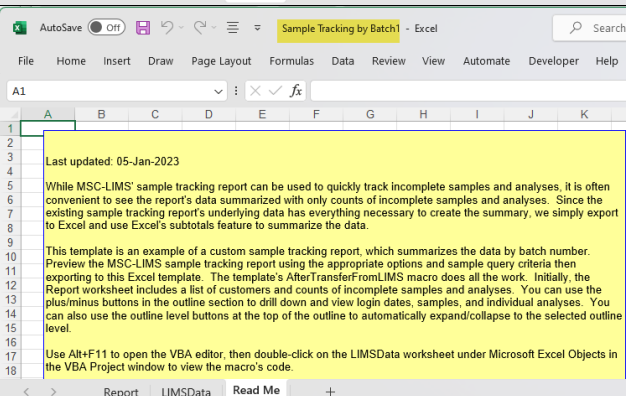
Template Name	ReadMe Tab	Change To
Control Chart - Analysis Results.xltm	 <p>AutoSave OFF Control Chart - Analysis Results2 - Excel</p> <p>File Home Insert Draw Page Layout Formulas Data Review View Automate Developer Help</p> <p>A1</p> <p>1 A B C D E F G H I J K L</p> <p>2</p> <p>3 Last updated: 05-Jan-2023</p> <p>4</p> <p>5 MSC-LIMS' Control Chart report is a useful tool. However, the Control Chart report's layout, tabular data, statistics, and graph appearance are not easily altered. Use this template when you want more control over the layout of your control charts. This template is designed for control charts that display analytical results rather than analytical batch QC data. Use template "Control Chart - QC Data.xltm" when exporting control charts displaying analytical batch QC data. To try the template, preview a control chart with analysis results, use File Export to MS Excel Template then select this template.</p> <p>6</p> <p>7 The ControlChart worksheet intentionally uses many columns with a small column width to give greater control over the layout of the report's data. Note that named range OneGraphPoint contains formulas to display the tabular data. Rows below this named range are inserted for each graph point exported from the LIMS. The OneGraphPoint range is then copied vertically for each graph point. After exporting a control chart to this template, explore the LIMSData sheet for the data available. Note that LIMSData named ranges are used in formulas within the OneGraphPoint named range.</p> <p>8</p> <p>9 The template's Settings worksheet includes a table of formulas used by the Graph Settings popup dialog. The items within this FormulaSettings named range are used to populate the pick lists for the control, target, and warning lines available on the Graph Settings dialog. Add additional formulas as necessary following the syntax of the existing formulas. Expand the Formula Settings named range, if necessary, to accommodate additional formulas.</p> <p>10</p> <p>11 The LIMSData worksheet, which contains the control chart data, is populated by the LIMS when exporting the Control Chart report. The AfterTransferFromLIMS macro creates the named ranges for the LIMSData sheet's data using the names in row one. The macro also retrieves LIMS data to set the initial title and Y-axis label for the graph. The macro also copies the ControlChart sheet's OneGraphPoint named range once for each graph point. To alter the report layout, no changes to the macro should be necessary. Simply modify the formulas and formats in the OneGraphPoint named range. To view the VBA code in the AfterTransferFromLIMS macro, use Alt+F11 to open the VBA editor, then double-click on the LIMSData worksheet under Microsoft Excel Objects in the VBA Project window. Note that macro text in green are comments.</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p>26</p> <p>27</p> <p>28</p> <p>ControlChart LIMSData Settings Read Me +</p>	qrySampleSummaryAll
Control Chart - QC Data.xltm	 <p>AutoSave OFF Control Chart - QC Data - Excel</p> <p>File Home Insert Draw Page Layout Formulas Data Review View Automate Developer Help</p> <p>A1</p> <p>1 A B C D E F G H I J K L</p> <p>2</p> <p>3 Last updated: 05-Jan-2023</p> <p>4</p> <p>5 MSC-LIMS' Control Chart report is a useful tool. However, the Control Chart report's layout, tabular data, statistics, and graph appearance are not easily altered. Use this template when you want more control over the layout of your control charts. This template is designed for control charts that display analytical batch QC data. Use template "Control Chart - Analysis Results.xltm" when exporting control charts displaying regular or QC sample analysis results. To try the template, preview a control chart with analytical batch QC data, use File Export to MS Excel Template then select this template.</p> <p>6</p> <p>7 The ControlChart worksheet intentionally uses many columns with a small column width to give greater control over the layout of the report's data. Note that named range OneGraphPoint contains formulas to display the tabular data. Rows below this named range are inserted for each graph point exported from the LIMS. The OneGraphPoint range is then copied vertically for each graph point. After exporting a control chart to this template, explore the LIMSData sheet for the data available. Note that LIMSData named ranges are used in formulas within the OneGraphPoint named range.</p> <p>8</p> <p>9 The template's Settings worksheet includes a table of formulas used by the Graph Settings popup dialog. The items within this FormulaSettings named range are used to populate the pick lists for the control, target, and warning lines available on the Graph Settings dialog. Add additional formulas as necessary following the syntax of the existing formulas.</p> <p>10</p> <p>11 The LIMSData worksheet, which contains the control chart data, is populated by the LIMS when exporting the Control Chart report. The AfterTransferFromLIMS macro creates the named ranges for the LIMSData sheet's data using the names in row one. The macro also retrieves LIMS data to set the initial title and Y-axis label for the graph. The macro also copies the ControlChart sheet's OneGraphPoint named range once for each graph point. To alter the report layout, no changes to the macro should be necessary. Simply modify the formulas and formats in the OneGraphPoint named range. To view the VBA code in the AfterTransferFromLIMS macro, use Alt+F11 to open the VBA editor, then double-click on the LIMSData worksheet under Microsoft Excel Objects in the VBA Project window. Note that macro text in green are comments.</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p>26</p> <p>27</p> <p>28</p> <p>ControlChart LIMSData Settings Read Me +</p>	qryQCData
EDD Example - All Analytes.xltm	 <p>AutoSave ON EDD Example - All Analytes1 - Excel</p> <p>File Home Insert Draw Page Layout Formulas Data Review View Automate Developer Help</p> <p>A1</p> <p>1 A B C D E F G H I J K L M N O</p> <p>2</p> <p>3 Last updated: 05-Jan-2023</p> <p>4</p> <p>5 This template can be used to create your own electronic data deliverables (EDD) by exporting MSC-LIMS' Sample Summary report. The template uses LIMS field and analyte names, and formulas on the first worksheet to list sample characteristics and all analysis results. (See EDD Example - Specific Analytes for an example that lists specific analytes for the samples exported). Most sample characteristic fields are already included. To try the template, preview a sample summary report, use File Export to MS Excel Template then select this template.</p> <p>6</p> <p>7 The template can be used to create electronic data files in Excel, comma separated values (CSV) and pipe delimited formats. Use the "Save to Text File" option on the Settings sheet to select a text file format. To create your own electronic data deliverables, delete the unnecessary sample characteristic columns on the first worksheet and rearrange columns as necessary. See the commented cells on row one of the first worksheet for additional information.</p> <p>8</p> <p>9 The LIMSData worksheet, which contains sample characteristics for each sample, is populated by the LIMS when exporting the Sample Summary report. The AfterTransferFromLIMS macro populates the LookupTable worksheet with analytical results for all samples exported by reading data from the LIMS. The macro then copies the formulas in the first worksheet's OneSampleResults named range vertically, once for each sample exported from the LIMS. To view the VBA code in the AfterTransferFromLIMS macro, use Alt+F11 to open the VBA editor, then double-click on the LIMSData worksheet under Microsoft Excel Objects in the VBA Project window. Note that macro text in green are comments.</p> <p>10</p> <p>11 For more information see "Create Electronic Data Deliverables" in MSC-LIMS Insights Issue #12, August 2009 in the Customers Only section at jstretlins.com</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>EDD LIMSData LookupTable Analyses Settings Read Me +</p>	WhereFormUserComputer(), SampleQuerySelect
EDD Example - Specific Analytes.xltm	 <p>AutoSave ON EDD Example - Specific Analytes1 - Excel</p> <p>File Home Insert Draw Page Layout Formulas Data Review View Automate Developer Help</p> <p>A1</p> <p>1 A B C D E F G H I J K L M N O</p> <p>2</p> <p>3 Last updated: 05-Jan-2023</p> <p>4</p> <p>5 This template can be used to create your own electronic data deliverables (EDD) by exporting MSC-LIMS' Sample Summary report. The template uses LIMS field and analyte names, and formulas on the first worksheet to list sample characteristics and specific analysis results. (See EDD Example - All Analytes for an example that lists all analytes for the samples exported). Most sample characteristic fields are already included. To try the template, preview a sample summary report, use File Export to MS Excel Template then select this template.</p> <p>6</p> <p>7 The template can be used to create electronic data files in Excel, comma separated values (CSV) and pipe delimited formats. Use the "Save to Text File" option on the Settings sheet to select a text file format. To create your own electronic data deliverables, delete the unnecessary sample characteristic columns on the first worksheet, rearrange columns, and add your LIMS analytes. See the commented cells on row one of the first worksheet for additional information.</p> <p>8</p> <p>9 The LIMSData worksheet, which contains sample characteristics for each sample, is populated by the LIMS when exporting the Sample Summary report. The AfterTransferFromLIMS macro populates the LookupTable worksheet with analytical results for all samples exported by reading data from the LIMS. The macro then copies the formulas in the first worksheet's OneSampleResults named range vertically, once for each sample exported from the LIMS. To view the VBA code in the AfterTransferFromLIMS macro, use Alt+F11 to open the VBA editor, then double-click on the LIMSData worksheet under Microsoft Excel Objects in the VBA Project window. Note that macro text in green are comments.</p> <p>10</p> <p>11 For more information see "Create Electronic Data Deliverables" in MSC-LIMS Insights Issue #12, August 2009 in the Customers Only section at jstretlins.com</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>EDD LIMSData LookupTable Settings Read Me +</p>	SampleQuerySelect, WhereFormUserComputer()

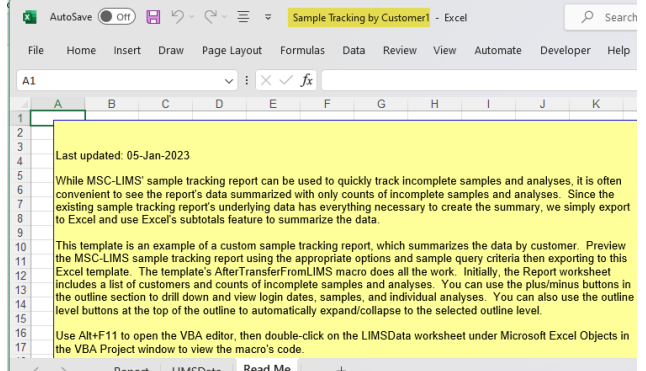
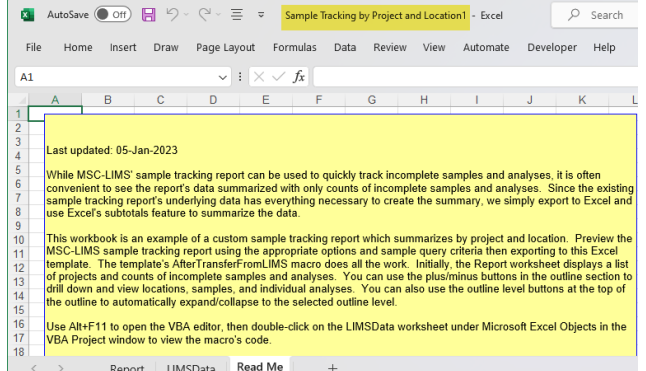
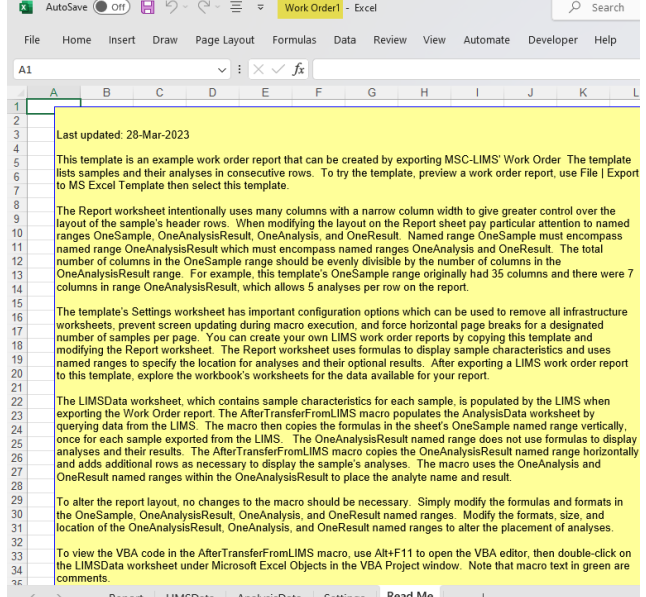
Template Name	ReadMe Tab	Change To
Final Report - N Samples per Page.xltm	 <p>AutoSave OFF Final Report - N Samples per Page1 - Excel</p> <p>File Home Insert Draw Page Layout Formulas Data Review View Automate Developer Help</p> <p>A1</p> <p>Last updated: 28-Mar-2023</p> <p>This template is an example of a multi-sample final report that can be created by exporting MSC-LIMS' Sample Summary report. The template displays a sample header followed by its analyses in consecutive rows. To try the template, preview a multiple-sample sample summary report, use File Export to MS Excel Template then select this template.</p> <p>The Report worksheet intentionally uses many columns with a small column width to give greater control over the layout of the report's header rows. The template's Settings worksheet has important configuration options which can be used to exclude "Internal data" analyses and to remove all infrastructure worksheets. To prevent page breaks from splitting a single sample, use the "Samples Per Page" option on the Settings worksheet to insert a page break after N samples. Use multiple copies of the template with distinct "Samples Per Page" settings for samples with few analyses and samples with many analyses.</p> <p>You can create your own final reports by copying this template and modifying the Report worksheet. The Report worksheet uses formulas to display sample characteristics, customer information, and analysis results. After exporting a sample summary report to this template, explore the workbook's worksheets for the data available for your report.</p> <p>The LIMSData worksheet, which contains sample characteristics for each sample, is populated by the LIMS when exporting the Sample Summary report. The AfterTransferFromLIMS macro populates the AnalysisData, and Customer worksheets by querying data from the LIMS. The macro then inserts a row on the Report worksheet and copies the formulas in the sheet's OneAnalysisResults named range vertically, once for each sample analysis exported from the LIMS. Analysis data is displayed on the Report worksheet using formulas defined within the sheet's OneAnalysisResults named range. The macro copies and inserts the PageBreakHeader named range at each change in SampleID in hidden column A. Note that formulas in the PageBreakHeader use the hidden SampleID to retrieve sample characteristics.</p> <p>To alter the report layout, no changes to the macro should be necessary. Simply modify the formulas and formats in the OneAnalysisResults and PageBreakHeader named ranges. To view the VBA code in the AfterTransferFromLIMS macro, use Alt+F11 to open the VBA editor, then double-click on the LIMSData worksheet under Microsoft Excel Objects in the VBA Project window. Note that macro text in green are comments.</p> <p>Report LIMSData AnalysisData Customer Settings Read Me</p>	qrySampleSummaryAnalysisRpt, WhereFormUserComputer(db)
Final Report - One Sample per Page with QC.xltm	 <p>AutoSave OFF Final Report - One Sample per Page with QC1 - Excel</p> <p>File Home Insert Draw Page Layout Formulas Data Review View Automate Developer Help</p> <p>A1</p> <p>Last updated: 05-Jan-2023</p> <p>This template is an example of a multi-sample final report that can be created by exporting MSC-LIMS' Sample Summary report. The template lists each sample on a separate worksheet. A separate QC worksheet lists all QC data for all samples. When the Remove Infrastructure option is enabled, all sample worksheets and the QC worksheet are selected so each sample and the QC data prints beginning on a new page. To try the template, preview a multiple-sample sample summary report, use File Export to MS Excel Template then select this template.</p> <p>The Sample1 worksheet, which is copied for each additional sample exported, intentionally uses many columns with a small column width to give greater control over the layout of the report's header rows. The template's Settings worksheet has important configuration options which can be used to exclude "Internal data" analyses and to remove all infrastructure worksheets. You can create your own final reports by copying this template and modifying the Sample1 worksheet. The Sample1 worksheet uses formulas to display sample characteristics, customer information, and analysis results. After exporting a sample summary report to this template, explore the workbook's worksheets for the data available for your report.</p> <p>The LIMSData worksheet, which contains sample characteristics for each sample, is populated by the LIMS when exporting the Sample Summary report. The AfterTransferFromLIMS macro populates the AnalysisData, and Customer worksheets by reading data from the LIMS. The macro then inserts a row on the Sample1 worksheet and copies the formulas in the sheet's OneAnalysisResults named range vertically, once for each sample analysis queried from the LIMS. Analysis data is displayed on the Sample1 worksheet using formulas defined within the sheet's OneAnalysisResult named range.</p> <p>To alter the report layout, no changes to the macro should be necessary. Simply modify the formulas and formats on the Sample1 worksheet. To view the VBA code in the AfterTransferFromLIMS macro, use Alt+F11 to open the VBA editor, then double-click on the LIMSData worksheet under Microsoft Excel Objects in the VBA Project window. Note that macro text in green are comments.</p> <p>Sample1 QC LIMSData AnalysisData QCData Customer Settings Read Me</p>	qrySampleSummaryAnalysisRpt, WhereFormUserComputer(db), SampleQuerySelect
Final Report - One Sample per Page.xltm	 <p>AutoSave OFF Final Report - One Sample per Page1 - Excel</p> <p>File Home Insert Draw Page Layout Formulas Data Review View Automate Developer Help</p> <p>A1</p> <p>Last updated: 05-Jan-2023</p> <p>This template is an example of a multi-sample final report that can be created by exporting MSC-LIMS' Sample Summary report. The template lists each sample on a separate worksheet. When the Remove Infrastructure option is enabled, all sample worksheets are selected so each sample prints beginning on a new page. To try the template, preview a multiple-sample sample summary report, use File Export to MS Excel Template then select this template.</p> <p>The Sample1 worksheet, which is copied for each additional sample exported, intentionally uses many columns with a small column width to give greater control over the layout of the report's header rows. The template's Settings worksheet has important configuration options which can be used to exclude "Internal data" analyses and to remove all infrastructure worksheets. You can create your own final reports by copying this template and modifying the Sample1 worksheet. The Sample1 worksheet uses formulas to display sample characteristics, customer information, and analysis results. After exporting a sample summary report to this template, explore the workbook's worksheets for the data available for your report.</p> <p>The LIMSData worksheet, which contains sample characteristics for each sample, is populated by the LIMS when exporting the Sample Summary report. The AfterTransferFromLIMS macro populates the AnalysisData, and Customer worksheets by reading data from the LIMS. The macro then inserts a row on the Sample1 worksheet and copies the formulas in the sheet's OneAnalysisResults named range vertically, once for each sample analysis queried from the LIMS. Analysis data is displayed on the Sample1 worksheet using formulas defined within the sheet's OneAnalysisResult named range.</p> <p>To alter the report layout, no changes to the macro should be necessary. Simply modify the formulas and formats on the Sample1 worksheet. To view the VBA code in the AfterTransferFromLIMS macro, use Alt+F11 to open the VBA editor, then double-click on the LIMSData worksheet under Microsoft Excel Objects in the VBA Project window. Note that macro text in green are comments.</p> <p>Sample1 LIMSData AnalysisData Customer Settings Read Me</p>	qrySampleSummaryAnalysisRpt, WhereFormUserComputer()

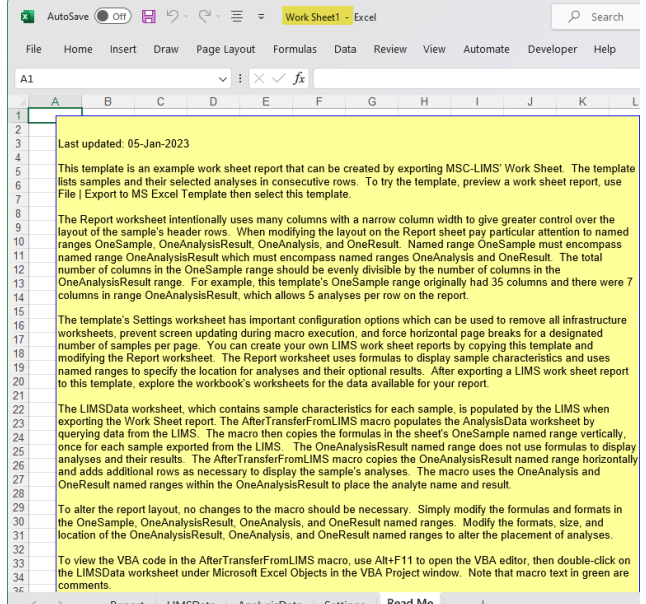
Template Name	ReadMe Tab	Change To
Final Report - Samples in Columns.xltm	 <p>AutoSave OFF</p> <p>File Home Insert Draw Page Layout Formulas Data Review View Automate Developer Help</p> <p>A1</p> <p>A B C D E F G H I J K L</p> <p>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29</p> <p>Last updated: 28-Mar-2023</p> <p>This template is an example of a multi-sample final report that can be created by exporting MSC-LIMS' Sample Summary report. The template is designed to display results for similar samples where the samples are listed in consecutive columns and the analyses in rows. This layout is particularly useful when the number of analyses exceeds the number of samples. When the number of samples exceeds the number of analyses, see template Final Report - Samples in Rows.xltm for an alternate layout. To try the template, preview a sample summary report, use File Export to MS Excel Template then select this template.</p> <p>The Report worksheet intentionally uses many columns with a small column width to give greater control over the layout of the report's header rows. Note that named ranges OneSampleCharacteristics and OneAnalysisResult use 5-column merged cells to display a single sample "column", which allows 5 samples per page.</p> <p>The template's Settings worksheet has important configuration options which can be used to exclude "internal data" analyses and to remove all infrastructure worksheets. The Settings sheet also includes a SignatureBlock named range, which is copied to the last report page following the report's data. You can create your own final reports by copying this template and modifying the Report worksheet. The Report worksheet uses formulas to display sample characteristics, customer information, and analysis results. After exporting a sample summary report to this template, explore the workbook's worksheets for the data available for your report. Most of the data is available via named ranges.</p> <p>The LIMSData worksheet, which contains sample characteristics for each sample, is populated by the LIMS when exporting the Sample Summary report. The AfterTransferFromLIMS macro populates the AnalysisData, Analyses, and Customer worksheets by reading data from the LIMS. The analysis data is displayed on the Report worksheet using a lengthy VLOOKUP formula defined within the sheet's OneAnalysisResult named range, which is copied to each sample's analyses cells. To alter the report layout, no changes to the macro should be necessary. Simply modify the formulas and formats in the OneAnalysisName, OneAnalysisResult, OneSampleCharacteristics, and ReportHeader named ranges. To view the VBA code in the AfterTransferFromLIMS macro, use Alt+F11 to open the VBA editor, then double-click on the LIMSData worksheet under Microsoft Excel Objects in the VBA Project window. Note that macro text in green are comments.</p> <p>Report LIMSData AnalysisData Analyses Customer Settings Read Me</p>	qrySampleSummaryAnalysisRpt
Final Report - Samples in Rows.xltm	 <p>AutoSave OFF</p> <p>File Home Insert Draw Page Layout Formulas Data Review View Automate Developer Help</p> <p>A1</p> <p>A B C D E F G H I J K L</p> <p>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29</p> <p>Last updated: 28-Mar-2023</p> <p>This template is an example of a multi-sample final report that can be created by exporting MSC-LIMS' Sample Summary report. The template is designed to display results for similar samples where the samples are listed in consecutive rows and the analyses in columns. This layout is particularly useful when the number of samples exceeds the number of analyses. When the number of analyses exceeds the number of samples see template Final Report - Samples in Columns.xltm for an alternate layout. To try the template, preview a sample summary report, use File Export to MS Excel Template then select this template.</p> <p>The Report worksheet intentionally uses many columns with a small column width to give greater control over the layout of the report's header rows. Note that named ranges OneAnalysisName and OneAnalysisResult use 5-column merged cells to display a single analysis "column", which allows 5 analyses per page.</p> <p>The template's Settings worksheet has important configuration options which can be used to exclude "internal data" analyses and to remove all infrastructure worksheets. The Settings sheet also includes a SignatureBlock named range, which is copied to the last report page following the report's data. You can create your own final reports by copying this template and modifying the Report worksheet. The Report worksheet uses formulas to display sample characteristics, customer information, and analysis results. After exporting a sample summary report to this template, explore the workbook's worksheets for the data available for your report. Most of the data is available via named ranges.</p> <p>The LIMSData worksheet, which contains sample characteristics for each sample, is populated by the LIMS when exporting the Sample Summary report. The AfterTransferFromLIMS macro populates the AnalysisData, Analyses, and Customer worksheets by reading data from the LIMS. The analysis data is displayed on the Report worksheet using a lengthy VLOOKUP formula defined within the sheet's OneAnalysisResult named range, which is copied to each sample's analyses cells. To alter the report layout, no changes to the macro should be necessary. Simply modify the formulas and formats in the OneAnalysisName, OneAnalysisResult, OneSampleCharacteristics, and ReportHeader named ranges. To view the VBA code in the AfterTransferFromLIMS macro, use Alt+F11 to open the VBA editor, then double-click on the LIMSData worksheet under Microsoft Excel Objects in the VBA Project window. Note that macro text in green are comments.</p> <p>Report LIMSData AnalysisData Analyses Customer Settings Read Me</p>	qrySampleSummaryAnalysisRpt, WhereFormUserComputer(db)
Final Report Example with QC.xltm	 <p>AutoSave OFF</p> <p>File Home Insert Draw Page Layout Formulas Data Review View Automate Developer Help</p> <p>A1</p> <p>A B C D E F G H I J K L</p> <p>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26</p> <p>Last updated: 05-Jan-2023</p> <p>This template is an example of a multi-sample final report that can be created by exporting MSC-LIMS' Sample Summary. The template lists samples and their analyses in consecutive rows and uses conditional formatting to prevent repeating the sample ID for each sample analysis row. A separate QC worksheet lists all QC data for the Report worksheet's samples. To try the template, preview a single-sample sample summary report, use File Export to MS Excel Template then select this template.</p> <p>The Report worksheet intentionally uses many columns with a small column width to give greater control over the layout of the report's header rows. The template's Settings worksheet has important configuration options which can be used to exclude "internal data" analyses and to remove all infrastructure worksheets. You can create your own final reports by copying this template and modifying the Report worksheet. The Report worksheet uses formulas to display sample characteristics, customer information, and analysis results. After exporting a sample summary report to this template, explore the workbook's worksheets for the data available for your report.</p> <p>The LIMSData worksheet, which contains sample characteristics for each sample, is populated by the LIMS when exporting the Sample Summary report. The AfterTransferFromLIMS macro populates the AnalysisData, and Customer worksheets by reading data from the LIMS. The macro then inserts a row on the Invoice worksheet and copies the formulas in the sheet's OneAnalysisResults named range vertically, once for each sample analysis exported from the LIMS. Analysis data is displayed on the Report worksheet using formulas defined within the sheet's OneAnalysisResult named range.</p> <p>To alter the report layout, no changes to the macro should be necessary. Simply modify the formulas and formats in the OneAnalysisResult, OneSampleCharacteristics, and ReportHeader named ranges. To view the VBA code in the AfterTransferFromLIMS macro, use Alt+F11 to open the VBA editor, then double-click on the LIMSData worksheet under Microsoft Excel Objects in the VBA Project window. Note that macro text in green are comments.</p> <p>Report QC LIMSData AnalysisData QCData Customer Settings Read Me</p>	qrySampleSummaryAnalysisRpt, WhereFormUserComputer(db)

Template Name	ReadMe Tab	Change To
Final Report Example.xltm		WhereFormUserComputer(), qrySampleSummaryAnalysisRpt
Invoice by Batch.xltm		WhereFormUserComputer(db, "frmInvoiceSetup")

Template Name	ReadMe Tab	Change To
Invoice by Sample.xlsm		No VBA Code to change.
InvoiceNumber.xls	No Read Me tab.	No VBA Code to change.
J Street LIMS Analyses.xlsm		No VBA Code to change.
J Street LIMS Export Template.xlsm		No VBA Code to change.

Template Name	ReadMe Tab	Change To
J Street LIMS UDR Export Template.xlsm		No VBA Code to change.
Monthly Sample Count Chart.xlsm		No VBA Code to change.
Sample Tracking by Batch and Customer.xlsm		No VBA Code to change.
Sample Tracking by Batch.xlsm		No VBA Code to change.

Template Name	ReadMe Tab	Change To
<p>Sample Tracking by Customer.xltm</p>	 <p>AutoSave: Off</p> <p>Sample Tracking by Customer - Excel</p> <p>File Home Insert Draw Page Layout Formulas Data Review View Automate Developer Help</p> <p>A1</p> <p>Last updated: 05-Jan-2023</p> <p>While MSC-LIMS' sample tracking report can be used to quickly track incomplete samples and analyses, it is often convenient to see the report's data summarized with only counts of incomplete samples and analyses. Since the existing sample tracking report's underlying data has everything necessary to create the summary, we simply export to Excel and use Excel's subtotals feature to summarize the data.</p> <p>This template is an example of a custom sample tracking report, which summarizes the data by customer. Preview the MSC-LIMS sample tracking report using the appropriate options and sample query criteria then exporting to this Excel template. The template's AfterTransferFromLIMS macro does all the work. Initially, the Report worksheet includes a list of customers and counts of incomplete samples and analyses. You can use the plus/minus buttons in the outline section to drill down and view login dates, samples, and individual analyses. You can also use the outline level buttons at the top of the outline to automatically expand/collapse to the selected outline level.</p> <p>Use Alt+F11 to open the VBA editor, then double-click on the LIMSData worksheet under Microsoft Excel Objects in the VBA Project window to view the macro's code.</p> <p>Report LIMSData Read Me</p>	<p>No VBA Code to change.</p>
<p>Sample Tracking by Project and Location.xltm</p>	 <p>AutoSave: Off</p> <p>Sample Tracking by Project and Location - Excel</p> <p>File Home Insert Draw Page Layout Formulas Data Review View Automate Developer Help</p> <p>A1</p> <p>Last updated: 05-Jan-2023</p> <p>While MSC-LIMS' sample tracking report can be used to quickly track incomplete samples and analyses, it is often convenient to see the report's data summarized with only counts of incomplete samples and analyses. Since the existing sample tracking report's underlying data has everything necessary to create the summary, we simply export to Excel and use Excel's subtotals feature to summarize the data.</p> <p>This workbook is an example of a custom sample tracking report which summarizes by project and location. Preview the MSC-LIMS sample tracking report using the appropriate options and sample query criteria then exporting to this Excel template. The template's AfterTransferFromLIMS macro does all the work. Initially, the Report worksheet displays a list of projects and counts of incomplete samples and analyses. You can use the plus/minus buttons in the outline section to drill down and view locations, samples, and individual analyses. You can also use the outline level buttons at the top of the outline to automatically expand/collapse to the selected outline level.</p> <p>Use Alt+F11 to open the VBA editor, then double-click on the LIMSData worksheet under Microsoft Excel Objects in the VBA Project window to view the macro's code.</p> <p>Report LIMSData Read Me</p>	<p>No VBA Code to change.</p>
<p>Work Order.xltm</p>	 <p>AutoSave: Off</p> <p>Work Order - Excel</p> <p>File Home Insert Draw Page Layout Formulas Data Review View Automate Developer Help</p> <p>A1</p> <p>Last updated: 28-Mar-2023</p> <p>This template is an example work order report that can be created by exporting MSC-LIMS' Work Order. The template lists samples and their analyses in consecutive rows. To try the template, preview a work order report, use File Export to MS Excel Template then select this template.</p> <p>The Report worksheet intentionally uses many columns with a narrow column width to give greater control over the layout of the sample's header rows. When modifying the layout on the Report sheet pay particular attention to named ranges OneSample, OneAnalysisResult, OneAnalysis, and OneResult. Named range OneSample must encompass named range OneAnalysisResult which must encompass named ranges OneAnalysis and OneResult. The total number of columns in the OneSample range should be evenly divisible by the number of columns in the OneAnalysisResult range. For example, this template's OneSample range originally had 35 columns and there were 7 columns in range OneAnalysisResult, which allows 5 analyses per row on the report.</p> <p>The template's Settings worksheet has important configuration options which can be used to remove all infrastructure worksheets, prevent screen updating during macro execution, and force horizontal page breaks for a designated number of samples per page. You can create your own LIMS work order reports by copying this template and modifying the Report worksheet. The Report worksheet uses formulas to display sample characteristics and uses named ranges to specify the location for analyses and their optional results. After exporting a LIMS work order report to this template, explore the workbook's worksheets for the data available for your report.</p> <p>The LIMSData worksheet, which contains sample characteristics for each sample, is populated by the LIMS when exporting the Work Order report. The AfterTransferFromLIMS macro populates the AnalysisData worksheet by querying data from the LIMS. The macro then copies the formulas in the sheet's OneSample named range vertically, once for each sample exported from the LIMS. The OneAnalysisResult named range does not use formulas to display analyses and their results. The AfterTransferFromLIMS macro copies the OneAnalysisResult named range horizontally and adds additional rows as necessary to display the sample's analyses. The macro uses the OneAnalysis and OneResult named ranges within the OneAnalysisResult to place the analyte name and result.</p> <p>To alter the report layout, no changes to the macro should be necessary. Simply modify the formulas and formats in the OneSample, OneAnalysisResult, OneAnalysis, and OneResult named ranges. Modify the formats, size, and location of the OneAnalysisResult, OneAnalysis, and OneResult named ranges to alter the placement of analyses.</p> <p>To view the VBA code in the AfterTransferFromLIMS macro, use Alt+F11 to open the VBA editor, then double-click on the LIMSData worksheet under Microsoft Excel Objects in the VBA Project window. Note that macro text in green are comments.</p> <p>Report LIMSData AnalysisData Settings Read Me</p>	<p>No VBA Code to change.</p>

Template Name	ReadMe Tab	Change To
Work Sheet.xltn	 <p>The screenshot shows an Excel spreadsheet with a 'ReadMe' tab selected. The text in the spreadsheet provides instructions for using the 'Work Sheet' template. Key points include: <ul style="list-style-type: none"> The template is an example work sheet report created by exporting MSC-LIMS 'Work Sheet'. It lists samples and their selected analyses in consecutive rows. The report intentionally uses many columns with narrow widths for better control over the layout. Named ranges like 'OneSample', 'OneAnalysisResult', 'OneAnalysis', and 'OneResult' are used. The 'Settings' worksheet has important configuration options for macro execution and page breaks. The 'LIMSData' worksheet contains sample characteristics and is populated by the LIMS when exporting. The 'AfterTransferFromLIMS' macro copies formulas and adds rows for analyses. Instructions on how to alter the report layout and view VBA code are provided. </p>	No VBA Code to change.