



Creating Custom Reports

Spectra Geospatial, 10368 Westmoor Drive, Westminster, CO 80021, USA Spectra Geospatial, Rue Thomas Edison, ZAC de la Fleuriaye – BP 60433, 44474 Carquefou (Nantes), FRANCE

© 2020, Trimble Inc. All rights reserved. Spectra Geospatial is a Division of Trimble Inc. Spectra Geospatial and the Spectra Geospatial logo are trademarks of Trimble Inc. or its subsidiaries. All other trademarks are the property of their respective owners.

About this tutorial

Survey Office provides numerous predefined reports that typically meet most user's reporting needs. However, you may have a need to create a custom report that meets the specific needs of a particular project or client — a report that requires a custom look or custom data layout. In this case, you can create a custom report template using Microsoft® Word® that defines the type of data included in the report and the layout of that data, and then run that report with any project.

In this tutorial, you will create a custom report template and then use it to run a custom report on data in the tutorial project. You will also modify a predefined custom report template.

Notes:

MS Word version 2010 or later is required to make edits to a report template.
 You cannot use the cloud-based version of Word in Microsoft[®] Office 365 to create custom reports.

- If you need additional help at any time you are using the software, press **F1** to display the online help.

Step 1. Open the project

For this tutorial, you will use the project file *Creating Custom Reports.vce*. GNSS, total station, and level data has already been imported into the project, and GNSS baselines have been processed.

Note: The downloaded *CreatingCustomReports* folder contains this PDF file and the *Creating Custom Reports.vce* project file. It also contains the *Tutorial Custom Report.docx* file that you will use to create a new custom report template.

- 1. In SO, select **File > Open**.
- 2. In the **Open File** dialog, browse to ..*CreatingCustomReports\Creating Custom Reports.vce* and click **Open**.

The project opens in the Survey Office window.



The project file is read-only. You can perform the tutorial steps without saving the project file.

Step 2. Create a new custom report template

In this step, you will specify properties for a new custom report template.

 In the Quick Access toolbar (located at the top of the SO window), select Reports > Create Custom Report to display the Create Custom Report dialog.

Create Custom Report	×
Report name:	
Description:	
Report source data:	
Baseline Processing Report	~
Report layout file:]]
Edit Layout OK C	ancel

2. In the **Report name** field, enter *Tutorial Custom Report*.

This is the name you will select when you run the report in SO. You will also select to use this name as the title to display in the report later in this procedure.

3. In the **Description** field, enter Use for tutorial.

This description is displayed with the report in the **Report Options** pane, which is covered later in this tutorial.

4. In the **Report source data** drop-down list, select *Point List*.

Each of the options in the list specifies a set of related data that can be added to your report. For the *Tutorial Custom Report*, you will be including point data.

5. Click the **Search** button located to the right of the **Report layout file** field.

The **Open** dialog displays with the the *C*:*ProgramData**Trimble**ReportTemplates* folder opened. This folder contains the predefined DOCX custom report templates installed with SO. For this procedure, you will not select to use one these DOCX template files. Instead, you will use a DOCX file that was downloaded with the tutorial package.

6. In the **Open** dialog, browse to the location where you downloaded the tutorial, select ...*CreatingCustomReports\Tutorial Custom Report.docx*, and click **Open**.

Create Custom Report		×
Report name:		
Tutorial Custom Report		
Description:		
Use for tutorial		
Report source data:		
Point List		~
Report layout file:		
C:\Trimble Tutorials\CreatingCustomRep	orts\Tutorial Custo	om Repo
Edit Layout	ОК	Cancel

- 7. Click **Edit Layout** to open *Tutorial Custom Report.docx,* which is a custom report template created specifically for this tutorial.
- 8. In the **Report Layout Data Fields** message dialog, click **OK** to insert the *Point List* source data into the *Tutorial Custom Report.docx* template.

The *Tutorial Custom Report.docx* document opens in MS Word.

Tutoni		- ut		Point List		
Tutoria	al Custo	п кер	ort		Data fields:	
Company nam Project title: Current date: Coordinate	e: System				⊕ □ 1. Stand ⊕ □ 70. Stand ⊕ □ 74. Hea ⊕ □ 77. Point	ardHeaderir dardFooterir derinfo :s
			-	0.11		
Name	Datum		Zone	Geoid		
Name Points Point ID	Longitude	Li	Zone	Geoid		
Name Points Point ID	Longitude	Li	Zone	Geoid Height	Selected path:	
Name Points Point ID Feature Cod	Longitude		Zone	Geoid Height	Selected path:	

Note: The **Create Custom Report** dialog will remain open while you edit the report template in Word. When you are done making edits in Word, you will return to this dialog to save the template in SO.

Step 3. Edit the new custom report template

In this step you will add *Point List* data fields to the Word document, which has already been formatted with headings, labels, and tables to support the data fields you want to add to the report. You can, as necessary, create your own Word document with the look and layout you desire for the resulting report.

Notes:

- MS Word version 2010 or later is required to make edits to a report template.

- You cannot use the cloud-based version of Word in Microsoft[®] Office 365 to create custom reports.

- If you open a DOCX report template directly from an **Explorer** window or the Word application, the **Report Layout Data Fields** dialog will not display and you will be unable to make data field edits in the template. To display the **Report Layout Data Files** dialog with the template in Word, you must open the template using the the **Edit Layout** button in SO.

The *Tutorial Custom Report.docx* file is read-only, so you will need to start by saving the file with a new name.

- 1. In MS Word, do the following:
 - a. Select File >Save As and click the Browse button.
 - b. In the **Save As** dialog, save the file to the ..*CreatingCustomReports* folder with a new name: *Tutorial Custom Report Copy.docx*.
 - c. Click Save.

2. In MS Word, click the **Show/Hide** paragraph icon [¶] in the tool bar to display formatting marks and hidden field text in the document.

Company name: Project title: Current date: Coordinate System Name Datum Points Point ID Longitude	Report	Geoid
Company name: Project title: Current date: Coordinate System Name Datum Points Point ID Longitude	Report	Geoid
Company name: Project title: Current date: Coordinate System Name Datum Points Point ID Longitude	Report	Geoid
Company name: Project title: Courrent date: Coordinate System Name Datum Points Point ID Longitude Longitude		Geoid
Company name: Project title: Current date: Coordinate System Name Datum Points Point ID Longitude		Geoid
Company name: Project title: Current date: Coordinate System Name Datum Points Point ID Longitude	Zone	Geoid
Company name: Project title: Current date: Coordinate System Name Datum Points Point ID Longitude	Zone	Geoid
Company name: Project title: Current date: Name Datum Points Point ID Longitude	Zone	Geoid
Current date: Coordinate System Name Datum Points Point ID Longitude	Zone	Geoid
Coordinate System Name Datum Points Point ID	Zone	Geoid
Coordinate System Name Datum Points Point ID	Zone	Geoid
Name Datum Points Point ID	Zone	Geoid
Points Point ID Longitude		
Points Point ID Longitude	I	
Points Point ID Longitude		
Point ID Longitude		
Point ID Longitude		
	Latitude	Height
/) = 26 = A A A Aa = 🚷 🗄 = 🚍	• *s;= • €≡ ∌≡ A↓ •	AaBbCcDt AaBbCcDt AaBb
- abe X2 X2 🔉 - at - = = =	= <u>1</u> - <u>∆</u> - ⊞ -	- Normal 1 No Spac Heading
Fact F	P	
FORL 121 X 1 <td>Paragraph</td> <td>4</td>	Paragraph	4
8		
Tutorial·Custom·	Report¶	
Tutorial Custom	Report¶	
Tutorial·Custom·	Report¶	
Tutorial·Custom· ¶ Company-name:-¤	Report¶	
Tutorial Custom	Report¶	
Tutorial Custom	Report¶	
Tutorial Custom	Report¶	
Tutorial Custom 1 Company-name::# Project title::# Current-date::# 1 Coordinate-System¶	Report¶	
Tutorial·Custom• 1 Company-name:-# Project-title:-# Current-date:-# 1 Coordinate-System¶ Name# Datum#	Zonett	Geoidt
Tutorial Custom 1 Company-name::# Project title::# Current-date::# 1 Coordinate-System¶ Name# Datum# # #	Report¶	Geoida R

Seeing the formatting marks should make it easier to perform the formatting tasks described in this procedure.

The following image shows the various components of the report template document.

Tutoria 1 Company-nam Project-title:-# Current-date:-: 1 Coordinate-S	e::¤ a System¶	stom·	Rep	ort¶	*	? ' 2'	12 12	Da	ita fields: 	Header IFooter Ifo
Name¤		Datum¤		Zone¤		Geoid¤	ä			
g		g		L B		1.0				
۹				1						
¶ Points¶ Point-ID¤	Long	itude¤	1	atitude¤	H	leight¤	µ			
¶ Points¶ Point-ID¤ ¤	Long ¤	itude¤	Li	atitude¤	H	leight¤	µ		lasted with	
¶ Points¶ ¤ গ Feature-Cod	Long ¤ es¶	itude¤	Li ¤	atitude¤	H x	leight¤	н н	Se	lected path:	
¶ Points¶ Point-ID¤ ¤ ¶ Feature-Cod	Long ¤ es¶ Code	itude¤ ?¤	Point-ID	atitude¤	Codex	leight¤	р	Se	lected path:	
¶ Point-ID¤ ¤ ¶ Feature-Cod Point-ID¤ ¤	Long k es¶ Code x	itude¤ ?¤	Point-ID ¤	atitude¤	н х Соdeя х	Height¤	н	Se	lected path: yout control:	

Key:

1. These are the headings, labels, and tables that have already been inserted into the document. When creating or editing a report template, you can use any of the formatting features in Word to provide the look and feel you want in the final report.

2. This is the **Report Layout Data Fields** pane. It displays all of the data fields available with the selected **Report source**, any of which you can select to add to the report template. Data fields are grouped in a "tree" type organization with expanding folder nodes.

3. These are "hidden" **Field Mapping** data fields that are required for the template. You can ignore these fields; you will not interact with them. Note that you can hide the fields by clicking the **Show/Hide** paragraph icon **1**.

To add data fields to the report template, you can click and drag the field from the **Report Layout Data Fields** pane to any location in your document. Or, you can select the data field in the **Report Layout Data Fields** pane and click the **Insert** button.

 In the Report Layout Data Fields pane, expand StandardHeaderInfo > CompanyInformation. Then click and drag the CompanyName data field to the right of the static text *Company name* in the template.

The data field displays showing the data field name and placeholder text.

Tutoria ¶ Company-name Project-title-a Current-date:a ¶ Coordinate-Sy	I-Custom-R	eport¶		H H H H	Point List Data fields: Data fi
Namor Manar	Datumir	70001	Conite	1	- I 1. CompanyContary Company I - I 12. CompanyPhone < Company I

1	Company-name: Company-Nameg
	Project·title:·¤
ľ	Current-date:-¤

When the report is generated, the company name specified in the project (**Project Settings > General Information > Company Information**) will display.

 Repeat this procedure to insert the StandardHeaderInfo > ProjectInformation > ProjectTitle and StandardFooterInfo > Current Date data fields into the template.

When you are done, placeholder text displays in the template at the locations where you inserted the data fields.

¶	
Com	pany·name:·Company·Name¤
Proj	ect·title:·Project·Title¤
Curr	ent·date: 2000/01/01·0:00:00¤
¶	

- 5. Insert the following data fields into the empty second row in the *Coordinate System* table:
 - StandardHeaderInfo > CoordinateSystem > Name
 - StandardHeaderInfo > CoordinateSystem > Datum
 - StandardHeaderInfo > CoordinateSystem > Zone
 - StandardHeaderInfo > CoordinateSystem > Geoid

Coordinate-System¶

Name¤	Datum¤	Zone¤	Geoid¤
US-State-Plane-1983¤	NAD·1983·(Conus)¤	Colorado-North-0501¤	GEOID03-(Conus)¤
9			

Note: To remove a data field and its placeholder text from the template, simply select it and press the **Delete** key twice. Or, click the **Remove** button in the **Report Layout Data Fields** pane.

- 6. Insert the following data fields into the empty second row in the *Points* table:
 - Points > Point > PointID

- Points > Point > Global > Longitude
- Points > Point > Global > Latitude
- Points > Point > Global > EllipsHeight

Points¶

Point·ID¤	Longitude¤	Latitude¤	Height¤
100	W100°00'00.00000"¤	N100°00'00.00000"¤	1234.567¤
9	·		

Next you will specify to display all of the points in the project, along with their coordinates, in the same table.

- 7. To specify that additional point rows be created as necessary in the report, do the following:
 - a. Select the **PointID** data field in the table.

P	oints¶	
	79! PointID	Longitud
	100¤	W100°00
Ĩ		

- b. In the **Report Layout Data Fields** pane, click the **Property** button to display the **Property** pane for the selected instance of the data field.
- c. Check the Increase rows for new record check box.

Note that you also have the option to create a new table in the report for each point record by checking the **Insert table for new record** check box.

Property	×
Repeated Option	
Increase rows for new record	
Insert tables for new record	
Repeated Order Number:	0
Do not increment record	

d. Click OK.

Although you do not see a change in the template, additional rows will be created as necessary when you generate the report with project data.

- 8. Insert the following data fields into the empty cells in the second row in the *Feature Codes* table:
 - Points > Point > PointID (first and third column)
 - Points > Point > FeatureCode > FeatureCode (second and fourth column)

Feature • Codes¶

Point·ID¤	Code¤	Point·ID¤	Code¤	¤
100¤	PP¤	100	PP¤	¤
9				

Note that each time you insert a new instance of a data field into the template, the number in parenthesis to the right of the data field in the **Report Layout Data Fields** pane increments by one, giving you an ongoing tally of how often the field is being used. You can see that the **PointID** data field has been inserted three times.



Also note that each instance of a data field is displayed in the **Layout control** list when any of the instances is selected in the template. Any options selected for an instance (in the **Property** dialog) are also displayed in the list. This allows you to select multiple instances of a data field and apply the same property to all of them at the same time using the **Property** dialog. In the following example, an instance of a **PointID** data field has been selected in the template. The three instances of the **PointID** data field are displayed in the **Layout control** list, and you can see that the first instance has the **Increase rows** option selected.

Lay	Layout control:					
#	Option	Data field				
1	Increase rows	79. PointID				
2	None	79. PointID				
3	None	79. PointID				

Unlike the *Points* table, where you set up a single row and then specified that rows be added as necessary to accommodate all of the point records, for this table you will create a specific number of rows so that the records can sort downward and then across using the **Repeated Order Number** option in the **Property** pane.

Repeated Order Number option not selected:

Point·ID¤	Feature ·	Point·ID¤	Feature-
	Code¤		Code¤
700¤ 📒	a a the	7015	
703¤ 🚅		7041	enmtø
706¤ 🧰	-	10.78	onmtx

Repeated Order Number option selected:

Point·ID¤	Feature ·	Point·ID¤	Feature ·
	Code¤		Code¤
700¤	nail¤	705¤	cmh¤
701¤	nail¤	706¤	epmt¤
702¤	epmtia	707¤	epmt¤
703¤	epmt¤	708¤	b¤

9. To add rows to the *Feature Codes* table, do the following :

a. Click in the template to the immediate left of the second row in the *Feature Codes* table to select the row. Or, click and drag to select the row.

Feature • Codes¶

TT.				
	Point·ID¤	Code¤	Point·ID¤	Code¤
	100¤	PP¤	100¤	PP¤
	¶			

- b. Right-click and press **Ctrl + C** to copy the row, including the inserted data fields.
- c. Click to the left of the paragraph marker immediately following the table and press **Ctrl + V** to paste the copied row immediately following the first row.

Feature • Codes¶

Point·ID¤	Code¤	Point·ID¤	Code¤
100¤	PP¤	100¤	PP¤
100¤	PP¤	100¤	PP¤
1			

- d. Continue to add 12 additional rows to the table (that is, continue to press Ctrl + V) for a total of 14 rows.
- e. The table will now support 28 **PointID/FeatureCode** records: up to 14 in each of two columns.
- 10. To apply the **Repeated Order Number** option to the data fields in the table, do the following:
 - a. Either click and drag, or use **Shift + click**, to select the first two columns in the second through fourteenth rows.

Point·ID¤	Code¤	Point·ID¤	Code¤	3
100 ¤	PP¤	100¤	PP¤	3
L00¤	PP¤	100¤	PP¤	3
¤ 00	PP¤	100¤	PP¤	3
.00 ¤	PP¤	100¤	PP¤	3
L00¤	PP¤	100¤	PP¤	3
100 ¤	PP¤	100¤	PP¤	3
L00¤	PP¤	100¤	PP¤	1
.00¤	PP¤	100¤	PP¤	3
.00 ¤	PP¤	100¤	PP¤	1
LOOM	PP¤	100¤	PP¤	3
L00 ¤	PP¤	100¤	PP¤	1
100 ¤	PP¤	100¤	PP¤	1
L00¤	PP¤	100¤	PP¤	1
100¤	PP¤	100¤	PP¤	3

Feature • Codes¶

- b. Click the **Property** button in the **Report Layout Data Fields** pane to display the **Property** dialog.
- c. Ensure the first two check boxes are not selected and select 1 in the **Repeated Order Number** drop-down list.



- d. Click OK.
- e. Select the last two columns in the second through fourteenth rows, click the Property button in the Report Layout Data Fields pane and select 2 in the Repeated Order Number drop-down list in the Property dialog. Then click OK.

Point·ID¤	Code¤	Point·ID¤	Code¤
100¤	PP¤	100¤	PP#
100¤	PP¤	100¤	PP¤
100¤	PP¤	100¤	PP#
100¤	PP¤	100¤	PP¤
100¤ 🧹	PP¤	100¤	PP¤
100¤	PP¤	100¤	PP¤
100¤	PP¤	100¤	PP¤
100¤	PP¤	100¤	PP#
100¤	PP¤	100¤	PP¤
100¤	PP¤	100¤	PP#
100¤	PP¤	100¤	PP¤
100¤	PP¤	100¤	PP¤
100¤	PP¤	100¤	PP¤
100¤	PP¤	100¤	PP¤
9			

Feature • Codes¶

Your report template is complete.

11. Click **Ok** in the **Report Layout Data Fields** pane.

MS Word closes.

The new Word template file name *Tutorial Custom Report - Copy.docx* displays in the **Report layout file** field in the **Create Custom Report** dialog in <Survey Office.

You are now ready to run the new custom report.

Step 4. Run the new custom report

1. In the **Create Custom Report** dialog in Survey Office, click **OK**.

The new report template is added to the report lists displayed in SO.

There are several ways to run a report. For this procedure, you will use the **Report Options** pane.

2. In the Quick Access toolbar, select Reports > Report Options to display the Report Options pane.



3. In the **Reports list**, select *Tutorial Custom Report* and click the **Show Report** button located in the **Report Options** pane tool bar.

The new custom report opens in MS Word, showing the project data.

Tutorial Custom Report

ompany name: Ace Surveying	
roject title: Creating Custom Reports	
urrent date: 12/10/2018 2:04:59 PM	

Coordinate System

Name	Datum	Zone	Geoid
US State Plane 1983	NAD 1983 (Conus)	Colorado North 0501	GEOID09 (Conus)

Points

Point ID	Longitude	Latitude	Height
3	W105°06'44.88903"	N39°53'51.32566"	1651.2280
5	W105°06'54.82440"	N39°53'55.54561"	1656.9293
5b	?	3	?
B 412	W105°05'44.58200"	N39°53'08.66618"	1619.3686

Note that additional rows were added to the *Points* table to support all of the points in the project. Note too that the records in the *Feature Codes* table run down and then across, as designed.

Feature Codes

Point ID	Code	Point ID	Code
3	scp	JEFFCO AZ MK	
5	SCP	Jeffco Reset	SCP
5b	1	P041	
B 412	SCP	PLTC	
barbara	scp	sixtwo	SCP
ENERGY	SCP	t	
ENERGY AZ MK		MGO	
F 408	SCP	u	
filter	scp	v	*
flange		w	
frey	scp	х	
fsi	SCP	у	
HANNA	S CP		
hard	scp		

Next, you will modify a predefined custom report template.

Step 5. Create a predefined custom report template

In this step, you will specify properties for a new custom report template based on one of the predefined MS Word report template installed with Survey Office in *C:\ProgramData\Trimble\ReportTemplates*. The predefined report templates replicate the default RDLC templates typically used to generate SO reports. Your intent in this tutorial is to add a point/feature code table to a predefined *Baseline Processing Report* template.

 In the Quick Access toolbar, select Reports > Create Custom Report to display the Create Custom Report dialog.

Create Custom Report	×
Report name:	
Description:	
Report source data:	
Baseline Processing Report	~
Report layout file:	
Edit Layout	OK Cancel

2. In the **Report name** field, enter *Tutorial Custom Report 2*.

This is the name you will select when you run the report in SO. You will also select to use this name as the title to display in the report later in this procedure.

3. In the **Description** field, enter *Use for tutorial*.

This description is displayed with the report in the **Report Options** pane.

- 4. In the **Report source data** drop-down list, select *Baseline Processing Report*.
- 5. Click the **Search** button located to the right of the **Report layout file** field.

The **Open** dialog displays with the *C*:*ProgramData**Trimble**ReportTemplates* folder open.

6. In the **Open** dialog, select *Custom Baseline Processing Report.docx* and click **Open**.

Create Custom Report	×
Report name:	
Tutorial Custom Report 2	
Description:	
Use for tutorial	
Report source data: Baseline Processing Report	~
Report layout file:	
C:\ProgramData\Trimble\ReportTemplates\Custom Baseline Proce	
Edit Layout OK Cancel	

7. Click Edit Layout to open *Custom Baseline Processing Report.docx*.

The *Custom Baseline Processing Report.docx* document opens in MS Word.

Name: X:ProjectFileName.v ce Name: Company Name Name: US Sta Size: 100 KB Office operator: Company Address 1 Datum: NAD 19 Size: 100 KB 2000/01/01 0:00:00 (UTC:7) Geoid: Geoid: GEOID Time zone: Mountain Standard Time Mountain Standard Vertical datum: Vertical Geoid: Vertical datum: Reference number: 1 Image: Comment 1: Project File Image: Comment 1: Image: Comment 1: Comment 1: Project File Comment 2: Project File Image: Comment 2: Image: Comment 2: Comment 3: Project File Comment 3 Image: Comment 3: Image: Comment 3: Image: Comment 3: Processing Report		oject file data
oe Office operator: Company Address 1 Datum: NAD 19 Size: 100 KB Zone: Colorad Modified: 2000/01/01 0:00:00 (UTC:7) Geoid: Geoid: GEOID Time zone: Mountain Standard Time Vertical datum: Vertical datum: Vertical Reference number: 1 Vertical datum: Vertical Vertical Description: Project File Description Project File Comment 1 Image: Comment 2 Image: Comment 2 Comment 2: Project File Comment 3 Project File Comment 3 Image: Comment 3 Image: Comment 3 Processing Report	X:\Projec	ime:
Size: 100 KB Zone: Colorad Modified: 2000/01/01 0:00:00 (UTC:7) Geoid: GEOID Time zone: Mountain Standard Time Vertical datum: Vertical second Vertical datum: Vertical second Reference number: 1 Project File Second Second <td< th=""><th>CB</th><th></th></td<>	CB	
Modified: 2000/01/01 0:00:00 (UTC:7) Geoid: GEOID Time zone: Mountain Standard Time Vertical datum: Vertical datum: Vertical datum: Reference number: 1 Image: Standard Description Image: Standard Description Image: Standard Description Image: Standard Description Comment 1: Project File Comment 1 Project File Comment 2 Image: Standard Description Image: Standard Description Comment 2: Project File Comment 3 Project File Comment 3 Image: Standard Description Image: Standard Description Comment 3: Project File Comment 3 Image: Standard Description Image: Standard Description Image: Standard Description Comment 2: Project File Comment 3 Image: Standard Description Image: Standard Description Image: Standard Description Standard Description Comment 2: Project File Comment 3 Image: Standard Description Image: Standard Description Project File Comment 3 Image: Standard Description Processing Report Processing Summary Observation HPrec: V.Prec: Geodelic Ellipsoid Dist	100 KB	e:
0:00:00 (UTC:7) Image: Standard Time Vertical datum:	2000/01	dified:
Time zone: Mountain Standard Time Vertical datum: Vertical statum: Vertical statum: Vertical statum: Reference number: 1 Project File Description Image: Statum s	0:00:00	
Time Image: Section Time Image: Section Image: Section <th< td=""><td>Mountai</td><th>ne zone:</th></th<>	Mountai	ne zone:
Reference number: 1 Image: Section of the Description Description: Project File Description Image: Section of the Description Comment 1: Project File Comment 1 Image: Section of the Description of the Description Comment 2: Project File Comment 2 Image: Section of the Description of the Description of the Description of the Description Comment 2: Project File Comment 2 Image: Section of the Description of the Descri	Time	
Description: Project File Description Project File Comment 1 Image: Comment 1 Comment 1: Project File Comment 2 Project File Comment 2 Image: Comment 2 Comment 3: Project File Comment 3 Image: Comment 3 Image: Comment 3 Baseline Processing Report Processing Summary Observation From To Solution Type H.Prec. (US survey V.Prec. (US survey Geodetic Az. Ellipsoid Dist	er: 1	ference nur
Description Image: Secret File Comment 1 Comment 1: Project File Comment 1 Comment 2: Project File Comment 2 Comment 3: Project File Comment 3 Baseline Processing Report Processing Summary Observation From To Solution HPrec: (US survey (US survey Az. V.Prec: Geodetic Ellipsoid Dist	Project	scription:
Comment 1: Project File Comment 1 Comment 2: Project File Comment 2 Comment 3: Project File Comment 3 Baseline Processing Report Processing Summary Observation From To Solution Type H.Prec. (US survey V.Prec. (US survey Geodetic Az. Ellipsoid Dist	Descrip	
Comment 1 Image: Comment 1 Comment 2: Project File Comment 2 Comment 3: Project File Comment 3 Baseline Processing Report Processing Summary Observation From To Solution Type H.Prec. (US survey V.Prec. (US survey Geodetic Az. Ellipsoid	Project	mment 1:
Comment 2: Project File Comment 2 Comment 3: Project File Comment 3 Baseline Processing Report Processing Summary Observation From To Solution Type H.Prec. (US survey V.Prec. (US survey Geodetic Az. Ellipsoid Dist	Comme	
Comment 2 Image: Comment 2 Comment 3: Project File Comment 3 Comment 3 Image: Comment 3 Baseline Processing Report Processing Summary Observation From To Solution Type H.Prec. (US survey V.Prec. (US survey Geodetic Az. Ellipsoid Dist	Project	mment 2:
Comment 3: Project File Comment 3 Image: Comment 3 Baseline Processing Report Processing Summary Observation From To Solution Type H.Prec. (US survey V.Prec. (US survey Geodetic Az. Ellipsoid Dist	Comme	
Comment 3 Baseline Processing Report Processing Summary Observation From To Solution H.Prec. V.Prec. Geodetic Ellipsoid Observation From To Solution H.Prec. V.Prec. Geodetic Ellipsoid Type (US survey (US survey Az. Dist.	Project	mment 3:
Baseline Processing Report Processing Summary Observation From To Solution H.Prec. V.Prec. Geodetic Ellipsoid Type (US survey (US survey Az. Dist.	Comme	
Observation From To Solution H.Prec. V.Prec. Geodetic Ellipsoid Type (US survey (US survey Az. Dist.		
Type (US survey (US survey Az. Dist.		
1900 (00 Juilly 102 Juilly 12. Disc.	From	servation
	From	servation

Note: The **Create Custom Report** dialog will remain open while you edit the report template in Word. When you are done making edits in Word, you will return to this dialog to save the template in SO.

Step 6. Edit the predefined custom report template

In this step you will add *Point List* data fields to the predefined *Custom Baseline Processing Report.docx* template.

Notes:

MS Word version 2010 or later is required to make edits to a report template.
 You cannot use the cloud-based version of Word in Microsoft[®] Office 365 to create custom reports.

- If you open a DOCX report template directly from an **Explorer** window or the Word application, the **Report Layout Data Fields** dialog will not display and you will be unable to make data field edits in the template. To display the **Report Layout Data Files** dialog with the template in Word, you must open the template using the the **Edit Layout** button in SO.

The *Custom Baseline Processing Report.docx* file is read-only, so you will need to start by saving the file with a new name.

- 1. In MS Word, do the following:
 - a. Select File >Save As and click the Browse button.
 - b. In the **Save As** dialog, save the file to the tutorial ..*CreatingCustomReports* folder with a new name: *Custom Baseline Processing Report Tutorial.docx*.

You could save the file to the default *C:\ProgramData\Trimble\ReportTemplates* folder, but it is probably better not to "clutter" that folder with this new tutorial report template.

- c. Click Save.
- 2. If a **Microsoft Word** message dialog displays prompting you to upgrade to the newest file format, click **OK**.
- 3. In MS Word, click the **Show/Hide** paragraph icon ^{III} in the tool bar to display formatting marks and hidden field text in the document.

You can now edit the report template by changing the look and layout as necessary. For example, you can move tables, remove tables, remove data fields, change fonts and sizes, and so on. For this tutorial, you will add a **FeatureCode** table to the end of the report.

4. Scroll to the end of the template (but preceding the "hidden" **Field Mapping** data fields) and click to insert the cursor to the immediate left of the paragraph marker following the "Acceptance Criteria" table, as shown here. Then press the **Enter** key four times to insert four new paragraph markers preceding the paragraph.

	Acceptance Criter
Vector-Component∝	Flago
Horizontal·Precision·>∞	0.020·m·+·1.000·pp
ł	
2000/01/01-0:00:00¤	X:\ProjectFileName.vceq
¶	
	Acceptance-Criteri
Vector-Component:	Flaga
Horizontal·Precision·>∞	0.020·m·+·1.000·ppn
¶	
¶	
¶	
¶	
¶	
2000/01/01-0:00:000	Y-\ProjectEileName.vcos

- 5. To insert the heading for the new table, do the following:
 - a. Click to insert the cursor to the immediate left of the second paragraph marker following the "Acceptance Criteria" table and type *Feature Codes*.

	Vector-Comp
	Horizontal Prec
¶	
Fea	ature Codes¶
¶	
¶	
¶	

b. Select the new heading text and then select *Arial, Bold, 10 pts* in the pop-up formatting toolbar (or select **Home > Font** in the **Word** ribbon).



c. With the table heading text still selected, click **Home > Paragraph > Center** to center it in the report.

~	:-		3		,	a T	-		5	Ξ	•	Ξ	Z۰
•		= :	=	≡		_		\$	=	Ŧ		⊘	
- Fai						Pa	ra	gra	ар	h			
	2			T				3	÷	÷	÷	I	

Acceptance Criteria¶								
	Flage							
	0.020·m·+·1.000·ppm¤							

Feature Codes¶

Click to insert the cursor to the immediate left of the first paragraph marker

- following the new table heading and do the following to insert a new table:
 - a. In the **Word** ribbon, select **Insert > Tables > Table** and select to create a twocolumn table with two rows.



- b. In the first column in the first row, type *Point ID* for the column heading.
- c. Select the new column heading text and change the font to *Arial, Bold, 9 pt* in the pop-up formatting toolbar. Also, select to center the column heading in the column.

-		Feature	e·Codes¶
+	Point-ID¤		
ł			¤
	$\mathbf{B} I \equiv \overset{\mathbf{a}}{\simeq} \mathbf{A} \times \overset{\mathbf{a}}{\simeq} \overset{\mathbf{a}}{\simeq} \mathbf{A} \times \overset{\mathbf{a}}{\simeq} \mathbf{A} \times \overset{\mathbf{a}}{\simeq} \mathbf{A} \times \overset{\mathbf{a}}{\simeq} \mathbf{A} \times \overset{\mathbf{a}}{\simeq} \overset{\mathbf{a}}{\simeq$		
	1		

d. Repeat these steps to add the column heading *Feature Code* to the second column.

Feature	Feature·Codes¶					
Point·ID¤	Feature-Code ^p					
۵	۵					

You are now ready to insert data fields into the new table

7. In the **Report Layout Data Fields** pane, select *Point List (Sub)* in the **Report source** drop-down list.

This is the same data source you used to create the previous template. Here, it is included as a "sub-report" data source for the primary *Baseline Processing Report* data source, allowing you to insert additional point/feature-related data fields into the report template.

8. In the **Report Layout Data Fields** message window, click **OK** to insert the *Point List* source data into the *Custom Baseline Processing Report - Tutorial.docx* template.

The data fields included in the *Point List (Sub)* report source are represented by a closed expandable node in the **Data fields** list.

Report Layout Data Fields
Report source:
Point List (Sub)
Data fields:

- 9. Using the **Data fields** list, insert the following data fields into the empty first and second column in the second row in the table.
 - Points > Point > PointID (first column)
 - Points > Point > FeatureCode > FeatureCode (second column)

+	¶	
	Point·ID¤	321! FeatureCode
	100 ¤	PP¤
	¶	
	e	

10. Click to the immediate left of the second row to select it. Then change the font to *Ariel, 8 pts* (not bold) in the pop-up toolbar.

This will apply the correct font style to the data in the actual report.

- 11. To specify that additional rows be created as necessary in the report, do the following:
 - a. Select the **PointID** data field in the table.
 - b. In the **Report Layout Data Fields** pane, click the **Property** button to display the **Property** pane for the selected instance of the data field.
 - c. Click the Increase rows for new record check box.

Feature Codes¶



d. Click OK.

-

Miscellaneous notes:

If you scroll up to the previous table in the report template (*Acceptance Criteria*), you can see two blue data field placeholders in the first row.

Acceptan	ce-Criteria¶	/	
Flag∝	2	Fail¤	
0.020·m·+	·1.000·ppm¤	0.050·m·+	·1.000·ppm¤

If you click on either of the blue placeholders, you can see that it is actually an image frame representing a data field that references a graphic file, which will display in the final report.





Acceptance Onicia				
Flag	2	Fail	P	
0.050 m + 1.000 ppm		0.100 m +	1.000 ppm	

Note that you can change the size of the image in the actual report by checking the **Stretch image to fit the control** check box in the **Property** dialog and resizing the image frame in the template.

If you create an empty table with multiple columns, you can drag a folder node from the **Data fields** list into the first column in the row, causing each of the data fields nested beneath the folder node (including those in subfolders) to be inserted into each of the columns in the row automatically, up to the limits of the row. For example, if you insert a folder node that contains five data fields into a table row with four columns, each of the first four data fields in the folder will be inserted into each of the columns in the row. The fourth data field will be ignored.

 If a folder in the **Data fields** list includes a red plus symbol, it indicates that the first data field in the folder is a parent field and all data fields nested beneath it in the folder and all subfolders are child fields.

Data fields:		
🖃 🗁 🗁 🖂		
🗄 🏣 316. Point		

The data in the child fields is dependent on the parent field. For example, a *Point* field is a parent field that includes numerous child fields, including *FeatureCode, Attributes, Northing, Easting, Elevation,* and additional property fields for the point. You can insert a parent/child folder () into a template table row, which, in turn, automatically adds the folder's parent field to the first column, followed by the child fields contained in the folder and subfolders in each of the subsequent columns, up to the limits of the row.

For this tutorial, your report template is complete.

12. Click **OK** in the **Report Layout Data Fields** pane.

MS Word closes.

You are now ready to run the newly edited predefined report.

Step 7. Run the edited predefined custom report

For this step, you will use a different method to run the report than you used in the step 4.

1. In the **Create Custom Report** dialog, click **OK**.

The new report template is added to the report lists displayed in SO.

2. In the Quick Access toolbar, select Reports > More Reports.

More Reports				
Alignment Geometry Report ALTA/NSPS Allowable Relative Tolerance Report Area/Length/Count Report As-Staked Corridor Report As-Staked Report Balance Line Report	^	OK Close		

3. In the More Reports dialog, select Tutorial Custom Report 2 and click OK.

The new report opens in MS Word, showing the project data.

Project file data		User information	User information		Coordinate System	
Name:	C:\Trimble	Name:	Ace Surveying	Name:	US State	
	Tutorials\CreatingCu stomReports\Creatin g Custom Reports Test vce	Office operator:		Datum:	NAD 19	
Size:	200 KB			Zone:	Colorade	
Modified:	12/10/2018 10:18:17 AM (UTC:-7)			Geoid:	GEOIDO	
Time zone:	Mountain Standard Time			Vertical datum:		
Reference number:		J				
Description:						
Comment 1:						
Comment 2:		••••••••••••••••••••••••••••••••••••••			+	
Comment 3:						

Tutorial Custom Report 2	
--------------------------	--

+	Processing Summary							
	Observation	From	То	Solution	H.Prec.	V.Prec.	Geodetic	Ellipsoid
				Туре	(Meter)	(Meter)	Az.	Dist.
								(Meter)

Go to the end of the report to see the new **Feature Code** table you added to the report template.

Vertical Precision >	0.100 m + 1.000 ppm	0.200 m + 1.000 pp

Codes
00400

Point ID	Feature Code
3	scp
5	SCP
B 412	SCP
barbara	scp
ENERGY	SCP
F 408	SCP
filter	scp

Note: To edit an existing report template, select it in the **Report Options** pane and click the **Edit Custom Report** button to display the **Edit Custom Report** dialog.

This completes the tutorial.