

Power Query Adding Characters

Adding Characters

Important Because . . .



- Data doesn't always come in the format or view we can use
- A variable may need specific number of characters to be able to combine with another data set
- Without having uniform length, you can run into sorting/searching issues or pivot table combining issues.
- Without cleaning the variable, you can arrive at incorrect results and make poor decision based on it.
- Sometimes a specific number or word/text needs to be added to a set of variable column, either at the beginning or end

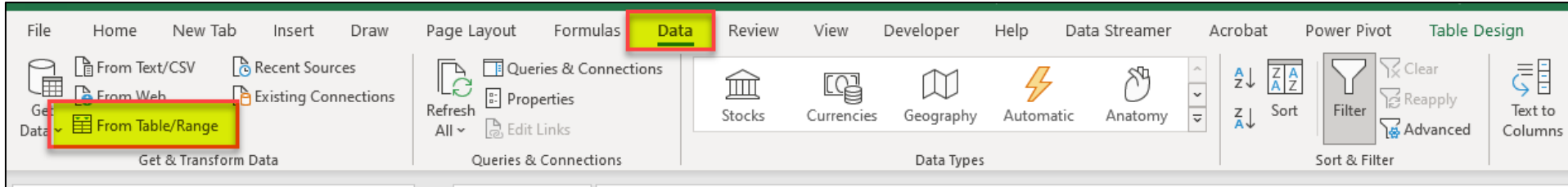


Client data is below, we created a table so it can be moved into Power Query. We are looking for Vendor Code. It's embedded in Column 2.

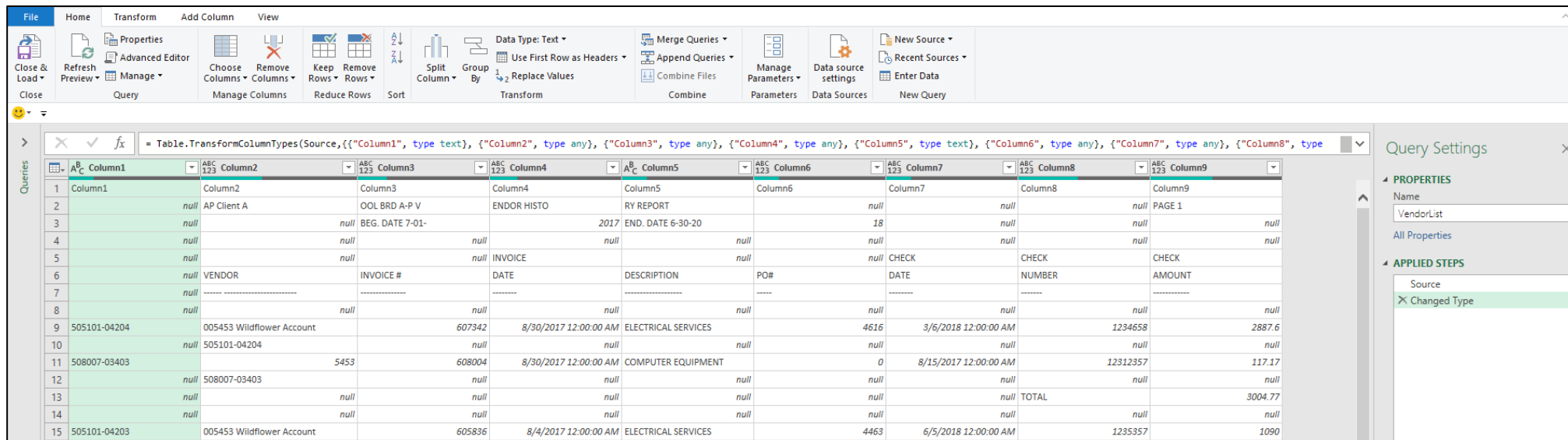
	A	B	C	D	E	F	G	H	I
1	Column1	Column2	Column3	Column4	Column5	Column6	Column7	Column8	Column9
2	Column1	Column2	Column3	Column4	Column5	Column6	Column7	Column8	Column9
3		AP Client A	OOL BRD A-P V	ENDOR HISTO	RY REPORT				PAGE 1
4			BEG. DATE 7-01-	2017	END. DATE 6-30-20	18			
5									
6				INVOICE			CHECK	CHECK	CHECK
7		VENDOR	INVOICE #	DATE	DESCRIPTION	PO#	DATE	NUMBER	AMOUNT
8		-----	-----	-----	-----	-----	-----	-----	-----
9									
10	505101-04204	005453 Wildflower Account	607342	8/30/2017	ELECTRICAL SERVICES	4616	3/6/2018	1234658	2887.6
11		505101-04204							
12	508007-03403	5453	608004	8/30/2017	COMPUTER EQUIPMENT	0	8/15/2017	12312357	117.17
13		508007-03403							
14								TOTAL	3004.77
15									
16	505101-04203	005453 Wildflower Account	605836	8/4/2017	ELECTRICAL SERVICES	4463	6/5/2018	1235357	1090
17		505101-04203							
18								TOTAL	1090
19									
20	508007-03403	005453 Wildflower Account	614229	11/11/2017	COMPUTER EQUIPMENT	0	8/15/2017	12312357	230.84
21		508007-03403							
22								TOTAL	230.84
23									
24	505102-03302	005453 Wildflower Account	626733	4/18/2018	HEATING SERVICES	0	4/4/2018	1234884	43.14
25		505102-03302							
26								TOTAL	43.14
27									
28								TOTAL	4368.75
29									
30									
31	506014-01402	002483 ProWeb Account	118484-163263032	7/15/2017	OTHER OPERATING SUPPLIES	0	9/13/2017	1233180	199.02
32		506014-01402							
33								TOTAL	199.02
34									
35	506014-01402	002483 ProWeb Account	118484-11114888-011	7/26/2017	OTHER OPERATING SUPPLIES	0	9/13/2017	1233180	149.9
36		506014-01402							
37	506014-01402	2483	118484-1632141644	7/26/2017	OTHER OPERATING SUPPLIES	0	9/13/2017	1233180	53.1
38		506014-01402							

The Table is then moved into Power Query Editor and transformed.

- With your cursor in the table, from the Data Ribbon, select From Table/Range



- It moves into PQE



With simple clicks and selections, we have created steps where the Vendor # is in its own column. The Vendor # still isn't set up correctly:

- Vendor # should be 6 characters.
- Not all are 6 characters, so any less than 6 characters needs zeros in front of the numbers to create a 6-character number.

Queries

fx = Table.SplitColumn("#Filtered Rows", "VENDOR", Splitter.SplitTextByEachDelimiter({" "}, QuoteStyle.Csv, false), {"VENDOR.1", "VENDOR.2"})

	A ^B _C GL ACCOUNTS	A ^B _C VENDOR.1	A ^B _C VENDOR.2	A ^B _C INVOICE #	A ^B _C INV DATE	A ^B _C DESCRIPTION	A ^B _C PO#	A ^B _C CHK DATE	A ^B _C CHK #	A ^B _C CHK AMT
1	505101-04204	005453	Wildflower Account	607342	8/30/2017 12:00:00 AM	ELECTRICAL SERVICES	4616	3/6/2018 12:00:00 AM	1234658	2887.6
2	508007-03403	5453	null	608004	8/30/2017 12:00:00 AM	COMPUTER EQUIPMENT	0	8/15/2017 12:00:00 AM	12312357	117.17
3	505101-04203	005453	Wildflower Account	605836	8/4/2017 12:00:00 AM	ELECTRICAL SERVICES	4463	6/5/2018 12:00:00 AM	1235357	1090
4	508007-03403	005453	Wildflower Account	614229	11/11/2017 12:00:00 AM	COMPUTER EQUIPMENT	0	8/15/2017 12:00:00 AM	12312357	230.84
5	505102-03302	005453	Wildflower Account	626733	4/18/2018 12:00:00 AM	HEATING SERVICES	0	4/4/2018 12:00:00 AM	1234884	43.14
6	506014-01402	002483	ProWeb Account	118484-163263032	7/15/2017 12:00:00 AM	OTHER OPERATING SUPPLIES	0	9/13/2017 12:00:00 AM	1233180	199.02
7	506014-01402	002483	ProWeb Account	118484-11114888-011	7/26/2017 12:00:00 AM	OTHER OPERATING SUPPLIES	0	9/13/2017 12:00:00 AM	1233180	149.9
8	506014-01402	2483	null	118484-1632141644	7/26/2017 12:00:00 AM	OTHER OPERATING SUPPLIES	0	9/13/2017 12:00:00 AM	1233180	53.1
9	503500-01210	002483	ProWeb Account	118484-11111601632-011	8/23/2017 12:00:00 AM	PRINTING & BINDING	0	12/19/2017 12:00:00 AM	1234062	467.8
10	506014-01402	002483	ProWeb Account	118484-1616444032	4/4/2018 12:00:00 AM	OTHER OPERATING SUPPLIES	0	9/13/2017 12:00:00 AM	1233180	181.5
11	508002-02106	002473	Peer Business	10246316294	6/7/2018 12:00:00 AM	FURNITURE & FIXTURES	0	10/10/2017 12:00:00 AM	1233470	2245.24
12	505101-03201	035468	Hydro Business	8142026	8/16/2017 12:00:00 AM	ELECTRICAL SERVICES	0	7/24/2017 12:00:00 AM	1232788	100.68
13	505101-03201	35468	null	8142026	8/16/2017 12:00:00 AM	ELECTRICAL SERVICES	0	7/24/2017 12:00:00 AM	1232788	-100.68
14	505101-03201	035468	Hydro Business	814201710	8/16/2017 12:00:00 AM	ELECTRICAL SERVICES	0	7/24/2017 12:00:00 AM	1232788	100.68
15	505201-02201	002469	Geek Business	201006	9/8/2017 12:00:00 AM	POSTAGE	0	9/13/2017 12:00:00 AM	1233167	150

Query Settings

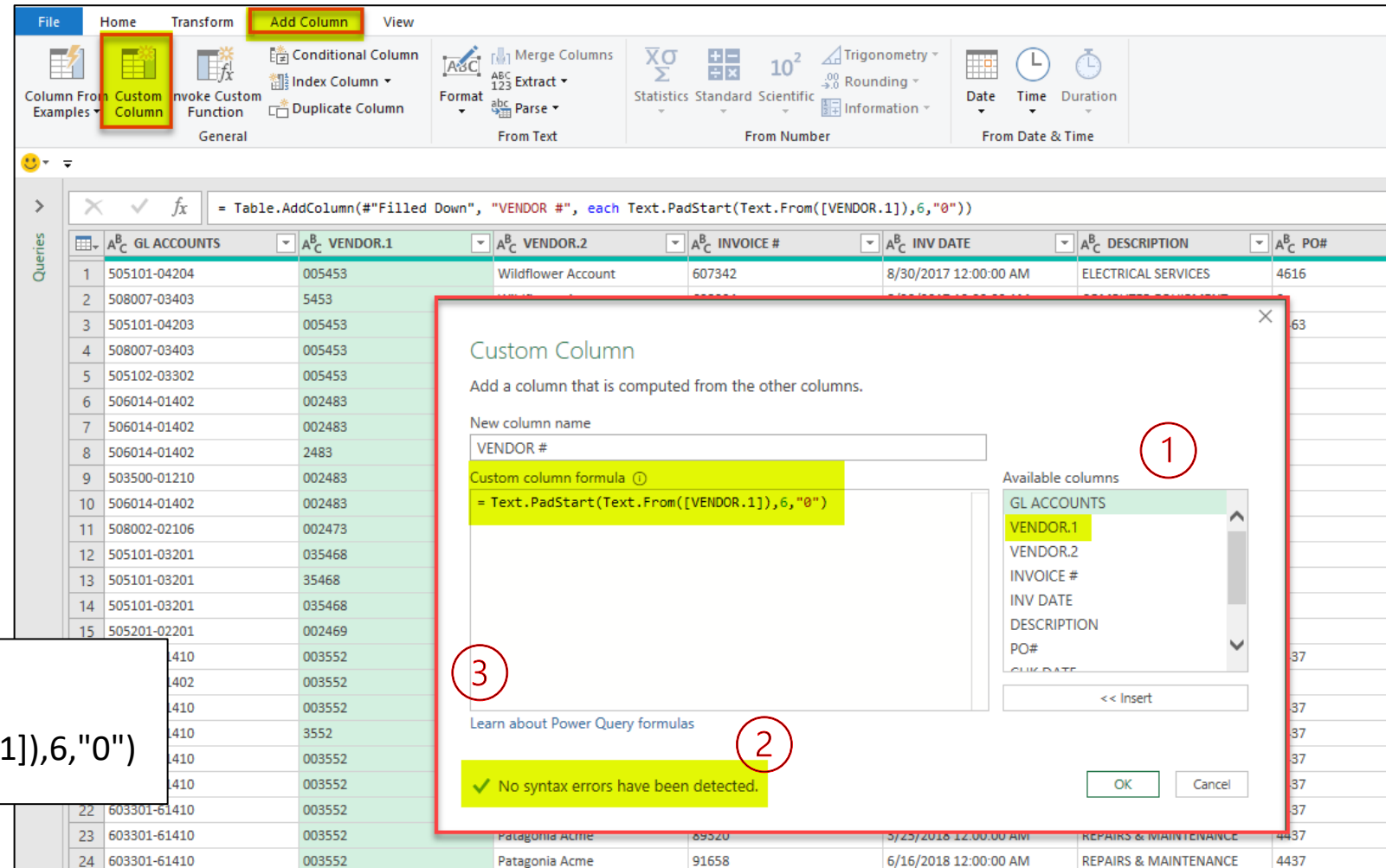
PROPERTIES
Name
VendorList

APPLIED STEPS
Source
Changed Type
Removed Top Rows
Promoted Headers
Changed Type1
Removed Top Rows1
Renamed Columns
Replaced Value
Filtered Rows
Split Column by Delimiter

There can be several steps set up add zeros at the front, but the easiest & best option is to use M-Code. M-Code is Power Query's method to "filter, combine and mash-up data from one or more supported data sources" (<https://docs.microsoft.com>) While its not a click and selection, PQ does help you along with the Custom Column box.

PQ in the Custom Column box has:

- ① Available columns to select from
- ② Identifies any syntax errors.
- ③ Has link to view help on PQ formulas (M-Code)



The screenshot shows the Power Query 'Add Column' ribbon with the 'Custom Column' button highlighted. Below it, the 'Custom Column' dialog box is open. The dialog box contains the following elements:

- New column name:** VENDOR #
- Custom column formula:** = Text.PadStart(Text.From([VENDOR.1]),6,"0")
- Available columns:** A list of columns including GL ACCOUNTS, VENDOR.1, VENDOR.2, INVOICE #, INV DATE, DESCRIPTION, and PO#. VENDOR.1 is selected.
- Syntax error check:** A green checkmark and the text "No syntax errors have been detected." are visible.
- Help link:** A link labeled "Learn about Power Query formulas" is present.

Formula to Copy/Paste:
Text.PadStart(Text.From([VENDOR.1]),6,"0")

Formula to Copy/Paste:

```
Text.PadStart(Text.From([VENDOR.1]),6,"0")
```

Text.PadStart(**text** as nullable text, **count** as number, **optional character** as nullable text) as nullable text

Reading this left to right, adding zeros or padding means the variable must be in a TEXT format.

- For the Vendor # we want the zeros in the front, the Custom Column gives you the = equal sign to start the formula. We type in **Text.PadStart** (the formatting is specific, so case is important)
- Like any Excel formula there is a "(" to start capturing the data. Type in "**Text.From**" and then select the variable from the Available column in the Custom Column box. This says we want to take the text from **VENDOR.1**
- The **6** is the number of characters needed for the text or in this case VENDOR #, we want a 6 character number
- Using the quotation marks on "**0**" shows that this is a text. Whenever using text in a formula, it needs to be in quotes. This "**0**" is the character to use to make up any differences in characters needed to make a 6 character Vendor #.

Custom Column

Add a column that is computed from the other columns.

New column name

Custom column formula ⓘ

Available columns
 GL ACCOUNTS
VENDOR.1
 VENDOR.2
 INVOICE #
 INV DATE
 DESCRIPTION
 PO#
 CUIK DATE

<< Insert

Learn about Power Query formulas

✓ No syntax errors have been detected.

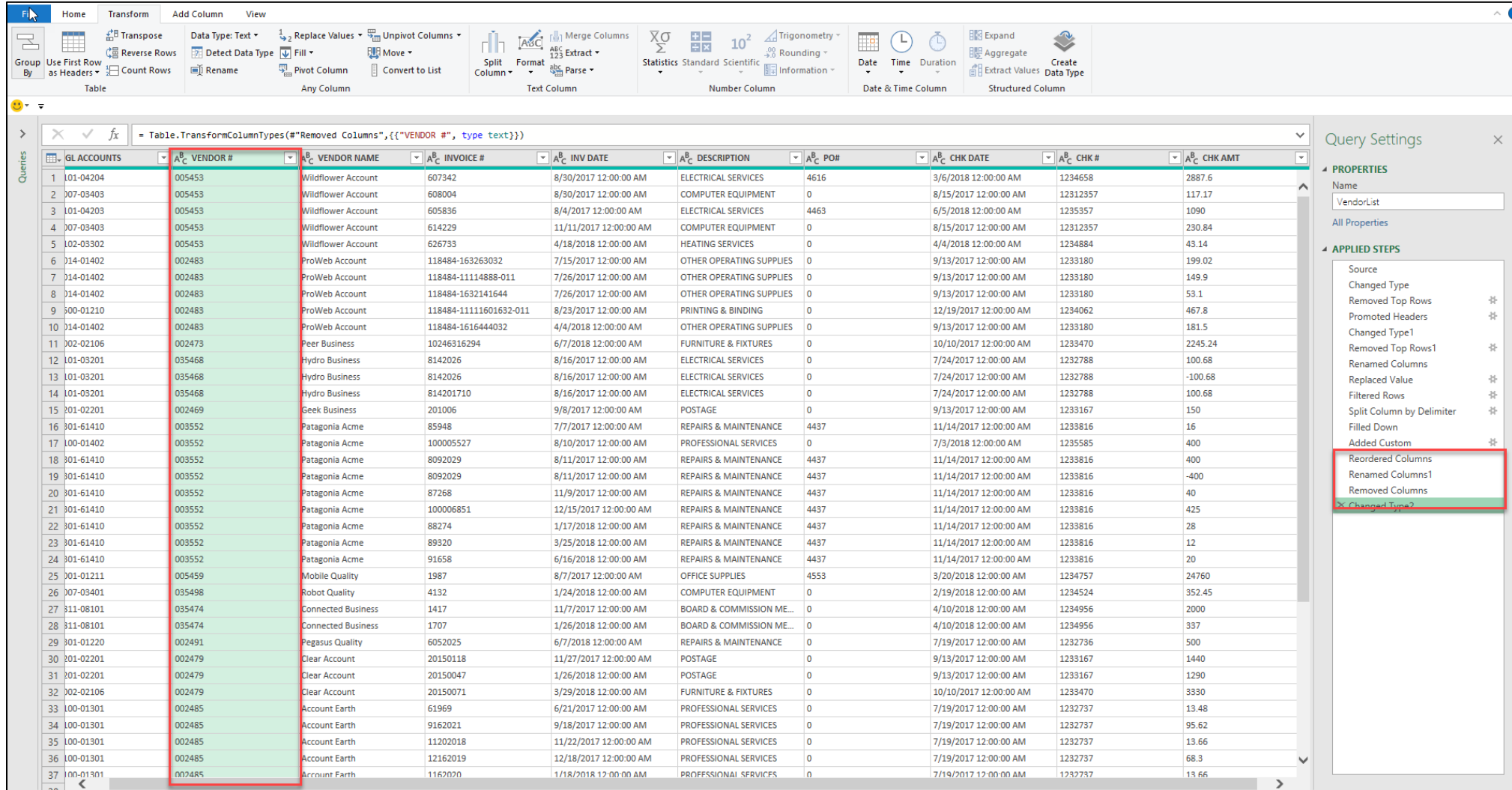
OK

Once the Custom Column is created, the Vendor # shows up as 6 characters. The format is not set, so will need to be changed to Text. If you change the format to a number, the zeros will disappear.

	GL ACCOUNTS	VENDOR #	VENDOR.1	VENDOR.2
1	505101-04204	005453	005453	Wildflower Account
2	508007-03403	005453	5453	Wildflower Account
3	505101-04203	005453	005453	Wildflower Account
4	508007-03403	005453	005453	Wildflower Account
5	505102-03302	005453	005453	Wildflower Account
6	506014-01402	002483	002483	ProWeb Account
7	506014-01402	002483	002483	ProWeb Account
8	506014-01402	002483	2483	ProWeb Account
9	503500-01210	002483	002483	ProWeb Account
10	506014-01402	002483	002483	ProWeb Account
11	508002-02106	002473	002473	Peer Business
12	505101-03201	035468	035468	Hydro Business
13	505101-03201	035468	35468	Hydro Business
14	505101-03201	035468	035468	Hydro Business
15	505201-02201	002469	002469	Geek Business
16	603301-61410	003552	003552	Patagonia Acme
17	503100-01402	003552	003552	Patagonia Acme
18	603301-61410	003552	003552	Patagonia Acme

The PQ Custom Column creates a new column that will show up to the far right of the data. All columns can be reordered in a step

Adding a couple more transformation steps and we have the column in the location and the format we want. By using the PQ M-Code, we can easily set up any length variable.



The screenshot displays the Power Query Editor interface. The main area shows a data table with the following columns: GL ACCOUNTS, VENDOR #, VENDOR NAME, INVOICE #, INV DATE, DESCRIPTION, PO#, CHK DATE, CHK #, and CHK AMT. The 'VENDOR #' column is highlighted in green. The right sidebar shows the 'Query Settings' pane, which includes 'PROPERTIES' and 'APPLIED STEPS'. The 'APPLIED STEPS' list includes: Source, Changed Type, Removed Top Rows, Promoted Headers, Changed Type1, Removed Top Rows1, Renamed Columns, Replaced Value, Filtered Rows, Split Column by Delimiter, Filled Down, Added Custom, Reordered Columns, Renamed Columns1, Removed Columns, and Changed Type2. The 'Reordered Columns' step is highlighted with a red box.

The End

Questions?

Comments?