

## HOW TO IDENTIFY SPECIAL CHARACTERS IN FILE D2 DATA CELLS

This process involves applying a specific formula into the data file, then looking for results that say “#VALUE!”. The identified cell can then be reviewed to locate and rectify a possible special character, such as Æ or ö, which will cause a USAspending.gov rejection. This document starts with an example of such a check with brief instructions. The actual formula used to perform the check is in the second section below.

### EXAMPLE

I wanted to check *Award Descriptions* for special characters in a certification report.

1. In an empty column, click on the first or second cell. In the example, I clicked in 2<sup>nd</sup> cell of Column BD (BD2).
2. In the Formula bar for that cell, copy/paste the formula *shown in next section*. (I used cell address AM2 where the *Award Description* is populated.)

A number appeared in the BD2 cell, 648, after I pasted in the formula.

\*A number result indicates no special characters were found in the award description on row 2.

3. Copy the formula into remaining cells in Column BD. (Click in the BD2 cell again and drag downward to copy the formula into remaining cells.)
4. Numbers appeared in most cells, but you are watching for #VALUE! which prompts you to review the relevant cell contents.

In the example below

- a. a number indicates that there are no special characters found
- b. **#VALUE!** indicates a special character (see Æ) in the Award Description. This will cause records/files to be rejected at USAspending.

| K | AL | AM   | AN   | AO  | AP  | AQ  | AR  | AS  | AT  | AU  | AV | AW  | AX  | AY | AZ | BA | BB | BC | BD      | BE  |
|---|----|--|------|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|----|----|----|----|----|---------|---|
|   |    | <b>AwardDescription</b>                            |      |     |     |     |     |     |     |     |    |     |     |    |    |    |    |    |         |   |
|   | 00 | Micro-Grants for Food Security Program             | 2109 | 508 | 040 | 000 | 000 | 000 | 000 | NOM | 00 | 202 | 012 | H  | AM | D2 |    |    | 648     | If result is just a number, there are no special characters |
|   | 00 | This project was developed in response to the Acer | 2109 | 409 | 010 | 000 | 000 | 000 | 000 | NOM | 00 | 202 | 012 | H  | AM | D2 |    |    | 4137    |   |
|   | 00 | BusinessÆ model innovation and industry            | 2109 | 409 | 993 | 000 | 000 | 000 | 000 | NOM | 00 | 202 | 012 | H  | AM | D2 |    |    | #VALUE! | Special Character Found!                                    |
|   | 00 | The Vermont Agency of Agriculture, Food, and       | 2109 | 409 | 723 | 000 | 000 | 000 | 000 | NOM | 00 | 202 | 012 | H  | AM | D2 |    |    | 4572    |   |
|   | 00 | Vermont Agency of Agriculture, Food and Markets'   | 2109 | 409 | 596 | 680 | 000 | 000 | 000 | NOM | 00 | 202 | 012 | H  | AM | D2 |    |    | 4418    |   |

### THE FORMULA

In the [basic formula](#) below, replace “[cell address]”, with the name of cell you are checking (with no brackets). There are 3 places to do this.

In the example above, I was checking the Award Description field in a Certification Report which falls in Column AM. Therefore, I used cell address: AM2  
I skipped the header row to do my check and placed the formula in 2<sup>nd</sup> row of Column BD, then copied it down to the remaining rows.

#### Basic Formula

```
=IF([CELL ADDRESS]="", "",SUMPRODUCT(SEARCH(MID([CELL ADDRESS],ROW(INDIRECT("1:"&LEN([CELL ADDRESS]))),1),"*****abcdefghijklmnopqrstuvwxyz !@#$%^&*;<>:-=+[]{}()'\_1234567890,.")))
```

#### Formula used in example

```
=IF(AM2="", "",SUMPRODUCT(SEARCH(MID(AM2,ROW(INDIRECT("1:"&LEN(AM2))),1),"*****abcdefghijklmnopqrstuvwxyz !@#$%^&*;<>:-=+[]{}()'\_1234567890,.")))
```