

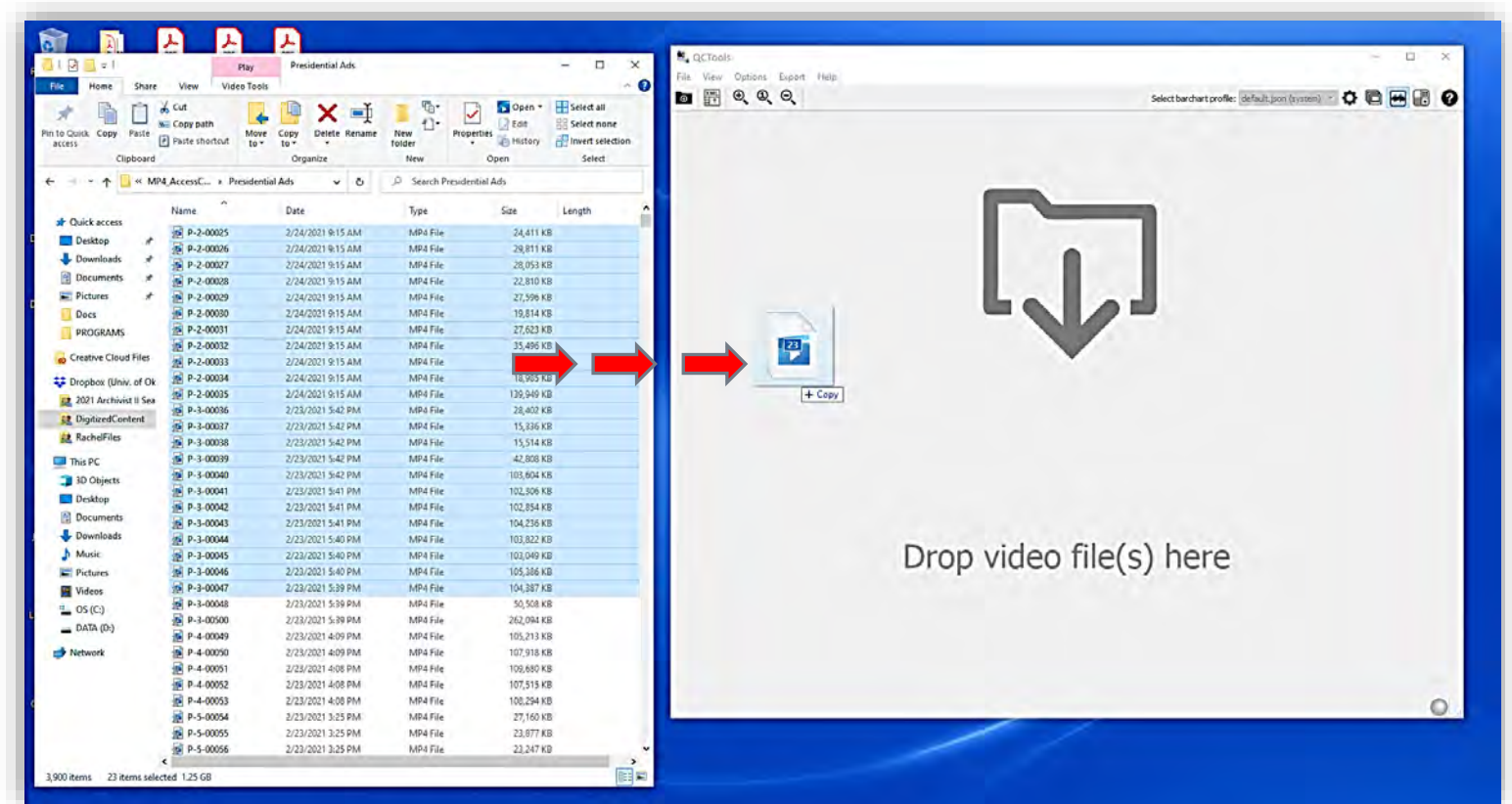
Metadata Tools – Software

Extracting Metadata – Quality Control - QCTools

- **QCTools:** software tool that helps users analyze and understand their digitized video files through use of audiovisual analytics and filtering.
 - Funded by the National Endowment for the Humanities and the Knight Foundation
- Download: <https://mediaarea.net/en/MediaInfo>

QCTools

- Open QCTools
- Open folder to files
- Drag files into QCTools

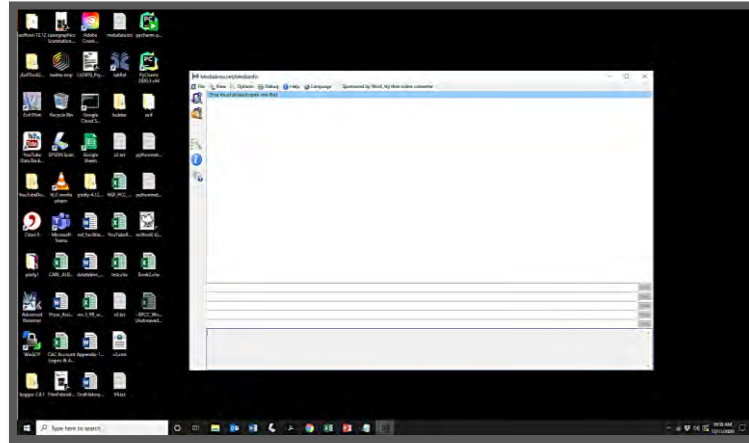


A/V Preservation – Extracting Metadata – MediaInfo

- **MediaArea:** an open-source software company focused on digital media analysis:
- **MediaInfo:** a standalone open-source program that reads media format technical metadata and creates working reports
- Download: <https://mediaarea.net/en/MediaInfo>

MediaInfo

- Open MediaInfo



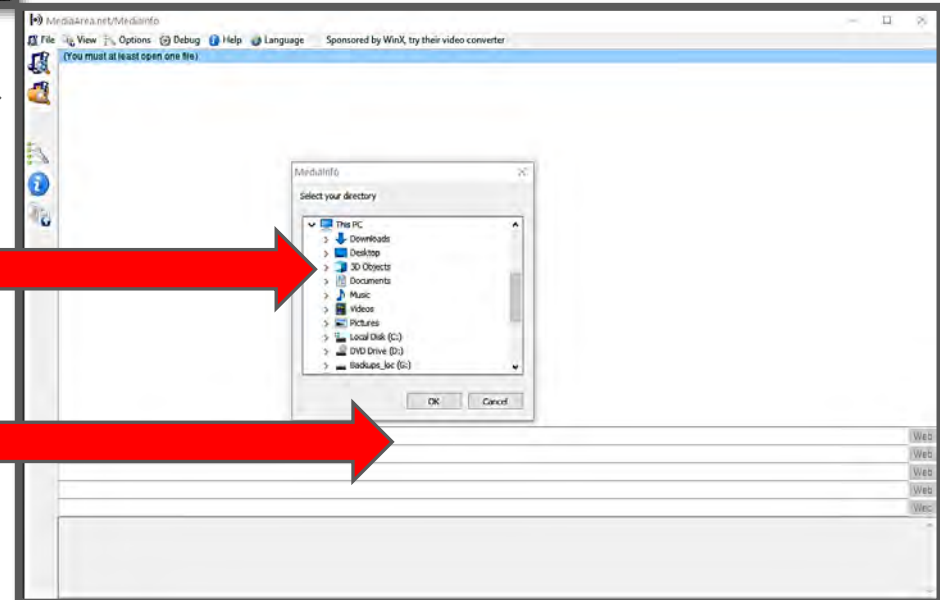
- Click the folder on the side panel



- Navigate to the folder with media

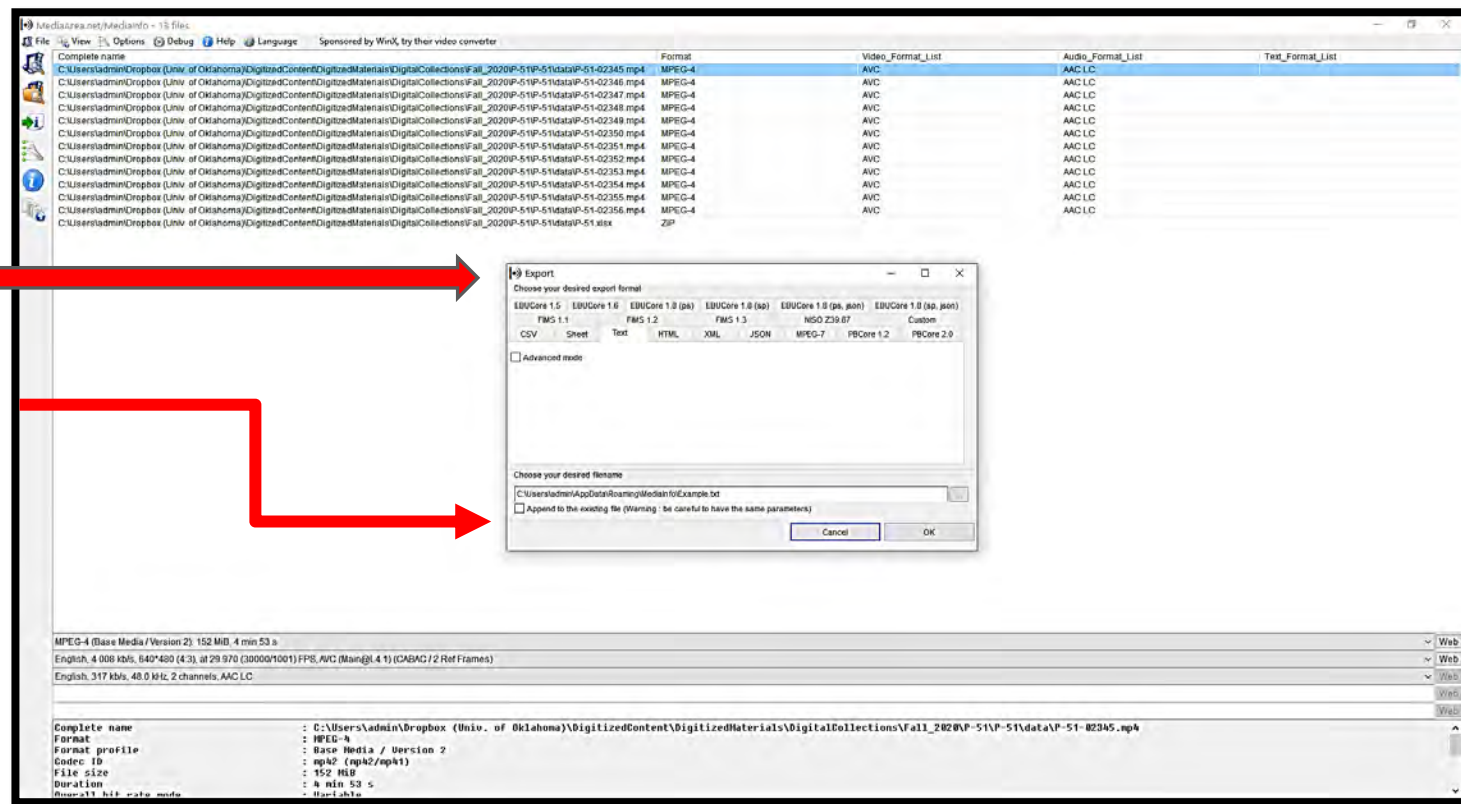


- Click OK



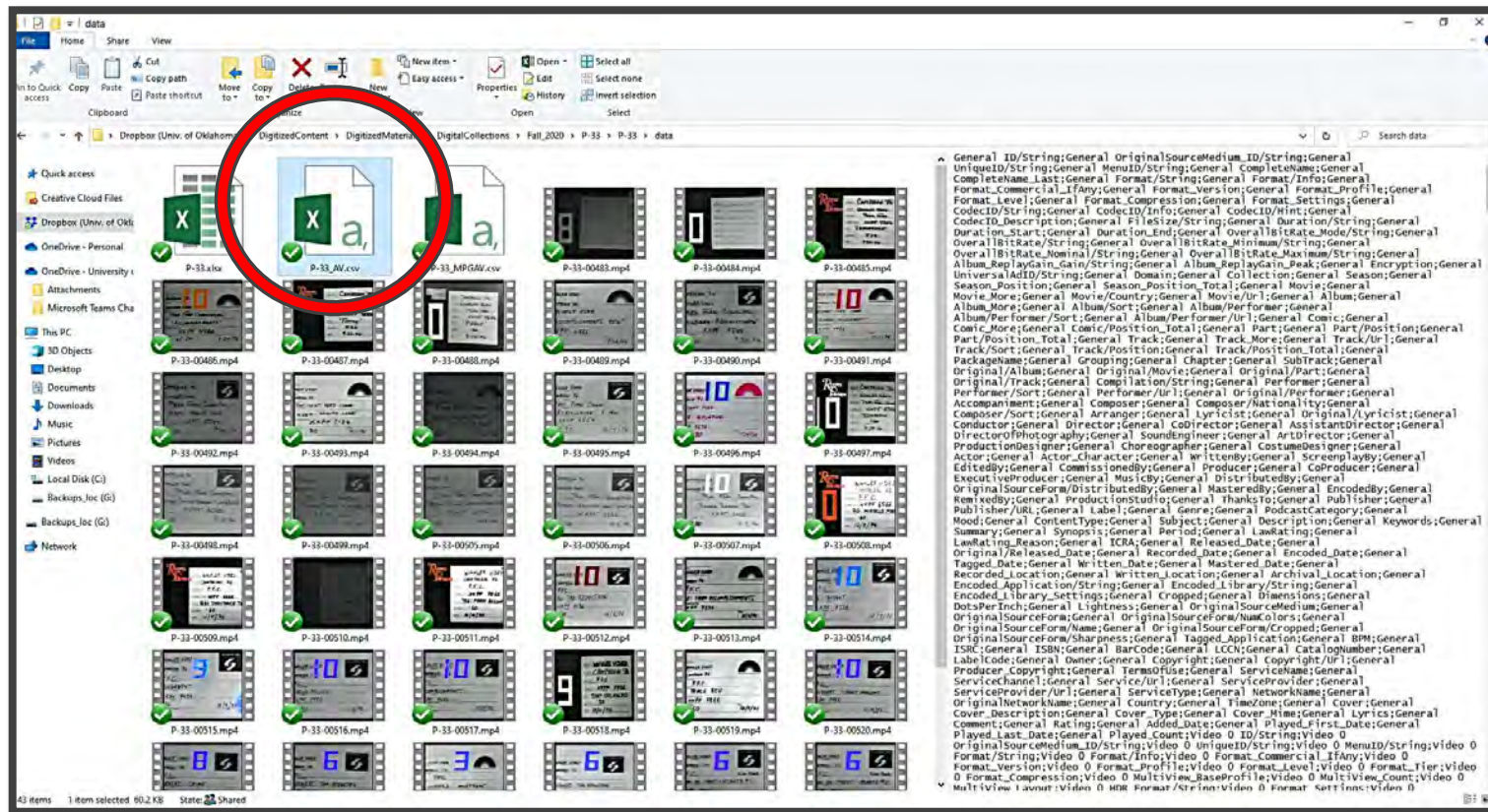
MediaInfo

- Click **FILE** and the **EXPORT**
- Click the **CSV Tab**
- Click the ... to browse location
 - Name the csv P-####_AV.csv
- Click OK



MediaInfo

- The .csv file is NOW in the location of the media



MediaInfo

- Now OPEN the metadata sheet

- MEDIAMETADATA.xlsx

<https://rb.gy/f1ncan>

- Notice two tabs at the bottom of the sheet – MP4 and MPEG

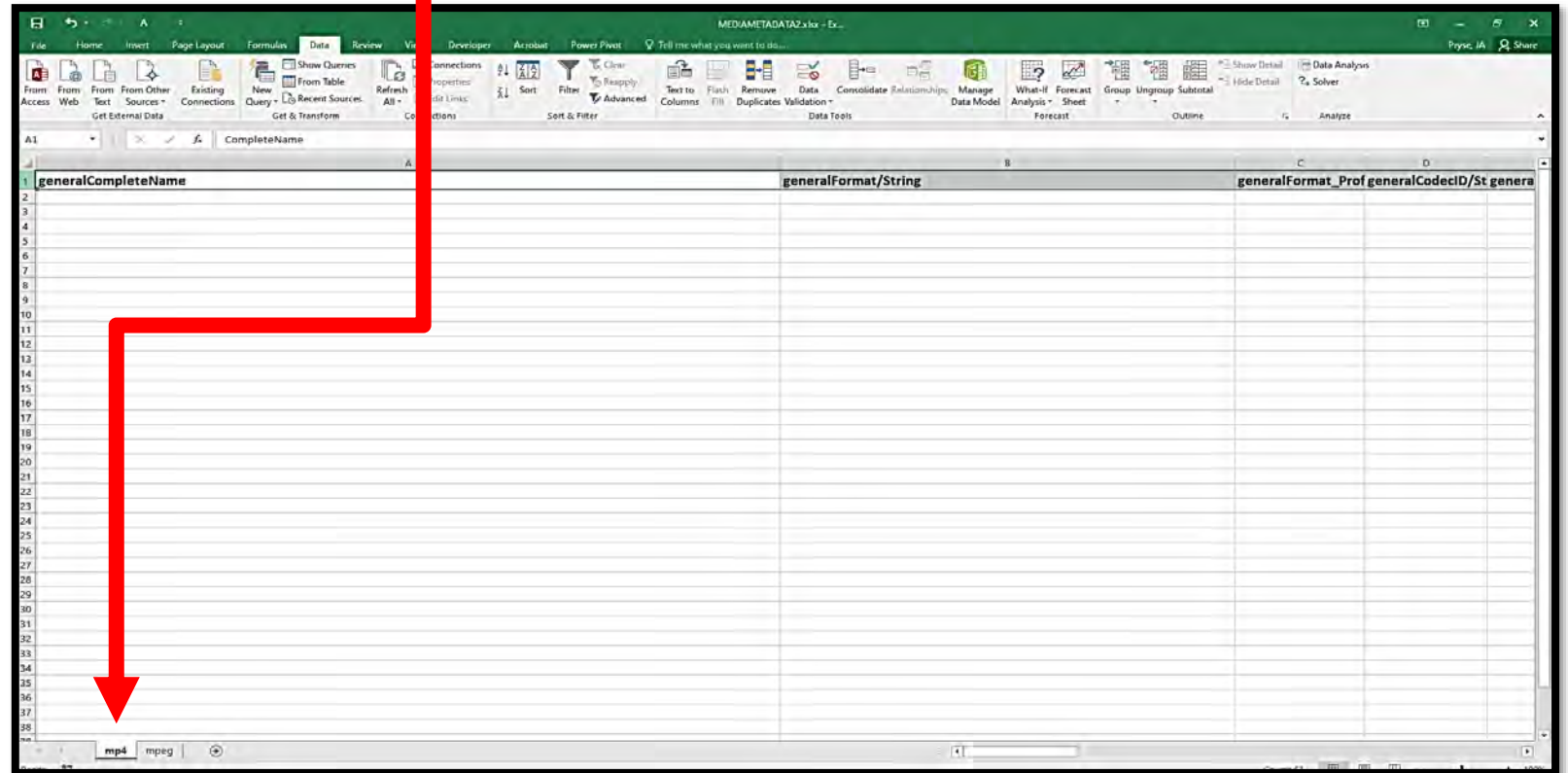
The screenshot shows an Excel spreadsheet titled 'MEDIAMETADATA2.xlsx'. The spreadsheet contains a table with the following columns: video/ID/String, video/Format/Str, video/Format/Info, video/Format_Profil, video/Format_Set, video/Format_Se, video/Format_Se, video/Format_Settings, video/CodecID, video/CodecID/Info, video/Duration/Str, and video/BitRate. The data rows show video files with details such as '1 AVC', 'Advanced Video Codec', 'High@L3.1', 'CABAC / 4 Ref Frames', 'Yes', '4 frames', 'M=3, N=29', 'avc1', 'Advanced Video Coding', and various duration and bit rate values. At the bottom of the Excel window, two tabs are visible: 'mp4' and 'mpeg'. A red arrow points from the text 'Notice two tabs at the bottom of the sheet – MP4 and MPEG' to these tabs.

video/ID/String	video/Format/Str	video/Format/Info	video/Format_Profil	video/Format_Set	video/Format_Se	video/Format_Se	video/Format_Settings	video/CodecID	video/CodecID/Info	video/Duration/Str	video/BitRate
1	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	45 s 479 ms	2 997 kb/s
2	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	44 s 478 ms	3 013 kb/s
3	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	4 min 36 s	2 999 kb/s
4	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 14 s	3 010 kb/s
5	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	4 min 37 s	3 004 kb/s
6	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 16 s	3 001 kb/s
7	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 17 s	3 004 kb/s
8	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 16 s	3 002 kb/s
9	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	45 s 479 ms	2 998 kb/s
10	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 28 s	2 783 kb/s
11	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	48 s 982 ms	3 015 kb/s
12	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 16 s	2 999 kb/s
13	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	4 min 37 s	3 007 kb/s
14	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	46 s 480 ms	2 998 kb/s
15	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	4 min 37 s	3 001 kb/s
16	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 16 s	3 004 kb/s
17	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 16 s	3 006 kb/s
18	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	47 s 481 ms	2 997 kb/s
19	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	46 s 480 ms	2 998 kb/s
20	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	4 min 36 s	3 000 kb/s
21	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 15 s	3 010 kb/s
22	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 16 s	3 004 kb/s
23	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 16 s	3 001 kb/s
24	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 17 s	3 002 kb/s
25	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	45 s 979 ms	2 994 kb/s
26	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	47 s 981 ms	3 005 kb/s
27	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	47 s 981 ms	2 991 kb/s
28	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	43 s 977 ms	2 998 kb/s
29	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	44 s 978 ms	2 999 kb/s
30	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	43 s 977 ms	2 997 kb/s
31	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	43 s 977 ms	2 997 kb/s
32	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 15 s	3 007 kb/s
33	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 15 s	3 007 kb/s
34	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 13 s	3 003 kb/s
35	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 10 s	3 010 kb/s
36	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	39 s 973 ms	3 012 kb/s
37	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	40 s 474 ms	3 019 kb/s
38	1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding		

MediaInfo

- Click on the appropriate TAB (mp4 or MPEG)

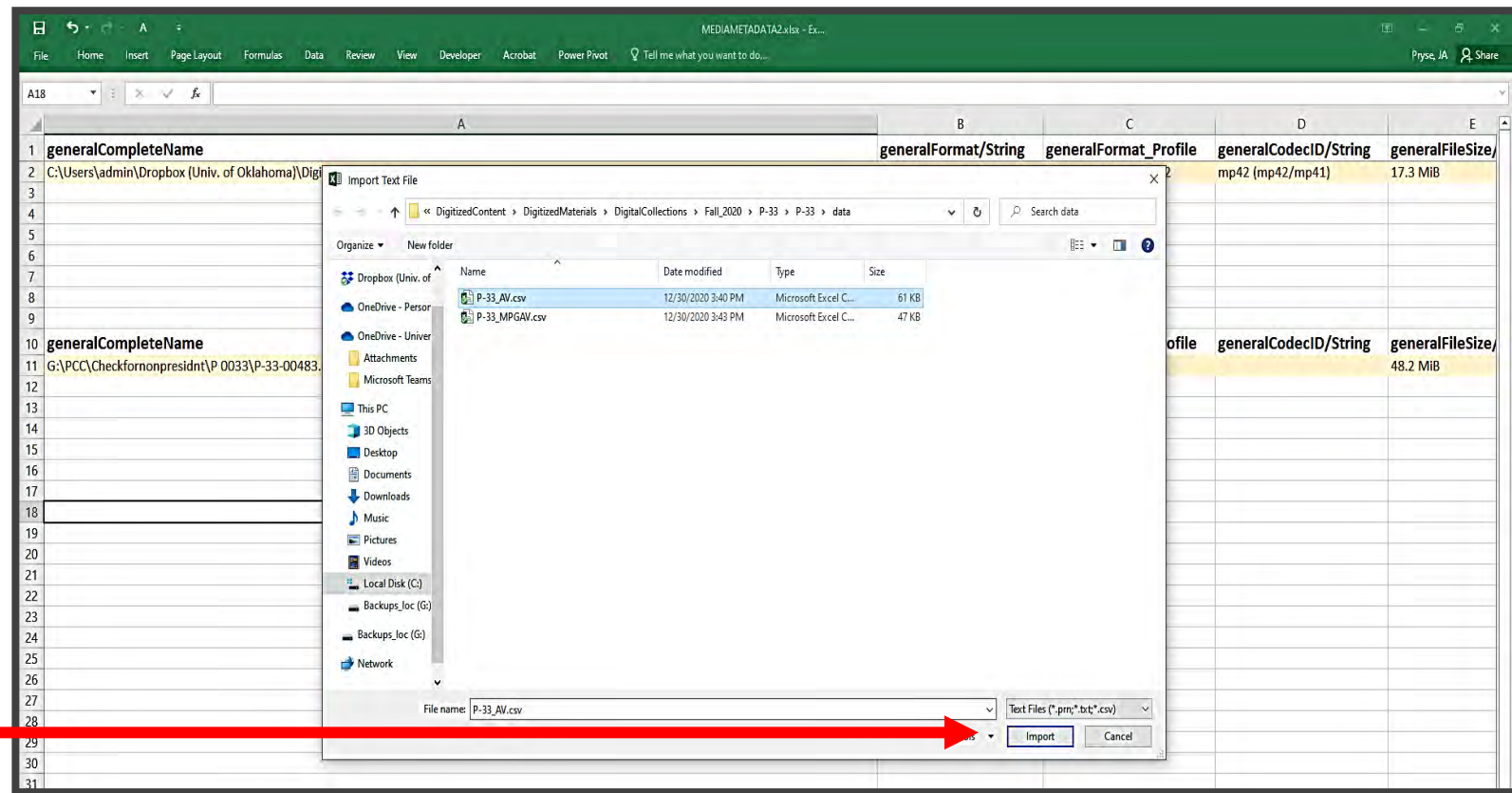
You will delete the highlighted cells before importing data



MediaInfo

A pop-up will bring the file explorer and navigate to saved P-###.csv

Click **IMPORT**



MediaInfo

A pop-up will bring the file explorer and navigate to saved P-###.csv

- Click **IMPORT**

- Click **Delimited**

- Click **NEXT**

- Then click **FINISH**

The screenshot shows an Excel spreadsheet with the following data:

generalCompleteName	generalFormat/String	generalFormat_Profile	generalCodecID/String	generalFileSize/
C:\Users\admin\Dropbox (Univ. of Oklahoma)\DigitizedContent\DigitizedMaterials\DigitalCollections\Fall_2020\P-33\P-33\data\P-33-00483.mp4	MPEG-4	Base Media / Version 2	mp42 (mp42/mp41)	17.3 MiB
G:\PCC\Checkfornonpresidnt\P 0033\P-33-00483.mpg				48.2 MiB

The Text Import Wizard dialog box is open, showing the following options:

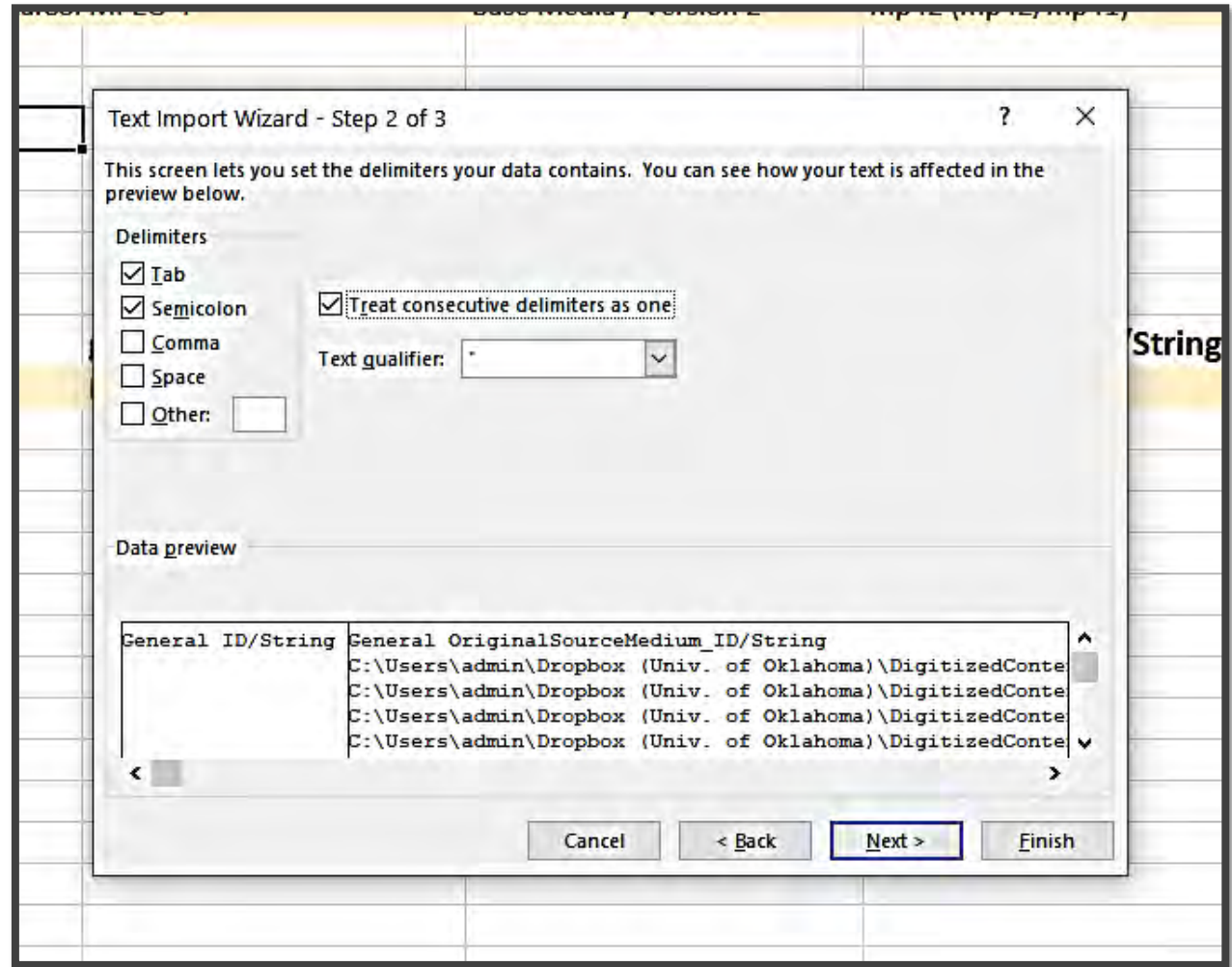
- Original data type: Delimited (selected), Fixed width
- Start import at row: 1, File origin: 437: OEM United States
- My data has headers:

The preview at the bottom of the dialog shows the following data:

```
1 General ID/String;General OriginalSourceMedium ID/String;General UniqueID
2 ;;;C:\Users\admin\Dropbox (Univ. of Oklahoma)\DigitizedContent\Digitized
3 ;;;C:\Users\admin\Dropbox (Univ. of Oklahoma)\DigitizedContent\Digitized
4 ;;;C:\Users\admin\Dropbox (Univ. of Oklahoma)\DigitizedContent\Digitized
5 ;;;C:\Users\admin\Dropbox (Univ. of Oklahoma)\DigitizedContent\Digitized
```

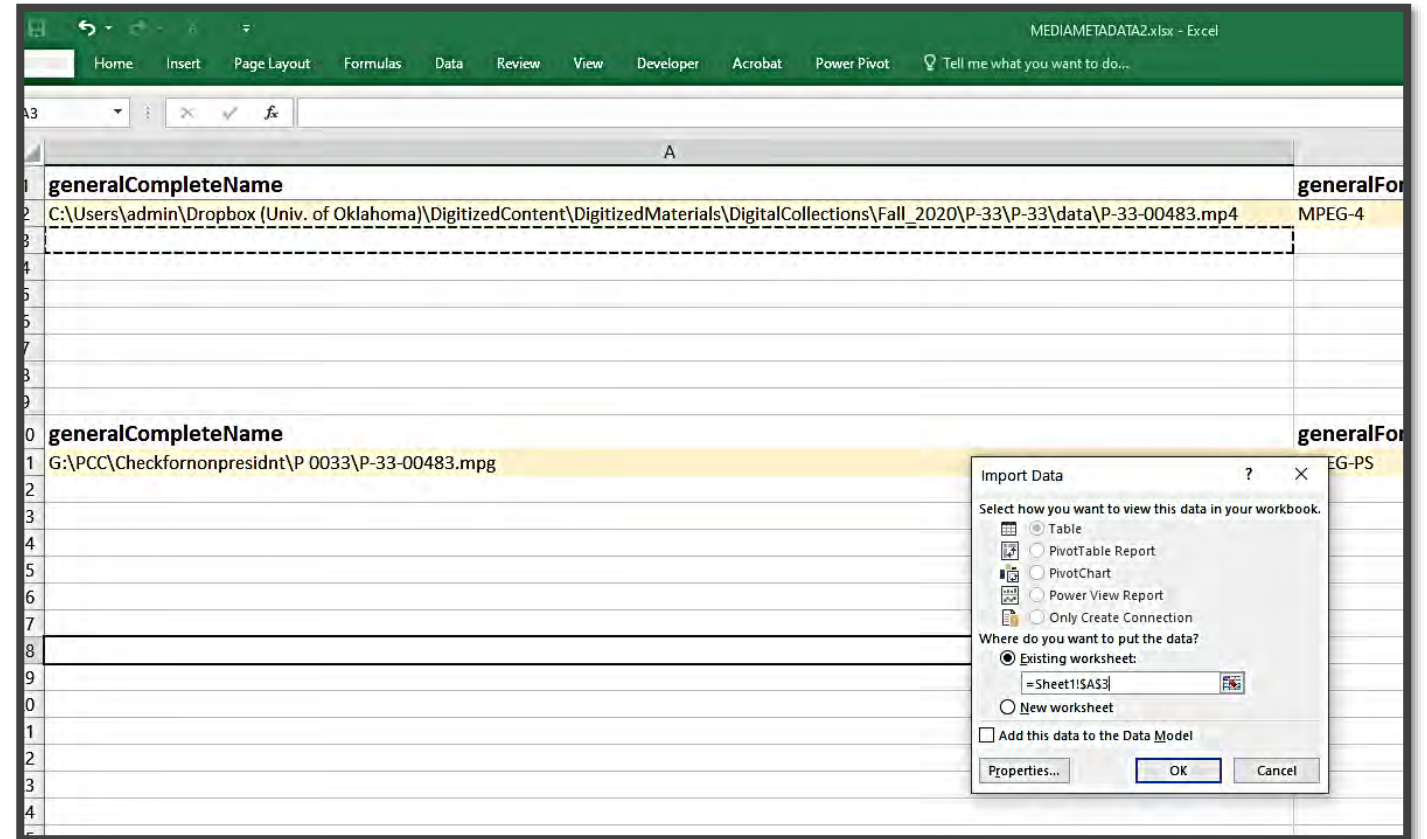
MediaInfo

- A new popup will appear
- Click TAB
- Click Semicolon
- Click Treat consecutive...
- Click NEXT
- Click FINISH on next screen



MediaInfo

- A new popup will appear
- Click the cell to start the import (=Sheet1!\$A\$2)
- Click OK



MediaInfo

- The worksheet populates **BUT** the data needs to be edited a little

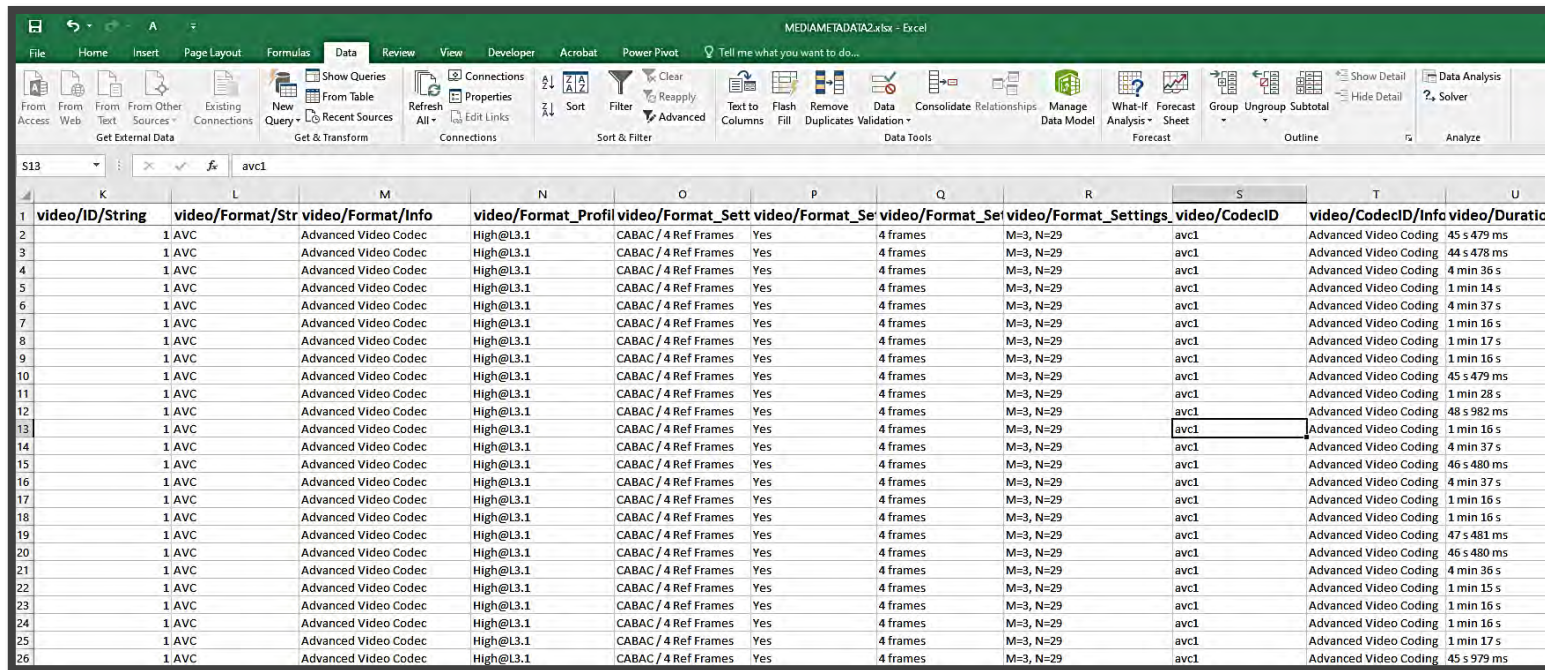
1. Delete top row
2. Highlight all cells and CUT/PASTE at A2

The screenshot shows the Microsoft Excel interface with the 'Data' tab selected. The worksheet contains a table with the following data:

1	generalCompl	generalFormat/String	generalFormat_Prof	generalCodeID/St
2	General ID/String	General OriginalSourceMedium_ID/String	General UniqueID/String	General MenuID/String
3		C:\Users\admin\Dropbox (Univ. of Oklahoma)\DigitizedContent\DigitizedMaterials\DigitalC MPEG-4	Base Media / Version 2	n
4		C:\Users\admin\Dropbox (Univ. of Oklahoma)\DigitizedContent\DigitizedMaterials\DigitalC MPEG-4	Base Media / Version 2	n
5		C:\Users\admin\Dropbox (Univ. of Oklahoma)\DigitizedContent\DigitizedMaterials\DigitalC MPEG-4	Base Media / Version 2	n
6		C:\Users\admin\Dropbox (Univ. of Oklahoma)\DigitizedContent\DigitizedMaterials\DigitalC MPEG-4	Base Media / Version 2	n
7		C:\Users\admin\Dropbox (Univ. of Oklahoma)\DigitizedContent\DigitizedMaterials\DigitalC MPEG-4	Base Media / Version 2	n
8		C:\Users\admin\Dropbox (Univ. of Oklahoma)\DigitizedContent\DigitizedMaterials\DigitalC MPEG-4	Base Media / Version 2	n
9		C:\Users\admin\Dropbox (Univ. of Oklahoma)\DigitizedContent\DigitizedMaterials\DigitalC MPEG-4	Base Media / Version 2	n
10		C:\Users\admin\Dropbox (Univ. of Oklahoma)\DigitizedContent\DigitizedMaterials\DigitalC MPEG-4	Base Media / Version 2	n
11		C:\Users\admin\Dropbox (Univ. of Oklahoma)\DigitizedContent\DigitizedMaterials\DigitalC MPEG-4	Base Media / Version 2	n
12		C:\Users\admin\Dropbox (Univ. of Oklahoma)\DigitizedContent\DigitizedMaterials\DigitalC MPEG-4	Base Media / Version 2	n
13		C:\Users\admin\Dropbox (Univ. of Oklahoma)\DigitizedContent\DigitizedMaterials\DigitalC MPEG-4	Base Media / Version 2	n
14		C:\Users\admin\Dropbox (Univ. of Oklahoma)\DigitizedContent\DigitizedMaterials\DigitalC MPEG-4	Base Media / Version 2	n
15		C:\Users\admin\Dropbox (Univ. of Oklahoma)\DigitizedContent\DigitizedMaterials\DigitalC MPEG-4	Base Media / Version 2	n
16		C:\Users\admin\Dropbox (Univ. of Oklahoma)\DigitizedContent\DigitizedMaterials\DigitalC MPEG-4	Base Media / Version 2	n
17		C:\Users\admin\Dropbox (Univ. of Oklahoma)\DigitizedContent\DigitizedMaterials\DigitalC MPEG-4	Base Media / Version 2	n
18		C:\Users\admin\Dropbox (Univ. of Oklahoma)\DigitizedContent\DigitizedMaterials\DigitalC MPEG-4	Base Media / Version 2	n

MediaInfo

- Make sure all of the columns match up and are in order
- Repeat steps for the mpeg data
- Save the workbook in the media folder as P-###_AV.xlsx



The screenshot shows an Excel spreadsheet with the following data:

	K	L	M	N	O	P	Q	R	S	T	U
1	video/ID/String	video/Format/Str	video/Format/Info	video/Format_Profile	video/Format_Settings	video/Format_Settings	video/Format_Settings	video/Format_Settings	video/CodecID	video/CodecID/Info	video/Duration
2		1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	45 s 479 ms
3		1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	44 s 478 ms
4		1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	4 min 36 s
5		1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 14 s
6		1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	4 min 37 s
7		1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 16 s
8		1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 17 s
9		1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 16 s
10		1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	45 s 479 ms
11		1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 28 s
12		1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	48 s 982 ms
13		1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 16 s
14		1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	4 min 37 s
15		1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	46 s 480 ms
16		1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	4 min 37 s
17		1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 16 s
18		1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 16 s
19		1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	47 s 481 ms
20		1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	46 s 480 ms
21		1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	4 min 36 s
22		1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 15 s
23		1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 16 s
24		1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 16 s
25		1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	1 min 17 s
26		1 AVC	Advanced Video Codec	High@L3.1	CABAC / 4 Ref Frames	Yes	4 frames	M=3, N=29	avc1	Advanced Video Coding	45 s 979 ms