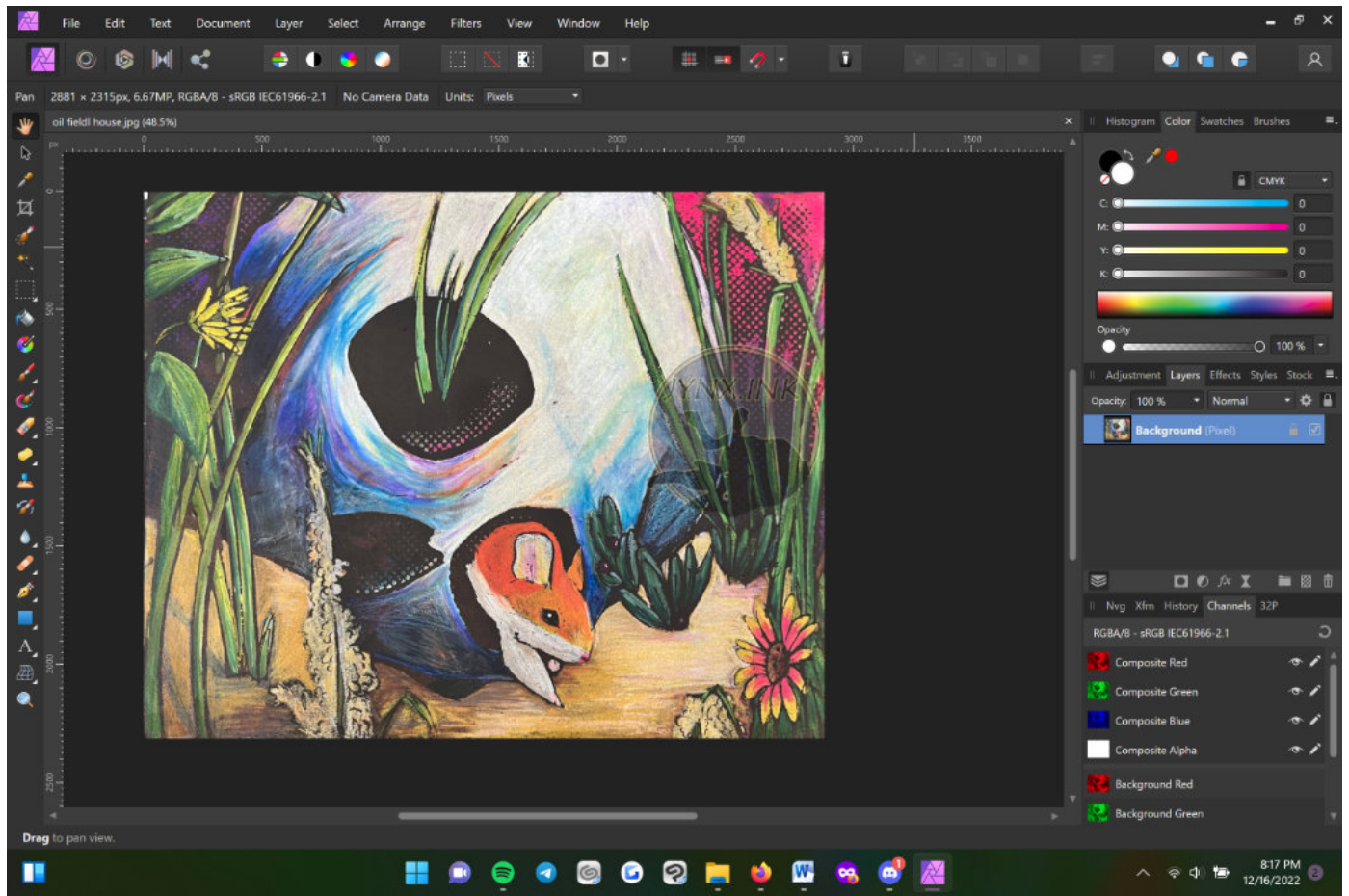


CMYK Halftone Setup in Affinity Photo

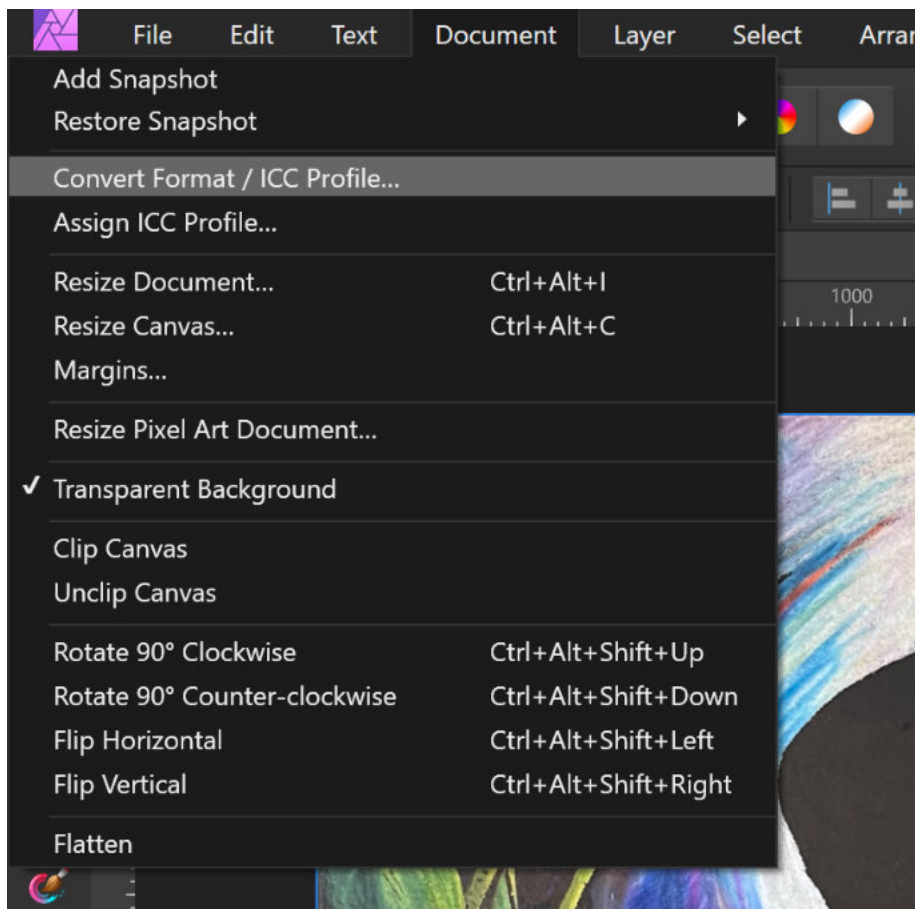
Instructions for setting up an image to screen print in CMYK process using traditional screen printing.

***Standard printing resolution is 300 DPI. Please make sure your photo is at LEAST this resolution in order to ensure print clarity.**



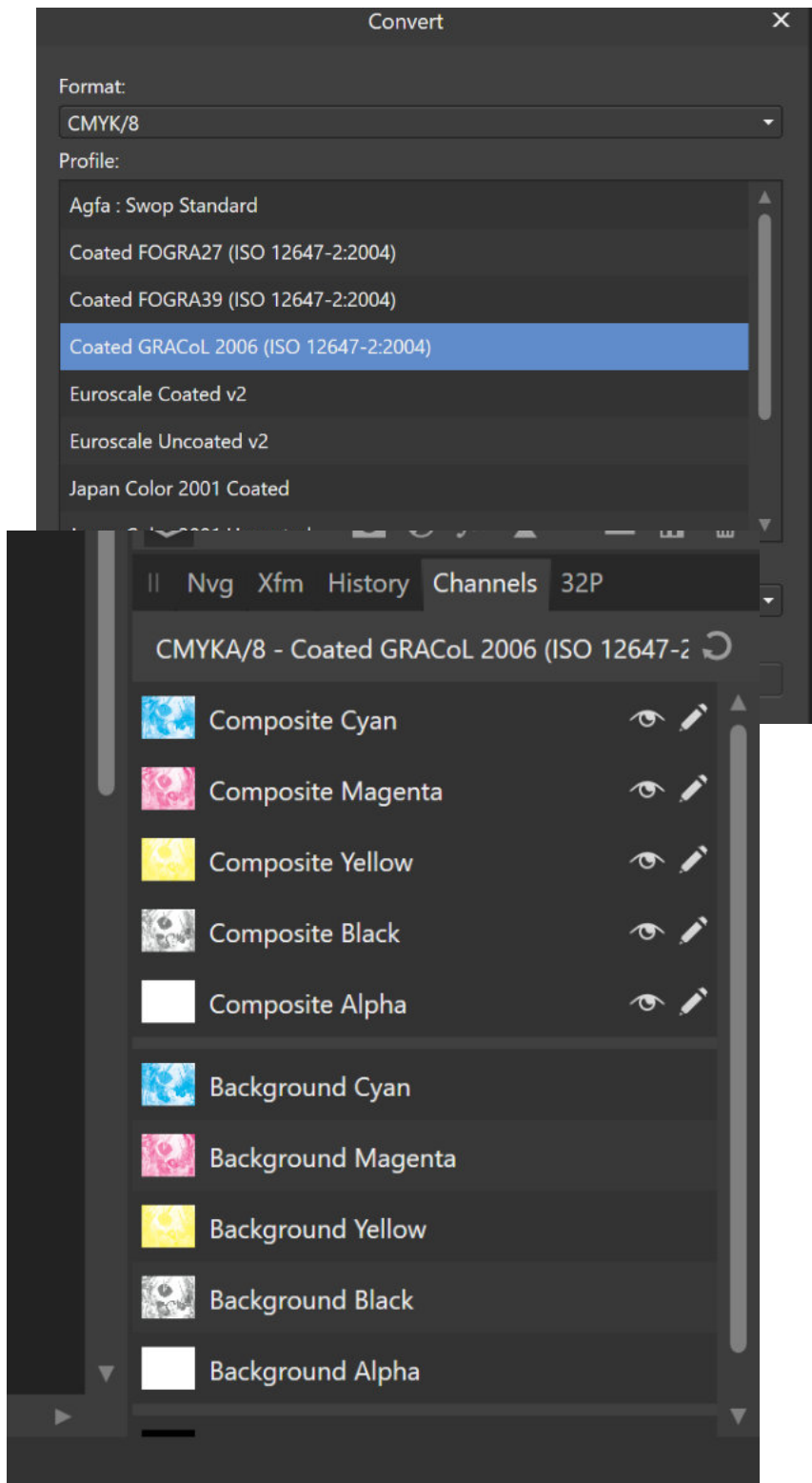


Step One: Convert this image from RGB to



Under the DOCUMENT tab, select Convert ICC Profile

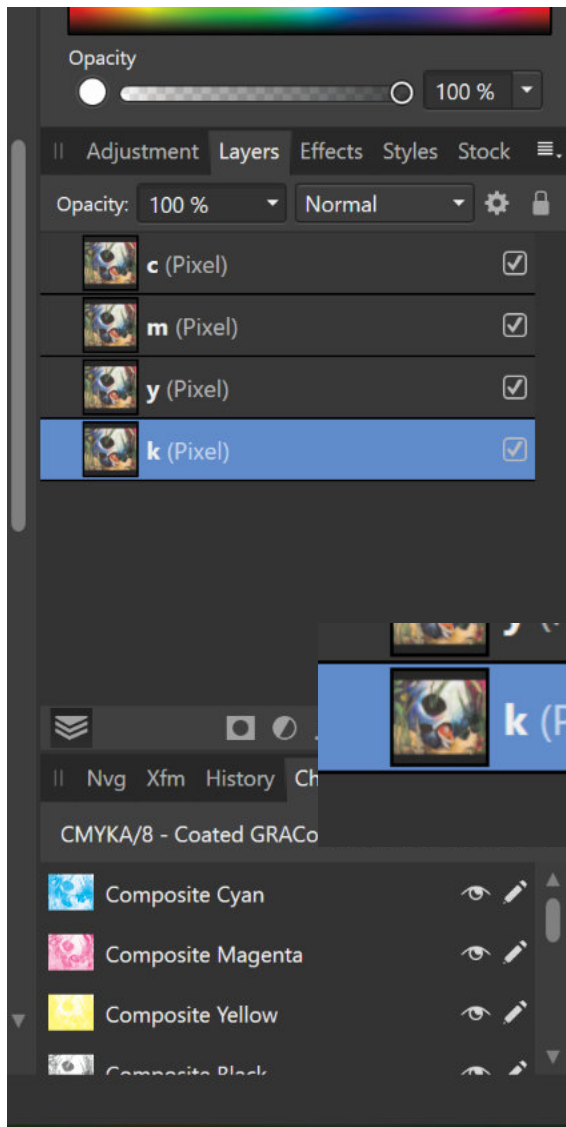




Select CMYK/8, and chose an ICC profile. I usually use the GRACoL 2006 profile and adjust as needed in later steps

After you convert your document, you'll see your CHANNELS (lower left of the window).



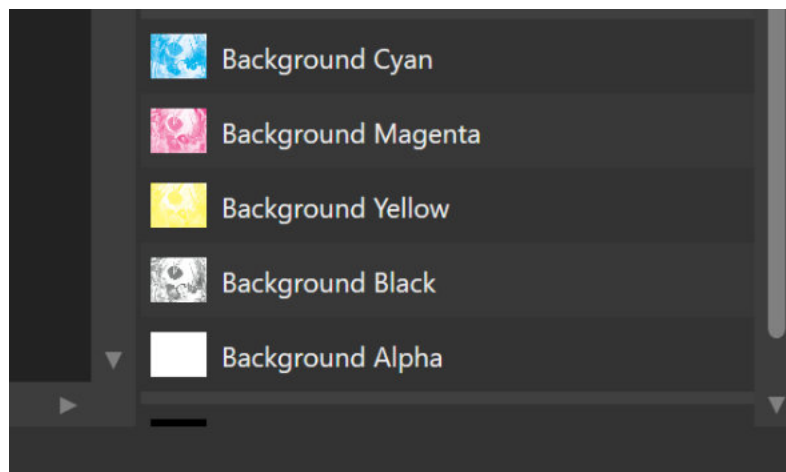


Now we need to set up our layers for separation!

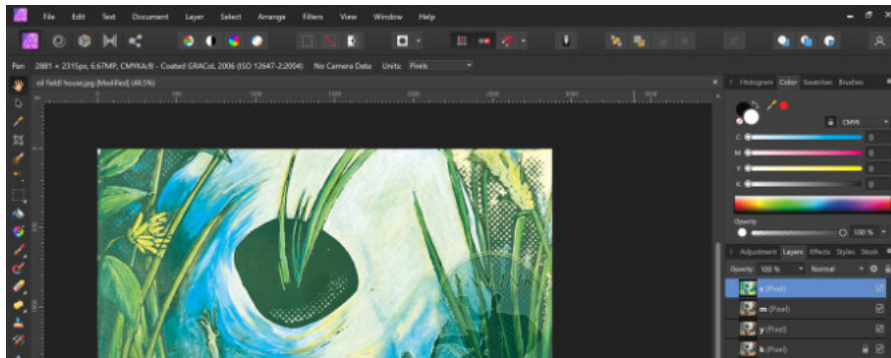
Make sure your starting layer dose NOT have a lock symbol on before starting. If it dose, click directly on the lock symbol to turn it off

For the sake of simplicity, I've named my layers the color they'll end up as, and for later reference once they're in gray scale.

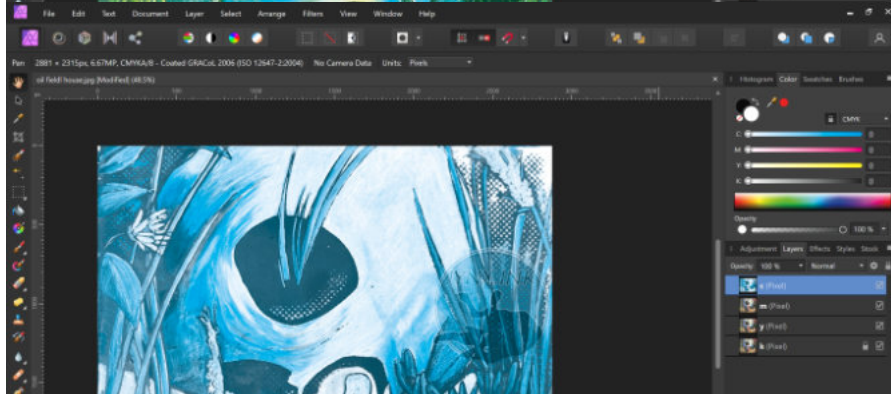
Now to separate out the colors. The menu we're focusing on is the set of channels that are NOT labeled composite.



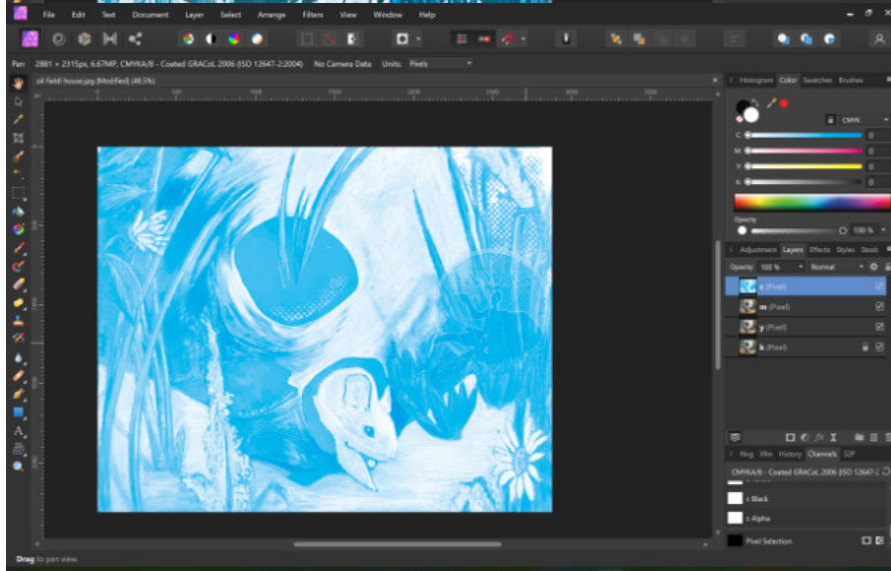
For each layer, you want to leave only the target color. Right click on each color channel, and select CLEAR for C M Y and for the K (black) layer, select FILL. This allows the effect to be easily visible in the final step, and makes adjusting colors easier. Below is the process on the CYAN layer of the image. Repeat this with all the layers to separate your colors. Be sure to select the target layer BEFORE clearing colors.



Removing M

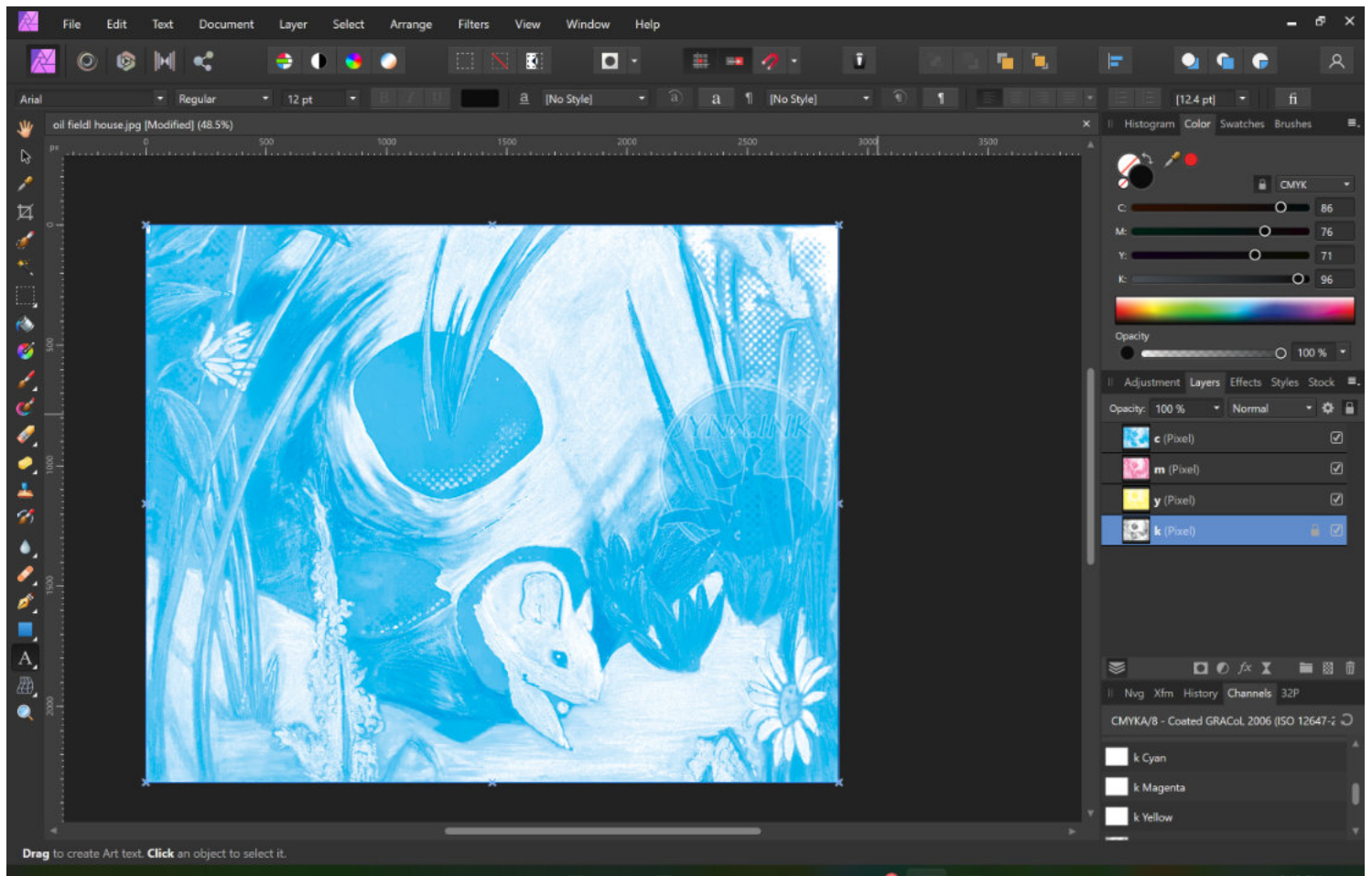


Removing Y

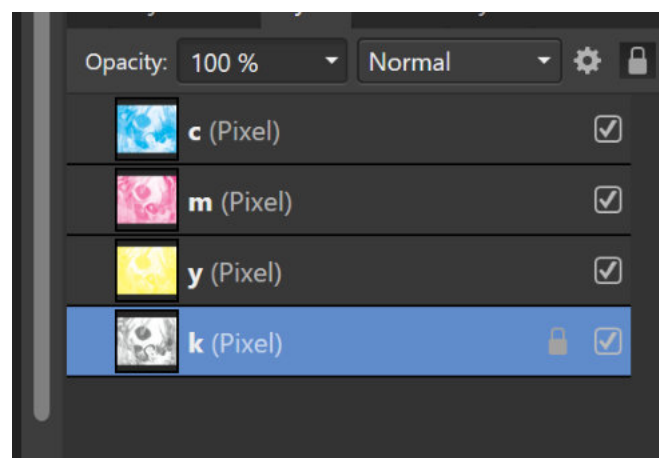


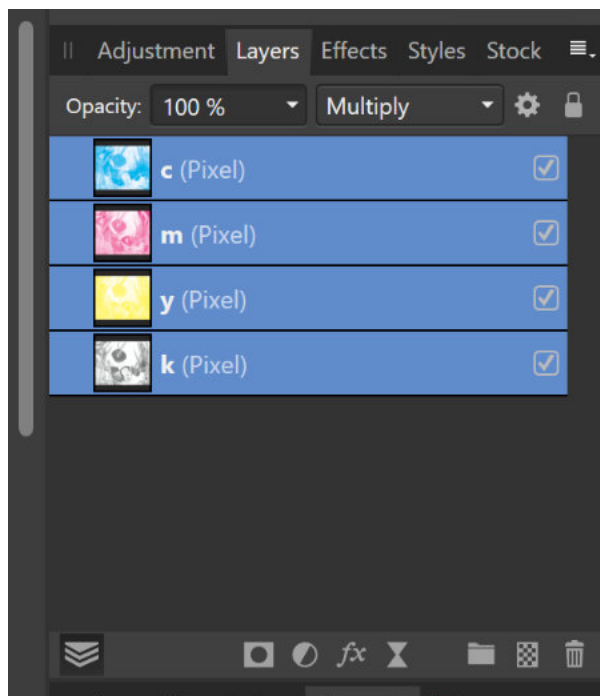
Filling K



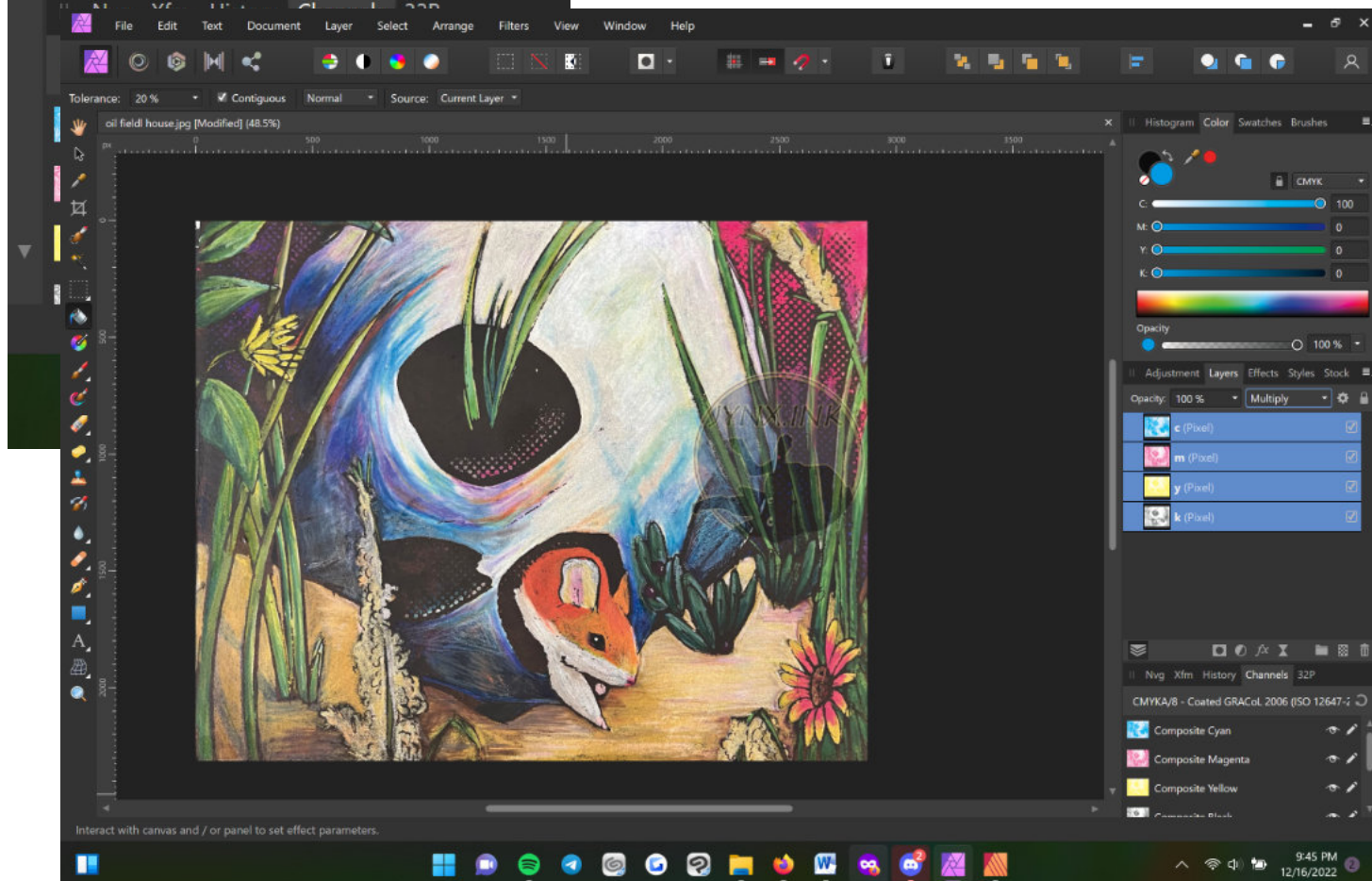


At this point, the layers are NOT transparent. This means that Your Cyan layer will remain visible unless you turn it off. The image preview on your layers will show an accurate preview of each layer. This (for now) is what we want so we can see accurate color previews when checking the image.



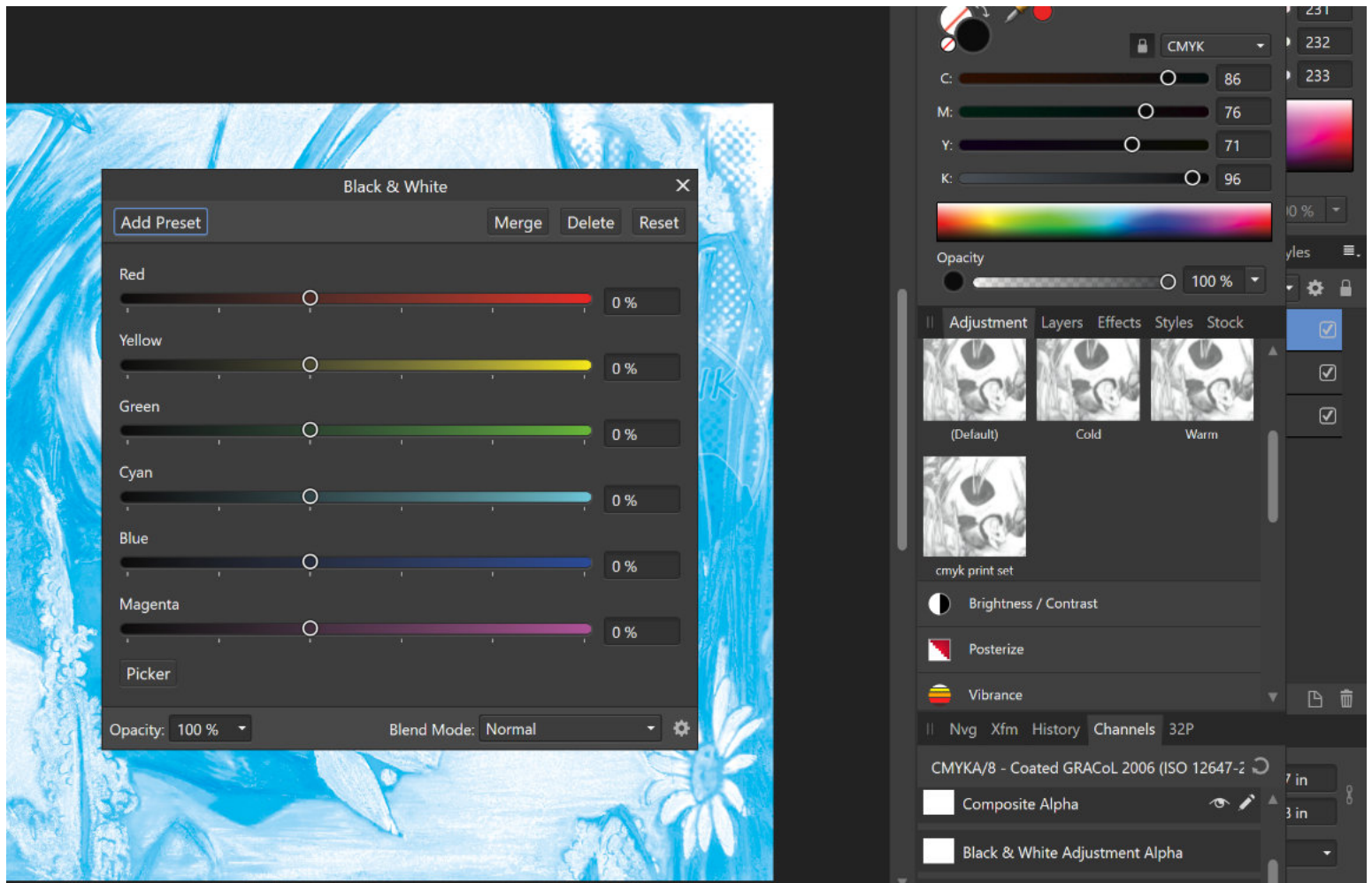


To check your color separation, select all your layers, and set the layer mode to MULTIPLY. This shows the image with colors overlapping and should be identical to your original.



Please see pg 12 for instructions of how to export individual layers for later use. The color separated layers are handy to have as backup or for other manipulation techniques.





Now we're going to turn each layer to Black and White. This is so our halftones properly show the value of each color. Under the ADJUSTMENTS menu (right next to layers) Select Black and White adjustment. Set each value to 0. Save this As a preset to use for later. You need to do this to the C M and Y Layers. The K layer is already in grayscale, so can be left alone for now.

Next we're going to start setting up our halftones. There are several value sets you can use to rotate pixels, and messing with these can give cool effects, but for now, we'll set it up to read as accurately as possible. Below are the values I use. These work for screen printing as well as digital print.

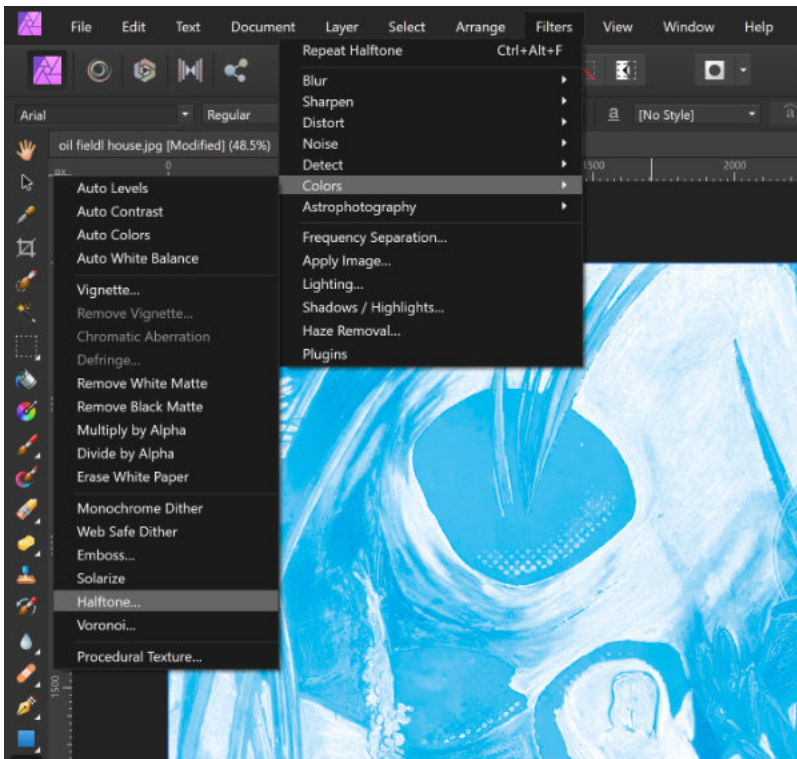
Halftone Size: 15-25

C: 55

M: 22

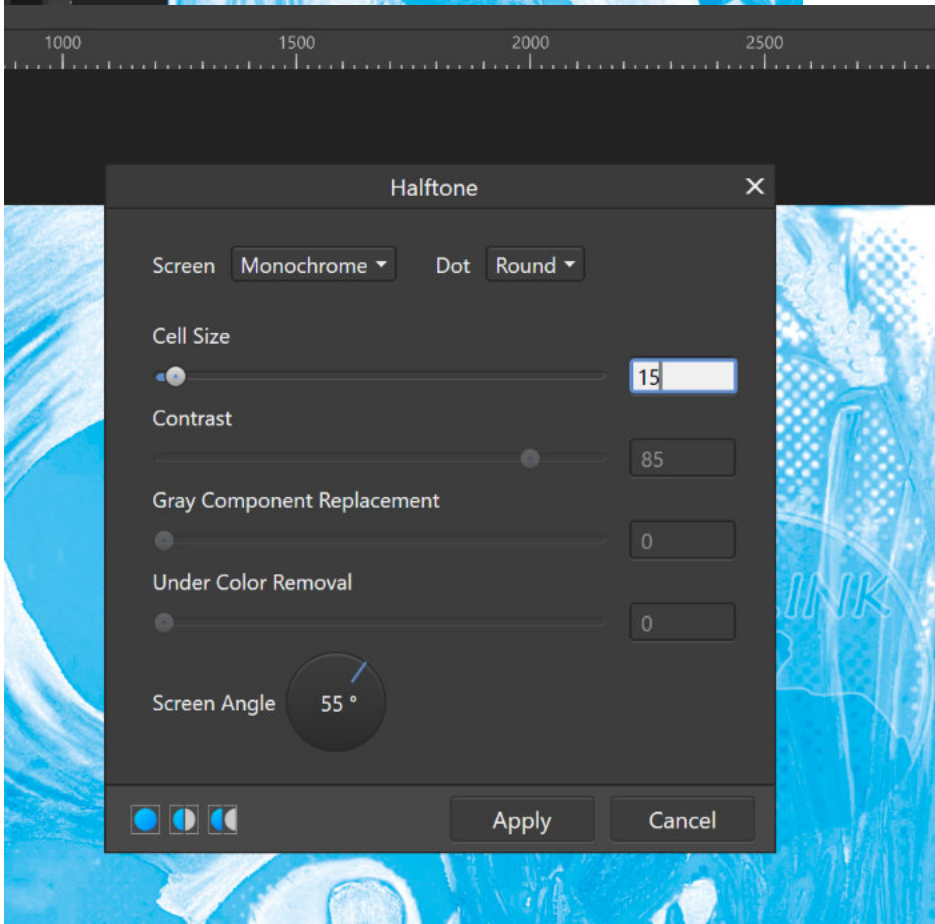
Y: 5

K: 80



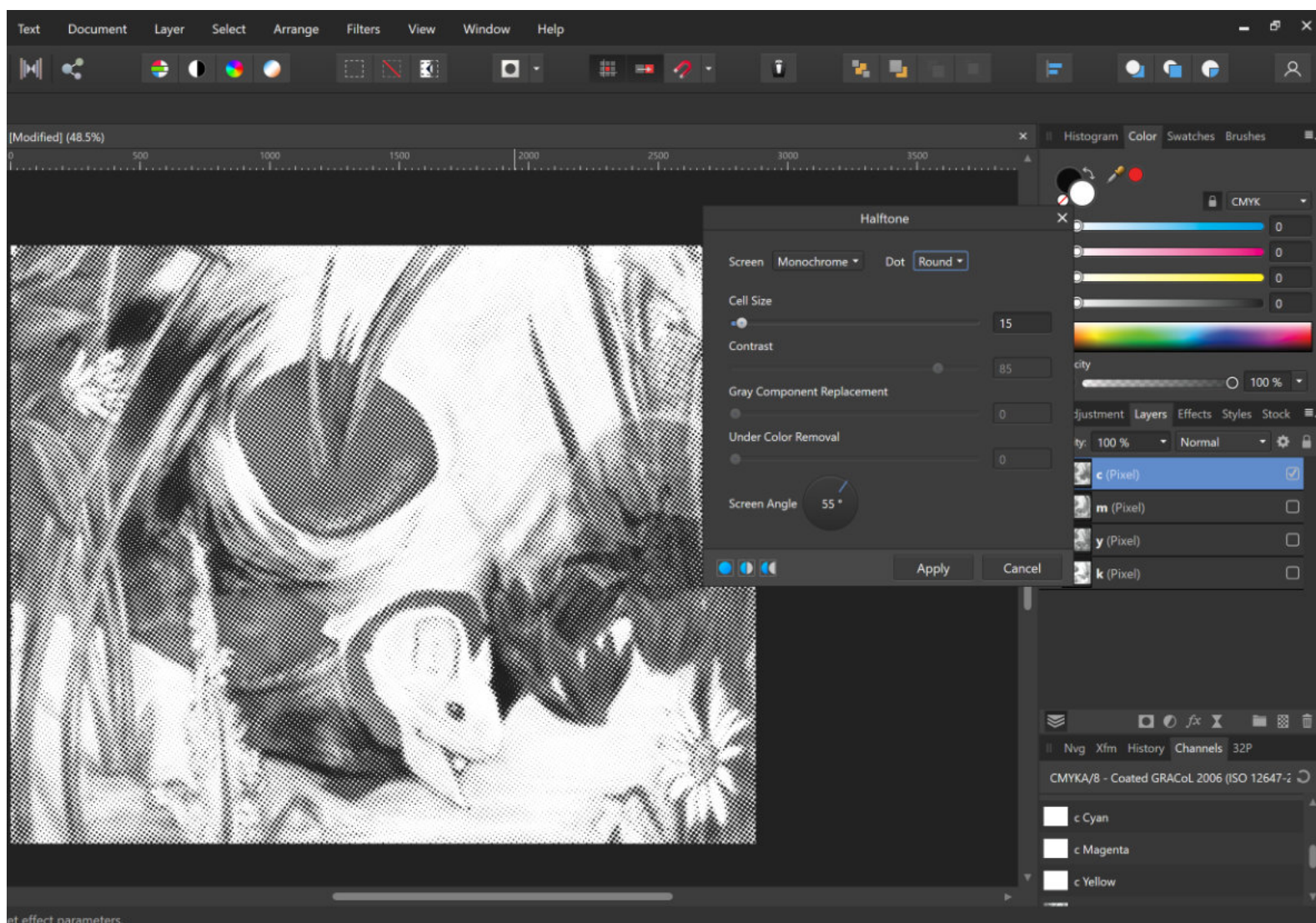
To start turning your layers into halftones, go to

FILTERS>COLORS>HALFTONE



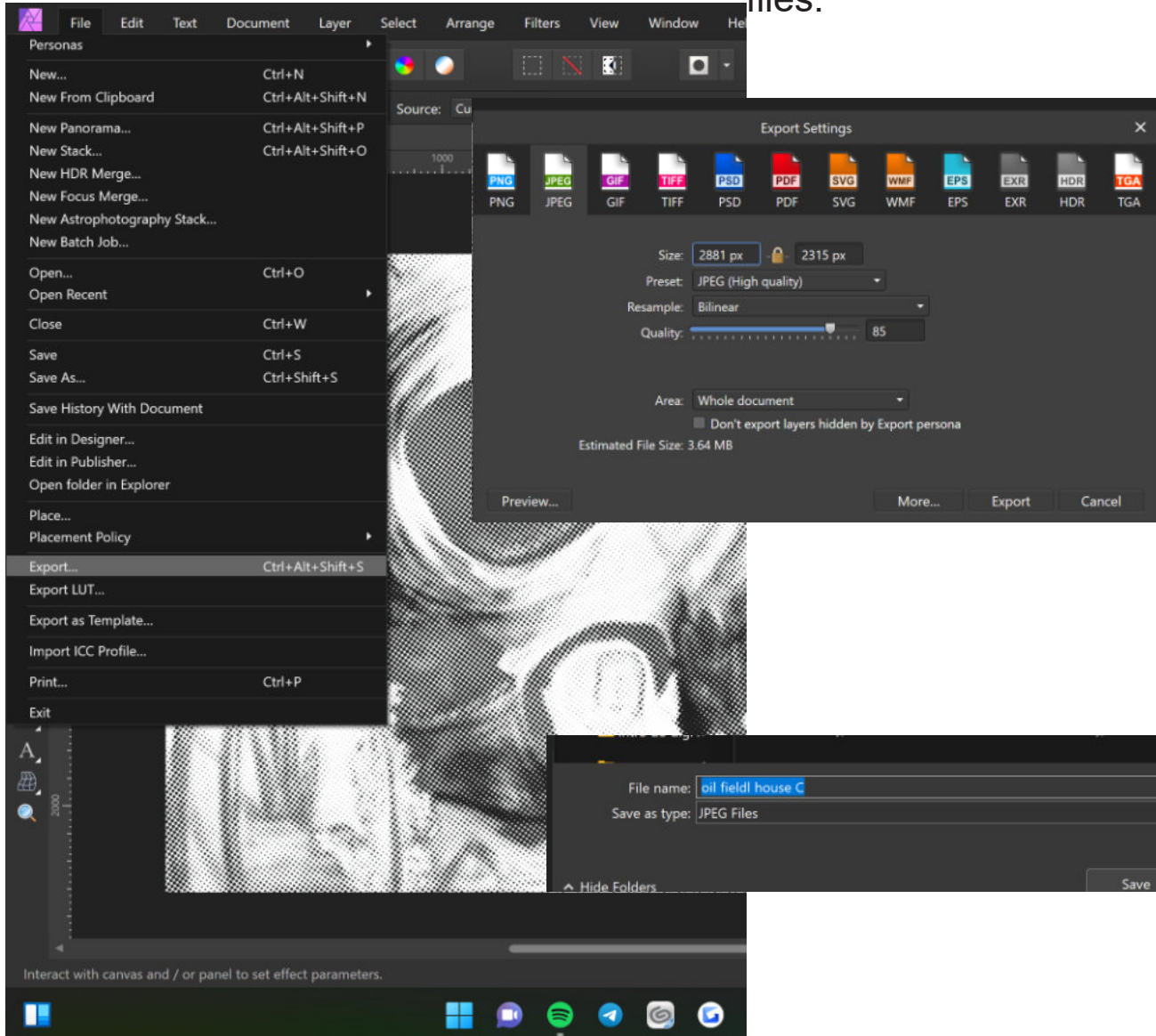
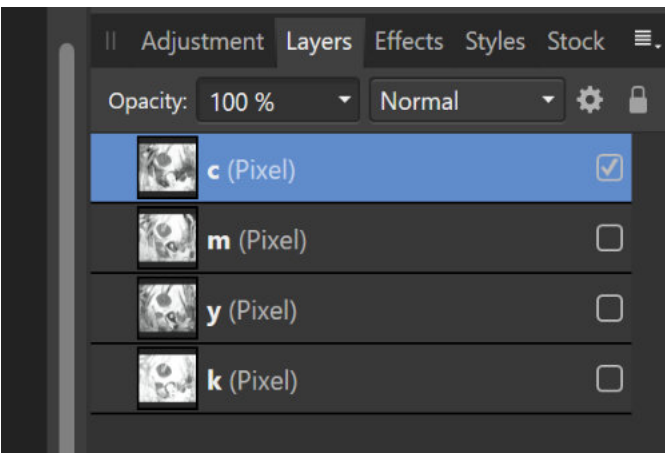
Since this is the CYAN layer, our screen angle is going to be 55. For each layer. Your screen should be set to MONOCHROME and your dot to ROUND.

This should be done on a layer that has ALREADY been turned black and white.



Do this for each layer, following the Screen Angle numbers given. Make sure you are selecting the right layer when you apply the black and white. You can hide each layer as you go by clicking the checked box next to the layer to see what you're doing more clearly.

Now we're going to export each of our layers for later use. To do this, make sure only the layer you want to save is checked. Then, go to EXPORT under FILE. Select JPEG and save it somewhere you can find it. I label my images as [Image name] [C,M,Y or K] so they all end up in a row in my files.



If you are printing your files for CMYK Screen printing, be sure to include your IN PHOTO registration marks. To do this, under the print menu, select Bleed and Marks, and check the Include Printers Marks box. And then click Include Registration Marks. This ensures you can line up your images precisely when printing.

