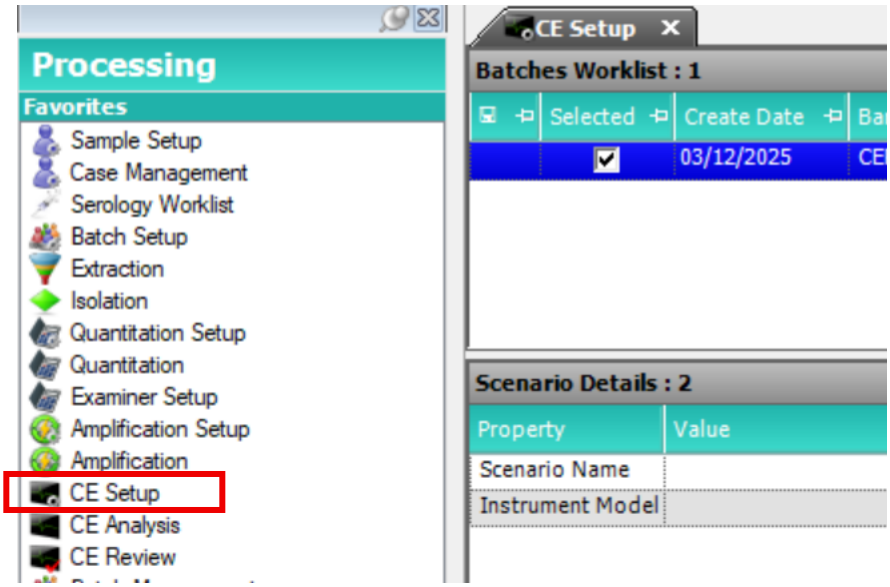
A. Capillary Electrophoresis – Batch Create

1. Open **Processing → DNA Processing → CE Setup**.

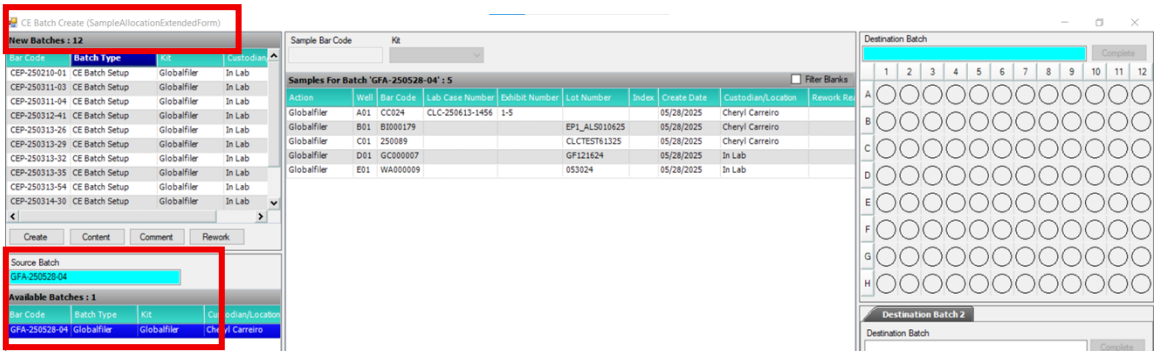


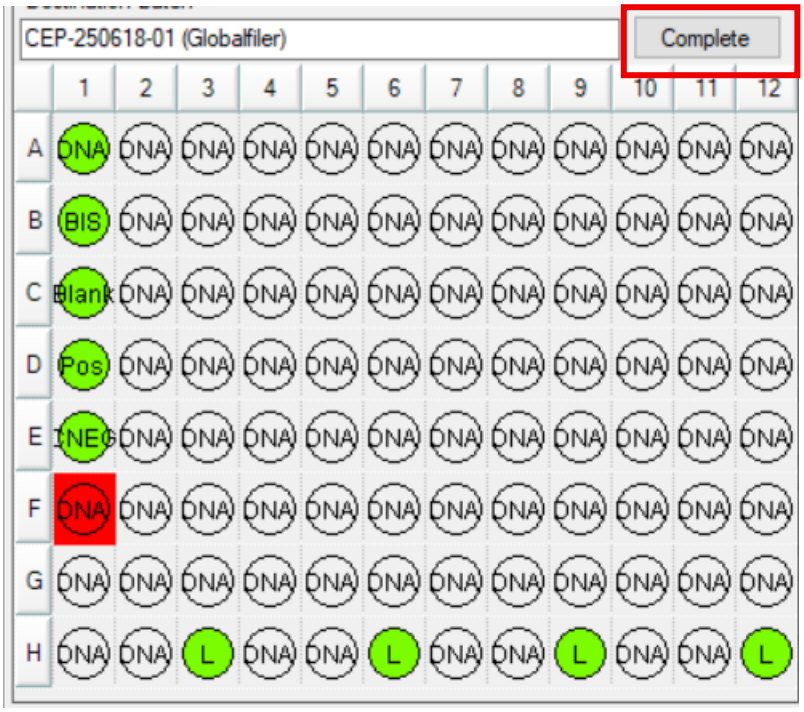
2. Click **Create Batch**. The CE Batch Create screen opens.
3. Click the **Create** button located under the New Batches worklist.
4. Select the appropriate **Batch Type, Kit,** and **Fill Order**.
    - CE Batch Setup – Use for single amplification kit.
    - Hybrid GF/GFE/YFP – Use for multiple amplification kits.
5. Click **Create**. Scan the newly-printed bar code. Click **Close.**
6. Scan the batch from the **Available Batches** worklist. STACS populates the scanned batch's samples onto the **Samples for Batch** worklist and adds its bar code to the **Source Batch** field.
7. Scan a destination batch from the **Destination Batches** worklist.
8. Right-click an unpopulated '**DNA**' well in the **Destination Batch** and select **Ladder** to assign a ladder. Click on the extra ladders and remove them, as necessary. If doing a Hybrid batch, ensure that the **Kit** is selected in the dropdown menu, so that you are adding the appropriate ladders. GF is green, GFE is orange and YFP is violet.

9. Select a well in the **Destination Batch**(es) where you would like the sample allocations to begin.
10. Perform one or more of the following actions:
    a. Scan the desired samples from the **Samples for Batch** worklist.

b. If doing a Hybrid batch, in the **Kit** dropdown, choose the kit for the samples you would like to add first.
c. Click **Allocate** to allocate all qualifying samples from the **Samples for Batch** worklist. This list will show the ng amped of each sample. Allocate the samples into injections for std/max/low appropriately. As a note, if doing a Hybrid batch, as long as the sample are being injected at the same parameter, they can be added to the same injection, even if from different kits.

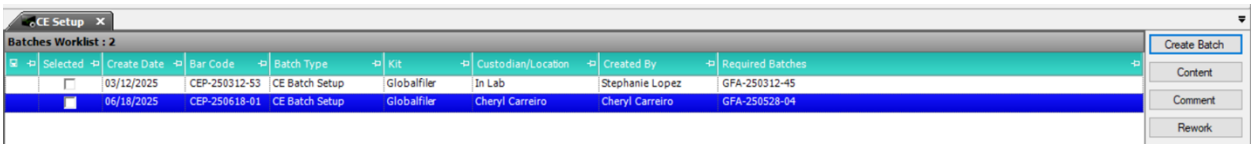
11. Click **Save**. If finished, click **Complete Batch**.



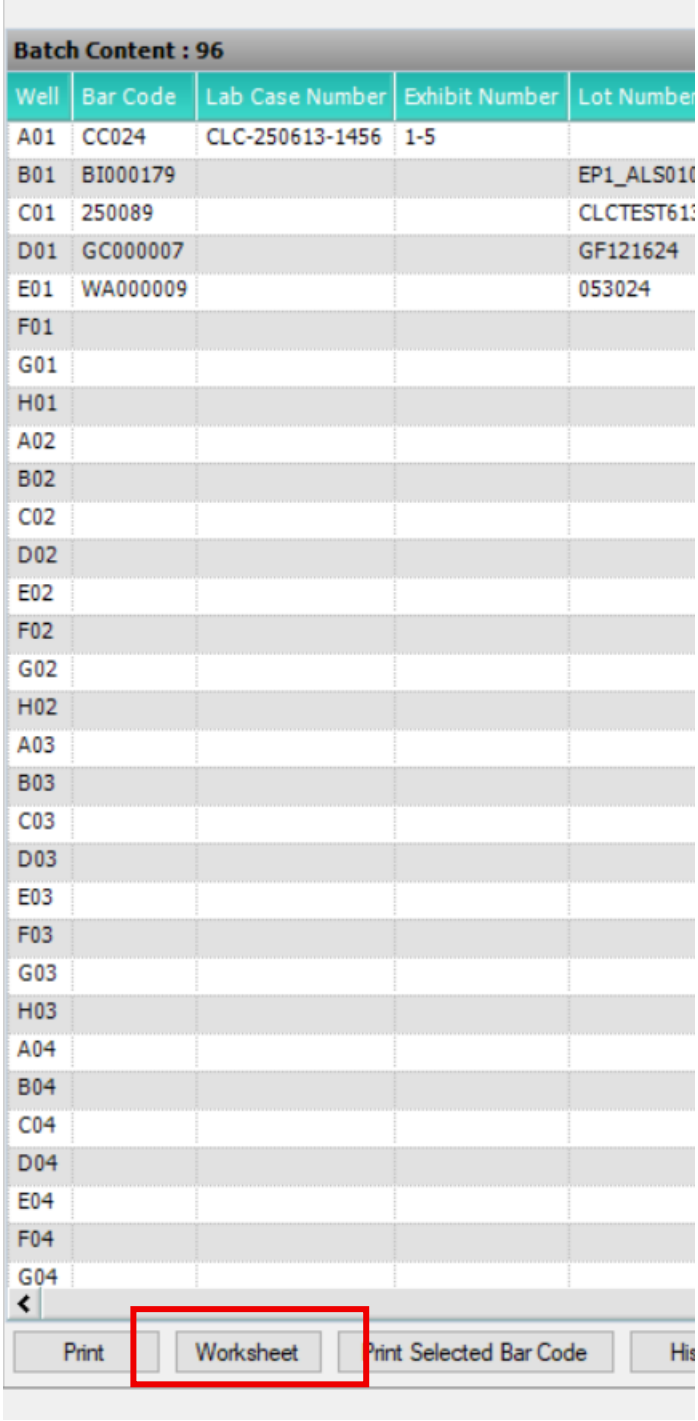


B. Capillary Electrophoresis – Setup & Analysis

1. Open **Processing → DNA Processing → CE Setup**.
2. Select/Scan the batch from the **Batches Worklist**.

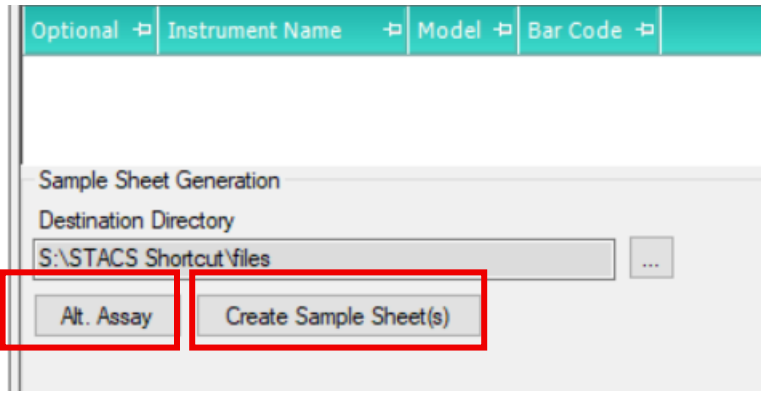


3. Click on **Print Labels**. Print the batch barcode label, which will go on the plate.
4. To pull up the plate map to either print or keep on screen, click on **Content** and in the Batch Content tab, click on **Worksheet**.



5. Click **Select Scenario**. Select the matching scenario from the worklist. Click **Select**.

6. Scan the consumable and batch barcodes.
7. Click **Start Process**. This will generate the 3500-import file.
8. Specify the location to store the file(s). U:\STACS share\CE\Sample Sheets
9. Click **Save**.
10. Open **Processing → DNA Processing → CE Analysis**
11. Scan the 3500xL barcode.
12. Scan your batch from the **Batches Worklist**.
13. For max injections, select **Alternate Assay**. Click on the wells in the injection that will be max injected at low. This will label them "max".It is not necessary to complete this for the entire injection. Standard injection time will be the default for any unlabeled sample on instruments 2, 3, 4, and 5. Low will be the default for any unlabeled sample on instruments 1 and 6.
14. Click **Create Sample Sheet.**
15. Once the sample sheet is created, if you need for one of your questioned injections to be injected at "low", pull up your sample sheet and manually change the "assay" column to "low".



Max injection: Alt Assay

16. To pull up the plate map to see reagent amounts to either print or keep on screen, click on **Content** and in the Batch Content tab, click on **Worksheet**.
17. Click **Save** and **Start Process**.
18. Once complete, click **Complete Process** and record the activity results using the Complete Batch Activity screen.
    - **Process Successful:** the batch advances to CE Analysis.
    - **Process Aborted:** the batch remains on the **Batches Worklist**. A **Batch Comment** is required with this option.

- **Process Failed:** the batch returns to CE Batch Create. A **Batch Comment** is required with this option.

C. CE Review

1. Open **Processing → DNA Processing → CE Review.** Check your batch by doing a quick GeneMarker/Genemapper ID-X analysis. If there are any major issues (whole plate failure or samples with failing size standard or controls that don't pass, you can rework any samples or plates at this step. Either choose individual samples in your batch and click **Sample Rework,** or choose the whole batch and select **Rework** (see step D for further details).
2. Once the initial round of rework is done, select the CE run andclick **Save**. Upon saving, the **'Complete Batch Activity'** window will pop-up. Select the appropriate option.

   Completing this step marks the sample(s) as **Pending Conclusion**.

3. Once the full analysis is done, go to **Processing→Utilities→View Batches** and filter by CE batch date. Highlight your CE batch and press '**content**'. At the bottom press '**Batch Comment**' and add any comments needed to the batch, including that your controls, ladders, and size standards passed. If batches contain multiple analysts, each of you can add your own comments as they will be date and time stamped with your name.

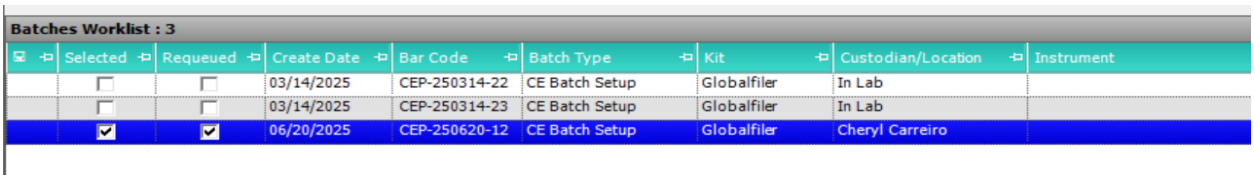
D. Rework

a. If needed, re-work may be directed through CE Review:
b. **Rework** button = entire batch will be reworked
c. **Sample** rework = individual sample will be reworked.
d. Choose the entry point (Examiner setup, CE Setup, or CE Analysis) and reason.
e. If a re-injection is being done, type in the new plate name (e.g., xxx-1) with the reason "re-inject" or reprep/reinject, etc.
f. Choose
   i. **CE Analysis** for a reinjection
   ii. **CE Setup** for a reprep/reinject
   iii. **Examiner Setup** for a reamp. You would follow the steps for amplification listed in STACS SOP-6.
g. The samples\batch will be available in the step selected. See below.

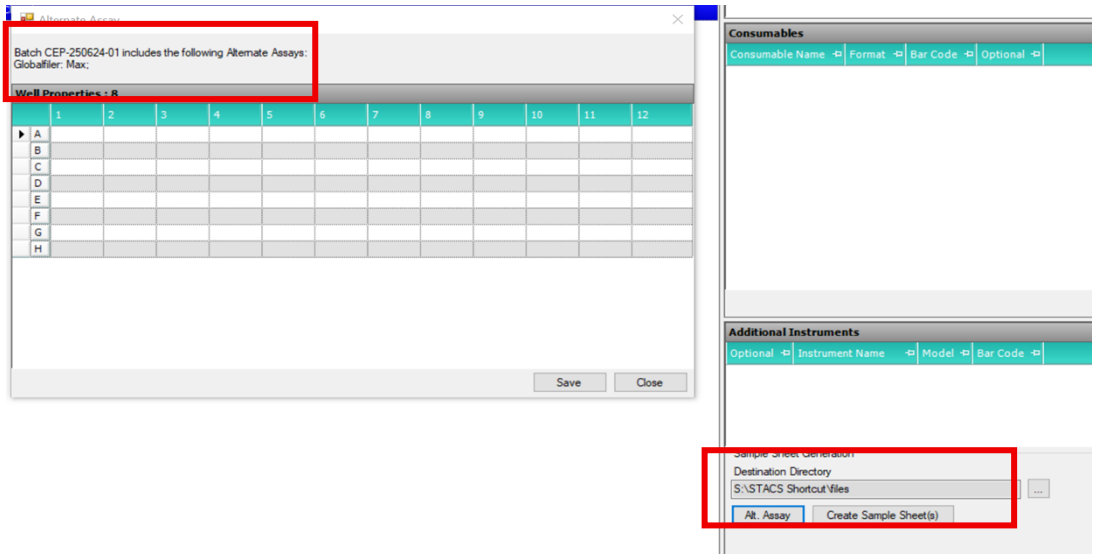
1. CE Analysis = Re-injection

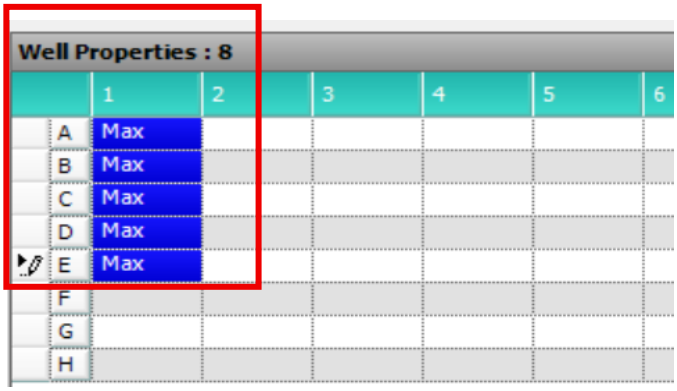
   a. The original CEP barcode will be listed in the "batches worklist".
   b. The new plate name will be in the comments and in the CE 3500 software.

i. Note the batch barcode name will not change.

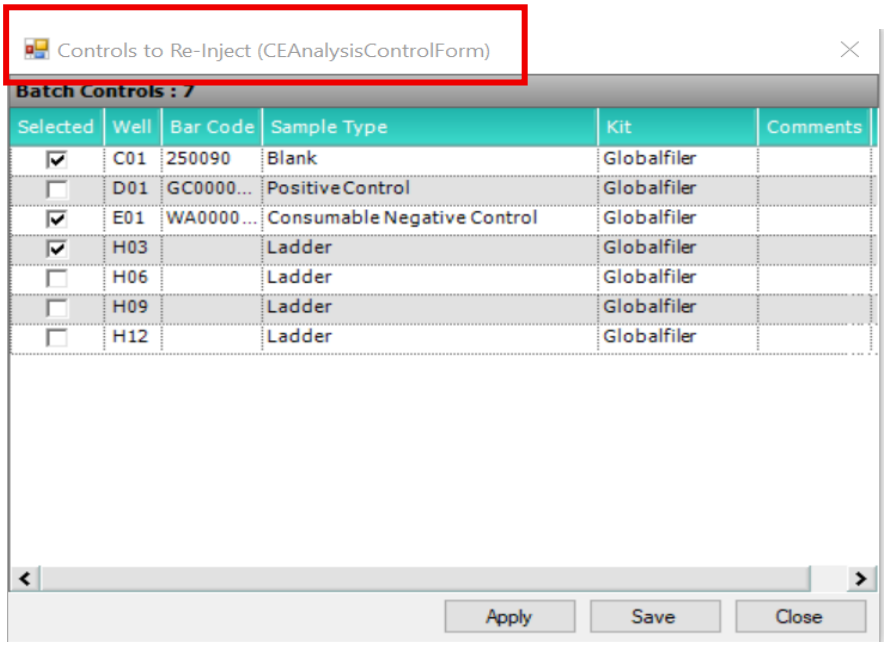


c. Scan the instrument barcode.
d. Scan the CEP-xxx barcode.
e. When another injection time is needed, select **Alt.Assay**
f. A window will pop up and the wells to be injected at an alternate assay will be selected. Max injection time, “Max”, will fill the boxes of those chosen with one mouse click.





g. Click **Save**.
h. Click **Create Sample Sheet**.
i. Another window will pop up and ask which controls to reinject.



j. Select the samples and click **Save**.
k. A file folder will pop up and save your sample sheet in that location.
l. Add some indication that this sample sheet is different than the first, such as -1, -max, -reinject, etc.
m. Click **Save**.
n. Click **Start Process**.
o. When the injection is done click **Complete Process**.
p. Go to **CE Review** and select the Batch.
q. Select **Save**.
r. A window will pop up; select successful (or not, with a comment) and click **Save**.
s. The batch will disappear and is ready for the next steps.

2. CE Setup = Re-prep/Re-inject

a. For re-prep a new CEP file will be made and a barcode.
b. Scan the new CEP barcode.
c. Allocate samples.

d. Select **Complete** next to **Destination Batch** at top right.
e. Follow **Part B above** in **CE Setup** for this new batch and follow **Part C for CE Analysis.**
f. Below is an example of the original plate and new plate.

```
Plate Name      Application Type        Capillary Length (cm)   Polymer Number of Wells
CEP-250620-12   HID     36 cm   POP-4   96      DPS\060299      CEP-250620-12

Well    Sample Name     Assay   Results Group   File Name Convention    Sample Type
A01     A01_CC027_CLC-250620-1434_200   STANDARD        CT-DSS_GF       CT-DSS  Sample
B01     B01_BI000140    STANDARD        CT-DSS_GF       CT-DSS  Positive Control
C01     C01_250091      STANDARD        CT-DSS_GF       CT-DSS  Negative Control
D01     D01_GC000005    STANDARD        CT-DSS_GF       CT-DSS  Positive Control
E01     E01_WA000009    STANDARD        CT-DSS_GF       CT-DSS  Negative Control
H03     H03_LADDER      STANDARD        CT-DSS_GF       CT-DSS  Allelic Ladder
H06     H06_LADDER      STANDARD        CT-DSS_GF       CT-DSS  Allelic Ladder
H09     H09_LADDER      STANDARD        CT-DSS_GF       CT-DSS  Allelic Ladder
H12     H12_LADDER      STANDARD        CT-DSS_GF       CT-DSS  Allelic Ladder
```

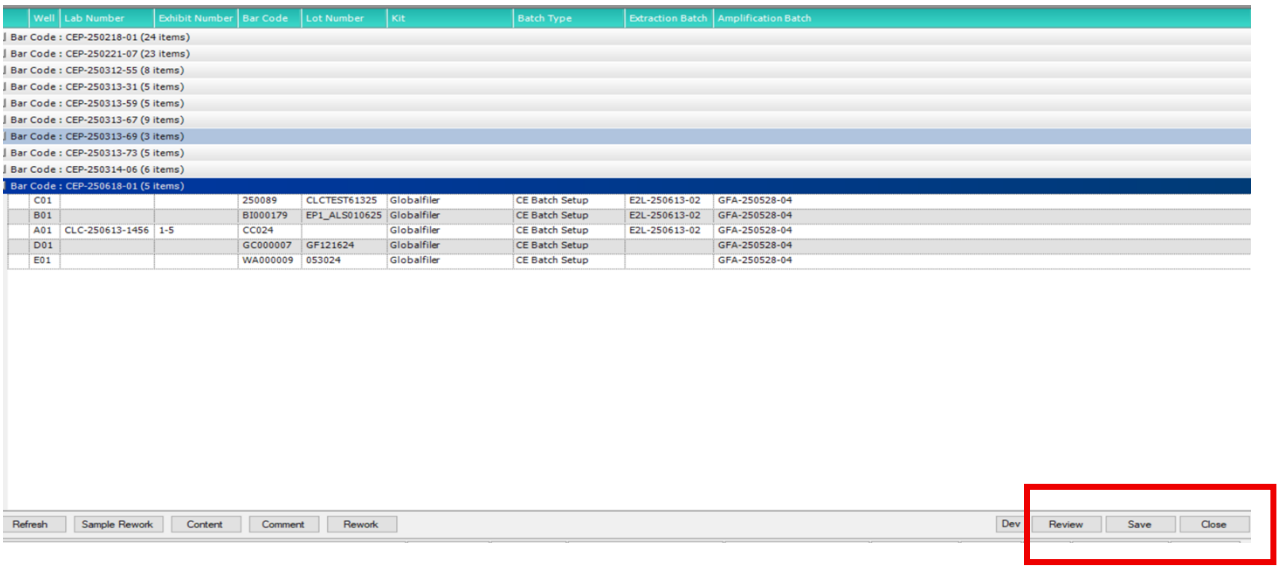
CEP-250624-01.txt - Notepad

File Edit Format View Help

```
3500 Plate Layout File Version 1.0

Plate Name      Application Type        Capillary Length (cm)   Polymer Number of Wells C
CEP-250624-01   HID     36 cm   POP-4   96      DPS\060299      CEP-250624-01

Well    Sample Name     Assay   Results Group   File Name Convention    Sample Type     U
A01     A01_CC025_CLC-250620-0954_100   Max     CT-DSS_GF       CT-DSS  Sample
B01     B01_CC026_CLC-250620-0954_101   Max     CT-DSS_GF       CT-DSS  Sample
C01     C01_250090      Max     CT-DSS_GF       CT-DSS  Negative Control
```



g. Click **Save** and **Close**.