**Slide 1: Agenda**

* Primary Test Structure & Process
* Consolidated Report Overview
* Next Steps

**Slide 2: Primary Test Process Overview**

[Flowchart with the following steps:]

1. Task Received
2. Acquire Cells
3. Enter Cell Information
   * Input detailed cell data into the inventory database

**Slide 3: Primary Subtest Process Overview**

[Flowchart with the following steps:]

1. **Task Received**
2. **Acquire Cells**
3. **Enter Cell Information**
   * Input detailed cell data into the inventory database
4. **Conduct Subtest**
5. **Data Analysis**
   * Software analyzes every cell in the subtest.
   * Report test metrics at each voltage cutoff.
   * Create tables (Voltage drops, Test voltages and DCIR, Weight and Dimensions).
   * Generate Standard data visualizations in Excel (VvC, VvE, TvC).
   * Weight and dimensions for each cell are queried from the WD SQL Database.
6. **Test Engineer Review**
   * Handles test discrepancies.
   * Validates data.
   * Performs further data analysis if needed.

**Slide 4: Subtest Excel File**

* Allows python to easily extract tables.
* Allows test engineer to perform data validation and data analysis and correct any errors easily.
* Median cell is chosen by median capacity at principal voltage cutoff.
* Subtest excel file is used as data storage and python as the engine to process the data.
* This file is reviewed by an additional two test engineers.

**Slide 5: Building a Consolidated Excel File**

* Median cell data is extracted from each subtest along with all the other tables.
* Complete test data is saved into an excel file.
* Complete test is reviewed and prepared to generate the final consolidated report.

**Slide 6: Consolidated Report**

* Summary of the complete Test
* Includes all tables from each subtest
* Most data visualizations include only the median cell from each subtest

**Slide 7: Data Visualization - All Cells Capacity**

[Insert a chart or graph showing All Cells Capacity data]

**Slide 8: Data Visualization - TvC**

[Insert a chart or graph showing TvC data]

**Slide 9: Data Visualization - VvC**

[Insert a chart or graph showing VvC data] \* Grouped by temperature \* Grouped by drain rate

**Slide 10: Data Visualization - VvE**

[Insert a chart or graph showing VvE data] \* Grouped by temperature \* Grouped by drain rate

**Slide 11: Tables**

* Test metrics
* Test voltages
* Weight and dimensions
* Voltage drops
* DCIR

**Slide 12: Voltage Drops Table**

[Insert a screenshot of the Voltage Drops table]

**Slide 13: DCIR Table**

[Insert a screenshot of the DCIR table]

**Slide 14: Consolidated Report Notes**

* Most of the process is now automated using python.
* Still involves test engineers to ensure data is correct and to further data analysis.
* The process for building a consolidated report is the same as building a presentation and a html primary handbook entry.

**Slide 15: Next Steps**

* Start delivering consolidated reports.
* Continue to improve Primary Data Analysis Software.
* Start working on transitioning to Secondary consolidated reports.

**Slide 16: Conclusion**

* Building a consolidated report is a detailed and involved process for test engineers.
* Consolidated reports require multiple steps and systems.
* Data validation and reviews involve several test engineers.
* Consolidated reports summarize the complete test.
* Most plots include only the media cell.
* The process is automated using Python.