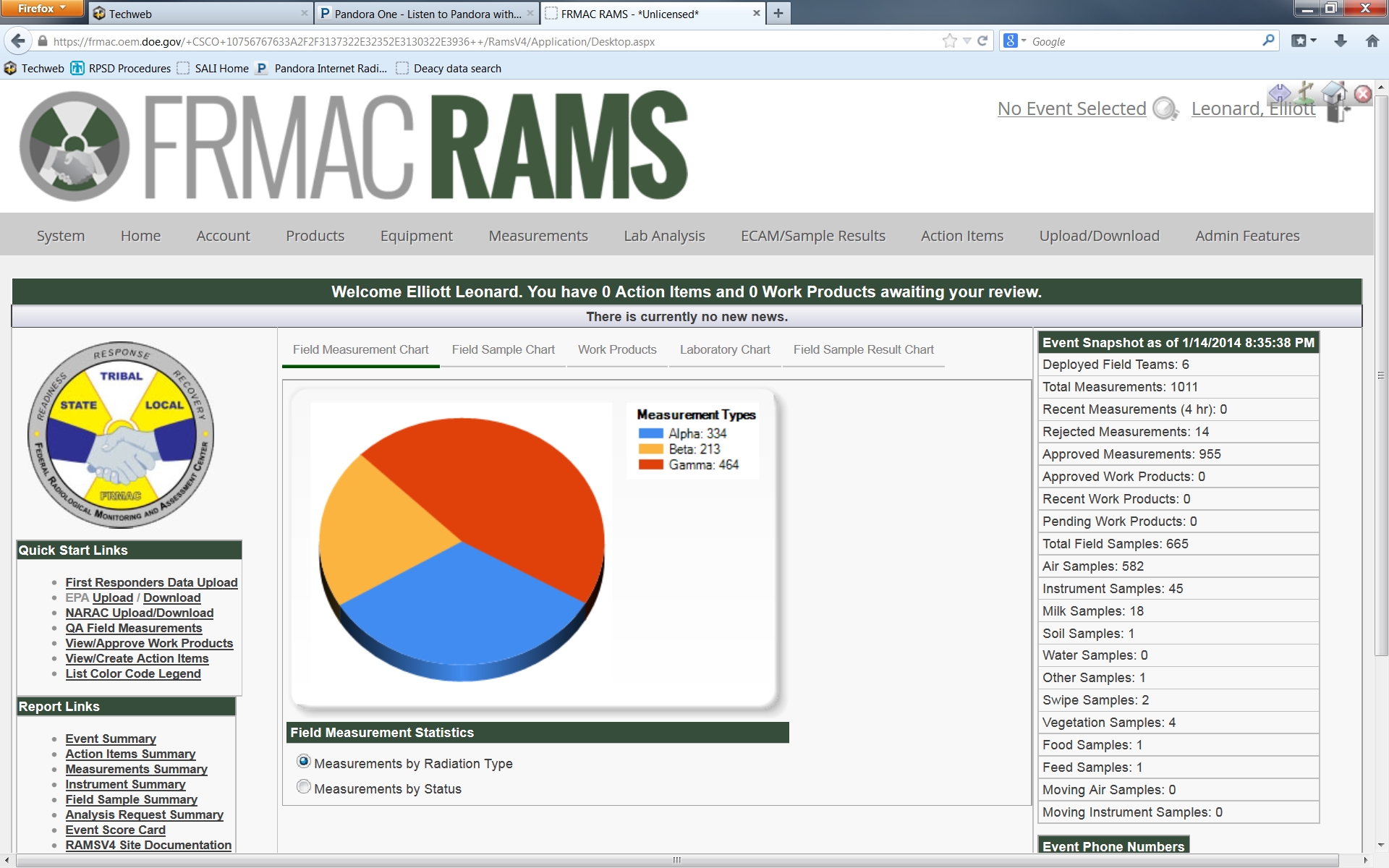
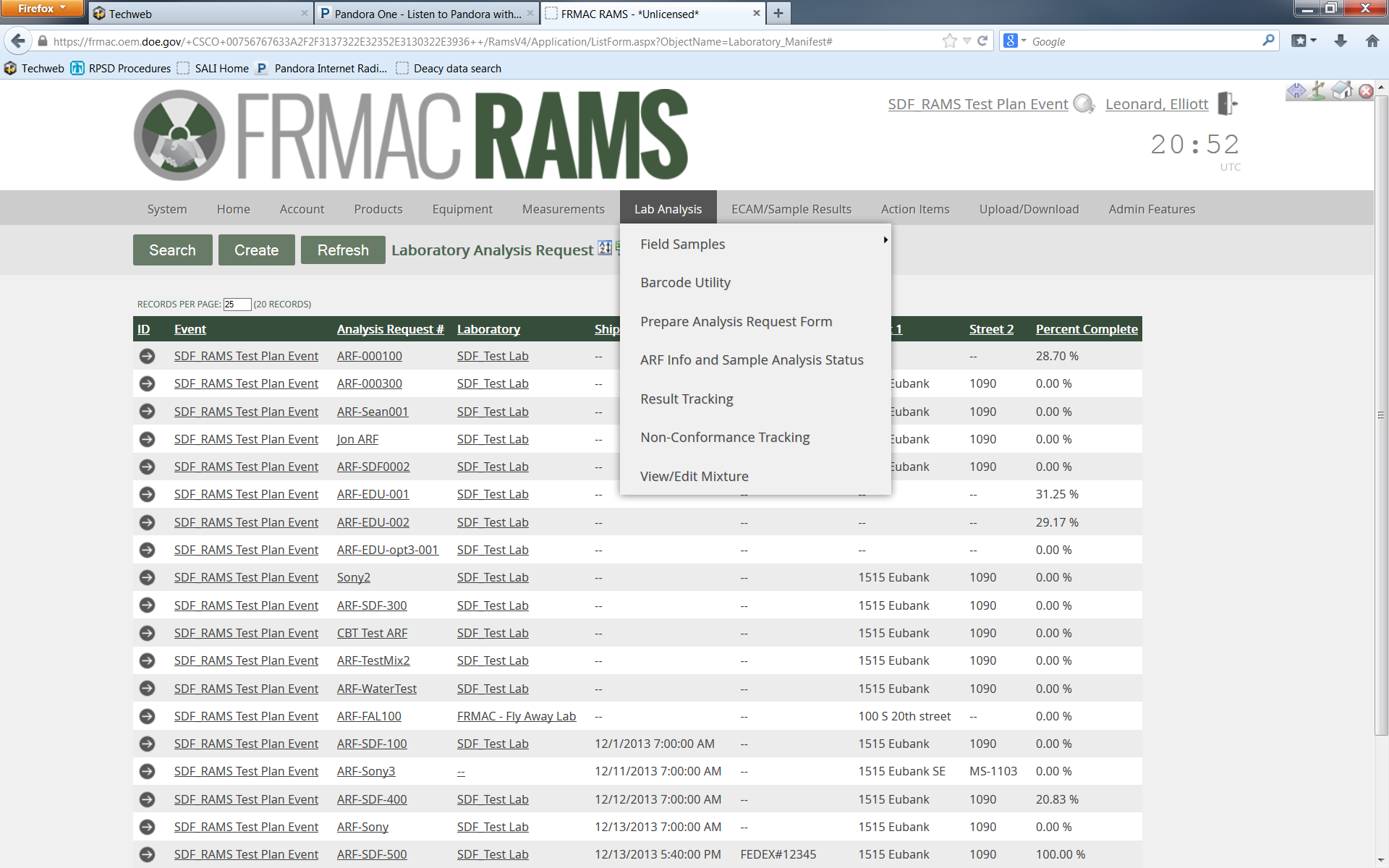
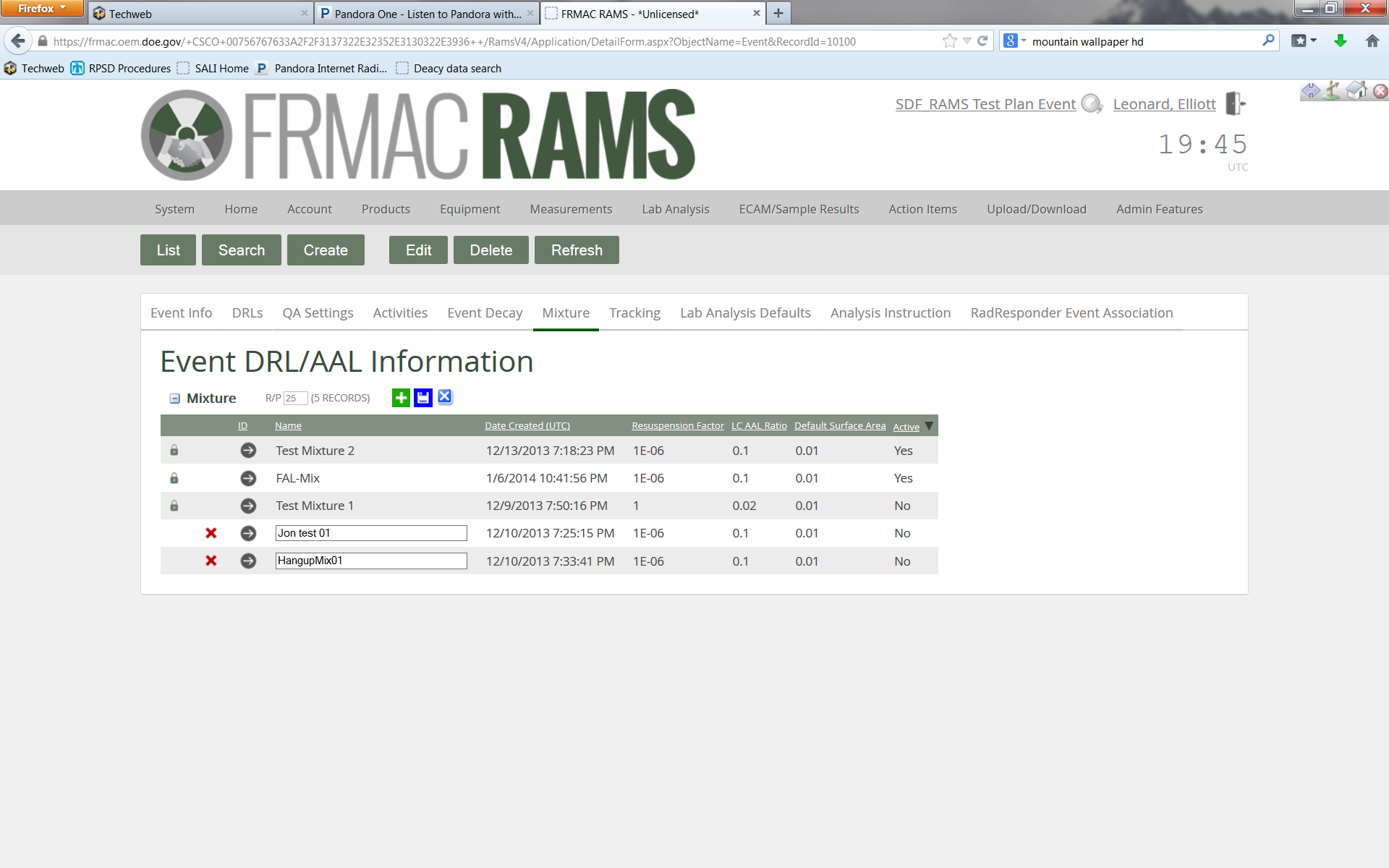
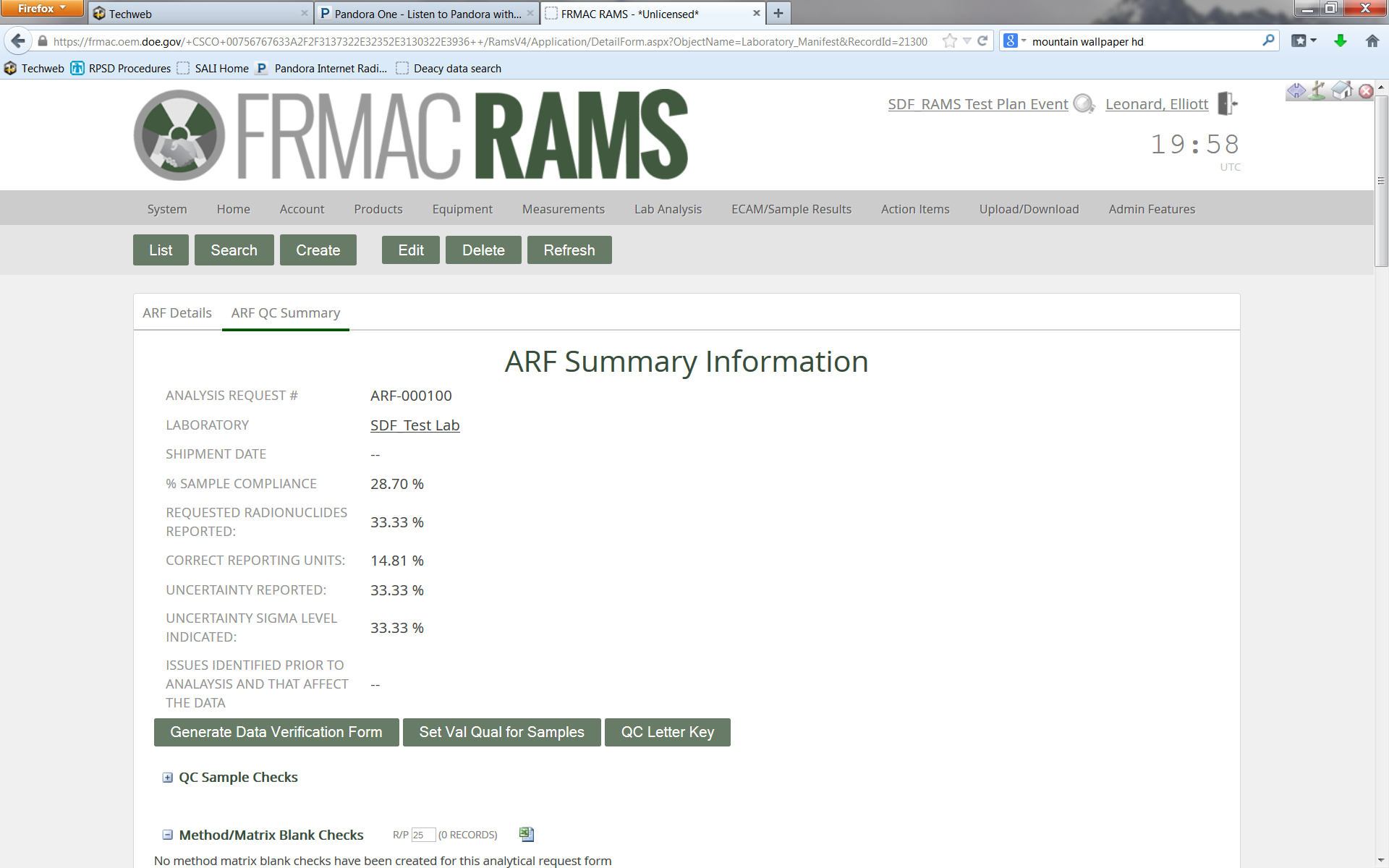
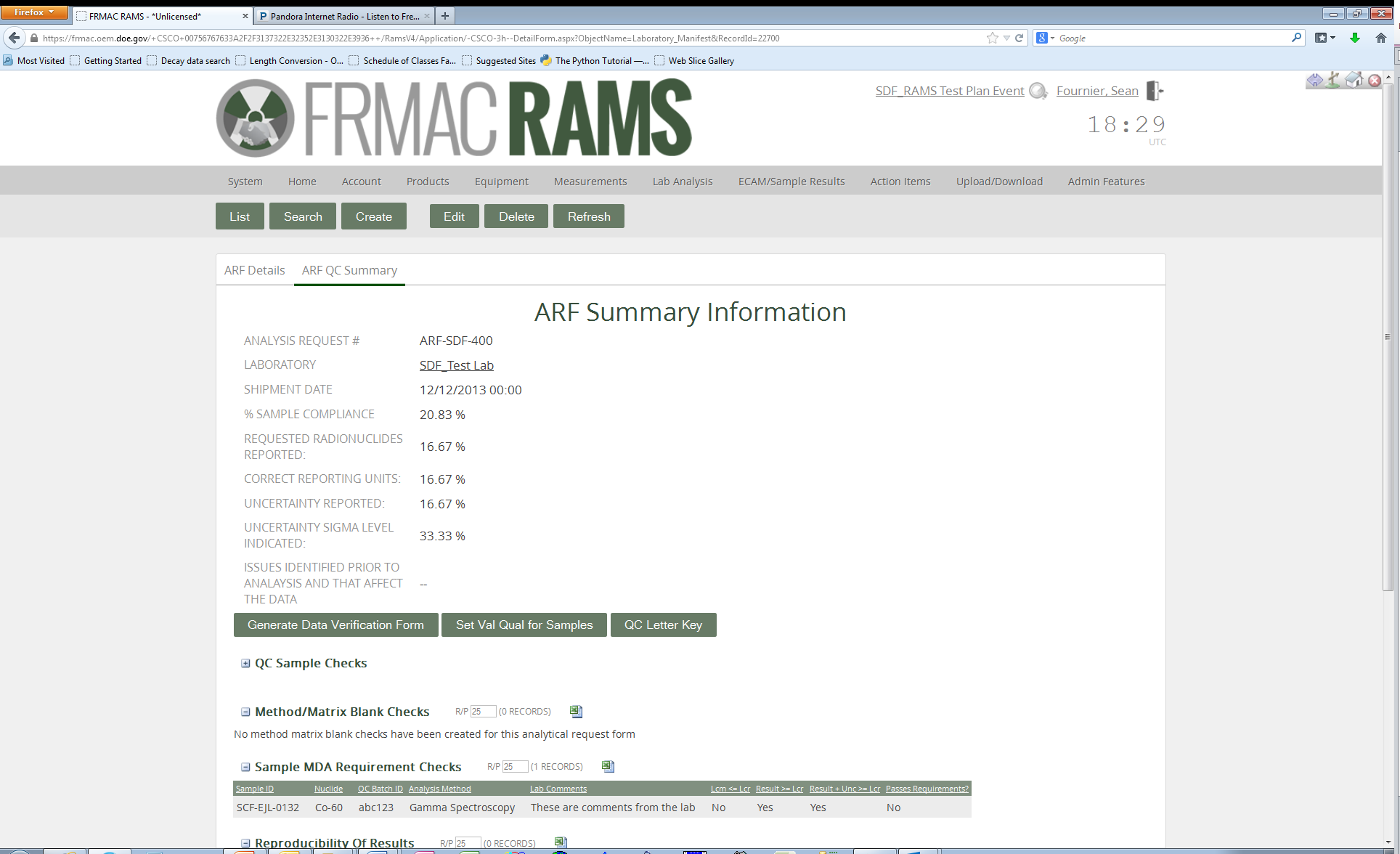
**Job Aid – RAMSV4 Sample Result Data Review**

**NOTE: This job-aid is meant to be a guide for RAMS users that have experience in the Quality Assurance review of radioanalytical sample data. It is not intended to help the user make informed decisions on the quality of data.**

**Data Review**

1. Access the Analysis Request you wish to review by hovering the mouse over  tab and click on 
2. Select the ARF by clicking on the  icon
3. Click on the  tab
4. Data that has been uploaded to RAMS for the ARF is displayed here. A series of automatic checks are done on the data based on the criteria set up at the event level under the {Lab Analysis Defaults} tab. Descriptions of each field are found below.
5. Click on the  symbol to expand/collapse each group of checks

Description of QA fields: ARF Summary Information

|  |  |
| --- | --- |
| **Field Name** | **Description** |
| % Sample Compliance | The percentage of requested results that have been submitted and meet all of the quality control requirements |
| Requested Radionuclides Reported | The percentage of uploaded results that have been uploaded with the correct radionuclides |
| Correct Reporting Units | The percentage of uploaded results that have units that match the required critical level as defined on the ARF document |
| Uncertainty Reported | The percentage of uploaded results that have an uncertainty reported |
| Uncertainty Sigma Level Indicated | The percentage of uploaded results that have an uncertainty sigma level indicated |
| Issues identified prior to analysis that affect the data | An open text field that the reviewer can use to document any issues with the samples that were identified prior to shipment. |

Description of QA fields: QC Sample Checks

|  |  |
| --- | --- |
| **Field Name** | **Description** |
| QC Batch ID | A laboratory-generated identifier that is used to link samples with other samples in the same analytical batch and any QC samples that have been run with the batch |
| % Recovery | Spike recovery value provided by the laboratory for Laboratory Control Samples and Matrix Spikes. This value is compared to the criteria set up at the event level under Lab Analysis Defaults tab |
| Lab Comments | An open text field available for laboratories to identify any issues with a sample result |
| Meets Recovery Requirements | Indicates if a reported % Recovery is between the high and low value set up at the event level under the Lab Analysis Defaults tab |

Description of QA fields: Method/Matrix Blank Checks

|  |  |
| --- | --- |
| **Field Name** | **Description** |
| Passes Unc Criteria? | Checks the blank sample result against it’s own uncertainty value. The result must be less than X times the result uncertainty where X is defined at the event level under the Lab Analysis Defaults tab. |

Description of QA fields: Sample MDA Requirement Checks

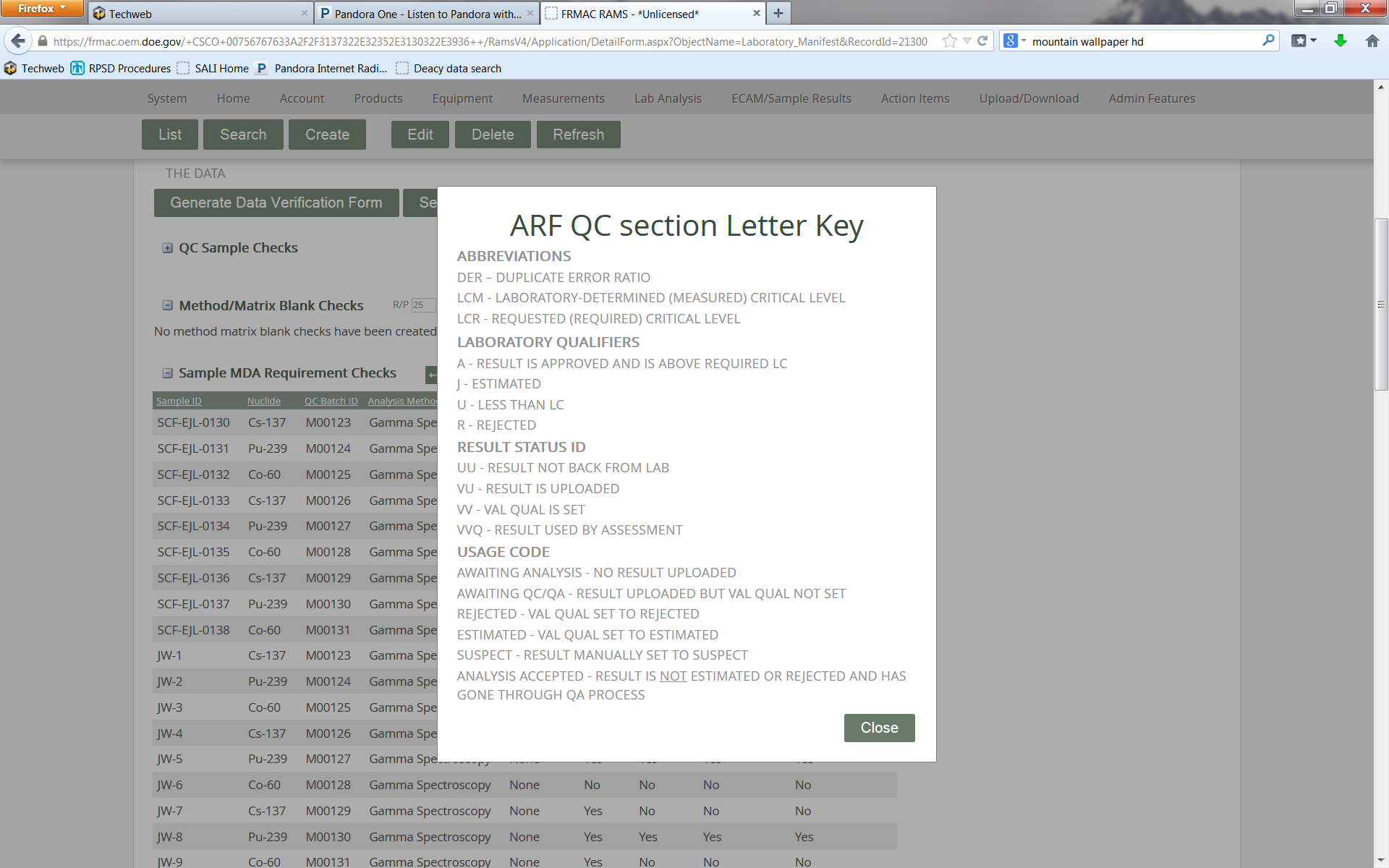
|  |  |
| --- | --- |
| **Field Name** | **Description** |
| Lcm <= Lcr | Checks to make sure that the reported critical level is less than or equal to the required critical level as defined on the ARF. If MDA is provided by the lab, the value is divided by two to estimate the critical level |
| Result >= Lcr | Checks if the result is greater than or equal to the required critical level |
| Result + Unc >= Lcr | Checks if the result added to its 1-sigma uncertainty is greater than the required critical level |
| Passes Requirements? | If all three of the above tests pass, this field is set to yes, otherwise, it is set to no |

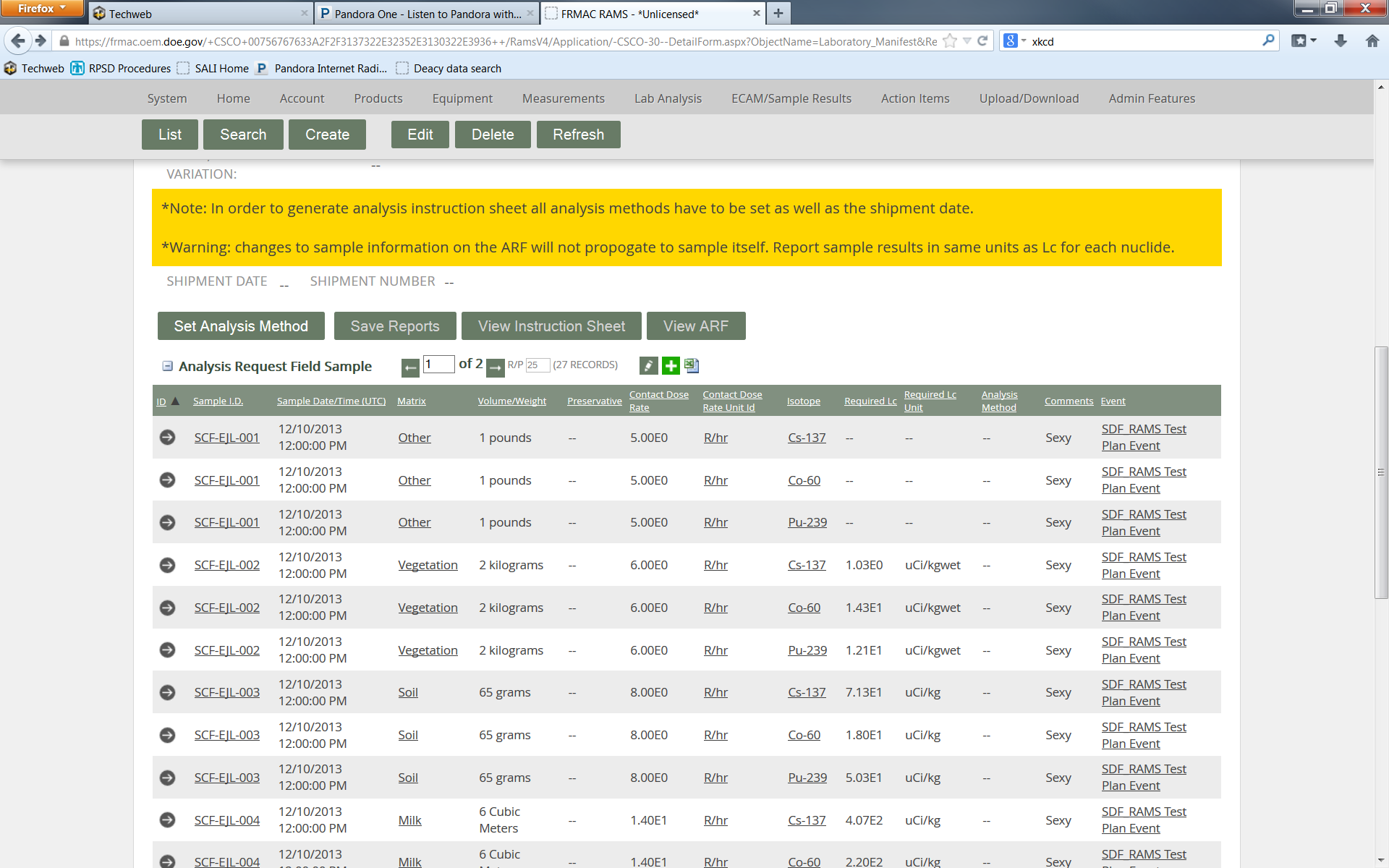
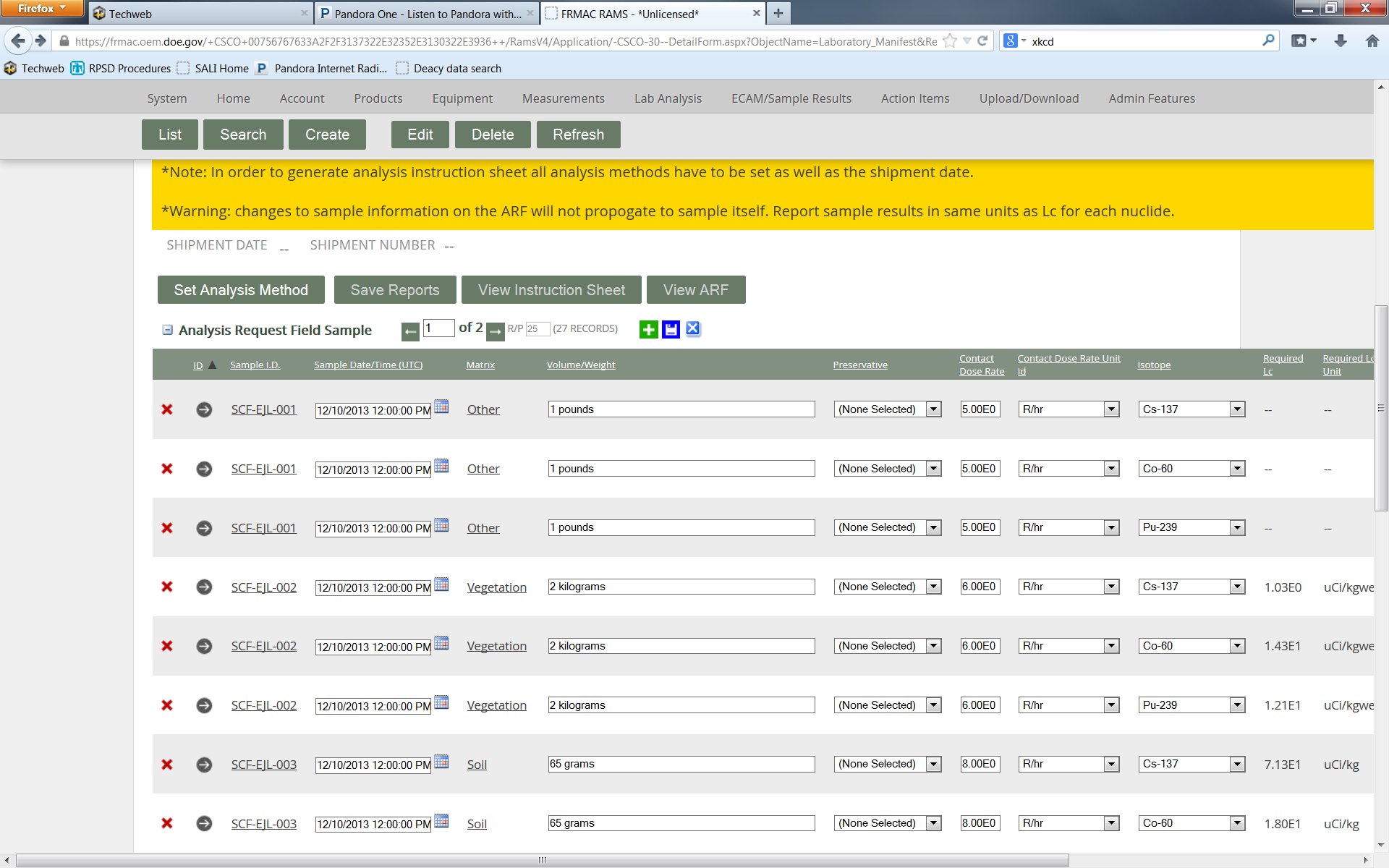
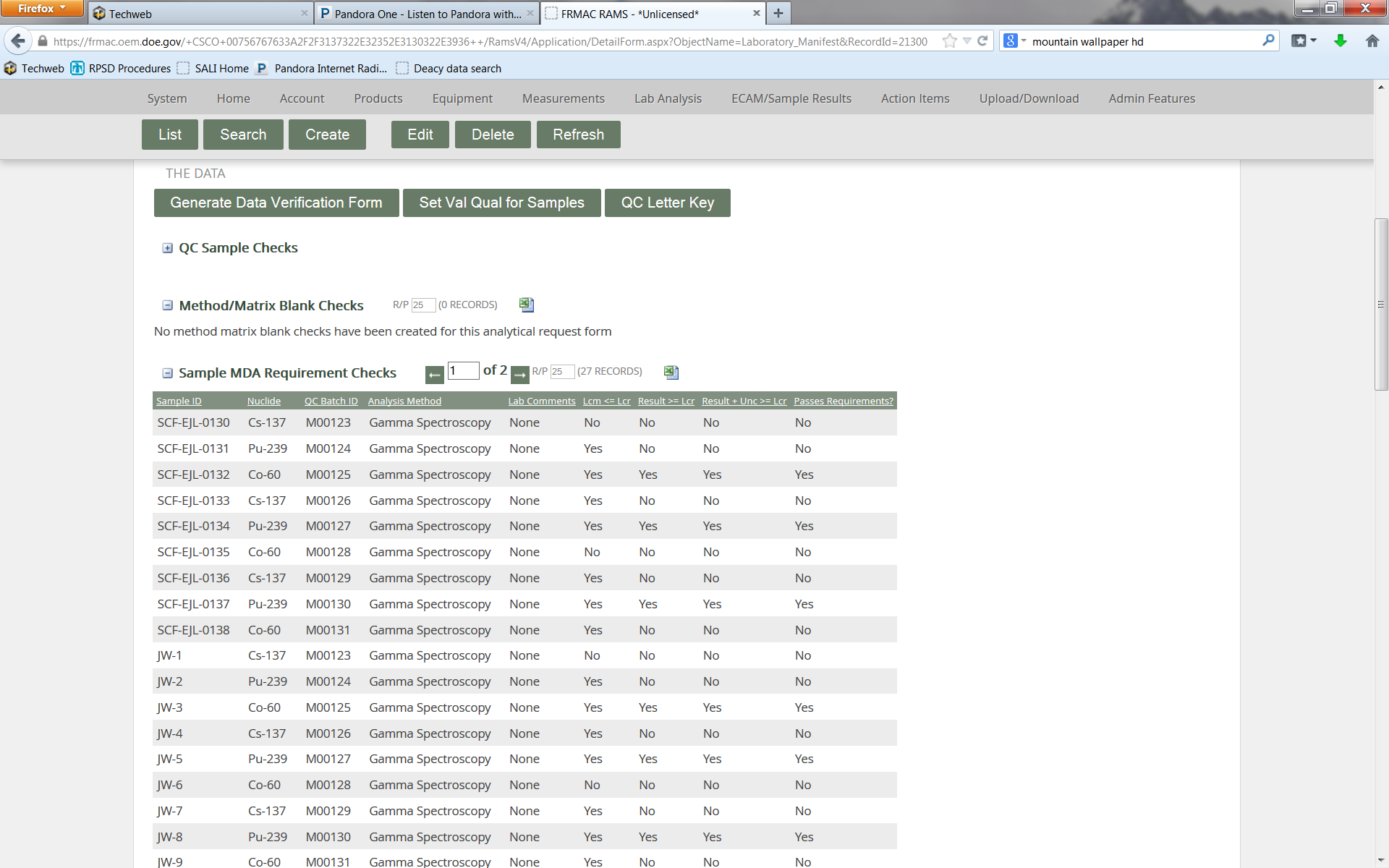
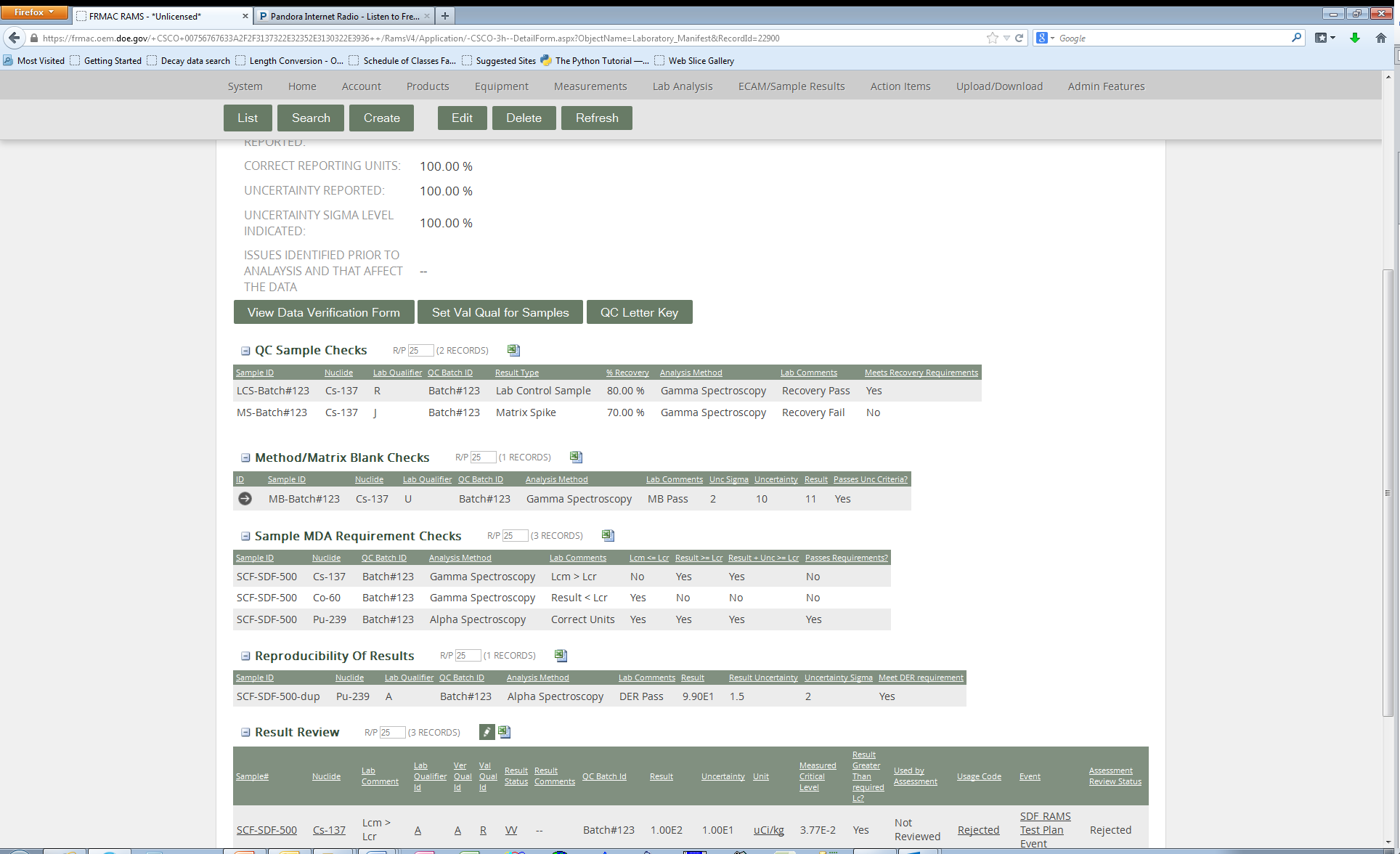
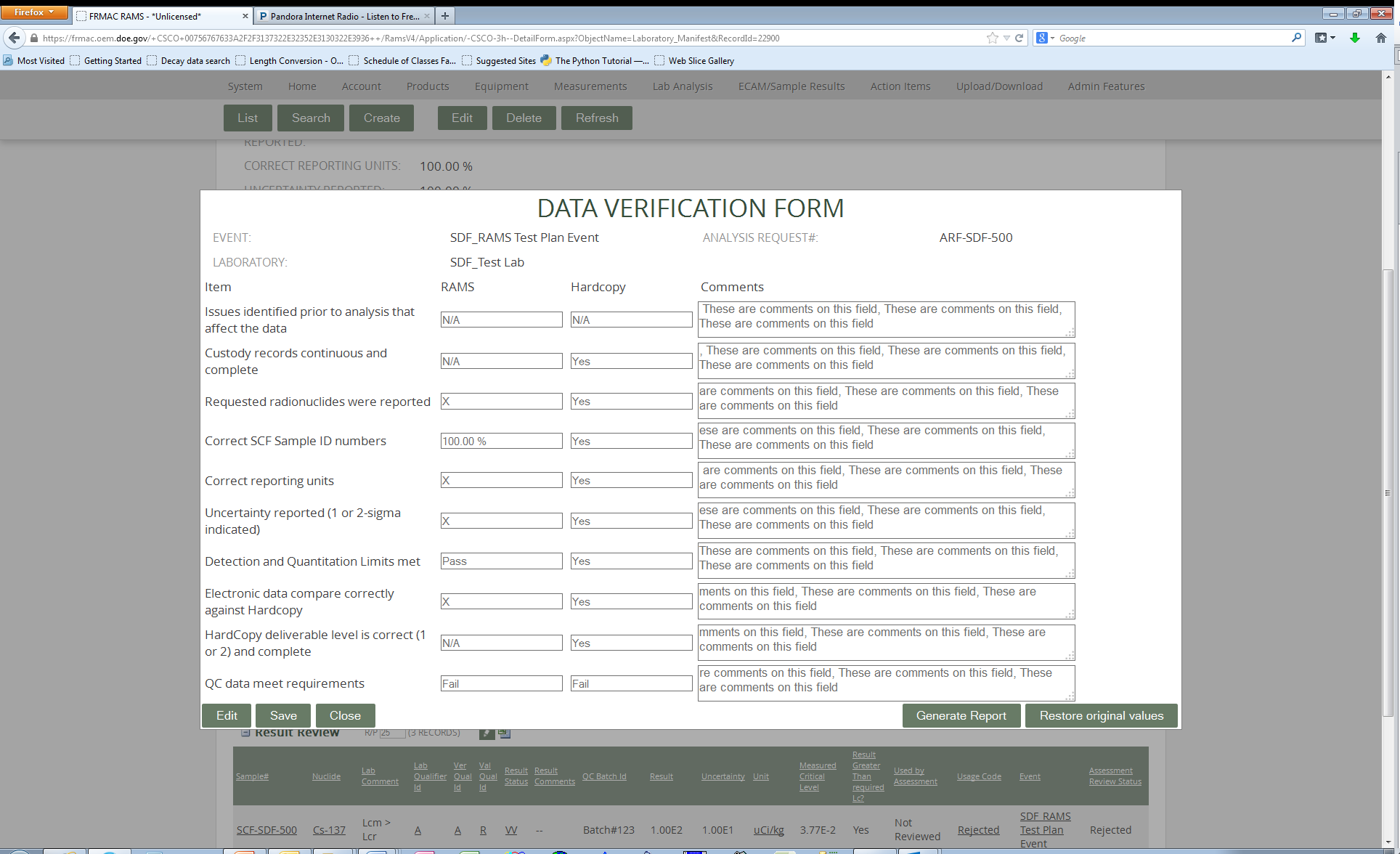
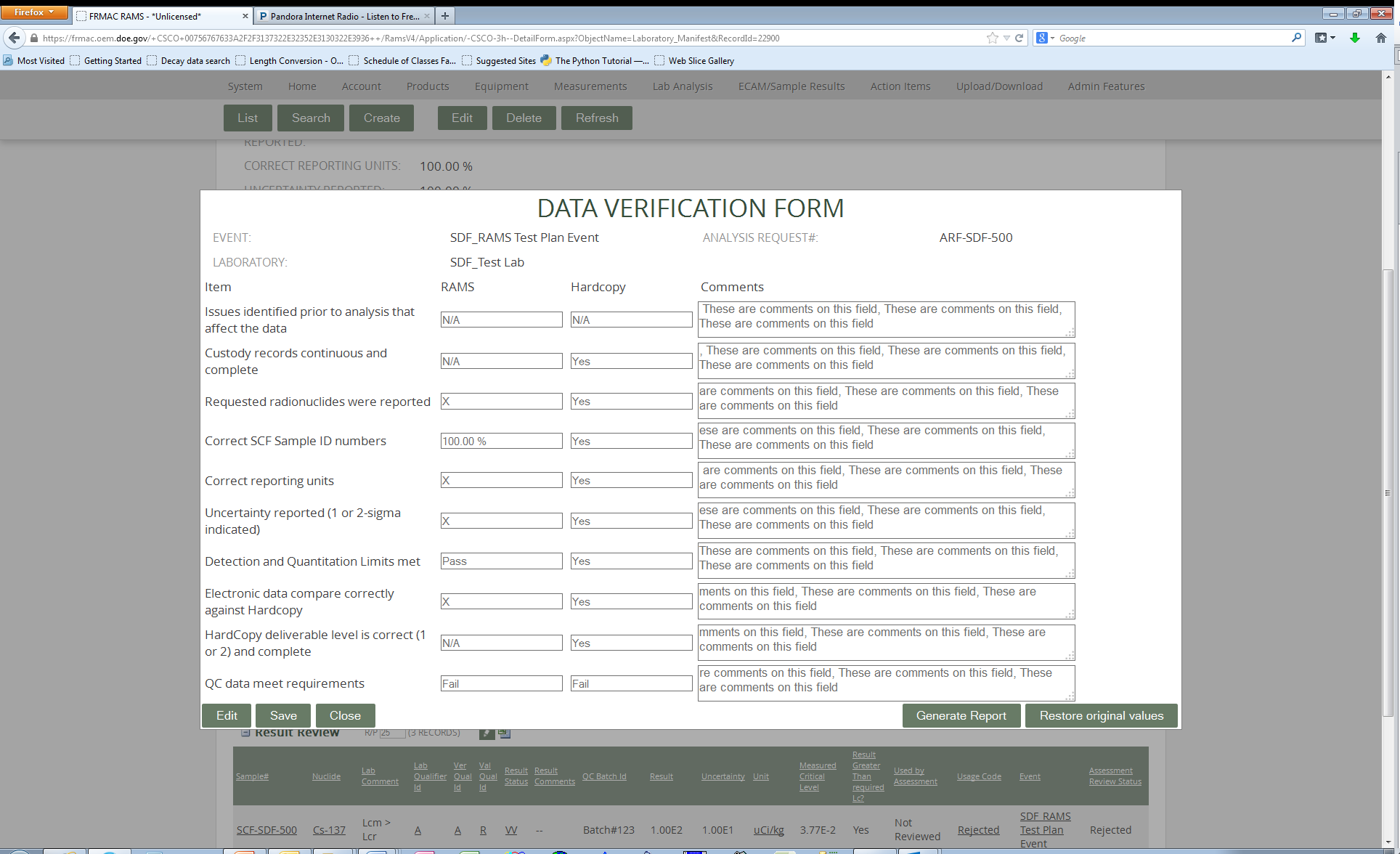
Description of QA fields: Reproducibility of Results

|  |  |
| --- | --- |
| **Field Name** | **Description** |
| Meet DER Requirement | Checks a duplicate sample result against a sample result with the Duplicate Error Ratio test as defined in the FRMAC Laboratory Analysis Manual. The criterion is set at the event level under the Lab Analysis Defaults tab. |

Description of QA fields: Result Review (See ARF QC Section Letter Key below)

|  |  |
| --- | --- |
| **Field Name** | **Description** |
| Lab Comment | Result comment provided by the analytical laboratory |
| Lab Qualifier ID | Qualifier code supplied by laboratory, not editable by FRMAC |
| Ver Qual ID | Qualifier automatically set to the Lab Qualifier ID but editable by FRMAC should the result have a different qualifier |
| Val Qual ID | Qualifier manually set by FRMAC after full QA review is performed |
| Result Status | Indicates the status of the result in the data review process, does not speak to the quality of the data |
| Result Comments | Open text field available to reviewer that the users of the data will see |
| Used By Assessment | Indicates if a result has been used by assessment scientists in a data product |
| Usage Code | Triggered by both the Val Qual ID and Result Status and speaks to the usability (quality) of the data element. This field can also be manually set by the reviewer. |



1. Review the data. Based on your experience and training, you will need to make a number of decisions about the data.
2. Changes to the Result Review table can be made by clicking the  icon to put the table into Edit mode. When changes have been made, the  icon will commit the changes to the database.
3. If needed, change the Ver Qual
4. Set the Val Qual ID using the  utility. The qualifiers are described in the ARF QC Section Letter Key figure above.
5. Enter a comment in the {Result Comments} field if needed
6. Change the {Usage Code} to reflect your final data quality decision if needed.
7. When the QA review for the entire ARF is complete, view the Data Verification Form by pressing the  button.
8. As the QA reviewer, you have the opportunity to comment on the RAMS and hardcopy data that has been submitted. Fill in the table appropriately and print the form by pressing the  button.
9. The  button will remove any edits you make to the fields and restore the form to the original state.
10. Print and sign the DVF and file it in the ARF folder.