# OJT Training Module Cover Sheet

**Title:** 416 How to analyze and summarize lab data reports for specific important soil properties in your survey area.

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<tr>
<th><strong>Type:</strong></th>
<th>X Skill</th>
<th>☐ Knowledge</th>
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**Performance Objective:** Trainee will be able to …
- Demonstrate proper summary of lab data for selected soil analytes and procedures.
- Evaluate lab data for poor dispersion and correct for poor dispersion if needed.

**Target Proficiency:**
- ☐ Awareness
- ☐ Understanding
- ☐ Perform w/ Supervision
- X Apply Independently
- ☐ Proficiency, can teach others

**Trainer Preparation:**
- Be familiar with soil properties important to the local soil survey office and any conversion factors needed to analyze the data.
- Have the *Soil Survey Laboratory Information Manual* (SSIR #45) available in hard copy for reference.
- Have example pedons in mind for use in the training.

**Special Requirements:**
Initiate an external learning request with a SF-182 in Aglearn for this activity. Instructions and a template are located on the training webpages for OJT modules.

**Prerequisite Modules:**
- 415 How to access and use soil characterization data.

**Notes:**
None

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**Approved by:**
Marc Crouch
The Five-Step OJT Cycle for Procedural Training (Skill)
Title: 416 How to analyze and summarize lab data reports for specific important soil properties in your survey area.

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<thead>
<tr>
<th>WHAT</th>
<th>WHY, WHEN, WHERE, HOW, SAFETY, QUALITY</th>
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| Cycle step 1 | Trainer and trainee review objectives of module.  
Trainer and trainee access:  
• National Cooperative Soil Survey Soil Characterization Data web site |
| Cycle step 2 | Trainer creates a lab data **Summary Report** from the NCSS Soil Characterization Data.  
Trainer discusses and demonstrates how to interpret lab data for poor dispersion and correct for if needed.  
• Poor dispersion if 1500 KPa Ratio/Clay is <0.25 or >0.6. Corrected %C = (2.5)(15 Bar water content – Total C)  
Trainer demonstrates use of the Summary Reports setting to do the following:  
• Determine the range in characteristics (ric) for several analytes/procedures in one sampled pedon. Explain that the ric for a **single pedon** can be used to ensure the pedon is within the ric for a particular series.  
• Determine the ric for several analytes/procedures among multiple sampled pedons. Explain that the ric for **multiple pedons** can be used to develop the series ric as well as entries for low, rv, and high in NASIS.  
Explore the settings for summarizing data by pedon and by horizon designation. Discuss the interpretation of numerical and graphical outputs for the analytes/procedures chosen.  
Note: Corrections for poor dispersion will not be reflected in the summary reports. |
| Cycle step 3 | Trainer provides the name of an example soil for the trainee to use in this step. Select several analytes/procedures for evaluation that can be used to populate low, rv, and high data entries in NASIS. Suggested properties to evaluate might include bulk density and total sand, silt, and clay.  
Trainee uses the **NCSS Soil Characterization Data** |
link to find requested data for the example soil and
summarizes the data for each pedon and among
multiple pedons with supervision.
- Trainer positions self to observe and guide.
- Ask trainee to explain each step.
- Ask trainee to explain what each step does.
- Ask the trainee to evaluate the data for poor
dispersion and correct for it if necessary.
- Ask trainee to summarize data using the
reports.
- Ask trainee for questions.

<table>
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<tr>
<th>Cycle step 4</th>
<th>Begin Measurement of Learning below.</th>
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</thead>
<tbody>
<tr>
<td>Cycle step 5</td>
<td>Trainer and trainee can debrief the exercise and discuss answers to any questions. Repeat the steps above until trainer is satisfied that the trainee can perform the steps independently.</td>
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### OJT Module Lesson Measurement of Learning

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| Give trainee a randomly selected soil from which to analyze and summarize data. The trainee must:  
  - Locate the available laboratory data.  
  - Evaluate the data for poor dispersion if applicable and correct for poor dispersion if needed.  
  - Generate summary report of individual pedons and multiple pedons by analytes/procedures.  
  - Identify the low, rv, and high data entries to use for these analytes/procedures in NASIS. | During project activities, assign this task to the trainee. Sign off on performance when target proficiency is achieved. |

### SF-182

Trainee and/or supervisor access Aglearn to verify completion of the module via its SF-182.