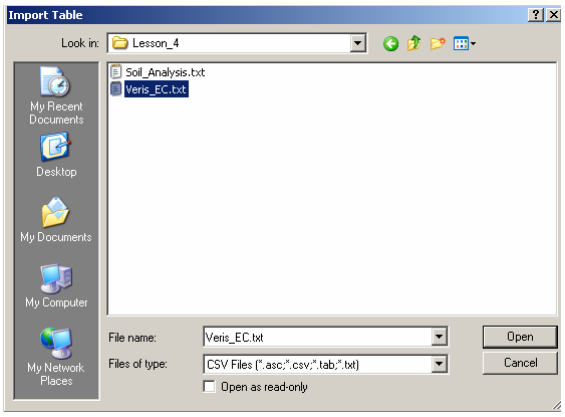
Lesson 4 - Visualization and Analysis of Soil Data

Exercise 4-1

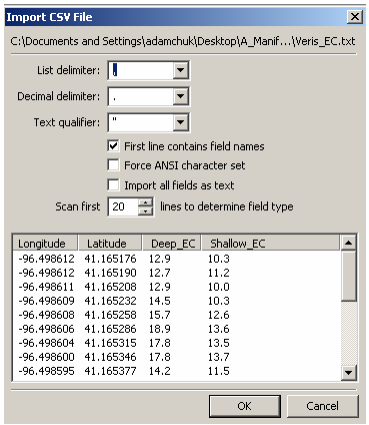
Objective: Import and display the soil electrical conductivity (EC) data layer and overlay it with field and soil type boundaries.

1. File-Open ***Project_4-0.map.*** *The project contains field boundary and soil survey drawing components (Exercises 2-3 and 2-4).*

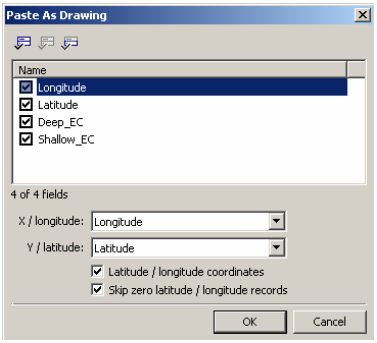
2. Select **File-Import-Table** and navigate to the desired text file. In the **Import Table** dialog box, select ***CSV Files (*.asc,*.tab,*.txt)*** in the **Files of type** box and navigate to the ***Veris_EC.txt*** file to open. Click **Open**.



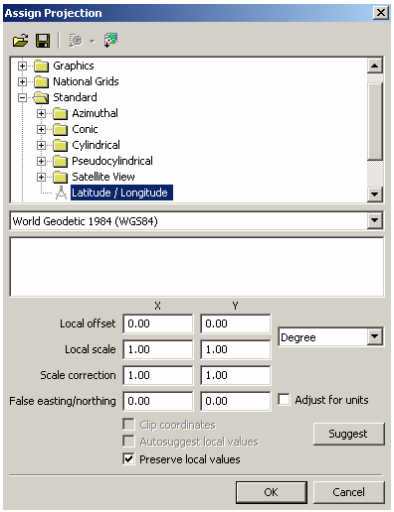
3. In the popup **Import CSV File** dialog box, click **OK**. *The file is comma delimited with a header line which is recognized automatically.*



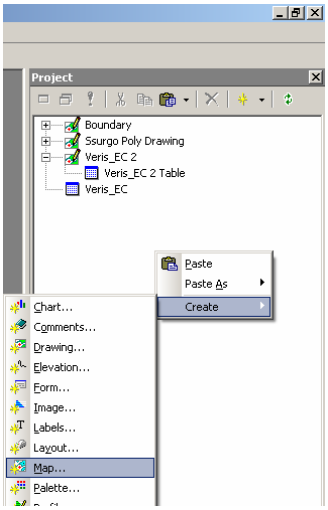
4. Right click the ***Veris_EC*** table component in the **Project** pane and click **Copy**. Right click any empty location in the **Project** pane and select **Paste As-Drawing**. In the popup **Paste As Drawing** dialog box, click **OK**. *In this file, Longitude and Latitude coordinates are recognized automatically.*



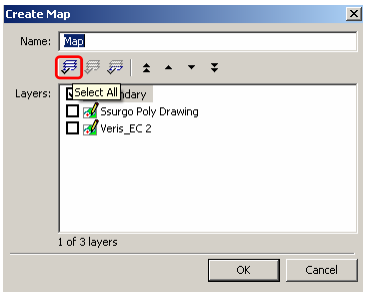
5. Right click the ***Drawing Veris_EC 2*** component in the **Project** pane and select **Assign Projection. I**n the popup **Assign Projection** dialog box press **OK** to confirm the Latitude/Longitude coordinates.



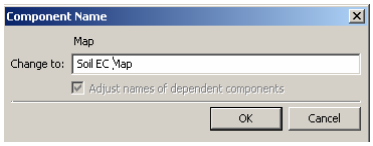
6. Right click any empty location in the project pane and select **Create-Map**.



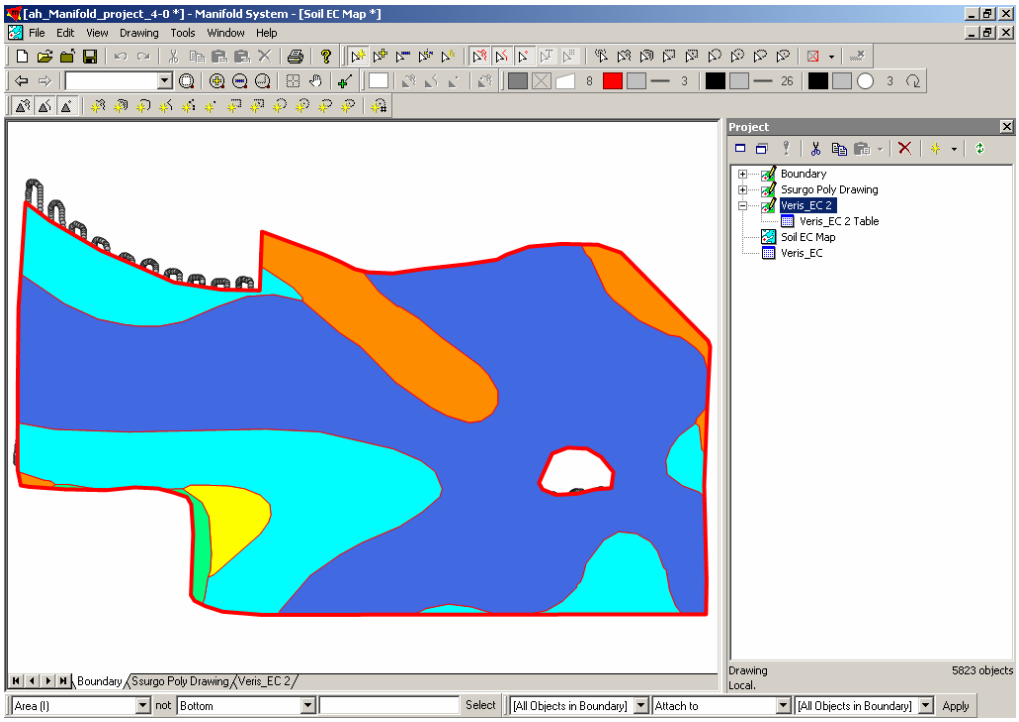
7. In the popup **Create Map** dialog box, click the ***Select All*** icon. Click **OK**.



8. Right click the ***Map*** component in the **Project** pane and select **Rename**. In the popup **Component Name** dialog box, type ***Soil EC Map*** in the **Change to** box. Click **OK**.

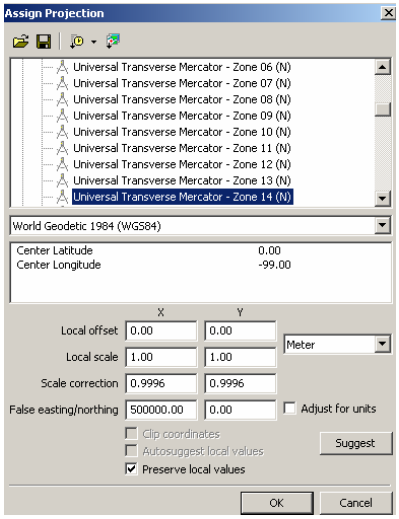


9. Double-click the ***Soil EC Map*** component in the **Project** pane. Expand the map by clicking the **Maximize** button and click the **Zoom To Fit** icon.

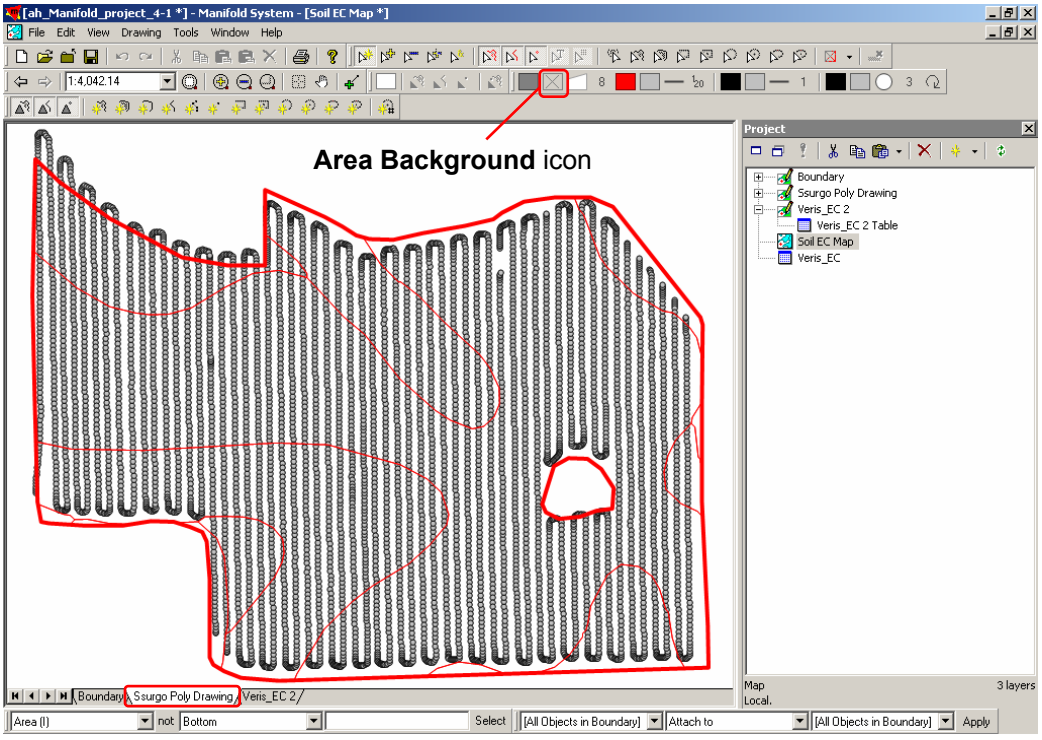


10. Right Click the ***Soil EC Map*** component in the **Project** pane and select **Assign Projection.** In the popup **Assign Projection** dialog box, navigate to the ***Universal Tranverse Mercator - Zone 14(N)*** option and click **OK**. *Once this is done, the field will*

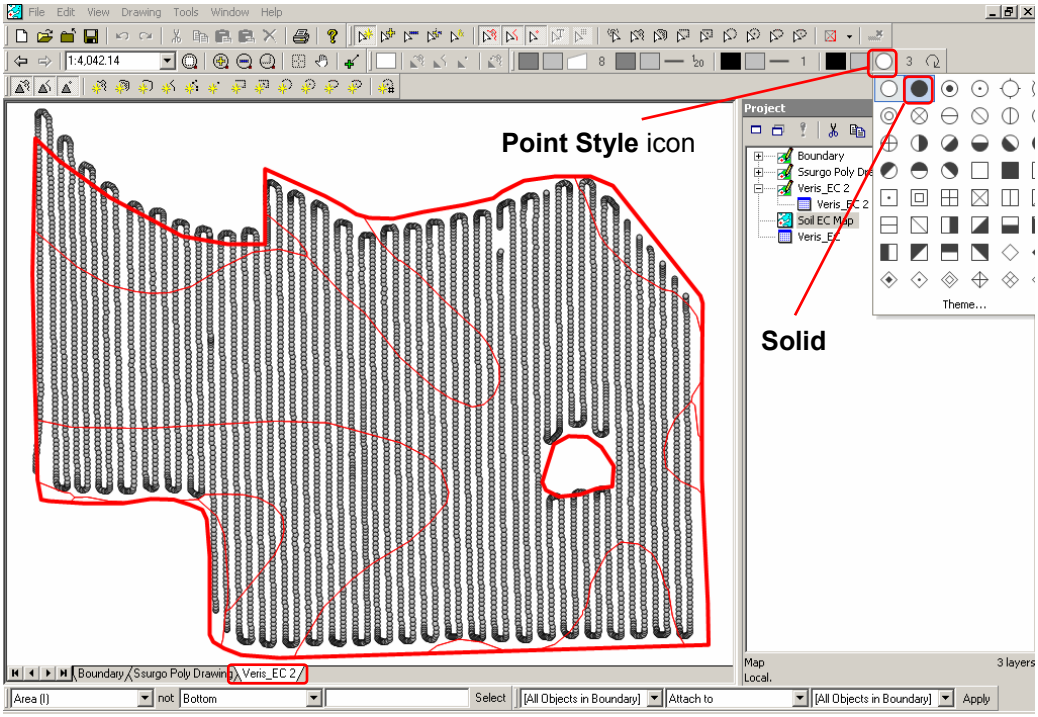
take the proper shape due to converting the easting and northing coordinates to linear units.



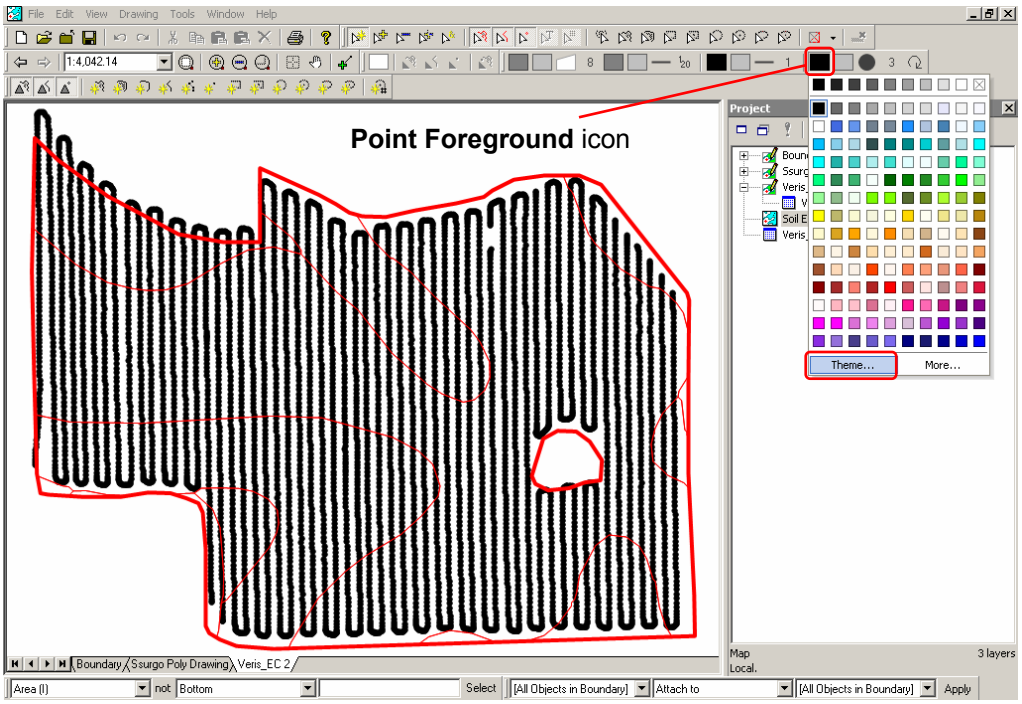
11. Click the ***SURRGO Poly Drawing*** tab at the bottom of the viewing window. Click the **Area Background** icon and select ***None***.



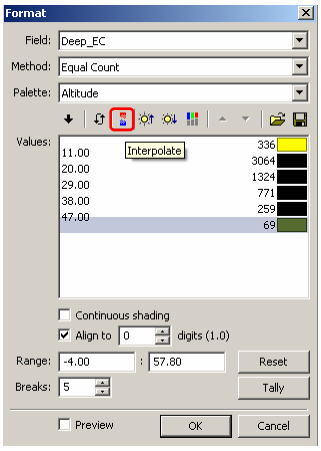
12. Click the ***Veris_EC 2*** tab at the bottom of the viewing window. Click the **Point Style** icon and select ***Solid***.



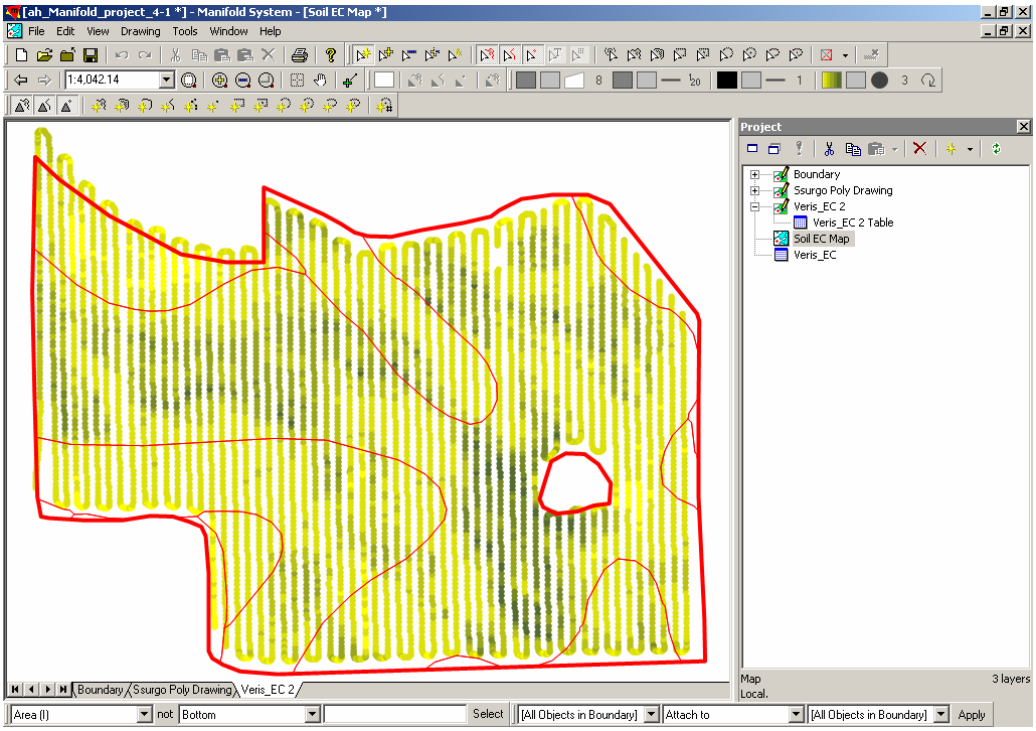
13. Click the **Point Foreground** icon and select ***Theme***.



14. In the popup **Format** dialog box select ***Deep_EC*** in the **Field** box. Double-click the color rectangle for the lowest value in the **Values** box and select ***Yellow*** from the popup **Palette.** Then double-click the color rectangle for the highest value and select ***Dark Green*** color. Click the **Interpolate** icon and click **OK**.



The result is a map of EC overlaid by the soil type and field boundaries:



15. **File-Save As *Project_4-1.map*.**