



# Exploration Archives 4.3

Using SEG-Y Scan™

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# 1.0 Using SEG-Y Scan™



**Note:** SEG-Y Scan is available in both the **Catalog** module and the **File** module. These instructions are in reference to the **Catalog** module.

**SEG-Y Scan** converts your SEG-Y data files into compressed replicas for quick viewing. The scanning process extracts the set of coordinates, data from the EBCDIC header, SEG-Y attributes and SEG-Y cataloging detail. Using the extracted data, Exploration Archives generates images that you can view using SEG-Y SnapShot.

The generated images include:

- » Live trace outline for each file
- » Amplitude map
- » Time sections
- » Time slice
- » Histogram of trace sample values

## 1.1 Identifying The Scan Status

In the **Catalog** module, the **Scan Status** column in the **Files** grid indicates whether a file has been scanned or not.

Files in a .sgy format are available for scanning and display a status in the **Scan Status** column as follows:

- » **Not Scanned:** SEG-Y file has not been scanned
- » **Scanned :** File was successfully scanned and outputs are available for viewing in SEG-Y SnapShot
- » **Missing Data:** The scan process was unsuccessful because data is missing from the file
- » **Missing Navigation Data:** The scan process was unsuccessful because navigation data is missing from the file

| File ID                | Scan Status           | Location [not + File |
|------------------------|-----------------------|----------------------|
| TTL.100000000000032579 | Scanned               | \\Talus-nasea\d...   |
| TTL.100000000000032580 | Missing navigation... | \\Talus-nasea\d...   |
| TTL.100000000000032581 | Invalid trace headers | \\Talus-nasea\d...   |
| TTL.100000000000032582 | XY contains zeros     | \\Talus-nasea\d...   |
| TTL.100000000000032583 | Not scanned           | \\Talus-nasea\d...   |

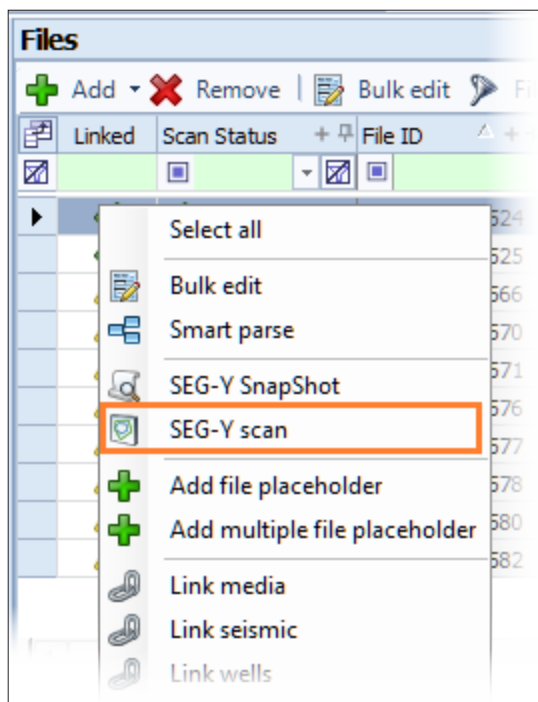
Count = 5

## 1.2 Adding Files To SEG-Y Scan

As part of your cataloging procedures, the files that are in a .sgy format are available for scanning.

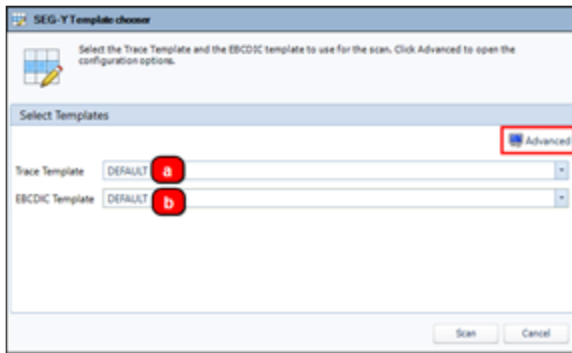
To prepare **SEG-Y Scan** for scanning files:

1. Use one of the following methods to select the files to add to SEG-Y Scan:
  - » Click to select one row in the **Files** grid.
  - » To select multiple individual rows, press Ctrl while clicking to select.
  - » To select multiple consecutive rows, click and drag in the leader column in the grid.
2. Right-click on a selected row and click **SEG-Y Scan** in the context menu.



3. The **SEG-Y Template chooser** window opens.
4. When the **SEG-Y Template chooser** window opens it is in the **Basic** scanning mode. In this mode, all the files are scanned with the same Trace and EBCDIC templates.

To configure a scan in Basic mode:

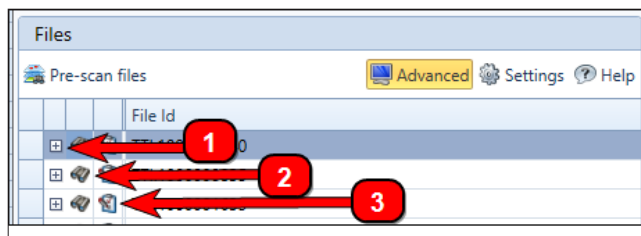


- a. Select the Trace Template from the drop-down list.
- b. Select the EBCDIC Template from the drop-down.
5. Click **Advanced** adjust settings for each selected file.

The Advanced widow is divided into 3 panels:

» **Files:**

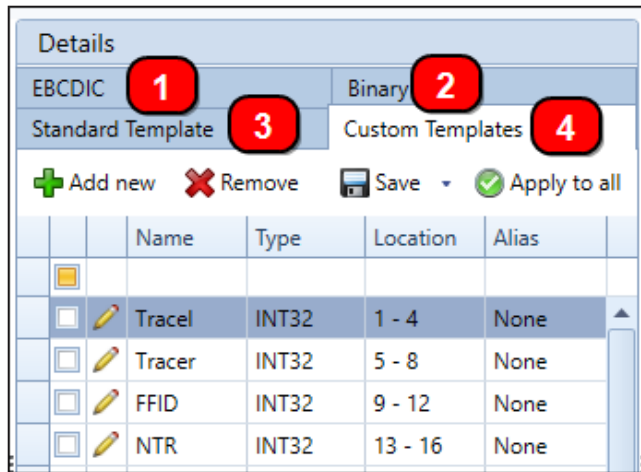
This panel displays all the records that have been selected for scanning. Each row represents one record. There are 3 icons available with each record:



1. **Information:** When you select this icon a dialogue will open showing the information for the record.
2. **Inspection:** Activates the Inspection Process and activates the Quality Control panel. Inspection parses the EBCDIC and Binary Headers and a Trace Header if one is assigned.
3. **Custom Template:** Overrides the existing Trace Template on the file. This will force the scan to run the file in custom mode using the override.

» **Details:**

The Panel is broken into 4 tabs:



1. **EBCDIC**: Displays the EBCDIC Header in ASCII format.
2. **Binary**: Displays the values from the binary header
3. **Standard Template**: Provides the standard byte locations. Select the standards to use for reading the data from the SEG-Y File.

To save the selected standards to use as a template right-click and select **Add to template**.

To set an alias to use when generating the spacing and sawtooth validations, right-click and select Set alias and select the alias to use.

4. **Custom Templates**: Displays the trace template details based on your selected template.

It includes the option to **Add new** or **Remove** templates from the custom list.

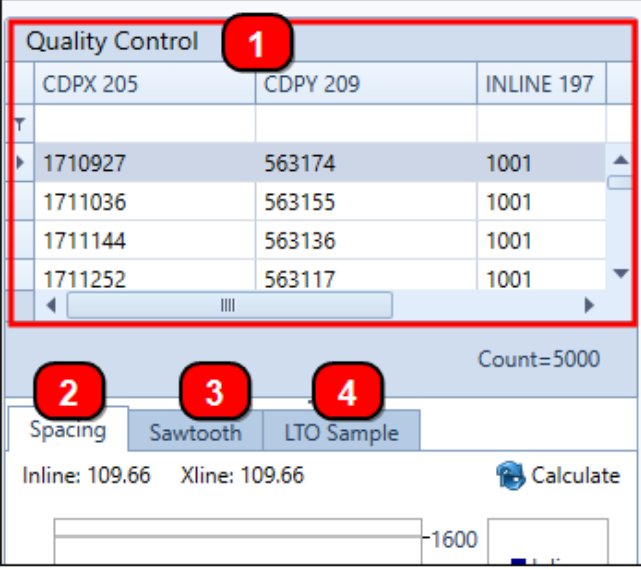
To save template options to a new template, click the **Save** drop-down and select **Save as new template**.

Edit an existing template by selecting the Pencil icon.

Select the templates on the list then click **Save**.

#### » **Quality Control:**

The panel is divided into 4 sections:



Quality Control

| CDPX 205 | CDPY 209 | INLINE 197 |
|----------|----------|------------|
| 1710927  | 563174   | 1001       |
| 1711036  | 563155   | 1001       |
| 1711144  | 563136   | 1001       |
| 1711252  | 563117   | 1001       |

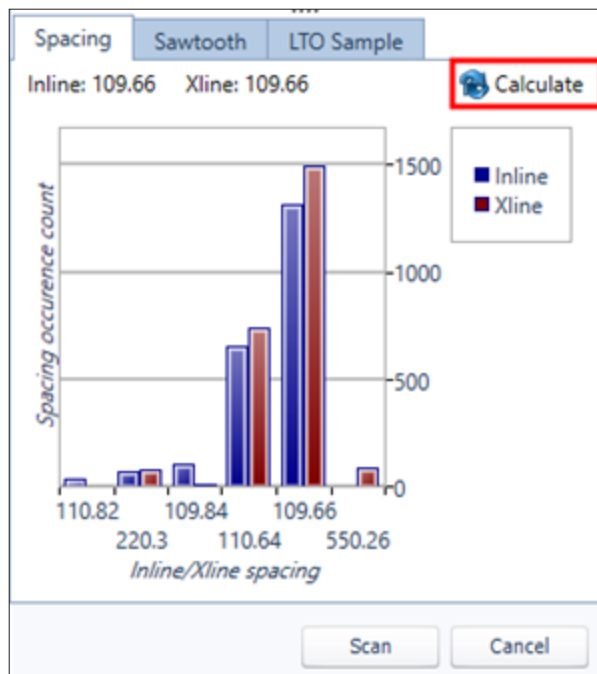
Count=5000

Spacing Sawtooth LTO Sample

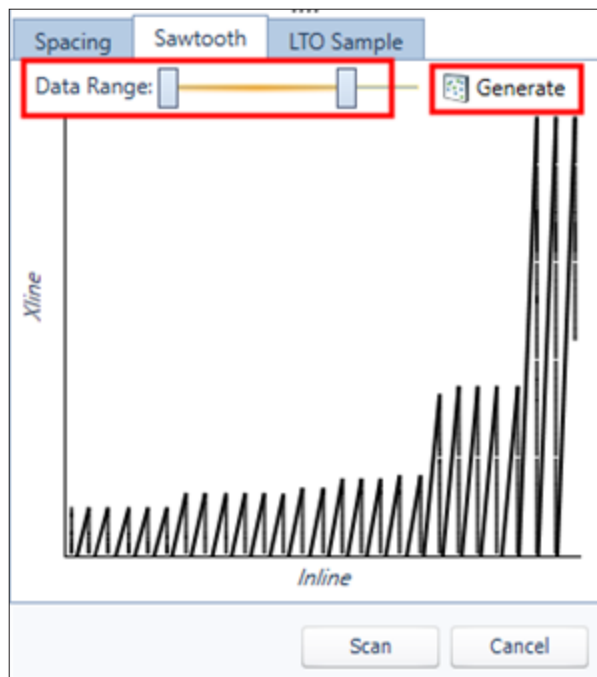
Inline: 109.66 Xline: 109.66 Calculate

1600

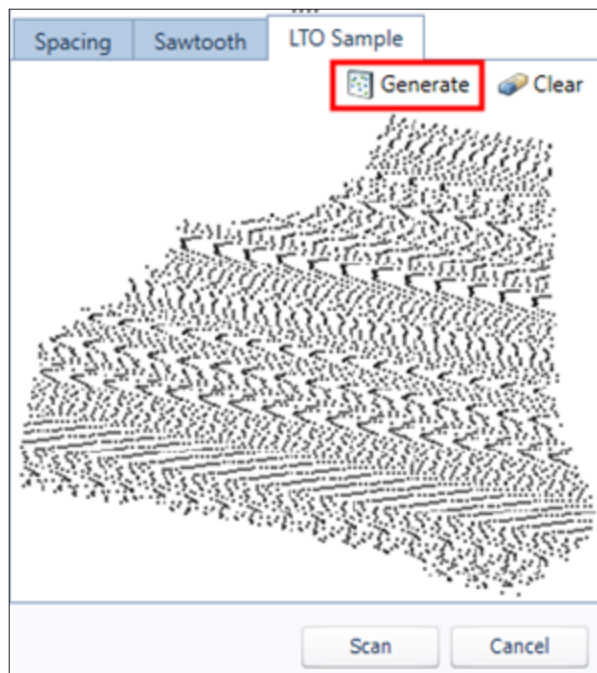
1. **Grid:** The grid displays the trace data from the SEG-Y based on the selected standard and custom templates. The values in this grid are used to generate the spacing and sawtooth charts.
2. **Spacing:** Click **Calculate** to view the spacing on a graph



3. **Sawtooth:** Click **Generate** to see a graphical representation. Use the **Data Range** slider to change the number of traces being used.



4. **LTO Sample**: click Generate to create the sample. To clear the panel, click **Clear**.



To start the scan process, refer to "Starting SEG-Y Scan" on the next page.

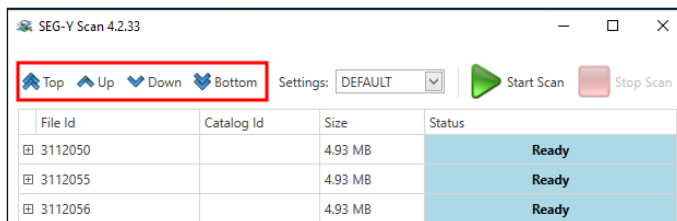
## 1.3 Starting SEG-Y Scan

After adding files to SEG-Y Scan and specifying the settings, you can start the scan process.

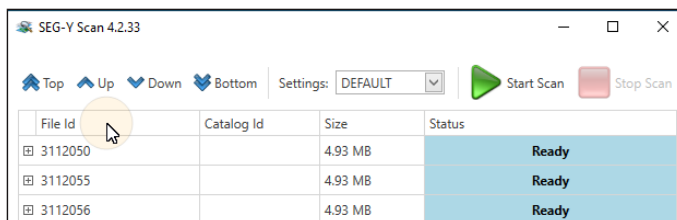
SEG-Y Scan opens with the selected files listed with a **Ready** status.

The application performs the scan in the order that the files are listed. Before starting the scan, you can change the priority order of the files.

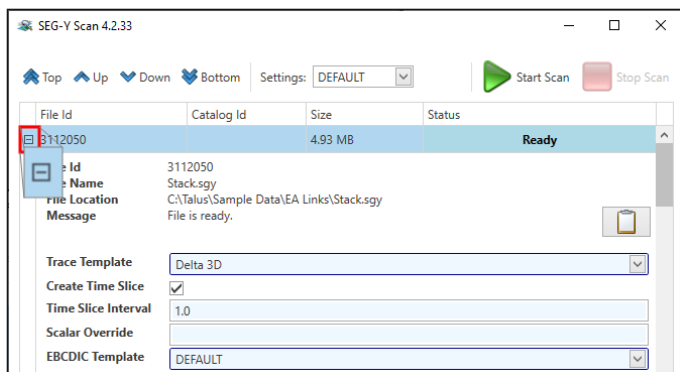
- » To move a file to a different priority in the list, select the file move it using the **Top**, **Up**, **Down** and **Bottom** buttons.



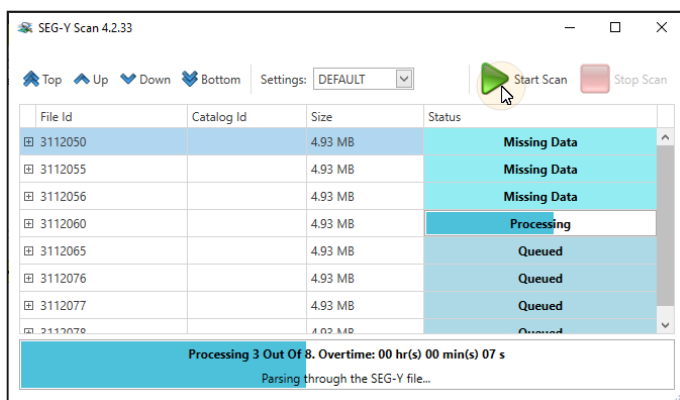
- » To display the list either ascending or descending by column category, click the column header.



- » To view file details or to change the specified template for a file, click the down arrow in the leader column to expand the file information.



- » Click **Start** when you are ready to begin the scan. As the scan progresses, the **Status** column displays the status of each file.



When complete, an information window opens and displays the result details of the scan. Click **OK**. The **SEG-Y Scan** window remains open for you to continue working.

To view the scan results in the **Files** grid, click **Reload** in the workspace toolbar. The **Scan Status** updates in the grid and displays detail for any files that had missing data.

**SEG-Y Scan** operates independently from Exploration Archives and will not interfere with performance. You can continue working in Exploration Archives while the scan completes.

For quick access to **SEG-Y Scan** while in progress, click on the icon in your taskbar

## 2.0 Viewing Files With SEG-Y SnapShot

During your cataloging process, you can view your scanned files using SEG-Y SnapShot. While these instructions pertain to the **Catalog** module, SEG-Y SnapShot is also available from the **File** and **Seismic** modules.

Files that appear in the **Files** with a **Scanned** status are available for viewing in **SEG-Y SnapShot**.

The "snapshots" of your SEG-Y are compressed replicas for a quick view of time slices, live trace outline, time section and the EBCDIC header detail.

To view files in **SEG-Y SnapShot**:

1. To locate SEG-Y files in the **Files** grid, use the filter row of the **File Location** column and enter ".sgy".
2. Use one of the following methods to select **Scanned** files for viewing:
  - » Click to select one row in the **Files** grid.
  - » To select multiple individual rows, press Ctrl while clicking to select.
  - » To select multiple consecutive rows, click and drag in the leader column in the grid.
3. Right-click on a selected row, point to **Tools** and select **SEG-Y SnapShot** in the context menu.



The **SEG-Y SnapShot** window opens.

The grid in the upper left displays the files you selected for viewing. Click to select a file to view.

The lower left grid displays the **Details** tab and the **Geometry** tab. Click a tab to view the associated information.

The panel on the right displays the generated snapshot files:

- » Time Slice
- » Live Trace Outline
- » Time Section
- » EBCDIC
- » Report

Click the drop-down to select a snapshot view. Use the navigation bar to browse, print or save the files.

