



## ***OLI Tips #68***

Using ESP models in the Analyzers

*Revised December 13, 2013*

Overview.....	1
Assumptions.....	1
Limitations .....	1
Procedure .....	2

### **Overview**

Occasionally a user will need to use a chemistry model created in ESP directly in the Analyzers. There are a variety of reasons to do this but the most common is to modify oxidization and reduction reactions such that they behave closer to reality.

### **Assumptions**

We make the following assumptions that...

1. You have access to ESP and have a valid license
2. You understand how to modify a chemistry model in side of ESP
3. You have finished the ESP chemistry model generation step and have a valid DBS file.

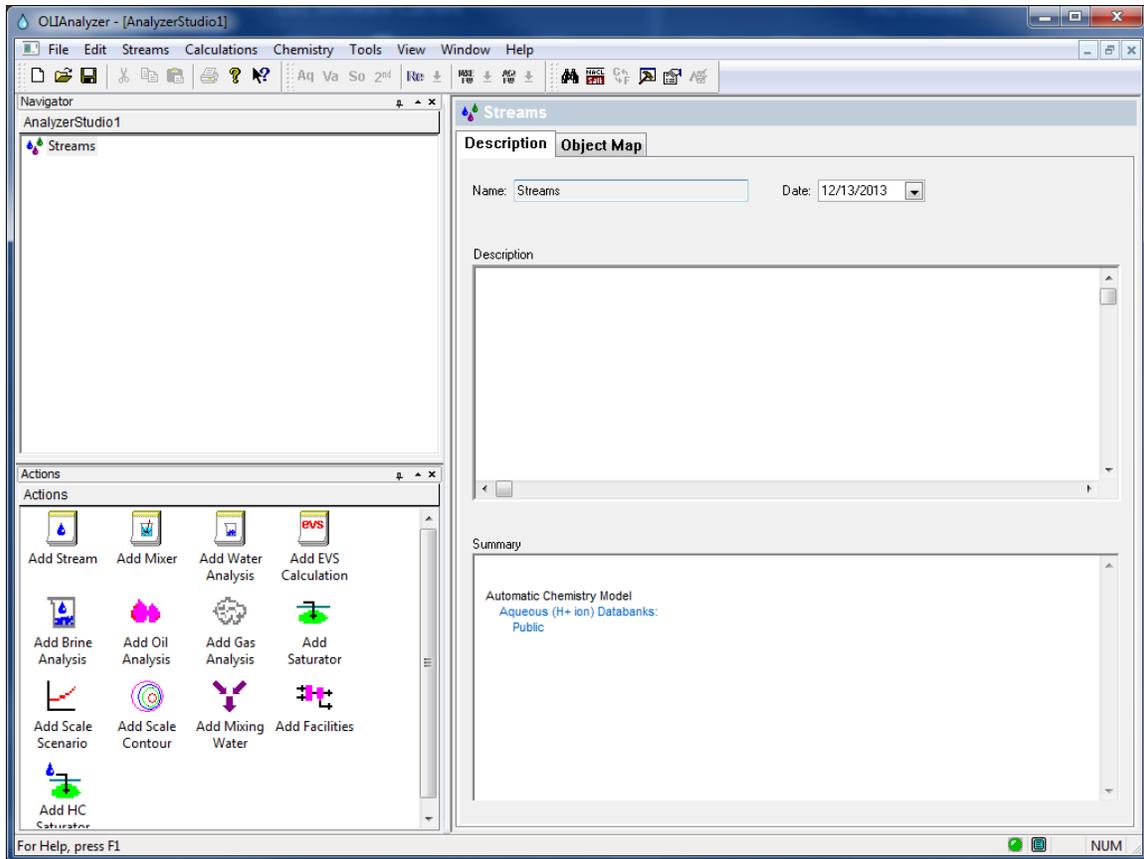
### **Limitations**

There are some limitations to using an ESP model in the StreamAnalyzer

1. You must use the OLI Tag name format for species. This means the species Na+ will be represented as NAION.
2. You can not add or remove species or change phase phenomena for streams that are using ESP models. That is the point of this exercise.

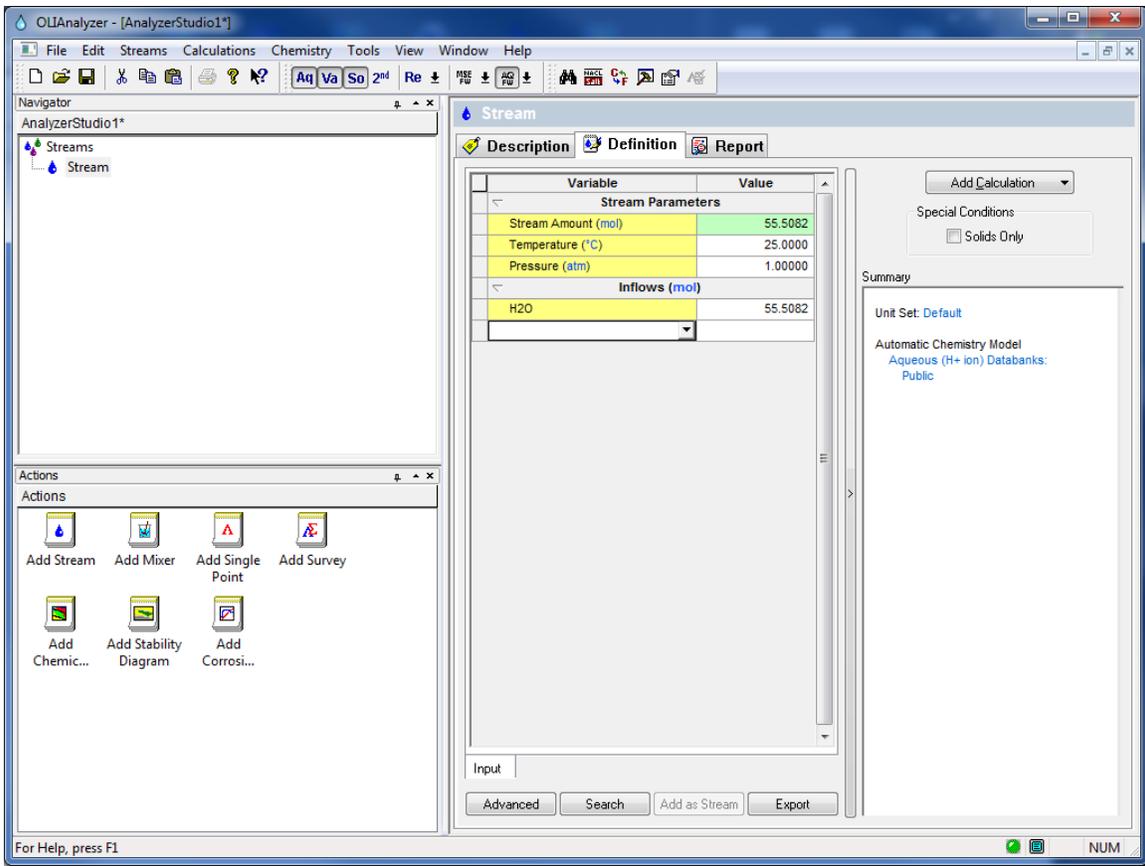
## Procedure

Start the OLI Analyzers program of choice. Here we are using Stream Analyzer 9.0



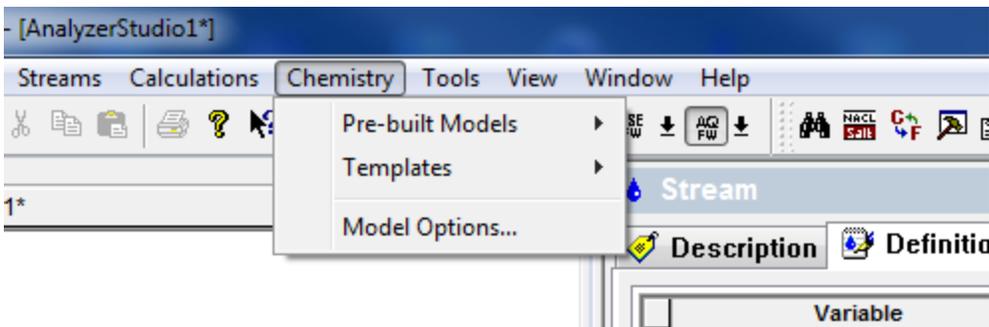
You can only use ESP models in a stream. So you will have to add a stream.

Click the **Add Stream** icon.

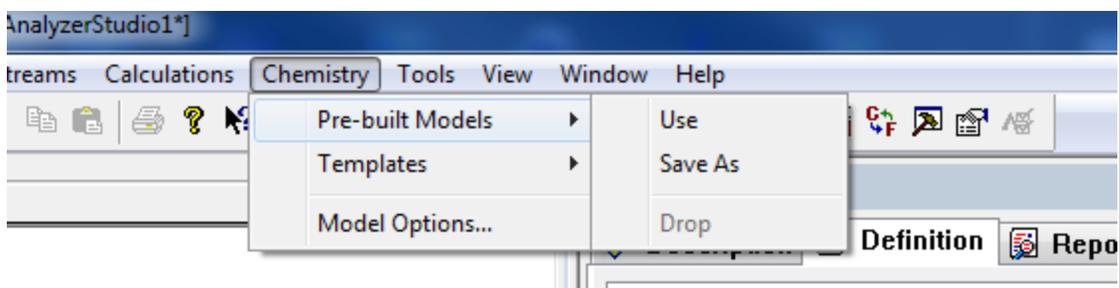


As you can see this is a standard stream definition grid. In the Summary box you can see that our standard models are being used.

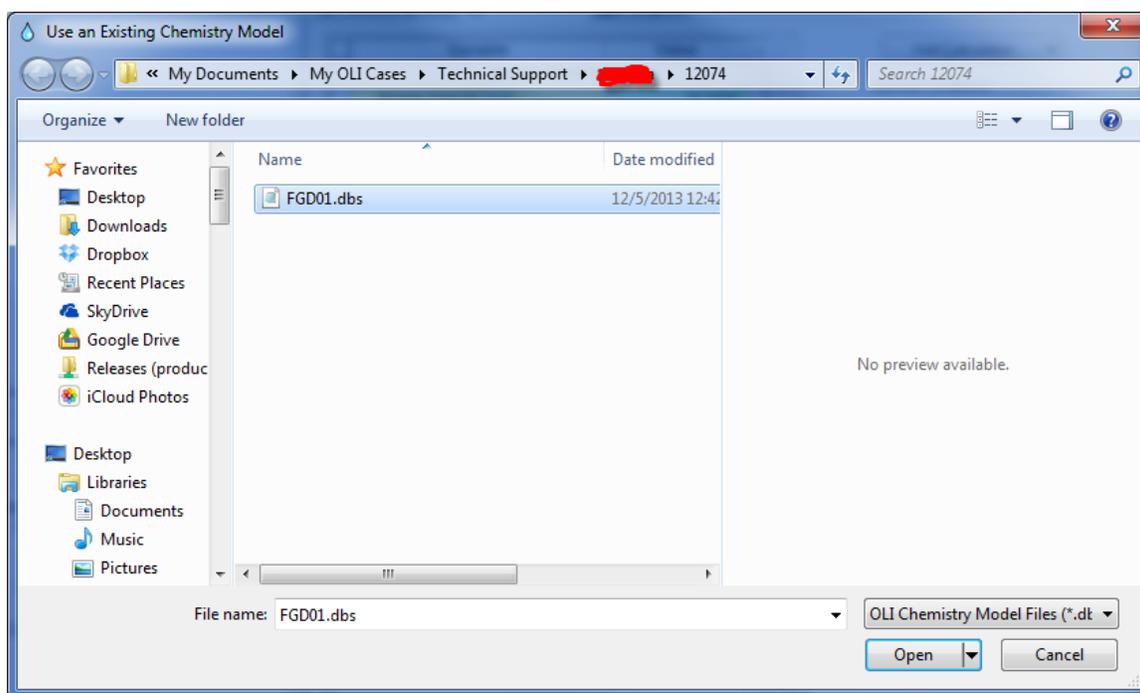
Click the **Chemistry Menu Item**.



Next select **Pre-Built Models**

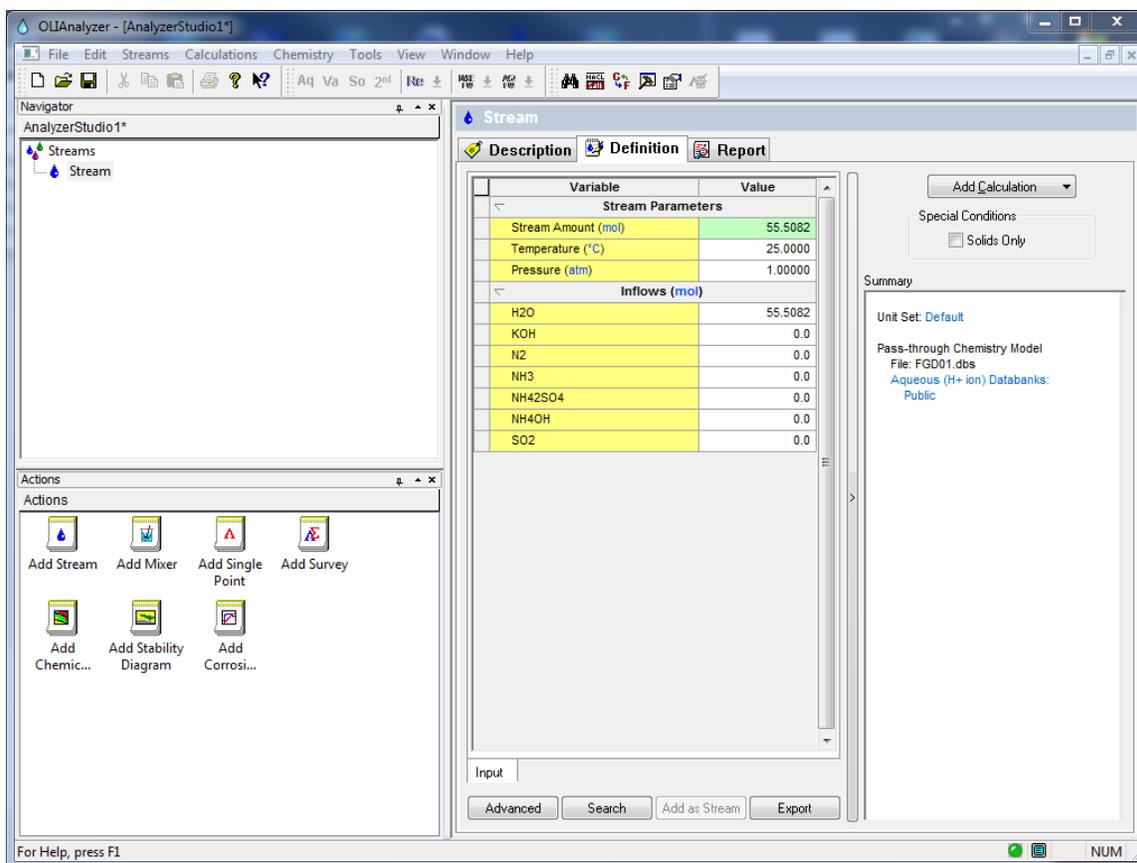


Now select **Use**



Navigate to the folder where the ESP model is located. The actual file name required has the file extension DBS. If this file does not exist, then you need to use ESP to generate the chemistry model.

Highlight the desired model and click the **Open** button.



As you can see the species names have defaulted to the OLI Tag name. The summary box contains updated information about the name of the chemistry model.

You can now use the OLI Studio Analyzer in the normal way.