LA-UR-12-26703

Approved for public release; distribution is unlimited.

Title: Intellus Demo Examples

Author(s): Paige, Karen S

Intended for: Web

Disclaimer:

Los Alamos National Laboratory, an affirmative action/equal opportunity employer, is operated by the Los Alamos National Security, LLC for the National Nuclear Security Administration of the U.S. Department of Energy under contract DE-AC52-06NA25396. By approving this article, the publisher recognizes that the U.S. Government retains nonexclusive, royalty-free license to publish or reproduce the published form of this contribution, or to allow others to do so, for U.S. Government purposes. Los Alamos National Laboratory requests that the publisher identify this article as work performed under the auspices of the U.S. Department of Energy. Los Alamos National Laboratory strongly supports academic freedom and a researcher's right to publish; as an institution, however, the Laboratory does not endorse the viewpoint of a publication or guarantee its technical correctness.

Retrieving data from the Intellus system, the publicly accessible data base for environmental data at LANL.

Website

www.intellusnmdata.com

Demonstration examples:

For the Reporting tab and the Maps tab

Example #1 Reports – Analytical Reporting: Using a location group and individual parameters

Aluminum and Strontium-90 data for Alluvial wells

1. Click the REPORTING link on the top left of the Intellus New Mexico homepage.
2. Select *Analytical Reporting* under *Reports*. Under the *Field Sample* (first/default tab), select *Field Sample Results* (which are *Analytical Data*)
3. On the *Field Sample Results: Specify Data Filter Categories* page, leave the default *Primary Filter Option* selected: *By Location Group*.
 - a. In the box to the right of *Name Like* type “alluv”
4. In the *Parameter Filter Options* select the radio button for *Individual Parameters*
5. Click the *Submit* button
6. The next page is the *View Field Sample Analytical Result Information: Select Data Filters And Output Options* page, which has three tabs. NOTE: selections must be made on each tab or the query will fail and will have to be completely redone.
 - a. On the *Primary Filter* (first) tab, click on the *Alluvial Well* location group and then click the ‘>’ arrow to move the location group to the *Selected Location Groups* column.
 - i. Change the date range to *Include data* from “May 1, 2010” to “May 1, 2012” using the drop-down boxes on the right side of the screen.
 - ii. Click the box under *Show Hits Only* to check it. This will omit samples that have been flagged as non-detects.
 - b. Click on the *Parameter Filters* tab.
 - i. Click anywhere in the *Available Parameters* selection box and quickly type “alu”. This will bring the selection to *Aluminum*. Use the ‘>’ to move your selection to the *Selected Parameters* box.

- ii. Click anywhere in the *Available Parameters* selection box again and quickly type “stro”. This will bring the selection to *Strontium*. Use the scroll bar on the right side of the *Available Parameters* selection box to scroll down to *Strontium-90* and select it by clicking double clicking on it. (*Strontium-90* should now be in the *Selected Parameters* box after *Aluminum*.)
 - c. Click on the *Data Fields/Output* tab.
 - i. In the box on the left scroll down to the *Sample Time (Start)* data field and select it using the ‘>’ button. That field will now be displayed with everything else that is listed in the box on the right side of the screen.
 - ii. Select *Sample Time (Start)* in the box on the right and click the *Up* button until the *Sample Time (Start)* is immediately below the *Sample Date (Start)* data field. This will display the date and time adjacent to each other on the resulting table.
7. Click the *Submit* button on the bottom left of the screen. The results are displayed in a table on the screen.
 - a. NOTE the text just above the table that states: *There are additional columns that are not being displayed; use the ‘Select Columns’ button to show them.* Click on the *Select Columns* button above the table on the right to display a pop-up window with options of additional available columns. Move those to the box on the right of the pop-up window by clicking on the column name and then clicking the arrow. Click *Apply*.
8. To export this data for your use, select the desired format (XLS = MS Excel/spreadsheet, TEXT = text) using the drop-down menu above the table and 3rd in from the right. Then click the button just to the left of the drop-down menu (hovering over it displays the following message: *Save the grid in the selected format.*) The next screen will tell you how many rows will be downloaded and you have the option to *Download* or *Cancel*, or you can *Return* to the *View Field Sample Analytical Result Information: Select Data Filters And Output Options* page.

- a. NOTE: Occasionally the *Sample Date (Start)* field will not display correctly in MS Excel. This can usually be remedied by changing the column formatting. Select the *Sample Date (Start)* column by clicking on the letter identifying the column. Depending on your version of MS Excel the formatting location will be different, but holding Ctrl + 1 will open the formatting menu. Under the *Number* tab, select *Date* and use the default date format by clicking *OK*.

Example #2 Reports – Analytical Reporting: Using individual locations and parameter groups

VOC/VOA data for R-54 Screen 1 and R-54 Screen 2

1. Click the REPORTING link on the top left of the Intellus New Mexico homepage.
2. Select *Analytical Reporting* under *Reports*. Under the *Field Sample* (first/default tab), select *Field Sample Results* (which are *Analytical Data*)
3. On the *Field Sample Results: Specify Data Filter Categories* page, select the radio button for *By Individual Location*.
 - a. In the box to the right of *ID Like* type “R-54”
4. In the *Parameter Filter Options* leave the default radio button selection for *Parameter Groups*
5. Click the *Submit* button
6. The next page is the *View Field Sample Analytical Result Information: Select Data Filters And Output Options* page, which has three tabs. NOTE: selections must be made on each tab or the query will fail and will have to be completely redone.
 - a. On the *Primary Filter* (first) tab, click the ‘>>’ arrow to move all three locations (R-54, R-54 S1, R-54 S2) to the *Selected Locations* column.
 - i. Change the date range to *Include data* from “May 1, 2010” to “May 1, 2012” using the drop-down boxes on the right side of the screen.
 - ii. Click the box under *Show Hits Only* to check it. This will omit samples that have been flagged as non-detects.
 - b. Click on the *Parameter Filters* tab.
 - i. Use the scroll bar on the right side of the *Available Parameter Groups* selection box to scroll down to *VOA and VOC*. Hold down the Ctrl key and click on *VOA* and *VOC* to select both groups. Click the “>” key to move the parameter groups into the *Selected Parameter Groups* box.
 - c. Click on the *Data Fields/Output* tab.

- i. In the box on the left scroll down to the *Sample Time (Start)* data field and select it using the '>' button. That field will now be displayed with everything else that is listed in the box on the right side of the screen.
 - ii. Select *Sample Time (Start)* in the box on the right and click the *Up* button until the *Sample Time (Start)* is immediately below the *Sample Date (Start)* data field. This will display the date and time adjacent to each other on the resulting table.
7. Click the *Submit* button on the bottom left of the screen. The results are displayed in a table on the screen.
 - a. NOTE the text just above the table that states: *There are additional columns that are not being displayed; use the 'Select Columns' button to show them.* Click on the *Select Columns* button above the table on the right to display a pop-up window with options of additional available columns. Move the column names from the box on the left to the box on the right of the pop-up window by clicking on the column name and then clicking the '>' button. Click *Apply*.
 - b. To export this data for your use, select the desired format (XLS = MS Excel/spreadsheet, TEXT = text) using the drop-down menu above the table and 3rd in from the right. Then click the button just to the left of the drop-down menu (hovering over it displays the following message: *Save the grid in the selected format.*) The next screen will tell you how many rows will be downloaded and you have the option to *Download* or *Cancel*, or you can *Return* to the *View Field Sample Analytical Result Information: Select Data Filters And Output Options* page.
 - i. NOTE: Occasionally the *Sample Date (Start)* field will not display correctly in MS Excel. This can usually be remedied by changing the column formatting. Select the *Sample Date (Start)* column by clicking on the letter identifying the column. Depending on your version of MS Excel the formatting location will be different, but holding Ctrl + 1 will open the formatting menu. Under the *Number* tab, select *Date* and use the default date format by clicking *OK*.

Example #3 Charts – Analytical Chemistry: Concentration Vs. Time for one lab parameter and two locations

Plot of Chromium concentration in R-43 Screen 1 and R-45 Screen 1 over time

1. Click the REPORTING link on the top left of the Intellus New Mexico homepage.
2. Select *Analytical Chemistry* under *Charts* in the right-hand column. This opens the *Specify Chemistry Plot Type and Data Filters* page.
 - a. Under the *Choose one of the Following Plot Types* leave the default radio button selection for *Concentration Vs Time For One Lab Parameter And Up To 10 Locations* (under the *(Plots of Lab Parameters)* section).
 - b. At the bottom of the page under the *Filter Options* section, select *Regional Well* from the *Location Group Name* drop-down box.
3. Click the *Submit* button. This will take you to the *Construct XY Concentration Plots (By Parameter)* page.
 - a. Scroll down the list in the *Choose A Parameter* box and select *Chromium*.
 - b. Click the box to the right of *Show Hits Only* (below the *Choose a Parameter* box) to select it.
 - c. In the box under *Choose Up To 10 Locations*, scroll down to *R-43 S1* and click on it. Hold down the Ctrl button and click on *R-43 S1*. Click the box next to *Initial Analyses Only* to un-select it.
 - d. Set the date range on the right side of the screen under *Use Data From* to “May 1, 2008” *To*: “May 1 2012”
4. Click *Submit* on the bottom. A new window will open with a plot of Chromium concentrations over time for R-43 S1 and R-45 S1. There are three labeled buttons and an icon on the bottom left of the screen.
 - a. Clicking on *Edit Chart* extends the screen view downward with options to customize/edit the chart.
 - b. Clicking on *Show Data* will extend the screen view downward with a basic display data on the chart. Clicking on *Hide Data* will close the extended view leaving the original chart view.

- c. Clicking on the icon will open a new window with options to *Specify File Information* for downloading the data associated with the chart. (Data includes Location, Parameter, Result, Units, Qualifier, Date and Detect status.)
 - i. NOTE: To save the chart, right click and select "save as image" and save the file. Once saved, the image file can be printed with standard software or viewed in any photo viewer.

Example #4 Reports – Non-Analytical Reporting: Using individual locations and parameter groups

Field Measurements for R-54 Screen 1 and R-54 Screen 2

Click the REPORTING link on the top left of the Intellus New Mexico homepage.

1. Select *Non-Analytical Reporting* under *Reporting* in the left-hand column. This opens the *EIM Location, Sample, and Field Measurement Views* page.
 - a. The first tab, *Location*, contains information related to *Locations, Boreholes and Wells*. The second tab, *Samples*, contains information related the collection of *Field Samples* and *Chain of Custody* records. The third tab, *Field Measurements*, contains *Groundwater Levels* and *Field Measurements*.
 - b. Click on the 3rd tab, *Field Measurements*, then click on the link for *Field Measurements*, which opens the *Field Measurements: Specify Data Filter Categories* page.
 - c. For the *Primary Filter Options* select the radio button for *By Individual Location* and type “R-54” into the box to the right of *ID Like*.
 - d. For the *Parameter Filter Options* use the default selection of *Parameter Groups*.
2. Click the *Submit* button on the lower left. This opens the *View Field Measurements: Select Data Filters and Output Options* page.
 - a. Select all three locations (R-54, R-54 S1, R-54 S2) under the *Choose One or More Locations* selection box by holding down Ctrl and clicking on each one.
 - b. Under the *Choose One or More Parameter Groups* select *WQH_Default*, which will provide basic field parameters.
 - c. Change the data range on the bottom left to *Include Data From: May 1, 2010 To: May 1, 2012*.
3. Click the *Submit* button on the bottom left to open a table of results for *Selected Field Measurements*.

- a. NOTE the text just above the table that states: *There are additional columns that are not being displayed; use the 'Select Columns' button to show them.* Click on the *Select Columns* button above the table on the right to display a pop-up window with options of additional available columns. Move the column names from the box on the left to the box on the right of the pop-up window by clicking on the column name and then clicking the '>' button. Click *Apply*.
- b. To export this data for your use, select the desired format (XLS = MS Excel/spreadsheet, TEXT = text) using the drop-down menu above the table and 3rd in from the right. Then click the button just to the left of the drop-down menu (hovering over it displays the following message: *Save the grid in the selected format.*) The next screen will tell you how many rows will be downloaded and you have the option to *Download* or *Cancel*, or you can *Return* to the *View Field Measurements: Select Data Filters and Output Options* page.
 - i. NOTE: Occasionally the *Date Measured* field will not display correctly in MS Excel. This can usually be remedied by changing the column formatting. Select the *Date Measured* column by clicking on the letter identifying the column. Depending on your version of MS Excel the formatting location will be different, but holding Ctrl + 1 will open the formatting menu. Under the *Number* tab, select *Date* and use the default date format by clicking *OK*.

[Example #5 Maps – Interactive Map: Obtaining data tables in mapping tool](#)

[RDX results in SWSC Spring](#)

Click the MAPS link on the top left of the Intellus New Mexico homepage.

1. Select *Interactive Map* under *Maps* in the left-hand column. This opens the Google Earth map. It starts by showing the world map and then zooms in on Los Alamos.
 - a. In the upper left hand corner, select the *Identify* tool (the binoculars) from the box labeled *Map Tools*.
 - b. In the box at the left labeled *Tools*, Click on the bar entitled *Layer List* to make those selections active. Scroll down to *Springs* and click the box on the right to make a check mark. Notice that all spring locations at LANL will be identified on the map. Click on any spring location and the data will appear in a box to the right. Within the box you can select a table of analytical data, or a table of exceedance data or a graph of select parameters.
2. Click on the next bar down entitled *Post Data*. This allows you to show analytical results on the map.
 - a. Click on the bar entitled *Select Parameters* to activate. Scroll down to the parameter RDX or click anywhere in the *Select Parameters* box and quickly type “r”. Then scroll to the parameter RDX. Click on the parameter to highlight it and select it. Click on the button labeled *Post* at the bottom of the box and notice that all RDX results with units and validation qualifier are listed next to the Springs sample locations.
 - b. Click the button labeled *Clear* which is to the left of the *Post* button and the map results are cleared. Below the *Select Parameters* box with RDX written in it, click the box that says *Detects Only*. Notice that only detected RDX results appear next to the Springs locations now.

- c. Click the button labeled *Clear* which is to the left of the *Post* button and the map results are cleared. Below the *Select Parameters* box with RDX written in it, click the box that says *Exceedances Only*. Click on the bar entitled *Select Action Limits* to select the preferred action limit for the exceedance comparison. Notice that all action limits are listed for choice. The database will automatically populate the box which lists action levels if an action limit is not selected. Notice that only RDX results that exceed action limits appear next to the Springs locations now.
3. Click on the next bar down entitled *Find Location*. This allows you to find locations on the map.
 - a. Type in a name or part of a name of a location such as "ladder". Click the *Find* button and the location with a matching name will appear in the box. Hover over the results and alias location names will appear. If the location is not in your screen currently, the screen will move so that it is centered in the screen.
4. Click on the next bar down entitled *Point Query*. This allows you to find results within a radius on the map.
 - a. Click the *Click Map* radio button. Click the Capture button to the right and then click on the map. A pointer will appear where you clicked. Enter the search radius you want and click the *Run* button at the bottom. A circle of appropriate radius will appear on the map at the point you selected and of the radius you selected and all analytical results within that radius will be shown on a table that appears in the upper right corner.

Example #6 Reports – Exceedance Reporting: Using individual locations

VOC/VOA data for R-54 Screen 1 and R-54 Screen 2

1. Click the REPORTING link on the top left of the Intellus New Mexico homepage.
2. Select *Analytical Reporting* under *Reports*. Under the *Field Sample* (first/default tab), select *Field Sample Results* (which are *Analytical Data*)
3. On the *Field Sample Results: Specify Data Filter Categories* page, select the radio button for *By Individual Location*.
 - a. In the box to the right of *ID Like* type “R-54”
4. In the *Parameter Filter Options* leave the default radio button selection for *Parameter Groups*
5. Click the *Submit* button
6. The next page is the *View Field Sample Analytical Result Information: Select Data Filters And Output Options* page, which has three tabs. NOTE: selections must be made on each tab or the query will fail and will have to be completely redone.
 - a. On the *Primary Filter* (first) tab, click the ‘>’ arrow to move all three locations (R-54, R-54 S1, R-54 S2) to the *Selected Locations* column.
 - i. Change the date range to *Include data* from “May 1, 2010” to “May 1, 2012” using the drop-down boxes on the right side of the screen.
 - ii. Click the box under *Show Hits Only* to check it. This will omit samples that have been flagged as non-detects.
 - b. Click on the *Parameter Filters* tab.
 - i. Use the scroll bar on the right side of the *Available Parameter Groups* selection box to scroll down to *VOA and VOC*. Hold down the Ctrl key and click on *VOA* and *VOC* to select both groups. Click the “>” key to move the parameter groups into the *Selected Parameter Groups* box.
 - c. Click on the *Data Fields/Output* tab.

- i. In the box on the left scroll down to the *Sample Time (Start)* data field and select it using the '>' button. That field will now be displayed with everything else that is listed in the box on the right side of the screen.
 - ii. Select *Sample Time (Start)* in the box on the right and click the *Up* button until the *Sample Time (Start)* is immediately below the *Sample Date (Start)* data field. This will display the date and time adjacent to each other on the resulting table.
7. Click the *Submit* button on the bottom left of the screen. The results are displayed in a table on the screen.
 - a. NOTE the text just above the table that states: *There are additional columns that are not being displayed; use the 'Select Columns' button to show them.* Click on the *Select Columns* button above the table on the right to display a pop-up window with options of additional available columns. Move the column names from the box on the left to the box on the right of the pop-up window by clicking on the column name and then clicking the '>' button. Click *Apply*.
 - b. To export this data for your use, select the desired format (XLS = MS Excel/spreadsheet, TEXT = text) using the drop-down menu above the table and 3rd in from the right. Then click the button just to the left of the drop-down menu (hovering over it displays the following message: *Save the grid in the selected format.*) The next screen will tell you how many rows will be downloaded and you have the option to *Download* or *Cancel*, or you can *Return* to the *View Field Sample Analytical Result Information: Select Data Filters And Output Options* page.
 - i. NOTE: Occasionally the *Sample Date (Start)* field will not display correctly in MS Excel. This can usually be remedied by changing the column formatting. Select the *Sample Date (Start)* column by clicking on the letter identifying the column. Depending on your version of MS Excel the formatting location will be different, but holding Ctrl + 1 will open the formatting menu. Under the *Number* tab, select *Date* and use the default date format by clicking *OK*.