

EPA Region 2 EQulS Workshop

EQulS Reporting Tools

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and

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Exporting EQulS Data to Envirolnsite

- From EQulS Professional select Reports menu
- Select Envirolnsite Data Export
- Select Groups = MonitoringWells_Shallow
- Sample Type = N
- Primary > Matrix = WG
- Result > Analyte > Individual
 - 127-18-4 TETRACHLOROETHYLENE(PCE)
 - 79-01-6 TRICHLOROETHYLENE (TCE)
- Fields > Check > Use dt_well_segment to define screen interval
- Elevation Units = ft
- Select Go 

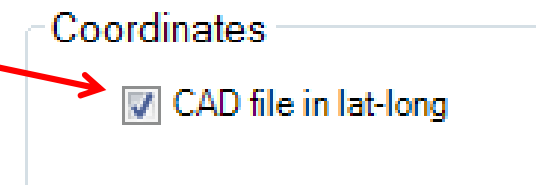
Add CAD File and Post Wells

Add a CAD File - Optional

- Insert a CAD file > Browse
- Select MapUpdated.dwg
- Select CAD file in lat-long

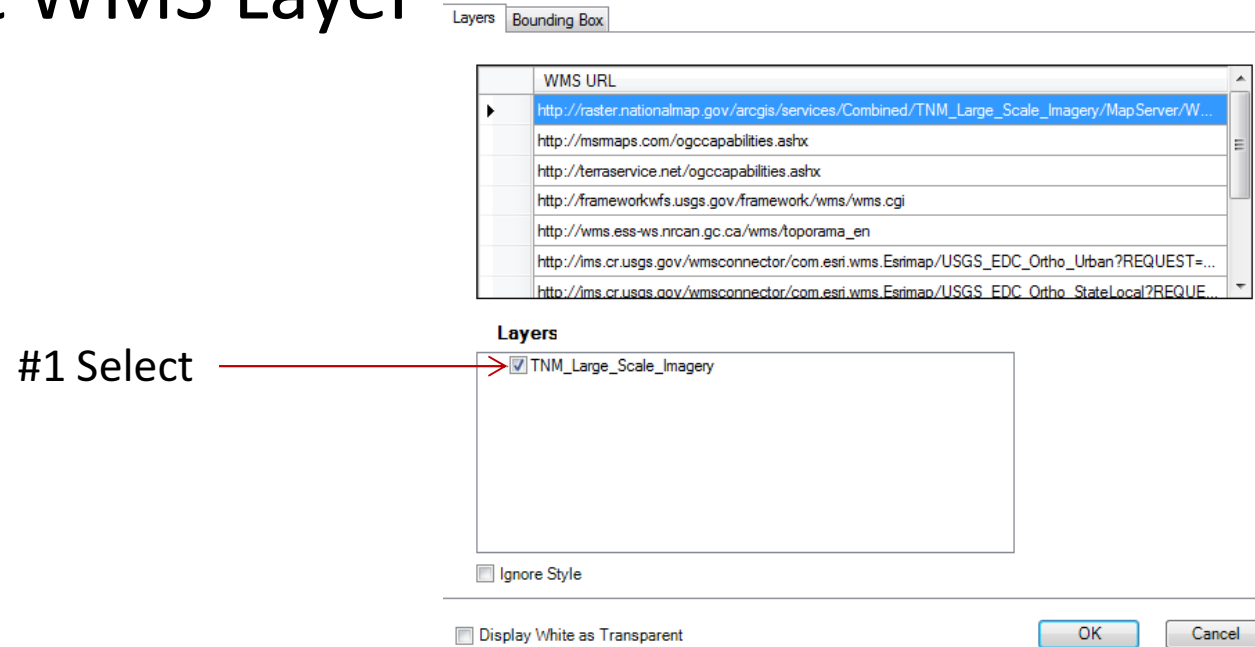
Plot Wells on map

- Select Plot > Wells
 - Labels Tab > Height = 15
 - Select Optimize Location (Optional)
 - Options Tab > Radius = 6



Add Aerial Photo

- Select Insert menu
- Select WMS Layer



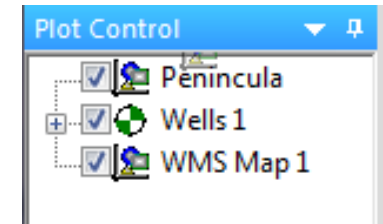
#1 Select

#2 Select

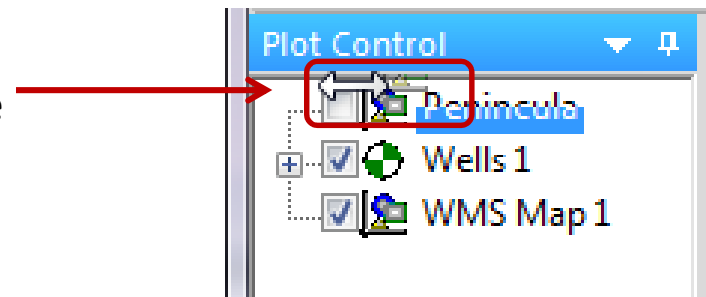


Display Layers with Wells On Top

- From the Plot Control window
 - Select the 'WMS Map 1' layer
 - Hold left mouse button and slide the layer up to the top
 - When you see the double arrow in the top position release the mouse button.

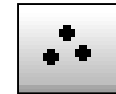


Place the aerial photo under the Wells

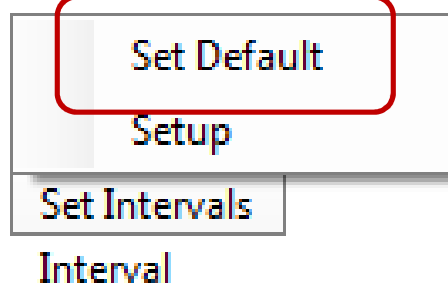


Classed Post – Review Hot Spots TETRACHLOROETHYLENE (PCE)

- Select Plot menu > Classed Post
- Query Tab > select > PCE
- Media = WG, Fraction = T
- Update in Data Summary
- Date Range = 5/1/2010 – 5/31/2010
- Interval Tab > Set Intervals



Enter Start
Values & OK



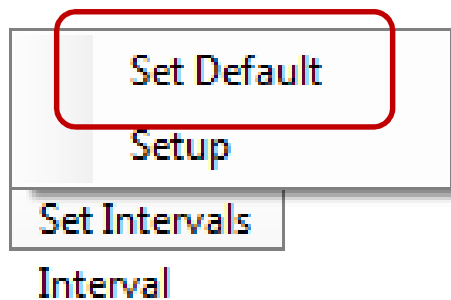
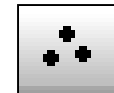
Start Value	End Value	Col	Radius
5	50	3.42	
50	200	3.99	
200	1000	4.56	
1000	4000	5.13	
4000	25001	5.70	
25001	30000	6.27	

EarthSoft

Classed Post – Review Hot Spots

TRICHLOROETHYLENE (TCE)

- Select Plot menu > Classed Post
- Query Tab > select > TCE
- Media = WG, Fraction = T
- Update in Data Summary
- Date Range = 5/1/2010 – 5/31/2010
- Interval Tab > Set Intervals



Enter Start
Values & OK

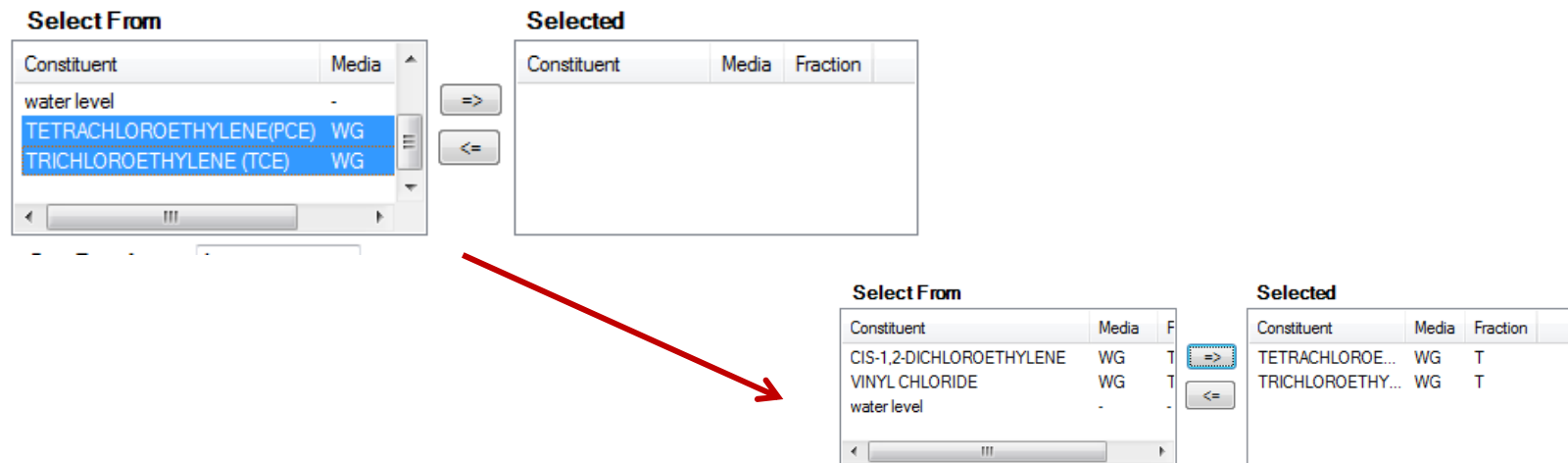


Start Value	End Value	Col	Radius
5	50	Blue	3.42
50	200	Cyan	3.99
200	500	Green	4.56
500	2000	Yellow-Green	5.13
2000	8335	Yellow	5.70
8335	10000	Red	6.27

EarthSoft

Pie Charts

- Select Plot Pie Charts 
- Query Tab
 - Select TCE & PCE
 - Select Right Arrow to move to Selected box



The screenshot shows the EarthSoft software interface with two windows: 'Select From' and 'Selected'.

Select From Window:

Constituent	Media
water level	-
TETRACHLOROETHYLENE(PCE)	WG
TRICHLOROETHYLENE (TCE)	WG

Selected Window:

Constituent	Media	Fraction
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A red arrow points from the 'Select From' window to the 'Selected' window, indicating the movement of selected items.

Second Screenshot (after selection):

Select From Window:

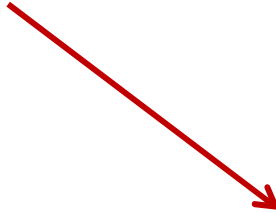
Constituent	Media	F
CIS-1,2-DICHLOROETHYLENE	WG	T
VINYL CHLORIDE	WG	T
water level	-	-

Selected Window:

Constituent	Media	Fraction
TETRACHLORO...	WG	T
TRICHLOROETHY...	WG	T

Pie Charts Continued

- Format Tab
 - Select Color (Optional)
 - Select OK



Constituent	Media	Fraction	Color
TETRACHLOROETHYLENE(PCE)	WG	T	
TRICHLOROETHYLENE (TCE)	WG	T	

Analyte Contour

- Select Plot > Contour 
- Query Tab
 - Select PCE
 - Select Media = WG, Fraction = T
 - Update in Data Summary
 - Date Range = 5/1/2010 – 5/31/2010
- Intervals Tab
 - Select Set Intervals
 - Set Defaults
 - Enter Start Values



Start Value	End Value	Col	Radius
5	50	Blue	3.42
50	200	Cyan	3.99
200	1000	Green	4.56
1000	4000	Yellow	5.13
4000	25001	Orange	5.70
25001	30000	Red	6.27

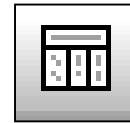
Contour Continued

- Select Format Tab
 - % Transparency = 15
- Select Interpolation Tab
 - Select Inverse Distance
 - Select OK
- Change Interpolation
 - Double click on contouring layer in Plot Control
 - Select Interpolation Tab
 - Select Method = Kriging
 - Options Tab > Transform Data > OK

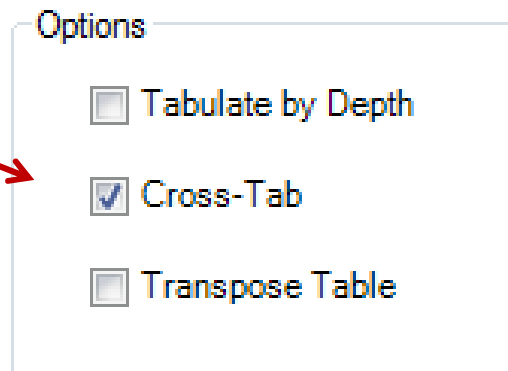
When Should I Use Transform Data?

Transform Data – Should be applied for data where concentrations are changing in an order of magnitude. Perform contouring on log transform instead of original values

Data Tables

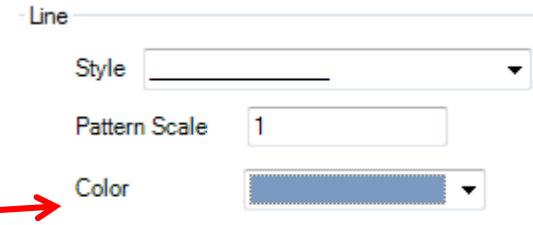


- Select Plot > Tables
 - Option Tab, select TCE, use right arrow to move to the Selected box
 - Select Media = WG, Fraction = T
 - Option Tab select Cross Tab
 - Select OK



Water Level Graphs

- Select Plot > Graphs 
- Select > waterlevel > OK
- Line Format Tab
 - Select Color = blue
 - Select OK



Envirolnsite Contouring Interpolation Types

- Interpolation Types
 - Inverse Distance – weight dependent on distance
 - Kriging – linear estimation – (Ordinary Kriging)
good for clustered data.
 - Natural Neighbor – if you want to contour to the fringes
 - Triangulation – no weighting, good for closely spaced data and irregularly spaced grid

Envirolnsite Additional Resources for Contouring Interpolation

www.bisolutions.us/A-Brief-Introduction-to-Spatial-Interpolation.php