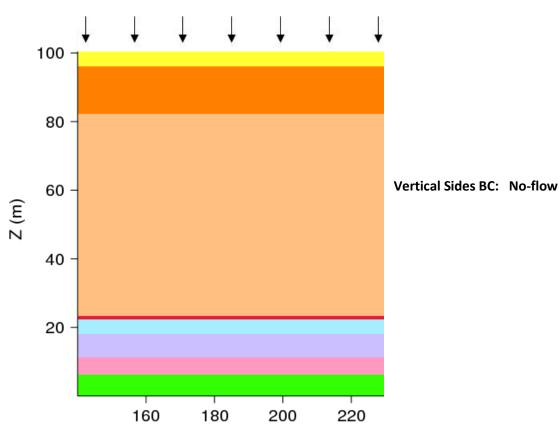
Layered Conceptual Model for 200 East (BC Cribs)



Top BC: Neumann - 3.5 mm/yr



Bottom BC: Dirichlet Pressure - 101325 Pa

Initial Guess for Pressure: 101325-pgz (z = distance from bottom of domain)

Description

- 1. Steady-state Flow
- 2. Elevations of Geologic Layers (Table 1)
- 3. Hydraulic Properties (Tables 2-3)
- 4. Metric(s) for UQ Analysis:
 - a. Global Integrated Water Mass
 - b. Integrated Water Mass by Layer (?)

Table 1. Top Elevation of Each Geological Unit.

Unit	Abbreviation	Elevation (m)
Backfill	Bf	103.2
Hanford Course Sand	Hcs	96.0
Hanford Fine Sand	Hfs	82.2
Hanford Gravel	Hg	23.4
Cold Creek Unit-caliche	CCuz	22.2
Cold Creek Unit – gravel	CCUg	18.0
Ringold Lower Mud	Rlm	11.4
Ringold – Wooded Island	Rwia	6.0

Table 2. Hydraulic Properties.

	Porosity	Hydraulic	Hydraulic
Unit	(θ_s)	Conductivity (Kx)	Conductivity (Kz)
		(cm/s)	(cm/s)
Bf	0.158	5.98E-04	5.98E-05
Hcs	0.364	5.32E-03	5.32E-04
Hfs	0.388	2.25E-03	2.25E-04
Hg	0.237	3.30E-04	3.30E-05
CCuz	0.360	5.57E-05	5.57E-06
CCUg	0.237	3.30E-04	3.30E-05
Rlm	0.360	5.57E-05	5.57E-06
Rwia	0.267	4.13E-04	4.13E-05

Table 3. Unsaturated Hydraulic Properties (van Genuchten).

Unit	Alpha (α)	van Genuchten n	Residual
	(1/cm)		Saturation (S _r)
Bf	0.019	1.400	0.103
Hcs	0.072	2.047	0.074
Hfs	0.021	2.507	0.089
Hg	0.017	1.725	0.134
CCuz	0.005	2.249	0.097
CCUg	0.017	1.725	0.134
Rlm	0.005	2.249	0.097
Rwia	0.008	1.660	0.135