
WinTran
Analytical Model of 2D Ground-Water Flow and
Finite-Element Contaminant Transport Model

Developed by
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Input File: WINTRAN K 216
Map File :

Model Entities

Number of Linesinks Defined by Infiltration Rate = 0

Number of Linesinks Defined by Head = 0

Number of Ponds = 0

Number of Wells = 1

Well #1

Center of Well -- x: 19220294.000000 y: 406525.000000

Radius = 2.000000

Pumping Rate = 61600.000000

Concentration of Injected Water = 0.000000

Head at Well Radius = -7.295766

Reference Head = 0.000000 Defined at -- x: 19231669.360000 y: 400723.680000

Aquifer Properties

.... Steady-State Flow Model

Permeability.....= 216.000000 [L/T]
Porosity.....= 0.250000
Elevation of Aquifer Top....= 69.000000
Elevation of Aquifer Bottom.= -56.000000
Uniform Regional Gradient...= 0.000000
Angle of Uniform Gradient...= 130.000000
Recharge.....= 0.000000

.... Transient Transport Model

Longitudinal Dispersivity...= 100.000000 [L]
Transverse Dispersivity.....= 10.000000 [L]
Diffusion Coefficient.....= 0.000000 [L²/T]
Contaminant half-life..... = 0.000000 [T]
Retardation Coefficient.....= 1.000000
Upstream Weighting in X.....= 0.000000
Upstream Weighting in Y.....= 0.000000

.... Time Stepping Information

Number of time steps.....= 5
Starting time value.....= 0.000000
Initial time step size.....= 1.000000
Time step multiplier..... = 1.200000
Maximum time step size.....= 365.000000
Time stepping scheme.....= Backward Differencing

.... Simulation Summary

Starting time.....= 0.000000
Ending time.....= 0.000000
Number of time steps.....= 0

(NOTE: following mass balance errors expressed as percent)
Transport Mass Balance Error= 0.000000

Peclet Criterion.....= 0.000000
Courant Number.....= 0.000000
Flow Model Type.....= Analytic Element

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Head Contour Matrix

Number of nodes in the X-direction = 100
Number of nodes in the Y-direction = 72

Minimum X Coordinate = 19217415.000000
Minimum Y Coordinate = 399700.000000

Maximum X Coordinate = 19232265.000000
Maximum Y Coordinate = 410350.000000

Minimum Head = -4.270187
Maximum Head = 0.061702

CONTOUR GRID -----

Row 1

-0.443129	-0.449440	-0.455506	-0.461313	-0.466849
-0.472102	-0.477059	-0.481709	-0.486041	-0.490042
-0.493704	-0.497017	-0.499971	-0.502559	-0.504773
-0.506608	-0.508057	-0.509117	-0.509786	-0.510059
-0.509938	-0.509422	-0.508514	-0.507214	-0.505528
-0.503460	-0.501016	-0.498202	-0.495027	-0.491499
-0.487628	-0.483422	-0.478894	-0.474055	-0.468915
-0.463487	-0.457783	-0.451815	-0.445598	-0.439142
-0.432461	-0.425567	-0.418473	-0.411192	-0.403734
-0.396114	-0.388341	-0.380427	-0.372384	-0.364221
-0.355949	-0.347579	-0.339118	-0.330577	-0.321965
-0.313288	-0.304556	-0.295775	-0.286953	-0.278096
-0.269211	-0.260304	-0.251380	-0.242445	-0.233504
-0.224561	-0.215621	-0.206687	-0.197764	-0.188856
-0.179964	-0.171094	-0.162247	-0.153426	-0.144633
-0.135872	-0.127143	-0.118449	-0.109792	-0.101173
-0.092594	-0.084055	-0.075559	-0.067106	-0.058698
-0.050335	-0.042017	-0.033747	-0.025524	-0.017348
-0.009221	-0.001143	0.006887	0.014867	0.022797
0.030678	0.038509	0.046290	0.054021	0.061702