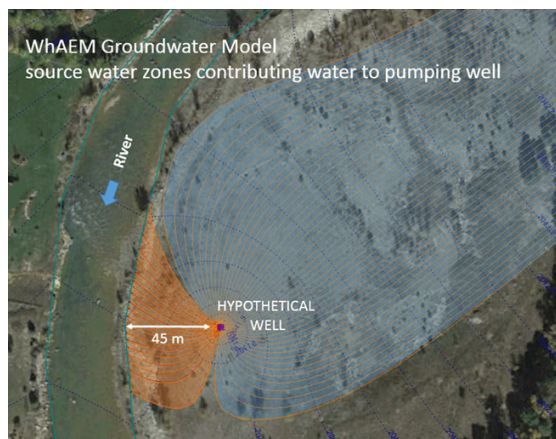


Hypothetical Scenario

Thursday, August 25, 2016 4:34 PM

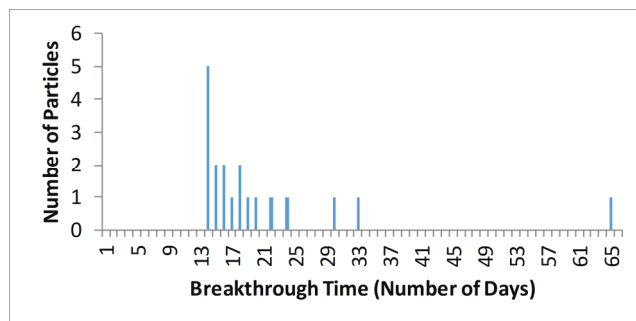
(a)



[AnimasGenericWell2_particles.whm](#)

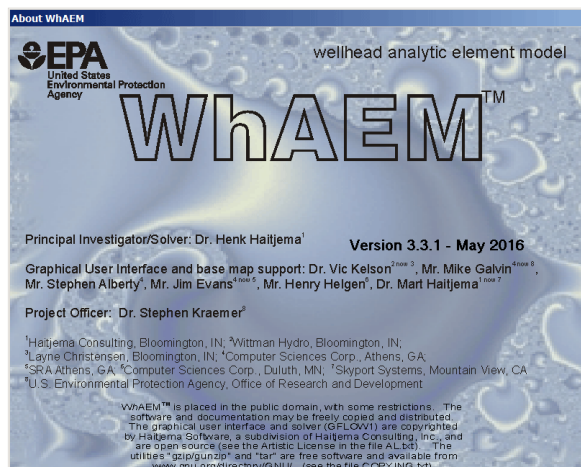
The EPA Wellhead Analytic Element Model ([WhAEM](#) v 3.3.1) was used to generate this figure. WhAEM is a Visual Basic user interface environment that includes access to the GFlow Fortran solver. A screen capture was processed by PhotoShop into a gif file. This file was imported into Powerpoint, and the orange and blue transparent shading added, along with the labels. Cut and pasted into the MS word report.

(b)



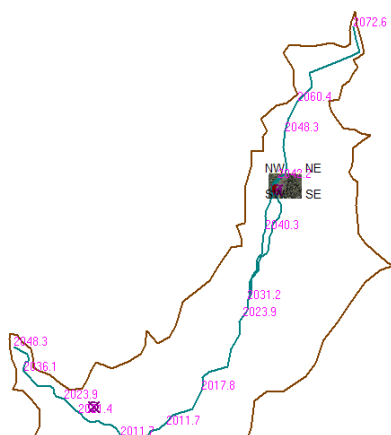
AnimasGenericWell2_particles.xlsx

The sourcing of river water in pumping wells is expected depending on proximity, pumping rates, and geohydrologic setting. For demonstration purposes, a hypothetical scenario is presented groundwater/surface water interactions using the EPA WhAEM groundwater modeling system, showing the capture zone of a pumping well using reverse streamline mapping, and the breakthrough histogram using forward particle tracking. The well is located about 45 m from the river. The well sources some of its water from the Animas River (orange zone) and some from aquifer recharge and storage (blue zone). (a) the source water capture zone defined by 64 streamlines emanating from the well. 19 particles were released from the river boundary as suggested by the capture zone streamlines. (b) time of arrival breakthrough (days) are reported in a histogram, with 5 particles arriving in 14 days. Suggested peak river concentration is diluted to about 8% (5/64). Transport is steady state and does not account for sorption or decay of solute.

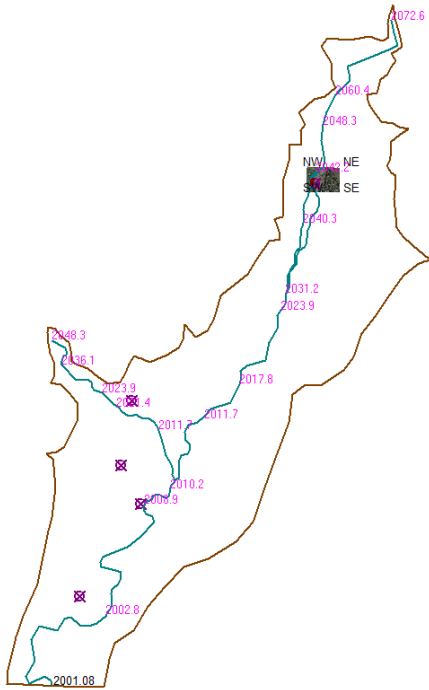


User input data (including organization of maps) are represented in the WhAEM project file (binary).

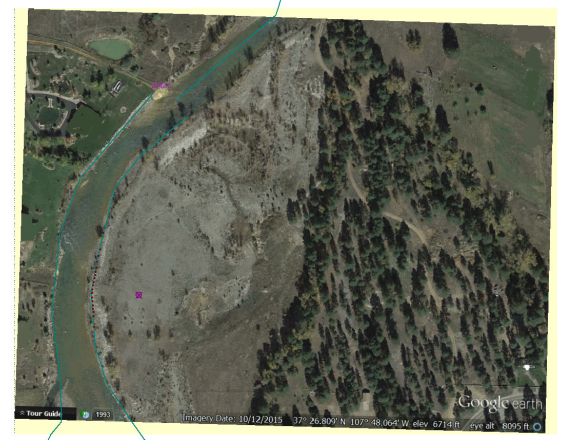
[AnimasGenericWell2_particles.whm](#)



WhAEM layout of analytic elements for regional model of the Mid Animas River floodplain alluvium. The far-field of the layout represents the surrounding rock geologic units. The inhomogeneity polygon element encompasses the alluvial floodplain deposits. The Animas River and Hermosa Creek are represented by line-sinks. The elevation at points inferred from USGS topographic maps (where the topo elevation contour crosses the river) at shown in meters above mean sea level.



WhAEM layout of analytic elements for regional model of the Mid Animas River floodplain alluvium. The far-field of the layout represents the surrounding rock geologic units. The inhomogeneity polygon element encompasses the alluvial floodplain deposits. The Animas River and Hermosa Creek are represented by line-sinks. The elevation at points inferred from USGS topographic maps (where the topo elevation contour crosses the river) at shown in meters above mean sea level.



Zoom-in to the location of the hypothetical pumping well. The date of the Google earth image was 10/12/2015. The image was created by screen-capture into PhotoShop and saved as a gif file. This file was imported into Global Mapper, georeferenced using 4 known points of latitude and longitude, and saved in the UTM zone 13 NAD83 projection (file AnimasGeneric_GE_UTM13N83.tif). This file was imported into WhAEM as a basemap.

[AnimasGeneric_GE_UTM13N83.tif](#)

Model Settings (F1 for Help)	
Aquifer Contouring Tracing Solver	
Aquifer Properties	
Base Elevation	2008.6 meters
Thickness	1000 meters
Hydraulic Conductivity	0.76 meters/day
Porosity	0.2 [dimensionless]

Well Properties (F1 for Help)	
Label: 35m66km	
General Other	
<input type="radio"/> Head-Specified <input checked="" type="radio"/> Discharge-Specified	
X coordinate	252076.475877 meters
Y coordinate	4148029.91912 meters
Discharge	2616.5 m ³ /day
Radius	1 meters
<input type="button" value="OK"/> <input type="button" value="Cancel"/>	

Inhomogeneity Properties (F1 for Help)	
Label: Alluvium	
General	
<input checked="" type="checkbox"/> Change hydraulic conductivity from default Conductivity: 76 m/day	
<input type="checkbox"/> Change recharge rate from default Added Recharge Rate: 0 m/day	
<input type="checkbox"/> Change porosity from default Porosity: 0.2	
<input type="checkbox"/> Change base elevation from default Base Elevation: 2008.6 meters	
<input type="checkbox"/> Provide estimate of average head Average Head: 3008.6 meters	
Color...	Inhomogeneity Color
<input type="button" value="OK"/> <input type="button" value="Cancel"/>	

The Generic.DAT model input file (ASCII text) is a command file used by WhAEM to parameterize the model and execute the solution. The command file has reprojected the (x-utm, y-utm) data into a internal (x,y) grid to facilitate the numerical solution.



Generic

```
* Written by WhAEM 3.3.1
error error.log
yes
message message.log
yes
echo echo.log
yes
picture off
quit
```

```
modelorigin 247328.322073143 4121565.8 2
title Generic
aquifer
base 2.00860E+03
```

permeability 7.6000000E-01
thickness 1.0000000E+03
porosity 2.0000000E-01
reference 1.5299096E+05 1.6433870E+05 2.0283328E+03
quit
layout
window 4430.05 26321.95 5327.64 26750.13
quit
inhomogeneity
transmissivity 7.60000E+01 -9.99900E+03 -9.99900E+03 0.0000000E+00 -9.99900E+03 IN_000030_0000
5.595519E+03 2.873522E+04 IN_000030_0001
5.441796E+03 2.871062E+04 IN_000030_0051
5.288073E+03 2.868602E+04 IN_000030_0101
5.113607E+03 2.869726E+04 IN_000030_0151
4.939140E+03 2.870850E+04 IN_000030_0201
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4.980627E+03 2.788052E+04 IN_000030_0651
4.894542E+03 2.781288E+04 IN_000030_0701
4.734050E+03 2.777331E+04 IN_000030_0751
4.504328E+03 2.756126E+04 IN_000030_0801
4.599799E+03 2.737795E+04 IN_000030_0826
4.526417E+03 2.728736E+04 IN_000030_0851
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5.820886E+03 2.868493E+04 IN_000030_9688
5.798415E+03 2.867048E+04 IN_000030_9701
5.747691E+03 2.868667E+04 IN_000030_9751
5.696967E+03 2.870285E+04 IN_000030_9801
quit
well
discharge
20.630779E+02 2.152300E+04 0.00000E+00 1.00000E+00 WL_000002
17.607779E+02 2.212170E+04 0.00000E+00 1.00000E+00 WL_000003
19.259779E+02 2.311100E+04 0.00000E+00 1.00000E+00 WL_000004
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11.229779E+02 2.009420E+04 0.00000E+00 1.00000E+00 WL_000006
52.477927E+00 0.000000E+00 0.00000E+00 1.00000E+00 WL_000007
quit
linesink
head
resistance 0
width 0.000000E+00 1
depth 0.000000E+00
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5.281865E+03 2.806182E+04 5.064967E+03 2.784492E+04 2.06147E+03 LS_000002_0401
head
resistance 0
width 0.000000E+00 1
depth 0.000000E+00
5.060790E+03 2.738899E+04 4.926877E+03 2.757613E+04 2.05684E+03 LS_000003_0101
4.926877E+03 2.757613E+04 4.877280E+03 2.737526E+04 2.05079E+03 LS_000003_0201
head
resistance 0
width 0.000000E+00 1
depth 0.000000E+00
4.878401E+03 2.738288E+04 4.846975E+03 2.713671E+04 2.04735E+03 LS_000004_0101
4.846975E+03 2.713671E+04 4.874473E+03 2.697303E+04 2.04576E+03 LS_000004_0151
4.874473E+03 2.697303E+04 4.901971E+03 2.680935E+04 2.04448E+03 LS_000004_0201
4.901971E+03 2.680935E+04 4.873382E+03 2.671909E+04 2.04348E+03 LS_000004_0251
4.873382E+03 2.671909E+04 4.782142E+03 2.664145E+04 2.04266E+03 LS_000004_0301
head
resistance 0
width 0.000000E+00 2
depth 0.000000E+00
4.761030E+03 2.664786E+04 4.694676E+03 2.657095E+04 2.04209E+03 LS_000006_0101
4.694676E+03 2.657095E+04 4.675826E+03 2.652043E+04 2.04192E+03 LS_000006_0201
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4.672245E+03 2.648405E+04 4.668663E+03 2.644767E+04 2.04175E+03 LS_000006_0251
4.668663E+03 2.644767E+04 4.674013E+03 2.640556E+04 2.04166E+03 LS_000006_0276
4.674013E+03 2.640556E+04 4.676688E+03 2.638450E+04 2.04159E+03 LS_000006_0288
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4.581784E+03 2.592384E+04 4.564316E+03 2.585934E+04 2.04044E+03 LS_000006_0901
4.564316E+03 2.585934E+04 4.560132E+03 2.583005E+04 2.04033E+03 LS_000006_1001
head
resistance 0
width 0.000000E+00 2
depth 0.000000E+00
4.560804E+03 2.582862E+04 4.544664E+03 2.577859E+04 2.04008E+03 LS_000008_0101
4.544664E+03 2.577859E+04 4.532560E+03 2.564705E+04 2.03933E+03 LS_000008_0201
4.532560E+03 2.564705E+04 4.522876E+03 2.551875E+04 2.03826E+03 LS_000008_0301
4.522876E+03 2.551875E+04 4.506737E+03 2.547436E+04 2.03754E+03 LS_000008_0401
4.506737E+03 2.547436E+04 4.473652E+03 2.543644E+04 2.03714E+03 LS_000008_0501
4.473652E+03 2.543644E+04 4.447829E+03 2.539125E+04 2.03672E+03 LS_000008_0601

4.447829E+03 2.539125E+04 4.441374E+03 2.535574E+04 2.03636E+03 LS_000008_0701
4.441374E+03 2.535574E+04 4.444302E+03 2.524915E+04 2.03577E+03 LS_000008_0801
4.444302E+03 2.524915E+04 4.370793E+03 2.515604E+04 2.03485E+03 LS_000008_0901
4.370793E+03 2.515604E+04 4.332500E+03 2.505803E+04 2.03393E+03 LS_000008_1001
4.332500E+03 2.505803E+04 4.330844E+03 2.487339E+04 2.03275E+03 LS_000008_1101
4.330844E+03 2.487339E+04 4.303061E+03 2.478101E+04 2.03160E+03 LS_000008_1201
head
resistance 0
width 0.000000E+00 1
depth 0.000000E+00
4.301600E+03 2.478100E+04 4.286541E+03 2.461033E+04 2.03054E+03 LS_000010_0101
4.286541E+03 2.461033E+04 4.166065E+03 2.442962E+04 2.02905E+03 LS_000010_0201
4.166065E+03 2.442962E+04 4.176104E+03 2.424388E+04 2.02751E+03 LS_000010_0301
4.176104E+03 2.424388E+04 4.035549E+03 2.401297E+04 2.02576E+03 LS_000010_0401
4.035549E+03 2.401297E+04 3.990370E+03 2.373437E+04 2.02364E+03 LS_000010_0501
3.990370E+03 2.373437E+04 3.689180E+03 2.364652E+04 2.02136E+03 LS_000010_0601
3.689180E+03 2.364652E+04 3.601332E+03 2.357122E+04 2.01971E+03 LS_000010_0701
3.601332E+03 2.357122E+04 3.611372E+03 2.344322E+04 2.01877E+03 LS_000010_0801
3.611372E+03 2.344322E+04 3.586273E+03 2.338549E+04 2.01804E+03 LS_000010_0901
head
resistance 0
width 0.000000E+00 1
depth 0.000000E+00
3.591451E+03 2.338579E+04 3.445592E+03 2.308286E+04 2.01655E+03 LS_000011_0101
3.445592E+03 2.308286E+04 3.137045E+03 2.298468E+04 2.01410E+03 LS_000011_0201
3.137045E+03 2.298468E+04 3.033261E+03 2.286126E+04 2.01230E+03 LS_000011_0301
head
resistance 0
width 0.000000E+00 1
depth 0.000000E+00
3.028915E+03 2.285860E+04 2.928464E+03 2.278012E+04 2.01163E+03 LS_000012_0101
2.928464E+03 2.278012E+04 2.790343E+03 2.273931E+04 2.01147E+03 LS_000012_0201
2.790343E+03 2.273931E+04 2.733839E+03 2.262316E+04 2.01132E+03 LS_000012_0301
2.733839E+03 2.262316E+04 2.752674E+03 2.249760E+04 2.01117E+03 LS_000012_0401
2.752674E+03 2.249760E+04 2.824873E+03 2.242854E+04 2.01104E+03 LS_000012_0501
2.824873E+03 2.242854E+04 2.824873E+03 2.236576E+04 2.01095E+03 LS_000012_0601
2.824873E+03 2.236576E+04 2.777787E+03 2.229669E+04 2.01086E+03 LS_000012_0701
2.777787E+03 2.229669E+04 2.680474E+03 2.226844E+04 2.01076E+03 LS_000012_0801
2.680474E+03 2.226844E+04 2.649083E+03 2.219310E+04 2.01066E+03 LS_000012_0901
2.649083E+03 2.219310E+04 2.658501E+03 2.206754E+04 2.01054E+03 LS_000012_1001
2.658501E+03 2.206754E+04 2.661640E+03 2.193570E+04 2.01039E+03 LS_000012_1101
2.661640E+03 2.193570E+04 2.583162E+03 2.187291E+04 2.01026E+03 LS_000012_1201
head
resistance 0
width 0.000000E+00 1
depth 0.000000E+00
2.584251E+03 2.187201E+04 2.536590E+03 2.181223E+04 2.01013E+03 LS_000013_0101
2.536590E+03 2.181223E+04 2.517202E+03 2.176377E+04 2.01001E+03 LS_000013_0201
2.517202E+03 2.176377E+04 2.507508E+03 2.168864E+04 2.00989E+03 LS_000013_0301
2.507508E+03 2.168864E+04 2.498622E+03 2.165148E+04 2.00979E+03 LS_000013_0401
2.498622E+03 2.165148E+04 2.475196E+03 2.162725E+04 2.00972E+03 LS_000013_0501
2.475196E+03 2.162725E+04 2.441268E+03 2.161836E+04 2.00966E+03 LS_000013_0601
2.441268E+03 2.161836E+04 2.408147E+03 2.163128E+04 2.00959E+03 LS_000013_0701
2.408147E+03 2.163128E+04 2.364525E+03 2.165633E+04 2.00952E+03 LS_000013_0801
2.364525E+03 2.165633E+04 2.316864E+03 2.166037E+04 2.00943E+03 LS_000013_0901
2.316864E+03 2.166037E+04 2.281321E+03 2.165390E+04 2.00935E+03 LS_000013_1001
2.281321E+03 2.165390E+04 2.256278E+03 2.164098E+04 2.00929E+03 LS_000013_1101
2.256278E+03 2.164098E+04 2.234467E+03 2.160382E+04 2.00922E+03 LS_000013_1201
2.234467E+03 2.160382E+04 2.204578E+03 2.157474E+04 2.00915E+03 LS_000013_1301
2.204578E+03 2.157474E+04 2.152070E+03 2.155697E+04 2.00906E+03 LS_000013_1401
2.152070E+03 2.155697E+04 2.131875E+03 2.154566E+04 2.00898E+03 LS_000013_1501
2.131875E+03 2.154566E+04 2.122989E+03 2.152869E+04 2.00894E+03 LS_000013_1601
2.122989E+03 2.152869E+04 2.118142E+03 2.151496E+04 2.00891E+03 LS_000013_1701
head
resistance 0
width 0.000000E+00 1
depth 0.000000E+00
2.119851E+03 2.151192E+04 2.106173E+03 2.147316E+04 2.00885E+03 LS_000014_0101
2.106173E+03 2.147316E+04 2.108453E+03 2.140934E+04 2.00873E+03 LS_000014_0201
2.108453E+03 2.140934E+04 2.147205E+03 2.136603E+04 2.00858E+03 LS_000014_0301
2.147205E+03 2.136603E+04 2.242945E+03 2.132727E+04 2.00839E+03 LS_000014_0401
2.242945E+03 2.132727E+04 2.270299E+03 2.124521E+04 2.00816E+03 LS_000014_0501
2.270299E+03 2.124521E+04 2.040067E+03 2.100130E+04 2.00766E+03 LS_000014_0601
2.040067E+03 2.100130E+04 1.846308E+03 2.085085E+04 2.00697E+03 LS_000014_0701
1.846308E+03 2.085085E+04 1.602399E+03 2.075739E+04 2.00636E+03 LS_000014_0801
1.602399E+03 2.075739E+04 1.474746E+03 2.070724E+04 2.00589E+03 LS_000014_0901
1.474746E+03 2.070724E+04 1.435994E+03 2.061606E+04 2.00561E+03 LS_000014_1001
1.435994E+03 2.061606E+04 1.442833E+03 2.054768E+04 2.00541E+03 LS_000014_1101
1.442833E+03 2.054768E+04 1.666226E+03 2.049981E+04 2.00505E+03 LS_000014_1201
1.666226E+03 2.049981E+04 1.750568E+03 2.046789E+04 2.00467E+03 LS_000014_1301
1.750568E+03 2.046789E+04 1.757407E+03 2.037899E+04 2.00446E+03 LS_000014_1401
1.757407E+03 2.037899E+04 1.714096E+03 2.028553E+04 2.00423E+03 LS_000014_1501
1.714096E+03 2.028553E+04 1.620635E+03 2.020119E+04 2.00396E+03 LS_000014_1601
1.620635E+03 2.020119E+04 1.604679E+03 2.012825E+04 2.00372E+03 LS_000014_1701
1.604679E+03 2.012825E+04 1.620635E+03 2.002795E+04 2.00351E+03 LS_000014_1801
1.620635E+03 2.002795E+04 1.609238E+03 1.995956E+04 2.00331E+03 LS_000014_1901
1.609238E+03 1.995956E+04 1.579604E+03 1.987978E+04 2.00312E+03 LS_000014_2001
1.579604E+03 1.987978E+04 1.524895E+03 1.980455E+04 2.00291E+03 LS_000014_2101

head
resistance 0
width 0.000000E+00 1
depth 0.000000E+00
1.528304E+03 1.979720E+04 1.378207E+03 1.968121E+04 2.00274E+03 LS_000015_0101
1.378207E+03 1.968121E+04 1.248577E+03 1.963004E+04 2.00263E+03 LS_000015_0201
1.248577E+03 1.963004E+04 1.118947E+03 1.965051E+04 2.00254E+03 LS_000015_0301
1.118947E+03 1.965051E+04 9.824950E+02 1.976649E+04 2.00244E+03 LS_000015_0401
9.824950E+02 1.976649E+04 8.801557E+02 1.974262E+04 2.00235E+03 LS_000015_0501
8.801557E+02 1.974262E+04 7.744052E+02 1.956864E+04 2.00225E+03 LS_000015_0601
7.744052E+02 1.956864E+04 4.912665E+02 1.964028E+04 2.00209E+03 LS_000015_0701
4.912665E+02 1.964028E+04 3.752820E+02 1.942195E+04 2.00192E+03 LS_000015_0801
3.752820E+02 1.942195E+04 4.196291E+02 1.909788E+04 2.00173E+03 LS_000015_0901
4.196291E+02 1.909788E+04 2.865880E+02 1.886250E+04 2.00154E+03 LS_000015_1001
2.865880E+02 1.886250E+04 3.343463E+02 1.875334E+04 2.00141E+03 LS_000015_1101
3.343463E+02 1.875334E+04 5.731380E+02 1.885226E+04 2.00129E+03 LS_000015_1201
5.731380E+02 1.885226E+04 6.788885E+02 1.878404E+04 2.00117E+03 LS_000015_1301
6.788885E+02 1.878404E+04 6.880266E+02 1.871201E+04 2.00110E+03 LS_000015_2001
head
resistance 0
width 0.000000E+00 1
depth 0.000000E+00
6.924306E+02 2.404835E+04 8.969647E+02 2.393318E+04 2.04561E+03 LS_000018_0101
8.969647E+02 2.393318E+04 9.198010E+02 2.385077E+04 2.04194E+03 LS_000018_0201
9.198010E+02 2.385077E+04 9.108651E+02 2.382297E+04 2.04063E+03 LS_000018_0301
9.108651E+02 2.382297E+04 8.641995E+02 2.380112E+04 2.03971E+03 LS_000018_0401
8.641995E+02 2.380112E+04 8.403703E+02 2.372269E+04 2.03818E+03 LS_000018_0501
8.403703E+02 2.372269E+04 8.423561E+02 2.367304E+04 2.03667E+03 LS_000018_0601
head
resistance 0
width 0.000000E+00 1
depth 0.000000E+00
8.429798E+02 2.367246E+04 1.062769E+03 2.343752E+04 2.03374E+03 LS_000019_0101
1.062769E+03 2.343752E+04 1.146137E+03 2.342520E+04 2.03076E+03 LS_000019_0201
1.146137E+03 2.342520E+04 1.256979E+03 2.343752E+04 2.02932E+03 LS_000019_0301
1.256979E+03 2.343752E+04 1.298663E+03 2.340436E+04 2.02811E+03 LS_000019_0401
1.298663E+03 2.340436E+04 1.308137E+03 2.331910E+04 2.02709E+03 LS_000019_0501
1.308137E+03 2.331910E+04 1.339400E+03 2.328215E+04 2.02610E+03 LS_000019_0601
1.339400E+03 2.328215E+04 1.457821E+03 2.323952E+04 2.02482E+03 LS_000019_0701
head
resistance 0
width 0.000000E+00 1
depth 0.000000E+00
1.457570E+03 2.323750E+04 1.524976E+03 2.318011E+04 2.02357E+03 LS_000020_0101
1.524976E+03 2.318011E+04 1.573028E+03 2.312205E+04 2.02296E+03 LS_000020_0201
1.573028E+03 2.312205E+04 1.633092E+03 2.306599E+04 2.02238E+03 LS_000020_0301
1.633092E+03 2.306599E+04 1.705837E+03 2.301260E+04 2.02174E+03 LS_000020_0401
head
resistance 0
width 0.000000E+00 1
depth 0.000000E+00
1.709806E+03 2.300969E+04 1.776257E+03 2.293960E+04 2.02074E+03 LS_000021_0101
1.776257E+03 2.293960E+04 1.853632E+03 2.288680E+04 2.01944E+03 LS_000021_0201
1.853632E+03 2.288680E+04 1.919173E+03 2.288407E+04 2.01836E+03 LS_000021_0301
1.919173E+03 2.288407E+04 1.980162E+03 2.290137E+04 2.01748E+03 LS_000021_0401
1.980162E+03 2.290137E+04 2.072101E+03 2.284584E+04 2.01631E+03 LS_000021_0501
2.072101E+03 2.284584E+04 2.127629E+03 2.283765E+04 2.01520E+03 LS_000021_0601
2.127629E+03 2.283765E+04 2.189529E+03 2.284220E+04 2.01439E+03 LS_000021_0701
2.189529E+03 2.284220E+04 2.256890E+03 2.279487E+04 2.01341E+03 LS_000021_0801
2.256890E+03 2.279487E+04 2.306956E+03 2.272750E+04 2.01227E+03 LS_000021_0901
head
resistance 0
width 0.000000E+00 1
depth 0.000000E+00
2.309963E+03 2.272189E+04 2.330793E+03 2.265130E+04 2.01164E+03 LS_000022_0101
2.330793E+03 2.265130E+04 2.392127E+03 2.247540E+04 2.01142E+03 LS_000022_0201
2.392127E+03 2.247540E+04 2.443046E+03 2.226478E+04 2.01109E+03 LS_000022_0301
2.443046E+03 2.226478E+04 2.528681E+03 2.212475E+04 2.01077E+03 LS_000022_0401
2.528681E+03 2.212475E+04 2.555298E+03 2.204259E+04 2.01057E+03 LS_000022_0501
2.555298E+03 2.204259E+04 2.539097E+03 2.197315E+04 2.01044E+03 LS_000022_0601
2.539097E+03 2.197315E+04 2.581915E+03 2.187479E+04 2.01029E+03 LS_000022_0701
head
resistance 0
width 0.000000E+00 2
depth 0.000000E+00
4.792698E+03 2.662675E+04 4.751315E+03 2.659314E+04 2.04214E+03 LS_000028_0101
4.751315E+03 2.659314E+04 4.738641E+03 2.657752E+04 2.04206E+03 LS_000028_0151
4.738641E+03 2.657752E+04 4.725968E+03 2.656190E+04 2.04202E+03 LS_000028_0201
4.725968E+03 2.656190E+04 4.722010E+03 2.654578E+04 2.04198E+03 LS_000028_0226
4.722010E+03 2.654578E+04 4.718051E+03 2.652967E+04 2.04195E+03 LS_000028_0251
4.718051E+03 2.652967E+04 4.716072E+03 2.652161E+04 2.04192E+03 LS_000028_0264
4.716072E+03 2.652161E+04 4.714092E+03 2.651355E+04 2.04190E+03 LS_000028_0276
4.714092E+03 2.651355E+04 4.712113E+03 2.650549E+04 2.04188E+03 LS_000028_0288
4.712113E+03 2.650549E+04 4.711123E+03 2.650146E+04 2.04187E+03 LS_000028_0294
4.711123E+03 2.650146E+04 4.710134E+03 2.649743E+04 2.04186E+03 LS_000028_0301
4.710134E+03 2.649743E+04 4.709427E+03 2.649347E+04 2.04185E+03 LS_000028_0308
4.709427E+03 2.649347E+04 4.708721E+03 2.648951E+04 2.04184E+03 LS_000028_0314
4.708721E+03 2.648951E+04 4.708014E+03 2.648555E+04 2.04184E+03 LS_000028_0320
4.708014E+03 2.648555E+04 4.707307E+03 2.648159E+04 2.04183E+03 LS_000028_0326

4.707307E+03 2.648159E+04 4.706601E+03 2.647763E+04 2.04182E+03 LS_000028_0332
4.706601E+03 2.647763E+04 4.705894E+03 2.647366E+04 2.04181E+03 LS_000028_0338
4.705894E+03 2.647366E+04 4.705187E+03 2.646970E+04 2.04180E+03 LS_000028_0344
4.705187E+03 2.646970E+04 4.704481E+03 2.646574E+04 2.04179E+03 LS_000028_0351
4.704481E+03 2.646574E+04 4.704952E+03 2.645980E+04 2.04178E+03 LS_000028_0358
4.704952E+03 2.645980E+04 4.705423E+03 2.645387E+04 2.04177E+03 LS_000028_0364
4.705423E+03 2.645387E+04 4.705894E+03 2.644793E+04 2.04176E+03 LS_000028_0370
4.705894E+03 2.644793E+04 4.706366E+03 2.644199E+04 2.04174E+03 LS_000028_0376
4.706366E+03 2.644199E+04 4.707190E+03 2.643011E+04 2.04172E+03 LS_000028_0388
4.707190E+03 2.643011E+04 4.708014E+03 2.641823E+04 2.04170E+03 LS_000028_0401
4.708014E+03 2.641823E+04 4.713409E+03 2.640090E+04 2.04167E+03 LS_000028_0426
4.713409E+03 2.640090E+04 4.718805E+03 2.638358E+04 2.04163E+03 LS_000028_0451
4.718805E+03 2.638358E+04 4.741428E+03 2.634887E+04 2.04156E+03 LS_000028_0476
4.741428E+03 2.634887E+04 4.758960E+03 2.632446E+04 2.04149E+03 LS_000028_0501
4.758960E+03 2.632446E+04 4.779166E+03 2.628842E+04 2.04141E+03 LS_000028_0551
4.779166E+03 2.628842E+04 4.799371E+03 2.625237E+04 2.04132E+03 LS_000028_0601
4.799371E+03 2.625237E+04 4.810293E+03 2.615845E+04 2.04118E+03 LS_000028_0701
4.810293E+03 2.615845E+04 4.799917E+03 2.610438E+04 2.04102E+03 LS_000028_0751
4.799917E+03 2.610438E+04 4.794729E+03 2.607735E+04 2.04093E+03 LS_000028_0776
4.794729E+03 2.607735E+04 4.789542E+03 2.605032E+04 2.04087E+03 LS_000028_0801
4.789542E+03 2.605032E+04 4.781623E+03 2.604172E+04 2.04083E+03 LS_000028_0814
4.781623E+03 2.604172E+04 4.773705E+03 2.603312E+04 2.04080E+03 LS_000028_0826
4.773705E+03 2.603312E+04 4.769746E+03 2.602882E+04 2.04078E+03 LS_000028_0832
4.769746E+03 2.602882E+04 4.765786E+03 2.602452E+04 2.04077E+03 LS_000028_0838
4.765786E+03 2.602452E+04 4.761827E+03 2.602022E+04 2.04076E+03 LS_000028_0844
4.761827E+03 2.602022E+04 4.757868E+03 2.601592E+04 2.04074E+03 LS_000028_0851
4.757868E+03 2.601592E+04 4.753909E+03 2.601162E+04 2.04073E+03 LS_000028_0858
4.753909E+03 2.601162E+04 4.749949E+03 2.600731E+04 2.04072E+03 LS_000028_0864
4.749949E+03 2.600731E+04 4.745990E+03 2.600301E+04 2.04071E+03 LS_000028_0870
4.745990E+03 2.600301E+04 4.742031E+03 2.599871E+04 2.04069E+03 LS_000028_0876
4.742031E+03 2.599871E+04 4.738072E+03 2.599441E+04 2.04068E+03 LS_000028_0882
4.738072E+03 2.599441E+04 4.734113E+03 2.599011E+04 2.04067E+03 LS_000028_0888
4.734113E+03 2.599011E+04 4.730153E+03 2.598581E+04 2.04066E+03 LS_000028_0894
4.730153E+03 2.598581E+04 4.728174E+03 2.598366E+04 2.04065E+03 LS_000028_0898
4.728174E+03 2.598366E+04 4.726194E+03 2.598151E+04 2.04064E+03 LS_000028_0901
4.726194E+03 2.598151E+04 4.723805E+03 2.597967E+04 2.04063E+03 LS_000028_0908
4.723805E+03 2.597967E+04 4.721416E+03 2.597783E+04 2.04063E+03 LS_000028_0914
4.721416E+03 2.597783E+04 4.719027E+03 2.597598E+04 2.04062E+03 LS_000028_0920
4.719027E+03 2.597598E+04 4.716638E+03 2.597414E+04 2.04061E+03 LS_000028_0926
4.716638E+03 2.597414E+04 4.714248E+03 2.597230E+04 2.04061E+03 LS_000028_0932
4.714248E+03 2.597230E+04 4.711859E+03 2.597045E+04 2.04060E+03 LS_000028_0938
4.711859E+03 2.597045E+04 4.709470E+03 2.596861E+04 2.04060E+03 LS_000028_0944
4.709470E+03 2.596861E+04 4.707081E+03 2.596677E+04 2.04059E+03 LS_000028_0951
4.707081E+03 2.596677E+04 4.704692E+03 2.596492E+04 2.04058E+03 LS_000028_0958
4.704692E+03 2.596492E+04 4.702303E+03 2.596308E+04 2.04058E+03 LS_000028_0964
4.702303E+03 2.596308E+04 4.699913E+03 2.596124E+04 2.04057E+03 LS_000028_0970
4.699913E+03 2.596124E+04 4.697524E+03 2.595939E+04 2.04056E+03 LS_000028_0976
4.697524E+03 2.595939E+04 4.695135E+03 2.595755E+04 2.04056E+03 LS_000028_0982
4.695135E+03 2.595755E+04 4.692746E+03 2.595571E+04 2.04055E+03 LS_000028_0988
4.692746E+03 2.595571E+04 4.690357E+03 2.595387E+04 2.04054E+03 LS_000028_0994
4.690357E+03 2.595387E+04 4.687967E+03 2.595202E+04 2.04054E+03 LS_000028_1001
4.687967E+03 2.595202E+04 4.687511E+03 2.594849E+04 2.04053E+03 LS_000028_1008
4.687511E+03 2.594849E+04 4.687055E+03 2.594496E+04 2.04052E+03 LS_000028_1014
4.687055E+03 2.594496E+04 4.686142E+03 2.593791E+04 2.04051E+03 LS_000028_1026
4.686142E+03 2.593791E+04 4.684316E+03 2.592379E+04 2.04049E+03 LS_000028_1051
4.684316E+03 2.592379E+04 4.682491E+03 2.590967E+04 2.04046E+03 LS_000028_1076
4.682491E+03 2.590967E+04 4.680665E+03 2.589556E+04 2.04043E+03 LS_000028_1101
4.680665E+03 2.589556E+04 4.680922E+03 2.588297E+04 2.04040E+03 LS_000028_1176
4.680922E+03 2.588297E+04 4.681179E+03 2.587038E+04 2.04037E+03 LS_000028_1251
4.681179E+03 2.587038E+04 4.681596E+03 2.584351E+04 2.04033E+03 LS_000028_1401
head
resistance 0
width 0.000000E+00 2
depth 0.000000E+00
4.681575E+03 2.584355E+04 4.673258E+03 2.582389E+04 2.04022E+03 LS_000029_0051
4.673258E+03 2.582389E+04 4.665904E+03 2.580624E+04 2.04006E+03 LS_000029_0101
4.665904E+03 2.580624E+04 4.651933E+03 2.577389E+04 2.03986E+03 LS_000029_0151
4.651933E+03 2.577389E+04 4.637961E+03 2.574153E+04 2.03959E+03 LS_000029_0201
4.637961E+03 2.574153E+04 4.634284E+03 2.570183E+04 2.03930E+03 LS_000029_0251
4.634284E+03 2.570183E+04 4.630608E+03 2.566212E+04 2.03900E+03 LS_000029_0301
4.630608E+03 2.566212E+04 4.625460E+03 2.561652E+04 2.03867E+03 LS_000029_0351
4.625460E+03 2.561652E+04 4.620313E+03 2.557093E+04 2.03832E+03 LS_000029_0401
4.620313E+03 2.557093E+04 4.599723E+03 2.550181E+04 2.03787E+03 LS_000029_0501
4.599723E+03 2.550181E+04 4.539424E+03 2.546063E+04 2.03732E+03 LS_000029_0601
4.539424E+03 2.546063E+04 4.498245E+03 2.542092E+04 2.03682E+03 LS_000029_0701
4.498245E+03 2.542092E+04 4.470302E+03 2.535915E+04 2.03635E+03 LS_000029_0801
4.470302E+03 2.535915E+04 4.473243E+03 2.522973E+04 2.03560E+03 LS_000029_0901
4.473243E+03 2.522973E+04 4.362941E+03 2.510766E+04 2.03448E+03 LS_000029_1001
4.362941E+03 2.510766E+04 4.352646E+03 2.484882E+04 2.03286E+03 LS_000029_1101
4.352646E+03 2.484882E+04 4.301171E+03 2.477676E+04 2.03154E+03 LS_000029_1201
quit
layout
window 4430.05 26321.95 5327.64 26750.13
quit
time 0
solve 2 0 0 1

save Generic


```

y
time 0
extract
file Generic
y
well discharge
well head
linesink discharge
linesink head
inhomogeneity
quit
grid
window 4430.05 26321.95 5327.64 26750.13
dotmap off
horizontalpoints 80
go
surfer Generic
y
quit
trace
picture off
file Generic
y
time 365
step 3.97793844645446
points
4.7160221E+03 2.6520448E+04 2.0100000E+03 1.0
4.7129601E+03 2.6505374E+04 2.0100000E+03 1.0
4.7113113E+03 2.6499486E+04 2.0100000E+03 1.0
4.7101336E+03 2.6494539E+04 2.0100000E+03 1.0
4.7094270E+03 2.6488651E+04 2.0100000E+03 1.0
4.7087204E+03 2.6485118E+04 2.0100000E+03 1.0
4.7084848E+03 2.6482292E+04 2.0100000E+03 1.0
4.7077782E+03 2.6479465E+04 2.0100000E+03 1.0
4.7068360E+03 2.6475697E+04 2.0100000E+03 1.0
4.7066005E+03 2.6472635E+04 2.0100000E+03 1.0
4.7061294E+03 2.6469102E+04 2.0100000E+03 1.0
4.7056583E+03 2.6465569E+04 2.0100000E+03 1.0
4.7054228E+03 2.6461564E+04 2.0100000E+03 1.0
4.7058939E+03 2.6458267E+04 2.0100000E+03 1.0
4.7063649E+03 2.6454734E+04 2.0100000E+03 1.0
4.7066005E+03 2.6451436E+04 2.0100000E+03 1.0
4.7068360E+03 2.6448374E+04 2.0100000E+03 1.0
4.7070716E+03 2.6444606E+04 2.0100000E+03 1.0
4.7075426E+03 2.6434949E+04 2.0100000E+03 1.0
quit
well 4.7481538E+03 2.6464119E+04 2.01000E+03 64
go
quit
stop

```