Vogtle PEmails

From: Williams, Dana M. [DANAWILL@SOUTHERNCO.COM]
Sent: Friday, August 22, 2008 11:38 AM
To: Christian Araguas; Scott Flanders; William Burton; Mark Notich; Gerald McCoy
Cc: Davis, James T.
Subject: SNC Letter AR-08-1286 transmitting VEGP ESP Response to RAI #11 Involving Groundwater (Part 2 of 2)
Attachments: AR-08-1286_RAI Ltr #11 Hyd_Resp_FINAL_PART 2.pdf

> An electronic copy of Southern Nuclear's letter, AR-08-1286, dated
> August 21, 2008 is attached. In addition, a hard copy has been
> transmitted to the NRC Document Control desk via FedEx.
>
> <<AR-08-1286_RAI Ltr #11 Hyd_Resp_FINAL_PART 2.pdf>>
>
> Thank you,
>
> Dana M. Williams
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>

Hearing Identifier: Vogtle_Public_EX
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Subject: SNC Letter AR-08-1286 transmitting VEGP ESP Response to RAI #11 Involving Groundwater (Part 2 of 2)
Sent Date: 8/22/2008 11:37:32 AM
Received Date: 8/22/2008 11:55:40 AM
From: Williams, Dana M.

Created By: DANAWILL@SOUTHERNCO.COM

Recipients:
"Davis, James T." <JTDAVIS@southernco.com>
Tracking Status: None
"Christian Araguas" <Christian.Araguas@nrc.gov>
Tracking Status: None
"Scott Flanders" <Scott.Flanders@nrc.gov>
Tracking Status: None
"William Burton" <William.Burton@nrc.gov>
Tracking Status: None
"Mark Notich" <Mark.Notich@nrc.gov>
Tracking Status: None
"Gerald McCoy" <Gerald.McCoy@nrc.gov>
Tracking Status: None

Post Office: ALXAPEX48.southernco.com

Files	**Size**	**Date & Time**
MESSAGE	468	8/22/2008 11:55:40 AM
AR-08-1286_RAI Ltr #11 Hyd_Resp_FINAL_PART 2.pdf	3973475	

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

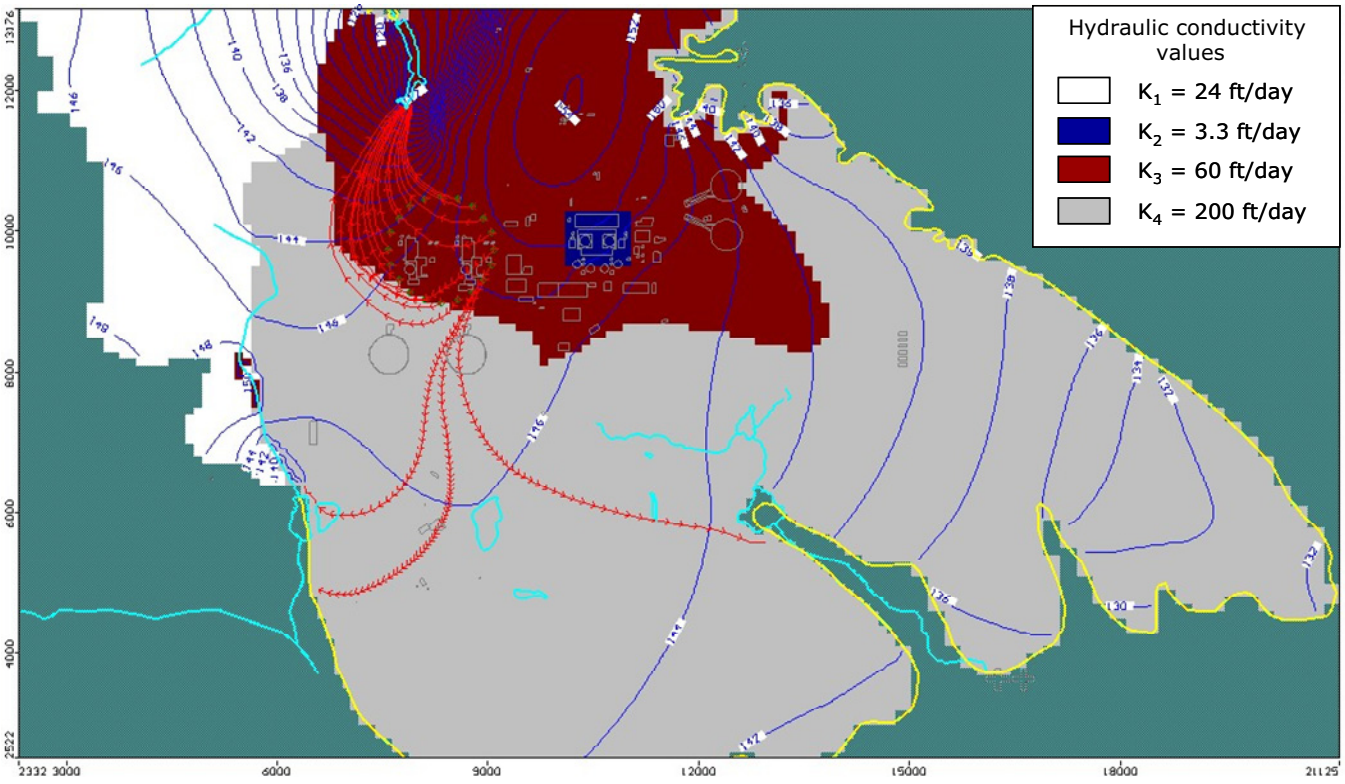

Figure 10 - Simulated heads and particle tracking for a hydraulic conductivity distribution that produces groundwater pathways to the south.

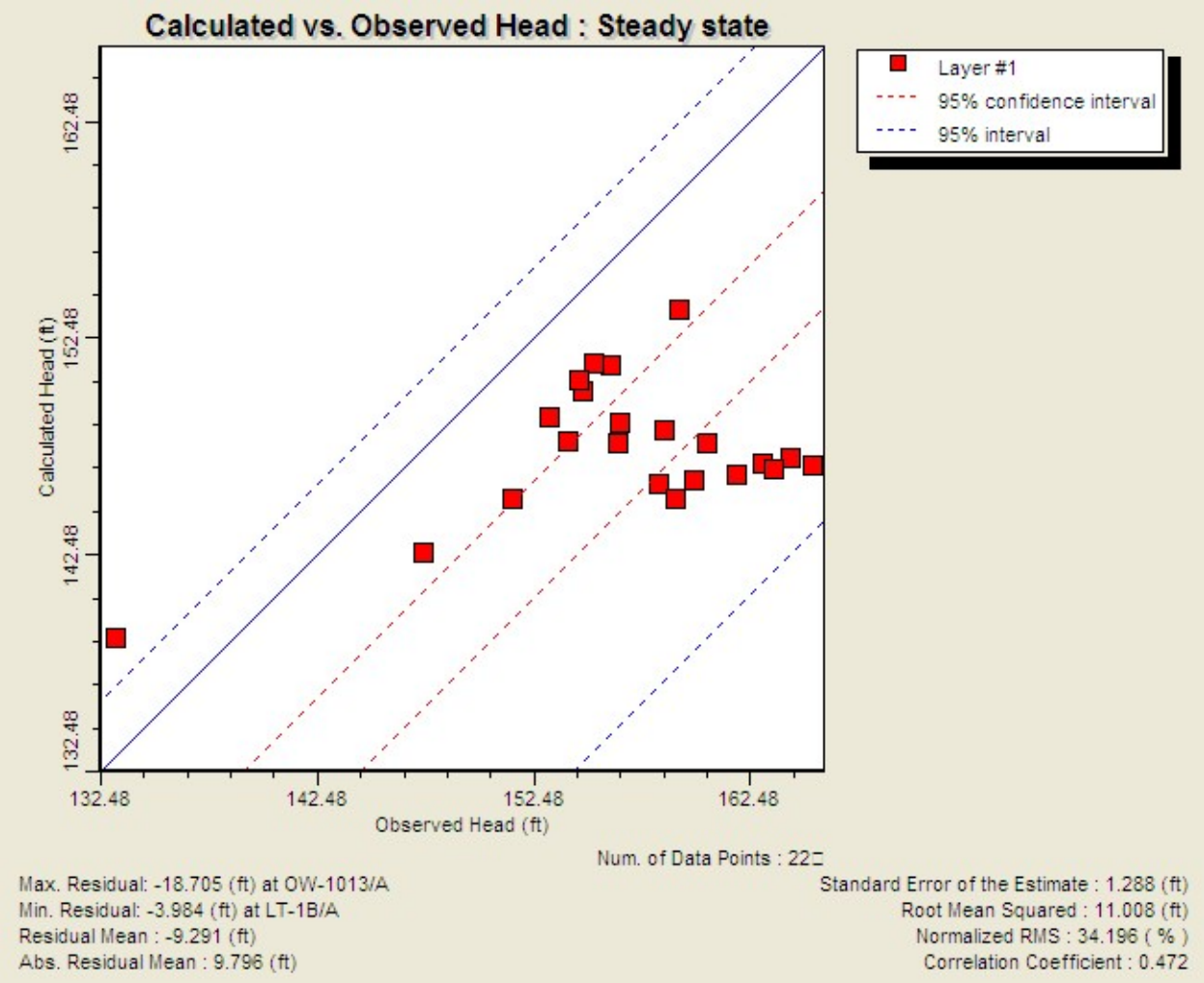

Figure 11 - Comparison of observed and computed heads for the hydraulic conductivity distribution shown in Figure 10.

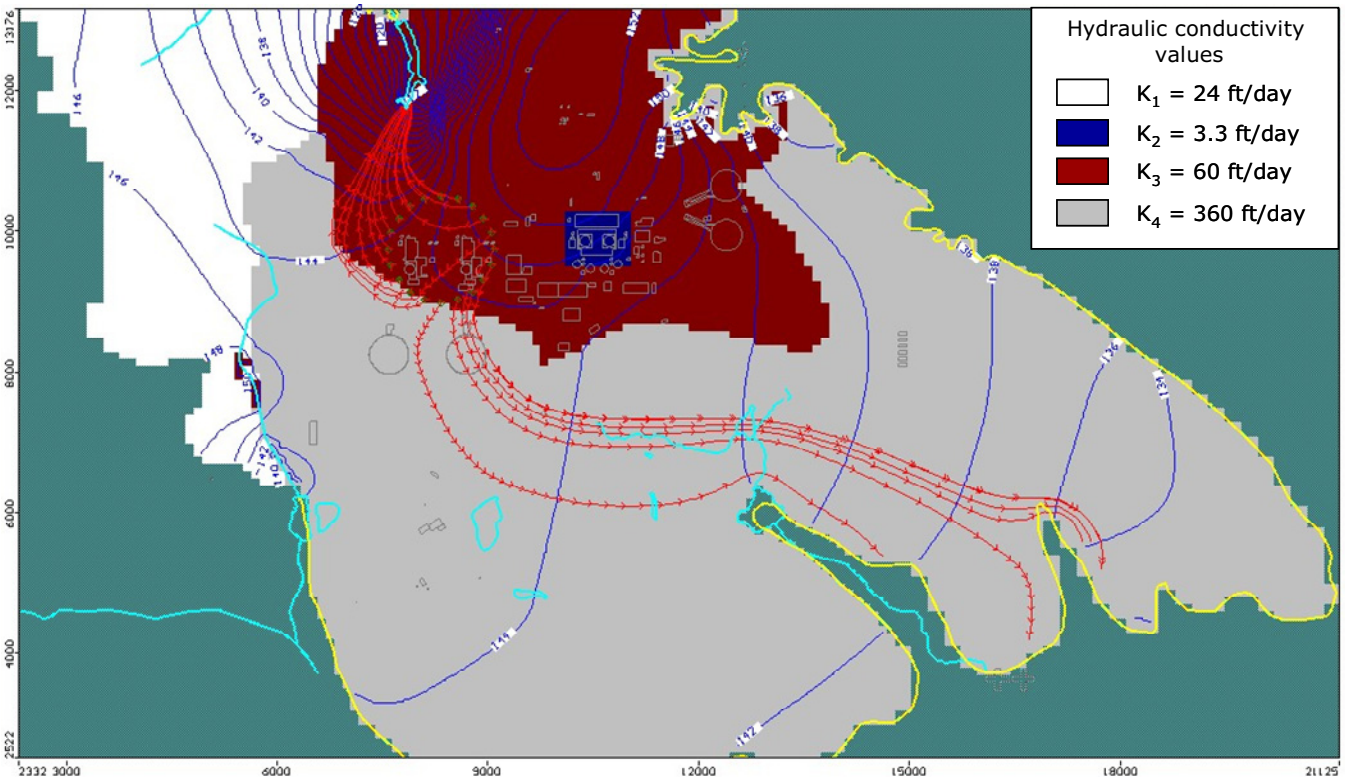

Figure 12 - Simulated heads and particle tracking for a hydraulic conductivity distribution that produces groundwater pathways to the south.

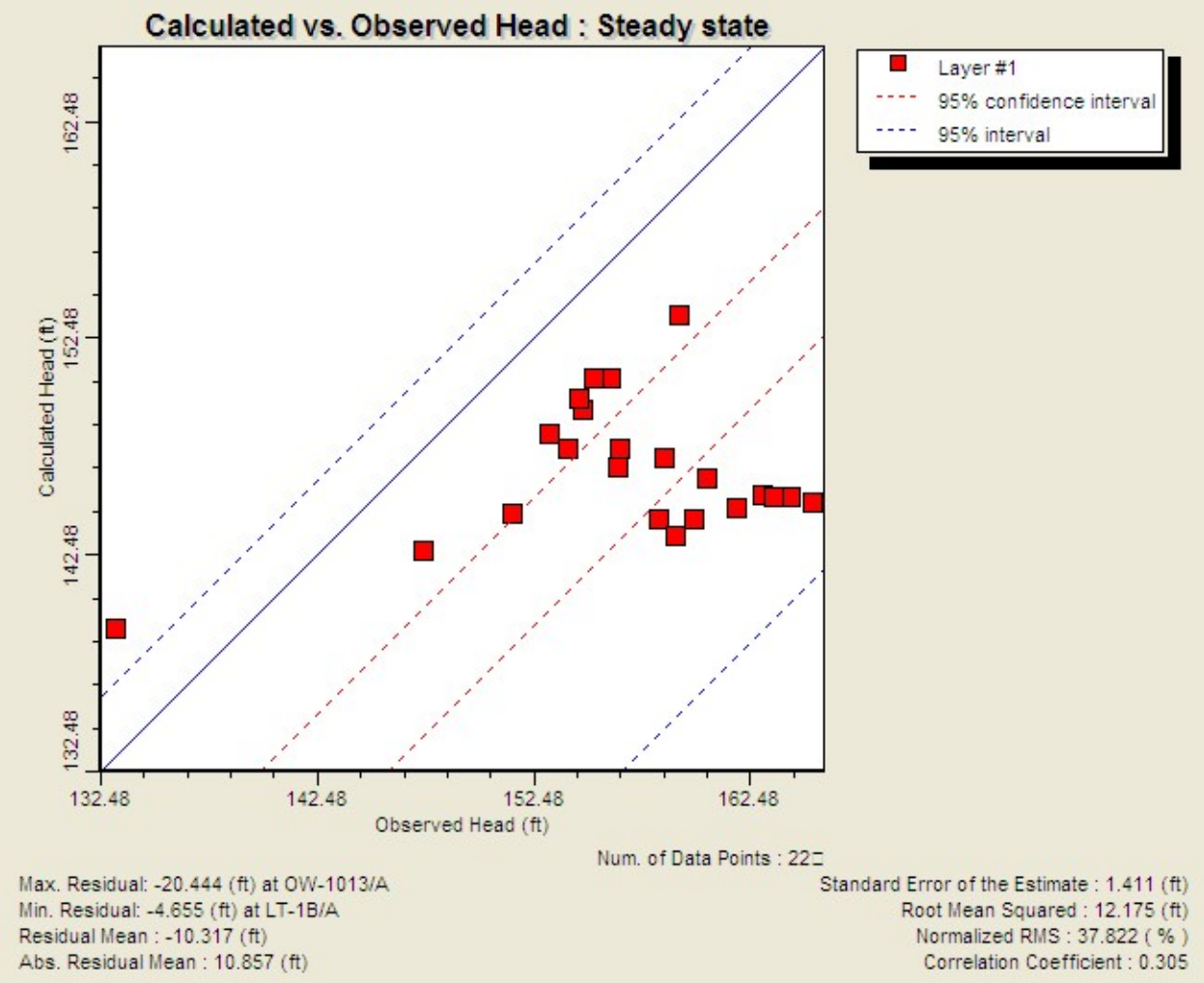

Figure 13 - Comparison of observed and computed heads for the hydraulic conductivity distribution shown in Figure 12.

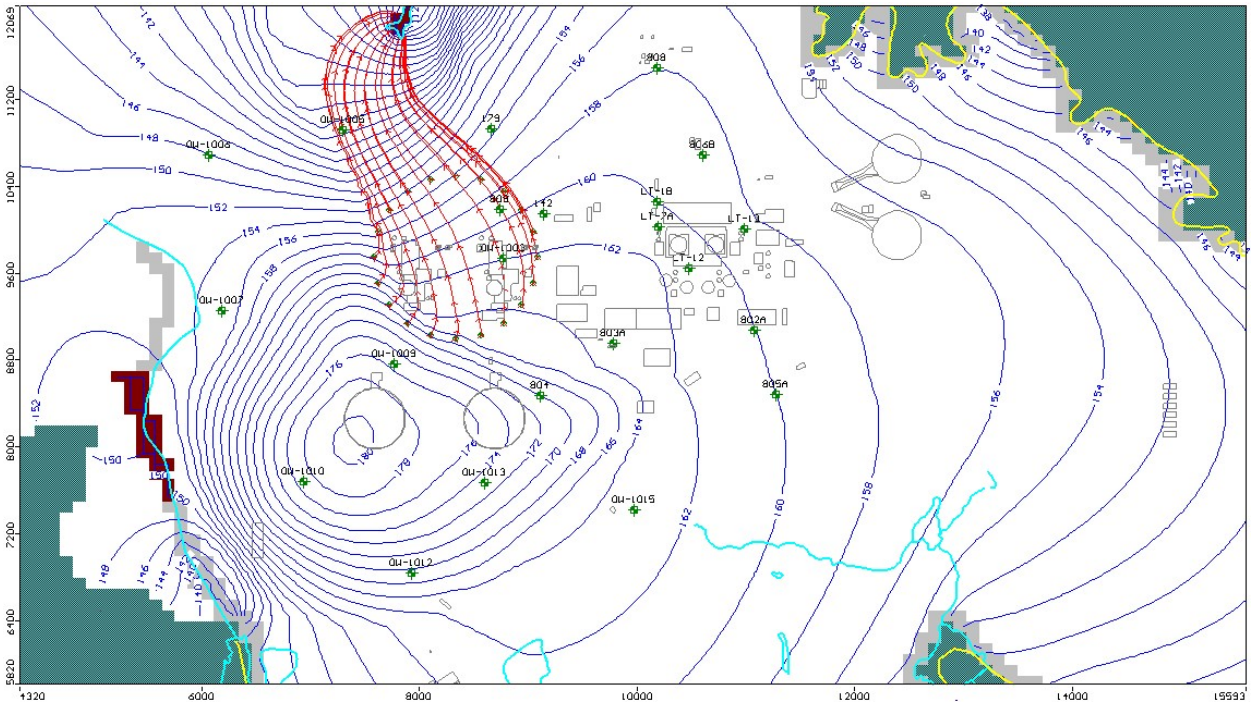

Figure 14 - Simulated heads and particle tracking with the baseline model, using the recharge distribution shown in Figure 9, and increasing the recharge in zone R_7 to 48 in/yr.

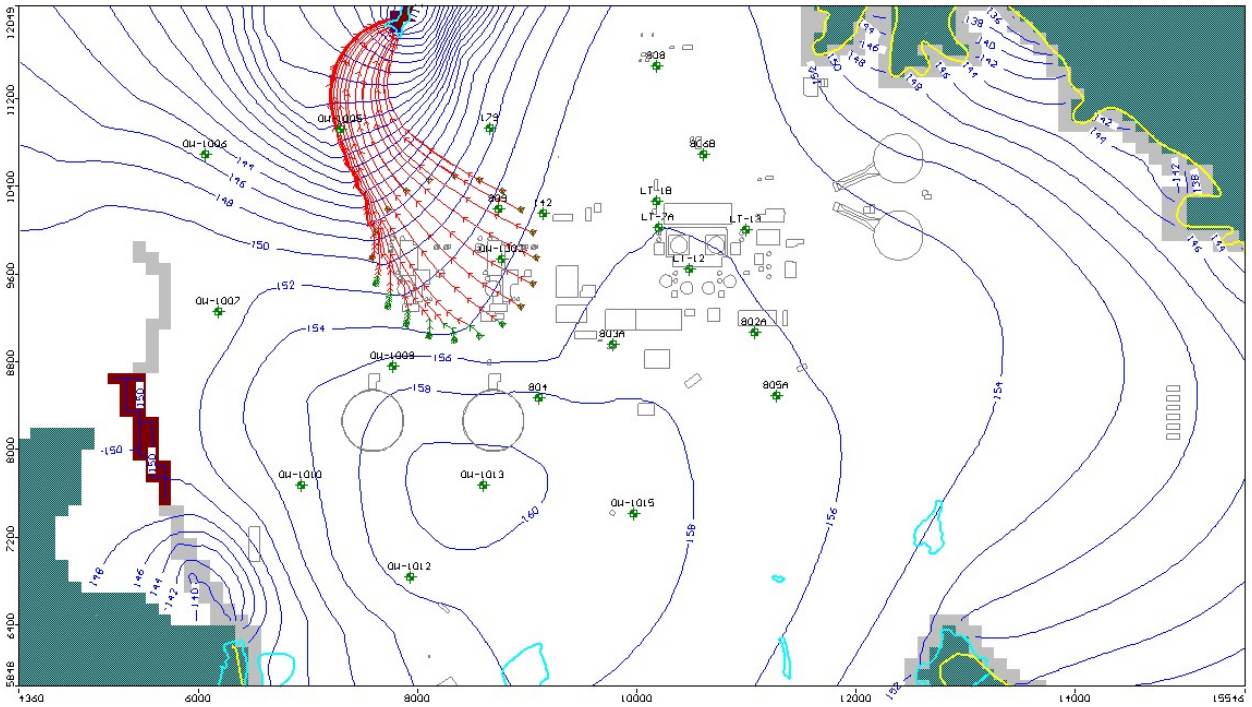

Figure 15 - Simulated heads and particle tracking with the baseline model, using the recharge distribution shown in Figure 9, and decreasing the recharge in zone R_7 to 0 in/yr.

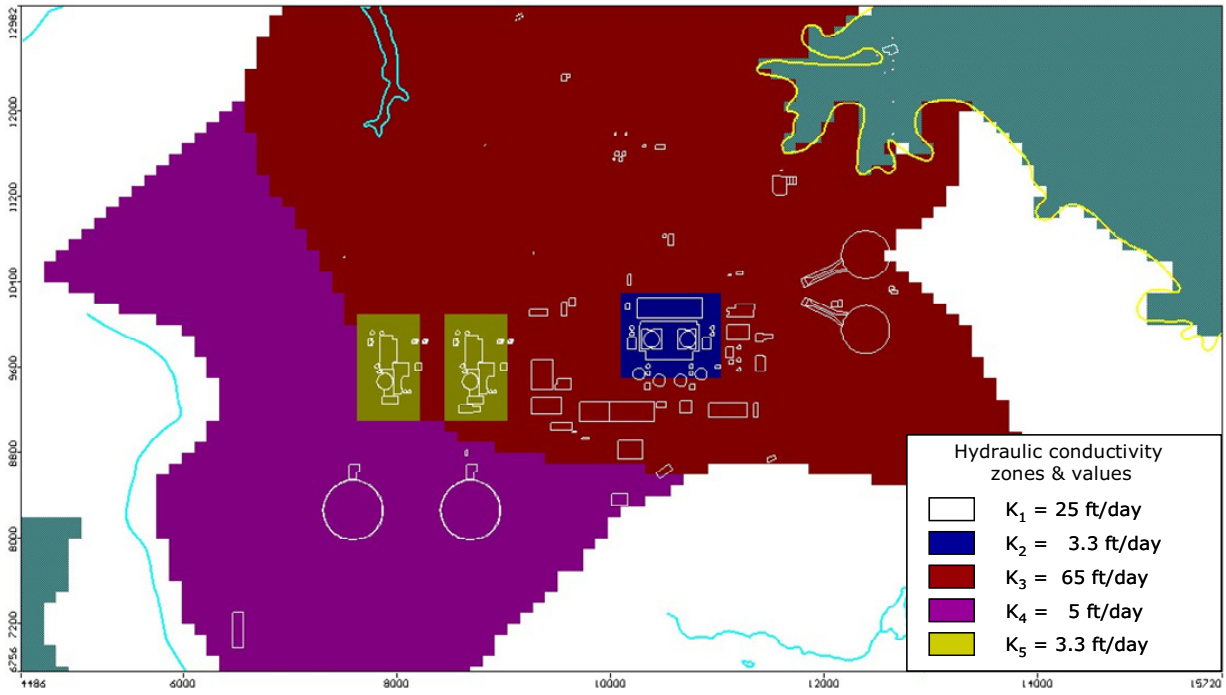

Figure 16 - Hydraulic conductivity zones for post-construction conditions.

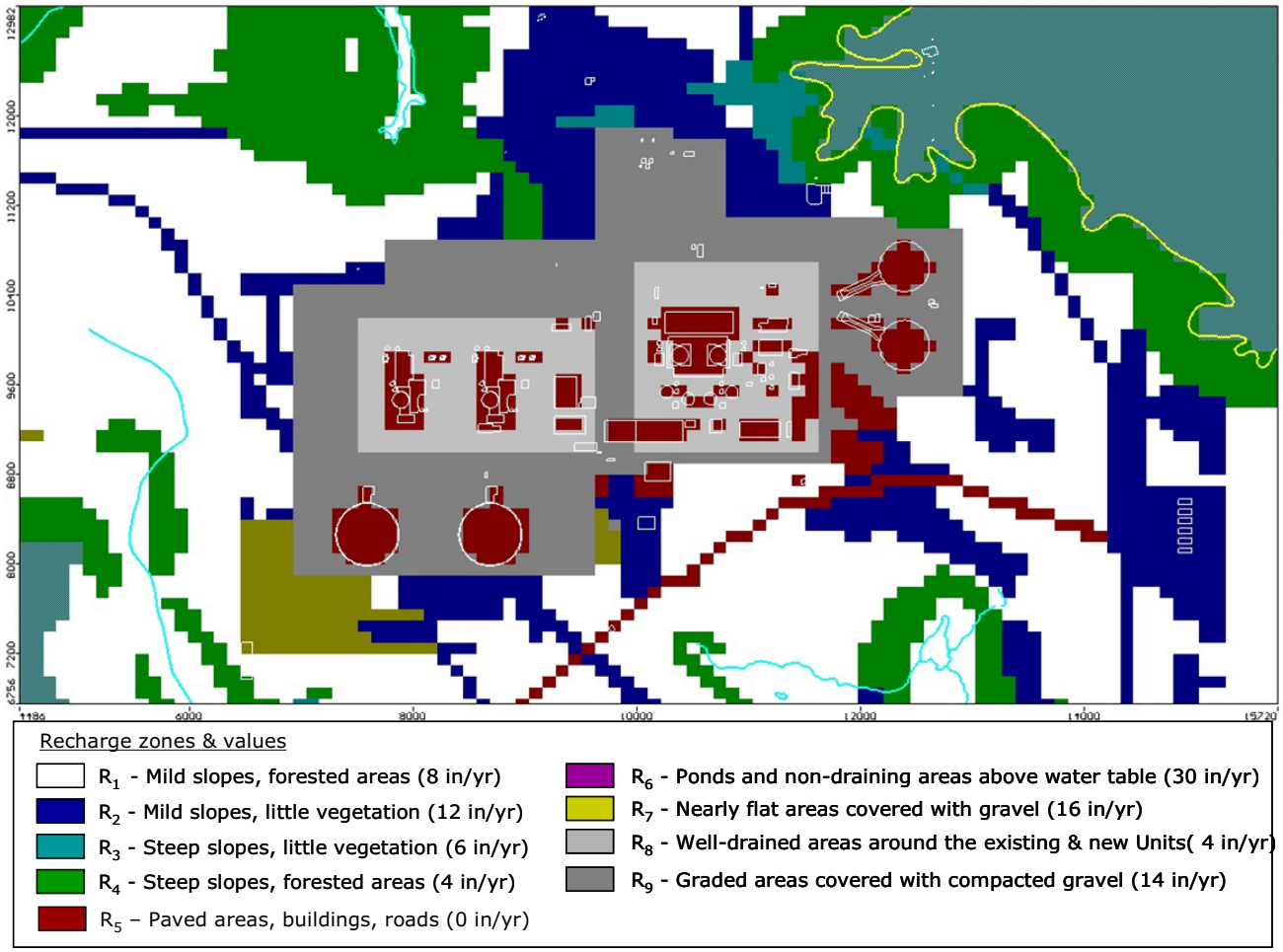

Figure 17 - Recharge zones for post-construction conditions

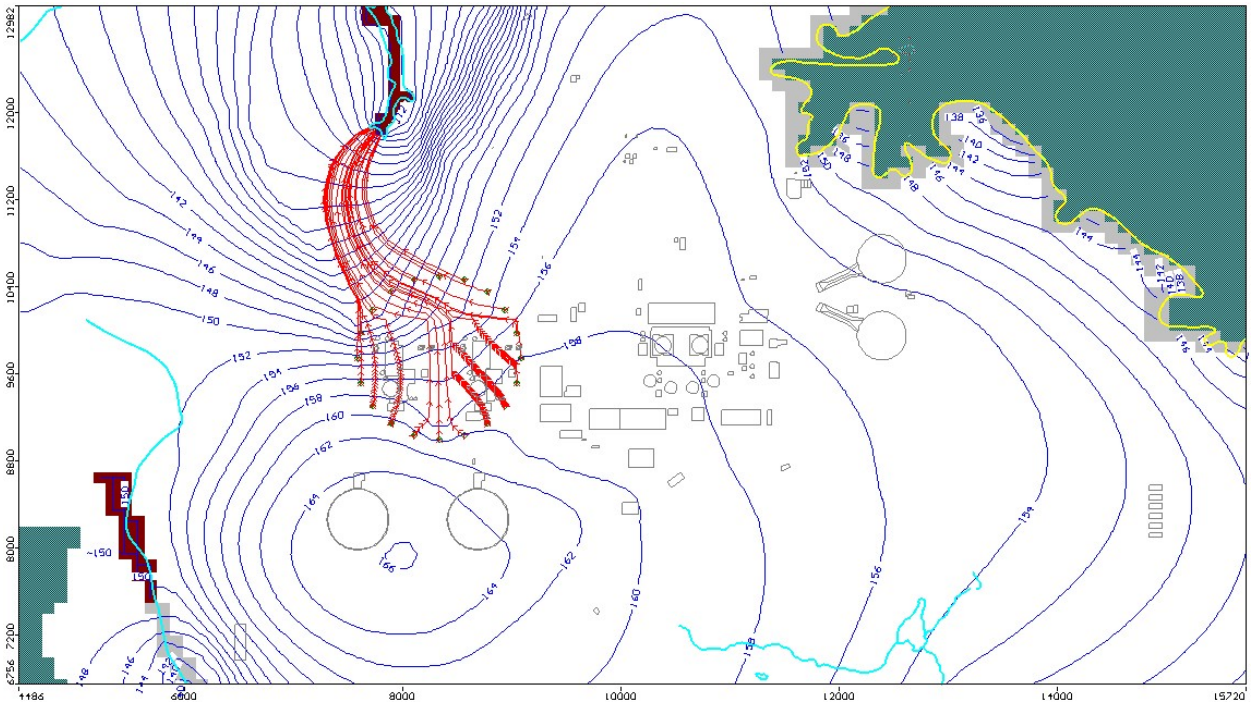

Figure 18 - Particle tracking under post-construction conditions. 20 particles are released along the periphery of 750-ft radius circle around the power block

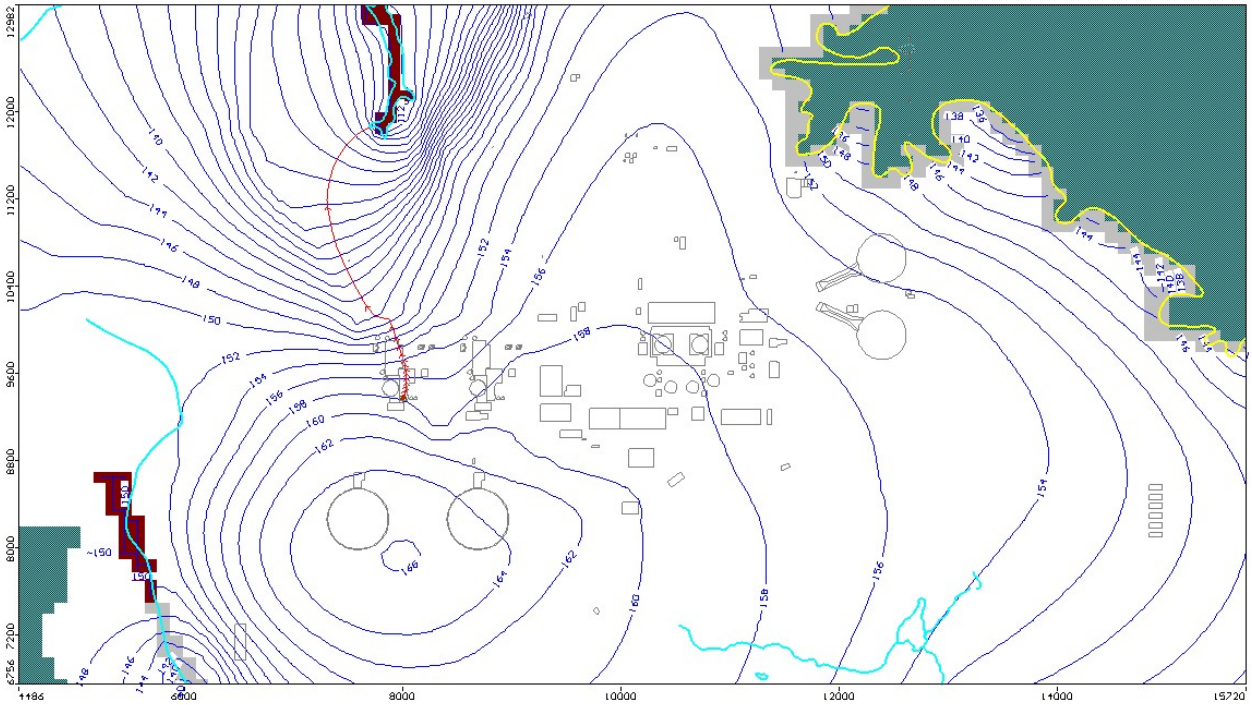

Figure 19 - Particle tracking under post-construction conditions. A particle is released at the auxiliary building of Unit 4.

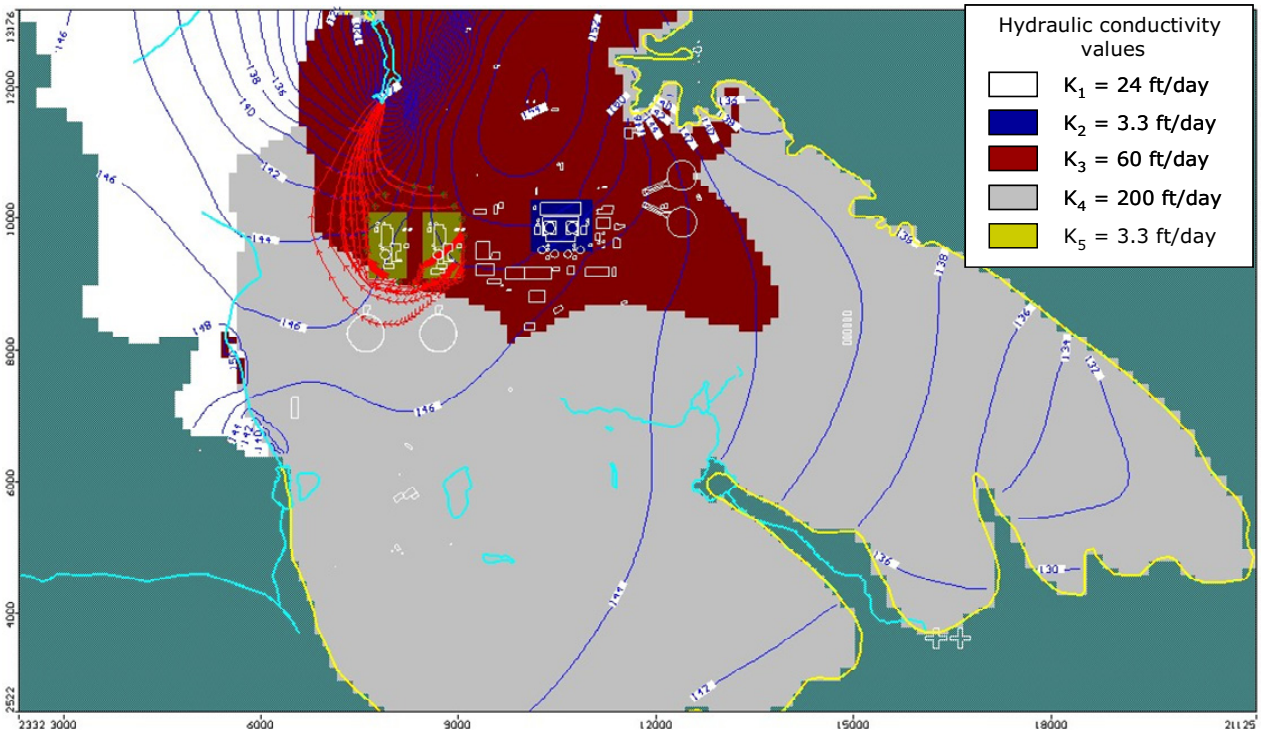

Figure 20 - Particle tracking for post-construction conditions using the same hypothetical high conductivity zone as in the simulation of Figure 10

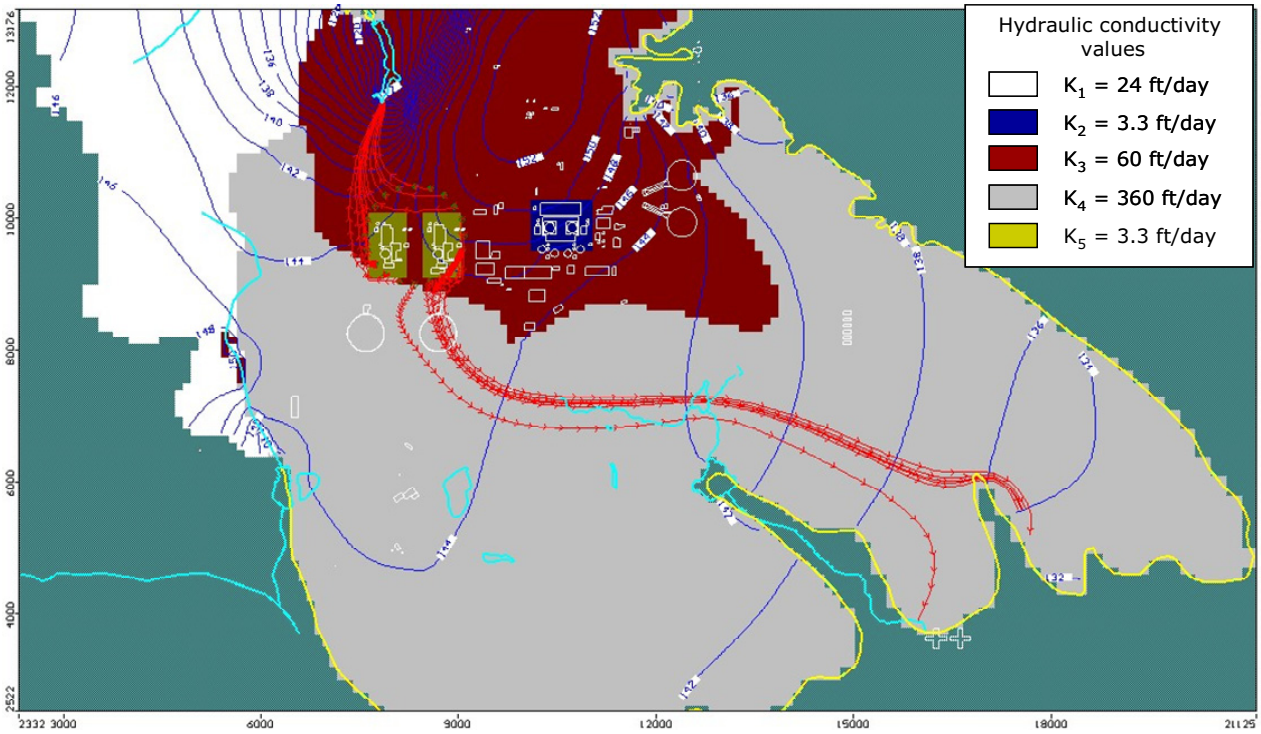

Figure 21 - Particle tracking for post-construction conditions using the same hypothetical high conductivity zone as in the simulation of Figure 12

Southern Nuclear Operating Company

AR-08-1286

Enclosure 2

Groundwater Model Input / Output Files

(C/D)

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Enclosure 3

Updated SSAR Appendix 2.4B Revision 4-S2 Figures

Note: This enclosure includes four figures.

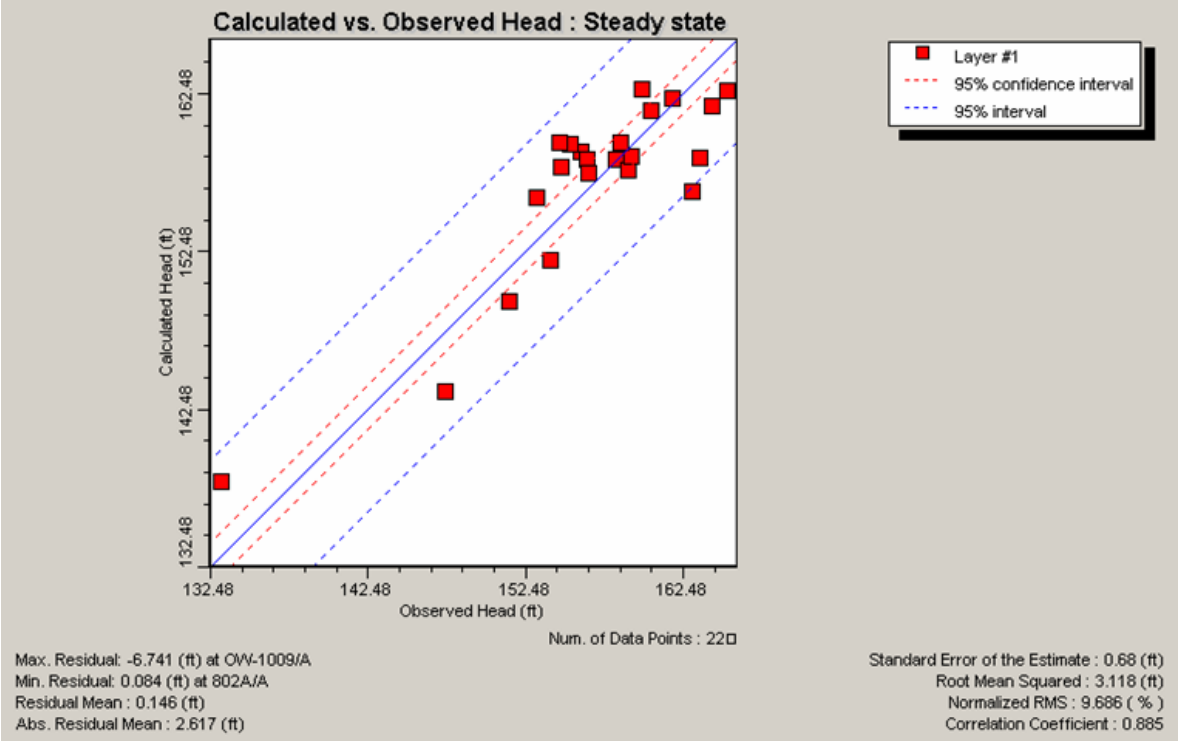

Figure 47: Model 7 - Simulated vs. observed water levels for Run 708 (K_1=32; K_2=100; K_3=8 ft/day; R_1=10; R_2=6; R_3=6; R_4=4; R_5=0 in/yr)

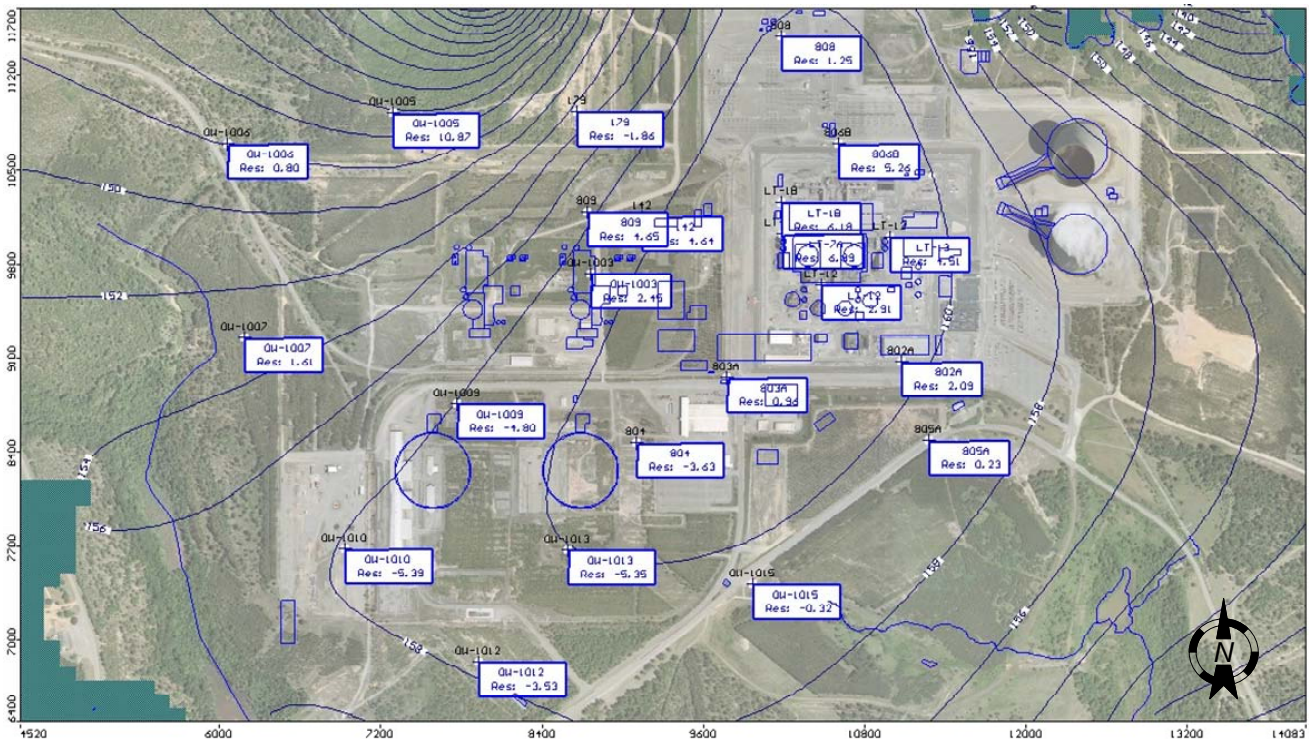

Figure 32: Model 3 - Estimated residuals for Run 305 (K_1=27; K_2=20; K_3=30; K_4=60 ft/day; R_1=10; R_2=6; R_3=6; R_4=4; R_5=0 in/yr)

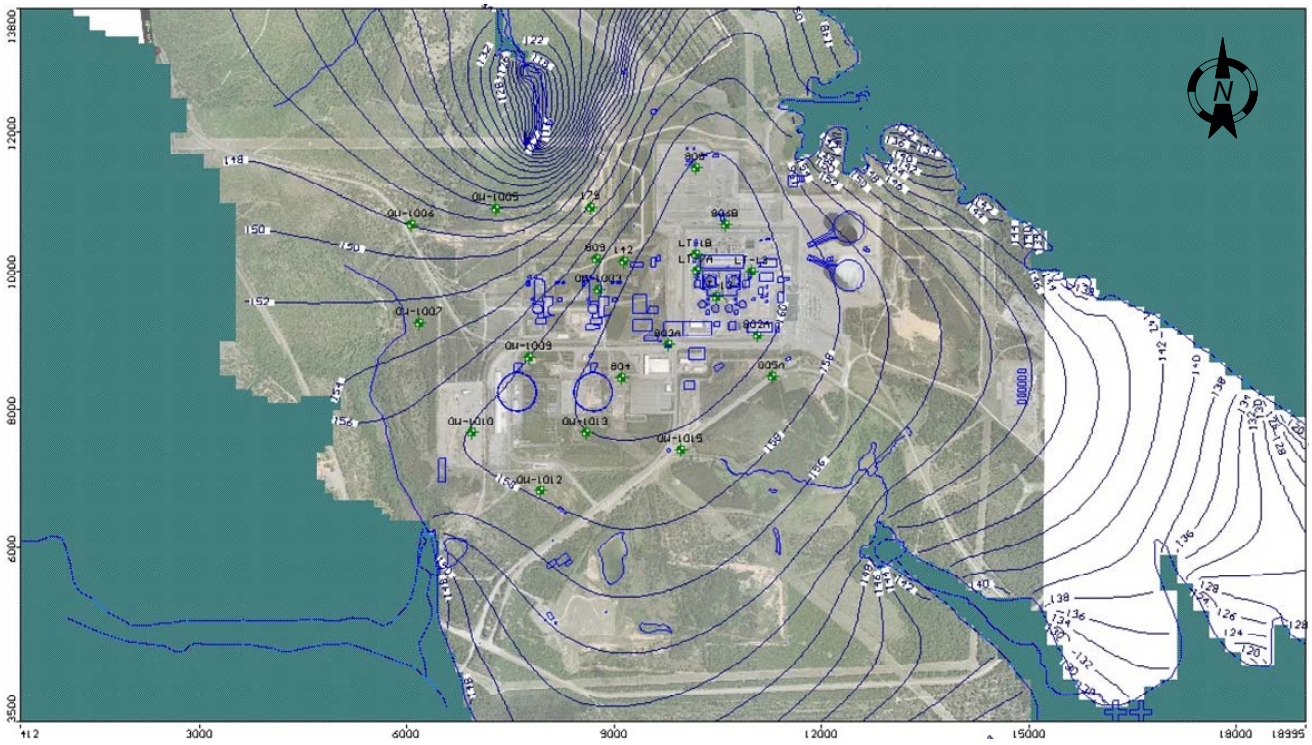

Figure 30: Model 3 - Simulated water levels for Run 305 (K_1=27; K_2=20; K_3=30; K_4=60 ft/day; R_1=10; R_2=6; R_3=6; R_4=4; R_5=0 in/yr)

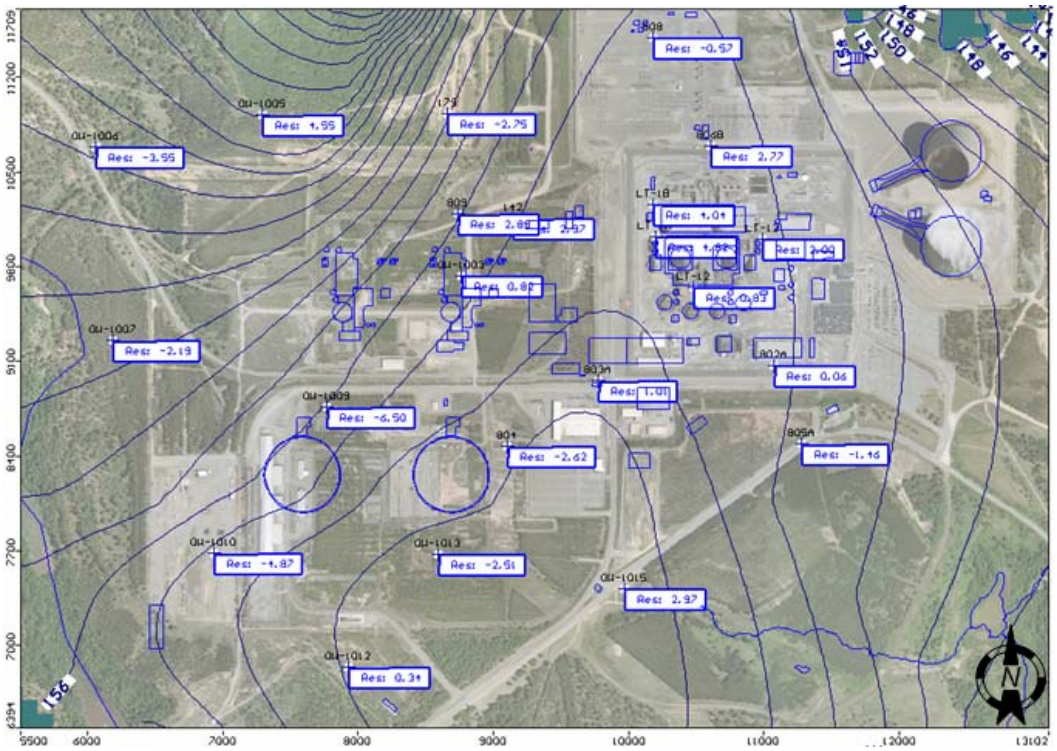

Figure 48: Model 7- Estimated residuals for Run 708 (K_1=32; K_2=100; K_3=8 ft/day; R_1=10; R_2=6; R_3=6; R_4=4; R_5=0 in/yr)