

Notes:





-  Coastal lowlands aquifer system—Dot patterned area indicates freshwater
-  Texas coastal uplands aquifer system
-  Confining unit
-  D Hydrogeologic unit—See figure 2.3.1-16

Figure 2.3.1-17 Generalized Cross Section through the Coastal Lowlands/Coastal Uplands Aquifer Systems (modified from Reference 2.3.1-21)

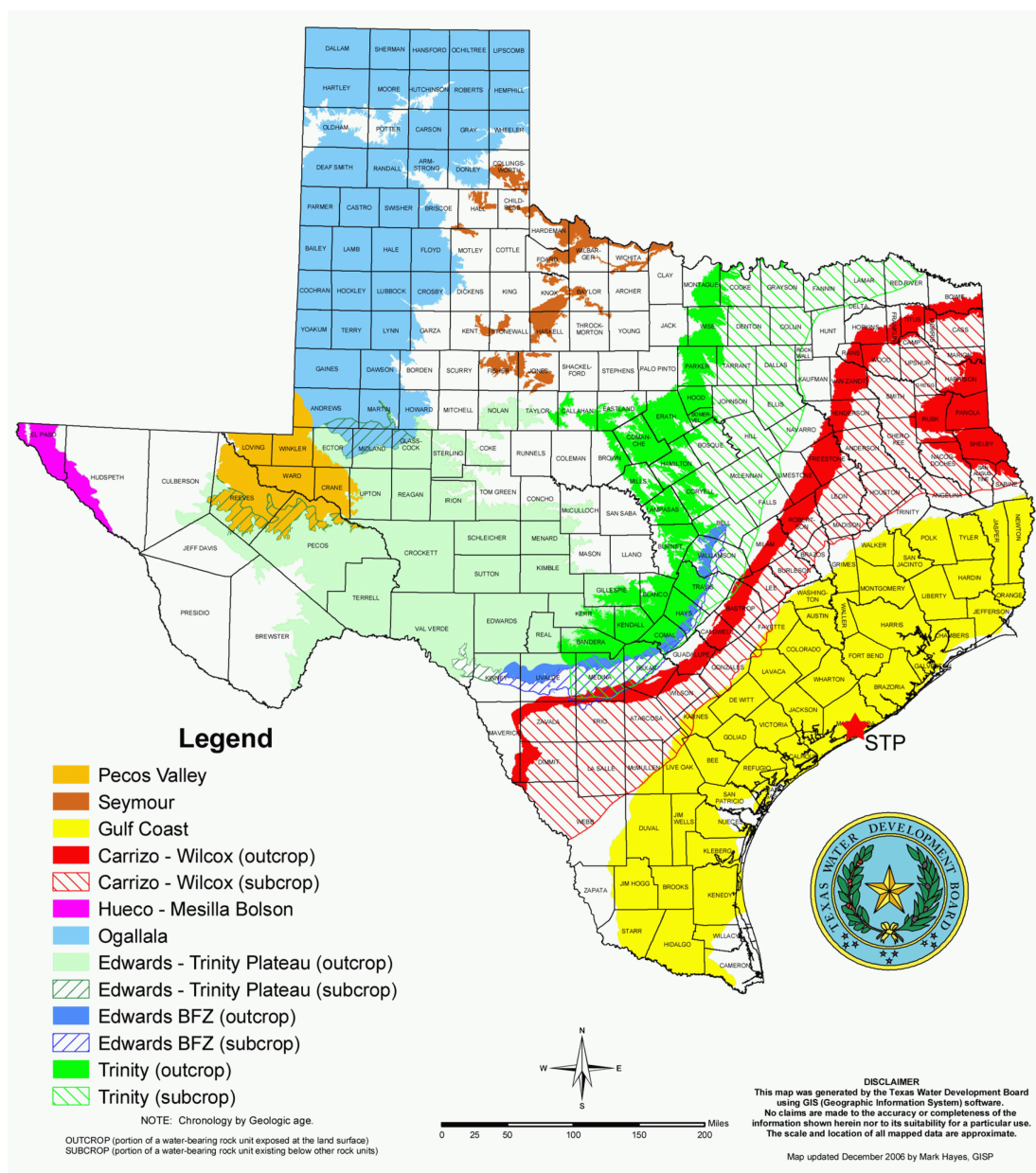


Figure 2.3.1-18 Major Aquifers of Texas (modified from Reference 2.3.1-22)

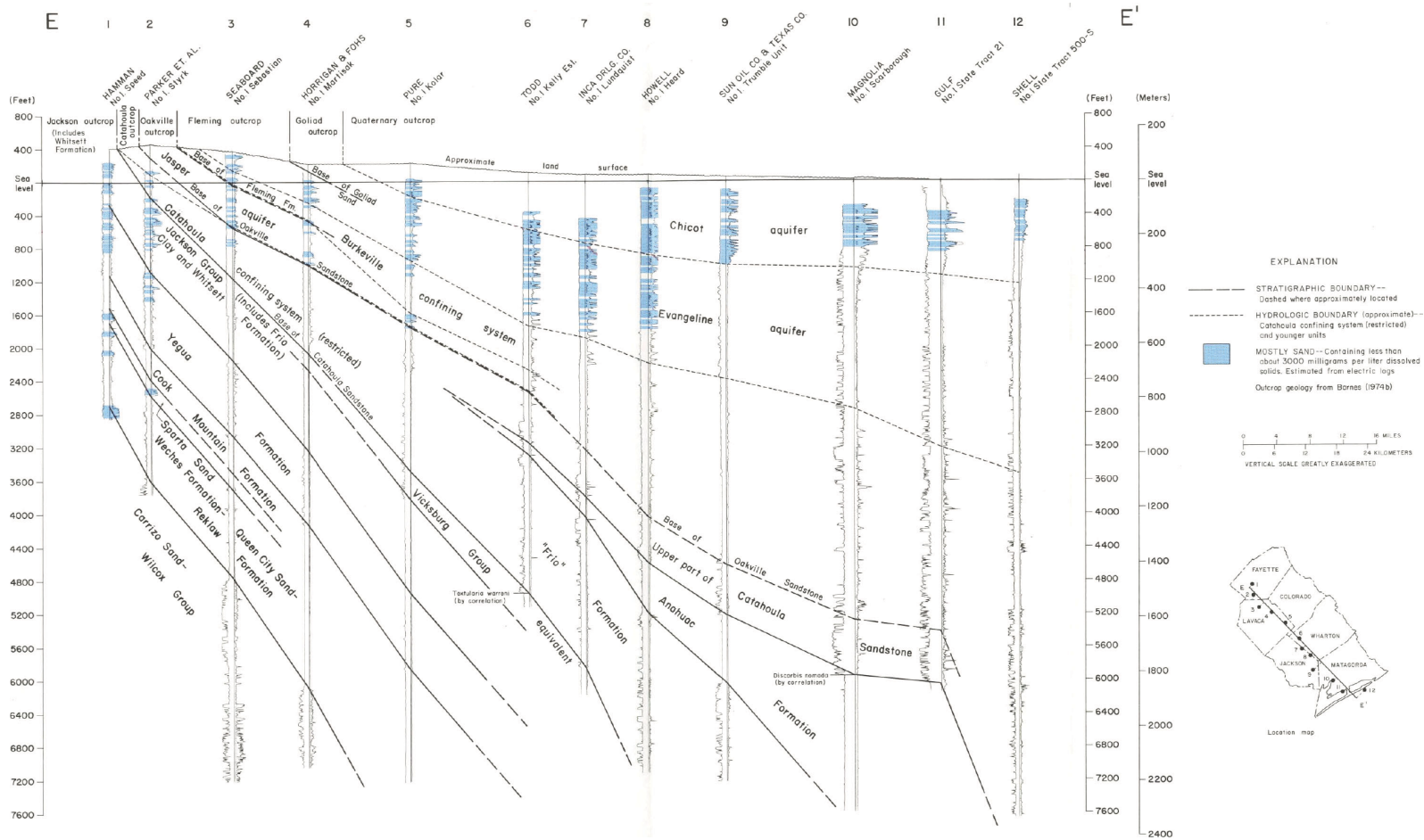


Figure 2.3.1-19 Regional Hydrogeologic Cross Section through the Gulf Coast Aquifer System (Reference 2.3.1-23)

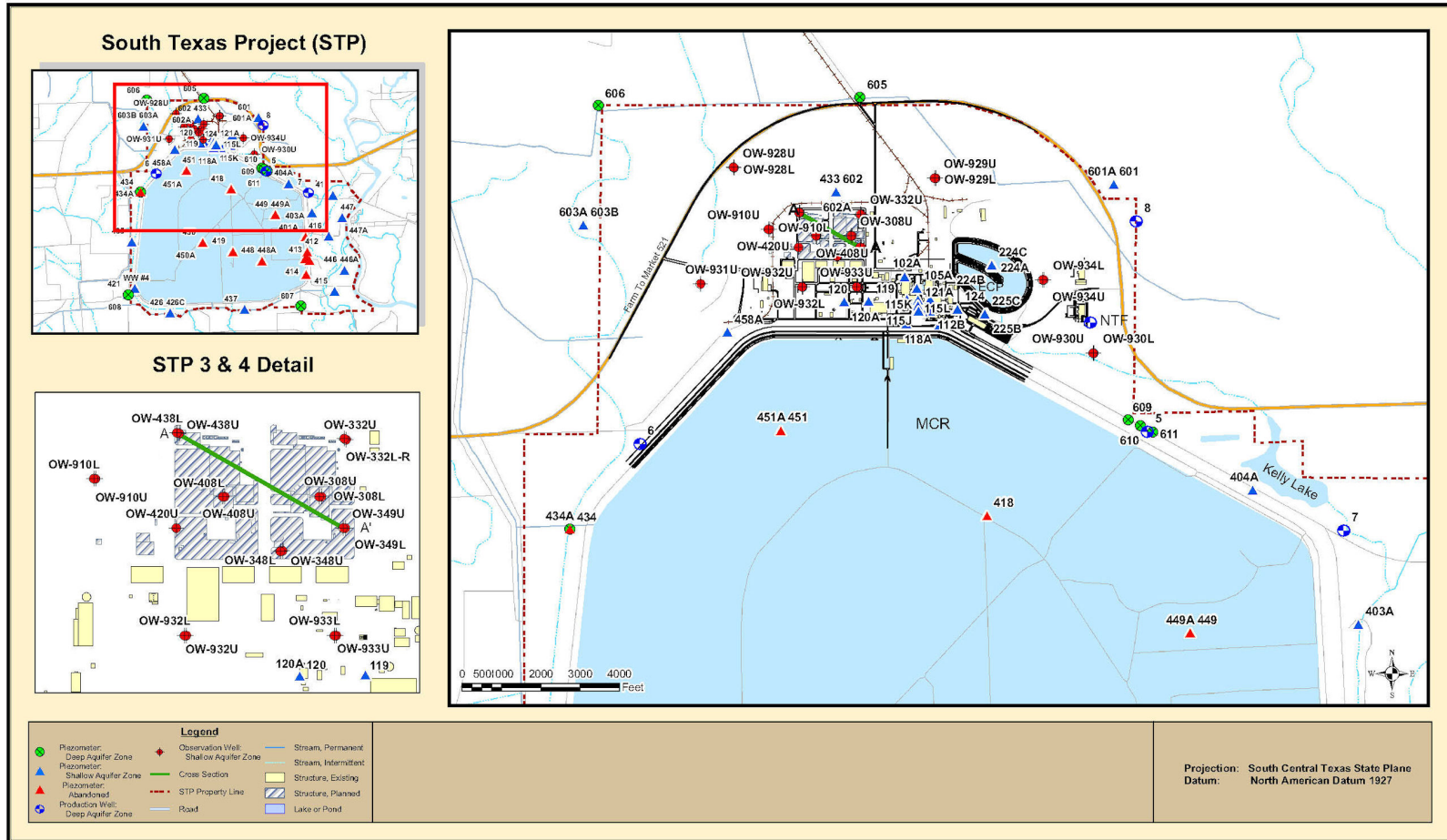
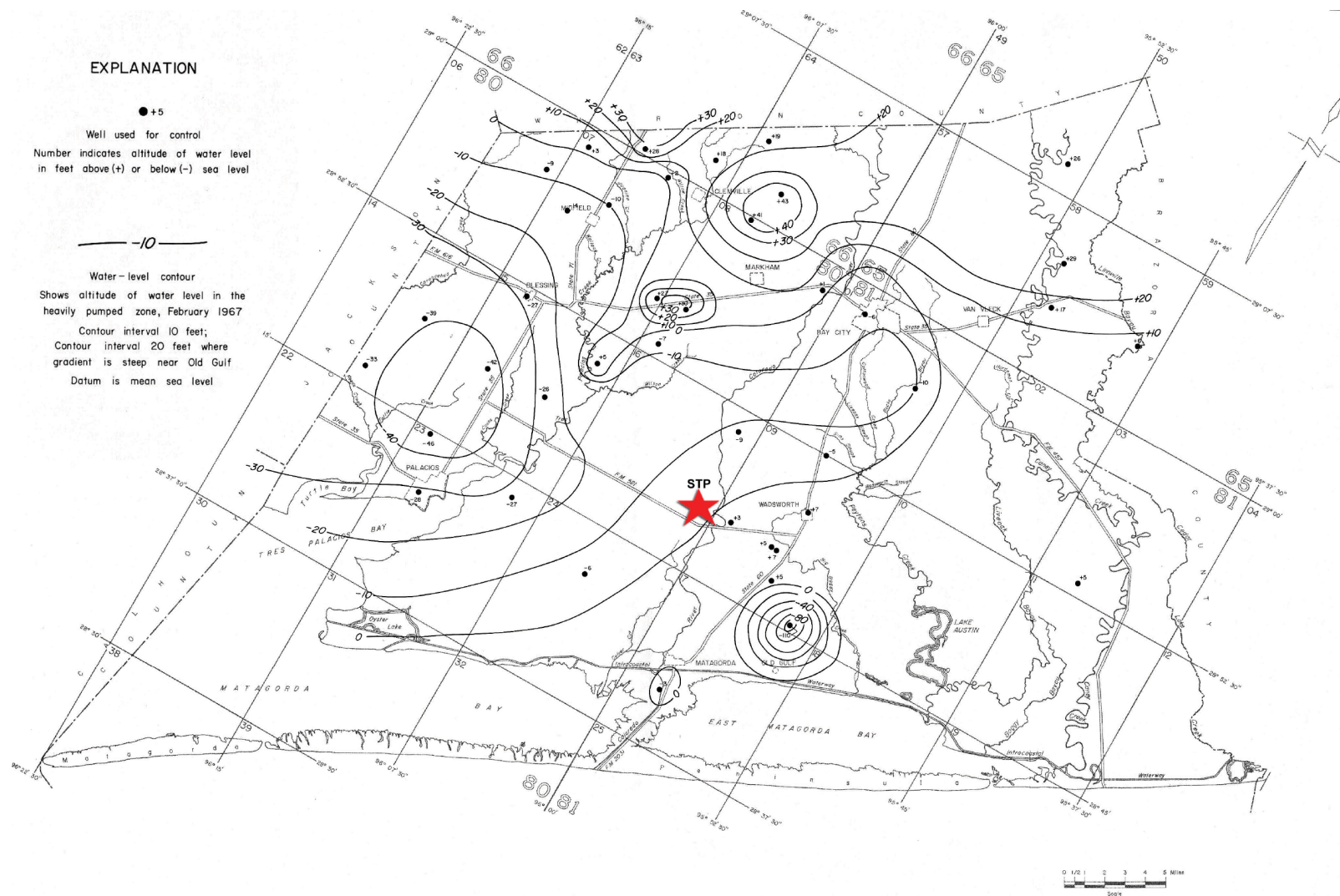


Figure 2.3.1-20 STP Site Well Locations



**Figure 2.3.1-21 Potentiometric Surface in the Deep Aquifer in Matagorda County in 1967
(modified from Reference 2.3.1-24)**

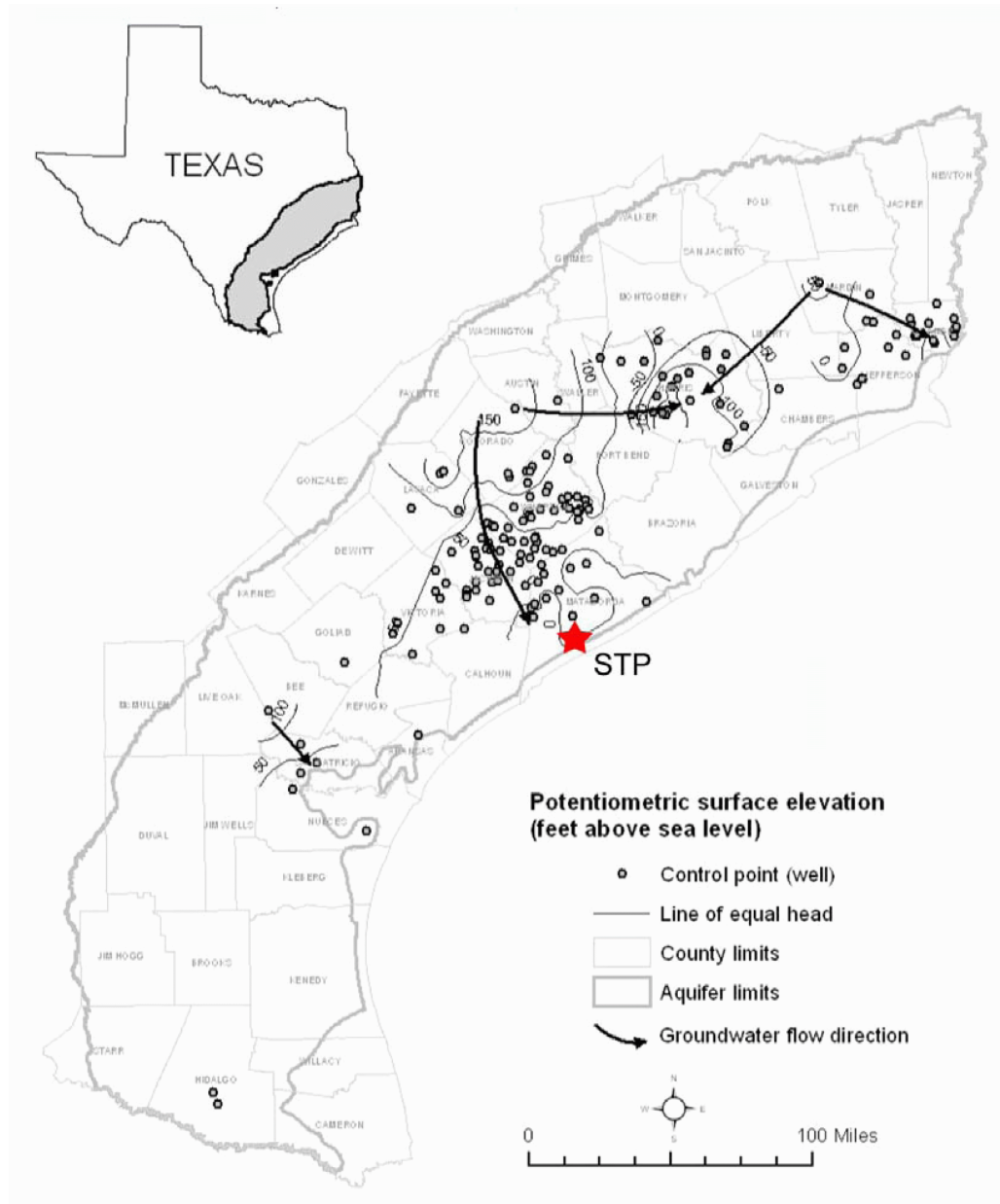


Figure 2.3.1-22 Regional Potentiometric Surface Map including Water Level Measurements from 2001 to 2005 (modified from Reference 2.3.1-26)

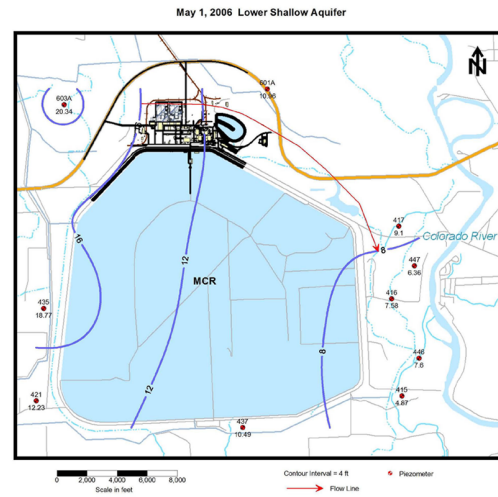
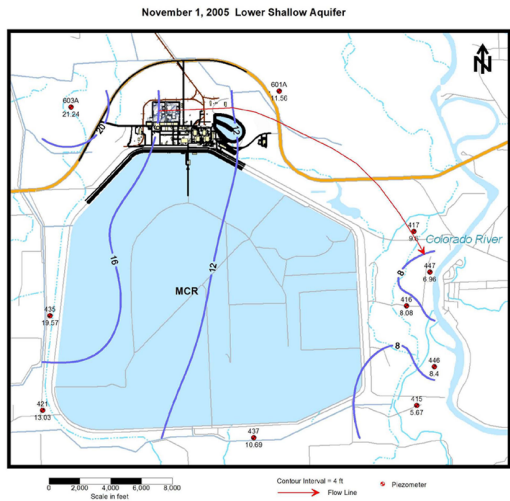
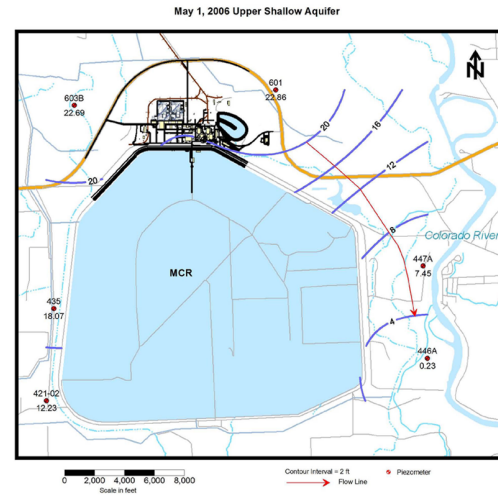
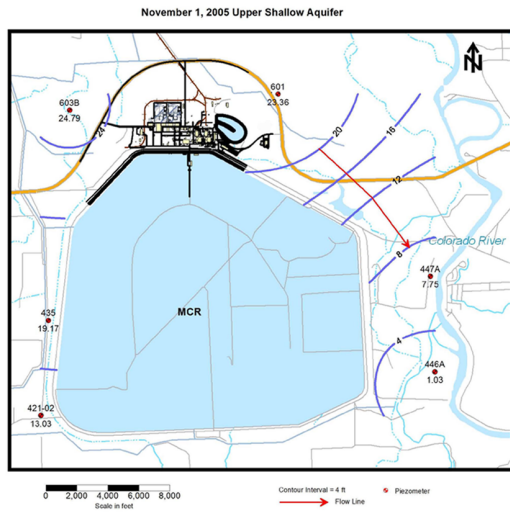


Figure 2.3.1-23 Shallow Aquifer Potentiometric Surface Maps

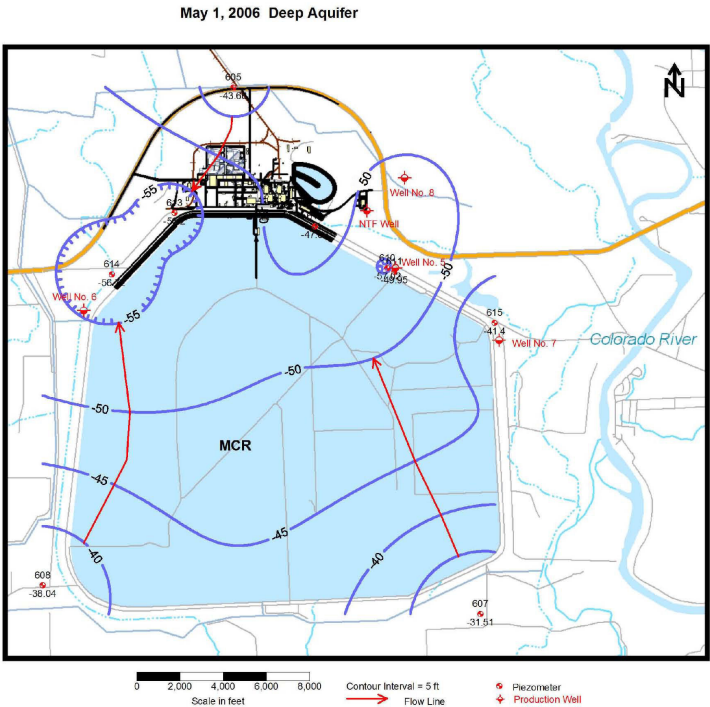
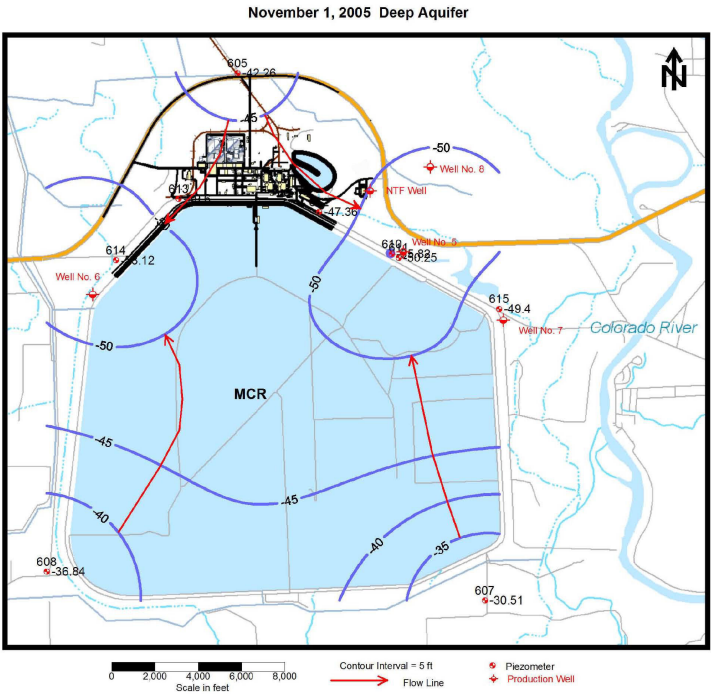
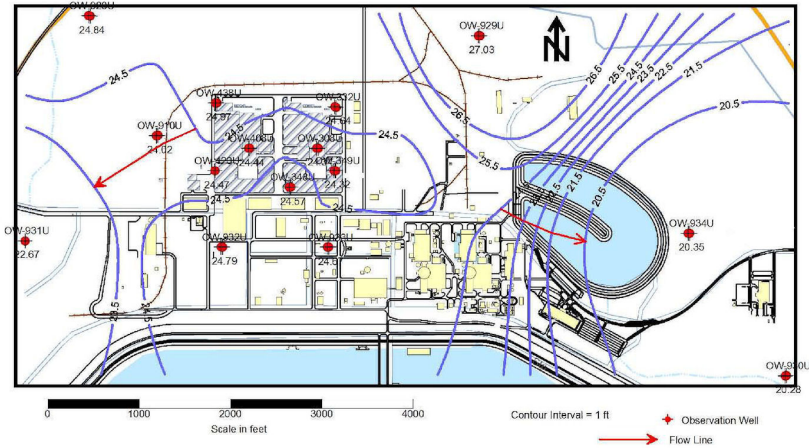
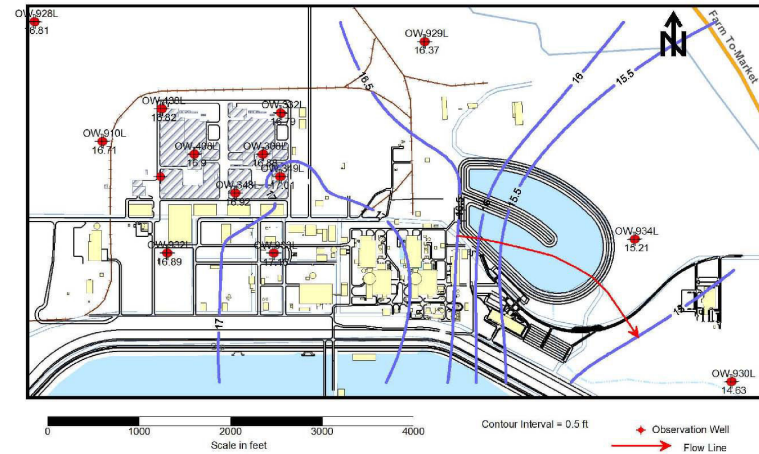


Figure 2.3.1-24 Deep Aquifer Potentiometric Surface Maps

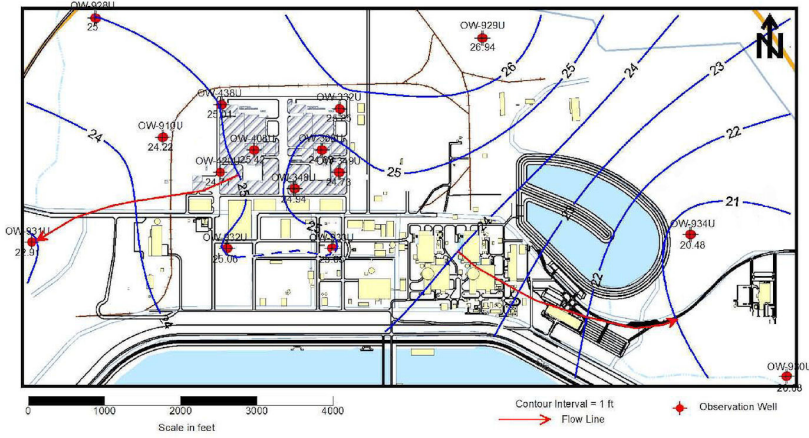
Upper Shallow Aquifer February 22, 2007



Lower Shallow Aquifer February 22, 2007



Upper Shallow Aquifer April 27, 2007



Lower Shallow Aquifer April 27, 2007

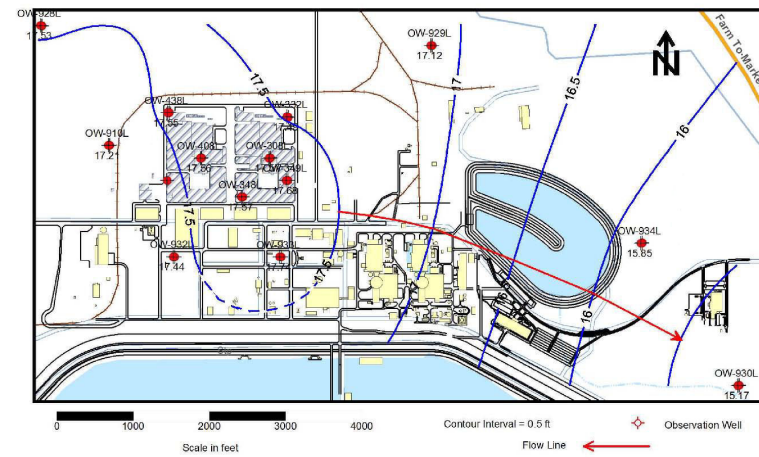


Figure 2.3.1-25 Quarterly Potentiometric Surface Maps in the STP 3 & 4 Areas

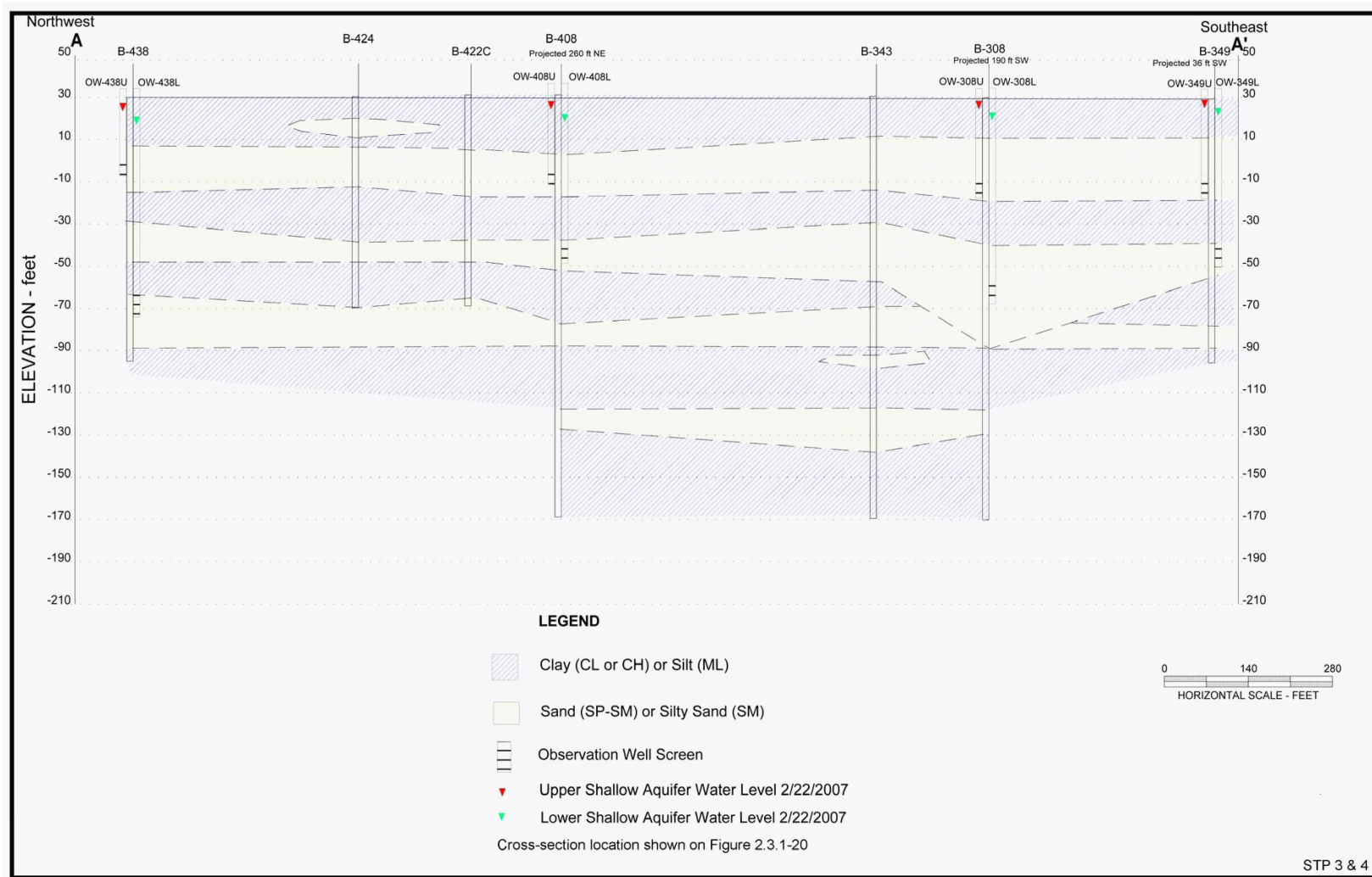


Figure 2.3.1-26 Hydrogeologic Cross-Section A-A'

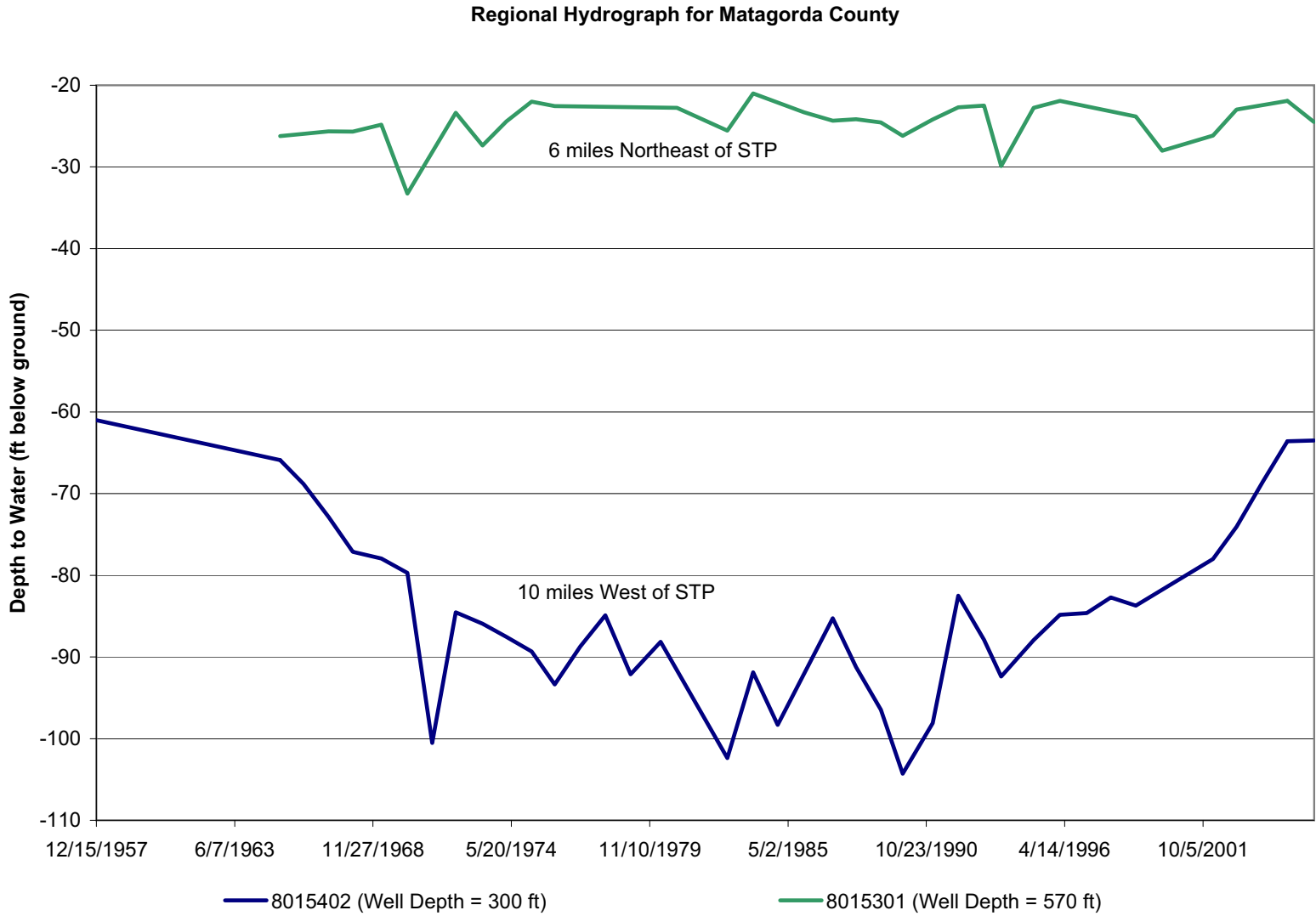


Figure 2.3.1-27 Regional Hydrographs for Deep Aquifer (Reference 2.3.1-27)

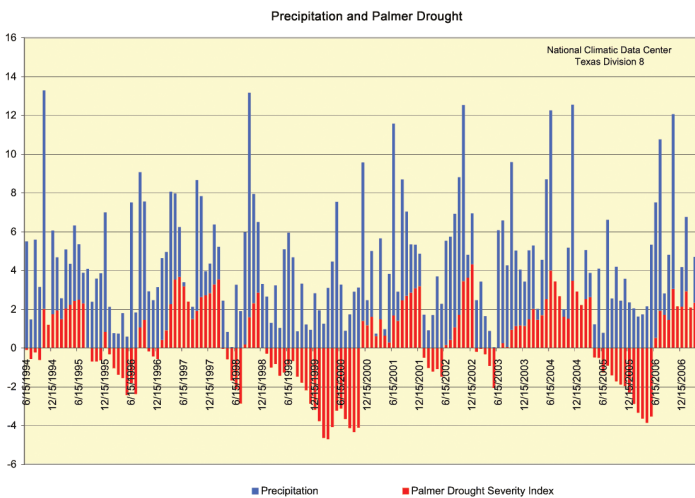
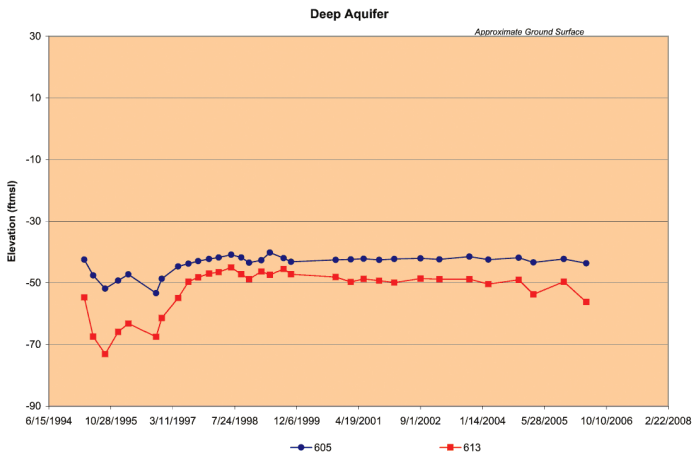
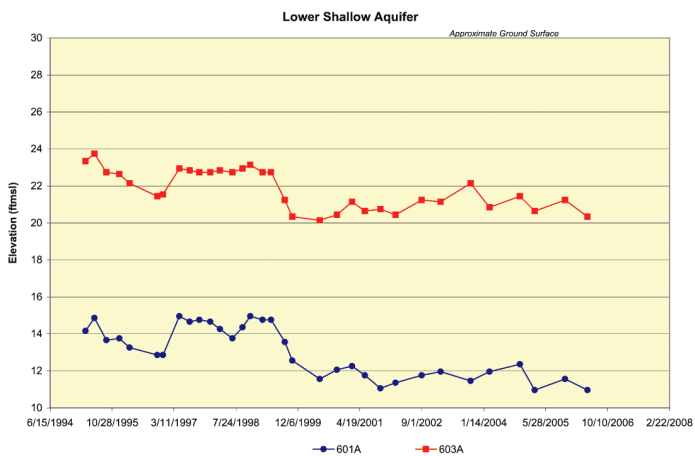
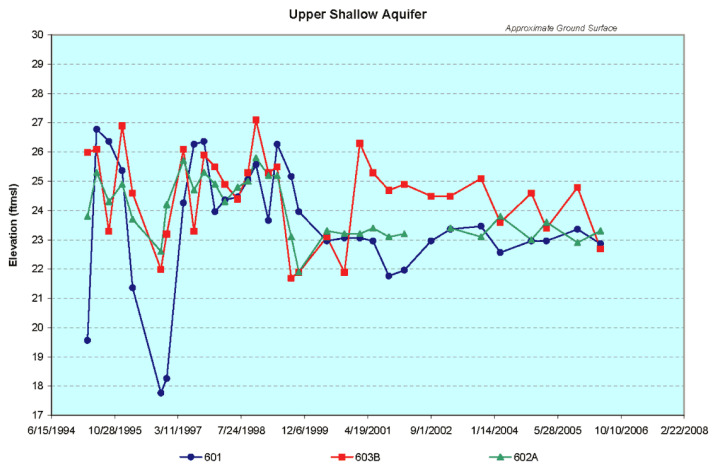


Figure 2.3.1-28 Hydrographs of Selected Wells at the STP Site

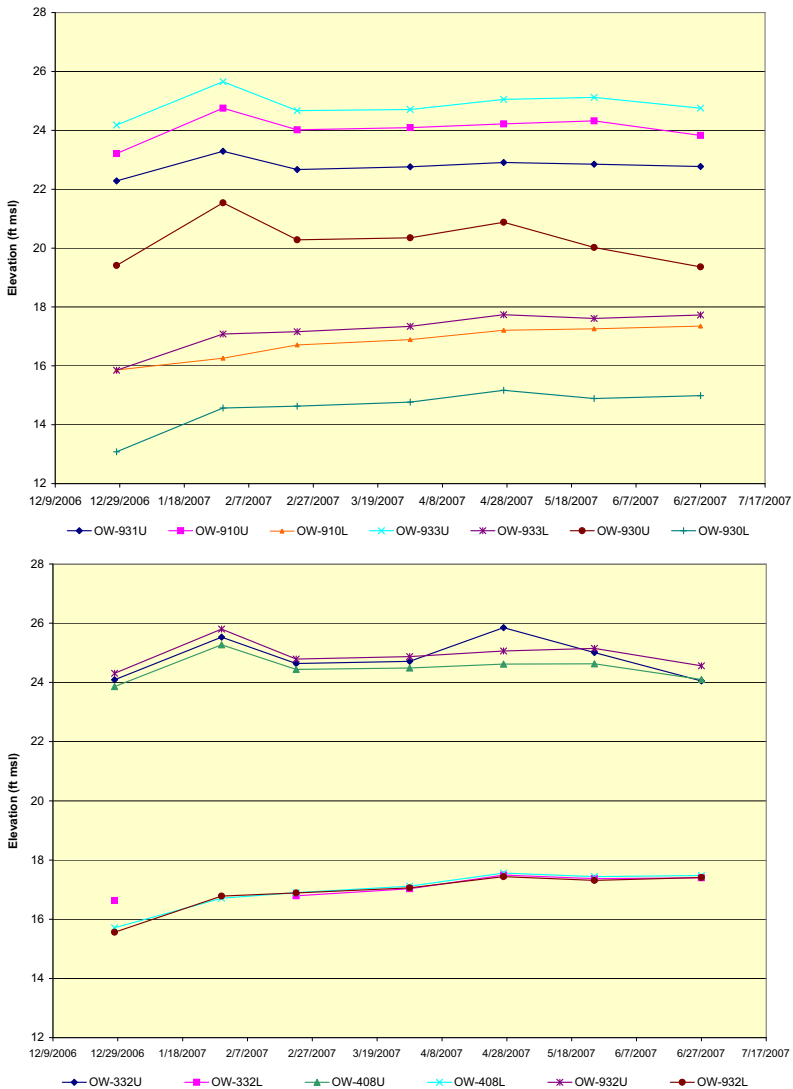
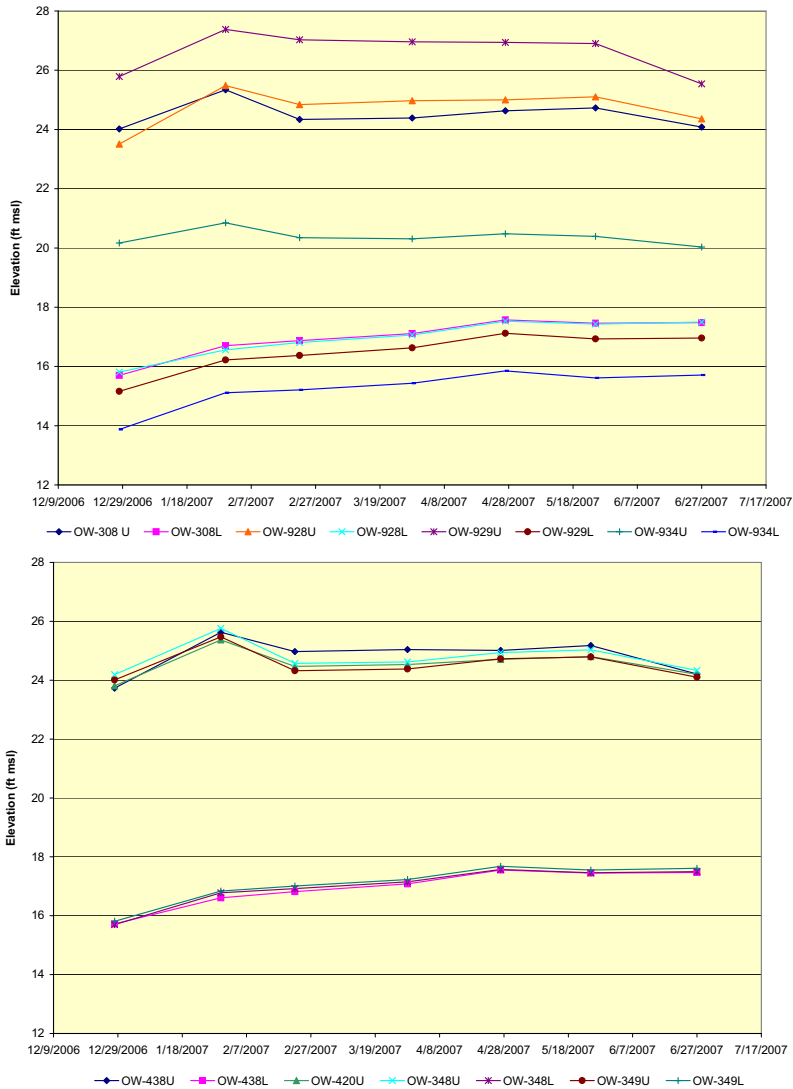


Figure 2.3.1-29 Hydrographs of Wells in the STP 3 & 4 Area

Parameter	Regional Transmissivity (gpd/ft)	STP Deep Aquifer Transmissivity (gpd/ft)	STP Shallow Aquifer Transmissivity (gpd/ft)	Regional Storage Coefficient (unitless)	STP Deep Aquifer Storage Coefficient (unitless)	STP Shallow Aquifer Storage Coefficient (unitless)
Sample Size (N)	40	3	5	6	2	4
Standard Deviation	71,936	14,526	11,620	0.0006	0.0004	0.0006
Mean	84,500	33,245	14,320	0.0008	0.0005	0.0009
Geometric Mean	63,725	31,379	9,295	0.0005	0.0004	0.0008
Median	63,800	25,533	13,000	0.0010	0.0005	0.0007

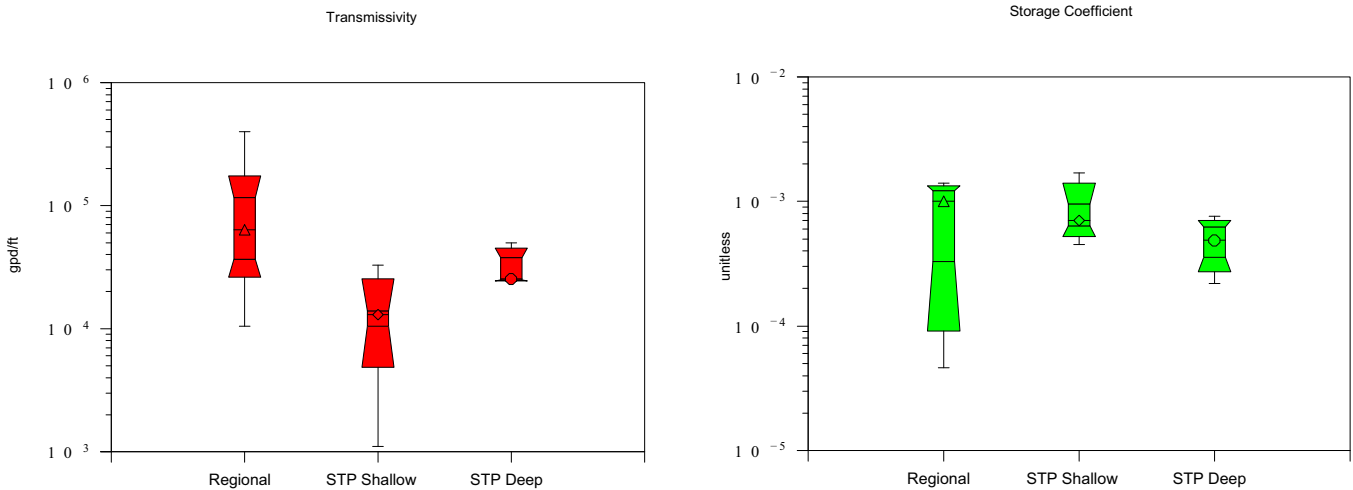


Figure 2.3.1-30 Summary of Aquifer Transmissivity and Storage Coefficient Data from Aquifer Pumping Tests