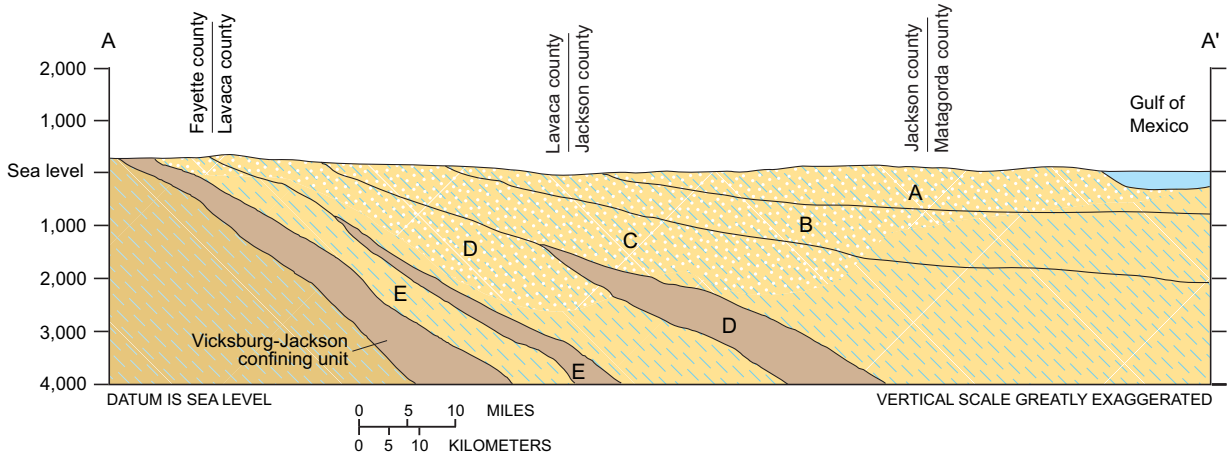

Notes:

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)

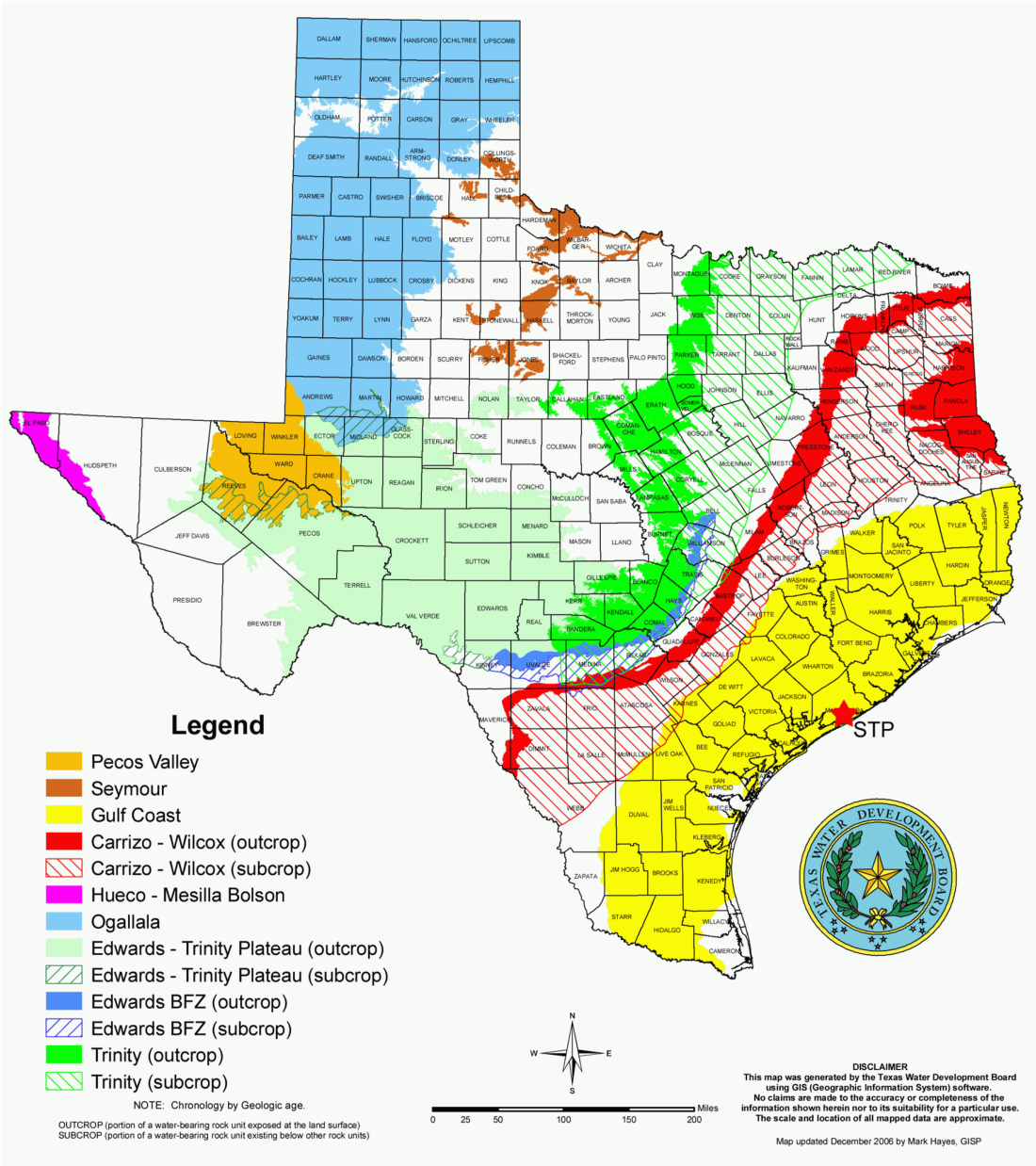

Figure 2.3.1-18 Major Aquifers of Texas (modified from Reference 2.3.1-22)

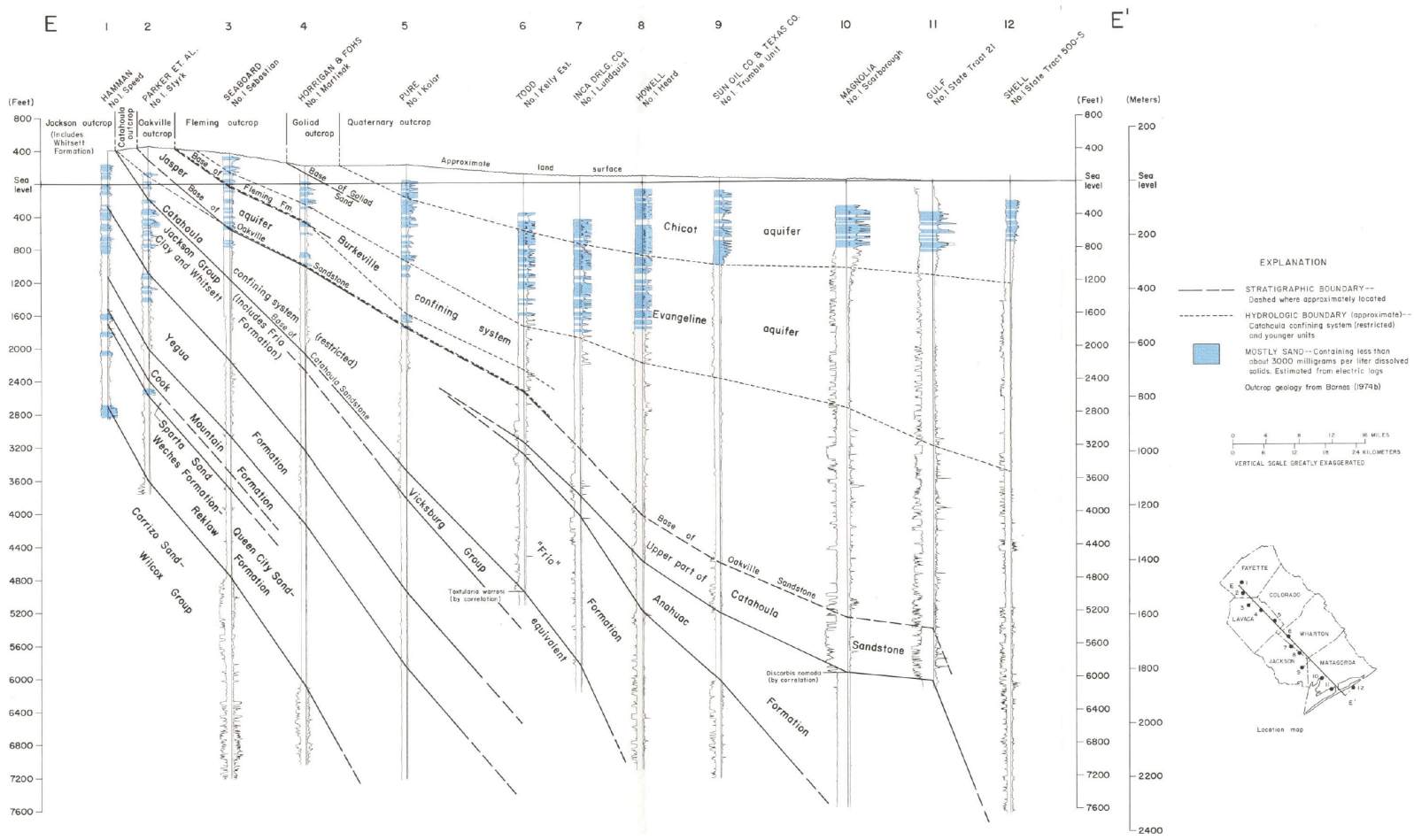

Figure 2.3.1-19 Regional Hydrogeologic Cross Section through the Gulf Coast Aquifer System (Reference 2.3.1-23)

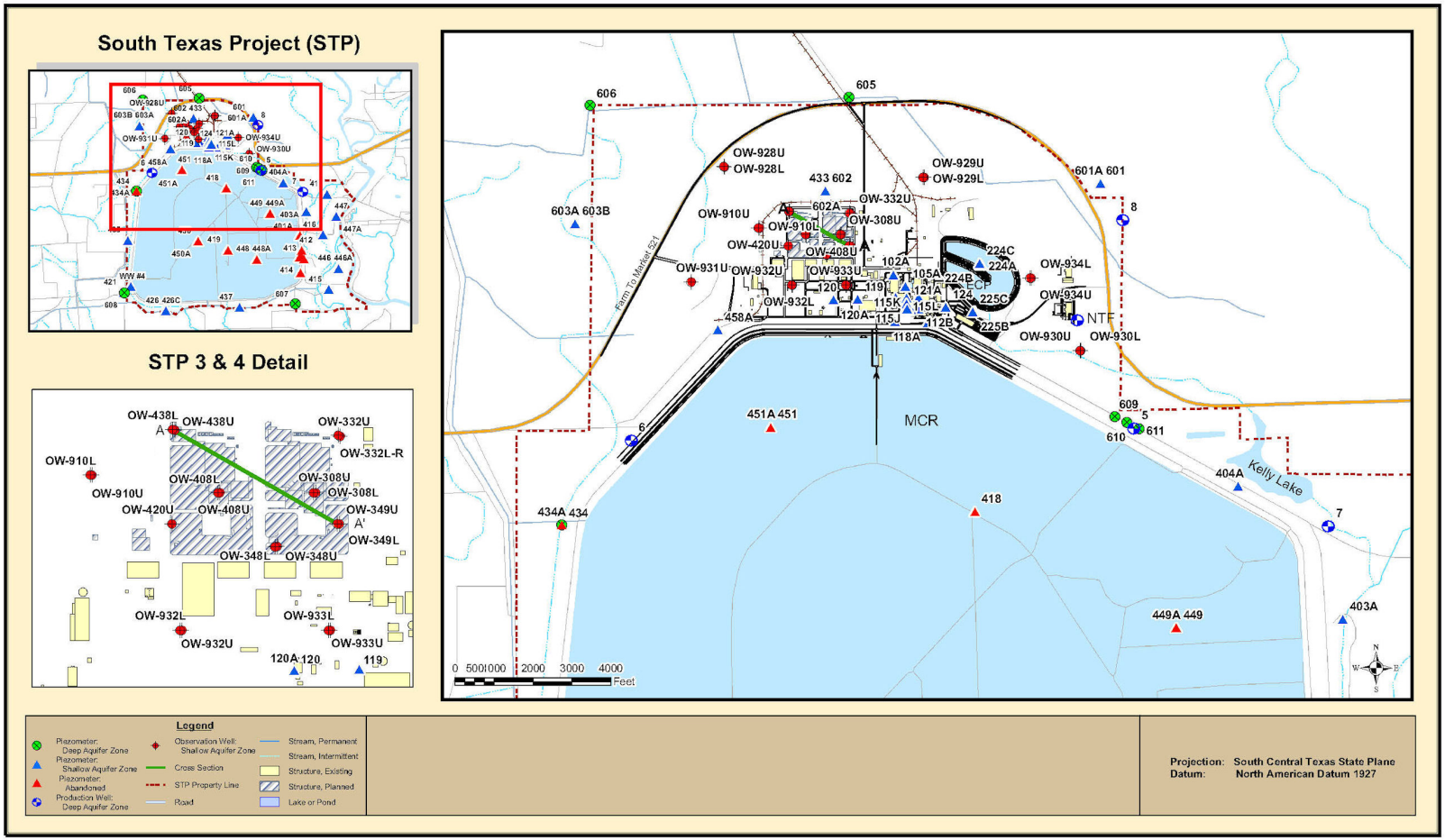

Figure 2.3.1-20 STP Site Well Locations

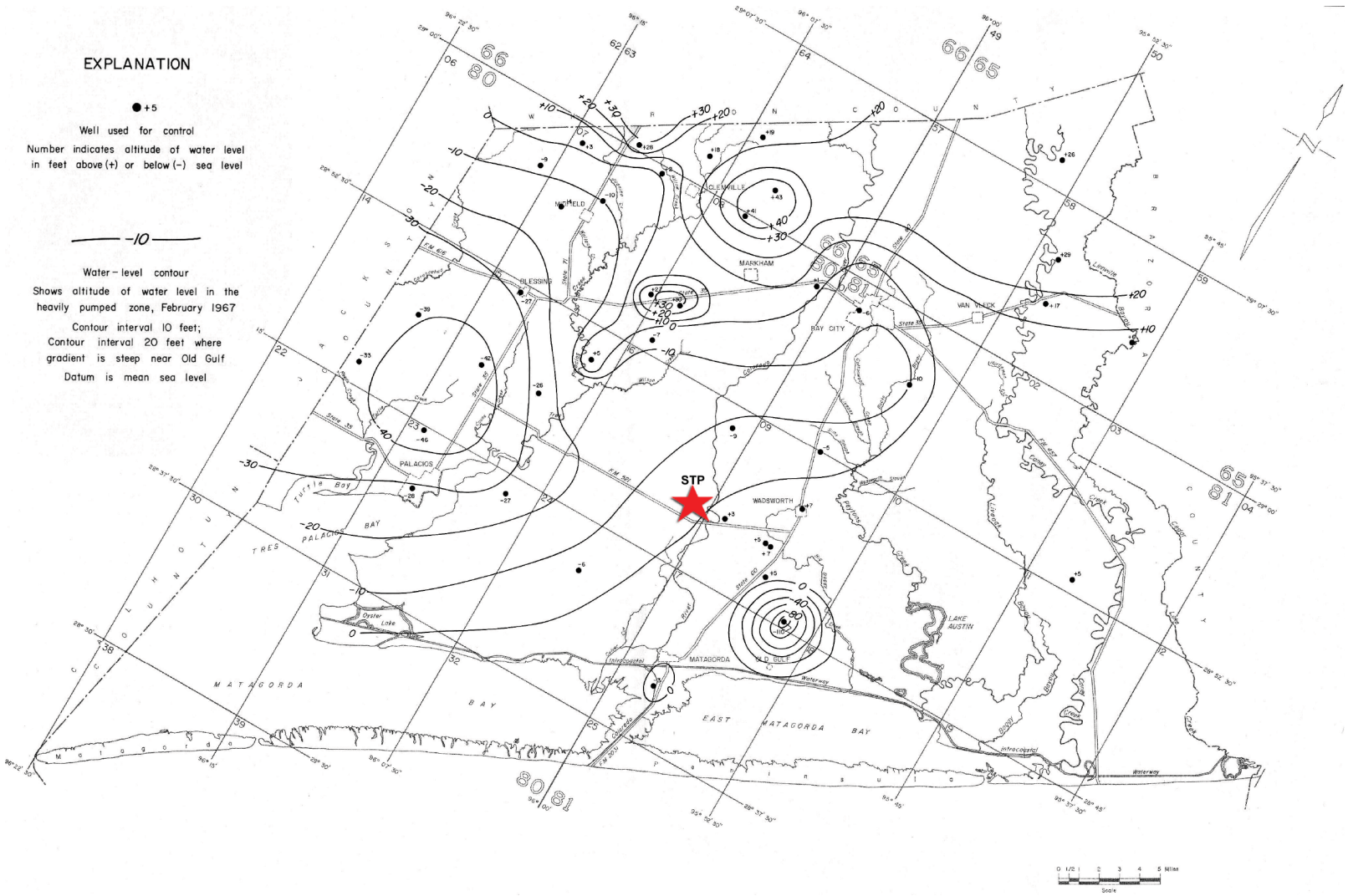

Figure 2.3.1-21 Potentiometric Surface in the Deep Aquifer in Matagorda County in 1967 (modified from Reference 2.3.1-24)

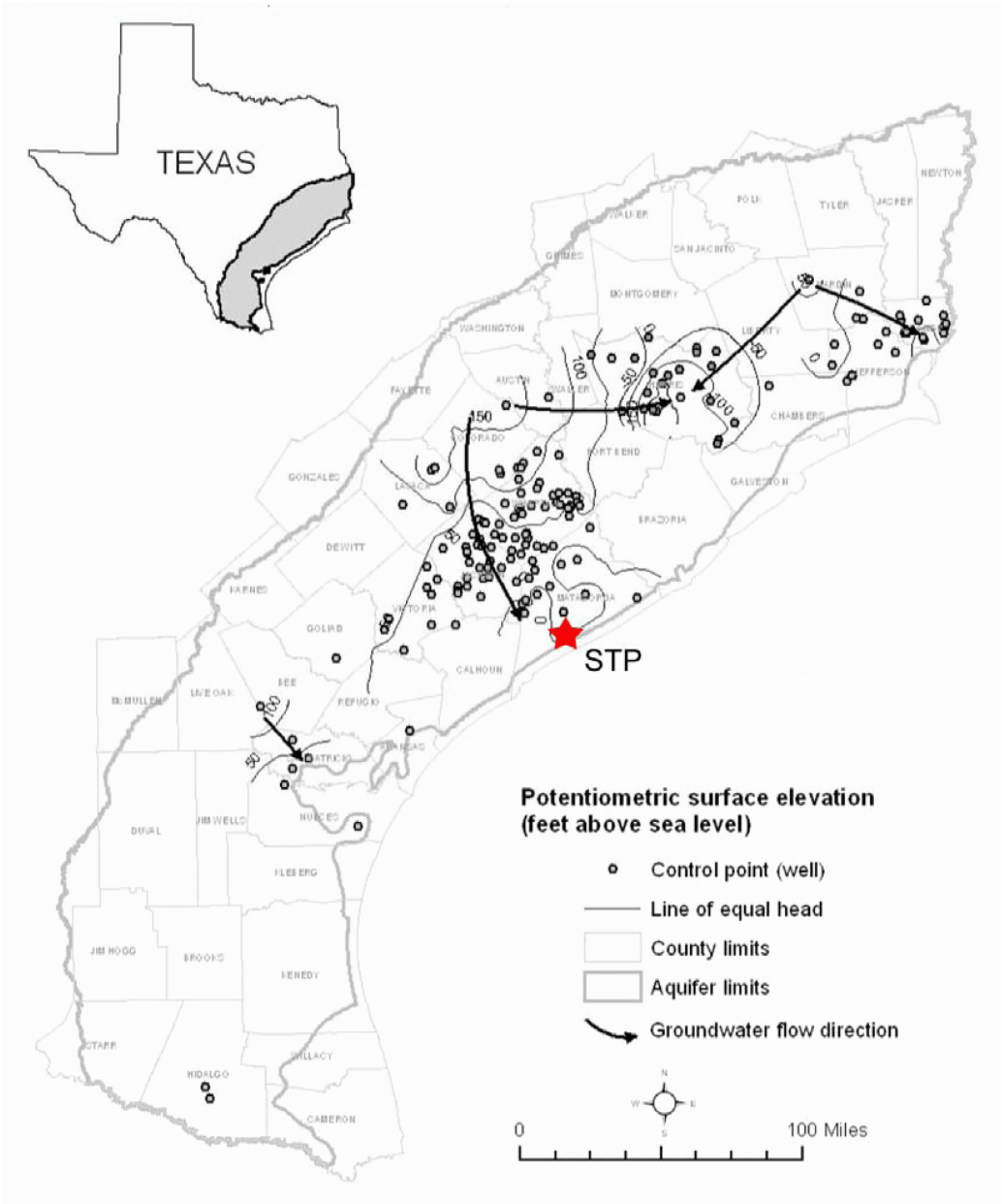

Figure 2.3.1-22 Regional Potentiometric Surface Map including Water Level Measurements from 2001 to 2005 (modified from Reference 2.3.1-26)

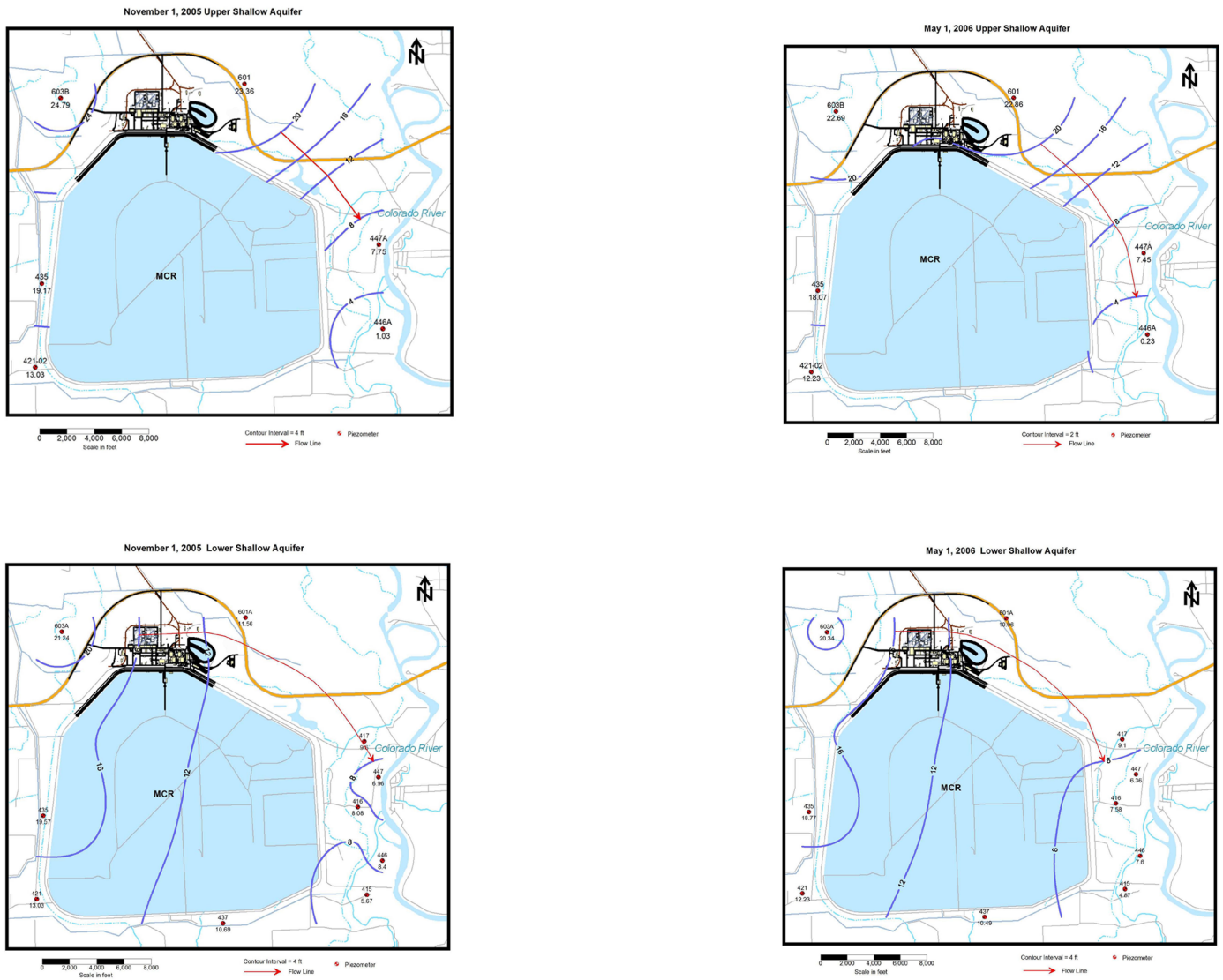

Figure 2.3.1-23 Shallow Aquifer Potentiometric Surface Maps

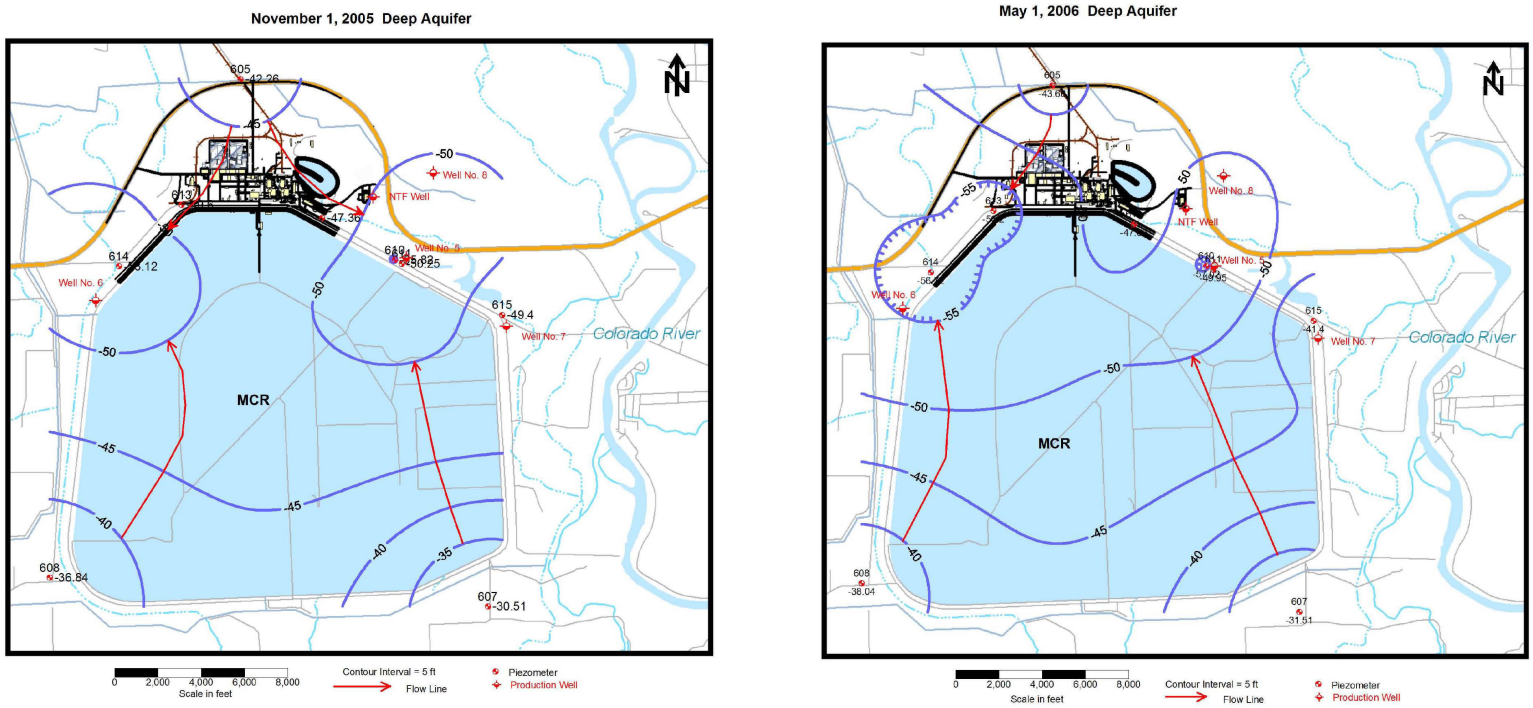

Figure 2.3.1-24 Deep Aquifer Potentiometric Surface Maps

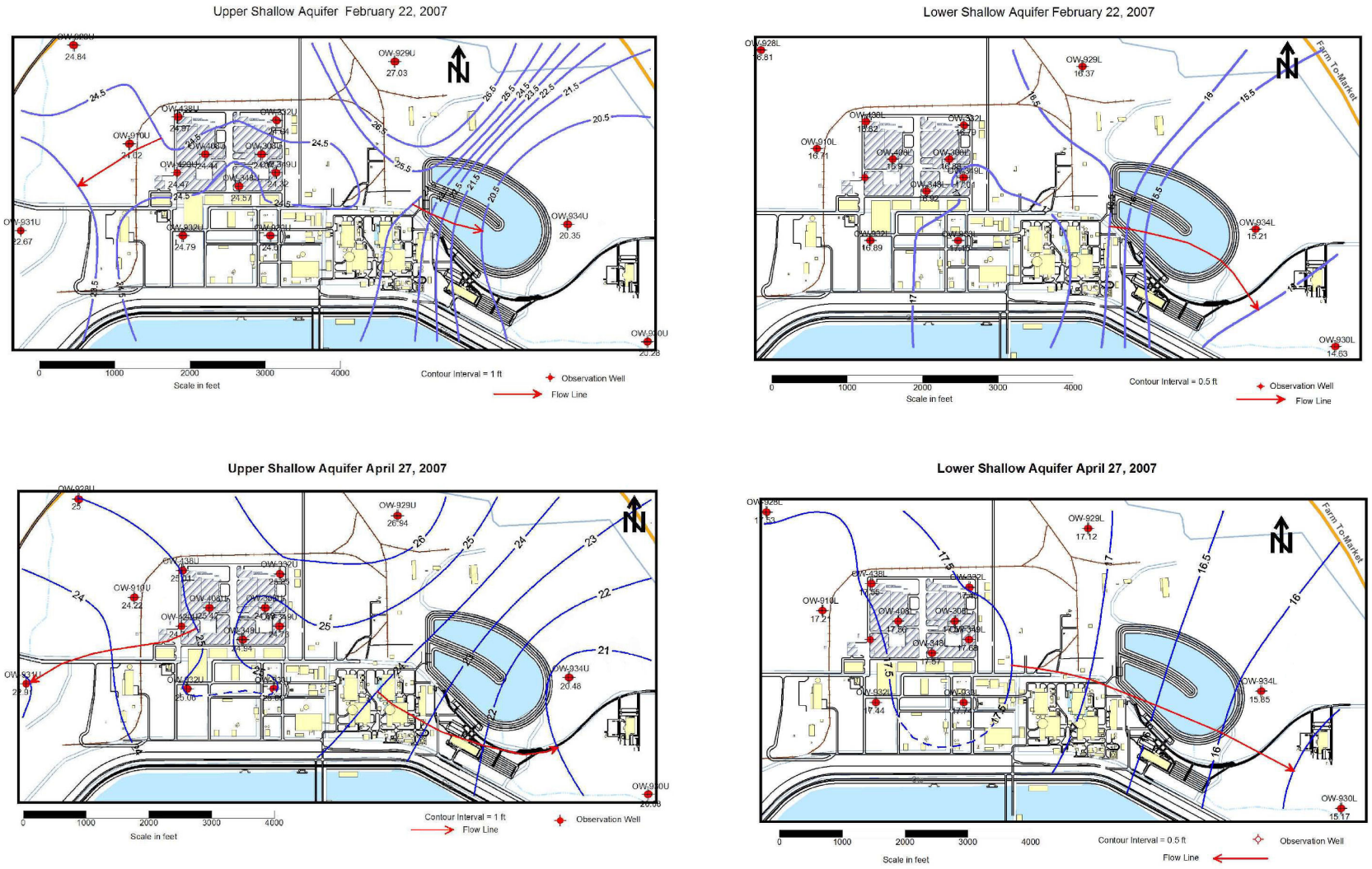

Figure 2.3.1-25 Quarterly Potentiometric Surface Maps in the STP 3 & 4 Areas

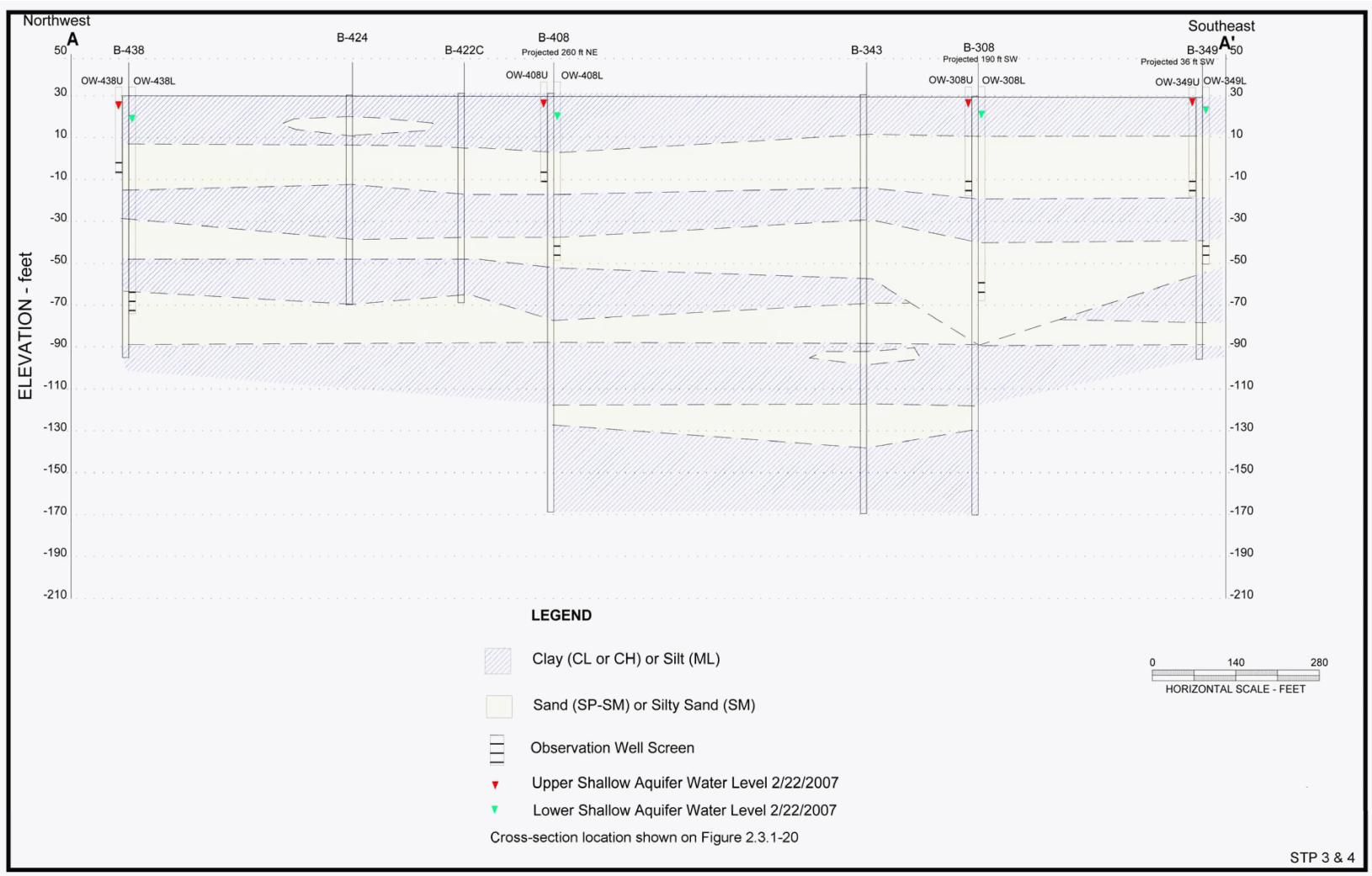

Figure 2.3.1-26 Hydrogeologic Cross-Section A-A'

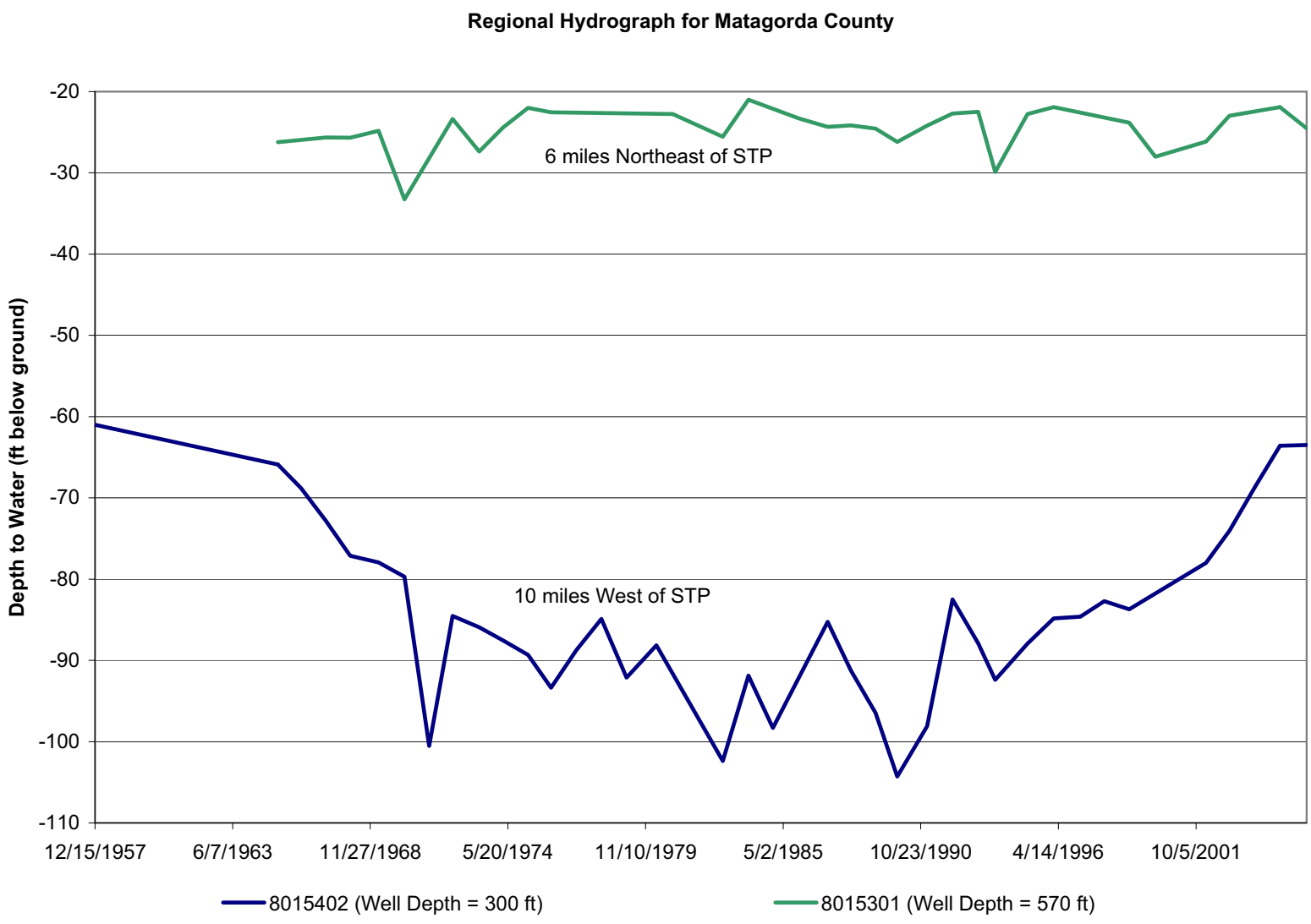

Figure 2.3.1-27 Regional Hydrographs for Deep Aquifer (Reference 2.3.1-27)

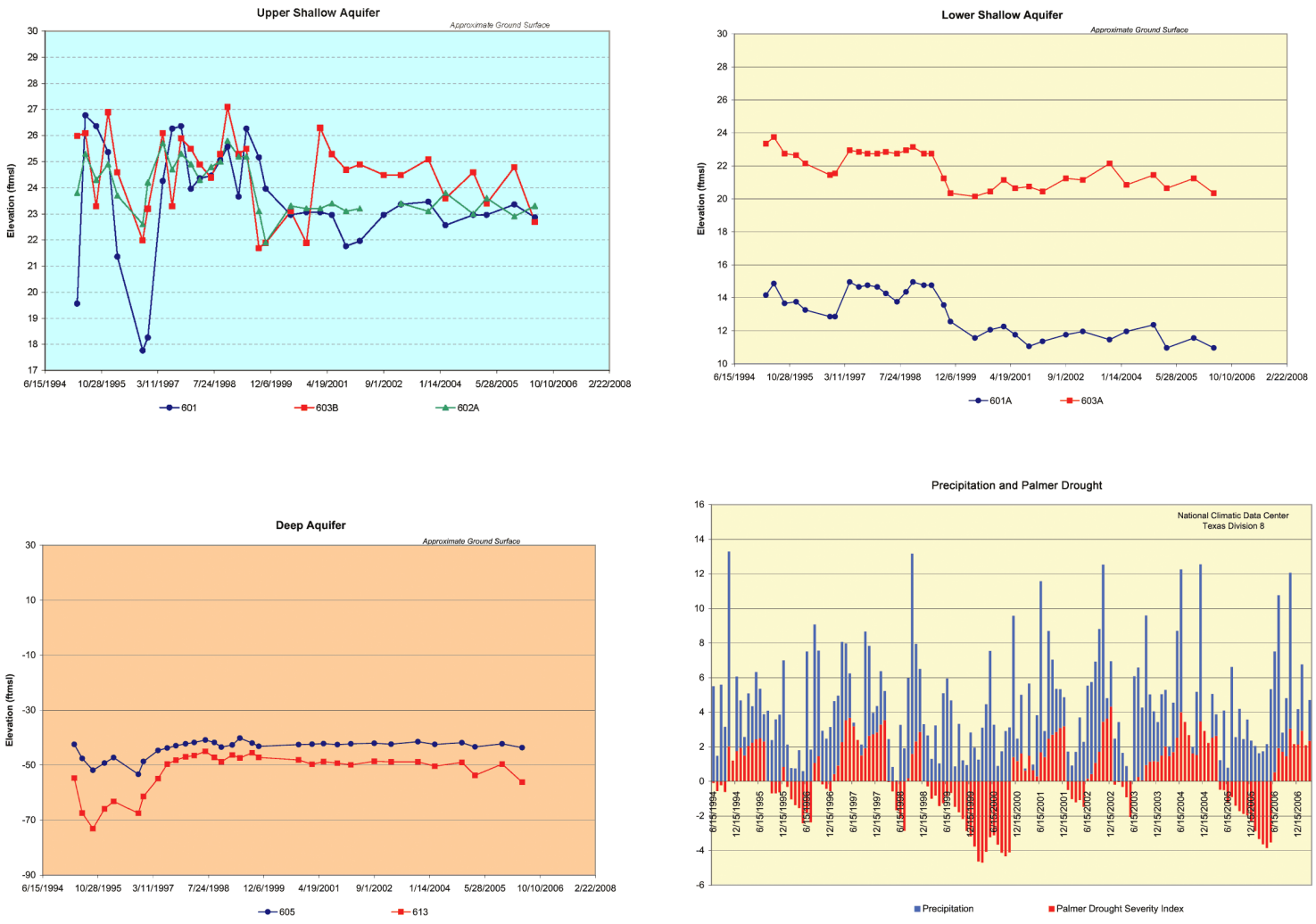

Figure 2.3.1-28 Hydrographs of Selected Wells at the STP Site

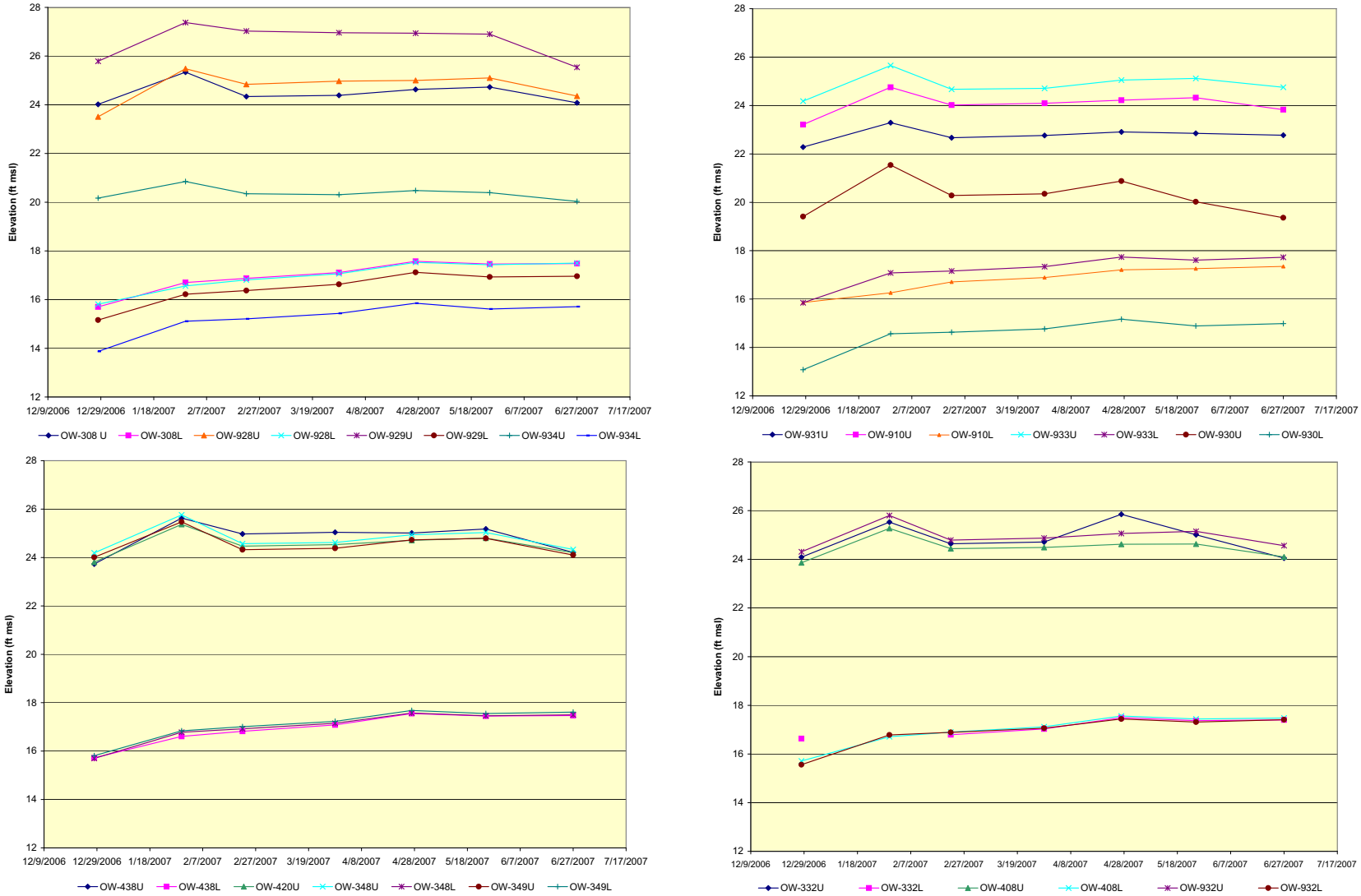

Figure 2.3.1-29 Hydrographs of Wells in the STP 3 & 4 Area

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

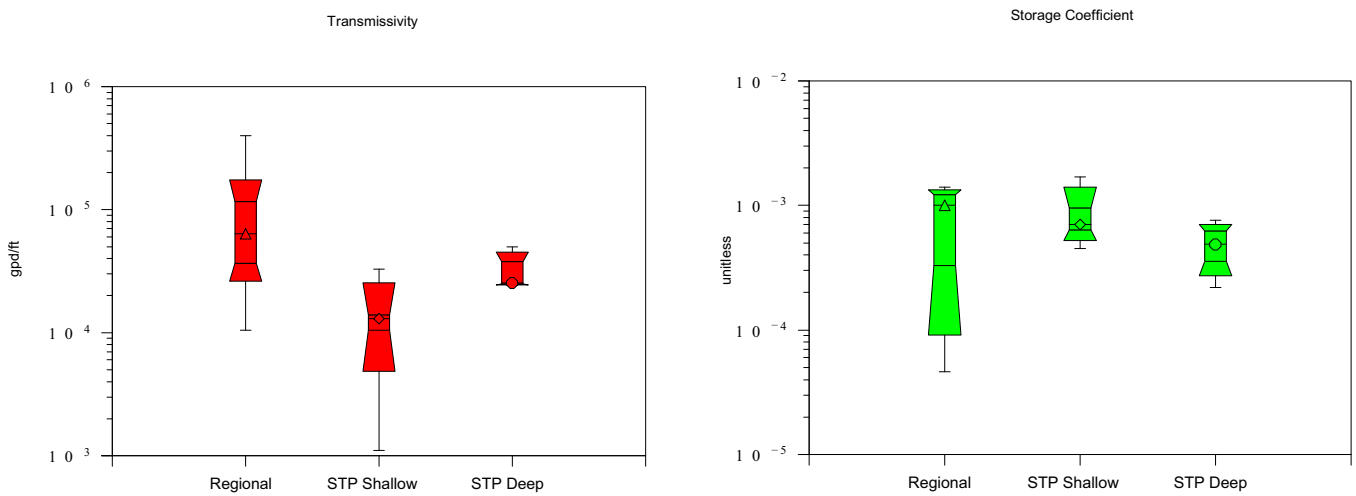

Figure 2.3.1-30 Summary of Aquifer Transmissivity and Storage Coefficient Data from Aquifer Pumping Tests