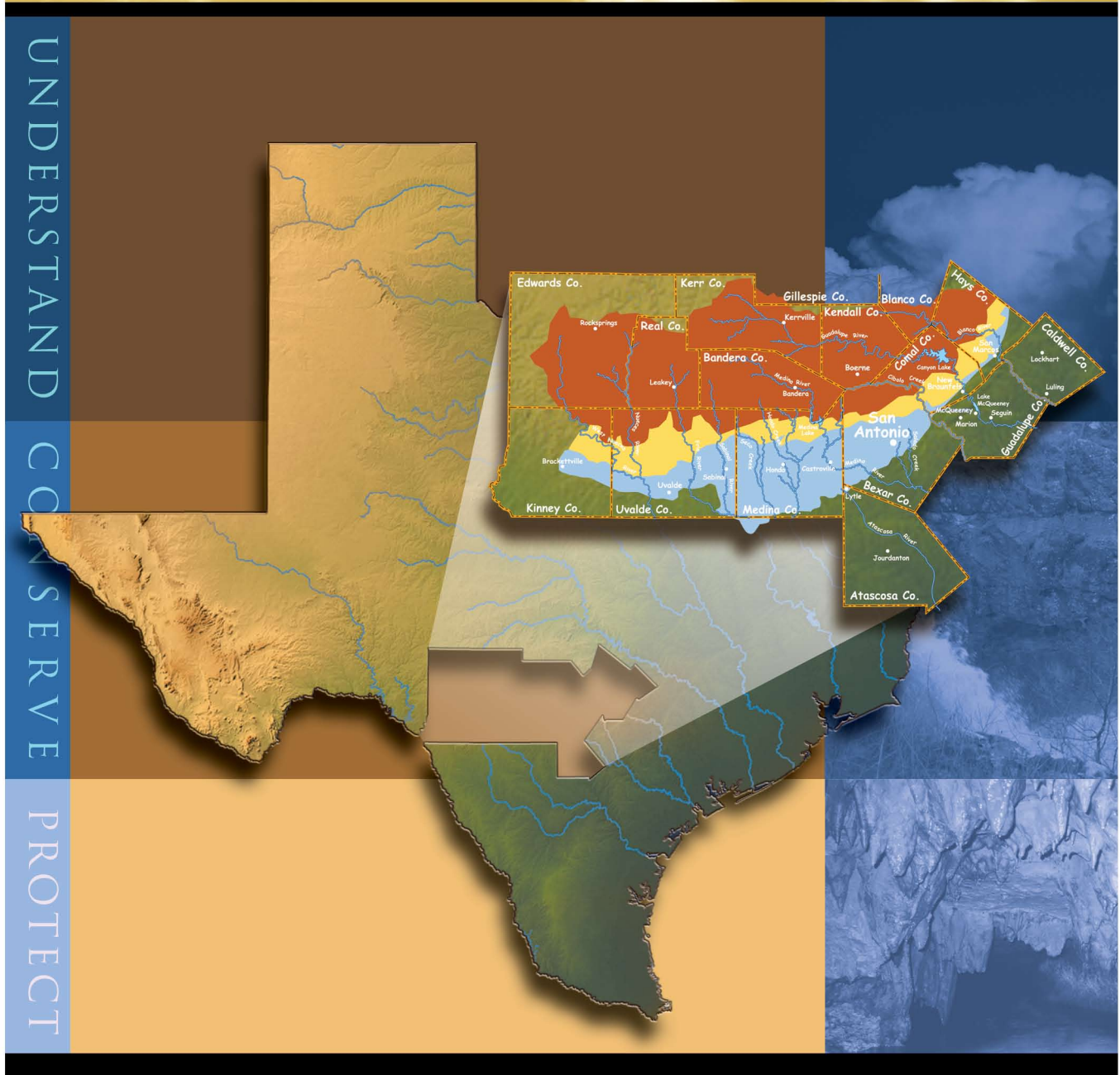


Edwards Aquifer Authority Synoptic Water Level Program 2005–2009 Water Level Data





**EDWARDS AQUIFER AUTHORITY
SYNOPTIC WATER LEVEL PROGRAM
2005–2009 WATER LEVEL DATA**

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INTRODUCTION

The Balcones Fault Zone Edwards Aquifer in south central Texas is one of the most permeable and productive aquifers in the United States. The southern segment of the aquifer, which is the subject of this report, extends from the groundwater divide near Brackettville in Kinney County, east to the city of San Antonio in Bexar County, then northeast to the groundwater divide near Kyle in Hays County—a distance of approximately 180 miles (Figure 1). The aquifer, the primary source of water for approximately two million people in the region (<http://quickfacts.census.gov/qfd/>), also provides most of the water for agriculture and industry. In addition, the aquifer discharges through a series of large springs that provide aquatic habitat for a number of threatened and endangered species. Springflow also provides a significant volume of water for downstream interests in the Guadalupe River Basin.

The Edwards Aquifer Authority (EAA) was created by the Texas Legislature in 1993 to succeed the Edwards Underground Water District (EUWD) as a special regional water management district in charge of the San Antonio segment of the Edwards Aquifer. The EAA conducts a variety of studies so that the characteristics of the Edwards Aquifer can be better understood, thus providing the technical basis for effective management and protection of the aquifer. The EAA's jurisdictional area encompasses all or parts of eight counties—Uvalde, Medina, Atascosa, Bexar, Comal, Guadalupe, Hays, and Caldwell (Figure 1).

The Legislature mandated that the EAA take all necessary measures to effectively manage the resource to ensure domestic and municipal water supplies, to provide water supplies for agriculture and industry, to protect terrestrial and aquatic life, and to sustain economic development of the region. To accomplish these goals, the EAA is vested with all of the “powers, rights, and privileges necessary to manage, conserve, preserve, and protect the aquifer, and to increase the recharge of, and prevent the waste or pollution of water in, the aquifer” [*the Edwards Aquifer Authority Act, as amended. The Act is available in pdf format at www.edwardsaquifer.org.*] Pursuant to this mandate, the EAA embarked on the Edwards Aquifer Optimization Program (EAOP). This program included a series of interrelated,

mission-directed biologic and hydrogeologic research studies known as Optimization Technical Studies (OTS).

The Synoptic Water Level Program (SWLP) was conceived by the OTS Technical Advisory Group (TAG) as a support study designed to “provide data for water level contour maps, flowpath studies, and computer model construction” (Todd Engineers, 1999). Additional details regarding the origin of the SWLP are discussed in the previous SWLP report (Edwards Aquifer Authority, 2006). The EAA currently coordinates the SWLP under the Aquifer Science Research Plan (ASRP) in support of the MODFLOW aquifer model and Hydrologic Simulation Program Fortran (HSPF) recharge model (Edwards Aquifer Authority, 2010). The EAA also coordinates the focused SWLP in support of these modeling efforts, to improve overall understanding of groundwater gradients in the aquifer and to develop a better understanding of aquifer flowpaths (Edwards Aquifer Authority, 2010). The regional synoptic measurements reported in this study are taken within the southern segment of the Balcones Fault Zone Edwards Aquifer in Kinney, Uvalde, Medina, Atascosa, Bexar, Comal, Guadalupe, and Hays counties. Additional measurements from parts of the Barton Springs segment of the Edwards Aquifer in Hays County, under the jurisdiction of the Barton Springs Edwards Aquifer Conservation District, are also included in this report.

Many synoptic studies have been performed prior to this investigation. Maclay et al. (1980) published a comprehensive study focusing on information regarding aquifer parameters, such as recharge, discharge, specific capacity, and aquifer test data, in addition to synoptic water level data. The Maclay study also includes a potentiometric (water level contour) map covering approximately the same geographic area as that of this investigation. Synoptic investigations prior to the EAA's work are listed in Table 1. These previous investigations include additional aquifer parameter data and may be more comprehensive.

In the first five years of the EAA SWLP (1999–2004), staff from the EAA, San Antonio Water System (SAWS), USGS, and Barton Springs/Edwards Aquifer Conservation District (BS/EACD) measured aquifer

water levels in approximately 220 wells over the Edwards Aquifer region, between one and three times annually within a one-week period. Synoptic measurements made between 1999 and 2004 are published in the *Edwards Aquifer Authority Synoptic Water Level Program 1999–2004 Report*. The report is available through the EAA website, <http://www.edwardsaquifer.org/files/SWLP%20Final%20Report.pdf>. The current report, covering the period from 2005 through 2009, documents more individual water level measurement events (13 events total) than do other listed investigations.

This study involves regional synoptic water level events and a series of focused synoptic events. Focused synoptic events are essentially synoptic studies limited to a smaller geographic area, in which detail can be enhanced by increasing the number of data points for a subset of the region. Staff from the EAA, SAWS, and BS/EACD measured aquifer water levels in more than 245 wells (on average) during the regional events and more than

124 wells (on average) in Comal and Hays counties during the focused events.

The purpose of this report is to provide interested parties a source of synoptic water level data (Appendices A and B) and potentiometric surface maps (Appendix C) that display an interpretation of data for each event. Additionally, the synoptic data provide a useful support tool for other studies related to the understanding of aquifer flowpaths and model development.

Each of the SWLP events documented herein is represented as a potentiometric surface map. Each map is produced from data point (water level) values without consideration of other parameters, such as recharge, discharge, or geologic structure, which may cause localized variations in the potentiometric surface. These parameters are summarized in the EAA annual *Hydrologic Data Report*, available in pdf format from the EAA Website at www.edwardsaquifer.org.

Table 1. Index of Previous Synoptic Water Level Maps for the San Antonio Segment of the Balcones Fault Zone Edwards Aquifer

Date of Map	Area Covered (County or Counties)	Source of Information
1930*	Uvalde and Medina	Sayre (1936)
October 1934*	Bexar County and portions of Medina and Comal	Livingston et al. (1936)
October 1934*	Bexar	Arnow (1959)
January 1947*	Kinney, Uvalde, Medina, Bexar, Comal, and Hays	Klemt et al. (1975)
January 1951*	Medina	Holt (1959)
January 1952*	Kinney, Uvalde, Medina, Bexar, Comal, and Hays	Petitt and George (1956)
January 1952*	Bexar	Arnow (1959)
August 1952*	Medina, Bexar, and Comal	Lang (1954)
August 1954*	Bexar	Arnow (1959)
August 1954*	Kinney, Uvalde, Medina, Bexar, Comal, and Hays	Petitt and George (1956)
August 1956*	Kinney, Uvalde, Medina, Bexar, Comal, and Hays	Garza (1962)
January 1957*	Bexar	Arnow (1959)
March 1958*	Kinney, Uvalde, Medina, Bexar, Comal, and Hays	Garza (1962)
January 1961*	Kinney, Uvalde, Medina, Bexar, Comal, and Hays	Garza (1966)
January 1972*	Kinney, Uvalde, Medina, Bexar, Comal, and Hays	Klemt et al. (1975)
February 1972*	Kinney, Uvalde, Medina, Bexar, Comal, and Hays	USGS Files—San Antonio Subdistrict
June 1972*	Kinney, Uvalde, Medina, Bexar, Comal, and Hays	USGS Files—San Antonio Subdistrict
February 1973*	Kinney, Uvalde, Medina, Bexar, Comal, and Hays	USGS Files—San Antonio Subdistrict
July 1973*	Kinney, Uvalde, Medina, Bexar, Comal, and Hays	USGS Files—San Antonio Subdistrict
February 1974*	Kinney, Uvalde, Medina, Bexar, Comal, and Hays	USGS Files—San Antonio Subdistrict
July 1974*	Kinney, Uvalde, Medina, Bexar, Comal, and Hays	USGS Files—San Antonio Subdistrict
July 1975*	Kinney, Uvalde, Medina, Bexar, Comal, and Hays	USGS Files—San Antonio Subdistrict
February 1976*	Kinney, Uvalde, Medina, Bexar, Comal, and Hays	USGS Files—San Antonio Subdistrict
August 1976*	Kinney, Uvalde, Medina, Bexar, Comal, and Hays	USGS Files—San Antonio Subdistrict
December 1980	Kinney, Uvalde, Medina, Bexar, Comal, and Hays	USGS Files—Austin
September 2006	Kinney, Uvalde, Medina, Bexar, Comal, and Hays	Edwards Aquifer Authority
December 2007	Travis and portions of Hays counties	Barton Springs Edwards Aquifer Conservation District
April 2010	Hays and Travis counties	Larry Land, HDR Engineering, Inc. (2010)

*Source: Maclay et al. (1980), Table 3.

Of the 13 SWLP events covered in this report, three events (October 2005, July 2007, and July 2009) plot the recharge and artesian zones of the aquifer as separate data sets and are referred to as two-system maps. These events are plotted as two-system maps because of their representation of conditions that are unique to the synoptic study period. Specifically the two-system maps represent the following aquifer conditions:

- Lowest (SWLP) water level event as recorded at J-17 (643' msl, July 2009),
- Highest (SWLP) water level events as recorded at J-17 (691' msl, July 2007), and
- SWLP water level event with the maximum number of data points, water level as recorded at J-17 (678' msl, October 2005).

The remaining ten SWLP events are plotted as a single system, wherein the data points are combined across the recharge and artesian zones of the aquifer.

The SWLP began in July of 1999, as a three-event-per-year effort to capture a “snapshot” of water levels across the entire reach of the southern segment of the Balcones Fault Zone Edwards Aquifer and the southernmost extent of the Barton Springs Segment of the Balcones Fault Zone Edwards Aquifer (Figure 1). After October 2003, the program was modified by a reduction of the number of annual regionwide events from three to one. This modification provides the exception that additional regionwide events would be performed if water levels at the Bexar County index well (J-17) were to exceed or fall below previously recorded levels for SWLP measurement events.

The modified SWLP program was initiated after a review of preliminary maps indicated that no significant changes in the potentiometric surface maps were evident in aquifer levels within the range of obtained data. Reducing the number of annual synoptic events allowed the EAA an option to pursue a more refined approach to synoptic data gathering in the form of “focused” synoptic events. These focused events allow concentrated data to be gathered from smaller geographic areas in an effort to reduce data gaps, resulting in a more representative picture of localized variations in the shape of the water surface. For example, areas such as the Knippa Gap, Cibolo Creek, and the Hays County groundwater divide benefit from

focused investigation, allowing groundwater behavior in these areas to be better understood. In addition, this focused approach increases resolution within the more limited study areas and might provide insight regarding other aspects of the system, such as the Edwards/Trinity groundwater interaction along the northern boundary of the Edwards Aquifer Recharge Zone.

As a result of the modified SWLP, focused measurement events were planned during the winter in January–February and the fall months in October–November, targeting Comal and Hays counties. Regional synoptic events were planned for the month of July. The first focused event for the current reporting period occurred during the winter (January–February) of 2007. However, the water level at J-17 did not exceed the previous synoptic high of 697 feet (recorded in November 2002) above mean sea level (msl), nor the SWLP high of 701 feet msl (recorded in December 2004). The December event was performed so that near-record-high water levels in the aquifer might be recorded. The December 2004 event was close to the historical high of 703 feet above msl for the period of record (1934–2004).

During 2009, water levels across the region were generally below the historical mean value. For calendar year 2009 Bexar County index well J-17 was significantly below the mean historical value most of the year (from mid-January to late October). The minimum water level at J-17 was 640.3 feet above msl recorded on July 2, approximately three weeks prior to synoptic measurements being taken. Amid all the summer (July) synoptic event measurements, the lowest level measured at J-17 was 643 feet msl on July 23, 2009, and the highest level measured was 679 feet msl on July 18, 2005.

Continuation of the SWLP will aid in the general understanding of water movement within the system, thereby contributing to other current scientific objectives, including improved modeling, protection, and optimization of the aquifer. The EAA is currently developing a series of focused synoptic studies, while performing at least one regional synoptic event annually. Should the level of the Edwards Aquifer as measured at J-17 exceed or fall below any previously recorded level measured since the inception of the SWLP, additional regional events will be planned.

HYDROGEOLOGY OF THE EDWARDS AQUIFER

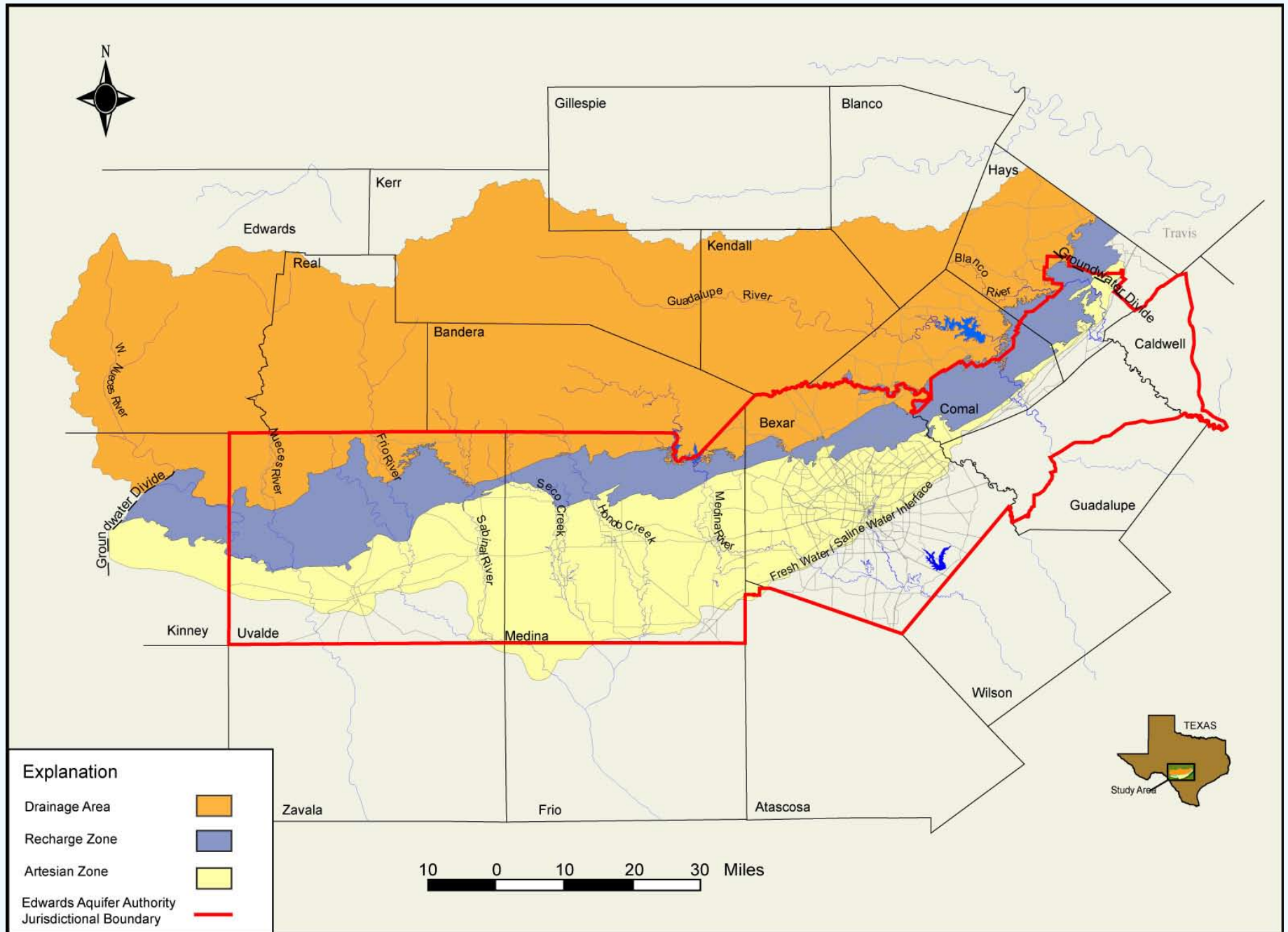
The southern segment of the Balcones Fault Zone Edwards Aquifer in south central Texas is one of the largest karst aquifer systems in the United States. The aquifer extends through parts of Kinney, Uvalde, Zavala, Medina, Frio, Atascosa, Bexar, Comal, Guadalupe, and Hays counties and covers an area approximately 180 miles long and five to 40 miles wide. The aquifer is the primary water source for much of this area, including the City of San Antonio and surrounding communities. Historically the cities of Uvalde, San Antonio, New Braunfels, and San Marcos were founded around large springs that discharge from the aquifer. As the region grew, wells were drilled into the aquifer to supplement water supplied by the springs. In addition, the Edwards Aquifer is the principal source of water for agriculture and industry in the region and provides springflow required for endangered species habitat, as well as recreational purposes and downstream uses in the Nueces, San Antonio, Guadalupe, and San Marcos river basins. The Edwards Aquifer transitions from freshwater to saline water along the south end of the artesian zone (Figure 1).

The Edwards Aquifer is contained within the Cretaceous Edwards Group limestone (Edwards Limestone) and associated units. The Edwards Limestone is generally capped by the Del Rio Clay and overlies the Upper Glen Rose Formation (upper unit of the Trinity Aquifer). The Edwards Limestone forms the top of the Edwards Plateau within much of the drainage area of the aquifer. However, the Edwards Limestone is not present along the south and east flanks of the plateau because of headward erosion along the Balcones Escarpment. The

Balcones Escarpment originally resulted from normal faulting, associated with the Balcones Fault Zone. South and east of the drainage area, the Edwards Limestone is again present and exposed at the surface within the most densely faulted area of the Balcones Fault Zone. This surface exposure is the recharge zone of the Edwards Aquifer. Farther south and east, downfaulting has dropped the Edwards Limestone even farther below the surface in the artesian zone of the Edwards Aquifer. Here the Edwards Aquifer produces freshwater from depths as great as 3,500 feet below the surface. The southern boundary of the artesian zone (Figure 1) marks the aquifer's transition from freshwater to saline water.

Water circulates through the Edwards Aquifer as part of the hydrologic cycle from recharge areas to discharge points (springs and wells). Streams flow south from the drainage area (the Texas Hill Country and Edwards Plateau) and lose all or most of their baseflow as they cross the recharge zone. In addition, part of the rain that falls directly on the recharge zone also enters the aquifer. Groundwater moves through the aquifer and ultimately discharges from a number of locations, such as Leona Springs in Uvalde County, San Pedro and San Antonio springs in Bexar County, Hueco and Comal springs in Comal County, and San Marcos Springs in Hays County. In addition, domestic, livestock, municipal, agricultural, and industrial wells throughout the region withdraw water from the aquifer. The residence time of water in the aquifer ranges from a few hours or days to many years, depending on depth of circulation, location, and other aquifer parameters.

Figure 1. Southern Segment of the Balcones Fault Zone, Edwards Aquifer



The Edwards Aquifer is a karst aquifer characterized by the presence of sinkholes, sinking streams, caves, large springs, and a well-integrated subsurface drainage system. Within the artesian zone, it is one of the most productive groundwater systems in the United States, characterized by extremely high capacity water wells and high spring discharges. The aquifer exhibits extremely high (cavernous) porosity and permeability, characteristic of many karst aquifers. In contrast, aquifers that occur in sand and gravel or in other rock types, such

as sandstone, have a much lower permeability. Because the Edwards Aquifer is known for having areas of high permeability, it allows the transmission of large volumes of water, enabling groundwater levels to respond quickly to rainfall (recharge) events. As a result, delineation of flowpaths can be a difficult process in the aquifer. The synoptic data may be used to better delineate flowpaths in the aquifer and to improve groundwater models used for aquifer management decisions.

DATA ACQUISITION, VALIDATION, AND ANALYSES

Background

Initially (1999–2003), SWLP data were collected three times annually on the basis of aquifer-related events:

- (1) Preirrigation (late January to early February), which often may represent a high level for the year;
- (2) Postirrigation (mid- to late July); and
- (3) Fall (late October to early November).

For the historical period of record (1934–2009), mean water level elevations at Bexar County index well J-17 are highest during the preirrigation period. Postirrigation water levels are close to the mean low elevation for the period of record. Aquifer levels for the fall synoptic event are generally representative of recovery from the high demand months of summer. See Figure 2 for historical daily average water levels at J-17, as well as J-17 water levels for the study period.

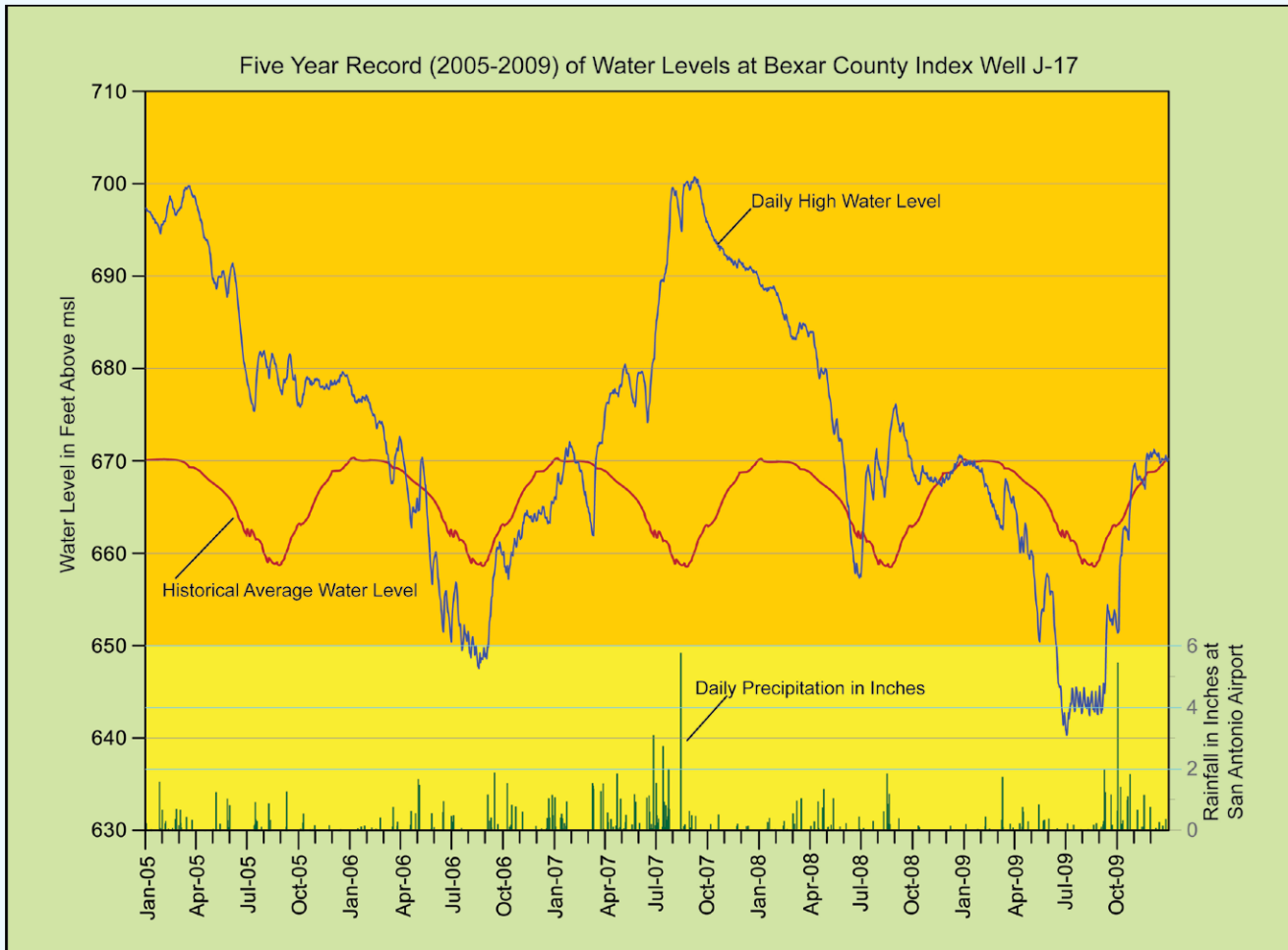
For SWLP events reported herein, the number of wells measured during regional events ranges from 220 (October 2006) to 288 (October 2005) per event. The average number of wells measured per regional event is 245. The number of wells measured during focused events ranges from 96 (October 2009) to 177

(February 2009) per event. The average number of wells measured per focused event is 124. For each event a small percentage of the measured wells were not used in construction of the potentiometric surface maps because of discrepancies with their respective data values. The data sets in Appendix A summarize all wells measured for each synoptic event. Appendix B provides a summary of wells not used in construction of the potentiometric surface maps. Well types measured include domestic, observation, municipal, industrial, and irrigation wells. Well distributions encompass the recharge, artesian, and, in some cases, the saline zones of the Edwards Aquifer.

Data Acquisition and Validation

Synoptic water level data are initially acquired in the field using one of the following devices: steel tape, electric line, pressure gauge, or continuous recorder. Generally speaking, the steel tape is the most accurate device for collecting water level information. As measurements are taken, they are recorded in the field on a water level form. These data are subsequently transferred into an electronic database by EAA staff. Once available electronically, data points are validated for location and elevation accuracy. Location accuracy is validated by plotting wells on maps, along with other geographic information.

Figure 2. Hydrograph of Daily High Water Level at the Bexar County Index Well, J-17 (AY-68-37-203), 2005–2009



Incorrectly located wells are either corrected or deleted from the data set for the particular synoptic event. After the “X and Y” location values for each well are validated, groundwater elevations (“Z” values) are validated.

Elevations are validated by posting all elevation values for each event on the map and comparing adjacent elevations for relative agreement. Data points with suspicious values are either corrected or not used in compiling the potentiometric surface maps. For example, wells exhibiting apparently anomalous groundwater elevations compared with surrounding wells are examined for measurement errors or other conditions that may cause an apparently anomalous value. If the

data point cannot be corrected after review of field notes and calculations, the data point in question is not used in map development. After completion of this process, initial potentiometric contours are subsequently generated and checked against point elevations again. This iterative process is conducted for each map and, in some cases, multiple times for various target data groups.

In order for artesian zone water levels to be interpreted more accurately, other wells (data points) removed from the data set prior to development of potentiometric maps include certain saline zone wells. In addition, well number RP-70-38-902 in the recharge zone in Kinney County and wells YP-69-35-401, YP-69-35-804, and YP-69-35-602

in the recharge zone of Uvalde County were not used in compiling potentiometric maps. The Kinney County well did not have sufficient surrounding water level data to justify its use, whereas the Uvalde County recharge zone wells were not used because of questionable water level behavior in these wells and insufficient surrounding water level data. Two of the Uvalde County wells appear to be hydraulically connected to the Frio River, whereas the third shows no significant water level fluctuation. These wells do not appear to properly represent water levels from the Edwards Aquifer.

Well Surveying and Identification

Many wells used for gathering synoptic water level data within the study area initially did not have accurate geographic or elevation information. As such, many wells required coordinate and elevation surveys to improve the quality of the data set with respect to locations and groundwater elevations. Therefore, the EAA contracted a Registered Professional Land Surveyor to perform coordinate and elevation surveys on SWLP wells with missing or questionable location and elevation data. Concurrent with the SWLP well survey, additional wells were surveyed under the same project to establish accurate location and elevation data for wells used as calibration points for an aquifer-modeling project. Approximately 400 wells were therefore identified by the EAA and surveyed by a contractor, or by staff in some cases, between calendar years 2002 and 2003. Approximately 75 additional wells were surveyed during a second survey event. The additional wells surveyed are those included in the focused synoptic events in Comal and Hays counties. Wells were surveyed for location and elevation accuracy using a surveyor-grade global positioning system (GPS) to collect latitude, longitude, and elevation data at each well. The location data were reported in degrees, minutes, and seconds in the NAD83 horizontal coordinate system, and the elevation data were reported in the NAVD88 vertical coordinate system accurate to within three inches.

BS/EACD staff provided the locations and elevations for a series of monitoring wells in the BS/EACD's jurisdiction. The BS/EACD location data were reported in

the WGS84 or NAD83 horizontal coordinate system, and the elevation data were reported in the NAVD88 vertical coordinate system, all reported data being accurate to within one to three feet (Stefani Helcamp, BS/EACD, written communication).

Each data point or well must have a unique identifier, and wells for this project are identified primarily according to the TWDB well numbering system (see Appendix D for additional information regarding the TWDB well numbering system). Wells without a state well number were assigned a unique pseudonumber on the basis of the well numbering system discussed in Appendix D.

Data Analyses

Once validated, data sets for individual events were plotted using surface mapping software. Plotting involves grouping point data into groups on the basis of geographic location. These groups are referred to herein as *target areas*. Maps for which the recharge and artesian zones were plotted separately (two-system maps) typically had four target areas for the recharge zone and four, or sometimes five, target areas for the artesian zone. Maps for which the recharge and artesian zones were plotted together had a total of four target areas. The target data sets provide a more representative picture of the area plotted by limiting the area of interest to those that are adequately populated for the geographic area being plotted. Generally these geographically limited data sets provide improved results when using the kriging algorithm in mapping software, as opposed to plotting the entire region as a single data group. Figures 3 and 4 demonstrate this approach of using target data sets for plotting the data. In some cases, a limited number of wells may appear in two target areas for continuity between data sets. For example, a few wells along the Bexar–Medina county boundary were used in target data sets T1 and T2 of Figure 4.

Once generated, potentiometric surface contours were plotted on maps, along with county and aquifer boundaries. The maps are representative of the general potentiometric surface in the aquifer at the time that the synoptic data were gathered. The completed potentiometric surface maps are located in Appendix C for all synoptic events.

Figure 3. Two-System Map Target Data Groups

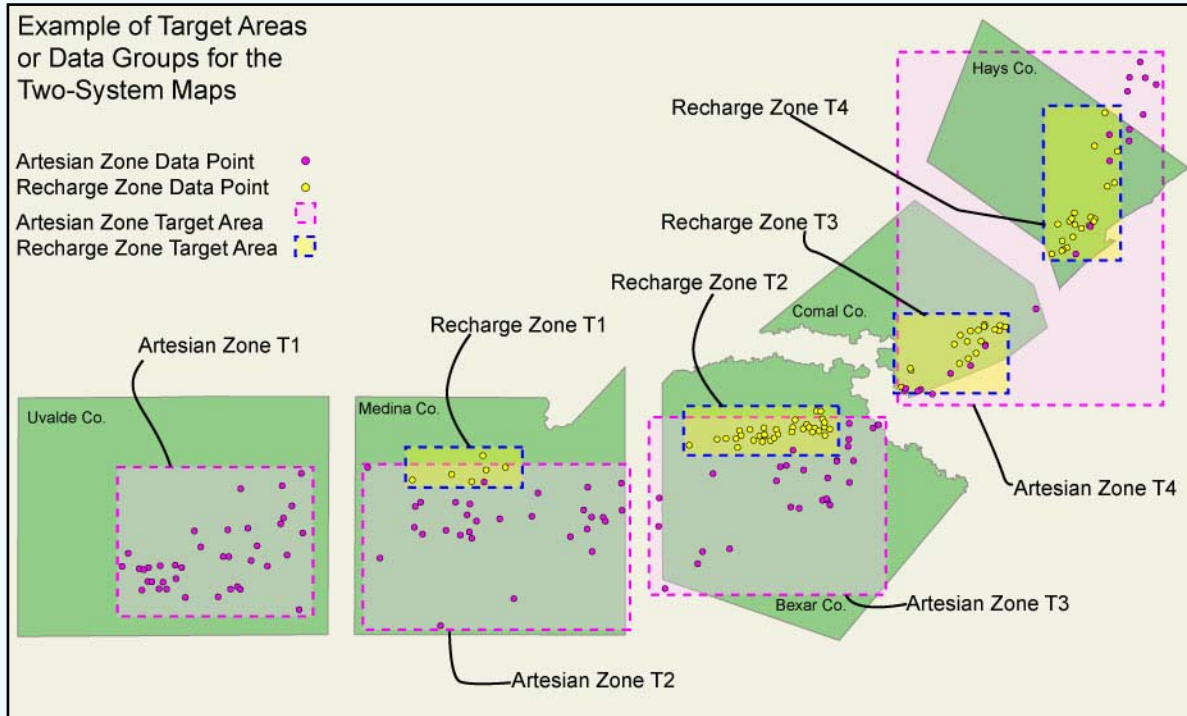
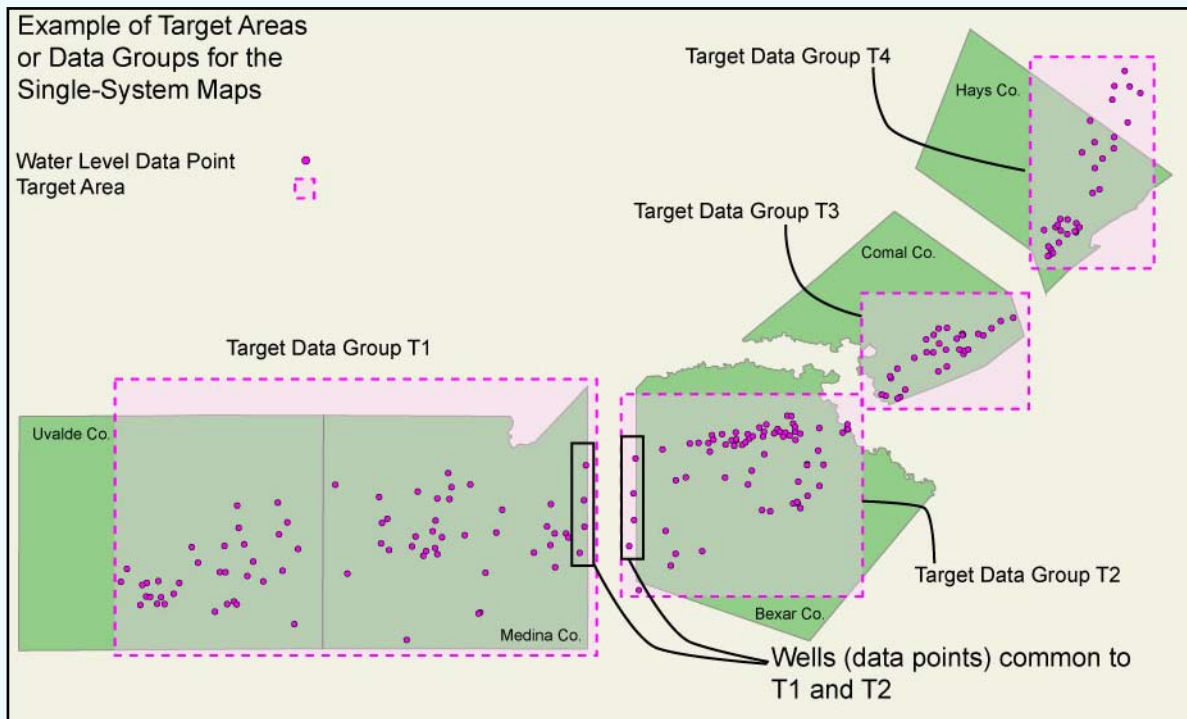


Figure 4. Single-System Map Target Data Groups



Data Gaps

All of the data sets have some areas with data gaps, or lack of groundwater elevation points, within them. Although this problem has been reduced during the evolution of the program, the following areas would benefit greatly from additional detail:

- Kinney County—All (currently only one well is regularly measured here).
- Uvalde County—Recharge zone (all) and artesian zone along east and west boundaries of the county.
- Medina County—Recharge zone in west and far-east parts of the county and artesian zone in the west, south, and southeast parts of the county. Also, that part of the artesian zone along west and south boundaries.
- Bexar County—Recharge zone in northeast and far-west parts of the county and artesian zone in west-central parts of the county.
- Comal County—Recharge zone in north and northeast parts of the county.
- Hays County—Recharge zone coverage is generally sparse in the southwest part of the county.

Observation of SWLP data gaps spurred interest in developing the focused SWLP to attempt data collection within a single county or in limited parts of multiple counties. These focused events would allow concentrated data to be gathered from smaller geographic areas so as to reduce data gaps. As a result, the focused SWLP was initiated in Comal and Hays counties during the winter (January–February) of 2007 and repeated during the following winter and fall months (October–November), thereafter through 2009. Although the program was initiated in the winter of 2007, obtaining well location data, coordinating survey data, and getting permission to access wells in this manner was a time-consuming process. For example, obtaining access to an adequate number of wells to perform a high-data-density, focused synoptic event began in 2006; however, the first measurement did not occur until winter of 2007. Note that

BSEACD staff participation during both the SWLP and focused SWLP added numerous data collation points to the BSEADC jurisdiction in northern Hays County. BSEACD conducted its synoptic events simultaneously with the EAA's events for October 2005 and July 2006 (Hunt et al., 2007). The number of data points unfortunately declined when BSEAD staff could not participate (Appendix B). Because of fewer data points, the July 2005 and October 2009 maps for Hays County provide less detail.

Sources of Error

There are several potential sources of errors, although all water levels with known suspected errors were not used in making contour maps, as indicated in Appendices A and B. Detailed well logs for many of the measured wells do not exist, nor is it feasible to obtain such information. Many of the wells are not fully penetrating, and a few may be completed through more than one water-bearing formation (i.e., Edwards-Trinity or Austin-Buda-Edwards). Wells completed in multiple formations could result in a groundwater elevation measurement that reflects an anomalous value with respect to the Edwards Aquifer. In addition, wells that are not fully penetrating may exhibit differing water levels between the top and bottom of the Edwards Limestone for some areas within the region. Some wells in the recharge zone may also be influenced by the underlying Trinity Aquifer, which may affect groundwater elevations at that point. Additionally, the potential for measurement error always exists, as do incorrect survey data or wells affected by drawdown due to pumping. Another possible problem is related to response time from recharge events. Recharge-zone wells may respond almost immediately in some cases to a recharge event, whereas artesian-zone wells may not respond for a period of days or not at all. Recharge-zone wells may also respond with a sharp increase in water level, whereas artesian-zone wells are commonly “buffered” in their response and may show only a small percentage of increase in water level. The response problem would be of significance if a heavy rainfall event occurred during the measurement process. All listed error sources influence two-system maps more significantly than they do single-system maps.

STUDY RESULTS

Since July 1999, the SWLP has yielded a comprehensive set of regional potentiometric surface maps for a wide range of aquifer conditions. Between 2005 and 2009, water levels in the Edwards Aquifer fluctuated 36 feet, from a low of 643 feet msl to a high of 679 feet msl, as measured at Bexar County index well J-17. The potentiometric surfaces represented by the maps may be correlated with Uvalde index well J-27 and J-17 in San Antonio, as well as with springflow rates at Comal and San Marcos springs. These water levels and springflow rates are included on each map for each synoptic measurement event, satisfying the objective of providing good calibration points (water levels) for aquifer modeling, as well as producing potentiometric (water level contour) maps.

Study results indicate regional groundwater flows from west to east across Uvalde, Medina, and Bexar counties. In Bexar County, the groundwater gradient takes a more northeasterly direction and continues through Comal and Hays counties. However, gradients become slightly more complex for the two-system maps, on which recharge-zone flow directions are much more variable and change by county. In addition, the two-system maps provide better detail regarding groundwater divide definition along the Hays and Travis county boundary. Whereas all of these synoptic maps may not reveal many of the potential local variations that most likely occur in the groundwater gradient across the region, they do provide representative detail, given the number of data points available. The lack of local resolution becomes apparent when the detail obtained in the recharge zone of Bexar County is compared with that of other areas in the study.

Some areas within the maps exhibit notable variations in groundwater gradient behavior. As mentioned for the two-system maps, the recharge and artesian zones frequently exhibit significantly different groundwater levels and gradients in many areas. Furthermore, the two-system maps indicate eastern east-central Hays County as the probable location of a groundwater divide. For all of the maps, the Knippa Gap area is another area of interest. Water levels to the west of the Knippa

Gap appear to be consistently higher and show little fluctuation when compared with levels in Medina, Bexar, Comal, and Hays counties.

Developing potentiometric surface maps with more data points for a smaller area would enhance resolution and most likely improve the overall understanding of local variations in groundwater gradients across the area. Another possibility is to plot the existing data at an enhanced scale. In some areas, doing so would result in significantly more detail. The lack of resolution with regard to localized variations made a focused SWLP appealing in Comal and Hays counties. The focused approach provided greater detail regarding local variations in the potentiometric surface by increasing data coverage per unit of area. As may be seen in the maps (Appendix C), data coverage is sparse in many areas. The area with the greatest number of wells is northern Hays County.

Two-System Maps

As discussed earlier, three of the SWLP potentiometric surface maps depict recharge and artesian zones separately. In general, this approach provides a more detailed representation of variations in groundwater gradients between the artesian and recharge zones of the aquifer. The most prominent differences between the two-system and single-system maps appear to be in the area of Comal and San Marcos springs for all three maps. Another interesting difference between artesian and recharge-zone behaviors occurs in the two-system map for Medina County for July 2007 and July 2009. Just west of the central part of the county, the recharge-zone gradient becomes steeper toward the artesian zone. The July 2009 map also provides good detail in the Bexar County recharge zone, indicating some of the local variations in groundwater gradient present in this area.

As previously mentioned, data-point resolution is fairly high in north Bexar County. The resulting detail is summarized in Figure 5, where contours from SWLP high and low water level values are displayed simultaneously

for this area. The synoptic low value at J-17 is 643 feet msl, recorded in July 2009. The synoptic high value at J-17 (for this report period) is 691 feet msl, recorded in July 2007. Unfortunately in July 2007, many of the wells over the recharge zone in Bexar County were not measured because of a shortage of staff. Therefore, contours for the second-highest water levels measured during this study were utilized. The second-highest level at J-17 is 679 feet msl, recorded in July 2005. In Figure 5, red contours represent the high value, whereas blue contours represent the low value. Note the contour lines adjacent to points A and B in the figure. Starting at these points and moving along a north-northwest trend line, note that the contours curve slightly in different directions between the two events. This change in curvature appears to

indicate a fluctuation in flowpath behavior for different water levels in these areas. At point A the July 2009 (low) water level seems to indicate that flow is dispersed to the south and southeast adjacent to and northwest of this point. However, the July 2005 (high) water level at point A seems to indicate that flow is concentrated along this general trend line, i.e., southeast. For point B, both July 2009 and July 2005 data indicate that flow appears to be dispersed mainly southeast along the same trend line. Further study will reveal more information regarding this behavior. Different flowpaths may be active within the same area as a result of changes in water levels.

The SWLP events plotted as two-system maps were selected on the basis of criteria outlined in Table 2.

Figure 5. Comparison of High and Low Synoptic Water Levels in Bexar County Recharge Zone

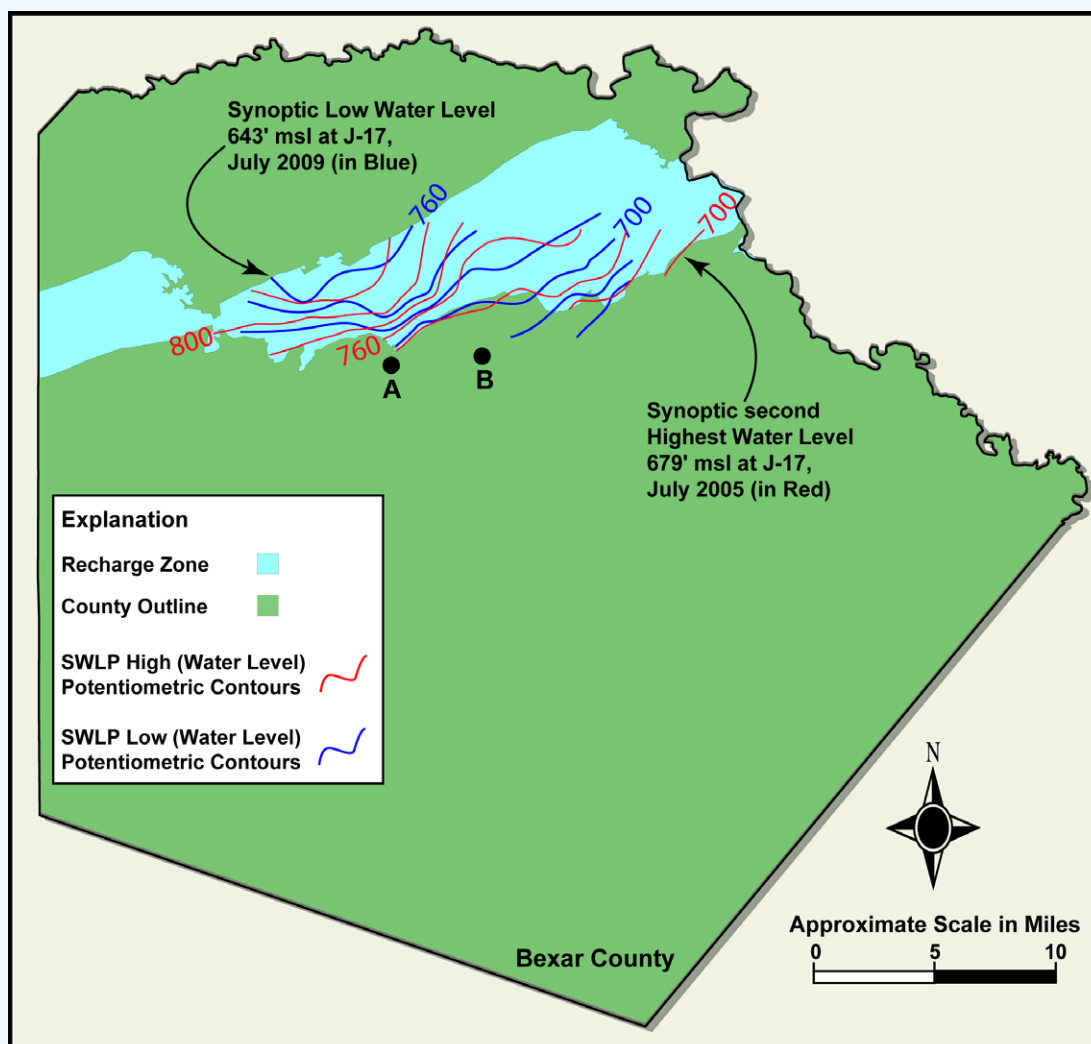


Table 2. Summary of Two-System Potentiometric Surface Maps

SWLP Map Date	Groundwater Elevation at Bexar County Index Well J-17	Groundwater Elevation at Uvalde County Index Well J-27	Criteria for Selection
July 20 through August 5, 2009 (Plate C-12)	643' msl ¹	861' msl ²	SWLP lowest groundwater level event.
July 9 through August 1, 2007 (Plate C-6)	691' msl ³	874' msl	SWLP maximum groundwater level event
October 24 through November 15, 2005 (Plate C-2)	678' msl	881' msl ⁴	SWLP event with the most wells measured and for which additional data were available near the Hays County groundwater divide and Medina County recharge zone. Plotted as a two-system map to better define the potentiometric surface in these areas.

Notes: msl = mean sea level; readings are in feet above mean sea level

¹ = SWLP low value for J-17

² = SWLP low value for J-27

³ = SWLP high value for J-17

⁴ = SWLP high value for J27

Single-System Maps

Ten—six focused and four regional—of the SWLP events were modeled as single-system maps, in which all data points were treated as a single system, making no distinction between artesian or recharge zone. These maps do not exhibit the same variations or resolution between recharge and artesian zones as do the two-system maps. However, they are useful for displaying a general groundwater gradient for the aquifer. Local variations certainly exist within the groundwater surface

across the area, but, as previously discussed, additional data points and/or different plotting methods are required for this level of resolution to be obtained.

The July 2007 and July 2008 regional maps have the same groundwater elevations at J-27 (874 feet msl); however, the J-17 groundwater elevations were different for every synoptic event. In addition, some variation in water level contours may occur because of variations in the data set, such as inclusion or exclusion of different wells between events.

Table 3. Summary of Single-System Potentiometric Surface Maps

SWLP Map Date	Groundwater Elevation at Bexar County Index Well J-17	Groundwater Elevation at Uvalde County Index Well J-27	Comments
July 18 through July 25, 2005	679' msl	880' msl	(J-17 and J-27 within one foot of two-system map for October 2005)
July 14 through July 21, 2006	650' msl	870' msl	
October 10 through October 25, 2006	660' msl	869' msl	
January 22 through February 9, 2007	672' msl	869' msl	Focused synoptic covering Comal and Hays counties
October 31 through November 8, 2007	669' msl	882' msl	Focused synoptic covering Comal and Hays counties
January 28 through February 8, 2008	688' msl	882' msl	Focused synoptic covering Comal and Hays counties
July 28 through August 7, 2008	669' msl	874' msl	
October 20 through November 3, 2008	668' msl	874' msl	Focused synoptic covering Comal and Hays counties
February 16 through February 27, 2009	665' msl	871' msl	Focused synoptic covering Comal and Hays counties
October 23 through November 6, 2009	670' msl	862' msl	Focused synoptic covering Comal and Hays counties

Note: msl = mean sea level; readings are in feet above mean sea level

Differences between the two map types are summarized in Figures 6 and 7. Figure 6 provides an example of a two-system map for the July–August 2009 SWLP event. Figure 7 provides an example of a single-system map for the July 2008 SWLP event. As can be seen in the maps, the general shape of the water surface (as represented by contour lines) is similar for both maps for the artesian part of the aquifer. However, contour differences can be noted for the recharge-zone area of the two-system map in Figure 6.

Focused synoptic maps were plotted at 10-foot contour intervals for better resolution and representation of the

potentiometric surface in Comal and Hays counties. All of these focused events were also plotted as single-system maps, in which all data points were treated as a single system, making no distinction between artesian or recharge zone. The general shape of the potentiometric surface is similar for all maps. The water level contours as plotted indicate steep gradients in the east section of the recharge zones in both Comal and Hays counties and flat gradients in the central and west parts of the recharge and artesian zones in both counties (Figure 8).

Figure 6. Two-System Map for July–August 2009

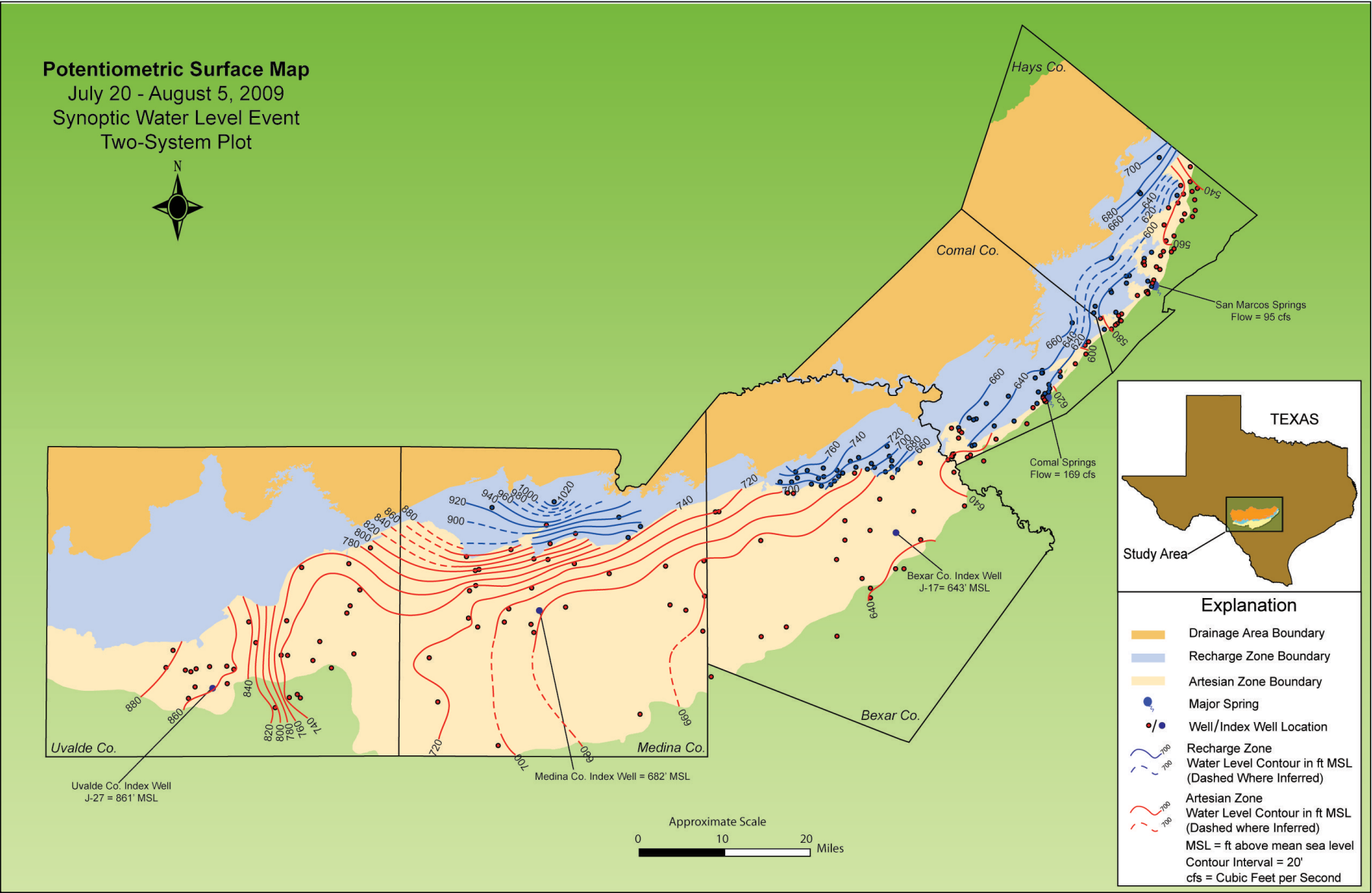


Figure 7. Single-System Map for July 2008

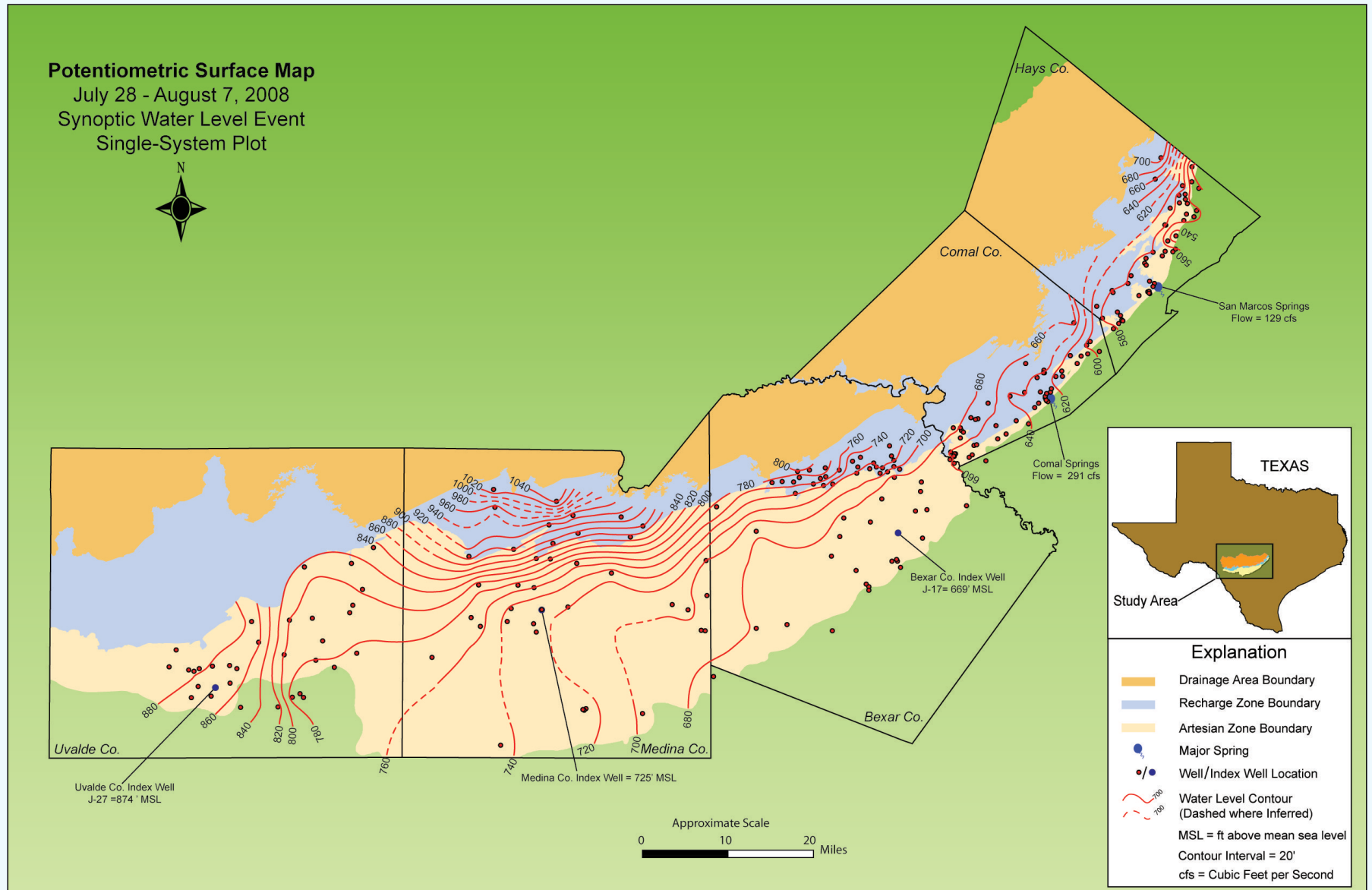
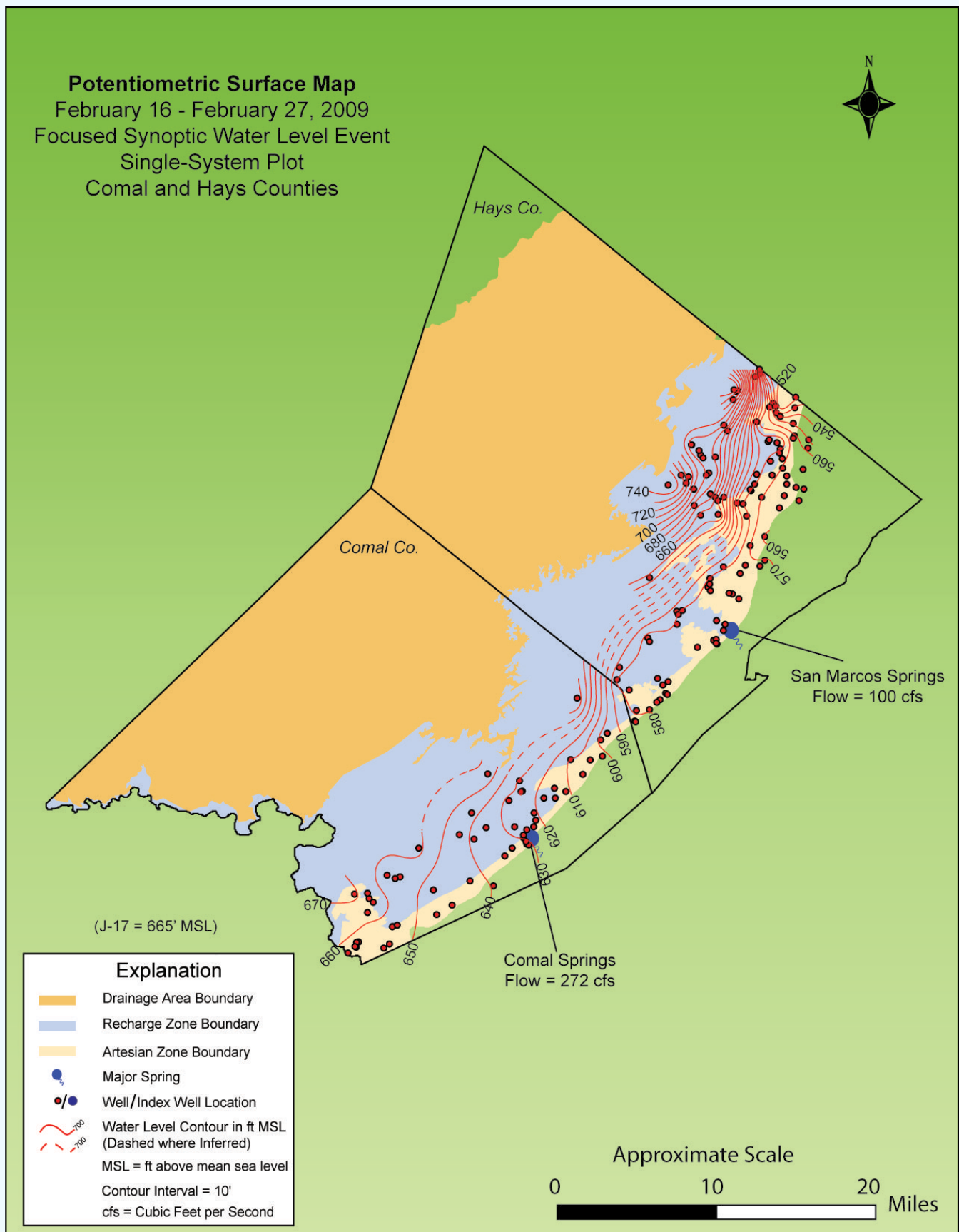


Figure 8. Single-System Map for FSWLP event, February 2009



Summary and Conclusions

The SWLP provides quality data regarding groundwater levels within the Edwards Aquifer. Compilation and reporting of these data by the EAA will help to further the overall understanding of groundwater behavior within the Edwards Aquifer, as well as prioritizing areas for additional focused SWLP events. The report is also aimed at satisfying the original intent of the ASRP, which is to obtain water level data for model calibration, develop potentiometric surface maps for the region, and provide data for the Hydrologic Simulation Program Fortran (HSPF) recharge model. Furthermore, the report provides a set of maps that present the data in three ways: two-system maps for five of the events, single-system maps for the remaining 11 events, and maps of focused synoptic events in Comal and Hays counties. The maps were compiled after collection, validation, and analysis of the 13 synoptic data sets included herein.

In conclusion, the study indicates that localized variations exist in the aquifer's flow regime, with the most prominent variations apparently occurring between recharge and artesian zones. The study has also confirmed the need to continue collecting focused synoptic data so that more insight might be gained with regard to flowpaths within the aquifer. Variations detected in the recharge zone of Bexar County confirm the efficacy of additional data points (see Figure 5).

In the future, combining results of this and future synoptic work with results of other flowpath studies should also increase the knowledge base of the Edwards Aquifer. For example, tracer-study locations may be selected on the basis of synoptic results or combined with synoptic results to enhance our understanding of the system.

This study has also effectively identified areas in need of more detailed investigation, such as the Knippa Gap, the Cibolo Creek area, and the interface between the Trinity and Edwards aquifers, as well as the recharge- and artesian-zone boundary within the Edwards Aquifer.

The EAA will continue to collect regional synoptic data annually with the help of various partners (well owners, area cities, SAWS, BS/EAGCD, USGS, etc.). Without these partners, it would be impossible to achieve the quantity or quality of data across the entire region that have been obtained in the past. In future years, regionwide data collection will be limited to one or two annual events, if water levels do not exceed or fall below previously recorded levels. The program will also continue to be modified to include a series of focused synoptic events over time, as well as an annual regionwide event. Collection of regional and focused synoptic data will help improve general understanding of the system and the flowpaths that exist within it.

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APPENDIX A

Table A-1. Water levels collected during the July 18 through July 25, 2005, SWLP event.

Well ID #	Date	County	Latitude	Longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer
6850201	7/19/2005	Atascosa	29.23026	-98.79888	1.00	712.86	711.86	682	Artesian
6821806	7/18/2005	Bexar	29.62937	-98.44849	2.38	953.04	950.66	760	Recharge
6827307	7/20/2005	Bexar	29.58549	-98.63081	1.10	991.84	990.74	829	Recharge
6827401	7/18/2005	Bexar	29.55284	-98.74448	2.45	1033.90	1031.45	802	Artesian
6827517	7/18/2005	Bexar	29.56628	-98.68172	2.05	999.44	997.39	802	Recharge
6827609	7/19/2005	Bexar	29.56793	-98.66162	-0.33	960.21	960.54	799	Recharge
6827610	7/20/2005	Bexar	29.54772	-98.63564	2.11	904.16	902.05	774	Artesian
6827611	7/19/2005	Bexar	29.57476	-98.62737	-0.23	963.93	964.16	801	Recharge
6827612	7/20/2005	Bexar	29.56761	-98.63895	2.83	960.67	957.84	797	Recharge
6828113	7/18/2005	Bexar	29.58791	-98.60765	-0.45	1021.88	1022.33	827	Recharge
6828211	7/18/2005	Bexar	29.58781	-98.54858	2.65	976.95	974.30	789	Recharge
6828313	7/18/2005	Bexar	29.60984	-98.50603	2.50	951.31	948.81	749	Recharge
6828314	7/18/2005	Bexar	29.59303	-98.51131	1.40	901.93	900.53	752	Recharge
6828315	7/18/2005	Bexar	29.60313	-98.52191	-0.17	946.58	946.75	751	Recharge
6828406	7/18/2005	Bexar	29.56376	-98.59950	0.80	979.52	978.72	777	Transition
6828407	7/18/2005	Bexar	29.57354	-98.58561	-0.22	999.81	1000.03	796	Recharge
6828512	7/22/2005	Bexar	29.57372	-98.57513	1.41	952.57	951.16	793	Recharge
6828515	7/18/2005	Bexar	29.56326	-98.56136	1.71	977.40	975.69	745	Recharge
6828516	7/18/2005	Bexar	29.56090	-98.57974	1.46	949.11	947.65	764	Recharge
6828517	7/18/2005	Bexar	29.57658	-98.57505	2.54	966.38	963.84	802	Recharge
6828518	7/18/2005	Bexar	29.57736	-98.54491	2.45	929.06	926.61	752	Recharge
6828519	7/18/2005	Bexar	29.56900	-98.55357	-0.30	926.54	926.84	744	Recharge
6828608	7/18/2005	Bexar	29.58246	-98.51359	1.90	859.98	858.08	746	Artesian
6828609	7/18/2005	Bexar	29.58296	-98.53712	-0.30	925.95	926.25	757	Recharge
6828909	7/21/2005	Bexar	29.50722	-98.52556	1.90	784.93	783.03	686	Artesian
6828920	7/19/2005	Bexar	29.54172	-98.51074	0.75	925.71	924.96	692	Artesian
6828921	7/21/2005	Bexar	29.50417	-98.53944	1.10	824.54	823.44	687	Artesian
6829103	7/19/2005	Bexar	29.58959	-98.48800	0.61	953.12	952.51	738	Recharge
6829112	7/19/2005	Bexar	29.59967	-98.48011	2.38	891.38	889.00	749	Recharge
6829114	7/18/2005	Bexar	29.59122	-98.46206	-0.30	852.30	852.60	748	Recharge
6829213	7/18/2005	Bexar	29.58457	-98.45244	1.30	853.16	851.86	719	Recharge
6829214	7/18/2005	Bexar	29.58878	-98.42807	-0.40	809.51	809.91	723	Recharge
6829215	7/18/2005	Bexar	29.59362	-98.43999	2.10	829.10	827.00	730	Recharge
6829216	7/18/2005	Bexar	29.61186	-98.44442	-0.40	923.30	923.70	756	Recharge
6829217	7/18/2005	Bexar	29.60413	-98.43983	-0.40	919.50	919.90	755	Recharge
6829418	7/19/2005	Bexar	29.58221	-98.46730	2.26	830.41	828.15	734	Recharge
6829506	7/19/2005	Bexar	29.57460	-98.43905	1.35	789.35	788.00	714	Artesian
6829605*	7/19/2005	Bexar	29.55004	-98.38709	-2.20	805.88	808.08	699	Artesian
6829611	7/21/2005	Bexar	29.56611	-98.38528	2.80	832.60	829.80	678	Artesian
6829701	7/18/2005	Bexar	29.53732	-98.46398	1.550	779.41	777.861	681	Artesian
6829925	7/18/2005	Bexar	29.51624	-98.39737	2.100	758.41	756.305	677	Artesian
6830211	7/18/2005	Bexar	29.60496	-98.32818	0.15	776.65	776.50	672	Artesian
6830807	7/20/2005	Bexar	29.52487	-98.29610	1.00	753.90	752.90	675	Artesian
6835106*	7/20/2005	Bexar	29.48194	-98.71389	5.00	964.51	959.51	629	Artesian
6836103*	7/20/2005	Bexar	29.48833	-98.60083	6.58	913.84	907.26	653	Artesian
6836107*	7/20/2005	Bexar	29.48858	-98.61109	3.80	882.00	878.20	709	Artesian
6836206	7/20/2005	Bexar	29.47250	-98.54806	4.20	760.43	756.23	686	Artesian
6836512	7/20/2005	Bexar	29.43833	-98.56472	3.97	689.43	685.46	687	Artesian
6836901	7/18/2005	Bexar	29.41369	-98.51577	3.21	640.45	637.24	683	Artesian
6837103	7/21/2005	Bexar	29.49722	-98.48694	1.00	730.53	729.53	683	Artesian
6837120*	7/22/2005	Bexar	29.48467	-98.46572	0.00	804.78	804.78	697	Artesian
6837203	7/18/2005	Bexar	29.47913	-98.43261	0.30	731.11	730.81	679	Artesian
6837304	7/22/2005	Bexar	29.46898	-98.38384	2.30	704.98	702.68	678	Artesian
6837524	7/20/2005	Bexar	29.42899	-98.44448	4.24	630.24	626.00	682	Artesian
6837525	7/20/2005	Bexar	29.42925	-98.43359	5.32	629.32	624.00	679	Artesian
6837526	7/20/2005	Bexar	29.43215	-98.43537	4.97	651.14	646.17	686	Artesian
6837527	7/20/2005	Bexar	29.43243	-98.43538	4.34	648.42	644.08	683	Artesian
6837722	7/20/2005	Bexar	29.38975	-98.49575	3.00	605.71	602.71	681	Artesian
6843402*	7/18/2005	Bexar	29.31360	-98.71431	1.42	699.86	698.44	709	Artesian
6843606	7/18/2005	Bexar	29.31971	-98.65333	1.83	608.79	606.96	687	Artesian
6843607	7/18/2005	Bexar	29.31273	-98.65039	2.59	622.55	619.96	687	Artesian
68293AA	7/22/2005	Bexar	29.60173	-98.38435	1.70	969.38	967.68	691	Artesian
68302AA	7/22/2005	Bexar	29.59858	-98.32022	1.09	781.83	780.74	671	Artesian
68302BB	7/22/2005	Bexar	29.59885	-98.31847	1.25	764.75	763.50	672	Artesian
68307AA	7/22/2005	Bexar	29.51793	-98.37472	1.05	820.15	819.10	677	Artesian
6837521	7/20/2005	Bexar	29.41821	-98.42768	3.85	623.85	620.00	677	Saline
6837522	7/20/2005	Bexar	29.41844	-98.42785	3.97	623.97	620.00	678	Saline
6837523	7/20/2005	Bexar	29.41833	-98.42777	3.74	623.74	620.00	677	Saline
6837723	7/20/2005	Bexar	29.38525	-98.49037	2.60	595.48	592.88	682	Saline
6837724	7/20/2005	Bexar	29.37901	-98.49037	1.90	594.93	593.03	682	Saline
68431AA	7/18/2005	Bexar	29.36596	-98.73721	1.00	718.01	717.01	697	Artesian
6844505	7/18/2005	Bexar	29.30906	-98.56314	3.20	593.20	590.00	681	Saline
6844506*	7/18/2005	Bexar	29.32115	-98.55000	3.10	613.10	610.00	662	Saline
6815809	7/21/2005	Comal	29.77095	-98.17648	0.35	908.74	908.39	671	Recharge
6815912	7/19/2005	Comal	29.75451	-98.14100	1.53	695.32	693.79	643	Recharge
6816602*	7/19/2005	Comal	29.79415	-98.02420	0.20	608.25	608.05	601	Saline
6816701	7/19/2005	Comal	29.75728	-98.10479	2.00	713.57	711.57	626	Artesian
6816703	7/19/2005	Comal	29.75366	-98.09312	0.70	701.24	700.54	618	Artesian
6816801	7/20/2005	Comal	29.78677	-98.05287	0.50	753.33	752.83	617	Artesian
6816803	7/21/2005	Comal	29.76992	-98.07410	1.50	726.89	725.39	617	Artesian
6822601	7/19/2005	Comal	29.67736	-98.28615	0.32	908.16	907.84	704	Recharge

Appendix A (cont.)

Table A-1. Water levels collected during the July 18 through July 25, 2005, SWLP event.

Well ID #	Date	County	Latitude	Longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer
6822603	7/19/2005	Comal	29.70225	-98.25158	1.28	946.94	945.66	700	Recharge
6822807	7/18/2005	Comal	29.65550	-98.30505	1.85	897.34	895.49	700	Artesian
6822810	7/18/2005	Comal	29.66027	-98.30709	1.30	890.73	889.43	704	Recharge
6822912	7/18/2005	Comal	29.63038	-98.27526	2.11	791.57	789.46	668	Recharge
6823105	7/19/2005	Comal	29.71494	-98.22324	1.57	986.45	984.88	682	Recharge
6823202*	7/19/2005	Comal	29.71157	-98.20093	0.40	935.60	935.20	629	Recharge
6823208	7/20/2005	Comal	29.73490	-98.19445	0.25	887.88	887.63	667	Recharge
6823209*	7/20/2005	Comal	29.72079	-98.17900	1.75	863.78	862.03	627	Recharge
6823210	7/19/2005	Comal	29.71452	-98.20805	0.32	920.55	920.23	674	Recharge
6823302	7/18/2005	Comal	29.71357	-98.13835	1.00	643.59	642.59	628	Recharge
6823304	7/21/2005	Comal	29.71111	-98.13833	0.36	626.53	626.17	643	Artesian
6823309	7/19/2005	Comal	29.71867	-98.13524	0.55	736.76	736.21	627	Recharge
6823316	7/20/2005	Comal	29.72137	-98.14791	1.06	807.58	806.52	634	Recharge
6823319	7/19/2005	Comal	29.72101	-98.12768	1.50	629.13	627.63	625	Recharge
6823504	7/20/2005	Comal	29.67135	-98.19642	3.40	709.58	706.18	652	Recharge
6823602	7/20/2005	Comal	29.70188	-98.15112	1.35	704.36	703.01	642	Recharge
6823617	7/21/2005	Comal	29.70559	-98.13506	2.72	635.94	633.22	647	Saline
6823621	7/18/2005	Comal	29.69445	-98.15917	0.87	671.68	670.81	645	Artesian
6823701	7/18/2005	Comal	29.64889	-98.21644	0.72	685.45	684.73	658	Artesian
6823709	7/18/2005	Comal	29.64043	-98.23312	1.10	706.61	705.51	664	Artesian
6823710	7/18/2005	Comal	29.66343	-98.23604	0.85	816.52	815.67	656	Recharge
6823807	7/18/2005	Comal	29.66636	-98.17132	1.70	657.58	655.88	649	Artesian
6824102	7/21/2005	Comal	29.74472	-98.10738	2.95	643.83	640.88	622	Recharge
6830208	7/18/2005	Comal	29.61022	-98.31958	2.11	800.20	798.09	670	Artesian
6830226	7/18/2005	Comal	29.61514	-98.31715	1.58	828.89	827.31	671	Artesian
6830312	7/18/2005	Comal	29.61281	-98.28392	0.90	774.08	773.18	666	Artesian
6830315	7/19/2005	Comal	29.60900	-98.28993	2.35	784.57	782.22	667	Artesian
6823616A	7/21/2005	Comal	29.70434	-98.13308	2.40	637.82	635.42	645	Saline
6823619B	7/21/2005	Comal	29.70739	-98.13625	2.30	636.71	634.41	644	Saline
6824105*	7/19/2005	Comal	29.73772	-98.08908	1.00	689.09	688.09	634	Artesian
68302AA	7/19/2005	Comal	29.61835	-98.32658	1.25	806.04	804.79	680	Artesian
6830314	7/19/2005	Guadalupe	29.60263	-98.25724	2.17	873.18	871.01	669	Artesian
6831403*	7/19/2005	Guadalupe	29.57306	-98.22948	2.09	711.17	709.08	672	Saline
6831511*	7/19/2005	Guadalupe	29.54597	-98.20266	2.06	676.06	674.00	667	Saline
6831808*	7/19/2005	Guadalupe	29.51599	-98.18471	2.89	651.81	648.92	658	Saline
6701303	7/18/2005	Hays	29.98976	-97.87548	1.10	720.34	719.24	556	Artesian
6701304	7/18/2005	Hays	29.98451	-97.87630	0.25	717.80	717.55	562	Artesian
6701311	7/19/2005	Hays	29.98143	-97.89140	2.48	773.00	770.52	575	Artesian
6701701	7/18/2005	Hays	29.89501	-97.96446	0.00	734.50	734.50	576	Artesian
6701809	7/18/2005	Hays	29.91192	-97.92877	1.20	602.47	601.27	578	Recharge
6709105	7/19/2005	Hays	29.84479	-97.98418	2.50	694.73	692.23	582	Artesian
6709106	7/19/2005	Hays	29.85243	-97.98716	1.32	700.98	699.66	582	Artesian
6709110	7/19/2005	Hays	29.84358	-97.98225	2.00	680.88	678.88	582	Artesian
6709113	7/19/2005	Hays	29.83874	-97.99074	1.69	706.42	704.73	582	Artesian
6808902	7/19/2005	Hays	29.89647	-98.00289	2.83	786.60	783.77	589	Recharge
6816603	7/19/2005	Hays	29.82923	-98.01621	2.76	739.67	736.91	583	Recharge
67014AA	7/18/2005	Hays	29.92160	-97.96544	0.90	725.78	724.88	582	Recharge
67017BB	7/18/2005	Hays	29.90860	-97.97154	0.77	768.60	767.83	586	Recharge
6701812	7/19/2005	Hays	29.89048	-97.92837	2.89	583.78	580.89	578	Saline
6701813A	7/19/2005	Hays	29.89113	-97.92938	3.10	584.22	581.12	577	Saline
6701813B	7/19/2005	Hays	29.89113	-97.92938	3.08	584.20	581.12	578	Saline
67018BB	7/19/2005	Hays	29.89444	-97.92945	1.25	586.28	585.03	576	Recharge
67018CC	7/19/2005	Hays	29.89361	-97.93205	2.12	634.82	632.70	576	Artesian
67018DD	7/19/2005	Hays	29.88718	-97.94963	1.00	751.96	750.96	577	Artesian
67018EE	7/18/2005	Hays	29.90817	-97.91931	2.05	611.97	609.92	578	Artesian
67018FF	7/18/2005	Hays	29.90269	-97.92173	2.45	591.82	589.37	578	Recharge
6702104*	7/19/2005	Hays	29.98279	-97.87153	2.61	676.93	674.32	572	Saline
6702105*	7/19/2005	Hays	29.95830	-97.84212	2.19	648.89	646.70	580	Saline
6702106*	7/19/2005	Hays	29.97474	-97.85711	2.17	680.45	678.28	577	Saline
67091AA	7/19/2005	Hays	29.85881	-97.99281	0.41	748.82	748.41	581	Recharge
67091BB	7/18/2005	Hays	29.86763	-97.96883	0.55	646.99	646.44	579	Recharge
67091CC	7/19/2005	Hays	29.83654	-97.99393	4.75	737.65	732.90	584	Artesian
6709401*	7/19/2005	Hays	29.82925	-97.96236	2.37	644.88	642.51	594	Saline
7038902*	7/20/2005	Kinney	29.41360	-100.26122	2.10	1381.04	1378.94	1196	Recharge
6833604	7/21/2005	Medina	29.42219	-98.88875	0.90	848.85	847.95	720	Artesian
6834506	7/18/2005	Medina	29.43132	-98.81296	0.85	1044.31	1043.46	710	Artesian
6841301	7/19/2005	Medina	29.35504	-98.88010	1.64	761.40	759.76	715	Artesian
6842502	7/19/2005	Medina	29.31056	-98.82272	1.25	730.10	728.85	707	Artesian
6842504	7/18/2005	Medina	29.30962	-98.81524	0.35	724.68	724.33	708	Artesian
6849813	7/18/2005	Medina	29.16578	-98.93941	2.50	665.70	663.20	719	Artesian
6938601	7/18/2005	Medina	29.43854	-99.28346	1.34	1009.16	1007.82	934	Recharge
6938902	7/18/2005	Medina	29.37908	-99.27684	0.78	943.10	942.32	799	Artesian
6938906	7/19/2005	Medina	29.38866	-99.26452	1.47	951.88	950.41	810	Artesian
6939504	7/20/2005	Medina	29.45099	-99.19489	1.65	1022.79	1021.14	921	Artesian
6939801	7/20/2005	Medina	29.38856	-99.18614	0.70	956.46	955.76	791	Artesian
6939901	7/19/2005	Medina	29.38452	-99.15391	1.13	933.61	932.48	781	Artesian
6940101	7/20/2005	Medina	29.49326	-99.12483	0.61	1023.83	1023.22	918	Artesian
6940404	7/20/2005	Medina	29.43394	-99.12176	1.15	936.33	935.18	832	Artesian
6940510	7/25/2005	Medina	29.42658	-99.06945	2.62	918.02	915.40	786	Artesian
6940901	7/20/2005	Medina	29.40943	-99.00077	0.71	878.94	878.23	734	Artesian
6946601	7/18/2005	Medina	29.33225	-99.27894	0.89	885.29	884.40	792	Artesian

Appendix A (cont.)

Table A-1. Water levels collected during the July 18 through July 25, 2005, SWLP event.

Well ID #	Date	County	Latitude	Longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer
6946602	7/19/2005	Medina	29.31683	-99.26061	0.50	908.82	908.32	790	Artesian
6947306	7/19/2005	Medina	29.34632	-99.13894	0.80	887.48	886.68	742	Artesian
6947503	7/19/2005	Medina	29.32537	-99.20767	0.86	885.64	884.78	749	Artesian
6947603	7/19/2005	Medina	29.30746	-99.14958	1.50	845.51	844.01	747	Artesian
6948102	7/18/2005	Medina	29.35114	-99.08672	0.65	867.68	867.03	739	Artesian
6948402	7/19/2005	Medina	29.32488	-99.10738	0.70	853.63	852.93	739	Artesian
6956501	7/18/2005	Medina	29.17418	-99.05100	2.13	716.83	714.70	751	Artesian
6956507	7/18/2005	Medina	29.17176	-99.05494	1.30	714.07	712.77	752	Artesian
6956508	7/18/2005	Medina	29.17289	-99.05739	1.75	701.67	699.92	748	Artesian
6963103	7/18/2005	Medina	29.11109	-99.22003	4.83	666.01	661.18	772	Artesian
6825711	7/25/2005	Medina	29.50712	-98.98151	2.05	1176.35	1174.30	920	Recharge
6832802	7/25/2005	Medina	29.51001	-99.07712	1.85	1127.21	1125.36	933	Recharge
6833102	7/22/2005	Medina	29.47229	-98.96302	1.00	969.23	968.23	860	Recharge
6833213	7/25/2005	Medina	29.49146	-98.93827	2.24	1015.66	1013.42	888	Recharge
6842112*	7/19/2005	Medina	29.34577	-98.84908	2.90	765.50	762.60	721	Artesian
68422AA	7/19/2005	Medina	29.37035	-98.81167	0.80	778.33	777.53	703	Artesian
6931406	7/25/2005	Medina	29.55485	-99.23474	1.90	1168.23	1166.33	1047	Recharge
6931708	7/25/2005	Medina	29.52363	-99.23251	1.70	1142.62	1140.92	962	Recharge
6932703	7/25/2005	Medina	29.53416	-99.10993	1.20	1234.20	1233.00	1056	Recharge
69396AA	7/19/2005	Medina	29.43503	-99.14966	1.00	1000.31	999.31	855	Artesian
6940102	7/20/2005	Medina	29.46115	-99.11712	2.50	969.10	966.60	883	Recharge
6940209	7/25/2005	Medina	29.47879	-99.06727	1.75	1037.91	1036.16	884	Recharge
6946702-B	7/18/2005	Medina	29.26292	-99.35631	2.00	951.73	949.73	794	Artesian
69472AA	7/20/2005	Medina	29.34813	-99.19962	2.63	911.90	909.27	753	Artesian
6936402	7/19/2005	Uvalde	29.41893	-99.60954	2.60	1098.94	1096.34	846	Artesian
6936601	7/18/2005	Uvalde	29.42564	-99.51626	0.07	1072.43	1072.36	867	Artesian
6937402	7/18/2005	Uvalde	29.45330	-99.47319	2.00	1155.22	1153.22	895	Artesian
6942709	7/20/2005	Uvalde	29.27362	-99.86285	1.80	1007.43	1005.63	904	Artesian
6943409	7/19/2005	Uvalde	29.32391	-99.71381	1.70	1058.16	1056.46	892	Artesian
6943607	7/19/2005	Uvalde	29.32651	-99.63863	2.00	1011.65	1009.65	829	Artesian
6943903	7/19/2005	Uvalde	29.26646	-99.64909	1.25	956.08	954.83	822	Artesian
6944108	7/19/2005	Uvalde	29.36788	-99.60593	2.50	1043.13	1040.63	828	Artesian
6944301	7/18/2005	Uvalde	29.35294	-99.51335	1.15	1003.08	1001.93	811	Artesian
6944703	7/20/2005	Uvalde	29.25742	-99.58624	1.10	935.51	934.41	801	Artesian
6944804	7/20/2005	Uvalde	29.29064	-99.57277	1.50	954.17	952.67	820	Artesian
6945401	7/18/2005	Uvalde	29.31944	-99.46990	0.70	954.49	953.79	806	Artesian
6950302	7/19/2005	Uvalde	29.20874	-99.78437	2.40	907.30	904.90	880	Artesian
6952202	7/18/2005	Uvalde	29.24517	-99.54958	2.70	876.72	874.02	802	Saline
6953701	7/19/2005	Uvalde	29.14722	-99.47814	1.80	749.83	748.03	799	Artesian
6935401*	7/19/2005	Uvalde	29.44185	-99.74915	1.00	1290.97	1289.97	1171	Recharge
6935602*	7/19/2005	Uvalde	29.44589	-99.66531	0.50	1150.22	1149.72	1088	Recharge
6935804*	7/19/2005	Uvalde	29.39450	-99.70216	0.00	1153.44	1153.44	1038	Recharge
69369AA	7/18/2005	Uvalde	29.38037	-99.49433	0.82	1029.41	1028.59	818	Artesian
69438AA	7/19/2005	Uvalde	29.28805	-99.69953	0.91	977.49	976.58	878	Artesian
69439AA	7/19/2005	Uvalde	29.26620	-99.63640	0.56	948.32	947.76	803	Artesian
69443AA	7/18/2005	Uvalde	29.34002	-99.51963	1.42	989.86	988.44	811	Artesian
69493AA	7/20/2005	Uvalde	29.24416	-99.87655	0.30	968.46	968.16	903	Artesian
69501AA	7/19/2005	Uvalde	29.23925	-99.83805	0.67	950.46	949.79	892	Artesian
69502AA	7/19/2005	Uvalde	29.21054	-99.81871	0.83	913.91	913.08	882	Artesian
69502BB	7/20/2005	Uvalde	29.24166	-99.81707	0.39	932.02	931.63	889	Artesian
69502DD	7/19/2005	Uvalde	29.23691	-99.82745	0.00	941.30	941.30	891	Artesian
69503AA	7/20/2005	Uvalde	29.24579	-99.79076	0.55	957.34	956.79	886	Artesian
69503BB	7/18/2005	Uvalde	29.24693	-99.75681	0.70	964.86	964.16	885	Artesian
69505AA	7/20/2005	Uvalde	29.19097	-99.83198	6.25	917.00	910.75	875	Artesian
69505BB	7/19/2005	Uvalde	29.19384	-99.79326	1.00	902.20	901.20	877	Artesian
69506AA	7/18/2005	Uvalde	29.19319	-99.77621	0.37	897.49	897.12	872	Artesian
69511AA	7/18/2005	Uvalde	29.24161	-99.74245	1.00	966.57	965.57	883	Artesian
6951602	7/19/2005	Uvalde	29.17573	-99.66051	0.90	864.26	863.36	833	Saline
6951606	7/19/2005	Uvalde	29.19307	-99.63233	2.17	879.72	877.55	795	Saline
6952403	7/19/2005	Uvalde	29.19889	-99.61690	0.00	875.11	875.11	794	Saline
6952404	7/19/2005	Uvalde	29.19250	-99.61045	2.52	869.54	867.02	796	Saline
7040901*	7/20/2005	Uvalde	29.39456	-100.00232	0.84	1125.11	1124.27	1081	Recharge

* Well visited and water level measured, but not used in potentiometric map.

Appendix A (cont.)

Table A-2. Water levels collected during the October 24 through November 15, 2005, SWLP event.

Well ID #	Date	County	Latitude	Longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer
6850201	10/25/2005	Atascosa	29.23026	-98.79888	1.00	712.86	711.856	681	Artesian
6821806	10/27/2005	Bexar	29.62937	-98.44849	2.38	953.04	950.66	746	Recharge
6826814	10/26/2005	Bexar	29.52443	-98.79205	2.55	1042.55	1040.00	783	Artesian
6827307	10/27/2005	Bexar	29.58549	-98.63081	1.10	991.84	990.74	809	Recharge
6827401	10/25/2005	Bexar	29.55284	-98.74448	2.45	1033.90	1031.45	783	Artesian
6827517	11/7/2005	Bexar	29.56628	-98.68172	2.05	999.44	997.39	775	Recharge
6827609	10/27/2005	Bexar	29.56793	-98.66162	-0.33	960.21	960.54	775	Recharge
6827610	10/27/2005	Bexar	29.54772	-98.63564	2.11	904.16	902.05	754	Artesian
6827611	10/27/2005	Bexar	29.57476	-98.62737	-0.23	963.93	964.16	778	Recharge
6827612	10/27/2005	Bexar	29.56761	-98.63895	2.83	960.67	957.84	772	Recharge
6828210	11/7/2005	Bexar	29.59178	-98.57610	-0.37	983.90	984.27	789	Recharge
6828211	10/27/2005	Bexar	29.58781	-98.54858	2.65	976.95	974.30	785	Recharge
6828313	10/27/2005	Bexar	29.60984	-98.50603	2.50	951.31	948.81	736	Recharge
6828314	10/27/2005	Bexar	29.59303	-98.51131	1.40	901.93	900.53	747	Recharge
6828406	10/27/2005	Bexar	29.56376	-98.59950	0.80	979.52	978.72	757	Transition
6828407	11/7/2005	Bexar	29.57354	-98.58561	-0.22	999.81	1000.03	773	Recharge
6828512	10/28/2005	Bexar	29.57372	-98.57513	1.41	952.57	951.16	777	Recharge
6828516	10/27/2005	Bexar	29.56090	-98.57974	1.46	949.11	947.65	748	Recharge
6828517	11/7/2005	Bexar	29.57658	-98.57505	2.54	966.38	963.84	779	Recharge
6828519	10/27/2005	Bexar	29.56900	-98.55357	-0.30	926.54	926.84	733	Recharge
6828608	10/27/2005	Bexar	29.58246	-98.51359	1.90	859.98	858.08	706	Artesian
6828609	10/27/2005	Bexar	29.58296	-98.53712	-0.30	925.95	926.25	742	Recharge
6828909	10/27/2005	Bexar	29.50722	-98.52556	1.90	784.93	783.03	682	Artesian
6828920	10/27/2005	Bexar	29.54172	-98.51074	0.75	925.71	924.96	687	Artesian
6828921	10/27/2005	Bexar	29.50417	-98.53944	1.10	824.54	823.44	683	Artesian
6829103	10/27/2005	Bexar	29.58959	-98.48800	0.61	953.12	952.51	723	Recharge
6829112	10/27/2005	Bexar	29.59967	-98.48011	2.38	891.38	889.00	730	Recharge
6829114	10/27/2005	Bexar	29.59122	-98.46206	-0.30	852.30	852.60	731	Recharge
6829213	10/27/2005	Bexar	29.58457	-98.45244	1.30	853.16	851.86	707	Recharge
6829214	10/27/2005	Bexar	29.58878	-98.42807	-0.40	809.51	809.91	709	Recharge
6829215	10/27/2005	Bexar	29.59362	-98.43999	2.10	829.10	827.00	717	Recharge
6829217	10/27/2005	Bexar	29.60413	-98.43983	-0.40	919.50	919.90	736	Recharge
6829418	10/27/2005	Bexar	29.58221	-98.46730	2.26	830.41	828.15	721	Recharge
6829506	10/27/2005	Bexar	29.57460	-98.43905	1.35	789.35	788.00	686	Artesian
6829611	10/27/2005	Bexar	29.56611	-98.38528	2.80	832.60	829.80	673	Artesian
6829701	10/27/2005	Bexar	29.53732	-98.46398	2.52	780.38	777.86	680	Artesian
6829925	10/25/2005	Bexar	29.51624	-98.39737	2.10	758.41	756.31	676	Artesian
6830211	10/27/2005	Bexar	29.60496	-98.32818	0.15	776.65	776.50	670	Artesian
6830807	10/27/2005	Bexar	29.52487	-98.29610	1.00	753.90	752.90	673	Artesian
6836107	10/26/2005	Bexar	29.48858	-98.61109	3.80	882.00	878.20	684	Artesian
6836206	10/26/2005	Bexar	29.47250	-98.54806	4.20	760.43	756.23	684	Artesian
6836512	10/26/2005	Bexar	29.43833	-98.56472	3.97	689.43	685.46	682	Artesian
6836901	10/25/2005	Bexar	29.41369	-98.51577	3.21	640.45	637.24	682	Artesian
6837103	10/27/2005	Bexar	29.49722	-98.48694	1.00	730.53	729.53	679	Artesian
6837203	10/27/2005	Bexar	29.47913	-98.43261	0.30	731.11	730.81	678	Artesian
6837304	10/28/2005	Bexar	29.46898	-98.38384	2.30	704.98	702.68	677	Artesian
6837521	10/26/2005	Bexar	29.41821	-98.42768	3.85	623.85	620.00	677	Saline
6837522	10/26/2005	Bexar	29.41844	-98.42785	3.97	623.97	620.00	678	Saline
6837523	10/26/2005	Bexar	29.41833	-98.42777	3.74	623.74	620.00	677	Saline
6837524	10/26/2005	Bexar	29.42899	-98.44448	4.24	630.24	626.00	680	Artesian
6837525	10/26/2005	Bexar	29.42925	-98.43359	5.32	629.32	624.00	676	Artesian
6837526	10/26/2005	Bexar	29.43215	-98.43537	4.97	651.14	646.17	680	Artesian
6837527	10/26/2005	Bexar	29.43243	-98.43538	4.34	648.42	644.08	680	Artesian
6837722	10/26/2005	Bexar	29.38975	-98.49575	3.00	605.71	602.71	680	Artesian
6837723	10/26/2005	Bexar	29.38525	-98.49037	2.60	595.48	592.88	681	Saline
6837724	10/26/2005	Bexar	29.37901	-98.49037	1.90	594.93	593.03	679	Saline
6843606	10/25/2005	Bexar	29.31971	-98.65333	1.83	608.79	606.96	686	Artesian
6843607	10/25/2005	Bexar	29.31273	-98.65039	2.59	622.55	619.96	686	Artesian
6844505	10/25/2005	Bexar	29.30906	-98.56314	3.20	593.20	590.00	681	Saline
6844506*	10/25/2005	Bexar	29.32115	-98.55000	3.10	613.10	610.00	662	Saline
68293AA	10/28/2005	Bexar	29.60173	-98.38435	1.70	969.38	967.68	684	Artesian
68302AA	10/28/2005	Bexar	29.59858	-98.32022	1.09	781.83	780.74	668	Artesian
68302BB	10/28/2005	Bexar	29.59885	-98.31847	1.25	764.75	763.50	668	Artesian
68307AA	10/28/2005	Bexar	29.51793	-98.37472	1.05	820.15	819.10	671	Artesian
68431AA	10/25/2005	Bexar	29.36596	-98.73721	1.00	718.01	717.01	700	Artesian
6815809	10/26/2005	Comal	29.77095	-98.17648	0.35	908.74	908.39	656	Recharge
6815902	10/28/2005	Comal	29.75912	-98.14005	2.13	661.89	659.76	659	Recharge
6815907	10/28/2005	Comal	29.75467	-98.13955	1.45	707.93	706.48	646	Recharge
6815912	10/28/2005	Comal	29.75451	-98.14100	1.53	695.32	693.79	641	Recharge
6816602*	10/24/2005	Comal	29.79415	-98.02420	0.20	608.25	608.05	601	Saline
6816701	10/28/2005	Comal	29.75728	-98.10479	2.00	713.57	711.57	618	Artesian
6816703	10/27/2005	Comal	29.75366	-98.09312	0.70	701.24	700.54	615	Artesian
6816801	10/24/2005	Comal	29.78677	-98.05287	0.50	753.33	752.83	612	Artesian
6816803	10/24/2005	Comal	29.76992	-98.07410	1.50	726.89	725.39	613	Artesian
6822601	10/25/2005	Comal	29.67736	-98.28615	0.32	908.16	907.84	690	Recharge
6822603	10/25/2005	Comal	29.70225	-98.25158	1.28	946.94	945.66	689	Recharge
6822807	10/25/2005	Comal	29.65550	-98.30505	1.85	897.34	895.49	688	Artesian
6822810	10/25/2005	Comal	29.66027	-98.30709	1.30	890.73	889.43	690	Recharge
6822912	10/24/2005	Comal	29.63038	-98.27526	2.11	791.57	789.46	664	Recharge
6823208	10/25/2005	Comal	29.73490	-98.1944	0.25	887.88	887.63	659	Recharge
6823209*	10/25/2005	Comal	29.72079	-98.1790	1.75	863.78	862.03	627	Recharge
6823210	10/25/2005	Comal	29.71452	-98.20805	0.32	920.55	920.23	666	Recharge
6823211	10/27/2005	Comal	29.74443	-98.17163	1.32	784.64	783.32	642	Recharge

Appendix A (cont.)

Table A-2. Water levels collected during the October 24 through November 15, 2005, SWLP event.

Well ID #	Date	County	Latitude	Longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer
6823302	10/24/2005	Comal	29.71357	-98.13835	1.00	643.59	642.59	628	Recharge
6823304	10/27/2005	Comal	29.71111	-98.13833	0.36	626.53	626.17	641	Artesian
6823306	10/27/2005	Comal	29.74621	-98.15395	1.40	809.07	807.67	639	Recharge
6823309	10/24/2005	Comal	29.71867	-98.13524	0.55	736.76	736.21	627	Recharge
6823316	10/26/2005	Comal	29.72137	-98.14791	1.06	807.58	806.52	632	Recharge
6823319	10/24/2005	Comal	29.72101	-98.12768	1.50	629.13	627.63	625	Recharge
6823504	10/27/2005	Comal	29.67135	-98.19642	3.40	709.58	706.18	650	Recharge
6823602	10/27/2005	Comal	29.70188	-98.15112	1.35	704.36	703.01	640	Recharge
6823617	10/26/2005	Comal	29.70559	-98.13506	2.72	635.94	633.22	640	Saline
6823621	10/24/2005	Comal	29.69445	-98.15917	0.87	671.68	670.81	644	Artesian
6823701	10/24/2005	Comal	29.64889	-98.21644	0.72	685.45	684.73	656	Artesian
6823709	10/24/2005	Comal	29.64043	-98.23312	1.10	706.61	705.51	662	Artesian
6823710	10/24/2005	Comal	29.66343	-98.23604	0.85	816.52	815.67	649	Recharge
6823807	10/24/2005	Comal	29.66636	-98.17132	1.70	657.58	655.88	647	Artesian
6824102	10/27/2005	Comal	29.74472	-98.10738	2.95	643.83	640.88	620	Recharge
6830208	10/24/2005	Comal	29.61022	-98.31958	2.11	800.20	798.09	668	Artesian
6830226	10/25/2005	Comal	29.61514	-98.31715	1.58	828.89	827.31	668	Artesian
6830312	10/24/2005	Comal	29.61281	-98.28392	0.90	774.08	773.18	664	Artesian
6830315	10/31/2005	Comal	29.60900	-98.28993	2.35	784.57	782.22	665	Artesian
6823616A	10/26/2005	Comal	29.70434	-98.13308	2.40	637.82	635.42	638	Saline
68302AA	10/25/2005	Comal	29.61835	-98.32658	1.25	806.04	804.79	672	Artesian
6830314	10/31/2005	Guadalupe	29.60263	-98.25724	2.17	873.18	871.01	665	Artesian
6831403*	10/31/2005	Guadalupe	29.57306	-98.22948	2.09	711.17	709.08	671	Saline
6831511*	10/31/2005	Guadalupe	29.54597	-98.20266	2.06	676.06	674.00	665	Saline
5849926	10/24/2005	Hays	30.12513	-97.90517	0.22	794.46	794	672	Recharge
5857502	11/2/2005	Hays	30.06635	-97.94447	0.50	890.50	890.00	683	Recharge
5857503	11/2/2005	Hays	30.06447	-97.92834	0.50	810.50	810.00	674	Recharge
5857509	11/1/2005	Hays	30.07240	-97.92031	0.60	781.60	781.00	660	Recharge
5857510	11/2/2005	Hays	30.06346	-97.94162	3.90	868.90	865.00	685	Recharge
5857512	11/10/2005	Hays	30.05853	-97.92112	1.95	830.25	828.30	672	Recharge
5857606	11/4/2005	Hays	30.04773	-97.88367	0.70	821.08	820.38	606	Recharge
5857610	11/4/2005	Hays	30.04560	-97.89873	2.35	805.75	803.40	615	Recharge
5857701	11/3/2005	Hays	30.03969	-97.96465	0.90	931.90	931.00	720	Recharge
5857702	11/3/2005	Hays	30.03865	-97.97967	0.40	949.57	949.17	751	Recharge
5857802	11/15/2005	Hays	30.02667	-97.92778	0.00	838.00	838.00	649	Recharge
5857807	11/15/2005	Hays	30.01944	-97.95194	0.00	887.00	887.00	673	Recharge
5857901	11/1/2005	Hays	30.03275	-97.89030	1.60	838.51	836.91	606	Artesian
5857902	11/2/2005	Hays	30.00833	-97.89500	0.00	815.00	815.00	596	Artesian
5857903	11/2/2005	Hays	30.03851	-97.88618	0.70	827.50	826.80	606	Artesian
5858101	11/2/2005	Hays	30.08358	-97.84264	0.90	707.84	706.94	580	Artesian
5858115	11/4/2005	Hays	30.12444	-97.87389	1.60	731.60	730.00	555	Recharge
5858122	11/8/2005	Hays	30.09472	-97.84361	1.00	715.00	714.00	573	Artesian
5858123	11/1/2005	Hays	30.10943	-97.84173	2.80	714.80	712.00	571	Artesian
5858128	10/28/2005	Hays	30.08725	-97.85361	1.50	749.96	748.46	584	Artesian
5858219	11/8/2005	Hays	30.09167	-97.81750	0.93	684.93	684.00	574	Artesian
5858413	11/1/2005	Hays	30.07051	-97.83549	1.08	753.51	752.43	577	Artesian
5858417	11/4/2005	Hays	30.04723	-97.86748	1.50	764.57	763.07	597	Artesian
5858418	11/2/2005	Hays	30.07129	-97.85825	0.40	731.45	731.05	605	Recharge
5858423	11/2/2005	Hays	30.06781	-97.85912	1.60	746.60	745.00	600	Recharge
5858424	11/4/2005	Hays	30.07856	-97.87157	2.00	746.00	744.00	601	Recharge
5858426	11/4/2005	Hays	30.08000	-97.86987	2.00	736.51	734.51	591	Recharge
5858427	11/4/2005	Hays	30.07717	-97.86132	2.00	711.43	709.43	608	Artesian
5858428	11/2/2005	Hays	30.05167	-97.83417	0.75	692.75	692.00	584	Saline
5858509	11/2/2005	Hays	30.07611	-97.83000	1.83	714.17	712.34	568	Artesian
5858511	11/8/2005	Hays	30.07193	-97.82836	3.75	740.74	736.99	577	Artesian
5858704	11/2/2005	Hays	30.02750	-97.85389	0.34	746.34	746.00	572	Artesian
5858711	11/2/2005	Hays	30.01677	-97.85932	1.95	698.57	696.62	573	Artesian
6701203	11/3/2005	Hays	29.96194	-97.92056	1.00	692.00	691.00	586	Recharge
6701301	11/3/2005	Hays	29.96294	-97.89681	1.00	680.00	679.00	564	Artesian
6701303	10/24/2005	Hays	29.98976	-97.87548	1.10	720.34	719.24	553	Artesian
6701304	10/24/2005	Hays	29.98451	-97.87630	0.25	717.80	717.55	563	Artesian
6701311	10/31/2005	Hays	29.98143	-97.89140	2.48	773.00	770.52	571	Artesian
6701809	10/24/2005	Hays	29.91192	-97.92877	1.20	602.47	601.27	576	Recharge
6701812	10/25/2005	Hays	29.89048	-97.92837	2.89	583.78	580.89	576	Saline
6702104*	10/31/2005	Hays	29.98279	-97.87153	2.61	676.93	674.32	568	Saline
6702105*	10/31/2005	Hays	29.95830	-97.84212	2.19	648.89	646.70	577	Saline
6702106*	10/31/2005	Hays	29.97474	-97.85711	2.17	680.45	678.28	571	Saline
6709105	10/25/2005	Hays	29.84479	-97.98418	2.50	694.73	692.23	579	Artesian
6709106	10/25/2005	Hays	29.85243	-97.98716	1.32	700.98	699.66	579	Artesian
6709110	10/24/2005	Hays	29.84358	-97.98225	13.71	692.59	678.88	580	Artesian
6709113	10/31/2005	Hays	29.83874	-97.99074	1.69	706.42	704.73	580	Artesian
6709401*	10/31/2005	Hays	29.82925	-97.96236	2.37	644.88	642.51	592	Saline
6808902	10/25/2005	Hays	29.89647	-98.00289	2.83	786.60	783.77	583	Recharge
6816603	10/26/2005	Hays	29.82923	-98.01621	2.76	739.67	736.91	581	Recharge
58575J2	11/1/2005	Hays	30.04950	-97.93567	1.49	914.97	913.48	700	Recharge
58575R5	11/2/2005	Hays	30.07601	-97.95407	0.85	960.85	960.00	762	Recharge
58575R7	11/2/2005	Hays	30.07612	-97.95426	0.40	960.40	960.00	762	Recharge
58575RR	11/2/2005	Hays	30.04613	-97.95755	2.10	902.10	900.00	713	Recharge
58576DS	11/10/2005	Hays	30.08139	-97.90945	1.65	791.65	790.00	653	Recharge
58576JC	11/10/2005	Hays	30.08055	-97.91111	1.60	783.60	782.00	646	Recharge
58576KW	11/10/2005	Hays	30.08278	-97.91250	1.80	786.80	785.00	656	Recharge
58576M3	11/10/2005	Hays	30.07214	-97.91615	1.50	791.50	790.00	668	Recharge
58576MZ	11/10/2005	Hays	30.08361	-97.91261	1.80	791.80	790.00	656	Recharge

Appendix A (cont.)

Table A-2. Water levels collected during the October 24 through November 15, 2005, SWLP event.

Well ID #	Date	County	Latitude	Longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer
58576SI	11/10/2005	Hays	30.08194	-97.91333	1.50	791.50	790.00	649	Recharge
585776FF	11/2/2005	Hays	30.04068	-97.96017	0.00	940.00	940.00	705	Recharge
585776GG	11/2/2005	Hays	30.04050	-97.96049	0.20	940.20	940.00	708	Recharge
58578BW1	11/3/2005	Hays	30.03833	-97.92834	2.00	853.00	851.00	671	Recharge
58578JG	11/3/2005	Hays	30.03494	-97.95198	0.30	856.30	856.00	688	Recharge
58578SG	11/2/2005	Hays	30.02337	-97.92108	1.05	876.09	875.04	638	Artesian
58579OL	11/2/2005	Hays	30.02159	-97.90551	0.30	865.30	865.00	608	Artesian
58579PC	11/2/2005	Hays	30.02778	-97.87917	1.34	801.70	800.36	576	Artesian
58581AB	11/1/2005	Hays	30.11337	-97.86055	1.10	771.10	770.00	539	Artesian
58581BC	10/28/2005	Hays	30.08509	-97.85768	0.73	743.73	743.00	585	Artesian
58581C1	11/1/2005	Hays	30.10156	-97.85811	0.95	747.95	747.00	565	Artesian
58581DD	10/28/2005	Hays	30.11858	-97.87114	1.78	756.78	755.00	537	Artesian
58581EH	10/28/2005	Hays	30.11096	-97.87410	1.60	808.60	807.00	554	Artesian
58581JS	10/28/2005	Hays	30.10578	-97.87267	2.10	800.10	798.00	562	Artesian
58581MC	11/2/2005	Hays	30.09111	-97.84028	0.70	700.70	700.00	582	Artesian
58581OS	10/28/2005	Hays	30.10535	-97.87415	2.00	793.00	791.00	554	Artesian
58581PS	11/7/2005	Hays	30.08919	-97.85257	1.32	748.85	747.53	581	Artesian
58581RD	10/28/2005	Hays	30.10806	-97.87382	2.10	839.10	837.00	555	Artesian
58581WM	10/28/2005	Hays	30.08540	-97.86787	0.00	768.80	768.80	598	Recharge
58584CT	11/2/2005	Hays	30.06020	-97.86848	1.13	735.93	734.80	600	Recharge
58584HO	11/2/2005	Hays	30.07203	-97.84697	1.25	726.25	725.00	593	Artesian
58584LC	11/4/2005	Hays	30.07083	-97.87361	1.00	711.00	710.00	583	Recharge
58584SG	11/2/2005	Hays	30.08111	-97.84361	0.00	710.00	710.00	583	Recharge
58584TC	11/2/2005	Hays	30.06184	-97.85600	0.00	748.00	748.00	596	Recharge
67014AA	10/24/2005	Hays	29.92160	-97.96544	0.90	725.78	724.88	581	Recharge
67015MD*	11/3/2005	Hays	29.94628	-97.93557	1.30	756.30	755.00	566	Artesian
67015XN	11/3/2005	Hays	29.92359	-97.94784	0.50	685.50	685.00	576	Recharge
67016AW2	11/3/2005	Hays	29.93740	-97.91480	0.70	790.70	790.00	571	Artesian
67016EN	11/3/2005	Hays	29.93216	-97.90456	0.70	670.70	670.00	574	Artesian
67017BB	10/24/2005	Hays	29.90860	-97.97154	0.77	768.60	767.83	580	Recharge
6701813A	10/25/2005	Hays	29.89113	-97.92938	3.10	584.22	581.12	576	Saline
6701813B	10/25/2005	Hays	29.89113	-97.92938	3.08	584.20	581.12	577	Saline
67018BB	10/26/2005	Hays	29.89444	-97.92945	1.25	586.28	585.03	575	Recharge
67018CC	10/26/2005	Hays	29.89361	-97.93205	2.12	634.82	632.70	575	Artesian
67018DD	10/26/2005	Hays	29.88718	-97.94963	1.00	751.96	750.96	576	Artesian
67019EG	11/3/2005	Hays	29.91359	-97.91647	0.85	650.85	650.00	579	Artesian
67091AA	10/24/2005	Hays	29.85881	-97.99281	0.41	748.82	748.41	579	Recharge
67091BB	10/24/2005	Hays	29.86763	-97.96883	0.55	646.99	646.44	578	Recharge
67091CC	10/26/2005	Hays	29.83654	-97.99393	4.75	737.65	732.90	580	Artesian
7038902*	10/26/2005	Kinney	29.41360	-100.26122	2.10	1381.04	1378.94	1198	Recharge
6825711	11/1/2005	Medina	29.50712	-98.98151	2.05	1176.35	1174.3	918	Recharge
6832802	11/1/2005	Medina	29.51001	-99.07712	1.85	1127.21	1125.36	926	Recharge
6833102	10/26/2005	Medina	29.47229	-98.96302	1.00	969.23	968.233	857	Recharge
6833213	11/1/2005	Medina	29.49146	-98.93827	2.24	1015.66	1013.42	885	Recharge
6833604	10/25/2005	Medina	29.42219	-98.88875	0.90	848.85	847.950	721	Artesian
6841301	10/25/2005	Medina	29.35504	-98.88010	1.64	761.40	759.761	716	Artesian
6842112	10/24/2005	Medina	29.34577	-98.84908	2.90	765.50	762.601	716	Artesian
6842502	10/25/2005	Medina	29.31056	-98.82272	1.25	730.10	728.852	706	Artesian
6842504	10/24/2005	Medina	29.30962	-98.81524	0.35	724.68	724.333	705	Artesian
6849813	10/25/2005	Medina	29.16578	-98.93941	2.50	665.70	663.2	714	Artesian
6931406	11/1/2005	Medina	29.55485	-99.23474	1.90	1168.23	1166.33	1046	Recharge
6931708	11/1/2005	Medina	29.52363	-99.23251	1.70	1142.62	1140.92	947	Recharge
6932703	11/1/2005	Medina	29.53416	-99.10993	1.20	1234.20	1233	1056	Recharge
6938601	10/27/2005	Medina	29.43854	-99.28346	1.34	1009.16	1007.825	930	Recharge
6938902	10/27/2005	Medina	29.37908	-99.27684	0.78	943.10	942.325	796	Artesian
6938906	10/27/2005	Medina	29.38866	-99.26452	1.47	951.88	950.408	811	Artesian
6939504	10/26/2005	Medina	29.45099	-99.19489	1.65	1022.79	1021.140	911	Artesian
6939801	10/26/2005	Medina	29.38856	-99.18614	0.70	956.46	955.760	787	Artesian
6939901	10/26/2005	Medina	29.38452	-99.15391	1.13	933.61	932.480	781	Artesian
6940101	10/26/2005	Medina	29.49326	-99.12483	0.61	1023.83	1023.220	911	Artesian
6940102	10/26/2005	Medina	29.46115	-99.11712	2.50	969.10	966.600	879	Recharge
6940202	10/26/2005	Medina	29.46714	-99.07395	1.05	998.74	997.691	865	Recharge
6940209	11/1/2005	Medina	29.47879	-99.06727	1.75	1037.91	1036.16	880	Recharge
6940404	10/26/2005	Medina	29.43394	-99.12176	1.15	936.33	935.180	827	Artesian
6940510	11/1/2005	Medina	29.42658	-99.06945	2.62	918.02	915.4	784	Artesian
6940901	10/26/2005	Medina	29.40943	-99.00077	0.71	878.94	878.225	736	Artesian
6946601	10/27/2005	Medina	29.33225	-99.27894	0.89	885.29	884.398	791	Artesian
6946602	10/28/2005	Medina	29.31683	-99.26061	0.50	908.82	908.315	790	Artesian
6947306	10/26/2005	Medina	29.34632	-99.13894	0.80	887.48	886.680	741	Artesian
6947503	10/28/2005	Medina	29.32537	-99.20767	0.86	885.64	884.776	752	Artesian
6947602	10/28/2005	Medina	29.32167	-99.15513	1.15	863.39	862.240	747	Artesian
6947603	10/28/2005	Medina	29.30746	-99.14958	1.50	845.51	844.012	748	Artesian
6948102	10/28/2005	Medina	29.35114	-99.08672	0.65	867.68	867.030	738	Artesian
6948402	10/26/2005	Medina	29.32488	-99.10738	0.70	853.63	852.929	721	Artesian
6956501	10/28/2005	Medina	29.17418	-99.05100	2.13	716.83	714.700	751	Artesian
6956507	10/28/2005	Medina	29.17176	-99.05494	1.30	714.07	712.767	750	Artesian
6956508	10/28/2005	Medina	29.17289	-99.05739	1.75	701.67	699.917	748	Artesian
6963103	10/28/2005	Medina	29.11109	-99.22003	4.83	666.01	661.184	768	Artesian
68422AA	10/25/2005	Medina	29.37035	-98.81167	0.80	778.33	777.534	707	Artesian
69396AA	10/26/2005	Medina	29.43503	-99.14966	1.00	1000.31	999.310	857	Artesian
6946702-B	10/28/2005	Medina	29.26292	-99.35631	2.00	951.73	949.728	788	Artesian
69472AA	10/27/2005	Medina	29.34813	-99.19962	2.63	911.90	909.270	755	Artesian
6935401*	10/25/2005	Uvalde	29.44185	-99.74915	1.00	1290.97	1289.97	1169	Recharge

Appendix A (cont.)

Table A-2. Water levels collected during the October 24 through November 15, 2005, SWLP event.

Well ID #	Date	County	Latitude	Longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer
6935602*	10/26/2005	Uvalde	29.44589	-99.66531	0.50	1150.22	1149.72	1087	Recharge
6935804*	10/26/2005	Uvalde	29.39450	-99.70216	0.00	1153.44	1153.44	1033	Recharge
6936402	10/26/2005	Uvalde	29.41893	-99.60954	2.60	1098.94	1096.34	835	Artesian
6936601	10/24/2005	Uvalde	29.42564	-99.51626	0.07	1072.43	1072.36	840	Artesian
6937402	10/24/2005	Uvalde	29.45330	-99.47319	2.00	1155.22	1153.22	876	Artesian
6942709	10/26/2005	Uvalde	29.27362	-99.86285	1.80	1007.43	1005.63	905	Artesian
6943409	10/26/2005	Uvalde	29.32391	-99.71381	1.70	1058.16	1056.46	890	Artesian
6943607	10/25/2005	Uvalde	29.32651	-99.63863	2.00	1011.65	1009.65	824	Artesian
6943903	10/25/2005	Uvalde	29.26646	-99.64909	1.25	956.08	954.83	876	Artesian
6944108	10/26/2005	Uvalde	29.36788	-99.60593	2.50	1043.13	1040.63	823	Artesian
6944301	10/24/2005	Uvalde	29.35294	-99.51335	1.15	1003.08	1001.93	809	Artesian
6944402	10/24/2005	Uvalde	29.33012	-99.59355	1.00	998.37	997.37	822	Artesian
6944703	10/25/2005	Uvalde	29.25742	-99.58624	1.10	935.51	934.41	806	Artesian
6944804	10/25/2005	Uvalde	29.29064	-99.57277	1.50	954.17	952.67	823	Artesian
6944902	10/24/2005	Uvalde	29.26979	-99.50527	1.97	901.88	899.91	802	Artesian
6945401	10/24/2005	Uvalde	29.31944	-99.46990	0.70	954.49	953.79	799	Artesian
6950302	10/24/2005	Uvalde	29.20874	-99.78437	2.40	907.30	904.90	881	Artesian
6951401	10/24/2005	Uvalde	29.17440	-99.73427	1.36	892.66	891.30	849	Artesian
6951602	10/24/2005	Uvalde	29.17573	-99.66051	0.90	864.26	863.36	835	Saline
6951606	10/24/2005	Uvalde	29.19307	-99.63233	2.17	879.72	877.55	804	Saline
6952202	10/24/2005	Uvalde	29.24517	-99.54958	2.70	876.72	874.02	801	Saline
6952403	10/24/2005	Uvalde	29.19889	-99.61690	0.00	875.11	875.11	803	Saline
6952404	10/24/2005	Uvalde	29.19250	-99.61045	2.52	869.54	867.02	804	Saline
7040901*	10/26/2005	Uvalde	29.39456	-100.00232	0.84	1125.11	1124.27	1081	Recharge
69369AA	10/25/2005	Uvalde	29.38037	-99.49433	0.82	1029.41	1028.59	814	Artesian
69438AA	10/25/2005	Uvalde	29.28805	-99.69953	0.91	977.49	976.58	875	Artesian
69439AA	10/25/2005	Uvalde	29.26620	-99.63640	0.56	948.32	947.76	870	Artesian
69443AA	10/24/2005	Uvalde	29.34002	-99.51963	1.42	989.86	988.44	808	Artesian
69493AA	10/25/2005	Uvalde	29.24416	-99.87655	0.30	968.46	968.16	904	Artesian
69501AA	10/25/2005	Uvalde	29.23925	-99.83805	0.67	950.46	949.79	892	Artesian
69502AA	10/25/2005	Uvalde	29.21054	-99.81871	0.83	913.91	913.08	883	Artesian
69502BB	10/26/2005	Uvalde	29.24166	-99.81707	0.39	932.02	931.63	890	Artesian
69502DD	10/25/2005	Uvalde	29.23691	-99.82745	0.00	941.30	941.30	892	Artesian
69503AA	10/25/2005	Uvalde	29.24579	-99.79076	0.55	957.34	956.79	887	Artesian
69503BB	10/25/2005	Uvalde	29.24693	-99.75681	0.70	964.86	964.16	886	Artesian
69503CC	10/25/2005	Uvalde	29.21670	-99.75534	0.80	931.15	930.35	883	Artesian
69505AA	10/25/2005	Uvalde	29.19097	-99.83198	6.25	917.00	910.75	876	Artesian
69506AA	10/24/2005	Uvalde	29.19319	-99.77621	0.37	897.49	897.12	871	Artesian
69511AA	10/25/2005	Uvalde	29.24161	-99.74245	1.00	966.57	965.57	884	Artesian

* Well visited and water level measured, but not used in potentiometric map.

Appendix A (cont.)

Table A-3. Water levels collected during the July 14 through July 21, 2006, SWLP event.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone
6850201	7/19/2006	Atascosa	29.23026	-98.79888	1.00	712.86	711.86	651	Artesian
6821806	7/26/2006	Bexar	29.62937	-98.44849	2.38	953.04	950.660	712	Recharge
6826814	7/19/2006	Bexar	29.52443	-98.79205	2.55	1042.55	1040.00	737	Artesian
6827307	7/18/2006	Bexar	29.58549	-98.63081	1.10	991.84	990.744	781	Recharge
6827401	7/17/2006	Bexar	29.55284	-98.74448	2.45	1033.90	1031.45	740	Artesian
6827517	7/18/2006	Bexar	29.56628	-98.68172	2.05	999.44	997.391	745	Recharge
6827609	7/18/2006	Bexar	29.56793	-98.66162	-0.33	960.21	960.540	739	Recharge
6827610	7/18/2006	Bexar	29.54772	-98.63564	2.11	904.16	902.050	716	Artesian
6827611	7/18/2006	Bexar	29.57476	-98.62737	-0.23	963.93	964.16	747	Recharge
6827612	7/18/2006	Bexar	29.56761	-98.63895	2.83	960.67	957.84	738	Recharge
6828113	7/27/2006	Bexar	29.58791	-98.60765	-0.45	1021.88	1022.33	761	Transition
6828211	7/18/2006	Bexar	29.58781	-98.54858	2.65	976.95	974.30	750	Recharge
6828313	7/18/2006	Bexar	29.60984	-98.50603	2.50	951.31	948.81	737	Recharge
6828314	7/18/2006	Bexar	29.59303	-98.51131	1.40	901.93	900.53	716	Recharge
6828315	7/18/2006	Bexar	29.60313	-98.52191	-0.17	946.58	946.75	720	Recharge
6828406	7/18/2006	Bexar	29.56376	-98.59950	0.80	979.52	978.72	722	Transition
6828407	7/18/2006	Bexar	29.57354	-98.58561	-0.22	999.81	1000.03	746	Recharge
6828515	7/18/2006	Bexar	29.56326	-98.56136	1.71	977.40	975.69	710	Recharge
6828516	7/18/2006	Bexar	29.56090	-98.57974	1.46	949.11	947.65	719	Recharge
6828517	7/18/2006	Bexar	29.57658	-98.57505	2.54	966.38	963.84	758	Recharge
6828518	7/18/2006	Bexar	29.57736	-98.54491	2.45	929.06	926.61	723	Recharge
6828608	7/18/2006	Bexar	29.58246	-98.51359	1.90	859.98	858.08	661	Artesian
6828609	7/18/2006	Bexar	29.58296	-98.53712	-0.30	925.95	926.25	722	Recharge
6828909	7/20/2006	Bexar	29.50722	-98.52556	1.90	784.93	783.03	651	Artesian
6828920	7/19/2006	Bexar	29.54172	-98.51074	0.75	925.71	924.96	655	Artesian
6828921	7/20/2006	Bexar	29.50417	-98.53944	1.10	824.54	823.44	652	Artesian
6829103	7/20/2006	Bexar	29.58959	-98.48800	0.61	953.12	952.51	692	Recharge
6829112	7/20/2006	Bexar	29.59967	-98.48011	2.38	891.38	889.00	709	Recharge
6829114	7/19/2006	Bexar	29.59122	-98.46206	-0.30	852.30	852.60	702	Recharge
6829213	7/19/2006	Bexar	29.58457	-98.45244	1.30	853.16	851.86	681	Recharge
6829214	7/19/2006	Bexar	29.58878	-98.42807	-0.40	809.51	809.91	674	Recharge
6829215	7/19/2006	Bexar	29.59362	-98.43999	2.10	829.10	827.00	692	Recharge
6829216	7/19/2006	Bexar	29.61186	-98.44442	-0.40	923.30	923.70	707	Recharge
6829217	7/19/2006	Bexar	29.60413	-98.43983	-0.40	919.50	919.90	704	Recharge
6829418	7/19/2006	Bexar	29.58221	-98.46730	2.26	830.41	828.15	690	Recharge
6829506	7/19/2006	Bexar	29.57460	-98.43905	1.35	789.35	788.00	653	Artesian
6829611	7/20/2006	Bexar	29.56611	-98.38528	2.80	832.60	829.80	646	Artesian
6829701	7/20/2006	Bexar	29.53732	-98.46398	2.52	780.38	777.86	650	Artesian
6829925	7/18/2006	Bexar	29.51624	-98.39737	2.10	758.41	756.31	648	Artesian
6830211	7/18/2006	Bexar	29.60496	-98.32818	0.15	776.65	776.50	646	Artesian
6830807	7/18/2006	Bexar	29.52487	-98.29610	1.00	753.90	752.90	646	Artesian
6836103*	7/19/2006	Bexar	29.48833	-98.60083	6.58	913.84	907.26	692	Artesian
6836107	7/20/2006	Bexar	29.48858	-98.61109	3.80	882.00	878.20	652	Artesian
6836206	7/19/2006	Bexar	29.47250	-98.54806	4.20	760.43	756.23	652	Artesian
6836512	7/19/2006	Bexar	29.43833	-98.56472	3.97	689.43	685.46	656	Artesian
6836901	7/17/2006	Bexar	29.41369	-98.51577	3.21	640.45	637.24	656	Artesian
6837103	7/20/2006	Bexar	29.49722	-98.48694	1.00	730.53	729.53	650	Artesian
6837203	7/18/2006	Bexar	29.47913	-98.43261	0.30	731.11	730.81	650	Artesian
6837304	7/21/2006	Bexar	29.46898	-98.38384	2.30	704.98	702.68	643	Artesian
6837521	7/20/2006	Bexar	29.41821	-98.42768	3.85	623.85	620.00	646	Saline
6837522	7/20/2006	Bexar	29.41844	-98.42785	3.97	623.97	620.00	647	Saline
6837523	7/20/2006	Bexar	29.41833	-98.42777	3.74	623.74	620.00	645	Saline
6837524	7/20/2006	Bexar	29.42899	-98.44448	4.24	630.24	626.00	649	Artesian
6837525	7/20/2006	Bexar	29.42925	-98.43359	5.32	629.32	624.00	645	Artesian
6837526	7/20/2006	Bexar	29.43215	-98.43537	4.97	651.14	646.17	653	Artesian
6837527	7/20/2006	Bexar	29.43243	-98.43538	4.34	648.42	644.08	651	Artesian
6837606	7/20/2006	Bexar	29.44623	-98.41117	0.90	678.58	677.68	647	Saline
6837722	7/18/2006	Bexar	29.38975	-98.49575	3.00	605.71	602.71	651	Artesian
6837723	7/18/2006	Bexar	29.38525	-98.49037	2.60	595.48	592.88	651	Saline
6837724	7/18/2006	Bexar	29.37901	-98.49037	1.90	594.93	593.03	650	Saline
6843402	7/17/2006	Bexar	29.31360	-98.71431	1.42	699.86	698.44	657	Saline
6843606	7/17/2006	Bexar	29.31971	-98.65333	1.83	608.79	606.96	658	Artesian
6843607	7/17/2006	Bexar	29.31273	-98.65039	2.59	622.55	619.96	657	Artesian
6844505	7/18/2006	Bexar	29.30906	-98.56314	3.20	593.20	590.00	663	Saline
6844506*	7/18/2006	Bexar	29.32115	-98.55000	3.10	613.10	610.00	645	Saline
68293AA	7/21/2006	Bexar	29.60173	-98.38435	1.70	969.38	967.68	656	Artesian
68302AA	7/21/2006	Bexar	29.59858	-98.32022	1.09	781.83	780.74	644	Artesian
68302BB	7/21/2006	Bexar	29.59885	-98.31847	1.25	764.75	763.50	645	Artesian
68307AA	7/21/2006	Bexar	29.51793	-98.37472	1.05	820.15	819.10	647	Artesian
68431AA	7/17/2006	Bexar	29.36596	-98.73721	1.00	718.01	717.01	665	Artesian
6815809	7/19/2006	Comal	29.77095	-98.17648	0.35	908.74	908.39	652	Recharge
6815902	7/19/2006	Comal	29.75912	-98.14005	2.13	661.89	659.76	653	Recharge
6815907	7/19/2006	Comal	29.75467	-98.13955	1.45	707.93	706.48	626	Recharge
6815912	7/19/2006	Comal	29.75451	-98.14100	1.53	695.32	693.79	627	Recharge
68166028*	7/17/2006	Comal	29.79415	-98.02420	0.20	608.25	608.05	600	Saline
6816701	7/21/2006	Comal	29.75728	-98.10479	2.00	713.57	711.57	614	Artesian
6816703	7/18/2006	Comal	29.75366	-98.09312	0.70	701.24	700.54	611	Artesian
6816801	7/17/2006	Comal	29.78677	-98.05287	0.50	753.33	752.83	607	Artesian
6816803	7/18/2006	Comal	29.76992	-98.07410	1.50	726.89	725.39	609	Artesian
6822601	7/19/2006	Comal	29.67736	-98.28615	0.32	908.16	907.84	667	Recharge
6822603	7/19/2006	Comal	29.70225	-98.25158	1.28	946.94	945.66	667	Recharge
6822807	7/19/2006	Comal	29.65550	-98.30505	1.85	897.34	895.49	667	Artesian
6822810	7/19/2006	Comal	29.66027	-98.30709	1.30	890.73	889.43	668	Recharge
6822902	7/24/2006	Comal	29.62940	-98.28032	2.35	790.99	788.64	645	Recharge
6822910	7/24/2006	Comal	29.62928	-98.28055	2.70	786.50	783.80	644	Recharge

Appendix A (cont.)

Table A-3. Water levels collected during the July 14 through July 21, 2006, SWLP event.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone
6822912	7/18/2006	Comal	29.63038	-98.27526	2.11	791.57	789.46	644	Recharge
6823203	7/21/2006	Comal	29.71022	-98.19230	1.60	988.20	986.60	642	Recharge
6823209	7/25/2006	Comal	29.72079	-98.17900	1.75	863.78	862.03	622	Recharge
6823210	7/19/2006	Comal	29.71452	-98.20805	0.32	920.55	920.23	652	Recharge
6823211	7/18/2006	Comal	29.74443	-98.17163	1.32	784.64	783.32	641	Recharge
6823302	7/17/2006	Comal	29.71357	-98.13835	1.00	643.59	642.59	624	Recharge
6823304	7/20/2006	Comal	29.71111	-98.13833	0.36	626.53	626.17	631	Artesian
6823306	7/19/2006	Comal	29.74621	-98.15395	1.40	809.07	807.67	632	Recharge
6823309	7/17/2006	Comal	29.71867	-98.13524	0.55	736.76	736.21	623	Recharge
6823312	7/20/2006	Comal	29.73404	-98.12711	0.40	672.14	671.74	623	Recharge
6823316	7/17/2006	Comal	29.72137	-98.14791	1.06	807.58	806.52	627	Recharge
6823319	7/17/2006	Comal	29.72101	-98.12768	1.50	629.13	627.63	622	Recharge
6823504	7/21/2006	Comal	29.67135	-98.19642	3.40	709.58	706.18	636	Recharge
6823602	7/21/2006	Comal	29.70188	-98.15112	1.35	704.36	703.01	630	Recharge
6823621	7/17/2006	Comal	29.69445	-98.15917	0.87	671.68	670.81	633	Artesian
6823701	7/17/2006	Comal	29.64889	-98.21644	0.72	685.45	684.73	639	Artesian
6823709	7/17/2006	Comal	29.64043	-98.23312	1.10	706.61	705.51	659	Artesian
6823710	7/20/2006	Comal	29.66343	-98.23604	0.85	816.52	815.67	641	Recharge
6823807	7/17/2006	Comal	29.66636	-98.17132	1.70	657.58	655.88	636	Artesian
6824104	7/21/2006	Comal	29.74783	-98.11657	1.60	685.35	683.75	614	Recharge
6830208	7/18/2006	Comal	29.61022	-98.31958	2.50	800.59	798.09	646	Artesian
6830226	7/18/2006	Comal	29.61514	-98.31715	1.58	828.89	827.31	647	Artesian
6830312	7/17/2006	Comal	29.61281	-98.28392	0.90	774.08	773.18	643	Artesian
6830315	7/18/2006	Comal	29.60900	-98.28993	2.35	784.57	782.22	643	Artesian
68069AA*	7/6/2006	Comal	29.87842	-98.28928	3.00	1018.00	1015.00	904	Drainage
68146AA	7/20/2006	Comal	29.82847	-98.27472	1.45	1368.45	1367.00	933	Recharge
68162AA	7/21/2006	Comal	29.84075	-98.07987	1.88	953.40	951.52	663	Recharge
68168NB	7/21/2006	Comal	29.78310	-98.06609	2.25	765.07	762.82	607	Artesian
68228AA	7/20/2006	Comal	29.65218	-98.30108	1.40	887.75	886.35	667	Artesian
68228BB	7/20/2006	Comal	29.65992	-98.32097	1.00	1003.70	1002.70	662	Artesian
68302AA	7/19/2006	Comal	29.61835	-98.32658	1.25	806.04	804.79	653	Artesian
68302BB	7/21/2006	Comal	29.61497	-98.31909	1.41	804.55	803.14	647	Artesian
6830314	7/18/2006	Guadalupe	29.60263	-98.25724	2.17	873.18	871.01	647	Artesian
6831403*	7/18/2006	Guadalupe	29.57306	-98.22948	2.09	711.17	709.08	649	Saline
6831511*	7/18/2006	Guadalupe	29.54597	-98.20266	2.06	676.06	674.00	647	Saline
6831808*	7/18/2006	Guadalupe	29.51599	-98.18471	2.89	651.81	648.92	644	Saline
5857318	7/21/2006	Hays	30.12378	-97.90764	1.92	801.92	800.00	670	Recharge
5857319	7/25/2006	Hays	30.08889	-97.91528	0.00	805.00	805.00	659	Recharge
5857509	7/25/2006	Hays	30.07240	-97.92031	0.60	781.60	781.00	656	Recharge
5857511	7/21/2006	Hays	30.04950	-97.93567	1.49	914.97	913.48	696	Recharge
5857701	7/20/2006	Hays	30.04045	-97.96059	0.20	948.19	947.99	730	Recharge
5857902	7/31/2006	Hays	30.00833	-97.89500	0.00	815.00	815.00	573	Artesian
5857903	7/28/2006	Hays	30.03851	-97.88618	0.70	827.50	826.80	580	Artesian
5857908	7/19/2006	Hays	30.00944	-97.89667	1.80	831.80	830.00	572	Artesian
5858123	7/28/2006	Hays	30.10943	-97.84173	2.80	714.80	712.00	536	Artesian
5858219	7/28/2006	Hays	30.09167	-97.81750	0.93	684.93	684.00	542	Artesian
5858220	7/28/2006	Hays	30.09333	-97.81445	1.50	694.50	693.00	551	Artesian
5858428	7/31/2006	Hays	30.05167	-97.83417	0.75	692.75	692.00	556	Saline
5858704	7/19/2006	Hays	30.02769	-97.85392	0.90	746.90	746.00	548	Artesian
5858704	7/31/2006	Hays	30.02750	-97.85389	0.34	746.34	746.00	544	Artesian
5858711	7/19/2006	Hays	30.01672	-97.85933	2.10	702.10	700.00	559	Artesian
5858711	7/25/2006	Hays	30.01677	-97.85932	1.95	698.57	696.62	551	Artesian
6701203	7/24/2006	Hays	29.96194	-97.92056	1.00	692.00	691.00	578	Recharge
6701301	7/24/2006	Hays	29.96294	-97.89681	1.00	680.00	679.00	561	Artesian
6701303	7/20/2006	Hays	29.98976	-97.87548	1.10	720.34	719.24	517	Artesian
6701304	7/19/2006	Hays	29.98451	-97.87630	0.25	717.80	717.55	547	Artesian
6701309	7/20/2006	Hays	29.98750	-97.88194	1.55	754.55	753.00	535	Artesian
6701311	7/18/2006	Hays	29.98143	-97.89140	2.48	773.00	770.52	543	Artesian
6701812*	7/18/2006	Hays	29.89048	-97.92837	2.89	583.78	580.89	575	Saline
6702104*	7/18/2006	Hays	29.98279	-97.87153	2.61	676.93	674.32	548	Saline
6702105*	7/18/2006	Hays	29.95830	-97.84212	2.19	648.89	646.70	571	Saline
6702106*	7/18/2006	Hays	29.97474	-97.85711	2.17	680.45	678.28	561	Saline
6709105	7/18/2006	Hays	29.84479	-97.98418	2.50	694.73	692.23	577	Artesian
6709106	7/18/2006	Hays	29.85243	-97.98716	1.32	700.98	699.66	577	Artesian
6709110	7/18/2006	Hays	29.84358	-97.98225	1.17	688.56	687.39	577	Artesian
6709113	7/18/2006	Hays	29.83874	-97.99074	1.69	706.42	704.73	578	Artesian
6709401*	7/18/2006	Hays	29.82925	-97.96236	2.37	644.88	642.51	590	Saline
6808902	7/18/2006	Hays	29.89647	-98.00289	2.83	786.60	783.77	578	Recharge
6816603	7/20/2006	Hays	29.82923	-98.01621	2.76	739.67	736.91	579	Recharge
58499BQ	7/25/2006	Hays	30.12583	-97.90361	0.90	788.28	787.38	709	Recharge
58573GC	7/31/2006	Hays	30.09758	-97.88686	0.00	824.50	824.50	591	Artesian
58579PC	7/31/2006	Hays	30.02778	-97.87917	1.34	801.70	800.36	559	Artesian
58581AB*	7/28/2006	Hays	30.11337	-97.86055	1.10	771.10	770.00	511	Artesian
58581C1	7/28/2006	Hays	30.10156	-97.85811	0.95	747.95	747.00	533	Artesian
58581MC	7/28/2006	Hays	30.09111	-97.84028	0.70	700.70	700.00	548	Artesian
58584CT	7/28/2006	Hays	30.06020	-97.86848	1.13	735.93	734.80	567	Artesian
58584HO	7/28/2006	Hays	30.07203	-97.84697	1.25	726.25	725.00	559	Artesian
58584SG	7/28/2006	Hays	30.08111	-97.84361	0.00	710.00	710.00	546	Recharge
58584TC	7/28/2006	Hays	30.06184	-97.85600	0.00	748.00	748.00	562	Recharge
67014AA	7/17/2006	Hays	29.92160	-97.96544	0.90	725.78	724.88	576	Recharge
67015BH	7/24/2006	Hays	29.92472	-97.93833	0.50	712.80	712.30	601	Artesian
67015PL	7/24/2006	Hays	29.91815	-97.93242	2.40	667.43	665.03	569	Recharge
67017BB	7/17/2006	Hays	29.90860	-97.97154	0.77	768.60	767.83	570	Recharge
6701813A	7/18/2006	Hays	29.89113	-97.92938	3.10	584.22	581.12	575	Saline
6701813B	7/18/2006	Hays	29.89113	-97.92938	3.08	584.20	581.12	574	Saline

Appendix A (cont.)

Table A-3. Water levels collected during the July 14 through July 21, 2006, SWLP event.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone
67018CC	7/19/2006	Hays	29.89361	-97.93205	2.12	634.82	632.70	574	Artesian
67018EE	7/17/2006	Hays	29.90817	-97.91931	2.05	611.97	609.92	574	Artesian
67018FF	7/17/2006	Hays	29.90269	-97.92173	2.45	591.82	589.37	575	Recharge
67019EG	7/24/2006	Hays	29.91359	-97.91647	0.85	650.85	650.00	577	Artesian
67091AA	7/18/2006	Hays	29.85881	-97.99281	0.41	748.82	748.41	577	Recharge
67091BB	7/17/2006	Hays	29.86763	-97.96883	0.55	646.99	646.44	576	Recharge
7038902*	7/19/2006	Kinney	29.41360	-100.26122	2.10	1381.04	1378.94	1191	Recharge
6825711	7/24/2006	Medina	29.50712	-98.98151	2.05	1176.35	1174.30	912	Recharge
6833102	7/19/2006	Medina	29.47229	-98.96302	1.00	969.23	968.23	847	Recharge
6833213	7/24/2006	Medina	29.49146	-98.93827	2.24	1015.66	1013.42	879	Recharge
6833604	7/20/2006	Medina	29.42219	-98.88875	0.90	848.85	847.95	683	Artesian
6834506	7/17/2006	Medina	29.43132	-98.81296	0.85	1044.31	1043.46	674	Artesian
6841301	7/19/2006	Medina	29.35504	-98.88010	1.64	761.40	759.76	679	Artesian
6842502	7/17/2006	Medina	29.31056	-98.82272	1.25	730.10	728.85	666	Artesian
6842504	7/17/2006	Medina	29.30962	-98.81524	0.35	724.68	724.33	669	Artesian
6849813	7/24/2006	Medina	29.16578	-98.93941	2.50	665.70	663.20	694	Artesian
6931406	7/24/2006	Medina	29.55485	-99.23474	1.90	1168.23	1166.33	1046	Recharge
6931708	7/24/2006	Medina	29.52363	-99.23251	1.70	1142.62	1140.92	926	Recharge
6932703	7/24/2006	Medina	29.53416	-99.10993	1.20	1234.20	1233.00	1053	Recharge
6938601	7/18/2006	Medina	29.43854	-99.28346	1.34	1009.16	1007.82	886	Recharge
6938906	7/18/2006	Medina	29.38866	-99.26452	1.47	951.88	950.41	751	Artesian
6939504	7/18/2006	Medina	29.45099	-99.19489	1.65	1022.79	1021.14	878	Artesian
6939801	7/19/2006	Medina	29.38856	-99.18614	0.70	956.46	955.76	739	Artesian
6939901	7/18/2006	Medina	29.38452	-99.15391	1.13	933.61	932.48	731	Artesian
6940101	7/19/2006	Medina	29.49326	-99.12483	0.61	1023.83	1023.22	889	Artesian
6940102	7/19/2006	Medina	29.46115	-99.11712	2.50	969.10	966.60	859	Recharge
6940209	7/24/2006	Medina	29.47879	-99.06727	1.75	1037.91	1036.16	863	Recharge
6940404	7/19/2006	Medina	29.43394	-99.12176	1.15	936.33	935.18	787	Artesian
6940510	7/24/2006	Medina	29.42658	-99.06945	2.62	918.02	915.40	742	Artesian
6940901	7/19/2006	Medina	29.40943	-99.00077	0.71	878.94	878.23	695	Artesian
6946601	7/18/2006	Medina	29.33225	-99.27894	0.89	885.29	884.40	740	Artesian
6946602	7/18/2006	Medina	29.31683	-99.26061	0.50	908.82	908.32	738	Artesian
6947306	7/17/2006	Medina	29.34632	-99.13894	0.80	887.48	886.68	696	Artesian
6947503	7/18/2006	Medina	29.32537	-99.20767	0.86	885.64	884.78	740	Artesian
6947602	7/19/2006	Medina	29.32167	-99.15513	1.15	863.39	862.24	699	Artesian
6947603	7/19/2006	Medina	29.30746	-99.14958	1.50	845.51	844.01	700	Artesian
6948102	7/17/2006	Medina	29.35114	-99.08672	0.65	867.68	867.03	696	Artesian
6948402	7/17/2006	Medina	29.32488	-99.10738	0.70	853.63	852.93	674	Artesian
6956508	7/19/2006	Medina	29.17289	-99.05739	1.75	701.67	699.92	705	Artesian
6963103	7/19/2006	Medina	29.11109	-99.22003	4.83	666.01	661.18	731	Artesian
68422AA	7/19/2006	Medina	29.37035	-98.81167	0.80	778.33	777.53	672	Artesian
69396AA	7/18/2006	Medina	29.43503	-99.14966	1.00	1000.31	999.31	816	Artesian
6946702-B	7/18/2006	Medina	29.26292	-99.35631	2.00	951.73	949.73	734	Artesian
69472AA	7/17/2006	Medina	29.34813	-99.19962	2.63	911.90	909.27	710	Artesian
6935401*	7/18/2006	Uvalde	29.44185	-99.74915	1.00	1290.97	1289.97	1153	Recharge
6935602*	7/18/2006	Uvalde	29.44589	-99.66531	0.50	1150.22	1149.72	1084	Recharge
6935804*	7/18/2006	Uvalde	29.39450	-99.70216	0.00	1153.44	1153.44	1010	Recharge
6936402	7/18/2006	Uvalde	29.41893	-99.60954	2.60	1098.94	1096.34	799	Artesian
6936601	7/17/2006	Uvalde	29.42564	-99.51626	0.07	1072.43	1072.36	803	Artesian
6937402	7/17/2006	Uvalde	29.45330	-99.47319	2.00	1155.22	1153.22	808	Artesian
6942709	7/19/2006	Uvalde	29.27362	-99.86285	1.80	1007.43	1005.63	893	Artesian
6943409	7/18/2006	Uvalde	29.32391	-99.71381	1.70	1058.16	1056.46	868	Artesian
6943607	7/19/2006	Uvalde	29.32651	-99.63863	2.00	1011.65	1009.65	770	Artesian
6943903	7/18/2006	Uvalde	29.26646	-99.64909	1.25	956.08	954.83	771	Artesian
6944108	7/18/2006	Uvalde	29.36788	-99.60593	2.50	1043.13	1040.63	769	Artesian
6944301	7/17/2006	Uvalde	29.35294	-99.51335	1.15	1003.08	1001.93	756	Artesian
6944402	7/19/2006	Uvalde	29.33012	-99.59355	1.00	998.37	997.37	769	Artesian
6944703	7/19/2006	Uvalde	29.25742	-99.58624	1.10	935.51	934.41	753	Artesian
6944902	7/17/2006	Uvalde	29.26979	-99.50527	1.97	901.88	899.91	750	Artesian
6945401	7/18/2006	Uvalde	29.31944	-99.46990	0.70	954.49	953.79	746	Artesian
6950302	7/17/2006	Uvalde	29.20874	-99.78437	2.40	907.30	904.90	870	Artesian
6951602	7/17/2006	Uvalde	29.17573	-99.66051	0.90	864.26	863.36	815	Saline
6951606	7/17/2006	Uvalde	29.19307	-99.63233	2.17	879.72	877.55	727	Saline
6952202	7/17/2006	Uvalde	29.24517	-99.54958	2.30	876.32	874.02	749	Saline
6952403	7/17/2006	Uvalde	29.19889	-99.61690	0.00	875.11	875.11	727	Saline
6952404	7/17/2006	Uvalde	29.19250	-99.61045	2.52	869.54	867.02	731	Saline
69369AA	7/17/2006	Uvalde	29.38037	-99.49433	0.82	1029.41	1028.59	762	Artesian
69438AA	7/19/2006	Uvalde	29.28805	-99.69953	0.91	977.49	976.58	850	Artesian
69439AA	7/18/2006	Uvalde	29.26620	-99.63640	0.56	948.32	947.76	767	Artesian
69443AA	7/17/2006	Uvalde	29.34002	-99.51963	1.42	989.86	988.44	755	Artesian
69493AA	7/19/2006	Uvalde	29.24416	-99.87655	0.30	968.46	968.16	891	Artesian
69501AA	7/18/2006	Uvalde	29.23925	-99.83805	0.67	950.46	949.79	881	Artesian
69502AA	7/19/2006	Uvalde	29.21054	-99.81871	0.83	913.91	913.08	872	Artesian
69502BB	7/19/2006	Uvalde	29.24166	-99.81707	0.39	932.02	931.63	876	Artesian
69502DD	7/18/2006	Uvalde	29.23691	-99.82745	0.00	941.30	941.30	878	Artesian
69503AA	7/19/2006	Uvalde	29.24579	-99.79076	0.55	957.34	956.79	873	Artesian
69503BB	7/19/2006	Uvalde	29.24693	-99.75681	0.70	964.86	964.16	870	Artesian
69503CC	7/18/2006	Uvalde	29.21670	-99.75534	0.80	931.15	930.35	863	Artesian
69505AA	7/18/2006	Uvalde	29.19097	-99.83198	6.25	917.00	910.75	867	Artesian
69506AA	7/18/2006	Uvalde	29.19319	-99.77621	0.37	897.49	897.12	867	Artesian
69511AA	7/17/2006	Uvalde	29.24161	-99.74245	1.00	966.57	965.57	871	Artesian

* Well visited and water level measured, but not used in potentiometric map.

Appendix A (cont.)

Table A-4. Water levels collected during the October 10 through October 25, 2006, SWLP event.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone
6850201	10/10/2006	Atascosa	29.23026	-98.79888	1.00	712.86	711.86	657	Artesian
6821806	10/17/2006	Bexar	29.62937	-98.44849	2.38	953.04	950.66	699	Recharge
6826814	10/16/2006	Bexar	29.52443	-98.792050	2.55	1042.55	1040.00	747	Artesian
6827401	10/16/2006	Bexar	29.55284	-98.744478	2.45	1033.90	1031.45	746	Artesian
6827517	10/17/2006	Bexar	29.56628	-98.68172	2.05	999.44	997.39	730	Recharge
6828113	10/17/2006	Bexar	29.58791	-98.60765	-0.45	1021.88	1022.33	753	Transition
6828210	10/17/2006	Bexar	29.59178	-98.57610	-0.37	983.90	984.27	761	Recharge
6828211	10/17/2006	Bexar	29.58781	-98.54858	2.65	976.95	974.30	745	Recharge
6828314	10/17/2006	Bexar	29.59303	-98.51131	1.40	901.93	900.53	712	Recharge
6828407	10/17/2006	Bexar	29.57354	-98.58561	-0.22	999.81	1000.03	746	Recharge
6828515	10/17/2006	Bexar	29.56326	-98.56136	1.71	977.40	975.69	699	Recharge
6828517	10/17/2006	Bexar	29.57658	-98.57505	2.54	966.38	963.84	753	Recharge
6828518	10/17/2006	Bexar	29.57736	-98.54491	2.45	929.06	926.61	715	Recharge
6828519	10/17/2006	Bexar	29.56900	-98.55357	-0.30	926.54	926.84	725	Recharge
6828609	10/17/2006	Bexar	29.58296	-98.53712	-0.30	925.95	926.25	716	Recharge
6828909	10/18/2006	Bexar	29.50722	-98.525556	1.90	784.93	783.03	661	Artesian
6828921	10/18/2006	Bexar	29.50417	-98.539444	1.10	824.54	823.44	663	Artesian
6829103	10/17/2006	Bexar	29.58959	-98.48800	0.61	953.12	952.51	688	Recharge
6829611	10/18/2006	Bexar	29.56611	-98.385278	2.80	832.60	829.80	654	Artesian
6829701	10/16/2006	Bexar	29.53732	-98.46398	2.52	780.38	777.86	653	Artesian
6829925	10/17/2006	Bexar	29.51624	-98.39737	2.10	755.10	753.00	657	Artesian
6830211	10/12/2006	Bexar	29.60496	-98.32818	0.15	776.65	776.50	651	Artesian
6830807	10/17/2006	Bexar	29.52487	-98.29610	1.00	753.90	752.90	655	Artesian
6835106	10/17/2006	Bexar	29.48194	-98.713889	5.00	964.51	959.51	671	Artesian
6836103*	10/17/2006	Bexar	29.48833	-98.600833	6.58	913.84	907.26	640	Artesian
6836107*	10/20/2006	Bexar	29.48858	-98.611095	3.80	882.00	878.20	658	Artesian
6836206	10/17/2006	Bexar	29.47250	-98.548056	4.20	760.43	756.23	663	Artesian
6836512	10/17/2006	Bexar	29.43833	-98.564722	3.97	689.43	685.46	664	Artesian
6836901	10/16/2006	Bexar	29.41369	-98.515770	3.21	640.45	637.24	662	Artesian
6837103	10/18/2006	Bexar	29.49722	-98.486944	1.00	730.53	729.53	660	Artesian
6837203	10/17/2006	Bexar	29.47913	-98.43261	0.30	731.11	730.81	660	Artesian
6837304	10/20/2006	Bexar	29.46898	-98.383844	2.30	704.98	702.68	652	Artesian
6837521	10/17/2006	Bexar	29.41821	-98.427675	3.85	623.85	620.00	658	Saline
6837522	10/17/2006	Bexar	29.41844	-98.427853	3.97	623.97	620.00	658	Saline
6837523	10/17/2006	Bexar	29.41833	-98.427767	3.74	623.74	620.00	656	Saline
6837524	10/17/2006	Bexar	29.42899	-98.444481	4.24	630.24	626.00	660	Artesian
6837525	10/17/2006	Bexar	29.42925	-98.433594	5.32	629.32	624.00	656	Artesian
6837526	10/17/2006	Bexar	29.43215	-98.435369	4.97	651.14	646.17	661	Artesian
6837527	10/17/2006	Bexar	29.43243	-98.435378	4.34	648.42	644.08	660	Artesian
6837722	10/16/2006	Bexar	29.38975	-98.495747	3.00	605.71	602.71	655	Artesian
6837723	10/16/2006	Bexar	29.38525	-98.490367	2.60	595.48	592.88	656	Saline
6837724	10/16/2006	Bexar	29.37901	-98.490367	1.90	594.93	593.03	664	Saline
6843402	10/16/2006	Bexar	29.31360	-98.714314	1.42	699.86	698.44	667	Saline
6843606	10/16/2006	Bexar	29.31971	-98.653333	1.83	608.79	606.96	665	Artesian
6843607	10/16/2006	Bexar	29.31273	-98.650388	2.59	622.55	619.96	665	Artesian
6844505	10/16/2006	Bexar	29.30906	-98.563139	3.20	593.20	590.00	659	Saline
6844506*	10/16/2006	Bexar	29.32115	-98.550000	3.10	613.10	610.00	643	Saline
68293AA	10/18/2006	Bexar	29.60173	-98.384353	1.70	969.38	967.68	662	Artesian
68302AA	10/18/2006	Bexar	29.59858	-98.320215	1.09	781.83	780.74	650	Artesian
68302BB	10/18/2006	Bexar	29.59885	-98.318475	1.25	764.75	763.50	650	Artesian
68307AA	10/18/2006	Bexar	29.51793	-98.374718	1.05	820.15	819.10	655	Artesian
68431AA	10/16/2006	Bexar	29.36596	-98.737206	1.00	718.01	717.01	671	Artesian
6815912	10/24/2006	Comal	29.75451	-98.14100	1.53	695.32	693.79	636	Recharge
6816602*	10/11/2006	Comal	29.79415	-98.02420	0.20	608.25	608.05	600	Saline
6816701	10/11/2006	Comal	29.75728	-98.10479	2.00	713.57	711.57	613	Artesian
6816703	10/11/2006	Comal	29.75366	-98.09312	0.70	701.24	700.54	607	Artesian
6816801	10/11/2006	Comal	29.78677	-98.05287	0.50	753.33	752.83	605	Artesian
6816803	10/11/2006	Comal	29.76992	-98.07410	1.50	726.89	725.39	607	Artesian
6822601	10/17/2006	Comal	29.67736	-98.28615	0.32	908.16	907.84	661	Recharge
6822603	10/17/2006	Comal	29.70225	-98.25158	1.28	946.94	945.66	663	Recharge
6822807	10/17/2006	Comal	29.65550	-98.30505	1.85	897.34	895.49	659	Artesian
6822810	10/17/2006	Comal	29.66027	-98.30709	1.30	890.73	889.43	662	Recharge
6822902	10/12/2006	Comal	29.62940	-98.28032	2.35	790.99	788.64	645	Recharge
6822910	10/12/2006	Comal	29.62928	-98.28055	2.70	786.50	783.80	647	Recharge
6822912	10/12/2006	Comal	29.63038	-98.27526	2.11	791.57	789.46	647	Recharge
6823104	10/11/2006	Comal	29.74454	-98.22424	0.95	997.33	996.38	693	Recharge
6823209*	10/25/2006	Comal	29.72079	-98.17900	1.75	863.78	862.03	610	Recharge
6823210	10/17/2006	Comal	29.71452	-98.20805	0.32	920.55	920.23	648	Recharge
6823211	10/24/2006	Comal	29.74443	-98.17163	1.32	784.64	783.32	625	Recharge
6823302	10/11/2006	Comal	29.71357	-98.13835	1.00	643.59	642.59	624	Recharge
6823304	10/11/2006	Comal	29.71111	-98.13833	0.36	626.53	626.17	632	Artesian
6823306	10/24/2006	Comal	29.74621	-98.15395	1.40	809.07	807.67	622	Recharge
6823309	10/11/2006	Comal	29.71867	-98.13524	0.55	736.76	736.21	622	Recharge
6823312	10/24/2006	Comal	29.73404	-98.12711	0.40	672.14	671.74	617	Recharge
6823316	10/11/2006	Comal	29.72137	-98.14791	1.06	807.58	806.52	626	Recharge
6823319	10/11/2006	Comal	29.72101	-98.12768	1.50	629.13	627.63	622	Recharge
6823504	10/17/2006	Comal	29.67135	-98.19642	3.40	709.58	706.18	636	Recharge
6823602	10/18/2006	Comal	29.70188	-98.15112	1.35	704.36	703.01	632	Recharge
6823621	10/11/2006	Comal	29.69445	-98.15917	0.87	671.68	670.81	633	Artesian
6823701	10/11/2006	Comal	29.64889	-98.21644	0.72	685.45	684.73	641	Artesian
6823709	10/12/2006	Comal	29.64043	-98.23312	1.10	706.61	705.51	659	Artesian
6823710	10/12/2006	Comal	29.66343	-98.23604	0.85	816.52	815.67	639	Recharge
6823807	10/11/2006	Comal	29.66636	-98.17132	1.70	657.58	655.88	635	Artesian

Appendix A (cont.)

Table A-4. Water levels collected during the October 10 through October 25, 2006, SWLP event.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone
6824104	10/11/2006	Comal	29.74783	-98.11657	1.60	685.35	683.75	614	Recharge
6830208	10/12/2006	Comal	29.61022	-98.31958	2.50	800.59	798.09	650	Artesian
6830226	10/12/2006	Comal	29.61514	-98.31715	1.58	828.89	827.31	648	Artesian
6830312	10/12/2006	Comal	29.61281	-98.28392	0.90	774.08	773.18	647	Artesian
6830315	10/12/2006	Comal	29.60900	-98.28993	2.35	784.57	782.22	648	Artesian
68159RP	10/19/2006	Comal	29.76397	-98.14248	1.30	699.60	698.30	639	Recharge
68226BF	10/20/2006	Comal	29.67551	-98.27226	1.24	839.62	838.38	656	Recharge
68226BH	10/19/2006	Comal	29.67406	-98.27697	0.50	855.68	855.18	656	Recharge
68228AA	10/17/2006	Comal	29.65218	-98.30108	1.40	887.75	886.35	663	Artesian
68228BB	10/12/2006	Comal	29.65992	-98.32097	1.00	1003.70	1002.70	667	Artesian
68233DW	10/19/2006	Comal	29.72716	-98.12531	0.95	646.43	645.48	622	Recharge
68302AA	10/12/2006	Comal	29.61835	-98.32658	1.25	806.04	804.79	651	Artesian
68302BB	10/12/2006	Comal	29.61497	-98.31909	1.41	804.55	803.14	650	Artesian
68302LH	10/18/2006	Comal	29.61119	-98.32087	0.82	801.00	800.18	643	Artesian
6830314	10/12/2006	Guadalupe	29.60263	-98.25724	2.17	873.18	871.01	648	Artesian
6831403*	10/12/2006	Guadalupe	29.57306	-98.22948	2.09	711.17	709.08	653	Saline
6831511*	10/12/2006	Guadalupe	29.54597	-98.20266	2.06	676.06	674.00	648	Saline
6831808*	10/12/2006	Guadalupe	29.51599	-98.18471	2.89	651.81	648.92	642	Saline
5857319	10/17/2006	Hays	30.08889	-97.91528	0.00	805.00	805.00	658	Recharge
5857502	10/17/2006	Hays	30.06635	-97.94447	0.50	890.50	890.00	681	Recharge
5857503	10/17/2006	Hays	30.06447	-97.92834	0.50	810.50	810.00	675	Recharge
5857701	10/12/2006	Hays	30.04045	-97.96059	0.20	948.19	947.99	730	Recharge
5857902	10/17/2006	Hays	30.00833	-97.895	0.00	815.00	815.00	566	Artesian
5857903	10/12/2006	Hays	30.03850	-97.88617	1.13	827.43	826.30	572	Artesian
5857908	10/12/2006	Hays	30.00944	-97.89667	1.80	831.80	830.00	574	Artesian
5858101	10/17/2006	Hays	30.08358	-97.84264	0.90	707.84	706.94	548	Artesian
5858123	10/17/2006	Hays	30.10943	-97.84173	2.80	714.80	712.00	544	Artesian
5858704	10/12/2006	Hays	30.02769	-97.85392	0.90	746.90	746.00	541	Artesian
5858711	10/12/2006	Hays	30.01672	-97.85933	2.10	702.10	700.00	549	Artesian
6701303	10/12/2006	Hays	29.98976	-97.87548	1.10	720.34	719.24	531	Artesian
6701304	10/12/2006	Hays	29.98451	-97.87630	0.25	717.80	717.55	531	Artesian
6701311	10/12/2006	Hays	29.98143	-97.89140	2.48	773.00	770.52	550	Artesian
6701809	10/12/2006	Hays	29.91192	-97.92877	1.20	602.47	601.27	574	Recharge
6701812	10/16/2006	Hays	29.89048	-97.92837	2.89	583.78	580.89	575	Saline
6702104*	10/12/2006	Hays	29.98279	-97.87153	2.61	676.93	674.32	548	Saline
6702105*	10/12/2006	Hays	29.95830	-97.84212	2.19	648.89	646.70	569	Saline
6702106*	10/12/2006	Hays	29.97474	-97.85711	2.17	680.45	678.28	557	Saline
6709105	10/17/2006	Hays	29.84479	-97.98418	2.50	694.73	692.23	577	Artesian
6709106	10/17/2006	Hays	29.85243	-97.98716	1.32	700.98	699.66	577	Artesian
6709110	10/12/2006	Hays	29.84358	-97.98225	1.17	688.56	687.39	577	Artesian
6709113	10/12/2006	Hays	29.83874	-97.99074	1.69	706.42	704.73	577	Artesian
6709401*	10/12/2006	Hays	29.82925	-97.96236	2.37	644.88	642.51	589	Saline
6808902	10/17/2006	Hays	29.89647	-98.00289	2.83	786.60	783.77	571	Recharge
6816603	10/18/2006	Hays	29.82923	-98.01621	2.76	739.67	736.91	578	Recharge
58499BQ	10/17/2006	Hays	30.12583	-97.90361	0.90	788.28	787.38	707	Recharge
58573GC	10/17/2006	Hays	30.09758	-97.88686	0.00	824.50	824.50	588	Artesian
58584CT	10/17/2006	Hays	30.06020	-97.86847	1.13	734.53	733.40	567	Artesian
67014AA	10/17/2006	Hays	29.92160	-97.96544	0.90	725.78	724.88	572	Recharge
67017BB	10/17/2006	Hays	29.90860	-97.97154	0.77	768.60	767.83	570	Recharge
6701813A	10/16/2006	Hays	29.89113	-97.92938	3.10	584.22	581.12	575	Saline
6701813B	10/16/2006	Hays	29.89113	-97.92938	3.08	584.20	581.12	574	Saline
67018BB	10/16/2006	Hays	29.89444	-97.92945	1.25	586.28	585.03	574	Recharge
67018CC	10/17/2006	Hays	29.89361	-97.93205	2.12	634.82	632.70	574	Artesian
67018DD	10/18/2006	Hays	29.88718	-97.94963	1.00	751.96	750.96	574	Artesian
67018EE	10/17/2006	Hays	29.90817	-97.91931	2.05	611.97	609.92	574	Artesian
67018FF	10/12/2006	Hays	29.90269	-97.92173	2.45	591.82	589.37	574	Recharge
67091AA	10/17/2006	Hays	29.85881	-97.99281	0.41	748.82	748.41	577	Recharge
67091CC	10/18/2006	Hays	29.83654	-97.99393	4.75	737.65	732.90	582	Artesian
68076AA*	10/11/2006	Hays	29.93194	-98.12972	1.60	1151.60	1150.00	1100	Recharge
68166HC	10/18/2006	Hays	29.81891	-98.01745	1.44	705.95	704.51	581	Artesian
7038902*	10/11/2006	Kinney	29.41360	-100.26122	2.10	1381.04	1378.94	1190	Recharge
6833102	10/12/2006	Medina	29.47229	-98.96302	1.00	969.23	968.23	844	Recharge
6833213	10/13/2006	Medina	29.49146	-98.93827	2.24	1015.66	1013.42	877	Recharge
6833604	10/12/2006	Medina	29.42219	-98.88875	0.90	848.85	847.95	693	Artesian
6841301	10/10/2006	Medina	29.35504	-98.88010	1.64	761.40	759.76	686	Artesian
6842112	10/12/2006	Medina	29.34577	-98.84908	2.90	765.50	762.60	685	Artesian
6842502	10/10/2006	Medina	29.31056	-98.82272	1.25	730.10	728.85	678	Artesian
6842504	10/10/2006	Medina	29.30962	-98.81524	0.35	724.68	724.33	677	Artesian
6849813	10/16/2006	Medina	29.16578	-98.93941	2.50	665.70	663.20	686	Artesian
6931406	10/13/2006	Medina	29.55485	-99.23474	1.90	1168.23	1166.33	1046	Recharge
6931708	10/13/2006	Medina	29.52363	-99.23251	1.70	1142.62	1140.92	924	Recharge
6932703	10/13/2006	Medina	29.53416	-99.10993	1.20	1234.20	1233.00	1051	Recharge
6938601	10/18/2006	Medina	29.43854	-99.28346	1.34	1009.16	1007.82	873	Recharge
6938902	10/20/2006	Medina	29.37908	-99.27684	0.78	943.10	942.32	749	Artesian
6938906	10/18/2006	Medina	29.38866	-99.26452	1.47	951.88	950.41	760	Artesian
6939504	10/17/2006	Medina	29.45099	-99.19489	1.65	1022.79	1021.14	867	Artesian
6939801	10/17/2006	Medina	29.38856	-99.18614	0.70	956.46	955.76	745	Artesian
6939901	10/11/2006	Medina	29.38452	-99.15391	1.13	933.61	932.48	735	Artesian
6940101	10/11/2006	Medina	29.49326	-99.12483	0.61	1023.83	1023.22	881	Artesian
6940102	10/11/2006	Medina	29.46115	-99.11712	2.50	969.10	966.60	851	Recharge
6940209	10/13/2006	Medina	29.47879	-99.06727	1.75	1037.91	1036.16	857	Recharge
6940404	10/11/2006	Medina	29.43394	-99.12176	1.15	936.33	935.18	785	Artesian
6940510	10/13/2006	Medina	29.42658	-99.06945	2.62	918.02	915.40	744	Artesian

Appendix A (cont.)

Table A-4. Water levels collected during the October 10 through October 25, 2006, SWLP event.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone
6946601	10/18/2006	Medina	29.33225	-99.27894	0.89	885.29	884.40	745	Artesian
6946602	10/17/2006	Medina	29.31683	-99.26061	0.50	908.82	908.32	743	Artesian
6947306	10/17/2006	Medina	29.34632	-99.13894	0.80	887.48	886.68	705	Artesian
6947503	10/18/2006	Medina	29.32537	-99.20767	0.86	885.64	884.78	714	Artesian
6947602	10/17/2006	Medina	29.32167	-99.15513	1.15	863.39	862.24	710	Artesian
6947603	10/17/2006	Medina	29.30746	-99.14958	1.50	845.51	844.01	710	Artesian
6948102	10/18/2006	Medina	29.35114	-99.08672	0.65	867.68	867.03	701	Artesian
6948402	10/11/2006	Medina	29.32488	-99.10738	0.70	853.63	852.93	705	Artesian
6956508	10/20/2006	Medina	29.17289	-99.05739	1.75	701.67	699.92	711	Artesian
6963103	10/20/2006	Medina	29.11109	-99.22003	4.83	666.01	661.18	726	Artesian
68422AA	10/12/2006	Medina	29.37035	-98.81167	0.80	778.33	777.53	679	Artesian
69396AA	10/11/2006	Medina	29.43503	-99.14966	1.00	1000.31	999.31	810	Artesian
6946702-B	10/17/2006	Medina	29.26292	-99.35631	2.00	951.73	949.73	720	Artesian
69472AA	10/19/2006	Medina	29.34813	-99.19962	2.63	911.90	909.27	717	Artesian
6935401*	10/13/2006	Uvalde	29.44185	-99.74915	1.00	1290.97	1289.97	1171	Recharge
6935602*	10/13/2006	Uvalde	29.44589	-99.66531	0.50	1150.22	1149.72	1084	Recharge
6935804*	10/13/2006	Uvalde	29.39450	-99.70216	0.00	1153.44	1153.44	1021	Recharge
6936402	10/13/2006	Uvalde	29.41893	-99.60954	2.60	1098.94	1096.34	772	Artesian
6936601	10/12/2006	Uvalde	29.42564	-99.51626	0.20	1072.56	1072.36	790	Artesian
6937402	10/11/2006	Uvalde	29.45330	-99.47319	2.00	1155.22	1153.22	809	Artesian
6942709	10/11/2006	Uvalde	29.27362	-99.86285	1.80	1007.43	1005.63	891	Artesian
6943409	10/13/2006	Uvalde	29.32391	-99.71381	1.70	1058.16	1056.46	865	Artesian
6943607	10/13/2006	Uvalde	29.32651	-99.63863	2.00	1011.65	1009.65	769	Artesian
6943903	10/12/2006	Uvalde	29.26646	-99.64909	1.25	956.08	954.83	810	Artesian
6944108	10/13/2006	Uvalde	29.36788	-99.60593	2.50	1043.13	1040.63	767	Artesian
6944301	10/11/2006	Uvalde	29.35294	-99.51335	1.15	1003.08	1001.93	757	Artesian
6944402	10/12/2006	Uvalde	29.33012	-99.59355	1.00	998.37	997.37	771	Artesian
6944703	10/13/2006	Uvalde	29.25742	-99.58624	1.10	935.51	934.41	766	Artesian
6944804	10/13/2006	Uvalde	29.29064	-99.57277	1.50	954.17	952.67	768	Artesian
6944902	10/10/2006	Uvalde	29.26979	-99.50527	1.97	901.88	899.91	750	Artesian
6945401	10/12/2006	Uvalde	29.31944	-99.46990	0.70	954.49	953.79	754	Artesian
6950302	10/12/2006	Uvalde	29.20874	-99.78437	2.40	907.30	904.90	869	Artesian
6951401	10/11/2006	Uvalde	29.17440	-99.73427	0.70	892.00	891.30	845	Artesian
6951602	10/10/2006	Uvalde	29.17573	-99.66051	0.90	864.26	863.36	821	Saline
6951606	10/12/2006	Uvalde	29.19307	-99.63233	2.17	879.72	877.55	764	Saline
6952202	10/10/2006	Uvalde	29.24517	-99.54958	2.30	876.32	874.02	749	Saline
6952403	10/12/2006	Uvalde	29.19889	-99.61690	0.00	875.11	875.11	764	Saline
6952404	10/12/2006	Uvalde	29.19250	-99.61045	2.52	869.54	867.02	765	Saline
7040901*	10/11/2006	Uvalde	29.39456	-100.00232	0.84	1125.11	1124.27	1081	Recharge
69369AA	10/12/2006	Uvalde	29.38037	-99.49433	0.82	1029.41	1028.59	761	Artesian
69438AA	10/16/2006	Uvalde	29.28805	-99.69953	0.91	977.49	976.58	849	Artesian
69439AA	10/12/2006	Uvalde	29.26620	-99.63640	0.56	948.32	947.76	804	Artesian
69443AA	10/11/2006	Uvalde	29.34002	-99.51963	1.42	989.86	988.44	757	Artesian
69493AA	10/11/2006	Uvalde	29.24416	-99.87655	0.30	968.46	968.16	889	Artesian
69501AA	10/11/2006	Uvalde	29.23925	-99.83805	0.67	950.46	949.79	880	Artesian
69502AA	10/11/2006	Uvalde	29.21054	-99.81871	0.83	913.91	913.08	871	Artesian
69502BB	10/11/2006	Uvalde	29.24166	-99.81707	0.39	932.02	931.63	875	Artesian
69502DD	10/11/2006	Uvalde	29.23691	-99.82745	0.00	941.30	941.30	877	Artesian
69503AA	10/11/2006	Uvalde	29.24579	-99.79076	0.55	957.34	956.79	872	Artesian
69503BB	10/12/2006	Uvalde	29.24693	-99.75681	0.70	964.86	964.16	869	Artesian
69503CC	10/12/2006	Uvalde	29.21670	-99.75534	0.80	931.15	930.35	864	Artesian
69505AA	10/12/2006	Uvalde	29.19097	-99.83198	6.25	917.00	910.75	867	Artesian
69506AA	10/12/2006	Uvalde	29.19319	-99.77621	0.37	897.49	897.12	866	Artesian
69511AA	10/13/2006	Uvalde	29.24161	-99.74245	1.00	966.57	965.57	869	Artesian

* Well visited and water level measured, but not used in potentiometric map.

Appendix A (cont.)

Table A-5. Water levels collected during the January 22 through February 9, 2007, SWLP event.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone
6830211	1/29/2007	Bexar	29.60496	-98.32818	0.15	776.65	776.50	662	Artesian
6815809	1/30/2007	Comal	29.77095	-98.17648	0.35	908.74	908.39	677	Recharge
6815902	1/30/2007	Comal	29.75912	-98.14005	2.13	661.89	659.76	659	Recharge
6815907	1/30/2007	Comal	29.75467	-98.13955	1.45	707.93	706.48	630	Recharge
6815912	1/30/2007	Comal	29.75451	-98.14100	1.53	695.32	693.79	632	Recharge
6816501	1/25/2007	Comal	29.80167	-98.05500	0.83	754.83	754.00	598	Artesian
6816502	1/25/2007	Comal	29.80806	-98.04750	1.95	752.95	751.00	582	Recharge
6816701	1/29/2007	Comal	29.75728	-98.10479	2.00	713.57	711.57	616	Artesian
6816703	1/29/2007	Comal	29.75366	-98.09312	0.70	701.24	700.54	612	Artesian
6816801	1/29/2007	Comal	29.78677	-98.05287	0.50	753.33	752.83	612	Artesian
6816803	1/29/2007	Comal	29.76992	-98.07410	1.50	726.89	725.39	611	Artesian
6822601	1/31/2007	Comal	29.67736	-98.28615	0.32	908.16	907.84	660	Recharge
6822603	1/31/2007	Comal	29.70225	-98.25158	1.28	946.94	945.66	659	Recharge
6822807	1/29/2007	Comal	29.65550	-98.30505	1.85	897.34	895.49	664	Artesian
6822810	1/29/2007	Comal	29.66027	-98.30709	1.30	890.73	889.43	663	Recharge
6822902	2/1/2007	Comal	29.62940	-98.28032	2.35	790.99	788.64	655	Recharge
6822910	2/1/2007	Comal	29.62928	-98.28055	2.70	786.50	783.80	657	Recharge
6822912	1/31/2007	Comal	29.63038	-98.27526	2.11	791.57	789.46	657	Recharge
6823203	1/31/2007	Comal	29.71022	-98.19230	1.60	988.20	986.60	638	Recharge
6823208	2/1/2007	Comal	29.73490	-98.19445	0.25	887.88	887.63	645	Recharge
6823209	2/1/2007	Comal	29.72079	-98.17900	1.75	863.78	862.03	635	Recharge
6823210	1/31/2007	Comal	29.71452	-98.20805	0.32	920.55	920.23	645	Recharge
6823211	1/30/2007	Comal	29.74443	-98.17163	1.32	784.64	783.32	627	Recharge
6823302	1/30/2007	Comal	29.71357	-98.13835	1.00	643.59	642.59	626	Recharge
6823304	1/30/2007	Comal	29.71111	-98.13833	0.36	626.53	626.17	636	Artesian
6823306	1/29/2007	Comal	29.74621	-98.15395	1.40	809.07	807.67	633	Recharge
6823309	1/30/2007	Comal	29.71867	-98.13524	0.55	736.76	736.21	624	Recharge
6823312	1/29/2007	Comal	29.73404	-98.12711	0.40	672.14	671.74	620	Recharge
6823316	1/30/2007	Comal	29.72137	-98.14791	1.06	807.58	806.52	628	Recharge
6823319	1/30/2007	Comal	29.72101	-98.12768	1.50	629.13	627.63	623	Recharge
6823504	1/31/2007	Comal	29.67135	-98.19642	3.40	709.58	706.18	644	Recharge
6823602	2/1/2007	Comal	29.70188	-98.15112	1.35	704.36	703.01	636	Recharge
6823621	1/30/2007	Comal	29.69445	-98.15917	0.87	671.68	670.81	639	Artesian
6823701	1/30/2007	Comal	29.64889	-98.21644	0.72	685.45	684.73	649	Artesian
6823709	1/30/2007	Comal	29.64043	-98.23312	1.10	706.61	705.51	653	Artesian
6823710	1/30/2007	Comal	29.66343	-98.23604	0.85	816.52	815.67	646	Recharge
6823807	1/30/2007	Comal	29.66636	-98.17132	1.70	657.58	655.88	641	Artesian
6824104	2/1/2007	Comal	29.74783	-98.11657	1.60	685.35	683.75	616	Recharge
6830208	1/29/2007	Comal	29.61022	-98.31958	2.50	800.59	798.09	660	Artesian
6830226	1/29/2007	Comal	29.61514	-98.31715	1.58	828.89	827.31	659	Artesian
6830312	1/29/2007	Comal	29.61281	-98.28392	0.90	774.08	773.18	657	Artesian
6830315	1/30/2007	Comal	29.60900	-98.28993	2.35	784.57	782.22	658	Artesian
68159RP	1/30/2007	Comal	29.76397	-98.14248	1.30	699.60	698.30	628	Recharge
68162AA	1/29/2007	Comal	29.84075	-98.07987	1.88	953.40	951.52	692	Recharge
68167ML	1/31/2007	Comal	29.78377	-98.08716	1.30	786.53	785.23	612	Recharge
68168NB	1/31/2007	Comal	29.78310	-98.06609	2.25	765.07	762.82	610	Artesian
68169FW	1/26/2007	Comal	29.79083	-98.03000	0.72	620.72	620.00	597	Saline
68225CC	1/29/2007	Comal	29.68247	-98.30028	0.88	866.38	865.50	669	Recharge
68226BF	1/29/2007	Comal	29.67551	-98.27226	1.24	839.62	838.38	657	Recharge
68226BH	1/29/2007	Comal	29.67406	-98.27697	0.50	855.68	855.18	658	Recharge
68228AA	1/29/2007	Comal	29.65218	-98.30108	1.40	887.75	886.35	663	Artesian
68228BB	1/29/2007	Comal	29.65992	-98.32097	1.00	1003.70	1002.70	668	Artesian
68233DW	1/31/2007	Comal	29.72716	-98.12531	0.95	645.95	645.00	623	Recharge
68241JF	1/22/2007	Comal	29.74786	-98.10394	1.00	701.00	700.00	611	Recharge
68302AA	1/29/2007	Comal	29.61835	-98.32658	1.25	806.04	804.79	661	Artesian
68302BB	1/29/2007	Comal	29.61497	-98.31909	1.41	804.55	803.14	660	Artesian
68302LH	1/29/2007	Comal	29.61119	-98.32087	0.82	801.00	800.18	660	Artesian
5857319	1/31/2007	Hays	30.08889	-97.91528	0.00	805.00	805.00	670	Recharge
5857701*	1/29/2007	Hays	30.04045	-97.96059	0.20	948.19	947.99	731	Recharge
5857902	2/5/2007	Hays	30.00890	-97.89527	1.00	821.56	820.56	598	Artesian
5857903	1/29/2007	Hays	30.03850	-97.88617	0.47	826.77	826.30	600	Artesian
5857908	1/29/2007	Hays	30.00944	-97.89667	1.80	831.80	830.00	597	Artesian
5858101	1/31/2007	Hays	30.08358	-97.84264	2.97	709.91	706.94	586	Artesian
5858123	1/31/2007	Hays	30.10943	-97.84173	2.80	703.69	700.89	570	Artesian
5858406	2/2/2007	Hays	30.06204	-97.85602	0.27	748.61	748.34	596	Artesian
5858407	2/2/2007	Hays	30.05345	-97.85553	1.54	760.37	758.83	593	Artesian
5858413	2/2/2007	Hays	30.07052	-97.83549	1.40	753.53	752.13	590	Artesian
5858427	1/31/2007	Hays	30.07717	-97.86132	1.80	710.83	709.03	591	Artesian
5858428	2/5/2007	Hays	30.05208	-97.83340	0.70	684.00	683.30	567	Saline
5858510	2/1/2007	Hays	30.07938	-97.82758	1.50	753.50	752.00	574	Artesian
5858511	2/1/2007	Hays	30.07193	-97.82836	3.75	736.99	733.24	570	Artesian
5858701	2/5/2007	Hays	30.03548	-97.84141	0.00	711.73	711.73	563	Artesian
5858704	1/31/2007	Hays	30.02769	-97.85392	0.90	746.90	746.00	561	Artesian
5858705	2/1/2007	Hays	30.02295	-97.83861	0.25	724.56	724.31	561	Saline
5858711	1/29/2007	Hays	30.01672	-97.85933	2.10	702.10	700.00	566	Artesian
5858801	2/1/2007	Hays	30.03364	-97.83316	1.48	717.65	716.17	561	Saline
6701303	1/29/2007	Hays	29.98976	-97.87548	1.10	720.34	719.24	534	Artesian
6701311	1/30/2007	Hays	29.98143	-97.89140	2.48	773.00	770.52	559	Artesian
6701809	1/29/2007	Hays	29.91192	-97.92877	1.20	602.47	601.27	577	Recharge
6701812	1/30/2007	Hays	29.89048	-97.92837	2.89	583.78	580.89	576	Saline
6702104*	1/30/2007	Hays	29.98279	-97.87153	2.61	676.93	674.32	554	Saline

Appendix A (cont.)

Table A-5. Water levels collected during the January 22 through February 9, 2007, SWLP event.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone
6702105*	1/30/2007	Hays	29.95830	-97.84212	2.19	648.89	646.70	569	Saline
6702106*	1/30/2007	Hays	29.97474	-97.85711	2.17	680.45	678.28	561	Saline
6709105	1/30/2007	Hays	29.84479	-97.98418	2.50	694.73	692.23	579	Artesian
6709106	1/30/2007	Hays	29.85243	-97.98716	1.32	700.98	699.66	580	Artesian
6709110	1/29/2007	Hays	29.84358	-97.98225	1.17	688.56	687.39	580	Artesian
6709113	1/30/2007	Hays	29.83874	-97.99074	1.69	706.42	704.73	581	Artesian
6709401*	1/30/2007	Hays	29.82925	-97.96236	2.37	644.88	642.51	589	Saline
6808902	1/30/2007	Hays	29.89647	-98.00289	2.83	786.60	783.77	590	Recharge
6816601	1/30/2007	Hays	29.82981	-98.00163	1.65	761.09	759.44	584	Artesian
6816603	1/31/2007	Hays	29.82923	-98.01621	2.76	739.67	736.91	582	Recharge
58573GC	1/31/2007	Hays	30.09759	-97.88685	0.00	824.50	824.50	592	Artesian
58584CT	1/31/2007	Hays	30.06020	-97.86847	0.00	733.40	733.40	598	Recharge
58584NM	2/5/2007	Hays	30.04596	-97.85135	1.64	753.66	752.02	574	Artesian
67013BB	2/2/2007	Hays	29.96324	-97.89693	0.50	690.00	689.50	577	Artesian
67013CC	2/5/2007	Hays	29.96745	-97.87624	1.65	693.91	692.26	577	Saline
67013DD	2/9/2007	Hays	29.96941	-97.88812	1.20	713.64	712.44	576	Artesian
67013EE	2/9/2007	Hays	29.96261	-97.88140	1.07	708.13	707.06	577	Saline
67014AA	1/30/2007	Hays	29.92160	-97.96544	0.90	725.78	724.88	585	Recharge
67015PG	2/6/2007	Hays	29.94337	-97.93769	2.04	782.88	780.84	575	Artesian
67015PLC	2/5/2007	Hays	29.91815	-97.93242	2.40	667.43	665.03	577	Recharge
67015RW	2/5/2007	Hays	29.93969	-97.93486	1.80	787.33	785.53	578	Artesian
67016CC	2/2/2007	Hays	29.95556	-97.90279	1.00	638.82	637.82	579	Artesian
67017BB	1/30/2007	Hays	29.90860	-97.97154	0.77	768.60	767.83	584	Recharge
6701813A	1/30/2007	Hays	29.89113	-97.92938	3.10	584.22	581.12	577	Saline
6701813B	1/30/2007	Hays	29.89113	-97.92938	3.08	584.20	581.12	576	Saline
67018BB	1/30/2007	Hays	29.89444	-97.92945	1.25	586.28	585.03	576	Recharge
67018CC	1/30/2007	Hays	29.89361	-97.93205	2.12	634.82	632.70	576	Artesian
67018DD	1/31/2007	Hays	29.88718	-97.94963	1.00	751.96	750.96	576	Artesian
67018EE	1/29/2007	Hays	29.90817	-97.91931	2.05	611.97	609.92	577	Artesian
67018FF	1/29/2007	Hays	29.90269	-97.92173	2.45	591.82	589.37	577	Recharge
67091AA	1/30/2007	Hays	29.85881	-97.99281	0.41	748.82	748.41	580	Recharge
68076AA*	1/29/2007	Hays	29.93194	-98.12972	1.60	1151.60	1150.00	1108	Recharge
68163AA	1/30/2007	Hays	29.84821	-98.02325	1.05	901.10	900.05	584	Artesian
68163DD	1/30/2007	Hays	29.86920	-98.03422	1.05	830.94	829.89	587	Artesian
68166HC	1/30/2007	Hays	29.81891	-98.01745	1.44	705.95	704.51	585	Artesian
68166HC#2	1/30/2007	Hays	29.81857	-98.01703	0.74	713.18	712.44	584	Artesian

* Well visited and water level measured, but not used in potentiometric map.

Appendix A (cont.)

Table A-6. Water levels collected during the July 9 through August 1, 2007, SWLP event.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone
6850201	7/9/2007	Atascosa	29.23026	-98.79888	1.00	712.86	711.86	692	Artesian
6826814	7/11/2007	Bexar	29.52443	-98.79205	2.55	1042.55	1040.00	856	Artesian
6827610	7/20/2007	Bexar	29.54772	-98.63564	2.11	904.16	902.05	756	Artesian
6828113	7/20/2007	Bexar	29.58791	-98.60765	-0.45	1021.88	1022.33	785	Transition
6828313	7/20/2007	Bexar	29.60984	-98.50603	2.50	951.31	948.81	796	Recharge
6828407	7/20/2007	Bexar	29.57354	-98.58561	-0.22	999.81	1000.03	752	Recharge
6828517*	7/20/2007	Bexar	29.57658	-98.57505	2.54	966.38	963.84	805	Recharge
6828909	7/12/2007	Bexar	29.50722	-98.52556	1.90	784.93	783.03	697	Artesian
6828921	7/12/2007	Bexar	29.50417	-98.53944	1.10	824.54	823.44	699	Artesian
6829103	7/20/2007	Bexar	29.58959	-98.48800	0.61	953.12	952.51	722	Recharge
6829611	7/12/2007	Bexar	29.56611	-98.38528	2.80	832.60	829.80	685	Artesian
6829701	7/19/2007	Bexar	29.53732	-98.46398	2.52	780.38	777.86	682	Artesian
6829925	7/20/2007	Bexar	29.51624	-98.39737	2.10	755.10	753.00	686	Artesian
6830807	7/20/2007	Bexar	29.52487	-98.29610	1.00	753.90	752.90	685	Artesian
6835106	7/11/2007	Bexar	29.48194	-98.71389	5.00	964.51	959.51	732	Artesian
6836103	7/11/2007	Bexar	29.48833	-98.60083	6.58	913.84	907.26	674	Artesian
6836107	7/11/2007	Bexar	29.48858	-98.61109	3.80	882.00	878.20	699	Artesian
6836206	7/11/2007	Bexar	29.47250	-98.54806	4.20	760.43	756.23	698	Artesian
6836512	7/11/2007	Bexar	29.43833	-98.56472	3.97	689.43	685.46	698	Artesian
6837103	7/12/2007	Bexar	29.49722	-98.48694	1.00	730.53	729.53	692	Artesian
6837203	7/20/2007	Bexar	29.47913	-98.43261	0.30	731.11	730.81	691	Artesian
6837304	7/13/2007	Bexar	29.46898	-98.38384	2.30	704.98	702.68	690	Artesian
6837521	7/11/2007	Bexar	29.41821	-98.42768	3.85	623.85	620.00	687	Saline
6837522	7/11/2007	Bexar	29.41844	-98.42785	3.97	623.97	620.00	689	Saline
6837523	7/11/2007	Bexar	29.41833	-98.42777	3.74	623.74	620.00	687	Saline
6837524	7/11/2007	Bexar	29.42899	-98.44448	4.24	630.24	626.00	691	Artesian
6837525	7/11/2007	Bexar	29.42925	-98.43359	5.32	629.32	624.00	688	Artesian
6837526	7/11/2007	Bexar	29.43215	-98.43537	4.97	651.14	646.17	692	Artesian
6837527	7/11/2007	Bexar	29.43243	-98.43538	4.34	648.42	644.08	691	Artesian
6837722	7/9/2007	Bexar	29.38975	-98.49575	3.00	605.71	602.71	687	Artesian
6837723	7/9/2007	Bexar	29.38525	-98.49037	2.60	595.48	592.88	691	Saline
6837724	7/9/2007	Bexar	29.37901	-98.49037	1.90	594.93	593.03	692	Saline
6843402	7/9/2007	Bexar	29.31360	-98.71431	1.42	699.86	698.44	702	Saline
6843606	7/9/2007	Bexar	29.31971	-98.65333	1.83	608.79	606.96	698	Artesian
6843607	7/9/2007	Bexar	29.31273	-98.65039	2.59	622.55	619.96	697	Artesian
6844505	7/9/2007	Bexar	29.30906	-98.56314	3.20	593.20	590.00	676	Saline
6844506*	7/9/2007	Bexar	29.32115	-98.55000	3.10	613.10	610.00	655	Saline
68293AA	7/13/2007	Bexar	29.60173	-98.38435	1.70	969.38	967.68	692	Artesian
68302AA	7/13/2007	Bexar	29.59858	-98.32022	1.09	781.83	780.74	676	Artesian
68302BB	7/13/2007	Bexar	29.59885	-98.31847	1.25	764.75	763.50	677	Artesian
68307AA	7/13/2007	Bexar	29.51793	-98.37472	1.05	820.15	819.10	684	Artesian
6830211	7/10/2007	Bexar	29.60496	-98.32818	0.15	776.65	776.50	679	Artesian
6815809	7/12/2007	Comal	29.77095	-98.17648	0.35	908.74	908.39	702	Recharge
6815907	7/16/2007	Comal	29.75467	-98.13955	1.45	707.93	706.48	641	Recharge
6815912	7/16/2007	Comal	29.75451	-98.14100	1.53	695.32	693.79	641	Recharge
6816501	7/31/2007	Comal	29.80162	-98.05505	0.83	756.50	755.67	606	Artesian
6816502	7/17/2007	Comal	29.80812	-98.04752	1.95	759.61	757.66	600	Recharge
6816701	7/10/2007	Comal	29.75728	-98.10479	2.00	713.57	711.57	621	Artesian
6816703	7/9/2007	Comal	29.75366	-98.09312	0.70	701.24	700.54	619	Artesian
6816801	7/9/2007	Comal	29.78677	-98.05287	0.50	753.33	752.83	606	Artesian
6816803	7/9/2007	Comal	29.76992	-98.07410	1.50	726.89	725.39	618	Artesian
6822601	7/13/2007	Comal	29.67736	-98.28615	0.32	908.16	907.84	695	Recharge
6822603	7/12/2007	Comal	29.70225	-98.25158	1.28	946.94	945.66	671	Recharge
6822807	7/11/2007	Comal	29.65550	-98.30505	1.85	897.34	895.49	681	Artesian
6822808	7/20/2007	Comal	29.64256	-98.30737	1.67	967.35	965.68	684	Artesian
6822810	7/11/2007	Comal	29.66027	-98.30709	1.30	890.73	889.43	690	Recharge
6822902	7/13/2007	Comal	29.62940	-98.28032	2.35	790.99	788.64	662	Recharge
6822910	7/13/2007	Comal	29.62928	-98.28055	2.70	786.50	783.80	674	Recharge
6822912	7/10/2007	Comal	29.63038	-98.27526	2.11	791.57	789.46	673	Recharge
6823203	7/17/2007	Comal	29.71022	-98.19230	1.60	988.20	986.60	642	Recharge
6823210	7/11/2007	Comal	29.71452	-98.20805	0.32	920.55	920.23	657	Recharge
6823302	7/9/2007	Comal	29.71357	-98.13835	1.00	643.59	642.59	629	Recharge
6823304	7/12/2007	Comal	29.71111	-98.13833	0.36	626.53	626.17	643	Artesian
6823309	7/9/2007	Comal	29.71867	-98.13524	0.55	736.76	736.21	628	Recharge
6823316	7/9/2007	Comal	29.72137	-98.14791	1.06	807.58	806.52	634	Recharge
6823319	7/9/2007	Comal	29.72101	-98.12768	1.50	629.13	627.63	626	Recharge
6823504	7/11/2007	Comal	29.67135	-98.19642	3.40	709.58	706.18	653	Recharge
6823602	7/12/2007	Comal	29.70188	-98.15112	1.35	704.36	703.01	640	Recharge
6823617	7/12/2007	Comal	29.70559	-98.13506	2.72	635.94	633.22	640	Saline
6823621	7/9/2007	Comal	29.69445	-98.15917	0.87	671.68	670.81	646	Artesian
6823709	7/10/2007	Comal	29.64043	-98.23312	1.10	706.61	705.51	675	Artesian
6823710	7/9/2007	Comal	29.66343	-98.23604	0.85	816.52	815.67	657	Recharge
6823807	7/9/2007	Comal	29.66636	-98.17132	1.70	657.58	655.88	648	Artesian
6824104	7/10/2007	Comal	29.74783	-98.11657	1.60	685.35	683.75	621	Recharge
6830208	7/10/2007	Comal	29.61022	-98.31958	2.50	800.59	798.09	677	Artesian
6830226	7/11/2007	Comal	29.61514	-98.31715	1.58	828.89	827.31	676	Artesian
6830312	7/10/2007	Comal	29.61281	-98.28392	0.90	774.08	773.18	672	Artesian
6830315	7/10/2007	Comal	29.60900	-98.28993	2.35	784.57	782.22	673	Artesian
68159RP	7/10/2007	Comal	29.76397	-98.14248	1.30	699.60	698.30	645	Recharge
68168NB	7/17/2007	Comal	29.78310	-98.06609	2.25	765.07	762.82	616	Artesian
68169FW	7/10/2007	Comal	29.79083	-98.03000	0.72	620.72	620.00	602	Saline
68226BF	7/17/2007	Comal	29.67551	-98.27226	1.24	839.62	838.38	684	Recharge
68226BH	7/20/2007	Comal	29.67406	-98.27697	0.50	855.68	855.18	690	Recharge

Appendix A (cont.)

Table A-6. Water levels collected during the July 9 through August 1, 2007, SWLP event.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone
68228BB	7/11/2007	Comal	29.65992	-98.32097	1.00	1003.70	1002.70	691	Artesian
68233DV	7/10/2007	Comal	29.72716	-98.12531	0.95	645.95	645.00	628	Recharge
6823616A	7/12/2007	Comal	29.70434	-98.13308	2.40	637.82	635.42	641	Saline
6823619B	7/12/2007	Comal	29.70739	-98.13625	2.30	636.71	634.41	642	Saline
68241JF	7/9/2007	Comal	29.74782	-98.10386	1.00	705.90	704.90	622	Recharge
68302AA	7/11/2007	Comal	29.61835	-98.32658	1.25	806.04	804.79	680	Artesian
68302BB	7/11/2007	Comal	29.61497	-98.31909	1.41	804.55	803.14	676	Artesian
68302LH	7/11/2007	Comal	29.61119	-98.32087	0.82	801.00	800.18	675	Artesian
6830314	7/10/2007	Guadalupe	29.60263	-98.25724	2.17	873.18	871.01	667	Artesian
6831403*	7/10/2007	Guadalupe	29.57306	-98.22948	2.09	711.17	709.08	677	Saline
6831511*	7/10/2007	Guadalupe	29.54597	-98.20266	2.06	676.06	674.00	666	Saline
6831808*	7/10/2007	Guadalupe	29.51599	-98.18471	2.89	651.81	648.92	652	Saline
5857319	7/10/2007	Hays	30.08889	-97.91528	0.00	805.00	805.00	687	Recharge
5857502	7/18/2007	Hays	30.06635	-97.944472	0.00	890.00	890.00	738	Recharge
5857503	7/10/2007	Hays	30.06447	-97.92834	0.50	810.50	810.00	708	Recharge
5857509	7/9/2007	Hays	30.07240	-97.920314	0.60	797.13	796.53	709	Recharge
5857701	7/9/2007	Hays	30.04045	-97.960592	0.20	948.19	947.99	719	Recharge
5857902	7/9/2007	Hays	30.00890	-97.895273	1.00	821.56	820.56	637	Artesian
5857903	7/9/2007	Hays	30.03850	-97.886168	0.62	826.92	826.30	648	Artesian
5857908	7/9/2007	Hays	30.00944	-97.896667	1.80	831.80	830.00	636	Artesian
5858101	7/20/2007	Hays	30.08358	-97.842639	1.15	708.09	706.94	645	Artesian
5858123	7/16/2007	Hays	30.10943	-97.841731	0.00	700.89	700.89	626	Artesian
5858406	7/18/2007	Hays	30.06204	-97.856020	0.27	748.61	748.34	646	Artesian
5858427	7/9/2007	Hays	30.07717	-97.861324	1.50	710.53	709.03	665	Artesian
5858510	7/20/2007	Hays	30.07938	-97.827580	1.50	753.50	752.00	637	Artesian
5858511	7/20/2007	Hays	30.07193	-97.828364	3.75	736.99	733.24	640	Artesian
5858704	7/9/2007	Hays	30.02769	-97.853917	0.90	746.90	746.00	596	Artesian
5858711	7/9/2007	Hays	30.01672	-97.859333	2.10	702.10	700.00	605	Artesian
6701203	7/19/2007	Hays	29.96218	-97.920766	0.75	692.79	692.04	601	Recharge
6701303	7/9/2007	Hays	29.98976	-97.875476	1.10	720.34	719.24	587	Artesian
6701311	7/10/2007	Hays	29.98143	-97.891403	2.48	773.00	770.52	597	Artesian
6701809	7/10/2007	Hays	29.91192	-97.928774	1.20	602.47	601.27	581	Recharge
6701812	7/11/2007	Hays	29.89048	-97.928369	2.89	583.78	580.89	578	Saline
6702104*	7/10/2007	Hays	29.98279	-97.871531	2.61	676.93	674.32	585	Saline
6702105*	7/10/2007	Hays	29.95830	-97.842122	2.19	648.89	646.70	575	Saline
6702106*	7/10/2007	Hays	29.97474	-97.857114	2.17	680.45	678.28	575	Saline
6709101	7/19/2007	Hays	29.85557	-97.981769	2.10	689.12	687.02	585	Artesian
6709105	7/11/2007	Hays	29.84479	-97.984182	2.50	694.73	692.23	581	Artesian
6709106	7/11/2007	Hays	29.85243	-97.987157	1.32	700.98	699.66	585	Artesian
6709110	7/10/2007	Hays	29.84358	-97.982247	1.17	688.56	687.39	585	Artesian
6709113	7/10/2007	Hays	29.83874	-97.990736	1.69	706.42	704.73	585	Artesian
6709401*	7/10/2007	Hays	29.82925	-97.962364	2.37	644.88	642.51	592	Saline
6808902	7/12/2007	Hays	29.89647	-98.002893	2.83	786.60	783.77	597	Recharge
6816601	7/23/2007	Hays	29.82981	-98.001633	1.65	761.09	759.44	587	Artesian
6816603	7/12/2007	Hays	29.82923	-98.016213	2.76	739.67	736.91	587	Recharge
58499BQ	7/18/2007	Hays	30.12583	-97.903611	0.90	784.90	784.00	726	Recharge
58573GC	7/9/2007	Hays	30.09759	-97.886850	0.00	824.50	824.50	638	Artesian
58584CT	7/18/2007	Hays	30.06020	-97.868471	1.13	734.53	733.40	652	Recharge
67013BB	7/19/2007	Hays	29.96324	-97.896931	0.50	690.00	689.50	584	Artesian
67013CC	7/9/2007	Hays	29.96745	-97.876243	1.65	693.91	692.26	582	Saline
67013DD	7/10/2007	Hays	29.96941	-97.888119	1.20	713.64	712.44	585	Artesian
67013EE	7/10/2007	Hays	29.96261	-97.881397	1.07	708.13	707.06	582	Saline
67014AA	7/10/2007	Hays	29.92160	-97.965442	0.90	725.78	724.88	589	Recharge
67015DH	8/1/2007	Hays	29.95153	-97.935277	0.85	778.68	777.83	599	Recharge
67015PG	7/19/2007	Hays	29.94337	-97.937687	2.00	782.84	780.84	587	Artesian
67015PLC	7/19/2007	Hays	29.91815	-97.932422	2.40	667.43	665.03	582	Recharge
67015RD	8/1/2007	Hays	29.94617	-97.935688	1.31	762.61	761.30	593	Artesian
67015RW	7/19/2007	Hays	29.93969	-97.934863	1.80	787.33	785.53	584	Artesian
67016CC	7/19/2007	Hays	29.95556	-97.902794	1.00	638.82	637.82	582	Artesian
67017BB	7/10/2007	Hays	29.90860	-97.971539	0.77	768.60	767.83	587	Recharge
6701813A	7/11/2007	Hays	29.89113	-97.929377	3.10	584.22	581.12	578	Saline
6701813B	7/11/2007	Hays	29.89113	-97.929377	3.08	584.20	581.12	579	Saline
67018EE	7/10/2007	Hays	29.90817	-97.919310	2.05	611.97	609.92	580	Artesian
67018FF	7/10/2007	Hays	29.90269	-97.921727	2.45	591.82	589.37	581	Recharge
67091AA	7/10/2007	Hays	29.85881	-97.992810	0.41	748.82	748.41	584	Recharge
68076AA*	7/10/2007	Hays	29.93194	-98.129722	1.60	1151.60	1150.00	1115	Recharge
68089SMB	7/10/2007	Hays	29.89294	-98.001344	0.40	760.41	760.01	593	Recharge
68163AA	7/23/2007	Hays	29.84821	-98.023251	1.05	901.10	900.05	598	Artesian
68163DD	7/20/2007	Hays	29.86920	-98.034217	1.05	830.94	829.89	593	Recharge
68163FF	7/20/2007	Hays	29.85778	-98.036920	0.00	929.87	929.87	595	Recharge
68166HC	7/9/2007	Hays	29.81891	-98.01745	1.44	705.95	704.51	590	Artesian
7038902*	7/11/2007	Kinney	29.41360	-100.26122	2.10	1381.04	1378.94	1202	Recharge
6825711	7/16/2007	Medina	29.50712	-98.98151	2.05	1176.35	1174.30	908	Recharge
6832802	7/16/2007	Medina	29.51001	-99.07712	1.85	1127.21	1125.36	924	Recharge
6833213	7/16/2007	Medina	29.49146	-98.93827	2.24	1015.66	1013.42	892	Recharge
6834506	7/9/2007	Medina	29.43132	-98.81296	0.85	1044.31	1043.46	727	Artesian
6841301	7/9/2007	Medina	29.35504	-98.88010	1.64	761.40	759.76	724	Artesian
6842502	7/11/2007	Medina	29.31056	-98.82272	1.25	730.10	728.85	719	Artesian
6842504	7/9/2007	Medina	29.30962	-98.81524	0.35	724.68	724.33	718	Artesian
6849813	7/9/2007	Medina	29.16578	-98.93941	2.50	665.70	663.20	703	Artesian
6931406	7/16/2007	Medina	29.55485	-99.23474	1.90	1168.23	1166.33	1048	Recharge
6931708	7/16/2007	Medina	29.52363	-99.23251	1.70	1142.62	1140.92	1004	Recharge
6932703	7/16/2007	Medina	29.53416	-99.10993	1.20	1234.20	1233.00	1057	Recharge

Appendix A (cont.)

Table A-6. Water levels collected during the July 9 through August 1, 2007, SWLP event.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone
6938601	7/11/2007	Medina	29.43854	-99.28346	1.34	1009.16	1007.82	885	Recharge
6938902	7/11/2007	Medina	29.37908	-99.27684	0.78	943.10	942.32	785	Artesian
6938906	7/11/2007	Medina	29.38866	-99.26452	1.47	951.88	950.41	790	Artesian
6939504	7/10/2007	Medina	29.45099	-99.19489	1.65	1022.79	1021.14	890	Artesian
6939801	7/10/2007	Medina	29.38856	-99.18614	0.70	956.46	955.76	780	Artesian
6939901	7/10/2007	Medina	29.38452	-99.15391	1.13	933.61	932.48	773	Artesian
6940101	7/10/2007	Medina	29.49326	-99.12483	0.61	1023.83	1023.22	891	Artesian
6940102	7/10/2007	Medina	29.46115	-99.11712	2.50	969.10	966.60	850	Recharge
6940209	7/16/2007	Medina	29.47879	-99.06727	1.75	1037.91	1036.16	858	Recharge
6940404	7/10/2007	Medina	29.43394	-99.12176	1.15	936.33	935.18	806	Artesian
6940510	7/16/2007	Medina	29.42658	-99.06945	2.62	918.02	915.40	773	Artesian
6940901	7/11/2007	Medina	29.40943	-99.00077	0.71	878.94	878.23	742	Artesian
6946602	7/11/2007	Medina	29.31683	-99.26061	0.50	908.82	908.32	779	Artesian
6947306	7/12/2007	Medina	29.34632	-99.13894	0.80	887.48	886.68	744	Artesian
6947503	7/10/2007	Medina	29.32537	-99.20767	0.86	885.64	884.78	752	Artesian
6947602	7/12/2007	Medina	29.32167	-99.15513	1.15	863.39	862.24	748	Artesian
6947603	7/12/2007	Medina	29.30746	-99.14958	1.50	845.51	844.01	748	Artesian
6948102	7/12/2007	Medina	29.35114	-99.08672	0.65	867.68	867.03	743	Artesian
6948402	7/11/2007	Medina	29.32488	-99.10738	0.70	853.63	852.93	742	Artesian
6956501	7/10/2007	Medina	29.17418	-99.05100	2.13	716.83	714.70	749	Artesian
6956507	7/10/2007	Medina	29.17176	-99.05494	1.30	714.07	712.77	751	Artesian
6956508	7/10/2007	Medina	29.17289	-99.05739	1.75	701.67	699.92	752	Artesian
6963103	7/10/2007	Medina	29.11109	-99.22003	4.83	666.01	661.18	751	Artesian
68422AA	7/10/2007	Medina	29.37035	-98.81167	0.80	778.33	777.53	711	Artesian
69396AA	7/10/2007	Medina	29.43503	-99.14966	1.00	1000.31	999.31	814	Artesian
69472AA	7/12/2007	Medina	29.34813	-99.19962	2.63	911.90	909.27	755	Artesian
6935401*	7/12/2007	Uvalde	29.44185	-99.74915	1.00	1290.97	1289.97	1186	Recharge
6935602*	7/11/2007	Uvalde	29.44589	-99.66531	0.50	1150.22	1149.72	1111	Recharge
6936402	7/11/2007	Uvalde	29.41893	-99.60954	2.60	1098.94	1096.34	800	Artesian
6936601	7/13/2007	Uvalde	29.42564	-99.51626	0.20	1072.56	1072.36	811	Artesian
6937402	7/10/2007	Uvalde	29.45330	-99.47319	2.00	1155.22	1153.22	826	Artesian
6942709	7/11/2007	Uvalde	29.27362	-99.86285	1.80	1007.43	1005.63	899	Artesian
6943409	7/11/2007	Uvalde	29.32391	-99.71381	1.70	1058.16	1056.46	875	Artesian
6943607	7/11/2007	Uvalde	29.32651	-99.63863	2.00	1011.65	1009.65	810	Artesian
6943903	7/18/2007	Uvalde	29.26646	-99.64909	1.25	956.08	954.83	810	Artesian
6944301	7/12/2007	Uvalde	29.35294	-99.51335	1.15	1003.08	1001.93	793	Artesian
6944402	7/12/2007	Uvalde	29.33012	-99.59355	1.00	998.37	997.37	807	Artesian
6944703	7/12/2007	Uvalde	29.25742	-99.58624	1.10	935.51	934.41	791	Artesian
6944804	7/10/2007	Uvalde	29.29064	-99.57277	1.50	954.17	952.67	802	Artesian
6944902	7/9/2007	Uvalde	29.26979	-99.50527	1.97	901.88	899.91	787	Artesian
6945401	7/10/2007	Uvalde	29.31944	-99.46990	0.70	954.49	953.79	789	Artesian
6950302	7/13/2007	Uvalde	29.20874	-99.78437	2.40	907.30	904.90	873	Artesian
6951401	7/9/2007	Uvalde	29.17440	-99.73427	0.82	892.12	891.30	850	Artesian
6951602	7/9/2007	Uvalde	29.17573	-99.66051	0.90	864.26	863.36	840	Saline
6951606	7/12/2007	Uvalde	29.19307	-99.63233	2.17	879.72	877.55	787	Saline
6952202	7/9/2007	Uvalde	29.24517	-99.54958	2.30	876.32	874.02	786	Saline
6952403	7/12/2007	Uvalde	29.19889	-99.61690	0.00	875.11	875.11	786	Saline
6952404	7/12/2007	Uvalde	29.19250	-99.61045	2.52	869.54	867.02	787	Saline
7040901*	7/11/2007	Uvalde	29.39456	-100.00232	0.84	1125.11	1124.27	1081	Recharge
69369AA	7/13/2007	Uvalde	29.38037	-99.49433	0.82	1029.41	1028.59	801	Artesian
69438AA	7/12/2007	Uvalde	29.28805	-99.69953	0.91	977.49	976.58	863	Artesian
69443AA	7/19/2007	Uvalde	29.34002	-99.51963	1.42	989.86	988.44	796	Artesian
69501AA	7/11/2007	Uvalde	29.23925	-99.83805	0.67	950.46	949.79	887	Artesian
69502AA	7/12/2007	Uvalde	29.21054	-99.81871	0.83	913.91	913.08	875	Artesian
69502DD	7/11/2007	Uvalde	29.23691	-99.82745	0.00	941.30	941.30	882	Artesian
69503AA	7/11/2007	Uvalde	29.24579	-99.79076	0.55	957.34	956.79	876	Artesian
69503CC	7/9/2007	Uvalde	29.21670	-99.75534	0.80	931.15	930.35	871	Artesian
69505AA	7/12/2007	Uvalde	29.19097	-99.83198	2.17	914.97	912.80	870	Artesian
69505BB	7/9/2007	Uvalde	29.19384	-99.79326	1.00	902.20	901.20	870	Artesian
69511AA	7/19/2007	Uvalde	29.24161	-99.74245	1.00	966.57	965.57	873	Artesian

* Well visited and water level measured, but not used in potentiometric map.

Appendix A (cont.)

Table A-7. Water levels collected during the October 31 through November 8, 2007, SWLP event.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone
6830211	11/1/2007	Bexar	29.60496	-98.32818	0.15	776.65	776.50	683.31	Artesian
6815809	11/8/2007	Comal	29.77095	-98.17648	0.35	908.74	908.39	691.54	Recharge
6815907	11/1/2007	Comal	29.75467	-98.13955	1.45	707.93	706.48	644.86	Recharge
6815912	11/1/2007	Comal	29.75451	-98.14100	1.53	695.32	693.79	645.62	Recharge
6816501	11/6/2007	Comal	29.80162	-98.05505	1.67	757.34	755.67	606.4	Artesian
6816502	11/6/2007	Comal	29.80812	-98.04752	1.95	759.61	757.66	606.11	Recharge
6816701	11/2/2007	Comal	29.75728	-98.10479	2.00	713.57	711.57	623.49	Artesian
6816703	10/31/2007	Comal	29.75366	-98.09312	0.70	701.24	700.54	617.4	Artesian
6816801	10/31/2007	Comal	29.78677	-98.05287	0.50	753.33	752.83	612.56	Artesian
6816803	10/31/2007	Comal	29.76992	-98.07410	1.50	726.89	725.39	620.79	Artesian
6822601	10/30/2007	Comal	29.67736	-98.28615	0.32	908.16	907.84	711.61	Recharge
6822603	10/30/2007	Comal	29.70225	-98.25158	1.28	946.94	945.66	695.29	Recharge
6822807	10/30/2007	Comal	29.65550	-98.30505	1.85	897.34	895.49	709.84	Artesian
6822808	10/30/2007	Comal	29.64256	-98.30737	1.67	967.35	965.68	696.35	Artesian
6822810	10/30/2007	Comal	29.66027	-98.30709	1.30	890.73	889.43	714.29	Recharge
6822902	10/29/2007	Comal	29.62940	-98.28032	2.35	790.99	788.64	678.87	Recharge
6822910	10/29/2007	Comal	29.62928	-98.28055	2.70	786.50	783.80	679.01	Recharge
6822912	10/29/2007	Comal	29.63038	-98.27526	2.11	791.57	789.46	678.94	Recharge
6823203	11/6/2007	Comal	29.71022	-98.19230	1.60	988.20	986.60	654.86	Recharge
6823208	11/8/2007	Comal	29.73490	-98.19445	0.25	887.88	887.63	674.01	Recharge
6823209	10/31/2007	Comal	29.72079	-98.17900	1.75	863.78	862.03	656.18	Recharge
6823210	10/30/2007	Comal	29.71452	-98.20805	0.32	920.55	920.23	674.63	Recharge
6823302	11/1/2007	Comal	29.71357	-98.13835	1.00	643.59	642.59	629.8	Recharge
6823304	11/2/2007	Comal	29.71111	-98.13833	0.36	626.53	626.17	646.42	Artesian
6823306	10/31/2007	Comal	29.74621	-98.15395	1.40	809.07	807.67	647.44	Recharge
6823309	10/31/2007	Comal	29.71867	-98.13524	0.55	736.76	736.21	629.09	Recharge
6823312	11/8/2007	Comal	29.73404	-98.12711	0.40	672.14	671.74	632.53	Recharge
6823316	11/1/2007	Comal	29.72137	-98.14791	1.06	807.58	806.52	636.51	Recharge
6823319	10/30/2007	Comal	29.72101	-98.12768	1.50	629.13	627.63	627.05	Recharge
6823504	10/30/2007	Comal	29.67135	-98.19642	3.40	709.58	706.18	658.9	Recharge
6823602	10/30/2007	Comal	29.70188	-98.15112	1.35	704.36	703.01	646.8	Recharge
6823617	11/2/2007	Comal	29.70559	-98.13506	2.72	635.94	633.22	643.9	Saline
6823621	10/30/2007	Comal	29.69445	-98.15917	0.87	671.68	670.81	650.49	Artesian
6823701	10/29/2007	Comal	29.64889	-98.21644	0.72	685.45	684.73	665.9	Artesian
6823709	10/29/2007	Comal	29.64043	-98.23312	1.10	706.61	705.51	672.79	Artesian
6823710	10/29/2007	Comal	29.66343	-98.23604	0.85	816.52	815.67	666.22	Recharge
6823807	10/30/2007	Comal	29.66636	-98.17132	1.70	657.58	655.88	654.78	Artesian
6824104	10/31/2007	Comal	29.74783	-98.11657	1.60	685.35	683.75	624.02	Recharge
6830208	11/1/2007	Comal	29.61022	-98.31958	2.50	800.59	798.09	682.21	Artesian
6830226	10/29/2007	Comal	29.61514	-98.31715	1.58	828.89	827.31	682.52	Artesian
6830312	10/29/2007	Comal	29.61281	-98.28392	0.90	774.08	773.18	676.23	Artesian
6830315	10/30/2007	Comal	29.60900	-98.28993	2.35	784.57	782.22	677.21	Artesian
68159RP	10/31/2007	Comal	29.76397	-98.14248	1.30	699.60	698.30	646.4	Recharge
68162AA	11/2/2007	Comal	29.84075	-98.07987	1.88	953.40	951.52	672.41	Recharge
68167ML	10/31/2007	Comal	29.78377	-98.08716	1.30	786.53	785.23	623.08	Recharge
68168NB	11/7/2007	Comal	29.78310	-98.06609	2.40	765.22	762.82	619.17	Artesian
68169FW	11/1/2007	Comal	29.79083	-98.03000	0.72	620.72	620.00	606.88	Saline
68225CC	10/30/2007	Comal	29.68247	-98.30111	0.88	866.38	865.50	721.4	Recharge
68226BF	10/30/2007	Comal	29.67551	-98.27226	1.24	839.62	838.38	689.2	Recharge
68226BH	11/2/2007	Comal	29.67406	-98.27697	0.50	855.68	855.18	699.59	Recharge
68228AA	10/31/2007	Comal	29.65218	-98.30108	1.40	887.75	886.35	717.47	Artesian
68228BB	10/29/2007	Comal	29.65992	-98.32097	1.00	1003.70	1002.70	724.99	Artesian
68233DW	10/31/2007	Comal	29.72716	-98.12531	0.95	645.95	645.00	629.7	Recharge
6823616A	11/1/2007	Comal	29.70434	-98.13308	2.40	637.82	635.42	641.05	Saline
6823619B	11/1/2007	Comal	29.70739	-98.13625	2.30	636.71	634.41	640.52	Saline
68241JF	10/31/2007	Comal	29.74782	-98.10386	1.00	705.90	704.90	624.2	Recharge
68302AA	11/1/2007	Comal	29.61835	-98.32658	1.25	806.04	804.79	689.24	Artesian
68302BB	10/29/2007	Comal	29.61497	-98.31909	1.41	804.55	803.14	683.78	Artesian
68302LH	10/29/2007	Comal	29.61119	-98.32087	0.82	801.00	800.18	682.2	Artesian
5857319	10/30/2007	Hays	30.08889	-97.91528	0.00	805.00	805.00	683	Recharge
5857701*	10/29/2007	Hays	30.04045	-97.96059	0.20	948.19	947.99	730	Recharge
5857902	10/29/2007	Hays	30.00890	-97.89527	1.00	821.56	820.56	632	Artesian
5857903	10/29/2007	Hays	30.03850	-97.88617	0.62	826.92	826.30	647	Artesian
5858101	11/1/2007	Hays	30.08358	-97.84264	2.97	709.91	706.94	615	Artesian
5858123	11/1/2007	Hays	30.10943	-97.84173	0.00	700.89	700.89	615	Artesian
5858413	11/1/2007	Hays	30.07052	-97.83549	1.40	753.53	752.13	619	Artesian
5858417	11/2/2007	Hays	30.04723	-97.86748	2.02	764.81	762.79	642	Artesian
5858427	11/1/2007	Hays	30.07717	-97.86132	1.50	710.53	709.03	629	Artesian
5858510	11/1/2007	Hays	30.07938	-97.82758	1.50	753.50	752.00	612	Artesian
5858511	11/1/2007	Hays	30.07193	-97.82836	3.75	736.99	733.24	613	Artesian
5858704	10/29/2007	Hays	30.02769	-97.85392	0.90	746.90	746.00	605	Artesian
5858705	11/2/2007	Hays	30.02295	-97.83861	0.25	724.56	724.31	599	Saline
5858711	10/29/2007	Hays	30.01672	-97.85933	2.10	702.10	700.00	604	Artesian
5858801	11/1/2007	Hays	30.03364	-97.83316	1.48	717.65	716.17	603	Saline
6701303	10/29/2007	Hays	29.98976	-97.87548	1.10	720.34	719.24	579	Artesian
6701304	10/29/2007	Hays	29.98451	-97.87630	0.25	717.80	717.55	573	Artesian
6701311	10/30/2007	Hays	29.98143	-97.89140	2.48	773.00	770.52	585	Artesian
6701809	10/30/2007	Hays	29.91192	-97.92877	1.20	602.47	601.27	581	Recharge
6701812	10/31/2007	Hays	29.89048	-97.92837	2.89	583.78	580.89	580	Saline
6702104*	10/30/2007	Hays	29.98279	-97.87153	2.61	676.93	674.32	554	Saline
6702105*	10/30/2007	Hays	29.95830	-97.84212	2.19	648.89	646.70	579	Saline

Appendix A (cont.)

Table A-7. Water levels collected during the October 31 through November 8, 2007, SWLP event.

Well ID #	Date	County	dec. latitude	dec. longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone
6702106*	10/30/2007	Hays	29.97474	-97.85711	2.17	680.45	678.28	577	Saline
6709101	10/31/2007	Hays	29.85557	-97.98177	1.50	688.52	687.02	585	Artesian
6709105	10/31/2007	Hays	29.84479	-97.98418	2.50	694.73	692.23	584	Artesian
6709106	10/31/2007	Hays	29.85243	-97.98716	1.32	700.98	699.66	586	Artesian
6709110	10/29/2007	Hays	29.84358	-97.98225	1.17	688.56	687.39	587	Artesian
6709113	10/31/2005	Hays	29.83874	-97.99074	1.69	706.42	704.73	587	Artesian
6709401*	10/31/2005	Hays	29.82925	-97.96236	2.37	644.88	642.51	595	Saline
6808902	10/30/2007	Hays	29.89647	-98.00289	2.83	786.60	783.77	596	Recharge
6816601	10/31/2007	Hays	29.82981	-98.00163	1.65	761.09	759.44	591	Artesian
6816603	11/1/2007	Hays	29.82923	-98.01621	2.76	739.67	736.91	589	Recharge
58499BQ	10/30/2007	Hays	30.12583	-97.90361	0.90	784.90	784.00	722	Recharge
58573GC	10/30/2007	Hays	30.09759	-97.88685	0.00	824.50	824.50	644	Artesian
58584CT	10/30/2007	Hays	30.06020	-97.86847	1.13	734.53	733.40	640	Recharge
58584NM	10/29/2007	Hays	30.04596	-97.85135	1.64	753.66	752.02	613	Artesian
67013BB	10/30/2007	Hays	29.96324	-97.89693	0.50	690.00	689.50	582	Artesian
67013CC	10/29/2007	Hays	29.96745	-97.87624	1.65	693.91	692.26	585	Saline
67013EE	10/29/2007	Hays	29.96261	-97.88140	1.07	708.13	707.06	583	Saline
67014AA	10/30/2007	Hays	29.92160	-97.96544	0.90	725.78	724.88	595	Recharge
67015DH	10/31/2007	Hays	29.95153	-97.93528	0.85	778.68	777.83	591	Recharge
67015PG	10/31/2007	Hays	29.94337	-97.93769	2.00	782.84	780.84	588	Artesian
67015PLC	10/31/2007	Hays	29.91815	-97.93242	2.40	667.43	665.03	582	Recharge
67015RD	10/31/2007	Hays	29.94617	-97.93569	1.31	762.61	761.30	585	Artesian
67015RW	10/31/2007	Hays	29.93969	-97.93486	1.80	787.33	785.53	584	Artesian
67016CC	10/30/2007	Hays	29.95556	-97.90279	1.00	638.82	637.82	582	Artesian
67017BB	10/30/2007	Hays	29.90860	-97.97154	0.77	768.60	767.83	596	Recharge
6701813A	10/31/2007	Hays	29.89113	-97.92938	3.10	584.22	581.12	579	Saline
6701813B	10/31/2007	Hays	29.89113	-97.92938	3.08	584.20	581.12	577	Saline
6701814A	11/1/2007	Hays	29.89183	-97.93086	6.40	581.94	575.54	576	Saline
67018BB	10/31/2007	Hays	29.89444	-97.92945	1.25	586.28	585.03	578	Recharge
67018CC	10/31/2007	Hays	29.89361	-97.93205	2.12	634.82	632.70	578	Artesian
67018DD	10/31/2007	Hays	29.88718	-97.94963	1.00	751.96	750.96	580	Artesian
67018EE	10/30/2007	Hays	29.90817	-97.91931	2.05	611.97	609.92	581	Artesian
67018FF	10/30/2007	Hays	29.90269	-97.92173	2.45	591.82	589.37	581	Recharge
67091AA	10/30/2007	Hays	29.85881	-97.99281	0.41	748.82	748.41	586	Recharge
68076AA*	10/31/2007	Hays	29.93194	-98.12972	1.60	1151.60	1150.00	1111	Recharge
68089SMBA	10/30/2007	Hays	29.89294	-98.00134	0.40	760.41	760.01	594	Recharge
68163AA	10/29/2007	Hays	29.84821	-98.02325	1.05	901.10	900.05	592	Artesian
68163DD	10/29/2007	Hays	29.86920	-98.03422	1.05	830.94	829.89	596	Recharge
68163FF	10/29/2007	Hays	29.85778	-98.03692	0.00	929.87	929.87	598	Recharge
68166HC	10/29/2007	Hays	29.81891	-98.01745	1.44	705.95	704.51	600.26	Artesian
68166HC#2	11/1/2007	Hays	29.81857	-98.01703	0.74	713.18	712.44	600.17	Artesian

* Well visited and water level measured, but not used in potentiometric map.

Appendix A (cont.)

Table A-8. Water levels collected during the January 28 through February 8, 2008, SWLP event.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone
6830211	2/4/2008	Bexar	29.60496	-98.32818	0.15	776.65	776.50	678	Artesian
6815809	1/29/2008	Comal	29.77095	-98.17648	0.35	908.74	908.39	669	Recharge
6815902*	1/30/2008	Comal	29.75912	-98.14005	2.13	661.89	659.76	660	Recharge
6815907	1/30/2008	Comal	29.75467	-98.13955	1.45	707.93	706.48	640	Recharge
6815912	1/30/2008	Comal	29.75451	-98.14100	1.53	695.32	693.79	641	Recharge
6816501	1/29/2008	Comal	29.80167	-98.05500	0.83	754.83	754.00	602	Artesian
6816502	1/29/2008	Comal	29.80806	-98.04750	1.95	752.95	751.00	594	Recharge
6816701	2/4/2008	Comal	29.75728	-98.10479	2.00	713.57	711.57	620	Artesian
6816703	1/28/2008	Comal	29.75366	-98.09312	0.70	701.24	700.54	617	Artesian
6816801	1/28/2008	Comal	29.78677	-98.05287	0.50	753.33	752.83	615	Artesian
6816803	1/28/2008	Comal	29.76992	-98.07410	1.50	726.89	725.39	617	Artesian
6822601	2/1/2008	Comal	29.67736	-98.28615	0.32	908.16	907.84	692	Recharge
6822603	1/31/2008	Comal	29.70225	-98.25158	1.28	946.94	945.66	691	Recharge
6822807	1/31/2008	Comal	29.65550	-98.30505	1.85	897.34	895.49	700	Artesian
6822808	2/7/2008	Comal	29.64256	-98.30737	1.67	967.35	965.68	687	Artesian
6822810	1/31/2008	Comal	29.66027	-98.30709	1.30	890.73	889.43	704	Recharge
6822902	2/1/2008	Comal	29.62940	-98.28032	2.35	790.99	788.64	674	Recharge
6822910	2/1/2008	Comal	29.62928	-98.28055	2.70	786.50	783.80	674	Recharge
6822912	1/29/2008	Comal	29.63038	-98.27526	2.11	791.57	789.46	674	Recharge
6823203	1/29/2008	Comal	29.71022	-98.19230	1.60	988.20	986.60	646	Recharge
6823209	1/29/2008	Comal	29.72079	-98.17900	1.75	863.78	862.03	652	Recharge
6823210	2/5/2008	Comal	29.71452	-98.20805	0.32	920.55	920.23	662	Recharge
6823211	1/30/2008	Comal	29.74443	-98.17163	1.32	784.64	783.32	647	Recharge
6823302	2/4/2008	Comal	29.71357	-98.13835	1.00	643.59	642.59	629	Recharge
6823304	2/5/2008	Comal	29.71111	-98.13833	0.36	626.53	626.17	644	Artesian
6823306	1/28/2008	Comal	29.74621	-98.15395	1.40	809.07	807.67	642	Recharge
6823309	1/31/2008	Comal	29.71867	-98.13524	0.55	736.76	736.21	626	Recharge
6823312	1/30/2008	Comal	29.73404	-98.12711	0.40	672.14	671.74	630	Recharge
6823316	2/4/2008	Comal	29.72137	-98.14791	1.06	807.58	806.52	634	Recharge
6823319	1/31/2008	Comal	29.72101	-98.12768	1.50	629.13	627.63	626	Recharge
6823504	2/5/2008	Comal	29.67135	-98.19642	3.40	709.58	706.18	655	Recharge
6823602	2/5/2008	Comal	29.70188	-98.15112	1.35	704.36	703.01	644	Recharge
6823617	2/5/2008	Comal	29.70559	-98.13506	4.46	637.68	633.22	645	Saline
6823621	1/31/2008	Comal	29.69445	-98.15917	0.87	671.68	670.81	648	Artesian
6823701	1/29/2008	Comal	29.64889	-98.21644	0.72	685.45	684.73	662	Artesian
6823709	1/29/2008	Comal	29.64043	-98.23312	1.10	706.61	705.51	668	Artesian
6823710	1/29/2008	Comal	29.66343	-98.23604	0.85	816.52	815.67	662	Recharge
6823807	1/29/2008	Comal	29.66636	-98.17132	1.70	657.58	655.88	652	Artesian
6824104	1/28/2008	Comal	29.74783	-98.11657	1.60	685.35	683.75	618	Recharge
6830208	2/4/2008	Comal	29.61022	-98.31958	2.50	800.59	798.09	677	Artesian
6830226	1/29/2008	Comal	29.61514	-98.31715	1.58	828.89	827.31	676	Artesian
6830312	1/29/2008	Comal	29.61281	-98.28392	0.90	774.08	773.18	672	Artesian
6830315	1/29/2008	Comal	29.60900	-98.28993	2.35	784.57	782.22	673	Artesian
68162AA	2/4/2008	Comal	29.84075	-98.07987	1.88	953.40	951.52	664	Recharge
68167ML	1/28/2008	Comal	29.78377	-98.08716	1.75	786.98	785.23	618	Recharge
68168NB	1/29/2008	Comal	29.78310	-98.06609	2.25	765.07	762.82	615	Artesian
68169FW	1/29/2008	Comal	29.79083	-98.03000	0.72	620.72	620.00	603	Saline
68226BF	2/7/2008	Comal	29.67551	-98.27226	1.24	839.62	838.38	685	Recharge
68226BH	2/7/2008	Comal	29.67406	-98.27697	0.50	855.68	855.18	691	Recharge
68228AA	2/1/2008	Comal	29.65218	-98.30108	1.40	887.75	886.35	704	Artesian
68228BB	2/7/2008	Comal	29.65992	-98.32097	1.00	1003.70	1002.70	704	Artesian
68233DW	1/28/2008	Comal	29.72716	-98.12531	0.95	645.95	645.00	627	Recharge
6823616A	2/7/2008	Comal	29.70434	-98.13308	4.91	640.33	635.42	643	Saline
6823619B	2/5/2008	Comal	29.70739	-98.13625	5.20	639.61	634.41	640	Saline
68241JF	1/28/2008	Comal	29.74786	-98.10394	1.00	701.00	700.00	616	Recharge
68302AA	1/29/2008	Comal	29.61835	-98.32658	1.25	806.04	804.79	685	Artesian
68302BB	1/29/2008	Comal	29.61497	-98.31909	1.41	804.55	803.14	678	Artesian
68302LH	1/29/2008	Comal	29.61119	-98.32087	0.82	801.00	800.18	677	Artesian
5857201	2/8/2008	Hays	30.10278	-97.93694	0.00	925.00	925.00	767	Recharge
5857319	1/31/2008	Hays	30.08889	-97.91528	0.00	805.00	805.00	666	Recharge
5857502*	1/31/2008	Hays	30.06635	-97.94447	0.00	890.00	890.00	688	Recharge
5857503	1/31/2008	Hays	30.06447	-97.92834	0.50	810.50	810.00	708	Recharge
5857701	1/29/2008	Hays	30.04045	-97.96059	0.20	948.19	947.99	719	Recharge
5857902	2/5/2008	Hays	30.00890	-97.89527	1.00	821.56	820.56	611	Artesian
5857903	1/28/2008	Hays	30.03850	-97.88617	0.47	826.77	826.30	621	Artesian
5857908	1/28/2008	Hays	30.00944	-97.89667	1.80	831.80	830.00	613	Artesian
5858101	1/31/2008	Hays	30.08358	-97.84264	2.97	709.91	706.94	595	Artesian
5858123	1/31/2008	Hays	30.10943	-97.84173	2.80	703.69	700.89	589	Artesian
5858406	2/8/2008	Hays	30.06204	-97.85602	0.27	748.61	748.34	610	Artesian
5858407	2/8/2008	Hays	30.05345	-97.95553	1.54	760.37	758.83	608	Artesian
5858413	2/2/2008	Hays	30.07052	-97.83549	1.40	753.53	752.13	590	Artesian
5858417	1/31/2008	Hays	30.04723	-97.86748	2.02	764.81	762.79	617	Artesian
5858427	1/31/2008	Hays	30.07717	-97.86132	1.80	710.83	709.03	618	Artesian
5858428	2/5/2008	Hays	30.05208	-97.83340	0.70	684.00	683.30	567	Saline
5858510	1/31/2008	Hays	30.07938	-97.82758	1.50	753.50	752.00	586	Artesian
5858511	1/31/2008	Hays	30.07193	-97.82836	3.75	736.99	733.24	589	Artesian
5858701	2/5/2008	Hays	30.03548	-97.84141	0.00	711.73	711.73	563	Artesian
5858704	1/28/2008	Hays	30.02769	-97.85392	0.90	746.90	746.00	587	Artesian
5858705	1/31/2008	Hays	30.02295	-97.83861	0.25	724.56	724.31	592	Saline
5858711	1/28/2008	Hays	30.01672	-97.85933	2.10	702.10	700.00	595	Artesian
5858801	1/31/2008	Hays	30.03364	-97.83316	1.48	717.65	716.17	593	Saline
6701203	2/6/2008	Hays	29.96218	-97.92077	0.75	692.79	692.04	591	Recharge
6701303	1/31/2008	Hays	29.98976	-97.87548	1.10	720.34	719.24	545	Artesian

Appendix A (cont.)

Table A-8. Water levels collected during the January 28 through February 8, 2008, SWLP event.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone
6701304	1/31/2008	Hays	29.98451	-97.87630	0.25	717.80	717.55	555	Artesian
6701311	1/29/2008	Hays	29.98143	-97.89140	2.48	773.00	770.52	566	Artesian
6701809	1/31/2008	Hays	29.91192	-97.92877	1.20	602.47	601.27	576	Recharge
6701812	2/1/2008	Hays	29.89048	-97.92837	2.89	583.78	580.89	577	Saline
6702104*	1/29/2008	Hays	29.98279	-97.87153	2.61	676.93	674.32	569	Saline
6702105*	1/29/2008	Hays	29.95830	-97.84212	2.19	648.89	646.70	579	Saline
6702106*	1/29/2008	Hays	29.97474	-97.85711	2.17	680.45	678.28	575	Saline
6709105	2/1/2008	Hays	29.84479	-97.98418	2.50	694.73	692.23	575	Artesian
6709106	2/1/2008	Hays	29.85243	-97.98716	1.32	700.98	699.66	581	Artesian
6709110	1/31/2008	Hays	29.84358	-97.98225	1.17	688.56	687.39	580	Artesian
6709113	1/29/2008	Hays	29.83874	-97.99074	1.69	706.42	704.73	581	Artesian
6709401*	1/29/2008	Hays	29.82925	-97.96236	2.37	644.88	642.51	594	Saline
6808902	1/31/2008	Hays	29.89647	-98.00289	2.83	786.60	783.77	585	Recharge
6816601	1/29/2008	Hays	29.82981	-98.00163	1.65	761.09	759.44	585	Artesian
6816603	1/31/2008	Hays	29.82923	-98.01621	2.76	739.67	736.91	589	Recharge
58499BQ	1/31/2008	Hays	30.12583	-97.90361	2.00	786.00	784.00	721	Recharge
58573GC	1/31/2008	Hays	30.09759	-97.88685	0.00	824.50	824.50	610	Artesian
58584CT	1/31/2008	Hays	30.06020	-97.86847	0.00	733.40	733.40	616	Recharge
67013BB	1/28/2008	Hays	29.96324	-97.89693	0.50	690.00	689.50	578	Artesian
67013CC	1/31/2008	Hays	29.96745	-97.87624	1.65	693.91	692.26	576	Saline
67013EE	1/31/2008	Hays	29.96261	-97.88140	1.07	708.13	707.06	577	Saline
67014AA	1/31/2008	Hays	29.92160	-97.96544	0.90	725.78	724.88	584	Recharge
67015DH	2/6/2008	Hays	29.95153	-97.93528	0.85	778.68	777.83	582	Recharge
67015RD	2/6/2008	Hays	29.94617	-97.93569	1.31	762.61	761.30	580	Artesian
67015RW	2/6/2008	Hays	29.93969	-97.93486	1.80	787.33	785.53	578	Artesian
67016CC	1/28/2008	Hays	29.95556	-97.90279	1.00	638.82	637.82	577	Artesian
6701813A	2/1/2008	Hays	29.89113	-97.92938	3.10	584.22	581.12	576	Saline
6701813B	2/1/2008	Hays	29.89113	-97.92938	3.08	584.20	581.12	577	Saline
67018BB	2/1/2008	Hays	29.89444	-97.92945	1.25	586.28	585.03	575	Recharge
67018CC	2/1/2008	Hays	29.89361	-97.93205	2.12	634.82	632.70	576	Artesian
67018DD	2/1/2008	Hays	29.88718	-97.94963	1.00	751.96	750.96	576	Artesian
67018EE	1/31/2008	Hays	29.90817	-97.91931	2.05	611.97	609.92	577	Artesian
67018FF	1/31/2008	Hays	29.90269	-97.92173	2.45	591.82	589.37	577	Recharge
67091AA	1/31/2008	Hays	29.85881	-97.99281	0.41	748.82	748.41	580	Recharge
68076AA*	1/28/2008	Hays	29.93194	-98.12972	1.60	1151.60	1150.00	1114	Recharge
68089SMBA	1/31/2008	Hays	29.89294	-98.00134	0.40	760.41	760.01	586	Recharge
68163AA	1/29/2008	Hays	29.84821	-98.02325	1.05	901.10	900.05	583	Artesian
68163DD	2/1/2008	Hays	29.86920	-98.03422	1.05	830.94	829.89	582	Recharge
68163FF	2/1/2008	Hays	29.85778	-98.03692	0.00	929.87	929.87	579	Recharge
68166HC	1/28/2008	Hays	29.81891	-98.01745	1.44	705.95	704.51	594	Artesian
68166HC#2	1/28/2008	Hays	29.81857	-98.01703	0.74	713.18	712.44	594	Artesian

* Well visited and water level measured, but not used in potentiometric map.

Appendix A (cont.)

Table A-9. Water levels collected during the July 28 through August 7, 2008, SWLP event.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone
6850201	7/29/2008	Atascosa	29.23026	-98.79888	1.00	712.86	711.86	672	Artesian
6821806	7/28/2008	Bexar	29.62937	-98.44849	2.38	953.04	950.66	733	Recharge
6826814	7/30/2008	Bexar	29.52443	-98.79205	2.55	1042.55	1040.00	773	Artesian
6827307	7/30/2008	Bexar	29.58549	-98.63081	1.10	991.84	990.74	803	Recharge
6827517	7/30/2008	Bexar	29.56628	-98.68172	2.05	999.44	997.39	766	Recharge
6827609	7/30/2008	Bexar	29.56793	-98.66162	-0.33	960.21	960.54	766	Recharge
6827610	7/30/2008	Bexar	29.54772	-98.63564	2.11	904.16	902.05	743	Artesian
6827611	7/30/2008	Bexar	29.57476	-98.62737	-0.23	963.93	964.16	772	Recharge
6827612	7/30/2008	Bexar	29.56761	-98.63895	2.83	960.67	957.84	764	Recharge
6828113	7/30/2008	Bexar	29.58791	-98.60765	-0.45	1021.88	1022.33	797	Transition
6828210	7/30/2008	Bexar	29.59178	-98.57610	-0.37	983.90	984.27	785	Recharge
6828211	7/30/2008	Bexar	29.58781	-98.54858	2.65	976.95	974.30	761	Recharge
6828313	7/30/2008	Bexar	29.60984	-98.50603	2.50	951.31	948.81	737	Recharge
6828314	7/30/2008	Bexar	29.59303	-98.51131	1.40	901.93	900.53	726	Recharge
6828315	7/30/2008	Bexar	29.60313	-98.52191	-0.17	946.58	946.75	721	Recharge
6828406	7/30/2008	Bexar	29.56376	-98.59950	0.80	979.52	978.72	749	Transition
6828407	7/30/2008	Bexar	29.57354	-98.58561	-0.22	999.81	1000.03	770	Recharge
6828515	7/30/2008	Bexar	29.56326	-98.56136	1.71	977.40	975.69	722	Recharge
6828516	7/30/2008	Bexar	29.56090	-98.57974	1.46	949.11	947.65	741	Recharge
6828517	7/30/2008	Bexar	29.57658	-98.57505	2.54	966.38	963.84	777	Recharge
6828608	7/30/2008	Bexar	29.58246	-98.51359	1.9	859.98	858.08	719	Artesian
6828921	7/31/2008	Bexar	29.50417	-98.53944	1.10	824.54	823.44	674	Artesian
6829103	7/28/2008	Bexar	29.58959	-98.48800	0.50	953.01	952.51	712	Recharge
6829112	7/28/2008	Bexar	29.59967	-98.48011	2.38	891.38	889.00	720	Recharge
6829113	7/28/2008	Bexar	29.59282	-98.47450	1.52	887.43	885.91	719	Transition
6829114	7/28/2008	Bexar	29.59122	-98.46206	-0.30	852.30	852.60	722	Recharge
6829213	7/28/2008	Bexar	29.58457	-98.45244	1.30	853.16	851.86	696	Recharge
6829214	7/28/2008	Bexar	29.58878	-98.42807	-0.40	809.51	809.91	695	Recharge
6829215	7/28/2008	Bexar	29.59362	-98.43999	2.10	829.10	827.00	706	Recharge
6829216	7/28/2008	Bexar	29.61186	-98.44442	-0.40	923.30	923.70	727	Recharge
6829217	7/28/2008	Bexar	29.60413	-98.43983	-0.40	919.50	919.90	725	Recharge
6829418	7/28/2008	Bexar	29.58221	-98.46730	2.26	830.41	828.15	711	Recharge
6829506	7/29/2008	Bexar	29.57460	-98.43905	1.35	789.35	788.00	674	Artesian
6829605	7/29/2008	Bexar	29.55004	-98.38709	-2.20	805.88	808.08	672	Artesian
6829611	7/31/2008	Bexar	29.56611	-98.38528	2.80	832.60	829.80	664	Artesian
6829701	7/28/2008	Bexar	29.53732	-98.46398	2.52	780.38	777.86	664	Artesian
6829925	7/28/2008	Bexar	29.51624	-98.39737	2.10	755.10	753.00	668	Artesian
6830211	7/28/2008	Bexar	29.60496	-98.32818	0.15	776.65	776.50	662	Artesian
6830807	7/28/2008	Bexar	29.52487	-98.29610	1.10	754.00	752.90	665	Artesian
6835106	7/30/2008	Bexar	29.48194	-98.71389	5.00	964.51	959.51	680	Artesian
6836103*	7/30/2008	Bexar	29.48833	-98.60083	6.58	913.84	907.26	653	Artesian
6836206	7/30/2008	Bexar	29.47250	-98.54806	4.20	760.43	756.23	674	Artesian
6836512	7/30/2008	Bexar	29.43833	-98.56472	3.97	689.43	685.46	674	Artesian
6836901	7/28/2008	Bexar	29.41369	-98.51577	3.21	640.45	637.24	673	Artesian
6837103	7/31/2008	Bexar	29.49722	-98.48694	1.00	730.53	729.53	670	Artesian
6837203	7/28/2008	Bexar	29.47913	-98.43261	0.83	731.64	730.81	670	Artesian
6837304	7/31/2008	Bexar	29.46898	-98.38384	2.30	704.98	702.68	670	Artesian
6837521	7/31/2008	Bexar	29.41821	-98.42768	3.85	623.85	620.00	667	Saline
6837522	7/31/2008	Bexar	29.41844	-98.42785	3.97	623.97	620.00	668	Saline
6837523	7/31/2008	Bexar	29.41833	-98.42777	3.74	623.74	620.00	667	Saline
6837524	7/31/2008	Bexar	29.42899	-98.44448	4.24	630.24	626.00	671	Artesian
6837525	7/31/2008	Bexar	29.42925	-98.43359	5.32	629.32	624.00	668	Artesian
6837526	7/31/2008	Bexar	29.43215	-98.43537	4.97	651.14	646.17	672	Artesian
6837527	7/31/2008	Bexar	29.43243	-98.43538	4.34	648.42	644.08	671	Artesian
6837722	7/30/2008	Bexar	29.38975	-98.49575	3.00	605.71	602.71	672	Artesian
6837723	7/30/2008	Bexar	29.38525	-98.49037	2.60	595.48	592.88	674	Saline
6837724	7/30/2008	Bexar	29.37901	-98.49037	1.90	594.93	593.03	673	Saline
6843402	7/28/2008	Bexar	29.31360	-98.71431	1.42	699.86	698.44	680	Saline
6843606	7/28/2008	Bexar	29.31971	-98.65333	1.83	608.79	606.96	674	Artesian
6844505	7/30/2008	Bexar	29.30906	-98.56314	3.20	593.20	590.00	674	Saline
6844506*	7/30/2008	Bexar	29.32115	-98.55000	3.10	613.10	610.00	653	Saline
68302AA	7/31/2008	Bexar	29.59858	-98.32022	1.09	781.83	780.74	658	Artesian
68307AA	7/31/2008	Bexar	29.51793	-98.37472	1.05	820.15	819.10	665	Artesian
6815809	8/4/2008	Comal	29.77095	-98.17648	0.35	908.74	908.39	656	Recharge
6815902	8/4/2008	Comal	29.75912	-98.14005	2.13	661.89	659.76	655	Recharge
6815907	8/4/2008	Comal	29.75467	-98.13955	1.45	707.93	706.48	631	Recharge
6815912	8/4/2008	Comal	29.75451	-98.14100	1.53	695.32	693.79	634	Recharge
6816501	7/31/2008	Comal	29.80162	-98.05505	0.83	756.50	755.67	597	Artesian
6816502	7/31/2008	Comal	29.80812	-98.04752	1.95	759.61	757.66	596	Recharge
6816701	8/6/2008	Comal	29.75728	-98.10479	2.00	713.57	711.57	616	Artesian
6816801	7/31/2008	Comal	29.78677	-98.05287	0.50	753.33	752.83	608	Artesian
6816803	7/31/2008	Comal	29.76992	-98.07410	1.50	726.89	725.39	610	Artesian
6822601	8/4/2008	Comal	29.67736	-98.28615	0.32	908.16	907.84	671	Recharge
6822603	7/31/2008	Comal	29.70225	-98.25158	1.28	946.94	945.66	674	Recharge
6822807	7/30/2008	Comal	29.65550	-98.30505	1.85	897.34	895.49	670	Artesian
6822808	8/1/2008	Comal	29.64256	-98.30737	1.67	967.35	965.68	667	Artesian
6822810	7/30/2008	Comal	29.66027	-98.30709	1.30	890.73	889.43	678	Recharge
6822902	8/4/2008	Comal	29.62940	-98.28032	2.35	790.99	788.64	656	Recharge
6822910	8/4/2008	Comal	29.62928	-98.28055	2.70	786.50	783.80	653	Recharge
6822912	7/28/2008	Comal	29.63038	-98.27526	2.11	791.57	789.46	657	Recharge
6823209	7/31/2008	Comal	29.72079	-98.17900	1.75	863.78	862.03	641	Recharge
6823210	7/31/2008	Comal	29.71452	-98.20805	0.32	920.55	920.23	637	Recharge
6823302	8/6/2008	Comal	29.71357	-98.13835	1.00	643.59	642.59	626	Recharge
6823304	8/7/2008	Comal	29.71111	-98.13833	0.36	626.53	626.17	636	Artesian
6823306	8/4/2008	Comal	29.74621	-98.15395	1.40	809.07	807.67	634	Recharge
6823309	8/5/2008	Comal	29.71867	-98.13524	0.55	736.76	736.21	624	Recharge

Appendix A (cont.)

Table A-9. Water levels collected during the July 28 through August 7, 2008, SWLP event.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone
6823316	8/7/2008	Comal	29.72137	-98.14791	1.06	807.58	806.52	629	Recharge
6823319	8/5/2008	Comal	29.72101	-98.12768	1.50	629.13	627.63	623	Recharge
6823504	8/5/2008	Comal	29.67135	-98.19642	3.40	709.58	706.18	643	Recharge
6823602	8/5/2008	Comal	29.70188	-98.15112	1.35	704.36	703.01	629	Recharge
6823617	8/6/2008	Comal	29.70559	-98.13506	4.46	637.68	633.22	637	Saline
6823621	8/5/2008	Comal	29.69445	-98.15917	0.87	671.68	670.81	638	Artesian
6823701	7/29/2008	Comal	29.64889	-98.21644	0.72	685.45	684.73	649	Artesian
6823709	7/29/2008	Comal	29.64043	-98.23312	1.10	706.61	705.51	659	Artesian
6823710	7/29/2008	Comal	29.66343	-98.23604	0.85	816.52	815.67	648	Recharge
6823807	7/29/2008	Comal	29.66636	-98.17132	1.70	657.58	655.88	641	Artesian
6824104	8/1/2008	Comal	29.74783	-98.11657	1.60	685.35	683.75	616	Recharge
6830208	8/7/2008	Comal	29.61022	-98.31958	2.50	800.59	798.09	659	Artesian
6830226	7/28/2008	Comal	29.61514	-98.31715	1.58	828.89	827.31	654	Artesian
6830312	7/28/2008	Comal	29.61281	-98.28392	1.56	774.74	773.18	657	Artesian
6830315	7/29/2008	Comal	29.60900	-98.28993	2.35	784.57	782.22	657	Artesian
68162AA	8/6/2008	Comal	29.84075	-98.07987	1.88	953.40	951.52	663	Recharge
68167ML	7/31/2008	Comal	29.78377	-98.08716	1.75	786.98	785.23	611	Recharge
68168NB	7/31/2008	Comal	29.78310	-98.06609	2.25	765.07	762.82	607	Artesian
68169FW	8/1/2008	Comal	29.79083	-98.03000	0.72	620.72	620.00	597	Saline
68226BF	8/1/2008	Comal	29.67551	-98.27226	1.24	839.62	838.38	666	Recharge
68226BH	8/1/2008	Comal	29.67406	-98.27697	0.50	855.68	855.18	668	Recharge
68228AA	7/31/2008	Comal	29.65218	-98.30108	1.40	887.75	886.35	670	Artesian
68228BB	7/28/2008	Comal	29.65992	-98.32097	1.00	1003.70	1002.70	691	Artesian
68233DW	8/4/2008	Comal	29.72716	-98.12531	0.95	645.95	645.00	623	Recharge
6823616A	8/6/2008	Comal	29.70434	-98.13308	4.91	640.33	635.42	636	Saline
6823619B	8/6/2008	Comal	29.70739	-98.13625	5.20	639.61	634.41	636	Saline
68241JF	8/1/2008	Comal	29.74782	-98.10386	1.00	705.90	704.90	616	Recharge
68302AA	7/28/2008	Comal	29.61835	-98.32658	1.25	806.04	804.79	658	Artesian
68302BB	7/28/2008	Comal	29.61497	-98.31909	1.41	804.55	803.14	660	Artesian
68302LH	7/28/2008	Comal	29.61119	-98.32087	0.82	801.00	800.18	657	Artesian
6830314	7/29/2008	Guadalupe	29.60263	-98.25724	2.17	873.18	871.01	656	Artesian
6831403*	7/29/2008	Guadalupe	29.57306	-98.22948	2.09	711.17	709.08	662	Saline
6831511*	7/29/2008	Guadalupe	29.54597	-98.20266	2.06	676.06	674.00	656	Saline
6831808*	7/29/2008	Guadalupe	29.51599	-98.18471	2.89	651.81	648.92	650	Saline
5857319	7/31/2008	Hays	30.08889	-97.91528	0.00	805.00	805.00	659	Recharge
5857701*	7/28/2008	Hays	30.04045	-97.96059	0.20	948.19	947.99	730.99	Recharge
5857902	7/28/2008	Hays	30.00890	-97.89527	1.00	821.56	820.56	581.99	Artesian
5857903	7/28/2008	Hays	30.03850	-97.88617	0.62	826.92	826.30	584.99	Artesian
5857908	7/28/2008	Hays	30.00944	-97.89667	1.80	831.80	830.00	584.38	Artesian
5858101	7/31/2008	Hays	30.08358	-97.84264	2.97	709.91	706.94	549.00	Artesian
5858123	7/31/2008	Hays	30.10943	-97.84173	0.00	700.89	700.89	536.07	Artesian
5858406	8/7/2008	Hays	30.06204	-97.85602	0.27	748.61	748.34	566.67	Artesian
5858407	8/7/2008	Hays	30.05345	-97.85553	1.54	760.37	758.83	563.68	Artesian
5858417	8/7/2008	Hays	30.04723	-97.86748	2.02	764.81	762.79	575.89	Artesian
5858427	8/7/2008	Hays	30.07717	-97.86132	1.80	710.83	709.03	593.74	Artesian
5858511	8/7/2008	Hays	30.07193	-97.82836	3.75	736.99	733.24	541.62	Artesian
5858704	7/28/2008	Hays	30.02769	-97.85392	0.90	746.90	746.00	562.19	Artesian
5858705	8/7/2008	Hays	30.02295	-97.83861	0.25	724.56	724.31	564.36	Saline
5858711	7/28/2008	Hays	30.01672	-97.85933	2.10	702.10	700.00	563.84	Artesian
5858801	8/7/2008	Hays	30.03364	-97.83316	1.48	717.65	716.17	563.92	Saline
6701203	8/5/2008	Hays	29.96218	-97.92077	0.75	692.79	692.04	580.83	Recharge
6701303	7/28/2008	Hays	29.98976	-97.87548	1.10	720.34	719.24	521.21	Artesian
6701311	7/29/2008	Hays	29.98143	-97.89140	2.48	773.00	770.52	544.63	Artesian
6701809	7/29/2008	Hays	29.91192	-97.92877	1.20	602.47	601.27	574.37	Recharge
6701812	7/30/2008	Hays	29.89048	-97.92837	2.89	583.78	580.89	575.15	Saline
6702104*	7/29/2008	Hays	29.98279	-97.87153	2.61	676.93	674.32	549.09	Saline
6702105*	7/29/2008	Hays	29.95830	-97.84212	2.19	648.89	646.70	573.91	Saline
6702106*	7/29/2008	Hays	29.97474	-97.85711	2.17	680.45	678.28	562.18	Saline
6709101*	7/31/2008	Hays	29.85557	-97.98177	1.50	688.52	687.02	586.51	Artesian
6709105	7/30/2008	Hays	29.84479	-97.98418	2.50	694.73	692.23	577.89	Artesian
6709106	7/30/2008	Hays	29.85243	-97.98716	1.32	700.98	699.66	577.93	Artesian
6709110	7/29/2008	Hays	29.84358	-97.98225	1.17	688.56	687.39	577.75	Artesian
6709113	7/29/2008	Hays	29.83874	-97.99074	1.69	706.42	704.73	578.21	Artesian
6709401*	7/29/2008	Hays	29.82925	-97.96236	2.37	644.88	642.51	590.36	Saline
6808902	7/30/2008	Hays	29.89647	-98.00289	2.83	786.60	783.77	580.45	Recharge
6816601	8/1/2008	Hays	29.82981	-98.00163	1.65	761.09	759.44	581.78	Artesian
58499BQ	7/31/2008	Hays	30.12583	-97.90361	0.90	784.90	784.00	710.33	Recharge
58584CT	7/31/2008	Hays	30.06020	-97.86847	1.13	734.53	733.40	573	Recharge
58584NM	7/29/2008	Hays	30.04596	-97.85135	1.64	753.66	752.02	562.02	Artesian
67013BB	8/5/2008	Hays	29.96324	-97.89693	0.50	690.00	689.50	573.3	Artesian
67013CC	7/29/2008	Hays	29.96745	-97.87624	1.65	693.91	692.26	565.41	Saline
67013EE	7/28/2008	Hays	29.96261	-97.88140	1.07	708.13	707.06	574.02	Saline
67014AA	7/29/2008	Hays	29.92160	-97.96544	0.90	725.78	724.88	577.36	Recharge
67015DH	8/5/2008	Hays	29.95153	-97.93528	0.85	778.68	777.83	576.02	Recharge
67015PG	8/4/2008	Hays	29.94337	-97.93769	2.04	782.88	780.84	569.65	Artesian
67015RW	8/4/2008	Hays	29.93969	-97.93486	1.80	787.33	785.53	574.48	Artesian
67016CC	8/5/2008	Hays	29.95556	-97.90279	1.00	638.82	637.82	573.66	Artesian
67017BB	7/29/2008	Hays	29.90860	-97.97154	0.77	768.60	767.83	580.56	Recharge
6701813A	7/30/2008	Hays	29.89113	-97.92938	3.10	584.22	581.12	574.59	Saline
6701813B	7/30/2008	Hays	29.89113	-97.92938	3.08	584.20	581.12	575.85	Saline
67018BB	7/31/2008	Hays	29.89444	-97.92945	1.25	586.28	585.03	574.35	Recharge
67018CC	7/31/2008	Hays	29.89361	-97.93205	2.12	634.82	632.70	574.53	Artesian
67018DD	7/31/2008	Hays	29.88718	-97.94963	1.00	751.96	750.96	574.6	Artesian
67018EE	7/29/2008	Hays	29.90817	-97.91931	2.05	611.97	609.92	574.58	Artesian
67018FF	7/29/2008	Hays	29.90269	-97.92173	2.45	591.82	589.37	574.84	Recharge
67091AA	7/29/2008	Hays	29.85881	-97.99281	0.41	748.82	748.41	577.55	Recharge

Appendix A (cont.)

Table A-9. Water levels collected during the July 28 through August 7, 2008, SWLP event.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone
68076AA*	8/1/2008	Hays	29.93194	-98.12972	1.60	1151.60	1150.00	1102.24	Recharge
68089SMBA	7/31/2008	Hays	29.89294	-98.00134	0.40	760.41	760.01	576.67	Recharge
68163AA	8/1/2008	Hays	29.84821	-98.02325	1.05	901.10	900.05	579.24	Artesian
68163DD	8/1/2008	Hays	29.86920	-98.03422	1.05	830.94	829.89	585.27	Recharge
7038902*	7/30/2008	Kinney	29.41360	-100.26122	2.10	1381.04	1378.94	1193	Recharge
6825711	8/1/2008	Medina	29.50712	-98.98151	2.05	1176.35	1174.30	914	Recharge
6832802	8/1/2008	Medina	29.51001	-99.07712	1.85	1127.21	1125.36	928	Recharge
6833102	7/28/2008	Medina	29.47229	-98.96302	1.00	969.23	968.23	852	Recharge
6833213	8/1/2008	Medina	29.49146	-98.93827	2.24	1015.66	1013.42	882	Recharge
6834506	7/28/2008	Medina	29.43132	-98.81296	0.85	1044.31	1043.46	699	Artesian
6841301	7/29/2008	Medina	29.35504	-98.88010	1.64	761.40	759.76	702	Artesian
6842112	7/29/2008	Medina	29.34577	-98.84908	2.90	765.50	762.60	705	Artesian
6842502	7/28/2008	Medina	29.31056	-98.82272	1.25	730.10	728.85	695	Artesian
6842504	7/28/2008	Medina	29.30962	-98.81524	0.35	724.68	724.33	696	Artesian
6849813	7/28/2008	Medina	29.16578	-98.93941	2.50	665.70	663.20	697	Artesian
6931406	8/1/2008	Medina	29.55485	-99.23474	1.90	1168.23	1166.33	1046	Recharge
6931708	8/1/2008	Medina	29.52363	-99.23251	1.70	1142.62	1140.92	942	Recharge
6932703	8/1/2008	Medina	29.53416	-99.10993	1.20	1234.20	1233.00	1056	Recharge
6938601	7/29/2008	Medina	29.43854	-99.28346	1.34	1009.16	1007.82	915	Recharge
6938906	7/29/2008	Medina	29.38866	-99.26452	1.47	951.88	950.41	787	Artesian
6939504	7/30/2008	Medina	29.45099	-99.19489	1.65	1022.79	1021.14	904	Artesian
6939801	7/29/2008	Medina	29.38856	-99.18614	0.70	956.46	955.76	769	Artesian
6939901	7/29/2008	Medina	29.38452	-99.15391	1.13	933.61	932.48	760	Artesian
6940101	7/28/2008	Medina	29.49326	-99.12483	0.61	1023.83	1023.22	911	Artesian
6940102	7/28/2008	Medina	29.46115	-99.11712	2.50	969.10	966.60	873	Recharge
6940209	8/1/2008	Medina	29.47879	-99.06727	1.75	1037.91	1036.16	877	Recharge
6940404	7/28/2008	Medina	29.43394	-99.12176	1.15	936.33	935.18	813	Artesian
6940510	8/1/2008	Medina	29.42658	-99.06945	2.62	918.02	915.40	765	Artesian
6940901	7/29/2008	Medina	29.40943	-99.00077	0.71	878.94	878.23	727	Artesian
6946601	7/29/2008	Medina	29.33225	-99.27894	0.89	885.29	884.40	769	Artesian
6946602	7/30/2008	Medina	29.31683	-99.26061	0.50	908.82	908.32	767	Artesian
6947306	7/28/2008	Medina	29.34632	-99.13894	0.80	887.48	886.68	723	Artesian
6947503	7/28/2008	Medina	29.32537	-99.20767	0.86	885.64	884.78	734	Artesian
6947602	7/31/2008	Medina	29.32167	-99.15513	1.15	863.39	862.24	728	Artesian
6947603	7/31/2008	Medina	29.30746	-99.14958	1.50	845.51	844.01	728	Artesian
6948102	7/31/2008	Medina	29.35114	-99.08672	0.65	867.68	867.03	721	Artesian
6948402*	7/28/2008	Medina	29.32488	-99.10738	0.70	853.63	852.93	636	Artesian
6956501	7/31/2008	Medina	29.17418	-99.05100	2.13	716.83	714.70	728	Artesian
6956507	7/31/2008	Medina	29.17176	-99.05494	1.30	714.07	712.77	733	Artesian
6956508	7/31/2008	Medina	29.17289	-99.05739	1.75	701.67	699.92	727	Artesian
6963103	7/31/2008	Medina	29.11109	-99.22003	4.83	666.01	661.18	744	Artesian
68422AA	7/29/2008	Medina	29.37035	-98.81167	0.80	778.33	777.53	690	Artesian
69396AA	7/29/2008	Medina	29.43503	-99.14966	1.00	1000.31	999.31	843	Artesian
6946702-B	7/30/2008	Medina	29.26292	-99.35631	2.00	951.73	949.73	770	Artesian
69472AA	7/30/2008	Medina	29.34813	-99.19962	2.63	911.90	909.27	736	Artesian
6935401	7/28/2008	Uvalde	29.44185	-99.74915	1.00	1290.97	1289.97	1187	Recharge
6935602	7/28/2008	Uvalde	29.44589	-99.66531	0.50	1150.22	1149.72	1112	Recharge
6936402	7/28/2008	Uvalde	29.41893	-99.60954	2.60	1098.94	1096.34	804	Artesian
6936601	7/28/2008	Uvalde	29.42564	-99.51626	0.20	1072.56	1072.36	815	Artesian
6937402	7/28/2008	Uvalde	29.45330	-99.47319	2.00	1155.22	1153.22	830	Artesian
6942709	7/30/2008	Uvalde	29.27362	-99.86285	1.80	1007.43	1005.63	898	Artesian
6943409	7/28/2008	Uvalde	29.32391	-99.71381	1.70	1058.16	1056.46	877	Artesian
6943607	7/28/2008	Uvalde	29.32651	-99.63863	2.00	1011.65	1009.65	798	Artesian
6943903	7/29/2008	Uvalde	29.26646	-99.64909	1.25	956.08	954.83	798	Artesian
6944301	7/29/2008	Uvalde	29.35294	-99.51335	1.15	1003.08	1001.93	781	Artesian
6944402	7/29/2008	Uvalde	29.33012	-99.59355	1.00	998.37	997.37	794	Artesian
6944703	7/29/2008	Uvalde	29.25742	-99.58624	1.10	935.51	934.41	779	Artesian
6944804	7/29/2008	Uvalde	29.29064	-99.57277	1.50	954.17	952.67	790	Artesian
6944902	7/28/2008	Uvalde	29.26979	-99.50527	1.97	901.88	899.91	778	Artesian
6950302	7/28/2008	Uvalde	29.20874	-99.78437	2.40	907.30	904.90	874	Artesian
6951401	7/28/2008	Uvalde	29.17440	-99.73427	0.70	892.00	891.30	846	Artesian
6951602	7/28/2008	Uvalde	29.17573	-99.66051	0.90	864.26	863.36	833	Saline
6951606	7/28/2008	Uvalde	29.19307	-99.63233	2.17	879.72	877.55	768	Saline
6952202	7/28/2008	Uvalde	29.24517	-99.54958	2.30	876.32	874.02	777	Saline
6952403	7/28/2008	Uvalde	29.19889	-99.61690	0.00	875.11	875.11	767	Saline
6952404	7/28/2008	Uvalde	29.19250	-99.61045	2.52	869.54	867.02	771	Saline
7040901*	7/30/2008	Uvalde	29.39456	-100.00232	0.84	1125.11	1124.27	1081	Recharge
69369AA	7/30/2008	Uvalde	29.38037	-99.49433	0.82	1029.41	1028.59	805	Artesian
69438AA	7/30/2008	Uvalde	29.28805	-99.69953	0.91	977.49	976.58	866	Artesian
69443AA	7/30/2008	Uvalde	29.34002	-99.51963	1.42	989.86	988.44	784	Artesian
69493AA	7/29/2008	Uvalde	29.24416	-99.87655	0.30	968.46	968.16	895	Artesian
69501AA	7/29/2008	Uvalde	29.23925	-99.83805	0.67	950.46	949.79	886	Artesian
69502AA	7/29/2008	Uvalde	29.21054	-99.81871	0.83	913.91	913.08	877	Artesian
69502BB	7/30/2008	Uvalde	29.24166	-99.81707	0.39	932.02	931.63	882	Artesian
69502DD	7/29/2008	Uvalde	29.23691	-99.82745	0.00	941.30	941.30	881	Artesian
69503AA	7/29/2008	Uvalde	29.24579	-99.79076	0.55	957.34	956.79	878	Artesian
69503BB	7/30/2008	Uvalde	29.24693	-99.75681	0.70	964.86	964.16	869	Artesian
69503CC	7/29/2008	Uvalde	29.21670	-99.75534	0.80	931.15	930.35	870	Artesian
69505AA	7/29/2008	Uvalde	29.19097	-99.83198	2.17	914.97	912.80	870	Artesian
69505BB	7/29/2008	Uvalde	29.19384	-99.79326	1.00	902.20	901.20	872	Artesian
69511AA	7/30/2008	Uvalde	29.24161	-99.74245	1.00	966.57	965.57	871	Artesian

* Well visited and water level measured, but not used in potentiometric map.

Appendix A (cont.)

Table A-10. Water levels collected during the October 20 through November 3, 2008, SWLP event.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone
6830211	10/20/2008	Bexar	29.60496	-98.32818	0.15	776.65	776.50	660	Artesian
6815809	10/30/2008	Comal	29.77095	-98.17648	0.35	908.74	908.39	659	Recharge
6815912	10/23/2008	Comal	29.75451	-98.14100	1.53	695.32	693.79	632	Recharge
6816701	10/21/2008	Comal	29.75728	-98.10479	2.00	713.57	711.57	615	Artesian
6816703	10/22/2008	Comal	29.75366	-98.09312	0.70	701.24	700.54	612	Artesian
6816801	10/20/2008	Comal	29.78677	-98.05287	0.50	753.33	752.83	607	Artesian
6816803	10/22/2008	Comal	29.76992	-98.07410	1.50	726.89	725.39	609	Artesian
6822601	10/21/2008	Comal	29.67736	-98.28615	0.32	908.16	907.84	671	Recharge
6822603	10/21/2008	Comal	29.70225	-98.25158	1.28	946.94	945.66	676	Recharge
6822807	10/21/2008	Comal	29.65550	-98.30505	1.85	897.34	895.49	675	Artesian
6822808	10/20/2008	Comal	29.64256	-98.30737	1.67	967.35	965.68	665	Artesian
6822810	10/21/2008	Comal	29.66027	-98.30709	1.30	890.73	889.43	673	Recharge
6822902	10/24/2008	Comal	29.62940	-98.28032	2.35	790.99	788.64	656	Recharge
6822910	10/24/2008	Comal	29.62928	-98.28055	2.70	786.50	783.80	656	Recharge
6822912	10/20/2008	Comal	29.63038	-98.27526	2.11	791.57	789.46	656	Recharge
6823209	10/30/2008	Comal	29.72079	-98.17900	1.75	863.78	862.03	638	Recharge
6823210	10/21/2008	Comal	29.71452	-98.20805	0.32	920.55	920.23	653	Recharge
6823302	10/23/2008	Comal	29.71357	-98.13835	1.00	643.59	642.59	626	Recharge
6823304	10/22/2008	Comal	29.71111	-98.13833	0.36	626.53	626.17	636	Artesian
6823306	10/30/2008	Comal	29.74621	-98.15395	1.40	809.07	807.67	632	Recharge
6823309	10/21/2008	Comal	29.71867	-98.13524	0.55	736.76	736.21	624	Recharge
6823316	10/20/2008	Comal	29.72137	-98.14791	1.06	807.58	806.52	628	Recharge
6823319	10/21/2008	Comal	29.72101	-98.12768	1.50	629.13	627.63	623	Recharge
6823504	10/22/2008	Comal	29.67135	-98.19642	3.40	709.58	706.18	643	Recharge
6823602	10/21/2008	Comal	29.70188	-98.15112	1.35	704.36	703.01	633	Recharge
6823617	10/24/2008	Comal	29.70559	-98.13506	4.46	637.68	633.22	637	Saline
6823621	10/20/2008	Comal	29.69445	-98.15917	0.87	671.68	670.81	638	Artesian
6823701	10/20/2008	Comal	29.64889	-98.21644	0.72	685.45	684.73	648	Artesian
6823709	10/20/2008	Comal	29.64043	-98.23312	1.10	706.61	705.51	659	Artesian
6823710	10/20/2008	Comal	29.66343	-98.23604	0.85	816.52	815.67	647	Recharge
6823807	10/20/2008	Comal	29.66636	-98.17132	1.70	657.58	655.88	641	Artesian
6824104	11/3/2008	Comal	29.74783	-98.11657	1.60	685.35	683.75	615	Recharge
6830208	10/20/2008	Comal	29.61022	-98.31958	2.50	800.59	798.09	659	Artesian
6830226	10/20/2008	Comal	29.61514	-98.31715	1.58	828.89	827.31	658	Artesian
6830312	10/20/2008	Comal	29.61281	-98.28392	1.56	774.74	773.18	656	Artesian
68162AA	10/21/2008	Comal	29.84075	-98.07987	1.88	953.40	951.52	667	Recharge
68167ML	10/22/2008	Comal	29.78377	-98.08716	1.75	786.98	785.23	608	Recharge
68168NB	11/3/2008	Comal	29.78310	-98.06609	2.25	765.07	762.82	603	Artesian
68169FW	10/22/2008	Comal	29.79083	-98.03000	0.72	620.72	620.00	597	Saline
68226BF	10/20/2008	Comal	29.67551	-98.27226	1.24	839.62	838.38	661	Recharge
68226BH	10/24/2008	Comal	29.67406	-98.27697	0.50	855.68	855.18	658	Recharge
68228AA	10/22/2008	Comal	29.65218	-98.30108	1.40	887.75	886.35	678	Artesian
68228BB	10/22/2008	Comal	29.65992	-98.32097	1.00	1003.70	1002.70	683	Artesian
68233DW	11/3/2008	Comal	29.72716	-98.12531	0.95	645.95	645.00	623	Recharge
6823616A	10/23/2008	Comal	29.70434	-98.13308	4.91	640.33	635.42	639	Saline
6823619B	10/23/2008	Comal	29.70739	-98.13625	5.20	639.61	634.41	637	Saline
68241JF	10/23/2008	Comal	29.74782	-98.10386	1.00	705.90	704.90	616	Recharge
68302AA	10/20/2008	Comal	29.61835	-98.32658	1.25	806.04	804.79	663	Artesian
68302BB	10/22/2008	Comal	29.61497	-98.31909	1.41	804.55	803.14	660	Artesian
68302LH	10/20/2008	Comal	29.61119	-98.32087	0.82	801.00	800.18	659	Artesian
5857319	10/20/2008	Hays	30.08889	-97.91528	0.00	805.00	805.00	659	Recharge
5857502	10/20/2008	Hays	30.06635	-97.94447	0.00	890.00	890.00	681	Recharge
5857902	10/20/2008	Hays	30.00890	-97.89527	1.00	821.56	820.56	580	Artesian
5857903	10/20/2008	Hays	30.03850	-97.88617	0.62	826.92	826.30	580	Artesian
5857908	10/20/2008	Hays	30.00944	-97.89667	1.80	831.80	830.00	580	Artesian
5858101	10/21/2008	Hays	30.08358	-97.84264	2.97	709.91	706.94	550	Artesian
5858123	11/3/2008	Hays	30.10943	-97.84173	0.00	700.89	700.89	536	Artesian
5858406	10/21/2008	Hays	30.06204	-97.85602	0.27	748.61	748.34	567	Artesian
5858417	10/23/2008	Hays	30.04723	-97.86748	2.02	764.81	762.79	574	Artesian
5858427	10/21/2008	Hays	30.07717	-97.86132	1.80	710.83	709.03	592	Artesian
5858511	10/23/2008	Hays	30.07193	-97.82836	3.75	736.99	733.24	546	Artesian
5858705	10/23/2008	Hays	30.02295	-97.83861	0.25	724.56	724.31	563	Saline
5858711	10/20/2008	Hays	30.01672	-97.85933	2.10	702.10	700.00	564	Artesian
5858801	10/23/2008	Hays	30.03364	-97.83316	1.48	717.65	716.17	561	Saline
6701203	10/21/2008	Hays	29.96218	-97.92077	0.75	692.79	692.04	577	Recharge
6701303	10/20/2008	Hays	29.98976	-97.87548	1.10	720.34	719.24	537	Artesian
6701304	10/20/2008	Hays	29.98451	-97.87630	0.25	717.80	717.55	552	Artesian
6701311	10/21/2008	Hays	29.98143	-97.89140	2.48	773.00	770.52	557	Artesian
6701809	10/20/2008	Hays	29.91192	-97.92877	1.20	602.47	601.27	574	Recharge
6701812	10/22/2008	Hays	29.89048	-97.92837	2.89	583.78	580.89	575	Saline
6702104*	10/21/2008	Hays	29.98279	-97.87153	2.61	676.93	674.32	558	Saline
6702105*	10/21/2008	Hays	29.95830	-97.84212	2.19	648.89	646.70	572	Saline
6702106*	10/21/2008	Hays	29.97474	-97.85711	2.17	680.45	678.28	565	Saline
6709101	10/21/2008	Hays	29.85557	-97.98177	1.50	688.52	687.02	585	Artesian
6709105	10/22/2008	Hays	29.84479	-97.98418	2.50	694.73	692.23	577	Artesian
6709106	10/22/2008	Hays	29.85243	-97.98716	1.32	700.98	699.66	577	Artesian
6709110	10/20/2008	Hays	29.84358	-97.98225	1.17	688.56	687.39	577	Artesian
6709113	10/21/2008	Hays	29.83874	-97.99074	1.69	706.42	704.73	578	Artesian
6709401*	10/21/2008	Hays	29.82925	-97.96236	2.37	644.88	642.51	590	Saline
6808902	10/21/2008	Hays	29.89647	-98.00289	2.83	786.60	783.77	578	Recharge
6816601	10/20/2008	Hays	29.82981	-98.00163	1.65	761.09	759.44	580	Artesian

Appendix A (cont.)

Table A-10. Water levels collected during the October 20 through November 3, 2008, SWLP event.

Well ID #	Date	County	dec. latitude	dec. longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone
6816603	10/23/2008	Hays	29.82923	-98.01621	2.76	739.67	736.91	579	Recharge
58499BQ	10/20/2008	Hays	30.12583	-97.90361	0.90	784.90	784.00	709	Recharge
58584CT	10/20/2008	Hays	30.06020	-97.86847	1.13	734.53	733.40	572	Recharge
58584NM	10/20/2008	Hays	30.04596	-97.85135	1.64	753.66	752.02	559	Artesian
67013BB	10/21/2008	Hays	29.96324	-97.89693	0.50	690.00	689.50	573	Artesian
67013CC	10/20/2008	Hays	29.96745	-97.87624	1.65	693.91	692.26	574	Saline
67013EE	10/20/2008	Hays	29.96261	-97.88140	1.07	708.13	707.06	574	Saline
67014AA	10/21/2008	Hays	29.92160	-97.96544	0.90	725.78	724.88	576	Recharge
67015DH	10/21/2008	Hays	29.95153	-97.93528	0.85	778.68	777.83	576	Recharge
67015PG	10/21/2008	Hays	29.94337	-97.93769	2.04	782.88	780.84	574	Artesian
67015RW	10/21/2008	Hays	29.93969	-97.93486	1.80	787.33	785.53	574	Artesian
67016CC	10/21/2008	Hays	29.95556	-97.90279	1.00	638.82	637.82	573	Artesian
67017BB	10/21/2008	Hays	29.90860	-97.97154	0.77	768.60	767.83	580	Recharge
6701813A	10/22/2008	Hays	29.89113	-97.92938	3.10	584.22	581.12	574	Saline
6701813B	10/22/2008	Hays	29.89113	-97.92938	3.08	584.20	581.12	575	Saline
67018BB	10/23/2008	Hays	29.89444	-97.92945	1.25	586.28	585.03	574	Recharge
67018CC	10/23/2008	Hays	29.89361	-97.93205	2.12	634.82	632.70	574	Artesian
67018DD	10/23/2008	Hays	29.88718	-97.94963	1.00	751.96	750.96	574	Artesian
67018EE	10/21/2008	Hays	29.90817	-97.91931	2.05	611.97	609.92	574	Artesian
67018FF	10/20/2008	Hays	29.90269	-97.92173	2.45	591.82	589.37	575	Recharge
67091AA	10/20/2008	Hays	29.85881	-97.99281	0.41	748.82	748.41	577	Recharge
67091CC	10/23/2008	Hays	29.83654	-97.99393	4.75	737.65	732.90	579	Artesian
68076AA*	10/23/2008	Hays	29.93194	-98.12972	1.60	1151.60	1150.00	1102	Recharge
68089SMB	10/21/2008	Hays	29.89294	-98.00134	0.40	760.41	760.01	579	Recharge
68163AA	10/20/2008	Hays	29.84821	-98.02325	1.05	901.10	900.05	582	Artesian
68163DD	10/20/2008	Hays	29.86920	-98.03422	1.05	830.94	829.89	585	Recharge
68163FF	10/20/2008	Hays	29.85778	-98.03692	0.00	929.87	929.87	585	Recharge

* Well visited and water level measured, but not used in potentiometric map.

Appendix A (cont.)

Table A-11. Water levels collected during the Febraury 16 through February 27, 2009, SWLP event.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone
6830211	2/17/2009	Bexar	29.60496	-98.32818	0.15	776.65	776.50	658	Artesian
6815809	2/17/2009	Comal	29.77095	-98.17648	0.35	908.74	908.39	658	Recharge
6815907	2/17/2009	Comal	29.75467	-98.13955	1.45	707.93	706.48	632	Recharge
6815912	2/17/2009	Comal	29.75451	-98.14100	1.53	695.32	693.79	629	Recharge
6816501	2/17/2009	Comal	29.80162	-98.05505	0.83	756.50	755.67	597	Artesian
6816502	2/17/2009	Comal	29.80812	-98.04752	1.95	759.61	757.66	594	Recharge
6816701	2/19/2009	Comal	29.75728	-98.10479	2.00	713.57	711.57	614	Artesian
6816703	2/17/2009	Comal	29.75366	-98.09312	0.70	701.24	700.54	611	Artesian
6816801	2/17/2009	Comal	29.78677	-98.05287	0.50	753.33	752.83	608	Artesian
6816803	2/17/2009	Comal	29.76992	-98.07410	1.50	726.89	725.39	608	Artesian
6822601	2/17/2009	Comal	29.67736	-98.28615	0.32	908.16	907.84	652	Recharge
6822603	2/17/2009	Comal	29.70225	-98.25158	1.28	946.94	945.66	662	Recharge
6822807	2/19/2009	Comal	29.65550	-98.30505	1.85	897.34	895.49	667	Artesian
6822808	2/24/2009	Comal	29.64256	-98.30737	1.67	967.35	965.68	661	Artesian
6822810	2/19/2009	Comal	29.66027	-98.30709	1.30	890.73	889.43	667	Recharge
6822902	2/20/2009	Comal	29.62940	-98.28032	2.35	790.99	788.64	654	Recharge
6822910	2/20/2009	Comal	29.62928	-98.28055	2.70	786.50	783.80	654	Recharge
6822912	2/18/2009	Comal	29.63038	-98.27526	2.11	791.57	789.46	654	Recharge
6823203	2/25/2009	Comal	29.71022	-98.19230	1.60	988.20	986.60	640	Recharge
6823208	2/18/2009	Comal	29.73490	-98.19445	0.25	887.88	887.63	643	Recharge
6823209	2/17/2009	Comal	29.72079	-98.17900	1.75	863.78	862.03	635	Recharge
6823210	2/19/2009	Comal	29.71452	-98.20805	0.32	920.55	920.23	643	Recharge
6823302	2/18/2009	Comal	29.71357	-98.13835	1.00	643.59	642.59	626	Recharge
6823304	2/24/2009	Comal	29.71111	-98.13833	0.36	626.53	626.17	635	Artesian
6823306	2/17/2009	Comal	29.74621	-98.15395	1.40	809.07	807.67	627	Recharge
6823309	2/19/2009	Comal	29.71867	-98.13524	0.55	736.76	736.21	624	Recharge
6823312	2/17/2009	Comal	29.73404	-98.12711	0.40	672.14	671.74	623	Recharge
6823316	2/18/2009	Comal	29.72137	-98.14791	1.06	807.58	806.52	627	Recharge
6823319	2/19/2009	Comal	29.72101	-98.12768	1.50	629.13	627.63	623	Recharge
6823504	2/20/2009	Comal	29.67135	-98.19642	3.40	709.58	706.18	642	Recharge
6823602	2/19/2009	Comal	29.70188	-98.15112	1.35	704.36	703.01	634	Recharge
6823617	2/25/2009	Comal	29.70559	-98.13506	4.46	637.68	633.22	636	Saline
6823621	2/18/2009	Comal	29.69445	-98.15917	0.87	671.68	670.81	637	Artesian
6823701	2/18/2009	Comal	29.64889	-98.21644	0.72	685.45	684.73	646	Artesian
6823709	2/18/2009	Comal	29.64043	-98.23312	1.10	706.61	705.51	648	Artesian
6823710	2/18/2009	Comal	29.66343	-98.23604	0.85	816.52	815.67	645	Recharge
6823807	2/18/2009	Comal	29.66636	-98.17132	1.70	657.58	655.88	640	Artesian
6824104	2/26/2009	Comal	29.74783	-98.11657	1.60	685.35	683.75	614	Recharge
6830208	2/17/2009	Comal	29.61022	-98.31958	2.50	800.59	798.09	657	Artesian
6830226	2/18/2009	Comal	29.61514	-98.31715	1.58	828.89	827.31	657	Artesian
6830312	2/17/2009	Comal	29.61281	-98.28392	1.56	774.74	773.18	654	Artesian
6830315	2/16/2009	Comal	29.60900	-98.28993	2.35	784.57	782.22	654	Artesian
68159RP	2/17/2009	Comal	29.76397	-98.14248	1.30	699.60	698.30	629	Recharge
68162AA	2/19/2009	Comal	29.84075	-98.07987	1.88	953.40	951.52	663	Recharge
68167ML	2/17/2009	Comal	29.78377	-98.08716	1.75	786.98	785.23	609	Recharge
68168NB	2/19/2009	Comal	29.78310	-98.06609	2.25	765.07	762.82	607	Artesian
68226BF	2/17/2009	Comal	29.67551	-98.27226	1.24	839.62	838.38	658	Recharge
68226BH	2/17/2009	Comal	29.67406	-98.27697	0.50	855.68	855.18	658	Recharge
68228AA	2/24/2009	Comal	29.65218	-98.30108	1.40	887.75	886.35	669	Artesian
68228BB	2/24/2009	Comal	29.65992	-98.32097	1.00	1003.70	1002.70	672	Artesian
68233DW	2/17/2009	Comal	29.72716	-98.12531	0.95	645.95	645.00	623	Recharge
6823616A	2/25/2009	Comal	29.70434	-98.13308	4.91	640.33	635.42	634	Saline
6823619B	2/24/2009	Comal	29.70739	-98.13625	5.20	639.61	634.41	635	Saline
68241JF	2/19/2009	Comal	29.74782	-98.10386	1.00	705.90	704.90	615	Recharge
68302BB	2/24/2009	Comal	29.61497	-98.31909	1.41	804.55	803.14	657	Artesian
68302LH	2/18/2009	Comal	29.61119	-98.32087	0.82	801.00	800.18	656	Artesian
5849916	2/24/2009	Hays	30.13861	-97.88472	2.00	768.00	766.00	597	Recharge
5849921	2/24/2009	Hays	30.14167	-97.87917	1.50	756.50	755.00	532	Recharge
5849922	2/24/2009	Hays	30.14167	-97.87917	1.25	756.25	755.00	536	Recharge
5849926	2/23/2009	Hays	30.12513	-97.90517	0.22	794.46	794.24	673	Recharge
5849927	2/24/2009	Hays	30.14528	-97.87971	1.65	746.65	745.00	551	Recharge
5849929	2/24/2009	Hays	30.14536	-97.87968	1.75	746.75	745.00	555	Recharge
5849938	2/24/2009	Hays	30.12583	-97.90361	0.90	788.28	787.38	718	Recharge
5857315	2/18/2009	Hays	30.09667	-97.88361	0.00	800.00	800.00	566	Recharge
5857317	2/23/2009	Hays	30.11772	-97.90820	0.50	802.50	802.00	700	Recharge
5857319	2/25/2009	Hays	30.08889	-97.91528	0.00	805.00	805.00	656	Recharge
5857502	2/20/2009	Hays	30.06635	-97.94447	0.00	890.00	890.00	681	Recharge
5857502	2/23/2009	Hays	30.06635	-97.94447	0.00	895.00	895.00	686	Recharge
5857503	2/26/2009	Hays	30.06447	-97.92834	0.50	810.50	810.00	674	Recharge
5857510	2/23/2009	Hays	30.06346	-97.94162	3.02	868.02	865.00	681	Recharge
5857511	2/17/2009	Hays	30.04950	-97.93567	1.49	914.97	913.48	701	Recharge
5857606	2/17/2009	Hays	30.04773	-97.88367	0.70	821.08	820.38	580	Recharge
5857701	2/17/2009	Hays	30.04045	-97.96059	0.20	948.19	947.99	732	Recharge
5857702	2/20/2009	Hays	30.03865	-97.97967	0.25	949.42	949.17	752	Recharge
5857802	2/20/2009	Hays	30.02686	-97.92847	0.00	838.00	838.00	646	Recharge
5857807	2/20/2009	Hays	30.01975	-97.95200	0.00	887.00	887.00	672	Recharge
5857809	2/20/2009	Hays	30.01032	-97.94487	0.45	738.45	738.00	653	Recharge
5857901	2/23/2009	Hays	30.03275	-97.89030	1.60	838.51	838.91	577	Artesian
5857902	2/17/2009	Hays	30.00890	-97.89527	1.00	821.56	820.56	580	Artesian
5857903	2/17/2009	Hays	30.03850	-97.88617	0.62	826.92	826.30	578	Artesian
5857913	2/26/2009	Hays	30.03389	-97.89111	1.10	850.10	849.00	574	Artesian

Appendix A (cont.)

Table A-11. Water levels collected during the Febraury 16 through February 27, 2009, SWLP event.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone
5858101	2/20/2009	Hays	30.08358	-97.84264	2.97	709.91	706.94	560	Artesian
5858118	2/24/2009	Hays	30.11386	-97.86561	1.50	815.00	813.50	517	Artesian
5858119	2/24/2009	Hays	30.11065	-97.86930	1.60	811.60	810.00	553	Artesian
5858120	2/24/2009	Hays	30.11127	-97.86252	2.10	785.80	783.70	515	Artesian
5858121	2/24/2009	Hays	30.10503	-97.86236	1.47	761.54	760.07	531	Artesian
5858122	2/25/2009	Hays	30.09472	-97.84361	1.00	715.00	714.00	548	Artesian
5858123	2/20/2009	Hays	30.10943	-97.84173	0.00	700.89	700.89	538	Artesian
5858124	2/18/2009	Hays	30.11908	-97.84083	1.95	716.92	714.97	520	Artesian
5858406	2/20/2009	Hays	30.06204	-97.85602	0.27	748.61	748.34	570	Artesian
5858407	2/20/2009	Hays	30.05345	-97.85553	1.54	760.37	758.83	570	Artesian
5858417	2/20/2009	Hays	30.04723	-97.86748	2.02	764.81	762.79	570	Artesian
5858418	2/23/2009	Hays	30.07129	-97.85825	0.40	731.45	731.05	574	Recharge
5858423	2/26/2009	Hays	30.06781	-97.85912	1.60	746.60	745.00	574	Recharge
5858424	2/25/2009	Hays	30.07856	-97.87157	2.00	746.00	744.00	584	Recharge
5858426	2/18/2009	Hays	30.08000	-97.86987	2.00	736.51	734.51	588	Recharge
5858427	2/20/2009	Hays	30.07717	-97.86132	1.80	710.83	709.03	590	Artesian
5858428	2/27/2009	Hays	30.05208	-97.83340	0.70	684.00	683.30	571	Saline
5858510	2/26/2009	Hays	30.07938	-97.82758	1.00	753.00	752.00	547	Artesian
5858511	2/20/2009	Hays	30.07193	-97.82836	3.75	736.99	733.24	557	Artesian
5858701	2/20/2009	Hays	30.03548	-97.84141	0.00	711.73	711.73	563	Artesian
5858704	2/17/2009	Hays	30.02769	-97.85392	0.90	746.90	746.00	564	Artesian
5858705	2/20/2009	Hays	30.02295	-97.83861	0.25	724.56	724.31	565	Saline
5858709	2/25/2009	Hays	30.03860	-97.85139	0.42	765.42	765.00	561	Artesian
5858711	2/17/2009	Hays	30.01672	-97.85933	2.10	702.10	700.00	568	Artesian
5858801	2/20/2009	Hays	30.03364	-97.83316	1.75	717.92	716.17	565	Saline
6701203	2/19/2009	Hays	29.96218	-97.92077	0.75	692.79	692.04	579	Recharge
6701303	2/17/2009	Hays	29.98976	-97.87548	1.10	720.34	719.24	557	Artesian
6701311	2/16/2009	Hays	29.98143	-97.89140	2.48	773.00	770.52	567	Artesian
6701809	2/17/2009	Hays	29.91192	-97.92877	1.20	602.47	601.27	577	Recharge
6701812	2/18/2009	Hays	29.89048	-97.92837	2.89	583.78	580.89	575	Saline
6702104*	2/16/2009	Hays	29.98279	-97.87153	2.61	676.93	674.32	560	Saline
6702105*	2/16/2009	Hays	29.95830	-97.84212	2.19	648.89	646.70	570	Saline
6702106*	2/16/2009	Hays	29.97474	-97.85711	2.17	680.45	678.28	563	Saline
6709101	2/18/2009	Hays	29.85557	-97.98177	1.50	688.52	687.02	576	Artesian
6709105	2/18/2009	Hays	29.84479	-97.98418	2.50	694.73	692.23	577	Artesian
6709106	2/18/2009	Hays	29.85243	-97.98716	1.32	700.98	699.66	577	Artesian
6709110	2/17/2009	Hays	29.84358	-97.98225	1.17	688.56	687.39	577	Artesian
6709113	2/16/2009	Hays	29.83874	-97.99074	1.69	706.42	704.73	577	Artesian
6709401*	2/16/2009	Hays	29.82925	-97.96236	2.37	644.88	642.51	589	Saline
6808902	2/18/2009	Hays	29.89647	-98.00289	2.83	786.60	783.77	573	Recharge
6816601	2/18/2009	Hays	29.82981	-98.00163	1.65	761.09	759.44	580	Artesian
6816603	2/19/2009	Hays	29.82923	-98.01621	2.76	739.67	736.91	578	Recharge
58499BQ	2/20/2009	Hays	30.12583	-97.90361	0.90	784.90	784.00	715	Recharge
58499QL	2/23/2009	Hays	30.12697	-97.90739	0.00	754.57	754.57	741	Recharge
58572HO	2/18/2009	Hays	30.09417	-97.91889	1.25	881.25	880.00	686	Recharge
58574R2	2/23/2009	Hays	30.04797	-97.96564	0.40	909.40	909.00	725	Recharge
58575JO	2/25/2009	Hays	30.04741	-97.93828	1.65	926.65	925.00	685	Recharge
58575R3	2/23/2009	Hays	30.07041	-97.94576	0.75	919.68	918.93	690	Recharge
58575R5	2/23/2009	Hays	30.07601	-97.95407	0.85	878.69	877.84	680	Recharge
58575R7	2/23/2009	Hays	30.07612	-97.95426	0.40	877.52	877.12	678	Recharge
58575RR	2/20/2009	Hays	30.04613	-97.95755	2.05	902.05	900.00	717	Recharge
585776G	2/20/2009	Hays	30.04050	-97.96049	0.20	940.20	940.00	697	Recharge
58578HR	2/20/2009	Hays	30.02378	-97.92594	1.30	826.30	825.00	644	Recharge
58578JG	2/20/2009	Hays	30.03494	-97.95198	0.50	856.50	856.00	688	Artesian
58578LB2	2/20/2009	Hays	30.03032	-97.93428	2.20	853.20	851.00	675	Recharge
58578WM	2/20/2009	Hays	30.01100	-97.92594	0.35	750.35	750.00	660	Recharge
58579MW	2/25/2009	Hays	30.02038	-97.98987	2.12	842.12	840.00	579	Artesian
58579OL	2/25/2009	Hays	30.02155	-97.90550	0.35	865.35	865.00	581	Artesian
58579PC	2/25/2009	Hays	30.02636	-97.87908	1.34	801.70	800.36	568	Artesian
58579TS	2/26/2009	Hays	30.02691	-97.91963	2.00	857.00	855.00	629	Recharge
58581C1	2/23/2009	Hays	30.10156	-97.85811	1.00	748.00	747.00	543	Artesian
58584CT	2/20/2009	Hays	30.06020	-97.86847	1.13	734.53	733.40	572	Recharge
58584NM	2/17/2009	Hays	30.04596	-97.85135	1.64	753.66	752.02	565	Artesian
58584SG	2/18/2009	Hays	30.08111	-97.84361	0.00	710.00	710.00	560	Recharge
67013BB	2/19/2009	Hays	29.96324	-97.89693	0.50	690.00	689.50	571	Artesian
67013CC	2/17/2009	Hays	29.96745	-97.87624	1.65	693.91	692.26	573	Saline
67013EE	2/17/2009	Hays	29.96261	-97.88140	1.07	708.13	707.06	574	Saline
67014AA	2/18/2009	Hays	29.92160	-97.96544	0.90	725.78	724.88	576	Recharge
67014FR#2	2/18/2009	Hays	29.92087	-97.97164	0.85	689.28	688.43	582	Recharge
67014XX	2/20/2009	Hays	29.91803	-97.96983	0.54	765.54	765.00	576	Recharge
67015DH	2/19/2009	Hays	29.95153	-97.93528	0.85	778.68	777.83	575	Recharge
67015PG	2/19/2009	Hays	29.94337	-97.93769	2.04	782.88	780.84	574	Artesian
67015RD	2/19/2009	Hays	29.94617	-97.93569	1.31	762.61	761.30	572	Artesian
67015RW	2/19/2009	Hays	29.93969	-97.93486	1.80	787.33	785.53	574	Artesian
67016AW	2/26/2009	Hays	29.93658	-97.91137	0.95	770.95	770.00	572	Artesian
67016AW2	2/26/2009	Hays	29.93740	-97.91480	0.80	790.80	790.00	570	Artesian
67016CC	2/19/2009	Hays	29.95556	-97.90279	1.00	638.82	637.82	579	Artesian
67016EN	2/26/2009	Hays	29.93216	-97.90456	0.00	670.00	670.00	573	Artesian
67017BB	2/18/2009	Hays	29.90860	-97.97154	0.77	768.60	767.83	579	Recharge
6701813A	2/18/2009	Hays	29.89113	-97.92938	3.10	584.22	581.12	574	Saline
6701813B	2/18/2009	Hays	29.89113	-97.92938	3.08	584.20	581.12	575	Saline

Appendix A (cont.)

Table A-11. Water levels collected during the February 16 through February 27, 2009, SWLP event.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone
67018BB	2/19/2009	Hays	29.89444	-97.92945	1.25	586.28	585.03	574	Recharge
67018CC	2/19/2009	Hays	29.89361	-97.93205	2.12	634.82	632.70	574	Artesian
67018DD	2/19/2009	Hays	29.88718	-97.94963	1.00	751.96	750.96	574	Artesian
67018EE	2/17/2009	Hays	29.90817	-97.91931	2.05	611.97	609.92	574	Artesian
67018FF	2/17/2009	Hays	29.90269	-97.92173	2.45	591.82	589.37	575	Recharge
67091AA	2/18/2009	Hays	29.85881	-97.99281	0.41	748.82	748.41	577	Recharge
67091CC	2/19/2009	Hays	29.83654	-97.99393	4.75	737.65	732.90	579	Artesian
68076AA*	2/17/2009	Hays	29.93194	-98.12972	1.60	1151.60	1150.00	1101	Recharge
68086FR#1	2/18/2009	Hays	29.95234	-98.00083	0.5	910.68	910.18	645	Recharge
68089SMBA	2/18/2009	Hays	29.89294	-98.00134	0.40	760.41	760.01	578	Recharge
68163AA	2/18/2009	Hays	29.84821	-98.02325	1.05	901.10	900.05	578	Artesian
68163DD	2/18/2009	Hays	29.86920	-98.03422	1.05	830.94	829.89	584	Recharge
68163FF	2/18/2009	Hays	29.85778	-98.03692	0.00	929.87	929.87	579	Recharge
68166HC	2/25/2009	Hays	29.81891	-98.01745	1.44	705.95	704.51	586	Artesian
68166HC#2	2/25/2009	Hays	29.81857	-98.01703	0.74	713.18	712.44	588	Artesian

* Well visited and water level measured, but not used in potentiometric map.

Appendix A (cont.)

Table A-12. Water levels collected during the July 20 through August 5, 2009, SWLP event.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone
6850201	7/24/2009	Atascosa	29.23026	-98.79888	1.00	712.86	711.86	643	Artesian
6821806	7/22/2009	Bexar	29.62937	-98.44849	2.38	953.04	950.66	718	Recharge
6826814	7/22/2009	Bexar	29.51667	-98.78333	2.55	1042.55	1040.00	722	Artesian
6827307	8/5/2009	Bexar	29.58549	-98.63081	1.10	991.84	990.74	770	Recharge
6827609	8/5/2009	Bexar	29.56793	-98.66162	-0.33	960.21	960.54	723	Recharge
6827610	8/5/2009	Bexar	29.54772	-98.63564	2.11	904.16	902.05	701	Artesian
6827611	8/5/2009	Bexar	29.57476	-98.62737	-0.23	963.93	964.16	731	Recharge
6827612	8/5/2009	Bexar	29.56761	-98.63895	2.83	960.67	957.84	722	Recharge
6828113	8/5/2009	Bexar	29.58791	-98.60765	-0.45	1021.88	1022.33	744	Transition
6828210	8/5/2009	Bexar	29.59178	-98.57610	-0.37	983.90	984.27	753	Recharge
6828211	8/5/2009	Bexar	29.58781	-98.54858	2.65	976.95	974.30	739	Recharge
6828313	8/5/2009	Bexar	29.60984	-98.50603	2.50	951.31	948.81	726	Recharge
6828314	8/3/2009	Bexar	29.59303	-98.51131	1.40	901.93	900.53	707	Recharge
6828315	7/31/2009	Bexar	29.60313	-98.52191	-0.17	946.58	946.75	719	Recharge
6828406	8/5/2009	Bexar	29.56376	-98.59950	0.80	979.52	978.72	709	Transition
6828407	8/5/2009	Bexar	29.57354	-98.58561	-0.22	999.81	1000.03	737	Recharge
6828515	7/31/2009	Bexar	29.56326	-98.56136	1.71	977.40	975.69	698	Recharge
6828516	8/5/2009	Bexar	29.56090	-98.57974	1.46	949.11	947.65	712	Recharge
6828517	8/5/2009	Bexar	29.57658	-98.57505	2.54	966.38	963.84	747	Recharge
6828518	8/5/2009	Bexar	29.57736	-98.54491	2.45	929.06	926.61	712	Recharge
6828519	7/31/2009	Bexar	29.56900	-98.55357	-0.30	926.54	926.84	695	Recharge
6828608	8/5/2009	Bexar	29.58246	-98.51359	1.90	859.98	858.08	687	Artesian
6828609	7/31/2009	Bexar	29.58296	-98.53712	-0.30	925.95	926.25	707	Recharge
6828921	7/22/2009	Bexar	29.50000	-98.53333	1.10	824.54	823.44	646	Artesian
6829103	8/5/2009	Bexar	29.58959	-98.48800	0.50	953.01	952.51	709	Recharge
6829112	7/31/2009	Bexar	29.59967	-98.48011	2.38	891.38	889.00	708	Recharge
6829113	8/5/2009	Bexar	29.59282	-98.47450	1.52	887.43	885.91	699	Transition
6829213	7/31/2009	Bexar	29.58457	-98.45244	1.30	853.16	851.86	671	Recharge
6829214	7/31/2009	Bexar	29.58878	-98.42807	-0.40	809.51	809.91	657	Recharge
6829215	8/3/2009	Bexar	29.59362	-98.43999	2.10	829.10	827.00	697	Recharge
6829216	7/30/2009	Bexar	29.61186	-98.44442	-0.40	923.30	923.70	700	Recharge
6829217	7/31/2009	Bexar	29.60413	-98.43983	-0.40	919.50	919.90	698	Recharge
6829506	7/31/2009	Bexar	29.57460	-98.43905	1.35	789.35	788.00	643	Artesian
6829611*	7/22/2009	Bexar	29.55000	-98.38333	2.80	832.60	829.80	615	Artesian
6829701	7/23/2009	Bexar	29.53732	-98.46398	2.52	780.38	777.86	642	Artesian
6829925	7/23/2009	Bexar	29.51624	-98.39737	2.10	755.10	753.00	642	Artesian
6830211	7/22/2009	Bexar	29.60496	-98.32818	0.15	776.65	776.50	640	Artesian
6830807	7/23/2009	Bexar	29.52487	-98.29610	1.10	754.00	752.90	642	Artesian
6835106	7/22/2009	Bexar	29.46667	-98.70000	5.00	964.51	959.51	650	Artesian
6836103*	7/22/2009	Bexar	29.48333	-98.60000	6.58	913.84	907.26	621	Artesian
6836206	7/22/2009	Bexar	29.46667	-98.53333	4.20	760.43	756.23	645	Artesian
6836512	7/22/2009	Bexar	29.43333	-98.55000	3.97	689.43	685.46	647	Artesian
6836901	7/20/2009	Bexar	29.40000	-98.50000	3.21	640.45	637.24	659	Artesian
6837103	7/22/2009	Bexar	29.48333	-98.48333	1.00	730.53	729.53	644	Artesian
6837203	7/23/2009	Bexar	29.47913	-98.43261	0.83	731.64	730.81	643	Artesian
6837304	7/21/2009	Bexar	29.46667	-98.38333	2.30	704.98	702.68	641	Artesian
6837521	7/21/2009	Bexar	29.41667	-98.41667	3.85	623.85	620.00	637	Saline
6837522	7/21/2009	Bexar	29.41667	-98.41667	3.97	623.97	620.00	637	Saline
6837523	7/21/2009	Bexar	29.41667	-98.41667	3.74	623.74	620.00	636	Saline
6837524	7/21/2009	Bexar	29.41667	-98.43333	4.24	630.24	626.00	638	Artesian
6837525	7/21/2009	Bexar	29.41667	-98.43333	5.32	629.32	624.00	636	Artesian
6837722	7/21/2009	Bexar	29.38333	-98.48333	3.00	605.71	602.71	641	Artesian
6837723	7/21/2009	Bexar	29.38333	-98.48333	2.60	595.48	592.88	641	Saline
6837724	7/21/2009	Bexar	29.36667	-98.48333	1.90	594.93	593.03	638	Saline
6843402	7/20/2009	Bexar	29.30000	-98.70000	1.42	699.86	698.44	651	Saline
6843606	7/20/2009	Bexar	29.31667	-98.65000	1.83	608.79	606.96	645	Artesian
6844505	7/20/2009	Bexar	29.30000	-98.55000	3.20	593.20	590.00	660	Saline
6844506*	7/20/2009	Bexar	29.31667	-98.55000	3.10	613.10	610.00	634	Saline
68293AA	7/21/2009	Bexar	29.60000	-98.38333	1.70	969.38	967.68	655	Artesian
68302AA	7/21/2009	Bexar	29.58333	-98.31667	1.09	781.83	780.74	638	Artesian
68302BB	7/21/2009	Bexar	29.58333	-98.31667	1.25	764.75	763.50	639	Artesian
68307AA	7/21/2009	Bexar	29.51667	-98.36667	1.05	820.15	819.10	636	Artesian
6815902	7/20/2009	Comal	29.75912	-98.14005	2.13	661.89	659.76	652	Recharge
6815907	7/20/2009	Comal	29.75467	-98.13955	1.45	707.93	706.48	627	Recharge
6815912	7/20/2009	Comal	29.75451	-98.14100	1.53	695.32	693.79	626	Recharge
6816501	7/23/2009	Comal	29.80162	-98.05505	0.83	756.50	755.67	596	Artesian
6816502	7/23/2009	Comal	29.80812	-98.04752	1.95	759.61	757.66	593	Recharge
6816701	7/20/2009	Comal	29.75728	-98.10479	2.00	713.57	711.57	613	Artesian
6816801	7/20/2009	Comal	29.78677	-98.05287	0.50	753.33	752.83	604	Artesian
6816803	7/20/2009	Comal	29.76992	-98.07410	1.50	726.89	725.39	606	Artesian
6822601	7/27/2009	Comal	29.67736	-98.28615	0.32	908.16	907.84	650	Recharge
6822603	7/21/2009	Comal	29.70225	-98.25158	1.28	946.94	945.66	655	Recharge
6822807	7/28/2009	Comal	29.65550	-98.30505	1.85	897.34	895.49	655	Artesian
6822808	7/23/2009	Comal	29.64256	-98.30737	1.67	967.35	965.68	647	Artesian
6822810	7/28/2009	Comal	29.66027	-98.30709	1.30	890.73	889.43	660	Recharge
6822902	7/30/2009	Comal	29.62940	-98.28032	2.35	790.99	788.64	636	Recharge
6822910	7/30/2009	Comal	29.62928	-98.28055	2.70	786.50	783.80	636	Recharge
6822912	7/21/2009	Comal	29.63038	-98.27526	2.11	791.57	789.46	638	Recharge
6823210	7/28/2009	Comal	29.71452	-98.20805	0.32	920.55	920.23	643	Recharge
6823302	7/20/2009	Comal	29.71357	-98.13835	1.00	643.59	642.59	623	Recharge
6823304	7/20/2009	Comal	29.71111	-98.13833	3.94	630.11	626.17	628	Artesian
6823306	7/31/2009	Comal	29.74621	-98.15395	1.40	809.07	807.67	626	Recharge
6823309	7/21/2009	Comal	29.71867	-98.13524	0.55	736.76	736.21	622	Recharge
6823312	7/20/2009	Comal	29.73404	-98.12711	0.40	672.14	671.74	620	Recharge
6823316	7/20/2009	Comal	29.72137	-98.14791	1.06	807.58	806.52	624	Recharge
6823319	7/30/2009	Comal	29.72101	-98.12768	1.50	629.13	627.63	621	Recharge
6823504	7/30/2009	Comal	29.67135	-98.19642	3.40	709.58	706.18	631	Recharge

Appendix A (cont.)

Table A-12. Water levels collected during the July 20 through August 5, 2009, SWLP event.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone
6823602	7/30/2009	Comal	29.70188	-98.15112	1.35	704.36	703.01	626	Recharge
6823617	7/30/2009	Comal	29.70559	-98.13506	4.46	637.68	633.22	627	Saline
6823621	7/21/2009	Comal	29.69445	-98.15917	0.87	671.68	670.81	629	Artesian
6823709	7/21/2009	Comal	29.64043	-98.23312	1.10	706.61	705.51	637	Artesian
6823710	7/21/2009	Comal	29.66343	-98.23604	0.85	816.52	815.67	634	Recharge
6823807	7/28/2009	Comal	29.66636	-98.17132	1.70	657.58	655.88	630	Artesian
6830208	7/22/2009	Comal	29.61022	-98.31958	2.50	800.59	798.09	639	Artesian
6830226	7/28/2009	Comal	29.61514	-98.31715	1.58	828.89	827.31	639	Artesian
6830312	7/21/2009	Comal	29.61281	-98.28392	1.56	774.74	773.18	638	Artesian
6830315	7/23/2009	Comal	29.60900	-98.28993	2.35	784.57	782.22	637	Artesian
68162AA	7/20/2009	Comal	29.84075	-98.07987	1.88	953.40	951.52	662	Recharge
68226BF	7/21/2009	Comal	29.67551	-98.27226	1.24	839.62	838.38	653	Recharge
68226BH	7/24/2009	Comal	29.67406	-98.27697	0.50	855.68	855.18	652	Recharge
68228AA	7/28/2009	Comal	29.65218	-98.30108	1.40	887.75	886.35	656	Artesian
68228BB	7/28/2009	Comal	29.65992	-98.32097	1.00	1003.70	1002.70	662	Artesian
68233DW	7/30/2009	Comal	29.72716	-98.12531	0.95	645.95	645.00	619	Recharge
6823616A	7/30/2009	Comal	29.70434	-98.13308	4.91	640.33	635.42	627	Saline
6823619B	7/30/2009	Comal	29.70739	-98.13625	5.20	639.61	634.41	627	Saline
68241JF	7/20/2009	Comal	29.74782	-98.10386	1.00	705.90	704.90	613	Recharge
68302BB	7/28/2009	Comal	29.61497	-98.31909	1.41	804.55	803.14	641	Artesian
68302LH	7/28/2009	Comal	29.61119	-98.32087	0.82	801.00	800.18	637	Artesian
6830314	7/23/2009	Guadalupe	29.60263	-98.25724	2.17	873.18	871.01	640	Artesian
6831403*	7/23/2009	Guadalupe	29.57306	-98.22948	2.09	711.17	709.08	641	Saline
6831511*	7/23/2009	Guadalupe	29.54597	-98.20266	2.06	676.06	674.00	639	Saline
6831808*	7/23/2009	Guadalupe	29.51599	-98.18471	2.89	651.81	648.92	632	Saline
5857502	7/24/2009	Hays	30.06635	-97.94447	0.00	890.00	890.00	678	Recharge
5857510	7/24/2009	Hays	30.06346	-97.94162	3.90	868.90	865.00	680	Recharge
5857902	7/20/2009	Hays	30.00890	-97.89527	1.00	821.56	820.56	569	Artesian
5857903	7/20/2009	Hays	30.03850	-97.88617	0.62	826.92	826.30	565	Artesian
5858101	7/24/2009	Hays	30.08358	-97.84264	2.97	709.91	706.94	542	Artesian
5858123	7/21/2009	Hays	30.10943	-97.84173	0.00	700.89	700.89	524	Artesian
5858406	7/27/2009	Hays	30.06204	-97.85602	0.27	748.61	748.34	552	Artesian
5858410	7/28/2009	Hays	30.06690	-97.83891	2.25	770.23	767.98	545	Artesian
5858417	7/27/2009	Hays	30.04723	-97.86748	2.02	764.81	762.79	558	Artesian
5858427	7/27/2009	Hays	30.07717	-97.86132	1.80	710.83	709.03	571	Artesian
5858428	7/28/2009	Hays	30.05208	-97.83340	0.70	684.00	683.30	544	Saline
5858511	7/28/2009	Hays	30.07193	-97.82836	3.75	736.99	733.24	542	Artesian
5858704	7/20/2009	Hays	30.02769	-97.85392	0.90	746.90	746.00	545	Artesian
5858705	7/27/2009	Hays	30.02295	-97.83861	0.25	724.56	724.31	552	Saline
5858711	7/20/2009	Hays	30.01672	-97.85933	2.10	702.10	700.00	555	Artesian
5858801	7/27/2009	Hays	30.03364	-97.83316	1.48	717.65	716.17	551	Saline
6701203	7/22/2009	Hays	29.96218	-97.92077	0.75	692.79	692.04	575	Recharge
6701303	7/20/2009	Hays	29.98976	-97.87548	1.10	720.34	719.24	540	Artesian
6701311	7/23/2009	Hays	29.98143	-97.89140	2.48	773.00	770.52	554	Artesian
6701606	7/28/2009	Hays	29.93652	-97.91142	0.95	773.64	772.69	574	Artesian
6701607	7/28/2009	Hays	29.93208	-97.90450	0.62	671.67	671.05	574	Artesian
6701809	7/20/2009	Hays	29.91192	-97.92877	1.20	602.47	601.27	574	Recharge
6701812	7/21/2009	Hays	29.89048	-97.92837	2.89	583.78	580.89	574	Saline
6701902	7/28/2009	Hays	29.91366	-97.91654	0.90	647.61	646.71	575	Artesian
6702104*	7/23/2009	Hays	29.98279	-97.87153	2.61	676.93	674.32	556	Saline
6702105*	7/23/2009	Hays	29.95830	-97.84212	2.19	648.89	646.70	570	Saline
6702106*	7/23/2009	Hays	29.97474	-97.85711	2.17	680.45	678.28	561	Saline
6709101	7/27/2009	Hays	29.85557	-97.98177	1.50	688.52	687.02	575	Artesian
6709105	7/21/2009	Hays	29.84479	-97.98418	2.50	694.73	692.23	577	Artesian
6709106	7/21/2009	Hays	29.85243	-97.98716	1.32	700.98	699.66	577	Artesian
6709110	7/20/2009	Hays	29.84358	-97.98225	1.17	688.56	687.39	576	Artesian
6709113	7/20/2009	Hays	29.83874	-97.99074	1.69	706.42	704.73	577	Artesian
6709401*	7/20/2009	Hays	29.82925	-97.96236	2.37	644.88	642.51	589	Saline
6808902	7/21/2009	Hays	29.89647	-98.00289	2.83	786.60	783.77	574	Recharge
6816601	7/24/2009	Hays	29.82981	-98.00163	1.65	761.09	759.44	579	Artesian
6816603	7/23/2009	Hays	29.82923	-98.01621	2.76	739.67	736.91	577	Recharge
58499BQ	7/24/2009	Hays	30.12583	-97.90361	0.90	784.90	784.00	693	Recharge
58584CT	7/24/2009	Hays	30.06020	-97.86847	1.13	734.53	733.40	558	Recharge
58584NM	7/20/2009	Hays	30.04596	-97.85135	1.64	753.66	752.02	531	Artesian
67013BB	7/27/2009	Hays	29.96324	-97.89693	0.50	690.00	689.50	573	Artesian
67013CC	7/20/2009	Hays	29.96745	-97.87624	1.65	693.91	692.26	573	Saline
67013EE	7/20/2009	Hays	29.96261	-97.88140	1.07	708.13	707.06	573	Saline
67014AA	7/20/2009	Hays	29.92160	-97.96544	0.90	725.78	724.88	575	Recharge
67014FR#2	7/21/2009	Hays	29.92087	-97.97164	0.85	689.28	688.43	581	Recharge
67015DH	7/21/2009	Hays	29.95153	-97.93528	0.85	778.68	777.83	575	Recharge
67015PG	7/21/2009	Hays	29.94337	-97.93769	2.04	782.88	780.84	574	Artesian
67015RD	7/21/2009	Hays	29.94617	-97.93569	1.31	762.61	761.30	572	Artesian
67015RW	7/21/2009	Hays	29.93969	-97.93486	1.80	787.33	785.53	574	Artesian
67016CC	7/27/2009	Hays	29.95556	-97.90279	1.00	638.82	637.82	573	Artesian
67017BB	7/20/2009	Hays	29.90860	-97.97154	0.77	768.60	767.83	573	Recharge
6701813A	7/21/2009	Hays	29.89113	-97.92938	3.10	584.22	581.12	574	Saline
6701813B	7/21/2009	Hays	29.89113	-97.92938	3.08	584.20	581.12	575	Saline
67018BB	7/21/2009	Hays	29.89444	-97.92945	1.25	586.28	585.03	574	Recharge
67018CC	7/21/2009	Hays	29.89361	-97.93205	2.12	634.82	632.70	574	Artesian
67018DD	7/21/2009	Hays	29.88718	-97.94963	1.00	751.96	750.96	574	Artesian
67018EE	7/20/2009	Hays	29.90817	-97.91931	2.05	611.97	609.92	574	Artesian
67018FF	7/20/2009	Hays	29.90269	-97.92173	2.45	591.82	589.37	574	Recharge
67091AA	7/20/2009	Hays	29.85881	-97.99281	0.41	748.82	748.41	576	Recharge
67091CC	7/23/2009	Hays	29.83654	-97.99393	4.75	737.65	732.90	578	Artesian
68086FR#1	7/21/2009	Hays	29.95234	-98.00083	0.50	910.68	910.18	640	Recharge
68089SMBA	7/21/2009	Hays	29.89294	-98.00134	0.40	760.41	760.01	575	Recharge

Appendix A (cont.)

Table A-12. Water levels collected during the July 20 through August 5, 2009, SWLP event.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone
68163AA	7/24/2009	Hays	29.84821	-98.02325	1.05	901.10	900.05	581	Artesian
68163DD	7/24/2009	Hays	29.86920	-98.03422	1.05	830.94	829.89	585	Recharge
68163FF	7/24/2009	Hays	29.85778	-98.03692	0.00	929.87	929.87	586	Recharge
7038902*	7/30/2009	Kinney	29.41360	-100.26122	2.10	1381.04	1378.94	1193	Recharge
6825711	7/24/2009	Medina	29.50712	-98.98151	2.05	1176.35	1174.30	904	Recharge
6825711	7/24/2009	Medina	29.50712	-98.98151	2.05	1176.35	1174.30	904	Recharge
6833102	7/23/2009	Medina	29.47229	-98.96302	1.00	969.23	968.23	839	Recharge
6833213	7/24/2009	Medina	29.49146	-98.93827	2.24	1015.66	1013.42	873	Recharge
6833604	7/24/2009	Medina	29.42219	-98.88875	0.90	848.85	847.95	672	Artesian
6834506	7/20/2009	Medina	29.43132	-98.81296	0.85	1044.31	1043.46	655	Artesian
6841301	7/21/2009	Medina	29.35504	-98.88010	1.64	761.40	759.76	669	Artesian
6842112	7/21/2009	Medina	29.34577	-98.84908	2.90	765.50	762.60	663	Artesian
6842502*	7/21/2009	Medina	29.31056	-98.82272	1.25	730.10	728.85	632	Artesian
6842504	7/21/2009	Medina	29.30962	-98.81524	0.35	724.68	724.33	659	Artesian
6849813	7/20/2009	Medina	29.16578	-98.93941	2.50	665.70	663.20	680	Artesian
6931708	7/24/2009	Medina	29.52363	-99.23251	1.70	1142.62	1140.92	924	Recharge
6932703	7/24/2009	Medina	29.53416	-99.10993	1.20	1234.20	1233.00	1046	Recharge
6938601	7/21/2009	Medina	29.43854	-99.28346	1.34	1009.16	1007.82	864	Recharge
6938901	7/22/2009	Medina	29.41472	-99.26556	1.50	983.50	982.00	795	Artesian
6938902	7/21/2009	Medina	29.37908	-99.27684	0.78	943.10	942.32	727	Artesian
6938906	7/21/2009	Medina	29.38866	-99.26452	1.47	951.88	950.41	739	Artesian
6939504	7/21/2009	Medina	29.45099	-99.19489	1.65	1022.79	1021.14	859	Artesian
6939901	7/21/2009	Medina	29.38452	-99.15391	1.13	933.61	932.48	714	Artesian
6940101	7/21/2009	Medina	29.49326	-99.12483	0.61	1023.83	1023.22	876	Artesian
6940102	7/21/2009	Medina	29.46115	-99.11712	2.50	969.10	966.60	845	Recharge
6940209	7/24/2009	Medina	29.47879	-99.06727	1.75	1037.91	1036.16	851	Recharge
6940404	7/21/2009	Medina	29.43394	-99.12176	1.15	936.33	935.18	770	Artesian
6940509	7/24/2009	Medina	29.55485	-99.23474	1.90	1168.23	1166.33	1046	Artesian
6940510	7/24/2009	Medina	29.42658	-99.06945	2.62	918.02	915.40	724	Artesian
6940901	7/27/2009	Medina	29.40943	-99.00077	0.71	878.94	878.23	695	Artesian
6946601	7/27/2009	Medina	29.33225	-99.27894	0.89	885.29	884.40	721	Artesian
6946602	7/22/2009	Medina	29.31683	-99.26061	0.50	908.82	908.32	720	Artesian
6947306	7/21/2009	Medina	29.34632	-99.13894	0.80	887.48	886.68	682	Artesian
6947503	7/21/2009	Medina	29.32537	-99.20767	0.86	885.64	884.78	692	Artesian
6947602	7/22/2009	Medina	29.32167	-99.15513	1.15	863.39	862.24	687	Artesian
6947603	7/22/2009	Medina	29.30746	-99.14958	1.50	845.51	844.01	684	Artesian
6948102	7/27/2009	Medina	29.35114	-99.08672	0.65	867.68	867.03	664	Artesian
6948402*	7/22/2009	Medina	29.32488	-99.10738	0.70	853.63	852.93	624	Artesian
6963103	7/23/2009	Medina	29.11109	-99.22003	4.83	666.01	661.18	703	Artesian
68422AA	7/22/2009	Medina	29.37035	-98.81167	0.80	778.33	777.53	660	Artesian
69396AA	7/21/2009	Medina	29.43503	-99.14966	1.00	1000.31	999.31	798	Artesian
6946702-B	7/21/2009	Medina	29.26292	-99.35631	2.00	951.73	949.73	716	Artesian
69472AA	7/22/2009	Medina	29.34813	-99.19962	2.63	911.90	909.27	692	Artesian
69544AA	7/21/2009	Medina	29.18694	-99.33889	3.00	793.00	790.00	725	Artesian
6935401*	7/30/2009	Uvalde	29.44185	-99.74915	1.00	1290.97	1289.97	1170	Recharge
6935602*	7/29/2009	Uvalde	29.44589	-99.66531	0.50	1150.22	1149.72	1091	Recharge
6935804*	7/23/2009	Uvalde	29.39450	-99.70216	0.00	1153.44	1153.44	1001	Recharge
6936402	7/24/2009	Uvalde	29.41893	-99.60954	2.60	1098.94	1096.34	749	Artesian
6936601	7/23/2009	Uvalde	29.42564	-99.51626	0.20	1072.56	1072.36	746	Artesian
6937402	7/27/2009	Uvalde	29.45330	-99.47319	2.00	1155.22	1153.22	788	Artesian
6942709	7/30/2009	Uvalde	29.27362	-99.86285	1.80	1007.43	1005.63	883	Artesian
6943409	7/30/2009	Uvalde	29.32391	-99.71381	1.70	1058.16	1056.46	851	Artesian
6943607	7/30/2009	Uvalde	29.32651	-99.63863	2.00	1011.65	1009.65	746	Artesian
6943903	7/28/2009	Uvalde	29.26646	-99.64909	0.93	955.76	954.83	735	Artesian
6944301	7/23/2009	Uvalde	29.35294	-99.51335	1.15	1003.08	1001.93	734	Artesian
6944703	7/28/2009	Uvalde	29.25742	-99.58624	1.10	935.51	934.41	729	Artesian
6944804	7/28/2009	Uvalde	29.29064	-99.57277	1.50	954.17	952.67	736	Artesian
6944902	7/20/2009	Uvalde	29.26979	-99.50527	1.97	901.88	899.91	729	Artesian
6950302	7/24/2009	Uvalde	29.20874	-99.78437	2.40	907.30	904.90	861	Artesian
6951602	7/20/2009	Uvalde	29.17573	-99.66051	0.90	864.26	863.36	826	Saline
6951606	7/20/2009	Uvalde	29.19307	-99.63233	2.17	879.72	877.55	718	Saline
6952202	7/20/2009	Uvalde	29.24517	-99.54958	2.30	876.32	874.02	728	Saline
6952403	7/20/2009	Uvalde	29.19889	-99.61690	0.00	875.11	875.11	722	Saline
6952404	7/20/2009	Uvalde	29.19250	-99.61045	2.52	869.54	867.02	719	Saline
7040901*	7/29/2009	Uvalde	29.39456	-100.00232	0.84	1125.11	1124.27	1081	Recharge
69369AA	7/23/2009	Uvalde	29.38037	-99.49433	0.82	1029.41	1028.59	739	Artesian
69438AA	7/23/2009	Uvalde	29.28805	-99.69953	0.91	977.49	976.58	833	Artesian
69439AA	7/28/2009	Uvalde	29.26620	-99.63640	0.56	948.32	947.76	728	Artesian
69443AA	7/23/2009	Uvalde	29.34002	-99.51963	1.42	989.86	988.44	733	Artesian
69493AA	7/23/2009	Uvalde	29.24416	-99.87655	0.30	968.46	968.16	881	Artesian
69501AA	7/29/2009	Uvalde	29.23925	-99.83805	0.67	950.46	949.79	866	Artesian
69502AA	7/23/2009	Uvalde	29.21054	-99.81871	0.83	913.91	913.08	864	Artesian
69502BB	7/29/2009	Uvalde	29.24166	-99.81707	0.39	932.02	931.63	866	Artesian
69502DD	7/23/2009	Uvalde	29.23691	-99.82745	0.00	941.30	941.30	866	Artesian
69503AA	7/29/2009	Uvalde	29.24579	-99.79076	0.55	957.34	956.79	863	Artesian
69503BB	7/29/2009	Uvalde	29.24693	-99.75681	0.70	964.86	964.16	860	Artesian
69503CC	7/29/2009	Uvalde	29.21670	-99.75534	0.80	931.15	930.35	856	Artesian
69505AA	7/23/2009	Uvalde	29.19097	-99.83198	2.17	914.97	912.80	859	Artesian
69511AA	7/23/2009	Uvalde	29.24161	-99.74245	1.00	966.57	965.57	863	Artesian

* Well visited and water level measured, but not used in potentiometric map.

Appendix A (cont.)

Table A-13. Water levels collected during the October 23 through November 6, 2009, SWLP event.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone
6830211	11/4/2009	Bexar	29.60496	-98.32818	0.15	776.65	776.50	659	Artesian
6815809	10/27/2009	Comal	29.77095	-98.17648	0.35	908.74	908.39	695	Recharge
6815907	10/27/2009	Comal	29.75467	-98.13955	1.45	707.93	706.48	632	Recharge
6815912	10/27/2009	Comal	29.75451	-98.14100	1.53	695.32	693.79	633	Recharge
6816501	10/28/2009	Comal	29.80162	-98.05505	0.83	756.50	755.67	599	Artesian
6816502	10/28/2009	Comal	29.80812	-98.04752	1.95	759.61	757.66	596	Recharge
6816701	11/2/2009	Comal	29.75728	-98.10479	2.00	713.57	711.57	616	Artesian
6816703	10/28/2009	Comal	29.75366	-98.09312	0.70	701.24	700.54	612	Artesian
6816801	10/28/2009	Comal	29.78677	-98.05287	0.50	753.33	752.83	611	Artesian
6816803	10/28/2009	Comal	29.76992	-98.07410	1.50	726.89	725.39	610	Artesian
6822807	11/6/2009	Comal	29.65550	-98.30505	1.85	897.34	895.49	667	Artesian
6822808	11/5/2009	Comal	29.64256	-98.30737	1.67	967.35	965.68	661	Artesian
6822810	11/6/2009	Comal	29.66027	-98.30709	1.30	890.73	889.43	673	Recharge
6822902	11/6/2009	Comal	29.62940	-98.28032	2.35	790.99	788.64	656	Recharge
6822910	11/6/2009	Comal	29.62928	-98.28055	2.70	786.50	783.80	656	Recharge
6823209	10/29/2009	Comal	29.72079	-98.17900	1.75	863.78	862.03	637	Recharge
6823210	10/27/2009	Comal	29.71452	-98.20805	0.32	920.55	920.23	648	Recharge
6823302	10/23/2009	Comal	29.71357	-98.13835	1.00	643.59	642.59	626	Recharge
6823306	10/27/2009	Comal	29.74621	-98.15395	1.40	809.07	807.67	634	Recharge
6823309	11/2/2009	Comal	29.71867	-98.13524	0.55	736.76	736.21	624	Recharge
6823312	10/27/2009	Comal	29.73404	-98.12711	0.40	672.14	671.74	626	Recharge
6823316	11/2/2009	Comal	29.72137	-98.14791	1.06	807.58	806.52	629	Recharge
6823319	11/5/2009	Comal	29.72101	-98.12768	1.50	629.13	627.63	623	Recharge
6823602	11/5/2009	Comal	29.70188	-98.15112	1.35	704.36	703.01	636	Recharge
6823621	11/5/2009	Comal	29.69445	-98.15917	0.87	671.68	670.81	638	Artesian
6823701	11/5/2009	Comal	29.64889	-98.21644	0.72	685.45	684.73	648	Artesian
6823709	10/27/2009	Comal	29.64043	-98.23312	1.10	706.61	705.51	654	Artesian
6823710	11/5/2009	Comal	29.66343	-98.23604	0.85	816.52	815.67	646	Recharge
6823807	10/27/2009	Comal	29.66636	-98.17132	1.70	657.58	655.88	637	Artesian
6830208	11/5/2009	Comal	29.61022	-98.31958	2.50	800.59	798.09	659	Artesian
6830226	11/5/2009	Comal	29.61514	-98.31715	1.58	828.89	827.31	658	Artesian
6830312	10/29/2009	Comal	29.61281	-98.28392	1.56	774.74	773.18	656	Artesian
6830315	10/27/2009	Comal	29.60900	-98.28993	2.35	784.57	782.22	656	Artesian
68162AA	11/2/2009	Comal	29.84075	-98.07987	1.88	953.40	951.52	671	Recharge
68167ML	10/28/2009	Comal	29.78377	-98.08716	1.75	786.98	785.23	612	Recharge
68168NB	10/28/2009	Comal	29.78310	-98.06609	2.25	765.07	762.82	608	Artesian
68226BF	10/29/2009	Comal	29.67551	-98.27226	1.24	839.62	838.38	675	Recharge
68226BH	11/6/2009	Comal	29.67406	-98.27697	0.50	855.68	855.18	674	Recharge
68228AA	10/29/2009	Comal	29.65218	-98.30108	1.40	887.75	886.35	673	Artesian
68228BB	11/5/2009	Comal	29.65992	-98.32097	1.00	1003.70	1002.70	670	Artesian
68233DW	10/27/2009	Comal	29.72716	-98.12531	0.95	645.95	645.00	623	Recharge
6823616A	11/6/2009	Comal	29.70434	-98.13308	5.23	640.65	635.42	635	Saline
6823619B	11/6/2009	Comal	29.70739	-98.13625	5.20	639.61	634.41	636	Saline
68241JF	10/28/2009	Comal	29.74782	-98.10386	1.00	705.90	704.90	616	Recharge
68302LH	11/5/2009	Comal	29.61119	-98.32087	0.82	801.00	800.18	658	Artesian
5857902	10/27/2009	Hays	30.00890	-97.89527	1.00	821.56	820.56	595	Artesian
5857903	10/27/2009	Hays	30.03850	-97.88617	0.62	826.92	826.30	591	Artesian
5857908	10/27/2009	Hays	30.00944	-97.89667	1.80	831.80	830.00	595	Artesian
5858406	10/30/2009	Hays	30.06204	-97.85602	0.27	748.61	748.34	588	Artesian
5858407	10/30/2009	Hays	30.05345	-97.85553	1.54	760.37	758.83	584	Artesian
5858413	10/30/2009	Hays	30.07052	-97.83549	1.40	753.53	752.13	572	Artesian
5858427	10/27/2009	Hays	30.07717	-97.86132	1.80	710.83	709.03	597	Artesian
5858511*	10/23/2009	Hays	30.07193	-97.82836	3.75	736.99	733.24	546	Artesian
5858701	10/30/2009	Hays	30.03548	-97.84141	0.00	711.73	711.73	557	Artesian
5858704	10/27/2009	Hays	30.02769	-97.85392	0.90	746.90	746.00	557	Artesian
5858705	10/30/2009	Hays	30.02295	-97.83861	0.25	724.56	724.31	561	Saline
5858711	10/27/2009	Hays	30.01672	-97.85933	2.10	702.10	700.00	575	Artesian
5858801	10/27/2009	Hays	30.03364	-97.83316	1.48	717.65	716.17	576	Saline
6701303	10/27/2009	Hays	29.98976	-97.87548	1.10	720.34	719.24	572	Artesian
6701311	10/27/2009	Hays	29.98143	-97.89140	2.48	773.00	770.52	578	Artesian
6701809	10/27/2009	Hays	29.91192	-97.92877	1.20	602.47	601.27	576	Recharge
6701812	10/27/2009	Hays	29.89048	-97.92837	2.89	583.78	580.89	575	Saline
6702104*	10/27/2009	Hays	29.98279	-97.87153	2.61	676.93	674.32	571	Saline
6702105*	10/27/2009	Hays	29.95830	-97.84212	2.19	648.89	646.70	569	Saline
6702106*	10/27/2009	Hays	29.97474	-97.85711	2.17	680.45	678.28	563	Saline
6709101	10/30/2009	Hays	29.85557	-97.98177	1.50	688.52	687.02	578	Artesian
6709105	10/28/2009	Hays	29.84479	-97.98418	2.50	694.73	692.23	579	Artesian
6709110	10/27/2009	Hays	29.84358	-97.98225	1.17	688.56	687.39	579	Artesian
6709113	10/27/2009	Hays	29.83874	-97.99074	1.69	706.42	704.73	579	Artesian
6709401*	10/27/2009	Hays	29.82925	-97.96236	2.37	644.88	642.51	588	Saline
6808902	10/28/2009	Hays	29.89647	-98.00289	2.83	786.60	783.77	588	Recharge
6816601	10/30/2009	Hays	29.82981	-98.00163	1.65	761.09	759.44	578	Artesian
58584NM	10/27/2009	Hays	30.04596	-97.85135	1.64	753.66	752.02	557	Artesian
67013CC	10/27/2009	Hays	29.96745	-97.87624	1.65	693.91	692.26	577	Saline
67013EE	10/27/2009	Hays	29.96261	-97.88140	1.07	708.13	707.06	577	Saline
67014AA	10/27/2009	Hays	29.92160	-97.96544	0.90	725.78	724.88	582	Recharge
67015DH	10/30/2009	Hays	29.95153	-97.93528	0.85	778.68	777.83	578	Recharge
67015PG	10/27/2009	Hays	29.94337	-97.93769	2.04	782.88	780.84	578	Artesian
67015RW	10/27/2009	Hays	29.93969	-97.93486	1.80	787.33	785.53	577	Artesian
67016CC	10/30/2009	Hays	29.95556	-97.90279	1.00	638.82	637.82	577	Artesian
67017BB	10/27/2009	Hays	29.90860	-97.97154	0.77	768.60	767.83	579	Recharge
6701813A	10/27/2009	Hays	29.89113	-97.92938	3.10	584.22	581.12	575	Saline
6701813B	10/27/2009	Hays	29.89113	-97.92938	3.08	584.20	581.12	576	Saline
67018BB	10/28/2009	Hays	29.89444	-97.92945	1.25	586.28	585.03	575	Recharge
67018CC	10/28/2009	Hays	29.89361	-97.93205	2.12	634.82	632.70	578	Artesian
67018EE	10/27/2009	Hays	29.90817	-97.91931	2.05	611.97	609.92	576	Artesian
67018FF	10/27/2009	Hays	29.90269	-97.92173	2.45	591.82	589.37	577	Recharge
67091AA	10/27/2009	Hays	29.85881	-97.99281	0.41	748.82	748.41	578	Recharge
68076AA*	10/28/2009	Hays	29.93194	-98.12972	1.60	1151.60	1150.00	1108	Recharge
68086FR#1	10/28/2009	Hays	29.95234	-98.00083	0.50	910.68	910.18	638	Recharge
68089SMB	10/28/2009	Hays	29.89294	-98.00134	0.40	760.41	760.01	584	Recharge
68163AA	10/30/2009	Hays	29.84821	-98.02325	1.05	901.10	900.05	580	Artesian
68163DD	10/30/2009	Hays	29.86920	-98.03422	1.05	830.94	829.89	586	Recharge
68163FF	10/30/2009	Hays	29.85778	-98.03692	0.00	929.87	929.87	584	Recharge
68166HC	10/28/2009	Hays	29.81891	-98.01745	1.44	705.95	704.51	591	Artesian
68166HC#2	10/28/2009	Hays	29.81857	-98.01703	0.74	713.18	712.44	592	Artesian

* Well visited and water level measured, but not used in potentiometric map.

APPENDIX B

Table B-1. Water levels collected during the July 18 through July 25, 2005, SWLP event, but not used in preparation of the potentiometric map.

Well ID #	Date	County	Latitude	Longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone	Comments
6829605*	7/19/2005	Bexar	29.55004	-98.38709	-2.20	805.88	808.08	699	Artesian Zone	Water level anomalously high
6835106*	7/20/2005	Bexar	29.48194	-98.71389	5.00	964.51	959.51	629	Artesian Zone	Water level anomalously low
6836103*	7/20/2005	Bexar	29.48833	-98.60083	6.58	913.84	907.26	653	Artesian Zone	Water level anomalously low
6836107*	7/20/2005	Bexar	29.48858	-98.61109	3.80	882.00	878.20	709	Artesian Zone	Water level anomalously high
6837120*	7/22/2005	Bexar	29.48467	-98.46572	0.00	804.78	804.78	697	Artesian Zone	Water level anomalously high
6843402*	7/18/2005	Bexar	29.31360	-98.71431	1.42	699.86	698.44	709	Artesian Zone	Water level anomalously high
6844506*	7/18/2005	Bexar	29.32115	-98.55000	3.10	613.10	610.00	662	Saline Zone	Water level anomalously low
6816602*	7/19/2005	Comal	29.79415	-98.02420	0.20	608.25	608.05	601	Saline Zone	Well in the saline zone
6823202*	7/19/2005	Comal	29.71157	-98.20093	0.40	935.60	935.20	629	Recharge Zone	Water level anomalously low
6823209*	7/20/2005	Comal	29.72079	-98.17900	1.75	863.78	862.03	627	Recharge Zone	Water level anomalously low
6824105*	7/19/2005	Comal	29.73772	-98.08908	1.00	689.09	688.09	634	Artesian Zone	Well is too deep
6831403*	7/19/2005	Guadalupe	29.57306	-98.22948	2.09	711.17	709.08	672	Saline Zone	Well in the saline zone
6831511*	7/19/2005	Guadalupe	29.54597	-98.20266	2.06	676.06	674.00	667	Saline Zone	Well in the saline zone
6831808*	7/19/2005	Guadalupe	29.51599	-98.18471	2.89	651.81	648.92	658	Saline Zone	Well in the saline zone
6702104*	7/19/2005	Hays	29.98279	-97.87153	2.61	676.93	674.32	572	Saline Zone	Well in the saline zone
6702105*	7/19/2005	Hays	29.95830	-97.84212	2.19	648.89	646.70	580	Saline Zone	Well in the saline zone
6702106*	7/19/2005	Hays	29.97474	-97.85711	2.17	680.45	678.28	577	Saline Zone	Well in the saline zone
6709401*	7/19/2005	Hays	29.82925	-97.96236	2.37	644.88	642.51	594	Saline Zone	Well in the saline zone
7038902*	7/20/2005	Kinney	29.41360	-100.26122	2.10	1381.04	1378.94	1196	Recharge Zone	Only well in the area
6842112*	7/19/2005	Medina	29.34577	-98.84908	2.90	765.50	762.60	721	Artesian Zone	Water level anomalously high
6935401*	7/19/2005	Uvalde	29.44185	-99.74915	1.00	1290.97	1289.97	1171	Recharge Zone	Only well in the area
6935602*	7/19/2005	Uvalde	29.44589	-99.66531	0.50	1150.22	1149.72	1088	Recharge Zone	Only well in the area
6935804*	7/19/2005	Uvalde	29.39450	-99.70216	0.00	1153.44	1153.44	1038	Recharge Zone	Only well in the area
7040901*	7/20/2005	Uvalde	29.39456	-100.00232	0.84	1125.11	1124.27	1081	Recharge Zone	Only well in the area

Appendix B (cont.)

Table B-2. Water levels collected during the October 24 through November 15, 2005, SWLP event, but not used in preparation of the potentiometric map.

Well ID #	Date	County	Latitude	Longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone	Comments
6844506*	10/25/2005	Bexar	29.32115	-98.55000	3.10	613.10	610.00	662	Saline Zone	Well in the saline zone
6816602*	10/24/2005	Comal	29.79415	-98.02420	0.20	608.25	608.05	601	Saline Zone	Well in the saline zone
6823209*	10/25/2005	Comal	29.72079	-98.1790	1.75	863.78	862.03	627	Recharge Zone	Water level anomalously low
6831403*	10/31/2005	Guadalupe	29.57306	-98.22948	2.09	711.17	709.08	671	Saline Zone	Well in the saline zone
6831511*	10/31/2005	Guadalupe	29.54597	-98.20266	2.06	676.06	674.00	665	Saline Zone	Well in the saline zone
6702104*	10/31/2005	Hays	29.98279	-97.87153	2.61	676.93	674.32	568	Saline Zone	Well in the saline zone
6702105*	10/31/2005	Hays	29.95830	-97.84212	2.19	648.89	646.70	577	Saline Zone	Well in the saline zone
6702106*	10/31/2005	Hays	29.97474	-97.85711	2.17	680.45	678.28	571	Saline Zone	Well in the saline zone
6709401*	10/31/2005	Hays	29.82925	-97.96236	2.37	644.88	642.51	592	Saline Zone	Well in the saline zone
67015MD*	11/3/2005	Hays	29.94628	-97.93557	1.30	756.30	755.00	566	Artesian Zone	Water level anomalously low
7038902*	10/26/2005	Kinney	29.41360	-100.26122	2.10	1381.04	1378.94	1198	Recharge Zone	Only well in the area
6935401*	10/25/2005	Uvalde	29.44185	-99.74915	1.00	1290.97	1289.97	1169	Recharge Zone	Only well in the area
6935602*	10/26/2005	Uvalde	29.44589	-99.66531	0.50	1150.22	1149.72	1087	Recharge Zone	Only well in the area
6935804*	10/26/2005	Uvalde	29.39450	-99.70216	0.00	1153.44	1153.44	1033	Recharge Zone	Only well in the area
7040901*	10/26/2005	Uvalde	29.39456	-100.00232	0.84	1125.11	1124.27	1081	Recharge Zone	Only well in the area

Appendix B (cont.)

Table B-3. Water levels collected during the July 14 through July 21, 2006, SWLP event, but not used in preparation of the potentiometric map.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone	Comments
6836103*	7/19/2006	Bexar	29.48833	-98.60083	6.58	913.84	907.26	692	Artesian	Water level anomalously low
6844506*	7/18/2006	Bexar	29.32115	-98.55000	3.10	613.10	610.00	645	Saline	Water level anomalously low
6816628*	7/17/2006	Comal	29.79415	-98.02420	0.20	608.25	608.05	600	Saline	Well in the saline zone
68069AA*	7/6/2006	Comal	29.87842	-98.28928	3.00	1018.00	1015.00	904	Drainage	Only well in the area
6831403*	7/18/2006	Guadalupe	29.57306	-98.22948	2.09	711.17	709.08	649	Saline	Well in the saline zone
6831511*	7/18/2006	Guadalupe	29.54597	-98.20266	2.06	676.06	674.00	647	Saline	Well in the saline zone
6831808*	7/18/2006	Guadalupe	29.51599	-98.18471	2.89	651.81	648.92	644	Saline	Well in the saline zone
6701812*	7/18/2006	Hays	29.89048	-97.92837	2.89	583.78	580.89	575	Saline	Well in the saline zone
6702104*	7/18/2006	Hays	29.98279	-97.87153	2.61	676.93	674.32	548	Saline	Well in the saline zone
6702105*	7/18/2006	Hays	29.95830	-97.84212	2.19	648.89	646.70	571	Saline	Well in the saline zone
6702106*	7/18/2006	Hays	29.97474	-97.85711	2.17	680.45	678.28	561	Saline	Well in the saline zone
6709401*	7/18/2006	Hays	29.82925	-97.96236	2.37	644.88	642.51	590	Saline	Well in the saline zone
58581AB*	7/28/2006	Hays	30.11337	-97.86055	1.10	771.10	770.00	511	Artesian	Water level anomalously low
7038902*	7/19/2006	Kinney	29.41360	-100.26122	2.10	1381.04	1378.94	1191	Recharge	Only well in the area
6935401*	7/18/2006	Uvalde	29.44185	-99.74915	1.00	1290.97	1289.97	1153	Recharge	Only well in the area
6935602*	7/18/2006	Uvalde	29.44589	-99.66531	0.50	1150.22	1149.72	1084	Recharge	Only well in the area
6935804*	7/18/2006	Uvalde	29.39450	-99.70216	0.00	1153.44	1153.44	1010	Recharge	Only well in the area

Appendix B (cont.)

Table B-4. Water levels collected during the October 10 through October 25, 2006, SWLP event, but not used in preparation of the potentiometric map.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone	Comments
6836103*	10/17/2006	Bexar	29.48833	-98.600833	6.58	913.84	907.26	640	Artesian	Water level anomalously low
6836107*	10/20/2006	Bexar	29.48858	-98.611095	3.80	882.00	878.20	658	Artesian	Water level anomalously low
6844506*	10/16/2006	Bexar	29.32115	-98.550000	3.10	613.10	610.00	643	Saline	Water level anomalously low
6816602*	10/11/2006	Comal	29.79415	-98.02420	0.20	608.25	608.05	600	Saline	Well in the saline zone
6823209*	10/25/2006	Comal	29.72079	-98.17900	1.75	863.78	862.03	610	Recharge	Water level anomalously low
6831403*	10/12/2006	Guadalupe	29.57306	-98.22948	2.09	711.17	709.08	653	Saline	Well in the saline zone
6831511*	10/12/2006	Guadalupe	29.54597	-98.20266	2.06	676.06	674.00	648	Saline	Well in the saline zone
6831808*	10/12/2006	Guadalupe	29.51599	-98.18471	2.89	651.81	648.92	642	Saline	Well in the saline zone
6702104*	10/12/2006	Hays	29.98279	-97.87153	2.61	676.93	674.32	548	Saline	Well in the saline zone
6702105*	10/12/2006	Hays	29.95830	-97.84212	2.19	648.89	646.70	569	Saline	Well in the saline zone
6702106*	10/12/2006	Hays	29.97474	-97.85711	2.17	680.45	678.28	557	Saline	Well in the saline zone
68076AA*	10/11/2006	Hays	29.93194	-98.12972	1.60	1151.60	1150.00	1100	Recharge	Only well in the area, possible Trinity well
7038902*	10/11/2006	Kinney	29.41360	-100.26122	2.10	1381.04	1378.94	1190	Recharge	Only well in the area
6935401*	10/13/2006	Uvalde	29.44185	-99.74915	1.00	1290.97	1289.97	1171	Recharge	Only well in the area
6935602*	10/13/2006	Uvalde	29.44589	-99.66531	0.50	1150.22	1149.72	1084	Recharge	Only well in the area
6935804*	10/13/2006	Uvalde	29.39450	-99.70216	0.00	1153.44	1153.44	1021	Recharge	Only well in the area
7040901*	10/11/2006	Uvalde	29.39456	-100.00232	0.84	1125.11	1124.27	1081	Recharge	Only well in the area

Appendix B (cont.)

Table B-5. Water levels collected during the January 22 through February 9, 2007, SWLP event, but not used in preparation of the potentiometric map.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone	Comments
5857701*	1/29/2007	Hays	30.04045	-97.96059	0.20	948.19	947.99	731	Recharge	Water level anomalously high
6702104*	1/30/2007	Hays	29.98279	-97.87153	2.61	676.93	674.32	554	Saline	Well in the saline zone
6702105*	1/30/2007	Hays	29.95830	-97.84212	2.19	648.89	646.70	569	Saline	Well in the saline zone
6702106*	1/30/2007	Hays	29.97474	-97.85711	2.17	680.45	678.28	561	Saline	Well in the saline zone
6709401*	1/30/2007	Hays	29.82925	-97.96236	2.37	644.88	642.51	589	Saline	Well in the saline zone
68076AA*	1/29/2007	Hays	29.93194	-98.12972	1.60	1151.60	1150.00	1108	Recharge	Only well in the area

Appendix B (cont.)

Table B-6. Water levels collected during the July 9 through August 1, 2007, SWLP event, but not used in preparation of the potentiometric map.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone	Comments
6828517*	7/20/2007	Bexar	29.57658	-98.57505	2.54	966.38	963.84	805	Recharge	Water level anomalously high
6844506*	7/9/2007	Bexar	29.32115	-98.55000	3.10	613.10	610.00	655	Saline	Water level anomalously low
6831403*	7/10/2007	Guadalupe	29.57306	-98.22948	2.09	711.17	709.08	677	Saline	Well in the saline zone
6831511*	7/10/2007	Guadalupe	29.54597	-98.20266	2.06	676.06	674.00	666	Saline	Well in the saline zone
6831808*	7/10/2007	Guadalupe	29.51599	-98.18471	2.89	651.81	648.92	652	Saline	Well in the saline zone
6702104*	7/10/2007	Hays	29.98279	-97.871531	2.61	676.93	674.32	585	Saline	Well in the saline zone
6702105*	7/10/2007	Hays	29.95830	-97.842122	2.19	648.89	646.70	575	Saline	Well in the saline zone
6702106*	7/10/2007	Hays	29.97474	-97.857114	2.17	680.45	678.28	575	Saline	Well in the saline zone
6709401*	7/10/2007	Hays	29.82925	-97.962364	2.37	644.88	642.51	592	Saline	Well in the saline zone
68076AA*	7/10/2007	Hays	29.93194	-98.129722	1.60	1151.60	1150.00	1115	Recharge	Only well in the area
7038902*	7/11/2007	Kinney	29.41360	-100.26122	2.10	1381.04	1378.94	1202	Recharge	Only well in the area
6935401*	7/12/2007	Uvalde	29.44185	-99.74915	1.00	1290.97	1289.97	1186	Recharge	Only well in the area
6935602*	7/11/2007	Uvalde	29.44589	-99.66531	0.50	1150.22	1149.72	1111	Recharge	Only well in the area
7040901*	7/11/2007	Uvalde	29.39456	-100.00232	0.84	1125.11	1124.27	1081	Recharge	Only well in the area

Appendix B (cont.)

Table B-7. Water levels collected during the October 31 through November 8, 2007, SWLP event, but not used in preparation of the potentiometric map.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)
5857701*	10/29/2007	Hays	30.04045	-97.96059	0.20	948.19
6702104*	10/30/2007	Hays	29.98279	-97.87153	2.61	676.93
6702105*	10/30/2007	Hays	29.95830	-97.84212	2.19	648.89
6702106*	10/30/2007	Hays	29.97474	-97.85711	2.17	680.45
6709401*	10/31/2005	Hays	29.82925	-97.96236	2.37	644.88
68076AA*	10/31/2007	Hays	29.93194	-98.12972	1.60	1151.60

Appendix B (cont.)

Table B-7. Water levels collected during the October 31 through November 8, 2007, SWLP event, but not used in preparation of the potentiometric map.

LSD (ft)	Water Level	Aquifer Zone	Comments
947.99	730	Recharge	Water level anomalously high
674.32	554	Saline	Well in the saline zone
646.70	579	Saline	Well in the saline zone
678.28	577	Saline	Well in the saline zone
642.51	595	Saline	Well in the saline zone
1150.00	1111	Recharge	Only well in the area

Appendix B (cont.)

Table B-7. Water levels collected during the January 28 through February 8, 2008, SWLP event, but not used in preparation of the potentiometric map.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone	Comments
6815902*	1/30/2008	Comal	29.75912	-98.14005	2.13	661.89	659.76	660	Recharge	Water level anomalously high
5857502*	1/31/2008	Hays	30.06635	-97.94447	0.00	890.00	890.00	688	Recharge	Water level anomalously low
6702104*	1/29/2008	Hays	29.98279	-97.87153	2.61	676.93	674.32	569	Saline	Well in the saline zone
6702105*	1/29/2008	Hays	29.95830	-97.84212	2.19	648.89	646.70	579	Saline	Well in the saline zone
6702106*	1/29/2008	Hays	29.97474	-97.85711	2.17	680.45	678.28	575	Saline	Well in the saline zone
6709401*	1/29/2008	Hays	29.82925	-97.96236	2.37	644.88	642.51	594	Saline	Well in the saline zone
68076AA*	1/28/2008	Hays	29.93194	-98.12972	1.60	1151.60	1150.00	1114	Recharge	Only well in the area

Appendix B (cont.)

Table B-9. Water levels collected during the July 28 through August 7, 2008, SWLP event, but not used in preparation of the potentiometric map.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone	Comments
6836103*	7/30/2008	Bexar	29.48833	-98.60083	6.58	913.84	907.26	653	Artesian	Water level anomalously low
6844506*	7/30/2008	Bexar	29.32115	-98.55000	3.10	613.10	610.00	653	Saline	Water level anomalously low
6831403*	7/29/2008	Guadalupe	29.57306	-98.22948	2.09	711.17	709.08	662	Saline	Well in the saline zone
6831511*	7/29/2008	Guadalupe	29.54597	-98.20266	2.06	676.06	674.00	656	Saline	Well in the saline zone
6831808*	7/29/2008	Guadalupe	29.51599	-98.18471	2.89	651.81	648.92	650	Saline	Well in the saline zone
5857701*	7/28/2008	Hays	30.04045	-97.96059	0.20	948.19	947.99	730.99	Recharge	Water level anomalously high
6702104*	7/29/2008	Hays	29.98279	-97.87153	2.61	676.93	674.32	549.09	Saline	Well in the saline zone
6702105*	7/29/2008	Hays	29.95830	-97.84212	2.19	648.89	646.70	573.91	Saline	Well in the saline zone
6702106*	7/29/2008	Hays	29.97474	-97.85711	2.17	680.45	678.28	562.18	Saline	Well in the saline zone
6709101*	7/31/2008	Hays	29.85557	-97.98177	1.50	688.52	687.02	586.51	Artesian	Water level anomalously high
6709401*	7/29/2008	Hays	29.82925	-97.96236	2.37	644.88	642.51	590.36	Saline	Well in the saline zone
68076AA*	8/1/2008	Hays	29.93194	-98.12972	1.60	1151.60	1150.00	1102.24	Recharge	Only well in the area
7038902*	7/30/2008	Kinney	29.41360	-100.26122	2.10	1381.04	1378.94	1193	Recharge	Only well in the area
6948402*	7/28/2008	Medina	29.32488	-99.10738	0.70	853.63	852.93	636	Artesian	Water level anomalously low
7040901*	7/30/2008	Uvalde	29.39456	-100.00232	0.84	1125.11	1124.27	1081	Recharge	Only well in the area

Appendix B (cont.)

Table B-10. Water levels collected during the October 20 through November 3, 2008, SWLP event, but not used in preparation of the potentiometric map.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone	Comments
6702104*	10/21/2008	Hays	29.98279	-97.87153	2.61	676.93	674.32	558	Saline	Well in the saline zone
6702105*	10/21/2008	Hays	29.95830	-97.84212	2.19	648.89	646.70	572	Saline	Well in the saline zone
6702106*	10/21/2008	Hays	29.97474	-97.85711	2.17	680.45	678.28	565	Saline	Well in the saline zone
6709401*	10/21/2008	Hays	29.82925	-97.96236	2.37	644.88	642.51	590	Saline	Well in the saline zone
68076AA*	10/23/2008	Hays	29.93194	-98.12972	1.60	1151.60	1150.00	1102	Recharge	Only well in the area

Appendix B (cont.)

Table B-11. Water levels collected during the February 16 through February 27, 2009, SWLP event, but not used in preparation of the potentiometric map.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone	Comments
6702104*	2/16/2009	Hays	29.98279	-97.87153	2.61	676.93	674.32	560	Saline	Well in the saline zone
6702105*	2/16/2009	Hays	29.95830	-97.84212	2.19	648.89	646.70	570	Saline	Well in the saline zone
6702106*	2/16/2009	Hays	29.97474	-97.85711	2.17	680.45	678.28	563	Saline	Well in the saline zone
6709401*	2/16/2009	Hays	29.82925	-97.96236	2.37	644.88	642.51	589	Saline	Well in the saline zone
68076AA*	2/17/2009	Hays	29.93194	-98.12972	1.60	1151.60	1150.00	1101	Recharge	Only well in the area

Appendix B (cont.)

Table B-12. Water levels collected during the July 20 through August 5, 2009, SWLP event, but not used in preparation of the potentiometric map.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone	Comments
6829611*	7/22/2009	Bexar	29.55000	-98.38333	2.80	832.60	829.80	615	Artesian	Water level anomalously low
6836103*	7/22/2009	Bexar	29.48333	-98.60000	6.58	913.84	907.26	621	Artesian	Water level anomalously low
6844506*	7/20/2009	Bexar	29.31667	-98.55000	3.10	613.10	610.00	634	Saline	Water level anomalously low
6831403*	7/23/2009	Guadalupe	29.57306	-98.22948	2.09	711.17	709.08	641	Saline	Well in the saline zone
6831511*	7/23/2009	Guadalupe	29.54597	-98.20266	2.06	676.06	674.00	639	Saline	Well in the saline zone
6831808*	7/23/2009	Guadalupe	29.51599	-98.18471	2.89	651.81	648.92	632	Saline	Well in the saline zone
6702104*	7/23/2009	Hays	29.98279	-97.87153	2.61	676.93	674.32	556	Saline	Well in the saline zone
6702105*	7/23/2009	Hays	29.95830	-97.84212	2.19	648.89	646.70	570	Saline	Well in the saline zone
6702106*	7/23/2009	Hays	29.97474	-97.85711	2.17	680.45	678.28	561	Saline	Well in the saline zone
6709401*	7/20/2009	Hays	29.82925	-97.96236	2.37	644.88	642.51	589	Saline	Well in the saline zone
7038902*	7/30/2009	Kinney	29.41360	-100.26122	2.10	1381.04	1378.94	1193	Recharge	Only well in the area
6842502*	7/21/2009	Medina	29.31056	-98.82272	1.25	730.10	728.85	632	Artesian	Water level anomalously low
6948402*	7/22/2009	Medina	29.32488	-99.10738	0.70	853.63	852.93	624	Artesian	Water level anomalously low
6935401*	7/30/2009	Uvalde	29.44185	-99.74915	1.00	1290.97	1289.97	1170	Recharge	Only well in the area
6935602*	7/29/2009	Uvalde	29.44589	-99.66531	0.50	1150.22	1149.72	1091	Recharge	Only well in the area
6935804*	7/23/2009	Uvalde	29.39450	-99.70216	0.00	1153.44	1153.44	1001	Recharge	Only well in the area
7040901*	7/29/2009	Uvalde	29.39456	-100.00232	0.84	1125.11	1124.27	1081	Recharge	Only well in the area

Appendix B (cont.)

Table B-10. Water levels collected during the October 23 through November 6, 2009, SWLP event, but not used in preparation of the potentiometric map.

Well ID #	Date	County	dec_latitude	dec_longitude	Measuring Point Height (ft)	Measuring Point Elevation (ft)	LSD (ft)	Water Level	Aquifer Zone	Comments
5858511*	10/23/2009	Hays	30.07193	-97.82836	3.75	736.99	733.24	546	Artesian	Water level anomalously low
6702104*	10/27/2009	Hays	29.98279	-97.87153	2.61	676.93	674.32	571	Saline	Well in the saline zone
6702105*	10/27/2009	Hays	29.95830	-97.84212	2.19	648.89	646.70	569	Saline	Well in the saline zone
6702106*	10/27/2009	Hays	29.97474	-97.85711	2.17	680.45	678.28	563	Saline	Well in the saline zone
6709401*	10/27/2009	Hays	29.82925	-97.96236	2.37	644.88	642.51	588	Saline	Well in the saline zone
68076AA*	10/28/2009	Hays	29.93194	-98.12972	1.60	1151.60	1150.00	1108	Recharge	Only well in the area

APPENDIX C

Plate C-1
Potentiometric Surface Map
 July 18 - 25, 2005
 Synoptic Water Level Event
 Single-System Plot

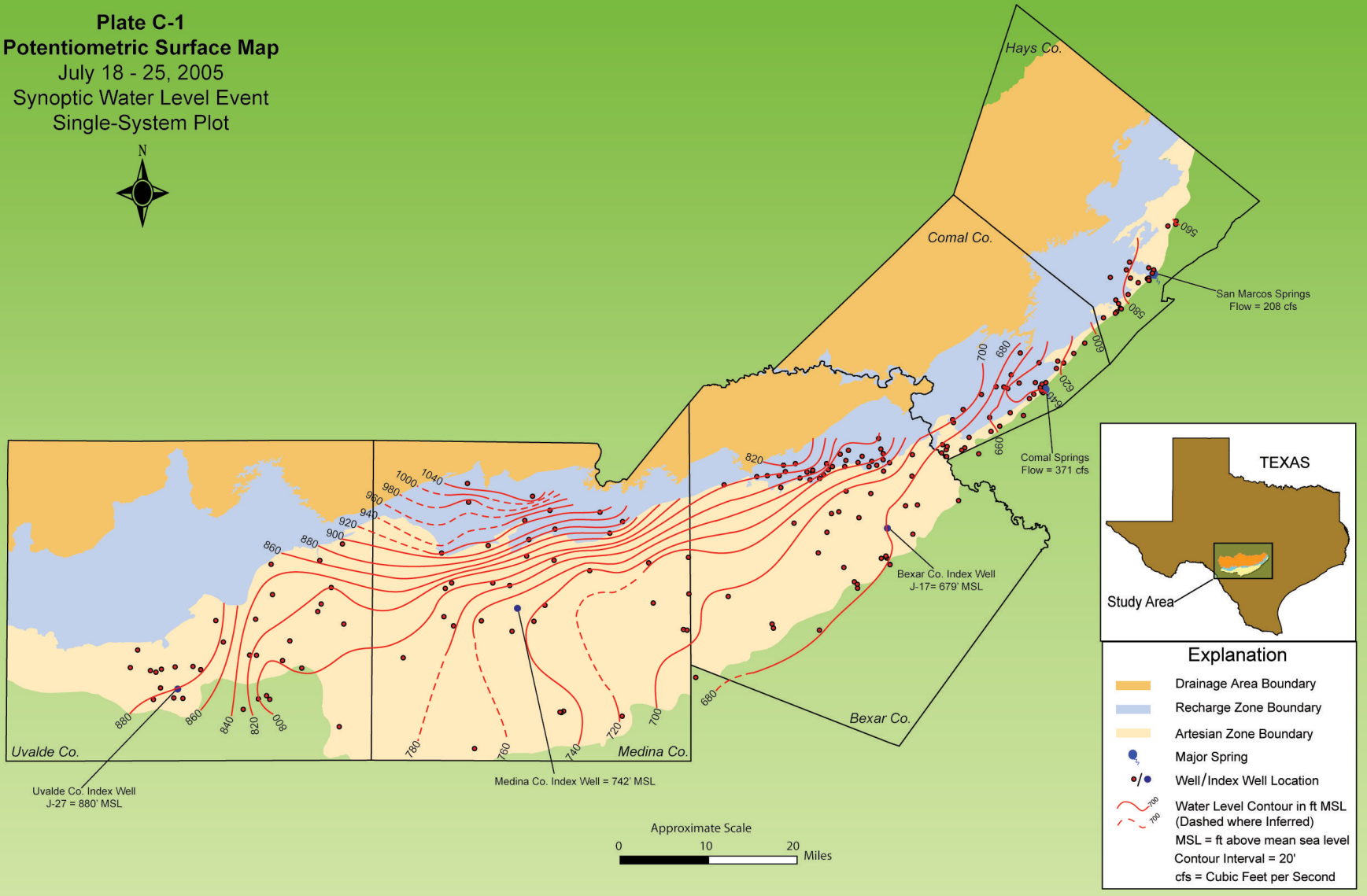


Plate C-2
Potentiometric Surface Map
 October 24 - November 15, 2005
 Synoptic Water Level Event
 Two-System Plot

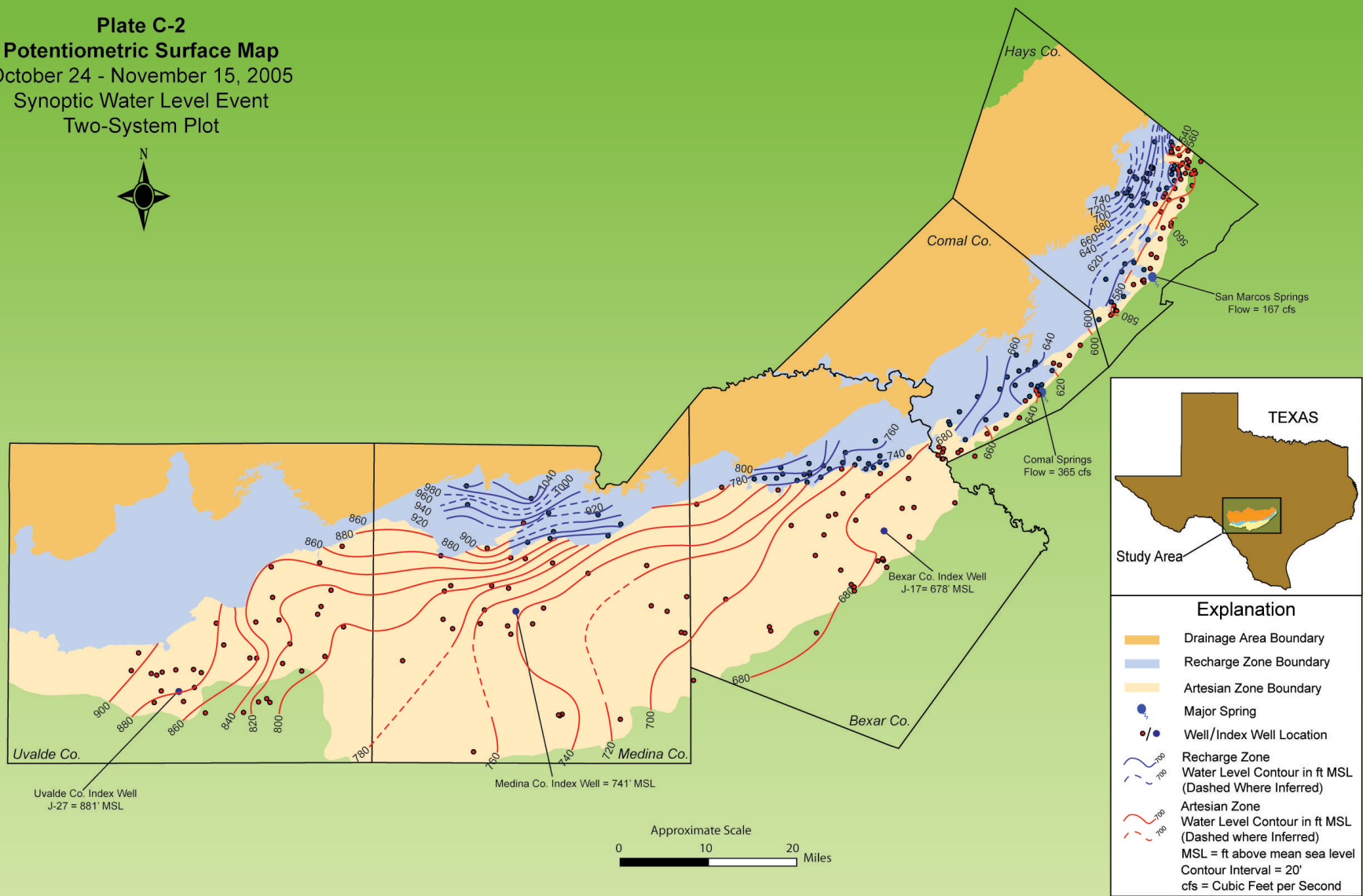


Plate C-3
Potentiometric Surface Map
 July 14 - 21, 2006
 Synoptic Water Level Event
 Single-System Plot

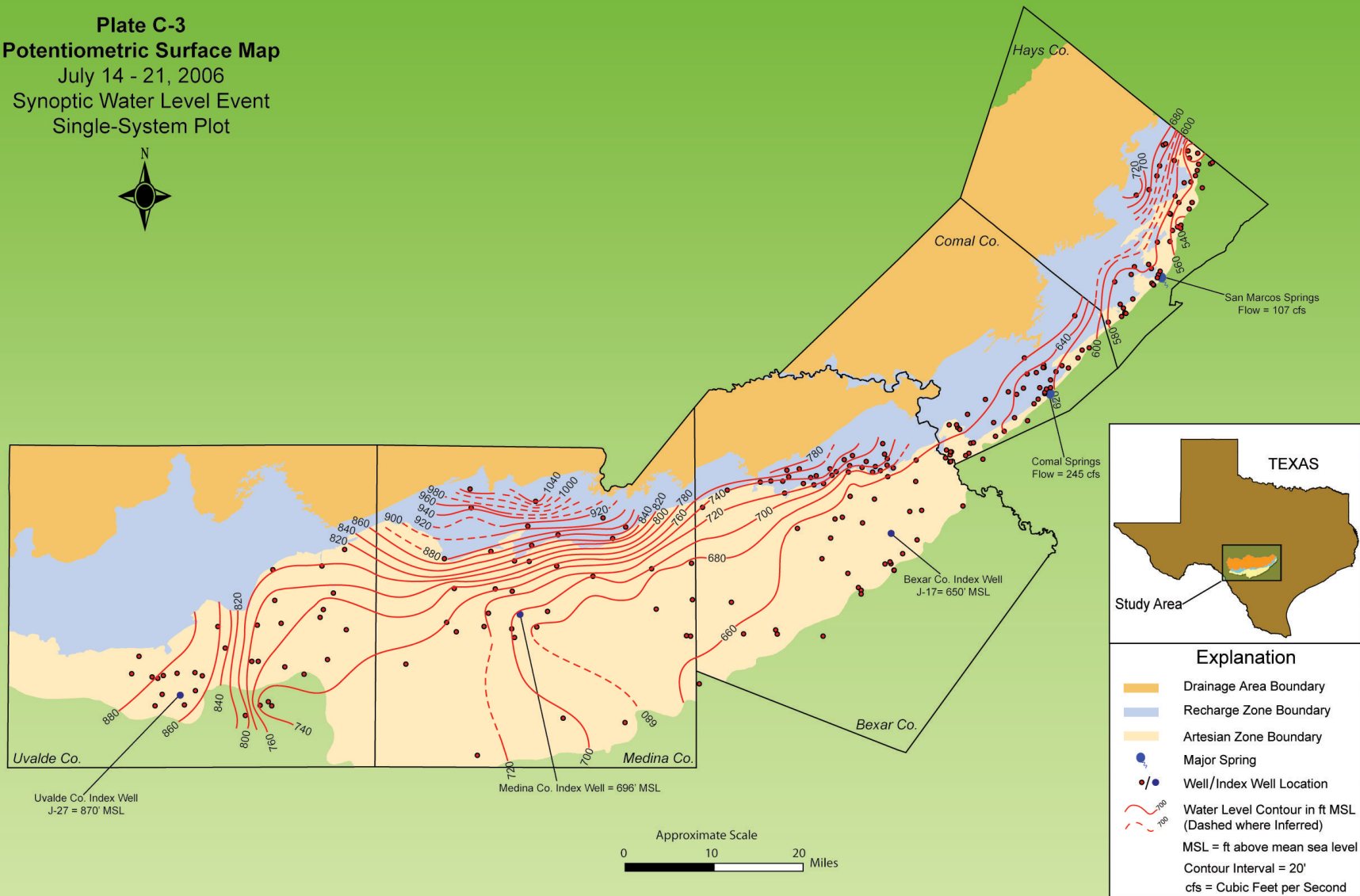


Plate C-4
Potentiometric Surface Map
 October 10 - 25, 2006
 Synoptic Water Level Event
 Single-System Plot

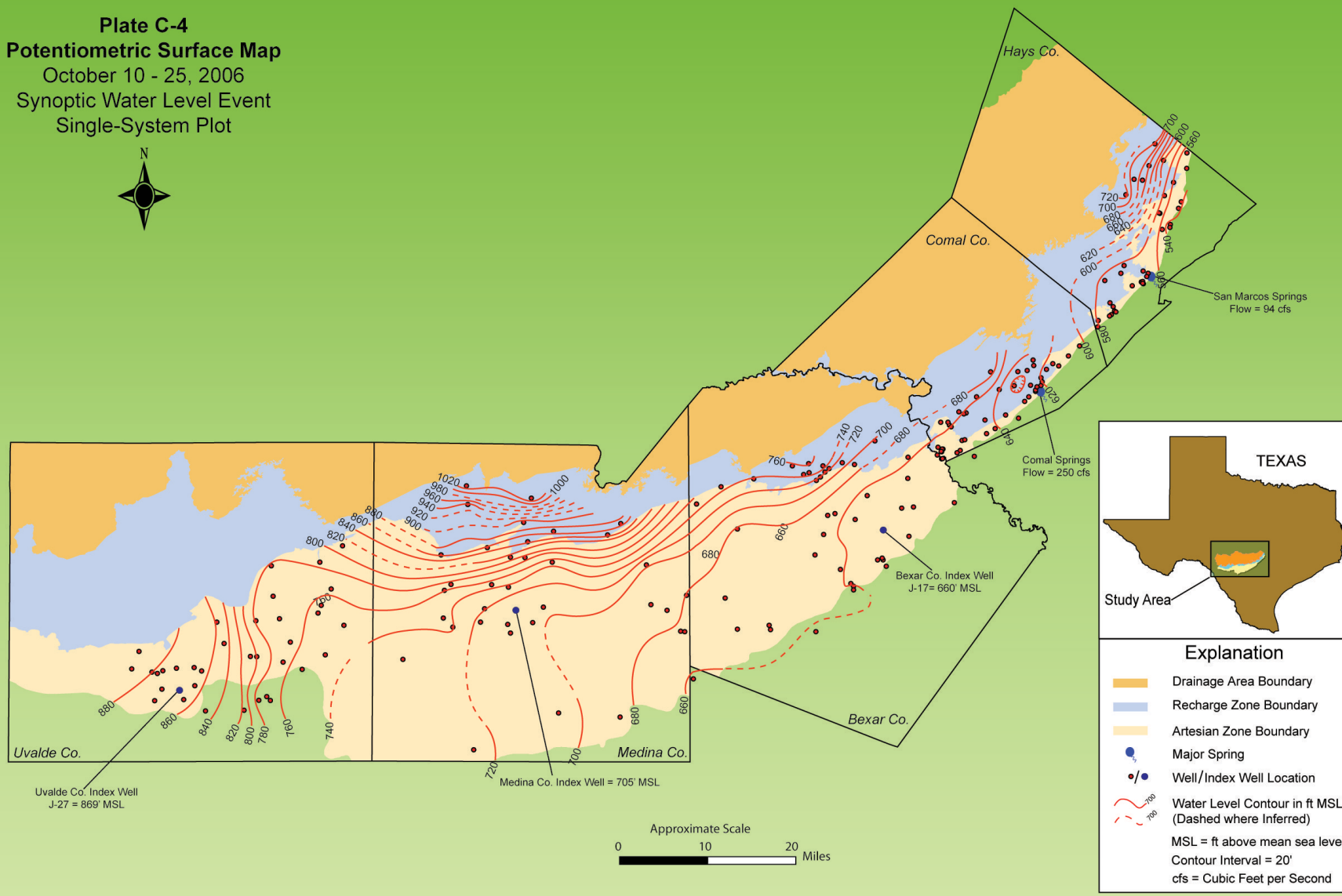


Plate C-5
Potentiometric Surface Map
 January 22 - February 9, 2007
 Focused Synoptic Water Level Event
 Single-System Plot
 Comal and Hays Counties

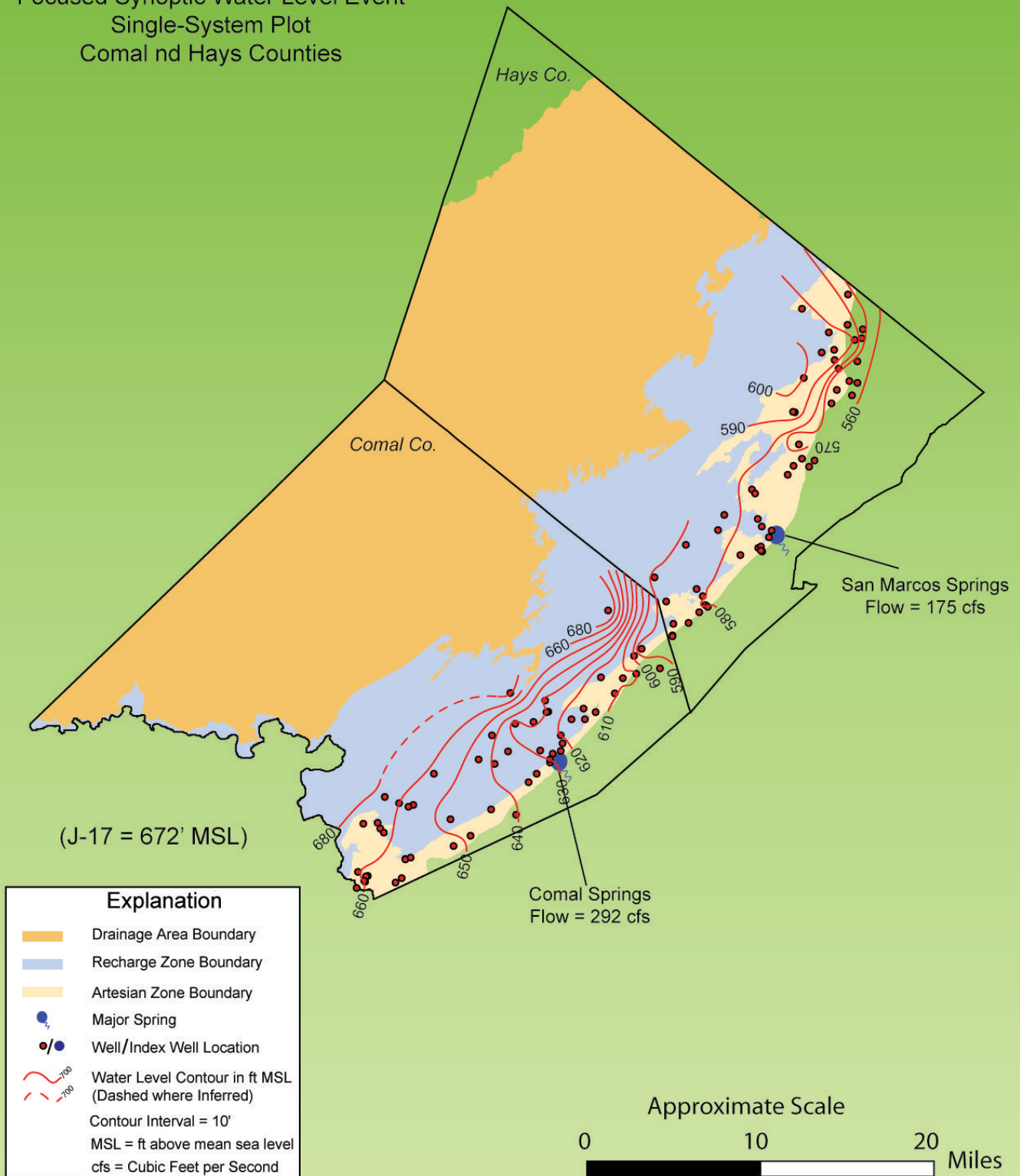


Plate C-6
Potentiometric Surface Map
 July 9 - August 1, 2007
 Synoptic Water Level Event
 Two-System Plot

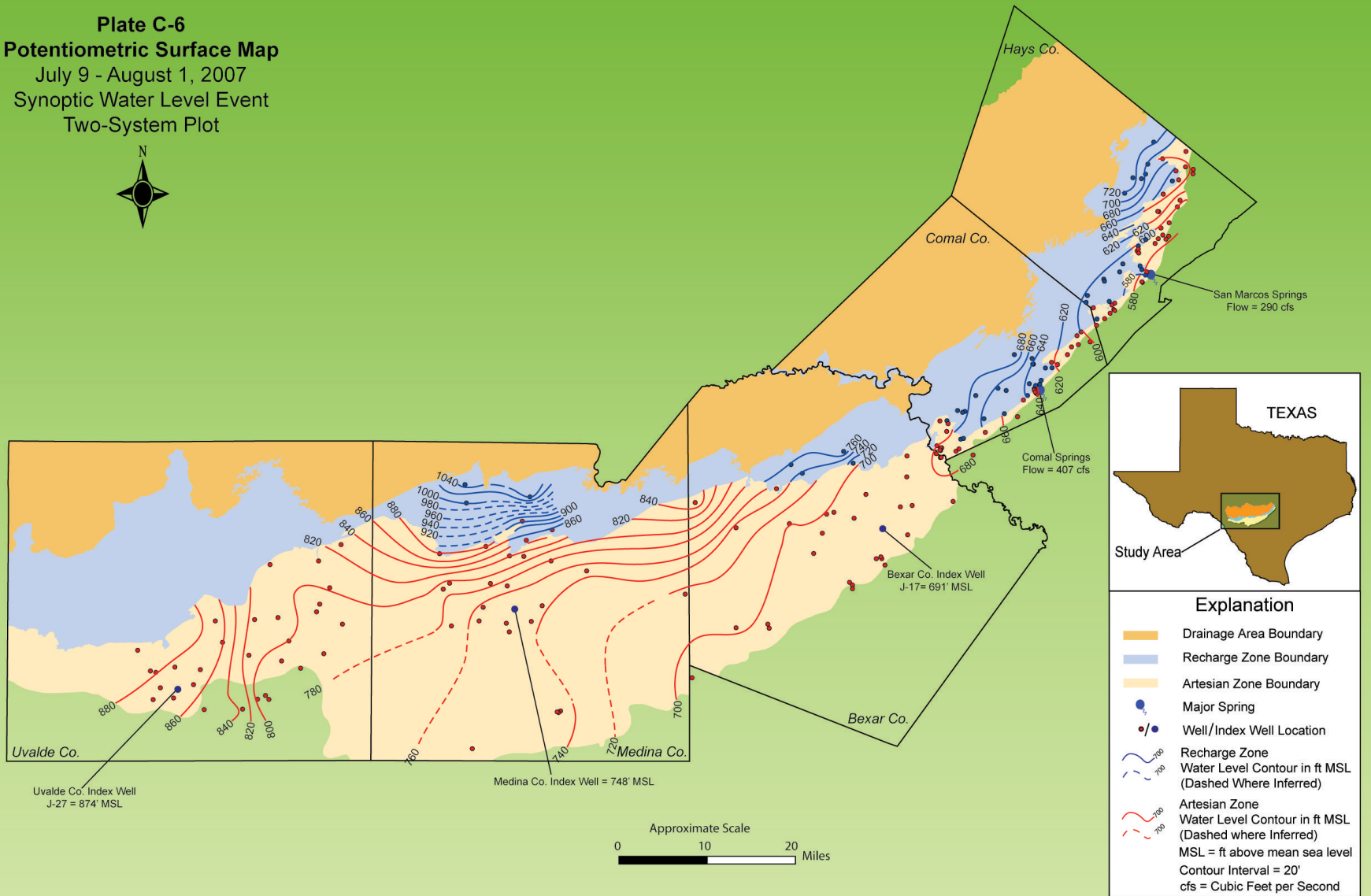


Plate C-7
Potentiometric Surface Map
 October 31 - November 8, 2007
 Focused Synoptic Water Level Event
 Single-System Plot
 Comal and Hays Counties

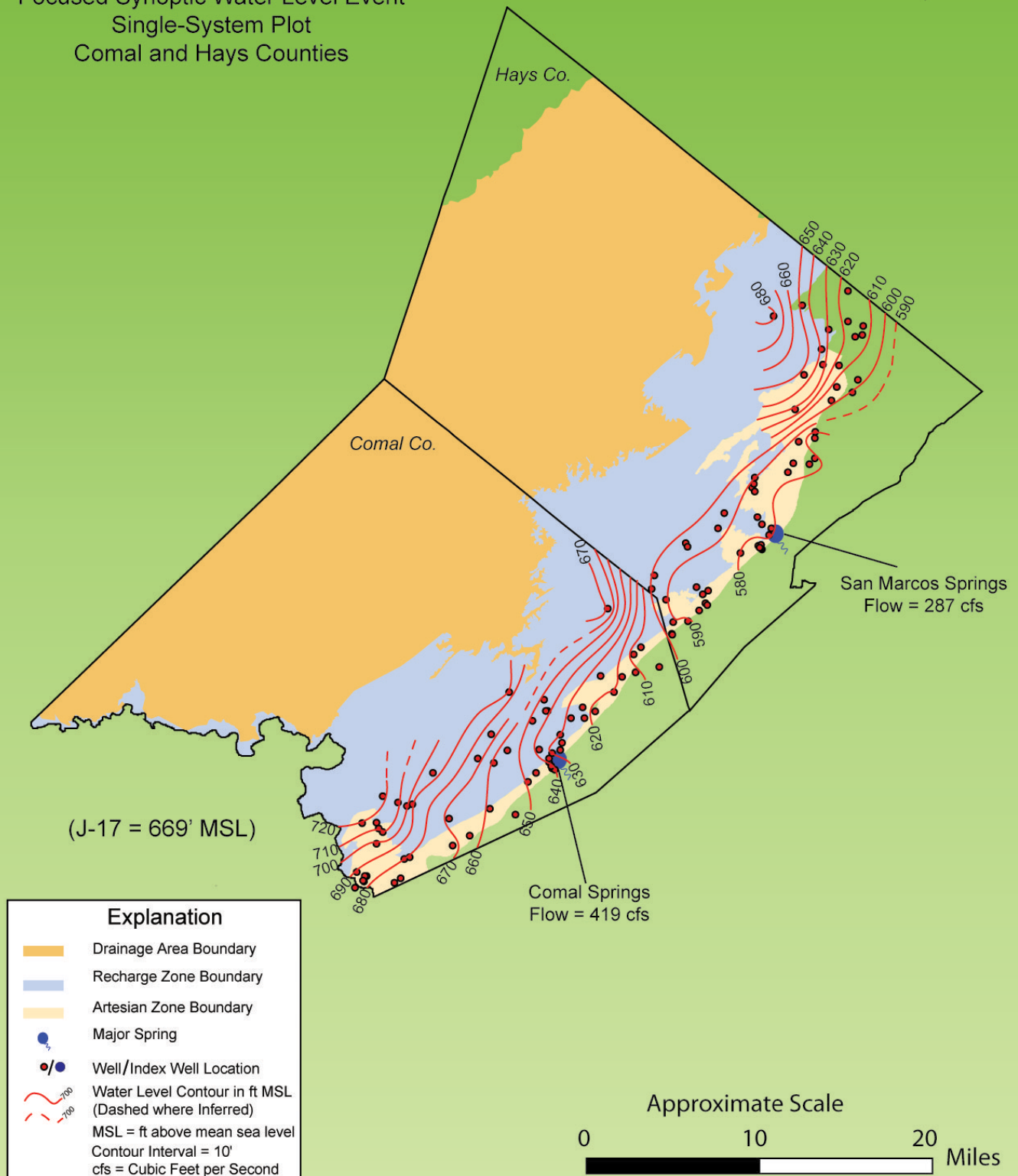


Plate C-8
Potentiometric Surface Map
 January 28 - February 8, 2008
 Focused Synoptic Water Level Event
 Single-System Plot
 Comal and Hays Counties

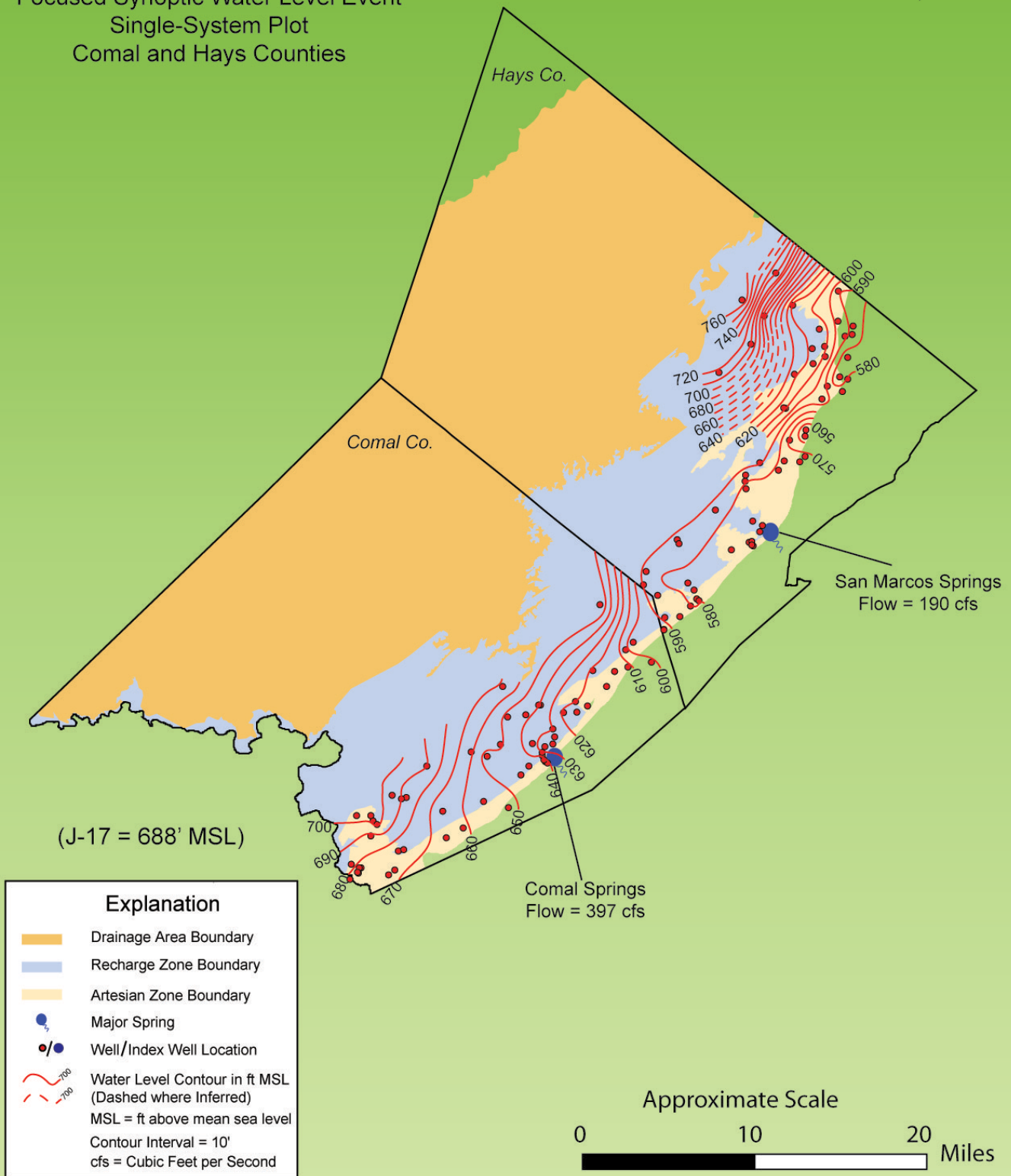


Plate C-9
Potentiometric Surface Map
 July 28 - August 7, 2008
 Synoptic Water Level Event
 Single-System Plot

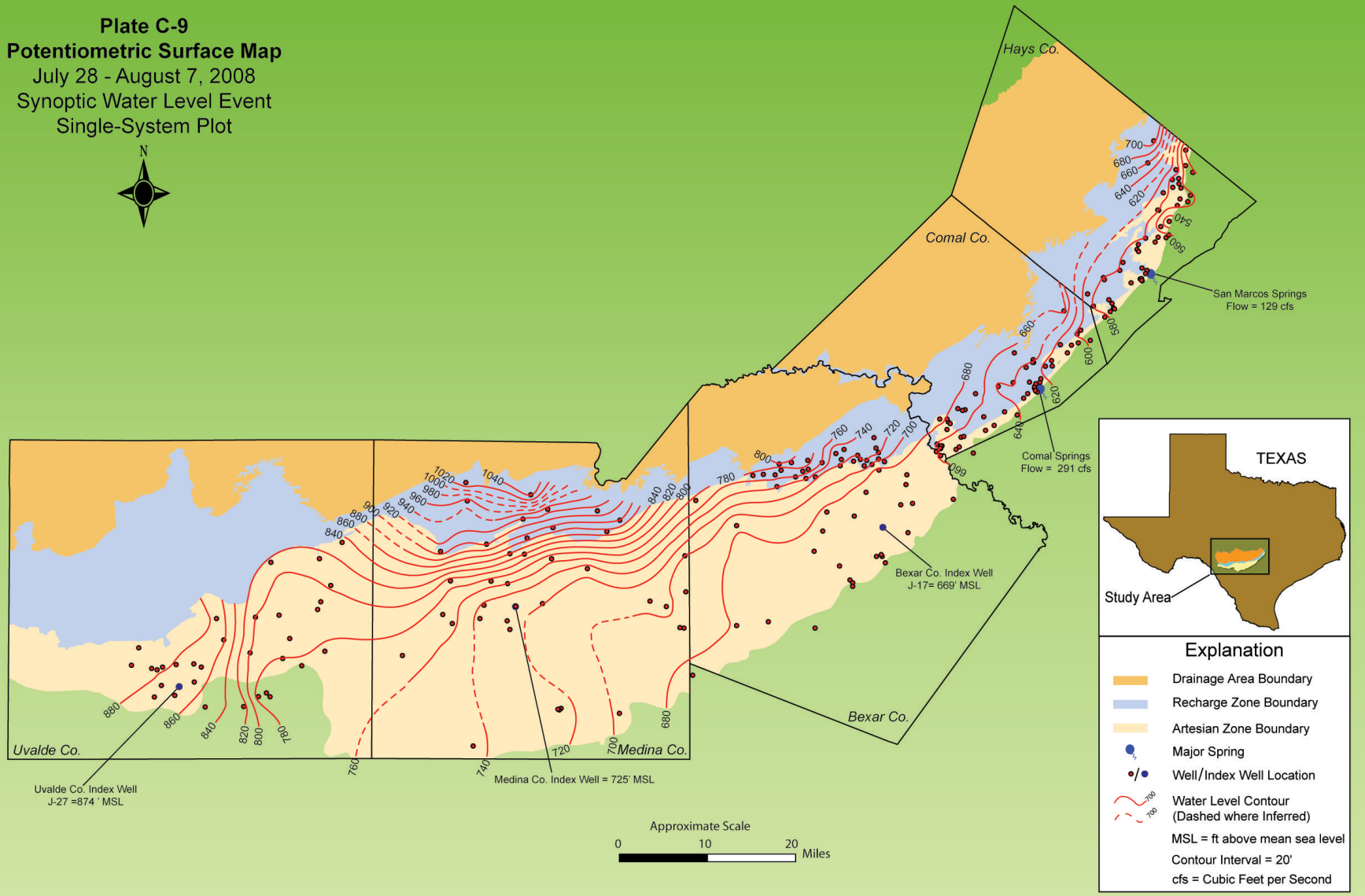


Plate C-10
Potentiometric Surface Map
 October 20 - November 3, 2008
 Focused Synoptic Water Level Event
 Single-System Plot
 Comal and Hays Counties

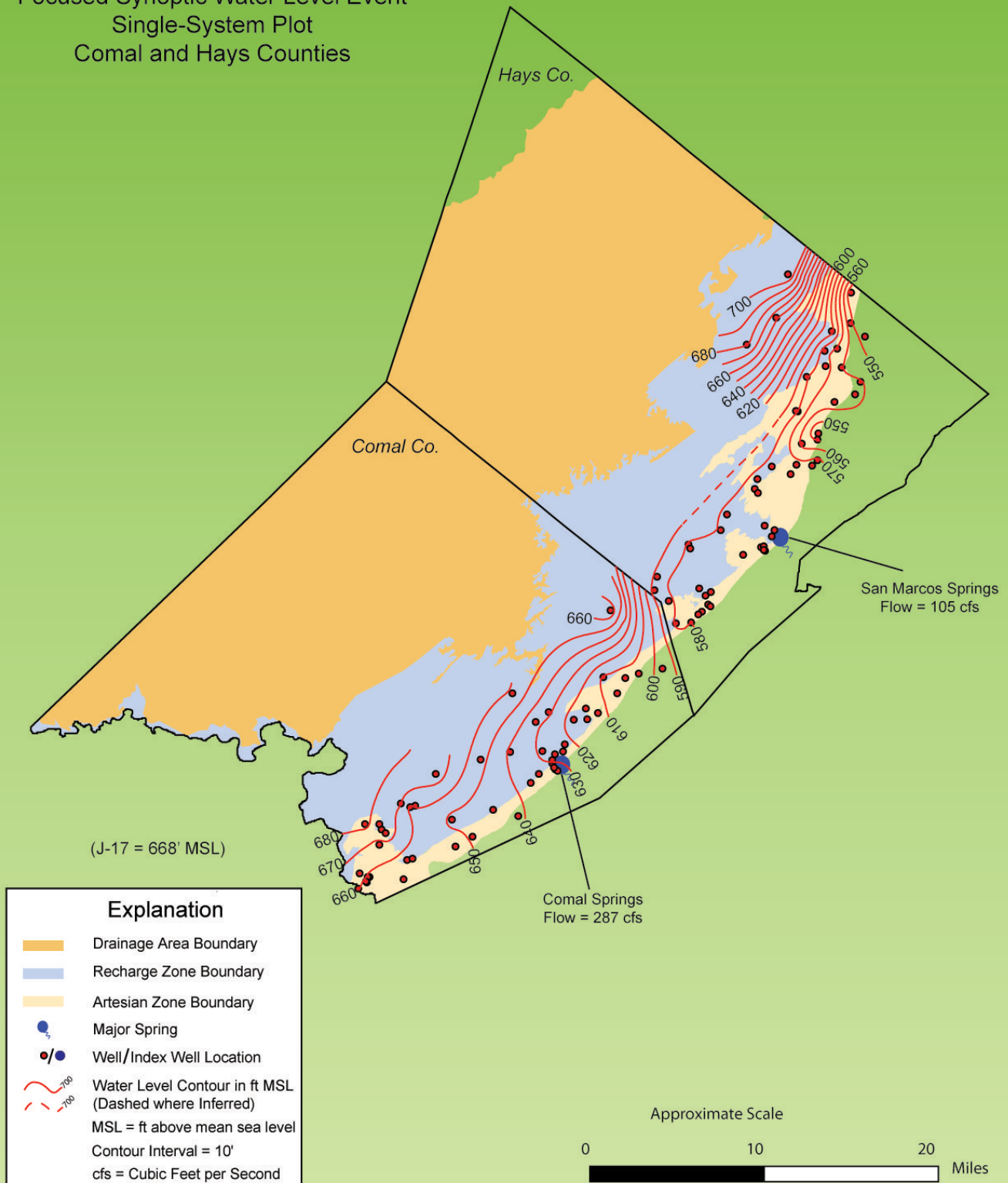
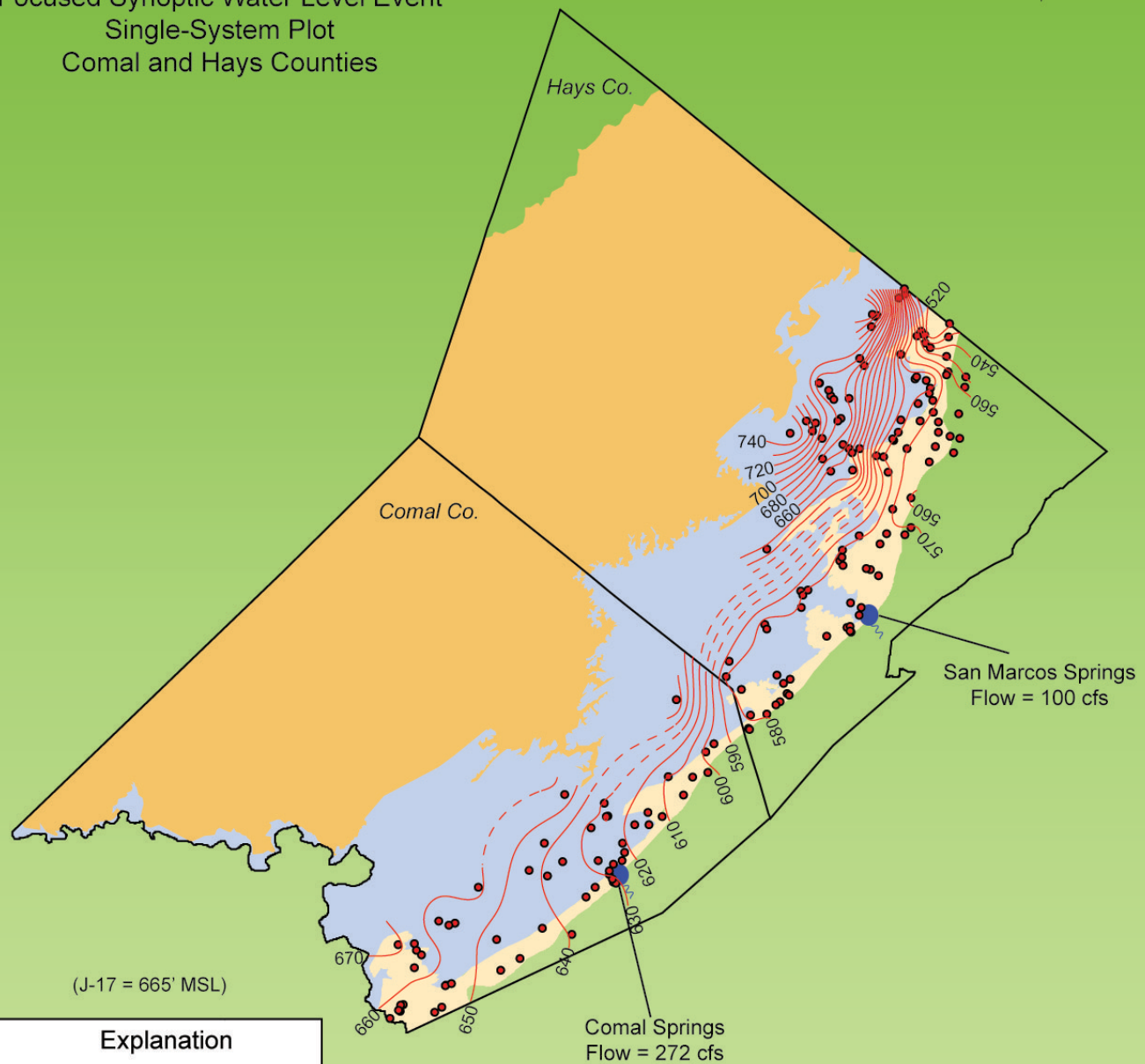


Plate C-11
Potentiometric Surface Map
 February 16 - February 27, 2009
 Focused Synoptic Water Level Event
 Single-System Plot
 Comal and Hays Counties



Explanation

- Drainage Area Boundary
- Recharge Zone Boundary
- Artesian Zone Boundary
- Major Spring
- Well/Index Well Location
- Water Level Contour in ft MSL
(Dashed where Inferred)
- MSL = ft above mean sea level
- Contour Interval = 10'
- cfs = Cubic Feet per Second

Approximate Scale



Plate C-12
Potentiometric Surface Map
 July 20 - August 5, 2009
 Synoptic Water Level Event
 Two-System Plot

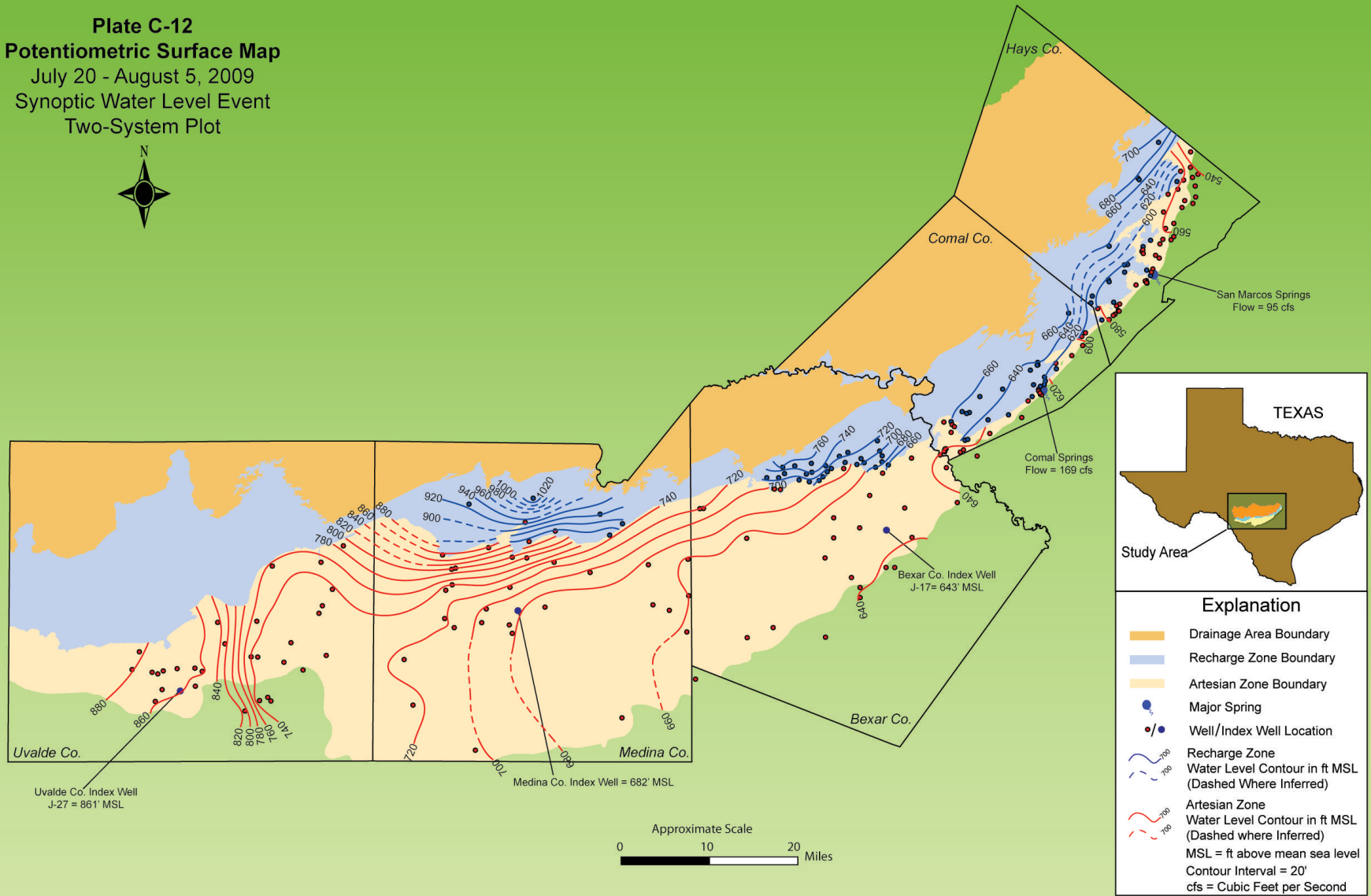
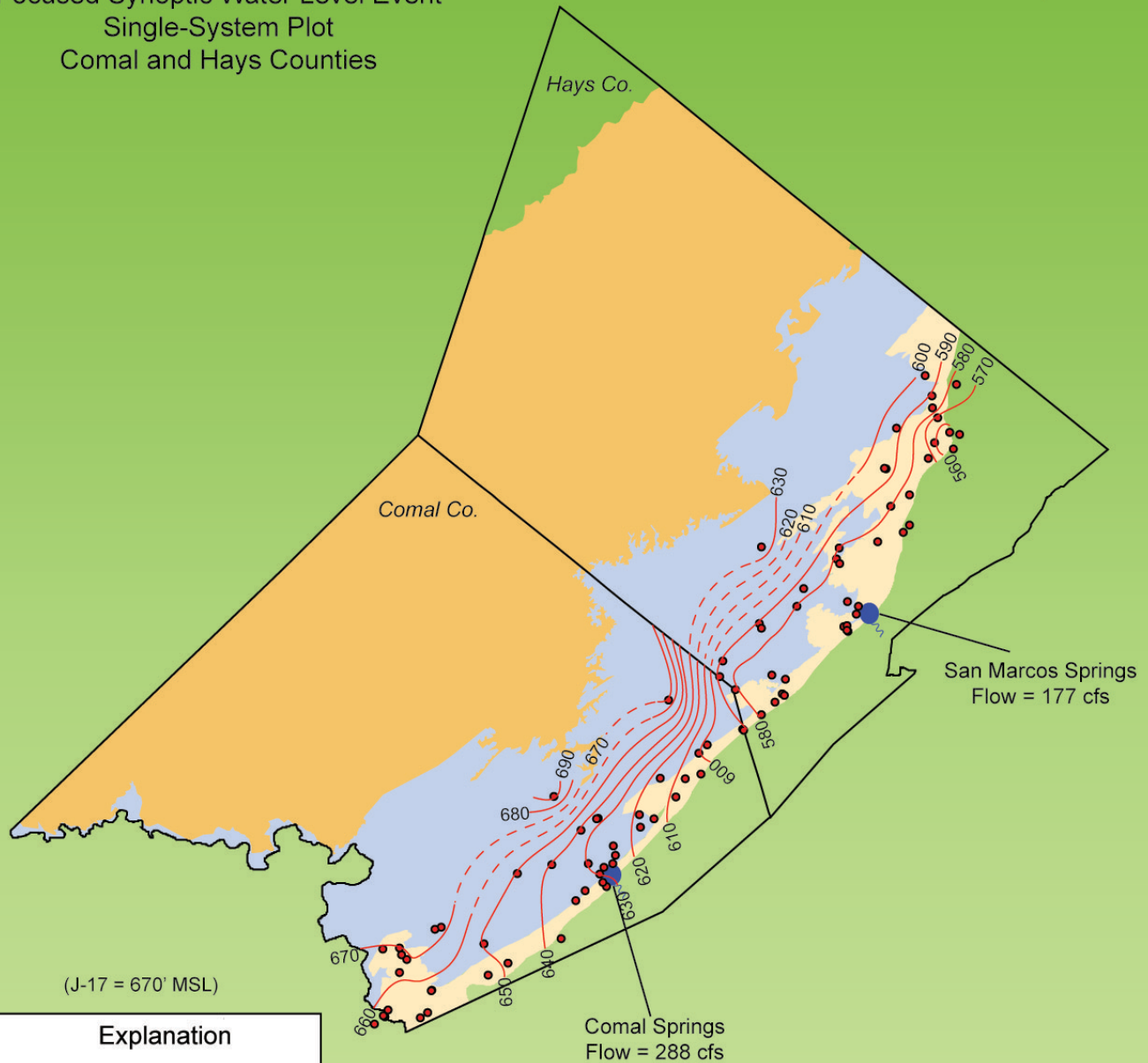


Plate C-13
Potentiometric Surface Map
 October 23 - November 6, 2009
 Focused Synoptic Water Level Event
 Single-System Plot
 Comal and Hays Counties



(J-17 = 670' MSL)

Explanation

- Drainage Area Boundary
- Recharge Zone Boundary
- Artesian Zone Boundary
- Major Spring
- Well/Index Well Location
- Water Level Contour in ft MSL
(Dashed where Inferred)
- MSL = ft above mean sea level
- Contour Interval = 10'
- cfs = Cubic Feet per Second

Approximate Scale



APPENDIX D

Texas Water Development Board Well Numbering System

Wells used in this project are identified mainly by the Texas Water Development Board (TWDB) well-numbering system, which was developed by TWDB in a comprehensive *Ground-Water Data Dictionary* for use throughout Texas (Nordstrom and Quincy, 1999). The well-numbering system was established to facilitate well locations and avoid duplication of well numbers.

Under this system, the state of Texas is divided into a grid of 1° quadrangles formed by degrees of latitude and longitude, and each quadrangle was given a two-digit number from 01 through 89. These are the first two digits of the well number.

Each 1° quadrangle is divided into 7½-minute quadrangles (similar to those on the 1:24,000 topographic quadrangle sheets), and each 7½-minute quadrangle is assigned another two-digit number from 01 through 64. These are the third and fourth digits of the well-identification number. Each 7½-minute quadrangle is divided into

2½-minute quadrangles numbered 1 through 9 for the fifth digit of the well number. As each well within the 2½-minute quadrangle is inventoried, a number from 01 to 99 is appended to the one-digit 2½-minute quadrangle for the last three digits of the well number (Groschen and Buszka, 1997). Each well record stored in the TWDB Ground Water Data System is identified by this unique, seven-digit number. The system allows for the numbering of as many as 99 wells in each 2½-minute quadrangle. An eighth space is provided for future expansion of the numbering system and will allow numbering of as many as 999 wells in each 2½-minute quadrangle (Nordstrom and Quincy, 1999).

In addition, a pseudo-identification number was applied to wells not registered or identified by the TWDB system. The previously mentioned process was applied to nonregistered wells. The only exception was that a two-letter code, from AA through ZZ, was appended to the one-digit 2½-minute quadrangle number to complete the last three digits of the well number.