



DRAFT: THE LOST PINES GROUNDWATER CONSERVATION DISTRICT HYDROGEOLOGIC MODEL: DATA COLLECTION AND METHODS SUMMARY REPORT

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SECTION 1: INTRODUCTION AND BACKGROUND

On January 18, 2023, a task order was issued formalizing the agreement between the Lost Pines Groundwater Conservation District ("LPGCD") and LRE Water ("LRE") for the development of a 3-Dimensional (3D) Hydrogeologic Model. This document serves as the Data Collection and Methods Summary Report for the development of the LPGCD 3D Hydrogeologic Model. This work aims to integrate, build upon, and ultimately enhance existing regional datasets with new hydrogeologic data. Specifically, this work includes a detailed stratigraphic analysis and uses innovative modeling techniques to better define the hydrogeologic framework for the major and minor aquifers of Lee and Bastrop counties. This data may later form the geologic framework for an updated groundwater flow model that utilizes the latest MODFLOW code (MODFLOW-6) and will be used for the local management of groundwater resources.

The stratigraphic units of interest in the LPGCD study area include the following from youngest to oldest: Jackson, Yegua, Cook Mountain, Sparta, Weches, Queen City, Reklaw, Carrizo, Calvert Bluff, Simsboro, and Hooper formations as well as the Midway Group. Collectively, these units serve as the primary water bearing and confining units of the Yegua-Jackson, Sparta, Queen City and Carrizo-Wilcox Aquifers.

Over a 12-month model development period, LRE performed the following tasks:

- Comprehensive literature review and data evaluation
- Consolidation of geologic data from state managed databases and prior regional studies
- Identification of additional geologic data, including geophysical logs, lithology logs, driller reports, scout tickets, and other historical reports from water, oil, and gas well records
- Interpretation of geophysical log data for the eleven stratigraphic units of interest underlying the study area
- Development a 3D Hydrogeologic Model
- Development of a draft well completion database for the LPGCD registered wells
- Development of a GIS geodatabase and organization of supporting source data into an easily transferable file structure

This comprehensive effort ensures that LPGCD has access to the best available science and data as required in Chapter 36 of the Texas Water Code for future scientific initiatives, regional and joint planning, groundwater permitting and management decisions.

1.1 STUDY AREA

The study area fully encompasses Bastrop and Lee counties and includes a three-mile buffer into the adjacent counties of Burleson, Caldwell, Fayette, Gonzales, Milam, Travis, Washington, and Williamson counties. Inclusion of the three-mile buffer into adjacent counties minimizes “edge effects” in modeling of the LPGCD management area of Lee and Bastrop counties (Figure 1).

The study area maintains a gently undulating topography that is characterized by broad terraced river valleys and land surface elevations that generally decrease in an eastward direction. Within the study area, Bastrop County is dissected by the Colorado River.

1.1.1 Lost Pines Groundwater Conservation District

In accordance with the 76th Texas Legislature in Senate Bill 1911 and ratified by the 77th Legislature in 2001, LPGCD was created. The LPGCD boundaries are coterminous with the area of Bastrop and Lee County (Figure 2), which reside in Groundwater Management Area 12 and are subdivided by regional planning areas K (Lower Colorado Regional Planning Group) and G (Brazos River Regional Planning Group) (LPGCD, 2023). LPGCD is bordered by the Post Oak Savannah Groundwater Conservation District to the north and east (Milam and Burleson counties), the Fayette County Groundwater Conservation District to the south (Fayette County), and the Gonzales County Underground Water Conservation District to the southwest (Caldwell County).

Administration through groundwater districts is the State’s preferred approach for groundwater management (2 Tex. Admin. Code §36.0015). Groundwater conservation districts are required to develop a management plan and rules to govern the groundwater resources within their jurisdiction. The LPGCD stated mission is “to develop rules to provide protection to existing wells, prevent waste, promote conservation, provide a framework that will allow availability and accessibility of groundwater on a sustainable basis, protect the quality of the groundwater, maintain responsible local management of the aquifer resources beneath Bastrop and Lee counties, and operate the District in a fair and equitable manner”. (LPGCD, 2023) These powers and duties are derived from and conferred under Chapter 36 of the Texas Water Code and are to be administered using the best available science and data (2 Tex. Admin. Code §36.0015).

An additional responsibility of the LPGCD is participation in the Groundwater Management Area 12 joint planning process. The main purpose of the joint planning process is to establish desired future conditions (DFCs) for the relevant aquifers within each management area. The third round of joint planning culminated in 2021, with desired future conditions being established for the following aquifers within the LPGCD’s jurisdiction: Sparta, Queen City, Carrizo, Calvert Bluff, Simsboro, and Hooper. The Yegua-Jackson Aquifer, although within LPGCD, was not considered as a relevant aquifer during this planning period. Currently, the LPGCD is participating in the fourth round of joint planning which factors in new science, pumpage, and data collected since the prior planning period. New DFCs will be created and adopted in 2026 as part of the fourth planning round.

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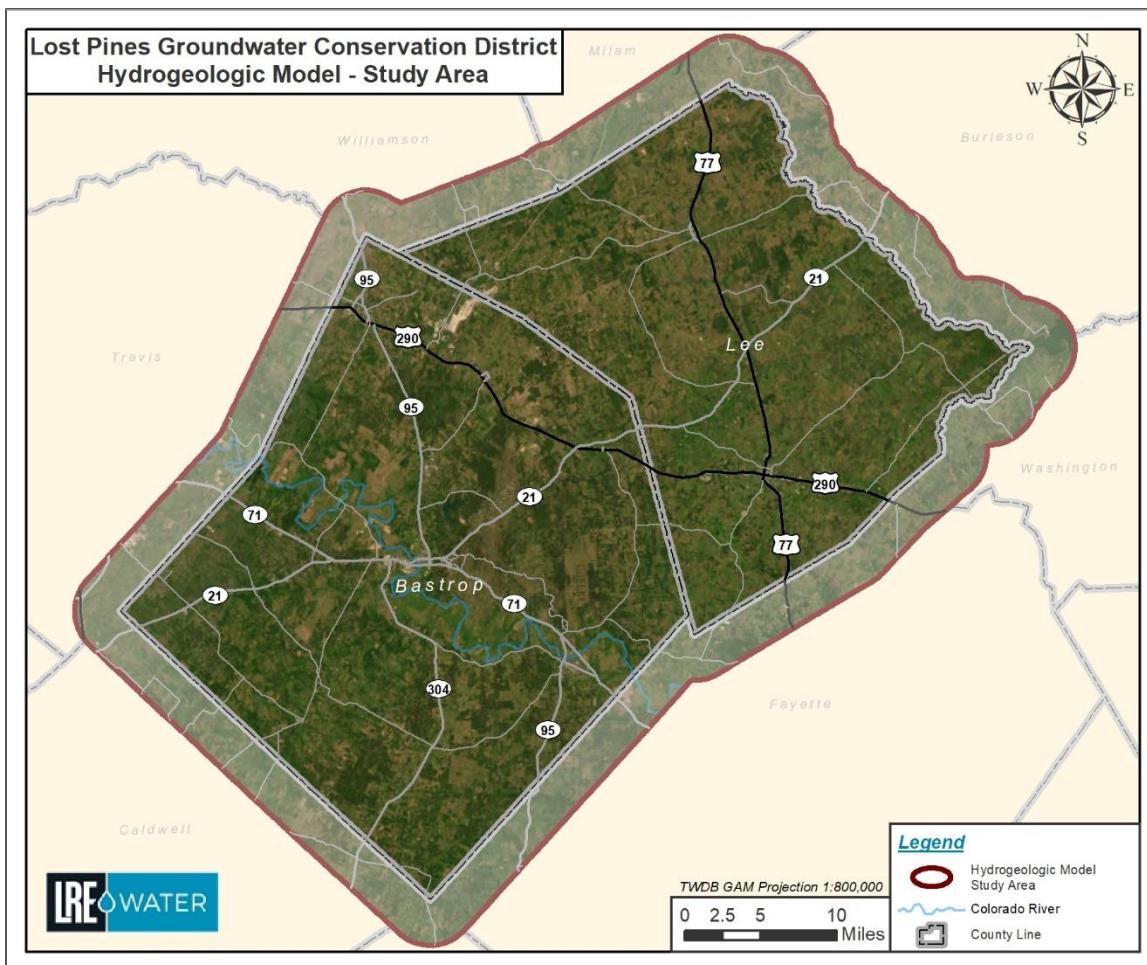


Figure 1 - Hydrogeologic Model Study Area.

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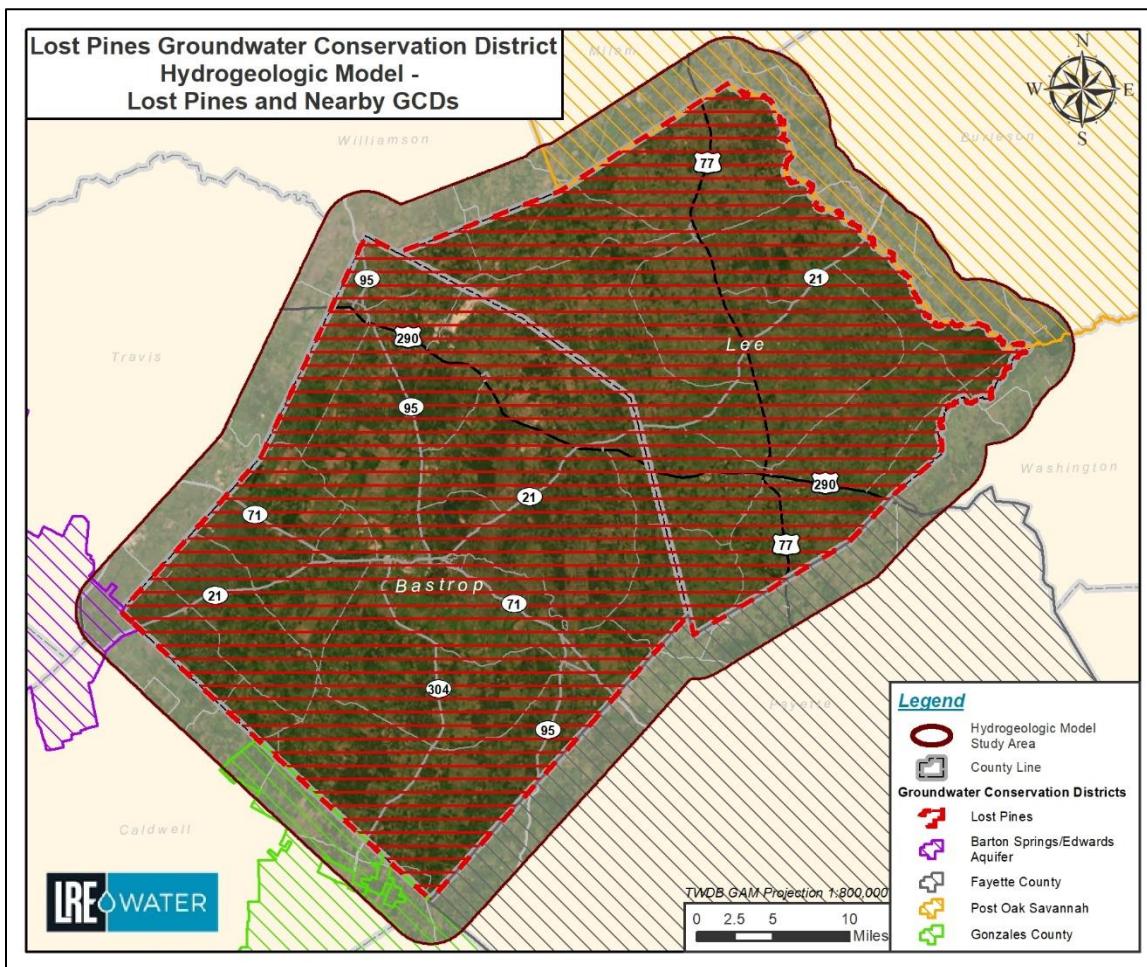


Figure 2 – Lost Pines and Nearby GCDs

1.2 HYDROGEOLOGIC SETTING

This section describes key factors related to the hydrogeology of the study area which are the most relevant for the development of the LPGCD 3D hydrogeologic model. Numerous studies and reports (Table 1) have described the aquifers across Lee and Bastrop counties. Absent from these discussions, however, is a complete and detailed hydrogeologic model for the study area. This report describes the first effort to develop detailed stratigraphy and the first complete hydrogeologic model of the LPGCD study area.

The study area includes rocks and sediment that range in age from the Cretaceous to the Quaternary Period (Table 2). The Quaternary-aged rocks were created by active and/or recently active fluvial deposition. The Tertiary-aged rocks were deposited between 33 and 65 million years ago (m.y.a.) as part of fluvial systems that meandered across the ancient landscape. The oldest rocks were deposited over 65 m.y.a. and are found within the Cretaceous-aged Navarro Group.

1.2.1 Major and Minor Aquifers

The study area uniquely traverses the updip (outcrop) and downdip (subcrop) section of several Texas Water Development Board (TWDB) defined major and minor aquifer systems: Carrizo-Wilcox, Queen City, Sparta, and Yegua-Jackson (Figure 3, Figure 4). These systems generally outcrop along narrow northeasterly trending belts that collectively thicken towards the Gulf Coast as alternating shale, clay and sand depositional systems (Young and others, 2018). These systems are subdivided and distinguishable from one another by changes in lithology, as described in Table 2.

1.2.2 Geologic Atlas of Texas Surface Geology

Corresponding aquifer outcrop areas are visible in Figure 5, which illustrates the Geologic Atlas of Texas (GAT) surface geology (outcrop areas) within the study area. Figure 5 also shows the Quaternary alluvial, terrace, and gravel deposits which provide pathways for shallow groundwater flow. The study area also includes the less relevant Taylor Marl, Willis, and Catahoula formations. Although the latter formations exist within the study area, they serve as insignificant sources of groundwater within the study area and were therefore viewed as inconsequential to the hydrogeologic model development.

1.2.3 Regional Faulting

Interspersed across the study area are a series of faults that collectively form the regional Milano Fault Zone (Figure 6). This laterally extensive fault system spans the study area from southwest Bastrop County to northeast Lee County along a northeasterly trend. Locally, the fault system can be subdivided into three separate structural systems: the Kovar Complex, the Paige Graben, and the Tanglewood Graben (Young and others, 2018).

Within Bastrop County, the Kovar Complex is best described as a series of normal down stepping faults towards the Gulf Coast with fault displacements that range from 100 to 500 feet. The Paige and Tanglewood Grabens are more complex systems comprised of numerous southeast and northwest downward faults with individual offsets that collectively provide between 100 and 700

feet of vertical offsets. Young and others (2018) demonstrated how these fault systems can create both missing and repeated sections as subsurface geology is displaced. Additionally, aquifer pump test evidence suggests that faults within the study area may operate as barriers to lateral flow (Ewing and Young, 2018).

Table 1 – Prior groundwater studies in Bastrop and Lee counties.

Report	Summary	Source
Ground-Water Resources of Lee County, Texas	General overview of the groundwater resources of Lee County, Texas	Thompson (1966)
Ground-Water Resources of Bastrop County, Texas	General overview of the groundwater resources of Bastrop County, Texas	Follett (1970)
The Wilcox Group and Carrizo Sand (Paleogene) in East-Central Texas: Depositional Systems and Deep-Basin Lignite	Evaluation of the Wilcox Group and Carrizo Sand depositional systems and lignite seams.	Ayers and Lewis (1985)
Groundwater Availability in the Carrizo-Wilcox Aquifer in Central Texas – Numerical Simulations of 200 through 2050 Withdrawal Projections	Developed a numerical model to assess possible hydrologic effects of groundwater withdrawal scenarios.	Dutton (1999)
Transmissivity, Hydraulic Conductivity, and Storativity of the Carrizo-Wilcox Aquifer in Texas	Developed a aquifer test / hydraulic property database for the Carrizo-Wilcox Aquifer.	Mace and others (2000)
Groundwater Availability Model for the Central Part of the Carrizo-Wilcox Aquifer in Texas	Documentation report for the Central Carrizo-Wilcox Aquifer GAM	Dutton and others (2003)
Groundwater availability models for the Queen City and Sparta aquifers	Documentation report for the development of the Queen City and Sparta Aquifers GAM.	Kelley and others (2004)
Structure of the Yegua-Jackson Aquifer of the Texas Gulf Coastal Plain	Documents the structure, lithology and depositional framework for the Yegua-Jackson Aquifer	Knox and others (2007)
Groundwater availability model for the Yegua-Jackson Aquifer	Documents the development of the Yegua-Jackson Groundwater Availability Model	Deeds and others (2010)
Groundwater availability model for the central portion of the Sparta, Queen City, and Carrizo-Wilcox aquifers	Documentation report for the development of the updated Sparta, Queen City and Carrizo-Wilcox Aquifers GAM.	Young and others (2018)
The Milano Fault System, Central Texas: Structure and Implications for the Simsboro Aquifer	Review of the Milano Fault Zone and identified boundary conditions to flow in the Carrizo-Wilcox Aquifer system.	Ewing and Young (2018)
GMA 12 update to the groundwater availability model for the central portion of the Sparta, Queen City, and Carrizo-Wilcox aquifers	Documentation for updates related to the updated Sparta, Queen City and Carrizo-Wilcox Aquifers GAM.	Young and others (2020)
Brackish groundwater in aquifers of the Upper Coastal Plains, Central Texas	Regional review of Brackish Groundwater potential within the Carrizo-Wilcox Aquifer (Bastrop)	Meyer and others (2020)
Brackish groundwater in the eastern portion of the Sparta Aquifer	Regional review of Brackish Groundwater potential within the East Texas Sparta Aquifer (Lee)	Laughlin and others (2023)

Table 2 – Study Area Stratigraphic Column (after Follett, 1972 and Thompson, 1966).

Period	Series / Epoch	Group	Geologic Unit	Lithology Type	Hydrogeologic Unit
Quaternary	Holocene to Pleistocene		Alluvium	River gravels, sands, clays and terrace deposits.	Alluvial System
Tertiary	Pliocene (?)		Willis Formation	Fine to medium sand	Gulf Coast
	Miocene		Catahoula	Tuffaceous sand and sandstone interbedded with clay, silt and tuff.	
	Jackson	Manning		Clay, Silt, volcanic ash, tuffaceous sand and shale and benthonic clay.	Yegua-Jackson Aquifer
			Wellborn		
			Caddell		
	Eocene	Yegua		Medium to fine sand, silt, clay, gypsum, some lignite	Aquitard
			Cook Mountain	Clay and small amounts of sand, sandstone, limestone, glauconite, gypsum	
		Sparta Sand		Fine to medium sand with some clay	Sparta Sand Aquifer
			Weches	Iron-bearing glauconitic clay and sand	Aquitard
		Queen City		Massive to thin-bedded fine to medium sand, clay and some conglomerate	Queen City Sand Aquifer
			Reklaw	Gluconitic sand and silt in lower section, clay, and thin sandstone beds in the upper	Aquitard
		Carrizo		Fine to cross-bedded sand and some thin beds of sandstone and clay	Carrizo-Wilcox Aquifer
			Calvert Bluff	Interbedded lignite and carbonaceous sandstone and shales	
	Wilcox	Simsboro Sand		Massive, fine- to medium-grained, well-sorted sandstone	
			Hooper	Interbedded lignite and carbonaceous sandstone and shale.	
	Paleocene	Midway		Clay, silt, glauconitic sand, and thin beds of limestone and sandstone	Aquitard
Cretaceous	Gulf	Navarro	Taylor Marl	Clay and silt, some sandstone	

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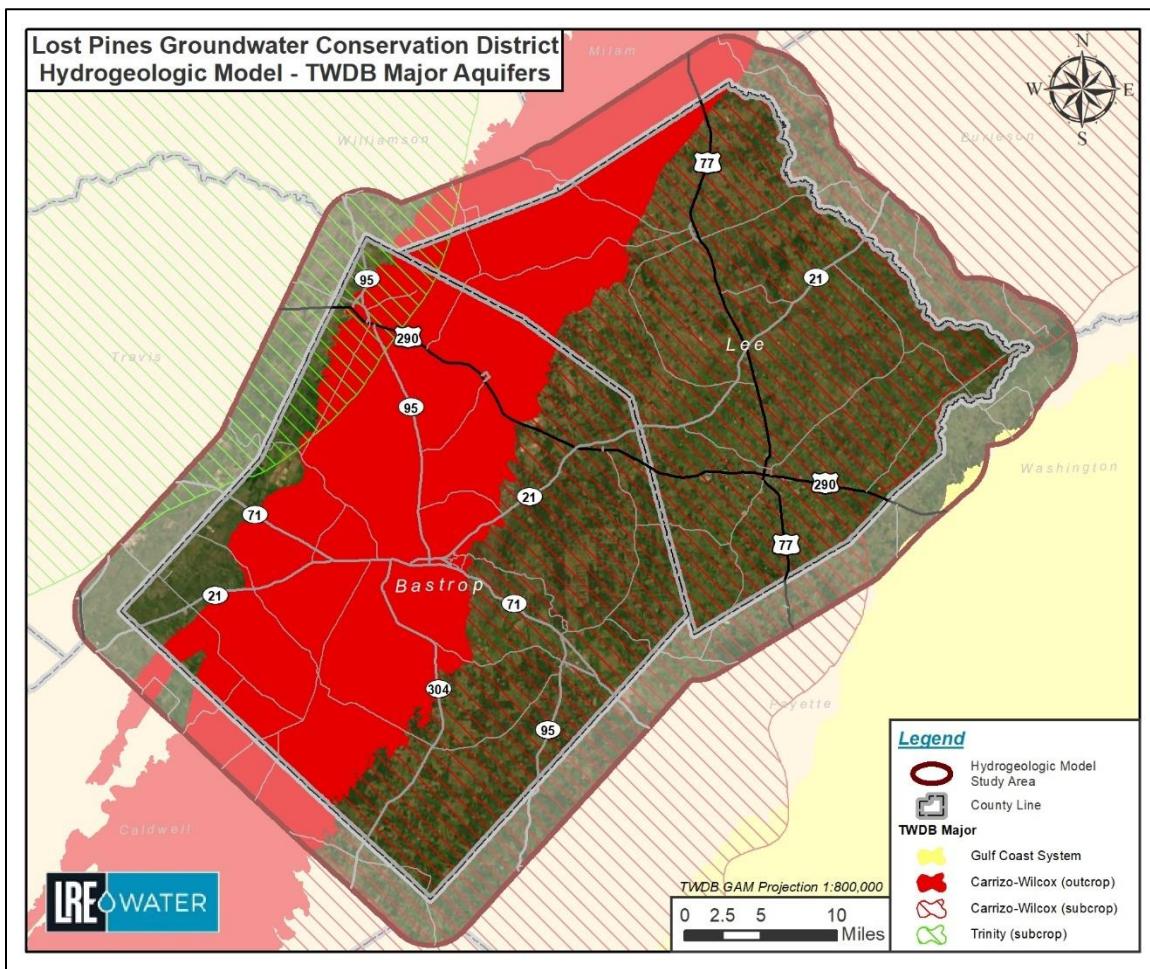


Figure 3 – TWDB major aquifers across Lee and Bastrop counties.

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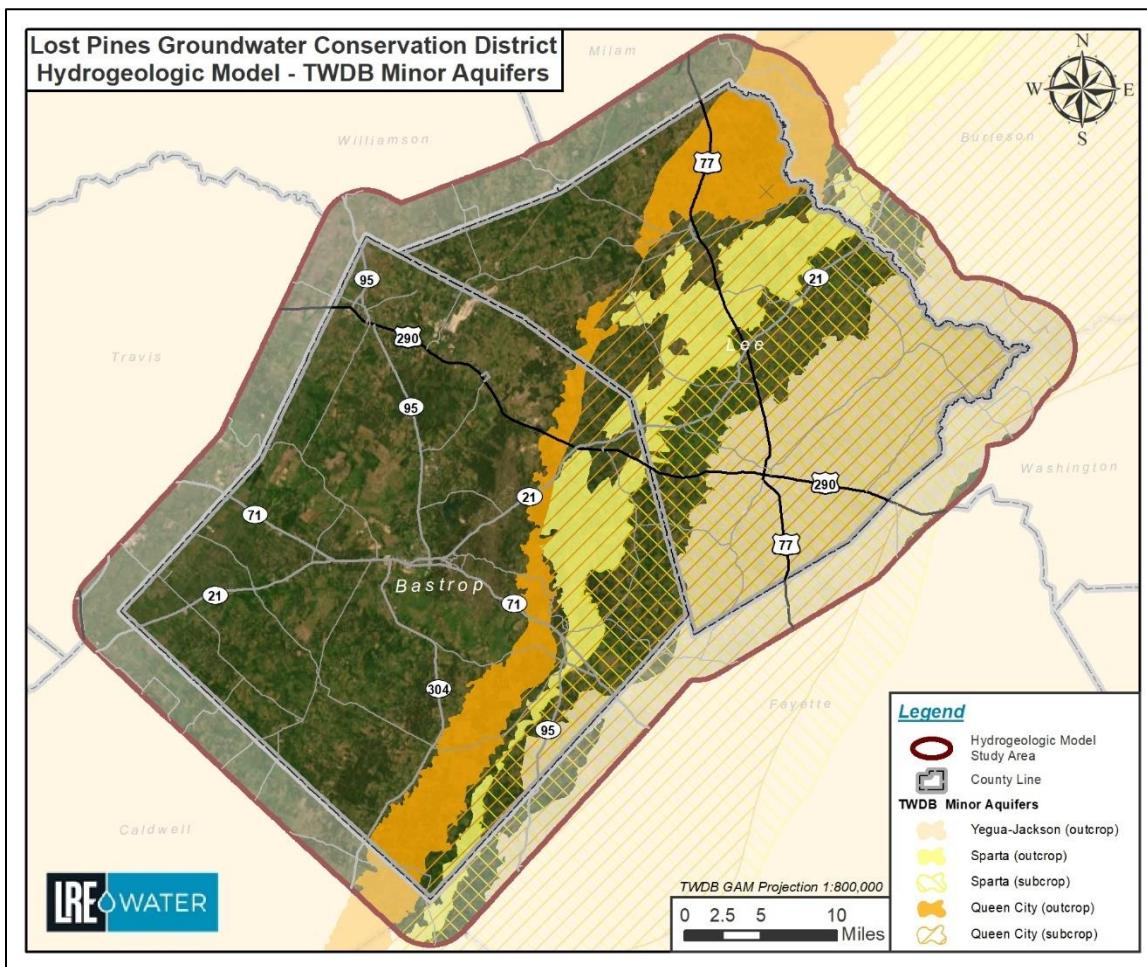


Figure 4 - TWDB minor aquifers across Lee and Bastrop counties.

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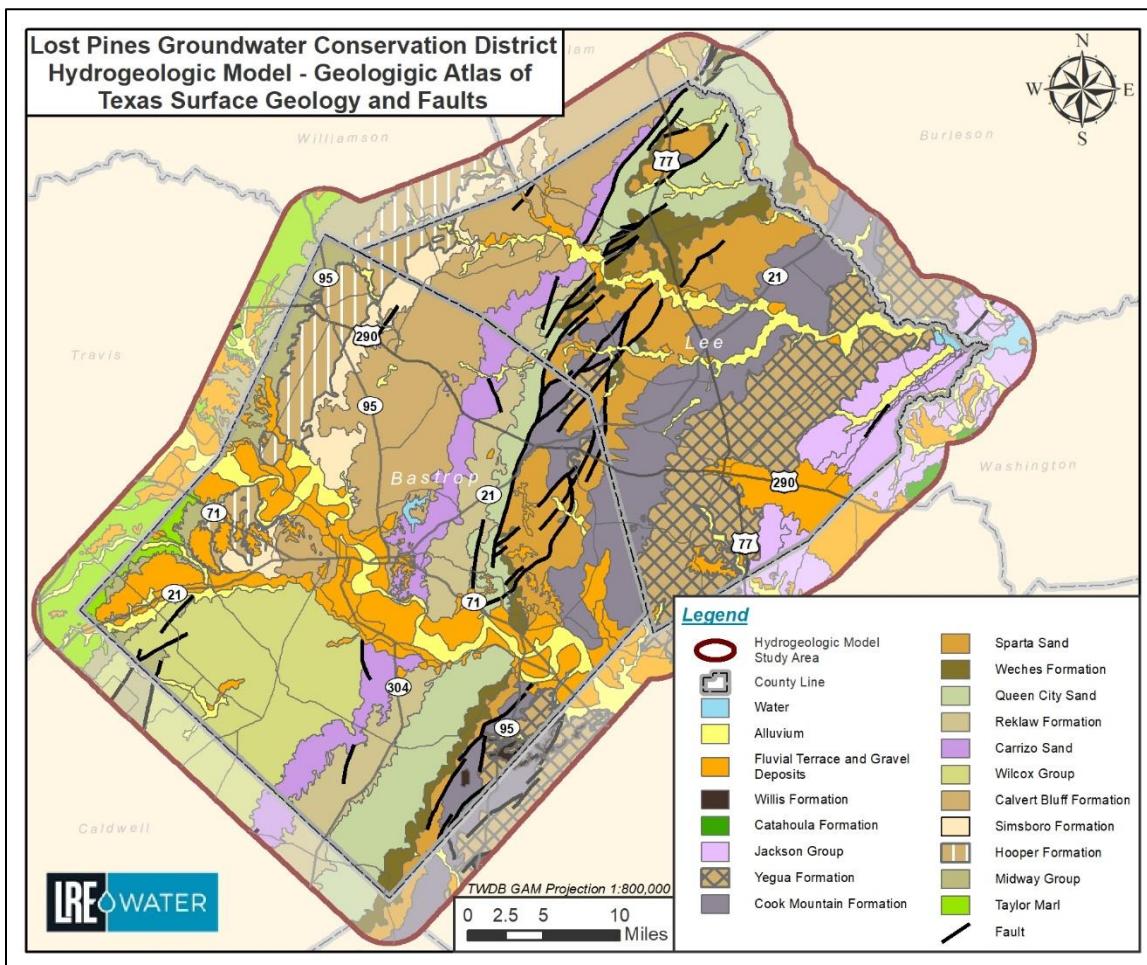


Figure 5 - Geologic Atlas of Texas surface geology and faults of Lee and Bastrop counties (Stoeser and others, 2007).

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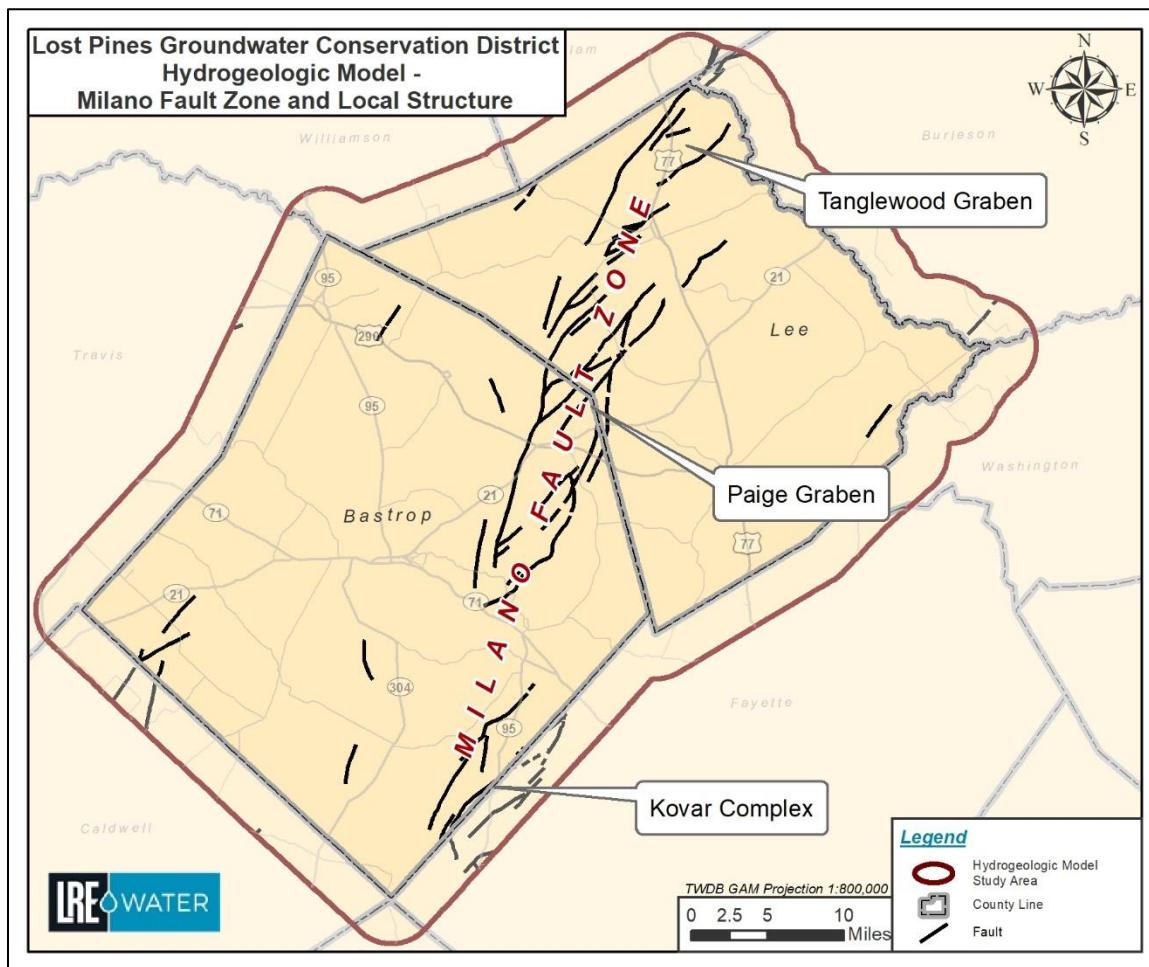


Figure 6 - Milano Fault Zone and local structure (Young and others, 2018).

SECTION 2: DATA AND METHODS

2.1 DATA COLLECTION

To initiate this study, the identification and review of previous works related to the LPGCD study area was conducted. This process involved “data mining” pertinent geologic and stratigraphic data from the numerous TWDB groundwater availability model (GAM) and Brackish Resources Aquifer Characterization System (BRACS) studies that overlap within the study area (Figure 7, Table 1). GAM, GAM updates, and conceptual model reports for the Yegua-Jackson, Sparta, Queen City, and Carrizo-Wilcox aquifers (Kelley et al., 2004; Deeds et al., 2010; Young et al., 2018; Young et al., 2020), and TWDB BRACS studies by Meyer et al. (2020) and Laughlin et al. (2023) were reviewed.

Over 600 unique well control points were extracted from these sources to establish an existing well control dataset (Figure 8). This dataset functioned as the initial stratigraphic framework for the LPGCD 3D hydrogeologic model. In this dataset, key limitations identified were: (1) data gaps in local well control from these regional studies, (2) inconsistencies or variations in correlated formation tops between some studies, and (3) missing formation tops within a logged section either not correlated or reported. One of the primary goals of the 3D hydrogeologic model is to improve upon these limitations.

To supplement the existing well control dataset, a search was carried out to enhance well control coverage in areas with data gaps and to improve data resolution around areas of interest (such as where known geologic faults occur). Supplemental well control points were identified from the TWDB BRACS and Bureau of Economic Geology Continuum databases. A total of 800 supplemental wells were identified as candidates for correlation and were organized in an acquired well control dataset (Figure 9). Only a subset of wells from this dataset were reviewed, due to time and budget constraints, however additional supplemental wells might eventually be evaluated as LPGCD needs evolve or site-specific issues arise.

2.2 STRATIGRAPHIC FRAMEWORK

Geophysical logs were used to assess the subsurface geology, determine the lateral extent, depth of occurrence, thickness, and vertical relationships between stratigraphic units. The term “geophysical logs” as used herein includes numerical and graphical results obtained from a variety of log tools. These log tools often measure spontaneous potential, gamma ray, resistivity, and neutron porosity. Each tool uniquely records variations in rock type and aquifer properties within the vertical wellbore, influenced by the physical properties of adjacent rock and/or fluids. These variations provide insights into the near-wellbore subsurface geology and were used to identify stratigraphic units in this study.

Stratigraphic contacts, defined as the top and/or base of key rock units, were interpreted for the following layers listed from youngest to oldest: Jackson, Yegua, Cook Mountain, Sparta, Weches, Queen City, Reklaw, Carrizo, Calvert Bluff, Simsboro, Hooper, Midway and Navarro Group. Our detailed review of geologic descriptions (Table 2) and key geophysical “type logs” from various

studies, including Ayers and Lewis (1985), Young et al. (2018), Meyers et al. (2020), and Laughlin et al. (2023), facilitated the comprehension and correlation of stratigraphic units across the study area. A “type log” is a well-studied and documented log that is used as a reference for correlating data across an area (Hunt and others, 2020).

One of the most well-studied Carrizo-Wilcox “type log” examples is found in Ayers and Lewis (1985) and is provided as a reference in Figure 10. This composite log example demonstrates the different geophysical log responses associated with the spontaneous potential, resistivity, and conductivity log curves. It provided the basis for many of our geophysical log interpretations. As the spontaneous potential and resistivity curves move from left to right, downhole differences in sand and clay content can be inferred. Figure 10 demonstrates how these tools are used to identify the stratigraphic top and bottom contacts for the Carrizo Sand, Calvert Bluff, Simsboro, and Hooper formations. It is also possible to identify the bottom contact of the Reklaw formation and the top contact for the Midway Group.

2.3 PETRA™ GEOLOGIC MAPPING

To facilitate the organization of geophysical log data, log calibrations, and well correlations for the interpretation of stratigraphic contacts and preliminary geologic mapping, we utilized the geologic modeling software Petra™. The typical Petra™ workflow involved: 1) importing and calibrating log data, 2) evaluating the spatial distribution of existing well control data, 3) evaluation of existing geologic tops, 4) in-filling of missing data in existing wells, 5) identification of data gap areas, 6) incorporation of acquired well control data, and 7) interpretation of geologic tops on acquired well control data.

The initial step involved importing the existing and acquired well control datasets into Petra™. Geophysical logs were imported in both raster and digital (.LAS) log formats. The predominant format assessed were raster logs, which can be more simply described as scanned images of paper logs. These raster logs often exhibited variations in image quality. Common quality concerns include crooked logs, which stem from logs scanned at an angle, and paper stretching due to jamming or slipping during scanning. Each log image was thoroughly reviewed, and quality concerns were manually addressed with log correction tools within Petra™. The less common digital (.LAS) log formats were provided in a format that is free of image quality concerns. Newer logs are more likely to be available in digital (.LAS) format.

Once log quality issues were resolved, each raster log underwent “calibration.” Log calibration captures pertinent log header information, identifies log run scales, and includes “depth registration”. Depth registration is a manual process that assigns depth points on the log image that are used to convert measured log depths to an elevation in reference to sea-level. Log calibration is tedious, yet also one of the unique benefits of using Petra™ as it allows for each log to be uniformly compared with respect to scale and sea-level elevation. The digital (.LAS) log formats are automatically calibrated and therefore did not undergo this same procedure.

LRE prioritized reviewing all geophysical logs from the existing well control dataset, except from wells that were clustered near one another. Instead, these clustered well logs underwent a selective review to reduce workflow redundancies within a localized area. A comprehensive review of available stratigraphic tops from the existing dataset was conducted, and missing stratigraphic tops within the logged interval were then interpreted by LRE. In some instances, errors in the existing interpretations, or conflicting interpretations from the various studies, were identified. For this reason, we sometimes made modifications to the stratigraphic tops in this dataset by referencing nearby type logs and surrounding well control. All existing well control data reviewed by LRE is flagged as “LRE Reviewed”. Existing well control that was not reviewed is flagged as “Existing Control”.

Next, the acquired well dataset was used to enhance the data resolution of the existing, current regional hydrogeologic framework. This dataset played a significant role in expanding our knowledge of the aquifers within Lee and Bastrop counties. Selectively, we identified wells that supplemented the existing dataset for the best spatial resolution of the aquifer systems. This included identifying wells along key faults and structures (such as the Tanglewood Graben) and infilling data points in areas with limited existing control. Wells from this dataset are flagged as “LRE Acquired”. All flags are listed within the LPGCD Stratigraphic Well Control dataset.

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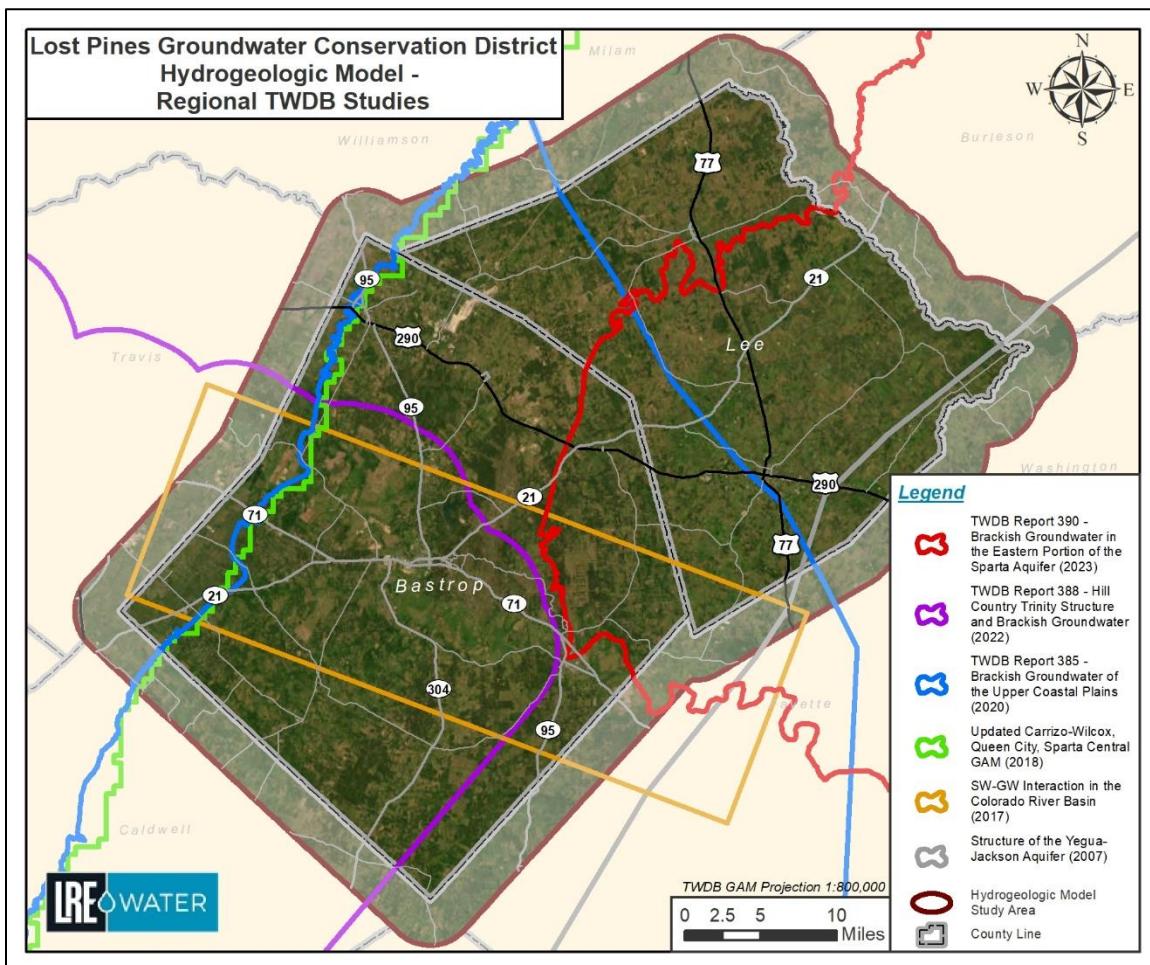


Figure 7 - Regional TWDB Studies with pertinent geologic data within the LPGCD study area.

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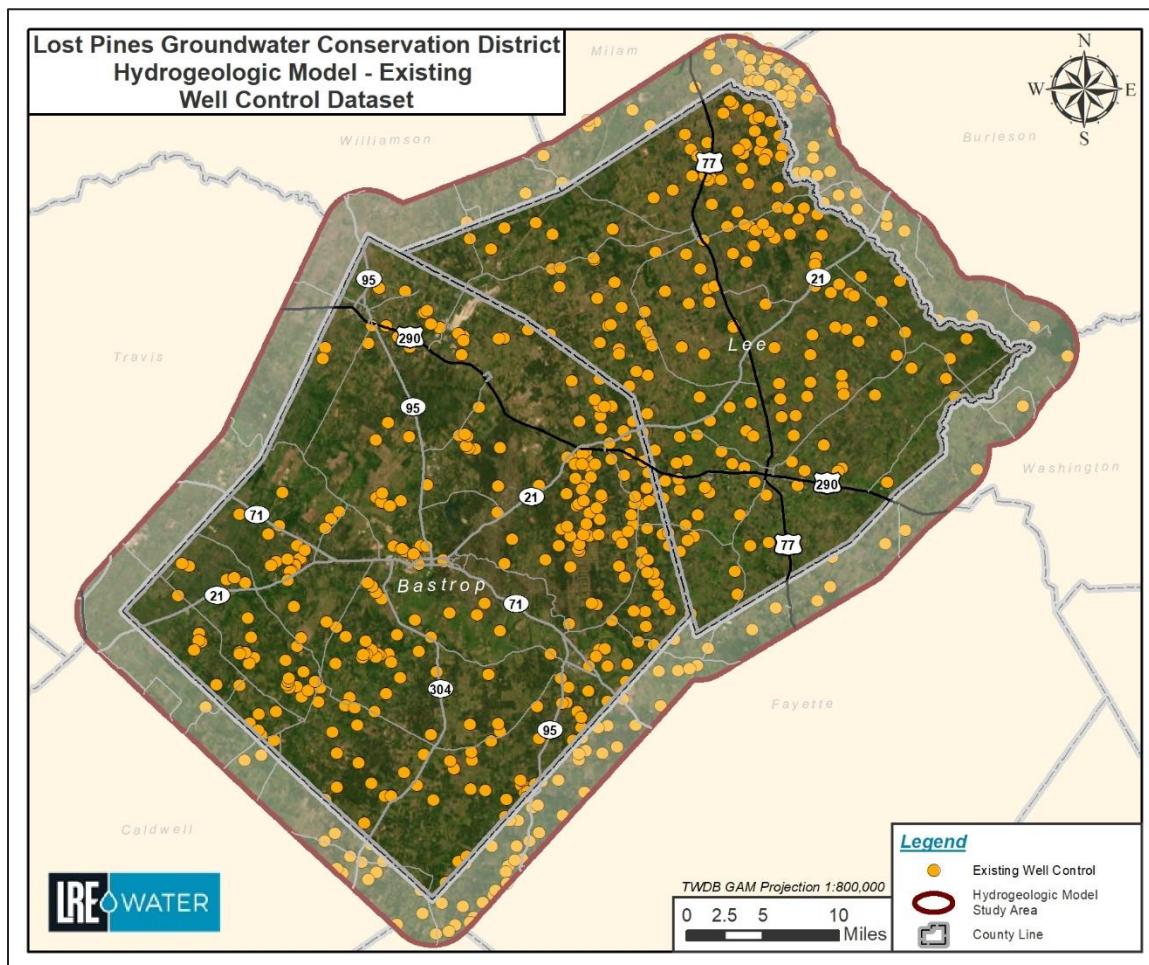


Figure 8 – Spatial distribution of the existing well control dataset.

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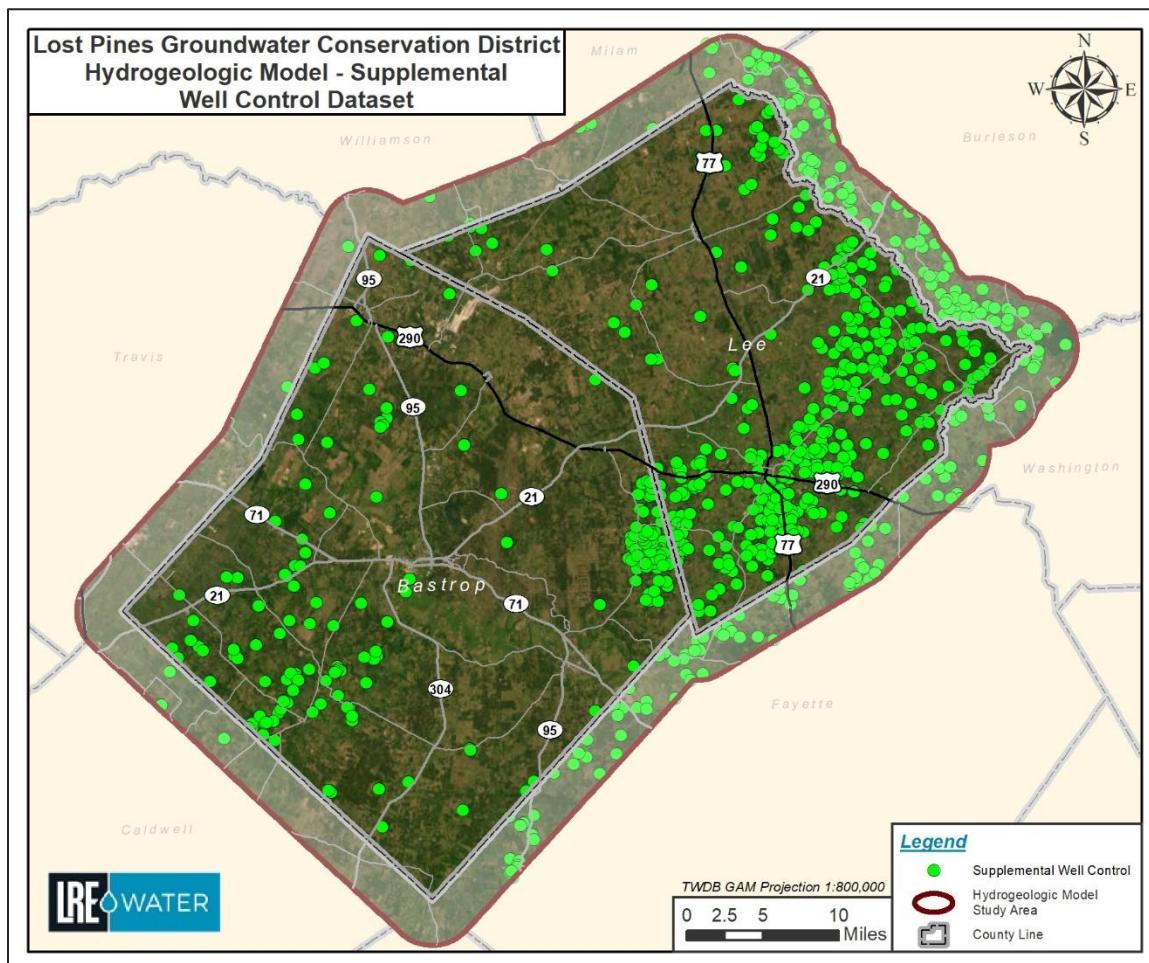


Figure 9 – Spatial Distribution of the Supplemental Well Control dataset.

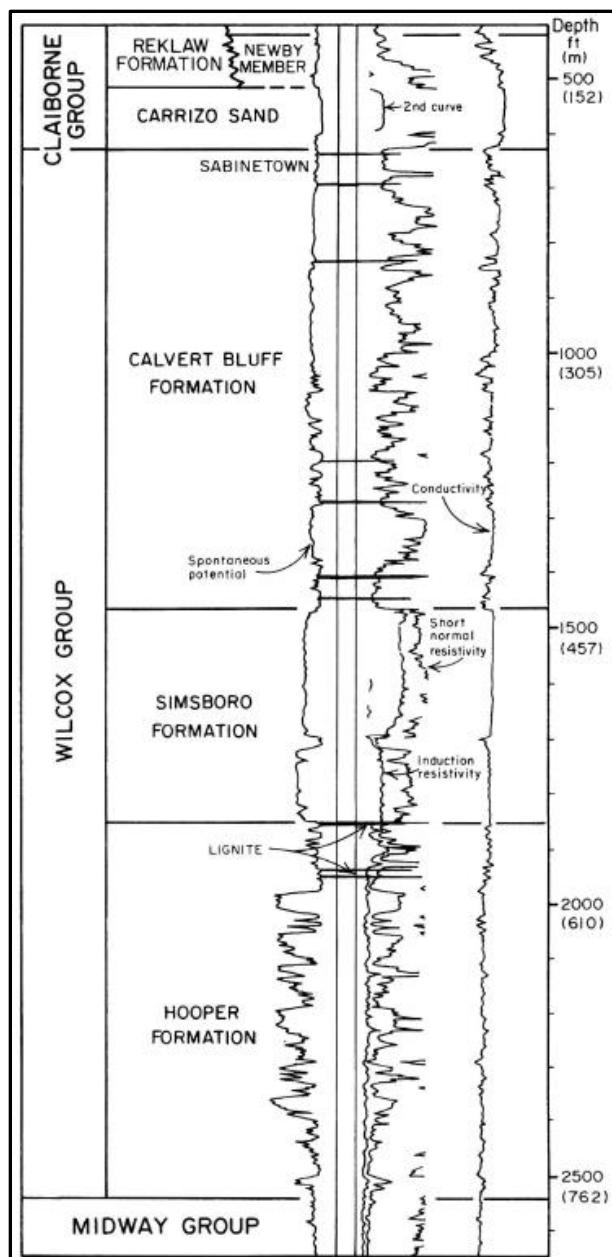


Figure 10 - Geophysical "Type Log" for the Carrizo-Wilcox Aquifer (Ayers and Lewis, 1985).

2.4 THREE-DIMENSIONAL (3D) HYDROGEOLOGIC MODEL

2.4.1 Three-Dimensional (3D) Model Framework

The 3D hydrogeologic model generally follows the groundwater model frameworks of Young and others (2019) (for the Carrizo-Wilcox, Queen City and Sparta Aquifers) and Deeds and others (2010) (for the Yegua-Jackson Aquifer). Additionally, the 3D hydrogeologic model fault framework follows the mapped faults of the Milano Fault Zone to the top of the Simsboro Formation from the 2018 Carrizo-Wilcox, Queen City, Sparta GAM update (Young and others, 2018). This refined fault system by Young and others (2018) is based on Barnes (1970, 1979, 1981), Stoeser and others (2007), and Ayers and Lewis (1985). LRE determined this fault system to be the most representative of the relevant faults within Lee and Bastrop counties. The smaller and less significant faults from this dataset were omitted in the development of the 3D model.

2.4.2 Three-Dimensional Model Layers

The 3D hydrogeologic model was developed as a 13-layer system to include the distinct hydrogeologic units within the Carrizo-Wilcox, Queen City, Sparta, and Yegua-Jackson aquifers as well as the Colorado River Alluvium. Table 3 outlines the relationship between the 3D Hydrogeologic model layers, and the layering system of the Carrizo-Wilcox, Queen City and Sparta (10-layers) and Yegua-Jackson (5-layers) GAMs. Although an exact one-to-one match does not exist between the 3D hydrogeologic model and GAM layers, they mostly represent the same confining beds and aquifer units. This noted divergence simply pertains to differences in the design structure for each model and does not pose any data limitations for the LPGCD.

2.4.3 Three-Dimensional (3D) Model Development

The 3D hydrogeologic model was constructed by Michelle A. Sutherland, LLC (MAS), with oversight from LRE. MAS is established as one of the leading experts in the development of 3D hydrogeologic models in Texas and has performed similar services for numerous groundwater conservation districts and the Texas Water Development Board.

LRE provided MAS with GIS shapefiles containing the LPGCD Stratigraphic Well Control dataset (Appendix A), faults, 10-meter resolution digital elevation model (DEM), base map layers, and supporting reference materials. Using Leapfrog Works by Sequent® software (“Leapfrog”), MAS developed the LPGCD 3D hydrogeologic model following the model layers outlined in Table 3.

With the LPGCD Stratigraphic Well Control dataset, the model layers were developed using a triangulated grid with a general target of approximately 5-10 grid triangles between neighboring data points. MAS used the modified “spline” interpolation technique to minimize the overall surface curvature provided between high and low points and better represents natural features (e.g. valleys and ridgelines). This technique is considered “modified” because the technique allows for user input of structural controls, and then resampling of the underlying “spline” mathematical equation along the triangulated grid. Ultimately, the goal was to create geologic surfaces that honored the data closely while maintaining a smooth and consistent layer appearance from one point to the next.

To model outcrop areas, the GAT was used to define the outcrops for each model layer (Figure 5). Digitized outcrops were converted into a series of points spaced at half-mile intervals. These points were added to each layer surface to provide for control at the land surface. This was necessary since the stratigraphic control dataset only provides subsurface values mostly within the downdip portions of the aquifer systems.

To account for the Milano Fault Zone, MAS began by integrating fault planes into Leapfrog. LRE Water provided the refined fault system shapefile by Young and others (2018) to be used as a reference when developing the three-dimensional fault structures in the model. The GAT surface geology map was also used to delineate faults (Stoeser and others, 2007).

Within Leapfrog, structural control disks were used to guide the interpolation in areas of sparse stratigraphic data, along faults, and near outcrop areas. Mainly, this was to ensure that stratigraphic units were consistent with the surrounding data and structure. Due to a lack of stratigraphic well control points in the Weches outcrop and subcrop area, we assumed the Weches layer has a thickness of 80 ft within the subcrop. This assumption is based on the approximate average Weches thickness across well control points. Additionally, several outcrop areas within the Reklaw were absent of data, and nearby outcrops were used to define unit thicknesses and slopes. In some limited areas this caused disagreement between data points and surface geology. Several fault blocks associated with the Milano Fault Zone also had poor data control, consequently in some instances the GAT surface geology and LPGCD 3D Hydrogeologic model outcrops are in disagreement.

While developing the 3D hydrogeologic model, several dozen outlier data points were identified from the “Not Reviewed” well control. These points may be correct, however were in direct disagreement with nearby well control. For this reason, these well control points were removed from the 3D hydrogeologic model workspace, but still included in the LPGCD Stratigraphic Well Control Dataset. These points are listed in Appendix B for future review.

The development of the hydrogeologic model was an iterative process that required numerous cycles of trial and error based on study area size, outcrop areas, fault blocks, and the disparate allocation of stratigraphic control. Two additional factors which required significant consideration and that impacted model development included the model rendering time, and Leapfrog viewer functionality.

Rendering time is the time required by the computer to process and create a 3D representation of the stratigraphic data. It is dependent on the following factors: study area size, total number of modeled units and control points, and model resolution. The leapfrog viewer is the freeware version of the model software that can seamlessly run on any computer with a viewer application file. As a model becomes more complex, it places an increased burden on a user’s computer (‘video card’) from which the viewer file runs, and performance issues can be experienced. For these reasons, a triangulated grid structure was adopted for this initial phase of model development. One downside of this approach is that the model grid takes on a smoother structure that can allow for areas where stratigraphic control and the model may disagree.

Table 3 – Comparison of GAM and LPGCD Hydrogeologic Model Layers.

	GAM Model Layers			Hydrogeologic Model Layers	
Yegua-Jackson GAM	Catahoula	Layer 1	X	Inconsequential to Hydrogeologic Model Development.	
	Upper Jackson	Layer 2	X	Layer 2	Yegua - Jackson
	Lower Jackson	Layer 3	→		
	Upper Yegua	Layer 4	→		
	Lower Yegua	Layer 5	→		
Carrizo-Wilcox, Queen City, Sparta GAM	Colorado River Alluvium	Layer 1	→	Layer 1	Colorado River Alluvium
	Shallow Flow Zone	Layer 2	X	Inconsequential to Hydrogeologic Model Development.	
	Represented as Overlying Formation		X	Layer 3	Cook Mountain
	Sparta Aquifer	Layer 3	→	Layer 4	Sparta Aquifer
	Weches Formation	Layer 4	→	Layer 5	Weches Formation
	Queen City Aquifer	Layer 5	→	Layer 6	Queen City Aquifer
	Reklaw Formation	Layer 6	→	Layer 7	Reklaw Formation
	Carizzo Aquifer	Layer 7	→	Layer 8	Carizzo Aquifer
	Calvert Bluff Formation	Layer 8	→	Layer 9	Calvert Bluff Formation
	Simsboro Formation	Layer 9	→	Layer 10	Simsboro Formation
	Hooper Formation	Layer 10	→	Layer 11	Hooper Formation
	Represented as the base of Layer 8.		X	Layer 12	Midway Group
	Inconsequential to GAM Model Development.		X	Layer 13	Undifferentiated Cretaceous

X – was used to signify where a GAM Model Layer and Hydrogeologic Model Layer were non-transferable.

→ - was used to signify where a GAM Model Layer and Hydrogeologic Model Layer were transferable.

SECTION 3: RESULTS

3.1 STRATIGRAPHIC CONTROL

A total of 793 well control points were included in the LPGCD Stratigraphic Well Control Dataset (Appendix A). A breakdown of stratigraphic picks for each unit by location is provided in Table 4. Importantly, nearly every formation registered at least a 50% increase in total well control when comparing the existing to new control developed through this research. Table 4 also includes the Colorado River Alluvium well control acquired from Young and others (2017) and Standen and Clause (2016). Not listed are well control points from the Jackson and Yegua formations, which primarily occur in eastern Lee county and within the buffer zone at or near land surface. Subsurface well control does not exist for these stratigraphic units since they are shallow and crop out at land surface.

The unequal allocation of stratigraphic control across formations can be attributed to well location, formation depth, and log quality. For example, a well in western Bastrop County does not provide information on the Sparta or Cook Mountain since those formations are absent there. Figure 11 illustrates the spatial distribution of the LPGCD Stratigraphic Well Control dataset. Also pictured in Figure 11 are the Colorado River Alluvium base well control points. For both Bastrop and Lee counties, the availability of stratigraphic well control diminished in a westward direction. This change in data availability relates to oil and gas activity since many of these well control points were derived from exploratory oil and gas surveys and well field development.

Seven regional cross sections were constructed to illustrate stratigraphic correlations, formation depths, structural complexities, and aquifer distributions (A-A' to G-G', Appendix C). Cross sections were not considered a key deliverable of this report, however, were presented to the LPGCD Board numerous times through progress report updates. Additionally, cross sections provide a useful demonstration of the study area stratigraphy with respect to geophysical log data. Cross sections were developed in the direction of depositional dip (A-A' to C-C'), strike (D-D' to E-E'), and along the Milano Fault Zone axis (G to G'). These cross sections allow for the visualization of geologic relationships between stratigraphic units. They also depict variations in formation depth, and anomalous data points encountered through this study (red/blue lines).

Table 4 – LPGCD Stratigraphic Well Control by county and formation.

	Bastrop		Lee		Buffer Zone		Total		
	Existing Control	New Total	% Increase						
Colorado R. Alluvium	376	-	N/A	-	84	-	460	460	0%
Cook Mountain	1	1	4	15	6	6	11	22	100%
Sparta	12	12	21	33	22	25	55	70	27%
Weches	21	8	27	42	21	13	69	63	(-8.7%)
Queen City Sand	20	22	12	57	19	32	51	111	117%
Reklaw	77	80	52	149	31	56	160	285	78%
Carrizo Sand	92	96	69	157	39	64	200	317	59%
Calvert Bluff	103	114	26	167	39	61	168	347	106%
Simsboro Sand	107	139	84	199	56	86	247	424	72%
Hooper	117	180	86	221	62	94	265	495	87%
Midway Group	212	277	42	215	52	89	306	581	90%

% increase – is the total increase in the LPGCD Stratigraphic Well Control from the initial existing well control dataset.

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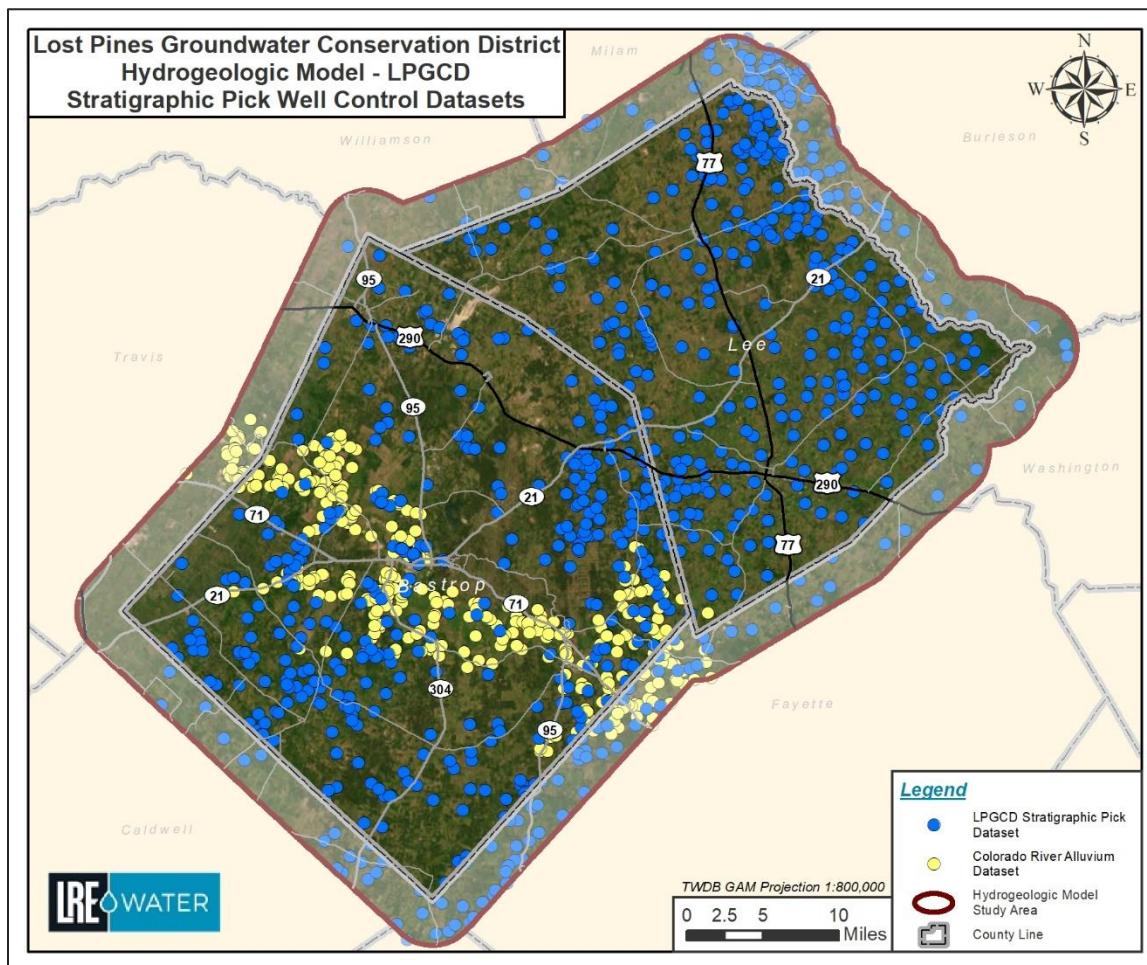


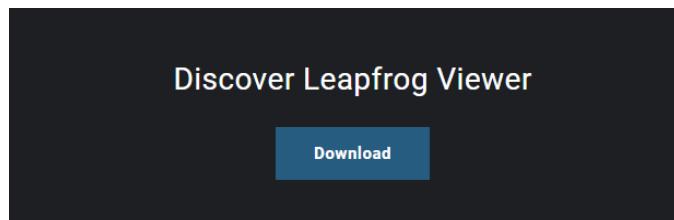
Figure 11 – LPGCD Stratigraphic Well Control dataset.

3.2 THREE-DIMENSIONAL (3D) HYDROGEOLOGIC MODEL

3.2.1 Model Viewer Download Instructions

The 3D hydrogeologic model is delivered to LPGCD as a Leapfrog Viewer file (Appendix D), a free desktop application by Sequent®. Although free, the viewer file must be downloaded before use. **Steps 1-6** below provide the necessary actions to download and install the viewer application file on any Windows operating system. After completing these steps, the viewer application file is available for use up to 30-days, after which time the software license will need to be renewed. Renewal instructions are provided in Steps 4-6. before needing to renew the license **Step 4 – 6.**

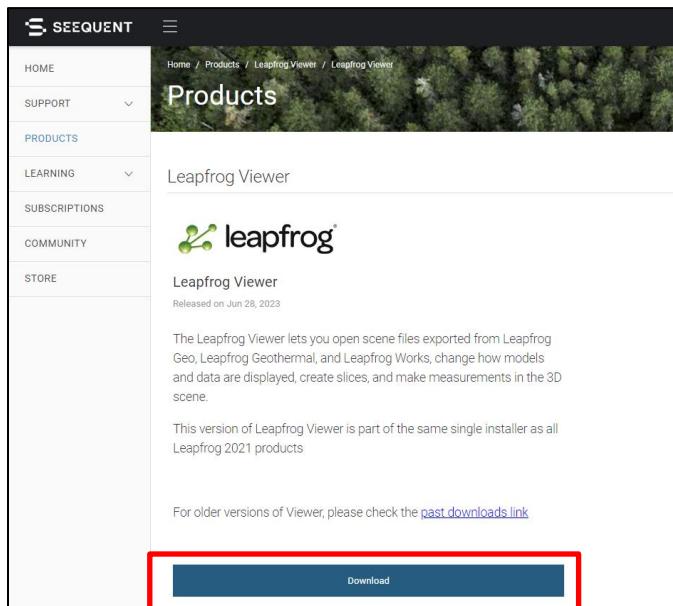
(Step 1) To open the viewer file, a user must first download the viewer application from <https://www.sequent.com/products-solutions/leapfrog-viewer/>. (As of 4/4/2024)



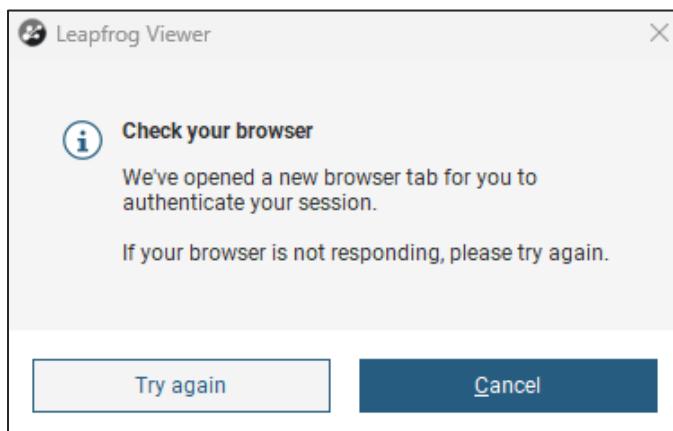
(Step 2) Upon attempting to download the file, a user must create an account which gives them unlimited access to the viewer application license.

A screenshot of a dark-themed account creation form for Sequent. It includes fields for First name (e.g. John), Last name (e.g. Smith), Email (e.g. John.Smith@sequent.com), Password, Confirm password, and Country (Select country dropdown). At the bottom, there is a checkbox for accepting terms and conditions, followed by a "Create an ID" button and a link for existing users to "Sign In".

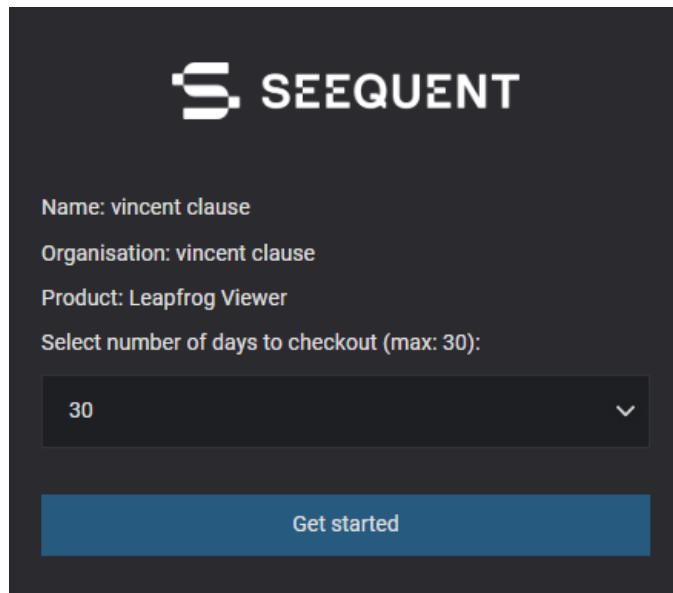
(Step 3) Once a new account is created, the user must log into the account and download and then install the leapfrog viewer application.



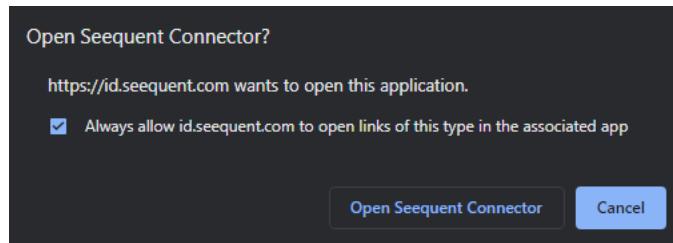
(Step 4) Upon opening the viewer application, the user will be prompted with a dialog box and must authenticate the software by navigating back to their internet browser and logging into their account.



(Step 5) A dialog box will open; and the user must check out a license. It is recommended that the user selects 30 days to limit the frequency that the license will need to be renewed.



(Step 6) Finally a user must authorize the Sequent Connector. After authentication, the application file is ready to use.



3.2.2 Three-Dimensional (Leapfrog) Hydrogeologic Model Environment

The 3D model leapfrog viewer includes three primary areas of functionality: (1) toolbar, (2) table of contents and (3) workspace (Figure 12).

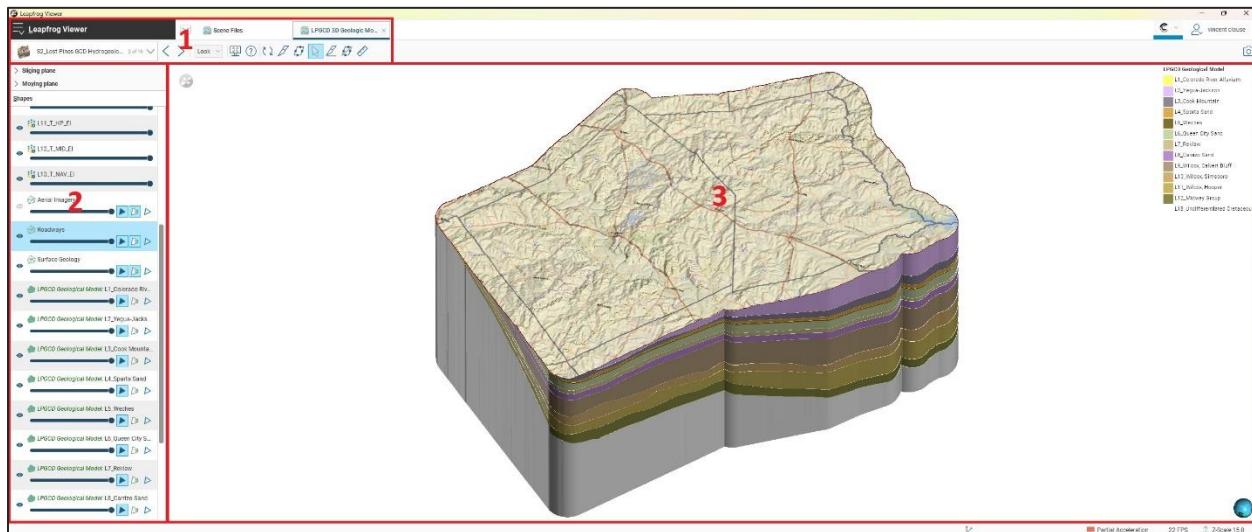


Figure 12 - LPGCD 3D Hydrogeologic Model (Leapfrog Viewer Scene 2).

3.2.2.1 Hydrogeologic Model Toolbar

The toolbar area (1) allows the user to navigate between predefined scenes by use of the drop-down menu. Additionally, this area provides access to the cross section and measuring tools which provide the ability to create on-the-fly cross sections and measure a vertical or horizontal distance anywhere in the model workspace. Tool tutorials can be found by clicking the help icon (?) located within the toolbar area.

3.2.2.2 Hydrogeologic Model Table of Contents

The table of contents (2) provides the ability to modify what is visible within the workspace area. It is within the table of contents that a user can change between base map layers, turn layers on and off, and adjust layer transparency. Modifications made within the table of contents are instantaneously visible within the model workspace area.

3.2.2.3 Hydrogeologic Model Workspace

The model workspace area (3) is where the user interacts with the model data by mouse click or with the cross section and measuring tools. Additional viewer functionality is available through keyboard ‘hot keys’ which can be found by clicking on the “Look” dropdown box located in model toolbar area.

3.2.2.4 LRE-defined Model Scenes

There are sixteen (16) LRE-defined scenes available by the drop-down menu on the left side of the Hydrogeologic Model toolbar (Figure 12). These scenes are useful for quickly navigating between areas of interest and provide a quick and straightforward way to reset or reorient while working within the model. The arrows located to the immediate right of the drop-down also provide useful functionality when navigating between scenes. The pre-defined scenes are listed below:

- S1_Stratigraphic Control
- S2_Lost Pines GCD Hydrogeologic Model
- S3_Lost Pines GCD Registered Wells
- S4_Layer 3 Cook Mountain Top
- S5_Layer 4 Sparta Sand
- S6_Layer 5 – Weches Top
- S7_Layer 6 – Queen City Sand Top
- S8_Layer 7 – Reklaw Top
- S9_Layer 8 – Carrizo Sand Top
- S10_Layer 9 – Wilcox, Calvert Bluff Top
- S11_Layer 10 – Wilcox, Simsboro Sand Top
- S12_Layer 11 – Wilcox, Hooper Top
- S13_Layer 12 – Midway Group
- S14_Layer 1 – Colorado River Alluvium
- S15_Fault Planes
- S16_GAM Hydraulic Conductivity

Figures 13 – 28 include still frame screenshots for each model scene listed above.

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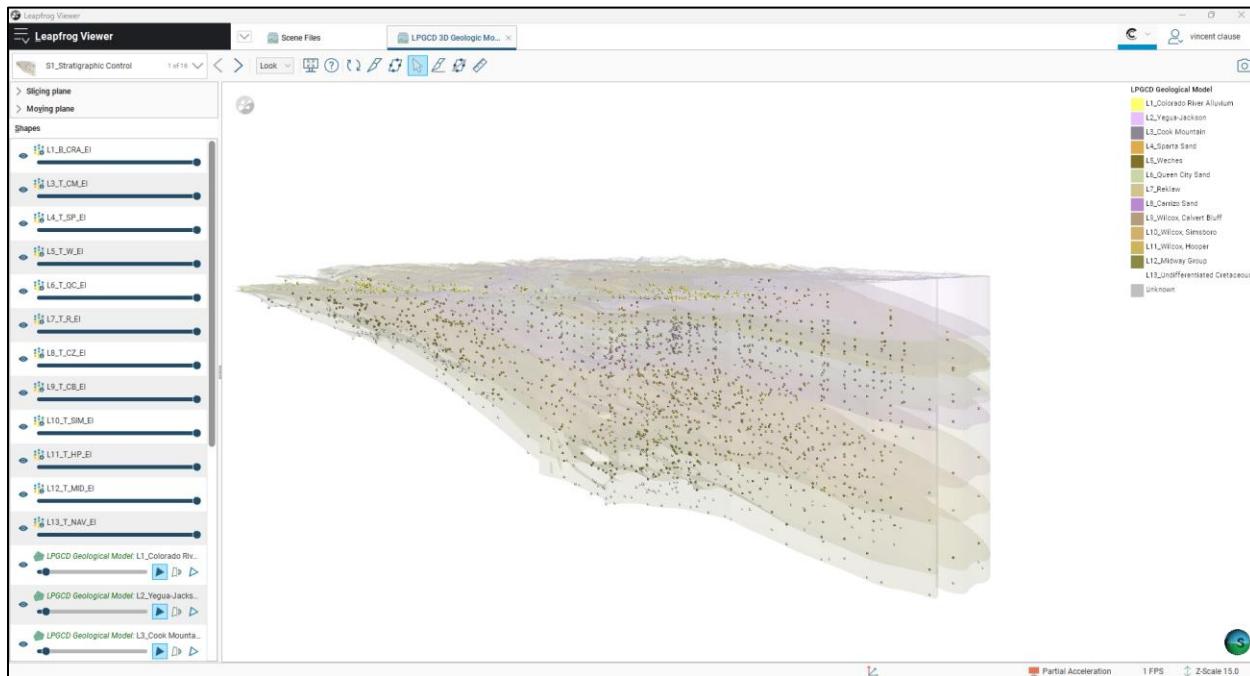


Figure 13 – Hydrogeologic Model Scene 1 “S1_Stratigraphic Control”.

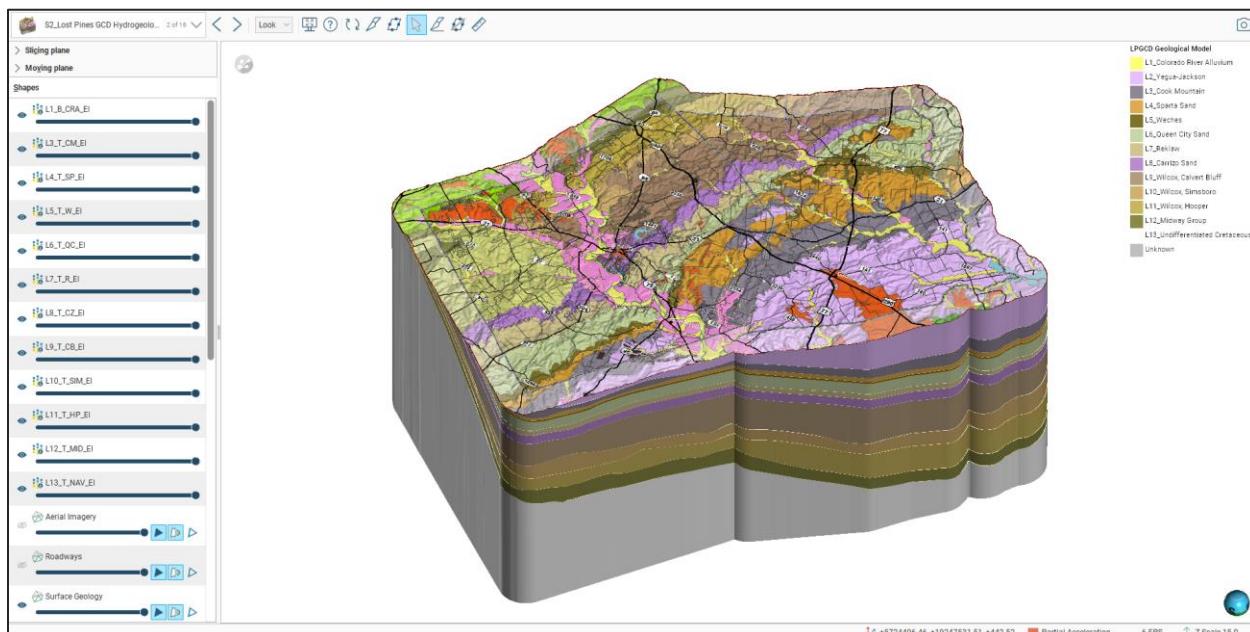


Figure 14 - Hydrogeologic Model Scene 2 “S2_Lost Pines GCD Hydrogeologic Model”.

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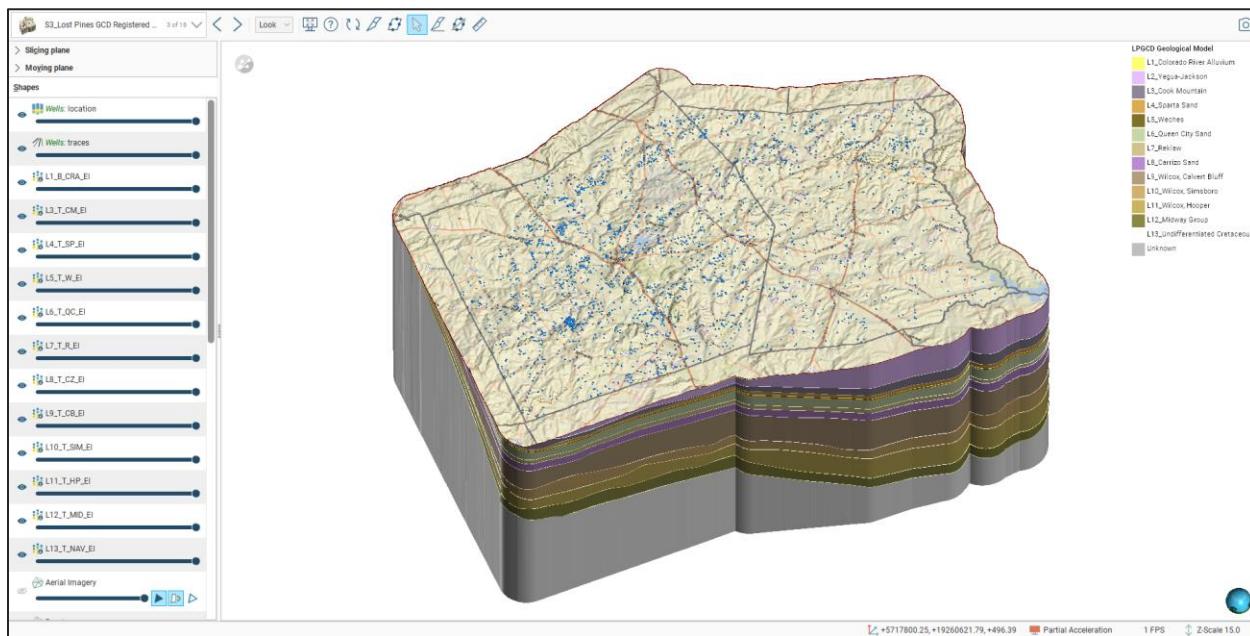


Figure 15 – Hydrogeologic Model Scene 3 “S3_Lost Pines GCD Registered Wells”.

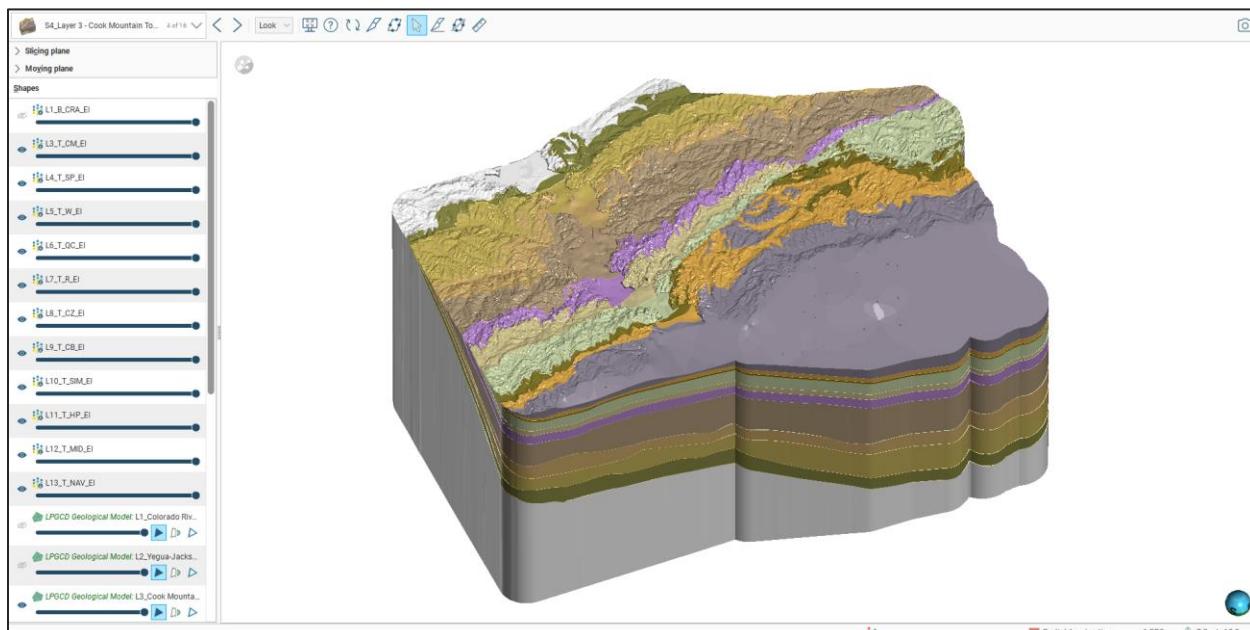


Figure 16 – Hydrogeologic Model Scene 4 “S4_Layer 3 - Cook Mountain Top and Well Control”.

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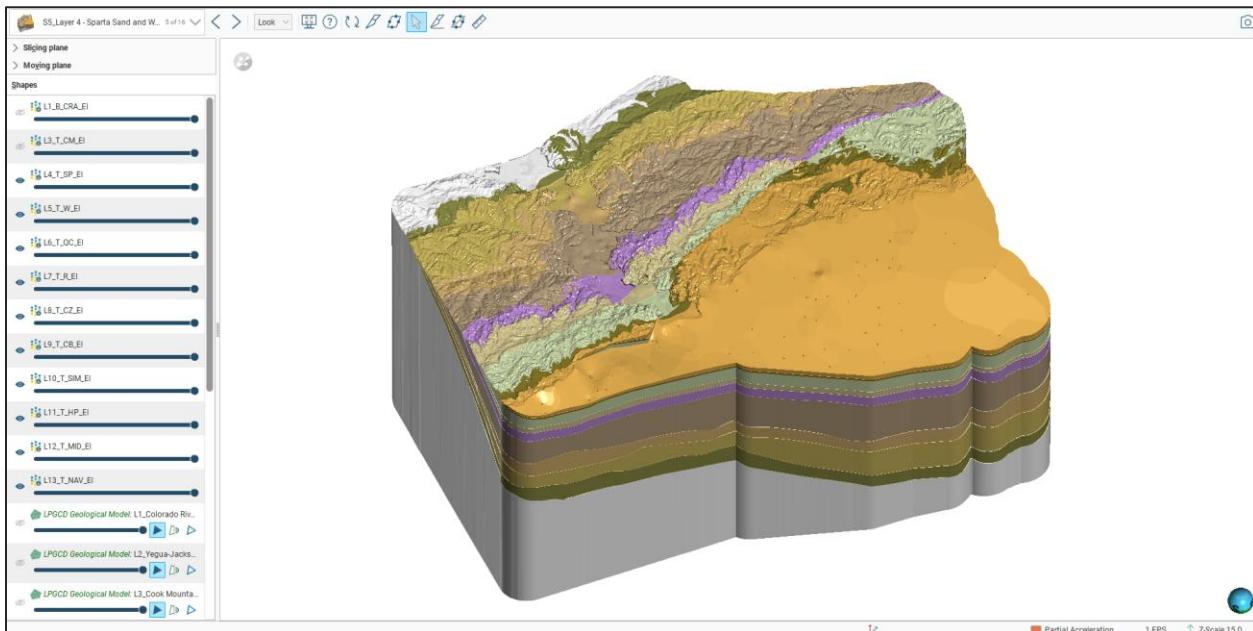


Figure 17 – Hydrogeologic Model Scene 5 “S5_Layer 4 - Sparta Sand and Well Control”.

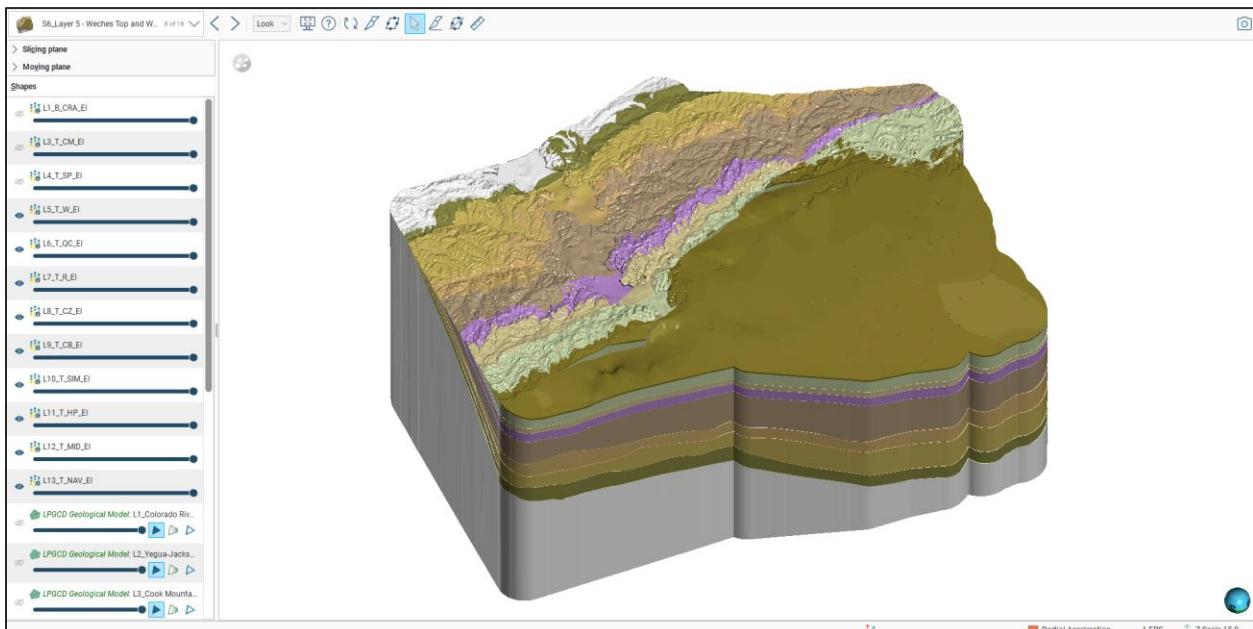


Figure 18 – Hydrogeologic Model Scene 6 “S6_Layer 5 - Weches Top and Well Control”.

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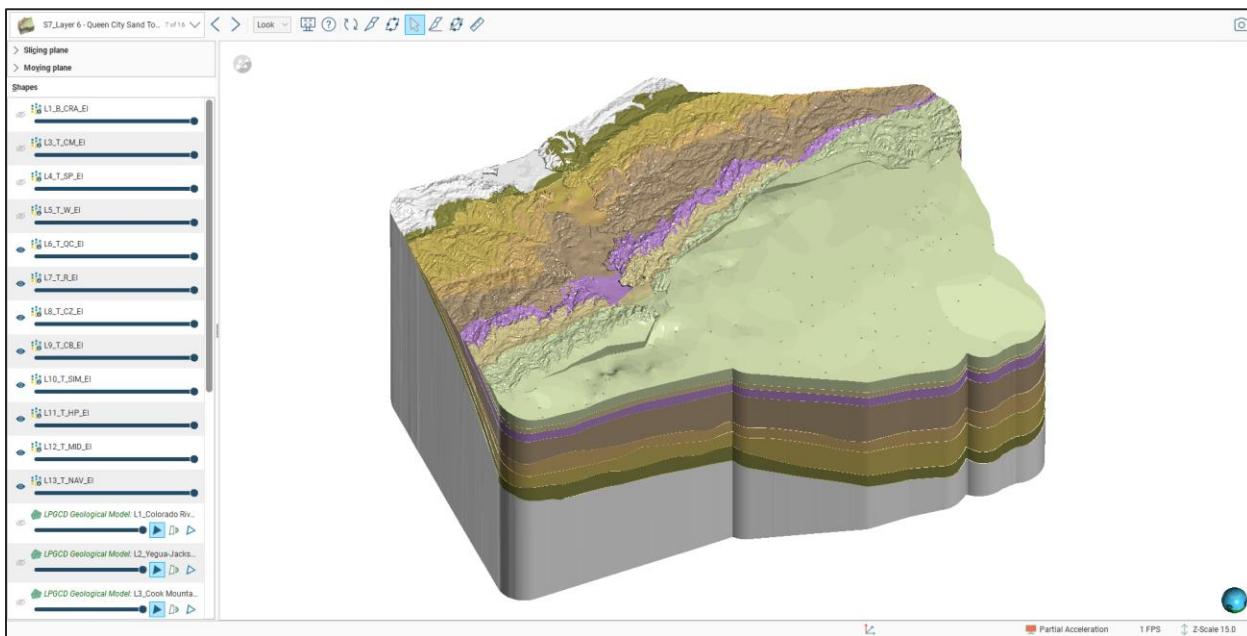


Figure 19 – Hydrogeologic Model Scene 7 “S7_Layer 6 – Queen City Sand Top and Well Control”.

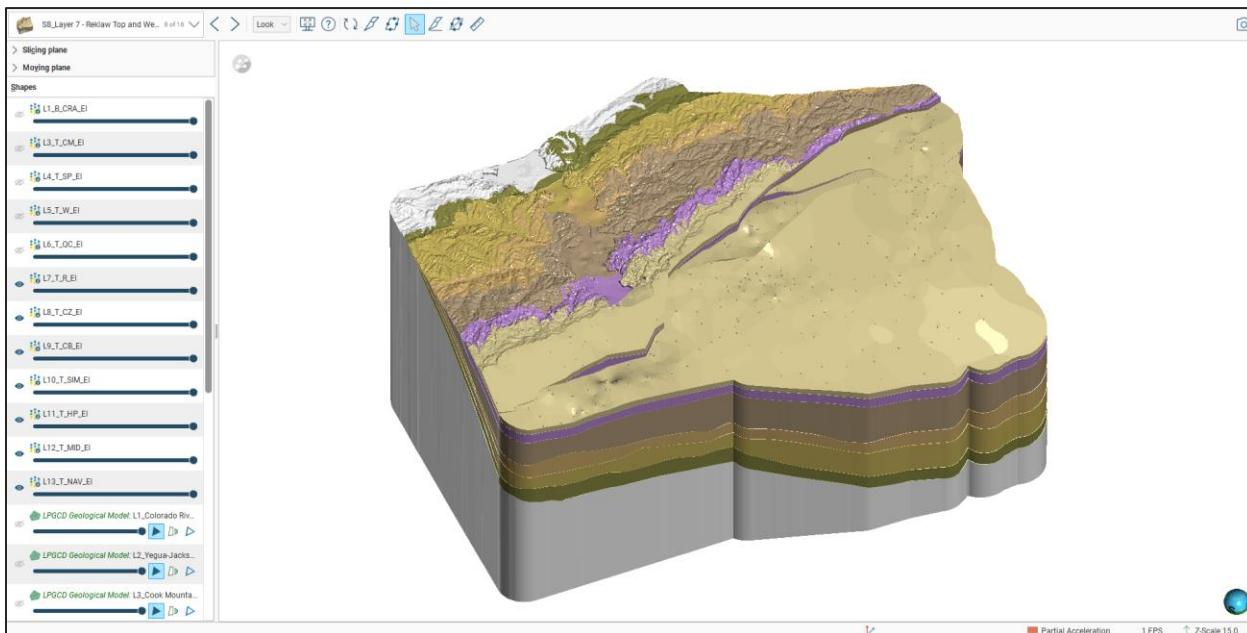


Figure 20 – Hydrogeologic Model Scene 8 “S8_Layer 7 – Reklaw Top and Well Control”.

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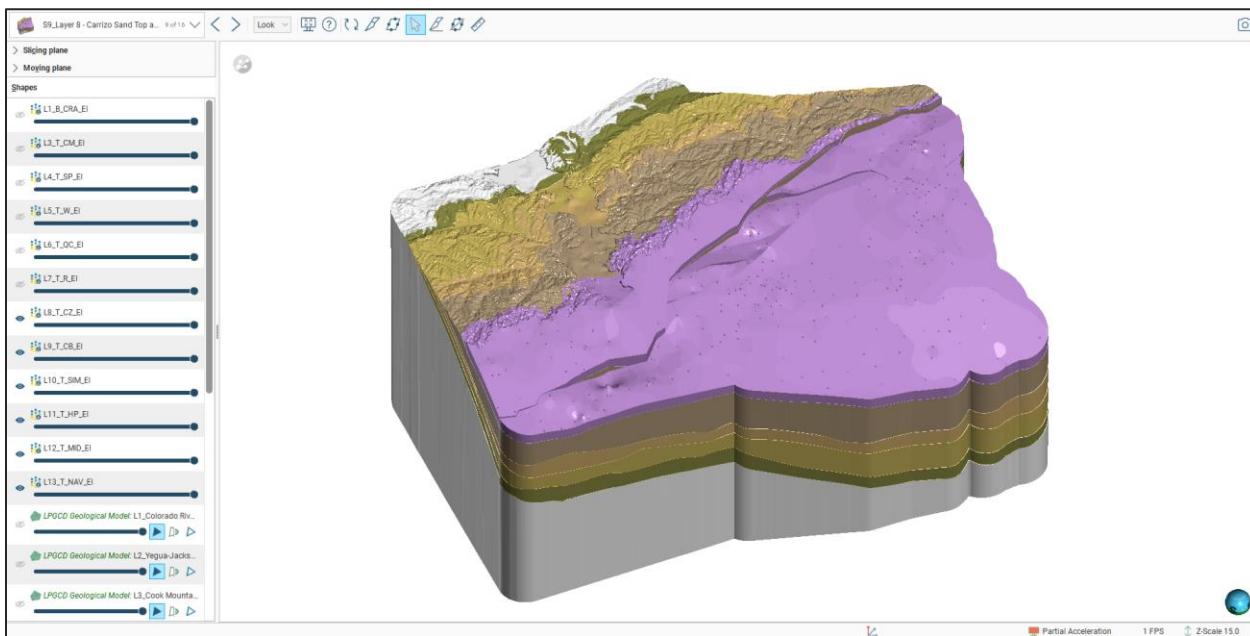


Figure 21 – Hydrogeologic Model Scene 9 “S9_Layer 8 – Carizzo Sand Top and Well Control”.

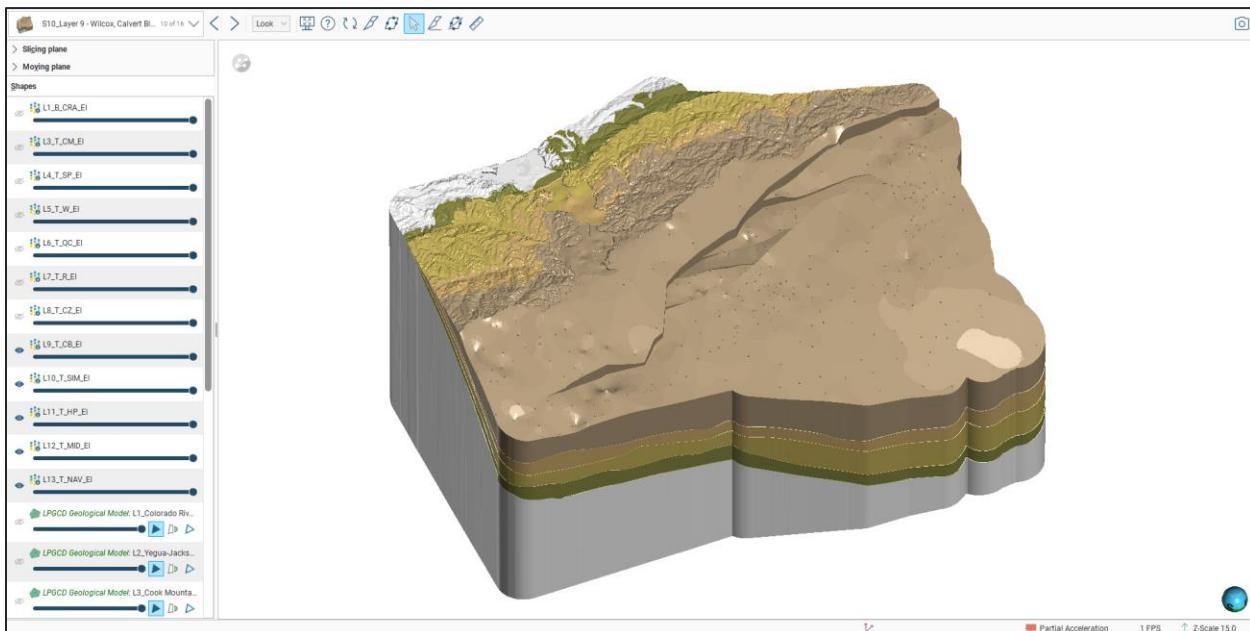


Figure 22 – Hydrogeologic Model Scene 10 “S10_Layer 9 – Wilcox, Calvert Bluff Top and Well Control”.

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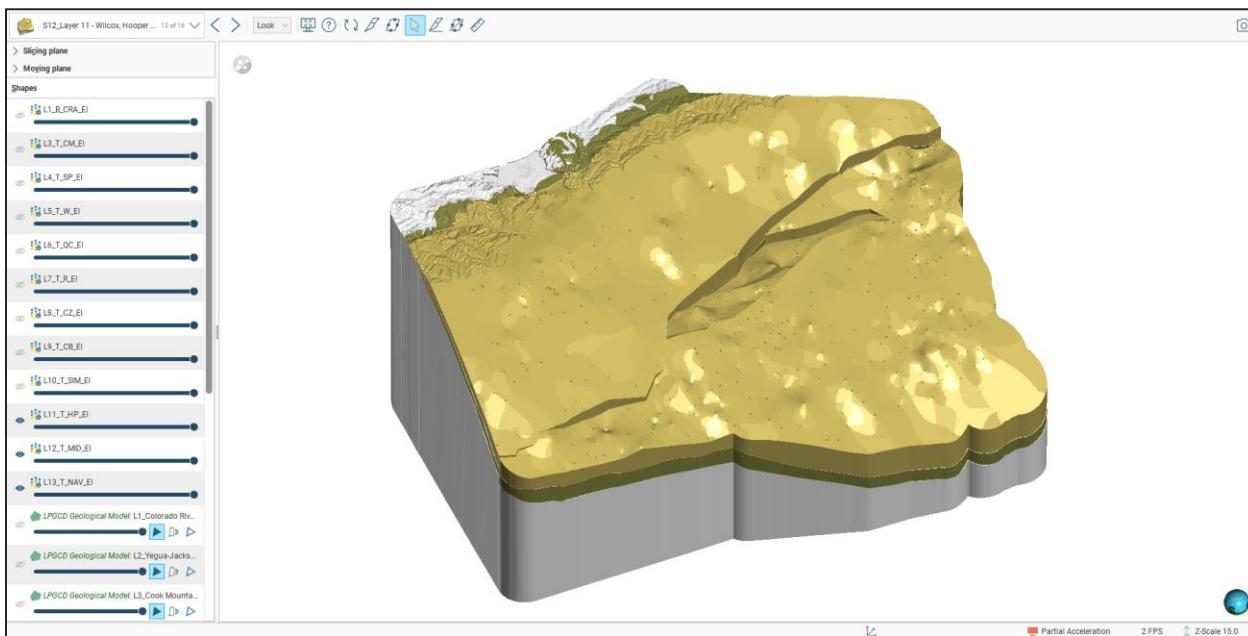


Figure 23 – Hydrogeologic Model Scene 11 “S11_Layer 10 – Wilcox, Simsboro Top and Well Control”.

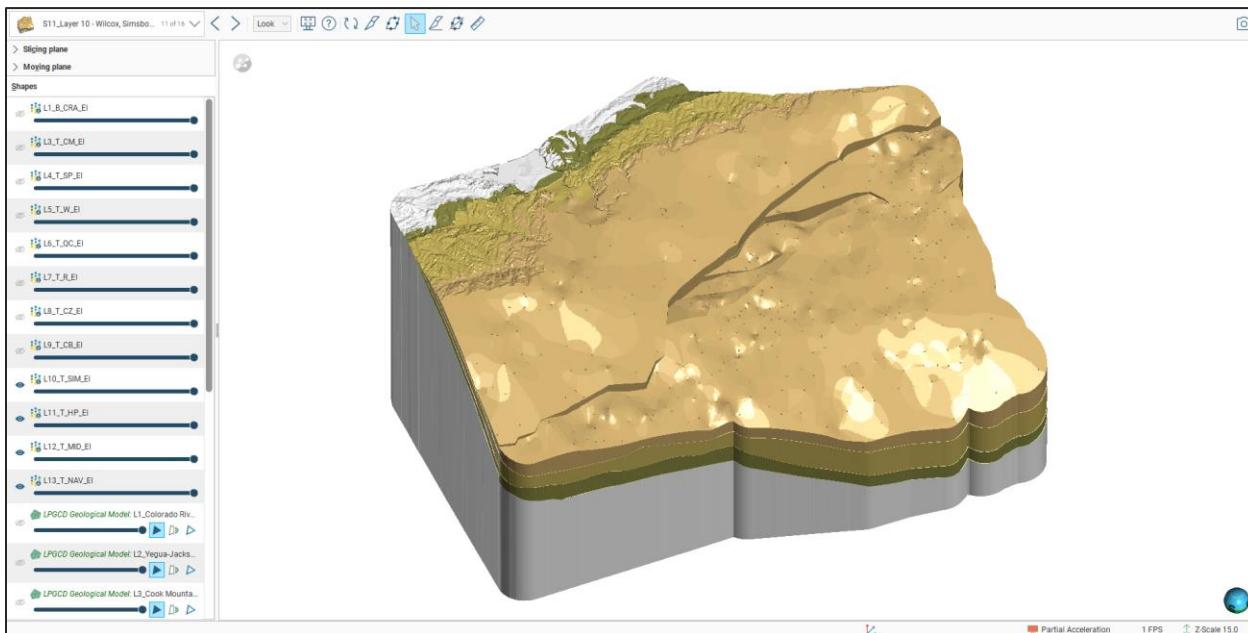


Figure 24 – Hydrogeologic Model Scene 12 “S12_Layer 11 – Wilcox, Hooper Top and Well Control”.

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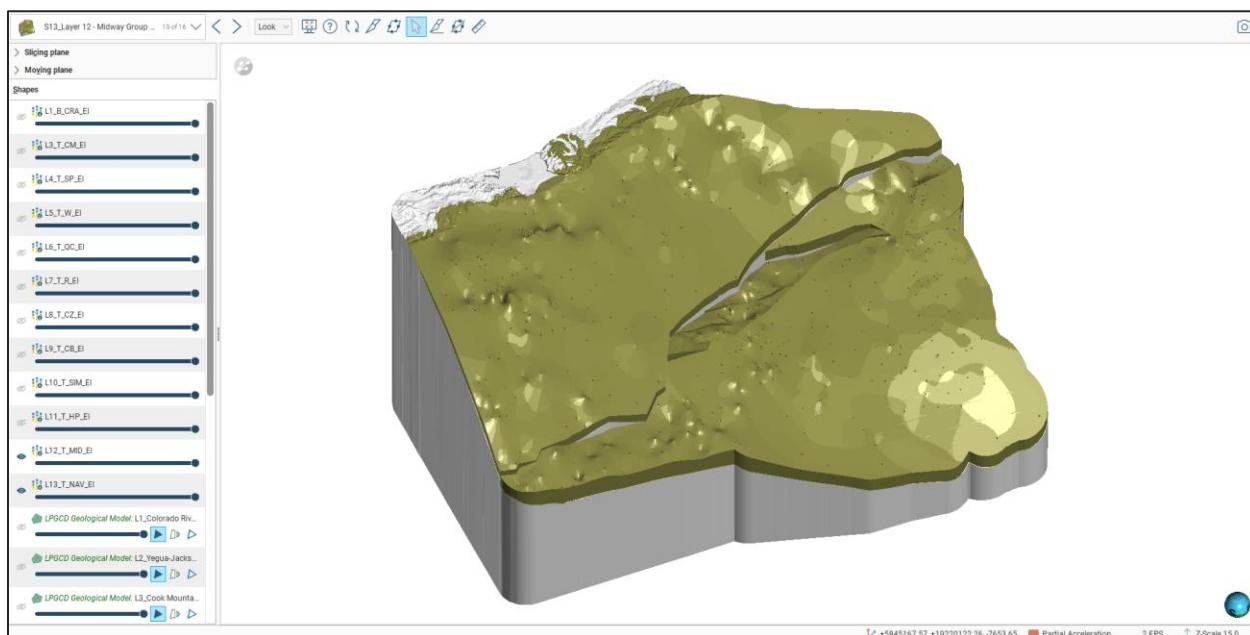


Figure 25 – Hydrogeologic Model Scene 13 “S13_Layer 12 – Midway Group Top and Well Control”.

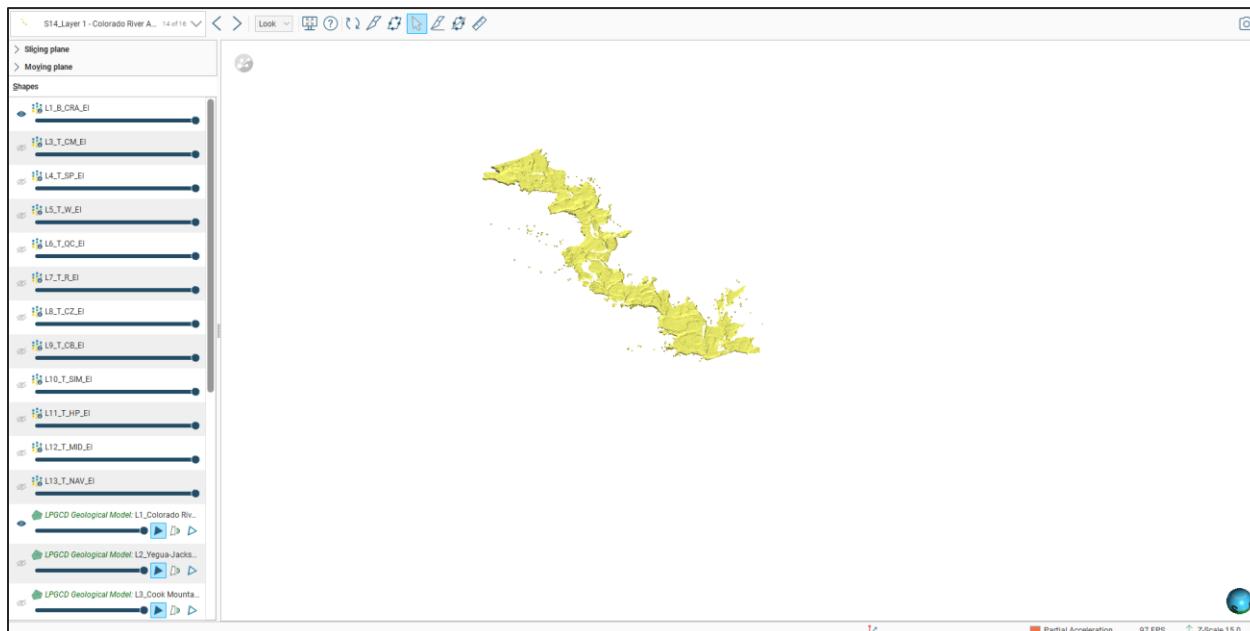


Figure 26 – Hydrogeologic Model Scene 14 “S14_Layer 1 – Colorado River Alluvium Base and Well Control”.

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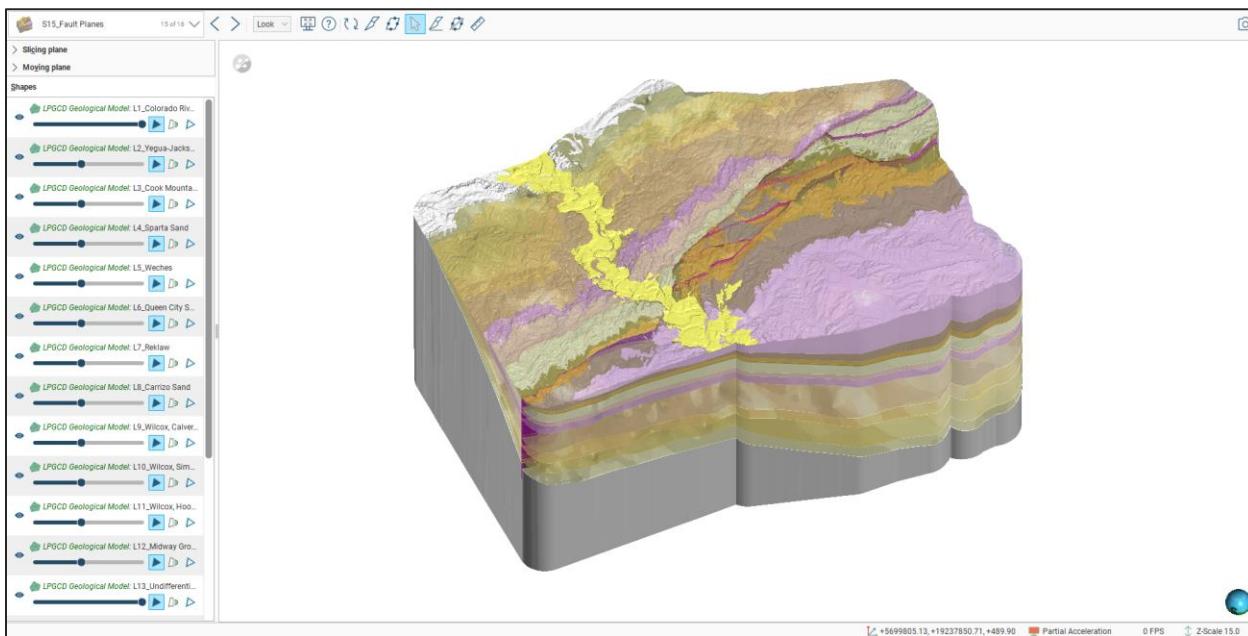


Figure 27 – Hydrogeologic Model Scene 15 “S15_Fault Planes”.

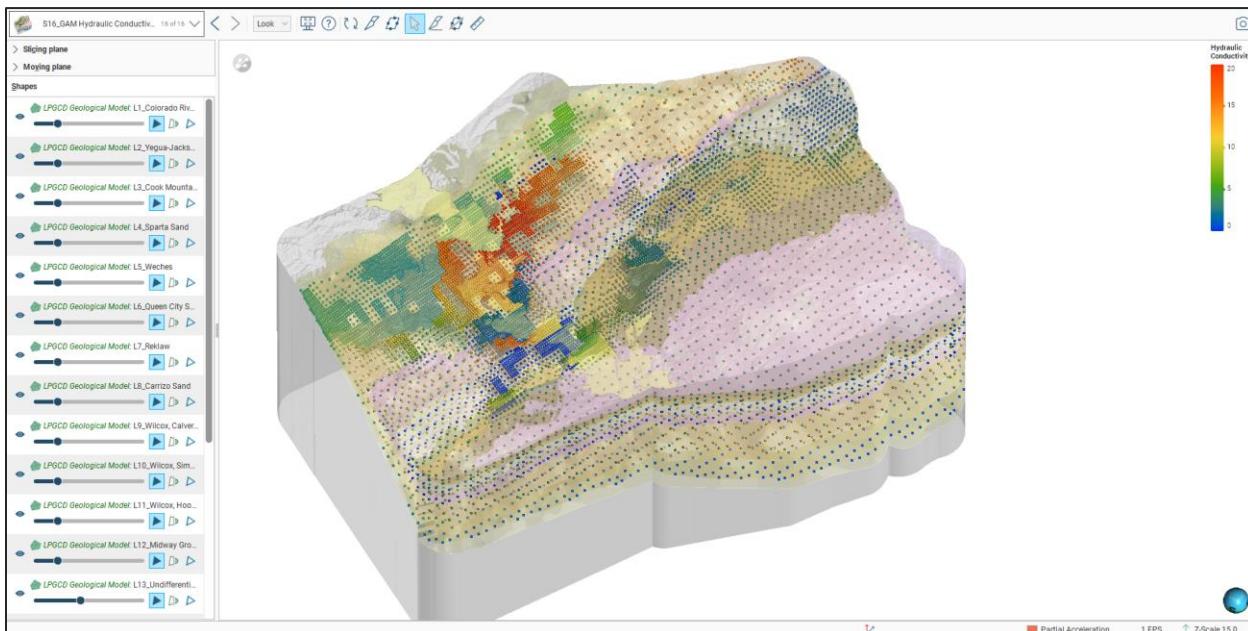


Figure 28 – Hydrogeologic Model Scene 16 “S16_GAM Hydraulic Conductivity”.

3.2.3 Hydrogeologic Model Variance Analysis

A variance analysis was performed to compare the modeled formation surface depths to the LPGCD stratigraphic picks that were used to develop the model. Model variance is used to demonstrate confidence and better understand where the model may be over or underestimating observed conditions. Variance is introduced by a variety of factors, and most frequently can be attributed to grid cell resolution as the model conforms to nearby data points while also considering distant trends. Figure 29 provides a simplified demonstration of this effect.

In Figure 29 Grid Cell A includes three equally spaced points that range from 695' to 705'. Although the mean for these points is 700' the modeled grid cell value is slightly higher at 701'. This is because it is also being influenced by the nearby points in cell B. Cell C has a modeled elevation of 694' feet while the only point in this grid is located at 690'. This variance is introduced because the model considers the higher elevation within cell B and the trend that exists between those grid cells. Model variance is usually amplified in areas that demonstrate high slope gradients commonly attributed to structural controls such as a fault.

The average variance for each modeled surface falls within a range of ± 4.1 and ± 11.5 feet of the control point value, except for the Weches (explained later). Figures 30-39 provide a visual representation of model variance for each model layer (from oldest to youngest), highlighting where modeled points are over or underestimated. Points that fall above the red line signify where the model overestimates compared to observations, while points below the red line are where the model has underestimated the observed surface location. Model variance is slightly higher at 22.4 feet for the Weches. This higher variance stems from the limited well control within the Weches formation, and with the formation's outcrop areas largely coinciding with fault blocks. For the Weches formation, we assigned a uniform layer thickness of 80 feet as a workaround for these data limitations. This uniform thickness is consistent with the Weches formation interval observed on geophysical logs within the study area.

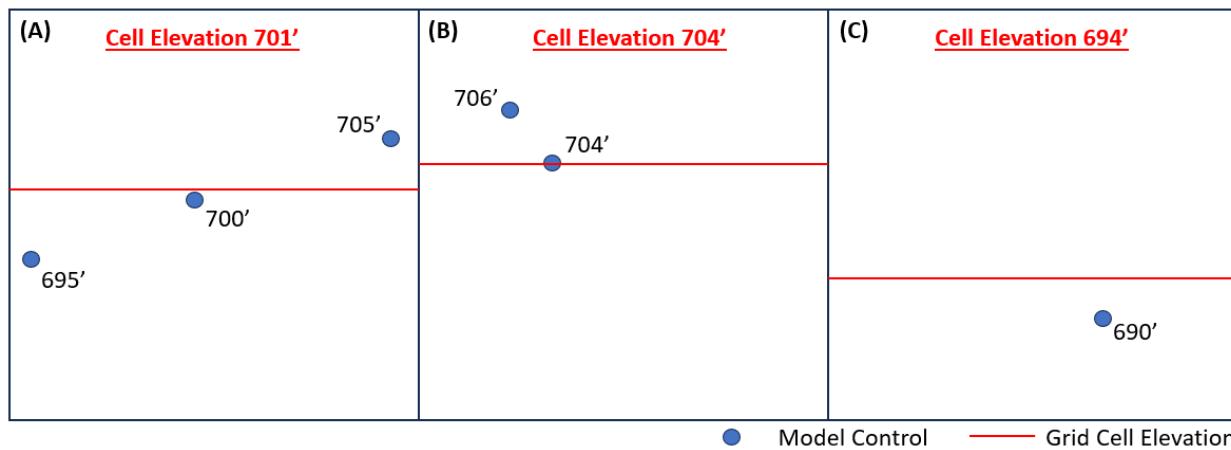


Figure 29 – Demonstration of model variance introduced by the grid cell resolution effect.

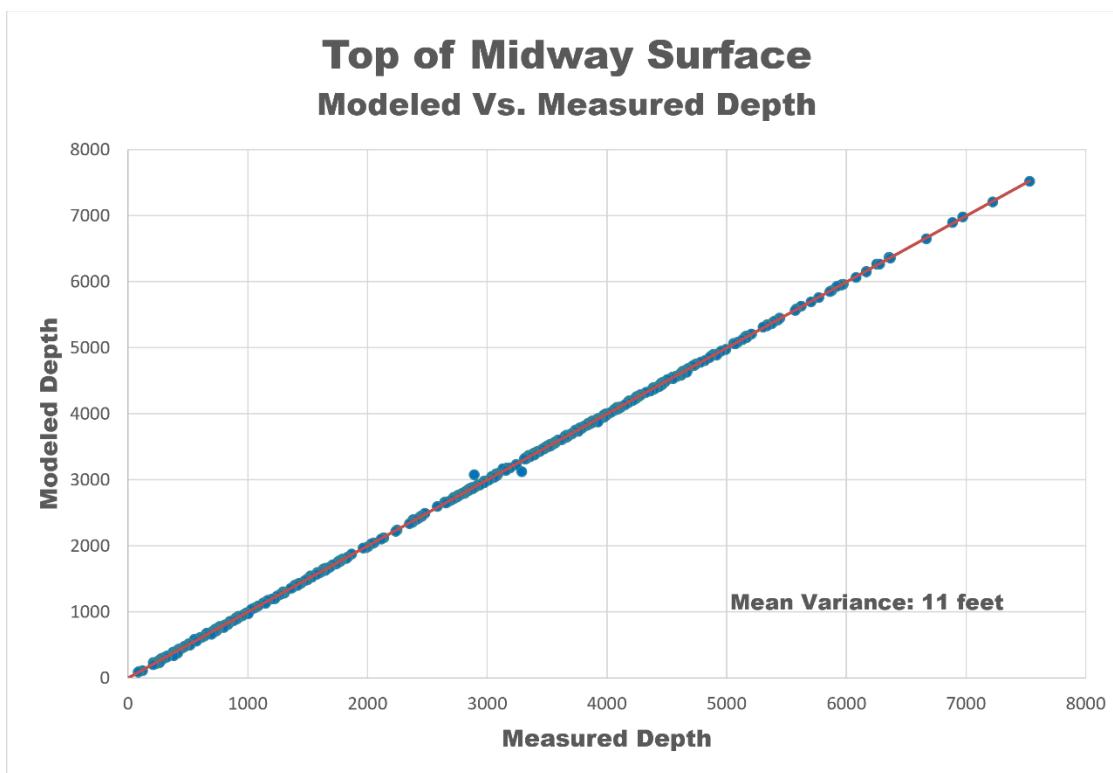


Figure 30 – Top of Midway Group Variance Analysis.

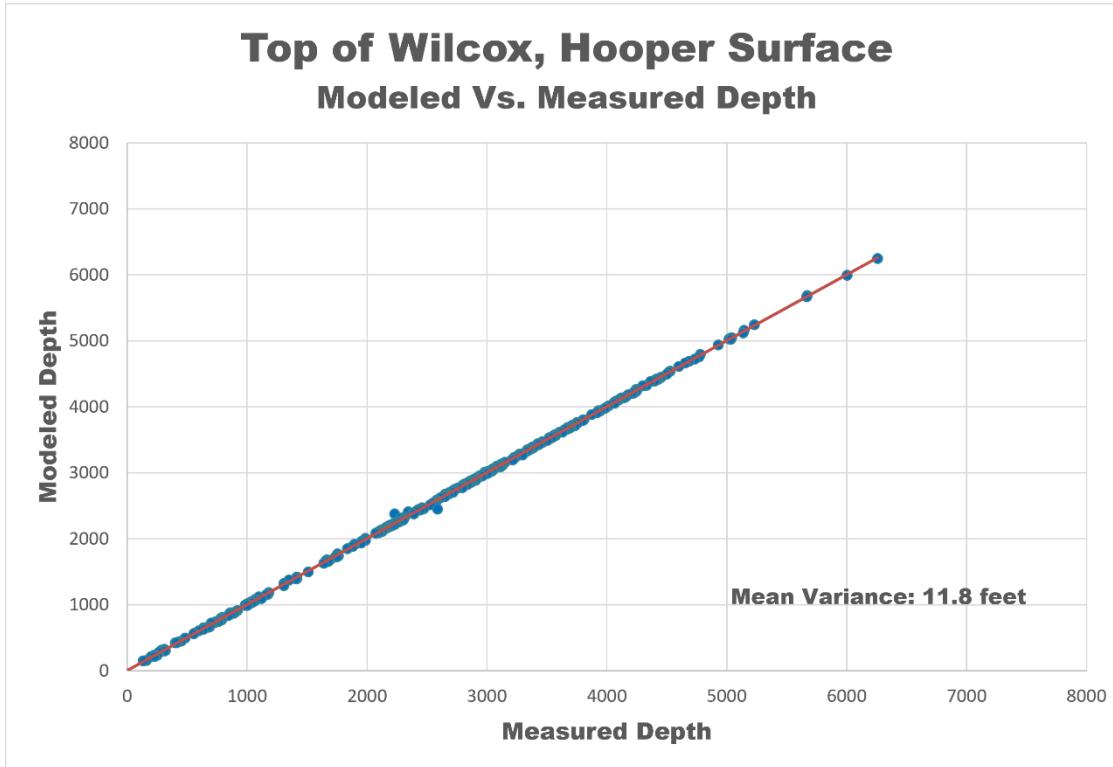


Figure 31 – Top of Wilcox, Hooper Variance Analysis

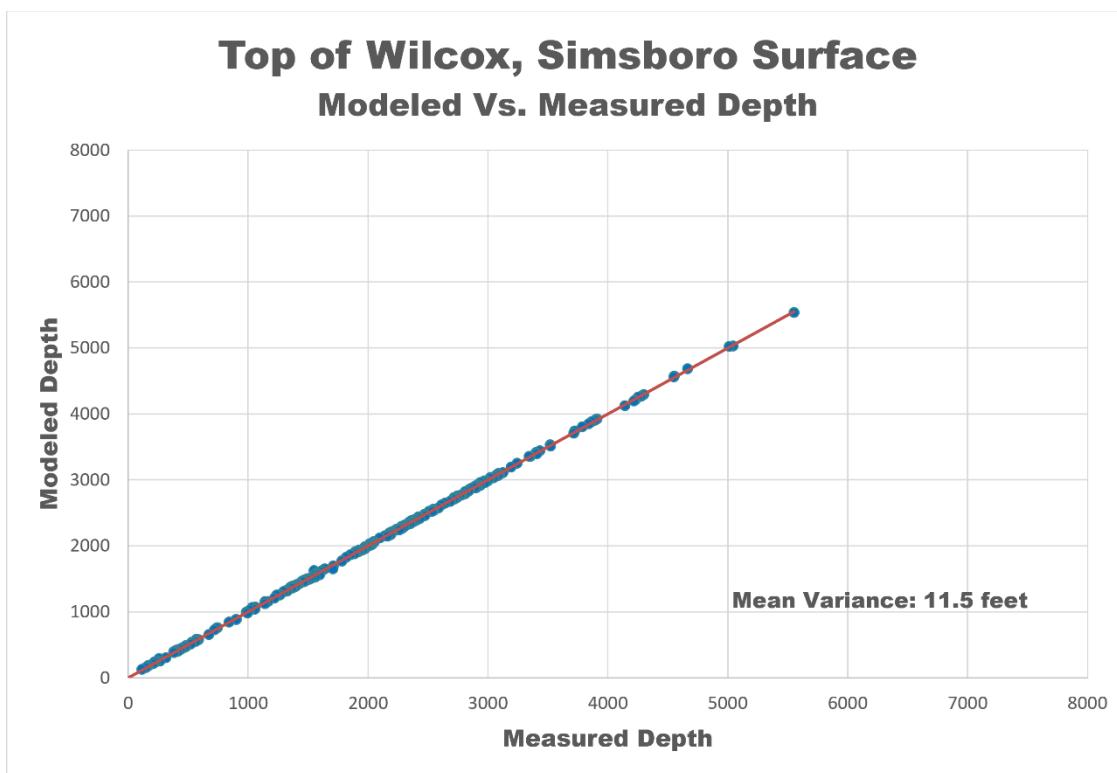


Figure 32 – Top of Wilcox, Simsboro Variance Analysis

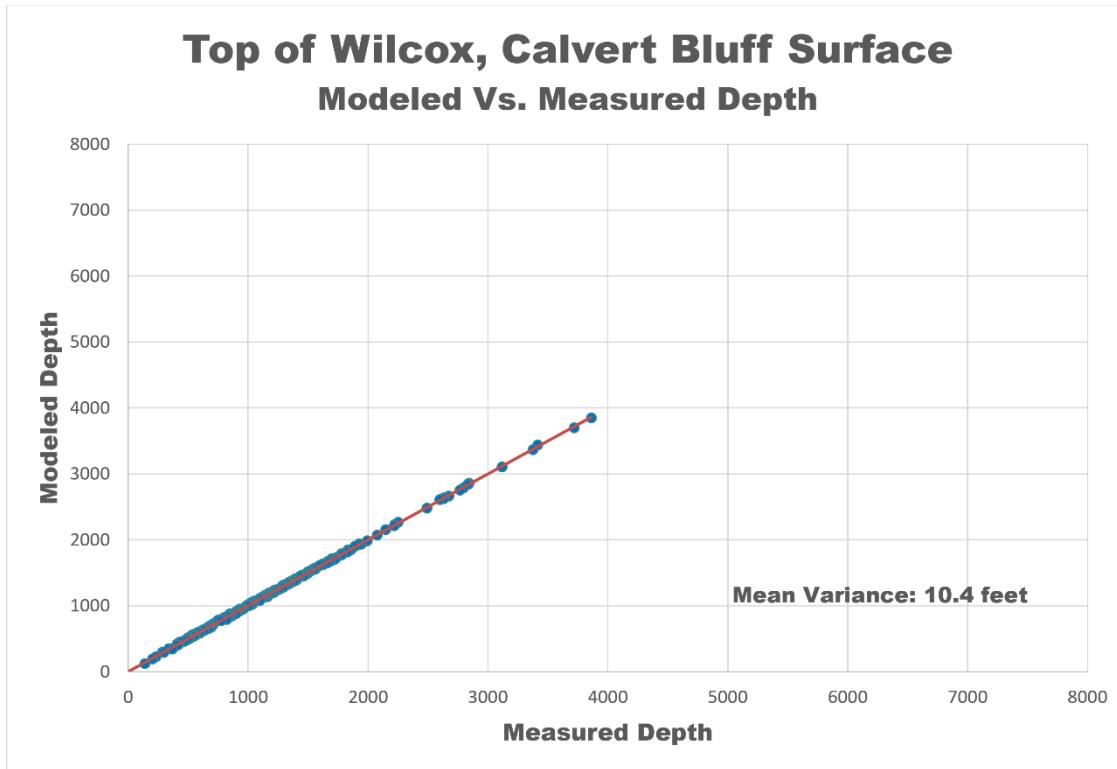


Figure 33 – Top of Wilcox, Calvert Bluff Variance Analysis

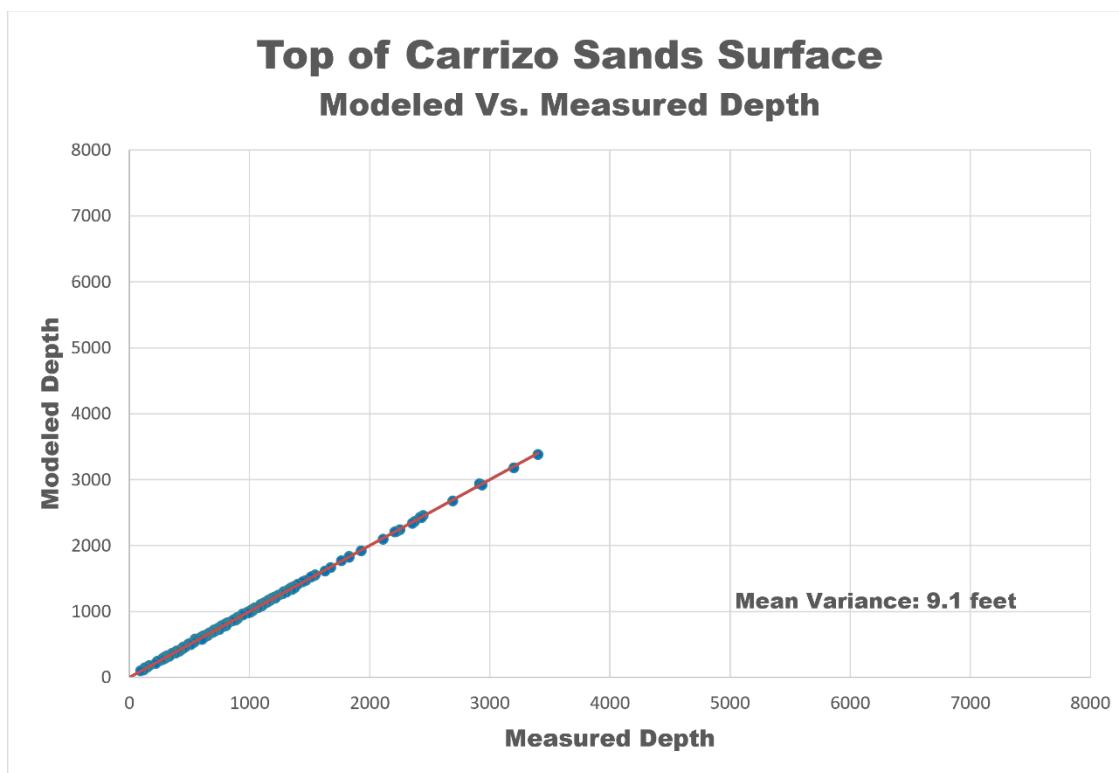


Figure 34 – Top of Carrizo Sand Variance Analysis.

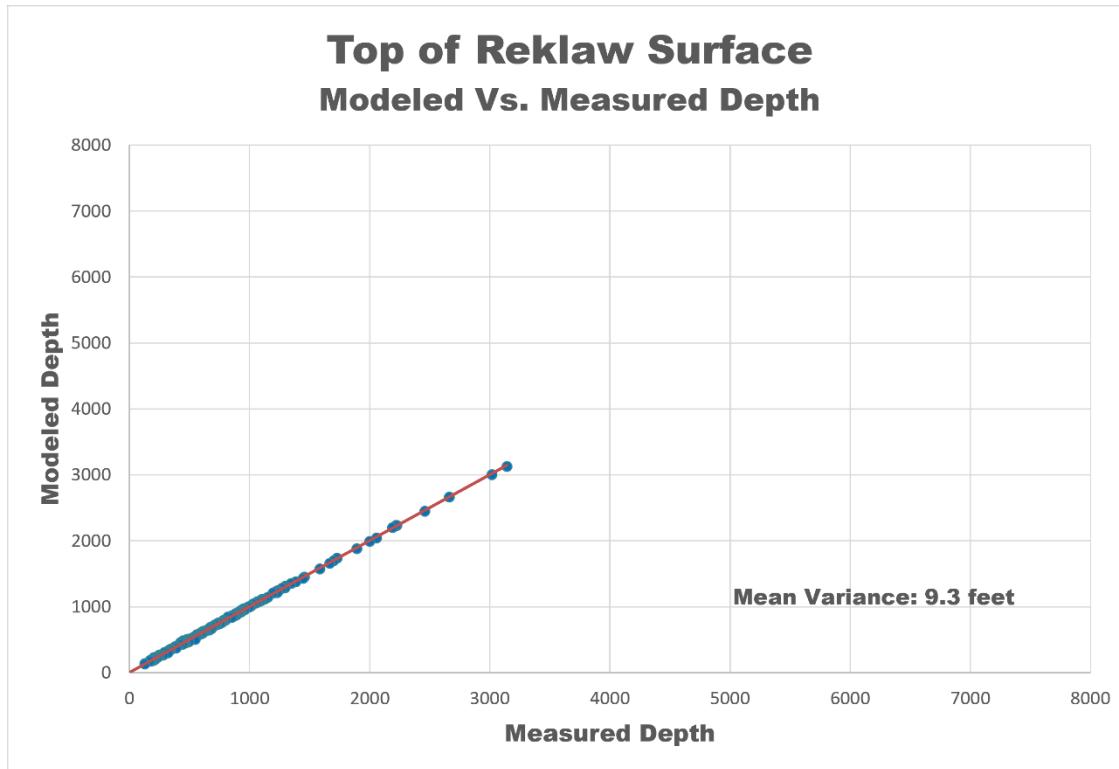


Figure 35 – Top of Reklaw Variance Analysis.

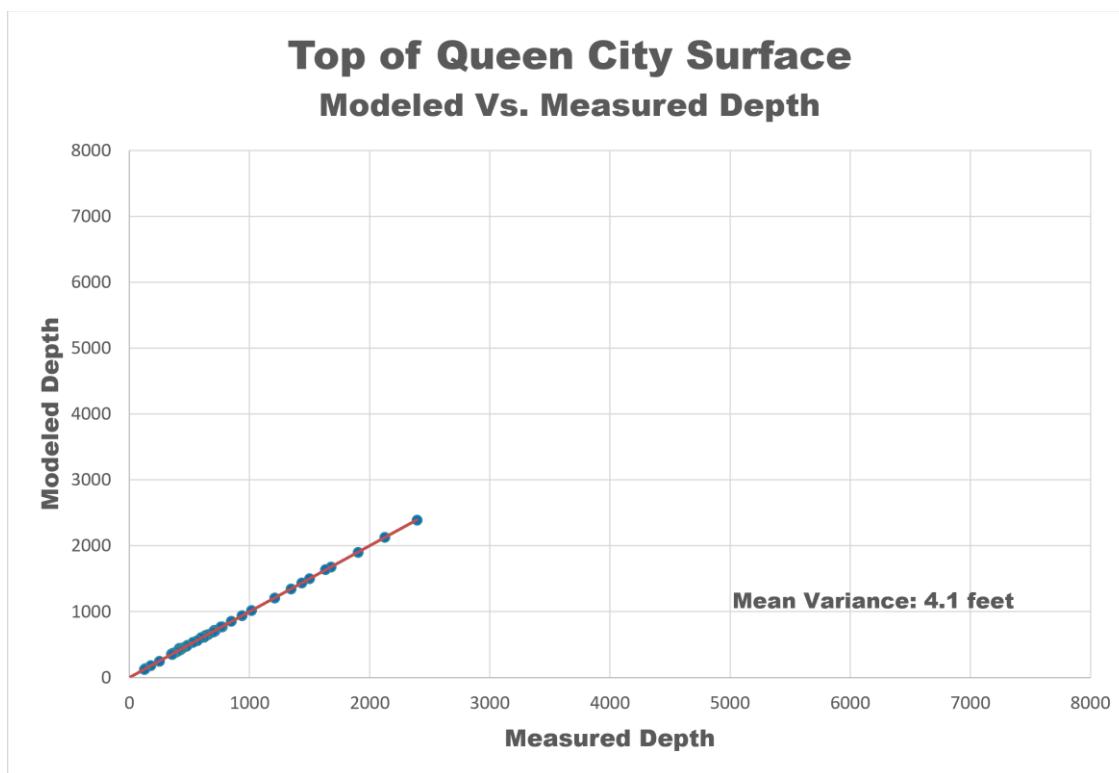


Figure 36 – Top of Queen City Sand Variance Analysis.

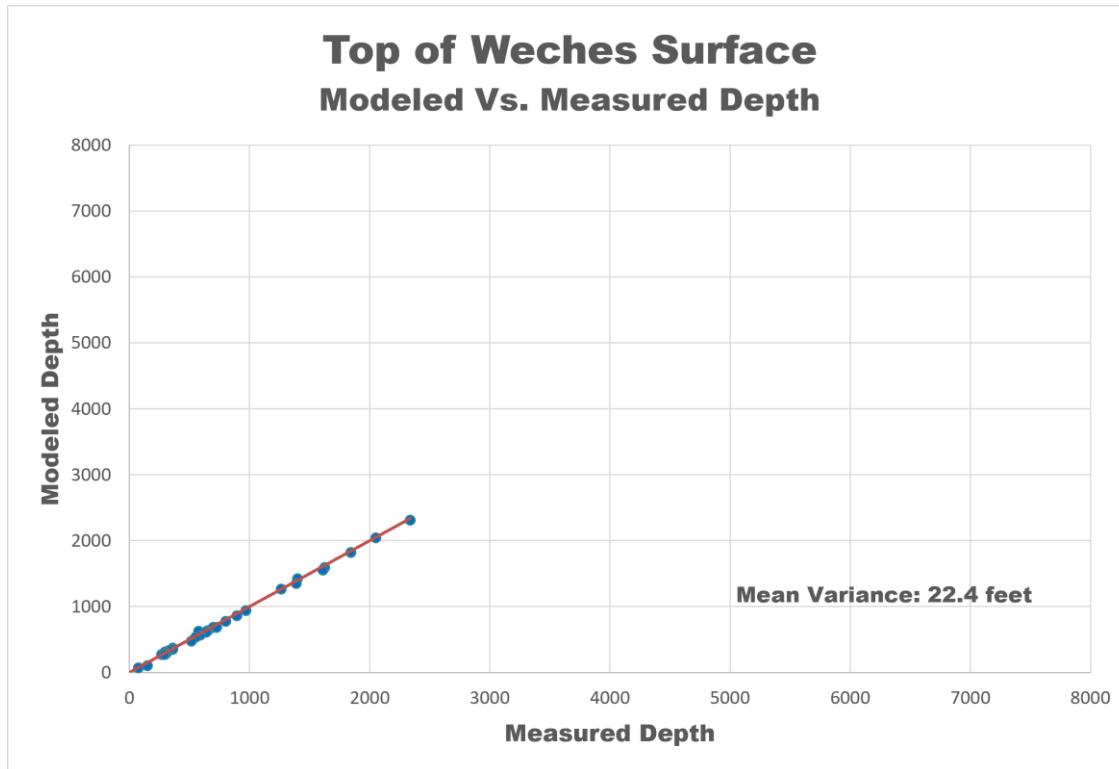


Figure 37 – Top of Weches Variance Analysis.

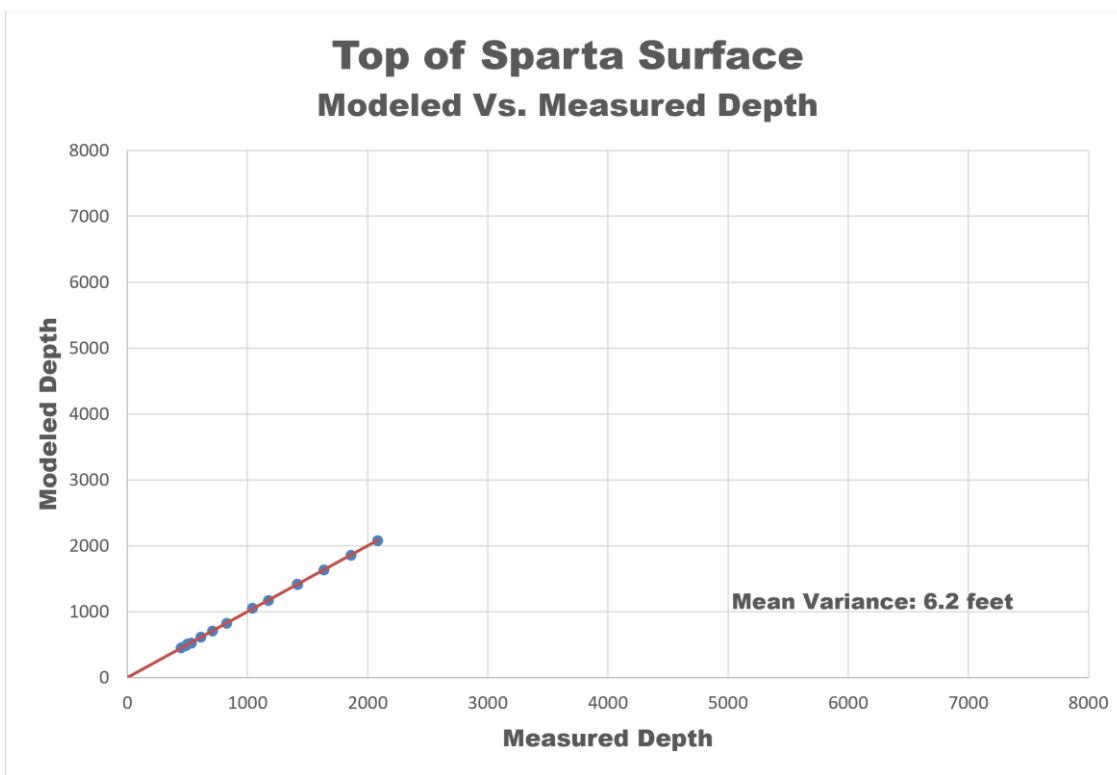


Figure 38 – Top of Sparta Sand Variance Analysis.

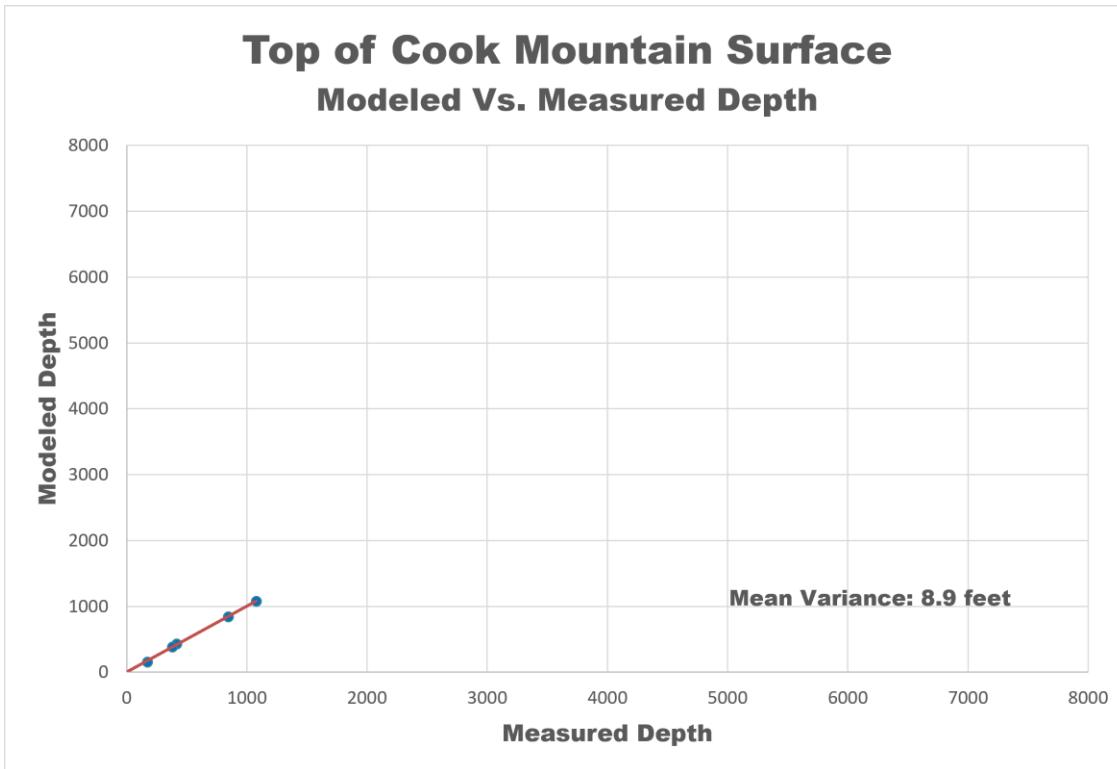


Figure 39 – Top of Cook Mountain Variance Analysis.

3.3 HYDROGEOLOGIC MODEL STRUCTURE AND ISOPACH DATA

The 3D hydrogeologic model can provide users with information on target aquifer thicknesses and drilling depths. Figures 40 – 49 illustrate the depth to the top of each model layer (excluding the Yegua-Jackson and Colorado River Alluvium which are present at land surface). These surfaces only account for depth of each unit when present below land surface, while associated outcrop areas are visible as grey.

Figures 50 – 61 illustrate total thickness (“isopach”) for each model layer. The total thickness for the undifferentiated Cretaceous was not calculated, as this surface top serves as the model base.

In general, the depth to each layer increases in a southeasterly direction, with the deepest measured sections occurring along the far eastern edges of Bastrop and Lee counties. Trends associated with unit thickness did vary across the study area, especially near the Milano Fault Zone and within the outcrop areas. Within each layer, the distribution of unit thickness is variable around the Milano Fault Zone. We believe this is a result of missing and/or repeat sections, coupled with a limited understanding of the complex faulting within this area. Each layer generally thickens to the east and southeast.

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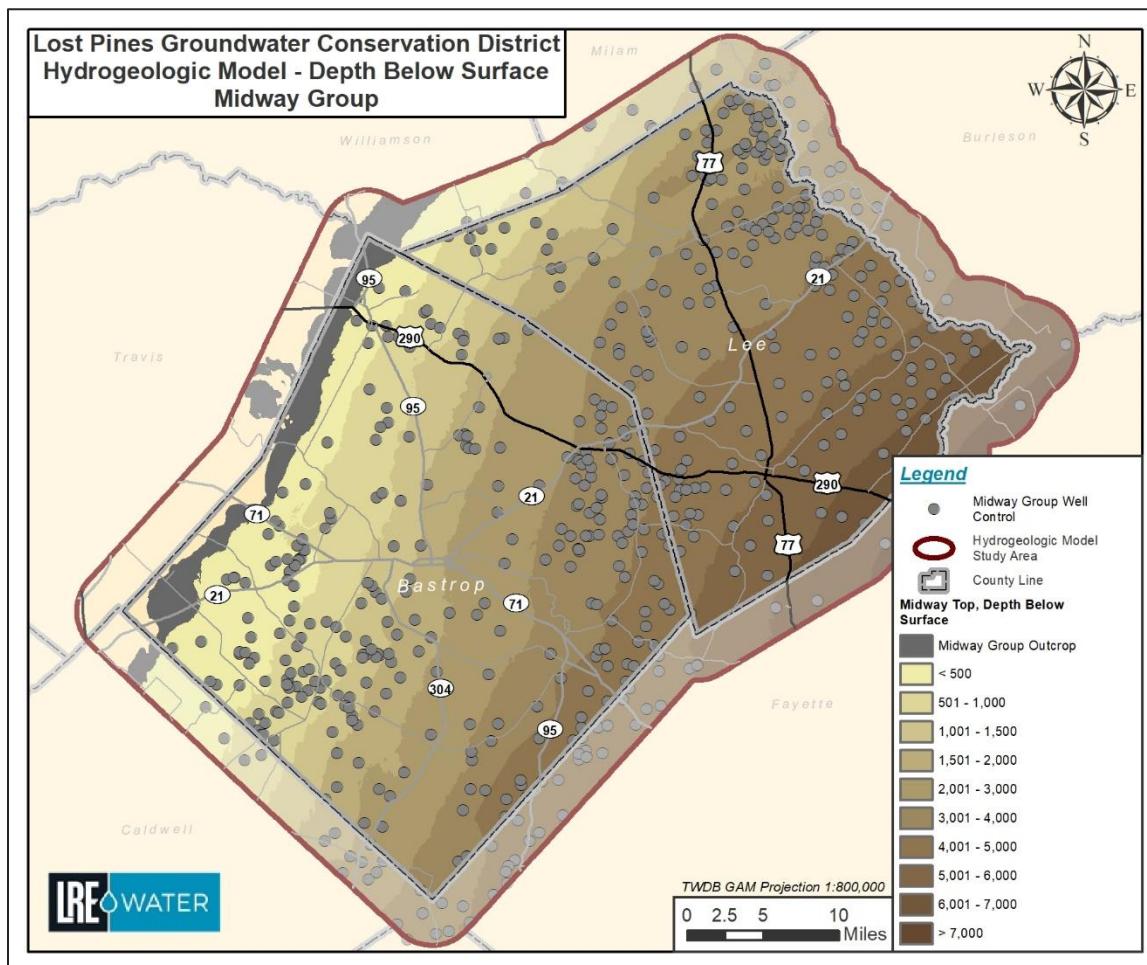


Figure 40 – Midway Group top depth below land surface.

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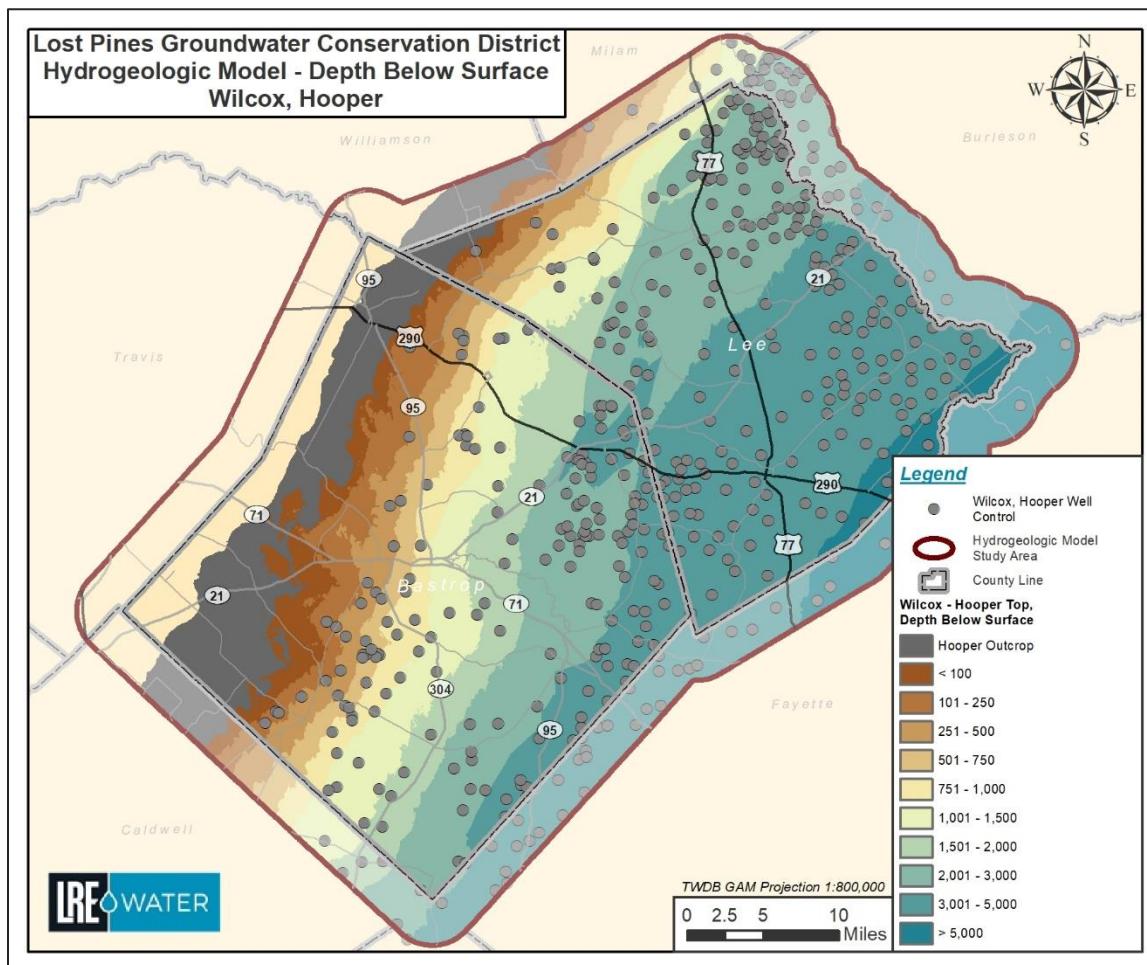


Figure 41 – Wilcox, Hooper Top, depth below land surface.

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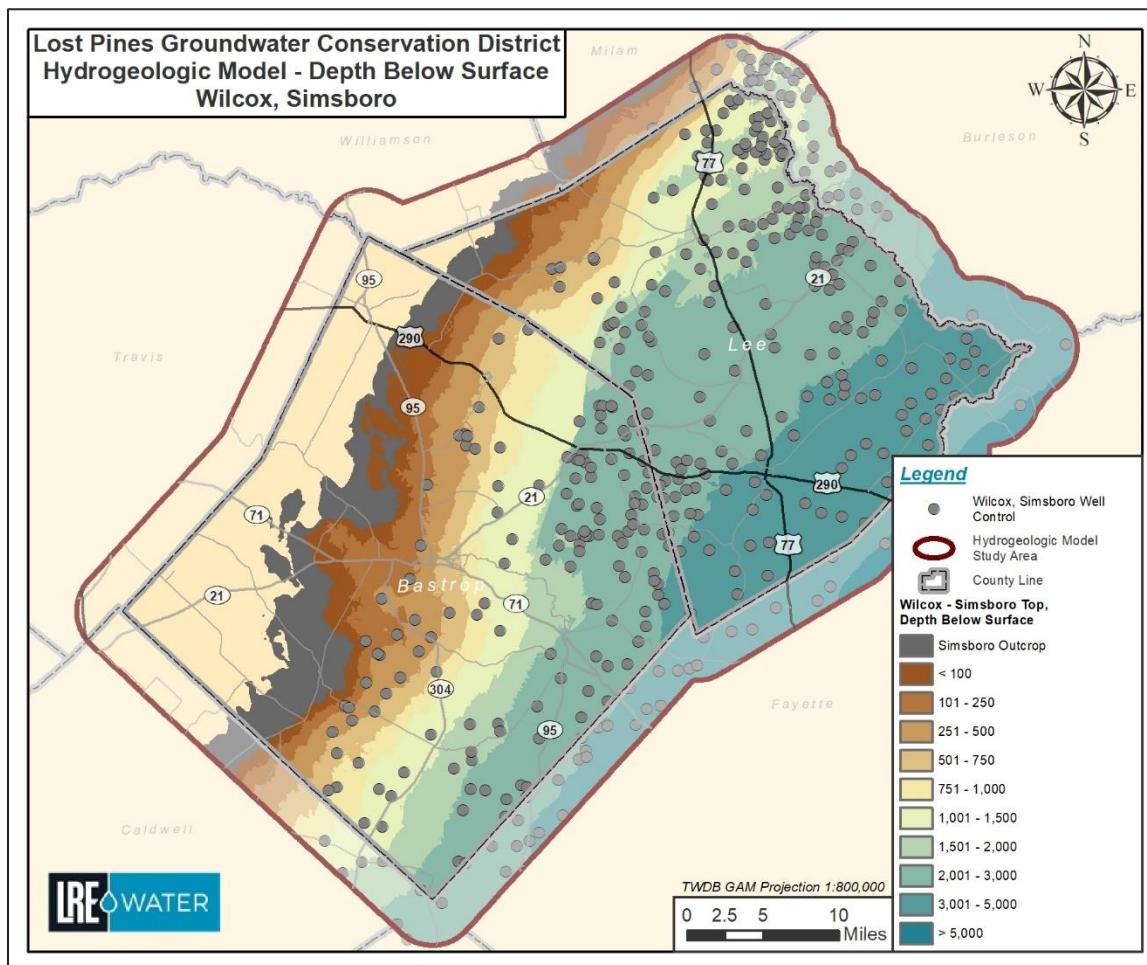


Figure 42 – Wilcox, Simsboro top, depth below land surface.

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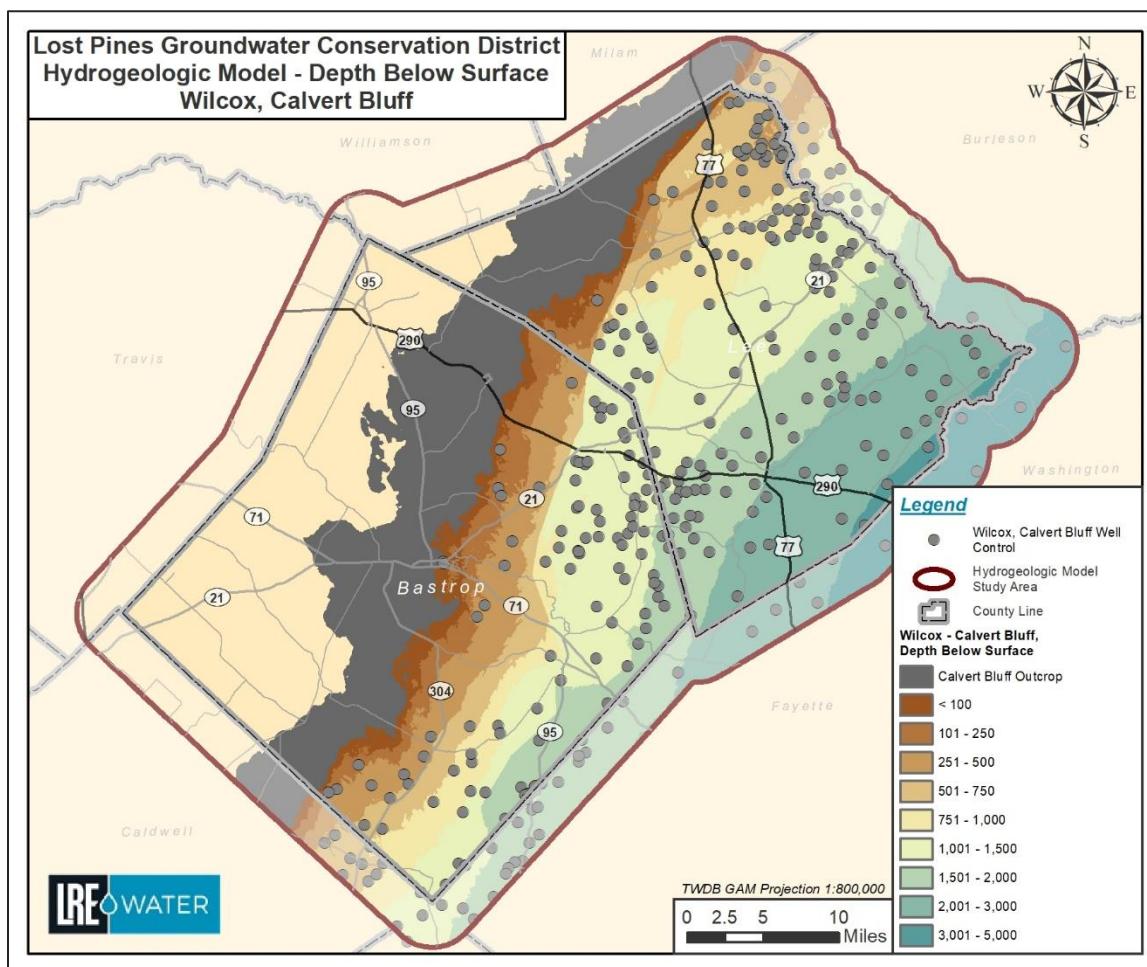


Figure 43 – Wilcox, Calvert Bluff, depth below land surface.

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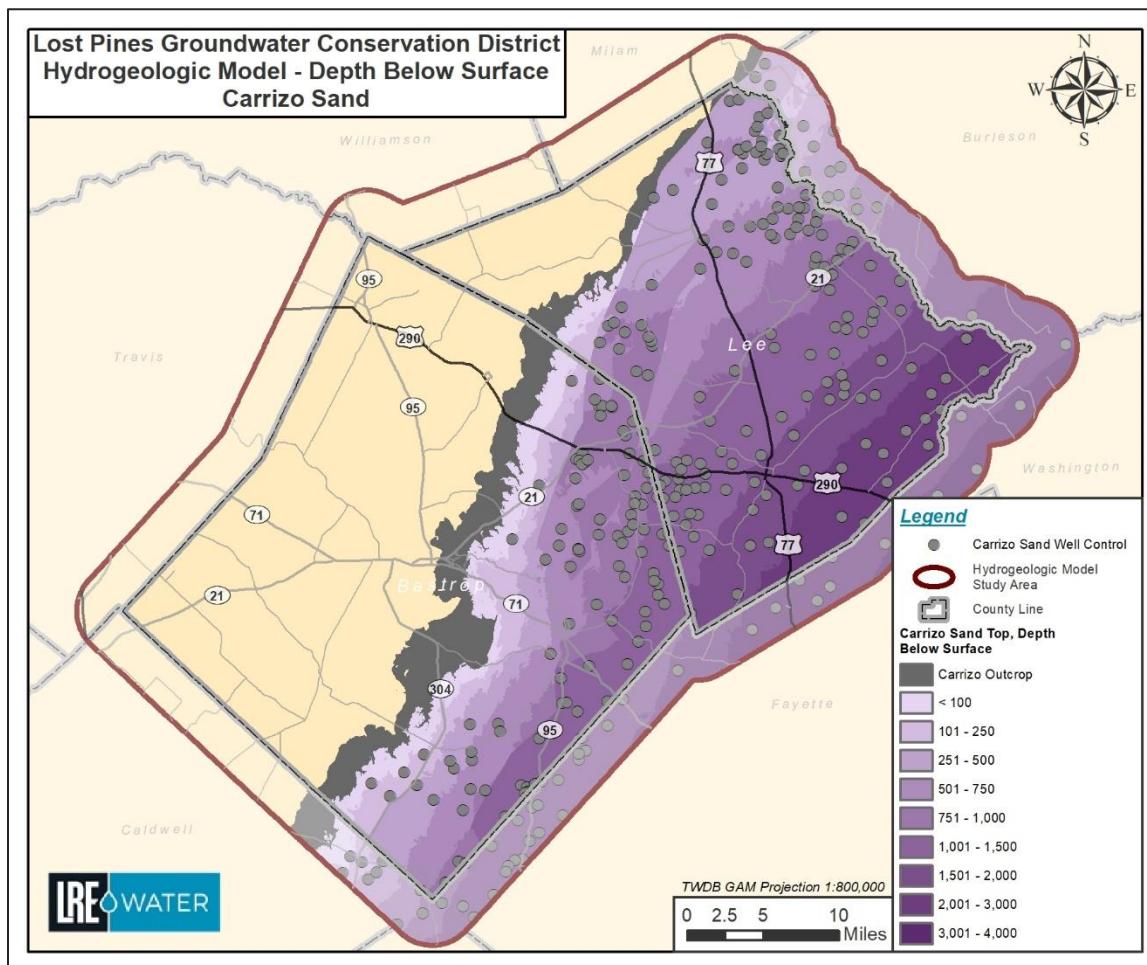


Figure 44 – Carrizo Sand, depth below land surface.

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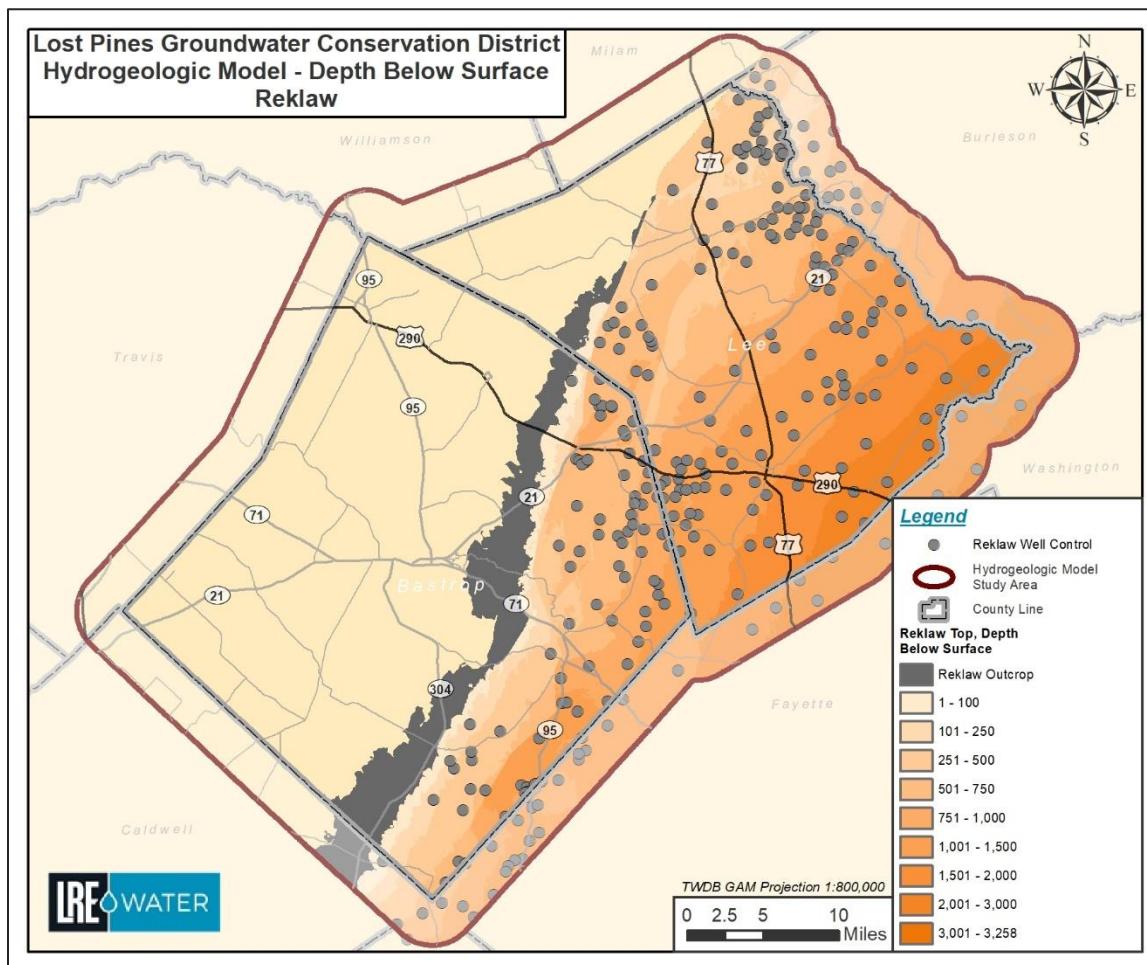


Figure 45 – Reklaw, depth below land surface.

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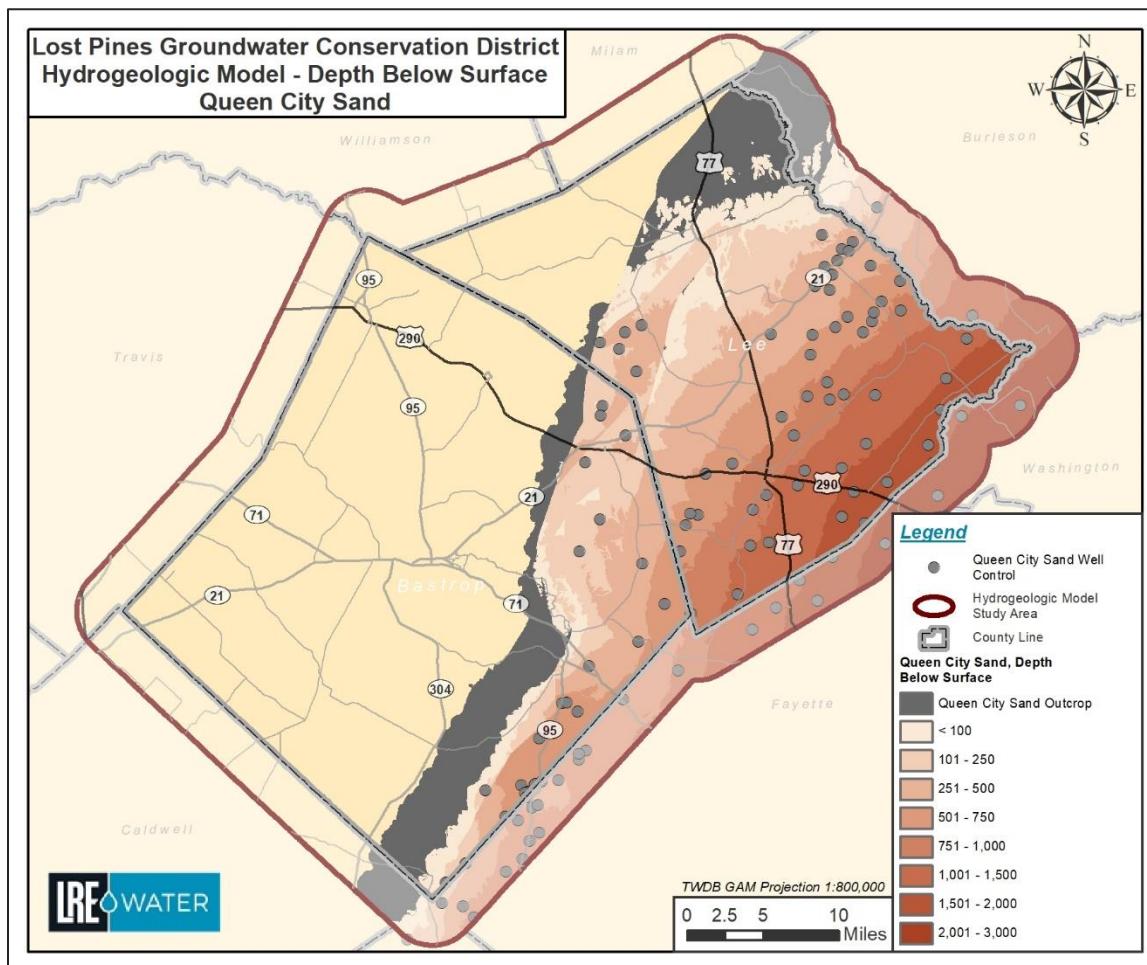


Figure 46 – Queen City Sand, depth below land surface.

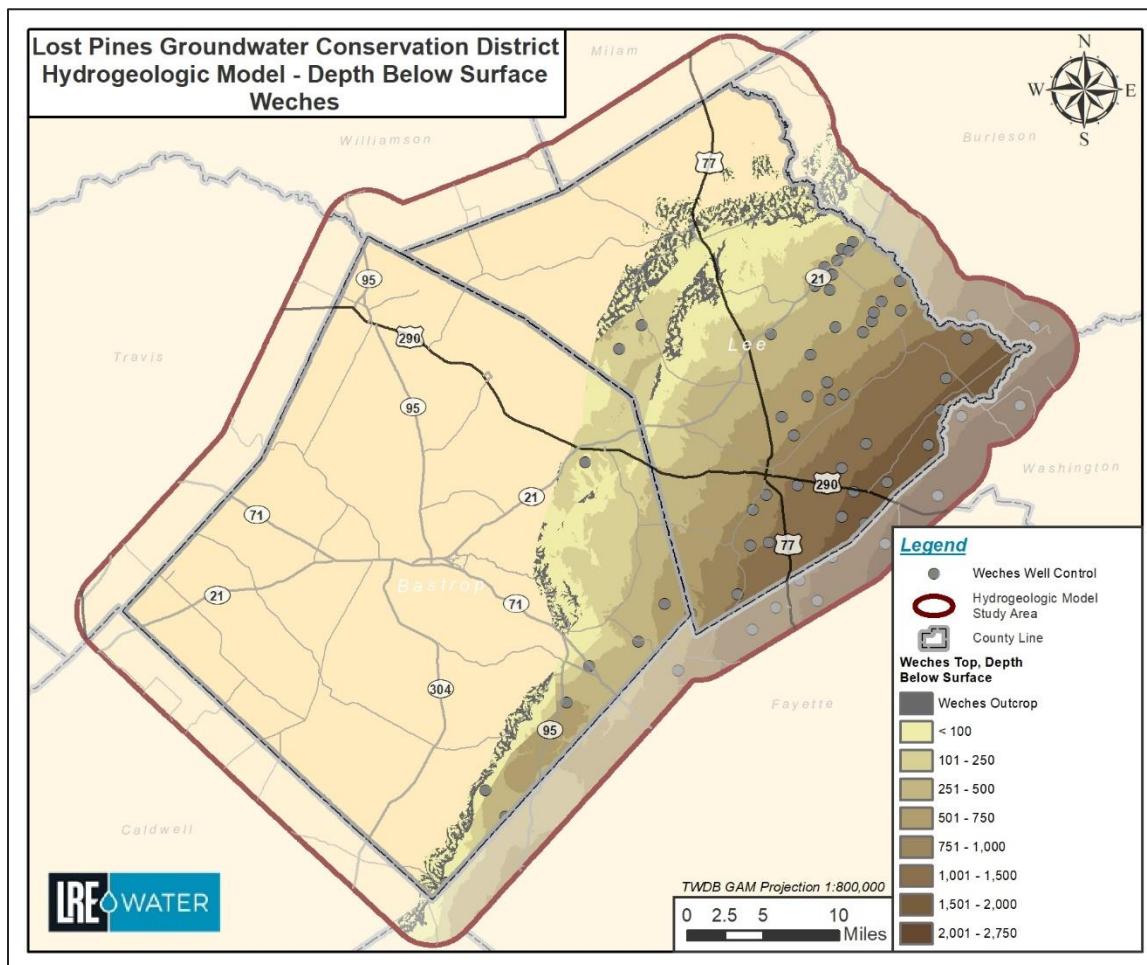


Figure 47 – Weches, depth below land surface.

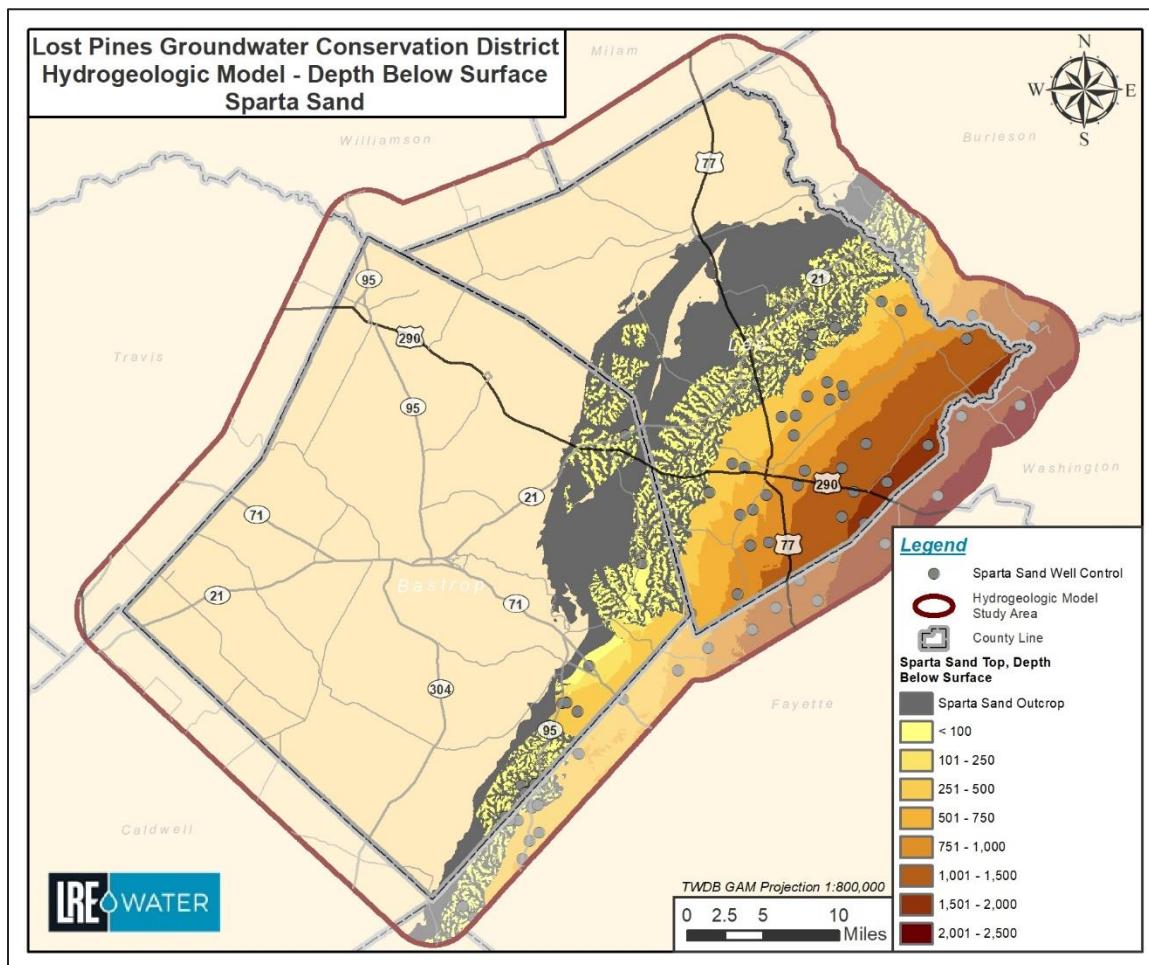


Figure 48 – Sparta Sand, depth below land surface.

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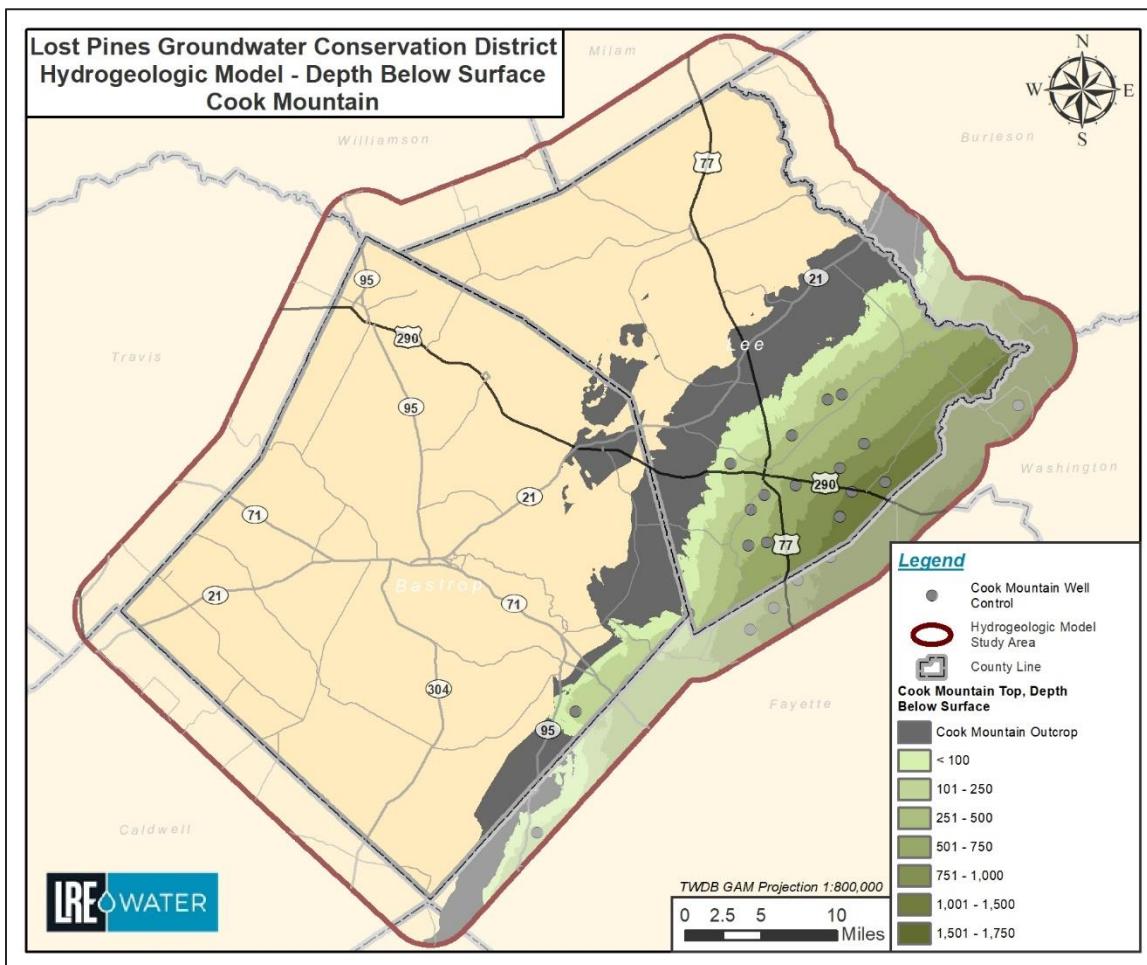


Figure 49 – Cook Mountain, depth below land surface.

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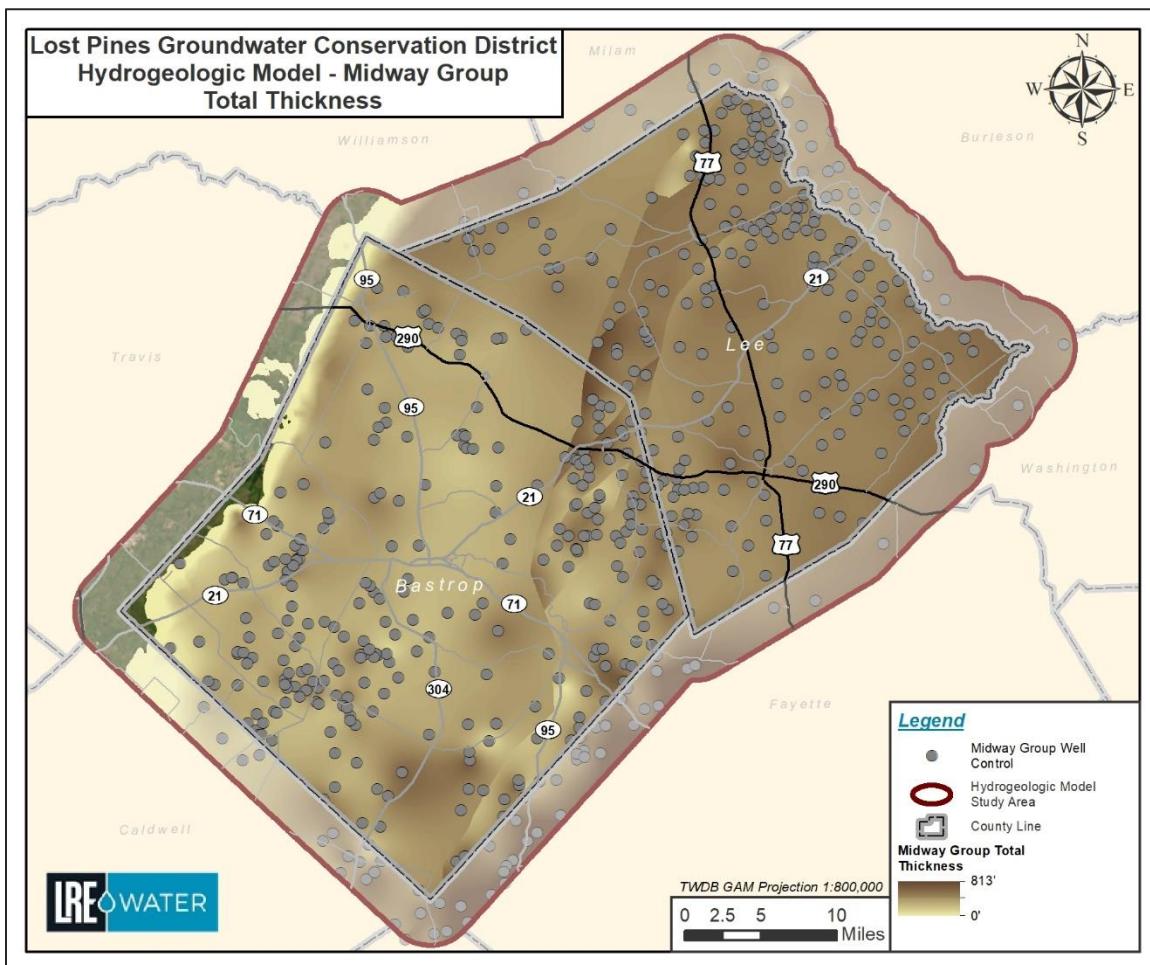


Figure 50 – Midway Group, total thickness.

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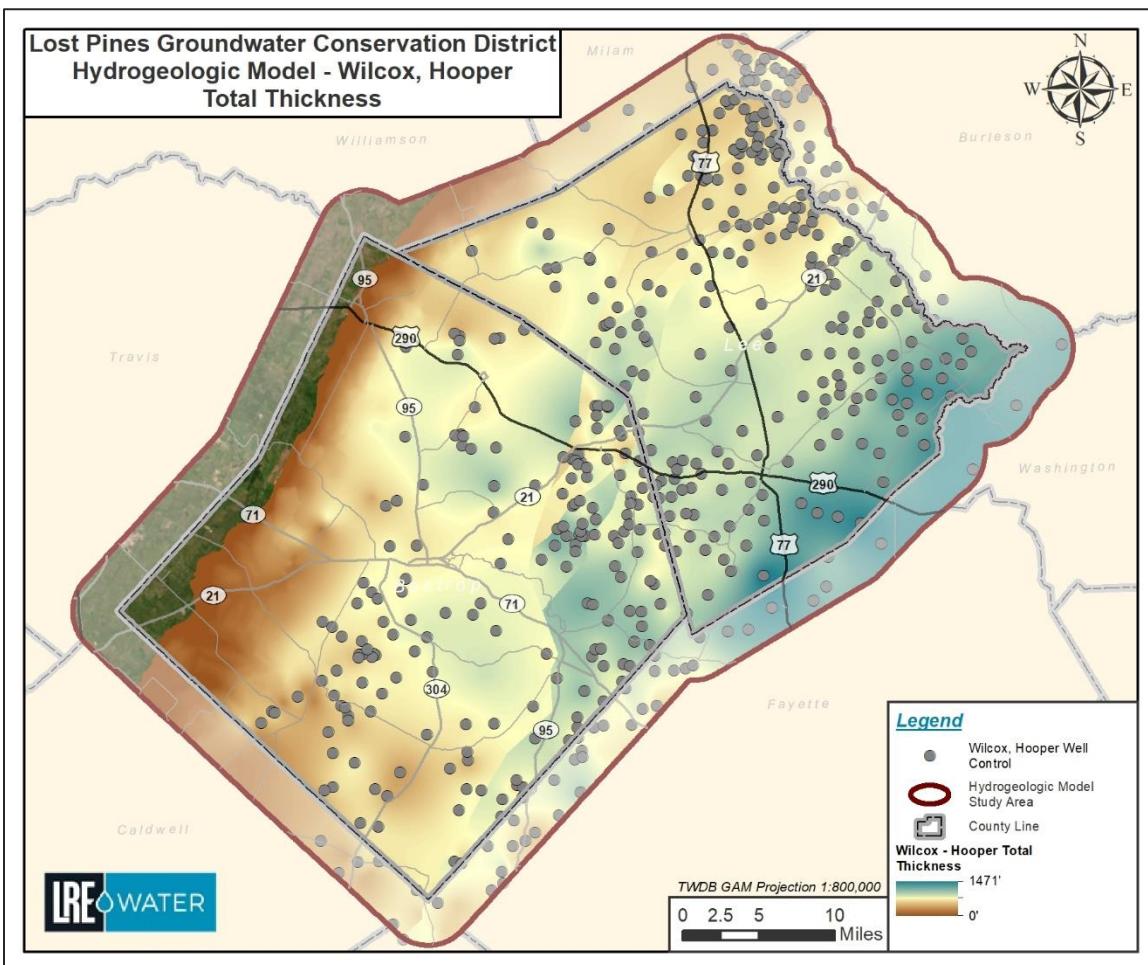


Figure 51 – Wilcox, Hooper, total thickness.

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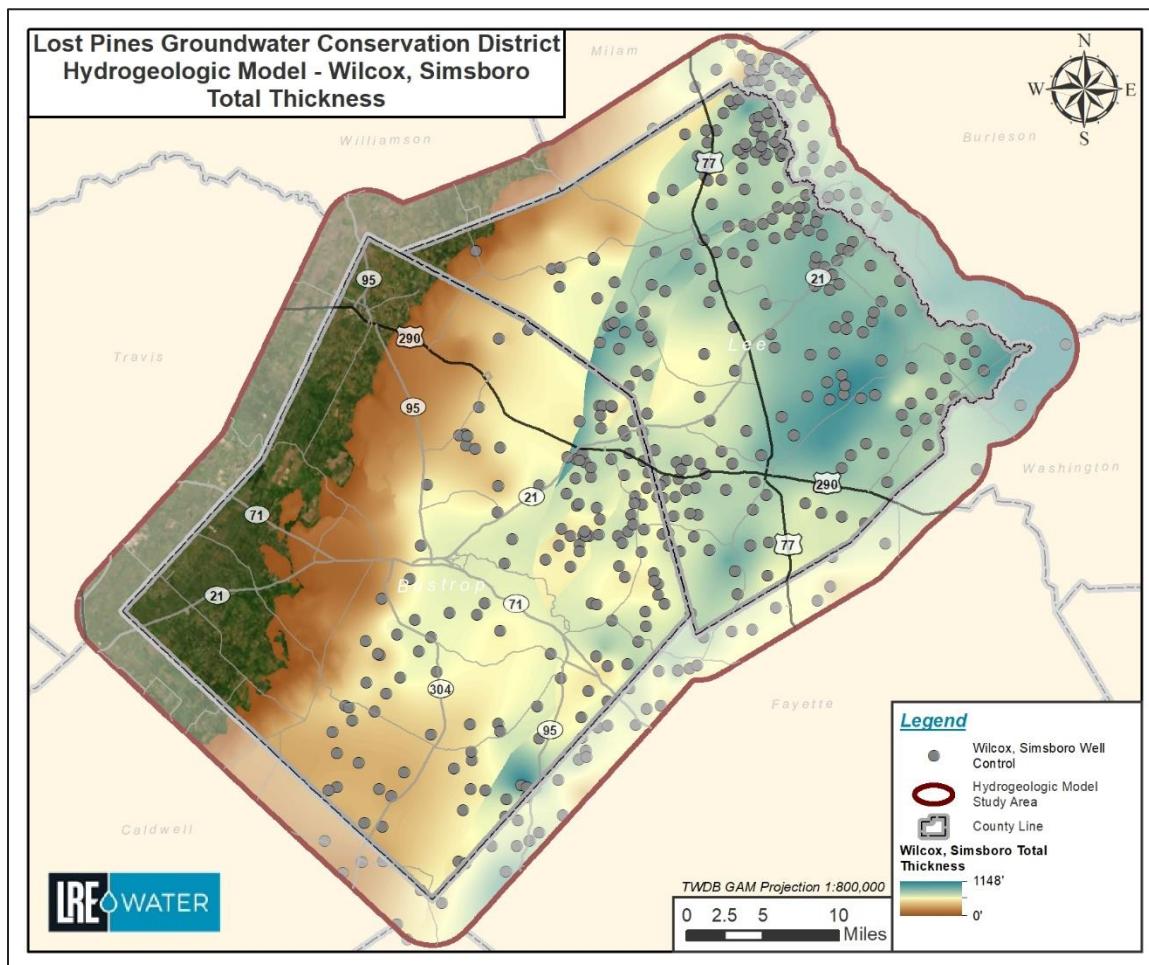


Figure 52 – Wilcox, Simsboro, total thickness.

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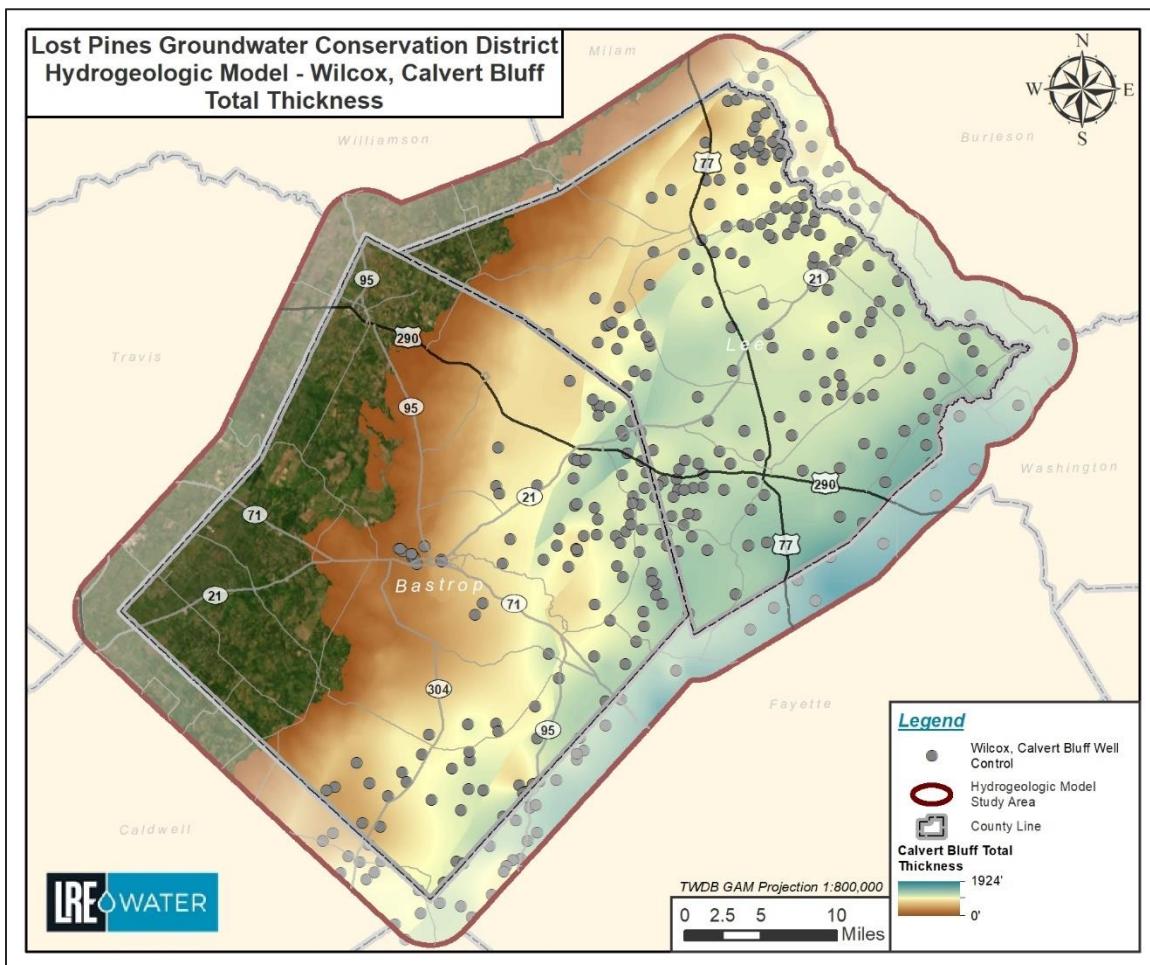


Figure 53 – Wilcox, Calvert Bluff, total thickness.

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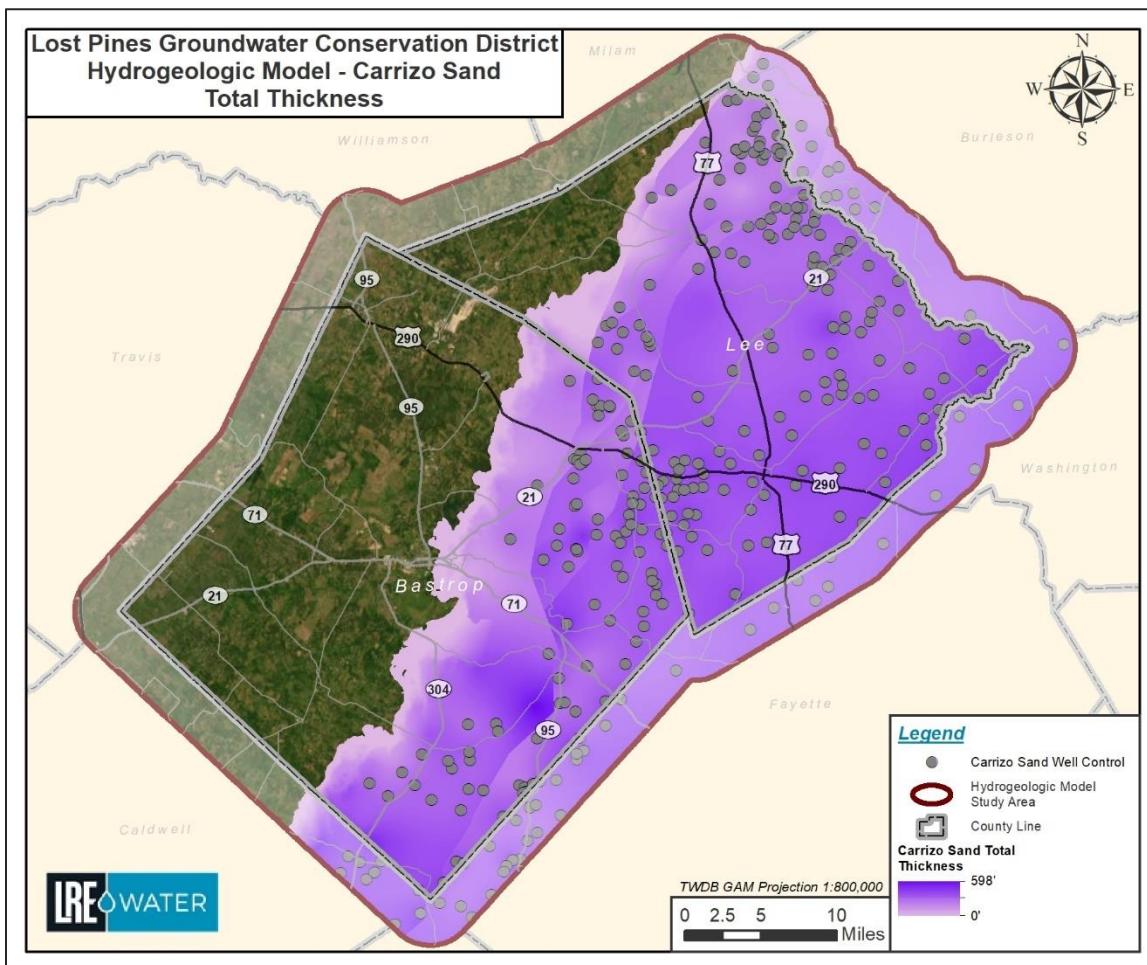


Figure 54 – Carrizo Sand, total thickness.

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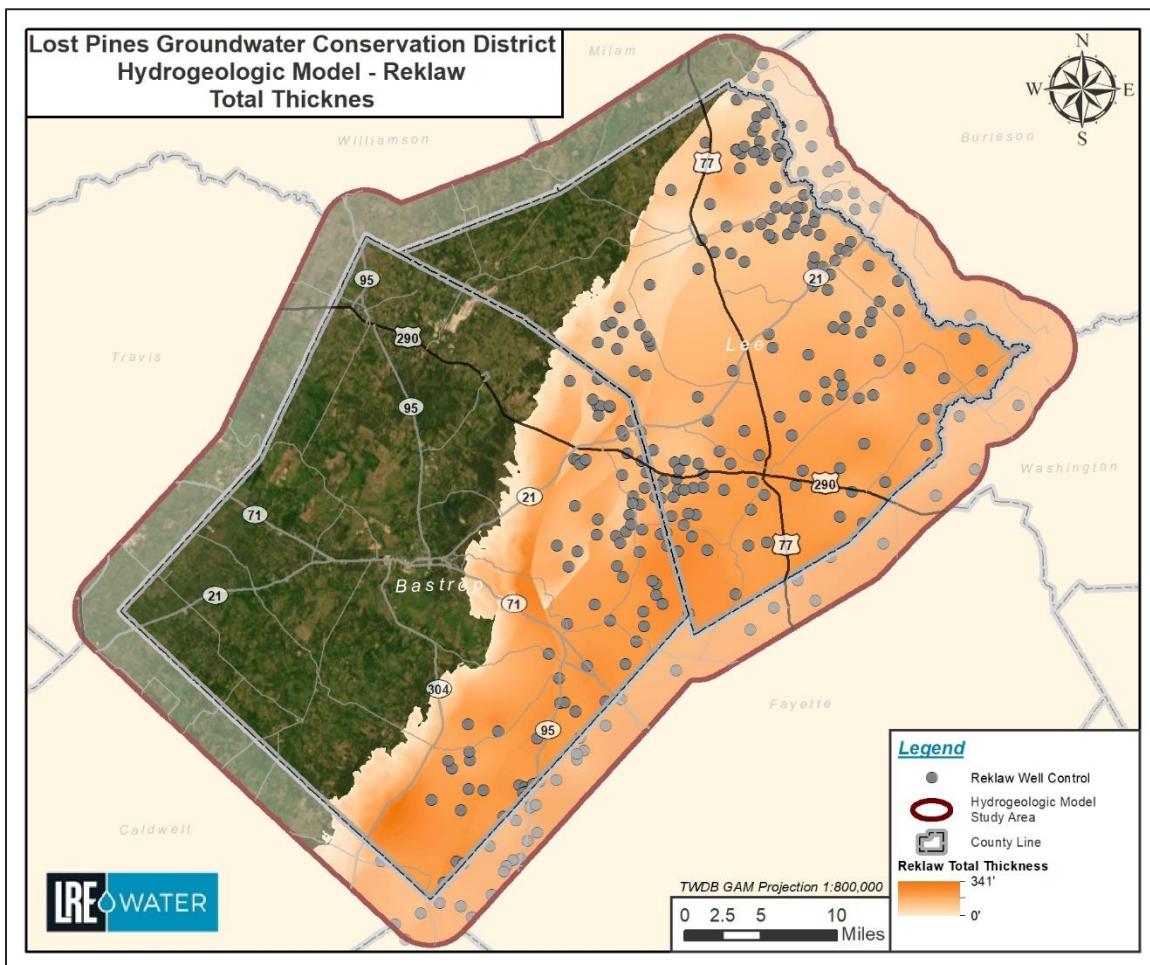


Figure 55 – Reklaw, total thickness.

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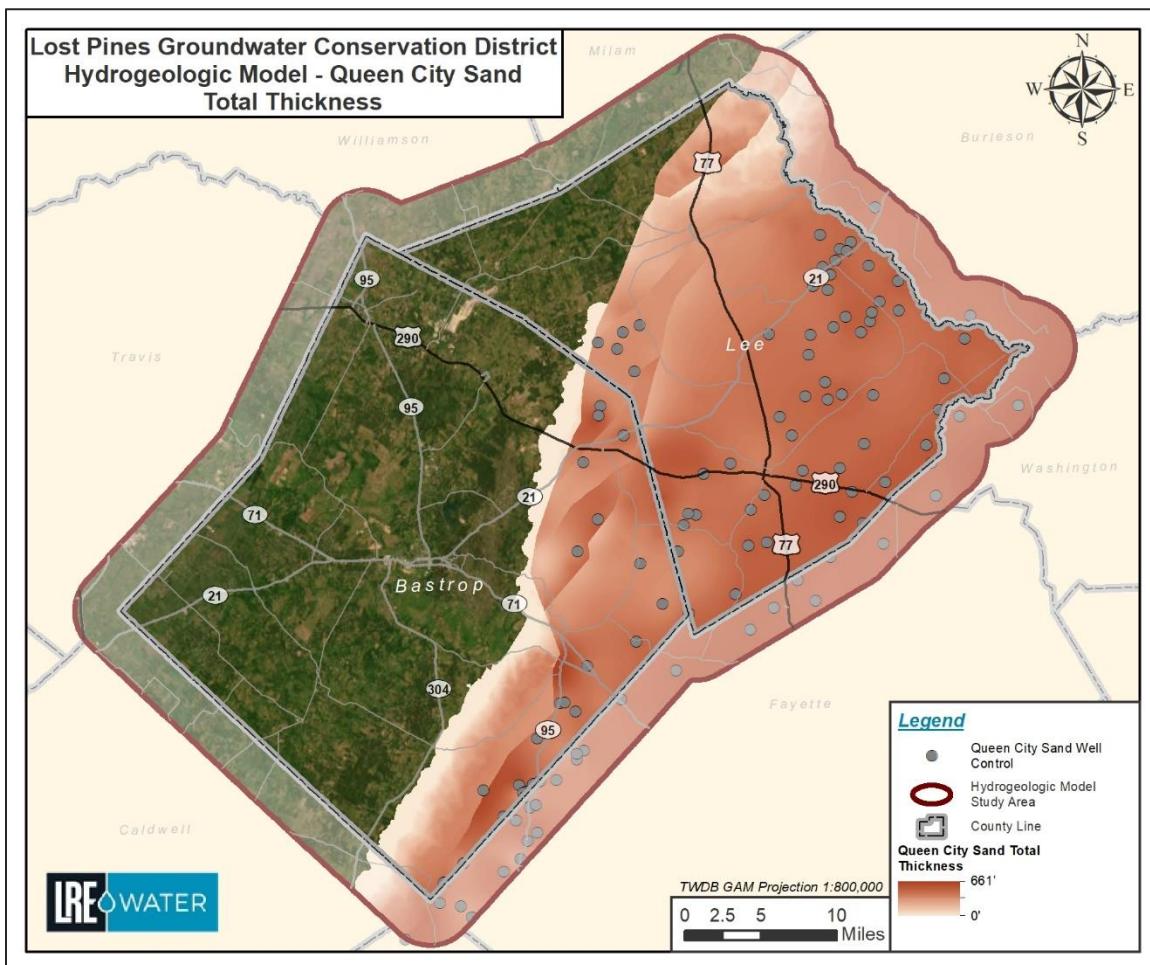


Figure 56 – Queen City Sand, total thickness.

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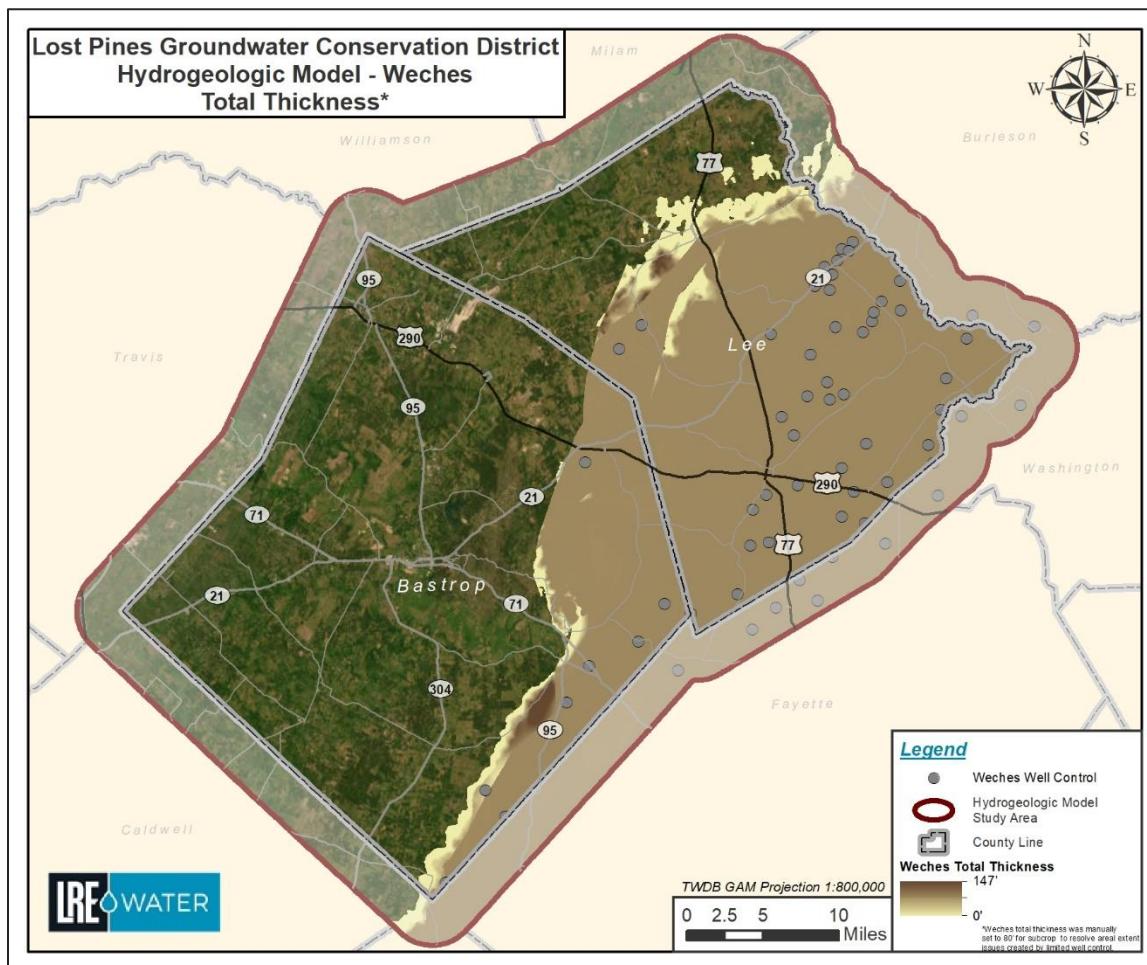


Figure 57 – Weches, total thickness.

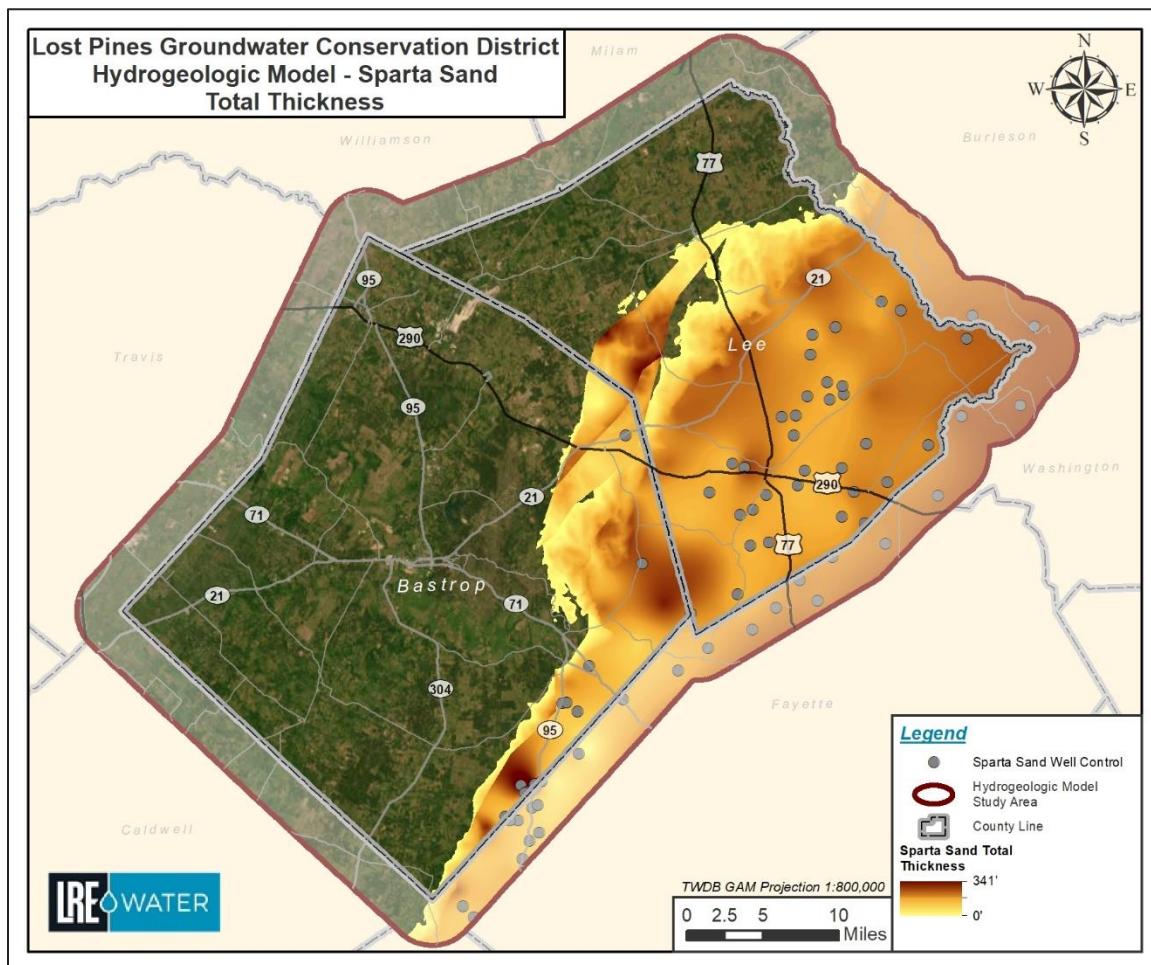


Figure 58 – Sparta Sand, total thickness.

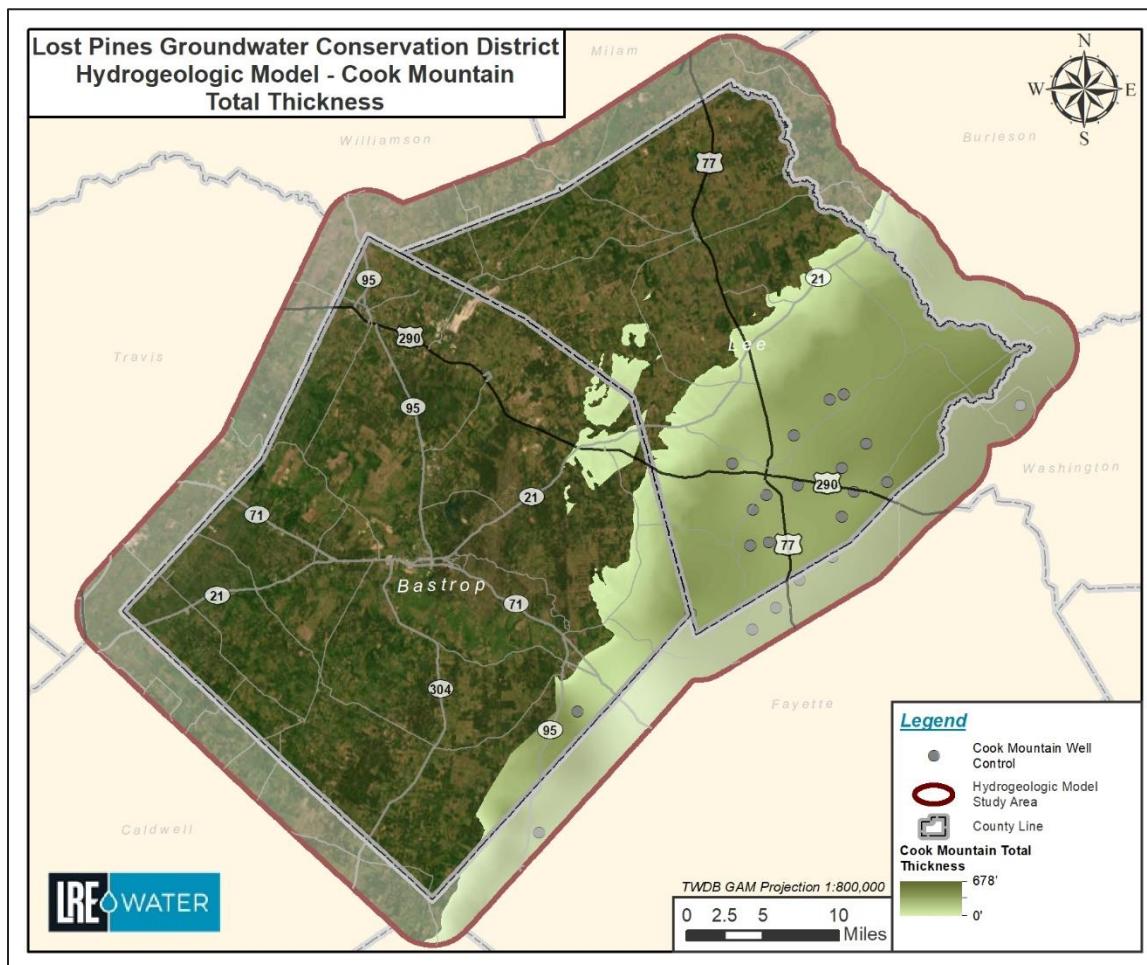


Figure 59 – Cook Mountain, total thickness.

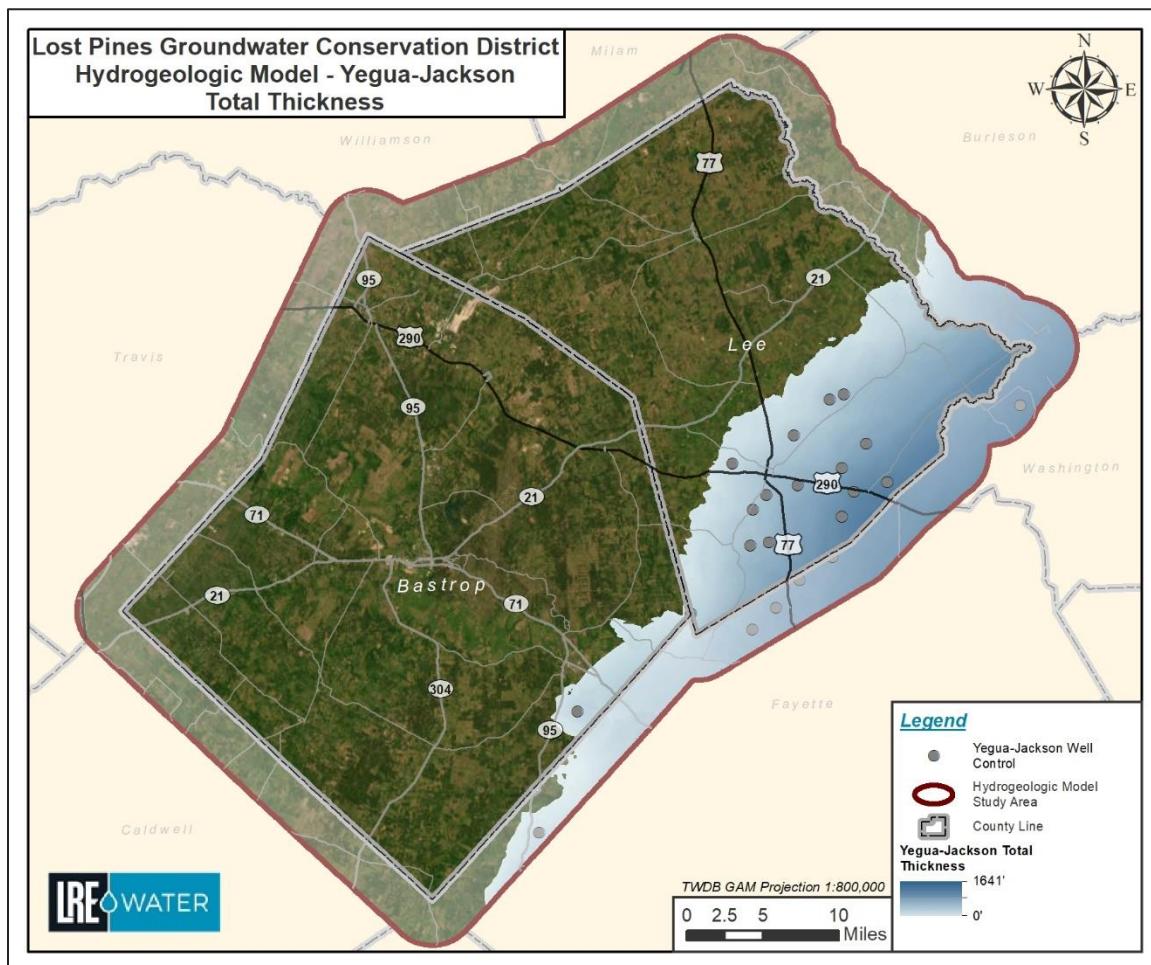


Figure 60 – Yegua-Jackson, total thickness.

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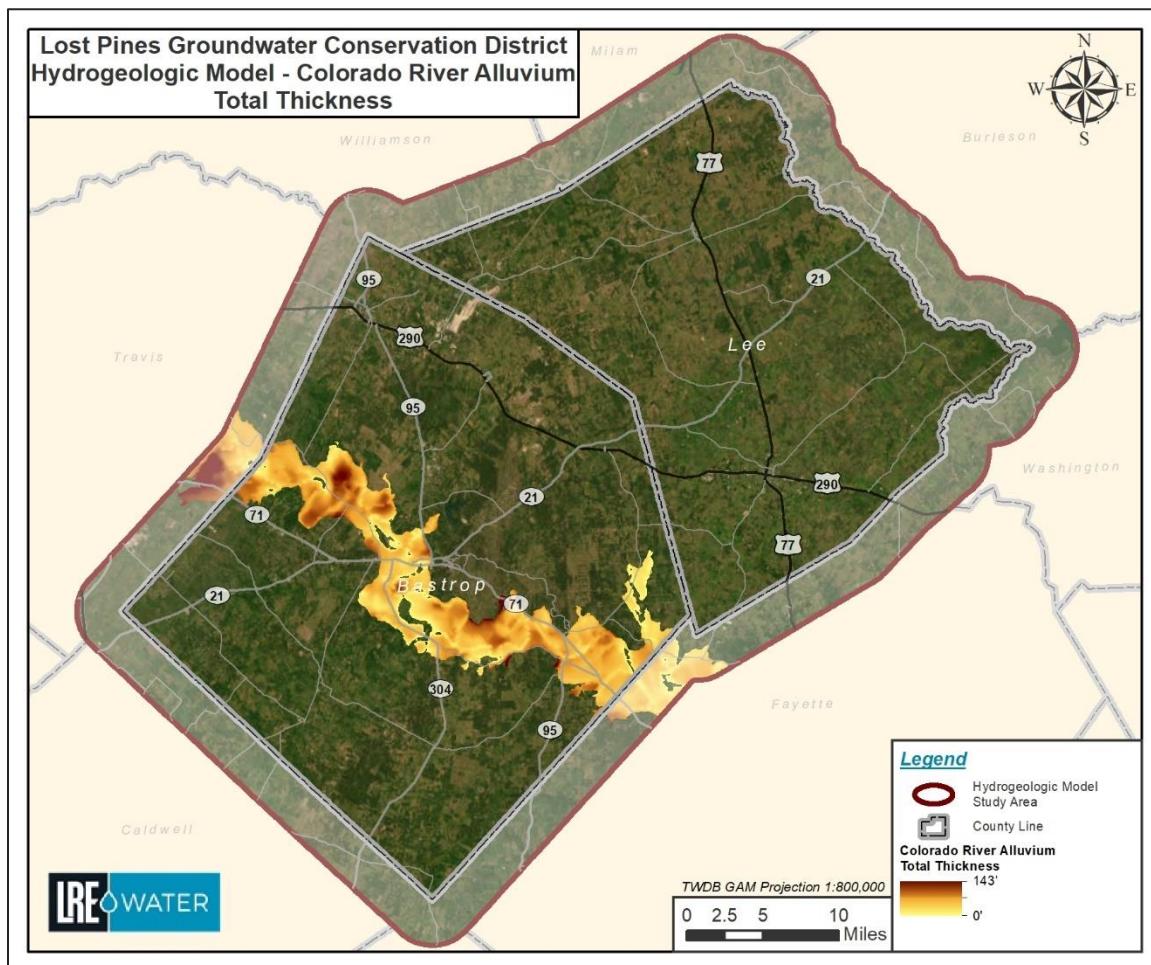


Figure 61 – Colorado River Alluvium, total thickness.

3.4 MILANO FAULT ZONE

The Milano Fault Zone is visible in the model workspace in both Bastrop and Lee counties. The Page and Tanglewood Grabens are most notable within this structure. Within the Tanglewood Graben, fault offsets are great enough to locally compartmentalize portions of the Carrizo aquifer (Figure 62). This faulting can have significant impacts on groundwater flow (Ewing and Young, 2020). Additionally, minor disparate faults in western Bastrop County create localized surface irregularities but were not substantial enough to be mapped in the 3D workspace.

3.5 LPGCD REGISTERED WELL DATABASE SOURCE AQUIFER DESIGNATIONS

Using the Hydrogeologic Model structure and isopach data, LRE assigned aquifers to wells within the LPGCD registered well database. This occurred for every well where LRE was able to assign an aquifer based on listed well depth. In some instances, a well depth alone may not provide enough information to accurately assign an aquifer. This can occur when a well penetrates more than one aquifer. Additionally, wells with missing well depth and/or incomplete well coordinate information were not included in this analysis. The results from this analysis are included within Appendix E.

3.6 GAM AQUIFER PROPERTY DATA

Aquifer hydraulic conductivity data were extracted from the Carrizo-Wilcox Queen City and Sparta GAM (Young and others, 2018), and were overlayed on the hydrogeologic model geologic structure as scene 16 in the model viewer (Figure 28). Figure 63 provides a demonstration of this display for the Simsboro, where red points would suggest a higher hydraulic conductivity. Hydraulic conductivity describes the ease with which water can move through each aquifer system, where a higher value indicates greater water movement.

3.7 WATER QUALITY AND WATER LEVEL DATA

LRE Water obtained and reviewed water quality and water level data from the LPGCD and TWDB Groundwater databases. These parameters were initially considered for inclusion within the model as separate scenes. Unfortunately, the disparate allocation of well control and inconsistent measurement dates within each of these datasets prevented the integration of this data without the creation of visibly flawed interpolations. The main issue faced was the extrapolation of values in the downdip portions of the aquifers and outcrop areas where limited control exists. In some instances, this limited well control created water level surfaces that were substantially above land surface. The attempted extrapolation also suggested water with very low total dissolved solids would be in the far downdip portion of the aquifer without nearby well control to confirm.

3.8 SUPPORTING GIS GEODATABASE AND DATASETS

All supporting GIS project data has been stored in an electronic project geodatabase (Appendix F). This includes all GIS shapefile data, raster files, and a virtual bore framework. Supporting geophysical log data has also been captured and is stored in Appendix G of this report.

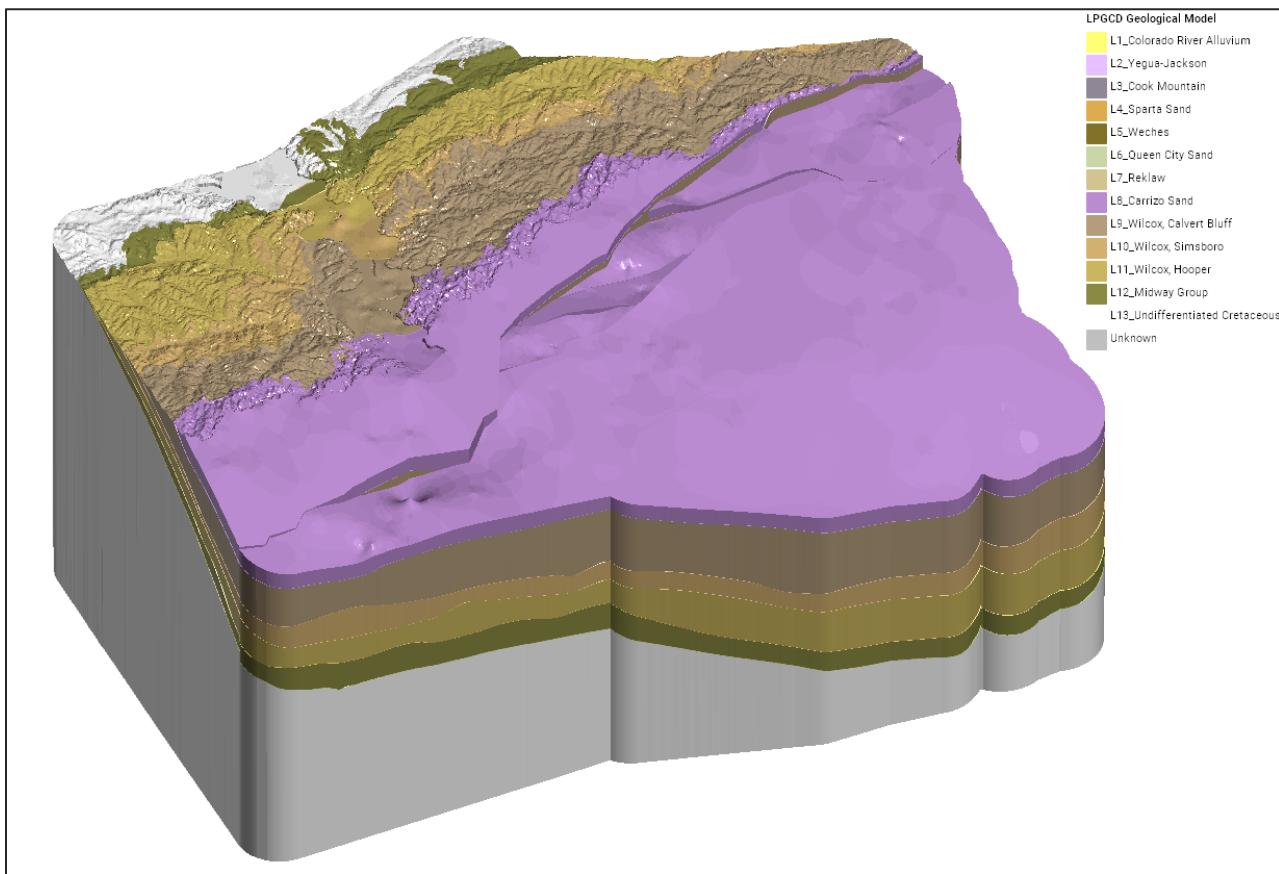


Figure 62 - 3D Hydrogeologic Model with Milano Fault Zone visible in the Carrizo Sand surface.

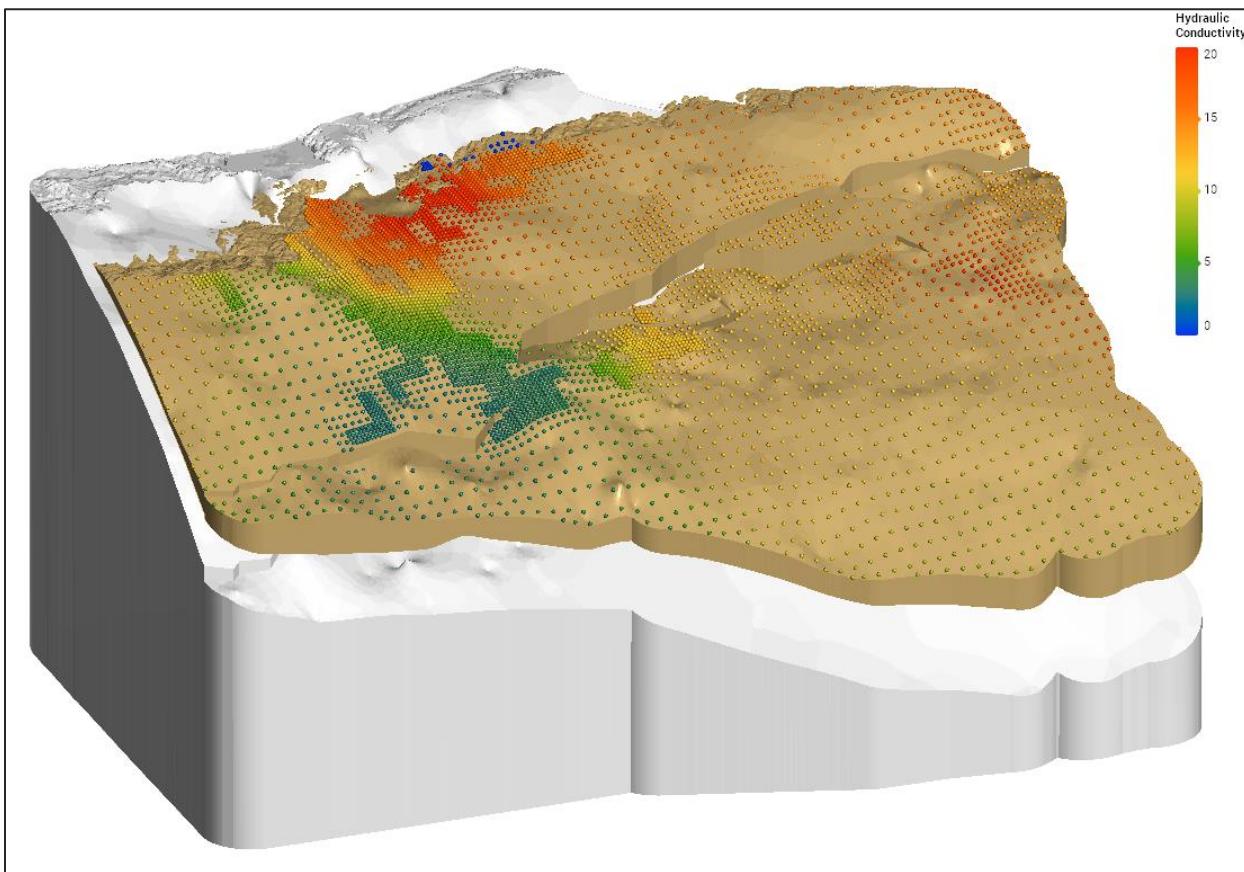


Figure 63 – 3D Hydrogeologic Model with GAM (2018), hydraulic conductivity overlay on the Simsboro formation.

SECTION 4: CONCLUSION AND RECOMMENDATIONS

The development of the LPGCD 3D Hydrogeologic Model has not only resulted in the development of new science and data but has also provided the first complete three-dimensional review of the aquifers within Lee and Bastrop counties. With this data, the LPGCD will be able to increase operational efficiencies, provide the region and state with new data, and have a scientifically defensible platform upon which aquifer management decisions may be made.

The primary goal of this work was to provide the LPGCD with a platform that improved upon the existing hydrogeologic frameworks and increased confidence in LPGCD management decisions that pertain to the groundwater resources within Lee and Bastrop counties. This work achieved this goal and provides the foundation for a local LPGCD groundwater flow model that can assist in both regional planning and in making local permitting decisions. This work also provides LPGCD with an educational tool for communicating the area's complex geology and is the framework for an update to LPGCD "Virtual Bore Tool".

Although this work provides new and improved data, it also highlights the need for additional research and future scientific initiatives. This model is a significant improvement from all past iterations of hydrogeologic frameworks of Lee and Bastrop counties but still has some limitations as it attempts to depict complex geology in a somewhat simplified manner as single unit fault blocks. Although minor to major structural details may be obscured, the end result and goal of developing a better understanding of study area hydrogeology is still achieved. Additionally, the stratigraphic data that supports the development of the model is limited in some geographic areas. For areas with fewer control points, more uncertainty arises. For some areas the GAT surface geology and model surface geology disagree. This once again is related to limited well control near outcrop areas and GAT surface geology that may not properly reflect reality. Fortunately, this was viewed as having an insignificant impact on overall model development. Many of these discrepancies between modeled and observed data are surficial and will have a very limited to negligible impact on the eventual development of a local groundwater flow model.

This model does not replace the need for or substitute for a groundwater flow model. This hydrogeologic model provides the geologic framework from which a groundwater flow model is based. A groundwater flow model simulates the movement of groundwater through that geologic framework. Hydrogeologic models are best used for identifying the relationships between geologic units and where those geologic units exist in relation to one another.

The development of the LPGCD 3D hydrogeologic model provides LPGCD with a solid foundation for future groundwater research and with time can be improved further. As highlighted by the variance analysis, this model closely follows the natural environment. With future model updates this model can also be modified or adapted to address specific issues (e.g., contamination, water level declines, facies changes), and should continue to evolve as more data becomes available. Dependent on future needs, the following should be considered:

- An evaluation of the existing "Not Reviewed" well control, either in local areas of interest or across the entire study area. Many of the existing data points were reviewed, modified and adjusted accordingly as this initial model was developed; however the subset of points currently identified as "Not Reviewed" may provide additional details regarding

aquifer structure and properties. This type of future analysis may be most useful in areas of interest or as site specific issues arise.

- A review of areas and well control points that demonstrate higher than average modeled variance. The stratigraphic well control included within the hydrogeologic model is believed to be correct but is only as accurate as the interpretation and interpolation on which it is based. Outlier data points should be reviewed to evaluate possible location errors and to determine if areas with structural changes related to faults or changes in depositional patterns may need to be re-evaluated.
- With time and with use of the model data, areas will be identified that may not align with newly captured and available data. For this reason, LPGCD should consider annual model updates which incorporate new data and evaluate site-specific data not previously included in this initial model development.
- With the demonstrated occurrence of significant faults within the study area, all future aquifer pump test data should be carefully considered and evaluated to provide additional insight regarding such features. Additionally, LPGCD and its applicants should consider strategic positioning of pump test and monitor wells around the mapped faults to determine if no flow or partial flow boundaries exist along the fault planes.
- A review and update of the LPGCD registered well database may improve the quality of the underlying well construction data. Within more complete well construction data, LRE can improve upon the aquifer classifications within the registered well database.
- An abundance of historic water level data was observed within the LPGCD study area, however a significant portion of this data was unreliable or not usable for one and usually several of the following reasons: (1) well completion and source aquifer information was unavailable, (2) measured values were anomalously high or low when compared to surrounding values, (3) infrequent and inconsistent measurement dates, (4) dual- and triple-completed wells (e.g. single wells completed in multiple aquifers), and (5) a poor spatial distribution of measured values in all downdip portions of the aquifers. We recommend that LPGCD continue to review the spatial and aquifer-specific distribution of their monitor wells.

With this model, LPGCD has invested in the development of a platform that could and should be at the center of future management decisions. In its current form, the model has provided the LPGCD with refined geologic structure data and educational tools and resources for the development of groundwater in Bastrop and Lee counties. This improved geologic model may serve as the foundation for a local groundwater flow model and should also be viewed as a significant improvement over past hydrogeologic model frameworks.

SECTION 5: REFERENCES

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**Appendix A –
Lost Pines GCD Stratigraphic Well Control Dataset**

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API	BRACS ID	COUNTY	Latitude NAD83 Decimal Degrees	Longitude NAD83 Decimal Degrees	Elev. Feet	Well Depth	Stratigraphic Review	Jackson Top Depth	Yegua Top Depth	Cook Mt. Top Depth	Sparta Top Depth	Weches Top Depth	Queen City Top Depth	Reklaw Top Depth	Carrizo Top Depth	Wilcox, Calvert Bluff Top Depth	Wilcox, Simsboro Top Depth	Wilcox, Hooper Top Depth	Midway Group Top Depth	Navarro Group Top Depth	
4217700074	59061	Gonzales	29.748733	-97.344708	469	6,530	Not Reviewed	-9999	-9999	-9999	-9999	-9999	164	590	-9999	865	1670	2737	3328	-9999	
4202100015	14308	Bastrop	30.365993	-97.329531	538	2,948	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	387	788	
4202100038	68300	Bastrop	30.334281	-97.301957	482	3,399	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	765	1190	
4202100074	15187	Bastrop	30.333905	-97.366797	557	2,078	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	215	515	
4202100082	14509	Bastrop	30.317499	-97.371666	511	2,168	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	285	671	
4202100133	14415	Bastrop	30.252275	-97.118856	518	3,118	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	598	687	1007	2134	2855	-9999	-9999	
4202100134	14416	Bastrop	30.251944	-97.115277	524	4,892	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	133	616	723	1040	2179	2841	3760	
4202100135	68301	Bastrop	30.250891	-97.10486	554	9,800	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	698	878	1142	2239	2873	3841	4266	
4202100136	15183	Bastrop	30.214872	-97.229328	600	5,033	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	139	840	1408	2246	2595
4202100138	68302	Bastrop	30.202224	-97.145583	554	6,380	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	702	808	1070	2008	2319	3680	4204	
4202100139	68303	Bastrop	30.200633	-97.140257	557	7,079	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1090	-9999	-9999	3710	4263
4202100140	14284	Bastrop	30.198909	-97.135899	554	9,812	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	150	179	627	804	1162	2238	2983	3927
4202100142	14283	Bastrop	30.144444	-97.12111	482	6,737	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	225	760	985	1290	2400	2900	3948	4428
4202100143	14512	Bastrop	30.130017	-97.139928	488	6,734	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2195	2593	-9999	4288
4202100144	68304	Bastrop	30.128522	-97.134066	475	6,808	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2410	2707	3740	4177
4202100145	68305	Bastrop	30.120935	-97.14449	452	6,665	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1981	2578	-9999	4144
4202100146	42729	Bastrop	30.129721	-97.123332	551	9,260	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1135	2140	2821	3652
4202100148	14427	Bastrop	30.064444	-97.132777	449	7,040	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2050	2690	3585	4123
4202100149	14285	Bastrop	30.17862	-97.232315	597	5,227	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	234	1012	1350	2433
4202100152	14426	Bastrop	30.127221	-97.218332	429	3,342	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	417	1268	1952	2700
4202100184	15196	Bastrop	30.123718	-97.318934	370	3,736	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	264	867	1535	1840

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4202100187	15194	Bastrop	30.166579	-97.339931	423	3,706	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	482	1130	1499	
4202100191	68309	Bastrop	30.161926	-97.351793	370	3,572	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	346	-9999	1411	
4202100201	15192	Bastrop	30.14213	-97.423844	508	2,992	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	473	820	
4202100210	14268	Bastrop	30.080268	-97.369606	416	3,666	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	452	1246	1574	
4202100212	14394	Bastrop	30.073535	-97.363586	416	3,924	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	320	550	1165	1720	
4202100219	14392	Bastrop	30.036243	-97.310481	341	6,425	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	399	1002	1869	2168	
4202100221	68310	Bastrop	30.002938	-97.304863	410	4,850	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	718	1308	2120	2447	
4202100224	14261	Bastrop	30.048315	-97.414523	472	3,364	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	200	924	1258	
4202100229	14390	Bastrop	30.038939	-97.404228	387	3,360	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	312	989	1330	
4202100317	14281	Bastrop	30.053333	-97.424721	479	3,416	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	228	935	1281	
4202100412	14495	Bastrop	30.111944	-97.581943	603	3,538	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	154	519	
4202100444	15206	Bastrop	30.058268	-97.51084	488	1,984	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	249	620	
4202100500	68311	Bastrop	30.03806	-97.56568	551	2,017	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	384	
4202100504	14503	Bastrop	30.045095	-97.565115	528	2,192	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	392	
4202100527	14486	Bastrop	30.029072	-97.570871	574	2,014	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	444	
4202100552	14397	Bastrop	30.020554	-97.505	436	2,617	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	324	694	
4202100553	14496	Bastrop	30.015	-97.511111	446	2,606	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	325	670	
4202100643	14447	Bastrop	29.997275	-97.468331	380	3,151	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	696	1017	
4202100668	14445	Bastrop	29.990628	-97.433097	459	3,188	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	703	1216	
4202100754	14441	Bastrop	29.980862	-97.401506	462	1,739	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1175	1700	
4202100772	14385	Bastrop	29.998687	-97.345153	439	4,280	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	414	1041	1769	2101

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4202100778	68314	Bastrop	29.983614	-97.36095	485	4,208	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	560	986	1710	2042	
4202100780	14384	Bastrop	29.907897	-97.343777	475	5,438	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	102	360	1248	1573	2000	2594
4202100781	68315	Bastrop	29.927736	-97.416447	541	4,047	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	672	1001	1599	1949	
4202100782	14280	Bastrop	29.918332	-97.393055	528	4,313	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	204	737	1068	1837	2174	
4202100794	68316	Bastrop	29.886186	-97.365063	485	4,843	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2512	
4202100795	68317	Bastrop	29.886025	-97.358119	515	8,207	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1340	1625	-9999	2630	
4202100796	14406	Bastrop	29.860555	-97.388333	551	4,730	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	546	1058	1412	2116	2488	
4202100803	14515	Bastrop	29.998888	-97.469999	387	2,387	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	600	1130	
4202100807	15076	Bastrop	29.970158	-97.168288	413	1,480	Not Reviewed	-9999	-9999	-9999	450	-9999	624	1060	1303	-9999	-9999	-9999	-9999	-9999	
4202100808	15077	Bastrop	29.970793	-97.163366	377	1,343	LRE Reviewed	-9999	-9999	-9999	401	546	612	1046	1304	-9999	-9999	-9999	-9999	-9999	
4202100810	68319	Bastrop	29.985309	-97.160694	370	5,108	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4363	
4202100813	14402	Bastrop	29.98111	-97.13861	354	7,601	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2839	3338	4436	4843	
4202100814	68321	Bastrop	29.970828	-97.118343	298	9,112	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	938	1188	1591	2896	3558	4433	4827	
4202100820	14275	Bastrop	29.93717	-97.19437	383	4,344	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	612	1042	1301	1599	2761	3324	4288	-9999
4202100823	68322	Bastrop	29.892898	-97.215066	416	9,276	Not Reviewed	-9999	-9999	-9999	500	-9999	667	1249	1485	1755	3082	3694	4230	4893	
4202100824	68323	Bastrop	29.89142	-97.209166	419	7,177	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	1251	1368	-9999	2494	2988	-9999	4537	
4202100826	14476	Bastrop	29.880236	-97.231745	462	8,625	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2759	3439	4070	4736	
4202100854	68324	Bastrop	29.976773	-97.435925	472	3,155	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	715	1166	
4202100874	15182	Bastrop	30.217284	-97.266834	456	3,194	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	444	780	1688	1994	
4202100875	68325	Bastrop	30.206954	-97.138561	547	4,512	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	905	-9999	2175	2417	-9999	4274
4202100876	14424	Bastrop	30.040839	-97.233918	324	2,826	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1115	1652	2497	-9999	

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4202100877	14265	Bastrop	30.022893	-97.324461	380	5,747	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	389	1036	1764	2099		
4202100878	14401	Bastrop	30.067083	-97.250283	436	5,756	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	288	984	1639	2443	2796		
4202100880	68327	Bastrop	29.970881	-97.395813	488	3,515	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1708		
4202100901	14453	Bastrop	30.313882	-97.418807	469	1,825	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	232		
4202100910	14290	Bastrop	30.223305	-97.090807	488	13,630	Not Reviewed	-9999	-9999	-9999	150	-9999	365	765	920	1290	2680	3190	3870	-9999		
4202100913	14391	Bastrop	30.052742	-97.327206	347	6,197	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	316	919	1749	2047		
4202100914	14420	Bastrop	30.177872	-97.187614	488	8,021	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	148	411	1298	1987	2712	3139	
4202100921	68328	Bastrop	29.822285	-97.286423	459	6,515	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	563	820	1220	2279	2800	3661	4083	
4202100924	68329	Bastrop	30.251236	-97.113049	538	5,000	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4215		
4202130003	14418	Bastrop	30.227662	-97.092927	475	5,109	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	724	805	1126	2416	3011	3810	4347	
4202130004	14288	Bastrop	30.200835	-97.142036	544	4,500	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	566	740	1053	2010	2344	3708	4235	
4202130006	14419	Bastrop	30.236872	-97.081792	456	6,361	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	629	770	1054	2388	2998	3947	4344	
4202130009	14421	Bastrop	30.114048	-97.145013	475	9,180	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	215	630	730	1042	2060	2615	3610	4065
4202130012	68330	Bastrop	30.157807	-97.146035	528	7,180	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	599	743	1100	2380	3005	3824	4172	
4202130013	14302	Bastrop	30.177281	-97.47028	419	1,939	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	265	608	
4202130031	14278	Bastrop	29.893726	-97.200747	416	2,037	Not Reviewed	-9999	-9999	-9999	485	-9999	654	1072	1315	1685	-9999	-9999	-9999	-9999	-9999	
4202130034	14279	Bastrop	29.893741	-97.199705	413	3,206	Not Reviewed	-9999	-9999	-9999	390	-9999	553	1027	1252	1580	-9999	-9999	-9999	-9999	-9999	
4202130039	15186	Bastrop	30.31284	-97.326185	574	1,498	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	159	963	1297	
4202130044	14414	Bastrop	30.237763	-97.141115	518	8,368	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1374	1893	3020	3416	
4202130050	14289	Bastrop	30.183888	-97.147193	518	4,484	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	746	1099	2285	2944	3734	4141		
4202130052	68332	Bastrop	30.153409	-97.233711	469	3,394	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1139	1750	2453	2797	

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4202130057	15193	Bastrop	30.157464	-97.518033	488	1,725	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999			
4202130067	14448	Bastrop	29.947816	-97.421242	577	3,254	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	467	796	1369	1696		
4202130077	14404	Bastrop	29.952517	-97.269933	498	7,118	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	130	350	633	1712	2140	2838	3233	
4202130079	15138	Bastrop	30.214882	-97.263951	488	3,957	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1530	2012		
4202130081	15131	Bastrop	29.889139	-97.254632	498	8,259	LRE Reviewed	-9999	-9999	-9999	-9999	74	124	559	782	1157	2301	2834	3609	4057		
4202130084	68335	Bastrop	30.19723	-97.139296	538	7,055	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	700	782	-9999	-9999	2107	2367	4263	
4202130089	68336	Bastrop	30.014029	-97.129776	305	6,930	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1297	2358	2989	4085	4480		
4202130090	14477	Bastrop	29.935738	-97.246808	492	5,560	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2850	3442		
4202130093	14403	Bastrop	29.967966	-97.195655	449	6,315	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1383	2283	2906	3690	4087		
4202130097	14422	Bastrop	30.099845	-97.1549	479	6,891	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	644	810	1148	2311	2942	3764	4123	
4202130193	14413	Bastrop	30.164826	-97.118954	456	6,711	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3910	4450		
4202130196	14518	Bastrop	30.086017	-97.374121	423	3,551	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	289	1490		
4202130198	14410	Bastrop	30.004421	-97.116894	318	7,115	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2747	3203	4070	4670	
4202130199	14409	Bastrop	30.02035	-97.12542	295	6,926	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3390	3970	4526		
4202130215	14304	Bastrop	30.151375	-97.416793	410	2,972	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	877	1242		
4202130218	68339	Bastrop	29.946777	-97.147957	321	7,871	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3492	4150	4773	
4202130223	14291	Bastrop	30.135987	-97.163566	485	6,763	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	617	932	1980	2428	3650	4049	
4202130224	15133	Bastrop	30.040078	-97.508354	488	2,283	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	269	629		
4202130239	68340	Bastrop	30.243165	-97.11769	567	5,035	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	405	874	929	1295	2358	2662	3735	4216
4202130244	15156	Bastrop	30.0567	-97.047583	383	7,772	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4535	5113		
4202130247	14511	Bastrop	30.128497	-97.137655	501	6,822	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2200	2627	3815	4350	

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4202130257	14444	Bastrop	30.006303	-97.450914	406	2,520	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	711	1059	
4202130269	68341	Bastrop	30.021193	-97.119552	288	6,926	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3219	4116	4500	
4202130273	68342	Bastrop	29.989625	-97.097273	318	7,495	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3509	4300	4963	
4202130275	14411	Bastrop	30.023621	-97.065913	311	7,700	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3570	4662	-9999	
4202130278	68343	Bastrop	29.956122	-97.147229	367	7,325	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2973	3573	4433	4825	
4202130279	14307	Bastrop	30.241252	-97.351922	452	3,228	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	899	1239	
4202130282	15159	Bastrop	30.017389	-97.470623	426	2,797	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	640	980	
4202130287	14460	Bastrop	29.98807	-97.446603	492	2,887	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	660	1152	
4202130289	14428	Bastrop	30.063289	-97.127515	413	6,798	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	665	884	1240	2264	2794	3876	4267
4202130309	15180	Bastrop	30.159236	-97.143936	508	12,266	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	610	900	1860	2620	3630	4174	
4202130312	68344	Bastrop	30.251891	-97.10506	551	4,524	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	793	841	-9999	2558	3065	-9999	4260
4202130314	68345	Bastrop	30.116866	-97.14634	465	6,701	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	695	1130	-9999	-9999	3670	4053	
4202130317	68346	Bastrop	29.982168	-97.453796	465	3,220	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	318	1003	1347	
4202130319	15132	Bastrop	29.884434	-97.430282	606	4,164	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1540	2106	
4202130320	15184	Bastrop	30.304371	-97.26877	508	1,975	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	408	1295	1622
4202130341	68347	Bastrop	30.055942	-97.086881	341	7,212	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3239	-9999	4647	
4202130344	14475	Bastrop	29.863526	-97.233492	456	6,884	LRE Reviewed	-9999	-9999	-9999	387	515	564	1030	1275	1685	2935	3541	4361	4819	
4202130346	15155	Bastrop	30.31914	-97.221879	547	3,802	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1000	1480	2082	
4202130348	14455	Bastrop	30.013106	-97.354716	439	0	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1613	1940	
4202130353	15140	Bastrop	30.101216	-97.464184	439	2,263	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	382	782		
4202130374	14259	Bastrop	30.033889	-97.382471	413	3,006	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	116	555	1266	1600	

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4202130391	68349	Bastrop	29.934307	-97.157161	357	7,203	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3543	4390	4808		
4202130399	15139	Bastrop	30.038139	-97.453123	433	2,965	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	693	1035			
4202130403	68350	Bastrop	29.826667	-97.277034	413	6,300	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3540	4172			
4202130405	68351	Bastrop	30.123706	-97.34857	360	3,884	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	411	1203	1548		
4202130413	14310	Bastrop	30.31838	-97.227519	564	3,675	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	588	1121	1739	2079		
4202130418	15144	Bastrop	29.897865	-97.216007	426	7,082	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3604	4434	4871		
4202130422	68352	Bastrop	29.952314	-97.239029	505	3,900	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	651	1036	1975	2550	3325	3742	
4202130430	15147	Bastrop	29.968601	-97.482393	446	2,573	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	133	768	1090		
4202130437	14522	Bastrop	30.081446	-97.587577	564	2,156	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	328		
4202130462	15152	Bastrop	30.277822	-97.117555	485	6,597	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	498	638	-9999	-9999	-9999	-9999	
4202130496	15149	Bastrop	30.017161	-97.179386	429	5,631	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	456	656	988	2182	2801	3570	3955
4202130497	14262	Bastrop	30.030309	-97.457843	492	2,704	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	753	1102	
4202130498	14398	Bastrop	30.02038	-97.367141	413	3,605	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	430	755	1295	1843	
4202130552	15160	Bastrop	30.120547	-97.166986	482	4,470	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	462	589	997	1994	2461	3626	4007
4202130556	14301	Bastrop	30.091806	-97.512715	446	1,899	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	238	543		
4202130568	15151	Bastrop	29.995719	-97.546935	456	1,746	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	92	437		
4202130573	14439	Bastrop	29.944603	-97.236787	492	2,282	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	400	608	960	1895	-9999	-9999	
4202130575	68353	Bastrop	30.204273	-97.155686	574	8,200	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1587	2127	2973	3393	
4202130581	68354	Bastrop	30.13325	-97.138869	508	6,577	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2163	2484	-9999	4271	
4202130602	15154	Bastrop	29.99233	-97.459623	449	2,577	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	757	-9999		
4202130790	68355	Bastrop	29.917981	-97.268799	501	3,804	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	351	489	810	1609	2201	2875	3515

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4202130801	15075	Bastrop	30.32165	-97.26642	462	3,775	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	500	1020	-9999	
4202130810	68356	Bastrop	29.99948	-97.247838	433	6,230	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2881	3257	
4202130811	15141	Bastrop	30.102626	-97.462014	419	2,280	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	255	783	
4202130815	68357	Bastrop	30.021179	-97.357368	393	3,627	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1310	1739	
4202130819	15157	Bastrop	30.32462	-97.27167	482	3,200	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	450	948	1304	
4202130833	15176	Bastrop	29.99466	-97.521724	492	2,880	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	370	714	
4202130866	15136	Bastrop	30.02174	-97.369341	419	3,110	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	257	738	1430	
4202130869	14257	Bastrop	30.01828	-97.371151	410	3,120	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	712	1409	1721
4202130874	14386	Bastrop	29.943153	-97.312899	459	5,000	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	498	1326	1738	2418	2778	
4202130879	15142	Bastrop	30.102356	-97.463174	433	2,250	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	245	775	
4202130892	14266	Bastrop	29.954022	-97.393891	541	3,848	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1460	1898	
4202130893	15191	Bastrop	30.138075	-97.486505	554	2,076	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	358	637	
4202130897	68358	Bastrop	30.167245	-97.119009	475	9,530	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3630	4167	
4202130902	15162	Bastrop	30.170165	-97.366662	377	3,060	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	58	-9999	-9999	720	1236	
4202130904	14393	Bastrop	30.059109	-97.289219	347	4,702	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	580	1180	2033	2361	
4202130909	68359	Bastrop	30.150293	-97.132474	508	6,051	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3710	4228	
4202130912	68360	Bastrop	30.140144	-97.1361	528	6,050	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3203	-9999	4318	
4202130914	68361	Bastrop	29.926088	-97.268868	482	3,760	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	322	511	898	1819	2310	3059	
4202130919	14299	Bastrop	30.068258	-97.460424	449	2,692	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	419	724	
4202130928	15195	Bastrop	30.181085	-97.31083	479	3,743	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	207	760	1579	1908	
4202130959	14309	Bastrop	30.071099	-97.059633	380	5,744	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1021	1240	1634	2991	-9999	-9999	

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4202130964	14295	Bastrop	30.091799	-97.063423	390	5,558	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1197	1581	2859	-9999	-9999	-9999		
4202130965	68362	Bastrop	30.17419	-97.359804	390	3,209	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	911	1253		
4202130969	15161	Bastrop	30.081259	-97.058863	403	5,655	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	993	1243	1654	2935	3565	4455	4850	
4202130973	15163	Bastrop	30.084639	-97.063253	410	5,725	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	982	1230	1580	3050	3555	4220	4790	
4202130981	68363	Bastrop	30.062113	-97.052461	383	5,744	LRE Reviewed	-9999	-9999	-9999	-9999	646	712	1102	1375	1707	3086	3646	4631	5008		
4202131007	15172	Bastrop	30.164016	-97.057593	511	5,390	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	912	1114	1486	2714	3347	4214	4609	
4202131019	68364	Bastrop	30.005838	-97.095527	308	5,648	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	927	1158	1499	2746	3422	4463	4835	
4202131020	14412	Bastrop	30.026731	-97.082763	351	5,686	LRE Reviewed	-9999	-9999	-9999	-9999	361	444	958	1186	1550	2724	3432	4506	4883		
4202131041	68365	Bastrop	30.185802	-97.093065	488	5,088	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	622	767	1097	2192	2844	3736	4119	
4202131074	68366	Bastrop	30.160531	-97.066691	469	5,307	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4495		
4202131075	68367	Bastrop	30.104474	-97.069686	393	5,405	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4581		
4202131081	89618	Bastrop	30.133116	-97.072973	433	5,288	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	779	982	1390	2547	3150	4076	4475	
4202131088	68368	Bastrop	30.206218	-97.087018	511	6,962	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1104	1173	1150	2298	2788	3780	4245	
4202131089	15165	Bastrop	30.05548	-97.074245	341	5,600	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	926	1177	1547	2719	3348	4408	4795	
4202131093	14423	Bastrop	30.104487	-97.227495	433	6,505	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	341	1221	1836	2655	3000
4202131097	68369	Bastrop	30.111984	-97.076373	416	5,313	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	782	1013	1360	2510	3083	4114	4501	
4202131127	15178	Bastrop	30.156916	-97.074174	472	5,155	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	805	950	1090	2300	2760	3870	4428	
4202131129	14442	Bastrop	29.958541	-97.511834	442	2,310	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	732	1048	
4202131130	68370	Bastrop	30.131659	-97.090376	403	5,122	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	686	796	1234	2307	3054	3863	4258	
4202131131	68371	Bastrop	30.187224	-97.066612	570	5,244	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	860	1005	1350	2422	3173	3982	4511	
4202131132	15171	Bastrop	30.04775	-97.110934	472	5,369	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	866	1098	1429	2421	3111	4184	4572	

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4202131150	68372	Bastrop	30.10704	-97.182242	505	5,060	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	498	914	2009	2562	3378	3776	
4202131151	68373	Bastrop	30.147869	-97.086928	452	5,146	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	761	881	1299	2362	3016	3891	4278
4202131157	68374	Bastrop	30.128037	-97.101961	419	4,980	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	661	787	1100	2324	2669	3595	4146
4202131174	14459	Bastrop	29.99658	-97.438772	426	2,597	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	655	1130	
4202131178	68375	Bastrop	30.09908	-97.101254	413	5,224	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	668	897	1286	2294	2864	3917	4300
4202131181	68376	Bastrop	30.198489	-97.07167	488	5,130	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	695	821	1217	2352	3018	3937	4320
4202131184	14277	Bastrop	29.887171	-97.208609	403	1,999	Not Reviewed	-9999	-9999	-9999	100	-9999	257	810	1020	1365	-9999	-9999	-9999	-9999	
4202131185	14276	Bastrop	29.885705	-97.211457	406	2,058	Not Reviewed	-9999	-9999	-9999	570	-9999	595	800	1050	1380	-9999	-9999	-9999	-9999	
4202131206	15173	Bastrop	30.138819	-97.084921	429	5,075	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	772	870	1332	2373	3095	3933	4315
4202131233	68377	Bastrop	30.21452	-97.257068	495	4,052	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	528	857	1780	2115	
4202131245	15185	Bastrop	30.333219	-97.351583	554	1,950	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	375	758	
4202131254	68378	Bastrop	30.317412	-97.266355	498	3,344	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	402	1228	1562	
4202131259	15168	Bastrop	30.172806	-97.069054	547	5,252	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	870	1010	1380	2715	3200	3950	4508
4202131274	14311	Bastrop	30.345639	-97.308852	515	2,780	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	800	1197	
4202131290	15164	Bastrop	30.12881	-97.052569	429	5,572	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	970	1200	1600	2860	3435	4165	4757
4202131299	68379	Bastrop	30.089008	-97.095824	400	5,300	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	732	943	1304	2478	3000	4036	4421
4202131303	68380	Bastrop	30.121414	-97.097558	396	4,952	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	682	782	1215	2289	3004	3807	4183
4202131308	68381	Bastrop	30.155109	-97.124893	459	6,100	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1119	2193	2922	3766	4169
4202131312	68382	Bastrop	30.22872	-97.26744	495	4,000	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	481	901	1654	2011
4202131314	68383	Bastrop	29.895877	-97.417967	636	4,150	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	295	745	1099	1776	2099
4202131321	15211	Bastrop	30.227633	-97.328881	396	3,280	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	225	1062	1395	

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4202131340	15134	Bastrop	30.0211	-97.381551	403	3,588	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	597	1307	1610	
4202131341	15204	Bastrop	30.095286	-97.533356	488	2,244	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	238	550	
4202131343	14443	Bastrop	29.966631	-97.501484	413	2,370	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	601	962	
4202131356	14256	Bastrop	30.021119	-97.385271	416	3,425	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	572	1110	1640	
4202131361	68384	Bastrop	30.165161	-97.081844	462	5,015	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	738	870	1296	2345	3021	3900	4270
4202131380	14296	Bastrop	30.0413	-97.073793	314	7,435	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	938	1170	1561	2747	3435	4486	4866
4202131385	68385	Bastrop	30.158467	-97.08304	465	5,134	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	812	905	1045	2447	2761	3670	4306
4202131388	68386	Bastrop	30.092464	-97.070949	380	5,416	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4633	
4202131394	15137	Bastrop	30.025719	-97.376301	347	3,108	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	633	1292	1622	
4202131402	15207	Bastrop	30.108116	-97.484194	492	2,092	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	396	712	
4202131405	14300	Bastrop	30.097206	-97.524605	498	1,774	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	255	588	
4202131407	14255	Bastrop	30.0182	-97.385921	419	3,350	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	587	1115	-9999	
4202131409	15127	Bastrop	29.951621	-97.502874	433	2,390	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	390	870	
4202131418	68387	Bastrop	30.227652	-97.273736	505	3,770	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	481	890	1626	1964
4202131424	15203	Bastrop	30.097006	-97.525515	508	1,798	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	21	582	
4202131427	14306	Bastrop	30.226463	-97.264919	469	3,765	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	472	660	1490	-9999
4202131429	15208	Bastrop	30.111306	-97.478744	492	2,126	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	403	723	
4202131433	14450	Bastrop	30.024599	-97.520795	511	2,246	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	223	596	
4202131440	15169	Bastrop	30.117428	-97.045833	459	5,677	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1010	1260	1660	2800	3270	4255	4862
4202131449	14437	Bastrop	29.802197	-97.300449	442	1,845	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	71	131	618	857	1257	-9999	-9999	-9999	-9999
4202131457	14449	Bastrop	30.026359	-97.520745	485	2,050	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	208	596	

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4202131465	14305	Bastrop	30.108206	-97.458114	469	2,170	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	439	-9999
4202131468	15199	Bastrop	30.114046	-97.452414	495	2,263	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	316	831
4202131471	15200	Bastrop	30.113196	-97.451394	488	2,432	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	415	782
4202131474	15198	Bastrop	30.112406	-97.453984	488	2,428	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	325	850
4202131485	68388	Bastrop	30.326295	-97.195038	623	4,760	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	897	1412	2054	2474
4202131506	15202	Bastrop	30.121836	-97.446424	469	2,200	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	422	770
4202131524	15181	Bastrop	30.253823	-97.251659	534	3,868	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	584	1063	1754	2097
4202131535	68389	Bastrop	30.209244	-97.135026	570	8,793	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3700	4339
4202131558	68390	Bastrop	30.201165	-97.10662	508	6,484	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2543	3296	4097	4500
4202131579	68391	Bastrop	30.184556	-97.13026	495	7,161	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2275	3020	3922	4338
4202131583	68392	Bastrop	30.17351	-97.14019	472	6,830	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4151
4202131584	68393	Bastrop	30.196493	-97.124794	541	7,301	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4451
4202131585	68394	Bastrop	30.176721	-97.137151	488	6,949	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3670	4188
4202131586	68395	Bastrop	30.129258	-97.154415	498	6,709	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1925	2247	3550	4106
4202131587	68396	Bastrop	30.169362	-97.15715	564	6,960	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2294	2495	-9999	4048
4202131588	68397	Bastrop	30.162339	-97.138098	469	8,707	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2914	-9999	4144
4202131590	68398	Bastrop	30.138101	-97.157732	518	6,836	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2540	-9999	4122
4202131591	68399	Bastrop	30.197377	-97.147451	551	6,960	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4168
4202131594	68400	Bastrop	30.216772	-97.108661	544	7,318	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3930	4524
4202131598	68401	Bastrop	30.230592	-97.117264	498	7,306	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2327	3039	3975	4398
4202131599	68402	Bastrop	30.193922	-97.129944	521	6,390	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2270	2537	3850	4360

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4228732563	68676	Lee	30.433252	-96.960346	456	9,780	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2579	3242	3745	
4228732565	68677	Lee	30.415081	-96.941116	475	7,300	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3546	3989	
4228732566	68678	Lee	30.419682	-96.972142	475	9,386	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3371	3864	
4228732568	68679	Lee	30.321447	-97.064817	465	7,370	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3842	4409	
4228732569	68680	Lee	30.359873	-97.042678	360	8,341	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2178	2960	3706	4239	
4228732570	68681	Lee	30.340858	-97.066277	406	9,450	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2257	2887	3777	4270	
4228732571	68682	Lee	30.465886	-96.988617	400	10,112	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1899	2585	3063	
4228732573	68683	Lee	30.530862	-96.945791	400	8,128	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2473	3074	3543	
4228732574	87322	Lee	30.31409	-96.88214	314	7,850	Not Reviewed	-9999	-9999	-9999	292	-9999	599	-9999	-9999	-9999	-9999	-9999	-9999	-9999	
4228732576	68684	Lee	30.300856	-97.095497	413	7,300	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3898	4371	
4228732578	68685	Lee	30.494	-97.010667	479	5,362	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3048	
4233100638	68694	Milam	30.518965	-97.123117	521	3,778	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	249	817	1264	
4233100639	68695	Milam	30.524365	-97.12303	570	3,749	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1264	
4233100640	68696	Milam	30.522601	-97.114709	508	3,780	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1259	
4233100641	37609	Milam	30.532904	-97.073805	600	4,228	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	558	1165	1605	
4233130030	68708	Milam	30.578116	-96.92112	449	3,800	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1513	2166	-9999	3392
4233130174	18531	Milam	30.597341	-96.944441	429	2,450	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	707	1310	-9999	2243
4233130266	68735	Milam	30.582089	-96.950341	416	2,585	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	684	1279	-9999	2308
4233130284	23499	Milam	30.593811	-96.986932	380	2,094	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1918
4233130773	68752	Milam	30.594539	-96.961931	442	2,304	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	454	1052	-9999	2084
4233131013	37440	Milam	30.553213	-97.003373	462	2,400	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	384	1002	1583	2042

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4233131135	68770	Milam	30.569261	-96.979835	413	2,325	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	378	1031	1630	2070	
4233131150	68773	Milam	30.567747	-96.94298	456	3,810	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1180	1460	-9999	2564	
4233131308	68778	Milam	30.465797	-97.153551	449	3,770	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	879	1310	
4233131321	68780	Milam	30.583869	-96.98703	370	2,150	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1892	
4233131465	68783	Milam	30.587235	-96.921256	459	3,878	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3611	
4233133049	68798	Milam	30.578157	-96.942	400	2,700	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	815	1278	-9999	2455	
4233133638	68812	Milam	30.516968	-97.05453	459	5,919	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1360	1788	
4247700365	6376	Washington	30.241742	-96.654718	314	10,235	LRE Reviewed	-9999	828	1614	2084	2339	2394	3018	3200	3719	5043	6004	7223	7873	
4247730365	68817	Washington	30.181926	-96.70523	410	11,040	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	3144	3400	3863	5552	6257	7531	8175	
4247730632	68818	Washington	30.287026	-96.601491	242	10,587	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	7495	
4249130211	33847	Williamson	30.430246	-97.259561	469	2,996	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	281	772	
4249130434	33852	Williamson	30.492005	-97.173098	538	2,179	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1051	
-9999	14267	Bastrop	29.97282	-97.406428	492	1,709	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	148	669	1278	1603	
-9999	15197	Bastrop	30.107576	-97.457364	472	2,179	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	275	-9999	
-9999	15254	Fayette	29.972287	-97.101168	308	5,111	Not Reviewed	-9999	-9999	-9999	335	-9999	530	1070	1310	1710	-9999	-9999	4380	-9999	
-9999	42731	Lee	30.185555	-96.894721	485	8,565	Not Reviewed	-9999	-9999	-9999	900	-9999	1120	1635	1860	2320	-9999	-9999	5195	-9999	
-9999	15248	Fayette	29.921919	-97.151419	413	4,301	Not Reviewed	-9999	-9999	-9999	480	-9999	658	995	1236	1753	-9999	-9999	4270	-9999	
-9999	14399	Bastrop	30.116388	-97.145555	459	6,616	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	790	1185	-9999	3580	-9999	
-9999	42512	Lee	30.328054	-97.069999	465	3,741	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	209	283	691	772	1100	2075	2947	-9999	-9999
-9999	14494	Bastrop	30.201111	-97.133054	531	7,079	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	590	760	1090	-9999	3690	-9999
-9999	14417	Bastrop	30.258425	-97.123851	531	3,608	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	560	660	970	-9999	3550	-9999

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4228700054	68961	Lee	30.329062	-97.103801	492	5,981	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	711	1568	2346	3132	3624	
4228700033	42493	Lee	30.265	-96.850277	383	5,003	Not Reviewed	-9999	-9999	-9999	696	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	
-9999	87320	Lee	30.171389	-96.902778	482	2,160	LRE Reviewed	-9999	-9999	552	933	1082	1124	1642	1878	-9999	-9999	-9999	-9999	-9999	
-9999	91466	Burleson	30.316112	-96.636667	298	1,675	LRE Reviewed	-9999	-9999	-9999	1501	1705	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	
-9999	15696	Fayette	29.779443	-97.282221	413	4,033	Not Reviewed	-9999	-9999	-9999	248	-9999	445	830	1072	1430	-9999	-9999	3805	-9999	
-9999	14274	Bastrop	29.890833	-97.270832	524	3,975	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	469	688	1034	2160	2648	3388	3855	
-9999	14400	Bastrop	29.910555	-97.288888	511	2,400	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	205	400	750	1735	2185	-9999	-9999	
-9999	15145	Bastrop	30.330658	-97.292075	462	3,845	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	882	1279	
-9999	68162	Gonzales	29.773225	-97.326544	413	4,007	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	610	810	1380	-9999	-9999	3390	-9999	
-9999	14407	Bastrop	29.885981	-97.359257	515	8,207	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	231	555	-9999	-9999	2110	-9999
-9999	14260	Bastrop	30.03924	-97.347463	357	4,017	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	171	796	1618	1940
-9999	15174	Bastrop	30.225319	-97.36547	485	3,191	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	886	-9999	
-9999	14519	Bastrop	30.322499	-97.338333	629	3,335	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	823	1221	
-9999	14312	Bastrop	30.34682	-97.305728	531	2,899	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	680	-9999	
-9999	15074	Bastrop	30.369721	-97.358055	554	2,737	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	218	615	
-9999	14524	Bastrop	30.118332	-97.337221	354	190	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	
-9999	14435	Caldwell	29.824091	-97.368929	479	2,558	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	89	271	702	1565	1830	2508
-9999	14405	Bastrop	29.966733	-97.373957	501	4,214	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	567	985	1677	2017
-9999	14517	Bastrop	30.089627	-97.378561	429	3,539	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	310	1088	1445	
-9999	14433	Caldwell	29.829443	-97.404444	492	2,204	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	98	510	-9999	-9999	1930	-9999
-9999	14501	Bastrop	30.013055	-97.416111	452	2,667	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	851	1176	

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-9999	14521	Bastrop	30.1575	-97.408055	390	353	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	55	-9999	-9999	-9999	-9999
-9999	15150	Bastrop	29.991413	-97.467981	410	2,563	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	680	-9999
-9999	14487	Bastrop	29.994166	-97.469721	403	2,391	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	620	-9999
-9999	14488	Bastrop	29.941666	-97.485277	495	2,999	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	748	1069
-9999	56495	Bastrop	30.126388	-97.455277	524	2,352	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	507	825
-9999	56494	Bastrop	30.14563	-97.47465	528	2,759	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	402	735
-9999	14478	Bastrop	30.09361	-97.466388	429	2,539	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	211	623
-9999	15126	Bastrop	29.946991	-97.499516	433	2,470	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	583	901
-9999	14516	Bastrop	30.025554	-97.514444	449	2,450	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	225	576
-9999	14510	Bastrop	30.037169	-97.563112	583	2,000	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	115	-9999
-9999	51866	Bastrop	29.881388	-97.311666	580	1,090	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	285	505	817	-9999	-9999
-9999	14269	Bastrop	30.004647	-97.137522	318	1,502	LRE Reviewed	-9999	-9999	-9999	140	312	370	851	1109	-9999	-9999	-9999	-9999	-9999
-9999	42542	Williamson	30.456456	-97.194219	518	578	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	535	-9999
-9999	14327	Bastrop	30.109657	-97.29499	521	636	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	65	-9999	-9999	-9999	-9999
-9999	14324	Bastrop	30.11252	-97.3248	331	55	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	50	-9999	-9999	-9999	-9999
-9999	14330	Bastrop	30.113467	-97.32715	328	55	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	48	-9999	-9999	-9999	-9999
-9999	14331	Bastrop	30.113011	-97.325508	328	52	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	41	-9999	-9999	-9999	-9999
-9999	14325	Bastrop	30.11572	-97.32717	321	38	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	28	-9999	-9999	-9999	-9999
-9999	14326	Bastrop	30.1156	-97.32692	318	34	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	27	-9999	-9999	-9999	-9999
-9999	58951	Bastrop	30.113536	-97.466217	469	165	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	165	-9999
-9999	51031	Fayette	30.018888	-97.005833	351	860	Not Reviewed	-9999	-9999	-9999	760	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999

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-9999	48906	Lee	30.144721	-96.967221	442	700	Not Reviewed	-9999	-9999	-9999	600	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	
-9999	51165	Lee	30.166943	-97.000001	490	550	Not Reviewed	-9999	-9999	-9999	420	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	
-9999	49188	Lee	30.189999	-96.960555	469	650	Not Reviewed	-9999	-9999	-9999	400	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	
-9999	87342	Lee	30.238056	-96.902778	377	650	Not Reviewed	-9999	-9999	-9999	520	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	
-9999	42741	Lee	30.321388	-97.171388	613	700	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	250	-9999	-9999	-9999	-9999	
-9999	14369	Bastrop	29.918054	-97.292499	482	480	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	84	303	-9999	-9999	-9999	-9999	-9999	
-9999	14270	Bastrop	29.924721	-97.32111	462	745	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	131	412	-9999	-9999	-9999	-9999	
-9999	39067	Bastrop	30.165	-97.361944	364	540	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	68	-9999	-9999	-9999	-9999	
-9999	39068	Bastrop	30.165833	-97.361111	367	550	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	58	-9999	-9999	-9999	-9999	
-9999	14527	Bastrop	30.12111	-97.340833	351	66	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	56	-9999	-9999	-9999	-9999	
-9999	14525	Bastrop	30.12111	-97.339999	351	620	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	49	-9999	-9999	-9999	-9999	
-9999	39069	Bastrop	30.122499	-97.312777	380	400	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	38	-9999	-9999	-9999	-9999	
-9999	14526	Bastrop	30.106111	-97.321666	334	760	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	35	-9999	-9999	-9999	-9999	
-9999	14370	Bastrop	29.89861	-97.379721	547	1,150	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	87	420	-9999	-9999	-9999	
-9999	15100	Bastrop	29.993888	-97.16861	318	5,160	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	890	1101	1464	2534	3104	3990	4363
-9999	15091	Bastrop	30.045555	-97.157777	383	930	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	456	667	-9999	-9999	-9999	-9999	-9999
-9999	1739	Lee	30.354722	-97.117499	482	1,763	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	149	944	1516	-9999	-9999	-9999
-9999	15111	Bastrop	30.056201	-97.258903	429	2,530	LRE Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	305	942	1549	2394	-9999	-9999
-9999	42740	Bastrop	30.276388	-97.14861	515	1,220	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	40	130	465	-9999	-9999	-9999	-9999
-9999	43036	Bastrop	30.101111	-97.076388	396	600	Not Reviewed	-9999	-9999	-9999	91	-9999	360	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999
-9999	43034	Fayette	29.86	-97.229166	442	577	Not Reviewed	-9999	-9999	-9999	373	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999

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-9999	39287	Bastrop	30.107777	-97.294166	521	931	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	65	-9999	-9999	-9999	-9999	
-9999	43032	Bastrop	29.895833	-97.329443	521	313	Not Reviewed	-9999	-9999	-9999	-9999	-9999	-9999	-9999	246	-9999	-9999	-9999	-9999		
4233100902	100780	Milam	30.521034	-97.120008	534	5,854	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	836	1282	
4228732557	100366	Lee	30.425334	-97.256043	479	3,100	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	517	996	
4228732402	100362	Lee	30.163616	-97.037763	492	5,636	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	995	1156	1562	2788	3425	4388	4810
4228732232	100361	Lee	30.28251	-96.968246	403	4,000	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	865	1015	1339	2520	3170	-9999	-9999
4205132693	100355	Burleson	30.513195	-96.885102	442	3,650	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	311	390	619	1569	2261	2922	3403
4202130842	100279	Bastrop	30.322732	-97.349336	528	2,530	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	514	915	
4202130844	100278	Bastrop	29.870845	-97.279894	492	4,162	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	464	677	1029	2099	2654	3392	3841
4202130516	100276	Bastrop	30.17123	-97.229086	544	600	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	203	-9999	-9999	-9999	-9999	
4202100762	100273	Bastrop	29.963154	-97.399094	501	2,340	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	162	766	1090	
4247730450	92024	Washington	30.298012	-96.602756	252	10,293	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2915	3413	4666	5669	6887	7369	
4247730313	92008	Washington	30.189071	-96.752734	331	10,483	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2023	2612	2761	3219	-9999	-9999	-9999
4233132492	91993	Milam	30.514688	-97.051392	456	2,200	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	219	700	1392	1801
4228730362	91793	Lee	30.29556	-96.832472	305	8,370	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3884	-9999	-9999	
4228730586	91792	Lee	30.269049	-96.866931	433	7,395	LRE Acquired	-9999	-9999	-9999	612	802	848	1384	1548	1922	3096	4059	4889	5395	
4228730294	91779	Lee	30.304717	-96.768621	337	8,525	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4126	5207	5712	
4228730441	91776	Lee	30.282801	-96.753197	331	9,133	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4454	5579	6076	
4228730079	91772	Lee	30.14965	-96.952477	400	8,493	LRE Acquired	-9999	-9999	328	653	844	886	1399	1638	2020	3369	4130	-9999	-9999	
4228730066	91769	Lee	30.526297	-96.924658	400	3,523	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	343	400	664	1426	2204	2808	3251
4228732485	91761	Lee	30.147326	-97.021636	534	5,884	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	536	1028	1287	1736	2981	3699	4549

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4228700052	91748	Lee	30.330916	-97.100235	465	3,004	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	358	445	701	1547	2516	-9999	-9999
4228700095	91746	Lee	30.395429	-96.985161	416	3,902	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	474	570	870	1915	2724	3503	-9999
4228700025	91736	Lee	30.410698	-96.92431	442	1,984	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	542	652	971	-9999	-9999	-9999	-9999
4228730278	91733	Lee	30.086152	-96.938794	436	9,111	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3787	4364	5862	6308
4228731760	91730	Lee	30.220448	-96.781472	347	9,840	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2357	2767	4218	5020	6167	6667
4228731012	91728	Lee	30.235695	-96.785684	301	9,455	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3843	4769	5877	6371
4228732114	91726	Lee	30.185066	-97.003666	505	5,774	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	580	1116	1281	1715	2987	3689	-9999
4228732274	91725	Lee	30.265313	-96.847557	370	7,509	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	1448	1628	1993	3086	4224	5071	5524
4228730337	91713	Lee	30.489671	-96.938558	426	3,555	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	173	240	500	1395	2203	2877	3344
4228732201	91710	Lee	30.454559	-96.952442	341	3,020	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	553	1538	2320	2977	-9999
4228730523	91702	Lee	30.334219	-96.813773	380	7,191	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	700	1259	1380	1687	2872	3767	4661
4228732237	91701	Lee	30.175016	-97.053963	518	5,390	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	915	1079	1497	2722	3353	4237	4642
4228732230	91695	Lee	30.171995	-97.015276	518	5,706	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	1036	1233	1626	2917	3703	4547	5001
4228732240	91694	Lee	30.1699	-97.025364	508	5,644	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	1013	1160	1553	2809	3519	4471	4902
4228732049	91693	Lee	30.19477	-97.009039	462	5,606	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	1054	1178	1618	2868	3563	-9999	-9999
4228731931	91688	Lee	30.145383	-97.040101	482	7,578	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	1003	1212	1620	2831	3504	4450	4864
4228730677	91686	Lee	30.140256	-96.85537	469	9,660	LRE Acquired	-9999	-9999	1080	1413	1610	1633	2219	2419	2830	4253	4929	6253	6748
4228730363	91684	Lee	30.535391	-96.917257	341	3,512	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	210	279	497	1369	2155	2754	3226
4228731784	91683	Lee	30.330724	-96.842845	308	5,308	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	530	1089	1218	1537	2641	3564	4450
4228731754	91682	Lee	30.447111	-96.884495	377	4,052	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	491	591	860	1885	2635	3309	3771
4228731698	91677	Lee	30.356337	-96.861259	344	5,054	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	330	412	885	1016	1350	2469	3360

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4228731636	91673	Lee	30.491868	-96.913158	364	3,606	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	188	278	555	1403	2146	2846	3315	
4228731562	91670	Lee	30.199351	-96.807433	364	9,746	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2374	2797	4227	5033	6169	6671	
4228731516	91668	Lee	30.413897	-96.882581	347	4,546	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	609	706	1021	2044	2965	3605	4083	
4228730746	91667	Lee	30.421479	-96.874317	321	4,204	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	577	667	1015	2018	2907	3530	4015	
4228731336	91666	Lee	30.250416	-96.791458	344	8,876	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4301	5625	6127	
4228731404	91665	Lee	30.384617	-96.852283	416	4,983	LRE Acquired	-9999	-9999	-9999	-9999	306	365	907	1027	1368	2428	3272	4084	4573	
4228731587	91661	Lee	30.371366	-96.85827	367	4,774	LRE Acquired	-9999	-9999	-9999	-9999	290	370	906	1015	1339	2429	3328	4085	4560	
4228731392	91657	Lee	30.401531	-96.834204	390	4,817	LRE Acquired	-9999	-9999	-9999	-9999	278	376	891	998	1325	2364	3195	4024	-9999	
4228730823	91653	Lee	30.425765	-96.922179	413	5,850	LRE Acquired	-9999	-9999	-9999	-9999	519	623	909	1894	2637	3360	3802			
4228730333	91636	Lee	30.487312	-96.908438	354	3,550	LRE Acquired	-9999	-9999	-9999	-9999	318	385	625	1547	2276	-9999	-9999			
4228730979	91635	Lee	30.343466	-96.770844	311	8,586	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3945	4743	5257	
4228731021	91631	Lee	30.154301	-96.894829	469	9,150	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3804	4402	-9999	-9999	
4228730996	91622	Lee	30.323833	-96.80056	311	8,279	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3949	4731	5202	
4228730892	91617	Lee	30.169149	-96.879369	465	9,112	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3814	-9999	-9999	-9999	
4228730848	91615	Lee	30.281798	-96.714159	269	9,346	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4083	4934	-9999	-9999	
4228730666	91613	Lee	30.337205	-96.761139	291	8,300	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4062	4915	5426	
4228731369	91608	Lee	30.293809	-96.703542	272	9,332	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2674	3867	4778	5974	6473
4228730008	91596	Lee	30.539656	-96.955643	387	3,535	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	227	334	557	1350	2166	2844	3315
4228730051	91594	Lee	30.514016	-96.936015	400	3,521	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	316	392	690	1479	2181	2860	3317
4228730110	91593	Lee	30.49881	-96.917473	351	3,472	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	465	1319	2107	2773	3240
4228730701	91590	Lee	30.317539	-96.748866	255	7,727	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4142	5154	5668	

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4228730640	91585	Lee	30.334809	-96.783511	288	8,460	LRE Acquired	-9999	-9999	-9999	494	702	786	1270	1440	1751	2948	3769	-9999	-9999		
4228730425	91575	Lee	30.238762	-96.868325	360	8,475	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4177	5132	5571		
4228730380	91570	Lee	30.357879	-96.80031	354	7,868	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4572	5047		
4228732131	91568	Lee	30.254814	-96.752455	272	8,480	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2222	2599	3893	4655	5961	6462	
4228730384	91566	Lee	30.241437	-96.834073	360	8,829	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4418	5395	5858		
4228730408	91561	Lee	30.13427	-96.974366	465	8,108	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4099	5093	5515		
4228730250	91556	Lee	30.069391	-97.000141	341	8,450	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4162	-9999	-9999		
4228730241	91555	Lee	30.280958	-96.826879	351	7,630	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4158	-9999	-9999		
4228730335	91538	Lee	30.270729	-96.803271	383	8,732	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4350	-9999	-9999		
4228730302	91537	Lee	30.198658	-96.843301	416	9,366	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3900	-9999	-9999		
4228730304	91532	Lee	30.124748	-96.991929	423	8,131	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3959	-9999	-9999		
4228730300	91528	Lee	30.13848	-96.936009	406	8,545	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4254	5304	5744		
4228731983	91527	Lee	30.219324	-96.853243	370	8,688	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4502	5441	5894		
4228730279	91524	Lee	30.102303	-96.981509	423	8,296	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4356	-9999	-9999		
4228730047	91518	Lee	30.112427	-97.001819	410	7,943	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1227	1478	1845	3176	3932	-9999	-9999	
4228730070	91515	Lee	30.252144	-96.865054	429	4,550	LRE Acquired	-9999	-9999	339	692	873	910	1461	1633	1987	3102	4176	-9999	-9999		
4205132280	91449	Burleson	30.445093	-96.860052	360	4,256	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	559	642	937	1917	2837	3487	-9999	
4205131938	91315	Burleson	30.366888	-96.751246	324	8,024	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3922	4716	5237		
4205132247	91273	Burleson	30.4733	-96.845421	377	4,100	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	528	627	905	1864	2598	3406	-9999	
4205130927	91238	Burleson	30.344039	-96.73283	301	8,232	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4246	5056	5568		
4205120010	91213	Burleson	30.433947	-96.806658	351	4,020	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	269	793	899	1275	2285	3058	3894	-9999

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4214930540	90492	Fayette	29.962454	-97.075591	275	6,961	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3344	4013	4917	5332
4214932142	90490	Fayette	30.081436	-96.903388	351	4,323	LRE Acquired	-9999	-9999	879	1199	1425	1467	2025	2249	2638	-9999	-9999	-9999	-9999
4214932727	38581	Lee	30.133888	-96.830277	442	10,514	LRE Acquired	-9999	-9999	-9999	1637	1844	1904	2460	2691	3120	4549	5230	6667	7157
4214930322	90405	Fayette	30.033893	-96.979374	419	8,890	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3765	4364	-9999	-9999
4214930495	90399	Fayette	30.012897	-97.060477	295	7,843	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3807	4806	-9999	-9999
4214930732	90350	Fayette	30.029753	-97.011109	347	8,395	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3356	4153	-9999	-9999
4214900061	90296	Fayette	29.9825	-97.093889	314	5,111	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2972	3687	4667	5033
4202100915	89661	Bastrop	30.150126	-97.478319	505	2,650	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	319	610
4202100314	89657	Bastrop	30.071558	-97.435526	429	2,473	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	979
4202100765	89656	Bastrop	29.971015	-97.402524	452	1,742	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	158	637	1279	1607
4202100640	89654	Bastrop	30.005159	-97.465009	400	2,311	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	720	1049
4202100316	89653	Bastrop	30.087764	-97.459817	416	2,091	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	363	693
4202130072	89652	Bastrop	30.18449	-97.444617	406	2,882	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	310	773
4202100646	89651	Bastrop	29.958349	-97.494937	469	2,315	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	203	694	-9999
4202130936	89641	Bastrop	30.022379	-97.588766	567	1,911	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	395
4202100162	89598	Bastrop	30.237467	-97.360673	475	3,196	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	954	1296
4202100690	89593	Bastrop	29.976999	-97.469492	465	2,680	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	554	867
4202130555	89592	Bastrop	30.008383	-97.444982	416	3,009	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	747	1083
4202100598	89591	Bastrop	29.998942	-97.554472	479	2,442	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	84	440
4202100491	89590	Bastrop	30.057396	-97.570919	459	1,861	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	323
4202130094	89589	Bastrop	30.339008	-97.383651	557	1,955	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	119	525

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4202130274	89586	Bastrop	30.003615	-97.088368	291	7,560	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3630	4551	4918	
4202130229	89585	Bastrop	30.299196	-97.420718	469	2,461	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	379	
4202130214	89584	Bastrop	29.892435	-97.426886	662	1,664	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	278	729	1090	-9999	-9999
4202100193	89582	Bastrop	30.132113	-97.449422	531	2,962	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	740	1080	
4202130092	89577	Bastrop	30.156616	-97.418041	370	3,151	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	812	1172	
4202100760	89576	Bastrop	29.9826	-97.413807	449	1,559	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	426	1150	1464	
4202100559	89574	Bastrop	30.028354	-97.561408	544	2,180	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	404	
4202100783	89573	Bastrop	29.89888	-97.339153	498	2,508	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	489	-9999	-9999	-9999	-9999
4202100009	89572	Bastrop	30.400544	-97.356494	610	2,550	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	332	
4202130997	89571	Bastrop	29.947233	-97.497411	433	2,317	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	583	907	
4202100581	89570	Bastrop	30.03172	-97.59501	567	2,405	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	240	449	
4202100918	89569	Bastrop	29.997018	-97.426524	452	2,715	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	227	899	1215	
4247730326	88349	Washington	30.157857	-96.748565	413	10,988	LRE Acquired	-9999	-9999	-9999	2087	2278	2368	2916	3193	3674	-9999	-9999	-9999	-9999	
4247730309	88348	Washington	30.232564	-96.720244	298	10,320	LRE Acquired	-9999	-9999	-9999	1656	1843	1958	2520	2716	3168	-9999	-9999	-9999	-9999	
4228732518	87306	Lee	30.37848	-96.815847	341	5,000	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	475	950	1120	1471	2545	3382	4278	4777
4202100117	86679	Bastrop	30.25526	-97.35295	410	3,460	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	748	1144
4202130930	86676	Bastrop	29.958352	-97.398781	501	3,918	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	438	842	1446	1791	
4202100793	86448	Bastrop	29.892602	-97.37137	508	7,021	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1167	1511	2138	2501	
4202130293	85774	Bastrop	29.856675	-97.36857	544	7,104	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	706	1303	1657	2368	2773
4202131374	85556	Bastrop	30.00664	-97.410392	462	4,990	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	295	979	1298	
4228700072	71013	Lee	30.4028	-97.25086	508	6,798	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4172	4639	

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4228730005	58495	Lee	30.424096	-97.24331	456	2,498	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	571	1041	
4228730475	58494	Lee	30.417625	-97.280853	495	2,104	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	517	1014	
4228730559	51929	Lee	30.2524	-96.830522	393	7,645	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1667	1830	2219	3408	4409	5341	5806
4228731134	42511	Lee	30.288333	-96.806666	341	7,462	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1469	1649	1987	3096	4051	-9999	-9999
4228731016	42507	Lee	30.275633	-96.694283	308	12,464	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2268	2485	2890	4165	-9999	-9999	-9999
4228730466	42498	Lee	30.239444	-96.742777	301	8,876	LRE Acquired	-9999	-9999	-9999	-9999	-9999	1611	1729	2278	2434	2870	4310	-9999	-9999	-9999
4228700102	42497	Lee	30.206388	-96.758055	341	10,478	LRE Acquired	-9999	-9999	-9999	1606	1799	1864	2428	2625	3046	4530	5275	-9999	-9999	-9999
4228731864	42496	Lee	30.231224	-96.759745	351	9,635	LRE Acquired	-9999	-9999	-9999	-9999	-9999	2225	2431	2839	4278	5139	6277	6784		
4228730834	42486	Lee	30.511766	-96.992542	423	3,255	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1035	1755	2379	2843
4228700012	42484	Lee	30.479999	-96.994999	469	5,944	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1600	2444	3155	3630
4228730561	42480	Lee	30.209465	-96.825837	360	9,405	LRE Acquired	-9999	-9999	710	1146	1307	1398	1930	2175	2584	3830	4646	-9999	-9999	-9999
4228731041	42475	Lee	30.144807	-96.877468	442	9,339	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3909	4601	5919	6419
4228731910	42471	Lee	30.201255	-96.94209	439	8,000	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1196	1443	1832	2960	3915	4819	5311
4228731986	42470	Lee	30.169196	-96.982021	442	5,946	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1161	1397	1777	3029	3779	4747	-9999
4228731794	42464	Lee	30.37844	-96.866528	406	5,230	LRE Acquired	-9999	-9999	-9999	-9999	-9999	290	354	833	1005	1348	2400	3300	4059	4522
4228730430	42458	Lee	30.268013	-96.773845	301	9,173	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4242	5572	6061	
4228732333	42454	Lee	30.295752	-96.858728	321	11,822	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	2888	3808	4667	5132
4228731778	42451	Lee	30.305762	-96.807176	301	8,169	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4867	5332	
4228730547	42449	Lee	30.315422	-96.826187	298	7,236	LRE Acquired	-9999	-9999	-9999	-9999	-9999	640	697	1240	1371	1719	2900	3800	4666	5144
4228730683	42448	Lee	30.503766	-96.93032	400	6,280	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1333	2114	2719	3207
4249130223	33486	Williamson	30.455755	-97.300022	554	2,500	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	408	

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API	BRACS ID	COUNTY	Latitude NAD83 Decimal Degrees	Longitude NAD83 Decimal Degrees	Elev. Feet	Well Depth	Stratigraphic Review	Jackson Top Depth	Yegua Top Depth	Cook Mt. Top Depth	Sparta Top Depth	Weches Top Depth	Queen City Top Depth	Reklaw Top Depth	Carrizo Top Depth	Wilcox, Calvert Bluff Top Depth	Wilcox, Simsboro Top Depth	Wilcox, Hooper Top Depth	Midway Group Top Depth	Navarro Group Top Depth
4245330027	32989	Travis	30.409646	-97.390675	600	1,835	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	
4228731156	32850	Lee	30.246384	-96.775445	301	4,100	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1028	1958	3060	3562
4228731769	30963	Lee	30.395289	-96.846498	396	4,800	LRE Acquired	-9999	-9999	-9999	-9999	297	356	878	1028	1336	2361	3217	4024	4497
4228732265	30615	Lee	30.393259	-96.838727	390	4,785	LRE Acquired	-9999	-9999	-9999	-9999	298	392	911	1029	1351	2381	3243	4067	4544
4205534192	26212	Caldwell	29.977569	-97.608156	531	1,781	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	169
4205504955	20862	Caldwell	30.008758	-97.598156	544	2,100	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	244
4205500232	20729	Caldwell	29.944341	-97.540165	452	2,269	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	438	751
4228730099	20521	Lee	30.316002	-96.9274	429	7,805	LRE Acquired	-9999	-9999	-9999	-9999	363	431	930	1069	1381	2549	3382	4224	4696
4228700091	20508	Lee	30.417009	-96.895949	367	16,441	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3983
4228700020	20503	Lee	30.435688	-96.892929	403	3,379	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3376
4228770047	20483	Lee	30.495096	-96.93244	380	3,500	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	3263
4228770101	20475	Lee	30.164047	-96.840787	439	2,324	LRE Acquired	-9999	-9999	1086	1399	1642	1667	2244	-9999	-9999	-9999	-9999	-9999	-9999
4228732535	15263	Lee	30.189686	-97.030262	524	5,574	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	4815
4214931073	15252	Fayette	29.918174	-97.142545	433	7,440	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	5063
4202130918	15189	Bastrop	30.227582	-97.451135	449	1,455	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	327
4202130898	15188	Bastrop	30.251411	-97.451565	459	2,020	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	272
4202131423	15177	Bastrop	30.038678	-97.575236	518	2,103	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	371
4202130539	15148	Bastrop	29.967461	-97.479993	429	2,467	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1146
4202131387	14458	Bastrop	29.975101	-97.433422	469	2,863	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1100
4202131556	14286	Bastrop	30.270422	-97.27044	465	3,429	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1821
4228700097	-9999	Lee	30.321464	-97.088198	482	3,750	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999

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API	BRACS ID	COUNTY	Latitude NAD83 Decimal Degrees	Longitude NAD83 Decimal Degrees	Elev. Feet	Well Depth	Stratigraphic Review	Jackson Top Depth	Yegua Top Depth	Cook Mt. Top Depth	Sparta Top Depth	Weches Top Depth	Queen City Top Depth	Reklaw Top Depth	Carrizo Top Depth	Wilcox, Calvert Bluff Top Depth	Wilcox, Simsboro Top Depth	Wilcox, Hooper Top Depth	Midway Group Top Depth	Navarro Group Top Depth
4202100209	-9999	Bastrop	30.092174	-97.332307	364	3,363	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	234	771	1501	1819
4202100217	-9999	Bastrop	30.051463	-97.357761	354	3,600	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	786	1477	1793
4202130368	-9999	Bastrop	30.080236	-97.336344	351	4,150	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	783	1534	1841
4202131581	-9999	Bastrop	30.362726	-97.280548	508	2,605	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1144
4228732591	-9999	Lee	30.366272	-97.05738	357	6,401	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	409	481	801	1937	2614	3402
4228700067	-9999	Lee	30.402095	-97.172486	410	2,563	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1649	2084
4228732533	-9999	Lee	30.510985	-96.981274	449	3,260	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	1651	2389	3029	-9999
4202100258	-9999	Bastrop	30.070045	-97.386001	360	3,413	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	265	1043	1367
4202100751	-9999	Bastrop	29.994586	-97.382692	472	3,357	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	168	730	1497	1823
4202100899	-9999	Bastrop	30.273634	-97.371206	452	3,187	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	693	1035
4202100174	-9999	Bastrop	30.224019	-97.419656	383	2,692	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	326	743
4202100306	-9999	Bastrop	30.051417	-97.442975	433	2,804	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	683	1012
4202130817	-9999	Bastrop	30.043186	-97.476141	462	2,514	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	460	801
4202130938	-9999	Bastrop	30.055377	-97.46546	492	2,771	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	478	795
4202100638	-9999	Bastrop	29.99797	-97.493371	449	2,442	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	495	822
4202130332	-9999	Bastrop	30.069975	-97.499019	459	2,190	LRE Acquired	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	-9999	682

**Appendix B –
Stratigraphic Well Control Excluded from Model Development**

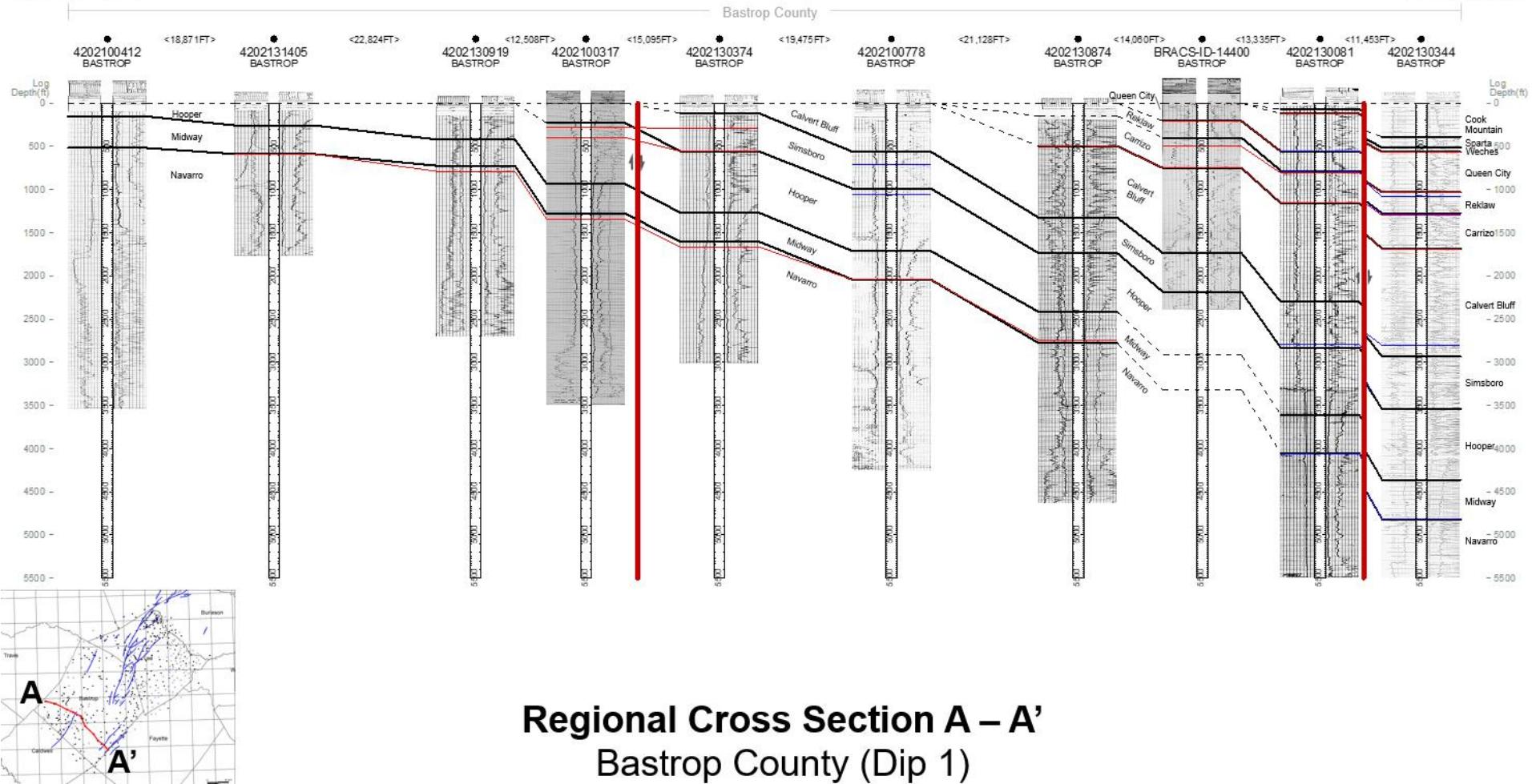
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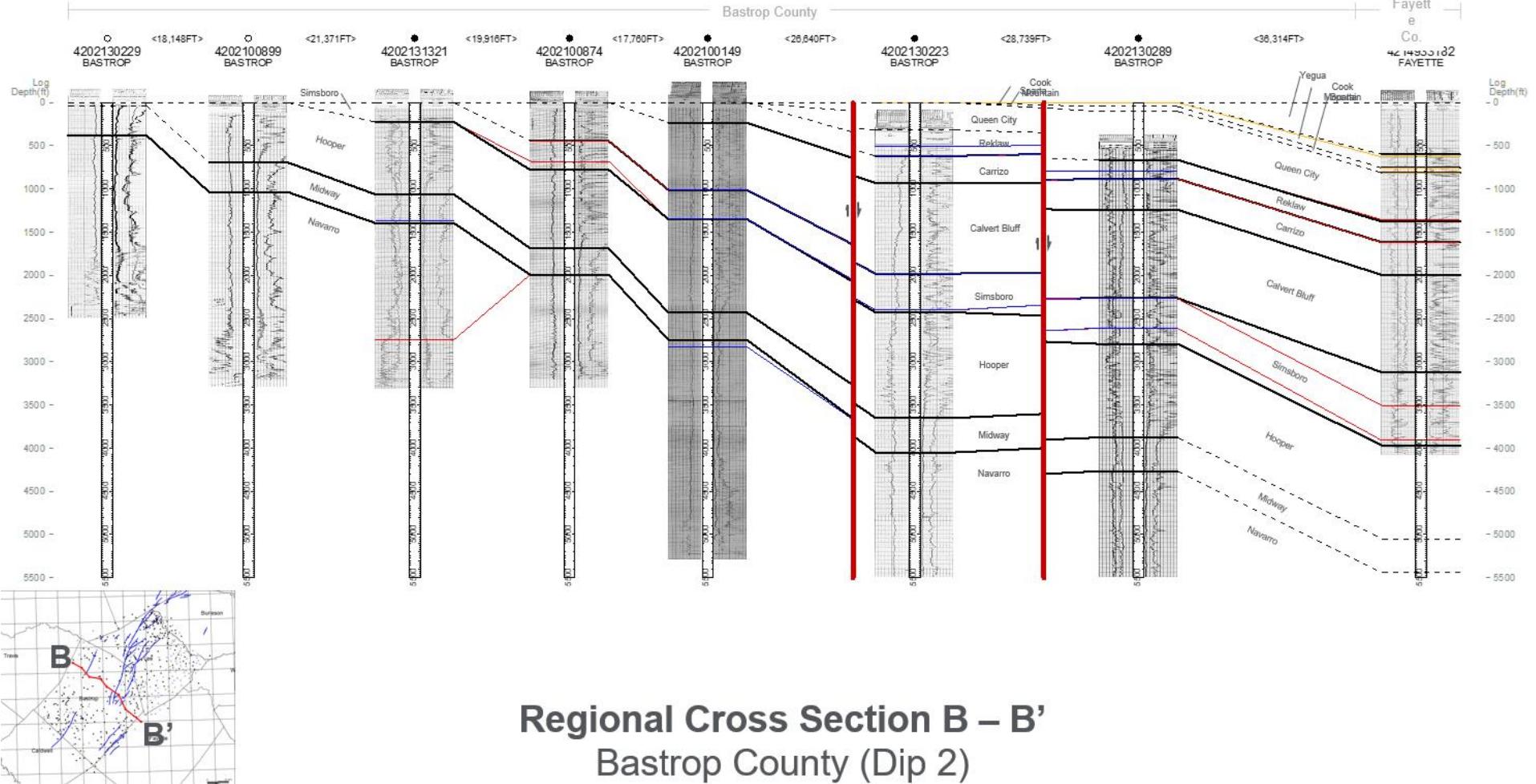
Undif. Cretaceous	Midway	Hooper	Simsboro	Calvert Bluff	Carrizo	Reklaw	Queen City	Sparta	Cook Mountain	Colorado River Alluvium
API	API	API	API	API	API	API	API	API	API	Track No
4202100412	4217700074	4202100134	4217700074	4217700074	4202100875	4217700074	4217700074	4202100823	4247700365	1271
4202130097	4202100148	4217700074	4202100138	4202100910	4202130309	4202130084	4202100910	4202130031		4951
4202130193	4202100212	4202100138	4202100144	4202130309	4202131088	4202130312	4202130239	4202130034	BRACS ID	45275
4205100003	4202100412	4202100824	4202100823	4202130902	4214930883	4202131088	4202131184	4202131184	87320	111925
4205130002	4202100826	4202100875	4202100910	4202131127	4214931060	4228700058	4214900206	4202131185		194865
4214900091	4202130079	4202130004	4202130004	4202131385	4228700037		4228732368	4202130344		207695
4228700005	4202130084	4202130084	4202130097	4214900109	4228700058		4228732574			220521
4228700019	4202130090	4202130097	4202130309	4228700058			4228732485			256662
4228700058	4202130097	4202130199	4202130312	4228730034			4205120010			282279
4202100762	4202130196	4202130239	4202130790							313683
4228700072	4202130218	4202130247	4202131088	BRACS ID			BRACS ID			316931
4228731156	4202130309	4202130309	4202131127	14524			43036			390751
	4202130346	4202130312	4228700004	14521						
	4202130498	4202130581	4228700005	14324						
	4202130815	4202130790	4228700019	14330						
	4202130897	4202130912	4228700058	14331						
	4202131157	4202131088	4228730045	14325						
	4202131385	4202131127	4228732250	14326						
	4202131409	4202131157	4228700072	39067						
	4202131424	4202131385	4228731156	39068						
	4202131427	4202131427	4228732591	14527						
	4205505020	4202131440	4228732533	14525						
	4205533735	4202131586		39069						
	4214900085	4202131587		14526						
	4214931431	4202131599		71013						
	4228700005	4205130002								
	4228700019	4205130360								
	4228700058	4214931431								
	4228731951	4228700005								
	4228732029	4228700019								
	4228731156	4228700058								
	4228732591	4228730301								
	4228732533	4228730891								
	4228700072	4228732086								
	4202100762	4228732280								
		4202100762								
	BRACS ID	4228700072								
	42731	4228731156								
	15248	4228732591								
	58951	4228732533								

**Appendix C -
Study Area Cross Sections (Progress Report 3)**

A
Northwest

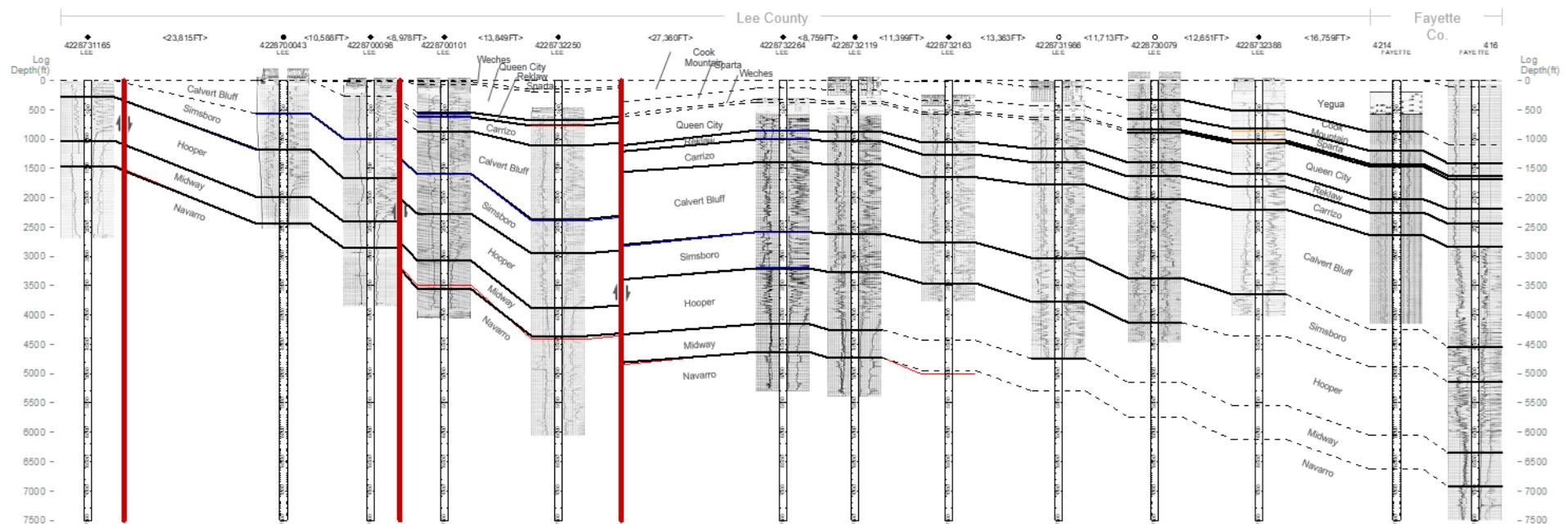


B
Northwest



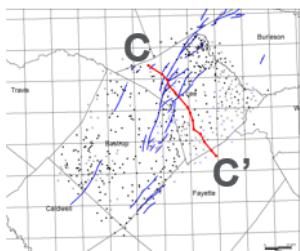
Regional Cross Section B – B'
Bastrop County (Dip 2)

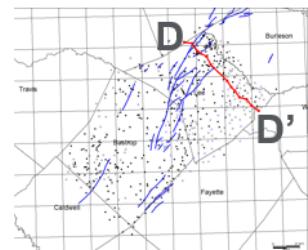
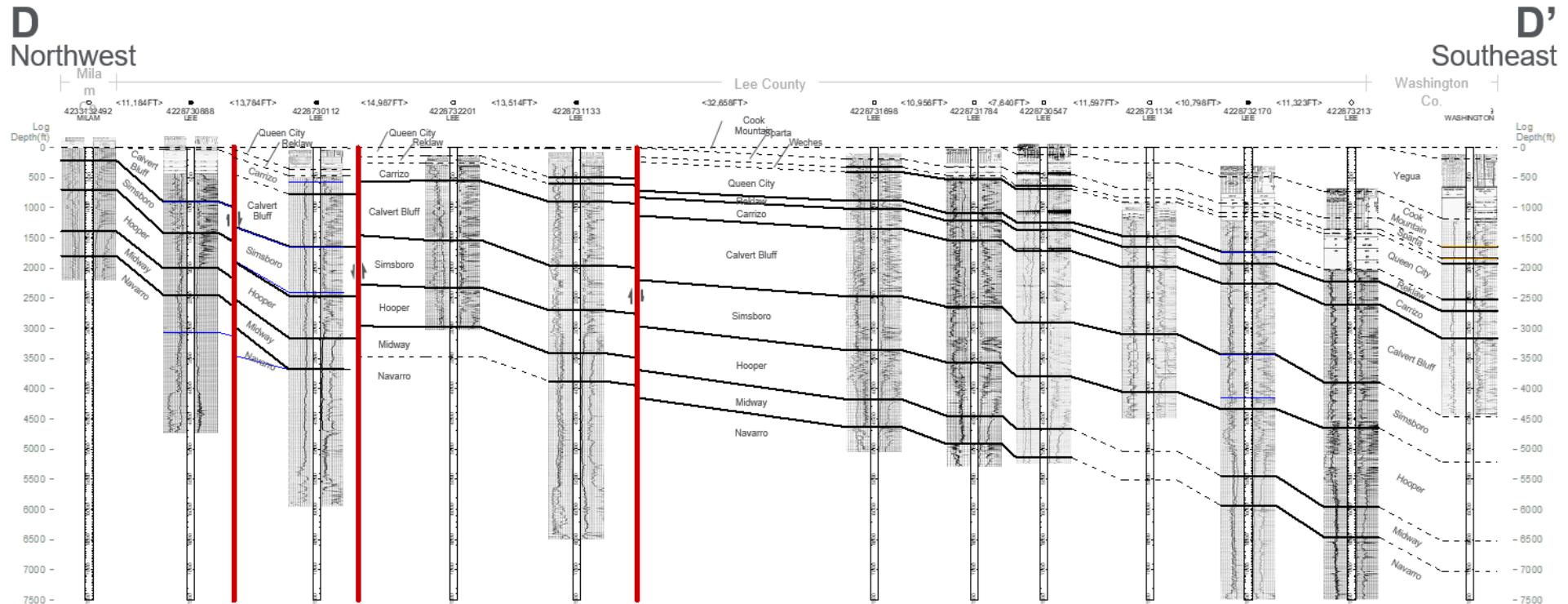
C
Northwest



C'
Southeast

Regional Cross Section C – C'
Lee County (Dip 1)

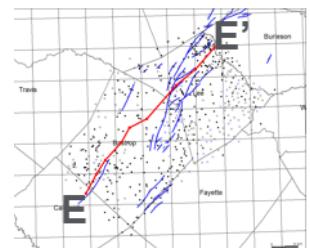
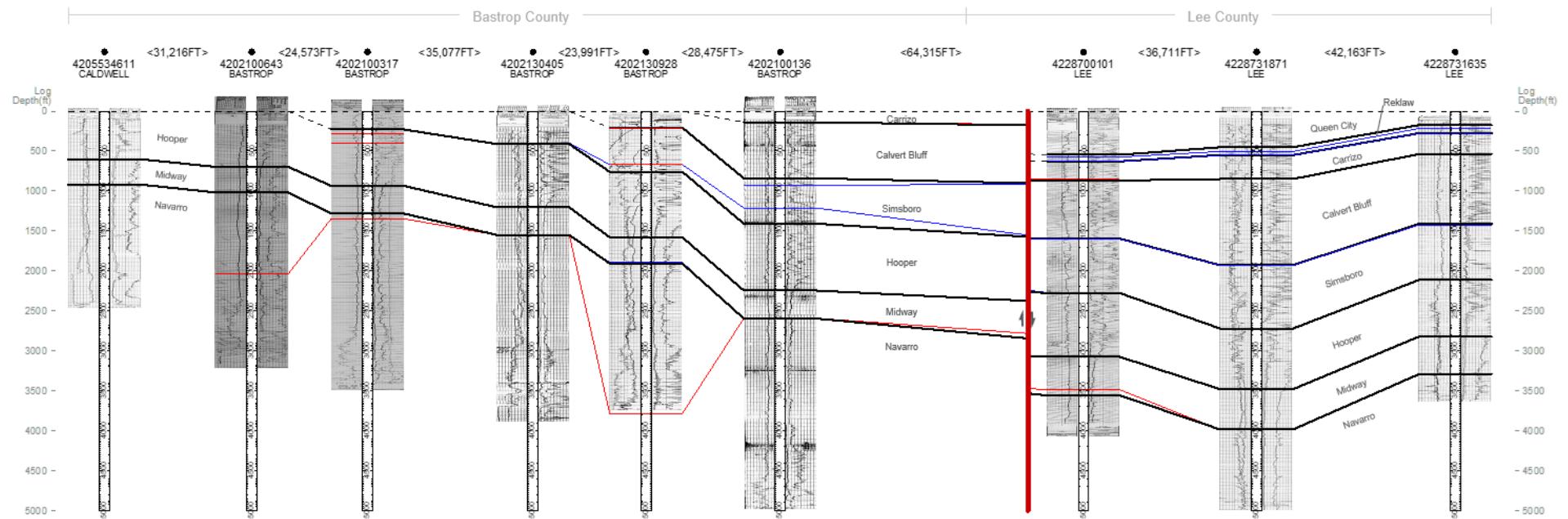




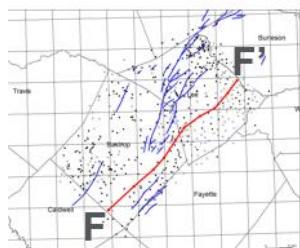
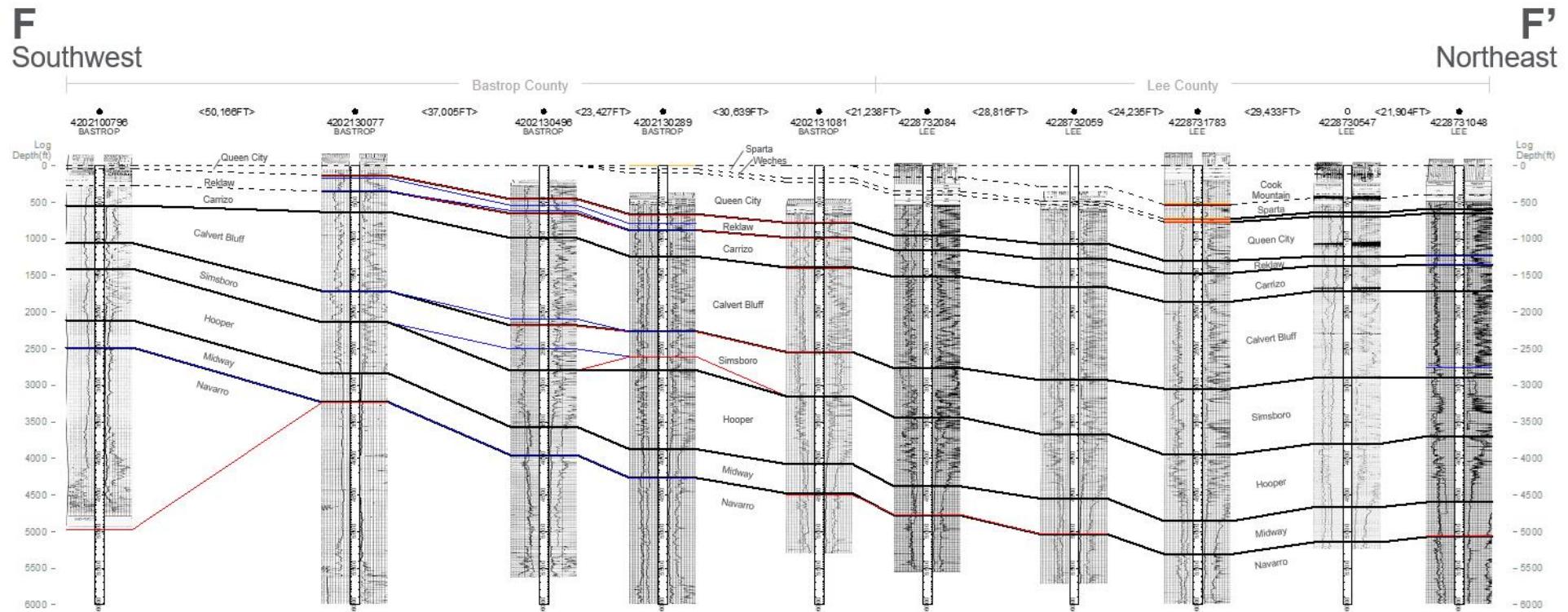
Regional Cross Section D – D'
Lee County (Dip 2)

E
Southwest

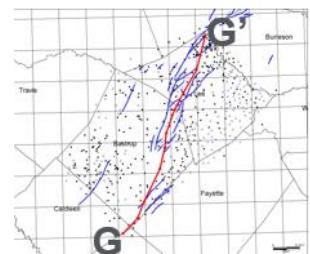
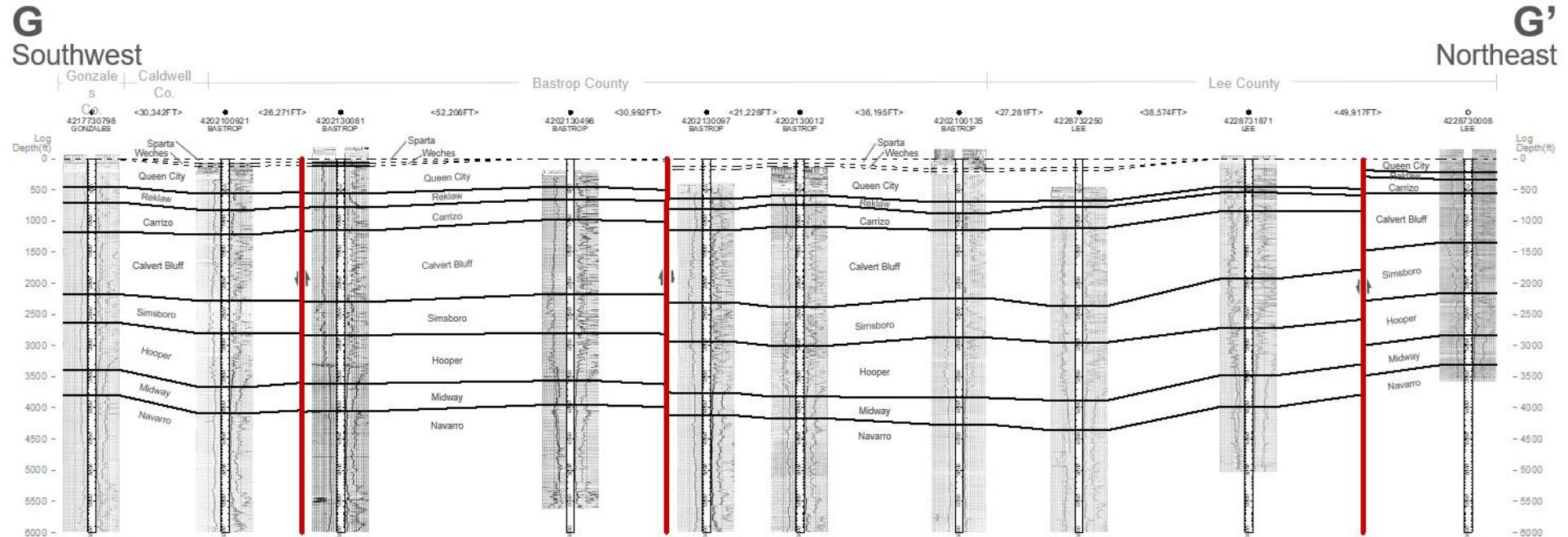
E'
Northeast



Regional Cross Section E – E'
Zones 3 to 1 (Strike 1)



Regional Cross Section F – F'
Zone 2 to 4 (Strike 1)



Regional Cross Section G – G'
True Strike

**Appendix D –
LPGCD 3D Hydrogeologic Model Leapfrog Viewer**

(Delivered as an electronic attachment.)

Appendix E –

LPGCD Registered Well Database Source Aquifer Designations

(Delivered as an electronic attachment.)

**Appendix F –
LPGCD Hydrogeologic Model Project Geodatabase**

(Delivered as an electronic attachment.)

**Appendix G –
Geophysical Log Files**

(Delivered as an electronic attachment.)