TRIENNIAL SUMMARY REPORT, 2006

FOR THE WATER QUALITY ASSESSMENT DIVISION OF THE LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

DEQ
LOUISIANA

BASELINE MONITORING PROGRAM

FISCAL YEARS 2004 – 2006 (July 2003 through June 2006)

PARTIAL FUNDING PROVIDED THROUGH CWA GRANT

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ACKNOWLEDGEMENTS

The Water Quality Assessment Division's (WQAD) Baseline Monitoring Program (the Program or BMP) owes its success to many people and agencies for their continual support through the years. Without this support, the Program could not exist.

The water well owners, who voluntarily participate in the Program, are owed a debt of gratitude. Without access to private, corporate, and public property and wellheads, the Program could not operate.

The Louisiana Department of Environmental Quality (LDEQ) Water Laboratory continues to provide excellent analytical service in addition to continued advice and assistance in data interpretation.

The Louisiana Department of Transportation and Development (LDOTD) Water Resources Section provides the Water Well Registration data set to LDEQ, and ultimately to the Water Quality Assessment Division, which is used for multiple purposes in the execution of the BMP.

The United States Geological Survey (USGS) Water Resources Division frequently provides well schedule data that are used during the execution of the BMP. These data are made available to the Program through a USGS-LDOTD cooperative program. In addition, the USGS allows its observation wells to be sampled.

Gratitude is also owed to the staff at EPA Region 6, Water Quality Protection Division, Assistance Programs Branch and the Source Water Protection Branch, for their assistance and support for the Baseline Monitoring Program.

This Program is funded in part by the U.S. Environmental Protection Agency through the Clean Water Act.

BACKGROUND

The Baseline Monitoring Program is conducted as a Clean Water Act activity. The Program was designed to determine and monitor the quality of ground water in the major freshwater aquifers across Louisiana. The data derived from this process is provided to LDEQ to aid in ground water protection and remediation strategy for the State. It is also available to the public through LDEQ's website and through the mail upon request. Also, each well owner receives a copy of the laboratory analytical results from the sampling of their well.

For this reporting period, the BMP monitored 193 wells in fourteen major freshwater aquifers and aquifer systems throughout the state. Table 2 lists these major aquifers and aquifer systems while Table 3 illustrates their stratigraphic occurrence. The number of wells assigned to each aquifer is based on the areal extent of each aquifer. Currently, the well density goal is approximately one well per 400 square miles. For example, an aquifer or aquifer system with an areal extent of 4,800 square miles would require a minimum of twelve wells to be assigned to it, 4,800/400 = 12. An effort is made to distribute sample locations (wells) evenly within the areal extent of each aquifer so that a representative sampling of the aquifer as a whole can be accomplished. Table 2 lists the square miles of each aquifer or aquifer system, the number of wells currently assigned to it and the well density for each aquifer or system. Figures 1 - 3 below, more readily illustrates this by graphing the data found in Table 2. Also, the last row of Table 2 lists the total areal extent of all monitored aquifers, total number of wells sampled and the overall well density for the Program.

The sampling process was designed so that each well is monitored every three years. Following this design allows for all fourteen aquifers and aquifer systems to be monitored within the three-year period. The process is then repeated once a three-year cycle has been completed. Typically, five or more wells, each producing from the same aquifer, are sampled each time sampling is performed. An effort is made to sample all assigned wells of the aquifer in question within a consecutive set of sampling episodes, or events, before moving to the next aquifer. Aquifers of small areal extent may have been completed in a single event, whereas larger aquifers may have required several events to complete. Table 4 lists the aquifers and aquifer systems sample schedule by month along with the number of wells sampled.

Each well is sampled for water quality parameters, inorganics (total metals), nutrients, volatile organic compounds, semi-volatile organic compounds, pesticides, and PCBs; and field parameters are also collected at each well. Table 5 lists these field and laboratory parameters along with their reporting units. For specific lists of analytes, methods, and detection limits, please refer to the aquifer summaries appended to this document.

SUMMARY OF FINDINGS

INTRODUCTION

This report summarizes the BMP sampling that occurred from July 2003 through June 2006. One hundred ninety-three wells completed in fourteen different aquifers or aquifer systems were monitored. Table 6 contains a listing of all the wells sampled, each well's owner, completed depth, use made of produced water, and the aquifers they produce from. In order to preserve privacy, "Private Owner" is listed for the well owner when a well is owned by a private citizen.

Table 7 lists the minimum, average and maximum sample results for the samples collected from each aquifer and aquifer system for field parameters, water quality parameters, and nutrients. Table 8 lists the minimum, average and maximum sample results for the samples collected from each aquifer and aquifer system for the inorganic parameters.

A brief summation of each aquifer's sample results and conclusions begin on the next page. This summation includes the findings for hardness based on the scale below, and a statement on the general water quality of the aquifer based on the data derived from the wells sampled. The number of federal primary MCLs (if any) and the number of secondary MCLs that were exceeded are noted also. The most common secondary MCLs exceeded were iron, color, total dissolved solids, and pH, in order of decreasing exceedances.

For a detailed discussion of each aquifer's findings, see the aquifer summaries appended to this document. Each summary consists of a discussion of the aquifer's geology and hydrogeology, and an interpretation of the laboratory analyses. The lab analysis interpretation is accomplished by evaluating the general water quality and by comparing the historical data averages with the current data averages to detect changes in water quality over time. Initial water quality is evaluated by comparing individual parameters to Federal Primary Drinking Water Standards to assess the aquifer's use as a drinking water source, and is rated as good or poor. Additionally a second water quality evaluation is made by taking into account whether or not Action Levels were exceeded, whether or not volatile organic compounds, semi-volatile organic compounds, pesticides or PCBs were detected, by taking into account the number of secondary standards exceeded in relation to the number of wells sampled, and the average hardness value. This rating uses values of good, fair and poor.

It should be noted that all statements about hardness in the aquifer sections and summary section are based on the following scale:

Soft	< 50 milligrams per Liter (mg/L)
Moderately hard	50-150 mg/L
Hard	151-300 mg/L
Very hard	> 300 mg/L

A statewide summary of the findings and the summary statement can be found in the section following the Aquifer Summations section.

AQUIFER SUMMATIONS

Sparta Aquifer

Fourteen wells ranging in depth from 153 feet to 773 feet, with an average depth of 523 feet were sampled for this aquifer. Laboratory and field data show that of these fourteen wells sampled during this reporting period for the Sparta aquifer, no primary MCL was exceeded, while twenty-two Secondary MCLs (SMCLs) were exceeded. However there were six detections of volatile organic compounds (VOCs) in two public supply wells in the low ug/L range. The VOCs reported are typically associated with the chlorination process and are considered to be byproducts of chlorination and not due to aquifer contamination. The data also show that the ground water produced from this aquifer is soft, and is of good quality when considering short-term or long-term health risk guidelines. Water produced from this aquifer is of fair quality when considering taste, odor, or appearance guidelines.

Carrizo-Wilcox Aquifer

Eleven wells ranging in depth from 105 feet to 410 feet, with an average depth of 258 feet were sampled for this aquifer. Laboratory and field data show that no assigned well that was sampled during this reporting period for the Carrizo-Wilcox aquifer exceeded a primary MCL, with twelve exceedances of secondary standards. The data show that the ground water produced from this aquifer is generally soft, and is of good quality when considering short-term or long-term health risk guidelines. Water produced from this aquifer is also good quality when considering taste, odor, or appearance guidelines.

Red River Alluvial Aquifer

Six wells ranging in depth from sixty feet to ninety-six feet, with an average depth of 72 feet were sampled for this aquifer. Laboratory and field data show that no assigned well that was sampled during this reporting period for the Red River Alluvial aquifer exceeded a primary MCL, while eleven SMCLs were exceeded, and the action level for lead was exceeded in one well. The data also show that the ground water produced from this aquifer is very hard and is of poor quality when considering taste, odor, or appearance guidelines, but is of good quality when considering short-term or long-term health risk guidelines.

Evangeline Aquifer

Eleven wells ranging in depth from 170 feet to 1,715 feet, with an average depth of 625 feet were sampled for this aquifer. Laboratory and field data show that no assigned well that was sampled during this reporting period for the Evangeline aquifer exceeded a primary MCL, while there were ten exceedances of secondary standards. The data show that the ground water produced from this aquifer is generally soft, and is of good quality when considering short-term or long-term health risk guidelines. Water produced from this aquifer is of good quality also when considering taste, odor, or appearance guidelines.

Catahoula Aquifer

Four wells ranging in depth from 188 feet to 1,477 feet, with an average depth of 704 feet were sampled for this aquifer. Laboratory and field data show that no assigned well that was sampled during this reporting period for the Catahoula aquifer exceeded a primary MCL, and only one SMCL was exceeded. The data show that the ground water produced from this aquifer is soft, and is of good quality when considering short or long-term health risk guidelines. Also, the water produced from this aquifer is of good quality when considering taste, odor, or appearance guidelines.

North Louisiana Terrace Aquifer

Eleven wells ranging in depth from forty-nine feet to 158 feet, with an average depth of 106 feet were sampled for this aquifer. Laboratory and field data show that the ground water produced from this aquifer is moderately hard and is of good quality when considering taste, odor, or appearance guidelines, with ten secondary standards exceeded. It is also of good quality when considering short-term or long-term health risk guidelines in that it appears that no BMP well sampled for this time period had a confirmed exceedance of a primary MCL. It should be noted that due to higher detection limits returned by a contract lab that was used during the sampling of this aquifer, and that the inorganic results from this lab are questionable, a definitive statement regarding MCL exceedances cannot be made. For more details concerning this issue, please refer to the FY 2004 *North Louisiana Terrace Aquifer Summary*, Appendix 6 of this report.

Carnahan Bayou Aquifer

Twelve wells ranging in depth from sixty-six feet to 2,036 feet, with an average depth of 612 feet were sampled for this aquifer. Laboratory and field data show that no assigned well that was sampled during this reporting period for the Carnahan Bayou aquifer exceeded a primary MCL, while only five secondary standards were exceeded. The data show that the ground water produced from this aquifer is moderately hard, is of good quality when considering short or long-term health risk guidelines, and is also of good quality when considering taste, odor, or appearance guidelines.

The quality statement for the Carnahan Bayou aquifer does not consider inorganic (metals) data for this reporting period. This data was of questionable quality in that the reported values were too inconsistent with historical and subsequent sample results. Therefore, the inorganic data was considered invalid and was not used in the quality assessment of this aquifer. For more details concerning this issue, please refer to the FY 2004 Carnahan Bayou Aquifer Summary, Appendix 7 of this report.

Mississippi River Alluvial Aquifer

Twenty-four wells ranging in depth from thirty feet to 352 feet, with an average depth of 127 feet were sampled for this aquifer. Laboratory and field data show that the ground water produced from the Mississippi River Alluvial aquifer is very hard, and that the primary MCL for arsenic was exceeded in five wells. Also, MTBE, a volatile organic compound which has no primary MCL, was found in one well at low ug/L levels (<10 ug/L).

Review of this data shows that this aquifer is of poor quality when considering taste, odor, or appearance guidelines with forty-three secondary standards being exceeded, the most of any aquifer monitored by this Program. It also shows that five exceedances of the arsenic MCL were found, making certain locations of this aquifer to be of questionable quality when considering short-term or long-term health risk guidelines. It is important to note that there are certain localized areas of the Mississippi River Alluvial aquifer that exhibit good water quality characteristics, but it still exhibits the poorest overall water quality characteristics of any of the fourteen aquifers or aquifer systems sampled.

Cockfield Aquifer

Thirteen wells ranging in depth from eighty feet to 445 feet, with an average depth of 254 feet were sampled for this aquifer. Laboratory and field data show that no assigned well that was sampled during this reporting period for the Cockfield aquifer exceeded a primary MCL, while fifteen SMCLs were exceeded. One public supply well did have three detections of VOCs at low concentrations, but were considered to be chlorination byproducts. The data show that the water produced from the Cockfield aquifer is moderately hard, is of good quality when considering short or long-term health risk guidelines, and is of fair quality when considering taste, odor, or appearance guidelines.

Chicot Aquifer

Twenty-five wells ranging in depth from sixty-six feet to 697 feet, with an average depth of 312 feet were sampled for this aquifer. Laboratory and field data show that no assigned well that was sampled during this reporting period for the Chicot aquifer exceeded a primary MCL, while twenty-five SMCLs were exceeded. Additionally, the action level for lead was exceeded in an irrigation well. While there is no MCL for lead, exceeding the action level of 15 ug/L would require some treatment technique to reduce the amount of lead in the water if this exceedance had occurred in a public supply well. These findings show that the waters produced from the Chicot aquifer is of good quality when considering short-term or long-term health risk guidelines. The data also show that the water produced from the Chicot aquifer is moderately hard and is of fair quality when considering taste, odor, or appearance guidelines.

Williamson Creek

Seven wells ranging in depth from 190 feet to 1,657 feet, with an average depth of 628 feet were sampled for this aquifer. Laboratory and field data show that no assigned well that was sampled during this reporting period for the Williamson Creek aquifer exceeded a primary MCL while only three secondary standards were exceeded. Mercury was detected in one well at a concentration of 0.09 ug/L, which is below mercury's primary MCL of 2 ug/L. (The well was later re-sampled and analyzed using the "Clean Metals" method and it was determined that the mercury concentration was approximately 0.5 parts per trillion, or about 0.0005 ug/L, in this well.) Review of the data shows that the waters produced from the Williamson Creek aquifer is soft, is of good quality when considering short-term or long-term health risk guidelines, and is also of good quality when considering taste, odor, or appearance guidelines.

Chicot Equivalent Aquifer System

Twenty-five wells ranging in depth from ninety feet to 807 feet, with an average depth of 349 feet were sampled for this aquifer. Laboratory and field data show that no assigned well that was sampled during this reporting period for the Chicot Equivalent Aquifer System exceeded a primary MCL while there were twenty-nine exceedances of secondary standards. Additionally the volatile organic compound, chloroform, a common laboratory contaminant, was detected at 2.3 ug/L in an industrial well. Review of the data show that the waters produced from the Chicot Equivalent Aquifer System is soft, is of good quality when considering short-term or long-term health risk guidelines, and that the waters produced from this aquifer is of fair quality when considering taste, odor, or appearance guidelines.

Evangeline Equivalent Aquifer System

Fifteen wells ranging in depth from 160 feet to 1,900 feet, with an average depth of 892 feet were sampled for this aquifer. Laboratory and field data show that no assigned well that was sampled during this reporting period for the Evangeline Equivalent Aquifer System exceeded a primary MCL, whereas sixteen secondary standards were exceeded. The data show that the water produced from the Evangeline Equivalent Aquifer System is soft, is of good quality when considering short-term or long-term health risk guidelines, and is also of good quality when considering taste, odor, or appearance guidelines.

Jasper Equivalent Aquifer System

Fifteen wells ranging in depth from 960 feet to 2,700 feet, with an average depth of 2,000 feet were sampled for this aquifer. Laboratory and field data show that no assigned well that was sampled during this reporting period for the Jasper Equivalent Aquifer System exceeded a primary MCL, while twelve secondary standards were exceeded, and one semi-volatile organic compound, (SVOC), was reported in one well. This SVOC, diethylphthalate, which has no MCL and is a common field/lab contaminant due to its widespread use in plastics, was reported at 16 ug/L. The data show that the water produced from the Jasper Equivalent aquifer system is soft, is of good quality when considering short-term or long-term health risk guidelines, and is also of good quality when considering taste, odor, or appearance guidelines.

STATEWIDE SUMMARY OF FINDINGS

COMBINED AQUIFER DATA AND HISTORICAL COMPARISON

Table 9 shows the minimum and maximum sample results, of all the results from the fourteen aquifers and aquifer systems that were sampled, for field parameters, water quality parameters, nutrients, and metals, as well as an average of all these sample results. A comparison of the current average values of each parameter to the historical average values of the two previous reporting periods (2000 BMP Triennial Report and 2003 BMP Triennial Report) shows that there was little or no change for most of the parameters measured. Of the thirty-two parameters compared, the most notable changes in average values that showed an increase from 2000 to 2006 were: pH, Specific Conductance, (lab results only, field measurements show almost no change), Sulfate and TSS. Those parameters showing a decrease in their average concentrations were: Nitrate-Nitrite, Copper, Iron and Nickel.

Table 1 highlights the pH, TDS, hardness, chloride, iron, and nitrite-nitrate minimum, maximum and average statewide values found in Table 9. Figures 4 – 9 are the graphed representations of only the average data values from Table 1, but on an aquifer by aquifer basis. It should be noted that the only data average listed in Table 1 that did not meet federal drinking water standards is the average for iron, which is not a health-related primary standard, but is an aesthetic, non-enforceable, secondary standard.

Table 1 – Selected Statewide Values

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	DRINKING WATER LIMITS (PRIMARY OR SECONDARY)
pH (SU)	4.96	9.35	7.42	>6.5, <8.5 Secondary
TDS (mg/L)	20.7	2,138.0	361.1	500 Secondary
Hardness (mg/L)	<5	597.0	102.2	N/A
Chloride (mg/L))	<1.3	671.0	56.9	250 Secondary
Iron (ug/L)	<20	34,800	1,371.7	300 Secondary
Nitrite-Nitrate (mg/L)	<0.05	7.48	0.15	10 Primary

FEDERAL PRIMARY MCL AND ACTION LEVEL EXCEEDANCES

A review of the laboratory and field data from all the aquifers and aquifer systems sampled show that there were five exceedances of the primary MCL for arsenic in the Mississippi River Alluvial Aquifer. The data also show that there were two exceedances of the federal action level for lead, one each in the Red River Alluvial Aquifer and the Chicot Aquifer.

QUALITY RANKINGS

As stated previously in this document, initial water quality is evaluated by comparing individual parameters to Federal Primary Drinking Water Standards to assess the aquifer's use as a drinking water source, and is rated as good or poor. Additionally a second water quality evaluation is made by taking into account whether or not Action Levels were exceeded, whether or not volatile organic compounds, semi-volatile organic compounds, pesticides or PCBs were detected, by taking into account the number of secondary standards exceeded in relation to the number of wells sampled, and the average hardness value. This rating uses values of good, fair and poor.

Using the above stated criteria against the data derived from the FY04 – FY06 sampling time period it is determined, based on initial evaluation, that thirteen of the fourteen aquifers and aquifer systems sampled exhibit good water quality characteristics while one exhibits poor water quality. Secondary evaluation shows that eight are in the good range; four are in the fair range while two are considered to be poor.

Those aquifers and aquifer systems considered to have Good water quality characteristics in both categories by the Baseline Monitoring Program are: Catahoula, Williamson Creek, Carnahan Bayou, Jasper Equivalent, Evangeline, Carrizo-Wilcox, Evangeline Equivalent and the North Louisiana Terrace. Those aquifers and aquifer systems considered to have Good water quality in the initial category and Fair water quality in the second category are: Chicot Equivalent, Chicot, Cockfield and the Sparta. The Red River Alluvial aquifer is considered to have Good initial and Poor secondary water quality characteristics, while the Mississippi River Alluvial aquifer is considered to have Poor initial and secondary water quality characteristics by this Program.

As might be expected, those aquifers and aquifer systems with deeper average well depths typically exhibit the best water quality characteristics while those with the shallower average well depths exhibit some of the poorest water quality characteristics. One notable exception to this is the North Louisiana Terrace aquifer that has an average well depth of just over 100 feet and exhibits similar water quality characteristics to those aquifers with much deeper average well depths.

SUMMARY STATEMENT

The majority of the major freshwater aquifers and aquifer systems of Louisiana that were sampled by the Baseline Monitoring Program exhibited Good water quality characteristics when considering health based standards and Fair to Good water quality characteristics when considering non-health based standards. More than half exhibited Good water quality characteristics in both categories. Only two aquifers, the Red River Alluvial and the Mississippi River Alluvial, exhibited Poor water quality characteristics when considering non-health based standards, while only the Mississippi River Alluvial aquifer exhibited Poor water quality characteristics in both categories.

Taking into account short-term or long-term health risk guidelines along with the findings of the Baseline Monitoring Program for the Fiscal Years 2004 to 2006, it is determined that the overall quality of the waters produced from Louisiana's principal freshwater aquifers is good, and that there is very little change in the water quality characteristics of these aquifers.

TABLES AND FIGURES

Figure 1 – Number of Wells Sampled per Aquifer

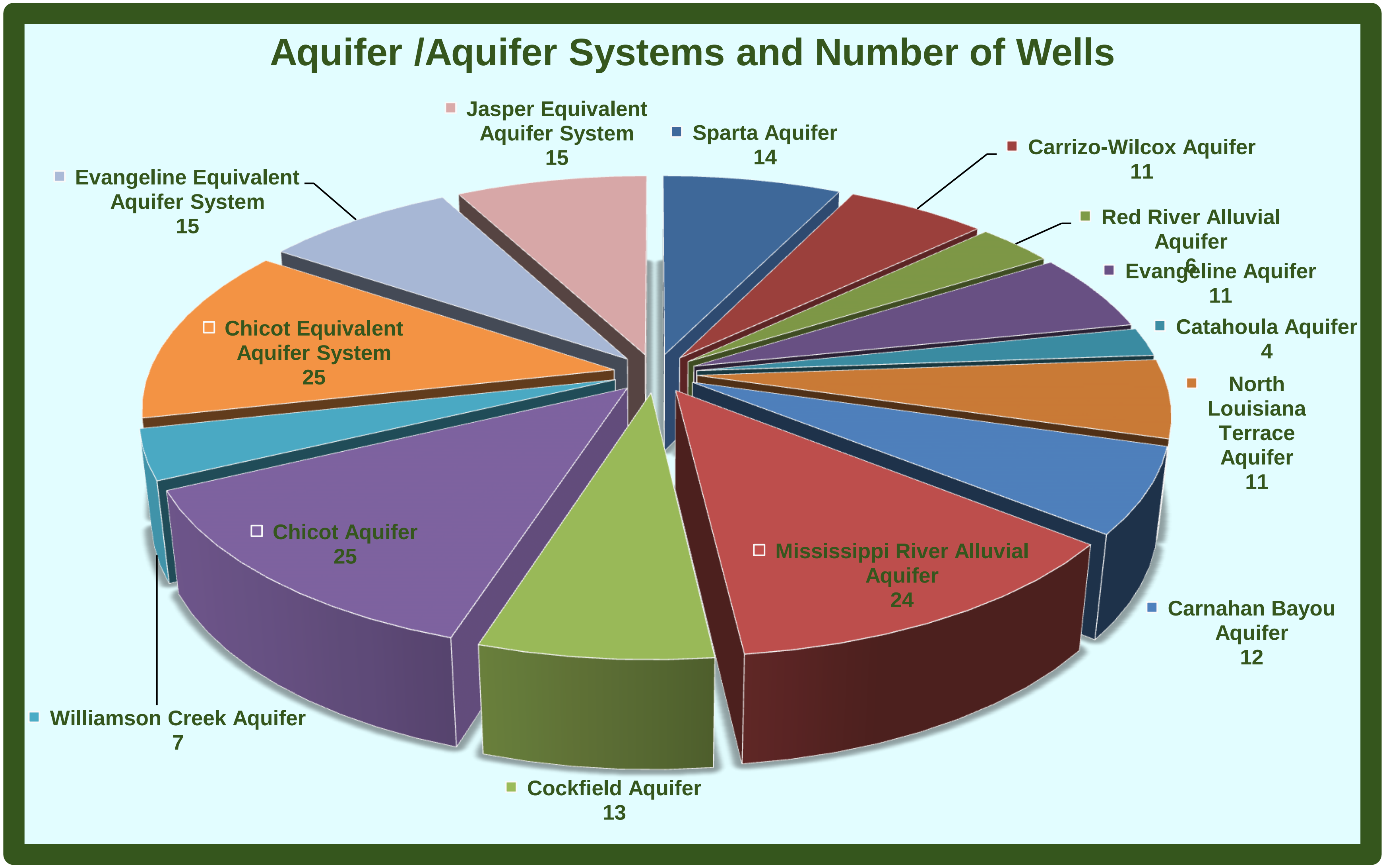

Figure 2 – Aquifer Areal Extent

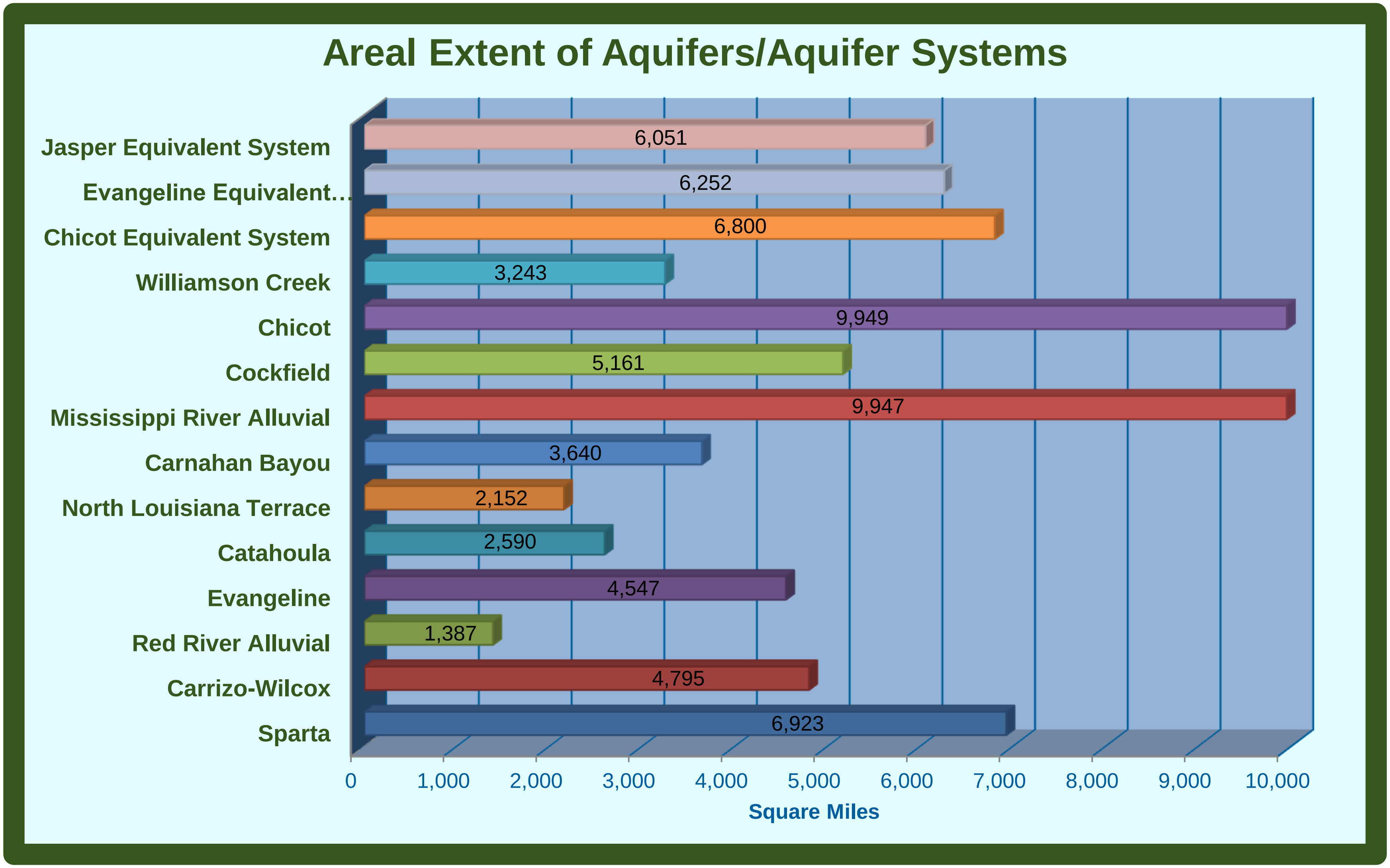

Figure 3 – Well Depth Statistics

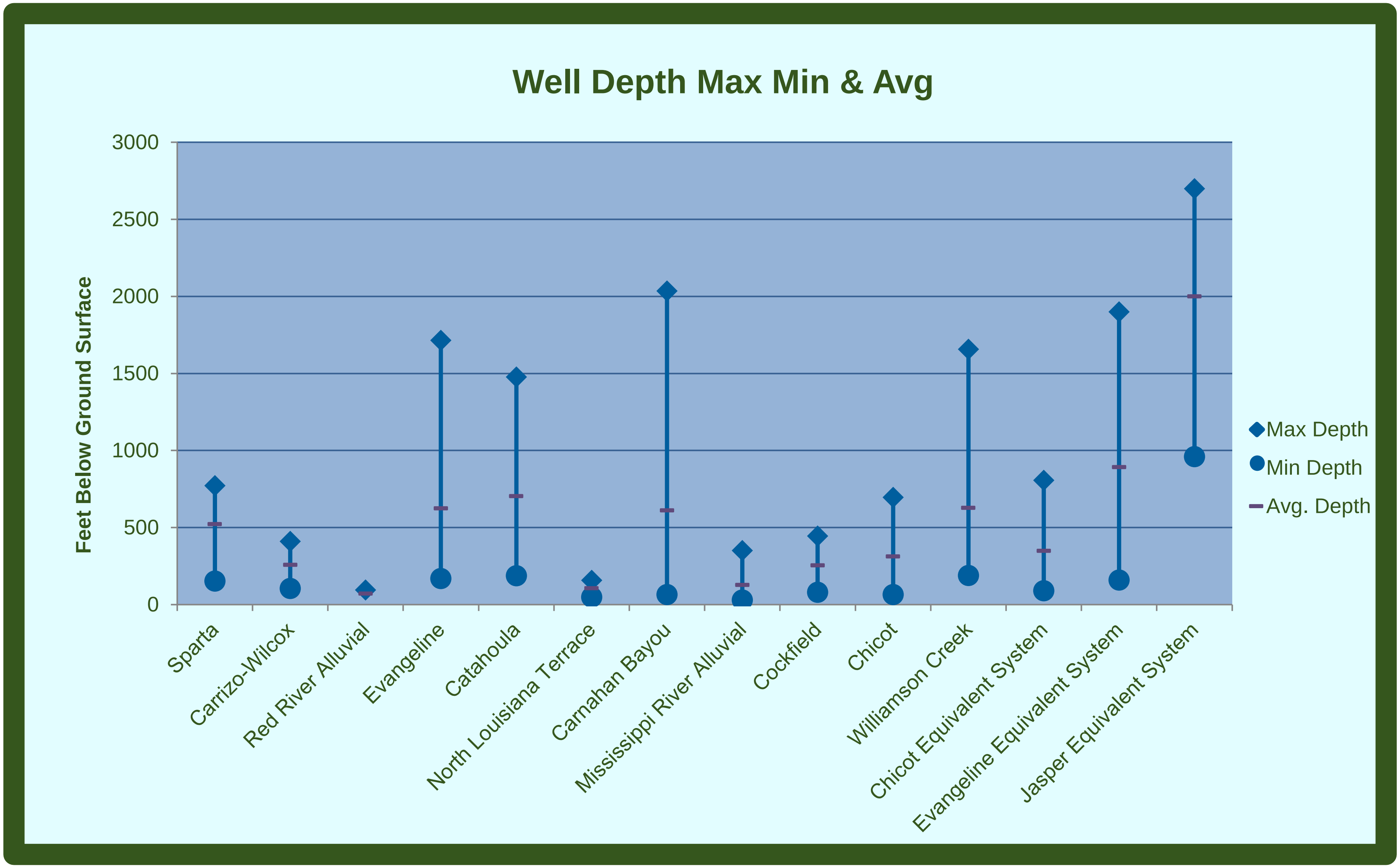

Figure 4 – Average pH Values

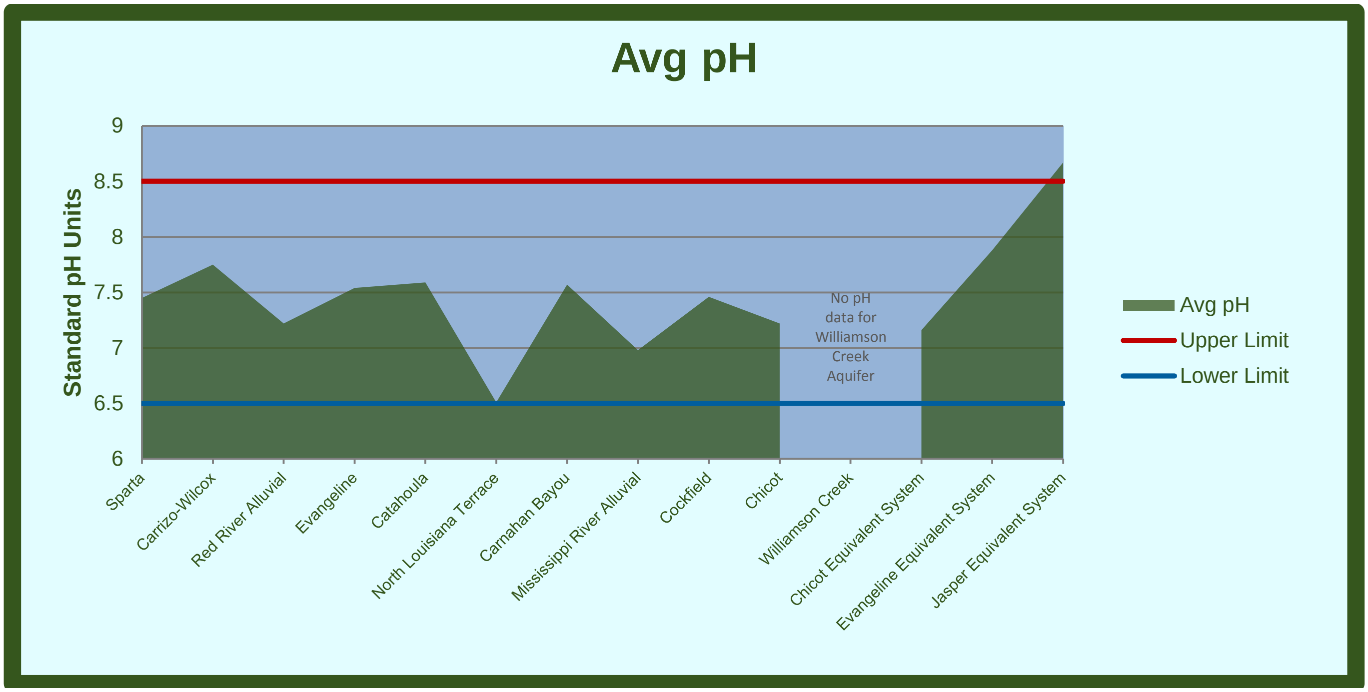

Figure 5 – Average Chloride Values

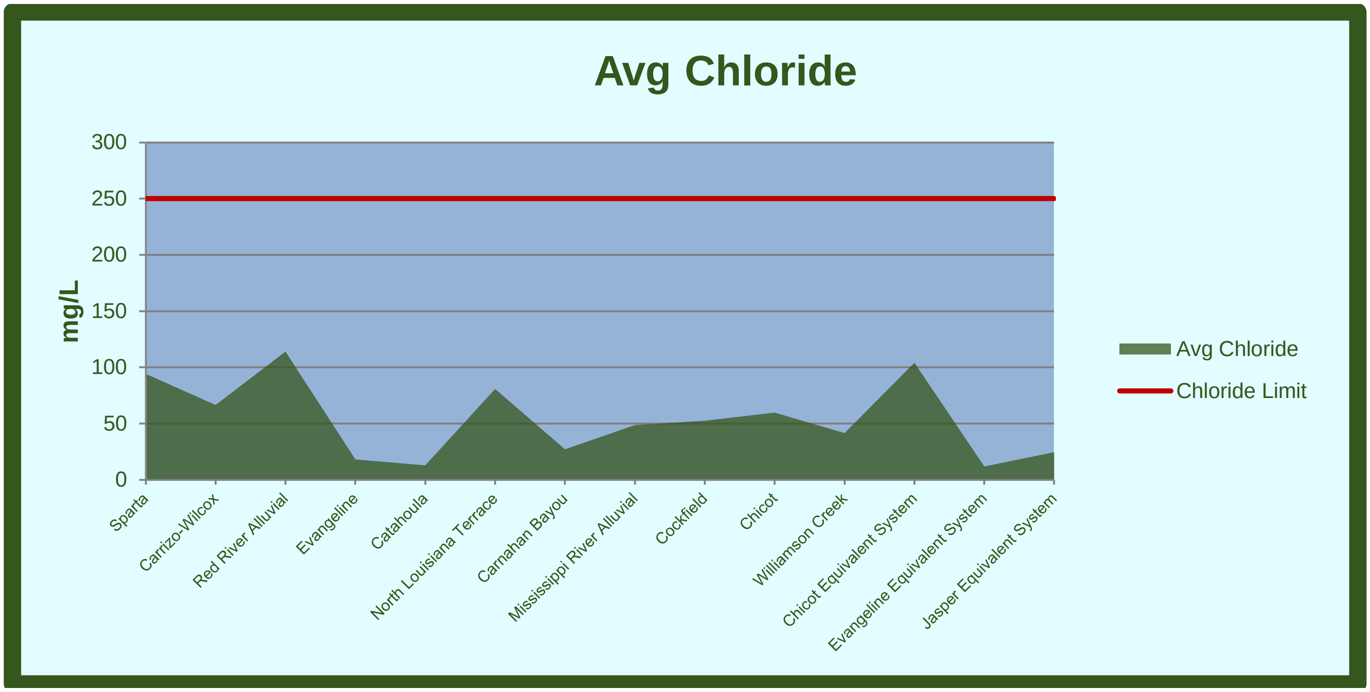

Figure 6 – Average TDS Values

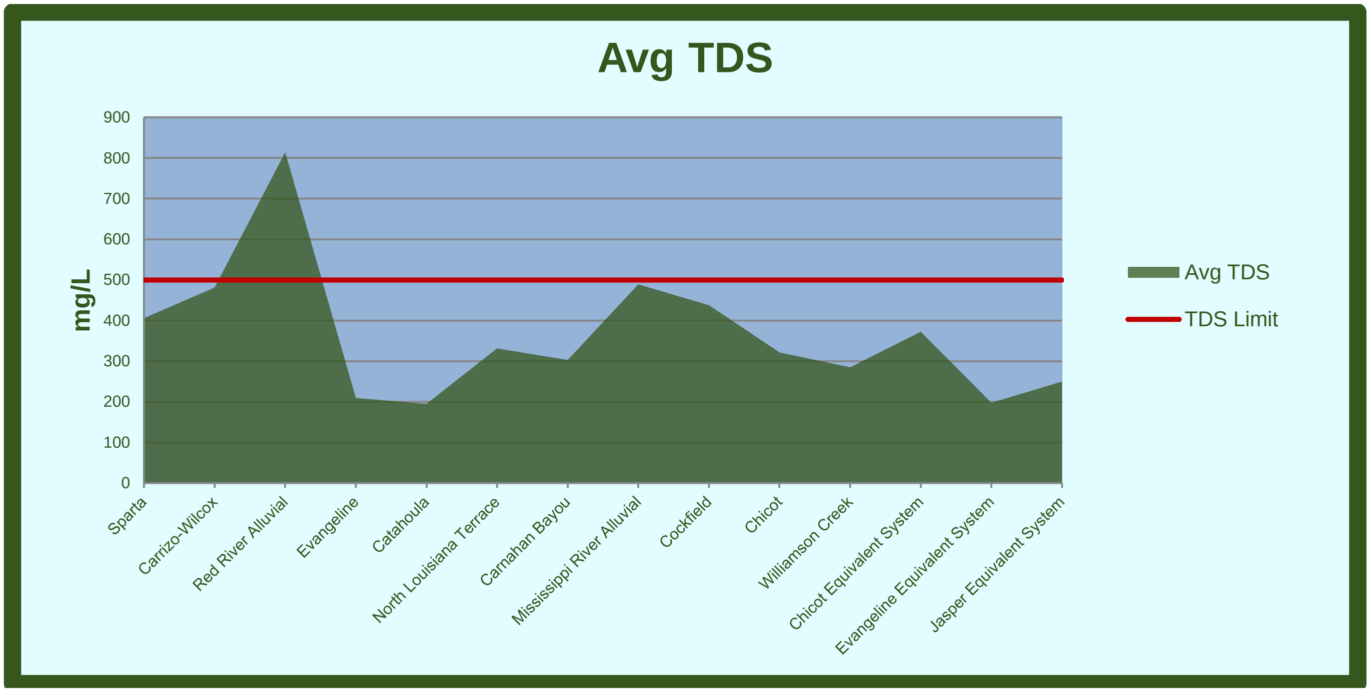

Figure 7 – Average Hardness Values

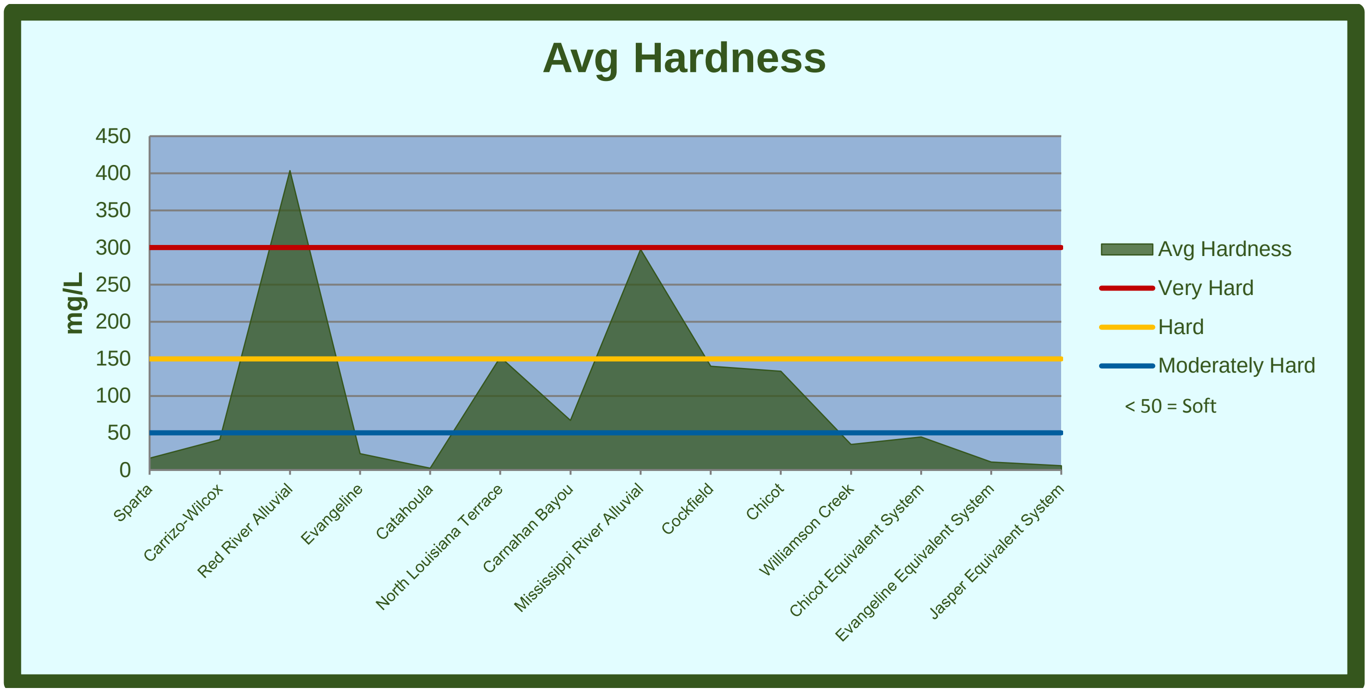

Figure 8 – Average Iron Values

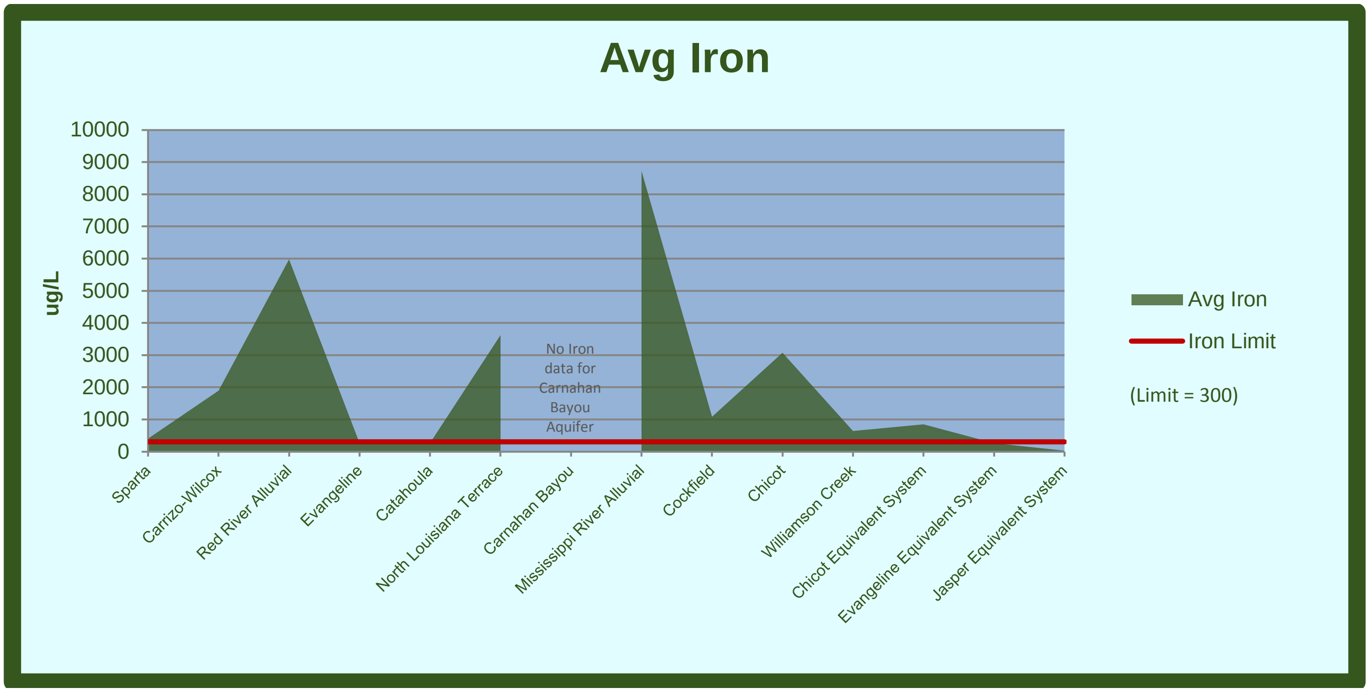

Figure 9 – Average Nitrite-Nitrate Values

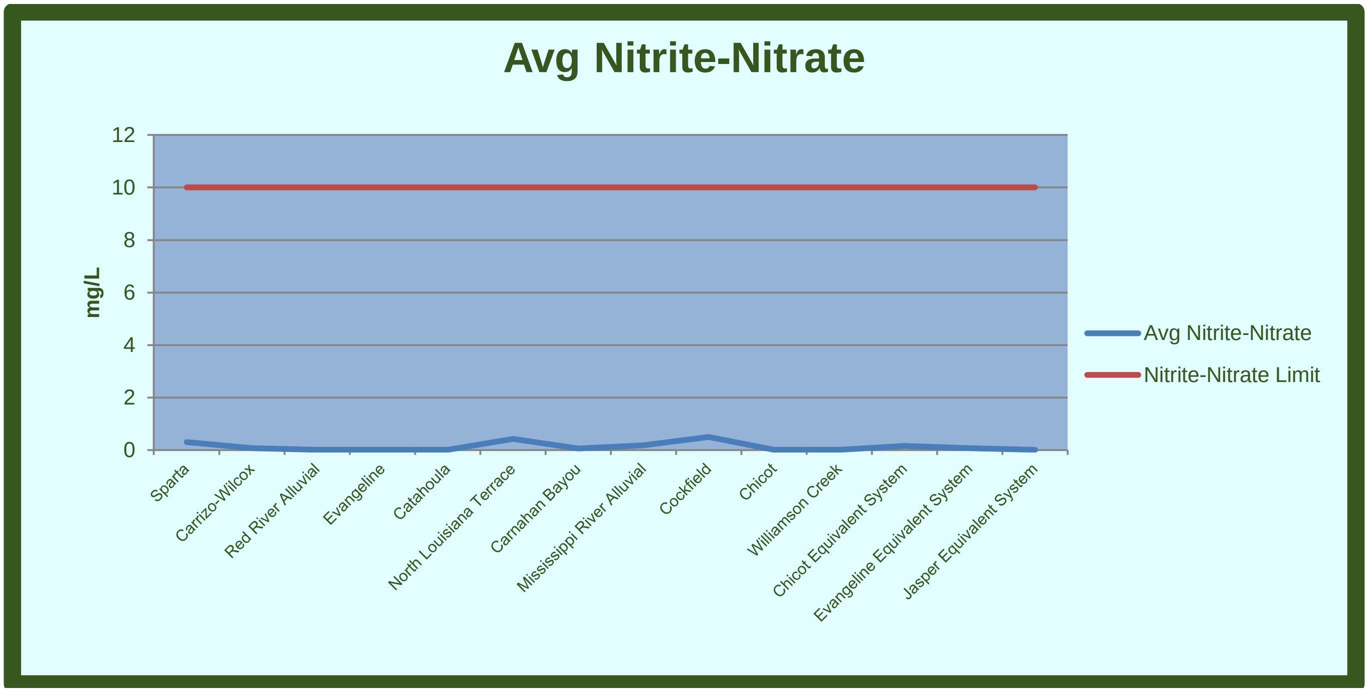

Table 2 - Aquifers and Aquifer Systems Monitored

AQUIFER OR SYSTEM	WELL DEPTH RANGE (feet)	AVERAGE WELL DEPTH (feet)	NUMBER OF WELLS	AREAL EXTENT (sq.mi.)	WELL DENSITY (sq. mi./well)
Sparta Aquifer	153 – 773	523	14	6,923	494
Carrizo-Wilcox Aquifer	105 – 410	258	11	4,795	436
Red River Alluvial Aquifer	60 – 96	72	6	1,387	231
Evangeline Aquifer	170 – 1,715	625	11	4,547	413
Catahoula Aquifer	188 – 1,477	704	4	2,590	648
North Louisiana Terrace Aquifer	49 – 158	106	11	2,152	235
Carnahan Bayou Aquifer	66 – 2,036	612	12	3,640	303
Mississippi River Alluvial Aquifer	30 – 352	127	24	9,947	414
Cockfield Aquifer	80 – 445	254	13	5,161	397
Chicot Aquifer	66 – 697	312	25	9,949	398
Williamson Creek Aquifer	190 – 1,657	628	7	3,243	463
Chicot Equivalent Aquifer System	90 – 807	349	25	6,800	272
Evangeline Equivalent Aquifer System	160 – 1,900	892	15	6,252	417
Jasper Equivalent Aquifer System	960 – 2,700	2,000	15	6,051	403
STATEWIDE	**30ft – 2,700ft**	**518ft**	**193 wells**	**73,437sq.mi.**	**380sq.mi./well**

Table 3 – Hydrogeologic Column of Aquifers

SYSTEM	SERIES	Stratigraphic Unit		Hydrogeologic Unit: Northern Louisiana – Aquifer or confining unit	Central and southwestern Louisiana – Aquifer system or confining unit	Central and southwestern Louisiana – Aquifer or confining unit: Lake Charles area	Central and southwestern Louisiana – Aquifer or confining unit: Rice growing area	Southeastern Louisiana – Aquifer system or confining unit	Southeastern Louisiana – Aquifer[1] or confining unit: Baton Rouge area	Southeastern Louisiana – Aquifer[1] or confining unit: St. Tammany, Tangipahoa, and Washington Parishes	Southeastern Louisiana – Aquifer[1] or confining unit: New Orleans area and lower Mississippi River parishes
Quaternary	Pleistocene	Red River alluvial deposits Miss. River alluvial deposits Northern La. Terrace deposits Unnamed Pleistocene deposits		Red River alluvial aquifer or surficial confining unit Mississippi River alluvial aquifer or surficial confining unit Upland terrace aquifer or surficial confining unit	Chicot aquifer system or surficial confining unit	"200-foot" sand	Upper sand unit	Chicot Equivalent aquifer system[2] or surficial confining unit	Mississippi River alluvial aquifer or surficial confining unit Shallow sand "400-foot" sand "600-foot" sand	Upland terrace aquifer Upper Ponchatoula aquifer	Gramercy aquifer[3] Norco aquifer[3] Gonzales-New Orleans Aquifer[3] "1,200-foot" sand[3]
						"500-foot" sand "700-foot" sand	Lower sand unit				
Tertiary	Pliocene -----?----- Miocene	Fleming Formation	Blounts Creek Member	Pliocene-Miocene aquifers are absent in this area	Evangeline aquifer or surficial confining unit			Evangeline equivalent aquifer system[2] or surficial confining unit	"800-foot" sand "1,000-foot" sand "1,200-foot" sand "1,500-foot" sand "1,700-foot" sand	Lower Ponchatoula Aquifer Big Branch aquifer Kentwood aquifer Abita aquifer Covington aquifer Slidell aquifer	
			Castor Creek Member		Castor Creek confining unit			Unnamed confining unit	"2,000-foot" sand "2,400-foot" sand "2,800-foot" sand	Tchefuncte aquifer Hammond aquifer Amite aquifer Ramsay aquifer Franklinton aquifer	
			Williamson Creek Member Dough Hills Member Carnahan Bayou Member		Jasper aquifer system or surficial confining unit	Williamson Creek aquifer Dough Hills confining unit Carnahan Bayou aquifer		Jasper equivalent aquifer system[2] or surficial confining unit			
	-----?----- Oligocene		Lena Member		Lena confining unit			Unnamed confining unit			
		Catahoula Formation			Catahoula aquifer			Catahoula equivalent aquifer system[2] or surficial confining unit			
		Vicksburg Group, undifferentiated		Vicksburg-Jackson confining unit	No fresh water occurs in older aquifers						
	Eocene	Jackson Group, undifferentiated									
		Claiborne Group	Cockfield Formation	Cockfield aquifer or surficial confining unit							
			Cook Mountain Formation	Cook Mountain aquifer or confining unit							
			Sparta Sand	Sparta aquifer or surficial confining unit							
			Cane River Formation	Cane River aquifer or confining unit							
			Carrizo Sand	Carrizo-Wilcox aquifer or surficial confining unit							
	Paleocene	Wilcox Group, undifferentiated									
		Midway Group, undifferentiated		Midway confining unit							

[1]Clay units separating aquifers in southeastern Louisiana are discontinuous

[2]Four aquifer systems as a group are called the Southern Hills aquifer system.

[3]Four aquifers as a group are called the New Orleans aquifer system.

Source: DOTD/USGS Water Resources Special Report No. 9, 1995

Table 4 – Aquifers and Number of Wells Sampled by Month

AQUIFER/SYSTEM	MONTH	NUMBER OF WELLS SAMPLED
State Fiscal Year 2004 (July 2003 – June 2004)		
Sparta	July (2 Events)	(7 / 6) 13
Sparta	October	1
Carrizo-Wilcox	October (2 Events)	(5 / 6) 11
Red River Alluvial	October	6
Evangeline	January	11
Catahoula	March	4
North Louisiana Terrace	March (2 Events)	(6 / 5) 11
Carnahan Bayou	April	9
Carnahan Bayou	May	3
State Fiscal Year 2005 (July 2004 – June 2005)		
Mississippi River Alluvial	August (2 Events)	(7 / 7) 14
Mississippi River Alluvial	September	1
Mississippi River Alluvial	December	5
Mississippi River Alluvial	February	3
Cockfield	February	6
Cockfield	March	7
Chicot	April (2 Events)	(7 / 8) 15
Chicot	May (2 Events)	(6 / 4) 10
Mississippi River Alluvial	June	1
State Fiscal Year 2006 (July 2005 – June 2006)		
Williamson Creek	July	5
Williamson Creek	August	2
Chicot Equivalent	August (2 Events)	(8 / 6) 14
Chicot Equivalent	November (2 Events)	(1 / 3) 4
Chicot Equivalent	January	7
Evangeline Equivalent	March (2 Events)	(7 / 8) 15
Jasper Equivalent	April (2 Events)	(8 / 7) 15

Table 5 – Parameter List

PARAMETER GROUP	LIST OF ANALYTES	REPORTING UNITS
FIELD	pH	S.U.
	Temperature	Degrees C.
	Specific Conductivity	mmhos/cm
	Total Dissolved Solids	g/L
	Salinity	ppt
WATER QUALITY	Alkalinity	mg/L
	Chloride	mg/L
	Color	PCU
	Specific Conductivity	umhos/cm
	Sulfate	mg/L
	Total Dissolved Solids	mg/L
	Total Suspended Solids	mg/L
	Turbidity	NTU
INORGANIC (TOTAL METALS)	Antimony	ug/L
	Arsenic	ug/L
	Barium	ug/L
	Beryllium	ug/L
	Cadmium	ug/L
	Chromium	ug/L
	Copper	ug/L
	Iron	ug/L
	Lead	ug/L
	Mercury	ug/L
	Nickel	ug/L
	Selenium	ug/L
	Silver	ug/L
	Thallium	ug/L
	Zinc	ug/L
NUTRIENTS	NH_3 – as N	mg/L
	Hardness	mg/L
	NO_2-NO_3 – as N	mg/L
	TKN	mg/L
	Total Phosphorus	mg/L
VOLATILE ORGANIC COMPOUNDS	Dichlorofluoromethane	ug/L
	Chlormethane	ug/L
	Vinyl chloride	ug/L
	Bromomethane	ug/L
	Chloroethane	ug/L
	Trichlorofluoromethane	ug/L

PARAMETER GROUP	LIST OF ANALYTES	REPORTING UNITS
VOLATILE ORGANIC COMPOUNDS	1,1-Dichloroethene	ug/L
	Methylene chloride	ug/L
	trans-1,2-Dichloroethene	ug/L
	Methyl-t-butyl ether	ug/L
	1,1-Dichloroethane	ug/L
	2,2 Dichloropropane	ug/L
	cis-1,2 Dichloroethene	ug/L
	Bromochloromethane	ug/L
	Chloroform	ug/L
	1,1,1-Trichloroethane	ug/L
	1,1 Dichloropropene	ug/L
	Carbon tetrachloride	ug/L
	Benzene	ug/L
	1,2-Dichloroethane	ug/L
	Trichloroethene	ug/L
	1,2-Dichloropropane	ug/L
	Bromodichloromethane	ug/L
	Dibromomethane	ug/L
	cis-1,3-Dichloropropene	ug/L
	Toluene	ug/L
	trans-1,3-Dichloropropene	ug/L
	1,1,2-Trichloroethane	ug/L
	1,3—Dichloropropane	ug/L
	Tetrachloroethene	ug/L
	1,2-Dibromoethane	ug/L
	Dibromochloromethane	ug/L
	Chlorobenzene	ug/L
	Ethylbenzene	ug/L
	1,1,1,2-Tetrachloroethane	ug/L
	p&m Xylene	ug/L
	o-Xylene	ug/L
	Styrene	ug/L
	Bromoform	ug/L
	Isopropylbenzene	ug/L
	1,1,2,2-Tetrachloromethane	ug/L
	1,2,3-Trichloropropane	ug/L
	Bromobenzene	ug/L
	n-Propylbenzene	ug/L
	2-Chlorotoluene	ug/L
	4-Chlorotoluene	ug/L
	1,3,5-Trimethylbenzene	ug/L

PARAMETER GROUP	LIST OF ANALYTES	REPORTING UNITS
VOLATILE ORGANIC COMPOUNDS	tert-Butylbenzene	ug/L
	1,2,4-Trimethylbenzene	ug/L
	sec-Butylbenzene	ug/L
	p-Isopropyltoluene	ug/L
	1,3-Dichlorobenzene	ug/L
	1,4-Dichlorobenzene	ug/L
	n-Butylbenzene	ug/L
	1,2-Dibromo-3-chloroproane	ug/L
	Naphthalene	ug/L
	1,2,4-Trichlorobenzene	ug/L
	Hexachlorobutadiene	ug/L
	1,2-Dichorobenzene	ug/L
	1,2,3-Trichlorobenzene	ug/L
SEMI-VOLATILE ORGANIC COMPOUNDS	Ethyl methanesulfonate	ug/L
	Phenol	ug/L
	Aniline	ug/L
	Bis(2-chloroethyl)ether	ug/L
	2-Chlorophenol	ug/L
	1,3-Dichlorobenzene	ug/L
	1,4-Dichlorobenzene	ug/L
	Benzyl alcohol	ug/L
	1,2-Dichlorobenzene	ug/L
	2-Methylphenol	ug/L
	Bis(2-chloroisopropyl)ether	ug/L
	4-Methylphenol	ug/L
	N-Nitroso-di-n-propylamine	ug/L
	Hexachloroethane	ug/L
	Acetophenone	ug/L
	Nitrobenzene	ug/L
	4-Nitrophenol	ug/L
	2,4-Dinitrophenol	ug/L
	Acenaphthene	ug/L
	N-Nitrosopiperidine	ug/L
	Isophorone	ug/L
	2,4-Dimethylphenol	ug/L
	2-Nitrophenol	ug/L
	Benzoic acid	ug/L
	Bis(2-chloroethoxy)methane	ug/L
	2,4-Dichlorophenol	ug/L
	a,a-Dimethylphenethylamine	ug/L
	1,2,4-trichlorobenzene	ug/L

PARAMETER GROUP	LIST OF ANALYTES	REPORTING UNITS
SEMI-VOLATILE ORGANIC COMPOUNDS	Benzidine	ug/L
	Pyrene	ug/L
	p-Dimethylaminoazobenzene	ug/L
	Butylbenzylphthalate	ug/L
	Bis(2-ethylhexyl)phthalate	ug/L
	3,3'-Dichlorobenzidine	ug/L
	Benzo(a)anthracene	ug/L
	Chrysene	ug/L
	Di-n-octylphthalate	ug/L
	7,12-Dimetnylbenz(a)anthracine	ug/L
	Benzo(b)fluoranthene	ug/L
	Benzo(k)fluoranthene	ug/L
	Benzo(a)pyrene	ug/L
	3-Methylcholanthrene	ug/L
	Dibenz(a,j)acridine	ug/L
	Indeno(1,2,3-cd)pyrene	ug/L
	Dibenz(a,h)anthracene	ug/L
	Benzo(g,h,i)perylene	ug/L
	Napthalene	ug/L
	4-Chloroaniline	ug/L
	2,6-Dichlorophenol	ug/L
	Hexachlorobutadiene	ug/L
	N-Nitrose-di-n-butylamine	ug/L
	4-Chloro-3-methylphenol	ug/L
	2-Methylnapthalene	ug/L
	Hexachlorocyclopentadiene	ug/L
	1,2,4,5-Tetrachlorobenzene	ug/L
	2,4,6-Trichlorophenol	ug/L
	2,4,5-Trichlorophenol	ug/L
	2-Chloronapthalene	ug/L
	1-Chloronapthalene	ug/L
	2-Nitroaniline	ug/L
	Dimethylphthalate	ug/L
	2,6-Dinitrotoluene	ug/L
	Acenaphthylene	ug/L
	3-Nitroaniline	ug/L
	2,4-Dinitrotoluene	ug/L
	Pentachlorobenzene	ug/L
	Dibenzofuran	ug/L
	1-Naphthylamine	ug/L
	Diethylphthalate	ug/L

PARAMETER GROUP	LIST OF ANALYTES	REPORTING UNITS
SEMI-VOLATILE ORGANIC COMPOUNDS	2,3,4,6-Tetrachlorophenol	ug/L
	2-Naphthylamine	ug/L
	4-Chlorophenyl phenyl ether	ug/L
	4-Nitroaniline	ug/L
	Fluorene	ug/L
	4,6-Dinitro-2-methylphenol	ug/L
	4-Aminobiphenyl	ug/L
	1,2-Diphenylhydrazine	ug/L
	Phenacetin	ug/L
	4-Bromophenyl phenyl ether	ug/L
	Hexachlorobenzene	ug/L
	Pronamide	ug/L
	N-Nitrosodiphenylamine / Diphenylamine	ug/L
	Pentachlorophenol	ug/L
	Pentachloronitrobenzene	ug/L
	Phenathrene	ug/L
	Anthracene	ug/L
	Di-n-butylphthalate	ug/L
	Fluoranthene	ug/L
PESTICIDES	Alpha BHC	ug/L
	Beta BHC	ug/L
	Gamma BHC	ug/L
	Delta BHC	ug/L
	Heptachlor	ug/L
	Aldrin	ug/L
	Heptachlor epoxide	ug/L
	Chlordane	ug/L
	Endosulfan I	ug/L
	4,4'-DDE	ug/L
	Dieldrin	ug/L
	4,4'DDD	ug/L
	Endrin	ug/L
	Toxaphene	ug/L
	Endosulfan II	ug/L
	Endrin Aldehyde	ug/L
	4,4'DDT	ug/L
	Endosulfan Sulfate	ug/L
	Methoxychlor	ug/L
	Endrin Ketone	ug/L
PCBs	PCB 1221/ PCB 1232	ug/L
	PCB 1016/ PCB 1242	ug/L

PARAMETER GROUP	LIST OF ANALYTES	REPORTING UNITS
PCBs	PCB 1254	ug/L
	PCB 1248	ug/L
	PCB 1260	ug/L

Table 6 – Wells Sampled

WELL NUMBER	OWNER	DEPTH (FEET)	WELL USE	AQUIFER/SYSTEM
BI-192	LUCKY WATER SYSTEM	153	Public Supply	Sparta Aquifer
BI-212	STONE CONTAINER CORP.	490	Industrial	Sparta Aquifer
CA-105	VIXEN WATER SYSTEM	525	Public Supply	Sparta Aquifer
CL-203	TOWN OF HOMER	460	Public Supply	Sparta Aquifer
L-31	CITY OF RUSTON	636	Public Supply	Sparta Aquifer
L-32	CITY OF RUSTON	652	Public Supply	Sparta Aquifer
MO-253	VILLAGE OF COLLINSTON	773	Public Supply	Sparta Aquifer
OU-506	ANGUS CHEMICAL	506	Industrial	Sparta Aquifer
OU-597	GRAPHIC PACKAGING INT'L INC.	710	Industrial	Sparta Aquifer
SA-534	BOISE CASCADE	543	Public Supply	Sparta Aquifer
UN-205	D'ARBONNE WATER SYSTEM	725	Public Supply	Sparta Aquifer
W-165	TOWN OF WINNFIELD	456	Public Supply	Sparta Aquifer
WB-241	TOWN OF SPRINGHILL	408	Public Supply	Sparta Aquifer
WB-269	CITY OF MINDEN	280	Public Supply	Sparta Aquifer
BI-236	ALBERTA WATER SYSTEM	410	Public Supply	Carrizo-Wilcox Aquifer
BO-274	VILLAGE WATER SYSTEM	395	Public Supply	Carrizo-Wilcox Aquifer
BO-275	VILLAGE WATER SYSTEM	308	Public Supply	Carrizo-Wilcox Aquifer
CD-453	CITY OF VIVIAN	228	Public Supply	Carrizo-Wilcox Aquifer
CD-630	PRIVATE OWNER	240	Irrigation	Carrizo-Wilcox Aquifer
CD-639	SI PRECAST	200	Industrial	Carrizo-Wilcox Aquifer
CD-642	LOUISIANA LIFT	210	Industrial	Carrizo-Wilcox Aquifer
DS-327	CITY OF MANSFIELD	243	Public Supply	Carrizo-Wilcox Aquifer
DS-363	CITY OF MANSFIELD	280	Public Supply	Carrizo-Wilcox Aquifer
RR-5070Z	PRIVATE OWNER	105	Domestic	Carrizo-Wilcox Aquifer
SA-502	PRIVATE OWNER	213	Irrigation	Carrizo-Wilcox Aquifer
CD-431	CERTAINTEED	62	Industrial	Red River Alluvial Aquifer
CD-586	PRIVATE OWNER	60	Irrigation	Red River Alluvial Aquifer
G-5193Z	PRIVATE OWNER	75	Domestic	Red River Alluvial Aquifer
NA-47	PRIVATE OWNER	80	Irrigation	Red River Alluvial Aquifer

WELL NUMBER	OWNER	DEPTH (FEET)	WELL USE	AQUIFER/SYSTEM
R-6675Z	PRIVATE OWNER	96	Domestic	Red River Alluvial Aquifer
RR-5095Z	PRIVATE OWNER	60	Irrigation	Red River Alluvial Aquifer
AL-120	CITY OF OAKDALE	910	Public Supply	Evangeline Aquifer
AL-363	WEST ALLEN PARISH WATER DIST.	1,715	Public Supply	Evangeline Aquifer
AL-391	FAIRVIEW WATER SYSTEM	800	Public Supply	Evangeline Aquifer
AV-441	TOWN OF EVERGREEN	319	Public Supply	Evangeline Aquifer
BE-410	BOISE CASCADE	474	Industrial	Evangeline Aquifer
BE-512	SINGER WATER DISTRICT	918	Public Supply	Evangeline Aquifer
CU-1362	LA WATER CO	635	Public Supply	Evangeline Aquifer
EV-858	SAVOY SWORDS WATER SYSTEM	472	Public Supply	Evangeline Aquifer
R-1350	PRIVATE OWNER	180	Irrigation	Evangeline Aquifer
V-5065Z	PRIVATE OWNER	170	Domestic	Evangeline Aquifer
V-668	LDWF/FORT POLK WMA HQ	280	Other	Evangeline Aquifer
CT-119	CITY OF JONESVILLE	800	Public Supply	Catahoula Aquifer
G-295	POLLOCK AREA WATER SYSTEM	188	Public Supply	Catahoula Aquifer
LS-278	ROGERS WATER SYSTEM	352	Public Supply	Catahoula Aquifer
V-656	E. CENTRAL VERNON WATER SYS.	1,477	Public Supply	Catahoula Aquifer
BI-208	PRIVATE OWNER	100	Domestic	North Louisiana Terrace Aquifer
BO-340	VILLAGE WATER SYSTEM	91	Public Supply	North Louisiana Terrace Aquifer
BO-434	RED CHUTE UTILITIES	94	Public Supply	North Louisiana Terrace Aquifer
BO-5382Z	PRIVATE OWNER	95	Domestic	North Louisiana Terrace Aquifer
G-342	VANGAURD SYNFUELS, LLC	49	Industrial	North Louisiana Terrace Aquifer
G-432	CENTRAL GRANT WATER SYSTEM	158	Public Supply	North Louisiana Terrace Aquifer
LS-264	CITY OF JENA	105	Public Supply	North Louisiana Terrace Aquifer
MO-124	TEXAS GAS	133	Public Supply	North Louisiana Terrace Aquifer
MO-364	PEOPLES WATER SERVICE	154	Public Supply	North Louisiana Terrace Aquifer
OU-5524Z	PRIVATE OWNER	95	Domestic	North Louisiana Terrace Aquifer
RR-254	EAST CROSS WATER SYSTEM	93	Public Supply	North Louisiana Terrace Aquifer
BE-405	BOISE CASCADE	1,016	Industrial	Carnahan Bayou Aquifer
CO-47	CITY OF VIDALIA	310	Public Supply	Carnahan Bayou Aquifer
CO-71	CONCORDIA W.W. DIST. NO.1	305	Public Supply	Carnahan Bayou Aquifer
G-5061Z	PRIVATE OWNER	275	Domestic	Carnahan Bayou Aquifer
G-5196Z	PRIVATE OWNER	125	Domestic	Carnahan Bayou Aquifer
R-1001	GARDENER WATER SYSTEM	1,080	Public Supply	Carnahan Bayou Aquifer
R-1172	CLECO-RODEMACHER	298	Power Generation	Carnahan Bayou Aquifer
R-1210	CITY OF ALEXANDRIA	2,036	Public Supply	Carnahan Bayou Aquifer
R-FAIRCLOT	PRIVATE OWNER	270	Domestic	Carnahan Bayou Aquifer
V-496	U.S. ARMY/FORT POLK	1,415	Public Supply	Carnahan Bayou Aquifer
V-566	ALCO-HUTTON VFD	143	Public Supply	Carnahan Bayou Aquifer

WELL NUMBER	OWNER	DEPTH (FEET)	WELL USE	AQUIFER/SYSTEM
V-8102Z	PRIVATE OWNER	66	Domestic	Carnahan Bayou Aquifer
AV-462	PRIVATE OWNER	110	Irrigation	Mississippi River Alluvial Aquifer
AV-5135Z	PRIVATE OWNER	110	Domestic	Mississippi River Alluvial Aquifer
AV-CHAT	PRIVATE OWNER	75	Irrigation	Mississippi River Alluvial Aquifer
CO-YAKEY	PRIVATE OWNER	150	Domestic	Mississippi River Alluvial Aquifer
CT-489	PRIVATE OWNER	144	Irrigation	Mississippi River Alluvial Aquifer
CT-DENNIS	PRIVATE OWNER	30	Domestic	Mississippi River Alluvial Aquifer
EB-885	PRIVATE OWNER	352	Irrigation	Mississippi River Alluvial Aquifer
EC-370	PRIVATE OWNER	119	Irrigation	Mississippi River Alluvial Aquifer
FR-1458	CITY OF WINNSBORO	82	Public Supply	Mississippi River Alluvial Aquifer
IB-363	SYNGENTA CROP PROTECTION, INC.	225	Industrial	Mississippi River Alluvial Aquifer
IB-5427Z	PRIVATE OWNER	160	Domestic	Mississippi River Alluvial Aquifer
IB-COM	PRIVATE OWNER	185	Domestic	Mississippi River Alluvial Aquifer
MA-28	TALLULAH WATER SERVICE	128	Public Supply	Mississippi River Alluvial Aquifer
MO-871	PRIVATE OWNER	80	Irrigation	Mississippi River Alluvial Aquifer
OU-483	PRIVATE OWNER	83	Irrigation	Mississippi River Alluvial Aquifer
RI-469	LIDDIEVILLE WATER SYSTEM	90	Public Supply	Mississippi River Alluvial Aquifer
RI-48	RAYVILLE WATER DEPARTMENT	115	Public Supply	Mississippi River Alluvial Aquifer
RI-730	START WATER SYSTEM	101	Public Supply	Mississippi River Alluvial Aquifer
SL-5477Z	PRIVATE OWNER	110	Domestic	Mississippi River Alluvial Aquifer
SMN-33	LDOTD/LAFAYTTE DISTRICT	125	Public Supply	Mississippi River Alluvial Aquifer
TS-60	TOWN OF ST. JOSEPH	140	Public Supply	Mississippi River Alluvial Aquifer
TS-FORTENB	PRIVATE OWNER	Unknown	Domestic	Mississippi River Alluvial Aquifer
WC-527	PRIVATE OWNER	85	Irrigation	Mississippi River Alluvial Aquifer
WC-91	NEW CARROLL WTR. ASSN.	115	Public Supply	Mississippi River Alluvial Aquifer
CA-35	CITY OF COLUMBIA	298	Public Supply	Cockfield Aquifer
EC-233	TOWN OF LAKE PROVIDENCE	371	Public Supply	Cockfield Aquifer
MO-479	BAYOU BONNE IDEE WATER SYS.	258	Public Supply	Cockfield Aquifer
NA-5614Z	PRIVATE OWNER	176	Domestic	Cockfield Aquifer
OU-FRITH	PRIVATE OWNER	80	Domestic	Cockfield Aquifer
RI-127	DELHI WATER WORKS	416	Public Supply	Cockfield Aquifer
RI-450	RIVER ROAD WATERWORKS	283	Public Supply	Cockfield Aquifer
SA-BYRD	PRIVATE OWNER	150	Domestic	Cockfield Aquifer
UN-167	PRIVATE OWNER	110	Irrigation	Cockfield Aquifer
W-192	RED HILL WATER SYSTEM	210	Public Supply	Cockfield Aquifer
W-198	ATLANTA WATER SYSTEM	445	Public Supply	Cockfield Aquifer
WC-187	NEW CARROLL WTR. ASSN.	110	Public Supply	Cockfield Aquifer
WC-487	TOWN OF OAK GROVE	396	Public Supply	Cockfield Aquifer
AC-539	CITY OF RAYNE	251	Public Supply	Chicot Aquifer

WELL NUMBER	OWNER	DEPTH (FEET)	WELL USE	AQUIFER/SYSTEM
AC-6919Z	PRIVATE OWNER	Unknown	Irrigation	Chicot Aquifer
AL-141	TOWN OF OBERLIN	155	Public Supply	Chicot Aquifer
BE-378	TRANSCONTINENTAL GAS PIPELINE	172	Industrial	Chicot Aquifer
BE-412	BOISE CASCADE	202	Industrial	Chicot Aquifer
BE-486	EAST BEAUREGARD HIGH SCHOOL	150	Public Supply	Chicot Aquifer
BE-488	SINGER WATER DISTRICT	262	Public Supply	Chicot Aquifer
CN-5589Z	PRIVATE OWNER	140	Domestic	Chicot Aquifer
CU-10192Z	PPG INDUSTRIES	230	Recovery	Chicot Aquifer
CU-1125	LDOTD	570	Public Supply	Chicot Aquifer
CU-1366	CITY OF LAKE CHARLES	685	Public Supply	Chicot Aquifer
CU-1436	PPG INDUSTRIES	530	Industrial	Chicot Aquifer
CU-770	USGS	490	Observation	Chicot Aquifer
CU-862	CITGO PETROLEUM CORPORATION	560	Industrial	Chicot Aquifer
EV-673	CITY OF MAMOU	247	Public Supply	Chicot Aquifer
I-5050Z	PRIVATE OWNER	188	Domestic	Chicot Aquifer
JD-862	CITY OF WELSH	697	Public Supply	Chicot Aquifer
LF-572	CITY OF LAFAYETTE	570	Public Supply	Chicot Aquifer
R-5428Z	PRIVATE OWNER	85	Domestic	Chicot Aquifer
SL-392	USGS	126	Observation	Chicot Aquifer
SMN-109	USGS	375	Observation	Chicot Aquifer
V-535	MARLOW FIRE STATION	66	Public Supply	Chicot Aquifer
VE-650	USGS	205	Observation	Chicot Aquifer
VE-862	TOWN OF GUEYDAN	249	Public Supply	Chicot Aquifer
VE-882	CITY OF KAPLAN	279	Public Supply	Chicot Aquifer
BE-407	BOISE CASCADE	1,657	Industrial	Williamson Creek Aquifer
CO-163	U. S. ARMY CORPS OF ENG.	513	Public Supply	Williamson Creek Aquifer
R-1362	INTERNATIONAL PAPER CO.	402	Industrial	Williamson Creek Aquifer
R-932	CITY OF ALEXANDRIA	466	Public Supply	Williamson Creek Aquifer
V-420	U.S. ARMY/FORT POLK	920	Public Supply	Williamson Creek Aquifer
V-5858Z	PRIVATE OWNER	248	Domestic	Williamson Creek Aquifer
V-8681Z	PRIVATE OWNER	190	Domestic	Williamson Creek Aquifer
AN-266	CITY OF GONZALES	548	Public Supply	Chicot Equivalent Aquifer System
AN-296	UNIROYAL CHEMICAL CO.	300	Industrial	Chicot Equivalent Aquifer System
AN-316	WESTLAKE VINYLS	478	Industrial	Chicot Equivalent Aquifer System
AN-321	RUBICON, INC.	523	Industrial	Chicot Equivalent Aquifer System
AN-337	BASF CORP.	459	Public Supply	Chicot Equivalent Aquifer System
AN-500	UNIROYAL CHEMICAL CO.	480	Industrial	Chicot Equivalent Aquifer System
AN-6297Z	OXY CHEMICAL	294	Monitor	Chicot Equivalent Aquifer System
AN-9183Z	PRIVATE OWNER	630	Domestic	Chicot Equivalent Aquifer System

WELL NUMBER	OWNER	DEPTH (FEET)	WELL USE	AQUIFER/SYSTEM
EB-1231	GEORGIA PACIFIC CORP.	280	Industrial	Chicot Equivalent Aquifer System
EB-34	EXXONMOBIL USA	453	Industrial	Chicot Equivalent Aquifer System
EB-991B	BATON ROUGE WATER WORKS	565	Public Supply	Chicot Equivalent Aquifer System
EF-5329Z	PRIVATE OWNER	97	Domestic	Chicot Equivalent Aquifer System
JF-28	ENTERGY	807	Industrial	Chicot Equivalent Aquifer System
LI-5477Z	PRIVATE OWNER	106	Domestic	Chicot Equivalent Aquifer System
LI-85	FRENCH SETTLEMENT WATER SYS	405	Public Supply	Chicot Equivalent Aquifer System
SC-179	UNION CARBIDE	460	Industrial	Chicot Equivalent Aquifer System
SH-5333Z	PRIVATE OWNER	230	Domestic	Chicot Equivalent Aquifer System
SH-77	TRANSCO	170	Public Supply	Chicot Equivalent Aquifer System
SJ-226	GRAMERCY ALUMINA, LLC	248	Industrial	Chicot Equivalent Aquifer System
SJB-173	E.I. DUPONT	425	Industrial	Chicot Equivalent Aquifer System
ST-11516Z	PRIVATE OWNER	340	Domestic	Chicot Equivalent Aquifer System
ST-5245Z	PRIVATE OWNER	90	Domestic	Chicot Equivalent Aquifer System
TA-520	PRIVATE OWNER	135	Irrigation	Chicot Equivalent Aquifer System
WA-5295Z	PRIVATE OWNER	100	Domestic	Chicot Equivalent Aquifer System
WA-5311Z	PRIVATE OWNER	90	Domestic	Chicot Equivalent Aquifer System
AV-5304Z	PRIVATE OWNER	547	Domestic	Evangeline Equivalent Aquifer System
EB-1003	BATON ROUGE WATER WORKS	1,430	Public Supply	Evangeline Equivalent Aquifer System
EF-5045Z	PRIVATE OWNER	160	Domestic	Evangeline Equivalent Aquifer System
LI-299	WARD 2 WATER DISTRICT	1,417	Public Supply	Evangeline Equivalent Aquifer System
PC-325	ALMA PLANTATION LTD	1,252	Industrial	Evangeline Equivalent Aquifer System
SL-679	VALERO ENERGY CORPORATION	1,152	Industrial	Evangeline Equivalent Aquifer System
ST-532	SE LOUISIANA STATE HOSPITAL	1,520	Public Supply	Evangeline Equivalent Aquifer System
ST-6711Z	PRIVATE OWNER	860	Domestic	Evangeline Equivalent Aquifer System
TA-284	CITY OF PONCHATOULA	608	Public Supply	Evangeline Equivalent Aquifer System
TA-286	TOWN OF KENTWOOD	640	Public Supply	Evangeline Equivalent Aquifer System
TA-6677Z	PRIVATE OWNER	495	Domestic	Evangeline Equivalent Aquifer System
WA-241	PRIVATE OWNER	400	Irrigation	Evangeline Equivalent Aquifer System
WA-5210Z	PRIVATE OWNER	752	Domestic	Evangeline Equivalent Aquifer System
WBR-181	PORT OF GREATER BATON ROUGE	1,900	Industrial	Evangeline Equivalent Aquifer System
WF-DELEE	PRIVATE OWNER	240	Domestic	Evangeline Equivalent Aquifer System
EB-630	BATON ROUGE WATER CO.	2,253	Public Supply	Jasper Equivalent Aquifer System
EB-854	CITY OF ZACHARY	2,090	Public Supply	Jasper Equivalent Aquifer System
EF-272	LA. WAR VETS HOME	1,325	Public Supply	Jasper Equivalent Aquifer System
LI-185	CITY OF DENHAM SPRINGS	2,610	Public Supply	Jasper Equivalent Aquifer System
LI-229	WARD 2 WATER DISTRICT	1,826	Public Supply	Jasper Equivalent Aquifer System
LI-257	VILLAGE OF ALBANY	1,842	Public Supply	Jasper Equivalent Aquifer System
PC-275	PRIVATE OWNER	1,912	Domestic	Jasper Equivalent Aquifer System

WELL NUMBER	OWNER	DEPTH (FEET)	WELL USE	AQUIFER/SYSTEM
SH-104	CAL MAINE FOODS	1,652	Industrial	Jasper Equivalent Aquifer System
ST-763	LDOTD	2,230	Public Supply	Jasper Equivalent Aquifer System
ST-995	PRIVATE OWNER	2,290	Irrigation	Jasper Equivalent Aquifer System
ST-FOLSOM	VILLAGE OF FOLSOM	2,265	Public Supply	Jasper Equivalent Aquifer System
TA-560	TOWN OF ROSELAND	2,032	Public Supply	Jasper Equivalent Aquifer System
TA-826	CITY OF PONCHATOULA	2,015	Public Supply	Jasper Equivalent Aquifer System
WA-248	TOWN OF FRANKLINTON	2,700	Public Supply	Jasper Equivalent Aquifer System
WF-264	W. FELICIANA PARISH UTILITIES	960	Public Supply	Jasper Equivalent Aquifer System

Table 7 – Field, Water Quality, & Nutrients Data Summary by Aquifer/Aquifer System

	FIELD PARAMETERS					LABORATORY PARAMETERS												
	pH SU	Sal. ppt	Sp. Cond. mmhos/cm	TDS g/L	Temp. Deg. C	Alk. mg/L	NH3 mg/L	Cl mg/L	Color PCU	Hard mg/L	Nitrite-Nitrate (as N) mg/L	TKN mg/L	Tot. P mg/L	Sp. Cond. umhos/cm	SO4 mg/L	TDS mg/L	TSS mg/L	Turb NTU
	LABORATORY DETECTION LIMITS →					2	0.1	1.3	5	5	0.05	0.1	0.05	10	1.3/1.25	4	4	1
SPARTA AQUIFER																		
Min	5.74	0.01	0.026	0.017	20.19	3	<0.1	1.5	<5	<5	<0.05	<0.1	<0.05	26.1	<1.3	31.3	<4	<1
Avg	7.45	0.32	0.651	0.420	23.50	185.5	0.48	94.2	16.1	15.96	0.31	0.59	0.35	646.9	9.3	405.7	<4	1.18
Max	8.72	1.01	1.986	1.291	27.0	585	1.55	464	60	70.2	1.34	1.75	0.87	1,950	21.7	1,128	<4	2.5
CARRIZO-WILCOX																		
Min	5.89	0.14	0.301	0.196	20.16	28.5	<0.1	<1.25	<5	<5	<0.05	<0.1	0.12	298	<1.3	208	<4	<1
Avg	7.75	0.39	0.80	0.520	21.39	273.5	0.81	66.5	14.8	41	0.07	0.97	0.33	799.5	26.6	481.2	<4	1.6
Max	8.45	0.63	1.268	0.824	24.08	608	1.46	170	65	119	0.59	1.78	0.93	1,254	145	719	<4	4.7
RED RIVER ALLUVIAL AQUIFER																		
Min	7.05	0.4	0.808	0.525	19.32	<2	0.5	10.6	<5	101	<0.05	0.42	0.48	799	<1.3	484	12	40
Avg	7.22	0.59	1.17	0.760	20.56	408	1.0	114.1	19.6	403.7	<0.05	0.97	0.61	2,445.7	227.4	814.3	30.8	64.3
Max	7.39	1.31	2.524	1.641	22.04	566	1.9	608	45	597	0.06	1.93	0.7	11,400	1,412	2,138	113	110
EVANGELINE AQUIFER																		
Min	6.46	0.02	0.035	0.023	19.83	9.7	<0.1	2.9	<5	<5	<0.05	<0.1	<0.05	32.8	<1.3	35.3	<4	<1
Avg	7.54	0.15	0.32	0.210	22.69	137.2	0.15	18.1	7.5	22.1	<0.05	0.27	0.10	322.3	5.4	209.4	<4	1.04
Max	8.96	0.54	1.091	0.709	24.79	410	0.52	92.9	29	60	0.07	0.65	0.28	1,130	34.5	661	<4	5.5
CATAHOULA AQUIFER																		
Min	7.19	0.09	0.191	0.124	19.68	99	0.18	3.4	<5	<5	<0.05	0.25	0.3	202	<1.3	139	<4	<1
Avg	7.59	0.12	0.25	0.160	23.46	132	0.27	12.8	5.5	<5	<0.05	0.41	0.55	292.8	6.23	194.8	<4	1.48
Max	8.15	0.16	0.327	0.213	29.85	174	0.33	20.4	10	<5	<0.05	0.58	1.1	352	12.5	264	<4	5.4
NORTH LOUISIANA TERRACE AQUIFER																		
Min	5.54	0.02	0.048	0.031	18.46	6.1	<0.1	3.5	<5	7.3	<0.05	<0.1	<0.05	44.2	<1.3	41.3	<4	<1
Avg	6.51	0.27	0.55	0.360	19.43	112.42	0.18	80.74	<5	152.26	0.43	0.25	0.15	558.24	38.32	331.35	7.73	35.05
Max	7.47	0.83	1.634	1.062	20.84	247	0.89	269	<5	464	1.89	0.91	1.06	1,649	206	1,026	69	380
CARNAHAN BAYOU																		
Min	5.58	0.01	0.03	0.01	18.77	5.4	<0.1	3.2	<5	<5	<0.05	<0.1	<0.05	25.7	<1.3	26	<4	<1
Avg	7.57	0.23	0.48	0.31	23.76	201.95	0.43	27.06	6.79	66.92	0.06	0.63	0.25	470.91	12.45	302.79	<4	4.27
Max	8.4	0.63	1.29	0.84	35.51	538	1.1	206	50	313	0.25	1.12	0.77	1,253	30.9	712	14.5	29
MISSISSIPPI RIVER ALLUVIAL AQUIFER																		
Min	6.62	0.01	0.03	0.02	14.75	<2	<0.1	8.6	<5	<5	<0.05	<0.1	<0.05	<10	<1.3	178	<4	<1
Avg	6.98	0.40	0.80	0.52	19.62	347.16	1.10	48.64	37.98	297.50	0.19	1.36	0.59	766.21	22.46	488.96	16.42	75.23
Max	7.44	0.64	1.28	0.83	23.55	616	6.54	246	220	530	3.08	7.86	1.96	1,356	186	896	56	280

	FIELD PARAMETERS					LABORATORY PARAMETERS												
	pH SU	Sal. ppt	Sp. Cond. mmhos/cm	TDS g/L	Temp. Deg. C	Alk. mg/L	NH3 mg/L	Cl mg/L	Color PCU	Hard mg/L	Nitrite-Nitrate (as N) mg/L	TKN mg/L	Tot. P mg/L	Sp. Cond. umhos/cm	SO4 mg/L	TDS mg/L	TSS mg/L	Turb NTU
	LABORATORY DETECTION LIMITS →					2	0.1	1.3	5	5	0.05	0.1	0.05	10	1.3/1.25	4	4	1
COCKFIELD																		
Min	5.28	0.07	0.15	0.1	17.09	6.3	<0.1	2.7	<5	<5	<0.05	<0.1	<0.05	163	<1.25	128	<4	<1
Avg	7.46	0.35	0.70	0.46	19.82	293.66	0.37	52.49	10.97	139.92	0.50	0.47	0.30	736.88	21.88	437.75	<4	5.44
Max	8.8	0.61	1.23	0.8	22.11	591	1	169	50	423	7.48	1.44	1.74	1,237	149	794	5.3	25
CHICOT																		
Min	5.68	0.01	0.02	0.01	18.39	5.8	<0.1	2.6	<5	<5	<0.05	<0.1	<0.05	24.2	<1.25	20.7	<4	<1
Avg	7.22	0.27	0.54	0.35	22.38	190.31	0.32	59.73	12.69	133.16	<0.05	0.50	0.23	539.21	1.99	321.47	17.9	16.17
Max	8.05	0.89	1.754	1.14	24.59	475	1.83	377	140	408	0.1	2.18	0.97	1,735	8.9	934	378	150
WILLIAMSON CREEK																		
Min	No Data	0.07	0.14	0.09	22.16	61.5	<0.1	5.6	<5	9.7	<0.05	<0.1	<0.05	147	<1.3	147	<4	<1
Avg		0.21	0.44	0.28	25.27	153.8	0.33	41.48	14.72	34.5	<0.05	0.70	0.15	440.9	8.02	284.8	<4	2.6
Max		0.29	0.6	0.39	31.56	233	0.54	93.7	110	147	0.26	1.21	0.36	609	40.2	372	16	7.9
CHICOT EQUIVALENT AQUIFER SYSTEM																		
Min	4.96	0.01	0.029	0.019	19.37	<2	<0.1	2.6	<5	<5	<0.05	<0.1	<0.05	23.4	<1.25	27.3	<4	<1
Avg	7.16	0.27	0.54	0.35	22.40	151.4	0.58	104.1	18.5	44.6	0.16	0.67	0.21	629.9	2.93	372.3	<4	2.15
Max	9.35	1.2	2.31	1.5	28.12	439	2.27	671	130	168	2.18	2.41	0.62	2,430	31	1,302	23	38
EVANGELINE EQUIVALENT AQUIFER SYSTEM																		
Min	6.06	0.02	0.051	0.033	18.37	14.9	<0.1	2.4	<5	<5	<0.05	<0.1	<0.05	47.1	<1.3	48.7	<4	<1
Avg	7.88	0.13	0.28	0.18	22.59	119.5	0.17	11.8	13.6	10.8	0.07	0.23	0.21	269.1	7.42	197.5	<4	<1
Max	9.11	0.32	0.658	0.428	28.81	334	0.39	65.2	50	35.6	0.78	0.58	0.66	635	11.8	428	<4	1.1
JASPER EQUIVALENT AQUIFER SYSTEM																		
Min	7.96	0.09	0.196	0.127	24.72	86.4	<0.1	2.3	<5	<5	<0.05	<0.1	0.13	192	6.5	171	<4	<1
Avg	8.67	0.18	0.368	0.239	29.16	165.3	0.29	24.5	8.9	5.8	<0.05	0.43	0.26	396.6	8.3	249.7	<4	<1
Max	9.22	0.38	0.784	0.51	32.79	308	0.73	121	45	11.3	0.16	1.21	0.58	827	10	481	<4	<1

Table 8 – Inorganic (Total Metals) Data Summary by Aquifer/Aquifer System

ANALYTE	Antimony ug/L	Arsenic ug/L	Barium ug/L	Beryllium ug/L	Cadmium ug/L	Chromium ug/L	Copper ug/L	Iron ug/L	Lead ug/L	Mercury ug/L	Nickel ug/L	Selenium ug/L	Silver ug/L	Thallium ug/L	Zinc ug/L
Laboratory Detection Limits	5/10/50/60	5/10/20	1/2/200	1/5	1/5	5/10	5/10	20/100	3/10/20	0.05/0.2	5/40	3/5/10	1/2.5/10	5/10	10/20
SPARTA AQUIFER															
Min	<5	<5	7.1	<1	<1	<5	<5	<20.0	<10	<0.05	<5	<5	<1	<5	<10
Avg	<5	<5	61.9	<1	<1	<5	5.8	405.8	<10	0.06	5.4	<5	<1	<5	16.5
Max	<5	<5	228	<1	<1	<5	9.5	2,290	<10	0.1	8.4	<5	<1	<5	66.3
CARRIZO-WILCOX															
Min	<5	<5	10.1	<1	<1	<5	<5	<20.0	<10	<0.05	<5	<5	<1	<5	<10
Avg	<5	<5	77.8	<1	<1	<5	<5	1,895	<10	<0.05	<5	<5	<1	<5	133.3
Max	<5	<5	236	<1	<1	<5	13.3	17,800	12.1	<0.05	7.1	<5	<1	<5	1,060
RED RIVER ALLUVIAL AQUIFER															
Min	<5	<5	204	<1	<1	<5	<5	31.2	<10	<0.05	<5	<5	<1	<5	<10
Avg	<5	<5	386.86	<1	<1	<5	10.3	5,977.3	14	<0.05	<5	<5	<1	<5	65.5
Max	<5	7.2	543	<1	<1	<5	24.9	10,400	37.7	<0.05	<5	<5	<1	<5	307
EVANGELINE AQUIFER															
Min	<5	<5	6	<1	<1	<5	<5	<20	<10	<0.05	<5	<5	<1	<5	<10
Avg	<5	<5	85.4	<1	<1	<5	6.6	267.4	<10	<0.05	<5	<5	<1	<5	26.8
Max	5.3	<5	201	<1	<1	<5	33.7	2,290	<10	<0.05	<5	<5	<1	<5	173
CATAHOULA AQUIFER															
Min	<60	<10	<200	<5	<5	<10	<10	<100	<3	<0.2	<40	<10	No Data	<10	<20
Avg	<60	<10	<200	<5	<5	<10	<10	268	<3	<0.2	<40	<10		<10	<20
Max	<60	<10	<200	<5	<5	<10	<10	520	6.91	<0.2	<40	<10		<10	33.4
NORTH LOUISIANA TERRACE AQUIFER															
Min	<60	<10	<200	<5	<5	<10	<10	<100	<3	<0.2	<40	<10	No Data	<10	<20
Avg	<60	<10	202.23	<5	<5	<10	27.52	3,623.7	3.64	<0.2	<40	<10		<10	33.8
Max	<60	<10	467	<5	<5	<10	179	34,800	7.75	<0.2	<40	<10		<10	284
CARNAHAN BAYOU															
NO DATA															
MISSISSIPPI RIVER ALLUVIAL AQUIFER															
Min	<60	<10	<1	<5	<5	<10	<10	<100	<10	<0.2	<40	<5	<10	<5	<10
Avg	<60	14.31	524.5	<5	<5	<10	<10	8,726	<10	<0.2	<40	<5	<10	<5	29.6
Max	<60	72.2	1,080	<5	<5	<10	123	23,600	17.1	<0.2	<40	<5	<10	<5	374

ANALYTE	Antimony ug/L	Arsenic ug/L	Barium ug/L	Beryllium ug/L	Cadmium ug/L	Chromium ug/L	Copper ug/L	Iron ug/L	Lead ug/L	Mercury ug/L	Nickel ug/L	Selenium ug/L	Silver ug/L	Thallium ug/L	Zinc ug/L
Laboratory Detection Limits	5/10/50/60	5/10/20	1/2/200	1/5	1/5	5/10	5/10	20/100	3/10/20	0.05/0.2	5/40	3/5/10	1/2.5/10	5/10	10/20
COCKFIELD															
Min	<10	<10	6.1	<1	<1	<5	<10	24.1	<10	<0.05	<5	<5	<1	<5	<20
Avg	<10	<10	161.88	<1	<1	<5	8.34	1,084.13	<10	<0.05	<5	<5	<1	<5	<20
Max	<10	<10	429	<1	<1	<5	40	6,600	<10	0.23	<5	<5	<1	<5	<20
CHICOT															
Min	<10	<10	12.6	<1	<1	<5	<10	<20	<10	<0.05	<5	<10	<10	<5	<20
Avg	<10	<10	359	<1	<1	<5	42.2	3,073.6	<10	<0.05	<5	<10	<10	<5	620.7
Max	<10	<10	1,047	<1	<1	8.4	511	33,101	33	<0.05	23.9	<10	<10	<5	9,639
WILLIAMSON CREEK															
Min	<10	<10	31	<1	<1	<5	<10	<20	<10	<0.05	<5	<5	<10	<5	<20
Avg	<10	<10	91.98	<1	<1	<5	<10	641.6	<10	<0.05	<5	<5	<10	<5	114.1
Max	<10	<10	349	<1	<1	<5	<10	4,480	<10	<0.05	<5	<5	<10	<5	541
CHICOT EQUIVALENT AQUIFER SYSTEM															
Min	<10	<10	13.7	<1	<1	<5	<10	<20	<10	<0.05	<5	<5	<10	<5	<20
Avg	<10	<10	130.9	<1	<1	<5	<10	848.6	<10	<0.05	<5	<5	<10	<5	21.3
Max	<10	<10	397	<1	<1	<5	46.4	10,200	12.7	<0.05	10.3	<5	<10	<5	296
EVANGELINE EQUIVALENT AQUIFER SYSTEM															
Min	<50	<20	3.1	<1	<1	<5	<10	<20	<20	<0.05	<5	<5	<2.5	<5	<10
Avg	<50	<20	47.8	<1	<1	<5	<10	265.1	<20	<0.05	<5	<5	<2.5	<5	<10
Max	<50	<20	111	<1	<1	<5	<10	1,730	<20	<0.05	<5	<5	<2.5	<5	10.3
JASPER EQUIVALENT AQUIFER SYSTEM															
Min	<50	<20	<2	<1	<1	<5	<10	<20	<20	<0.05	<5	<5	<2.5	<5	<10
Avg	<50	<20	14.3	<1	<1	<5	<10	30.9	<20	<0.05	<5	<5	<2.5	<5	<10
Max	<50	<20	43.9	<1	<1	<5	15.3	211	<20	<0.05	<5	<5	<2.5	<5	<10

Table 9 – Data Summary of All Aquifers/Aquifer Systems

WATER QUALITY PARAMETERS	FIELD PARAMETERS					LABORATORY PARAMETERS													
	pH SU	Sal. ppt	Sp. Cond. mmhos/cm	TDS g/L	Temp. Deg. C	Alk. mg/L	NH3 mg/L	Cl mg/L	Color PCU	Hard mg/L	Nitrite-Nitrate (as N) mg/L	TKN mg/L	Tot. P mg/L	Sp. Cond. umhos/cm	SO4 mg/L	TDS mg/L	TSS mg/L	Turb NTU
	LABORATORY DETECTION LIMITS →					2	0.1	1.3	5	5	0.05	0.1	0.05	10	1.3/1.25	4	4	1
COMBINED AQUIFER AND AQUIFER SYSTEM DATA																			
Min	4.96	0.01	0.020	0.01	14.75	<2	<0.1	<1.3	<5	<5	<0.05	<0.1	<0.05	<10	<1.3	20.7	<4	<1
Avg	7.42	0.27	0.567	0.37	22.44	194.1	0.50	56.9	15.4	102.2	0.15	0.64	0.30	618.1	19.2	361.1	7.08	16.8
Max	9.35	1.31	2.524	1.64	35.51	616	6.54	671	220	597	7.48	7.86	1.96	11,400	1,412	2,138	378	380

	INORGANIC (TOTAL METALS) PARAMETERS														
	Antimony ug/L	Arsenic ug/L	Barium ug/L	Beryllium ug/L	Cadmium ug/L	Chromium ug/L	Copper ug/L	Iron ug/L	Lead ug/L	Mercury ug/L	Nickel ug/L	Selenium ug/L	Silver ug/L	Thallium ug/L	Zinc ug/L
DETECTION LIMITS →	5/10/50/60	5/10/20	1/2/200	1/5	1/5	5/10	5/10	20/100	3/10/20	0.05/0.2	5/40	3/5/10	1/2.5/10	5/10	10/20
COMBINED AQUIFER AND AQUIFER SYSTEM DATA															
Min	<5	<5	<1	ND	ND	<5	<5	<20	<10	<0.05	<5	ND	ND	ND	<10
Avg	†	<10	199.6	ND	ND	‡	11.9	1,371.7	<10	<0.2	6.50	ND	ND	ND	114
Max	†5.3	72.2	1,080	ND	ND	‡8.4	511	34,800	37.7	0.23	23.9	ND	ND	ND	9,639

*Detection limits vary due to different labs performing metals analyses over the three year period.
†Antimony detected in two wells at 5.2 and 5.3 ug/L. Average value not calculated. Maximum value is maximum detected value.
‡Chromium detected in two wells at 7.2 and 8.4 ug/L. Average value not calculated. Maximum value is maximum detected value.

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