APPENDIX 2

CHICOT AQUIFER SUMMARY

BASELINE MONITORING PROJECT, EPA FY'99

(July 1998 Through June 1999)

PART III

OF

TRIENNIAL SUMMARY REPORT

FOR THE

ENVIRONMENTAL EVALUATION DIVISION

OF

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

PARTIAL FUNDING PROVIDED THROUGH CWA 106 GRANT

CHICOT AQUIFER SUMMARY

TABLE OF CONTENTS

BACKGROUND

To better assess the water quality of a particular aquifer at a given point in time, an attempt was made during the project year to sample all project wells producing from a common aquifer in a narrow time frame. Also, to more conveniently and economically promulgate those data collected, these aquifer summaries will make up the project Triennial Summary Report.

Figure III-1 shows the geographic locations of the Chicot Aquifer and the associated project wells, whereas Table III-1 lists the wells in the aquifer along with their total depths and the use made of produced waters and the date sampled.

These data show that in February through May, and in August, of 1999, twenty-six project wells were sampled which produce from the Chicot Aquifer. Of these twenty-six wells, eight are classified as Public Supply, five are classified as Observation wells, four are classified as Domestic, one is classified as an Irrigation well, and one is classified as an Industrial well. The wells are located in fifteen parishes, mainly in southwest Louisiana.

PROJECT FIELD AND ANALYTICAL PARAMETERS

The field parameters that are checked at each sampling site and the list of water quality parameters that are analyzed in the laboratory are shown in Table III-2. Those project inorganic (total metals) parameters analyzed in the laboratory are listed in Table III-3. These tables also show the field and analytical results determined for each analyte.

In addition to the analytical parameters mentioned above, a list of project analytical parameters that include three other categories of compounds (Volatiles, Semi-volatiles, and Pesticides/PCB's) is included. Due to the large number of analytes in these three categories, tables were not prepared for each well. However, in order for the reader to be aware of the total list of analytes, Tables III-4, III-5, and III-6 were included in this summary. These tables list the project analytes along with their Practical Quantitation Limits (PQLs) used during processing. Please note that methyl-t-butyl ether is listed in Table III-4. Any well sampled prior to May in this report was not sampled for this compound, as it was added to the list of analytes just prior to the May sampling event.

DISCUSSION OF WATER QUALITY DATA

FEDERAL PRIMARY DRINKING WATER STANDARDS: Under the Federal Safe Drinking Water Act, EPA has established Maximum Contaminant Levels (MCL) for pollutants that may pose a health risk in public drinking water. An MCL is the highest level of a contaminant that EPA allows in public drinking water. MCLs ensure that drinking water does not pose either a short-term or long-term health risk. While not all wells sampled were public supply wells, this Office does use the MCLs as a benchmark for further evaluation.

Laboratory data show that five project water wells in the Chicot Aquifer exceeded the Federal MCL of 6 parts per billion (ppb) for Bis(2-ethylhexyl)phthalate (BEHP).

VE-6936Z – 10 ppb

VE-862 – 40 ppb

AC-6919Z – 64 ppb

EV-5314Z – 75 ppb

LF-572 – 71 ppb

Several wells in the previously sampled aquifer had also exhibited similar results for BEHP. Therefore, a target group of wells that displayed BEHP exceedances was selected for resampling from both of these aquifers. Out of the wells listed above, VE-6936Z and VE-862 were resampled. In the laboratory results from this resampling event, BEHP was not detected in any sample, therefore, it is this Office's opinion that all of the above listed exceedances were due to laboratory contamination.

Laboratory data show that project water well CU-699 exceeded the Federal MCL of 6 ppb for Antimony with a concentration of 7.2 ppb. However, this well was resampled for Total Metals and in the resample Antimony was not detected. Therefore, it is the opinion of this Office that the exceedance exhibited in the initial sample results was due to field contamination.

CU-770 exhibited a concentration for Antimony of 5.7 ppb for the initial sample, but the duplicate sample showed a concentration of <5.0 ppb. The MCL for Antimony is 6.0 ppb. Because the initial concentration was below the MCL and the duplicate was non-detect, and since this well is a United States Geological Survey observation well, no further action was taken as a result of the Antimony value exhibited for this well. It is the opinion of this Office that the exceedance exhibited in the initial sample results was due to field contamination.

Those project wells reporting Turbidity levels of >1 NTU, do not exceed the MCL of 1.0, as this primary standard applies to surface water systems only.

FEDERAL SECONDARY DRINKING WATER STANDARDS: EPA has set secondary standards which are defined as non-enforceable taste, odor or appearance guidelines. Field and laboratory data contained in Tables III-2 and III-3 show that twenty-one of the wells sampled in the Chicot Aquifer exceeded the Secondary Maximum Contaminant Level (SMCL) for Iron, four of the wells exceeded the SMCL for Total Dissolved Solids (TDS), and four wells exceeded the SMCL for Color.

IRON (SMCL=300 ppb):

I-5050Z – 1,494 ppb

VE-882 – 2,677 ppb

AC-6919Z – 4,209 ppb

AC-539 – 427.8 ppb

LF-572 – 919 ppb, 1,032 ppb (duplicate sample)

SL - 392 – 16,867 ppb

CU-770 – 496 ppb, 958 ppb (duplicate sample)

JD-363 – 2,240 ppb, 2,150 ppb (duplicate sample)

BE-378 – 6,962 ppb

CU-1023 – 872 ppb

CU-699 – 586 ppb, 733.8 ppb (result found in resample)

VE-6936Z – 1,033 ppb

VE-862 – 1,069 ppb

EV-5314Z – 3,179 ppb

SMN-109 – 1,530 ppb

VE-650 – 3,271 ppb

CN-92 – 1,166 ppb

BE-412 – 1,117 ppb

CU-1125 – 2,072 ppb

CU-869 – 1,389 ppb

CU-1060 – 465 ppb

TDS (SMCL=500 ppm):

VE-862 – 624 ppm

CN-92 – 1,082 ppm

SMN-109 – 791 ppm

CU-1023 – 572 ppm

COLOR (SMCL=15 PCU):

VE-882 – 20 PCU

JD-363 – 20 PCU, 30 PCU (duplicate sample)

SMN-109 – 20 PCU

CU-1125 – 40 PCU

FEDERAL LEAD ACTION LEVEL: Under the Federal Safe Drinking Water Act, EPA has established an Action Level of 15 ppb for Lead to ensure that this contaminant does not pose either a short-term or long-term health risk in drinking water. Laboratory data contained in Table III-3 show that two of the wells sampled in the Chicot Aquifer exceeded the Action Level for Lead.

CU-770 – 54.7 ppb, 34.0 ppb (duplicate sample)

BE-378 – 28.7 ppb

Neither of the two wells mentioned above are public supply wells. CU-770 is an observation well and BE-378 is an industrial well, so the Lead concentrations do not pose a direct drinking water threat to the public. Therefore no further action was taken as a result of the Lead values exhibited in these two wells and they will both be resampled in three years as part of the regular sampling schedule.

VOLATILE ORGANICS WHICH HAVE NO ESTABLISHED MCL: The following values were exhibited in Project well BE-378. The listed Volatile Organic Compounds do not have MCLs established for them.

n-Propylbenzene – 3.0 ppb

2-Chlorotoluene – 5.0 ppb

1, 2, 4-Trimethylbenzene – 4.0 ppb

Naphthalene – 11.0 ppb

BE-378 was resampled for Volatile Organics. In the results from the resampling, and duplicate resampling, no Volatile Organic was detected. Therefore, it is this Office's that the results listed above were due to field contamination.

SELECTED WATER QUALITY MAPS: For the reader's convenience, maps showing the contoured values for TDS, Chloride, and Iron are included in this summary report in Figures III-2 through III-4. The contour map for pH, which is usually included in this Office's aquifer summaries, is not included in this particular summary because the field meter that measures pH was not functioning during the sampling of some wells. For this reason, there is not enough pH data to complete a contoured map of the pH for this aquifer.

SUMMARY AND RECOMMENDATIONS

In summary, the analytical data show that the ground water from this aquifer is of good quality when considering short-term or long-term health risks. This is with the exception of the lead concentrations found in project wells CU-770 and BE-378, which do not pose a direct drinking water threat to the public. Please refer to Page 3 of 17, "Federal Lead Action Level" for a discussion of these lead concentrations. This aquifer is of fair quality when considering taste, odor or appearance guidelines.

CU-770 exhibited a concentration for Antimony of 5.7 ppb for the initial sample, but the duplicate sample showed a concentration of <5.0 ppb. The MCL for Antimony is 6.0 ppb. Because the initial concentration was below the MCL and the duplicate was non-detect, and since this well is a United States Geological Survey observation well, no further action was taken for this well as a result of the Antimony concentration exhibited in the initial sample. It is the opinion of this Office that the exceedance exhibited in the initial sample results was due to field contamination.

Also, since CU-770 is an observation well and BE-378 is an industrial well, the Lead concentrations found in the samples taken from those two wells do not pose a direct drinking water threat to the public. Therefore no further action was taken as a result of the Lead values exhibited in these two wells and they will both be resampled in three years as part of the regular sampling schedule.

It is recommended that the several project wells assigned to the Chicot Aquifer be resampled as planned, in approximately three years. In addition, several wells should be added to those currently sampled to increase the well density for this aquifer.

Table III-1 List of Project Wells Sampled

PROJECT NUMBER	PARISH	WELL NUMBER	DATE SAMPLED	OWNER	DEPTH (Feet)	WELL USE	AQUIFER
199616	ACADIA	AC-539	02/09/1999	CITY OF RAYNE	251	PUBLIC SUPPLY	CHICOT
199102	ACADIA	AC-6919Z	02/08/1999	PRIVATE OWNER	UNKNOWN	IRRIGATION	CHICOT
199618	ALLEN	AL-141	04/13/1999	TOWN OF OBERLIN	155	PUBLIC SUPPLY	CHICOT
198404	BEAUREGARD	BE-378	05/11/1999	TRANSCONTINENTAL PIPELINE GAS	172	INDUSTRIAL	CHICOT
199120	BEAUREGARD	BE-412	04/13/1999	BOISE CASCADE	202	INDUSTRIAL	CHICOT
199619	BEAUREGARD	BE-486	04/13/1999	EAST BEAUREGARD HIGH SCHOOL	150	PUBLIC SUPPLY	CHICOT
199620	BEAUREGARD	BE-488	04/13/1999	SINGER WATER DISTRICT	262	PUBLIC SUPPLY	CHICOT
198405	CAMERON	CN-92	03/10/1999	USGS	443	OBSERVATION	CHICOT
199018	CALCASIEU	CU-1023	05/10/1999	PPG INDUSTRIES	701	INDUSTRIAL	CHICOT
199015	CALCASIEU	CU-1060	05/10/1999	PPG INDUSTRIES	200	PUBLIC SUPPLY	CHICOT
199622	CALCASIEU	CU-1125	05/11/1999	LDOTD	570	PUBLIC SUPPLY	CHICOT
199020	CALCASIEU	CU-699	08/18/1999	CITGO PETROLEUM REFINING	530	INDUSTRIAL	CHICOT
199901	CALCASIEU	CU-770	03/10/1999	USGS	490	OBSERVATION	CHICOT
199017	CALCASIEU	CU-869	05/10/1999	PPG INDUSTRIES	526	INDUSTRIAL	CHICOT
199104	EVANGELINE	EV-5314Z	02/09/1999	PRIVATE OWNER	180	DOMESTIC	CHICOT
199316	IBERIA	I-5050Z	02/08/1999	PRIVATE OWNER	188	DOMESTIC	CHICOT
199315	JEFFERSON DAVIS	JD-363	05/09/1999	CITY OF WELSH	237	PUBLIC SUPPLY	CHICOT
199409	LAFAYETTE	LF-572	02/09/1999	CITY OF LAFAYETTE	570	PUBLIC SUPPLY	CHICOT
199621	RAPIDES	R-5428Z	04/13/1999	PRIVATE OWNER	85	DOMESTIC	CHICOT
198410	ST LANDRY	SL-392	03/09/1999	USGS	126	OBSERVATION	CHICOT
198412	ST MARTIN	SMN-109	03/09/1999	USGS	375	OBSERVATION	CHICOT
199314	VERNON	V-535	04/13/1999	MARLOW FIRE STATION	66	PUBLIC SUPPLY	CHICOT
198413	VERMILION	VE-650	03/09/1999	USGS	205	OBSERVATION	CHICOT
199103	VERMILION	VE-6936Z	02/08/1999	PRIVATE OWNER	125	DOMESTIC	CHICOT
198622	VERMILION	VE-862	02/08/1999	TOWN OF GUEYDAN	249	PUBLIC SUPPLY	CHICOT
199617	VERMILION	VE-882	02/08/1999	CITY OF KAPLAN	279	PUBLIC SUPPLY	CHICOT

Table III-2 Summary of Water Quality Data

WELL NUMBER	TEMP. °C	pH SU	COND. mmhos/cm	SAL. ppt	TSS ppm	TDS ppm	ALK. ppm	HARD. ppm	TURB. NTU	COND. umhos/cm	COLOR PCU	Cl ppm	SO4 ppm	TOT. P ppm	TKN ppm	TOC ppm	NH3 (as N) ppm	NITRITE-NITRATE (as N) ppm
AC-539	22.24	7.16	0.609	0.30	4.0	378.0	296.0	203.0	2.3	633.0	5.0	28.10	<1.25	0.19	2.08	4.40	0.95	0.02
AC-6919Z	22.91	7.16	0.736	0.36	25.0	424.0	217.0	158.0	9.6	762.0	5.0	108.00	<1.25	0.34	2.21	6.00	1.16	<0.02
AL-141	No Data				<4.0	214.0	174.0	<5.0	<1.0	338.0	<5.0	9.00	<1.25	0.31	0.23	3.70	<0.10	0.02
AL-141*	No Data				<4.0	212.0	174.0	<5.0	<1.0	338.0	<5.0	9.00	<1.25	0.35	0.17	3.40	0.16	0.02
BE-378	23.14	6.67	0.322	0.15	13.5	224.0	117.0	67.3	50.0	328.0	50.0	35.60	<1.25	0.45	0.18	<2.00	<0.10	<0.02
BE-412	No Data				<4.0	48.0	19.5	<5.0	<1.0	54.2	<5.0	6.00	<1.25	0.14	0.11	2.20	0.10	0.06
BE-486	No Data				<4.0	122.0	38.2	<5.0	1.0	151.0	<5.0	24.00	<1.25	0.05	0.50	<2.00	<0.10	0.03
BE-488	No Data				<4.0	186.0	165.0	<5.0	3.6	324.7	5.0	5.40	5.80	0.15	0.07	2.70	<0.10	0.07
CN-92	23.26	7.76	1.725	0.87	<4.0	1082.0	265.0	180.0	2.5	1744.0	5.0	415.00	2.10	0.09	1.14	3.10	0.42	<0.02
CU-1023	26.60	6.92	0.925	No Data	<4.0	572.0	186.0	118.0	6.7	1057.0	10.0	211.00	<1.25	0.29	0.24	<2.00	0.13	<0.02
CU-1060	25.70	7	0.331		<4.0	248.0	184.0	116.0	4.4	380.0	10.0	17.30	1.40	0.24	0.13	<2.00	<0.10	<0.02
CU-1125	21.98	7.1	0.359	0.17	<4.0	250.0	159.0	66.9	14.0	380.0	40.0	30.00	<1.25	0.22	0.32	<2.00	0.20	<0.02
CU-699	28.83	7.41	0.490	No Data	<4.0	325.9	197.1	133.0	6.4	516.0	15.0	50.22	<1.25	0.18	0.13	No Data	0.11	<0.02
CU-770	22.80	7.5	0.369	0.18	<4.0	360.0	142.0	93.3	9.1	367.0	5.0	31.60	<1.25	0.19	0.10	2.40	<0.10	<0.02
CU-770*	22.80	7.5	0.369	0.18	<4.0	336.0	141.0	93.8	8.7	368.0	5.0	31.70	<1.25	0.20	<0.05	3.10	<0.10	<0.02
CU-869	27.70	6.57	0.490	No Data	4.5	330.0	162.0	114.0	11.0	543.0	10.0	73.90	1.90	0.33	0.36	<2.00	<0.10	<0.02
EV-5314Z	21.31	6.95	0.610	0.30	5.5	358.0	224.0	158.0	24.0	612.0	10.0	41.60	30.60	0.16	0.93	4.80	0.22	<0.02
I-5050Z	21.90	6.48	0.463	0.22	<4.0	270.0	244.0	204.0	13.0	473.0	5.0	6.20	<1.25	0.26	<0.05	2.40	<0.10	0.02
JD-363	24.00	6.55	0.764	0.37	4.5	478.0	131.0	161.0	9.3	814.0	20.0	177.00	<1.25	0.38	<0.05	<2.00	<0.10	<0.02
JD-363*	24.00	6.55	0.764	0.37	4.5	472.0	130.0	160.9	6.3	817.0	30.0	171.00	<1.25	0.35	0.55	<2.00	0.21	<0.02
LF-572	20.82	7.24	0.365	0.17	<4.0	284.0	182.0	170.0	6.0	370.0	10.0	5.50	5.15	0.31	0.85	4.20	0.21	<0.02
LF-572*	20.82	7.24	0.365	0.17	5.0	218.0	182.0	170.0	6.1	369.0	5.0	5.40	5.10	0.28	0.86	<2.00	0.18	<0.02
R-5428Z	No Data				<4.0	30.0	14.7	<5.0	1.3	42.6	<5.0	4.10	<1.25	0.12	<0.05	2.10	<0.10	0.06
SL-392	21.29	6.56	0.371	0.18	32.0	334.0	138.0	139.0	110.0	331.0	50.0	18.50	5.80	0.21	<0.05	2.80	<0.10	<0.02
SMN-109	21.54	6.89	1.147	0.57	2.0	791.0	439.0	295.0	13.0	1155.0	20.0	11.60	<1.25	0.18	1.10	5.00	0.74	0.02
V-535	No Data				<4.0	14.0	7.9	<5.0	1.6	23.8	<5.0	3.10	<1.25	0.23	<0.05	<2.00	<0.10	0.06
VE-650	22.11	6.61	0.494	0.24	5.5	398.0	251.0	190.0	25.0	489.0	10.0	9.40	<1.25	0.40	1.18	3.30	0.78	0.04
VE-6936Z	21.84	6.73	0.649	0.32	9.0	344.0	233.0	181.0	26.0	572.0	10.0	34.90	8.20	0.41	0.51	7.90	0.31	<0.02
VE-862	22.29	7.28	1.109	0.55	<4.0	624.0	364.0	221.0	8.7	1147.0	10.0	147.00	<1.25	0.25	3.01	8.50	2.07	<0.02
VE-882	21.24	6.85	0.783	0.38	6.0	460.0	355.0	208.0	21.0	758.0	20.0	45.00	<1.25	0.29	2.03	8.40	1.16	<0.02

* Denotes duplicate sample.

Table III-3 Summary of Inorganic Data

WELL NUMBER	ARSENIC ppb	SILVER Ppb	BARIUM ppb	BERYLLIUM ppb	CADMIUM ppb	CHROMIUM ppb	COPPER ppb	IRON ppb	MERCURY ppb	NICKEL ppb	ANTIMONY ppb	SELENIUM ppb	LEAD ppb	THALLIUM ppb	ZINC ppb
AC-539	<10.0	<1.0	600.0	<1.0	<1.0	<5.0	<5.0	427.8	<0.05	<5.0	<5.0	<5.0	<10.0	<5.0	<10.0
AC-6919Z	<5.0	<1.0	679.0	<1.0	<1.0	<5.0	19.8	4,209.0	<0.05	15.3	<5.0	<5.0	<10.0	<5.0	15.8
AL-141	<5.0	<1.0	13.9	<1.0	<1.0	<5.0	16.6	53.3	<0.05	<5.0	<5.0	<5.0	<10.0	<5.0	39.1
AL-141*	<5.0	<1.0	13.1	<1.0	<1.0	<5.0	<5.0	127.6	<0.05	<5.0	<5.0	<5.0	<10.0	<5.0	<10.0
BE-378	<5.0	<1.0	102.0	<1.0	<1.0	<5.0	163.0	6,962.0	<0.05	<5.0	<5.0	<5.0	28.7	<5.0	194.0
BE-412	<5.0	<1.0	112.0	<1.0	<1.0	63.0	<5.0	117.0	<0.05	<5.0	<5.0	<5.0	<10.0	<5.0	464.0
BE-486	<5.0	<1.0	158.0	<1.0	1.1	<5.0	15.7	64.8	<0.05	<5.0	<5.0	<5.0	<10.0	<5.0	28.2
BE-488	<5.0	<1.0	<10.0	<1.0	<1.0	<5.0	5.8	163.0	<0.05	<5.0	<5.0	<5.0	<10.0	<5.0	<10.0
CN-92	<5.0	<2.0	988.0	<1.0	<1.0	<5.0	<5.0	166.0	<0.05	<5.0	<5.0	<5.0	<10.0	<5.0	101.4
CU-1023	<5.0	<1.0	357.0	<1.0	<1.0	<5.0	<5.0	872.0	<0.05	<5.0	<5.0	<5.0	<10.0	<5.0	39.6
CU-1060	<5.0	<1.0	208.0	<1.0	<1.0	<5.0	<5.0	465.0	<0.05	<5.0	<5.0	<5.0	<10.0	<5.0	121.0
CU-1125	<5.0	<1.0	188.0	<1.0	<1.0	<5.0	5.7	2,072.0	<0.05	<5.0	<5.0	<5.0	<10.0	<5.0	193.0
CU-699	<5.0	<1.0	248.0	<1.0	<1.0	6.0	157.6	586.0	<0.05	<5.0	7.2	<5.0	6.8	<5.0	85.0
CU-770	<5.0	<2.0	281.0	<1.0	<1.0	<5.0	<5.0	496.0	<0.05	<5.0	5.7	<5.0	54.7	<5.0	920.0
CU-770*	<5.0	<2.0	288.0	<1.0	<1.0	<5.0	<5.0	958.0	<0.05	<5.0	<5.0	<5.0	34.0	<5.0	980.0
CU-869	<5.0	<1.0	224.0	<1.0	<1.0	<5.0	<5.0	1,389.0	<0.05	5.1	<5.0	<5.0	12.0	<5.0	24.1
EV-5314Z	<5.0	<1.0	301.0	<1.0	<1.0	<5.0	180.0	3,179.0	<0.05	6.6	<5.0	<5.0	10.0	<5.0	25.5
I-5050Z	<10.0	<1.0	213.0	<5.0	<1.0	<5.0	<5.0	1,494.0	<0.05	6.6	<5.0	<5.0	<10.0	<5.0	341.0
JD-363	<5.0	<1.0	702.0	<1.0	1.0	<5.0	<5.0	2,249.0	<0.05	<5.0	<5.0	<5.0	<10.0	<5.0	12.7
JD-363*	<5.0	<1.0	688.0	<1.0	<1.0	<5.0	<5.0	2,150.0	<0.05	<5.0	<5.0	<5.0	<10.0	<5.0	26.5
LF-572	<10.0	<1.0	262.0	<1.0	<1.0	<5.0	5.4	919.0	<0.05	5.0	<5.0	<5.0	<10.0	<5.0	<10.0
LF-572*	<10.0	<1.0	223.0	<1.0	<1.0	<5.0	<5.0	1,032.0	<0.05	6.9	<5.0	<5.0	10.2	<5.0	<10.0
R-5428Z	<5.0	<1.0	103.0	<1.0	<1.0	<5.0	73.0	87.8	<0.05	8.6	<5.0	<5.0	<10.0	<5.0	26.5
SL-392	<5.0	<2.0	283.0	<1.0	<1.0	<5.0	<5.0	16,867.0	<0.05	<5.0	<5.0	<5.0	<10.0	<5.0	5.9
SMN-109	<5.0	<2.0	40.0	<1.0	<1.0	<5.0	<5.0	1,530.0	<0.05	<5.0	<10.0	<5.0	<5.0	<5.0	618.0
V-535	<5.0	<1.0	28.9	<1.0	<1.0	<5.0	281.0	53.3	<0.05	<5.0	<5.0	<5.0	14.2	<5.0	80.1
VE-650	<5.0	<2.0	49.7	<1.0	<1.0	<5.0	<5.0	3,271.0	<0.05	<5.0	<5.0	<5.0	<10.0	<5.0	707.6
VE-6936Z	<5.0	<1.0	249.0	<5.0	<1.0	<5.0	<5.0	1,033.0	<0.05	7.8	<5.0	<5.0	<10.0	<5.0	<10.0
VE-862	<5.0	<1.0	1056.0	<1.0	<1.0	<5.0	<5.0	1,069.0	<0.05	7.9	<5.0	<5.0	<10.0	<5.0	19.1
VE-882	<5.0	<1.0	679.0	<1.0	<1.0	<5.0	6.4	2,677.0	<0.05	6.2	<5.0	<5.0	<10.0	<5.0	<10.0

* Denotes duplicate sample.

Table III-4 List of VOC Analytical Parameters
BASELINE MONITORING PROJECT

VOLATILE ORGANICS BY EPA METHOD 8260

COMPOUNDS	PQL (ppb)
DICHLOROFLUOROMETHANE	5
CHLOROMETHANE	2
VINYL CHLORIDE	2
BROMOMETHANE	2
CHLOROETHANE	2
TRICHLOROFLUOROMETHANE	5
1,1-DICHLOROETHENE	2
METHYLENE CHLORIDE	2
TRANS-1,2-DICHLOROETHENE	2
METHYL-t-BUTYL ETHER	2
1,1-DICHLOROETHANE	2
2,2 DICHLOROPROPANE	2
CIS-1,2 DICHLOROETHENE	2
BROMOCHLOROMETHANE	2
CHLOROFORM	2
1,1,1-TRICHLOROETHANE	2
1,1 DICHLOROPROPENE	2
CARBON TETRACHLORIDE	2
BENZENE	2
1,2-DICHLOROETHANE	2
TRICHLOROETHENE	2
1,2-DICHLOROPROPANE	2
BROMODICHLOROMETHANE	2
DIBROMOMETHANE	2
CIS-1,3-DICHLOROPROPENE	2
TOLUENE	2
TRANS-1,3-DICHLOROPROPENE	2
1,1,2-TRICHLOROETHANE	2
1,3--DICHLOROPROPANE	2
TETRACHLOROETHENE	2
1,2-DIBROMOETHANE	2
DIBROMOCHLOROMETHANE	2
CHLOROBENZENE	2
ETHYLBENZENE	2
1,1,1,2-TETRACHLOROETHANE	2
P&M XYLENE	4
O-XYLENE	2
STYRENE	2
BROMOFORM	2

Table III-4 (Cont'd)
Volatile Organic (VOC) Parameters

COMPOUNDS	PQL (ppb)
ISOPROPYLBENZENE	2
1,1,2,2-TETRACHLOROMETHANE	2
1,2,3,-TRICHLOROPROPANE	2
BROMOBENZENE	2
n-PROPYLBENZENE	2
2-CHLOROTOLUENE	2
4-CHLOROTOLUENE	2
1,3,5-TRIMETHYLBENZENE	2
TERT-BUTYLBENZENE	2
1,2,4-TRIMETHYLBENZENE	2
SEC-BUTYLBENZENE	2
P-ISOPROPYLTOLUENE	2
1,3-DICHLOROBENZENE	2
1,4-DICHLOROBENZENE	2
n-BUTYLBENZENE	2
1,2-DIBROMO-3-CHLOROPROPANE	2
NAPHTHALENE	2
1,2,4-TRICHLOROBENZENE	2
HEXACHLOROBUTADIENE	2
1,2-DICHLOROBENZENE	2
1,2,3-TRICHLOROBENZENE	2

PQL = Practical Quantitation Limit
ppb = parts per billion

Table III-5 List of Semi-volatile Analytical Parameters
BASELINE MONITORING PROJECT

SEMIVOLATILE ORGANICS BY EPA METHOD 8270

COMPOUNDS	PQL (ppb)
N-Nitrosodimethylamine	10
2-Picoline	10
Methyl methanesulfonate	10
Ethyl methanesulfonate	20
Phenol	10
Aniline	10
Bis(2-chloroethyl)ether	10
2-Chlorophenol	10
1,3-Dichlorobenzene	10
1,4-Dichlorobenzene	10
Benzyl alcohol	10
1,2-Dichlorobenzene	10
2-Methylphenol	10
Bis(2-chloroisopropyl)ether	10
4-Methylphenol	10
N-Nitroso-di-n-propylamine	10
Hexachloroethane	20
Acetophenone	10
Nitrobenzene	10
N-Nitrosopiperidine	20
Isophorone	10
2,4-Dimethylphenol	10
2-Nitrophenol	10
Benzoic acid	50
Bis(2-chloroethoxy)methane	10
2,4-Dichlorophenol	10
a,a-Dimethylphenethylamine	10
1,2,4-trichlorobenzene	10
Benzidine	50
Pyrene	10
p-Dimethylaminoazobenzene	10
Butylbenzylphthalate	10
Bis(2-ethylhexyl)phthalate	10

Table III-5 (Cont'd)
Semivolatile Parameters

COMPOUNDS	PQL (ppb)
3,3'-Dichlorobenzidine	20
Benzo(a)anthracene	10
Chrysene	10
Di-n-octylphthalate	10
7,12-Dimetnylbenz(a)anthracine	10
Benzo(b)fluoranthene	10
Benzo(k)fluoranthene	10
Benzo(a)pyrene	10
3-Methylcholanthrene	10
Dibenz(a,j)acridine	10
Indeno(1,2,3-cd)pyrene	10
Dibenz(a,h)anthracene	10
Benzo(g,h,i)perylene	10
Napthalene	10
4-Chloroaniline	10
2,6-Dichlorophenol	10
Hexachlorobutadiene	10
N-Nitrose-di-n-butylamine	10
4-Chloro-3-methylphenol	20
2-Methylnapthalene	10
Hexachlorocyclopentadiene	10
1,2,4,5-Tetrachlorobenzene	10
2,4,6-Trichlorophenol	10
2,4,5-Trichlorophenol	10
2-Chloronapthalene	10
1-Chloronapthalene	10
2-Nitroaniline	50
Dimethylphthalate	10
2,6-Dinitrotoluene	10
Acenaphthylene	10
3-Nitroaniline	50
4-Nitrophenol	50
2,4-Dinitrophenol	50
Acenaphthene	10

Table III-5 (Cont'd)
Semivolatile Parameters

COMPOUNDS	PQL (ppb)
2,4-Dinitrotoluene	10
Pentachlorobenzene	10
Dibenzofuran	10
1-Naphthylamine	10
Diethylphthalate	10
2,3,4,6-Tetrachlorophenol	10
2-Naphthylamine	10
4-Chlorophenyl phenyl ether	10
4-Nitroaniline	50
Fluorene	10
4,6-Dinitro-2-methylphenol	50
4-Aminobiphenyl	20
1,2-Diphenylhydrazine	10
Phenacetin	20
4-Bromophenyl phenyl ether	10
Hexachlorobenzene	10
Pronamide	10
N-Nitrosodiphenylamine/Diphenylamine	10
Pentachlorophenol	50
Pentachloronitrobenzene	20
Phenathrene	10
Anthracene	10
Di-n-butylphthalate	10
Fluoranthene	10

Table III-6 List of Pesticide and PCB Analytical Parameters
BASELINE MONITORING PROJECT

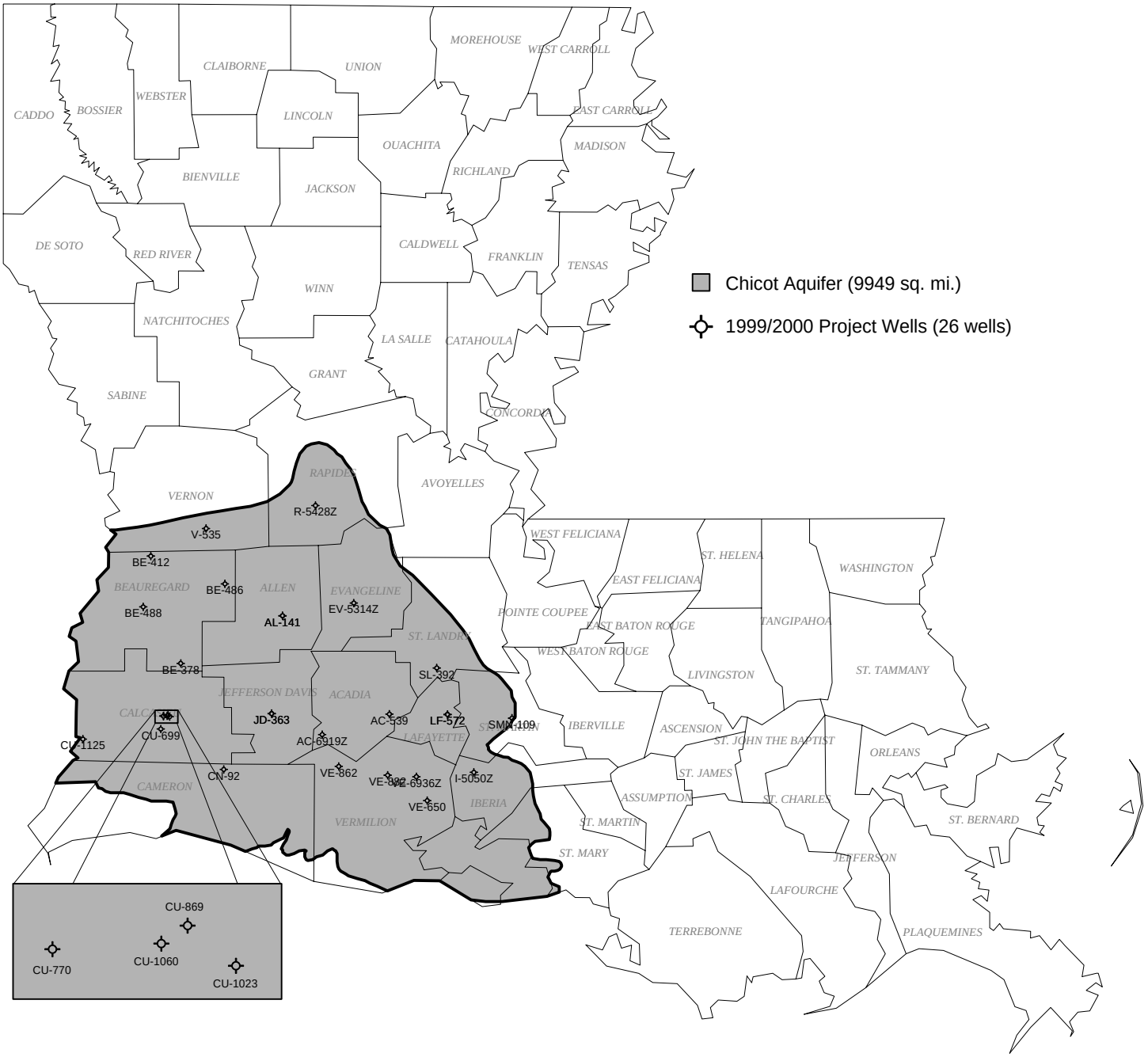
SEMIVOLATILE ORGANICS BY EPA METHOD 8270

COMPOUNDS	PQL (ppb)
Alpha BHC	2
Beta BHC	2
Gamma BHC	2
Delta BHC	2
Heptachlor	2
Aldrin	2
Heptachlor epoxide	2
Chlordane	2
Endosulfan I	2
4,4'-DDE	2
Dieldrin	2
4,4'DDD	2
Endrin	2
Toxaphene	2
Endosulfan II	2
Endrin Aldehyde	2
4,4'DDT	2
Endosulfan Sulfate	2

SEMIVOLATILE ORGANICS BY EPA METHOD 8270

COMPOUNDS	PQL (ppb)
PCB 1221/ PCB 1232	10
PCB 1016/ PCB 1242	10
PCB 1254	10
PCB 1248	10
PCB 1260	10

BASELINE MONITORING PROJECT WELLS OF THE CHICOT AQUIFER



Aquifer bondary digitized from Louisiana Hydrologic Map No. 2: Areal extent of Freshwater in Major Aquifers of Louisiana. Smoot, 1988; USGS/LDOTD Report 86-4150

Figure III-1 Location Plat, Chicot Aquifer

CHICOT AQUIFER - TDS (PPM)

Baseline Monitoring Project, FY1999-2000

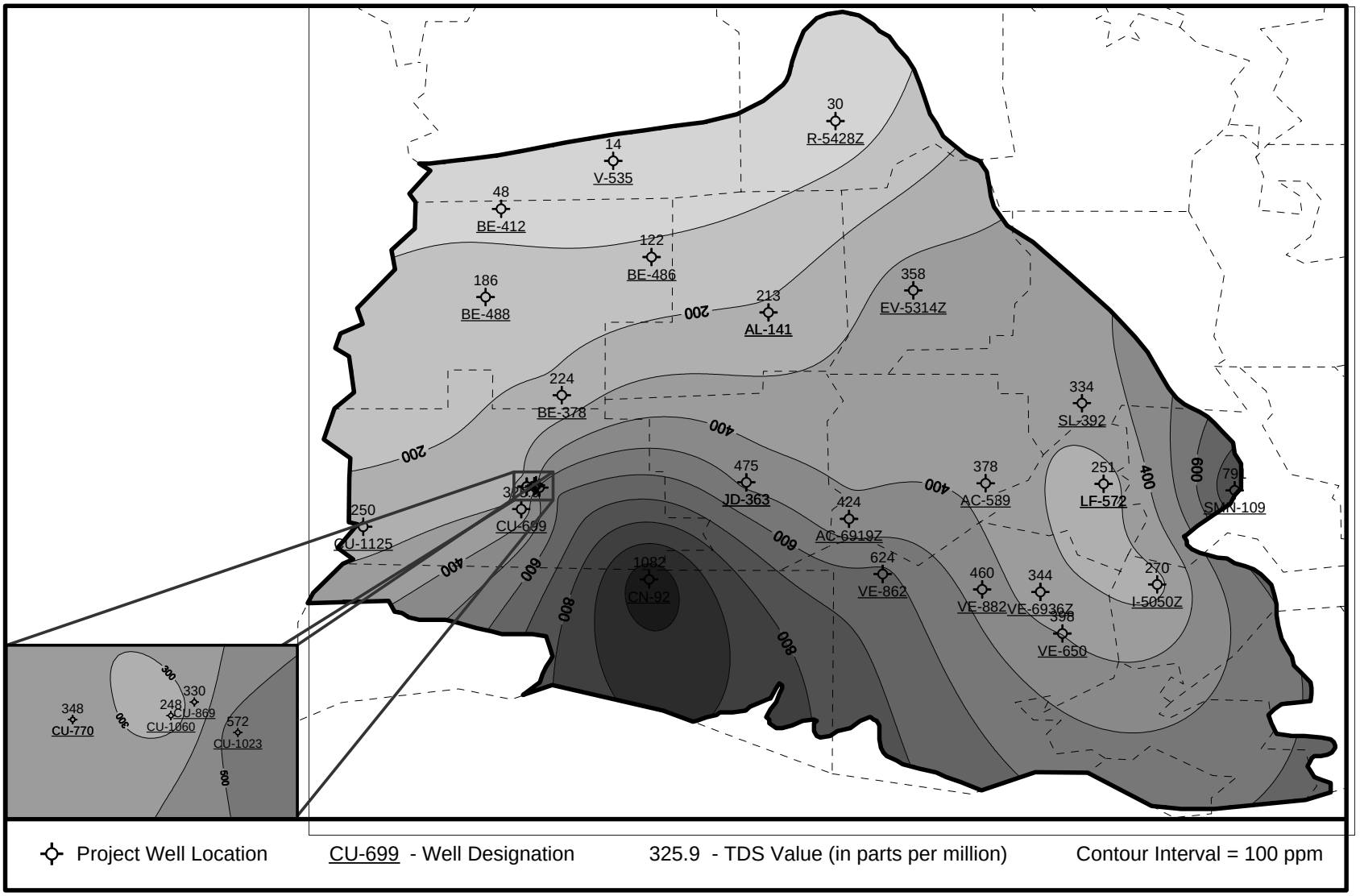


Figure III-2 Map of TDS Data

CHICOT AQUIFER - CHLORIDE (PPM)

Baseline Monitoring Project, FY1999-2000

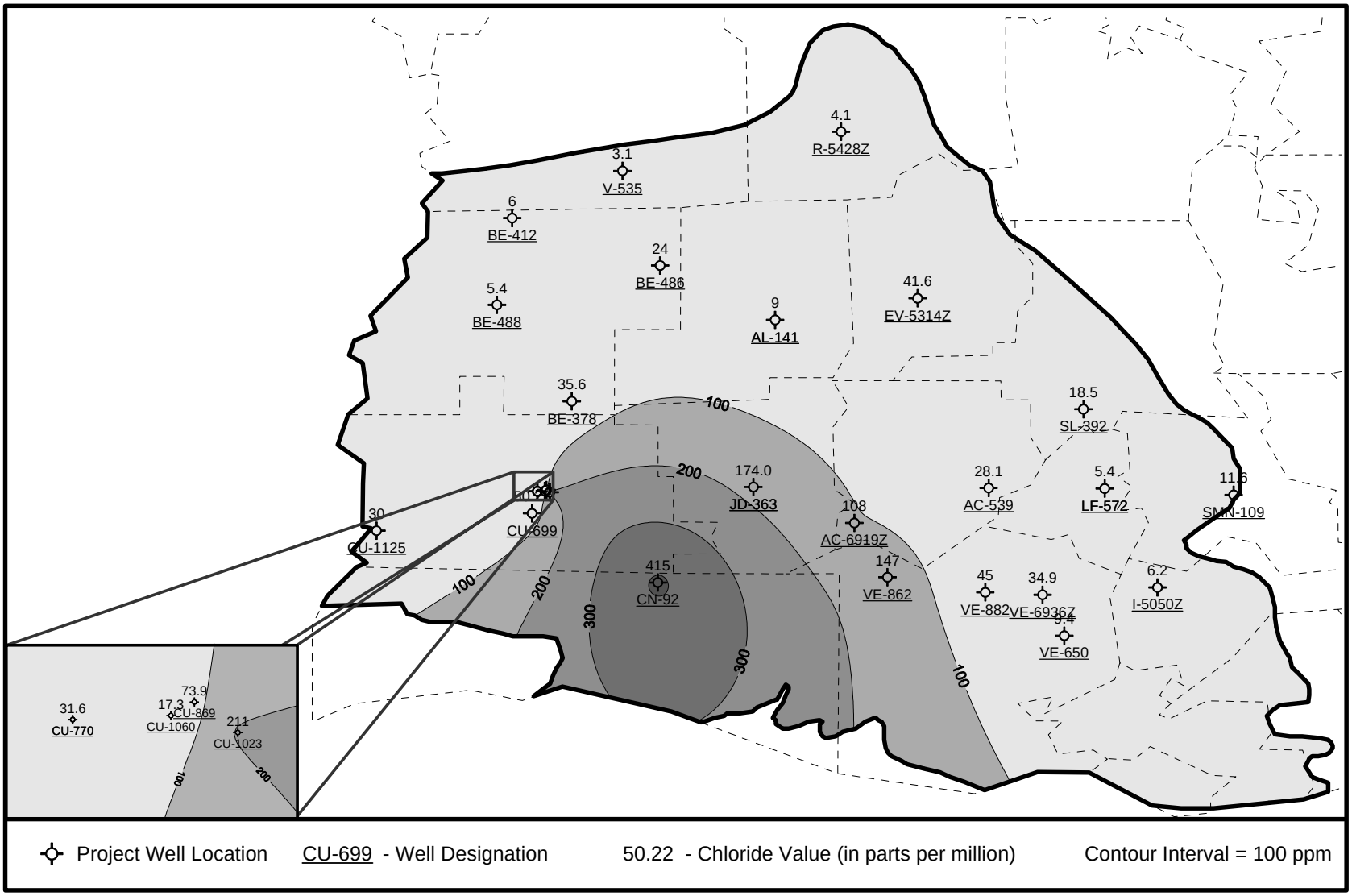


Figure III-3 Map of Chloride Data

CHICOT AQUIFER - IRON (PPB)

Baseline Monitoring Project, FY1999-2000

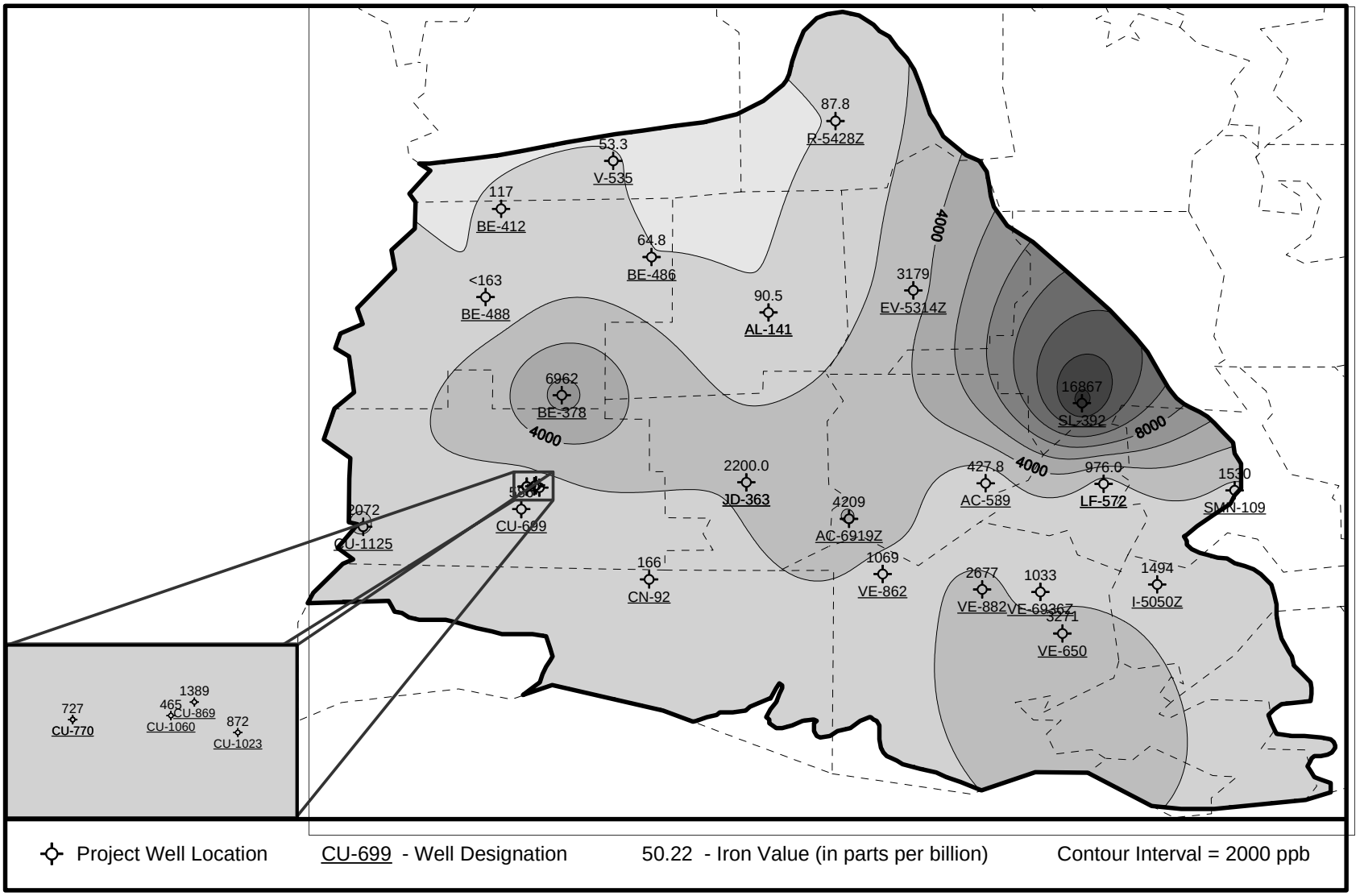


Figure III-4 Map of Iron Data