

**Table 4.1
Natural Water Quality Parameters
for Selected Wells in CSSA Vicinity**

	Sample ID	Date	Cations				Anions				Total Dissolved Solids	Hardness	pH
			Na	K	Ca	Mg	Cl	HCO ₃	CO ₃	SO ₄			
			mg/L				mg/L				(mg/L)	(mg/L)	
CSSA	CSSA (Distribution)	1984	13.0	-	74.0	32.0	18.0	331.0	0.0	47.0	352	315	8.2
		1990	11.0	-	114.0	31.0	83.0	339.0	0.0	41.0	454	411	8.0
	CS-1	1992	8.0	-	89.0	11.0	11.0	309.0	0.0	21.0	294	267	7.5
	CS-9	1994	8.1	1.9	87.0	24.0	17.0	338.0	0.0	20.0	345	318	6.9
	CS-10	1992	6.0	-	75.0	35.0	25.0	348.0	0.0	30.0	345	331	7.4
		Min:	6.0	1.9	74.0	11.0	11.0	309.0	0.0	20.0	294.0	267.0	6.9
	Max:	13.0	1.9	114.0	35.0	83.0	348.0	0.0	47.0	454.0	411.0	8.2	
	Average:	9.2	1.9	87.8	26.6	30.8	333.0	0.0	31.8	358.0	328.4	7.6	
Fair Oaks Ranch	Fairco (Distribution)	1985	8.0	-	77.0	21.0	13.0	322.0	0.0	19.0	301	280	8.2
		1991	9.0	-	80.0	24.0	16.0	350.0	0.0	12.0	316	300	7.7
	FO-2	1976	9.0	-	103.0	20.0	40.0	340.0	0.0	11.0	360	339	7.4
		1977	10.0	-	89.0	21.0	20.0	337.0	0.0	17.0	342	308	7.6
	FO-3*	1977	232.0	-	310.0	169.0	231.0	255.0	0.0	1350.0	2432	1468	7.5
		1992	200.0	-	337.0	193.0	136.0	250.0	0.0	1561.0	2553	1634	7.1
	FO-6	1994	16.0	3.0	73.0	30.0	23.0	323.0	0.0	50.0	370	308	7.0
	FO-9	1992	7.0	-	74.0	21.0	11.0	321.0	0.0	6.0	281	271	7.3
	FO-15	1983	14.0	-	104.0	16.0	28.0	348.0	0.0	37.0	379	328	8.1
	FO-17	1992	8.0	-	95.0	15.0	15.0	342.0	0.0	7.0	315	298	7.4
	FO-27	1994	7.7	-	-	-	173.0	374.0	0.0	28.0	613	670	6.5
		1995	8.0	-	115.0	29.0	64.0	390.0	0.0	21.0	433	408	7.6
	FO-28	1994	6.0	-	-	-	98.0	366.0	0.0	21.0	480	450	6.6
		1995	7.0	-	100.0	29.0	42.0	372.0	0.0	16.0	378	368	7.6
		Min:*	6.0	3.0	73.0	15.0	11.0	321.0	0.0	6.0	281.0	271.0	6.5
	Max:*	16.0	3.0	115.0	30.0	173.0	390.0	0.0	50.0	613.0	670.0	8.2	
	Average:*	9.1	3.0	91.0	22.6	45.3	348.8	0.0	20.4	380.7	360.7	7.4	
Leon Springs Villa/Hidden Springs Estates	LS-1	1972	7.0	-	120.0	16.0	13.0	317.0	0.0	94.0	570	366	7.2
		1973	11.0	-	106.0	16.0	18.0	355.0	0.0	22.0	530	332	7.7
		1973	7.0	-	79.0	27.0	13.0	334.0	0.0	18.0	313	308	7.6
	LS-2	1968	12.0	-	137.0	11.0	17.0	423.0	0.0	18.0	432	387	7.8
		1973	9.0	-	107.0	16.0	16.0	355.0	0.0	24.0	352	332	7.4
	LS-3	1971	14.0	-	229.0	162.0	11.0	333.0	0.0	900.0	1483	1238	7.3
		1971	8.0	-	64.0	37.0	11.0	338.0	0.0	29.0	316	311	7.7
		1973	15.0	-	87.0	31.0	19.0	388.0	0.0	18.0	374	344	7.5
	LS-4	1971	8.0	-	62.0	36.0	11.0	326.0	0.0	30.0	308	302	7.6
		1972	9.0	-	70.0	36.0	13.0	350.0	0.0	32.0	334	322	7.4
		1974	8.0	-	67.0	37.0	13.0	346.0	0.0	31.0	328	319	7.9
	HS-2	1998	8.3	3.1	61.8	39.6	10.4	331.9	0.0	49.7	357	321	7.2
	HS-4	1998	7.0	2.2	58.7	29.4	11.0	292.9	0.0	20.9	292	269	7.2
	Min:	7.0	2.2	58.7	11.0	10.4	292.9	0.0	18.0	292.0	269.0	7.2	
	Max:	15.0	3.1	229.0	162.0	19.0	423.0	0.0	900.0	1483.0	1238.0	7.9	
	Average:	9.5	2.6	96.0	38.0	13.6	345.4	0.0	99.0	460.7	396.2	7.5	
Total		Min:	6.0	1.9	58.7	11.0	10.4	292.9	0.0	6.0	281.0	267.0	6.5
	Max:	16.0	3.1	229.0	162.0	173.0	423.0	0.0	900.0	1483.0	1238.0	8.2	
	Average:	9.3	2.5	92.8	30.5	29.1	344.7	0.0	56.4	411.6	370.7	7.5	

Notes:

Natural water quality data were compiled from information available from the Texas Water Development Board and the Texas Natural Resources Conservation Commission

- * FO-3 has not been included in the statistical calculations for min, max, and average since the well is completed in the Hosston Sand of the Lower Trinity aquifer. The groundwater from this well is highly mineralized, and is not directly comparable to the remainder of the wells completed within the Middle Trinity aquifer.