

**Texas Water Development Board (TWDB)  
Groundwater Database (GWDB)  
Well Information Report for State Well Number  
69-23-804**

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**Well Basic Details**

[Scanned Documents](#)

State Well Number	6923804
County	Bandera
River Basin	Nueces
Groundwater Management Area	9
Regional Water Planning Area	J - Plateau
Groundwater Conservation District	Bandera County RA & GWD
Latitude (decimal degrees)	29.6287139
Latitude (degrees minutes seconds)	29° 37' 43.37" N
Longitude (decimal degrees)	-99.1779139
Longitude (degrees minutes seconds)	099° 10' 40.49" W
Coordinate Source	Global Positioning System - GPS
Aquifer Code	218GLRS - Glen Rose Limestone
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	1495
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	
Well Depth Source	
Drilling Start Date	
Drilling End Date	
Drilling Method	
Borehole Completion	

Well Type	Spring
Well Use	Other
Water Level Observation	None
Water Quality Available	Yes
Pump	None
Pump Depth (feet below land surface)	
Power Type	
Annular Seal Method	
Surface Completion	
Owner	TPWD Hill Country SNA West Verde Spring
Driller	
Other Data Available	
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	
Groundwater Conservation District Well Number	
Owner Well Number	West Verde Springs
Other Well Number	
Previous State Well Number	
Reporting Agency	Texas Water Development Board
Created Date	3/31/2005
Last Update Date	3/15/2022

Remarks West Verde Spring 6/25/20 0.03344 CFS

**Casing - No Data**

**Well Tests - No Data**

**Lithology - No Data**

**Annular Seal Range - No Data**

**Borehole - No Data**

**Plugged Back - No Data**

**Filter Pack - No Data**

**Packers - No Data**

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**Water Level Measurements**

No Data Available

### Water Quality Analysis

**Sample Date:** 3/31/2005    **Sample Time:** 1018    **Sample Number:** 1    **Collection Entity:** Texas Water Development Board

**Sampled Aquifer:** Glen Rose Limestone

**Analyzed Lab:** LCRA - Lower Colorado River Authority

**Reliability:** Sampled using TWDB protocols

**Collection Remarks:** Spring sample

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
39086	ALKALINITY FIELD DISSOLVED AS CaCO <sub>3</sub>		272	mg/L as CaCO <sub>3</sub>	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO <sub>3</sub> )		267	mg/L as CaCO <sub>3</sub>	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	4.08	ug/L	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1.02	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)	<	2.04	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		31.4	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1.02	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO <sub>3</sub> )		325.83	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		84	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.04	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1.02	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		95.9	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO <sub>3</sub> )		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		6.81	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)		3.91	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1.02	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)		1.19	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.22	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO <sub>3</sub> )		286	mg/L as CaCO <sub>3</sub>	
01046	IRON, DISSOLVED (UG/L AS FE)	<	51	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	1.02	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		2.16	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		11.1	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	1.02	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	<	1.02	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO <sub>3</sub> )		1.63	mg/L as NO <sub>3</sub>	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		0.3691	mg/L as N	

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00400	PH (STANDARD UNITS), FIELD		7.03	SU	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		0.57	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	4.08	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SI02)		12.2	mg/L as SI02	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.16		
00932	SODIUM, CALCULATED, PERCENT		5	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		6.21	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		561	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		290	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		16.5	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		18.2	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1.02	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		312	mg/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		1.86	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)		9.37	ug/L	

### Water Quality Analysis

**Sample Date:** 6/25/2020    **Sample Time:** 1300    **Sample Number:** 1    **Collection Entity:** Texas Water Development Board

**Sampled Aquifer:** Glen Rose Limestone

**Analyzed Lab:** LCRA - Lower Colorado River Authority

**Reliability:** Sampled using TWDB protocols

**Collection Remarks:** Lab Calculated Anion/Cation Chg Bal set to TWDB Calculated Value due to an error in the lab calculated formula

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
39086	ALKALINITY FIELD DISSOLVED AS CaCO3		283	mg/L as CaCO3	
00425	ALKALINITY, BICARBONATE DISSOLVED (MG/L), LAB		274	mg/L	
00430	ALKALINITY, CARBONATE DISSOLVED (MG/L), LAB		0	mg/L	
00420	ALKALINITY, HYDROXIDE DISSOLVED (MG/L), LAB		0	mg/L	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)		274	mg/L as CaCO3	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)		9.34	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		1.3412	PCT	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)	<	1	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		32.9	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		334.375	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)	<	50	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.0523	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		103	mg/L	
28004	CARBON-14 DISS APPARENT AGE (YEARS BP)		40	Y-BP	
82172	CARBON-14 FRACTION MODERN		0.9949		0.0036
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		9.68	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)		4.55	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)	<	1	ug/L	
82081	DELTA CARBON 13 C13/C12 PER MIL		-10.4	0/00	
50791	DEUTERIUM, EXPRESSED AS PERMIL VSMOW		-25.32	0/00	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.195	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO3)		306.626	mg/L as CaCO3	
01046	IRON, DISSOLVED (UG/L AS FE)	<	50	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	1	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		2.36	ug/L	

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Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		11.9	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	1	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	<	1	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		3.143	mg/L as NO3	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		0.71	mg/L as N	
50790	OXYGEN-18, EXPRESSED AS PERMIL VSMOW		-4.66	0/00	
00400	PH (STANDARD UNITS), FIELD		7.2	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	<	0.02	mg/L as P	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		0.557	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	5	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SI02)		12.1	mg/L as SI02	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.161		
00932	SODIUM, CALCULATED, PERCENT		4.391	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		6.46	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		468	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		326	ug/L	
48297	STRONTIUM, ISOTOPE OF MASS 86 AND 87 RATIO		0.707757	N/A	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		21	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		20.4	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		332.773	mg/L	
07012	TRITIUM IN WATER (TRITIUM UNITS)		1.63	TU	0.09
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)	<	1	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		2.31	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)	<	5	ug/L	

\* Value may not display all significant digits for parameter in results, check Scanned Documents for laboratory paperwork..

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