

GWDB Reports and Downloads

Well Basic Details

Scanned Documents

State Well Number	6901502
County	Real
River Basin	Nueces
Groundwater Management Area	7
Regional Water Planning Area	J - Plateau
Groundwater Conservation District	Real-Edwards C & RD
Latitude (decimal degrees)	29.9505556
Latitude (degrees minutes seconds)	29° 57' 02" N
Longitude (decimal degrees)	-99.9547222
Longitude (degrees minutes seconds)	099° 57' 17" W
Coordinate Source	Global Positioning System - GPS
Aquifer Code	218EDRDA - Edwards and Associated Limestones
Aquifer	Edwards-Trinity Plateau
Aquifer Pick Method	Assigned by Professional Geoscientist using all available documentation
Land Surface Elevation (feet above sea level)	1933
Land Surface Elevation Method	Digital Elevation Model -DEM
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	Eagle Nest Ranch Morris Springs
Driller	
Other Data Available	
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	295731099573101
Texas Commission on Environmental Quality Source Id	
Groundwater Conservation District Well Number	
Owner Well Number	Morris Springs
Other Well Number	LL1 in TWDB R-189
Previous State Well Number	
Reporting Agency	Texas Water Development Board
Created Date	4/6/2005
Last Update Date	4/6/2023

Remarks TWDB R-189: "Morris Spring (LL1). Latitude 29° 57', longitude 99°57', 10 miles north of Vance. Aquifer: Edwards and associated limestones. The spring issues through a fault. Mendoza may have drunk from this spring in 1683. Discharge: April 17, 1955-1.6 ft3/s." Blue hole on topo map. Site A-28 in Bulletin 5803. Aug 17, 1955 estimated flow 600-800 gpm. Temp 70 deg F.

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

Water Level Measurements

No Data Available

Water Quality Analysis

Sample Date: 4/6/2005 **Sample Time:** 1038 **Sample Number:** 1 **Collection Entity:** Texas Water Development Board

Sampled Aquifer: Edwards and Associated Limestones

Analyzed Lab: LCRA - Lower Colorado River Authority

Reliability: Sampled using TWDB protocols

Collection Remarks: No Data

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
39086	ALKALINITY FIELD DISSOLVED AS CaCO ₃		200	mg/L as CaCO ₃	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO ₃)		192	mg/L as CaCO ₃	
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)		32.6	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1.02	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO ₃)		234.3	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		69.6	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.06	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1.02	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		66	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO ₃)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		8.47	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)		3.45	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1.02	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)	<	1.02	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.13	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO ₃)		219	mg/L as CaCO ₃	
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)	<	2.04	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		13.2	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 ₃)		6.59	mg/L as NO ₃	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		1.488	mg/L as N	

Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
69-01-502

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00400	PH (STANDARD UNITS), FIELD		7.51	SU	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		0.65	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)		12.3	mg/L as SI02	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.15		
00932	SODIUM, CALCULATED, PERCENT		5	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		5.28	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		437	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		129	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		5.84	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		20.4	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1.02	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		234	mg/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		5.33	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)	<	4.08	ug/L	

Water Quality Analysis

Sample Date: 8/8/2019 **Sample Time:** 1010 **Sample Number:** 1 **Collection Entity:** Texas Water Development Board

Sampled Aquifer: Edwards and Associated Limestones

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
00425	ALKALINITY, BICARBONATE DISSOLVED (MG/L), LAB		204	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 CaCO ₃)		204	mg/L as CaCO ₃	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	5	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		-1.0581	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)		31.8	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO ₃)		248.951	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)	<	50	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.0624	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		63.1	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO ₃)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		9.24	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)		1	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)	<	1	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.109	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO ₃)		210.881	mg/L as CaCO ₃	
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	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		12.9	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 NO ₃)		5.445	mg/L as NO ₃	

Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
69-01-502

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		1.23	mg/L as N	
00400	PH (STANDARD UNITS), FIELD		7.48	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	<	0.02	mg/L as P	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		0.624	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)		10.2	mg/L as SI02	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.157		
00932	SODIUM, CALCULATED, PERCENT		5.117	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		5.22	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		392	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		139	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		5.63	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		23.4	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		235.016	mg/L	
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)	<	1	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		4.73	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)	<	5	ug/L	

Water Quality Analysis

Sample Date: 7/9/2020 **Sample Time:** 1345 **Sample Number:** 1 **Collection Entity:** Texas Water Development Board

Sampled Aquifer: Edwards and Associated Limestones

Analyzed Lab: LCRA - Lower Colorado River Authority

Reliability: Sampled using TWDB protocols

Collection Remarks: No Data

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00425	ALKALINITY, BICARBONATE DISSOLVED (MG/L), LAB		203	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 CaCO ₃)		203	mg/L as CaCO ₃	
01503	ALPHA, DISSOLVED (PC/L)	<	3	PC/L	1.56
01106	ALUMINUM, DISSOLVED (UG/L AS AL)		7.77	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		4.88	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	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO ₃)		247.73	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)	<	50	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.0572	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		69	mg/L	
28004	CARBON-14 DISS APPARENT AGE (YEARS BP)		1450	Y-BP	
82172	CARBON-14 FRACTION MODERN		0.835		0.003
00445	CARBONATE ION, CALCULATED (MG/L AS CO ₃)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		9.25	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	<	1	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		-11.4	0/00	
50791	DEUTERIUM, EXPRESSED AS PERMIL VSMOW		-29.78	0/00	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.12	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO ₃)		235.118	mg/L as CaCO ₃	
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)		2.22	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		15.2	mg/L	

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
69-01-502**

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
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)		4.825	mg/L as NO3	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		1.09	mg/L as N	
00400	PH (STANDARD UNITS), FIELD		7.52	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	<	0.02	mg/L as P	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		0.7	mg/L	
09503	RADIUM 226, DISSOLVED, PC/L	<	1	PC/L	0.1
81366	RADIUM 228, DISSOLVED (PC/L AS RA-228)	<	1	PC/L	0.62
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	5	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SI02)		12	mg/L as SIO2	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.169		
00932	SODIUM, CALCULATED, PERCENT		5.234	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		5.96	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		404	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		165	ug/L	
48297	STRONTIUM, ISOTOPE OF MASS 86 AND 87 RATIO		0.7080963	N/A	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		5.19	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		20.8	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		244.219	mg/L	
07012	TRITIUM IN WATER (TRITIUM UNITS)		0.77	TU	0.09
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)	<	1	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		6.87	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)	<	5	ug/L	

Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
69-01-502

Water Quality Analysis

Sample Date: 5/10/2021 **Sample Time:** 1126 **Sample Number:** 1 **Collection Entity:** Texas Water Development Board

Sampled Aquifer: Edwards and Associated Limestones

Analyzed Lab: LCRA - Lower Colorado River Authority

Reliability: Sampled using TWDB protocols

Collection Remarks: Sampled from spring orifice with largest flow.

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00425	ALKALINITY, BICARBONATE DISSOLVED (MG/L), LAB		201	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 CaCO ₃)		201	mg/L as CaCO ₃	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	5	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		2.95	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)		33.3	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO ₃)		245.29	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)	<	50	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.0632	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		65.5	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO ₃)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		9	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)		4.06	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)	<	1	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.112	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO ₃)		224.319	mg/L as CaCO ₃	
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	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		14.7	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 NO ₃)		4.87	mg/L as NO ₃	

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
69-01-502**

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		1.1	mg/L as N	
00400	PH (STANDARD UNITS), FIELD		7.34	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	<	0.02	mg/L as P	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		0.63	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)		10.4	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		5.115	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		5.55	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		427	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		166	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		5.32	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		20.9	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		236.857	mg/L	
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)	<	1	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		5.81	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)	<	5	ug/L	

Water Quality Analysis

Sample Date: 6/9/2022
Sample Time: 1200
Sample Number: 1
Collection Entity: Texas Water Development Board

Sampled Aquifer: Edwards and Associated Limestones

Analyzed Lab: TWDB Field Analysis

Reliability: Sampled using TWDB protocols

Collection Remarks: Sampled from spring orifice with largest flow.

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00400	PH (STANDARD UNITS), FIELD		7.03	SU	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		350	MICR	
00010	TEMPERATURE, WATER (CELSIUS)		20.4	C	

Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
69-01-502

Water Quality Analysis

Sample Date: 3/29/2023 **Sample Time:** 1214 **Sample Number:** 1 **Collection Entity:** Texas Water Development Board

Sampled Aquifer: Edwards and Associated Limestones

Analyzed Lab: LCRA - Lower Colorado River Authority

Reliability: Sampled using TWDB protocols

Collection Remarks: No Data

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00425	ALKALINITY, BICARBONATE DISSOLVED (MG/L), LAB		202	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 CaCO ₃)		202	mg/L as CaCO ₃	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	5	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		0.57	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)		31.8	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO ₃)		246.51	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)	<	50	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.0659	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		62.6	mg/L	
28004	CARBON-14 DISS APPARENT AGE (YEARS BP)		1610	Y-BP	
82172	CARBON-14 FRACTION MODERN		0.8179		0.003
00445	CARBONATE ION, CALCULATED (MG/L AS CO ₃)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		9.89	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	<	1	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)		1.34	ug/L	
82081	DELTA CARBON 13 C13/C12 PER MIL		-11.2	0/00	
50791	DEUTERIUM, EXPRESSED AS PERMIL VSMOW		-30.66	0/00	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.112	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO ₃)		216.262	mg/L as CaCO ₃	
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	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		14.5	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	1	ug/L	

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
69-01-502**

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
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)		4.648	mg/L as NO3	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		1.05	mg/L as N	
50790	OXYGEN-18, EXPRESSED AS PERMIL VSMOW		-5.07	0/00	
00400	PH (STANDARD UNITS), FIELD		7.61	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	<	0.02	mg/L as P	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		0.7	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	5	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SiO2)		11.6	mg/L as SiO2	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.155		
00932	SODIUM, CALCULATED, PERCENT		5.006	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		5.23	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		446	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		174	ug/L	
48297	STRONTIUM, ISOTOPE OF MASS 86 AND 87 RATIO		0.7080678	N/A	0.0007
00946	SULFATE, DISSOLVED (MG/L AS SO4)		5.45	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		20.9	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		236.113	mg/L	
07012	TRITIUM IN WATER (TRITIUM UNITS)		0.67	TU	0.09
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)	<	1	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		4.63	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..

GWDB DISCLAIMER: Except where noted, all of the information provided in the Texas Water Development Board (TWDB) Groundwater Database (<https://www.twdb.texas.gov/groundwater/data/gwdb.rpt.asp>) is believed to be accurate and reliable; however, the TWDB assumes no responsibility for any errors appearing in rules or otherwise. Further, TWDB assumes no responsibility for the use of the information provided. PLEASE NOTE that users of these data are responsible for checking the accuracy, completeness, currency and/or suitability of all information themselves. TWDB makes no guarantees or warranties as to the accuracy, completeness, currency, or suitability of the information provided via the Groundwater Database (GWDB). TWDB specifically disclaims any and all liability for any claims or damages that may result from providing GWDB data or the information it contains. For additional information or answers to questions concerning the TWDB GWDB, contact the Groundwater Data Team at GroundwaterData@twdb.texas.gov.