



Water-Data Report 2010

0818998070 East Prong Nueces River above Eagle Ranch near Vance, TX

Nueces Basin
Nueces Headwaters Subbasin

LOCATION.--Lat 29°59'15", long 99°57'27" referenced to North American Datum of 1983, Real County, TX, Hydrologic Unit 12110101.

DRAINAGE AREA.--33.2 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL DATA: Aug. 2009 to Mar. 2010. (discontinued).

RADIOCHEMICAL DATA: Aug. 2009 to Mar. 2010. (discontinued).

REMARKS.--Water-quality samples collected for Upper Nueces Springflow Project beginning in Water Year 2009 and discontinued in Water Year 2010, as noted in the Period of Record. Both Water Years are being published in Water-Data Report 2010.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 1 of 5

[CaCO₃, calcium carbonate; SiO₂, silicon dioxide; mg/L, milligrams per liter; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than]

Date	Sample start time	Medium name	Sample type	Dissolved oxygen, water, unfiltered, mg/L (00300)	pH, water, unfiltered, field, standard units (00400)	pH, water, unfiltered, laboratory, standard units (00403)	Specific conductance, water, unfiltered, laboratory, μS/cm at 25 °C (90095)	Specific conductance, water, unfiltered, laboratory, μS/cm at 25 °C (00095)	Temperature, water, °C (00010)
08-12-2009	1730	Surface water	Regular	10.9	7.8	8.0	398	400	25.0

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 2 of 5

[CaCO₃, calcium carbonate; SiO₂, silicon dioxide; mg/L, milligrams per liter; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than]

Date	Sample purpose (71999)	Sampler type (84164)	Sampling method (82398)	Type of quality assurance data associated with sample (99111)	Dissolved solids dried at 180 °C, water, filtered, mg/L (70300)	Dissolved solids, water, filtered, sum of constituents, milligrams per liter (70301)	Dissolved solids, water, filtered, tons per acre-foot (70303)	Hardness, water, mg/L as CaCO ₃ (00900)
08-12-2009	GW/SW Intrction Stdy	US DH-81 Teflon	EWI	No assoc QA data	228	219	.31	196

0818998070 East Prong Nueces River above Eagle Ranch near Vance, TX—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 3 of 5

[CaCO₃, calcium carbonate; SiO₂, silicon dioxide; mg/L, milligrams per liter; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than]

Date	Noncarbon ate hardness, water, filtered, field, milligrams per liter as calcium carbonate (00904)	Calcium, water, filtered, mg/L (00915)	Magne- sium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)	Sodium adsorption ratio, water, number (00931)	Sodium fraction of cations, percent in equivalent s of major cations (00932)	Sodium, water, filtered, mg/L (00930)	Alkalinity, water, filtered, inflection- point, incremental titration method, field, mg/L as CaCO ₃ (39086)	Bicarbonate, water, filtered, inflection- point, incremental titration method, field, mg/L (00453)
08-12-2009	6	59.4	11.6	.63	.17	6	5.57	191	232

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 4 of 5

[CaCO₃, calcium carbonate; SiO₂, silicon dioxide; mg/L, milligrams per liter; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than]

Date	Bromide, water, filtered, mg/L (71870)	Carbon dioxide, water, unfiltered, milligrams per liter (00405)	Carbonate, water, filtered, inflection- point titration method, field, mg/L (00452)	Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Hydrogen ion, water, unfiltered, calculated , milligrams per liter (00191)	Silica, water, filtered, mg/L as SiO ₂ (00955)	Sulfate, water, filtered, mg/L (00945)	Iron, water, filtered, μg/L (01046)	Manga- nese, water, filtered, μg/L (01056)
08-12-2009	.06	5.9	< 1	10.2	.16	.00002	11.0	6.04	4	2.0

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO
SEPTEMBER 2009

Part 5 of 5

[CaCO₃, calcium carbonate; SiO₂, silicon dioxide; mg/L, milligrams per liter; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than]

Date	Strontium, water, filtered, μg/L (01080)	Strontium- 87/Strontiu m-86 ratio, water, filtered, per mil (75978)
08-12-2009	220	70,800

0818998070 East Prong Nueces River above Eagle Ranch near Vance, TX—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 1 of 7

[%, percent; CaCO₃, calcium carbonate; SiO₂, silicon dioxide; mg/L, milligrams per liter; mm Hg, millimeters of mercury; per mil, parts per thousand; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than; M, presence verified but not quantified]

Date	Sample start time	Medium name	Sample type	Barometric pressure, mm Hg (00025)	Temperature, air, °C (00020)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	pH, water, unfiltered, field, standard units (00400)	pH, water, unfiltered, laboratory, standard units (00403)	Specific conductance, water, unfiltered, laboratory, μS/cm at 25 °C (90095)
03-23-2010	1620	Surface water	Regular	711	22.8	11.3	138	8.4	8.2	372

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 2 of 7

[%, percent; CaCO₃, calcium carbonate; SiO₂, silicon dioxide; mg/L, milligrams per liter; mm Hg, millimeters of mercury; per mil, parts per thousand; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than; M, presence verified but not quantified]

Date	Specific conductance, water, unfiltered, μS/cm at 25 °C (00095)	Temperature, water, °C (00010)	Sample purpose (71999)	Sampler type (84164)	Sampling method (82398)	Type of quality assurance data associated with sample (99111)	Dissolved solids, water, filtered, dried at 180 °C, water, filtered, mg/L (70300)	Dissolved solids, water, filtered, sum of constituents, milligrams per liter (70301)	Dissolved solids, water, filtered, tons per acre-foot (70303)
03-23-2010	383	21.8	Routine	US DH-81 Teflon	EWI	No assoc QA data	213	212	.29

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 3 of 7

[%, percent; CaCO₃, calcium carbonate; SiO₂, silicon dioxide; mg/L, milligrams per liter; mm Hg, millimeters of mercury; per mil, parts per thousand; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than; M, presence verified but not quantified]

Date	Hardness, water, mg/L as CaCO ₃ (00900)	Calcium, water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)	Sodium adsorption ratio, water, number (00931)	Sodium fraction of cations, percent in equivalents of major cations (00932)	Sodium, water, filtered, mg/L (00930)	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, field, milligrams per liter as calcium carbonate (00418)	Bromide, water, filtered, mg/L (71870)	Carbon dioxide, water, unfiltered, milligrams per liter (00405)
03-23-2010	191	57.0	11.8	.66	.16	5	5.13	184	.06	1.5

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 4 of 7

[%, percent; CaCO₃, calcium carbonate; SiO₂, silicon dioxide; mg/L, milligrams per liter; mm Hg, millimeters of mercury; per mil, parts per thousand; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than; M, presence verified but not quantified]

Date	Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Hydrogen	Silica, water, filtered, mg/L as SiO ₂ (00955)	Sulfate, water, filtered, mg/L (00945)	Aluminum, water, filtered, μg/L (01106)	Barium, water, filtered, μg/L (01005)	Beryllium, water, filtered, μg/L (01010)	Cadmium, water, filtered, μg/L (01025)	Chromium, water, filtered, μg/L (01030)
			ion, water, unfiltered, calculated , milligrams per liter (00191)							
03-23-2010	9.99	.19	M	10.8	6.05	< 3.4	75	< .01	< .02	< .12

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 5 of 7

[%, percent; CaCO₃, calcium carbonate; SiO₂, silicon dioxide; mg/L, milligrams per liter; mm Hg, millimeters of mercury; per mil, parts per thousand; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than; M, presence verified but not quantified]

Date	Cobalt, water, filtered, μg/L (01035)	Copper, water, filtered, μg/L (01040)	Iron, water, filtered, μg/L (01046)	Lead, water, filtered, μg/L (01049)	Lithium, water, filtered, μg/L (01130)	Manga-	Molyb-	Nickel, water, filtered, μg/L (01065)	Silver, water, filtered, μg/L (01075)	Strontium, water, filtered, μg/L (01080)
						nese, water, filtered, μg/L (01056)	denum, water, filtered, μg/L (01060)			
03-23-2010	.43	< 1.0	< 6	< .03	1.9	1.0	.6	.39	< 0.010	192

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 6 of 7

[%, percent; CaCO₃, calcium carbonate; SiO₂, silicon dioxide; mg/L, milligrams per liter; mm Hg, millimeters of mercury; per mil, parts per thousand; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than; M, presence verified but not quantified]

Date	Thallium, water, filtered, μg/L (01057)	Vanadium, water, filtered, μg/L (01085)	Zinc, water, filtered, μg/L (01090)	Antimony, water, filtered, μg/L (01095)	Arsenic, water, filtered, μg/L (01000)	Boron, water, filtered, μg/L (01020)	Selenium, water, filtered, μg/L (01145)	Uranium (natural), water, filtered, μg/L (22703)	Deuterium/	Oxygen-
									Protium ratio, water, unfiltered, per mil (82082)	18/Oxygen- ratio, water, unfiltered, per mil (82085)
03-23-2010	< .02	4.6	< 2.8	.16	.48	31	.41	.63	-29.70	-5.13

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**WATER-QUALITY DATA
WATER YEAR OCTOBER
2009 TO SEPTEMBER
2010**

Part 7 of 7

[%, percent; CaCO₃, calcium carbonate; SiO₂, silicon dioxide; mg/L, milligrams per liter; mm Hg, millimeters of mercury; per mil, parts per thousand; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than; M, presence verified but not quantified]

Date	Strontium-87/Strontium-86 ratio, water, filtered, per mil (75978)
03-23-2010	70,800