



Water-Data Report 2012

305457097353601 Local number AX-58-04-702

Edwards-Trinity aquifer system
Edwards and Associated Limestones

Bell County, TX

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

- CHEMICAL DATA: June 2012.
- BIOCHEMICAL DATA: June 2012.
- RADIOCHEMICAL DATA: June 2012.
- STABLE ISOTOPES DATA: June 2012
- PESTICIDE DATA: June 2012.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**

Part 1 of 18

[%, percent; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft, feet; 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; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Medium name	Sample type	Barometric pressure, mm Hg (00025)	Temperature, air, °C (00020)	Depth to water level, ft below land surface (72019)	Dissolved oxygen, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	pH, water, unfiltered, field, standard units (00400)	pH, water, unfiltered, laboratory, standard units (00403)
06-15-2012	1315	Groundwater	Regular	744	38.6	72.71	7.0	84	7.2	7.4

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 2 of 18

[%, percent; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft, feet; 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; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Specific conductance, water, unfiltered, laboratory, μS/cm at 25°C (90095)	Specific conductance, water, unfiltered, μS/cm at 25°C (00095)	Temperature, water, °C (00010)	Turbidity, water, unfiltered, field, broad band light source (400-680 nm), detectors at multiple angles including 90 +/-30 degrees, ratiometric correction, nephelometric (72188)	Sampling depth, ft (00003)	Dissolved solids, water, filtered, sum of constituents, mg/L (70301)	Dissolved solids, water, filtered, tons per acre-foot (70303)	Hardness, water, mg/L as CaCO ₃ (00900)	Non-carbonate hardness, water, filtered, field, mg/L as CaCO ₃ (00904)
06-15-2012	1315	569	609	23.4	1.1	81.8	325	0.44	313	35

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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[%, percent; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft, feet; 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; E, estimated; M, presence verified but not quantified]

Date	Sample start time	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, water, percent in equivalents 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)
06-15-2012	1315	94.9	18.4	0.33	0.10	3	3.93	278	339

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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[%, percent; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft, feet; 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; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Bromide, water, filtered, mg/L (71870)	Carbon dioxide, water, unfiltered, mg/L (00405)	Carbonate, water, filtered, inflection-point incremental	Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Hydrogen sulfide, water, unfiltered, mg/L (71875)	Silica, water, filtered, mg/L as SiO ₂ (00955)	Sulfate, water, filtered, mg/L (00945)	Ammonia plus organic nitrogen, water, unfiltered, mg/L as N (00625)
				titration method, field, mg/L (00452)						
06-15-2012	1315	0.053	36	< 1.0	5.81	0.15	M	9.37	7.12	0.08

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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[%, percent; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft, feet; 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; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Ammonia, water, filtered, mg/L as NH ₄ (71846)	Ammonia, water, filtered, mg/L as N (00608)	Nitrate plus nitrite, water, filtered, mg/L as N (00631)	Nitrate, water, filtered, mg/L (71851)	Nitrate, water, filtered, mg/L as N (00618)	Nitrite, water, filtered, mg/L (71856)	Nitrite, water, filtered, mg/L as N (00613)	Organic nitrogen, water, unfiltered, mg/L (00605)	Orthophosphate, water, filtered, mg/L (00660)
				mg/L as N (00631)						
06-15-2012	1315	0.018	0.014	4.12	18.2	4.12	< .003	< .001	0.07	0.042

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 6 of 18

[%, percent; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft, feet; 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; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Orthophosphate, water, filtered, mg/L as P (00671)	Phosphorus, water, filtered, mg/L as P (00666)	Phosphorus, water, unfiltered, mg/L as P (00665)	Total nitrogen, water, unfiltered, mg/L (00600)	Aluminum, water, filtered, µg/L (01106)	Barium, water, filtered, µg/L (01005)	Beryllium, water, filtered, µg/L (01010)	Cadmium, water, filtered, µg/L (01025)
					mg/L (00600)				
06-15-2012	1315	0.014	< .01	0.03	4.2	< 2.2	27.4	< .006	< .016

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 7 of 18

[%, percent; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft, feet; 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; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Chromium, water, filtered, µg/L (01030)	Cobalt, water, filtered, µg/L (01035)	Copper, water, filtered, µg/L (01040)	Lead, water, filtered, µg/L (01049)	Lithium, water, filtered, µg/L (01130)	Manganese, water, filtered, µg/L (01056)	Molybdenum, water, filtered, µg/L (01060)	Nickel, water, filtered, µg/L (01065)	Silver, water, filtered, µg/L (01075)
06-15-2012	1315	0.15	0.088	< .80	< .025	2.22	0.56	0.330	0.65	< .005

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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[%, percent; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft, feet; 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; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Strontium, water, filtered, µg/L (01080)	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)	1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (49295)
06-15-2012	1315	153	0.022	3.8	2.1	< .027	0.48	30	0.25	< .0360

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[%, percent; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft, feet; 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; E, estimated; M, presence verified but not quantified]

Date	Sample start time	2,6-Diethyl-aniline, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82660)	2-Chloro-2',6'-diethyl-acetanilide, water, filtered, recoverable, µg/L (61618)	2-Chloro-4-isopropyl-amino-6-triazine, water, filtered, recoverable, µg/L (04040)	2-Ethyl-6-methyl-aniline, water, filtered, recoverable, µg/L (61620)	3,4-Dichloro-aniline, water, filtered, recoverable, µg/L (61625)	3,5-Di-chloro-aniline, water, filtered, recoverable, µg/L (61627)	4-Chloro-2-methyl-phenol, water, filtered, recoverable, µg/L (61633)	Aceto-chlor, water, filtered, recoverable, µg/L (49260)	Alachlor, water, filtered, recoverable, µg/L (46342)
06-15-2012	1315	< .0060	< .010	E .005	< .010	< .0060	< .006	< .0080	< .010	< .008

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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[%, percent; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft, feet; 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; E, estimated; M, presence verified but not quantified]

Date	Sample start time	alpha-Endo-sulfan, water, filtered, recoverable,	Atrazine, water, filtered, recoverable,	Azinphos-methyl oxygen analog, water, filtered, recoverable,	Azinphos-methyl, water, filtered, (0.7 micron glass fiber filter), recoverable,	Benfluralin, water, filtered, (0.7 micron glass fiber filter), recoverable,	Carbaryl, water, filtered, (0.7 micron glass fiber filter), recoverable,	Carbofuran, water, filtered, (0.7 micron glass fiber filter), recoverable,	Chlorpyrifos oxygen analog, water, filtered, recoverable,
		µg/L (34362)	µg/L (39632)	µg/L (61635)	µg/L (82686)	µg/L (82673)	µg/L (82680)	µg/L (82674)	µg/L (61636)
06-15-2012	1315	< .006	< .008	< .042	< .120	< .014	< .060	< .060	< .08

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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[%, percent; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft, feet; 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; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Chlorpyrifos, water, filtered, recoverable,	cis-Permethrin, water, filtered, (0.7 micron glass fiber filter), recoverable,	cis-Propiconazole, water, filtered, recoverable,	Cyanazine, water, filtered, recoverable,	Cyfluthrin, water, filtered, recoverable,	Cypermethrin, water, filtered, recoverable,	DCPA, water, filtered, (0.7 micron glass fiber filter), recoverable,	Desulfinyl-fipronil amide, water, filtered, recoverable,	Desulfinyl-fipronil, water, filtered, recoverable,
		µg/L (38933)	µg/L (82687)	µg/L (79846)	µg/L (04041)	µg/L (61585)	µg/L (61586)	µg/L (82682)	µg/L (62169)	µg/L (62170)
06-15-2012	1315	< .0036	< .010	< .008	< .022	< .016	< .020	< .0076	< .029	< .012

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WATER-QUALITY DATA

WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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[% , percent; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft, feet; 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; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Diazinon, water, filtered, recoverable, µg/L (39572)	Dichlorvos, water, filtered, recoverable, µg/L (38775)	Dicrotophos, water, filtered, recoverable, µg/L (38454)	Dieldrin, water, filtered, recoverable, µg/L (39381)	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82662)	Disulfoton sulfone, water, filtered, recoverable, µg/L (61640)	Disulfoton, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82677)	Endosulfan sulfate, water, filtered, recoverable, µg/L (61590)	EPTC, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82668)
06-15-2012	1315	< .0060	< .04	< .08	< .008	< .0100	< .014	< .040	< .016	< .0056

WATER-QUALITY DATA

WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 13 of 18

[% , percent; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft, feet; 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; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Ethion monoxon, water, filtered, recoverable, µg/L (61644)	Ethion, water, filtered, recoverable, µg/L (82346)	Ethoprop, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82672)	Fenamiphos sulfone, water, filtered, recoverable, µg/L (61645)	Fenamiphos sulfoxide, water, filtered, recoverable, µg/L (61646)	Fenamiphos, water, filtered, recoverable, µg/L (61591)	Fipronil sulfide, water, filtered, recoverable, µg/L (62167)	Fipronil sulfone, water, filtered, recoverable, µg/L (62168)	Fipronil, water, filtered, recoverable, µg/L (62166)
06-15-2012	1315	< .021	< .010	< .016	< .054	< .08	< .030	< .012	< .024	< .018

WATER-QUALITY DATA

WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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[% , percent; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft, feet; 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; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Fonofos, water, filtered, recoverable, µg/L (04095)	Hexazinone, water, filtered, recoverable, µg/L (04025)	Iprodione, water, filtered, recoverable, µg/L (61593)	Isofenphos, water, filtered, recoverable, µg/L (61594)	lambda-Cyhalothrin, water, filtered, recoverable, µg/L (61595)	Malaoxon, water, filtered, recoverable, µg/L (61652)	Malathion, water, filtered, recoverable, µg/L (39532)	Metalaxyl, water, filtered, recoverable, µg/L (61596)	Methidathion, water, filtered, recoverable, µg/L (61598)
06-15-2012	1315	< .0048	< .012	< .014	< .008	< .010	< .022	< .016	< .014	< .012

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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[%, percent; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft, feet; 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; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable,	Metolachlor, water, filtered, recoverable,	Metribuzin, water, filtered, recoverable,	Molinate, water, filtered (0.7 micron glass fiber filter), recoverable,	Myclobutanil, water, filtered, recoverable,	Oxyfluorfen, water, filtered, recoverable,	Pendimethalin, water, filtered (0.7 micron glass fiber filter), recoverable,	Phorate oxygen analog, water, filtered, recoverable,	
		µg/L (61664)	µg/L (82667)	µg/L (39415)	µg/L (82630)	µg/L (82671)	µg/L (61599)	µg/L (61600)	µg/L (82683)	µg/L (61666)
06-15-2012	1315	< .014	< .008	0.005	< .012	< .0040	< .010	< .010	< .012	< .027

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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[%, percent; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft, feet; 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; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Phorate, water, filtered (0.7 micron glass fiber filter), recoverable,	Phosmet oxygen analog, water, filtered, recoverable,	Phosmet, water, filtered, recoverable,	Prometon, water, filtered, recoverable,	Prometryn, water, filtered, recoverable,	Propanil, water, filtered (0.7 micron glass fiber filter), recoverable,	Propargite, water, filtered (0.7 micron glass fiber filter), recoverable,	Propyzamide, water, filtered (0.7 micron glass fiber filter), recoverable,	Simazine, water, filtered, recoverable,
		µg/L (82664)	µg/L (61668)	µg/L (61601)	µg/L (04037)	µg/L (04036)	µg/L (82679)	µg/L (82685)	µg/L (82676)	µg/L (04035)
06-15-2012	1315	< .020	< .0511	< .080	< .012	< .010	< .010	< .020	< .0036	< .006

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WATER-QUALITY DATA
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[%, percent; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft, feet; 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; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Tebu-thiuron, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82670)	Tefluthrin, water, filtered, recoverable, µg/L (61606)	Terbufos oxygen analog sulfone, water, filtered, recoverable, µg/L (61674)	Terbufos, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82675)	Terbuthyl-azine, water, filtered, recoverable, µg/L (04022)	Thioben-carb, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82681)	trans-Propicon-azole, water, filtered, recoverable, µg/L (79847)	Tribuphos, water, filtered, recoverable, µg/L (61610)	Trifluralin, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82661)
06-15-2012	1315	< .028	< .014	< .045	< .018	< .008	< .016	< .018	< .018	< .018

WATER-QUALITY DATA
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[%, percent; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft, feet; 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; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Uranium (natural), water, filtered, µg/L (22703)	Nitrogen-15/-Nitrogen-14 ratio in nitrate fraction, water, filtered, per mil (82690)	Oxygen-18/Oxygen-16 ratio in nitrate fraction, water, filtered, per mil (63041)	Oxygen-18/Oxygen-16 ratio, water, unfiltered, per mil (82085)	Deuterium/Protium ratio, water, unfiltered, per mil (82082)	Strontium-87/Strontium-86 ratio, water, filtered, per mil (75978)
06-15-2012	1315	1.01	3.34	4.69	-4.33	-25.40	0.70785