



Water-Data Report 2012

305639097320601 AX-58-04-614

Little Basin  
Lampasas Subbasin

LOCATION.--Lat 30°56'38", long 97°32'01" referenced to North American Datum of 1983, Bell County, TX, Hydrologic Unit 12070203.

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--

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

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

Part 1 of 18

[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, 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; E, estimated; U, analyzed for but not detected]

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)
05-16-2012	1230	Groundwater	Regular	750	29.4	5.7	65	7.2	7.5	576

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

Part 2 of 18

[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, 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; E, estimated; U, analyzed for but not detected]

Date	Sample start time	Specific conductance, water, unfiltered, µS/cm at 25°C (00095)	Temperature, water, °C (00010)	Dissolved solids, filtered, sum of constituents, mg/L (70301)	Dissolved solids, filtered, tons per acre-foot (70303)	Hardness, water, mg/L as CaCO <sub>3</sub> (00900)	Non-carbonate hardness, water, filtered, mg/L as CaCO <sub>3</sub> (00904)	Calcium, water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)
05-16-2012	1230	580	20.7	340	0.46	301	46	95.7	14.9	1.14

305639097320601 AX-58-04-614—Continued

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

Part 3 of 18

[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, 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; E, estimated; U, analyzed for but not detected]

Date	Sample start time	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 <sub>3</sub> (39086)	Bicarbonate, water, filtered, inflection-point, incremental titration method, field, mg/L (00453)	Bromide, water, filtered, mg/L (71870)	Carbon dioxide, water, unfiltered, mg/L (00405)	Carbonate, water, filtered, inflection-point incremental titration method, field, mg/L (00452)
					Silica, water, filtered, mg/L as SiO <sub>2</sub> (00955)	Sulfate, water, filtered, mg/L (00945)			Ammonia, plus organic nitrogen, water, unfiltered, mg/L as N (00625)
05-16-2012	1230	0.32	8	12.6	254	310	0.109	33	< 1.0

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

Part 4 of 18

[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, 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; E, estimated; U, analyzed for but not detected]

Date	Sample start time	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 <sub>2</sub> (00955)	Sulfate, water, filtered, mg/L (00945)	Ammonia plus organic nitrogen, water, unfiltered, mg/L as N (00625)	Ammonia, water, filtered, mg/L as NH <sub>4</sub> (71846)	Ammonia, water, filtered, mg/L as N (00608)	Nitrate plus nitrite, water, filtered, mg/L as N (00631)
							Organic nitrogen, water, unfiltered, mg/L (00605)	Orthophosphate, water, filtered, mg/L (00660)	Orthophosphate, water, filtered, mg/L as P (00671)	Phosphorus, water, filtered, mg/L as P (00666)
05-16-2012	1230	14.9	0.31	U	10.1	18.0	< .07	< .013	< .010	4.35

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

Part 5 of 18

[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, 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; E, estimated; U, analyzed for but not detected]

Date	Sample start time	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)	Orthophosphate, water, filtered, mg/L as P (00671)	Phosphorus, water, filtered, mg/L as P (00666)
05-16-2012	1230	19.3	4.35	< .003	< .001	< .07	0.027	0.009	0.01

305639097320601 AX-58-04-614—Continued

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

Part 6 of 18

[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, 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; E, estimated; U, analyzed for but not detected]

Date	Sample start time	Total								
		Phosphorus, water, unfiltered, mg/L as P (00665)	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)	Chromium, water, filtered, µg/L (01030)	Cobalt, water, filtered, µg/L (01035)	Copper, water, filtered, µg/L (01040)
05-16-2012	1230	< .01	< 4.4	< 2.2	46.3	< .006	< .016	0.10	0.082	< .80

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

Part 7 of 18

[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, 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; E, estimated; U, analyzed for but not detected]

Date	Sample start time	Lead, water, filtered, µg/L (01049)	Lithium, water, filtered, µg/L (01130)	Manga-nese, water, filtered, µg/L (01056)	Molyb-denum, water, filtered, µg/L (01060)	Nickel, water, filtered, µg/L (01065)	Silver, water, filtered, µg/L (01075)	Strontium, water, filtered, µg/L (01080)	Thallium, water, filtered, µg/L (01057)	Vanadium, water, filtered, µg/L (01085)
		05-16-2012	1230	< .025	4.13	< .13	0.701	0.70	< .005	234

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

Part 8 of 18

[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, 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; E, estimated; U, analyzed for but not detected]

Date	Sample start time	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)	2,6-Diethyl-aniline, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82660)	2-Chloro-2',6'-diethyl-acetanil-ide, water, filtered, recoverable, µg/L (61618)	2-Chloro-4-isopropyl-amino-6-amino-s-triazine, water, filtered, recoverable, µg/L (04040)
		05-16-2012	1230	< 1.4	< .027	0.36	65	0.57	< .0360	< .0060

305639097320601 AX-58-04-614—Continued

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

Part 9 of 18

[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, 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; E, estimated; U, analyzed for but not detected]

Date	Sample start time	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)	alpha-Endo-sulfan, water, filtered, recoverable, µg/L (34362)	Atrazine, water, filtered, recoverable, µg/L (39632)	Azinphos-methyl oxygen analog, water, filtered, recoverable, µg/L (61635)
05-16-2012	1230	< .010	< .0060	< .006	< .0080	< .010	< .008	< .006	0.011	< .042

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

Part 10 of 18

[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, 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; E, estimated; U, analyzed for but not detected]

Date	Sample start time	Azinphos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82686)	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82673)	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82680)	Carbofuran, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82674)	Chlorpyrifos oxygen analog, water, filtered, recoverable, µg/L (61636)	Chlorpyrifos, water, filtered, recoverable, µg/L (38933)	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82687)	cis-Propiconazole, water, filtered, recoverable, µg/L (79846)
05-16-2012	1230	< .120	< .014	< .060	< .060	< .08	< .0036	< .010	< .008

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

Part 11 of 18

[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, 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; E, estimated; U, analyzed for but not detected]

Date	Sample start time	Cyanazine, water, filtered, recoverable, µg/L (04041)	Cyfluthrin, water, filtered, recoverable, µg/L (61585)	Cyper-methrin, water, filtered, recoverable, µg/L (61586)	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82682)	Desulfinyl-fipronil, water, filtered, recoverable, µg/L (62169)	Desulfinyl-fipronil, water, filtered, recoverable, µg/L (62170)	Diazinon, water, filtered, recoverable, µg/L (39572)	Dichlorvos, water, filtered, recoverable, µg/L (38775)	Dicrotophos, water, filtered, recoverable, µg/L (38454)
05-16-2012	1230	< .022	< .016	< .020	< .0076	< .029	< .012	< .0060	< .04	< .08

305639097320601 AX-58-04-614—Continued

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

Part 12 of 18

[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, 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; E, estimated; U, analyzed for but not detected]

Date	Sample start time	Dieldrin,	Dimetho-	Disulfoton,	Disulfoton,	Endosulfan	EPTC,	Ethion	Ethion,	Ethoprop,
		water, filtered, recoverable, µg/L (39381)	ate, water, filtered, recoverable, µg/L (82662)	sulfone, water, filtered, recoverable, µg/L (61640)	water, filtered, recoverable, µg/L (82677)	sulfate, water, filtered, recoverable, µg/L (61590)	water, filtered, recoverable, µg/L (82668)	monoxon, water, filtered, recoverable, µg/L (61644)	water, filtered, recoverable, µg/L (82346)	water, filtered, recoverable, µg/L (82672)
05-16-2012	1230	< .008	< .0100	< .014	< .040	< .016	< .0056	< .021	< .010	< .016

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

Part 13 of 18

[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, 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; E, estimated; U, analyzed for but not detected]

Date	Sample start time	Fenami-	Fenami-	Fenami-	Fipronil	Fipronil	Fipronil,	Fonofos,	Hexa-	lprodione,
		phos sulfone, water, filtered, recoverable, µg/L (61645)	phos sulfoxide, water, filtered, recoverable, µg/L (61646)	phos, water, filtered, recoverable, µg/L (61591)	sulfide, water, filtered, recoverable, µg/L (62167)	sulfone, water, filtered, recoverable, µg/L (62168)	water, filtered, recoverable, µg/L (62166)	water, filtered, recoverable, µg/L (04095)	zinone, water, filtered, recoverable, µg/L (04025)	water, filtered, recoverable, µg/L (61593)
05-16-2012	1230	< .054	< .08	< .030	< .012	< .024	< .018	< .0048	< .012	< .014

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

Part 14 of 18

[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, 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; E, estimated; U, analyzed for but not detected]

Date	Sample start time	Isofen-	lambda-	Malaoxon,	Malathion,	Metalaxyl,	Methida-	Methyl	Methyl	Methyl	Metola-
		phos, water, filtered, recoverable, µg/L (61594)	Cyhalo-thrin, water, filtered, recoverable, µg/L (61595)	water, filtered, recoverable, µg/L (61652)	water, filtered, recoverable, µg/L (39532)	water, filtered, recoverable, µg/L (61596)	thion, water, filtered, recoverable, µg/L (61598)	paraoxon, water, filtered, recoverable, µg/L (61664)	parathion, water, filtered, recoverable, µg/L (82667)	chlor, water, filtered, recoverable, µg/L (39415)	
05-16-2012	1230	< .008	< .010	< .022	< .016	< .014	< .012	< .014	< .008	< .020	

305639097320601 AX-58-04-614—Continued

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

Part 15 of 18

[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, 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; E, estimated; U, analyzed for but not detected]

Date	Sample start time	Metribuzin,	Molinate,	Myclobutanil,	Oxyfluorfen,	Pendimethalin,	Phorate oxygen analog,	Phorate,	Phosmet oxygen analog,	Phosmet,
		water, filtered, recoverable, µg/L (82630)	water, (0.7 micron glass fiber filter), recoverable, µg/L (82671)	water, filtered, recoverable, µg/L (61599)	water, filtered, recoverable, µg/L (61600)	water, (0.7 micron glass fiber filter), recoverable, µg/L (82683)	water, filtered, recoverable, µg/L (61666)	water, (0.7 micron glass fiber filter), recoverable, µg/L (82664)	water, filtered, recoverable, µg/L (61668)	water, filtered, recoverable, µg/L (61601)
05-16-2012	1230	< .012	< .0040	< .010	< .010	< .012	< .027	< .020	< .0511	< .080

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

Part 16 of 18

[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, 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; E, estimated; U, analyzed for but not detected]

Date	Sample start time	Prometon,	Prometryn,	Propanil,	Propargite,	Propyzamide,	Simazine,	Tebu-thiuron,	Tefluthrin,	Terbufos oxygen sulfone,
		water, filtered, recoverable, µg/L (04037)	water, filtered, recoverable, µg/L (04036)	water, (0.7 micron glass fiber filter), recoverable, µg/L (82679)	water, (0.7 micron glass fiber filter), recoverable, µg/L (82685)	water, (0.7 micron glass fiber filter), recoverable, µg/L (82676)	water, filtered, recoverable, µg/L (04035)	water, (0.7 micron glass fiber filter), recoverable, µg/L (82670)	water, filtered, recoverable, µg/L (61606)	water, filtered, recoverable, µg/L (61674)
05-16-2012	1230	< .012	< .010	< .010	< .020	< .0036	< .006	< .028	< .014	< .045

305639097320601 AX-58-04-614—Continued

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

Part 17 of 18

[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, 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; E, estimated; U, analyzed for but not detected]

Date	Sample start time	Terbufos,	Terbuthyl-	Thioben-	trans-	Tribuphos,	Trifluralin,	Uranium	Nitrogen-	Oxygen-
		water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82675)	azine, water, filtered, recover- able, µg/L (04022)	carb, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82681)	Propicon- azole, water, filtered, recover- able, µg/L (79847)	azole, water, filtered, recover- able, µg/L (61610)	water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82661)	(natural), water, filtered, µg/L (22703)	15- Nitrogen- 14 ratio in nitrate water, filtered, per mil (82690)	18/Oxygen- 16 ratio in nitrate water, filtered, per mil (63041)
05-16-2012	1230	< .018	< .008	< .016	< .018	< .018	< .018	0.821	6.01	5.66

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

Part 18 of 18

[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, 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; E, estimated; U, analyzed for but not detected]

Date	Sample start time	Oxygen-	Deuterium/	Strontium-
		18/Oxygen- 16 ratio, water, unfiltered, per mil (82085)	Protium ratio, water, unfiltered, per mil (82082)	87/Strontiu m-86 ratio, water, filtered, per mil (75978)
05-16-2012	1230	-4.30	-23.80	0.70865