



Water-Data Report 2012

305640097323001 AX-58-04-515

Little Basin  
Lampasas Subbasin

LOCATION.--Lat 30°56'40", long 97°32'30" 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)	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)	Specific conductance, water, unfiltered, laboratory, µS/cm at 25°C (00095)
05-18-2012	0900	Groundwater	Regular	745	5.5	63	7.1	7.5	571	569

**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	Temperature, water, °C (00010)	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 <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)	Sodium adsorption ratio, water, number (00931)
05-18-2012	0900	20.7	333	0.45	297	50	94.1	15.1	1.20	0.26

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**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 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)	Chloride, water, filtered, mg/L (00940)
05-18-2012	0900	7	10.3	248	302	0.107	39	< 1.0	13.5

**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	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)	Nitrate, water, filtered, mg/L (71851)
05-18-2012	0900	0.24	U	10.6	17.6	< .07	< .013	< .010	4.81	21.3

**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 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)	Phosphorus, water, unfiltered, mg/L as P (00665)
05-18-2012	0900	4.81	< .003	< .001	< .07	0.025	0.008	< .01	0.01

**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 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)	Lead, water, filtered, µg/L (01049)
05-18-2012	0900	< 4.9	< 2.2	45.9	< .006	< .016	0.16	0.085	< .80	< .025

**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	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)	Strontium, water, filtered, µg/L (01080)	Thallium, water, filtered, µg/L (01057)	Vanadium, water, filtered, µg/L (01085)	Zinc, water, filtered, µg/L (01090)
05-18-2012	0900	4.24	0.33	0.596	0.60	< .005	231	0.194	2.3	< 1.4

**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	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-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)
05-18-2012	0900	0.033	0.37	59	0.63	< .0360	< .0060	< .010	E .012	< .010

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**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	3,4-Dichloro-aniline, water, filtered, recoverable,	3,5-Di-chloro-aniline, water, filtered, recoverable,	4-Chloro-2-methyl-phenol, water, filtered, recoverable,	Aceto-chlor, water, filtered, recoverable,	Alachlor, water, filtered, recoverable,	alpha-Endo-sulfan, water, filtered, recoverable,	Atrazine, water, filtered, recoverable,	Azinphos-methyl oxygen analog, water, filtered, recoverable,	Azinphos-methyl, water, filtered, recoverable,
		(61625) µg/L	(61627) µg/L	(61633) µg/L	(49260) µg/L	(46342) µg/L	(34362) µg/L	(39632) µg/L	(61635) µg/L	(82686) µg/L
05-18-2012	0900	< .0060	< .006	< .0080	< .010	< .008	< .006	< .008	< .042	< .120

**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	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,	Chlorpyrifos, water, filtered, recoverable,	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable,	cis-Propiconazole, water, filtered, recoverable,	Cyanazine, water, filtered, recoverable,
		(82673) µg/L	(82680) µg/L	(82674) µg/L	(61636) µg/L	(38933) µg/L	(82687) µg/L	(79846) µg/L	(04041) µg/L
05-18-2012	0900	< .014	< .060	< .060	< .08	< .0036	< .010	< .008	< .022

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**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	Cyfluthrin, water, filtered, recoverable, µg/L (61585)	Cypermethrin, water, filtered, recoverable, µg/L (61586)	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82682)	Desulfinyl-fipronil amide, 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)	Dieldrin, water, filtered, recoverable, µg/L (39381)
05-18-2012	0900	< .016	< .020	< .0076	< .029	< .012	< .0060	< .04	< .08	< .008

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

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[%, 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	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)	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)
05-18-2012	0900	< .0100	< .014	< .040	< .016	< .0056	< .021	< .010	< .016	< .054

**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	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)	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)
05-18-2012	0900	< .08	< .030	< .012	< .024	< .018	< .0048	< .012	< .014	< .008

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**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	lambda-Cyhalothrin,	Malaoxon,	Malathion,	Metalaxyl,	Methodathion,	Methyl paraoxon,	Methyl parathion,	Metolachlor,	Metribuzin,
		water, filtered, recoverable, µg/L (61595)	water, filtered, recoverable, µg/L (61652)	water, filtered, recoverable, µg/L (39532)	water, filtered, recoverable, µg/L (61596)	water, filtered, recoverable, µg/L (61598)	water, filtered, recoverable, µg/L (61664)	water, filtered, recoverable, µg/L (82667)	water, filtered, recoverable, µg/L (39415)	water, filtered, recoverable, µg/L (82630)
05-18-2012	0900	< .010	< .022	< .016	< .014	< .012	< .014	< .008	< .020	< .012

**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	Molinate,	Myclobutanil,	Oxyfluorfen,	Pendimethalin,	Phorate oxygen analog,	Phorate,	Phosmet oxygen analog,	Phosmet,	Prometon,
		water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82671)	water, filtered, recoverable, µg/L (61599)	water, filtered, recoverable, µg/L (61600)	water, filtered, recoverable, µg/L (82683)	water, filtered, recoverable, µg/L (61666)	water, filtered, recoverable, µg/L (82664)	water, filtered, recoverable, µg/L (61668)	water, filtered, recoverable, µg/L (61601)	water, filtered, recoverable, µg/L (04037)
05-18-2012	0900	< .0040	< .010	< .010	< .012	< .027	< .020	< .0511	< .080	< .012

305640097323001 AX-58-04-515—Continued

**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	Prometryn, water, filtered, recoverable, µg/L (04036)	Propanil, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82679)	Propargite, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82685)	Propyz-amide, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82676)	Simazine, water, filtered, recoverable, µg/L (04035)	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)
05-18-2012	0900	< .010	< .010	< .020	< .0036	< .006	< .028	< .014	< .045	< .018

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

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[%, 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	Terbutyl-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)	Uranium (natural), water, filtered, µg/L (22703)	Nitrogen-15/-Nitrogen-14 ratio in nitrate fraction, filtered, per mil (82690)	Oxygen-18/Oxygen-16 ratio in nitrate fraction, filtered, per mil (63041)	Oxygen-18/Oxygen-16 ratio, water, unfiltered, per mil (82085)
05-18-2012	0900	< .008	< .016	< .018	< .018	< .018	0.855	5.86	5.57	-4.31

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**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]

<b>Date</b>	<b>Sample start time</b>	<b>Deuterium/Protium ratio, water, unfiltered, per mil (82082)</b>	<b>Strontium-87/Strontium-86 ratio, water, filtered, per mil (75978)</b>
05-18-2012	0900	-26.40	0.70862