



Water-Data Report NE-2005

**4204040975003 ELKHORN RIVER AT TILDEN, NE**

PLATTE RIVER BASIN

LOCATION.--Lat 42°04'04", long 97°50'03", in NW ¼ SW ¼ sec.7, T.24 N., R.4 W., Madison County, Hydrologic Unit 10220001, at north-south county road bridge, 1.4 mi north of Tilden, 0.1 mi upstream from Al Hopkins Creek, and 0.2 mi downstream from Giles Creek.

DRAINAGE AREA.--Unknown

**WATER-DISCHARGE AND HYDRAULIC HEAD DIFFERENCE RECORDS**

REMARKS.--Measurements of streamflow discharge during base flow, and concurrent differences in hydraulic head between stream and alluvial aquifer as measured by potentiomanometer. Hydraulic heads are for specified locations in channel cross section and are from static water level in stream and ground-water level in temporary piezometer set at specified depth below stream bed. Differences computed as stream head minus aquifer head, with negative numbers indicating discharge from aquifer to stream and positive numbers indicating the reverse.

**DISCHARGE MEASUREMENTS  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005**

Date	Discharge, in ft <sup>3</sup> /s	Gage height, in ft
May 10, 2005	431	---
Jul 19, 2005	194	---
Sep 20, 2005	222	---

**HYDRAULIC HEAD DIFFERENCES BETWEEN STREAM AND ALLUVIAL AQUIFER  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005**

[lew, left edge of water; rew, right edge of water; negative head differences indicate ground water discharging into stream]

Date	Station location		Cross-section stationing, in feet	Remarks	Piezometer depth below stream bed, in meters	Hydraulic head differences, in millimeters
	Latitude	Longitude				
May 10, 2005			186	lew	---	---
			165		0.6	-2
			140		0.6	-4
			115		0.6	-4
			95		0.6	0
			60		0.6	-22
			40		0.6	-45
			0		---	---
Jul 19, 2005			119	lew	---	---
			110		0.3	-4
			90		0.5	88
			75		0.5	72
			65		0.6	-40
			50		0.5	-11
			25		0.6	-2
			0		---	---
Sep 20, 2005	42°04'04.9"	97°50'02.9"	134	lew	---	---
			120		0.6	-58
			105		0.6	-22
			85		0.6	-5
			60		0.4	30
			45		0.6	94
			25		0.6	0
			0		---	---
					rew	---