



Water-Data Report NE-2005

06798000 SOUTH FORK ELKHORN RIVER AT EWING, NEBR.

PLATTE RIVER BASIN

LOCATION.--Lat 42°14'29", long 98°23'54", in SE ¼ NE ¼ sec.7, T.26 N., R.9 W., Holt County, Hydrologic Unit 10220001, on right bank 7 feet downstream and 80 feet landward from bridge on county highway, 3.1 mi southwest of U.S. highway 275 bridge at Ewing, and 5.5 mi upstream from mouth.

DRAINAGE AREA.--314 mi², approximately, of which about 190 mi² contributes directly to surface runoff

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 ³ /s	Gage height, in ft
May 9, 2005	51.3	---
Jul 18, 2005	29.0	---
Sep 19, 2005	29.0	---

**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 9, 2005			43	lew	---	---
			40		0.6	141
			34		0.6	143
			28		0.6	-18
			22		0.6	130
			16		0.6	-9
			8		0.6	10
			0		---	---
Jul 18, 2005	42°14'31.2"	98°23'55.5"	51	lew	---	---
			45		0.6	5
			35		0.5	-1
			25		0.6	-5
			20		0.6	-5
			15		0.6	-26
			5		0.4	-12
			0		---	---
Sep 19, 2005	42°14'30.8"	98°23'56.1"	52	lew	---	---
			48		0.5	-140
			38		0.5	-3
			30		0.6	-3
			20		0.6	-39
			10		0.6	-201
			0		---	---
			0		rew	---