



Water-Data Report 2006

384709118270401 Local number 122 N11 E31 35ABDC1

Other aquifers
 Undefined Aquifer
 Mineral County, NV

LOCATION.--Lat 38°47'09.2", long 118°27'04.5" referenced to North American Datum of 1983, in SE ¼ NW ¼ NE ¼ sec.35, T.11 N., R.31 E., Mineral County, NV, Hydrologic Unit 16050303.

WATER-QUALITY RECORDS

REMARKS.--Walker Lake is a perennial, natural terminal lake that became at-risk because of upstream agricultural diversions. Between 1882 and 1994, upstream diversions caused Walker Lake to decline about 140 feet and the total dissolved solids (TDS) concentrations to increase from 2,500 mg/L to 13,300 mg/L. The Lahontan cutthroat trout (LCT), a threatened species that is native to Walker Lake, has adapted to the high TDS of terminal basins. However, diversions have lowered lake levels and increased TDS to concentrations that threaten the survival of the LCT. The objectives of this project are to develop (1) an improved water budget for Walker Lake and (2) the capability to predict how changes in irrigation practices in and below Mason Valley will affect flows in the lower Walker River so alternatives for supplementing flows can be evaluated.

**WATER-QUALITY DATA
 WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005**

Part 1 of 3
 [Remark codes: <, less than; E, estimated.]

Date	Time	Sample type	Depth of well, feet below LSD (72008)	Flow rate, instantaneous gal/min (00059)	pH, water, unfltrd std units (00400)	Specif. conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit, mg/L as CaCO3 (39086)
Apr 08...	1045	Environmental	310.	4.0	7.3	744	18.5	34.3	4.38	3.49	112	160

**WATER-QUALITY DATA
 WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005**

Part 2 of 3
 [Remark codes: <, less than; E, estimated.]

Date	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Bromide water, fltrd, mg/L (71870)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC, wat flt mg/L (70300)	Boron, water, fltrd, ug/L (01020)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Strontium, water, fltrd, ug/L (01080)	Deuterium/Protium ratio, water, unfltrd per mil (82082)	Sr-87/Sr-86 ratio, water, fltrd, per mil (75978)
Apr 08...	195	.15	42.7	.74	47.8	142	457	740	<6	E.6	480	-120	.70575

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Part 3 of 3

[Remark codes: <, less than; E, estimated.]

Date	U-234, water, fltrd, pCi/L (22610)	U-235, water, fltrd, pCi/L (22620)	U-238, water, fltrd, pCi/L (22603)	B11/B10 ratio, water, fltrd, per mil (62648)	O-18 / O-16 ratio, water, unfltrd per mil (82085)	S34/S32 in sulfate water, fltrd, per mil (49932)
Apr 08...	10.1	.23	4.09	4.06	-14.73	3.59