

12433556 MIDNITE MINE DRAINAGE NEAR WELLPINIT, WA

LOCATION.--Lat 47°55'27", long 118°05'20", in NW 1/4 SE 1/4 sec.13, T.28 N., R.37 E., Stevens County, Hydrologic Unit 17010307, Spokane Indian Reservation, on right bank, 2.4 mi downstream from Turtle Lake, and 0.1 mi upstream from confluence with Blue Creek, and 5.4 mi northwest of Wellpinit.

DRAINAGE AREA.--1.3 mi².

PERIOD OF RECORD.--June 1984 to October 1998, January 2000 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,070 ft above NGVD of 1929, from topographic map.

REMARKS.--Records poor. Three ponds upstream from gage exist for mine surface-water retention; June 1987, three diversions from the upstream channels were added to retain and treat contaminated water for mixing and later release. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--16 years (water years 1985-98, 2001-02), 0.39 ft³/s, 285 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5.9 ft³/s Mar. 19, 1997, gage height, 1.78 ft; no flow during part of water years 1986 to 1992 and 2001.

EXTREMES FOR CURRENT YEAR.--Maximum discharge .96 ft³/s Apr. 16, gage height 1.31 ft; minimum discharge, .03 ft³/s Oct. 1-3, 16 and 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.04	0.11	0.07	e0.10	e0.18	e0.28	0.33	0.74	0.30	0.25	0.79	0.09
2	0.04	0.10	0.07	e0.10	e0.18	e0.28	0.33	0.76	0.18	0.54	0.67	0.07
3	0.04	0.10	0.06	e0.12	e0.18	e0.29	0.30	0.68	0.27	0.71	0.30	0.17
4	0.05	0.10	0.06	e0.12	e0.18	e0.30	0.29	0.29	0.59	0.57	0.13	0.47
5	0.05	0.10	0.07	e0.13	e0.18	e0.32	0.28	0.19	0.76	0.25	0.26	0.61
6	0.05	0.10	0.06	0.15	e0.20	e0.29	0.25	0.28	0.76	0.15	0.63	0.53
7	0.06	0.08	0.06	0.26	e0.20	e0.26	0.23	0.59	0.65	0.14	0.80	0.24
8	0.05	0.08	0.06	0.37	e0.20	e0.27	0.21	0.72	0.31	0.30	0.77	0.08
9	0.05	0.08	0.06	0.38	e0.20	e0.30	0.21	0.80	0.18	0.64	0.63	0.17
10	0.05	0.08	0.06	0.27	e0.20	e0.34	0.21	0.68	0.28	0.79	0.29	0.47
11	0.06	0.08	0.06	0.23	e0.19	e0.36	0.19	0.29	0.59	0.78	0.11	0.61
12	0.06	0.08	0.06	0.22	e0.18	e0.34	0.20	0.17	0.76	0.67	0.22	0.62
13	0.06	0.09	0.12	0.19	e0.18	e0.33	0.20	0.27	0.74	0.30	0.57	0.53
14	0.05	0.12	0.13	0.19	e0.18	0.33	0.26	0.60	0.61	0.13	0.74	0.24
15	0.04	0.10	0.09	e0.17	e0.20	0.32	0.31	0.75	0.29	0.25	0.72	0.08
16	0.04	0.11	0.08	e0.16	e0.20	0.30	0.85	0.76	0.15	0.57	0.61	0.15
17	0.05	0.13	0.09	e0.14	e0.22	0.30	0.92	0.67	0.25	0.76	0.27	0.42
18	0.06	0.07	0.08	e0.15	e0.22	0.30	0.86	0.29	0.55	0.79	0.10	0.57
19	0.06	0.07	0.10	e0.16	e0.22	0.30	0.72	0.18	0.67	0.67	0.21	0.60
20	0.06	0.07	e0.08	e0.20	e0.20	0.28	0.29	0.27	0.70	0.30	0.54	0.49
21	0.08	0.07	e0.08	e0.18	0.18	0.27	0.19	0.58	0.59	0.13	0.69	0.22
22	0.08	0.10	e0.08	e0.16	0.30	0.26	0.28	0.79	0.28	0.25	0.67	0.07
23	0.08	0.07	e0.07	e0.16	0.34	0.25	0.52	0.76	0.15	0.62	0.57	0.14
24	0.08	0.05	e0.07	e0.18	e0.30	0.24	0.76	0.69	0.24	0.79	0.26	0.40
25	0.12	0.06	e0.07	e0.20	e0.25	0.26	0.86	0.33	0.52	0.80	0.10	0.55
26	0.11	0.06	e0.08	e0.18	e0.26	0.30	0.72	0.19	0.65	0.67	0.19	0.58
27	0.11	0.05	e0.08	e0.18	e0.26	0.34	0.29	0.18	0.66	0.30	0.50	0.51
28	0.13	0.05	e0.09	e0.18	e0.28	0.37	0.19	0.23	0.59	0.13	0.65	0.25
29	0.16	0.06	e0.10	e0.16	---	0.39	0.30	0.55	0.31	0.26	0.66	0.08
30	0.18	0.05	e0.10	e0.17	---	0.39	0.60	0.74	0.15	0.63	0.56	0.15
31	0.13	---	e0.10	e0.18	---	0.37	---	0.65	---	0.78	0.26	---
TOTAL	2.28	2.47	2.44	5.74	6.06	9.53	12.15	15.67	13.73	14.92	14.47	10.16
MEAN	0.074	0.082	0.079	0.185	0.216	0.307	0.405	0.505	0.458	0.481	0.467	0.339
MAX	0.18	0.13	0.13	0.38	0.34	0.39	0.92	0.80	0.76	0.80	0.80	0.62
MIN	0.04	0.05	0.06	0.10	0.18	0.24	0.19	0.17	0.15	0.13	0.10	0.07
AC-FT	4.5	4.9	4.8	11	12	19	24	31	27	30	29	20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2002, BY WATER YEAR (WY)

MEAN	0.435	0.380	0.172	0.183	0.244	0.567	0.549	0.550	0.498	0.421	0.394	0.407
MAX	1.27	1.11	0.51	0.73	0.65	1.69	1.31	1.29	1.12	1.05	1.06	1.11
(WY)	1997	1996	1996	1997	1997	1997	1995	1995	1996	1996	1996	1997
MIN	0.051	0.076	0.068	0.075	0.088	0.13	0.098	0.064	0.046	0.026	0.008	0.019
(WY)	1992	1991	1993	1989	1993	1992	1992	1992	1992	1988	1992	2001

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1984 - 2002
ANNUAL TOTAL	94.63	109.62	
ANNUAL MEAN	0.259	0.300	0.394
HIGHEST ANNUAL MEAN			1.00
LOWEST ANNUAL MEAN			0.076
HIGHEST DAILY MEAN	0.90	Apr 28	0.92
LOWEST DAILY MEAN	0.00	Aug 7	0.04
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 7	0.05
ANNUAL RUNOFF (AC-FT)	188	217	285
10 PERCENT EXCEEDS	0.84	0.68	1.1
50 PERCENT EXCEEDS	0.10	0.23	0.17
90 PERCENT EXCEEDS	0.01	0.07	0.05

e Estimated