

## 12433556 MIDNITE MINE DRAINAGE NEAR WELLPINIT, WA

LOCATION.--Lat 47°55'27", long 118°05'20", in NW $\frac{1}{4}$ SE $\frac{1}{4}$ , 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 mi<sup>2</sup>.

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.--18 years (water years 1985-98, 2001-04), 0.38 ft<sup>3</sup>/s, 279 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5.9 ft<sup>3</sup>/s, Mar. 19, 1997, gage height, 1.78 ft; no flow during part of water years 1986 to 1992, 2001, and 2004.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1.2 ft<sup>3</sup>/s, May 13, June 26, gage height, 1.34 ft; minimum discharge, no flow Sept. 7.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.04	0.11	0.05	e0.06	e0.12	0.13	0.07	0.38	0.19	0.77	0.06	0.22
2	0.04	0.13	0.05	e0.06	e0.11	0.11	0.07	0.10	0.50	0.58	0.12	0.06
3	0.04	0.12	0.05	e0.05	e0.10	0.10	0.07	0.19	0.70	0.28	0.38	0.05
4	0.04	e0.11	0.05	e0.04	e0.10	0.10	0.08	0.55	0.67	0.11	0.58	0.04
5	0.04	e0.11	0.09	e0.04	e0.09	0.08	0.08	0.79	0.36	0.07	0.67	0.03
6	0.04	e0.11	0.07	e0.06	e0.10	0.08	0.08	0.86	0.11	0.16	0.59	0.03
7	0.05	e0.11	e0.06	e0.07	e0.10	0.08	0.07	0.75	0.19	0.37	0.28	0.02
8	0.05	e0.13	e0.06	e0.07	e0.10	0.09	0.07	0.39	0.47	0.53	0.10	0.03
9	0.05	e0.12	e0.06	e0.07	e0.10	0.10	0.07	0.12	0.71	0.51	0.15	0.03
10	0.05	e0.12	0.05	e0.07	e0.10	0.09	0.07	0.21	0.81	0.26	0.37	0.03
11	0.08	e0.12	0.05	e0.07	e0.09	0.08	0.07	0.58	0.69	0.09	0.59	0.06
12	0.10	e0.10	0.05	e0.07	e0.08	0.08	0.19	0.83	0.36	0.14	0.58	0.04
13	0.06	e0.10	0.05	e0.07	e0.09	0.07	0.58	0.94	0.14	0.34	0.51	0.05
14	0.05	e0.10	0.06	e0.07	e0.10	0.07	0.90	0.79	0.18	0.48	0.25	0.05
15	0.07	0.11	0.05	e0.08	e0.10	0.07	1.0	0.41	0.43	0.53	0.07	0.05
16	0.11	0.13	0.05	e0.08	e0.11	0.07	0.90	0.15	0.63	0.46	0.13	0.04
17	0.09	0.10	0.06	e0.08	e0.15	0.07	0.35	0.21	0.74	0.25	0.35	0.05
18	0.08	0.10	0.06	e0.09	e0.20	0.07	0.08	0.49	0.66	0.10	0.55	0.04
19	0.09	0.08	0.06	e0.08	e0.17	0.08	0.20	0.65	0.35	0.15	0.61	0.04
20	0.10	0.06	0.06	e0.08	e0.17	0.07	0.69	0.73	0.12	0.33	0.51	0.04
21	0.10	0.05	0.06	e0.08	e0.15	0.07	0.97	0.72	0.17	0.47	0.26	0.03
22	0.08	0.05	0.06	e0.08	e0.14	0.07	1.0	0.48	0.46	0.54	0.10	0.03
23	0.08	0.05	0.06	e0.09	e0.13	0.07	0.86	0.14	0.67	0.47	0.16	0.03
24	0.10	0.05	0.07	e0.09	e0.13	0.07	0.40	0.21	0.77	0.24	0.49	0.03
25	0.10	0.04	0.07	e0.08	e0.15	0.07	0.11	0.48	0.69	0.07	0.71	0.03
26	0.11	0.04	0.07	e0.08	e0.19	0.08	0.21	0.65	0.47	0.13	0.64	0.03
27	0.11	0.04	e0.06	e0.08	e0.17	0.08	0.58	0.75	0.14	0.32	0.53	0.04
28	0.11	0.04	e0.07	e0.08	0.15	0.07	0.80	0.69	0.19	0.46	0.29	0.04
29	0.11	0.06	e0.06	e0.10	0.14	0.07	0.91	0.39	0.55	0.53	0.11	0.04
30	0.11	0.05	e0.06	e0.13	---	0.07	0.78	0.13	0.75	0.47	0.15	0.04
31	0.11	---	e0.06	e0.12	---	0.07	---	0.09	---	0.24	0.32	---
TOTAL	2.39	2.64	1.84	2.37	3.63	2.48	12.31	14.85	13.87	10.45	11.21	1.34
MEAN	0.08	0.09	0.06	0.08	0.13	0.08	0.41	0.48	0.46	0.34	0.36	0.04
MAX	0.11	0.13	0.09	0.13	0.20	0.13	1.0	0.94	0.81	0.77	0.71	0.22
MIN	0.04	0.04	0.05	0.04	0.08	0.07	0.07	0.09	0.11	0.07	0.06	0.02
AC-FT	4.7	5.2	3.6	4.7	7.2	4.9	24	29	28	21	22	2.7

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2004, BY WATER YEAR (WY)

MEAN	0.40	0.35	0.16	0.18	0.24	0.53	0.55	0.57	0.51	0.43	0.40	0.38
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	0.05	0.08	0.06	0.08	0.09	0.08	0.10	0.06	0.05	0.03	0.01	0.02
(WY)	(1992)	(1991)	(2004)	(1989)	(1993)	(2004)	(1992)	(1992)	(1992)	(1988)	(1992)	(2001)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1984 - 2004
ANNUAL TOTAL	144.45	79.38	
ANNUAL MEAN	0.40	0.22	0.38
HIGHEST ANNUAL MEAN			1.00 1997
LOWEST ANNUAL MEAN			0.08 1992
HIGHEST DAILY MEAN	1.5	Apr 17	5.3 Mar 20, 1997
LOWEST DAILY MEAN	0.04	Sep 27	0.00 Jun 22, 1986
ANNUAL SEVEN-DAY MINIMUM	0.04	Sep 27	0.00 Aug 8, 1990
ANNUAL RUNOFF (AC-FT)	287	157	279
10 PERCENT EXCEEDS	1.0	0.64	1.0
50 PERCENT EXCEEDS	0.22	0.10	0.17
90 PERCENT EXCEEDS	0.06	0.05	0.05

e Estimated