

## 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.--17 years (water years 1985-98, 2001-03), 0.39 ft<sup>3</sup>/s, 286 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 and 2001.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 1.7 ft<sup>3</sup>/s Apr. 24, gage height 1.35 ft; minimum discharge, .02 ft<sup>3</sup>/s Sept. 27.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.40	e0.08	0.08	0.12	0.33	0.19	0.30	1.4	0.36	0.70	0.75	0.10
2	0.54	e0.08	0.08	0.17	0.28	0.19	0.32	1.2	0.46	0.97	0.41	0.19
3	0.58	e0.09	0.08	0.21	0.25	0.19	0.32	0.70	0.91	1.1	0.20	0.49
4	0.48	e0.09	0.08	0.20	0.22	0.17	0.33	0.42	1.2	0.88	0.27	0.74
5	0.24	e0.10	0.08	0.18	0.22	0.18	0.33	0.54	1.3	0.48	0.62	0.65
6	0.08	e0.10	0.08	0.15	0.20	0.18	0.31	1.0	1.1	0.23	0.89	0.32
7	0.15	0.11	0.08	0.13	0.19	0.18	0.30	1.4	0.60	0.34	0.91	0.14
8	0.40	0.18	0.08	0.13	0.19	0.18	0.30	1.5	0.31	0.74	0.78	0.27
9	0.53	0.09	0.08	0.12	0.19	0.19	0.31	1.2	0.43	1.0	0.43	0.57
10	0.56	0.12	0.08	0.12	0.17	0.19	0.33	0.71	0.89	1.1	0.20	0.85
11	0.42	0.08	0.08	0.11	0.17	0.17	0.35	0.39	1.3	0.82	0.26	0.82
12	0.19	0.13	0.10	0.15	0.17	0.20	0.33	0.54	1.3	0.45	0.64	0.39
13	0.07	0.10	0.12	0.13	0.17	0.22	0.33	1.0	1.0	0.21	0.86	0.18
14	0.06	0.10	0.21	0.15	0.17	0.27	0.54	1.4	0.57	0.31	0.89	0.09
15	0.05	0.08	0.12	0.13	0.18	0.54	1.1	1.4	0.31	0.69	0.74	0.09
16	0.05	0.08	0.20	0.13	0.26	0.68	1.4	1.2	0.40	0.97	0.39	0.15
17	0.05	0.08	0.11	0.13	0.22	0.49	1.5	0.68	0.82	1.0	0.18	0.35
18	0.05	0.08	0.10	0.12	0.21	0.42	1.2	0.42	1.1	0.85	0.23	0.56
19	0.05	0.09	0.09	0.11	0.21	0.39	0.69	0.52	1.2	0.44	0.56	0.49
20	0.05	0.08	0.08	0.11	0.21	0.37	0.40	1.0	1.0	0.19	0.81	0.25
21	0.05	0.08	0.08	0.11	0.19	0.36	0.54	1.3	0.55	0.29	0.91	0.10
22	0.05	0.08	0.08	0.12	0.19	0.36	1.0	1.4	0.30	0.68	0.80	0.06
23	0.05	0.08	0.08	0.13	0.19	0.33	1.3	1.2	0.39	0.97	0.42	0.06
24	0.06	0.08	0.08	0.13	0.19	0.33	1.5	0.69	0.79	1.0	0.20	0.06
25	0.06	0.08	0.10	0.14	0.21	0.32	1.3	0.40	1.1	0.86	0.23	0.05
26	0.06	0.08	0.10	0.22	0.22	0.32	0.68	0.34	1.1	0.44	0.55	0.05
27	0.07	0.07	0.11	0.22	0.22	0.30	0.40	0.47	0.92	0.19	0.83	0.04
28	0.07	0.08	0.11	0.20	0.21	0.31	0.51	0.92	0.50	0.26	0.88	0.04
29	0.08	0.08	0.10	0.20	---	0.33	0.99	1.3	0.26	0.63	0.73	0.04
30	e0.07	0.08	0.10	0.22	---	0.31	1.3	1.2	0.36	0.88	0.37	0.05
31	e0.07	---	0.13	0.34	---	0.30	---	0.67	---	0.89	0.17	---
TOTAL	5.69	2.73	3.08	4.83	5.83	9.16	20.51	28.51	22.83	20.56	17.11	8.24
MEAN	0.18	0.091	0.099	0.16	0.21	0.30	0.68	0.92	0.76	0.66	0.55	0.27
MAX	0.58	0.18	0.21	0.34	0.33	0.68	1.5	1.5	1.3	1.1	0.91	0.85
MIN	0.05	0.07	0.08	0.11	0.17	0.17	0.30	0.34	0.26	0.19	0.17	0.04
AC-FT	11	5.4	6.1	9.6	12	18	41	57	45	41	34	16

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2003, BY WATER YEAR (WY)

MEAN	0.42	0.36	0.17	0.18	0.24	0.55	0.56	0.57	0.51	0.43	0.40	0.40
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)	(1997)	(1995)	(1995)	(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 2002 CALENDAR YEAR

## FOR 2003 WATER YEAR

## WATER YEARS 1984 - 2003

ANNUAL TOTAL		113.93		149.08							0.39	
ANNUAL MEAN		0.31		0.41							1.00	1997
HIGHEST ANNUAL MEAN											0.076	1992
LOWEST ANNUAL MEAN											5.3	Mar 20, 1997
HIGHEST DAILY MEAN		0.92	Apr 17		1.5	Apr 17					0.00	Jun 22, 1986
LOWEST DAILY MEAN		0.05	Oct 15		0.04	Sep 27					0.00	Aug 8, 1990
ANNUAL SEVEN-DAY MINIMUM		0.05	Oct 15		0.05	Sep 24					286	
ANNUAL RUNOFF (AC-FT)		226		296							1.1	
10 PERCENT EXCEEDS		0.68		1.0							0.18	
50 PERCENT EXCEEDS		0.25		0.26							0.05	
90 PERCENT EXCEEDS		0.08		0.08								

e Estimated

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