



Water-Data Report 2011

**12433556 MIDNITE MINE DRAINAGE NEAR WELLPINIT, WA**

Spokane Basin  
Lower Spokane Subbasin

LOCATION.--Lat 47°55'27", long 118°05'20" referenced to North American Datum of 1927, in NW ¼ SE ¼ sec.13, T.28 N., R.37 E., Stevens County, WA, 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>.

**SURFACE-WATER RECORDS**

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

REVISED RECORDS.--WDR-US-2007; August and September 2006

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 FOR PERIOD OF RECORD.--25 years (water years 1985-98, 2001-11), 0.37 ft<sup>3</sup>/s, 267 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; maximum gage height, 2.32 ft (observed during beaver dam activity) Sept. 18, 2009; no flow during part of water years 1986 to 1992, 2001, 2004 to 2006, 2008, and 2009.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1.3 ft<sup>3</sup>/s, May 26, gage height, 1.26 ft, maximum gage height, 1.27 ft June 11; minimum discharge, 0.03 ft<sup>3</sup>/s, Oct. 12, 23.

**12433556 MIDNITE MINE DRAINAGE NEAR WELPINIT, WA—Continued**

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**  
**DAILY MEAN VALUES**  
[*e*, estimated]

<b>Day</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
<b>1</b>	0.06	0.07	0.06	e0.08	e0.10	e0.10	0.30	0.27	0.46	0.62	0.08	0.82
<b>2</b>	0.06	0.07	0.06	e0.08	e0.10	e0.12	0.30	0.27	0.64	0.42	0.08	0.82
<b>3</b>	0.06	0.06	0.06	e0.09	e0.11	e0.12	0.28	0.26	0.53	0.22	0.08	0.86
<b>4</b>	0.06	0.06	0.07	e0.10	e0.11	e0.14	0.28	0.25	0.55	0.21	0.08	0.79
<b>5</b>	0.06	0.06	0.08	e0.10	e0.11	e0.17	0.28	0.25	0.40	0.30	0.07	0.78
<b>6</b>	0.06	0.06	0.08	e0.11	e0.12	e0.17	0.25	0.25	0.39	0.53	0.07	0.76
<b>7</b>	0.06	0.09	0.08	e0.12	e0.13	e0.21	0.25	0.26	0.57	0.65	0.07	0.82
<b>8</b>	0.06	0.07	0.08	e0.14	e0.13	e0.26	0.23	0.25	0.69	0.68	0.07	0.86
<b>9</b>	0.06	0.07	0.08	e0.12	e0.13	e0.33	0.22	0.25	0.76	0.47	0.06	0.87
<b>10</b>	0.06	0.07	0.11	e0.10	e0.13	0.31	0.22	0.25	0.81	0.23	0.06	0.92
<b>11</b>	0.06	0.08	0.11	e0.10	e0.13	0.32	0.22	0.25	0.85	0.29	0.06	0.93
<b>12</b>	0.05	0.08	0.15	e0.11	e0.20	0.30	0.22	0.25	0.82	0.54	0.06	0.91
<b>13</b>	0.05	0.08	0.15	e0.13	e0.18	0.35	0.22	0.23	0.79	0.70	0.07	0.91
<b>14</b>	0.05	0.08	0.21	e0.16	e0.18	0.55	0.22	0.24	0.78	0.81	0.07	0.92
<b>15</b>	0.05	0.08	0.16	e0.16	e0.18	0.58	0.21	0.25	0.81	0.76	0.11	0.85
<b>16</b>	0.05	0.10	0.15	e0.16	e0.16	0.56	0.22	0.41	0.68	0.44	0.33	0.90
<b>17</b>	0.05	0.09	0.15	e0.15	e0.16	0.47	0.20	0.65	0.49	0.15	0.38	0.99
<b>18</b>	0.05	0.09	e0.13	e0.14	e0.17	0.44	0.20	0.81	0.24	0.11	0.44	1.0
<b>19</b>	0.05	0.07	e0.11	e0.13	e0.17	0.46	0.20	0.91	0.21	0.11	0.50	1.0
<b>20</b>	0.05	0.06	e0.10	e0.13	e0.17	0.43	0.20	0.89	0.21	0.10	0.57	1.0
<b>21</b>	0.05	0.06	e0.10	e0.12	e0.15	0.42	0.20	0.62	0.21	0.10	0.60	1.1
<b>22</b>	0.05	0.06	e0.11	e0.11	e0.15	0.39	0.20	0.46	0.51	0.10	0.60	1.1
<b>23</b>	0.06	0.05	e0.11	e0.11	e0.15	0.36	0.20	0.48	0.57	0.09	0.65	1.1
<b>24</b>	0.09	0.05	e0.11	e0.12	e0.12	0.36	0.20	0.69	0.58	0.09	0.70	1.2
<b>25</b>	0.07	0.05	e0.11	e0.13	e0.07	0.36	0.21	0.82	0.41	0.09	0.70	1.2
<b>26</b>	0.06	0.05	e0.11	e0.13	e0.07	0.36	0.36	1.0	0.21	0.09	0.68	1.2
<b>27</b>	0.05	0.05	e0.12	e0.13	e0.07	0.36	0.39	0.90	0.31	0.08	0.74	1.2
<b>28</b>	0.06	0.06	e0.12	e0.13	e0.08	0.33	0.31	0.62	0.52	0.09	0.77	1.1
<b>29</b>	0.09	0.06	e0.10	e0.12	---	0.34	0.29	0.45	0.59	0.08	0.76	1.1
<b>30</b>	0.06	0.06	e0.08	e0.11	---	0.33	0.27	0.42	0.63	0.08	0.79	1.1
<b>31</b>	0.08	---	e0.08	e0.11	---	0.33	---	0.41	---	0.08	0.82	---
<b>Total</b>	1.83	2.04	3.33	3.73	3.73	10.33	7.35	14.32	16.22	9.31	11.12	29.11
<b>Mean</b>	0.06	0.07	0.11	0.12	0.13	0.33	0.24	0.46	0.54	0.30	0.36	0.97
<b>Max</b>	0.09	0.10	0.21	0.16	0.20	0.58	0.39	1.0	0.85	0.81	0.82	1.2
<b>Min</b>	0.05	0.05	0.06	0.08	0.07	0.10	0.20	0.23	0.21	0.08	0.06	0.76
<b>Ac-ft</b>	3.6	4.0	6.6	7.4	7.4	20	15	28	32	18	22	58

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2011, BY WATER YEAR (WY)**

	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
<b>Mean</b>	0.36	0.27	0.14	0.17	0.22	0.44	0.52	0.56	0.53	0.46	0.40	0.40
<b>Max</b>	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)
<b>Min</b>	0.04	0.02	0.05	0.05	0.08	0.08	0.10	0.06	0.05	0.03	0.01	0.02
(WY)	(2006)	(2006)	(2009)	(2009)	(2009)	(2004)	(1992)	(1992)	(1992)	(1988)	(1992)	(2001)

**12433556 MIDNITE MINE DRAINAGE NEAR WELPINIT, WA—Continued****SUMMARY STATISTICS**

	<b>Calendar Year 2010</b>	<b>Water Year 2011</b>	<b>Water Years 1984 - 2011</b>	
<b>Annual total</b>	114.02	112.42		
<b>Annual mean</b>	0.31	0.31	0.37	
<b>Highest annual mean</b>			1.00	1997
<b>Lowest annual mean</b>			0.08	1992
<b>Highest daily mean</b>	1.4	May 27	1.2	Sep 24
<b>Lowest daily mean</b>	0.05	Sep 23	0.05	Oct 12
<b>Annual seven-day minimum</b>	0.05	Oct 12	0.05	Oct 12
<b>Annual runoff (ac-ft)</b>	226		223	267
<b>10 percent exceeds</b>	0.93		0.81	1.0
<b>50 percent exceeds</b>	0.14		0.18	0.17
<b>90 percent exceeds</b>	0.06		0.06	0.05

