

**MOUNT POLLEY PROJECT
TAILINGS STORAGE FACILITY
MONTHLY WATER BALANCE - AVERAGE PRECIPITATION CONDITIONS**

ASSUMPTIONS:

Daily Ore Throughput (tpd) = 20,813
 Solids Content = 35%
 Tailings S.G. = 2.65
 Water Content of Ore = 2.98%
 Dry Density (t/m³) = 1.4
 Initial Volume (m³) = 568,467
 Minimum Desired Volume = 1,000,000
 Minimum Fresh Water Makeup = 2.4%
 Undrainage Recovery - Back to TSF (m³) = 0
 Initial Volume Cariboo Pit (m³) = 2,032,516
 Initial Volume Wight Pit = 600,781
 Initial Volume Bell Pit (m³) = 526,062
 Groundwater Seepage Loss (m³/month) = 5,840
 Discharge from TSF (Yes/no) no
 If yes, m³/month 0

Runoff Coefficients:

	General	Freshet	Low Flow Period
Unprepared Basin =	0.35	1.00	0.20
Tailings Beach =	0.90	0.90	0.20
Open Pit Areas =	0.50	0.50	0.20
Undisturbed RDS Areas =	0.24	0.40	0.00
Millsite Area =	0.50	0.50	0.10
East RDS - Disturbed =	0.60	0.40	0.00
Downstream Tailings Areas =	0.70	1.00	0.20
North RDS - Disturbed =	0.60	1.00	0.15
Northeast RDS - Disturbed =	0.60	1.00	0.00

Areas:

Open Pits
 Bell Pit (Area A) = 17
 Diversion Efficiency = 100%
 Springer Pit (Area B) = 36
 Diversion Efficiency = 0%
 Wight Pit (Area C) = 16
 Diversion Efficiency = 100%
 Cariboo Pit Area (Area D1) = 31
 Cariboo Pit acts as a water storage pond

Mill Site
 Millsite Area (Area H) = 59
 Diversion Efficiency = 0%

Tailings Storage Facility (TSF)
 Total Tailings Facility Area = 235.0
 Pond Area (Area I) = 150.0
 Beach Area (Area J) = 85.0

Rock Disposal Sites (RDS)
 East Rock Disposal Site (RDS) - Disturbed (Area E1) = 55
 Diversion Efficiency = 0%
 East RDS - Undisturbed (Area E2) = 89
 Diversion Efficiency = 0%
 North RDS - Disturbed (Area F1) = 15
 Diversion Efficiency = 100%
 North RDS - Undisturbed (Area F2) = 1
 Diversion Efficiency = 100%
 Northeast RDS - Disturbed Area (Area G1) = 0
 Diversion Efficiency = 100%
 Northeast RDS - Un-Disturbed Area (Area G2) = 0
 Diversion Efficiency = 100%

Unprepared Area (Area K) = 0.0
 Biosolids Stockpile (Area L) = 4
 Diversion Efficiency = 0%
 Downstream Seepage Pond and Area (Area M) = 13
 Diversion Efficiency = 0%

Groundwater Pumping Rate to the TSF % to TSF
 Cariboo Pit Groundwater Infiltration (m³/mo) = 0 0%
 (gpm) = 0
 Wight Pit Groundwater Infiltration (m³/mo) = 76,091 0%
 (gpm) = 450
 Bell Pit Groundwater Infiltration (m³/mo) = 16,909 0%
 (gpm) = 100
 Springer Pit Groundwater Infiltration (m³/mo) = 33,818 100%
 (gpm) = 200

Water Pumped to Other Pits from the TSF

To Wight Pit (m³/year) = 0
 To Cariboo Pit (m³/year) = 0
 To Bell Pit (m³/year) = 0

Water Pumped to the TSF from Cariboo Pit

To TSF (m³/year) = 0

DESCRIPTION	20.523	21.612	17.800	15.500	20.500	22.087	19.500	22.140	21.700	22.500	23.570	22.323	ANNUAL
	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	
A Precipitation (mm/month)	94	17	100	31	20	10	92	80	104	40	23	24	635
B % of Annual Precipitation	14.9%	2.7%	15.7%	4.9%	3.1%	1.6%	14.5%	12.6%	16.4%	6.3%	3.6%	3.8%	100%
C Evaporation (mm/month)	0.0	0.0	0.0	0.0	0.0	0.0	58.0	76.0	103.4	68.7	29.0	29.3	364
Days per Month	30.0	31.0	31.0	28.0	31.0	30.0	31.0	30.0	31.0	31.0	30.0	31.0	365
<WATER INTO TAILINGS IMPOUNDMENT> (m³)													
9 Open Pits													
17 Bell Pit (Area 7a)	0	0	0	0	0	0	0	0	0	0	0	0	0
12 Bell Pit Groundwater	0	0	0	0	0	0	0	0	0	0	0	0	0
18 Springer Pit (Area 11) Springer to Cariboo	0	0	0	0	0	0	0	0	0	0	0	0	0
13 Springer Pit Groundwater See Row 123	0	0	0	0	0	0	0	0	0	0	0	0	0
16 Wight Pit (Area 12)	0	0	0	0	0	0	0	0	0	0	0	0	0
15 Wight Pit Groundwater (Pumped)	35,000	4,000	50,000	50,000	50,000	110,000	230,000	0	0	0	0	0	529,000
SEZ (Pumped)	10,000	0	0	0	0	0	0	0	0	0	0	0	10,000
15 Rock Disposal Sites (RDS)													
Long Ditch Flow	25,000	17,280	5,000	10,000	50,000	110,000	230,000	107,000	125,000	67,000	50,000	75,000	871,280
Springer RDS	0	0	0	0	0	75,000	0	0	0	0	0	0	75,000
1 Mill Site													
8 With Slurry	1,143,424	1,244,234	1,024,771	806,000	1,180,214	1,230,561	1,122,643	1,233,514	1,249,300	1,295,357	1,313,186	1,285,167	14,128,372
Mill Site (Area 6)	2,000	0	0	0	10,000	10,000	10,000	10,000	10,000	0	0	0	52,000
2 Tailings Storage Facility (TSF)													
3 Tailings Pond Precipitation (Area 1)	374,100	0	0	0	217,050	202,050	138,000	120,000	156,150	60,000	34,500	35,850	963,600
4 Tailings Beach Runoff (Area 2)	72,216	0	0	0	26,622	64,260	115,668	13,600	17,697	6,800	3,910	18,284	339,057
5 Unprepared Area Tailings Facility (Area 3)	0	0	0	0	0	0	0	0	0	0	0	0	0
11 Biosolids Stockpile (Area 4)	2,266	0	0	0	1,392	3,360	6,048	0	0	0	0	0	574
Downstream Seepage Pond and Area (Area 9)	8,590	0	0	0	4,524	10,920	19,656	2,080	2,707	1,040	598	2,175	52,290
>>> Total	1,298,496	1,265,514	1,079,771	866,000	1,539,802	1,816,151	1,872,015	1,486,194	1,560,854	1,430,197	1,402,194	1,417,049	17,034,238
<WATER OUT OF TAILINGS IMPOUNDMENT> (m³)													
20 Unrecoverable Water													
21 (-) Seepage Loss/Discharge	5,840	5,840	5,840	5,840	5,840	5,840	5,840	5,840	5,840	5,840	5,840	5,840	70,080
22 (-) Water Retained in Tailings	207,443	225,732	185,916	146,226	214,117	223,251	203,673	223,787	226,651	235,007	238,241	233,158	2,563,202
23 (-) Evaporation from Supernatant Pond	0	0	0	0	0	0	0	0	155,100	103,050	43,500	43,950	546,600
(-) Evaporation from Beach	0	0	0	0	0	0	24,650	32,300	43,945	29,198	12,325	12,453	154,870
(-) Dust Control (water from TSF Ponds)	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	213,283	231,572	191,756	152,066	219,957	229,091	321,163	375,927	431,536	373,094	299,906	295,401	3,334,752
24 Water In or Out of the TSF													
(-) Water Recycled to Mill	1,106,513	1,205,655	989,823	774,670	1,142,695	1,192,209	1,086,075	1,195,113	1,210,638	1,255,933	1,273,467	1,245,912	13,678,703
(+/-) Water Accumulating or Lost	-21,300	-171,713	-101,808	-60,736	177,150	394,851	464,777	-84,846	-81,320	-198,830	-171,179	-124,263	20,782
(+) TSF Discharge	0	0	0	0	0	0	0	0	0	0	0	0	0
>>> Total	1,341,096	1,608,941	1,283,387	987,472	1,185,502	1,026,450	942,461	1,655,886	1,723,494	1,827,858	1,744,553	1,665,575	13,699,485
26 Monthly Water Available (excluding stored water in the TSF)	1,085,214	1,033,942	888,015	713,934	1,319,845	1,587,060	1,580,852	1,110,267	1,129,318	1,057,103	1,102,287	1,121,648	13,699,485
27 Available Stored Water in TSF at Beginning of Month	568,467	780,168	850,374	990,486	1,171,670	1,409,071	1,883,922	2,443,699	2,488,853	2,537,533	3,000,000	2,858,821	2,858,821
Total Monthly Water Available	1,653,681	1,814,110	1,738,389	1,704,420	2,491,515	2,996,131	3,434,774	3,553,966	3,618,170	3,594,635	4,102,287	3,980,469	17,034,238
28 Water Required at Millsite													
Water for slurry	1,143,424	1,244,234	1,024,771	806,000	1,180,214	1,230,561	1,122,643	1,233,514	1,249,300	1,295,357	1,313,186	1,285,167	14,128,372
30 (-) Minimum Fresh Water Input to Mill (from groundwater wells)	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	216,000
31 (-) Water in Ore	18,911	20,578	16,949	13,330	19,520	20,352	18,567	20,401	20,662	21,424	21,719	21,255	233,669
Total Required Water Recycle to Mill	1,106,513	1,205,655	989,823	774,670	1,142,695	1,192,209	1,086,075	1,195,113	1,210,638	1,255,933	1,273,467	1,245,912	13,678,703
32 Total Water Required	1,106,513	1,205,655	989,823	774,670	1,142,695	1,192,209	1,086,075	1,195,113	1,210,638	1,255,933	1,273,467	1,245,912	13,678,703
34 Water Surplus (Deficit) After Recycle to Process	-21,300	-171,713	-101,808	-60,736	177,150	394,851	464,777	-84,846	-81,320	-198,830	-171,179	-124,263	20,782
Annual Cumulative Surplus (Deficit)	-21,300	-193,013	-294,821	-355,557	-178,406	216,445	681,221	596,376	515,055	316,225	145,046	20,782	20,782
<CARIBOO PIT> (m³)													
35 Water Stored in Cariboo Pit at the Beginning of the Month	2,032,516	1,871,780	1,689,042	1,506,304	1,317,838	1,327,558	1,330,871	1,289,763	1,201,003	1,156,220	1,068,505	1,078,917	1,078,917
36 Cariboo Pit Precipitation (Area 8)	29,264	0	0	0	10,788	26,040	46,872	24,800	32,271	12,400	7,130	7,409	196,974
37 Cariboo Pit Groundwater	0	0	0	0	0	0	0	0	0	0	0	0	0
38 Cariboo Pit Evaporation	0	0	0	0	0	0	17,980	23,560	32,054	21,297	8,990	9,083	112,964
Water Pumped to the Cariboo Pit from the Springer / and NEZ pit	43,000	59,182	59,182	53,455	59,182	57,273	50,000	50,000	115,000	59,182	57,273	59,182	721,909
Water Pumped to Cariboo Pit from the TSF	0	0	0	0	0	0	0	0	0	0	0	0	0
Water Pumped out of Cariboo for Dust Control and Transfer	233,000	241,920	241,920	60,250	80,000	80,000	120,000	160,000	160,000	138,000	45,000	10,000	613,000
Water Pump for Dust Control	0	0	0	0	0	0	25,000	10,000	30,000	50,000	15,000	10,000	140,000
Water Pumped from the Cariboo pit to the TSF	233,000	241,920	241,920	60,250	80,000	80,000	120,000	160,000	160,000	138,000	45,000	10,000	1,572,010
40 Water Stored in Cariboo Pit at the End of the Month	1,871,780	1,689,042	1,506,304	1,317,838	1,327,558	1,330,871	1,289,763	1,201,003	1,156,220	1,068,505	1,078,917	1,126,425	1,126,425
Available Space below 922m = 6,500,000 m ³ *0.25 = 1,625,000 m ³													
<WIGHT PIT> (m³)													
Water Stored in Wight Pit at the Beginning of the Month	600,781	618,333	659,333	609,333	559,333	512,117	408,837	190,933	193,493	196,824	198,104	198,840	198,840
Wight Pit Runoff	7,552	0	0	0	2,784	6,720	12,096	2,560	3,331	1,280	736	1,912	38,971
Wight Pit Groundwater	45,000	45,000	0	0	0	0	0	0	0	0	0	0	90,000
Wight Pit Groundwater (Pumped)	35,000	4,000	50,000	50,000	50,000	110,000	230,000	0	0				