

Report to:



PACIFIC BOOKER MINERALS INC.

**Morrison Copper/Gold Project
Feasibility Study
Volume 4 - Operating Cost Estimate (OPEX)**

Document No. 0652720100-REP-R0006-03

Third Party Disclaimer

The content of this document is not intended for the use of, nor is it intended to be relied upon by any person, firm or corporation, other than the client and Wardrop Engineering Inc. Wardrop Engineering Inc. denies any liability whatsoever to other parties for damages or injury suffered by such third party arising from use of this document by them, without the express prior written authority of Wardrop Engineering Inc. and our client. This document is subject to further restrictions imposed by the contract between the client and Wardrop Engineering Inc. and these parties' permission must be sought regarding this document in all other circumstances.

Confidential

This document is for the confidential use of the addressee only. Any retention, reproduction, distribution or disclosure to parties other than the addressee is prohibited without the express written authorization of Wardrop Engineering Inc.

Report to:




PACIFIC BOOKER MINERALS INC.

**MORRISON COPPER/GOLD
PROJECT
FEASIBILITY STUDY
VOLUME 4 - OPERATING COST
ESTIMATE (OPEX)**

FEBRUARY 2009

Prepared by


Raycho Angelov M.Sc., P. Eng.

Date

February 12, 2009

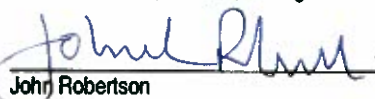
Reviewed by


Hassan Ghaffari, M.A.Sc., P. Eng.

Date

February 12, 2009

Authorized by


John Robertson

Date

February 12, 2009

WARDROP

Suite 800, 555 West Hastings Street, Vancouver, British Columbia V6B 1M1
Phone: 604-408-3788 Fax: 604-408-3722 E-mail: vancouver@wardrop.com

REVISION HISTORY

REV. NO	ISSUE DATE	PREPARED BY AND DATE	REVIEWED BY AND DATE	APPROVED BY AND DATE	DESCRIPTION OF REVISION
00	Dec. '08	Dec. '08 R. Anguelov	Dec. '08 H. Ghaffari	Dec. '08 J. Robertson	Draft issued to client.
01	Jan. 13, '09	Jan. 14, '09 R. Anguelov	Jan. 14, '09 H. Ghaffari	Jan. 14, '09 J. Robertson	Draft re-issued to client.
02	Jan. 21, '09	Jan. 21, '09 R. Anguelov	Jan. 21, '09 H. Ghaffari	Jan. 21, '09 J. Robertson	Draft re-issued to client.
03	Jan. 29, '09	Jan. 29, '09 R. Anguelov	Jan. 29, '09 H. Ghaffari	Jan. 29, '09 J. Robertson	Issued for client acceptance.
04	Feb. 3, '09	Feb. 3, '09 R. Anguelov	Feb. 3, '09 H. Ghaffari	Feb. 3, '09 J. Robertson	Issued for client acceptance.

TABLE OF CONTENTS

1.0	OPERATING COST ESTIMATE.....	1-1
1.1	SUMMARY	1-1
	1.1.1 MINING	1-2
	1.1.2 PROCESS, POWER, TAILINGS AND G&A	1-3
1.2	BASIS OF ESTIMATE	1-3
	1.2.1 INTRODUCTION.....	1-3
	1.2.2 COST BASIS.....	1-4
	1.2.3 MINING	1-5
	1.2.4 PROCESS.....	1-6
	1.2.5 POWER.....	1-6
	1.2.6 TAILINGS MANAGEMENT FACILITY (TMF)	1-7
	1.2.7 GENERAL & ADMINISTRATION (G&A) AND OWNERS COSTS	1-7
1.3	ESTIMATE EXCLUSIONS	1-8

LIST OF TABLES

Table 1.1 Annual Mine Operating Cost Summary	1-2
Table 1.2 Annual Operating Cost Summary (excluding mining)	1-3
Table 1.3 Currency	1-5
Table 1.4 General and Administration Operating Cost Summary	1-8

LIST OF APPENDICES

APPENDIX A	OPERATING COSTS - MINING
APPENDIX B	OPERATING COSTS – PROCESS, POWER, GENERAL AND ADMINISTRATION
APPENDIX C	OPERATING COSTS - TAILINGS

1.0 OPERATING COST ESTIMATE

1.1 SUMMARY

In September 2006, Pacific Booker Minerals Inc. (PBM) commissioned Wardrop Engineering Inc. (Wardrop) to complete a feasibility study including operating costs for the Morrison Copper/Gold Project.

The following engineering consulting companies and PBM were responsible for different sections of operating cost preparation as follows:

- Wardrop Engineering Inc. (Wardrop)
Mining and Process including plant power distribution
- Klohn Crippen Berger Ltd. (KCBL)
Tailings Facility, Waste Dumps and Site Water Management
- PBM
General and administration, owner costs and labour rates

This summary report presents the sources of data, basis of estimate, assumptions and the design criteria in preparation of the annual operating cost estimate.

The project is the developing and commissioning of a mine complete with processing facilities.

Client:	Pacific Booker Minerals Inc.
Project:	Morrison Copper/Gold
Deposit:	Porphyry Copper/Gold/Molybdenum
Mining Operation:	Open Pit
Life of Mine:	21 years
Operation Rate:	10,950,000t/a ore
Feed Rate:	30,000t/d

Mine operations consist conventional drilling, blasting, loading and hauling using drill rigs, ANFO/slurry trucks, shovels and mechanical haul trucks.

Process operations consist of crushing, grinding, and flotation to produce copper and molybdenum concentrates from the ore, open pit mined on site. The production rate for mining and process will be 30,000t/d. The concentrates will either be exported to potential customers in Asia or moved to markets in Canada.

Copper concentrates are shipped to Asia smelting operations through Stewart Bulk Terminals in Stewart, BC.

Molybdenum concentrate will be shipped by truck to a Canadian refinery for processing.

The operating cost estimate is based on the following:

- Budget quotations for main equipment spares, fuel, lubricants and explosives
- Vendor usage data
- Metallurgical test data from SGS and others
- In-house database
- Labour Surveys data received from client

All quantities were developed from general arrangement drawings, process design criteria, process flowsheets and equipment lists. Allowances were applied where necessary.

1.1.1 MINING

The operating cost for the mining section of the project is estimated based on annual mining production plan and summarized in Table 1.1.

Table 1.1 - Annual Mine Operating Cost Summary

Period	Year	Annual Operating Cost (Million CDN\$)	Unit Cost (CDN\$/tonne milled)
-1	2010	12,960,843	-
1	2011	30,943,708	3.14
2	2012	34,345,535	3.14
3	2013	31,851,573	2.91
4	2014	31,893,972	2.91
5	2015	32,847,001	3.00
6	2016	32,958,829	3.01
7	2017	33,693,477	3.08
8	2018	29,158,889	2.66
9	2019	29,979,361	2.74
10	2020	30,680,907	2.80
11	2021	32,505,307	2.97
12	2022	32,293,440	2.95
13	2023	33,541,197	3.06
14	2024	34,385,498	3.14
15	2025	35,192,841	3.21
16	2026	26,102,011	2.38
17	2027	24,937,289	2.28
18	2028	23,440,201	2.14
19	2029	10,262,546	0.94
20	2030	5,405,179	0.49
21	2031	3,221,876	0.51

The Mining operating personnel requirement is estimated to be 141.

1.1.2 PROCESS, POWER, TAILINGS AND G&A

The operating cost for the Morrison project for Process, Power, Tailings, General & Administration (G&A) is estimated to be CAD\$5.51/t ore milled and summarized in Table 1.2.

Table 1.2 Annual Operating Cost Summary (excluding mining)

Description	Labour	Annual Cost (CAD\$)	Unit Cost (CAD\$/Tonne Milled)
Process Labour	53	3,727,000	0.34
Maintenance Labour	29	2,288,000	0.21
Process Power, Propane and Fuel		12,459,000	1.14
Supplies (Operating and Maintenance)		32,005,000	2.92
FLEET (Maintenance and Fuel)		519,000	0.05
Sub-TOTAL	82	50,998,000	4.66
Tailings		2,389,000	0.22
General & Administration (G&A)	28	\$6,922,054	0.63
TOTAL	110	\$60,309,054	5.51

1.2 BASIS OF ESTIMATE

1.2.1 INTRODUCTION

The operating cost estimate includes all recurring costs for payroll, service contractors, camp operations, maintenance parts and supplies, reagents, consumables, supplies, freight, personnel transportation, etc. to operate all facilities as described in this feasibility study. Operating expense is defined as any recurring expenditure which can be expensed in the tax year in which it occurs.

The mine and plant operating schedule is summarized as follows:

- Two 12 hour shifts daily
- Two weeks on / Two weeks off
- Two crew basis to provide 24 hour coverage
- Salaried staff will be paid for 2,080 annual hours including vacation time
- Hourly personnel will work approximately 2,008 hours per annum excluding vacation time.

Operating expense commences with the introduction of feed to the process plant in the first quarter of 2012.

The estimates are summarized as follows:

- Mining
- Process
- Power
- Tailings
- General & Administration (G&A)

Estimated details are contained in the supporting documents. In the case of mining areas, the costs were developed for each year of operation. All other cost details were developed for a typical year and extended over the years of operation.

The estimates are complete in terms of scope and allowances for all planned and anticipated events, activities and occurrences throughout life of mine. The level of estimate detail was determined by the significance of the item and its cost and the degree of definition available.

SCOPE

The recurring annual operating expense estimate includes all personnel, parts, supplies, services, logistical, life support and personnel turnaround costs to mine, process, and service the operation for a nominal 30,000 tonnes ore per day operation. It includes all costs to be incurred by the PBM management organization. It also includes all activities from the start of mining operations through to product transfer to the participants. The estimate excludes all marketing activity, contingency and escalation.

1.2.2 COST BASIS

GENERAL

All costs are presented on yearly basis in the year in which they are incurred. All costs are expressed in constant fourth quarter 2008 CAD\$ funds.

The following general criteria were used in the preparation of the mine operating cost estimate:

- Mining cost estimates for labour, freight, fuel and power are included as indicated in Appendix A.
- Mining equipment supplies and consumable costs have been based on North American budget pricing.

- Supplies and consumable costs for pit operation and pit service equipment includes such items as fuel, oil, lubricants, tires, undercarriage repair and replacement, other replacement and repair parts, and ground-engaging tools.
- The replacement of parts due to normal wear and tear and equipment breakdown was considered part of the operating cost.
- Major mining equipment costs were based on budget quotes obtained from the equipment suppliers. Equipment operating costs such as ongoing repairs, tyres, tracks, lubricants, wear parts and major overhauls are based on vendor supplied information, Wardrop and PBM experience.

GENERAL AND ADMINISTRATION FUNCTIONS

Payroll salaries and burdens are based on a personnel list and corresponding salary scales provided by PBM. Insurance premium costs, site leasing costs, annual permitting costs and other similar items of cost were also provided by PBM.

CURRENCY

The estimate was prepared with CAD\$ as the base currency. Foreign exchange rates, as noted below are supplied as required. The foreign currency rates provided by PBM will be used without change until completion of the operating cost estimate (February 2009).

Table 1.3 - Currency

Base Currency	Foreign Currency
CAD \$1.00	USD \$0.87
CAD \$1.00	Euro €0.65

MATERIAL PRICING

The operating cost estimate makes use of pricing obtained from the capital cost estimate wherever practical.

FUEL COST

The fuel cost includes the selling price at source plus taxes, and transportation cost to site is CAD\$1.00 per litre.

1.2.3 MINING

A detailed basis of estimate and calculation is presented in Appendix A.

1.2.4 PROCESS

The process operating cost estimate was prepared from data provided by suppliers and reconciled with a mining operations of similar size. Process operating supply costs are based on new test results and budgetary prices from vendors of consumables and reagents. Based on the current study, the process operating cost per tonne is CAD\$4.66. The mill has been sized to process 30,000t/d with an availability of 92%.

Processing costs include the costs of direct process operations, labour, consumables and reagents, maintenance and operating supplies.

Labour wage rates were calculated reflecting two weeks on and two weeks off, crew schedules and hours of work. The main labour sources will be in Smithers, British Columbia. A load salary factor has been used to cover the costs of benefits, CPP, WCB, EI, life and long-term disabilities, pension plan, and statutory holidays. The details of salaries and applied factors are presented in Appendix B.

Process operating supply costs are based on budgetary prices from vendors for the key consumables and reagents. Reagent and consumable consumption rates are based on the metallurgical test results from SGS and comminution test results from Polysius. The prices for liners and balls in crushing and grinding sections are based on vendors data, the feasibility study and industry standards.

Process maintenance supply costs are factored from equipment costs.

A detailed process operating cost estimate is provided in Appendix B.

1.2.5 POWER

The power supply estimate is based on the use of power BC hydro provided by PBM. The operating load estimate has been developed based on process equipment sized from the feasibility study. The power supply cost was based on BC hydro cost for electrical energy costs which was CAD\$0.03804/kWh. Prices for fuel and lube oil were received from the client and used for power operating cost calculations.

SUMMARY

The BC hydro and power generating units including Operating and maintenance personnel requirements were described in plant and infrastructure section of feasibility study.

The parts costs were totalized and annualized over the period. An allowance was then added for minor operating materials and contingency.

The total plant site power operating and maintenance cost is CAD\$0.03804 per kW-hr or \$0.93 per tonne milled based on mill and miscellaneous power.

FUEL

The cost of fuel was calculated using a landed site cost of CAD\$1.00 per litre.

OPERATING AND MAINTENANCE PERSONNEL

The Process operating personnel requirement is displayed in Table 1.1. Management, supervision and planning are provided by a power plant superintendent and a mechanical supervisor working on cross shifts. The senior electrical person (general electrical foreman) on the mill maintenance rotation will also be on the opposite shift to the power plant superintendent. Operational personnel will consist of one power plant operator and one labourer (serving as helper, trainee and clean-up person) per shift per rotation.

In addition, one electrician has been allocated to cover power house electrical work.

1.2.6 TAILINGS MANAGEMENT FACILITY (TMF)

The TMF operating costs, were developed and provided by KCBL. The estimated operating costs routine maintenance and servicing of infrastructure, as well as earthworks maintenance for the tailings and related water handling systems, and tailings and waste rock storage facilities are presented in Appendix C.

1.2.7 GENERAL & ADMINISTRATION (G&A) AND OWNERS COSTS

The G&A operating costs developed by Wardrop and PBM are as follows:

G&A costs include the personnel costs for management and administrative support functions and loss control. The Owner's costs include insurance, head office expenses, external assays, legal services, recruitment, camp catering and maintenance, and personnel rotation transportation costs.

The transportation services include crew shift rotations, staff flights, management transport to Vancouver, other flights and bus services.

Environment testing and ongoing studies; information required for costing and design of environmental aspects are considered.

Owner's costs were developed by client at the time of this estimate.

Table 1.4 summarizes the annual General and administration cost.

Table 1.4 - General and Administration Operating Cost Summary

General & Administration	Annual Cost (CAD\$)	Unit Cost (CAD\$/Tonne Milled)
Labour	2,051,000	0.19
Fleet Maintenance	145,000	0.01
Fleet Fuel	548,000	0.05
General & Administrative Expenses	4,178,054	0.38
TOTAL G&A	\$6,922,054	0.63

All supported document for the G&A are provided in Appendix B.

1.3 ESTIMATE EXCLUSIONS

The following items are not included in the operating cost estimate:

- Management or pre-production costs prior to introduction of feed on first quarter of 2012
- Environmental and ecological considerations beyond those addressed in this feasibility study report
- All initial and on-going capital costs
- First fills to support process plant to start up
- All costs for mine close-out
- All royalties
- On-going exploration
- All owner costs including branch and head office operations, Joint Venture charges and assessments to the Morrison project
- Escalation
- Federal Government Goods and Services Tax
- Impact Benefit Agreement Costs

APPENDIX A

OPERATING COSTS - MINING

APPENDIX B

OPERATING COSTS – PROCESS, POWER, GENERAL AND
ADMINISTRATION

Client: Pacific Booker Minerals Inc.
 Project Name: Morrison Copper/Gold Project
 Project Number: 06527201.00
 Date: 21-Jan-09



Daily tonne milled 30,000 t/d
 Mill availability 92% %
 Annual operating days 365 days
 Annual throughput 10,950,000 t/y

PROCESS OPERATING COST SUMMARY

WARDROP

DESCRIPTION	LABOUR	ANNUAL COST (CAD\$)	UNIT COST (CAD\$ /tonne ore)
LABOUR			
MILL LABOUR	53	\$3,727,000	0.34
MINE LABOUR (costed in Mine Operating)	141	\$0	0.00
MAINTENANCE LABOUR	29	\$2,288,000	0.21
SUB-TOTAL STAFF	223	\$6,015,000	0.55
UTILITY			
POWER		\$10,240,000	0.94
PROPANE		\$1,671,000	0.15
FUEL - SURFACE FLEET		\$548,000	0.05
SUB-TOTAL COSTS		\$12,459,000	1.14
CONSUMABLES			
OPERATING SUPPLIES		\$26,889,000	2.46
MAINTENANCE SUPPLIES		\$5,134,000	0.47
SUB-TOTAL SUPPLIES		\$32,023,000	2.92
FLEET			
MAINTENANCE		\$81,000	0.01
FUEL		\$438,000	0.04
SUB-TOTAL FLEET		\$519,000	0.05
TOTAL OPERATING COST		\$51,016,000	\$4.66

G&A OPERATING COST SUMMARY

DESCRIPTION	LABOUR	ANNUAL COST (CAD\$)	UNIT COST (CAD\$ /tonne ore)
LABOUR			
G&A	28	\$2,051,000	0.19
SUB-TOTAL STAFF	28	\$2,051,000	0.19
FLEET			
MAINTENANCE		\$145,000	0.01
FUEL		\$548,000	0.05
SUB-TOTAL G&A		\$693,000	0.06
G&A EXPENSES			
GENERAL & ADMINISTRATIVE EXPENSES		\$4,178,054	0.38
SUB-TOTAL G&A		\$4,178,054	0.38
TOTAL OPERATING COST		\$6,922,054	\$0.63

Client:
 Project Name:
 Project Number:
 Date:

Pacific Booker Minerals Inc.
 Morrison Copper/Gold Project
 06527201.00
 21-Jan-09



Daily tones milled 30,000 t/d
 Mill availability 92%
 Annual operating days 365 days
 Annual throughput 10,950,000 t/y

POWER SUPPLY

Hydro kW-hr \$0.038

WARDROP

SUPPLIES	kW	kW Running	kW hr Annual	Unit Cost (annual)	Unit Cost (CAD\$/t)
A2 - POWER DISTRIBUTION	70	50	307,000	\$12,000	0.001
A6 - YARD LIGHTING	100	60	338,000	\$13,000	0.001
B0 - MINING	0	0	0	\$0	0.000
B2 - OPEN PIT MOBILE EQUIPMENT	30	20	116,000	\$4,000	0.000
C0 - PRIMARY CRUSHING	910	600	4,518,000	\$172,000	0.016
D0 - COARSE ORE STOCKPILE AND RECLAIM	820	650	5,045,000	\$192,000	0.018
D1 - HPGR	7,310	5,630	45,173,000	\$1,718,000	0.157
E0 - MILL BUILDING	300	230	1,406,000	\$53,000	0.005
E1 - GRINDING AND CLASSIFICATION	15,610	13,850	112,999,000	\$4,298,000	0.393
E2 - SECONDARY CRUSHING	80	60	562,000	\$21,000	0.002
E3 - FLOTATION	7,250	5,640	44,001,000	\$1,674,000	0.153
E4 - CONCENTRATE DEWATERING AND LOADOUT	400	250	1,977,000	\$75,000	0.007
E5 - REAGENTS	180	140	1,023,000	\$39,000	0.004
F0 - TAILINGS	50	30	204,000	\$8,000	0.001
F1 - TAILINGS DISPOSAL AND RECLAIM	5,890	6,010	44,152,000	\$1,680,000	0.153
G1 - FRESH/FIRE WATER	130	60	435,000	\$17,000	0.002
G2 - PROCESS WATER	520	220	1,744,000	\$66,000	0.006
G5 - PLANT AND INSTRUMENT AIR	300	140	816,000	\$31,000	0.003
G6 - SEWAGE TREATMENT	100	80	636,000	\$24,000	0.002
J1 - ADMINISTRATION AND MINE DRY	160	130	884,000	\$34,000	0.003
J2 - TRUCKSHOP AND WAREHOUSE	520	290	1,835,000	\$70,000	0.006
J3 - ASSAY LABORATORY	110	70	424,000	\$16,000	0.001
J4 - FUEL STORAGE AND DISTRIBUTION	100	50	389,000	\$15,000	0.001
J5 - COLD STORAGE WAREHOUSE	20	20	124,000	\$5,000	0.000
POWER PROVIDED TO BELL MINE (XSTRATA)	100	102	70,000	\$3,000	0.000
TOTAL POWER SUPPLY	41,060	34,382	269,178,000	\$10,240,000	\$0.935

annual average kW hours with utilization and distribution losses

PROPANE SUPPLY

SUPPLIES	Liters	Unit Cost per Liter	Unit Cost (annual)	Unit Cost (CAD\$/t)
Building Heating	2,510,000	0.65	\$1,632,000	0.149
Site Consumption	25,000	0.65	\$16,000	0.001
Propane Tank rental (2 tanks)			\$23,000	0.002
TOTAL POWER SUPPLY	2,535,000		\$1,671,000	\$0.153

Client: Pacific Booker Minerals Inc.
 Project Name: Morrison Copper/Gold Project
 Project Number: 06527201.00
 Date: 21-Jan-09



Daily tonne milled 30,000 t/d
 Mill availability 92% %
 Annual operating days 365 days
 Annual throughput 10,950,000 t/y

G&A AND SITE SERVICES FLEET

WARDROP

Description		Total Cost (CAD\$/year)	Unit Cost (CAD\$/t ore)
Grader	Site Services - Road Grading and Snow	\$29,000	0.0026
Backhoe Loader	Site Services - Ditching and Maintenance	\$16,000	0.0015
Snow Removal / Dump Truck	Site Services - Road Maintenance	\$8,000	0.0007
Bus - 37 Passenger	Site Services - Personnel Transportation	\$6,000	0.0005
Forklift	Site Services - Loading and Maintenance	\$2,000	0.0002
Bobcat	Site Services - Cleaning and Maintenance	\$3,000	0.0003
Forklift	Warehouse	\$1,000	0.0001
Ambulance	H&S	\$2,000	0.0002
Fire Truck	H&S	\$6,000	0.0005
Passenger Van	Administration	\$2,000	0.0002
Truck 1/2 tonne	General Manager	\$2,000	0.0002
Truck 1/2 tonne	Environmental	\$2,000	0.0002
Truck 1/2 tonne	Warehouse	\$2,000	0.0002
TOTAL MTCE. SUPPLIES		\$81,000	\$0.007
Liters per Day	1,200		
Fuel Cost per liter	\$1.00	\$438,000	0.0400
TOTAL FUEL		\$438,000	\$0.040

PROCESS & MAINTENANCE FLEET

Description		Total Cost (CAD\$/year)	Unit Cost (CAD\$/t ore)
Crane - 100T	Maintenance	\$29,000	0.0026
Boom Truck -20T	Maintenance	\$4,000	0.0004
Welding Truck	Maintenance	\$2,000	0.0002
Loader F/E	Process - Concentrate Loadout	\$41,000	0.0037
Loader F/E	Process - Dam Construction	\$41,000	0.0037
Compactor	Process - Dam Construction	\$9,000	0.0008
Grader	Process - Dam Construction	\$11,000	0.0010
Truck 1/2 tonne	Maintenance - Superintendent	\$2,000	0.0002
Truck 1/2 tonne	Maintenance - Millwright	\$2,000	0.0002
Truck 1/2 tonne	Maintenance - Electrician	\$2,000	0.0002
Truck 1/2 tonne	Process - Tailings Operator	\$2,000	0.0002
TOTAL MTCE. SUPPLIES		\$145,000	\$0.013
Liters per Day	1,500		
Fuel Cost per liter	\$1.00	\$548,000	0.0500
TOTAL FUEL		\$548,000	\$0.050

Client: Pacific Booker Minerals Inc.
 Project Name: Morrison Copper/Gold Project
 Project Number: 06527201.00
 Date: 21-Jan-09



Daily tones milled 30,000 t/d
 Mill availability 92% %
 Annual operating days 365 days
 Annual throughput 10,950,000 t/y

GENERAL & ADMINISTRATION

WARDROP

DESCRIPTION	Labour	Hourly Base			Loaded	
		Rate	Base Salary	Annual Salary	Salary	Annual Cost
		CAD\$/Hr	CAD\$	CAD\$	CAD\$	CAD\$
		basis hours:	1,880	2,080		
GENERAL & ADMINISTRATION EXPENSES						
General Manager	1	80.00	\$150,400	\$166,400	\$188,000	\$188,000
Administrative Superintendent	1	40.00	\$75,200	\$80,200	\$95,000	\$95,000
Community Liaison	1	30.00	\$56,400	\$62,400	\$75,000	\$75,000
IT Network Technician*	1	35.00	\$70,300	\$74,600	\$89,000	\$89,000
Clerk	2	20.00	\$37,600	\$41,600	\$51,000	\$102,000
Accounting						
Accountant	1	35.00	\$65,800	\$72,800	\$86,000	\$86,000
Accounting Clerk	2	23.00	\$43,200	\$47,800	\$59,000	\$118,000
Purchasing						
Purchasing Agent	1	31.00	\$58,300	\$64,500	\$77,000	\$77,000
Warehouse Shipper & Receiver*	4	25.00	\$50,200	\$53,300	\$65,000	\$260,000
Tool Crib Attendent *	2	20.00	\$40,200	\$42,700	\$53,000	\$106,000
HR and Training						
Human Resources Manager	1	45.00	\$84,600	\$93,600	\$109,000	\$109,000
HRT Officer	2	38.00	\$71,400	\$79,000	\$93,000	\$186,000
H&S, Environment						
HSE Supervisor	1	40.00	\$75,200	\$83,200	\$98,000	\$98,000
H&S Technician	2	25.00	\$47,000	\$52,000	\$63,000	\$126,000
Environmental Technician *	2	28.00	\$56,200	\$59,700	\$72,000	\$144,000
Cleaning						
Janitor*	4	18.00	\$36,100	\$38,300	\$48,000	\$192,000
TOTAL	28					\$2,051,000

* 12 hour shift		basis hours:	2,008
-----------------	--	--------------	-------

Client:
 Project Name:
 Project Number:
 Date:

Pacific Booker Minerals Inc.
 Morrison Copper/Gold Project
 06527201.00
 21-Jan-09



Daily tonne milled 30,000
 Mill availability 92%
 Annual operating days 365
 Annual throughput 10,950,000

GENERAL & ADMINISTRATIVE EXPENSES

WARDROP

GENERAL & ADMINISTRATIVE EXPENSES		Total Cost (CAD\$/year)	Unit Cost (CAD\$/t ore)
Safety & Training Supplies		\$50,000	\$0.005
Medical Service/First Aid		\$50,000	\$0.005
Warehouse Supplies, Helmets/Gloves/Boots		\$55,000	\$0.005
Warehouse Services, Clothing/Coveralls		\$69,000	\$0.006
Security Supplies and Scale		\$24,000	\$0.002
Communications; Tel, Fax, Internet		\$36,000	\$0.003
Office Supplies	Computers, Furnishings, Couriers & Postage inclu	\$92,000	\$0.008
Software Licensing		\$50,000	\$0.005
Coffee Room and Janitorial Supplies		\$135,000	\$0.012
HR Recruitment and Expences		\$50,000	\$0.005
Medical and Drug Testing		\$24,000	\$0.002
Apprentice Training		\$75,000	\$0.007
Employee Courses & Training		\$50,000	\$0.005
Insurances		\$750,000	\$0.068
Legal Services		\$50,000	\$0.005
Permitting Regulatory Compliance		\$50,000	\$0.005
Payroll Administration		\$50,000	\$0.005
Benefit Administration		\$50,000	\$0.005
Audit		\$50,000	\$0.005
Employee Communications		\$10,000	\$0.001
Safety Incentives		\$73,000	\$0.007
Head Office Allowance		\$1,000,000	\$0.091
Public Relations & Donations		\$50,000	\$0.005
Staff Travel, Expenses & Entertainment		\$50,000	\$0.005
Process & Mining Consultations		\$108,000	\$0.010
Environmental Monitoring and Reporting		\$146,000	\$0.013
Barge Access		\$400,000	\$0.037
Annual Snow Removal-Forest Roads and O&M		\$363,054	\$0.033
Garbage Removal Costs		\$88,000	\$0.008
Hazardous Waste Removal and Disposal	Batteries, Tires, Chemical, and Oil	\$100,000	\$0.009
Local Vehicle Rental & Lodging		\$30,000	\$0.003
Power Line Rental (Xstrata)		\$0	\$0.000
Crew Transportation included	Included in Site Services	\$0	\$0.000
TOTAL G&A EXPENSES		\$4,178,054	\$0.382

Client: Pacific Booker Minerals Inc.
 Project Name: Morrison Copper/Gold Project
 Project Number: 06527201.00
 Date: 21-Jan-09



Daily tonne milled 30,000 t/d
 Mill availability 92% %
 Annual operating days 365 days
 Annual throughput 10,950,000 t/y

PLANT OPERATING SUPPLIES

WARDROP

SUPPLIES	Consumption (kg/t ore)	Source	Unit Cost (CAD\$/kg)	Source	Unit Cost FOB point	Total Cost (CAD\$/year)	Unit Cost (CAD\$/t ore)
LINERS							
Gyratory Crusher Liners	0.005	Industry	3.99	Industry	Minesite	\$233,000	0.0212
Cone Crusher Liners	0.004	Industry	5.80	Industry	Minesite	\$237,000	0.0216
Primary Ball Mills Liners	0.071	Industry	2.37	Industry	Minesite	\$1,845,000	0.1685
Regrind Balls Mill Liners	0.013	Industry	1.42	Industry	Minesite	\$199,000	0.0182
SUB-TOTAL 1						\$2,514,000	\$0.230
BALLS							
HPGR Rolls	0.042	Supplier	4.88	Supplier	Minesite	\$2,246,000	0.2051
Ball Mill Balls	0.923	Industry	0.97	Industry	Minesite	\$9,802,000	0.8952
Regrind Ball Mills Balls	0.166	Industry	1.09	Industry	Minesite	\$1,986,000	0.1813
SUB-TOTAL 2						\$14,034,000	\$1.282
REAGENTS							
PEX	0.055	SGS	3.65	Quadra	Minesite	\$2,198,000	0.2008
CYTEC 3302	0.015	SGS	14.15	Cytec	Minesite	\$2,324,000	0.2123
Lime	0.500	SGS	0.40	Quadra	Minesite	\$2,190,000	0.2000
Frothers (MIBC)	0.055	SGS	3.65	Quadra	Minesite	\$2,198,000	0.2008
CMC	0.005	SGS	4.15	Quadra	Minesite	\$204,000	0.0187
Kerosine	0.006	SGS	2.25	Quadra	Minesite	\$136,000	0.0124
Fuel Oil	0.006	SGS	1.45	Quadra	Minesite	\$87,000	0.0080
Flocculant	0.010	SGS	5.52	Cytec	Minesite	\$604,000	0.0552
SUB-TOTAL 3						\$9,941,000	\$0.908
DEWATERING							
Filters Cloth (Concs)	Allowance	Industry				\$100,000	0.0091
SUB-TOTAL 4						\$100,000	\$0.009
ASSAY AND QUALITY CONTROL							
Laboratory Supplies	Allowance	Industry				\$50,000	0.0046
External Assays and Testing	Allowance	Industry				\$150,000	0.0137
SUB-TOTAL 5						\$200,000	\$0.018
OTHERS							
Miscellaneous	Allowance	Industry				\$100,000	0.0091
SUB-TOTAL 6						\$100,000	\$0.009
TOTAL OPERATING SUPPLIES						\$26,889,000	\$2.456

Client: Pacific Booker Minerals Inc.
 Project Name: Morrison Copper/Gold Project
 Project Number: 06527201.00
 Date: 21-Jan-09



Daily tonne milled 30,000 t/d
 Mill availability 92% %
 Annual operating days 365 days
 Annual throughput 10,950,000 t/y

MAINTENANCE SUPPLIES

WARDROP

AREA	Total Cost (CAD\$/year)	Unit Cost (CAD\$/t ore)
A0 - OVERALL SITE	\$0	0.0000
A1 - POWER SUPPLY	\$90,000	0.0082
A2 - POWER DISTRIBUTION	\$0	0.0000
A3 - CONTROL SYSTEM	\$17,000	0.0016
A4 - COMMUNICATION	\$14,000	0.0013
A6 - YARD LIGHTING	\$0	0.0000
A7 - ACCESS ROAD	\$0	0.0000
A8 - DIVERSIONS	\$0	0.0000
B0 - MINING (included in mining)	\$0	0.0000
C0 - PRIMARY CRUSHING	\$393,000	0.0359
D0 - COARSE ORE STOCKPILE AND RECLAIM	\$127,000	0.0116
D1 - SECONDARY CRUSHING	\$604,000	0.0552
D2 - HPGR	\$889,000	0.0812
E0 - MILL BUILDING	\$14,000	0.0013
E1 - GRINDING AND CLASSIFICATION	\$1,551,000	0.1416
E3 - FLOTATION	\$589,000	0.0538
E4 - CONCENTRATE DEWATERING AND LOADOUT	\$144,000	0.0132
E5 - REAGENTS	\$46,000	0.0042
F0 - TAILINGS (included in tailings sustaining)	\$0	0.0000
F1 - TAILINGS DISPOSAL AND RECLAIM	\$420,000	0.0384
G1 - FRESH/FIRE WATER	\$26,000	0.0024
G2 - PROCESS WATER	\$32,000	0.0029
G3 - POTABLE WATER	\$4,000	0.0004
G4 - GLAND WATER	\$1,000	0.0001
G5 - PLANT AND INSTRUMENT AIR	\$8,000	0.0007
G6 - SEWAGE TREATMENT	\$29,000	0.0026
G6 - SEEPAGE MANAGEMENT	\$0	0.0000
J1 - ADMINISTRATION AND MINE DRY	\$8,000	0.0007
J2 - TRUCKSHOP AND WAREHOUSE *	\$94,000	0.0086
J3 - ASSAY LABORATORY	\$12,000	0.0011
J4 - FUEL STORAGE AND DISTRIBUTION	\$4,000	0.0004
J5 - COLD STORAGE WAREHOUSE	\$0	0.0000
J6 - TRUCKWASH AND TIRE CHANGE	\$14,000	0.0013
J7 - ARCTIC CORRIDORS	\$0	0.0000
J8 - PROPANE STORAGE	\$4,000	0.0004
TOTAL MTCE. SUPPLIES	\$5,134,000	\$0.469

Client: Pacific Booker Minerals Inc.
 Project Name: Morrison Copper/Gold Project
 Project Number: 06527201.00
 Date: 21-Jan-09



Daily tones milled 30,000 t/d
 Mill availability 92% %
 Annual operating days 365 days
 Annual throughput 10,950,000 t/y

MILL MAINTENANCE STAFF

WARDROP

DESCRIPTION	Labour	Hourly Base			Loaded	
		Rate	Base Salary	Annual Salary	Salary	Annual Cost
		CAD\$/Hr	CAD\$	CAD\$	CAD\$	CAD\$
		basis hours:	1,880	2,080		
MAINTENANCE STAFF						
Plant Maintenance Supervisor	1	40.00	\$75,200	\$83,200	\$98,000	\$98,000
Maintenance Planner	1	30.00	\$56,400	\$62,400	\$75,000	\$75,000
Maintenance Clerk	1	20.00	\$37,600	\$41,600	\$51,000	\$51,000
SUB-TOTAL MILL STAFF	3					\$224,000
		basis hours:	2,008			
PLANT MAINTENANCE						
Plant Maintenance Shift Supervisor	2	33.00	\$66,200	\$70,300	\$84,000	\$168,000
Electrician	4	31.00	\$62,200	\$66,000	\$79,000	\$316,000
Instrument Technician	4	31.00	\$62,200	\$66,000	\$79,000	\$316,000
Millwright	12	31.00	\$62,200	\$66,000	\$79,000	\$948,000
Plumber	2	31.00	\$62,200	\$66,000	\$79,000	\$158,000
Welder	2	31.00	\$62,200	\$66,000	\$79,000	\$158,000
SUB-TOTAL PLANT MAINT.	26					\$2,064,000
TOTAL LABOUR	29					\$2,288,000

Client: Pacific Booker Minerals Inc.
 Project Name: Morrison Copper/Gold Project
 Project Number: 06527201.00
 Date: 21-Jan-09



Daily tones milled 30,000 t/d
 Mill availability 92% %
 Annual operating days 365 days
 Annual throughput 10,950,000 t/y

MILL STAFF

WARDROP

DESCRIPTION	Labour	HOURLY			Loaded	Annual Cost
		BASE RATE	Base Salary	Annual Salary	Salary	
		CAD\$/Hr	CAD\$	CAD\$	CAD\$	CAD\$
		basis hours:	1,880	2,080		
STAFF						
Plant Superintendent	1	50.00	\$94,000	\$104,000	\$120,000	\$120,000
Metallurgist	1	40.00	\$75,200	\$83,200	\$98,000	\$98,000
Plant Supervisor	1	40.00	\$75,200	\$83,200	\$98,000	\$98,000
Plant Shift Supervisor*	4	33.00	\$66,200	\$70,300	\$84,000	\$336,000
Tailings Surface Supervisor	1	40.00	\$75,200	\$83,200	\$98,000	\$98,000
SUB-TOTAL STAFF	8					\$750,000
		basis hours:	2,008			
OPERATIONS						
Crushers and Stockpile Operator	4	26.00	\$52,200	\$55,400	\$67,000	\$268,000
Control Room Operator	4	30.00	\$60,200	\$63,900	\$77,000	\$308,000
Grinding Operator	4	28.00	\$56,200	\$59,700	\$72,000	\$288,000
Flotation Operator	4	28.00	\$56,200	\$59,700	\$72,000	\$288,000
De-Watering Operator	4	26.00	\$52,200	\$55,400	\$67,000	\$268,000
Concentrate Loadout Operator	2	28.00	\$56,200	\$59,700	\$72,000	\$144,000
Mill Helper	8	22.50	\$45,200	\$48,000	\$59,000	\$472,000
SUB-TOTAL OPERATIONS	30					\$2,036,000
		basis hours:	2,008			
SURFACE						
Surface Operator	4	26.00	\$52,200	\$55,400	\$67,000	\$268,000
Surface Laborer	4	20.00	\$40,200	\$42,700	\$53,000	\$212,000
SUB-TOTAL TAILINGS FACILITY	8					\$480,000
		basis hours:	2,008			
PLANT MET AND ASSAY LAB						
Metallurgical Technician**	1	30.00	\$56,400	\$62,400	\$75,000	\$75,000
Assayer	2	28.50	\$57,200	\$60,700	\$73,000	\$146,000
Sample Bucker	4	23.00	\$46,200	\$49,000	\$60,000	\$240,000
SUB-TOTAL MET AND ASSAY	7					\$461,000
TOTAL MILL LABOUR	53					\$3,727,000

* works same hours as operations

** works same hours as staff

Client: Pacific Booker Minerals Inc.
 Project Name: Morrison Copper/Gold Project
 Project Number: 06527201.00
 Date: 21-Jan-09



Daily tones milled 30,000 t/d
 Mill availability 92% %
 Annual operating days 365 days
 Annual throughput 10,950,000 t/y

MINE STAFF

WARDROP

DESCRIPTION	Labour	HOURLY			Loaded	
		BASE RATE	Base Salary	Annual Salary	Salary	Annual Cost
		CAD\$/Hr	CAD\$	CAD\$	CAD\$	CAD\$
		basis hours:	1,880	2,080		
MINE STAFF		basis hours:	2,008			
Mine Superintendent	1	50.00	\$94,000	\$104,000	\$120,000	\$120,000
Mine Supervisor	1	40.00	\$75,200	\$83,200	\$98,000	\$98,000
Clerk	2	24.00	\$45,100	\$49,900	\$61,000	\$122,000
Geologist	1	42.00	\$79,000	\$87,400	\$102,000	\$102,000
Chief Engineer	1	38.00	\$71,400	\$79,000	\$93,000	\$93,000
Mine Engineer	2	37.00	\$69,600	\$77,000	\$91,000	\$182,000
Geology/ Grade Control	2	24.00	\$48,200	\$51,200	\$63,000	\$126,000
Surveyor	2	33.00	\$66,200	\$70,300	\$84,000	\$168,000
Survey Helper	2	24.00	\$48,200	\$51,200	\$63,000	\$126,000
SUB-TOTAL STAFF	14					\$1,137,000
		basis hours:	2,008			
MINE OPERATIONS						
Mine Shift Supervisor	4	33.00	\$66,200	\$70,300	\$84,000	\$336,000
Drill & Blast Engineer	2	28.00	\$56,200	\$59,700	\$72,000	\$144,000
Lube/Fuel Operators & Helper	4	23.50	\$47,200	\$50,100	\$61,000	\$244,000
Equipment operator	53	30.00	\$60,200	\$63,900	\$77,000	\$4,081,000
Driller	8	28.00	\$56,200	\$59,700	\$72,000	\$576,000
Drill Helper	8	22.00	\$44,200	\$46,900	\$58,000	\$464,000
Blaster	2	28.00	\$56,200	\$59,700	\$72,000	\$144,000
Blaster Helper	4	23.50	\$47,200	\$50,100	\$61,000	\$244,000
SUB-TOTAL OPERATIONS	85					\$6,233,000
		basis hours:	2,008			
MINE MAINTENANCE						
Mine Maintenance Supervisor	1	40.00	\$75,200	\$83,200	\$98,000	\$98,000
Mine Maintenance Planner	1	31.00	\$58,300	\$64,500	\$77,000	\$77,000
Mine Maintenance Shift Supervisor	2	33.00	\$66,200	\$70,300	\$84,000	\$168,000
Light Vehicle Mechanic	2	31.00	\$62,200	\$66,000	\$79,000	\$158,000
Mine Maintenance Mechanic	16	31.00	\$62,200	\$66,000	\$79,000	\$1,264,000
Mine Maintenance Welder	8	31.00	\$62,200	\$66,000	\$79,000	\$632,000
Mine Maintenance Helper	12	22.00	\$44,200	\$46,900	\$58,000	\$696,000
Small Projects Tradesmen	0	33.00	\$66,200	\$70,300	\$84,000	\$0
SUB-TOTAL MAINTENANCE	42					\$3,093,000
TOTAL MINE LABOUR	141					\$10,463,000

APPENDIX C

OPERATING COSTS - TAILINGS

TABLE 1 - Operating Activity Task List and Quantity/Cost Estimate - Rev.2

Rev.1 - Corrections under "Special Equipment"

Rev.2 - Correction to column heading "Non-Routine/Breakdown Maintenance"

WBS Code	Area, Item Description & Equipment Number	Measure Qty	Unit	Daily-Weekly	Every 3 Months	Every 6 Months	Every 12 months	Special Equipment	Estimated Annual Cost of Consumables or Annual Quantity	Non-Routine/Breakdown Maintenance (Allowance)
	Pump Stn 1 (in plant)			Monitoring Minor adjustments Lubrication	Replace Impellers Replacing seals	Replace pump casing			\$1,160,000/year	
	Excavation	0	m3							
	Concrete	0	m3							
	Building	0	m2							
	Pump Units	4	EA							
	Pump Box (by Wardrop)									
	Pipework	3800	kg							
	Valves and Couplings	1	LS							
	MV Switchgear	1	LS							
	Cabling	1	LS							
	Controls	1	LS							
	Misc Steel	10000	kg							
	Pump Stn 2			Monitoring Minor adjustments Lubrication	Replace Impellers Replacing seals	Replace pump casing			\$1,160,000/year	
	Excavation	6800	m3							
	Concrete	480	m3							
	Building	283	m2							
	Pump Units	4	EA							
	Pump Box	37	t							
	Pipework	3800	kg							
	Valves and Couplings	1	LS							
	MV Switchgear	1	LS							
	Controls	1	LS							
	Main Transformer	1	LS							
	Auxilliary Electrical	1	LS							
	Cabling	1	LS							
	Misc Steel	10000	kg							
	Tailings Line - P/Stn 1 to P/Stn 2			Monitoring						
	Steel 28" Std	1375	m							
	HDPE Liner	1375	m							
	HDPE 32M SDR 11 (160psi)	940	m							
	Tailings Line - P/Stn 2 to Top of Dam			Monitoring						
	Steel 28" Std	1195	m							
	HDPE Liner	1195	m							
	HDPE 32M SDR 11 (160psi)	430	m							
	Tailings Line - Top of Dam			Monitoring			Relocation/Extension	Existing Mine Fleet		
	HDPE 30 SDR 17 (100psi)	9724	m							
	Spigots and Isolation Valves	26	ea							
	Emergency Dump Valves			Lubrication Monitoring						
	Spigots and Dump Valves	2	ea							
	Reclaim Line			Monitoring Minor adjustments			Relocation/Extension	Crane HDPE Pipe Welder	Existing Mine Equipment Fleet Incl. in Install Cost	
	Barge to Top of Dam									
	HDPE 28" SDR 32.5 (50psi)	750	m							
	Top of Dam to Fire Tank									
	HDPE 20" SDR 32.5 (50psi)	1010	m							
	HDPE 22" SDR 21 (80PSI)	114	m							
	HDPE 24" SDR 13.5 (128PSI)	193	m							
	HDPE 26" SDR 11 (160psi)	2268	m							
	Fire Tank to Process Water Tank									
	HDPE 18" SDR 26 (64PSI)	129	m							
	HDPE 18" SDR 17 (100PSI)	151	m							
	HDPE 24" SDR 13.5 (128PSI)	1305	m							
	Hydrocyclones			Monitoring Minor adjustments Relocation		Replace Liner		Mobile Crane/excavator	Existing Mine Equipment Fleet Liner \$7,500/yr	
	Hydrocyclones	2	EA							
	Reclaim Pump Barge			Monitoring Minor adjustments	Minor Maintenance				\$2,000 Misc. Parts (e.g. O-Ring seals, Gland Packing, etc.)	\$28,000 Misc. Part Failure
	Reclaim Barge	1	LS							
	Shore Electrical Equipment	1	LS							
	North Seepage Pond Pump House			Monitoring Minor adjustments	Minor Maintenance		Pipeline Relocation/Extension Replacing seals	Crane HDPE Pipe Welder	Existing Mine Equipment Fleet Incl. in Install Cost \$2,000 Misc. Parts (e.g. O-Ring seals, Gland Packing, etc.)	\$8,000 Misc. Part Failure
	Excavation	500	m3							
	Concrete	10	m3							
	Pre-Cast Concrete Well	1	LS							
	Building	15	m2							
	Pump Units	2	EA							
	Pipework	200	kg							
	Pipework & Valves	1	LS							
	MV Switchgear & Transformer	1	LS							
	Controls	1	LS							
	Auxilliary Electrical	1	LS							
	Cabling	1	LS							
	Misc Steel	2000	kg							
	HDPE 12" SDR 13.5 (128psi)	100	m							
	HDPE 7" SDR 9 (200PSI)	1000	m							
	South Seepage Pond Pump House			Monitoring Minor adjustments	Minor Maintenance		Pipeline Relocation/Extension Replacing seals	Crane HDPE Pipe Welder	Existing Mine Equipment Fleet Incl. in Install Cost \$2,000 Misc. Parts (e.g. O-Ring seals, Gland Packing, etc.)	\$8,000 Misc. Part Failure
	Excavation	500	m3							
	Concrete	10	m3							
	Pre-Cast Concrete Well	1	LS							

TABLE 1 - Operating Activity Task List and Quantity/Cost Estimate - Rev.2

Rev.1 - Corrections under "Special Equipment"

Rev.2 - Correction to column heading "Non-Routine/Breakdown Maintenance"

WBS Code	Area, Item Description & Equipment Number	Measure Qty	Unit	Daily-Weekly	Every 3 Months	Every 6 Months	Every 12 months	Special Equipment	Estimated Annual Cost of Consumables or Annual Quantity	Non-Routine/Breakdown Maintenance (Allowance)
	Building	15	m2							
	Pump Units	2	EA							
	Pipework	200	kg							
	Pipework & Valves	1	LS							
	MV Switchgear & Transformer	1	LS							
	Controls	1	LS							
	Auxilliary Electrical	1	LS							
	Cabling	1	LS							
	Misc Steel	2000	kg							
	HDPE 12" SDR 13.5 (128psi)	100	m							
	HDPE 7" SDR 9 (200PSI)	1000	m							
	Cyclowash Pump Station No. 1			Monitoring		Minor Maintenance	Relocation		\$1,000 Misc. Parts	\$4,000 Misc. Part Failure
	Pump Skid	1	LS	Minor adjustments			Replacing seals		(e.g. O-Ring seals, Gland Packing, etc.)	
	Electrical Equipment	1	LS							
	Cyclowash Pump Station No. 2			Monitoring		Minor Maintenance	Relocation		\$1,000 Misc. Parts	\$4,000 Misc. Part Failure
	Pump Skid	1	LS	Minor adjustments			Replacing seals		(e.g. O-Ring seals, Gland Packing, etc.)	
	Electrical Equipment	1	LS							
	Cyclowash Pipeline			Monitoring			Relocation/Extension	Crane HDPE Pipe Welder	Existing Mine Equipment Fleet Incl. in Install Cost	
	HDPE 6" SDR 32.5 (50psi)	5000	m							
	HDPE 6" SDR 17 (100psi)	2500	m							
	Fire Water Line			Monitoring						
	HDPE 12" SDR 26 (64psi)	129	m							
	HDPE 12" SDR 17 (100psi)	151	m							
	HDPE 12" SDR 13.5 (128psi)	1305	m							
	Fresh/Process Water Make-up Pump House			Monitoring	Minor Maintenance				\$4,000 Misc. Parts	\$16,000 Misc. Part Failure
	Excavation	500	m3	Minor adjustments					(e.g. O-Ring seals, Gland Packing, etc.)	
	Concrete	10	m3							
	Pre-Cast Concrete Well	1	LS							
	Building	15	m2							
	Pump Units	2	EA							
	Pipework	400	kg							
	Pipework & Valves	1	LS							
	MV Switchgear & Transformer	1	LS							
	Controls	1	LS							
	Auxilliary Electrical	1	LS							
	Cabling	1	LS							
	Misc Steel	2000	kg							
	HDPE 12" SDR 13.5 (128psi)	200	m							
	HDPE 10" SDR 11 (160psi)	600	m							
1	Tailings Storage Facility									
1.1	Site Preparation									
1.1.1	Clear	540.9	ha							
1.1.2	Clear and Grub	72.6573	ha							
1.1.3	Strip and Stockpile Topsoil	145314.6	m3							
1.1.4	Excavate Unsuitable Soils	75000	m3							
1.1.5	Proof Roll Embankment Footprint	726573	m2							
1.1.6	Borrow Areas - Clear and Grub	41.3438	ha							
1.1.7	Borrow Areas - Stockpile Topsoil	82687.6	m3							
1.1.8	Borrow Area - Misc. Ditching	41.3438	ha							
1.1.9	Temporary Haul Roads to Borrow Areas	1	LS	Surface maintenance						
1.1.10	Site Dewatering, Sediment Control, and Drainage	1	LS							
1.2	Dams (Main, North and West)									
1.2.1	Excavate Cutoff Trench - All	82875	m3							
1.2.2	Zone A - Starter Dam (from Borrow)	359433	m3							
1.2.3	Zone A - Annual Raises (from Borrow)	2487803	m3							
1.2.4	Zone B (General Fill) - Starter Dam (from Open Pit Mining)	600000	m3							
1.2.5	Zone B (General Fill) - Starter Dam (from Borrow)	342680	m3							
1.2.6	Zone B (General Fill) - Annual Raises (from Borrow)	1210783	m3							
1.2.7	Zone E (Blanket Drain) - All (from Granular Borrow)	726573	m3							
1.2.8	Zone C - Upstream Cycloned Sand	3510000	m3							
1.2.9	Zone D - Downstream Cycloned Sand	12204000	m3							
1.2.10	Seepage Mitigation - Provisional Sum	1	LS							
1.3	Water Management									
1.3.1	Seepage Collection Dam Fill (South)	250000	m3							
1.3.2	Seepage Collection Dam Fill (North)	250000	m3							
1.3.3	Seepage Collection Ditches	7875	m							
1.3.4	Diversion Ditch - Excavation	3800	m							
1.3.5	Diversion Ditch - Erosion Protection	7600	m3							
1.3.6	Temporary Ditching - Excavation	49000	m3							
1.3.7	Sedimentation Pond - Excavation	750	m3					Sediment excavation and disposal	Approx. 16,000 m3/yr	
1.4	Tailings Delivery and Water Reclaim									
	See Separate Estimate									
1.5	Closure									
1.5.1	Non-PAG Cover Over Tailing Beach	472000	m3							
1.5.2	Soil Cover on Dam Slope Face Using Till	392527	m3					Erosion repair		
1.5.3	Topsoil Cover on Dam Slope Face Using Organics	117758	m3					Erosion repair		
1.5.4	Erosion Protection	6400	m							
1.5.5	Erosion Protection	3200	m3							
1.5.6	Reclamation	392527	m2					Monitoring		
1.5.7	Closure Spillway - Excavation in Bedrock	7500	m3					Monitoring/clearing		

TABLE 1 - Operating Activity Task List and Quantity/Cost Estimate - Rev.2

Rev.1 - Corrections under "Special Equipment"

Rev.2 - Correction to column heading "Non-Routine/Breakdown Maintenance"

WBS Code	Area, Item Description & Equipment Number	Measure Qty	Unit	Daily-Weekly	Every 3 Months	Every 6 Months	Every 12 months	Special Equipment	Estimated Annual Cost of Consumables or Annual Quantity	Non-Routine/Breakdown Maintenance (Allowance)
1.5.8	Decommission Diversion Ditches	3800	m							
2	Low Grade Ore Stockpile and Waste Rock Dump									
2.1	Site Preparation									
2.1.1	Clear and Grub - Waste Rock Dump	174	ha							
2.1.2	Clear and Grub - LGO Stockpile	29.5	ha							
2.1.3	Excavate and Dispose Unsuitable Soils - Waste Rock Dump	50000	m3							
2.1.3	Excavate and Dispose Unsuitable Soils - LGO Stockpile	646113	m3							
2.2	Water Management									
2.2.1	Seepage Collection Ditches	1125	m	Monitoring						
2.2.2	Diversion Ditch - Excavation	3600	m				Clearing			
2.2.3	Diversion Ditch - Erosion Protection	7200	m3							
2.2.4	Seepage Collection Pumping Sumps	14400	m3				Sediment excavation and disposal			
2.2.5	Surface Water Return Pumps	4	ea	Pump maintenance						
2.2.6	Surface Water Return Pipelines	3000	m	Monitoring						
2.2.7	Diversion Outlet Erosion Control	1	LS	Monitoring						
2.3	Closure									
2.3.1	Topsoil Cover - From Stockpiles	610500	m3				Erosion repair			
2.3.2	Low Permeability Cover - From Stockpile	1851360	m3				Erosion repair			
2.3.3	Erosion Protection	22500	m							
2.3.4	Erosion Protection	11250	m3							
2.3.4	Reclamation	2035000	m2				Monitoring			
2.3.5	Decommission Diversion Ditches	3600	m							
2.3.6	Recontouring and grading (estimate 1.6 m3/m2)	2962176	m3							
2.3.7	Seepage Water Treatment Plant (Capital)									
2.3.8	Treatment Plant Infrastructure Upkeep (\$/year)			Pump Maintenance						
2.3.9	Seepage Water Treatment Plant (Operating \$/year)			Reagent purchasing						
2.3.10	Sludge Disposal (\$/year)				Sludge Disposal					
3	Stockpiles and Borrow Areas									
3.1	Site Preparation									
3.1.1	Clear and Grub - Stockpiles	62.8	ha							
3.1.2	Strip - Stockpiles	125600	m3							
3.1.3	Clear and Grub - Granular Borrow Areas	21.7	ha							
3.1.4	Strip - Borrow Areas	43400	m3							
3.1.5	Excavate Unsuitable Soils	231938	m3							
3.2	Water Management									
3.2.1	Seepage Collection Ditches	4876	m							
3.2.2	Sedimentation Ponds - Excavation	3000	m3				Sediment excavation and disposal			
3.3	Closure									
3.3.1	Topsoil Cover	16.9	m3							
3.3.3	Erosion Protection	1	LS							
3.3.5	Reclamation	0.00845	ha				Monitoring			
4	Booker Lake and Ore Lake									
4.1	Site Preparation									
4.1.1	Excavate Lake-Bottom Sediment - Booker Lake	600000	m3							
4.1.2	Lake Dewatering - Booker Lake	1500000	m3							
4.1.3	Excavate Lake-Bottom Sediment - Ore Lake	50000	m3							
4.1.4	Lake Dewatering - Ore Lake	127235	m3							
4.1.5	Excavate Organic Sediment - Bog	13806	m3							
4.1.6	Overburden Containment Fill - From Stockpile	500000	m3							
5	Infrastructure									
5.1	Roads									
5.1.1	Primary Roads (~ 10 m wide, 30 m clear and grub)	12.6	km	Surface maintenance			Import additional fill	Crushing/Screening Plant	\$25,000/yr	
5.1.2	Secondary Roads (~ 6 m wide)	6.9	km	Surface maintenance			Import additional fill	Crushing/Screening Plant	\$12,500/yr	
5.2	Creek Crossings									
5.2.1	Primary Creek Crossing	1	LS				Monitoring			
5.2.2	Secondary Road/Pipeline Crossings	16	each				Monitoring			
5.3	Water and Tailings Pipeline									
5.3.1	Clear and Grub	41000	m2							
5.3.2	Emergency Backflow Ponds - Excavation	20000	m3				Sediment excavation and disposal		Approx. 5,000 m3	
6	Monitoring									
6.1	Instrumentation	1	LS		Monitoring					
7	Other									
7.1	Mobilization/Demobilization - Initial									
7.2	Mobilization/Demobilization - On-going									
7.5	Contractor Crew Housing (Allowance)	1	LS							
7.3	Engineering - Initial									
7.4	Engineering - On-going									