Appendix B
Updated Reclamation Cost Estimate

POGO MINE
Table 1: Pogo Mine DSTF Expansion Cost Model Update
3/20/2012

SUMMARY OF ESTIMATED RECLAMATION AND CLOSURE COSTS-POGO MINE SITE									
Item Description		**1 year holding cost**	**Phase I**	**Phase II**	**Phase III**	**Phase IV Water Treatment**	**Phase IV Reclamation**	**Phase V**	**Total**
Direct Cost		$ 812,700	$ -	$ 952,400	$ 10,819,000	$ 6,298,300	$ 3,686,000	$ 109,500	$ 22,677,900
Site Management Cost		$ 1,221,900	$ -	$ 27,800	$ 2,953,800	$ 5,374,833	$ 2,001,700	$ -	$ 11,580,033
Subtotal Direct Cost		**$ 2,034,600**	**$ -**	**$ 980,200**	**$ 13,772,800**	**$ 11,673,133**	**$ 5,687,700**	**$ 109,500**	**$ 34,257,933**
Indirect Costs	**% of Subtotal**								
Mobilization/Demobilization	**5.0%**	$ -	$ -	$ 49,010	$ 688,640	$ -	$ 284,385	$ 5,475	$ 1,027,510
Subtotal		**$ 2,034,600**	**$ -**	**$ 1,029,210**	**$ 14,461,440**	**$ 11,673,133**	**$ 5,972,085**	**$ 114,975**	**$ 35,285,443**
Contractor Overhead and Profit	**15.0%**	$ 305,190	$ -	$ 154,382	$ 2,169,216	$ 1,750,970	$ 895,813	$ 17,246	$ 5,292,816
Subtotal		**$ 2,339,790**	**$ -**	**$ 1,183,592**	**$ 16,630,656**	**$ 13,424,103**	**$ 6,867,898**	**$ 132,221**	**$ 40,578,259**
Performance Bond	**3.0%**	$ 70,194	$ -	$ 35,508	$ 498,920	$ 402,723	$ 206,037	$ 3,967	$ 1,217,348
Insurance	**1.5%**	$ 35,097	$ -	$ 17,754	$ 249,460	$ 201,362	$ 103,018	$ 1,983	$ 608,674
Subtotal		**$ 2,445,081**	**$ -**	**$ 1,236,853**	**$ 17,379,036**	**$ 14,028,187**	**$ 7,176,953**	**$ 138,171**	**$ 42,404,281**
Contract Administration	**4.0%**	$ 97,803	$ -	$ 49,474	$ 695,161	$ 561,127	$ 287,078	$ 5,527	$ 1,696,171
Engineering Re-Design	**3.0%**	$ -	$ -	$ 37,106	$ 521,371	$ -	$ 215,309	$ 4,145	$ 777,930
Contingency	**15.0%**	$ 366,762	$ -	$ 185,528	$ 2,606,855	$ 2,104,228	$ 1,076,543	$ 20,726	$ 6,360,642
Total Indirects		**$ 875,046**	**$ -**	**$ 528,761**	**$ 7,429,623**	**$ 5,020,410**	**$ 3,068,183**	**$ 59,069**	**$ 16,981,092**
Total Direct + Indirect		$ 2,909,646	$ -	$ 1,508,961	$ 21,202,423	$ 16,693,543	$ 8,755,883	$ 168,569	$ 51,239,025
Inflation Proofing	**2.06%**	$ 59,926	$ -	$ 31,078	$ 436,676	$ 343,813	$ 180,332	$ 3,472	$ 1,055,297
Total Closure Cost		**$ 2,969,572**	**$ -**	**$ 1,540,039**	**$ 21,639,099**	**$ 17,037,356**	**$ 8,936,215**	**$ 172,041**	**$ 52,294,322**
								Rounded	$ 52,294,000

Phase	Area Code	WBS	Item	Area Description	Activity	Task	Description 2	Status	Quantity	Unit	Quantity	Unit	Cost Code	Unit Mhrs	Total Mhrs	Activity Total	Source / Comments
1 year holding	6000	S-00		All of Mine	Water treatment	Operate water treatment plant			12	months	12	months	W.001	0.00	8760.00	$648,199	See Water_treatment cost worksheet
1 year holding	6000	S-00		All of Mine	Monitoring	Monitoring Phase III TeckCominco inspection			1	yr	1	yr			540.00	$164,521	See monitoring cost
															9300.00	$812,720	

CLOSURE COSTS - Site Management Cost

Administration costs	enter 1 if item is required, 0 if not required																	$	205,846
	1	Worker's compensation	62	Man-months	x	$ -	per person per month										$0		
	1	equip. Insurance (10% of equipment cost)	10%		of	$0	Equipment Cost										$0		
	1	Office Supplies	12.00	months	x	$100	/month										$1,200		
	1	Communications	12.00	months	x	$1,000	/month										$12,000		
	1	Heating Fuel (avg. 400 gal per month)	12.00	months	x	400	gal/month	x	$ 4.46	/ gallon							$21,408		
	1	Misc. Supplies	12.00	months	x	$500	/month										$6,000		
	1	Camp Operation	365	days	x	$453	per day										$165,238		
Field support														Turnarounds	Total hours	unit	rate	$	358,668
	1	Supervisor #1	365	days	x	12	hrs/day							26	4197.5	hr	$ 80.35	$337,249	
	0	Administrative Assistant #1	365	days	x	12	hrs/day							26	4197.5	hr	$ -	$0	
	1	Field Support Vehicles	365	days	x	1	trucks								1,095	hr	$ 19.56	$21,420	
	0	Turnaround costs - Admin	-	trips	x	$ 295.92	/trip											$0	
Field crew														Turnarounds	Total hours	unit	rate	$	632,780
	0	Foreman #1	365	days	x	12	hrs/day							26	4,198	hr	$ -	$0	
	0	Foreman #2	365	days	x	12	hrs/day							26	4197.5	hr	$ -	$0	
	0	Foreman #3	365	days	x	12	hrs/day							26	4197.5	hr	$ -	$0	
	1	Equipment Operator	365	days	x	12	hrs/day							26	4197.5	hr	$ 73.83	$309,887	
	1	Mechanic #1	365	days	x	12	hrs/day							26	4197.5	hr	$ 71.82	$301,473	
	0	Mechanic #2	365	days	x	12	hrs/day							26	4197.5	hr	$ -	$0	
	0	Survey Field Manager	365	days	x	12	hrs/day							26	4197.5	hr	$ -	$0	
	0	Survey Crew (Surveyor + helper)	365	days	x	12	hrs/day							26	4197.5	hr	$ -	$0	
	1	Field Support Vehicles	365	days	x	1	trucks								1,095	hr	$ 19.56	$21,420	
	0	Turnaround costs - Crew	-	trips	x	$ 295.92	/trip											$0	
Contract Administration and QA/QC														Turnarounds	Total hours	unit	rate	$	-
	0	Resident Engineer #1	365	days	x	12	hrs/day							26	4197.5	hr	$ -	$0	
	0	Resident Engineer #2	365	days	x	12	hrs/day							26	4197.5	hr	$ -	$0	
	0	Engineering Technician #1	365	days	x	12	hrs/day							26	4197.5	hr	$ -	$0	
	0	Engineering Technician #2	365	days	x	12	hrs/day							26	4197.5	hr	$ -	$0	
	0	Laboratory and Material Testing Costs	-	months	x	$1,000	/month											$0	
	0	Field Support Vehicles	365	days	x	1	trucks								1,095	hr	$ -	$0	
	0	Turnaround costs - QA/QC	-	trips	x	$ 295.92	/trip											$0	
Other																		$	24,650
	0	Helicopter support		hours	x	$ 1,390	/hour	x										$0	
	1	Freight costs	12%		of	$0	Material Costs											$0	
	1	Allowance for haul road maintenance	1.0	yr													$ 24,650.00	$24,650	
Subtotal Site Management Cost																			$1,221,945
CLOSURE COSTS - TOTAL																			
		Total direct and management costs																	$2,034,664

Administrative Crew size	3	Crew Size
	346.0	days + 10 for pre/post job work
Project duration	12	months
Field crew assumption calculations		
expected duration	12	months
Expected work hours per month per man	322	mhr/month
Total work hours for the project per man	3864	hrs
Crew size	2	people
Camp rotation is every 30 days	0.0	days
Required supervision		
Forman 1-5 men		
Forman 1-10 men		
Forman 1-20 men		
Forman 1-30 men		

Table

The current labor rates in use are for AlaskanContractor

I: Post-Construction

Area Code	Area	Activity	Description	Status	Total Mhrs	Labor Cost	Material Cost	Equipment Cost	Fuel Consumed (gal)	Fuel Cost	Activity Total	Area Subtotal	Source / Comments
CLOSURE COSTS - DIRECT													
1000	1525 Portal Area											$0	
		Demobilization/Demolition											
		Recontouring/Reshaping											
		Spread Growth Media											
		Enhanced recovery											
		Install											
		Monitoring											
2000	Airstrip Area											$0	
		Demobilization/Demolition											
		Recontouring/Reshaping											
		Spread Growth Media											
		Enhanced recovery											
		Install											
		Monitoring											
3000	Mill & Camp Area											$0	
		Demobilization/Demolition											
		Recontouring/Reshaping											
		Spread Growth Media											
		Enhanced recovery											
		Install											
		Monitoring											
4000	Drystack and RTP											$0	
		Demobilization/Demolition											
		Recontouring/Reshaping											
		Spread Growth Media											
		Enhanced recovery											
		Install											
		Monitoring											
5000	Underground workings											$0	
		Demobilization/Demolition											
		Recontouring/Reshaping											
		Spread Growth Media											
		Enhanced recovery											
		Install											
6000	All Mine in general											$0	
		Demobilization/Demolition											
		Recontouring/Reshaping											
		Spread Growth Media											
		Enhanced recovery											
		Install											
		Water treatment											
		Monitoring											
Subtotal Direct Costs										**$**	**-**		

CLOSURE COSTS - Site Management Cost

Administration c	enter 1 if item is required, 0 if not required														$	-
0	Worker's compensation	-	Man-months	x		$ -	per person per month								$0	
0	equip. Insurance (10% of equipment cost)	10%			of	$0	Equipment Cost								$0	
0	Office Supplies	-	months		x	$100	/month								$0	
0	Communications	-	months		x	$1,000	/month								$0	
0	Heating Fuel (avg. 400 gal per month)	-	months		x	400	gal/month x	$ 4.46	/ gallon						$0	
0	Misc. Supplies	-	months		x	$500	/month								$0	
0	Camp Operation	-	Man-days		x	$50	per day per person								$0	
Field support								Turnarounds	Total hours	unit		rate			$	-
0	Supervisor #1	-	days		x	12	hrs/day	-	0	hr	$	-			$0	
0	Administrative Assistant #1	-	days		x	12	hrs/day	-	0	hr	$	-			$0	
0	Field Support Vehicles	-	days		x	0	trucks		0	day	$	84.08			$0	
0	Turnaround costs - Admin	-	trips		x	$ -	/trip								$0	
Field crew								Turnarounds	Total hours	unit		rate			$	-
0	Foreman #1	-	days		x	12	hrs/day	-	0	hr	$	-			$0	
0	Foreman #2	-	days		x	12	hrs/day	-	0	hr	$	-			$0	
0	Foreman #3	-	days		x	12	hrs/day	-	0	hr	$	-			$0	
0	Foreman #4	-	days		x	12	hrs/day	-	0	hr	$	-			$0	
0	Mechanic #1	-	days		x	12	hrs/day	-	0	hr	$	-			$0	
0	Mechanic #2	-	days		x	12	hrs/day	-	0	hr	$	-			$0	
0	Survey Field Manager	-	days		x	12	hrs/day	-	0	hr	$	-			$0	
0	Survey Crew (Surveyor + helper)	-	days		x	12	hrs/day	-	0	hr	$	-			$0	
0	Field Support Vehicles	-	days		x	0	trucks				$	-			$0	
0	Turnaround costs - Crew	-	trips		x	$ -	/trip								$0	
Contract Administration and QA/QC								Turnarounds	Total hours	unit		rate			$	-
0	Resident Engineer #1	-	days		x	12	hrs/day	-	0	hr	$	-			$0	
0	Resident Engineer #2	-	days		x	12	hrs/day	-	0	hr	$	-			$0	
0	Engineering Technician #1	-	days		x	12	hrs/day	-	0	hr	$	-			$0	
0	Engineering Technician #2	-	days		x	12	hrs/day	-	0	hr	$	-			$0	
0	Laboratory and Material Testing Costs	-	months		x	$1,000	/month								$0	
0	Field Support Vehicles	-	days		x	1	trucks		0	day	$	-			$0	
0	Turnaround costs - QA/QC	-	trips		x	$ -	/trip								$0	
Other															$	-
0	Helicopter support		hours	x		$ 1,390	/hour x								$0	
0	Freight costs	12%			of	$0	Material Costs								$0	
0	Allowance for haul road maintenance	10.0	yr									$ 24,650.00			$0	
Subtotal Site Management Cost																$0
CLOSURE COSTS - TOTAL																
	Total direct and management costs															**$0**

Administrative Crew size	0	Crew Size
	0.0	days + 10 for pre/post job work
Project duration	0	months
Field crew assumption calculations		
expected duration	-	months
Expected work hours per month per man	322	mhr/month
Total work hours for the project per man	0	hrs
Crew size	0	people
Camp rotation is every 30 days	0.0	days
Required supervision		
Forman 1-5 men		
Forman 1-10 men		
Forman 1-20 men		
Forman 1-30 men		

Table

The current labor rates in use are for AlaskanContractor

II: Reclamation Concurrent with Mining

Area Code	Area	Activity	Description	Status	Total Mhrs	Labor Cost	Material Cost	Equipment Cost	Fuel Consumed (gal)	Fuel Cost	Activity Total	Area Subtotal	Source / Comments
CLOSURE COSTS - DIRECT													
1000	1525 Portal Area											$942,402	
		Demobilization/Demolition			675	$76,277	$22,052	$45,508	1,706	$7,609	$151,446		
		Recontouring/Reshaping			2,178	$159,971		$242,165	17,718	$79,025	$481,161		
		Spread Growth Media			159	$11,760		$15,792	1,123	$5,007	$32,559		
		Enhanced recovery			1		$10,606				$10,606		
		Install			2,100	$143,593	$24,500	$72,378	5,865	$26,159	$266,630		
		Monitoring											
2000	Airstrip Area											$2,691	
		Demobilization/Demolition			10	$738		$1,575	85	$378	$2,691		
		Recontouring/Reshaping											
		Spread Growth Media											
		Enhanced recovery											
		Install											
		Monitoring											
3000	Mill & Camp Area											$7,215	
		Demobilization/Demolition			40	$4,893					$6,893		
		Recontouring/Reshaping											
		Spread Growth Media											
		Enhanced recovery											
		Install			2	$102	$202	$13	1	$6	$322		
		Monitoring											
4000	Drystack and RTP											$0	
		Demobilization/Demolition											
		Recontouring/Reshaping											
		Spread Growth Media											
		Enhanced recovery											
		Install											
		Monitoring											
5000	Underground workings											$0	
		Demobilization/Demolition											
		Recontouring/Reshaping											
		Spread Growth Media											
		Enhanced recovery											
		Install											
6000	All Mine in general											$0	
		Demobilization/Demolition											
		Recontouring/Reshaping											
		Spread Growth Media											
		Enhanced recovery											
		Install											
		Water treatment											
		Monitoring											
Subtotal Direct Costs					**5,164**	**$397,333**	**$57,360**	**$377,432**	**26,498**	**$ 118,183**	**$952,308**	$952,308	

CLOSURE COSTS - Site Management Cost

Administration costs	enter 1 if item is required, 0 if not required														$	-
0	Worker's compensation	16	Man-months	x		$ -	per person per month							$0		
0	equip. Insurance (10% of equipment cost)	10%			of	$377,432	Equipment Cost							$0		
0	Office Supplies	7.80	months		x	$100	/month							$0		
0	Communications	7.80	months		x	$1,000	/month							$0		
0	Heating Fuel (avg. 400 gal per month)	7.80	months		x	400	gal/month x	$ 4.46	/ gallon					$0		
0	Misc. Supplies	7.80	months		x	$500	/month							$0		
0	Camp Operation	16	Man-days		x	$50	per day per person							$0		
Field support								Turnarounds	Total hours	unit		rate			$	-
0	Supervisor #1	240	days		x	12	hrs/day	8	2760	hr	$	-	$0			
0	Administrative Assistant #1	240	days		x	12	hrs/day	8	2760	hr	$	-	$0			
0	Field Support Vehicles	240	days		x	0	trucks		0	day	$	84.08	$0			
0	Turnaround costs - Admin	8	trips		x		/trip						$0			
Field crew								Turnarounds	Total hours	unit		rate			$	-
0	Foreman #1	224	days		x	12	hrs/day	7	2576	hr	$	-	$0			
0	Foreman #2	224	days		x	12	hrs/day	7	2576	hr	$	-	$0			
0	Foreman #3	224	days		x	12	hrs/day	7	2576	hr	$	-	$0			
0	Foreman #4	224	days		x	12	hrs/day	7	2576	hr	$	-	$0			
0	Mechanic #1	224	days		x	12	hrs/day	7	2576	hr	$	-	$0			
0	Mechanic #2	224	days		x	12	hrs/day	7	2576	hr	$	-	$0			
0	Survey Field Manager	224	days		x	12	hrs/day	7	2576	hr	$	-	$0			
0	Survey Crew (Surveyor + helper)	224	days		x	12	hrs/day	7	2576	hr	$	-	$0			
0	Field Support Vehicles	224	days		x	1	trucks				$	-	$0			
0	Turnaround costs - Crew	7	trips		x		/trip						$0			
Contract Administration and QA/QC								Turnarounds	Total hours	unit		rate			$	-
0	Resident Engineer #1	240	days		x	12	hrs/day	8	2760	hr	$	-	$0			
0	Resident Engineer #2	240	days		x	12	hrs/day	8	2760	hr	$	-	$0			
0	Engineering Technician #1	240	days		x	12	hrs/day	8	2760	hr	$	-	$0			
0	Engineering Technician #2	240	days		x	12	hrs/day	8	2760	hr	$	-	$0			
0	Laboratory and Material Testing Costs	8	months		x	$1,000	/month						$0			
0	Field Support Vehicles	240	days		x	1	trucks		240	day	$	-	$0			
0	Turnaround costs - QA/QC	8	trips		x		/trip						$0			
Other															$	27,791
1	Helicopter support	20	hours	x		$ 1,390	/hour x						$27,791			
0	Freight costs	12%			of	$57,360	Material Costs						$0			
0	Allowance for haul road maintenance	10.0	yr								$	24,650.00	$0			
Subtotal Site Management Cost																$27,791
CLOSURE COSTS - TOTAL																
	Total direct and management costs															**$980,100**

Administrative Crew size	0	Crew Size
	234.0	days + 10 for pre/post job work
Project duration	8	months
Field crew assumption calculations		
expected duration	8	months
Expected work hours per month per man	322	mhr/month
Total work hours for the project per man	2576	hrs
Crew size	2	people
Camp rotation is every 30 days	224.0	days
Required supervision		
Forman 1-5 men		
Forman 1-10 men		
Forman 1-20 men		
Forman 1-30 men		

Table

The current labor rates in use are for AlaskanContractor

III: Final Reclamation & Closure

Area Code	Area	Activity	Description	Status	Total Mhrs	Labor Cost	Material Cost	Equipment Cost	Fuel Consumed (gal)	Fuel Cost	Activity Total	Area Subtotal	Source / Comments
CLOSURE COSTS - DIRECT													
1000	1525 Portal Area											$813,435	
		Demobilization/Demolition			2,341	$247,932	$99,705	$176,540	7,569	$33,759	$557,935		
		Recontouring/Reshaping			437	$30,139	$38,429	$46,116	3,343	$14,911	$129,594		
		Spread Growth Media			10	$721		$2,788	200	$891	$4,400		
		Enhanced recovery			66	$4,728	$12,636	$18,295	1,311	$5,847	$41,507		
		Install									$75,000		
		Monitoring									$5,000		
2000	Airstrip Area											$124,993	
		Demobilization/Demolition			127	$11,535		$8,619	165	$736	$20,891		
		Recontouring/Reshaping			209	$14,236	$22,616	$17,943	1,297	$5,787	$60,582		
		Spread Growth Media			9	$655		$879	66	$293	$1,827		
		Enhanced recovery			35	$2,358	$27,572	$5,077	378	$1,688	$36,694		
		Install											
		Monitoring									$5,000		
3000	Mill & Camp Area											$3,719,300	
		Demobilization/Demolition			9,608	$770,804	$5,189	$978,031	62,964	$280,821	$2,044,845		
		Recontouring/Reshaping			4,351	$319,899	$27,633	$788,409	54,802	$244,418	$1,380,359		
		Spread Growth Media			220	$15,601		$28,848	2,074	$9,249	$53,698		
		Enhanced recovery			28		$230,398				$230,398		
		Install											
		Monitoring									$10,000		
4000	Drystack and RTP											$3,131,301	
		Demobilization/Demolition			304	$22,480		$48,405	3,607	$16,090	$86,974		
		Recontouring/Reshaping			3,931	$291,487		$446,303	31,635	$141,095	$878,885		
		Spread Growth Media			1,420	$105,328		$153,997	10,899	$48,609	$307,934		
		Enhanced recovery			80		$658,443				$658,443		
		Install			885	$67,683		$1,074,267	12,806	$57,116	$1,199,065		
		Monitoring											
5000	Underground workings											$2,965,744	
		Demobilization/Demolition			150	$6,162	$70,047	$366	137	$613	$77,188		
		Recontouring/Reshaping											
		Spread Growth Media											
		Enhanced recovery											
		Install			9,004	$76,319	$743,810	$13,221	1,147	$5,115	$2,888,556		
6000	All Mine in general											$64,199	
		Demobilization/Demolition											
		Recontouring/Reshaping			3	$253		$546	41	$181	$981		
		Spread Growth Media			17	$1,245		$1,790	132	$587	$3,622		
		Enhanced recovery			100	$7,067	$39,251	$10,000	735	$3,279	$59,596		
		Install											
		Water treatment											Moved to IV: Water Treatment
		Monitoring											Moved to IV: Water Treatment
Subtotal Direct Costs					**38,496**	**$1,996,632**	**$1,975,728**	**$3,820,438**	**195,308**	**$ 871,084**	**$10,818,973**	$10,818,973	

CLOSURE COSTS - Site Management Cost

Administration c	enter 1 if item is required, 0 if not required														$ 789,379
1	Worker's compensation	183	Man-months	x	$ -	per person per month								$0	
1	equip. Insurance (10% of equipment cost)	10%		of	$3,820,438	Equipment Cost								$382,044	
1	Office Supplies	6.00	months	x	$100	/month								$600	
1	Communications	6.00	months	x	$1,000	/month								$6,000	
1	Heating Fuel (avg. 400 gal per month)	6.00	months	x	400	gal/month x	$ 4.46	/ gallon						$10,704	
1	Misc. Supplies	6.00	months	x	$500	/month								$3,000	
1	Camp Operation	5,545	Man-days	x	$70	per day per person								$387,031	
Field support								Turnarounds	Total hours	unit		rate			$ 442,412
1	Supervisor #1	180	days	x	11.5	hrs/day		13	2070	hr	$	80.35	$166,314		
2	Administrative Assistant #1	180	days	x	11.5	hrs/day		13	2,070.0	hr	$	64.14	$265,534		
1	Field Support Vehicles	180	days	x	1	trucks			540.0	hr	$	19.56	$10,563		
0	Turnaround costs - Admin	13	trips	x	$ 51.74	/trip							$0		
Field crew								Turnarounds	Total hours	unit		rate			$ 1,056,922
1	Foreman #1	168	days	x	11.5	hrs/day		12	1932	hr	$	79.79	$154,148		
1	Foreman #2	168	days	x	11.5	hrs/day		12	1932	hr	$	79.79	$154,148		
0	Foreman #3	168	days	x	11.5	hrs/day		12	1932	hr	$	-	$0		
0	Foreman #4	168	days	x	11.5	hrs/day		12	1932	hr	$	-	$0		
1	Mechanic #1	168	days	x	11.5	hrs/day		12	1932	hr	$	71.82	$138,760		
1	Mechanic #2	168	days	x	11.5	hrs/day		12	1932	hr	$	71.82	$138,760		
1	Survey Field Manager	168	days	x	11.5	hrs/day		12	1932	hr	$	78.61	$151,868		
1	Survey Crew (Surveyor + helper)	168	days	x	11.5	hrs/day		12	1932	hr	$	139.72	$269,942		
1	Field Support Vehicles	168	days	x	5	trucks			2,520	hr	$	19.56	$49,295		
0	Turnaround costs - Crew	12	trips	x	$ 51.74	/trip							$0		
Contract Administration and QA/QC								Turnarounds	Total hours	unit		rate			$ 382,735
1	Resident Engineer #1	180	days	x	11.5	hrs/day		13	2070	hr	$	96.55	$199,858		
0	Resident Engineer #2	180	days	x	11.5	hrs/day		13	2070	hr	$	-	$0		
1	Engineering Technician #1	180	days	x	11.5	hrs/day		13	2070	hr	$	80.35	$166,314		
0	Engineering Technician #2	180	days	x	11.5	hrs/day		13	2070	hr	$	-	$0		
1	Laboratory and Material Testing Costs	6	months	x	$1,000	/month							$6,000		
1	Field Support Vehicles	180	days	x	1	trucks			540	hr	$	19.56	$10,563		
0	Turnaround costs - QA/QC	13	trips	x	$ 51.74	/trip							$0		
Other															$ 282,309
0	Helicopter support	38,496	hours	x	$ 1,390	/hour x							$0		
1	Turnaround Cost	13	trips	x	$ 1,600	/trip							$20,571		
1	Freight costs	12%		of	$1,975,728	Material Costs							$237,087		
1	Allowance for haul road maintenance	1.0	yr								$	24,650.00	$24,650		
Subtotal Site Management Cost															$2,953,756
CLOSURE COSTS - TOTAL															
	Total direct and management costs														**$13,772,729**

Administrative Crew size	11	Crew Size
	178.0	days + 10 for pre/post job work
Project duration	6	months
Field crew assumption calculations		
expected duration	6	months
Expected work hours per month per man	322	mhr/month
Total work hours for the project per man	1,932	hrs
Crew size	20	people
Camp rotation is every 14 days	168.0	days
Required supervision		
Forman 1-5 men		
Forman 1-10 men		
Forman 1-20 men		
Forman 1-30 men		

Table

The current labor rates in use are for AlaskanContractor

IV: Water Treatment

Area Code	Area	Activity	Description	Status	Total Mhrs	Labor Cost	Material Cost	Equipment Cost	Fuel Consumed (gal)	Fuel Cost	Activity Total	Area Subtotal	Source / Comments
CLOSURE COSTS - DIRECT													
1000	1525 Portal Area											$0	
		Demobilization/Demolition											
		Recontouring/Reshaping											
		Spread Growth Media											
		Enhanced recovery											
		Install											
		Monitoring											
2000	Airstrip Area											$0	
		Demobilization/Demolition											
		Recontouring/Reshaping											
		Spread Growth Media											
		Enhanced recovery											
		Install											
		Monitoring											
3000	Mill & Camp Area											$0	
		Demobilization/Demolition											
		Recontouring/Reshaping											
		Spread Growth Media											
		Enhanced recovery											
		Install											
		Monitoring											
4000	Drystack and RTP											$0	
		Demobilization/Demolition											
		Recontouring/Reshaping											
		Spread Growth Media											
		Enhanced recovery											
		Install											
		Monitoring											
5000	Underground workings											$0	
		Demobilization/Demolition											
		Recontouring/Reshaping											
		Spread Growth Media											
		Enhanced recovery											
		Install											
6000	All Mine in general											$6,298,310	
		Demobilization/Demolition											
		Recontouring/Reshaping											
		Spread Growth Media											
		Enhanced recovery											
		Install											
		Water treatment			27,600						$4,453,533		
		Monitoring			5,940						$1,844,777		
Subtotal Direct Costs					**33,540**					**$ -**	**$6,298,310**	$6,298,310	

CLOSURE COSTS - Site Management Cost

Administration c	enter 1 if item is required, 0 if not required														$ 904,543
0	Worker's compensation	480	Man-months	x		$ -	per person per month								$0
0	equip. Insurance (10% of equipment cost)	10%			of	$0	Equipment Cost								$0
1	Office Supplies	120.00	months		x	$100	/month								$12,000
1	Communications	120.00	months		x	$1,000	/month								$120,000
1	Heating Fuel (avg. 400 gal per month)	120.00	months		x	400	gal/month x	$ 4.46	/ gallon						$214,080
1	Misc. Supplies	120.00	months		x	$500	/month								$60,000
1	Camp Operation	3,650	days		x	$137	per day								$498,463
Field support									Turnarounds	Total hours	unit		rate		$ 214,198
0	Supervisor #1	3,650	days		x	11.5	hrs/day		261	41975	hr	$	-	$0	
0	Administrative Assistant #1	3,650	days		x	11.5	hrs/day		261	41975	hr	$	-	$0	
1	Field Support Vehicles	3,650	days		x	1	trucks			10,950.0	hr	$	19.56	$214,198	
0	Turnaround costs - Admin	261	trips		x	$ 400.00	/trip							$0	
Field crew									Turnarounds	Total hours	unit		rate		$ 4,009,592
0	Foreman #1	3,650	days		x	11.5	hrs/day		261	41975	hr	$	-	$0	
0	Foreman #2	3,650	days		x	11.5	hrs/day		261	41975	hr	$	-	$0	
0	Foreman #3	3,650	days		x	11.5	hrs/day		261	41975	hr	$	-	$0	
0	Equipment Operator	3,650	days		x	11.5	hrs/day		261	41975	hr	$	73.83	$0	
1	Mechanic #1	3,650	days		x	11.5	hrs/day		261	41975	hr	$	71.82	$3,014,731	
0.3	Mechanic #2	3,650	days		x	11.5	hrs/day		261	41975	hr	$	71.82	$994,861	
0	Survey Field Manager	3,650	days		x	11.5	hrs/day		261	41975	hr	$	-	$0	
0	Survey Crew (Surveyor + helper)	3,650	days		x	11.5	hrs/day		261	41975	hr	$	-	$0	
0	Field Support Vehicles	3,650	days		x	1	trucks					$	-	$0	
0	Turnaround costs - Crew	261	trips		x	$ 400.00	/trip							$0	
Contract Administration and QA/QC									Turnarounds	Total hours	unit		rate		$ -
0	Resident Engineer #1	3,650	days		x	11.5	hrs/day		261	41,975.0	hr	$	-	$0	
0	Resident Engineer #2	3,650	days		x	11.5	hrs/day		261	41975	hr	$	-	$0	
0	Engineering Technician #1	3,650	days		x	11.5	hrs/day		261	41975	hr	$	-	$0	
0	Engineering Technician #2	3,650	days		x	11.5	hrs/day		261	41975	hr	$	-	$0	
0	Laboratory and Material Testing Costs	120	months		x	$1,000	/month							$0	
0	Field Support Vehicles	3,650	days		x	1	trucks			10,950	hr	$	-	$0	
0	Turnaround costs - QA/QC	261	trips		x	$ 400.00	/trip							$0	
Other															$ 246,500
0	Helicopter support	33,540	hours	x		$ 1,390	/hour	x						$0	
0	Turnaround Cost	-				$ 1,600	/trip							$0	
0	Freight costs	12%			of	$0	Material Costs							$0	
1	Allowance for haul road maintenance	10.0	yr									$	24,650.00	$246,500	
Subtotal Site Management Cost															$5,374,833
CLOSURE COSTS - TOTAL															
	Total direct and management costs														**$11,673,143**

Administrative Crew size	2	Crew Size
	3650.0	days
Project duration	120	months
Field crew assumption calculations		
expected duration	**120**	months
Expected work hours per month per man	322	mhr/month
Total work hours for the project per man	38,640	hrs
Crew size	2	people
Camp rotation is every 30 days	3650.0	days
Required supervision		
Forman 1-5 men		
Forman 1-10 men		
Forman 1-20 men		
Forman 1-30 men		

Table

The current labor rates in use are for AlaskanContractor

IV: Post Closure Reclamation

Area Code	Area	Activity	Description	Status	Total Mhrs	Labor Cost	Material Cost	Equipment Cost	Fuel Consumed (gal)	Fuel Cost	Activity Total	Area Subtotal	Source / Comments
CLOSURE COSTS - DIRECT													
1000	1525 Portal Area											$1,377,159	
		Demobilization/Demolition			1,518	$120,901		$149,712	9,891	$44,115	$414,726		
		Recontouring/Reshaping			3,019	$222,744		$479,588	33,147	$147,836	$850,168		
		Spread Growth Media			519	$38,450		$48,919	3,704	$16,519	$103,888		
		Enhanced recovery			1		$8,376				$8,376		
		Install											
		Monitoring											
2000	Airstrip Area											$86,172	
		Demobilization/Demolition											
		Recontouring/Reshaping											
		Spread Growth Media			402	$29,932		$42,353	3,114	$13,887	$86,172		
		Enhanced recovery											
		Install											
		Monitoring											
3000	Mill & Camp Area											$107,123	
		Demobilization/Demolition			270	$18,462	$3,150	$9,306	754	$3,363	$34,281		
		Recontouring/Reshaping			88	$6,471		$19,485	1,416	$6,317	$32,272		
		Spread Growth Media			88	$6,532		$8,512	618	$2,756	$17,799		
		Enhanced recovery			3		$22,771				$22,771		
		Install											
		Monitoring											
4000	Drystack and RTP											$924,380	
		Demobilization/Demolition			153	$12,637		$7,744	464	$2,068	$34,950		
		Recontouring/Reshaping			2,675	$157,901	$294	$410,150	28,568	$127,416	$695,761		
		Spread Growth Media			383	$28,528		$44,172	3,241	$14,457	$87,156		
		Enhanced recovery			13		$106,513				$106,513		
		Install											
		Monitoring											
5000	Underground workings											$87,585	
		Demobilization/Demolition											
		Recontouring/Reshaping											
		Spread Growth Media			409	$30,155		$44,062	2,997	$13,368	$87,585		
		Enhanced recovery											
		Install											
6000	All Mine in general											$1,103,544	
		Demobilization/Demolition			427	$28,403		$11,030	894	$3,987	$43,420		
		Recontouring/Reshaping			5	$338		$727	54	$242	$501,306		
		Spread Growth Media											
		Enhanced recovery			8		$67,011				$67,011		
		Install											
		Water treatment			2,070						$324,099		
		Monitoring									$167,707		
Subtotal Direct Costs					**12,050**	**$701,453**	**$208,116**	**$1,275,760**	**88,862**	**$ 396,330**	**$3,685,963**	$3,685,963	

CLOSURE COSTS - Site Management Cost

Administration cr	enter 1 if item is required, 0 if not required														$	350,494
1	Worker's compensation	96	Man-months	x		$ -	per person per month							$0		
1	equip. Insurance (10% of equipment cost)	10%			of	$1,275,760	Equipment Cost							$127,576		
1	Office Supplies	6.00	months		x	$100	/month							$600		
1	Communications	6.00	months		x	$1,000	/month							$6,000		
1	Heating Fuel (avg. 400 gal per month)	6.00	months		x	400	gal/month x	$ 4.46	/ gallon					$10,704		
1	Misc. Supplies	6.00	months		x	$500	/month							$3,000		
1	Camp Operation	2,903	Man-days		x	$70	per day per person							$202,614		
Field support								Turnarounds	Total hours	unit		rate			$	309,645
1	Supervisor #1	180	days		x	11.5	hrs/day	13	2070	hr	$	80.35	$166,314			
1	Administrative Assistant #1	180	days		x	11.5	hrs/day	13	2070	hr	$	64.14	$132,767			
1	Field Support Vehicles	180	days		x	1	trucks		540	hr	$	19.56	$10,563			
0	Turnaround costs - Admin	13	trips		x	$ 98.54	/trip						$0			
Field crew								Turnarounds	Total hours	unit		rate			$	888,585
1	Foreman #1	168	days		x	11.5	hrs/day	12	1932	hr	$	79.79	$154,148			
1	Foreman #2	168	days		x	11.5	hrs/day	12	1932	hr	$	79.79	$154,148			
0	Foreman #3	168	days		x	11.5	hrs/day	12	1932	hr	$	-	$0			
0	Foreman #4	168	days		x	11.5	hrs/day	12	1932	hr	$	-	$0			
1	Mechanic #1	168	days		x	11.5	hrs/day	12	1932	hr	$	71.82	$138,760			
0	Mechanic #2	168	days		x	11.5	hrs/day	12	1932	hr	$	-	$0			
1	Survey Field Manager	168	days		x	11.5	hrs/day	12	1932	hr	$	78.61	$151,868			
1	Survey Crew (Surveyor + helper)	168	days		x	11.5	hrs/day	12	1932	hr	$	139.72	$269,942			
1	Field Support Vehicles	168	days		x	2	trucks		1,008	hr	$	19.56	$19,718			
0	Turnaround costs - Crew	12	trips		x	$ 98.54	/trip						$0			
Contract Administration and QA/QC								Turnarounds	Total hours	unit		rate			$	382,735
1	Resident Engineer #1	180	days		x	11.5	hrs/day	13	2070	hr	$	96.55	$199,858			
0	Resident Engineer #2	180	days		x	11.5	hrs/day	13	2070	hr	$	-	$0			
1	Engineering Technician #1	180	days		x	11.5	hrs/day	13	2070	hr	$	80.35	$166,314			
0	Engineering Technician #2	180	days		x	11.5	hrs/day	13	2070	hr	$	-	$0			
1	Laboratory and Material Testing Costs	6	months		x	$1,000	/month						$6,000			
1	Field Support Vehicles	180	days		x	1	trucks		540.0	hr	$	19.56	$10,563			
0	Turnaround costs - QA/QC	13	trips		x	$ 98.54	/trip						$0			
Other															$	70,195
0	Helicopter support	12,050	hours	x		$ 1,390	/hour x						$0			
1	Turnaround Cost	13				$ 1,600	/trip						$20,571			
1	Freight costs	12%			of	$208,116	Material Costs						$24,974			
1	Allowance for haul road maintenance	1.0	yr								$	24,650.00	$24,650			
Subtotal Site Management Cost																$2,001,654
CLOSURE COSTS - TOTAL																
	Total direct and management costs															**$5,687,617**

Administrative Crew size	10	Crew Size
	178.0	days + 10 for pre/post job work
Project duration	6	months
Field crew assumption calculations		
expected duration	6	months
Expected work hours per month per man	322	mhr/month
Total work hours for the project per man	1932	hrs
Crew size	6	people
Camp rotation is every 30 days	168.0	days
Required supervision		
Forman 1-5 men		
Forman 1-10 men		
Forman 1-20 men		
Forman 1-30 men		

Table

The current labor rates in use are for AlaskanContractor

V: Post Closure Monitoring

Area Code	Area	Activity	Description	Status	Total Mhrs	Labor Cost	Material Cost	Equipment Cost	Fuel Consumed (gal)	Fuel Cost	Activity Total	Subtotals	Source / Comments
CLOSURE COSTS - DIRECT													
1000	1525 Portal Area											$0	
		Demobilization/Demolition											
		Recontouring/Reshaping											
		Spread Growth Media											
		Enhanced recovery											
		Install											
		Monitoring											
2000	Airstrip Area											$0	
		Demobilization/Demolition											
		Recontouring/Reshaping											
		Spread Growth Media											
		Enhanced recovery											
		Install											
		Monitoring											
3000	Mill & Camp Area											$0	
		Demobilization/Demolition											
		Recontouring/Reshaping											
		Spread Growth Media											
		Enhanced recovery											
		Install											
		Monitoring											
4000	Drystack and RTP											$0	
		Demobilization/Demolition											
		Recontouring/Reshaping											
		Spread Growth Media											
		Enhanced recovery											
		Install											
		Monitoring											
5000	Underground workings											$0	
		Demobilization/Demolition											
		Recontouring/Reshaping											
		Spread Growth Media											
		Enhanced recovery											
		Install											
6000	All Mine in general											$109,545	
		Demobilization/Demolition									$31,663		Work to be contracted out
		Recontouring/Reshaping											
		Spread Growth Media											
		Enhanced recovery											
		Install											
		Water treatment											
		Monitoring			238						$77,882		
Subtotal Direct Costs					**238**					**$ -**	**$109,545**	$109,545	

CLOSURE COSTS - Site Management Cost

Administration cc	enter 1 if item is required, 0 if not required															$	-
0	Worker's compensation	-	Man-months	x		$ -	per person per month								$0		
0	equip. Insurance (10% of equipment cost)	10%			of	$0	Equipment Cost								$0		
0	Office Supplies	-	months		x	$100	/month								$0		
0	Communications	-	months		x	$1,000	/month								$0		
0	Heating Fuel (avg. 400 gal per month)	-	months		x	400	gal/month x	$ 4.46	/ gallon						$0		
0	Misc. Supplies	-	months		x	$500	/month								$0		
0	Camp Operation	-	Man-days		x	$137	per day								$0		
Field support										Turnarounds	Total hours	unit		rate		$	-
0	Supervisor #1	-	days		x	12	hrs/day			-	0	hr	$	-	$0		
0	Administrative Assistant #1	-	days		x	12	hrs/day			-	0	hr	$	-	$0		
0	Field Support Vehicles	-	days		x	0	trucks				0	day	$	-	$0		
0	Turnaround costs - Admin	-	trips		x	$ -	/trip								$0		
Field crew										Turnarounds	Total hours	unit		rate		$	-
0	Foreman #1	-	days		x	12	hrs/day			-	0	hr	$	-	$0		
0	Foreman #2	-	days		x	12	hrs/day			-	0	hr	$	-	$0		
0	Foreman #3	-	days		x	12	hrs/day			-	0	hr	$	-	$0		
0	Foreman #4	-	days		x	12	hrs/day			-	0	hr	$	-	$0		
0	Mechanic #1	-	days		x	12	hrs/day			-	0	hr	$	-	$0		
0	Mechanic #2	-	days		x	12	hrs/day			-	0	hr	$	-	$0		
0	Survey Field Manager	-	days		x	12	hrs/day			-	0	hr	$	-	$0		
0	Survey Crew (Surveyor + helper)	-	days		x	12	hrs/day			-	0	hr	$	-	$0		
0	Field Support Vehicles	-	days		x	0	trucks						$	-	$0		
0	Turnaround costs - Crew	-	trips		x	$ -	/trip								$0		
Contract Administration and QA/QC										Turnarounds	Total hours	unit		rate		$	-
0	Resident Engineer #1	-	days		x	12	hrs/day			-	0	hr	$	-	$0		
0	Resident Engineer #2	-	days		x	12	hrs/day			-	0	hr	$	-	$0		
0	Engineering Technician #1	-	days		x	12	hrs/day			-	0	hr	$	-	$0		
0	Engineering Technician #2	-	days		x	12	hrs/day			-	0	hr	$	-	$0		
0	Laboratory and Material Testing Costs	-	months		x	$1,000	/month								$0		
0	Field Support Vehicles	-	days		x	1	trucks				0	day	$	-	$0		
0	Turnaround costs - QA/QC	-	trips		x	$ -	/trip								$0		
Other																$	-
0	Helicopter support	238	hours	x		$ 1,390	/hour	x							$0		
0	Freight costs	12%			of	$0	Material Costs								$0		
0	Allowance for haul road maintenance	10.0	yr										$	24,650.00	$0		
Subtotal Site Management Cost																	$0
CLOSURE COSTS - TOTAL																	
	Total direct and management costs																**$109,545**

Administrative Crew size	0	Crew Size
	0.0	days + 10 for pre/post job work
Project duration	0	months
Field crew assumption calculations		
expected duration	-	months
Expected work hours per month per man	322	mhr/month
Total work hours for the project per man	0	hrs
Crew size	0	people
Camp rotation is every 30 days	0.0	days
Required supervision		
Forman 1-5 men		
Forman 1-10 men		
Forman 1-20 men		
Forman 1-30 men		

Phase	Area Code	WBS	Item	Area Description	Activity	Task	Status	Quantity	Unit	Quantity	Unit	Cost Code	Unit Mhrs	Total Mhrs	Unit Labor	Labor Cost	Unit Material	Material Cost	Unit Equip.	Equipment Cost	Unit Fuel	Fuel Consumed (L)	Fuel Consumed (gal)	Fuel Cost	Total Unit Cost	Activity Total	Source / Comments
II: Reclamation Concurrent with Mining	1000	E02		Rock storage pad	Recontouring/Reshaping	Temporary stockpile removal	1/2 completed	24,000	cy	18349	m3	R.001	0.086	1585.01	6.38	117043.41	0.00	0	9.712	178210.43	3.23	50330.46	13295.80	59299.91	19.32	$354,554	Total quantity was 48000cy estimated
II: Reclamation Concurrent with Mining	1000	E08		Upper Exploration camp	Enhanced recovery	Upper Exploration Camp		6,000	sy	5017	m2	C4.01	0.000	0.77	0.00	0.00	1.27	6352.198	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$6,352	
II: Reclamation Concurrent with Mining	1000	E03		Lower camp pond	Recontouring/Reshaping	Gravel pits will be converted to high value overwintering ponds and emergent wetlands.		1,261	cy	964	m3	R.002	0.003	2.51	0.19	185.25	0.00	0	0.269	259.45	0.10	79.59	21.02	93.77	0.56	$538	*Table 5 from 404 Permit*
IV: Post Closure Reclamation	1000	E03		Lower camp pond	Spread Growth Media	Spread growth media near shoreline		630	cy	482	m3	R.003	0.04	19.13	2.95	1424.08	0.00	0	3.961	1909.32	1.32	539.64	142.56	635.81	8.23	$3,969	
II: Reclamation Concurrent with Mining	1000	E02		Rock storage pad	Enhanced recovery	Seed pad area for test revegetation program		35,843	sf	3330	m2	C4.01	0.00	0.51	0.00	0.00	1.27	4216.277	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$4,216	Anticipated test area for revegetation trial, place enhanced recovery
III: Final Reclamation & Closure	1000	N08		Fuel berms	Recontouring/Reshaping	Remove fuel berm liner and material to solid waste facility		870	cy	665	m3	R.004	0.06	41.55	4.64	3087.36	0.00	0	7.145	4755.18	2.34	1320.03	348.71	1555.27	14.12	$9,398	Included liner with the removed material.
III: Final Reclamation & Closure	2000	N11		Airstrip laydown	Recontouring/Reshaping	Remove fuel berm liner and material to solid waste facility		1,268	cy	969	m3	R.004	0.06	60.53	4.64	4497.75	0.00	0	7.145	6927.49	2.34	1923.06	508.01	2265.77	14.12	$13,691	Included liner with the removed material.
II: Reclamation Concurrent with Mining	1000	E05		Lower camp diversion ditch	Recontouring/Reshaping	Lower camp diversion ditch		107	cy	82	m3	C2.08	1.00	81.63	64.14	5235.57	0.00	0	0.000	0.00	0.00	0.00	0.00	0.00	64.14	$5,236	
II: Reclamation Concurrent with Mining	1000	E05		Lower camp diversion ditch	Enhanced recovery	Lower camp diversion ditch		320	sf	30	m2	C4.01	0.00	0.00	0.00	0.00	1.27	37.67785	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$38	Assumed no growth media required (enhanced recovery)
II: Reclamation Concurrent with Mining	1000	F13			Install	Cap surface boreholes		70	ea	70	ea	C2.03	30.00	2100.00	2051.33	143592.99	350.00	24500	1033.975	72378.25	373.70	22202.30	5865.18	26159.00	3809.00	$266,630	estimated
II: Reclamation Concurrent with Mining	2000	N01		1525 Portal	Demobilization/Demolition	Remove temporary substation for WTP		10	hr	10	hr	C1.02	1.00	10.00	73.83	738.27	0.00	0	157.470	1574.70	37.83	321.08	84.82	378.30	269.13	$2,691	
II: Reclamation Concurrent with Mining	3000	N05		Construction/Exploration Camp pad	Demobilization/Demolition	Remove buildings around injection wells		40	hr	40	hr	C1.08	1.00	40.00	122.32	4892.78	0.00	0	0.000	0.00	0.00	0.00	0.00	0.00	122.32	$4,893	Included here instead of infrastructure removal
II: Reclamation Concurrent with Mining	3000	N05		Construction/Exploration Camp pad	Install	Cap Injection wells, remove projecting pipe, plug		5	ea	5	ea	C3.10	0.31	1.54	20.31	101.53	40.44	202.2	2.560	12.80	1.17	4.96	1.31	5.85	64.48	$322	
II: Reclamation Concurrent with Mining	3000	N05		Construction/Exploration Camp pad	Demobilization/Demolition	Remove and dispose of septic tank/clear stream unit		200	cy	153	m3															$2,000	estimated
II: Reclamation Concurrent with Mining	6000	S00			Monitoring	Monitoring Phase II TeckCominco inspection		0	yr	0	yr			0.00												$0	See Monitoring cost worksheet
II: Reclamation Concurrent with Mining	1000				Demobilization/Demolition	Site structure (see Infrastructure removal)								675.00	3091.26	76276.67	9080.19	22051.89	2482.633	45508.35	402.57	6457.89	1705.98	7608.76	15056.65	$ 151,446	reference to infrastructure removal tab
II: Reclamation Concurrent with Mining	2000				Demobilization/Demolition	Site structure (see Infrastructure removal)								0.00	73.83	0.00	0.00	0	115.933	0.00	37.83	0.00	0.00	0.00	227.59	$ -	reference to infrastructure removal tab
II: Reclamation Concurrent with Mining	3000				Demobilization/Demolition	Site structure (see Infrastructure removal)								0.00	0.00	0.00	0.00	0	0.000	0.00	0.00	0.00	0.00	0.00	0.00	$ -	reference to infrastructure removal tab
II: Reclamation Concurrent with Mining	4000				Demobilization/Demolition	Site structure (see Infrastructure removal)								0.00	0.00	0.00	0.00	0	0.000	0.00	0.00	0.00	0.00	0.00	0.00	$ -	reference to infrastructure removal tab
II: Reclamation Concurrent with Mining	5000				Demobilization/Demolition	Site structure (see Infrastructure removal)								0.00	0.00	0.00	0.00	0	0.000	0.00	0.00	0.00	0.00	0.00	0.00	$ -	reference to infrastructure removal tab
II: Reclamation Concurrent with Mining	6000				Demobilization/Demolition	Site structure (see Infrastructure removal)								0.00	0.00	0.00	0.00	0	0.000	0.00	0.00	0.00	0.00	0.00	0.00	$ -	reference to infrastructure removal tab
III: Final Reclamation & Closure	1000	E01		1525 Portal access road	Recontouring/Reshaping	Remove Culverts		150	ft	46	m	C2.11	0.33	15.24	24.61	1125.12	0.00	0	52.989	2422.65	17.61	683.48	180.55	805.28	95.21	$4,353	
III: Final Reclamation & Closure	1000	E01		1525 Portal access road	Enhanced recovery	Seed area for revegetation		39294	sf	3651	m2	C4.01	0.00	0.56	0.00	0.00	1.27	4622.317	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$4,622	
III: Final Reclamation & Closure	1000	E01		1525 Portal access road	Install	Relocate sub station from the mill for Water treatment operation (reuse 138kv to 5kv and 5kv to 460V transformers)		1	ls	1	ls															$75,000	
III: Final Reclamation & Closure	1000	E03		Lower camp pond	Recontouring/Reshaping	Remove Culverts		80	ft	24	m	C2.11	0.33	8.13	24.61	600.06	0.00	0	52.989	1292.08	17.61	364.52	96.30	429.48	95.21	$2,322	
III: Final Reclamation & Closure	1000	E07		Burn Pit Area	Recontouring/Reshaping	Seed burn pit area for revegetation		2,461	sf	229	m2	C4.01	0.00015	0.03	0.00	0.00	1.27	289.4525	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$289	
III: Final Reclamation & Closure	3000	N14		Mill bench	Recontouring/Reshaping	Remove fuel berm liner and material to solid waste facility		184	cy	141	m3	R.004	0.06	8.77	4.64	651.85	0.00	0	7.145	1003.99	2.34	278.71	73.63	328.37	14.12	$1,984	Included liner with the removed material.
III: Final Reclamation & Closure	5000	F02			Install	Paste Backfill selected areas of accesses, declines to compartmentalize hydrogeology			ton	0	tonnes	C3.15	0.03	0.00	2.37	0.00	5.15	0	1.918	0.00	0.57	0.00	0.00	0.00	10.01	$0	Information provided by Ernie Siemoneit (Mine department) - cost/production used US standard
III: Final Reclamation & Closure	5000	F03			Install	Piping Allowance paste backfill area			ft	0	m	C3.16	0.16	0.00	11.59	0.00	236.22	0	0.400	0.00	0.67	0.00	0.00	0.00	248.88	$0	
III: Final Reclamation & Closure	5000	F10			Install	Borehole to facilitate flooding of mine		700	ft	213	m	C2.02	0.60	128.02	45.60	9729.15	0.00	0	22.615	4825.18	6.00	1087.25	287.22	1281.01	74.22	$15,835	
III: Final Reclamation & Closure	5000	F10			Demobilization/Demolition	Remove piping from mine where possible		3,000	ft	914	m	C3.17	0.16	150.00	6.74	6162.42	0.00	0	0.400	365.57	0.67	519.86	137.33	612.50	7.81	$7,140	
III: Final Reclamation & Closure	5000	F11			Demobilization/Demolition	Remove Mine Equipment		54	ea	54	ea	C5.01	0.00	0.00	0.00	0.00	1297.17	70047.18	0.000	0.00	0.00	0.00	0.00	0.00	1297.17	$70,047	estimated 54 trips to Fairbanks for equipment demobilization
III: Final Reclamation & Closure	5000	F12			Demobilization/Demolition	Remove Mine Electrical Equipment		6	ea	6	ea		0.00	0.00	0.00	0.00	0.00	0	0.000	0.00	0.00	0.00	0.00	0.00	0.00	$0	
III: Final Reclamation & Closure	1000	N01		1525 Portal	Demobilization/Demolition	Remove propane distribution, return rented tanks and remove above ground piping		100	hr	100	hr	C1.08	1.00	100.00	122.32	12231.94	0.00	0	0.000	0.00	0.00	0.00	0.00	0.00	122.32	$12,232	estimated
III: Final Reclamation & Closure	1000	N01		1525 Portal	Demobilization/Demolition	Remove fuel tanks from 1525 portal		2	ea	2	ea	C2.06	3.00	6.00	137.97	275.93	648.59	1297.17	83.919	167.84	37.35	63.40	16.75	74.70	907.82	$1,816	
III: Final Reclamation & Closure	5000	N01		1525 Portal	Install	1525 portal seal opening concrete plug		235	cy	180	m3			437.00												$142,818	

Phase	Area Code	WBS	Item	Area Description	Activity	Task	Status	Quantity	Unit	Quantity	Unit	Cost Code	Unit Mhrs	Total Mhrs	Unit Labor	Labor Cost	Unit Material	Material Cost	Unit Equip.	Equipment Cost	Unit Fuel	Fuel Consumed (L)	Fuel Consumed (gal)	Fuel Cost	Total Unit Cost	Activity Total	Source / Comments
III: Final Reclamation & Closure	1000	N02		Outfall 002 path	Demobilization/Demolition	Remove river discharge mixing zone at outfall 002		50	hr	50	hr	C1.08	1.00	50.00	122.32	6115.97	0.00	0	0.000	0.00	0.00	0.00	0.00	0.00	122.32	$6,116	
III: Final Reclamation & Closure	1000	N02		Outfall 002 path	Demobilization/Demolition	Remove discharge pipe to outfall 002		2,080	ft	634	m	C3.07	0.01	6.97	0.72	459.58	101.00	64032.38	0.207	131.10	0.07	40.22	10.62	47.38	102.01	$64,670	
III: Final Reclamation & Closure	1000	N02		Outfall 002 path	Enhanced recovery	Apply defined enhanced recovery to Outfall 002 path		100	sf	9	m2	C4.01	0.00015	0.00	0.00	0.00	1.27	11.76331	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$12	Assumed no growth media required (enhanced recovery)
III: Final Reclamation & Closure	1000	N03		Access road #7	Recontouring/Reshaping	Remove Culverts		200	ft	61	m	C2.11	0.33	20.32	24.61	1500.16	0.00	0	52.989	3230.21	17.61	911.30	240.74	1073.71	95.21	$5,804	
III: Final Reclamation & Closure	1000	N04		1525 Laydown areas	Enhanced recovery	Seed1525 Laydown areas		68,026	sf	6320	m2	C4.01	0.00015	0.97	0.00	0.00	1.27	8002.104	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$8,002	
III: Final Reclamation & Closure	2000	N08		Fuel berms	Spread Growth Media	spread growth media on the fuel containment berm area		290	cy	222	m3	R.005	0.04	8.80	2.95	655.35	0.00	0	3.961	878.66	1.32	248.34	65.60	292.60	8.23	$1,827	
IV: Post Closure Reclamation	1000	N05		Construction/Exploration Camp pad	Demobilization/Demolition	Remove temporary Closure camp		200	hr	200	hr	C1.01	1.00	200.00	73.83	14765.34	0.00	0	115.933	23186.66	37.83	6421.60	1696.39	7566.00	227.59	$45,518	Assumed temp facilities will be required at end of closure
III: Final Reclamation & Closure	1000	N05		Construction/Exploration Camp pad	Demobilization/Demolition	Remove propane distribution, rented tanks returned, above ground piping removed		10	hr	10	hr	C1.08	1.00	10.00	122.32	1223.19	0.00	0	0.000	0.00	0.00	0.00	0.00	0.00	122.32	$1,223	estimated
III: Final Reclamation & Closure	1000	N05		Construction/Exploration Camp pad	Demobilization/Demolition	Remove fuel tanks to Fairbanks		13	ea	13	ea	C2.06	3.00	39.00	137.97	1793.55	648.59	8431.605	83.919	1090.95	37.35	412.11	108.87	485.55	907.82	$11,802	includes N27 fuel tanks
III: Final Reclamation & Closure	1000	N05		Construction/Exploration Camp pad	Demobilization/Demolition	1.7 Transformer Upper Level: Incinerator 13.8kV-480 V 45 kVA Pole Mounted		1	ea	1	ea	C3.04	20.00	20.00	1830.71	1830.71	0.00	0	1200.458	1200.46	102.50	87.00	22.98	102.50	3133.66	$3,134	
III: Final Reclamation & Closure	1000	N05		Construction/Exploration Camp pad	Demobilization/Demolition	Remove Transformers (Lower Portal: Warehouse, Truck Shop/Offices; Upper Level: Fresh Water Pp, Camps)		5	ea	5	ea	C3.04	20.00	100.00	1830.71	9153.53	0.00	0	1200.458	6002.29	102.50	434.98	114.91	512.50	3133.66	$15,668	
III: Final Reclamation & Closure	3000	N10		1690 Portal	Spread Growth Media	Spread Growth media on 1690 Portal area		2,340	cy	1789	m3	R.005	0.04	71.01	2.95	5286.23	0.00	0	3.961	7087.49	1.32	2003.17	529.18	2360.15	8.23	$14,734	*Table 9 from 404 Permit*
III: Final Reclamation & Closure	3000	N10		1690 Portal	Recontouring/Reshaping	Highwalls will be stabilized by pulling the outer crest of the fill over the pad to the highwall. Recontoured surfaces will be ripped and respread with growth media. Not feasible to restore wetland due to marginal hydrology.		3,395	cy	2595	m3	R.006	0.00	5.91	0.17	436.12	0.00	0	0.650	1687.43	0.21	457.76	120.93	539.34	1.03	$2,663	*Table 9 from 404 Permit*
III: Final Reclamation & Closure	2000	N31		ORTW	Recontouring/Reshaping	Breach ORTW containment ponds		5,500	cy	4205	m3	R.006	0.00	9.57	0.17	706.58	0.00	0	0.650	2733.90	0.21	741.65	195.92	873.82	1.03	$4,314	
III: Final Reclamation & Closure	2000	N07		Main Airstrip	Enhanced recovery	Seed Main Airstrip		1,000	sf	93	m2	C4.01	0.00015	0.01	0.00	0.00	1.27	117.6331	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$118	
IV: Post Closure Reclamation	1000	E01		1525 Portal access road	Recontouring/Reshaping	Highwalls will be stabilized by pulling the outer crest of the fill over the pad to the highwall. Not feasible to restore wetland due to marginal hydrology.		58,318	cy	44587	m3	R.006	0.00	101.48	0.17	7492.04	0.00	0	0.650	28988.08	0.21	7863.83	2077.39	9265.26	1.03	$45,745	*Table 5 from 404 Permit*
III: Final Reclamation & Closure	1000	N08		Fuel berms	Recontouring/Reshaping	Estimated 10% could be sent off site for incineration pending sampling results		87	cy	67	m3	C3.14	1.14	75.69	71.08	4730.56	233.27	15524.05	0.000	0.00	0.00	0.00	0.00	0.00	304.36	$20,255	
IV: Post Closure Reclamation	1000	E01		1525 Portal access road	Spread Growth Media	Recontoured surfaces will be ripped and respread with growth media.		6,549	cy	5007	m3	R.007	0.03	139.61	2.07	10376.11	0.00	0	2.700	13521.63	0.87	3716.23	981.72	4378.50	5.65	$28,276	*Table 5 from 404 Permit*
III: Final Reclamation & Closure	1000	N08		Fuel berms	Monitoring	Sampling of hydro carbon soils for the fuel containment berms		5	ea	5	ea															$5,000	estimated sampling cost
III: Final Reclamation & Closure	2000	N08		Fuel berms	Enhanced recovery	Seed fuel berm area for revegetation		1,741	sf	162	m2	C4.01	0.00015	0.02	0.00	0.00	1.27	204.78	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$205	
IV: Post Closure Reclamation	1000	N06		#6 Road Access road Goodpaster bridge to Liese bridge	Recontouring/Reshaping	Complete removal road #6 to Material site 23 (wetlands area)		140,479	cy	107404	m3	R.008	0.02	2518.62	1.73	185795.72	0.00	0	3.183	341864.46	0.97	88165.89	23290.78	103878.02	5.88	$631,538	
III: Final Reclamation & Closure	3000	N10		1690 Portal	Demobilization/Demolition	Remove 1690 Portal Lighting - Liese Area		15	hr	15	hr	C1.08	1.00	15.00	122.32	1834.79	0.00	0	0.000	0.00	0.00	0.00	0.00	0.00	122.32	$1,835	estimated
III: Final Reclamation & Closure	3000	N10		1690 Portal	Demobilization/Demolition	Remove Transformer for Materials Handling at Conveyor Portal		1	ea	1	ea	C3.04	20.00	20.00	1830.71	1830.71	0.00	0	1200.458	1200.46	102.50	87.00	22.98	102.50	3133.66	$3,134	
III: Final Reclamation & Closure	3000	N10		1690 Portal	Enhanced recovery	Seed 1690 Portal area		141,895	sf	13182	m2	C4.01	0.00015	2.02	0.00	0.00	1.27	16691.57	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$16,692	
IV: Post Closure Reclamation	1000	E06		Access road Goodpaster bridge to Construction Camp	Spread Growth Media	Spread growth media on #6 access road		530	cy	405	m3	R.009	0.05	20.11	3.69	1494.57	0.00	0	5.345	2167.53	1.71	590.16	155.90	695.33	10.75	$4,357	
III: Final Reclamation & Closure	1000	E07		Burn Pit Area	Recontouring/Reshaping	Excavate ashes from the Burn Pit and place in solid waste area		1,640	cy	1254	m3	R.010	0.06	74.05	4.36	5468.68	0.00	0	6.663	8356.18	2.17	2306.62	609.34	2717.68	13.19	$16,543	
II: Reclamation Concurrent with Mining	1000	E08		Upper Exploration camp	Recontouring/Reshaping	Upper Exploration Camp		6,000	cy	4587	m3	R.012	0.00	10.93	0.18	807.28	0.00	0	0.379	1738.28	0.13	490.40	129.55	577.80	0.68	$3,123	
III: Final Reclamation & Closure	5000	N10		1690 Portal	Install	1690 portal seal opening concrete plug		211	cy	161	m3			432.16												$136,562	
III: Final Reclamation & Closure	1000	N11		Airstrip laydown	Recontouring/Reshaping	Estimated 10% will be sent off site for incineration		127	cy	97	m3	C3.14	1.14	110.27	71.08	6891.61	233.27	22615.88	0.000	0.00	0.00	0.00	0.00	0.00	304.36	$29,507	
III: Final Reclamation & Closure	2000	N11		Airstrip laydown	Demobilization/Demolition	Remove Electricity - Overhead electrical conductors on power line to airstrip		3,787	ft	1154	m	C3.02	0.03	36.93	2.93	3380.80	0.00	0	1.921	2216.91	0.16	160.66	42.44	189.29	5.01	$5,787	
III: Final Reclamation & Closure	2000	N11		Airstrip laydown	Demobilization/Demolition	Remove transmission powerline on airstrip to where the batch plant was		11	ea	11	ea	C3.03	4.55	50.00	408.47	4493.19	0.00	0	363.775	4001.53	31.06	289.99	76.61	341.67	803.31	$8,836	
III: Final Reclamation & Closure	2000	N11		Airstrip laydown	Demobilization/Demolition	1.7 Transformer: Airstrip 13.8kV-480 V 45 kVA Pole Mounted		1	ea	1	ea	C3.04	20.00	20.00	1830.71	1830.71	0.00	0	1200.458	1200.46	102.50	87.00	22.98	102.50	3133.66	$3,134	
III: Final Reclamation & Closure	2000	N11		Airstrip laydown	Demobilization/Demolition	Remove transformer for concrete batch plant Pole Mounted		1	ea	1	ea	C3.04	20.00	20.00	1830.71	1830.71	0.00	0	1200.458	1200.46	102.50	87.00	22.98	102.50	3133.66	$3,134	
III: Final Reclamation & Closure	2000	N11		Airstrip laydown	Recontouring/Reshaping	Estimated 10% of the material might be sent off site for incineration		127	cy	97	m3	C3.14	1.14	110.27	71.08	6891.61	233.27	22615.88	0.000	0.00	0.00	0.00	0.00	0.00	304.36	$29,507	
III: Final Reclamation & Closure	2000	N11		Airstrip laydown	Enhanced recovery	Seed Airstrip laydown		231,650	sf	21521	m2	C4.01	0.00015	3.29	0.00	0.00	1.27	27249.66	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$27,250	
III: Final Reclamation & Closure	4000	N20		Access road to RTP seepage wells	Recontouring/Reshaping	Reshaping access road to RTP seepage wells		8,955	cy	6846	m3	R.012	0.00	16.32	0.18	1204.82	0.00	0	0.379	2594.27	0.13	731.89	193.34	862.33	0.68	$4,661	
III: Final Reclamation & Closure	4000	N20		Dry Stack and RTP area	Monitoring	Install monitoring wells - wells already installed		0	ft	0	m														0.00	$0	
III: Final Reclamation & Closure	4000	N23		Diversion ditches	Recontouring/Reshaping	Reshape diversion ditches		136,367	cy	104260	m3	R.012	0.00	248.53	0.18	18347.84	0.00	0	0.379	39507.37	0.13	11145.80	2944.39	13132.11	0.68	$70,987	
III: Final Reclamation & Closure	2000	N11		Airstrip laydown	Demobilization/Demolition	Diesel Tank - located at airstrip	removed	1	ea	1	ea															$ -	
III: Final Reclamation & Closure	2000	N11		Airstrip laydown	Monitoring	Sampling of hydro carbon soils for the fuel containment berms		5	ea	5	ea															$5,000	estimated sampling cost
III: Final Reclamation & Closure	3000	N14		Mill bench	Demobilization/Demolition	Remove propane distribution, rented tanks returned, above ground piping removed		10	hr	10	hr	C1.08	1.00	10.00	122.32	1223.19	0.00	0	0.000	0.00	0.00	0.00	0.00	0.00	122.32	$1,223	estimated
III: Final Reclamation & Closure	3000	N14		Mill bench	Demobilization/Demolition	remove Diesel Tanks - located at millsite to Fairbanks		6	ea	6	ea	C2.06	3.00	18.00	137.97	827.79	648.59	3891.51	83.919	503.51	37.35	190.20	50.25	224.10	907.82	$5,447	

Phase	Area Code	WBS	Item	Area Description	Activity	Task	Status	Quantity	Unit	Quantity	Unit	Cost Code	Unit Mhrs	Total Mhrs	Unit Labor	Labor Cost	Unit Material	Material Cost	Unit Equip.	Equipment Cost	Unit Fuel	Fuel Consumed (L)	Fuel Consumed (gal)	Fuel Cost	Total Unit Cost	Activity Total	Source / Comments
III: Final Reclamation & Closure	3000	N14		Mill bench	Recontouring/Reshaping	Estimated 10% of the material might be sent off site for incineration		18	cy	14	m3	C3.14	1.14	15.98	71.08	998.79	233.27	3277.69	0.000	0.00	0.00	0.00	0.00	0.00	304.36	$4,276	
III: Final Reclamation & Closure	3000	N14		Mill bench	Demobilization/Demolition	Remove communication cables on Mill bench (above ground only)		10,000	ft	3048	m	C3.18	0.02	60.00	1.26	3848.32	0.00	0	0.000	0.00	0.00	0.00	0.00	0.00	1.26	$3,848	estimated
III: Final Reclamation & Closure	3000	N14		Mill bench	Demobilization/Demolition	Remove electrical and communication cables to Mill bench to 1525 Portal (above ground only)		15,000	ft	4572	m	C3.18	0.02	90.00	1.26	5772.48	0.00	0	0.000	0.00	0.00	0.00	0.00	0.00	1.26	$5,772	estimated length
III: Final Reclamation & Closure	3000	N25		Storm pond	Recontouring/Reshaping	Reshape/Recontour with water bars at the storm pond		5,107	cy	3905	m3	R.012	0.00	9.31	0.18	687.13	0.00	0	0.379	1479.56	0.13	417.41	110.27	491.80	0.68	$2,658	
III: Final Reclamation & Closure	3000	N14		Mill bench	Enhanced recovery	seed, Mill bench		617,893	sf	57404	m2	C4.01	0.00	8.78	0.00	0.00	1.27	72684.75	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$72,685	
III: Final Reclamation & Closure	6000	N28B		Material site B	Spread Growth Media	Spread growth media on material site B		258	sy	216	m2	R.012	0.00	0.51	0.18	38.01	0.00	0	0.379	81.84	0.13	23.09	6.10	27.20	0.68	$147	Growth media is stockpiled there, will not require relocation
III: Final Reclamation & Closure	6000	N28D		Material site D	Recontouring/Reshaping	Reshape material site D		1,884	cy	1440	m3	R.012	0.00	3.43	0.18	253.43	0.00	0	0.379	545.70	0.13	153.95	40.67	181.39	0.68	$981	
III: Final Reclamation & Closure	3000	N14		Mill bench	Monitoring	Sampling of hydro carbon soils for the fuel containment berms		5	ea	5	ea															$5,000	estimated sampling cost
III: Final Reclamation & Closure	4000	N15		Road #3 to Mill to RTP	Enhanced recovery	Seed road #3 to drystack		509,015	sf	47289	m2	C4.01	0.00015	7.24	0.00	0.00	1.27	59877.02	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$59,877	
III: Final Reclamation & Closure	2000	N31		ORTW	Enhanced recovery	Breach ORTW containment ponds		17,524	cy	13398	m3	R.012	0.00238	31.94	0.18	2357.82	0.00	0	0.379	5076.97	0.13	1432.31	378.37	1687.56	0.68	$9,122	
III: Final Reclamation & Closure	3000	N16		Main Camp/1875 Portal	Demobilization/Demolition	Dispose of culvert under 1875 portal		2	hr	2	hr	C1.01	1.00	2.00	73.83	147.65	0.00	0	115.933	231.87	37.83	64.22	16.96	75.66	227.59	$455	
III: Final Reclamation & Closure	3000	N16		Main Camp/1875 Portal	Demobilization/Demolition	Remove structures around portal heater		1	ls	1	ls	C1.08	1.00	1.00	122.32	122.32	0.00	0	0.000	0.00	0.00	0.00	0.00	0.00	122.32	$122	
III: Final Reclamation & Closure	5000	N16		Main Camp/1875 Portal	Install	1875 portal seal with concrete plug		50	cy	38	m3			400.68												$95,894	
III: Final Reclamation & Closure	3000	N16		Main Camp/1875 Portal	Recontouring/Reshaping	Remove Storm drainage Culverts		2,848	ft	868	m	C2.11	0.33	289.39	24.61	21364.86	0.00	0	52.989	46003.76	17.61	12978.56	3428.55	15291.48	95.21	$82,660	
III: Final Reclamation & Closure	3000	N16		Main Camp/1875 Portal	Demobilization/Demolition	Remove communication cables on Main camp and 1875 bench (above ground only)		10,000	ft	3048	m	C3.18	0.02	60.00	1.26	3848.32	0.00	0	0.000	0.00	0.00	0.00	0.00	0.00	1.26	$3,848	
III: Final Reclamation & Closure	3000	N16		Main Camp/1875 Portal	Enhanced recovery	Facilities removed and foundations buried. Highwalls will be stabilized by pulling the outer crest of the fill over the pad to the highwall. Recontoured surfaces will be ripped and respread with growth media. Not feasible to restore wetland due to marginal hydrology.		293,591	sf	27276	m2	C4.01	0.00015	4.17	0.00	0.00	1.27	34536.06	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$34,536	*Table 9 from 404 Permit*
III: Final Reclamation & Closure	3000	N16		Main Camp/1875 Portal	Enhanced recovery	Seed area for revegetation		850,129	sf	78980	m2	C4.01	0.00015	12.08	0.00	0.00	1.27	100003.40	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$100,003	
IV: Post Closure Reclamation	1000	N06		#6 Road Access road Goodpaster bridge to Liese bridge	Demobilization/Demolition	Remove Liese Bridge abutments		1,000	cy	765	m3	R.012	0.00	1.82	0.18	134.55	0.00	0	0.379	289.71	0.13	81.73	21.59	96.30	0.68	$521	
IV: Post Closure Reclamation	1000	N06		#6 Road Access road Goodpaster bridge to Liese bridge	Recontouring/Reshaping	Restore stream under Liese bridge		6,193	cy	4735	m3	R.012	0.00	11.29	0.18	833.31	0.00	0	0.379	1794.33	0.13	506.22	133.73	596.43	0.68	$3,224	
III: Final Reclamation & Closure	3000	N16		Main Camp/1875 Portal	Demobilization/Demolition	Remove Electrical above ground cables		5,000	ft	1524	m															$10,000	estimated
III: Final Reclamation & Closure	3000	N16		Main Camp/1875 Portal	Monitoring	Sampling of hydro carbon soils for the fuel containment berms		5	ea	5	ea															$5,000	estimated sampling cost
III: Final Reclamation & Closure	3000	N16F		Main Camp/1875 Portal fuel berms	Recontouring/Reshaping	Estimated 10% of the material could be sent off site for incineration pending sampling results		91	cy	70	m3	C3.14	1.14	79.21	71.08	4950.40	233.27	16245.5	0.000	0.00	0.00	0.00	0.00	0.00	304.36	$21,196	
III: Final Reclamation & Closure	5000	N17		RTP	Install	Run 6" pipe from 1690 to 1525 above ground for Phase IV water treatment		12,000	lf	3658	m	C3.09	0.28	1008.99	18.21	66590.04	203.36	743809.5	2.296	8396.05	1.05	3254.23	859.67	3834.17	224.91	$822,630	Assumed running around Liese ridge next to #6 road with steel pipe where the pressures exceed HDPE capabilities
III: Final Reclamation & Closure	4000	N18		Drystack	Install	Screen Non mineralized rock cover from Material site D for drystack cover system		65,455	cy	50044	m3	C2.01	0.01	667.25	1.02	51039.34	0.00	0	20.537	1027736.02	0.95	40183.56	10615.29	47344.72	22.50	$1,126,120	
III: Final Reclamation & Closure	4000	N18		Drystack	Install	Screen sand layer from Material site D		65,455	cy	50044	m3	C2.04	0.00	217.58	0.33	16643.26	0.00	0	0.930	46530.52	0.20	8293.58	2190.91	9771.58	1.46	$72,945	
III: Final Reclamation & Closure	4000	N18		Drystack	Enhanced recovery	Seed drystack cover		3,534,555	sf	328371	m2	C4.01	0.00015	50.24	0.00	0.00	1.27	415780.9	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$415,781	
IV: Post Closure Reclamation	6000	N28A		Material sites A	Recontouring/Reshaping	Material site A, Highwalls will be stabilized by pulling the outer crest of the fill over the pad to the highwall. Recontoured surfaces will be ripped and respread with growth media. Not feasible to restore wetland due to marginal hydrology.		626	cy	478	m3	R.012	0.00	1.14	0.18	84.19	0.00	0	0.379	181.29	0.13	51.15	13.51	60.26	0.68	$326	Table 9 from 404 Permit
IV: Post Closure Reclamation	6000	N28D		Material site D	Recontouring/Reshaping	Material site D, Highwalls will be stabilized by pulling the outer crest of the fill over the pad to the highwall. Recontoured surfaces will be ripped and respread with growth media. Not feasible to restore wetland due to marginal hydrology.		1,884	cy	1440	m3	R.012	0.00	3.43	0.18	253.43	0.00	0	0.379	545.70	0.13	153.95	40.67	181.39	0.68	$981	
III: Final Reclamation & Closure	1000	N04		1525 Laydown areas	Recontouring/Reshaping	Rip/scarify 1525 Laydown areas		45,351	sy	37919	m2	R.014	0.00	52.19	0.10	3852.69	0.00	0	0.393	14906.76	0.13	4043.88	1068.27	4764.54	0.62	$23,524	
III: Final Reclamation & Closure	1000	N05		Construction/Exploration Camp pad	Enhanced recovery	Seed Construction/Exploration Camp pad		55,658	sy	46537	m2	R.014	0.00	64.05	0.10	4728.35	0.00	0	0.393	18294.85	0.13	4962.99	1311.07	5847.46	0.62	$28,871	

Phase	Area Code	WBS	Item	Area Description	Activity	Task	Status	Quantity	Unit	Quantity	Unit	Cost Code	Unit Mhrs	Total Mhrs	Unit Labor	Labor Cost	Unit Material	Material Cost	Unit Equip.	Equipment Cost	Unit Fuel	Fuel Consumed (L)	Fuel Consumed (gal)	Fuel Cost	Total Unit Cost	Activity Total	Source / Comments
III: Final Reclamation & Closure	4000	N20		Access road to RTP seepage wells	Enhanced recovery	Enhanced recovery access road to RTP seepage wells		104,713	sf	9728	m2	C4.01	0.00015	1.49	0.00	0.00	1.27	12317.76	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$12,318	
III: Final Reclamation & Closure	1000	N05		Construction/Exploration Camp pad	Recontouring/Reshaping	Culverts and wetland fills removed, then regraded, ripped or scarified.		37,105	cy	28369	m3	R.014	0.00	39.04	0.10	2882.40	0.00	0	0.393	11152.54	0.13	3025.44	799.23	3564.61	0.62	$17,600	
III: Final Reclamation & Closure	1000	N05		Construction/Exploration Camp pad	Spread Growth Media	Spread with growth media.		9,276	cy	7092	m3	R.014	0.00	9.76	0.10	720.60	0.00	0	0.393	2788.13	0.13	756.36	199.81	891.15	0.62	$4,400	
III: Final Reclamation & Closure	3000	N21		Transmission line	Demobilization/Demolition	Remove Electricity - Overhead electrical conductors (3 each set)		8,183	ft	2494	m	C3.02	0.03	79.81	2.93	7305.78	0.00	0	1.921	4790.66	0.16	347.18	91.71	409.05	5.01	$12,505	
III: Final Reclamation & Closure	3000	N21		Transmission line	Demobilization/Demolition	Remove transmission powerline on mine site to the mill (Poles only - 2 each set)		42	ea	42	ea	C3.03	4.55	190.91	408.47	17155.82	0.00	0	363.775	15278.56	31.06	1107.23	292.50	1304.55	803.31	$33,739	
III: Final Reclamation & Closure	6000	N21		Transmission line	Enhanced recovery	Enhanced recovery after transmission line removal		77,072	sf	7160	m2	C4.01	0.00015	1.10	0.00	0.00	1.27	9066.266	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$9,066	
III: Final Reclamation & Closure	4000	N23		Diversion ditches	Demobilization/Demolition	Remove diversion ditch flume to Stilling basin		2,517	ft	767	m	C2.11	0.33	255.73	24.61	18879.49	0.00	0	52.989	40652.15	17.61	11468.76	3029.70	13512.63	95.21	$73,044	
III: Final Reclamation & Closure	4000	N23		Diversion ditches	Enhanced recovery	Seed the diversion ditches		1,324,200	sf	123022	m2	C4.01	0.00015	18.82	0.00	0.00	1.27	155769.9	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$155,770	
III: Final Reclamation & Closure	2000	N07		Main Airstrip	Recontouring/Reshaping	Rip/scarify Main Airstrip		14,463	sy	12093	m2	R.014	0.00	16.64	0.10	1228.69	0.00	0	0.393	4754.02	0.13	1289.66	340.69	1519.49	0.62	$7,502	
III: Final Reclamation & Closure	3000	N25		Storm pond	Recontouring/Reshaping	Seed the storm pond area		68,944	sf	6405	m2	C4.01	0.00015	0.98	0.00	0.00	1.27	8110.142	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$8,110	
III: Final Reclamation & Closure	2000	N11		Airstrip laydown	Recontouring/Reshaping	Rip/scarify airport laydown areas		11,736	cy	8973	m3	R.014	0.00	12.35	0.10	911.69	0.00	0	0.393	3527.51	0.13	956.94	252.79	1127.47	0.62	$5,567	
III: Final Reclamation & Closure	3000	N30		Ore stockpile	Recontouring/Reshaping	Rip/Scarify Ore stockpile		4,082	cy	3121	m3	R.014	0.00	4.29	0.10	317.07	0.00	0	0.393	1226.79	0.13	332.80	87.92	392.11	0.62	$1,936	
IV: Post Closure Reclamation	1000	E06		Access road Goodpaster bridge to Construction Camp	Recontouring/Reshaping	Rip/Scarify #6 Access road from the Goodpaster bridge to the construction pad		1,061	cy	811	m3	R.014	0.00	1.12	0.10	82.40	0.00	0	0.393	318.82	0.13	86.49	22.85	101.90	0.62	$503	
III: Final Reclamation & Closure	6000	N27		Growth Media	Enhanced recovery	Seed growth media storage areas		92,410	sf	8585	m2	C4.01	0.00015	1.31	0.00	0.00	1.27	10870.44	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$10,870	
III: Final Reclamation & Closure	6000	N28A		Material sites A	Enhanced recovery	Seed Material site A		84,477	sf	7848	m2	C4.01	0.00015	1.20	0.00	0.00	1.27	9937.298	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$9,937	
IV: Post Closure Reclamation	1000	N06		#6 Road Access road Goodpaster bridge to Liese bridge	Recontouring/Reshaping	Rip/Scarify road#6		295,779	cy	226139	m3	R.014	0.00	311.22	0.10	22976.53	0.00	0	0.393	88900.42	0.13	24116.75	6370.92	28414.62	0.62	$140,292	
III: Final Reclamation & Closure	6000	N28B		Material site B	Enhanced recovery	Seed Material site B		28,855	sf	2681	m2	C4.01	0.00015	0.41	0.00	0.00	1.27	3394.275	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$3,394	
IV: Post Closure Reclamation	3000	N13		Access Road #1	Recontouring/Reshaping	Highwalls will be stabilized by pulling the outer crest of the fill over the pad to the highwall. Recontoured surfaces will be ripped and respread with growth media. Not feasible to restore wetland due to marginal hydrology.		25,093	cy	19185	m3	R.015	0.00	87.65	0.34	6470.68	0.00	0	1.016	19484.60	0.33	5361.27	1416.29	6316.71	1.68	$32,272	*Table 9 from 404 Permit*
IV: Post Closure Reclamation	3000	N13		Access Road #1	Spread Growth Media	Spread Growth Media, Access Road #1		3,585	cy	2741	m3	R.016	0.03	87.88	2.38	6531.51	0.00	0	3.106	8511.54	1.01	2339.28	617.97	2756.16	6.49	$17,799	*Table 9 from 404 Permit*
III: Final Reclamation & Closure	6000	N28D		Material site D	Enhanced recovery	Seed Material site D		50,857	sf	4725	m2	C4.01	0.00015	0.72	0.00	0.00	1.27	5982.514	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$5,983	
III: Final Reclamation & Closure	3000	N14		Mill bench	Recontouring/Reshaping	Recontour and install water bars on Mill bench		267,458	cy	204487	m3	R.017	0.00	934.19	0.34	68968.08	0.00	0	1.116	228262.30	0.35	60727.28	16042.32	71549.55	1.80	$368,780	
III: Final Reclamation & Closure	3000	N30		Ore stockpile	Enhanced recovery	Seed Ore stockpile		55,102	sf	5119	m2	C4.01	0.00015	0.78	0.00	0.00	1.27	6481.805	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$6,482	
III: Final Reclamation & Closure	3000	N14		Mill bench	Spread Growth Media	Place growth media on Mill bench		11,381	cy	8702	m3	R.017	0.00	39.75	0.34	2934.81	0.00	0	1.116	9713.29	0.35	2584.14	682.65	3044.66	1.80	$15,693	
III: Final Reclamation & Closure	4000	N15		Road #3 to Mill to RTP	Spread Growth Media	Spread growth media on Road #3 to drystack		9,426	cy	7207	m3	R.018	0.00	32.92	0.34	2430.68	0.00	0	1.016	7319.31	0.33	2013.94	532.02	2372.85	1.68	$12,123	
IV: Post Closure Reclamation	4000	N15		Road #3 to Mill to RTP	Recontouring/Reshaping	Highwalls will be stabilized by pulling the outer crest of the fill over the pad to the highwall. Recontoured surfaces will be ripped and respread with growth media. Not feasible to restore wetland due to marginal hydrology.		65,983	cy	50448	m3	R.018	0.00	230.47	0.34	17014.79	0.00	0	1.016	51235.17	0.33	14097.58	3724.16	16609.93	1.68	$84,860	*Table 9 from 404 Permit*
IV: Post Closure Reclamation	4000	N15R		Road #3 to RTP to drystack	Recontouring/Reshaping	Reshape Road #3 to drystack to 10% cross fall wt water bars		64,732	cy	49491	m3	R.018	0.00	226.10	0.34	16692.08	0.00	0	1.016	50263.43	0.33	13830.20	3653.52	16294.90	1.68	$83,250	
IV: Post Closure Reclamation	4000	N15R		Road #3 to RTP to drystack	Spread Growth Media	Spread growth media on Road #3 to drystack		9,247	cy	7070	m3	R.018	0.00	32.30	0.34	2384.58	0.00	0	1.016	7180.49	0.33	1975.74	521.93	2327.84	1.68	$11,893	
III: Final Reclamation & Closure	4000	N32		Stilling Basin	Demobilization/Demolition	Remove dam spill flume to seepage collection wells		480	ft	146	m	C2.11	0.33	48.77	24.61	3600.38	0.00	0	52.989	7752.50	17.61	2187.13	577.77	2576.90	95.21	$13,930	
III: Final Reclamation & Closure	4000	N32		Stilling Basin	Enhanced recovery	Seed Stilling Basin area		124,940	sf	11607	m2	C4.01	0.00015	1.78	0.00	0.00	1.27	14697.08	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$14,697	
III: Final Reclamation & Closure	3000	N16		Main Camp/1875 Portal	Recontouring/Reshaping	Reshape bench and road at Main Camp/1875 Portal with 10% cross fall and water bars		293,591	cy	224467	m3	R.019	0.01	2394.84	0.79	176664.20	0.00	0	1.795	402818.19	0.55	104577.44	27626.22	123214.30	3.13	$702,697	
III: Final Reclamation & Closure	3000	N25		Storm pond	Recontouring/Reshaping	Remove liner from the storm pond to the solid waste facility		1,379	cy	1054	m3	R.020	0.03	36.61	2.56	2700.58	0.00	0	3.743	3946.06	1.14	1016.09	268.42	1197.17	7.44	$7,844	
IV: Water Treatment	6000	S00			Water treatment	Operate water treatment plant		80	months	80	months	W.001	0.00	27600.00	0.00	0.00	0.00	0	0.000	0.00	0.00	0.00	0.00	0.00	54016.58	$4,321,327	See Water_treatment cost worksheet
IV: Water Treatment	6000	S00			Water treatment	Sludge disposal		80	months	80	months														1652.58	$132,207	
IV: Water Treatment	6000	S00			Monitoring	Monitoring Phase III TeckCominco inspection		11	yr	11	yr			5940.00												$1,844,777	See Monitoring cost worksheet
III: Final Reclamation & Closure	1000				Demobilization/Demolition	Site structure (see Infrastructure removal)								2009.05	3730.16	214847.15	5188.68	25943.4	5087.824	167947.08	1271.92	27614.85	7295.01	32536.12	15278.58	$ 441,274	reference to infrastructure removal tab
III: Final Reclamation & Closure	3000				Demobilization/Demolition	Site structure (see Infrastructure removal)		1	lot	1	lot			9061.00	17031.78	726886.93	1297.17	1297.17	27348.078	956026.10	7880.06	236549.11	62489.18	278704.77	53557.09	$ 1,962,915	reference to infrastructure removal tab
III: Final Reclamation & Closure	5000				Demobilization/Demolition	Site structure (see Infrastructure removal)								0.00	0.00	0.00	0.00	0	0.000	0.00	0.00	0.00	0.00	0.00	0.00	$ -	reference to infrastructure removal tab
III: Final Reclamation & Closure	6000				Demobilization/Demolition	Site structure (see Infrastructure removal)								0.00	0.00	0.00	0.00	0	0.000	0.00	0.00	0.00	0.00	0.00	0.00	$ -	reference to infrastructure removal tab
III: Final Reclamation & Closure	5000			Underground stopes	Install	Backfill		38,513	cy	29445	m3			6596.82												$ 1,674,817	

Phase	Area Code	WBS	Item	Area Description	Activity	Task	Status	Quantity	Unit	Quantity	Unit	Cost Code	Unit Mhrs	Total Mhrs	Unit Labor	Labor Cost	Unit Material	Material Cost	Unit Equip.	Equipment Cost	Unit Fuel	Fuel Consumed (L)	Fuel Consumed (gal)	Fuel Cost	Total Unit Cost	Activity Total	Source / Comments
IV: Post Closure Reclamation	5000	N16		Main Camp/1875 Portal	Spread Growth Media	Spread growth media at Main Camp/1875 bench		15,397	cy	11772	m3	R.020	0.03	408.76	2.56	30155.08	0.00	0	3.743	44062.27	1.14	11345.77	2997.21	13367.71	7.44	$87,585	
IV: Post Closure Reclamation	2000	N07		Main Airstrip	Spread Growth Media	Place growth media on Main Airstrip		37,046	cy	28324	m3	R.021	0.01	402.07	1.06	29932.34	0.00	0	1.495	42353.31	0.49	11786.21	3113.56	13886.64	3.04	$86,172	
IV: Post Closure Reclamation	1000	N01		1525 Portal	Recontouring/Reshaping	Highwalls will be stabilized by pulling the outer crest of the fill over the pad to the highwall. Recontoured surfaces will be ripped and respread with growth media. Not feasible to restore wetland due to marginal hydrology.		28,182	cy	21547	m3	R.022	0.00	67.24	0.23	4964.22	0.00	0	0.763	16429.99	0.24	4371.06	1154.70	5150.03	1.23	$26,544	
IV: Post Closure Reclamation	1000	E04		Construction Airstrip		Construction Airstrip	in natural recovery			0	0																Assumed natural recovery, floods during high water
IV: Post Closure Reclamation	1000	E06		Access road Goodpaster bridge to Construction Camp	Enhanced recovery	Seed #6 access road area for revegetation		909	sf	84	m2	C4.01	0.00015	0.01	0.00	0.00	1.27	106.9513	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$107	
IV: Post Closure Reclamation	1000	N01		1525 Portal	Spread Growth Media	Spread Growth Media on 1525 Portal bench		2,601	cy	1989	m3	R.023	0.02	47.90	1.79	3565.68	0.00	0	2.537	5045.32	0.83	1404.03	370.90	1654.24	5.16	$10,265	
III: Final Reclamation & Closure	4000	N20		Access road to RTP seepage wells	Spread Growth Media	Placing growth media on access road to RTP seepage wells		3,878	cy	2965	m3	R.024	0.04	131.03	3.29	9754.25	0.00	0	4.655	13801.96	1.53	3840.85	1014.64	4525.33	9.47	$28,082	
IV: Post Closure Reclamation	1000	M09			Demobilization/Demolition	Earth Station		40	hr	40	hr	C1.08	1.00	40.00	122.32	4892.78	0.00	0	0.000	0.00	0.00	0.00	0.00	0.00	122.32	$4,893	
IV: Post Closure Reclamation	1000	N01		1525 Portal	Enhanced recovery	Seed 1525 Portal bench		21,137	sf	1964	m2	C4.01	0.00015	0.30	0.00	0.00	1.27	2486.378	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$2,486	
III: Final Reclamation & Closure	3000	N30		Ore stockpile	Spread Growth Media	Spread Growth media on Ore stockpile		1,020	cy	780	m3	R.025	0.04	30.96	2.95	2304.83	0.00	0	4.180	3261.26	1.37	907.55	239.75	1069.29	8.51	$6,635	
III: Final Reclamation & Closure	4000	N18		Drystack	Recontouring/Reshaping	Place Non mineralized rock cover on drystack		130,909	cy	100087	m3	R.026	0.02	2230.30	1.65	165382.03	0.00	0	2.360	236171.88	0.74	62572.98	16529.91	73724.18	4.75	$475,278	
IV: Post Closure Reclamation	1000	N05		Construction/Exploration Camp pad	Demobilization/Demolition	Remove 6" dia HDPE dr17 insulated heat trace Discharge pipe to injection wells		1,800	ft	549	m	C2.09	0.10	54.86	6.66	3651.78	0.00	0	2.585	1418.20	0.93	435.04	114.92	512.57	10.18	$5,583	
IV: Post Closure Reclamation	1000	N05		Construction/Exploration Camp pad	Demobilization/Demolition	Remove remaining above ground items		1	ls	1	ls															$100,000	Assumed Misc. cleanup of the area from demolition camp
IV: Post Closure Reclamation	1000	N06		#6 Road Access road Goodpaster bridge to Liese bridge	Recontouring/Reshaping	Remove Culverts		80	ft	24	m	C2.11	0.33	8.13	24.61	600.06	0.00	0	52.989	1292.08	17.61	364.52	96.30	429.48	95.21	$2,322	
IV: Post Closure Reclamation	1000	N06		#6 Road Access road Goodpaster bridge to Liese bridge	Demobilization/Demolition	Remove Liese Bridge		50	ft	15	m	C3.05	4.00	60.96	268.91	4098.16	0.00	0	240.092	3659.00	20.50	265.16	70.05	312.42	529.50	$8,070	
IV: Post Closure Reclamation	1000	N06		#6 Road Access road Goodpaster bridge to Liese bridge	Enhanced recovery	Remove road #6 to Material site 23		49,161	sf	4567	m2	C4.01	0.00015	0.70	0.00	0.00	1.27	5782.994	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$5,783	
III: Final Reclamation & Closure	4000	N18		Drystack	Recontouring/Reshaping	Place sand layer from Material site B on Drystack		65,455	cy	50044	m3	R.026	0.02	1115.15	1.65	82691.01	0.00	0	2.360	118085.94	0.74	31286.49	8264.95	36862.09	4.75	$237,639	
III: Final Reclamation & Closure	4000	N18		Drystack	Spread Growth Media	Place Growth media from pile C, 6"		65,455	cy	50044	m3	R.026	0.02	1115.15	1.65	82691.01	0.00	0	2.360	118085.94	0.74	31286.49	8264.95	36862.09	4.75	$237,639	
IV: Post Closure Reclamation	4000	N17		RTP	Recontouring/Reshaping	Place filter base material for capping runoff sediments		2,500	cy	1911	m3	R.027	0.04	75.85	2.95	5646.85	0.00	0	4.180	7990.12	1.37	2223.51	587.39	2619.77	8.51	$16,257	Quantity from table 4.5 in Reclamation plan. ***RTP breached. Slopes trimmed with maximum 2:1 sideslopes and 50 ft wide floodplain reestablished. Foot slopes and impoundment spread with growth media. Highwall cuts will be stabilized and left in place. Emergent wetlands established in impoundment (Table 9 in 404 Permit)***
IV: Post Closure Reclamation	4000	N17		RTP	Spread Growth Media	Place growth media on RTP dam		6,947	cy	5311	m3	R.027	0.04	210.77	2.95	15690.94	0.00	0	4.180	22202.19	1.37	6178.49	1632.17	7279.57	8.51	$45,173	
IV: Post Closure Reclamation	4000	N17		RTP	Recontouring/Reshaping	Remove HDPE liner to solid waste facility		8,500	cy	6499	m3	R.028	0.03	177.87	1.51	9840.35	0.00	0	3.840	24957.20	1.17	6473.98	1710.23	7627.71	6.53	$42,425	Quantity from table 4.5 in Reclamation plan. ***RTP breached. Slopes trimmed with maximum 2:1 sideslopes and 50 ft wide floodplain reestablished. Foot slopes and impoundment spread with growth media. Highwall cuts will be stabilized and left in place. Emergent wetlands established in impoundment (Table 9 in 404 Permit)***
IV: Post Closure Reclamation	4000	N17		RTP	Recontouring/Reshaping	Remove filter base material to the drystack facility		85,400	cy	65293	m3	R.028	0.03	1787.12	1.51	98866.59	0.00	0	3.840	250746.48	1.17	65044.46	17182.79	76636.10	6.53	$426,249	Quantity from table 4.5 in Reclamation plan. ***RTP breached. Slopes trimmed with maximum 2:1 sideslopes and 50 ft wide floodplain reestablished. Foot slopes and impoundment spread with growth media. Highwall cuts will be stabilized and left in place. Emergent wetlands established in impoundment (Table 9 in 404 Permit)***
IV: Post Closure Reclamation	3000	N13		Access Road #1	Enhanced recovery	Seed, Access Road #1		193,577	sf	17984	m2	C4.01	0.00015	2.75	0.00	0.00	1.27	22771.07	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$22,771	

Phase	Area Code	WBS	Item	Area Description	Activity	Task	Status	Quantity	Unit	Quantity	Unit	Cost Code	Unit Mhrs	Total Mhrs	Unit Labor	Labor Cost	Unit Material	Material Cost	Unit Equip.	Equipment Cost	Unit Fuel	Fuel Consumed (L)	Fuel Consumed (gal)	Fuel Cost	Total Unit Cost	Activity Total	Source / Comments
IV: Post Closure Reclamation	4000	N17		RTP	Recontouring/Reshaping	Remove Geosynthetic Clay Liner		8,500	cy	6499	m3	R.028	0.03	177.87	1.51	9840.35	0.00	0	3.840	24957.20	1.17	6473.98	1710.23	7627.71	6.53	$42,425	Quantity from table 4.5 in Reclamation plan. ***RTP breached. Slopes trimmed with maximum 2:1 sideslopes and 50 ft wide floodplain reestablished. Foot slopes and impoundment spread with growth media. Highwall cuts will be stabilized and left in place. Emergent wetlands established in impoundment (Table 9 in 404 Permit)***
III: Final Reclamation & Closure	3000	N25		Storm pond	Spread Growth Media	Spread growth media on the storm pond		1,277	cy	976	m3	R.030	0.04	38.74	2.20	2143.05	0.00	0	4.751	4637.57	1.45	1200.73	317.20	1414.71	8.40	$8,195	
III: Final Reclamation & Closure	6000	N28A		Material sites A	Enhanced recovery	Spread growth media on material site A		3,129	cy	2392	m3	R.031	0.04	94.93	2.95	7067.10	0.00	0	4.180	9999.72	1.37	2782.75	735.12	3278.67	8.51	$20,345	
IV: Post Closure Reclamation	4000	N15R		Road #3 to RTP to drystack	Enhanced recovery	Seed road #3 to drystack		499,361	sf	46392	m2	C4.01	0.00015	7.10	0.00	0.00	1.27	58741.37	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$58,741	
III: Final Reclamation & Closure	6000	N28B		Material site B	Spread Growth Media	Spread growth media on material site B		534	cy	409	m3	R.032	0.04	16.21	2.95	1206.95	0.00	0	4.180	1707.80	1.37	475.25	125.55	559.95	8.51	$3,475	
III: Final Reclamation & Closure	3000	N10		1690 Portal	Recontouring/Reshaping	Remove culver fill material from 1690 Portal and place as fill in material site A. Remove culvert and restore Liese creek drainage		40,237	cy	30763	m3	R.034	0.02	550.80	1.32	40637.51	0.00	0	3.239	99636.59	1.00	26011.27	6871.40	30646.76	5.56	$170,921	
III: Final Reclamation & Closure	3000	N31		ORTW	Spread Growth Media	Breach ORTW containment ponds		1,298	cy	992	m3	R.036	0.04	39.39	2.95	2932.04	0.00	0	4.180	4148.74	1.37	1154.52	304.99	1360.27	8.51	$8,441	
IV: Post Closure Reclamation	4000	N17		RTP	Demobilization/Demolition	Remove Transformer Upper Level at the RTP Pump house		1	ea	1	ea	C3.04	20.00	20.00	1830.71	1830.71	0.00	0	1200.458	1200.46	102.50	87.00	22.98	102.50	3133.66	$3,134	
IV: Post Closure Reclamation	4000	N17		RTP	Enhanced recovery	Seed the RTP dam area		406,106	sf	37728	m2	C4.01	0.00015	5.77	0.00	0.00	1.27	47771.51	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$47,772	From quantities worksheet
IV: Post Closure Reclamation	4000	N17		RTP	Recontouring/Reshaping	Liner system base and cover used for capping runoff sediments		2,500	sf	232	m2	C4.01	0.00015	0.04	0.00	0.00	1.27	294.0829	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$294	Quantity from table 4.5 in Reclamation plan. ***RTP breached. Slopes trimmed with maximum 2:1 sideslopes and 50 ft wide floodplain reestablished. Foot slopes and impoundment spread with growth media. Highwall cuts will be stabilized and left in place. Emergent wetlands established in impoundment (Table 9 in 404 Permit)***
III: Final Reclamation & Closure	4000	N32		Stilling Basin	Recontouring/Reshaping	Depression filled, contoured and spread with growth media.		16,196	cy	12383	m3	R.037	0.02	298.83	1.80	22246.40	0.00	0	3.753	46467.03	1.24	13036.00	3443.72	15359.15	6.79	$84,073	Table 9 from 404 Permit
III: Final Reclamation & Closure	4000	N32		Stilling Basin	Spread Growth Media	Depression filled, contoured and spread with growth media.		4,627	cy	3538	m3	R.038	0.04	140.40	2.95	10452.11	0.00	0	4.180	14789.41	1.37	4115.64	1087.23	4849.09	8.51	$30,091	Table 9 from 404 Permit
IV: Post Closure Reclamation	4000	N32		Stilling Basin	Spread Growth Media	spread growth media on Stilling Basin area		4,627	cy	3538	m3	R.038	0.04	140.40	2.95	10452.11	0.00	0	4.180	14789.41	1.37	4115.64	1087.23	4849.09	8.51	$30,091	
III: Final Reclamation & Closure	4000	N18			Recontouring/Reshaping	Install erosion ditches (rip rap) on edges of drystack		1,000	cy	765	m3	R.039	0.03	21.87	2.11	1614.56	0.00	0	4.547	3476.55	1.51	980.80	259.10	1155.59	8.17	$6,247	Estimated 5935' of 6'x1' of rip rap to construct ditch and 10% of the maximum production rate will be achieved during the task
II: Reclamation Concurrent with Mining	1000	E02		Rock storage pad	Spread Growth Media	Spread growth media over rock storage pad area		5,974	cy	4567	m3	R.041	0.03	158.59	2.57	11760.16	0.00	0	3.458	15792.44	1.10	4249.52	1122.60	5006.83	7.13	$32,559	Test area for enhanced recovery with GM placement
IV: Post Closure Reclamation	4000	N17		RTP	Demobilization/Demolition	1.5 I/O panel for RTP pump house		1	ea	1	ea															$500	estimated
IV: Post Closure Reclamation	4000	N17		RTP	Demobilization/Demolition	Inlet structure: RTP breakup & bury in place		100	cy	76	m3															$3,000	estimated
IV: Post Closure Reclamation	4000	N17		RTP	Demobilization/Demolition	Stilling basin lock blocks: RTP		650	ea	650	ea															$9,000	estimated
IV: Post Closure Reclamation	6000	N17			Demobilization/Demolition	Remove 6" dia HDPE DR 17 from RTP sump to WTP #2		14,000	lf	4267	m	C2.09	0.10	426.72	6.66	28402.76	0.00	0	2.585	11030.45	0.93	3383.63	893.85	3986.63	10.18	$43,420	
IV: Post Closure Reclamation	3000	N20		Access road to RTP seepage wells	Demobilization/Demolition	Remove seepage collection and cap wells		9	ea	9	ea	C2.03	30.00	270.00	2051.33	18461.96	350.00	3150	1033.975	9305.78	373.70	2854.58	754.09	3363.30	3809.00	$34,281	
IV: Post Closure Reclamation	4000	N20		Access road to RTP seepage wells	Demobilization/Demolition	Remove electrical and communications cables to RTP (above ground only)		8,000	ft	2438	m	C3.18	0.02	48.00	1.26	3078.65	0.00	0	0.000	0.00	0.00	0.00	0.00	0.00	1.26	$3,079	
II: Reclamation Concurrent with Mining	1000	E02		Rock storage pad	Recontouring/Reshaping	Temporary stockpile liners and fills will be removed		11,948	cy	9135	m3	R.042	0.05	497.54	4.02	36699.45	0.00	0	6.783	61956.82	2.09	16171.25	4271.96	19053.15	12.89	$117,709	*Table 5 from 404 Permit Item N25*
III: Final Reclamation & Closure	3000	N16		Main Camp/1875 Portal	Recontouring/Reshaping	Remove main camp fuel berm liner and material to solid waste facility		911	cy	696	m3	R.043	0.03	20.49	2.19	1522.30	0.00	0	3.367	2344.66	1.10	650.87	171.94	766.87	6.65	$4,634	Included liner with the removed material.
IV: Post Closure Reclamation	1000	N06		#6 Road Access road Goodpaster bridge to Liese bridge	Spread Growth Media	Place growth media on road #6 from GM 16 and GM 17		8,194	cy	6264	m3	R.044	0.05	292.13	3.45	21589.60	0.00	0	4.194	26275.16	1.46	7770.48	2052.73	9155.26	9.10	$57,020	
IV: Post Closure Reclamation	6000	S00			Enhanced recovery	Additional enhanced recovery deemed necessary - estimated 5% of total (11393289 sy)		569,664	sf	52924	m2	C4.01	0.00015	8.10	0.00	0.00	1.27	67011.43	0.000	0.00	0.00	0.00	0.00	0.00	1.27	$67,011	
IV: Post Closure Reclamation	6000	S00			Water treatment	Water treatment operations		6	months	6	months	W.001	0.00	2070	0	0	0	0	0	0.00	0	0	0	0	0	$324,099	estimated
IV: Post Closure Reclamation	6000	S00			Monitoring	Monitoring Phase IV TeckCominco inspection		1	yr	1	yr			0.00												$167,707	See Monitoring cost worksheet
IV: Post Closure Reclamation	6000	T00			Recontouring/Reshaping	Winter Road Demobilization		1	ls	1	ls															$500,000	estimated
IV: Post Closure Reclamation	1000				Demobilization/Demolition	Site structure (see Infrastructure removal)								1160.00	1965.52	93358.32	0.00	0	2839.080	121158.59	816.20	30238.81	7988.19	35627.70	5620.80	$ 250,143	reference to infrastructure removal tab
IV: Post Closure Reclamation	2000				Demobilization/Demolition	Site structure (see Infrastructure removal)								0.00	0.00	0.00	0.00	0	0.000	0.00	0.00	0.00	0.00	0.00	0.00	$ -	reference to infrastructure removal tab
IV: Post Closure Reclamation	3000				Demobilization/Demolition	Site structure (see Infrastructure removal)		1	lot	1	lot			0.00	0.00	0.00	0.00	0	0.000	0.00	0.00	0.00	0.00	0.00	0.00	$ -	reference to infrastructure removal tab
IV: Post Closure Reclamation	4000				Demobilization/Demolition	Site structure (see Infrastructure removal)								85.00	1278.02	7728.12	0.00	0	2063.729	6543.67	594.96	1668.50	440.77	1965.85	3936.71	$ 16,238	reference to infrastructure removal tab
IV: Post Closure Reclamation	5000				Demobilization/Demolition	Site structure (see Infrastructure removal)								0.00	0.00	0.00	0.00	0	0.000	0.00	0.00	0.00	0.00	0.00	0.00	$ -	reference to infrastructure removal tab
IV: Post Closure Reclamation	6000				Demobilization/Demolition	Site structure (see Infrastructure removal)								0.00	0.00	0.00	0.00	0	0.000	0.00	0.00	0.00	0.00	0.00	0.00	$ -	reference to infrastructure removal tab
V: Post Closure Monitoring	6000	S00			Demobilization/Demolition	Monitoring phase V: Cap groundwater monitoring wells		7	ea	7	ea	C2.03	30.00	210.00	2051.33	14359.30	350.00	2450	1033.975	7237.83	373.70	2220.23	586.52	2615.90	3809.00	$31,663	Added $5000 for additional cost of travel and lodging
V: Post Closure Monitoring	6000	S00			Monitoring	Monitoring Phase V TeckCominco inspection		7	yr	7	yr			238.00												$77,882	See Monitoring cost worksheet

Table 20. Site Management Cost Inputs

Cost Code	Category	Rate Used in Estimate	Unit	Source/Comments
~~A.01~~	~~Camp Operation - Phase I & II~~	~~$50.00~~	~~USD/day/man~~	~~Cominco~~
A.01	Camp Operation - Phase III	$69.80	USD/day/man	2012 Quote from Taiga Venture
A.01	Camp Operation - Phase IV Reclamation	$69.80	USD/day/man	2012 Quote from Taiga Venture
A.01	Camp Operation - 1yr holding	$452.71	USD/day	2012 Quote from Taiga Venture
A.01	Camp Operation - Phase IV Water Treatment	$136.57	USD/day	2009 rate increased by 5.05%
A.02	Communications	$1,000	Month	Assuming Iridium phone
A.03	Freight	12%		Of Material Costs
A.04	Heating Fuel	400	gal/month	
A.05	Equipment Insurance	10%		Of Equipment Costs
A.06	Laboratory/Material Testing	$1,000.00	Month	Estimated
A.07	Misc. Admin Supplies	$500.00	Month	Estimated
A.08	Office Supplies	$100.00	Month	Estimated
A.09	Turnaround Costs	$1,600.00	USD/trip	By Bus: This includes round trip in and out for 50 passengers
A.11	Worker hours per shift	11.5	hrs/day	

Table 19. Tasks Unit Costs

		Metric		US Standard		Rates							Man-hour Details: Laborers/Trades			Man-hour Details: Equipment Operators			Equipment Details					Material Details						
Cost Code	Item	Unit	Productivity (unit/hr)	Unit	Productivity (unit/hr)	Total Unit Cost	Man-hours per Unit (hrs/Unit)	Labor Cost Per Unit ($/Unit)	Material Cost Per Unit ($/Unit)	Equipment Cost Per Unit ($/Unit)	Fuel Cost Per Unit ($/Unit)	Power Cost Per Unit	Qnty	Description	Rate (USD/hr)	Qnty	Description	Rate (USD/hr)	Equipment Type	Equipment Model	# of Equipment	Equipment Rate ($/hr)	Fuel Cost ($/hr)	Cost Code	Item	Unit Rate	Unit	Multiplier	Multiplier Comments	Task Comments/Productivity Sources
Demolition																														
C1.01	Excavator: CAT 330 w/ grapple attachment	**hrs**	**1**	**hrs**	**1**	**$ 227.59**	1.000	$ 73.83	$ -	$ 115.93	$ 37.83					1.0	Power Equipment Operator - Group 1	$73.83	Excavator	CAT 330 Grapple	1	$115.93	$37.83							
C1.02	Excavator: CAT 330 w/ hammer attachment	**hrs**	**1**	**hrs**	**1**	**$ 269.13**	1.000	$ 73.83	$ -	$ 157.47	$ 37.83					1.0	Power Equipment Operator - Group 1	$73.83	Excavator	CAT 330 Hammer	1	$157.47	$37.83							
C1.03	Excavator: CAT 330 w/ shear attachment	**hrs**	**1**	**hrs**	**1**	**$ 251.47**	1.000	$ 73.83	$ -	$ 139.81	$ 37.83					1.0	Power Equipment Operator - Group 1	$73.83	Excavator	CAT 330 Shear	1	$139.81	$37.83							
C1.04	Truck: CAT 735	**hrs**	**1**	**hrs**	**1**	**$ 212.21**	1.000	$ 73.73	$ -	$ 106.39	$ 32.09					1.0	Truck Drivers - Group 1	$73.73	Truck	CAT 735	1	$106.39	$32.09							
C1.05	Dozer: CAT D9	**hrs**	**1**	**hrs**	**1**	**$ 364.70**	1.000	$ 73.83	$ -	$ 226.45	$ 64.42					1.0	Power Equipment Operator - Group 1	$73.83	Dozer	CAT D9T	1	$226.45	$64.42							
C1.06	Dozer: CAT D8T	**hrs**	**1**	**hrs**	**1**	**$ 290.51**	1.000	$ 73.83	$ -	$ 167.38	$ 49.31					1.0	Power Equipment Operator - Group 1	$73.83	Dozer	CAT D8T	1	$167.38	$49.31							
C1.07	Dozer: CAT D7	**hrs**	**1**	**hrs**	**1**	**$ 230.42**	1.000	$ 73.83	$ -	$ 118.43	$ 38.17					1.0	Power Equipment Operator - Group 1	$73.83	Dozer	CAT D7R	1	$118.43	$38.17							
C1.08	General Labor	**hrs**	**1**	**hrs**	**1**	**$ 122.32**	1.000	$ 122.32	$ -	$ -	$ -		1.0	Engineer	$122.32															
C1.09	Crane dismantling (100 T)	**hrs**	**1**	**hrs**	**1**	**$ 401.22**	2.000	$ 140.63	$ -	$ 240.09	$ 20.50		1.0	Laborers Group 1	$64.14	1.0	Power Equipment Operator - Group 1A	$76.49	Lifting	Crane (Cable Boom), 100T	1	$240.09	$20.50							
Earthworks															**0.0**															
C2.01	Crusher: screen materials	m3	**150**	yd3	196.2	$ 22.50	0.013	$ 1.02	$ -	$ 20.54	$ 0.95								Misc. Equipmen	Screen Plant (200 Tons/hr)	1	$2,771.22	$20.00							Estimated production/cost/ fuel usage
																2.0	Power Equipment Operator - Group 1A	$76.49	Loader	CAT 980H	2	$101.45	$44.91							Assumed a conversion factor of 1.3tn/cy
																			Truck	CAT 735	1	$106.39	$32.09							
C2.02	Drilling: Air Rotary 8" dia.	**m**	**5**	**yd**	**5.5**	**$ 74.22**	0.600	$ 45.60	$ -	$ 22.62	$ 6.00		1.0	Engineering Technician	$80.35	2.0	Power Equipment Operator - Group 1	$73.83	Drill	Air Rotary, 200 cfm compressor	1	$113.08	$30.02							
C2.03	Capping wells: remove projecting pipe, plug	**each**	**0.1**	each	0.100	$ 3,809.00	30.000	$ 2,051.33	$ 350.00	$ 1,033.98	$ 373.70		2.0	Laborers - Group 2	$65.65	1.0	Power Equipment Operator - Group 1	$73.83	Excavator	CAT 330 L	1	$103.40	$37.37	M.47	Delivered pre-mixed concrete	$350.00	$350.00	1		
C2.04	Cover sand production for drystack (screen plant)	**m^3**	**230**	**yd^3**	**300.8**	**$ 1.46**	0.004	$ 0.33	$ -	$ 0.93	$ 0.20									Screen Plant (200 Tons/hr)	1	$112.40								
																1.0	Power Equipment Operator - Group 1A	$76.49	Loader	CAT 980H	1	$101.45	$44.91							Fuel rate was included in estimate for screen plant
C2.05	Bridge demolition	**m**	**0.2**	**ft**	**0.7**	**$ 2,783.47**	20.000	$ 1,387.23	$ -	$ 1,048.95	$ 347.30		1.0	Laborers Group 1	$64.14	2.0	Power Equipment Operator - Group 1	$73.83	Excavator	CAT 330 L	1	$103.40	$37.37							
													1.0	Laborers - Group 2	$65.65				Truck	CAT 735	1.0	$106.39	$32.09							
C2.06	Remove fuel tanks	**each**	**1**	**each**	**1**	**$ 907.82**	3.000	$ 137.97	$ 648.59	$ 83.92	$ 37.35		1.0	Laborers Group 1	$64.14	1.0	Power Equipment Operator - Group 1	$73.83	Loader	CAT 966H	1.0	$83.92	$37.35	M.50	Haulage to Fairbanks	$1,297.17	$1,297.17	0.5	Assumed 2 tanks per load	estimated, does not include sampling, included empting tanks
C2.07	Remove electrical cables	**m**	**100**	**ft**	**328.1**	$ 2.16	0.030	$ 1.97	$ -	$ 0.07	$ 0.12		2.0	Laborers Group 1	$64.14	1.0	Truck Drivers - Group 5	$68.55	Truck	Light Truck (3/4T) 4x2	1	$7.31	$12.25							
C2.08	Labor (reshape soils)	**m^2**	**3**	**yd^2**	**3.6**	$ 64.14	1.000	$ 64.14	$ -	$ -	$ -		3.0	Laborers Group 1	$64.14															
C2.09	Remove above ground piping	**m**	**40**	**ft**	**131.2**	$ 10.18	0.100	$ 6.66	$ -	$ 2.58	$ 0.93		3.0	Laborers Group 1	$64.14	1.0	Power Equipment Operator - Group 1	$73.83	Excavator	CAT 330 L	1	103.40	37.37							
C2.10	Install concrete plug in portal	**m3**	**5**	**cy**	**6.5**	$ 517.49	0.800	$ 52.80	$ 455.00	$ 6.66	$ 3.04		3.0	Laborers Group 1	$64.14	1.0	Power Equipment Operator - Group 3	$71.57	Lifting	Forklift CAT 924G	1	33.28	15.20	M.47	Delivered pre-mixed concrete	$350.00	$350.00	1.3		
C2.11	Culvert removal	**m**	**3**	**ft**	**9.8**	$ 95.21	0.333	$ 24.61	$ -	$ 52.99	$ 17.61					1.0	Power Equipment Operator - Group 1	$73.83	Excavator	CAT 345 L	1	158.97	52.84					1		
Materials																														
C3.01	Dust Suppressant - Supply and Apply	**m^2**	**1000**	**yd^2**	**1196.0**	**$ 0.21**	0.003	$ 0.17	$ 0.03	$ 0.01	$ 0.01		2.0	Laborers - Group 4	$48.34	1.0	Truck Drivers - Group 5	$68.55	Truck	Light Truck (3/4T) 4x2	1	$7.31	$12.25	M.02	Dust Suppressant	$0.03	$0.03	1		
C3.02	Remove Electricity - Overhead electrical conductors	**m**	**125**	**ft**	**410.1**	**$ 5.01**	0.032	$ 2.93	$ -	$ 1.92	$ 0.16		3.0	Electrician	$96.55	1.0	Power Equipment Operator - Group 1A	$76.49	Lifting	Crane (Cable Boom), 100T	1	$240.09	$20.50					1		RSMeans 2005 (18 04 0108)
C3.03	Remove Electricity - Treated Power Poles (40' class 3)	**each**	**0.66**	**each**	**0.66**	**$ 803.31**	4.545	$ 408.47	$ -	$ 363.78	$ 31.06		2.0	Electrician	$96.55	1.0	Power Equipment Operator - Group 1A	$76.49	Lifting	Crane (Cable Boom), 100T	1	$240.09	$20.50					1		RSMeans 2005 (18 04 0108)
C3.04	Remove Electricity - Pole mounted transformer	**each**	**0.2**	**each**	**0.2**	**$ 3,133.66**	20.000	$ 1,830.71	$ -	$ 1,200.46	$ 102.50		3.0	Electrician	$96.55	1.0	Power Equipment Operator - Group 1A	$76.49	Lifting	Crane (Cable Boom), 100T	1	$240.09	$20.50					1		RSMeans 2005 (18 04 0108)
C3.05	Bridge removal	**ft**	**1**	**ft**	**1**	**$ 529.50**	4.000	$ 268.91	$ -	$ 240.09	$ 20.50		3.0	Laborers Group 1	$64.14	1.0	Power Equipment Operator - Group 1A	$76.49	Lifting	Crane (Cable Boom), 100T	1	$240.09	$20.50					1		RSMeans 2005 (18 04 0108)
C3.06	Fencing: 7' galvanized Chain-link fence	**m**	**20**	**yd**	**21.9**	**$ 115.63**	0.225	$ 14.65	$ 100.00	$ 0.37	$ 0.61		3.5	Laborers - Group 1	$64.14	1.0	Truck Drivers - Group 5	$68.55	Truck	Light Truck (3/4T) 4x2	1	$7.31	$12.25					1		RSMeans 2005 (18 04 0108)
C3.07	Remove above ground piping	**m**	**500**	**ft**	**1640.4**	**$ 102.01**	0.011	$ 0.72	$ 101.00	$ 0.21	$ 0.07		4.5	Laborers - Group 1	$64.14	1.0	Power Equipment Operator - Group 1	$73.83	Truck	CAT 330 L	1	$103.40	$37.37		surface piping removal			2		estimated
C3.08	Geotextile: Supply and Install (large areas)	**m^2**	**250**	**yd^2**	**299.0**	**$ 1.55**	0.016	$ 1.06	$ -	$ 0.34	$ 0.15		3.0	Laborers - Group 1	$64.14	1.0	Power Equipment Operator - Group 1	$73.83	Loader	CAT 966H	1	$83.92	$37.35							
C3.09	HDPE pipe: 150mm, insulated; supplied and installed (6")	**m**	**14.5**	**yd**	**15.9**	**$ 224.91**	0.276	$ 18.21	$ 203.36	$ 2.30	$ 1.05		3.0	Laborers - Group 1	$64.14	1.0	Power Equipment Operator - Group 3	$71.57	Truck	Forklift CAT 924G	1	$33.28	$15.20	M.17	HDPE pipe: 6X50 DR11 W/3" INS & HT Trace channel comes in 20' pieces	$62.00	$62.00	3.28		
C3.10	Install steel piping 6"	**m**	**13**	**yd**	**14.2**	**$ 64.48**	0.308	$ 20.31	$ 40.44	$ 2.50	$ 1.17		3.0	Laborers - Group 1	$64.14	1.0	Power Equipment Operator - Group 3	$71.57	Truck	Forklift CAT 924G	1	$33.28	$15.20	M.39	Steel Pipe: 6" dia. W/ Foam Insul JDT Sch. 40 comes in 21' pipe lengths	$40.44	$40.44	1		
C3.11	Heat trace: constant watt cables, installed	**m**	**50**	**yd**	**54.7**	**$ 30.96**	0.080	$ 5.87	$ 24.70	$ 0.15	$ 0.25		1.0	Electrician	$96.55	1.0	Truck Drivers - Group 5	$68.55	Truck	Light Truck (3/4T) 4x2	1	$7.31	$12.25	M.25	Heat trace: constant watt cables	$24.70	m	1		
													2.0	Laborers - Group 1	$64.14															
C3.12	Heat trace Power Feed Kit	**each**	**0.5**	**each**	**0.5**	**$ 992.43**	4.000	$ 386.20	$ 606.23	$ -	$ -		2.0	Electrician	$96.55									M.24	Heat trace Power Feed Kit	$606.23	each	1		
C3.13	Heat trace electrical thermostat	**each**	**2**	**each**	**2**	**$ 1,443.54**	1.000	$ 96.55	$ 1,346.99	$ -	$ -		2.0	Electrician	$96.55									M.23	Heat trace electrical thermostat	$1,346.99	each	1		
C3.14	Transport/incinerate hydrocarbon soils	**m^3**	**0.9**	**Cy**	**1.15**	**$ 304.36**	1.137	$ 71.08	$ 233.27	$ -	$ -					1.0	Contracting Truck 23cy	$62.50						M.48	Incineration of hydrocarbon soils	$117.57	ton	1		Quote from OIT
C3.15	Install paste underground	**tonnes**	**122.5**	**ton**	**135**	**$ 10.01**	0.033	$ 2.37	$ 5.15	$ 1.92	$ 0.57		2.0	Tunnel Labor Group 3	$71.70	2.0	Truck Drivers - Group 1	$73.73	Truck	CAT 740	2	$117.44	$34.69							Information from Mine department
																								M.13	cement paste ration 1:.032	$161.00	ton	0.032		This is 68% solids cost are calculated in US standard
C3.16	Install paste piping underground	**m**	**18.3**	**ft**	**60**	**$ 248.88**	0.164	$ 11.59	$ 236.22	$ 0.40	$ 0.67		2.0	Tunnel Labor Group 3	$71.70	1.0	Truck Drivers - Group 5	$68.55	Truck	Light Truck (3/4T) 4x2	1	$7.31	$12.25		Paste (plastic pipe)+welding	$18.00	ft	4	multiplied by 4 for added cost of install	
C3.17	Remove underground piping	**m**	**18.3**	**ft**	**60**	**$ 7.81**	0.164	$ 6.74	$ -	$ 0.40	$ 0.67		2.0	Tunnel Labor Group 3	$71.70	1.0	Truck Drivers - Group 5	$68.55	Truck	Light Truck (3/4T) 4x2	1	$7.31	$12.25							
C3.18	Remove surface electrical cable	**m**	**152.4**	**ft**	**500**	**$ 1.26**	0.020	$ 1.26	$ -	$ -	$ -		3.0	Laborers - Group 1	$64.14															

Revegetation																																	
C4.01	Seeding/Fertilizing: Application by Hydroseeder	m^2	**929.03**	ft^2	**10000.0**	**$ 1.27**	0.0	$ -	$ 1.27	$ -	$ -															M.12	Hydroseeding	$0.11	ft2			Phone quote Labrenze Landscaping Inc.
																										M.08	Fertilizer	$0.0037	ft2			300 lbs/acre
																										M.28	Native Seed	$0.0039	ft2			50 lbs/acre
~~C4.03~~	~~Seeding/Fertilizing: Application by Helicopter~~	~~**hec**~~	~~**2.8**~~	~~**acre**~~	~~**6.9**~~	~~**$ 562.10**~~	~~0.893~~	~~$ 58.84~~	~~$ -~~	~~$ 498.88~~	~~$ 4.38~~		~~1.5~~	~~Laborers - Group 1~~	~~$64.14~~					~~Other~~	~~Helicopter~~	~~1.0~~	~~$1,389.55~~	~~$0.00~~	~~M.28~~	~~Native seed~~	~~$3.44~~	~~lb~~		~~60kg per hectare~~	~~estimated~~
																~~1.0~~	~~Truck Drivers - Group 5~~	~~$68.55~~	~~Truck~~	~~Light Truck (3/4T) 4x2~~	~~1.0~~	~~$7.31~~	~~$12.25~~	~~M.08~~	~~Fertilizer~~	~~$1,070.00~~	~~ton~~		~~500kg per hectare~~	
~~C4.02~~	~~Planting (shrubs, seedlings, etc.): By hand~~	~~**hec**~~	~~**0.032**~~	~~**acre**~~	~~**0.1**~~	~~**$ 6,762.18**~~	~~93.750~~	~~$ 6,150.88~~	~~$ -~~	~~$ 228.48~~	~~$ 382.81~~		~~2.0~~	~~Laborers - Group 1~~	~~$64.14~~	~~1.0~~	~~Truck Drivers - Group 5~~	~~$68.55~~	~~Truck~~	~~Light Truck (3/4T) 4x2~~	~~1.0~~	~~$7.31~~	~~$12.25~~								
Relocations																																	
C5.01	Demobilization to Fairbanks	**each**	**1**	**each**	**1**	**$ 1,297.17**			$ 1,297.17	$ -	$ -															M.50	Haulage to Fairbanks	$1,297.17	2012 quote	1	500kg per hectare	

Table 17. Unit Rate Inputs

A. Equipment Rates

Adjustment Factors					
Adjustment Factor for ownership/maintenance cost vs Blue Book	1.00				
Equipment Rates Used:	AlaskanContractor	SWITCH FOR LABOR RATE SELECTION			
Exchange Rate: 1USD =	1.000	CAD			
Include Operator?	No	Avg. Wage ($/hr)			
Include Equipment Owner Overhead?	No	Owner OH Rate:	10%		
Include Equipment Owner Profit?	No	Profit rate:	10%	Fuel (USD/g)	
Include Fuel Cost?	No	Fuel Cost per litre:	$1.18	$	4.46

		Operator Details			Rates Used in Estimate		
Model	HP	# of Operators	Operator Type	Operator Rate (US $/hr)	Equipment Rate (US $/hr)	Fuel Rate (US $/hr)	Equipment Rate Source
Compactor							
CAT CP563	143	1	Power Equipment Operator - Group 3	$71.57	**$55.87**	**$21.90**	Eqip. Watch 2012 Rate
Sheepsfoot (72 in, 2 drums)	0	0					
Walk-behind vibrating (30 in)	11	1	Laborers - Group 1	$64.14	**$13.33**	**$1.68**	Eqip. Watch 2012 Rate
Dozer							
D6N LGP	150	1	Power Equipment Operator - Group 1	$73.83	**$85.01**	**$23.86**	Eqip. Watch 2012 Rate
CAT D7R	240	1	Power Equipment Operator - Group 1	$73.83	**$118.43**	**$38.17**	Eqip. Watch 2012 Rate
CAT D8T	310	1	Power Equipment Operator - Group 1	$73.83	**$167.38**	**$49.31**	Eqip. Watch 2012 Rate
CAT D9T	405	1	Power Equipment Operator - Group 1	$73.83	**$226.45**	**$64.42**	Eqip. Watch 2012 Rate
CAT D10	574	1	Power Equipment Operator - Group 1	$73.83	**$285.65**	**$91.30**	Eqip. Watch 2012 Rate
CAT D11	850	1	Power Equipment Operator - Group 1	$73.83	**$402.22**	**$135.20**	Eqip. Watch 2012 Rate
Drill							
Air track rig (900cfm)	215	2	Power Equipment Operator - Group 1	$73.83	**$89.48**	**$32.93**	SOA 2009 Rate escalated
Air Rotary, 200 cfm compressor	196	2	Power Equipment Operator - Group 1	$73.83	**$113.08**	**$30.02**	SOA 2009 Rate escalated
Excavator							
CAT 330 L	244	1	Power Equipment Operator - Group 1	$73.83	**$103.40**	**$37.37**	Eqip. Watch 2012 Rate
CAT 365 L	404	1	Power Equipment Operator - Group 1	$73.83	**$203.04**	**$61.88**	Eqip. Watch 2012 Rate
CAT 345 L	345	1	Power Equipment Operator - Group 1	$73.83	**$158.97**	**$52.84**	Eqip. Watch 2012 Rate
CAT 330 Grapple	247	1	Power Equipment Operator - Group 1	$73.83	**$115.93**	**$37.83**	SOA 2009 Rate escalated
CAT 330 Hammer	247	1	Power Equipment Operator - Group 1	$73.83	**$157.47**	**$37.83**	SOA 2009 Rate escalated
CAT 330 Shear	247	1	Power Equipment Operator - Group 1	$73.83	**$139.81**	**$37.83**	SOA 2009 Rate escalated
Grader							
CAT 16H	285	1	Power Equipment Operator - Group 1	$73.83	**$124.58**	**$47.01**	Eqip. Watch 2012 Rate
Lifting							
Crane (Cable Boom), 100T	174	1	Power Equipment Operator - Group 1A	$76.49	**$240.09**	**$20.50**	Eqip. Watch 2012 Rate
Crane (Cable Boom), 150T	300	1	Power Equipment Operator - Group 1A	$76.49	**$207.26**	**$35.35**	Eqip. Watch 2012 Rate
Forklift CAT 924G	129	1	Power Equipment Operator - Group 3	$71.57	**$33.28**	**$15.20**	Eqip. Watch 2012 Rate
Loader							
CAT 966H	262	1	Power Equipment Operator - Group 1	$73.83	**$83.92**	**$37.35**	Eqip. Watch 2012 Rate
CAT 980H	315	1	Power Equipment Operator - Group 1A	$76.49	**$101.45**	**$44.91**	Eqip. Watch 2012 Rate
CAT 988H	475	1	Power Equipment Operator - Group 1A	$76.49	**$173.75**	**$67.72**	Eqip. Watch 2012 Rate
Truck							
Light Truck (3/4T) 4x2	160	1	Truck Drivers - Group 5	$68.55	**$7.31**	**$12.25**	Eqip. Watch 2012 Rate
CAT 735	419	1	Truck Drivers - Group 1	$73.73	**$106.39**	**$32.09**	Eqip. Watch 2012 Rate
CAT 740	453	1	Truck Drivers - Group 1	$73.73	**$117.44**	**$34.69**	Eqip. Watch 2012 Rate
CAT 777D	938	1	Truck Drivers - Group 1A	$75.65	**$185.46**	**$71.84**	Eqip. Watch 2012 Rate

1. Hourly rate for a monthly rental based on 10 hour shifts.
2. Price increase of 6% based on average increase in equipment costs noted from BC BlueBook between 2004 and 2006.
3. Minor Maintenance costs not otherwise included in third party rental rates, i.e. ground engaging tools, lubricants, routine preventative maintenance, minor repairs.
4. 2012 Equipment Watch rates used to revise rates used in the estimate

Misc. Equipment	Rate (USD/hr)	Est. Fuel Rate	Source
Crusher (200 Tons/hr)	$2,771		Quote from Brice, note: fuel consumption was estimated, escalated to 2012
Helicopter	$1,389.55		Estimated in 2009, escalated to 2012
Hydro-seeder truck	$110.66		Equipment Watch 2012 - Seed Sprayer for Truck Mounting + Diesel Truck (incl. fuel costs)
Spreader: Dozer attachment (3m width)	$6.37		Equipment Watch 2012 - Chemical spreader 5 cy capacity (Incl. fuel costs)
Screen Plant (200 Tons/hr)	$112.40		Estimated in 2009, escalated to 2012

B. Labor Rates

0.2516 0.21

Cost Code	Category	Rate Used in Estimate	Unit	Contractor Labor Rates Basic Hourly Rate	Fringes	Over time	burden	Contractor Total Unit Cost	Alaska Labor Code
P.01	Laborers Group 1	$64.14	USD/hr	$29.00	$20.22	$7.30	$7.62	$64.14	N1201
P.02	Carpenter (journeyman)	$74.38	USD/hr	$35.49	$20.63	$8.93	$9.33	$74.38	A0301
P.03	Electrician	$96.55	USD/hr	$47.43	$24.72	$11.93	$12.47	$96.55	A0704
P.04	Engineer	$122.32	USD/hr	$63.34	$26.39	$15.94	$16.65	$122.32	
P.05	Engineering Technician	$80.35	USD/hr	$44.34	$13.20	$11.16	$11.65	$80.35	
P.06	Foreman	$79.79	USD/hr	$42.23	$15.84	$10.62	$11.10	$79.79	
P.07	Environmental Laborer	$64.14	USD/hr	$29.00	$20.22	$7.30	$7.62	$64.14	N1201
P.08	Health and Safety Supervisor	$79.79	USD/hr	$42.23	$15.84	$10.63	$11.10	$79.79	
P.09	Laborers - Group 1	$64.14	USD/hr	$29.00	$20.22	$7.30	$7.62	$64.14	N1201
P.10	Laborers - Group 2	$65.65	USD/hr	$30.00	$20.22	$7.55	$7.89	$65.65	N1202
P.11	Laborers - Group 3	$67.02	USD/hr	$30.90	$20.22	$7.77	$8.12	$67.02	N1203
P.12	Laborers - Group 3A	$71.98	USD/hr	$34.18	$20.22	$8.60	$8.98	$71.98	N1204
P.13	Laborers - Group 4	$48.34	USD/hr	$18.57	$20.22	$4.67	$4.88	$48.34	N1205
P.14	Mechanic	$71.82	USD/hr	$36.51	$16.53	$9.19	$9.60	$71.82	A2103
P.15	Millwright (journeyman)	$69.95	USD/hr	$33.89	$18.63	$8.53	$8.91	$69.95	A1251
P.16	Power Equipment Operator - Group 1	$73.83	USD/hr	$36.83	$18.05	$9.27	$9.68	$73.83	A1601
P.17	Power Equipment Operator - Group 1A	$76.49	USD/hr	$38.59	$18.05	$9.71	$10.14	$76.49	A1602
P.18	Power Equipment Operator - Group 2	$72.66	USD/hr	$36.06	$18.05	$9.07	$9.48	$72.66	A1603
P.19	Power Equipment Operator - Group 3	$71.57	USD/hr	$35.34	$18.05	$8.89	$9.29	$71.57	A1604
P.20	Power Equipment Operator - Group 4	$62.17	USD/hr	$29.13	$18.05	$7.33	$7.66	$62.17	A1605
P.21	Site Clerk / Medic	$64.14	USD/hr	$29.00	$20.22	$7.30	$7.62	$64.14	N1201
P.22	Superintendent	$80.35	USD/hr	$44.34	$13.20	$11.16	$11.65	$80.35	
P.23	Survey Field Manager	$78.61	USD/hr	$40.99	$16.53	$10.31	$10.77	$78.61	A2001
P.24	Survey Crew (Surveyor + Helper-2 people)	$139.72	USD/hr	$70.43	$33.06	$17.72	$18.51	$139.72	A2004+A2005
P.25	Truck Drivers - Group 1A	$75.65	USD/hr	$39.04	$16.53	$9.82	$10.26	$75.65	A2102
P.26	Truck Drivers - Group 1	$73.73	USD/hr	$37.77	$16.53	$9.50	$9.93	$73.73	A2101
P.27	Truck Drivers - Group 2	$71.82	USD/hr	$36.51	$16.53	$9.19	$9.60	$71.82	A2103
P.28	Truck Drivers - Group 3	$70.58	USD/hr	$35.69	$16.53	$8.98	$9.38	$70.58	A2104
P.29	Truck Drivers - Group 4	$69.70	USD/hr	$35.11	$16.53	$8.83	$9.23	$69.70	A2105
P.30	Truck Drivers - Group 5	$68.55	USD/hr	$34.35	$16.53	$8.64	$9.03	$68.55	A2106
P.31	Tunnel Labor Group 1	$68.53	USD/hr	$31.90	$20.22	$8.03	$8.38	$68.53	N2201
P.32	Tunnel Labor Group 2	$70.20	USD/hr	$33.00	$20.22	$8.30	$8.67	$70.20	N2202
P.33	Tunnel Labor Group 3	$71.70	USD/hr	$33.99	$20.22	$8.55	$8.93	$71.70	N2203
P.34	Tunnel Labor Group 3A	$77.16	USD/hr	$37.60	$20.22	$9.46	$9.88	$77.16	N2204
P.35	Tunnel Labor Group 3B	$78.54	USD/hr	$38.51	$20.22	$9.69	$10.12	$78.54	N2206

Notes:
Alaska Dep. Of Labor - Laborers' & Mechanics Min. Rate of Pay, Pamphlet No. 600, Issue 23 (November 1, 2011) are N1201-N1206 classification
2009 rates increased by average 2009 to 2012 labor rates increase calculated for the Alaska Dept. of Labor rates

C. Material Costs

Cost Code	Item	Unit Cost (USD)	Unit	Source
M.01	Bentonite	$300.575	tonnes	Quote: Apr. 2006, escalated to 2012 - Delta Industrial /Brian Johnson (907) 895-5
M.02	Dust Suppressant	$0.03	m2	Estimated in 2009, escalated to 2012
M.03	Electricity	$0.156	kWh	2012 Rate - GVEA on-line calculator (1,080,000 kWh/month + 500 kW demand)
M.07	Explosives (for rip-rap production)	$88.59	lb	2012 Quote - Dyno Nobel/Matt Buding (907) 688-8688
M.08	Fertilizer	$1,070.00	ton	2012 Quote - Groundhogs Landscaping/Ken Kelsch (907) 474-4647
M.10	Fuel: Diesel	$1.18	Litre	Calculated from rate per gallon
M.11	Fuel: Diesel	$4.46	Gallon	Feb 2012 bulk diesel rate (Alaska West Express/Alan Hoza (907) 328-4318)
M.12	Hydroseeding	$0.11	ft2	2012 Quote - Groundhogs Landscaping/Ken Kelsch (907) 474-4647
M.13	Cement	$161.00	ton	2012 Quote from Alaska Basic / Xavier Schell (907) 240-4024
M.14	8" Paste Pipe	$18.00	ft	2012 Quote from C&R Pipe and Steel
M.17	HDPE pipe: 6X50 DR11 W/3" INS & HT Trace channel comes in 20' pieces	$62.00	ft	2012 Quote Ferguson/ Jason Trine (907) 456-1234
M.18	Recycled income for No. 1 Steel prepared	$95.00	ton	Quote from Alaska Metal Recycling 7-2-08 - not used in the RCE
M.19	Recycled income for scrap Steel unprepared	$40.00	ton	Quote from Alaska Metal Recycling 7-2-08 - not used in the RCE
M.23	Heat trace electrical thermostat	$1,346.99	each	2012 Quote from Wolseley Mechanical Group Chris Wardrop (604) 205-2900
M.24	Heat trace Power Feed Kit	$606.23	each	2012 Quote from Wolseley Mechanical Group Chris Wardrop (604) 205-2900
M.25	Heat trace: constant watt cables	$24.70	m	2012 Quote from Wolseley Mechanical Group Chris Wardrop (604) 205-2900
M.26	Lime	$1,250.00	ton	2012 Quote from Univar / Rick Holland (907) 227-8254
M.27	Lumber: 2x4 Stud framing	$4.82	m	RSMeans 2012 (06 11 10.18 2000)
M.28	Native seed	$3.44	lb	2012 Quote - Groundhogs Landscaping/Ken Kelsch (907) 474-4647
M.35				
M.36	Quick lime	$1,800.00	ton	2012 Quote from Univar / Rick Holland (907) 227-8254
M.38	FERRIC CHLORIDE 40%	$0.89	$/lb	2012 Quote from Univar / Rick Holland (907) 227-8254
M.39	Steel Pipe: 6" dia. W/ Foam Insul JDT Sch. 40 comes in 21' pipe lengths	$40.44	m	2012 Quotes from C&R Pipe and Steel (pipe) + Vertex (insulation)
~~M.47~~	~~Delivered pre-mixed concrete~~	~~$350.00~~	~~cy~~	~~Verbal quote (delta concrete) $350/cy~~
M.48	Incineration of hydrocarbon soils	$117.57	ton	Quote: OIT February 2012 /Mark Sanford (907) 488-4899, excl. transport costs
M.49	Borough landfill cost	$118.00	ton	Fairbanks North Star Borough - FY2012 Solids Waste User Fee Schedule
M.50	Haulage to Fairbanks	$1,297.17	each	2012 quote from Alaska West Express/Greg Schutte (907) 328-4322 - D. Weide

								Productivities			Unit Rates						Loader						Excavator					Truck					Dozer 1					Compactor				
Cost Code	Area	Activity	Material	Source	Area used Code	Destination	Code	Loose (LCY^3/hr)	Loose (Lm^3/hr)	Bank (Bm^3/hr)	Total Loose Unit Rate ($/Lm3)	Total Bank Unit Rate ($/Bm3)	Manhours (hrs/Bm3)	Labor Cost ($/Bm3)	Equipment Cost ($/Bm3)	Fuel Cost ($/Bm3)	Qnty	Model	Equipment Rate ($/hr)	Fuel Cost ($/hr)	Operator Wage ($/hr)	Qnty	Model	Equipment Rate ($/hr)	Fuel Cost ($/hr)	Operator Wage ($/hr)	Qnty	Model	Equipment Rate ($/hr)	Fuel Cost ($/hr)	Operator Wage ($/hr)	Qnty	Model	Equipment Rate ($/hr)	Fuel Cost ($/hr)	Operator Wage ($/hr)	Qnty	Model	Equipment Rate ($/hr)	Fuel Cost ($/hr)	Operator Wage ($/hr)
R.001	1525 Portal area	Load, haul, dump, place dev. rock	Sand & Gravel	E02	E02	Drystack (N18)		117	89.5	81.0	$21.33	$19.32	0.086	$ 6.38	$ 9.71	$ 3.23	1	CAT 980H	$101.45	$44.91	$76.49	1	CAT 345 L	$158.97	$52.84	$73.83	3	CAT 740	$117.44	$34.69	$73.73	1	CAT D7R	$118.43	$38.17	$73.83	1	CAT CP563	$55.87	$21.90	$71.57
R.002	Lower camp pond	Reshaping shoreline	Gravels	in place	E02	in place (cut/fill)		553	422.6	384.2	$0.61	$0.56	0.003	$ 0.19	$ 0.27	$ 0.10						1	CAT 330 L	$103.40	$37.37	$73.83															
R.003	Lower camp pond	Load, haul, place growth media	Growth media	N27 next to ponds	N27	Mineralized rock storage (E02)		145	110.9	100.8	$9.06	$8.23	0.040	$ 2.95	$ 3.96	$ 1.32	1	CAT 980H	$101.45	$44.91	$76.49						2	CAT 735	$106.39	$32.09	$73.73	1	D6N LGP	$85.01	$23.86	$73.83					
R.004	Lower camp fuel containment	Remove fuel berms liner to dry stack tailings facility	HDPE liner	N08 Fuel island	N08	Solid Waste facility		115	88.1	80.1	$15.53	$14.12	0.062	$ 4.64	$ 7.15	$ 2.34	1	CAT 980H	$101.45	$44.91	$76.49						3	CAT 740	$117.44	$34.69	$73.73	1	CAT D7R	$118.43	$38.17	$73.83					
R.005	Lower camp fuel containment	Load, haul, place growth media	Growth media	N27 next to ponds	N27	N08		145	110.9	100.8	$9.06	$8.23	0.040	$ 2.95	$ 3.96	$ 1.32	1	CAT 980H	$101.45	$44.91	$76.49						2	CAT 735	$106.39	$32.09	$73.73	1	D6N LGP	$85.01	$23.86	$73.83					
R.006	general	Reshaping roads, berms (no haul) dozer	Waste Rock	general	E01,	in place (cut/fill)		632	483.3	439.4	$1.13	$1.03	0.002	$ 0.17	$ 0.65	$ 0.21																1	CAT D10	$285.65	$91.30	$73.83					
R.007	1525 Portal access road	Load, haul, place growth media	Growth media	N27 next to ponds	N27	E01		258	197.3	179.3	$6.21	$5.65	0.028	$ 2.07	$ 2.70	$ 0.87	1	CAT 980H	$101.45	$44.91	$76.49						2	CAT 735	$106.39	$32.09	$73.73	2	D6N LGP	$85.01	$23.86	$73.83					
R.008	Access road Goodpaster bridge to Liese bridge	Remove road material	Waste Rock	#6 access road	E06	Material site 23		307	234.5	213.2	$6.47	$5.88	0.023	$ 1.73	$ 3.18	$ 0.97						1	CAT 345 L	$158.97	$52.84	$73.83	3	CAT 740	$117.44	$34.69	$73.73	1	CAT D8T	$167.38	$49.31	$73.83	0	CAT CP563	$55.87	$21.90	$71.57
R.009	Access road Goodpaster bridge to Liese bridge	Load, haul, place growth media	Growth media	N27 next to ponds	N27	in place		145	110.9	100.8	$11.82	$10.75	0.050	$ 3.69	$ 5.35	$ 1.71	1	CAT 980H	$101.45	$44.91	$76.49						3	CAT 740	$117.44	$34.69	$73.73	1	D6N LGP	$85.01	$23.86	$73.83					
R.010	Burn Pit	Load, haul, dump in dry stack tailings facility	Misc.	Burn Pit	E-7	Solid Waste facility		133	101.6	101.6	$13.19	$13.19	0.059	$ 4.36	$ 6.66	$ 2.17	1	CAT 980H	$101.45	$44.91	$76.49						3	CAT 740	$117.44	$34.69	$73.73	1	CAT D8T	$167.38	$49.31	$73.83	1	CAT CP563	$55.87	$21.90	$71.57
R.011	Road #6	Load, haul , dump, compact	Sand & Gravel	#6 Road	N06	Material site 23		307	234.5	212.5	$5.34	$4.84	0.019	$ 1.39	$ 2.64	$ 0.81						1	CAT 345 L	$158.97	$52.84	$73.83	2	CAT 740	$117.44	$34.69	$73.73	1	CAT D8T	$167.38	$49.31	$73.83	0	CAT CP563	$55.87	$21.90	$71.57
R.012	general	General excavator reshaping	Misc.	general	N20	general		549	419.5	419.5	$0.68	$0.68	0.002	$ 0.18	$ 0.38	$ 0.13						1	CAT 345 L	$158.97	$52.84	$73.83															
R.013	#7 Access Road	Excavate, haul, place	Sand & Gravel	#7 Road	N03	Material site A		600	458.7	415.5	$3.16	$2.86	0.010	$ 0.71	$ 1.64	$ 0.51						1	CAT 345 L	$158.97	$52.84	$73.83	2	CAT 740	$117.44	$34.69	$73.73	1	CAT D10	$285.65	$91.30	$73.83	0	CAT CP563	$55.87	$21.90	$71.57
R.014	general	Ripping/scarifying	Sand & Gravel	general	N07,N30	in place		1049	802.2	726.6	$0.68	$0.62	0.001	$ 0.10	$ 0.39	$ 0.13																1	CAT D10	$285.65	$91.30	$73.83					
R.015	Access road #1	Reshaping to 10% wt water bars	Sand & Gravel	#1 road (N13)	N13	in place (cut/fill)		632	483.3	437.8	$1.86	$1.68	0.005	$ 0.34	$ 1.02	$ 0.33						1	CAT 345 L	$158.97	$52.84	$73.83						1	CAT D10	$285.65	$91.30	$73.83					
R.016	Access road #1	Load, haul, place growth media	Growth media	N27 below mill bench	N27	Access road #1 (N13)		224	171.5	155.9	$7.14	$6.49	0.032	$ 2.38	$ 3.11	$ 1.01	1	CAT 980H	$101.45	$44.91	$76.49						2	CAT 735	$106.39	$32.09	$73.73	2	D6N LGP	$85.01	$23.86	$73.83					
R.017	Mill bench	Reshaping (cut/fill)	Sand & Gravel	Mill bench (N14)	N14	in place (cut/fill)		632	483.3	437.8	$1.99	$1.80	0.005	$ 0.34	$ 1.12	$ 0.35						1	CAT 365 L	$203.04	$61.88	$73.83						1	CAT D10	$285.65	$91.30	$73.83	0	CAT CP563	$55.87	$21.90	$71.57
R.018	Access road #3	Reshaping to 10% wt water bars	Sand & Gravel	#1 road (N15)	N15	in place (cut/fill)		632	483.3	437.8	$1.86	$1.68	0.005	$ 0.34	$ 1.02	$ 0.33						1	CAT 345 L	$158.97	$52.84	$73.83						1	CAT D10	$285.65	$91.30	$73.83					
R.019	Main Camp/1875 Portal	Reshaping (cut/fill) (short haul)	Sand & Gravel	Mill bench (N16)	N16	in place (cut/fill) (short haul)		677	517.4	468.6	$3.46	$3.13	0.011	$ 0.79	$ 1.79	$ 0.55						1	CAT 365 L	$203.04	$61.88	$73.83	3	CAT 740	$117.44	$34.69	$73.73	1	CAT D10	$285.65	$91.30	$73.83	0	CAT CP563	$55.87	$21.90	$71.57
R.020	Main Camp/1875 Portal	Load, haul, place growth media	Growth media	N27 below RTP	N27	Access road #1 (N13)		290	221.7	201.6	$8.18	$7.44	0.035	$ 2.56	$ 3.74	$ 1.14						1	CAT 345 L	$158.97	$52.84	$73.83	4	CAT 735	$106.39	$32.09	$73.73	2	D6N LGP	$85.01	$23.86	$73.83					
R.021	Main Airstrip	Load, haul, place growth media	Growth media	N27 on Airstrip	N07	Airstrip (N07)		405	310.0	281.8	$3.35	$3.04	0.014	$ 1.06	$ 1.50	$ 0.49	1	CAT 980H	$101.45	$44.91	$76.49						2	CAT 740	$117.44	$34.69	$73.73	1	D6N LGP	$85.01	$23.86	$73.83					
R.022	1525 Portal bench	Reshaping (cut/fill)	Sand & Gravel	1525 Portal bench (N01	N01	in place (cut/fill)		925	707.5	640.9	$1.36	$1.23	0.003	$ 0.23	$ 0.76	$ 0.24						1	CAT 365 L	$203.04	$61.88	$73.83						1	CAT D10	$285.65	$91.30	$73.83	0	CAT CP563	$55.87	$21.90	$71.57
R.023	1525 Portal bench	Load, haul, place growth media	Growth media	N27 next to ponds	N01	in place (cut/fill)		239	182.7	166.1	$5.68	$5.16	0.024	$ 1.79	$ 2.54	$ 0.83	1	CAT 980H	$101.45	$44.91	$76.49						2	CAT 740	$117.44	$34.69	$73.73	1	D6N LGP	$85.01	$23.86	$73.83	0	CAT CP563	$55.87	$21.90	$71.57
R.024	Access road to RTP seepage wells material site A	Load, haul, place growth media	Growth media	material site A	N20	Seepage Well		130	99.6	90.5	$10.42	$9.47	0.044	$ 3.29	$ 4.65	$ 1.53	1	CAT 980H	$101.45	$44.91	$76.49						2	CAT 740	$117.44	$34.69	$73.73	1	D6N LGP	$85.01	$23.86	$73.83					
R.025	Ore stockpile (short haul)	Load, haul, place growth media	Growth media	N27 below mill bench	N27	in place		145	110.9	100.8	$9.36	$8.51	0.040	$ 2.95	$ 4.18	$ 1.37	1	CAT 980H	$101.45	$44.91	$76.49						2	CAT 740	$117.44	$34.69	$73.73	1	D6N LGP	$85.01	$23.86	$73.83					
R.026	Cover material on drystack placement	Load, haul , place 6" layers	Sands	Material site B	N18	drystack (N18)		411	314.1	314.1	$4.75	$4.75	0.022	$ 1.65	$ 2.36	$ 0.74	1	CAT 980H	$101.45	$44.91	$76.49						4	CAT 740	$117.44	$34.69	$73.73	2	D6N LGP	$85.01	$23.86	$73.83					
R.027	RTP dam (short haul)	Load, haul, place growth media	Growth media	N27 below RTP dam	N17	RTP dam		145	110.9	100.8	$9.36	$8.51	0.040	$ 2.95	$ 4.18	$ 1.37	1	CAT 980H	$101.45	$44.91	$76.49						2	CAT 740	$117.44	$34.69	$73.73	1	D6N LGP	$85.01	$23.86	$73.83					
R.028	RTP dam	Load, haul, place liner in dry stack tailings facility	HDPE liner	N17 RTP dam	N17	Solid Waste facility		210	160.8	146.1	$7.18	$6.53	0.027	$ 1.51	$ 3.84	$ 1.17						1	CAT 345 L	$158.97	$52.84		2	CAT 740	$117.44	$34.69	$73.73	1	CAT D8T	$167.38	$49.31	$73.83					
R.029	Storm pond	Load, haul, place liner in dry stack tailings facility	HDPE liner	N25 storm pond	N25	Solid Waste facility		120	92.1	83.7	$12.53	$11.39	0.048	$ 2.64	$ 6.70	$ 2.05						1	CAT 345 L	$158.97	$52.84		2	CAT 740	$117.44	$34.69	$73.73	1	CAT D8T	$167.38	$49.31	$73.83					
R.030	Storm pond	Load, haul, place growth media (short haul)	Growth media	N25 storm pond	N25	Solid Waste facility		145	110.9	100.8	$9.24	$8.40	0.040	$ 2.20	$ 4.75	$ 1.45						1	CAT 345 L	$158.97	$52.84		2	CAT 740	$117.44	$34.69	$73.73	1	D6N LGP	$85.01	$23.86	$73.83					
R.031	Material site A	Load, haul, place growth media	Growth media	N27 below RTP dam	N17	Material site A		145	110.9	100.8	$9.36	$8.51	0.040	$ 2.95	$ 4.18	$ 1.37	1	CAT 980H	$101.45	$44.91	$76.49						2	CAT 740	$117.44	$34.69	$73.73	1	D6N LGP	$85.01	$23.86	$73.83					
R.032	Material site B	Load, haul, place growth media	Growth media	N27 below mill bench	N17	Material site B		145	110.9	100.8	$9.36	$8.51	0.040	$ 2.95	$ 4.18	$ 1.37	1	CAT 980H	$101.45	$44.91	$76.49						2	CAT 740	$117.44	$34.69	$73.73	1	D6N LGP	$85.01	$23.86	$73.83					
R.033	Material site C	Load, haul, place growth media	Growth media	N27 below RTP dam	N17	Material site C		145	110.9	100.8	$9.36	$8.51	0.040	$ 2.95	$ 4.18	$ 1.37	1	CAT 980H	$101.45	$44.91	$76.49						2	CAT 740	$117.44	$34.69	$73.73	1	D6N LGP	$85.01	$23.86	$73.83					
R.034	1690 Portal	Reshaping (cut/fill) (short haul)	Sand & Gravel	1690 Portal (N10)	N10	in place (cut/fill) (short haul) (N10)		323	246.6	223.4	$6.13	$5.56	0.018	$ 1.32	$ 3.24	$ 1.00						1	CAT 365 L	$203.04	$61.88	$73.83	2	CAT 740	$117.44	$34.69	$73.73	1	CAT D10	$285.65	$91.30	$73.83	0	CAT CP563	$55.87	$21.90	$71.57
R.035	1690 Portal	Load, haul, place growth media	Growth media	N27 next to storm pond	N10	1690 Portal (N10)		145	110.9	100.8	$9.24	$8.40	0.040	$ 2.20	$ 4.75	$ 1.45						1	CAT 345 L	$158.97	$52.84		2	CAT 740	$117.44	$34.69	$73.73	1	D6N LGP	$85.01	$23.86	$73.83					
R.036	ORTW	Load, haul, place growth media (short haul)	Growth media	N27 next to ORTW	N31	ORTW (N31)		145	110.9	100.8	$9.36	$8.51	0.040	$ 2.95	$ 4.18	$ 1.37	1	CAT 980H	$101.45	$44.91	$76.49						2	CAT 740	$117.44	$34.69	$73.73	1	D6N LGP	$85.01	$23.86	$73.83					
R.037	Stilling basin	Load, haul place excavated fill	Sand & Gravel	N32	N32	Stilling Basin		239	183.0	165.7	$7.50	$6.79	0.024	$ 1.80	$ 3.75	$ 1.24	1	CAT 980H	$101.45	$44.91	$76.49						2	CAT 740	$117.44	$34.69	$73.73	1	CAT D10	$285.65	$91.30	$73.83					
R.038	Stilling basin (short haul)	Load, haul, place growth media	Growth media	N27 below RTP dam	N32	Stilling Basin		145	110.9	100.8	$9.36	$8.51	0.040	$ 2.95	$ 4.18	$ 1.37	1	CAT 980H	$101.45	$44.91	$76.49						2	CAT 740	$117.44	$34.69	$73.73	1	D6N LGP	$85.01	$23.86	$73.83					
R.039	drystack (erosion ditch) construction	General excavator reshaping	Rip-Rap	general	N18	N18		55	42.0	35.0	$9.80	$8.17	0.029	$ 2.11	$ 4.55	$ 1.51						1	CAT 345 L	$158.97	$52.84	$73.83															
R.040	1525 Mineralized storage pad	Load, haul, dump, place at dry stack tailings facility	Waste Rock	E02	E02	Drystack (N18)		244	186.7	169.7	$13.56	$12.32	0.047	$ 3.48	$ 6.77	$ 2.08						1	CAT 345 L	$158.97	$52.84	$73.83	6	CAT 740	$117.44	$34.69	$73.73	1	CAT D10	$285.65	$91.30	$73.83	0	CAT CP563	$55.87	$21.90	$71.57
R.041	1525 Mineralized storage pad	Load, haul, place growth media	Growth media	N27 next to ponds	N27	E01		290	221.7	201.6	$7.84	$7.13	0.035	$ 2.57	$ 3.46	$ 1.10	1	CAT 980H	$101.45	$44.91	$76.49						4	CAT 735	$106.39	$32.09	$73.73	2	D6N LGP	$85.01	$23.86	$73.83					
R.042	1525 Mineralized storage pad	Load, haul, dump, place in drystack	HDPE liner	E02	E02	Drystack (N18)		158	121.2	110.2	$14.17	$12.89	0.054	$ 4.02	$ 6.78	$ 2.09						1	CAT 345 L	$158.97	$52.84	$73.83	4	CAT 740	$117.44	$34.69	$73.73	1	CAT D7R	$118.43	$38.17	$73.83	0	CAT CP563	$55.87	$21.90	$71.57
R.043	Main camp/Mill bench fuel berms to solid waste	Remove fuel berms liner to dry stack tailings facility	HDPE liner	N14 Mill Area	N08	Solid Waste facility		245	187.0	170.0	$7.32	$6.65	0.029	$ 2.19	$ 3.37	$ 1.10	1	CAT 980H	$101.45	$44.91	$76.49						3	CAT 740	$117.44	$34.69	$73.73	1	CAT D7R	$118.43	$38.17	$73.83					
R.044	#6 road	Load, haul, place growth media	Growth media	GM 16 and GM 17	N01	#6 road		123	94.4	85.8	$10.01	$9.10	0.047	$ 3.45	$ 4.19	$ 1.46	1	CAT 980H	$101.45	$44.91	$76.49						1	CAT 740	$117.44	$34.69	$73.73	1	D6N LGP	$85.01	$23.86	$73.83	1	CAT CP563	$55.87	$21.90	$71.57

Material Properties

Assumed Material Properties	Bulk density Mg/m3	Bulking Factor	Mg/m3	Factor	Compacted Density Mg/m3
Clay - Natural	2.02	3078.00	1.20	1.68	0.90
Earth	1.90	2700.00	1.25	1.52	0.95
Gravels	2.17	2835.00	1.10	1.97	0.97
Misc.	2.00	3371.11	1.00	2.00	1.00
Rip-Rap	3.00	2700.00	1.20	2.50	1.00
Sands	1.90	3240.00	1.10	1.73	0.90
Sand & Gravel	2.23	3375.00	1.10	2.02	1.00
Shale	2.00	2673.00	1.20	1.67	0.90
Solid Waste	1.00	1685.55	1.00	1.00	0.00
Growth media	1.37	2309.21	1.40	0.98	1.10
Till	1.84	3101.42	1.20	1.53	0.90
HDPE liner	1.00	1685.00	1.00	1.00	1.00
Waste Rock	2.10	3539.67	1.10	1.91	1.00

Reference: Pocket Ref by Thomas J. Glover 3rd edition, fourth printing, November 2002

Do not Delete

Conversion factors			
1	cy	=	0.765	m³
1	loy	=	0.836	m³
1	yard	=	0.914	m
1	ft	=	0.305	m
1	acre	=	0.405	hec
1	ea	=	1.000	ea
1	hr	=	1.000	hr
1	men	=	1.000	men
1	ton	=	0.907	tonnes
1	ls	=	1.000	ls
1	tbcy	=	0.836	tbm³
1	sf	=	0.093	m²
1	lf	=	0.305	m
1	lot	=	1.000	lot
1	cf	=	0.028	m³
1	mi	=	1.609	km
1	ft	=	0.00030048	km

Do not Delete

Cat 735					Cat 740				Cat 777F			
		Operating Wt.	31391	kg	69206	lb	Operating Wt.	32840	kg	69206	lb	Operating Wt.	90316	kg	####	lb
	GMW		64091	kg	141297	lb	GMW	70840	kg	156175	lb	GMW	163293	kg	####	lb
		top speed	51.3	km/h	31.9	mph	top speed	54.7	km/h	31.9	mph	top speed	64.5	km/h	40.1	mph
		Heaped capacity	19.7	m3	25.8	cy	Heaped capacity	22.9	m3	30	cy	Heaped capacity	60.2	m3	78.8	cy
Load distribution							Load distribution					Load distribution				
	Empty						Empty					Empty				
	front		60.5%				front	59.1%				front	45.0%			
	Center		20.8%				Center	21.5%				Center				
	Rear		18.7%				Rear	19.4%				Rear	55.0%			
	Loaded						Loaded					Loaded				
	front		34.9%				front	34.3%				front	33.0%			
	Center		33.1%				Center	33.3%				Center				
	Rear		32.0%				Rear	32.4%				Rear	67.0%			
Traction factor			50%				Traction factor	50%				Traction factor	50%			

Data from Cat handbook 38

Compactor	Roller width		Overlap @10%		Compaction speed		Passes	Compacted lift depth		Production	Assumptions	
CAT CP563	5 ft	1524 mm	6 inches	1828.8 mm	4 mph	6.4 km/hr	6	2 ft	0.6 m	**925.3836 cy/hr**	Travel Speed efficiency	95%
Sheepsfoot (72 in, 2 drums)	6 ft	1828.8 mm	7.2 inches	2194.56 mm	5 mph	7.4 km/hr	6	2 ft	0.6 m	**1388.075 cy/hr**	Job efficiency	83% (50 min work hour)
Walk-behind vibrating (30 in)	2.5 ft	762 mm	3 inches	914.4 mm	20 ft/min	334 km/hr	6	2 ft	0.6 m			
Dozer	Uncorrected productions				CAT Handbook Pages 1-43,1-44 (Assumed 100' average dozing distance)					Corrected productions	Assumptions: Correction factors	
D6N LGP	**390 LCY/hr**				Semi-Universal Blade					145 LCY/hr	Material factor	**80%** Hard to cut:(frozen)
CAT D7R	**725 LCY/hr**				Semi-Universal Blade					270 LCY/hr	Job efficiency	**83%** (50 min work hour)
CAT D8T	**825 LCY/hr**				Semi-Universal Blade					307 LCY/hr	Traction factor	**80%** (working on +10% grades)
CAT D9T	**1250 LCY/hr**				Semi-Universal Blade					465 LCY/hr	Visibility	**80%**
CAT D10	**1700 LCY/hr**				Semi-Universal Blade					632 LCY/hr	Operator skill	**70%** Average
CAT D11	**2800 LCY/hr**				Semi-Universal Blade					1041 LCY/hr	side by side dozing	**125%**
	Note: Production rates are in Loose cubic yards.											
Dozer Ripping	Uncorrected productions				CAT Handbook Pages 1-69 Assumed D10 with single shank, ideal conditions					Corrected productions	Assumptions: Correction factors	
CAT D10	**874 BLCY/hr**		**1049 LCY/hr**	with a 20% swell factor	Single shank					325 LCY/hr	Operator skill	**70%** Average
	Assumed 3 ft spacing, 2 ft penetration, 300 ft distance, 3.41 min for rip time, .25 min for maneuver time, 60 min hour. And actual production is 80%											
Drill												
Air track rig (900cfm)												
Air Rotary, 200 cfm compressor												
Excavator	ated Cycle time CAT handbook page		bucket capacity		Assumptions:					Productivity		
CAT 330 L	**0.27 min**		**3.33 cy**	**2.55 m3**	Job efficiency Factor	83% (50 min work hour)				552.8 cy/hr	423.3 m3/hr	
CAT 365 L	**0.42 min**		**4.99 cy**	**3.82 m4**	Bucket fill F	90%				532.5 cy/hr	407.6 m3/hr	
CAT 345 L	**0.33 min**		**4.04 cy**	**3.08 m5**						548.7 cy/hr	418.3 m3/hr	
CAT 330 Grapple												
CAT 330 Hammer												
CAT 330 Shear												
Grader												
CAT 16H												
Lifting												
Crane (Cable Boom), 100T												
Crane (Cable Boom), 150T												
Forklift CAT 924G												
Loader	Loading Cycle time		Struck bucket capacity							Production		
CAT 966H	**0.55 min**		**5.25 cy**	**4 m3**	Job efficiency Factor	83% (50 min work hour)				452 LCY/hr	344 m3/hr	
CAT 980H	**0.55 min**		**5.75 cy**	**4.5 m4**	Bucket fill F	95%				495 LCY/hr	387 m3/hr	
CAT 988H	**0.55 min**		**9 cy**	**6.9 m5**						774 LCY/hr	594 m3/hr	

Truck					
Light Truck (3/4T) 4x2	**See Segment travel time table**	**Maneuver in dump area**		**Maneuver in load area**	
CAT 735		Maneuver in dump area (minutes) Avg	1.1	Maneuver in load area (minutes) Avg	0.7
CAT 740		Maneuver in dump area (minutes) Slow	1.2	Maneuver in load area (minutes) Slow	0.8
CAT 777D		Maneuver in dump area (minutes) Fast	1	Maneuver in load area (minutes) Fast	0.6

Truck Production rate | Dozer 1 Production | Loader Production | Compactor Production | Excavator Production | **Haul Route Information**

												Segment 1		Segment 2		Segment 3		Segment 4		Segment 5		Segment 6		Segment 7		Segment 8		Segment 9		Segment 10		Segment 11		Segment 12		Segment 13		Segment 14		Segment 15		Segment 16		Segment 17		Segment 18		Segment 19		Segment 20		Segment 21		Segment 22		General short	
LCyhr	m^3/hr	Cyhr	m^3/hr	Cyhr	m^3/hr	Syhr	m^3/hr	Cyhr	m^3/hr	Total travel time		Outward (Loaded) (min)	Return (Empty) (min)	Outward (Loaded) (min)	Return (Empty) (min)	Outward (Loaded) (min)	Return (Empty) (min)	Outward (Loaded) (min)	Return (Empty) (min)	Outward (Loaded) (min)	Return (Empty) (min)	Outward (Loaded) (min)	Return (Empty) (min)	Outward (Loaded) (min)	Return (Empty) (min)	Outward (Loaded) (min)	Return (Empty) (min)	Outward (Loaded) (min)	Return (Empty) (min)	Outward (Loaded) (min)	Return (Empty) (min)	Outward (Loaded) (min)	Return (Empty) (min)	Outward (Loaded) (min)	Return (Empty) (min)	Outward (Loaded) (min)	Return (Empty) (min)	Outward (Loaded) (min)	Return (Empty) (min)	Outward (Loaded) (min)	Return (Empty) (min)	Outward (Loaded) (min)	Return (Empty) (min)	Outward (Loaded) (min)	Return (Empty) (min)	Outward (Loaded) (min)	Return (Empty) (min)	Outward (Loaded) (min)	Return (Empty) (min)	Outward (Loaded) (min)	Return (Empty) (min)	Outward (Loaded) (min)	Return (Empty) (min)	Outward (Loaded) (min)	Return (Empty) (min)	Outward (Loaded) (min)	Return (Empty) (min)	Outward (Loaded) (min)	Return (Empty) (min)
117	123	270	206	495	378	925	708	549	420	26.9		5.1	1.3	0.3	0.3	3.0	0.9	1.2	0.8	3.6	1.1			0.1	0.1			5.6	1.4			0.5	0.1			0.5	0.4			0.8	0.6	0.6	0.6			2.8	1.8										
								553	423	0.0																																															
416	1,970	145	111	495	378					0.0																																0.6	0.6												
115	121	270	206	495	378					26.9		5.1	1.3	0.3	0.3	3.0	0.9	1.2	0.8	3.6	1.1			0.1	0.1			5.6	1.4			0.5	0.1			0.5	0.4	0.4	0.4	0.6	0.6			0.6	0.6	2.8	1.8										
416	1,970	145	111	495	378					0.0																																0.6	0.6												
		632	483							0.0																																											
258	473	290	222	495	378					5.0																																									3.6	1.4		
411	692	307	235			925	708	549	420	3.6																														0.6	0.4	0.8	0.6					1.8	1.8						
383	610	145	111	495	378					4.6																														0.4	0.4	0.8	0.6					2.8	1.8						
133	143	307	235	495	378	925	708			22.3		5.1	1.3	0.3	0.3	3.0	0.9	1.2	0.8	3.6	1.1			0.1	0.1			5.6	1.4			0.5	0.1			0.5	0.4			0.8	0.6	0.6	0.6										
600	#DIV/0!	307	235			925	708	549	420	0.0																																											
								549	420	0.0																																													
600	#DIV/0!	632	483			925	708	549	420	0.0																																											
		632	483							0.0																																											
		632	483					549	420	0.0																																											
224	364	290	222	495	378					5.6		1.3	2.7			0.9	1.6																																				
		632	483			925	708	533	407	0.0																																											
		632	483					549	420	0.0																																											
677	2,355					925	708	533	407	0.0								0.8	0.8																																		0.1	0.1
454	742	290	222					549	420	3.0								0.8	0.8	1.1	1.9	0.4	0.6	0.1	0.1	0.3	0.4																												
405	1,145			495	378					0.0																																								0.6	0.5	0.7	0.6				
						925	708	533	407	0.0																																													
239	364			495	378	925	708			5.0																																0.8	0.6	0.6	0.6									3.6	1.4		
130	152			495	378					15.3		5.1	1.3			3.0	0.9	1.2	0.8	3.6	1.1			0.1	0.1	0.6	0.3																												
588	13,740	145	111	495	378					0.0																																										0.1	0.1
411	572			495	378					7.0												0.4	0.5	0.1	0.1			5.6	1.4			0.5	0.1			0.5	0.4																		
588	13,740	145	111	495	378					0.0																																									0.1	0.1
210	297	307	235					549	420	7.0																0.3	0.4	5.6	1.4			0.5	0.1			0.5	0.4																		
120	138	307	235					549	420	15.9				0.3	0.3	3.0	0.9	1.2	0.8	3.6	1.1			0.1	0.1			5.6	1.4			0.5	0.1			0.5	0.4																		
588	13,740	145	111					549	420	0.0																																									0.1	0.1
175	226	145	111	495	378					8.1		1.3	2.4	0.3	0.3	0.9	1.5	0.8	0.8	1.1	1.8			0.1	0.1	0.6	0.3																												
219	316	145	111	495	378					7.0												0.4	0.5	0.1	0.1			5.6	1.4			0.5	0.1																						
588	13,740	145	111	495	378					0.0																																									0.1	0.1
323	639					925	708	533	407	3.7		1.3	2.4	0.3	0.3																																						
600	#DIV/0!	145	111					549	420	0.0																																										
588	13,740	145	111	495	378					0.0																																								0.1	0.1
239	365	632	483	495	378					5.9								1.2	0.8	3.6	1.1			0.1	0.1	0.3	0.4																												
445	1,584	145	111	495	378					0.0												0.4	0.5	0.1	0.1	0.3	0.4																												
								549	420	0.0																																													
244	259	632	483			925	708	549	420	25.9		5.1	1.3			3.0	0.9	1.2	0.8	3.6	1.1			0.1	0.1			5.6	1.4			0.5	0.1			0.5	0.4			0.8	0.6	0.6	0.6			1.8	1.8										
412	627	290	222	495	378					5.0														0.1	0.1																	0.6	0.6	0.6	0.6									3.6	1.4		
158	167	270	206			925	708	549	420	26.9		5.1	1.3			3.0	0.9	1.2	0.8	3.6	1.1			0.1	0.1			5.6	1.4			0.5	0.1			0.5	0.4			0.8	0.6	0.6	0.6			2.8	1.8										
245	308	270	206	495	378					11.7										3.6	1.1			0.1	0.1			5.6	1.4			0.5	0.1			0.5	0.4																		
123	192			495	378	925	708			4.6																																0.8	0.6	0.6	0.6			2.8	1.8						

Segment travel time table		Segment 1		Segment 2		Segment 3		Segment 4		Segment 5		Segment 6		Segment 7		Segment 8		Segment 9		Segment 10		Segment 11		Segment 12		Segment 13		Segment 14		Segment 15		Segment 16		Segment 17		Segment 18		Segment 19		Segment 20		Segment 21		Segment 22		General short	
		T.R. (%)	Distance (ft)	T.R. (%)	Distance (ft)	T.R. (%)	Distance (ft)	T.R. (%)	Distance (ft)	T.R. (%)	Distance (ft)	T.R. (%)	Distance (ft)	T.R. (%)	Distance (ft)	T.R. (%)	Distance (ft)	T.R. (%)	Distance (ft)	T.R. (%)	Distance (ft)	T.R. (%)	Distance (ft)	T.R. (%)	Distance (ft)	T.R. (%)	Distance (ft)	T.R. (%)	Distance (ft)	T.R. (%)	Distance (ft)	T.R. (%)	Distance (ft)	T.R. (%)	Distance (ft)	T.R. (%)	Distance (ft)	T.R. (%)	Distance (ft)	T.R. (%)	Distance (ft)	T.R. (%)	Distance (ft)	T.R. (%)	Distance (ft)
Base grade and distance		**12%**	**2925**	**5%**	**440**	**11%**	**1863**	**4%**	**1826**	**10%**	**2509**	**6%**	**595**	**5%**	**77**	**10%**	**457**	**12%**	**3200**	**8%**	**401**	**12%**	**300**	**3%**	**1115**	**5%**	**505**	**5%**	**555**	**2%**	**1220**	**2%**	**973**	**3%**	**1097**	**4%**	**4722**	**4%**	**4026**	**2%**	**737**	**2%**	**1050**	**7%**	**3498**	**2%**	**100**
		time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)	time (min) (min)
Up	735	**4.9**	**2.7**	0.4	0.3	**3.0**	**1.6**	**1.3**	**0.8**	**3.5**	**1.9**	**0.6**	**0.6**	**0.1**	**0.1**	0.6	0.4	**5.4**	**3.0**	0.6	0.3	**0.5**	**0.3**	0.6	0.6	**0.5**	**0.4**	0.6	0.4	0.8	0.6	0.6	0.6	0.7	0.6	**3.1**	**1.9**	2.7	1.8	0.6	0.5	0.7	0.6	**3.6**	**2.0**	**0.1**	**0.1**
	740	**5.1**	**2.4**	0.3	0.3	**3.0**	**1.5**	**1.2**	**0.8**	**3.6**	**1.8**	**0.5**	**0.5**	**0.1**	**0.1**	0.6	0.4	**5.6**	**2.6**	0.5	0.3	**0.5**	**0.2**	0.6	0.6	**0.5**	**0.4**	0.6	0.4	0.8	0.6	0.6	0.6	0.7	0.6	**2.8**	**1.8**	2.4	1.6	0.6	0.5	0.7	0.6	**3.6**	**1.8**	**0.1**	**0.1**
	777																																												
Down	735	**1.3**	**1.3**	0.3	0.3	**0.9**	**0.9**	**0.8**	**0.8**	**1.1**	**1.1**	**0.4**	**0.4**	**0.1**	**0.1**	0.3	0.3	**1.4**	**1.4**	0.3	0.3	**0.1**	**0.1**	0.6	0.6	**0.4**	**0.4**	0.4	0.4	0.6	0.6	0.6	0.6	0.6	0.6	**1.8**	**1.8**	1.5	1.5	0.5	0.5	0.6	0.6	**1.4**	**1.4**	**0.1**	**0.1**
	740	**1.3**	**1.3**	0.3	0.3	**0.9**	**0.9**	**0.8**	**0.8**	**1.1**	**1.1**	**0.4**	**0.4**	**0.1**	**0.1**	0.3	0.3	**1.4**	**1.4**	0.3	0.3	**0.1**	**0.1**	0.6	0.6	**0.4**	**0.4**	0.4	0.4	0.6	0.6	0.6	0.6	0.6	0.6	**1.8**	**1.8**	1.5	1.5	0.5	0.5	0.6	0.6	**1.4**	**1.4**	**0.1**	**0.1**
	777																																												

Assumptions

One-way travel time was estimated using Caterpillar Performance Handbook

T.R. (Total Resistance) was calculated by adding 2% of rolling resistance to the actual grade, except Segment 9.

Area	Description	AutoCAD layer information (ft^2)	(acres)	Est. Volume GM placement (yd^3)	Est. Area Seeding (ft^2)	Est. Area Seeding (acres)	Est. Area Natural Recovery (yd^2)	Est. Area Rip/Scarify (yd^3)	Est. Volume Reshaping (yd^3)	Est. Volume Relocation (yd^3)	Wetlands Disturbed (Acres)
E01	1525 Portal access road	353,649.1	8.1	6,549.1	39,294.3	.9	7.2			58,317.5	3.35
E02	Rock storage pad	322,583.3	7.4	5,973.8	35,842.6	.8	6.6			11,947.5	1.29
E03	Lower camp pond	340,455.8	7.8	630.5			7.8		1,260.9		.47
E04	Construction Airstrip	86,671.4	2.0				2.0				.00
E05	Lower camp diversion ditch	2,882.7	.1		320.3	.0	.1			106.8	.00
E06	Access road Goodpaster bridge to Construction Camp	8,182.7	.2	530.4	909.2	.0	.2		1,060.7	1,060.7	.00
E07	Burn Pit	22,145.7	.5		2,460.6	.1	.5			1,640.4	.00
E08	Upper Exploration Camp	54,270.0									.00
N01	1525 Portal	190,230.4	4.4	2,601.2	21,136.7	.5	3.9			28,182.3	1.69
N02	Outfall 002 path	23,822.6	.5				.5				.00
N04	1525 Laydown areas	612,233.3	14.1		68,025.9	1.6	12.5	45,350.6			4.95
N05	Construction/Exploration Camp pad	500,923.3	11.5	9,276.4	55,658.1	1.3	10.2	37,105.4			1.30
N06	#6 Road Access road Goodpaster bridge to Liese bridge	442,451.3	10.2	8,193.5	49,161.3	1.1	9.0	21,909.6		19,013.1	3.44
N08	Fuel berms	15,667.6	.4	290.1	1,740.8	.0	.3			870.4	.00
Airport Area											
N03	Access road #7	282,980.0	6.5	5,240.4	31,442.2	.7	5.8	2,762.9		46,533.8	3.64
N07	Main Airstrip	1,952,514.0	44.8	37,046.1	216,946.0	5.0	39.8	144,630.7		6,219.4	12.63
N09	Borrow source at airstrip	23,638.1	.5	43.8	591.0	.0	.5			87.5	.00
N11	Airstrip laydown	1,601,522.5	36.8	317.0	231,649.5	5.3	31.4	117,363.2		1,268.1	6.29
N31	ORTW	700,966.0	16.1	1,298.1	17,524.1	.4	15.7		2,596.2	5,500.0	.22
N34	Log Storage	145,597.4	3.3								.00
Mill & Camp Area											
N10	1690 Portal	141,895.1	3.3	2,340.3	141,895.1	3.3				40,236.7	3.08
N13	Access Road #1	193,577.0	4.4	3,584.8	193,577.0	4.4				25,093.3	4.44
N14	Mill bench	617,893.4	14.2	11,381.2	617,893.4	14.2				267,642.2	.61
N16	Main Camp/1875 Portal	850,129.4	19.5	15,396.8	850,129.4	19.5				293,591.2	24.79
N16F	Main Camp/1875 Portal fuel berms	12,296.8	.3		12,296.8	.3				910.9	.00
N25	Storm pond	68,944.4	1.6	1,276.7	68,944.4	1.6				5,107.0	1.58
N30	Ore stockpile	55,101.9	1.3	1,020.4	55,101.9	1.3		4,081.6			1.14
Tailings Treatment Area											
N15	Road #3 to Mill to RTP	509,014.9	11.7	9,426.2	509,014.9	11.7				65,983.4	.29
N15R	Road #3 to RTP to drystack	499,360.7	11.5	9,247.4	499,360.7	11.5				64,731.9	.00
N17	RTP	406,105.9	9.3	6,946.8	406,105.9	9.3					5.23
N18	Drystack	3,534,555.5	81.1	65,454.7	3,534,555.5	81.1				130,909.5	33.86
N20	Access road to RTP seepage wells	104,713.4	2.40	3,878.3	104,713.4	2.4				8,954.6	1.61
N23	Diversion ditches (flume)	1,324,200.3	30.4	5,430.5	1,324,200.3	30.4				136,367.5	1.69
N32	Stilling Basin	124,940.0	2.9	4,627.4	124,940.0	2.9				16,195.9	2.46
All of Mine											
N21	Transmission line	770,723.7	17.7		770,723.7	17.7					8.89
N27	Growth Media	924,096.7	21.2		924,096.7	21.2					9.61
N28A	Material sites A	84,477.0	1.9	3,128.8	84,477.0	1.9				625.8	.00
N28B	Material site B	144,273.8	3.3	534.3	144,273.8	3.3				1,068.7	.00
N28D	Material site D	254,286.9	5.8	941.8	254,286.9	5.8				1,883.6	.00
N28	Material sites										2.07
N36	Road - Phase III Access	137,314.2	3.2				3.2				2.99
N37	Material Site - Phase III	1,229,094.6	28.2				28.2				25.08
N38	Growth Media Pile - Phase III	344,228.4	7.9				7.9				3.40
			89.3								
Total		**20,014,611**	**458**	**222,607**	**11,393,289**	**262**	**193**	**373,204**	**4,918**	**1,240,050**	**172**

Area	Component	Description	AutoCAD layer information (ft^2)	(acres)	Est. Volume GM placement (yd^3)	Est. Area Seeding (ft^2)	Est. Area Seeding (acres)	Est. Area Natural Recovery (yd^2)	Est. Area Liner removal (yd^2)	Est. Area Rip/Scarify (yd^2)	Est. Volume Reshaping (yd^3)	Est. Volume Relocation (yd^3)	Comments	Poly line length	Average depth assumption	Highwall area
	1525 Portal Area															
1000	E01	1525 Portal access road	336801	7.7	6237	37422	0.9	6.87				56133	Assumed 4.5' average depth	10609	4.5	
1000	E01	1525 Portal access road	16848	0.4	312	1872	0.0	0.34				2184	Assumed 3.5' average depth	775	4	
1000	E02	Rock storage pad	61909	1.4	1146	6879	0.2	1.26				2293	Assumed 1' average depth	1082	1	
1000	E02	Rock storage pad	43758	1.0	810	4862	0.1	0.89				1621	Assumed 1' average depth	1417	1	
1000	E02	Rock storage pad	216916	5.0	4017	24102	0.6	4.43	4338			8034	Assumed 1' average depth	2250	1	
1000	E03	Lower camp pond	203624	4.7	377		0.0	4.67			754		Gravel pits will be converted to high value overwintering ponds and emergent wetlands	1958	0	
1000	E03	Lower camp pond	22431	0.5	42		0.0	0.51			83		Gravel pits will be converted to high value overwintering ponds and emergent wetlands	835	0	
1000	E03	Lower camp pond	114401	2.6	212		0.0	2.63			424		Gravel pits will be converted to high value overwintering ponds and emergent wetlands	1483	0	
1000	E04	Construction Airstrip	86671	2.0			0.0	1.99						3266		
1000	E05	Lower camp diversion ditch	1186	0.0		132	0.0	0.02				44	Assumed 1' average depth	424	1	
1000	E05	Lower camp diversion ditch	1696	0.0		188	0.0	0.03				63	Assumed 1' average depth	557	1	
1000	E06	Access road Goodpaster bridge to Construction Camp	8183	0.2	530	909	0.0	0.17			1061	1061	Assumed 3.5' average depth	540	4	
1000	E07	Burn Pit	22146	0.5		2461	0.1	0.45				1640	Assumed 2' average depth	584	2	
1000	N01	1525 Portal	190230	4.4	2601	21137	0.5	3.88				28182	Assumed 4' average depth, subtracted highwall area out of GM requirement	1945	4	49765
1000	N02	Outfall 002 path	23823	0.5			0.0	0.55						2423		
1000	N04	1525 Laydown areas	180010	4.1		20001	0.5	3.67		13334				2222		
1000	N04	1525 Laydown areas	216387	5.0		24043	0.6	4.42		16029				2399		
1000	N04	1525 Laydown areas	215836	5.0		23982	0.6	4.40		15988				2486		
1000	N05	Construction/Exploration Camp pad	500923	11.5	9276	55658	1.3	10.22		37105				3765		
1000	N06	#6 Road Access road Goodpaster bridge to Liese bridge	295779	6.8	5477	32864	0.8	6.04		21910				12912		
1000	N06	#6 Road Access road Goodpaster bridge to Liese bridge	140479	3.2	2601	15609	0.4	2.87				18210	Assumed 3.5' average depth	3210	4	
1000	N06	#6 Road Access road Goodpaster bridge to Liese bridge	6193	0.1	115	688	0.0	0.13				803	Stream restoration under Liese bridge	469	4	
1000	N08	Fuel berms	15668	0.4	290	1741	0	0				870	Assumed 1.5' average depth	521	2	
		Subtotal 1525 Portal Area	**2921899**	**67**	**34045**	**274550**	**6**	**61**	**4338**	**104366**	**2322**	**120268**	**0**	**57609**		

Area	Component	Description	AutoCAD layer information (ft²)	(acres)	Est. Volume GM placement (yd³)	Est. Area Seeding (ft²)	Est. Area Seeding (acres)	Est. Area Natural Recovery (yd²)	Est. Area Liner removal (yd²)	Est. Area Rip/Scarify (yd²)	Est. Volume Reshaping (yd³)	Est. Volume Relocation (yd³)	Comments	Poly line length	Average depth assumption	Highwall area
	Airport Area															
2000	N03	Access road #7	87070	2.0	1612	9674	0.2	1.78				11287	Assumed 3.5' average depth	3556	4	
2000	N03	Access road #7	158611	3.6	2937	17623	0.4	3.24				35247	Assumed 6' average depth (complete removal)	3556	6	
2000	N03	Access road #7	37299	0.9	691	4144	0.1	0.76		2763				4593		
2000	N07	Main Airstrip	79374	1.8	1470	8819	0.2	1.62		5880				2665		
2000	N07	Main Airstrip	530645	12.2	9827	58961	1.4	10.83		39307				3367		
2000	N07	Main Airstrip	620601	14.2	11493	68956	1.6	12.66		45970				3883		
2000	N07	Main Airstrip	219989	5.1	4074	24443	0.6	4.49		16296				7231		
2000	N07	Main Airstrip	140401	3.2	2600	15600	0.4	2.87		10400				4630		
2000	N07	Main Airstrip	223526	5.1	4139	24836	0.6	4.56		16557				7290		
2000	N07	Main Airstrip	45000	1.0	833	5000	0.1	0.92		3333				900		
2000	N07	Main Airstrip	45000	1.0	833	5000	0.1	0.92		3333				900		
2000	N07	Main Airstrip	47978	1.1	1777	5331	0.1	0.98		3554		6219	Assumed 3.5' average depth	3481	4	
2000	N09	Borrow source at airstrip	23638	0.5	44	591	0.0	0.53				88	Assumed 10% of 1' x area for shoreline volume	649	1	
2000	N11	Airstrip laydown	59153	1.4		6573	0.2	1.21		4382				1110		
2000	N11	Airstrip laydown	151035	3.5		16782	0.4	3.08		11188				1154		
2000	N11	Airstrip laydown	101476	2.3		11275	0.3	2.07		7517				1243		
2000	N11	Airstrip laydown	166572	3.8		18508	0.4	3.40		12339				1594		
2000	N11	Airstrip laydown	186654	4.3		20739	0.5	3.81		13826				1780		
2000	N11	Airstrip laydown	159750	3.7		17750	0.4	3.26		11833				1905		
2000	N11	Airstrip laydown	247517	5.7		27502	0.6	5.05		18335				2160		
2000	N11	Airstrip laydown	400675	9.2		44519	1.0	8.18		29680				2788		
2000	N11	Airstrip laydown	25962	0.6		2885	0.1	0.53		1923				645		
2000	N11	Airstrip laydown	42313	1.0		4701	0.1	0.86		3134				838		
2000	N11	Airstrip laydown	43297	1.0		43297	1.0	0.00		3207				890		
3000	N11	Airstrip laydown fuel berms	17119	0.4	317	17119	0.4	0.00				1268	Assumed 2' average depth	626	2	
2000	N31	ORTW	700966	16.1	1298	17524	0.4	15.69			2596	5500	Breach ponds (estimated)	4950		
2000	N34	Log Storage	80135											1453		
2000	N34	Log Storage	2765											215		
2000	N34	Log Storage	6419											298		
2000	N34	Log Storage	6288											303		
2000	N34	Log Storage	6338											304		
2000	N34	Log Storage	9751											376		
2000	N34	Log Storage	12689											459		
2000	N34	Log Storage	21213											792		
		Subtotal 1525 Portal Area	**4707218**	**105**	**43945**	**498153**	**11**	**93**	**0**	**264757**		**59609**		**0**	**72586**	

Area	Component	Description	AutoCAD layer information (ft²)	(acres)	Est. Volume GM placement (yd³)	Est. Area Seeding (ft²)	Est. Area Seeding (acres)	Est. Area Natural Recovery (yd²)	Est. Area Liner removal (yd²)	Est. Area Rip/Scarify (yd³)	Est. Volume Reshaping (yd³)	Est. Volume Relocation (yd³)	Comments	Poly line length	Average depth assumption	Highwall area
	Mill & Camp Area															
3000	N10	1690 Portal	17491	0.4	324	17491	0.4	0.00				19434	Assumed 30' average depth (complete removal)	1761	30	
3000	N10	1690 Portal	15517	0.4		15517	0.4	0.00					Highwall area only requires seeding	530		
3000	N10	1690 Portal	63059	1.4	1168	63059	1.4	0.00				14013	Assumed 6' average depth	617	6	
3000	N10	1690 Portal	11606	0.3	215	11606	0.3	0.00				1719	Assumed 4' average depth	620	4	
3000	N10	1690 Portal	19409	0.4	359	19409	0.4	0.00				2875	Assumed 4' average depth	620	4	
3000	N10	1690 Portal	14814	0.3	274	14814	0.3	0.00				2195	Assumed 4' average depth	620	4	
3000	N13	Access Road #1	193577	4.4	3585	193577	4.4	0.00				25093	Assumed 3.5' average depth	5566	4	
3000	N14	Mill bench	614585	14.1	11381	614585	14.1	0.00				267458	Assumed 11.75' average depth	3704	12	
3000	N14	Mill bench fuel berm	3308	0.1		3308	0.1	0.00				184	Assumed 1.5' average depth	232	2	
3000	N16	Main Camp/1875 Portal	27061	0.6	501	27061	0.6	0.00					Bottom area (only will require growth media/seeding	1184		
3000	N16	Main Camp/1875 Portal	281929	6.5	5221	281929	6.5	0.00				36546	Assumed 3.5' average depth	4026	4	
3000	N16	Main Camp/1875 Portal	506030	11.6	9371	506030	11.6	0.00				231462	Assumed 12.35' average depth, subtracted highwall area out of GM placement	4660	12	
3000	N16	Main Camp/1875 Portal	18701	0.4		18701	0.4	0.00				10389	Assumed 15' average depth (complete removal), highwall will not require growth media	486	15	
3000	N16	Main Camp/1875 Portal	16409	0.4	304	16409	0.4	0.00				15194	Assumed 25' average depth (complete removal)	525	25	
3000	N16F	Main Camp/1875 Portal fuel berms	3707	0.1		3707	0.1	0.00				275	Assumed 2' average depth	525	2	
3000	N16F	Main Camp/1875 Portal fuel berms	8589	0.2		8589	0.2	0.00				636	Assumed 2' average depth	525	2	
3000	N25	Storm pond	68944	1.6	1277	68944	1.6	0.00	1379			5107	Assumed 2' average depth	1208	2	
3000	N30	Ore stockpile	55102	1.3	1020	55102	1.3	0.0		4082				1333		
		Subtotal 1525 Portal Area	**1939838**	**45**	**35000**	**1939838**	**45**	**0**	**1379**	**4082**		**632581**	**0**	**28743**		

Area	Component	Description	AutoCAD layer information (ft^2)	(acres)	Est. Volume GM placement (yd^3)	Est. Area Seeding (ft^2)	Est. Area Seeding (acres)	Est. Area Natural Recovery (yd^2)	Est. Area Liner removal (yd^2)	Est. Area Rip/Scarify (yd^3)	Est. Volume Reshaping (yd^3)	Est. Volume Relocation (yd^3)	Comments	Poly line length	Average depth assumption	Highwall area
Drystack and RTP																
4000	N15	Road #3 to RTP to drystack	509015	11.7	9426	509015	11.7	0.00				65983	Assumed 3.5' average depth	12660	4	
4000	N15R	Road #3 to Mill to RTP	499361	11.5	9247	499361	11.5	0.00				64732	Assumed 3.5' average depth	7704	4	
4000	N17	RTP	46059	1.1	853	46059	1.1	0.00	184				Removal vol. in table 4.5	1006		
4000	N17	RTP	30981	0.7		30981	0.7	0.00					All highwall area	1243		
4000	N17	RTP	123901	2.8	2294	123901	2.8	0.00					Removal vol. in table 4.5	2608		
4000	N17	RTP	76648	1.8	1419	76648	1.8	0.00					Removal vol. in table 4.5	2739		
4000	N17	RTP	7734	0.2	143	7734	0.2	0.00					Removal vol. in table 4.5	510		
4000	N17	RTP	19785	0.5	366	19785	0.5	0.00	356				Removal vol. in table 4.5	661		
4000	N17	RTP	21449	0.5	397	21449	0.5	0.00					Removal vol. in table 4.5	787		
4000	N17	RTP	16998	0.4	315	16998	0.4	0.00					Removal vol. in table 4.5	836		
4000	N17	RTP	34500	0.8	639	34500	0.8	0.00	690				Removal vol. in table 4.5	864		
4000	N17	RTP	28051	0.6	519	28051	0.6	0.00	112				Removal vol. in table 4.5	888		
4000	N18	Drystack	3534555	81.1	65455	3534555	81.1	0.00						9303		
4000	N18	Drystack (Non-mineralized rock cover -1')										130909		9303		
4000	N20	Access road to RTP seepage wells	49889	1.1	1848	49889	1.1	0.00				1848	Assumed 1' average depth	1825	1	
4000	N20	Access road to RTP seepage wells	54825	1.3	2031	54825	1.3	0.00				7107	Assumed 3.5' average depth	2765	4	
4000	N23	Diversion ditches	1044	0.0	39	1044	0.0	0.00				232	Assumed 6' average depth	134	6	
4000	N23	Diversion ditches	845	0.0	31	845	0.0	0.00				188	Assumed 6' average depth	138	6	
4000	N23	Diversion ditches	424	0.0	16	424	0.0	0.00				94	Assumed 6' average depth	114	6	
4000	N23	Diversion ditches	1108	0.0	41	1108	0.0	0.00				246	Assumed 6' average depth	179	6	
4000	N23	Diversion ditches	895	0.0	33	895	0.0	0.00				199	Assumed 6' average depth	144	6	
4000	N23	Diversion ditches	39219	0.9	1453	39219	0.9	0.00				8715	Assumed 6' average depth	2099	6	
4000	N23	Diversion ditches	179252	4.1	664	179252	4.1	0.00				23236	Assumed 3.5' average depth, Assum	7892	4	
4000	N23	Diversion ditches	330983	7.6	1226	330983	7.6	0.00				42905	Assumed 3.5' average depth, Assum	7748	4	
4000	N23	Diversion ditches	283884	6.5	1051	283884	6.5	0.00				36800	Assumed 3.5' average depth, Assum	12071	4	
4000	N23	Diversion ditches	183225	4.2	679	183225	4.2	0.00				23751	Assumed 3.5' average depth, Assum	6867	4	
4000	N23	Diversion ditches (flume)	4308	0.1	160	4308	0.1	0.00					No reshaping required	368		
4000	N23	Diversion ditches (flume)	1044	0.0	39	1044	0.0	0.00					No reshaping required	469		
4000	N23	Diversion ditches	297967	6.8		297967	6.8	0.00					All highwall area	7664	4	
4000	N32	Stilling Basin	24511	0.6	908	24511	0.6	0.00				3177	Assumed 3.5' average depth	1724	4	
4000	N32	Stilling Basin	42463	1.0	1573	42463	1.0	0.00				5504	Assumed 3.5' average depth	1823	4	
4000	N32	Stilling Basin	57966	1.3	2147	57966	1.3	0.0				7514	Assumed 3.5' average depth	2334	4	
		Subtotal 1525 Portal Area	**6502891**	**149**	**105011**	**6502891**	**149**	**0**	**1343**			**423143**	**0**	**107469**		

Area	Component	Description	AutoCAD layer information (ft²)	(acres)	Est. Volume GM placement (yd³)	Est. Area Seeding (ft²)	Est. Area Seeding (acres)	Est. Area Natural Recovery (yd²)	Est. Area Liner removal (yd²)	Est. Area Rip/Scarify (yd³)	Est. Volume Reshaping (yd³)	Est. Volume Relocation (yd³)	Comments	Poly line length	Average depth assumption	Highwall area
	All of Mine															
6000	N21	Transmission line	437	0.0		437	0.0	0.00						107		
6000	N21	Transmission line	30023	0.7		30023	0.7	0.00						1224		
6000	N21	Transmission line	74923	1.7		74923	1.7	0.00						1766		
6000	N21	Transmission line	100514	2.3		100514	2.3	0.00						1900		
6000	N21	Transmission line	3000	0.1		3000	0.1	0.00						249		
6000	N21	Transmission line	175348	4.0		175348	4.0	0.00						3361		
6000	N21	Transmission line	6108	0.1		6108	0.1	0.00						360		
6000	N21	Transmission line	8332	0.2		8332	0.2	0.00						440		
6000	N21	Transmission line	11869	0.3		11869	0.3	0.00						481		
6000	N21	Transmission line	360168	8.3		360168	8.3	0.00						6140		
6000	N27	Growth Media	22420	0.5		22420	0.5	0.00						1035		
6000	N27	Growth Media	19869	0.5		19869	0.5	0.00						1086		
6000	N27	Growth Media	35598	0.8		35598	0.8	0.00						1127		
6000	N27	Growth Media	102900	2.4		102900	2.4	0.00						1447		
6000	N27	Growth Media	83363	1.9		83363	1.9	0.00						1458		
6000	N27	Growth Media	104316	2.4		104316	2.4	0.00						1465		
6000	N27	Growth Media	84088	1.9		84088	1.9	0.00						1579		
6000	N27	Growth Media	49578	1.1		49578	1.1	0.00						1681		
6000	N27	Growth Media	42352	1.0		42352	1.0	0.00						1810		
6000	N27	Growth Media	175900	4.0		175900	4.0	0.00						2390		
6000	N27	Growth Media	95922	2.2		95922	2.2	0.00						2500		
6000	N27	Growth Media	8597	0.2		8597	0.2	0.00						471		
6000	N27	Growth Media	15248	0.4		15248	0.4	0.00						608		
6000	N27	Growth Media	17252	0.4		17252	0.4	0.00						642		
6000	N27	Growth Media	27689	0.6		27689	0.6	0.00						793		
6000	N27	Growth Media	39005	0.9		39005	0.9	0.00						993		
6000	N28A	Material sites A	84477	1.9	3129	84477	1.9	0.00				626	Assumed 2' average depth and 10% material reshaping	1216	2	
4000	N28B	Material site B	74532	1.7	276	74532	1.7	0.00				552	Only pit floor requires growth media, remainder is highwall, Assumed this is 10% of the area	1076	2	
6000	N28B	Material site B	69742	1.6	258	69742	1.6	0.00				517	Only pit floor requires growth media, remainder is highwall, Assumed this is 10% of the area	1096	2	
6000	N28D	Material site D	254287	5.8	942	254287	5.8	0.00				1884	Only pit floor requires growth media, remainder is highwall, Assumed this is 10% of the area	3539	2	
6000	N36	Road - Phase III Access	5640	0.1				0.13						344		
6000	N36	Road - Phase III Access	131675	3.0				3.02						5414		
6000	N37	Material Site - Phase III	533224	12.2				12.24						3471		
6000	N37	Material Site - Phase III	695871	16.0				15.97						3687		
6000	N38	Growth Media Pile - Phase III	89921	2.1				2.06						1189		
6000	N38	Growth Media Pile - Phase III	254307	5.8				5.8						2158		
		Subtotal 1525 Portal Area	**3888495**	**89**	**4605**	**2177858**	**50**	**39**		**0**	**0**	**3578**		**60303**		
Total			**19960341**	**454.9**	**222607**	**11393289**	**262**	**193**	**7060**	**373204**	**2322**	**1239179**		**326711**		

Growth Media Stockpile Volumes by Area

Notes:
Based on field estimates of height and area calculations from Reclamation quantities (final).dwg

Layer	Area	Description	Pile #	Length	Area (footprint)	Acres	Average height	estimated vol. (cy)	requirements
1525 Portal Area									
N27	1000	north of burn pit	17	1447	80754	1.9	10	24156	
N27	1000	south end of pond	18	608	15248	0.4	3	1481	
N27	1000	north end of laydown area	16	656	15636	0.4	3	1508	
							Sub-Total	**27,144**	**26,575**
Airport Area									
N27	2000	southeast end of airstrip	5	1810	42352	1.0	6	6912	
N27	2000	northeast of second laydown by powerline	4	1086	19869	0.5	6	2882	
N27	2000	north end of laydown areas	1	1925	153662	3.5	6	31495	
N27	2000	northeast of first laydown	6	1035	22420	0.5	3	2135	
N27	2000	north end of airstrip	3	2390	175900	4.0	15	76471	
N27	2000	first road to left going to airstrip	7	793	27689	0.6	6	5010	
N27	2000	south end of airstrip, east side	8	1414	44404	1.0	6	7896	
N27	2000	first road to left going to airstrip	7	1243	101476	2.3	6	20808	
N27	2000	has substantial growth on it (possible GM pile)	2	1321	96796	2.2			
							Sub-Total	**153,611**	**37,046**
Mill & Camp Area									
N27	3000	below mill bench off of ore pad	9	2500	95922	2.2	6	17897	
N27	3000	below camp bench	10	993	39005	0.9	3	3992	
N27	3000			1184	27061	0.6	3	2601	
							Sub-Total	**24,491**	**18,561**
Drystack and RTP Area									
N27	4000	next to road to diversion ditch, off of #3 road	12	1127	~~0~~	0.0	0	0	
N27	4000	below road to toe of drystack	13	1458	83363	1.9	11	26905	
N27	4000	below road to toe of drystack	15	471	177888	4.1	12	75865	
N27	4000	below road to toe of drystack	19	1681	49578	1.1	12	12386	
N27	4000	above road to toe of drystack	14	642	17252	0.4	10	3616	
N27	4000	below RTP road	11	1579	84088	1.9	4	11496	
							Sub-Total	**130,268**	**104,208**
						Total		**335,514**	**CY**

Table 15. Infrastructure Removal Activities

Phase	Work Area Code	Area	Sub Area	Equipment Description	Status	Quantity	Unit	Cost Code	Unit Mhrs	Total Mhrs	Labor Rate	Labor Cost	Unit Matl	Material Cost	Unit Equip.	Equipment Cost	Unit Fuel	Fuel Consumed (L)	Fuel Cost	Total Unit Cost	Activity Total	Subtotals	Source / Comments
II: Reclamation Concurrent with Mining	1000	Upper Exploration Camp																				$ 28,334	
II: Reclamation Concurrent with Mining	1000		Office/Kitchen	attachment		60	hr	C1.01	1	60	73.83	4429.60	0	0	115.93	6956.00	37.83	1926.48	2269.80	227.59	$ 13,655		
II: Reclamation Concurrent with Mining	1000			General Labor		120	hr	C1.08	1	120	122.32	14678.33	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 14,678		
II: Reclamation Concurrent with Mining	1000	Upper Exploration Camp																				$ 23,611	
II: Reclamation Concurrent with Mining	1000		Core Shark	attachment		50	hr	C1.01	1	50	73.83	3691.33	0	0	115.93	5796.66	37.83	1605.40	1891.50	227.59	$ 11,379		
II: Reclamation Concurrent with Mining	1000			General Labor		100	hr	C1.08	1	100	122.32	12231.94	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 12,232		
III: Final Reclamation & Closure	1000	Rock Storage Pad																				$ 139,786	
III: Final Reclamation & Closure	1000		incinerator building																				
III: Final Reclamation & Closure	1000			Crane to dismantle the structure		196.3	hr	C1.09	1	196.3	140.63	27612.78	0	0	240.09	47141.89	20.50	3416.34	4025.17	401.22	$ 78,780		
III: Final Reclamation & Closure	1000			Transport to Fairbanks		10	ea	C5.01	1	10	0.00	0.00	1297	12972	0.00	0.00	0.00	0.00	0.00	1297.17	$ 12,972		
III: Final Reclamation & Closure	1000			General Labor		392.7	hr	C1.08	1	392.7	122.32	48034.71	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 48,035		
III: Final Reclamation & Closure	1000	Lower camp																				$ 50,567	
III: Final Reclamation & Closure	1000		77-bed Addition to D Wing	Excavator: CAT 330 w/ grapple attachment		81	hr	C1.01	1	81	73.83	5979.96	0	0	115.93	9390.60	37.83	2600.75	3064.23	227.59	$ 18,435		
III: Final Reclamation & Closure	1000			Excavator: CAT 330 w/ hammer attachment		0	hr	C1.02	1	0	73.83	0.00	0	0	157.47	0.00	37.83	0.00	0.00	269.13	$ -		
III: Final Reclamation & Closure	1000			Excavator: CAT 330 w/ shear attachment		3	hr	C1.03	1	3	73.83	221.48	0	0	139.81	419.43	37.83	96.32	113.49	251.47	$ 754		
III: Final Reclamation & Closure	1000			Truck: CAT 735		81	hr	C1.04	1	81	73.73	5972.15	0	0	106.39	8617.74	32.09	2206.13	2599.29	212.21	$ 17,189		
III: Final Reclamation & Closure	1000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
III: Final Reclamation & Closure	1000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
III: Final Reclamation & Closure	1000			Dozer: CAT D7		0	hr	C1.07	1	0	73.83	0.00	0	0	118.43	0.00	38.17	0.00	0.00	230.42	$ -		
III: Final Reclamation & Closure	1000			General Labor		116	hr	C1.08	1	116	122.32	14189.05	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 14,189		
II: Reclamation Concurrent with Mining	1000	Lower camp																				$ 1,383	
II: Reclamation Concurrent with Mining	1000		exploration core workshop	attachment		5	hr	C1.01	1	5	73.83	369.13	0	0	115.93	579.67	37.83	160.54	189.15	227.59	$ 1,138		
II: Reclamation Concurrent with Mining	1000			General Labor		2	hr	C1.08	1	2	122.32	244.64	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 245		
II: Reclamation Concurrent with Mining	1000	Lower camp																				$ 612	
II: Reclamation Concurrent with Mining	1000		exploration tent workshop	General Labor		5	hr	C1.08	1	5	122.32	611.60	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 612		
II: Reclamation Concurrent with Mining	1000	Lower camp																				$ 1,383	
II: Reclamation Concurrent with Mining	1000		exploration storage building	attachment		5	hr	C1.01	1	5	73.83	369.13	0	0	115.93	579.67	37.83	160.54	189.15	227.59	$ 1,138		
II: Reclamation Concurrent with Mining	1000			General Labor		2	hr	C1.08	1	2	122.32	244.64	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 245		
II: Reclamation Concurrent with Mining	1000	Lower camp																				$ -	
II: Reclamation Concurrent with Mining	1000		Septic tank	Excavator: CAT 330 w/ grapple attachment		0	hr	C1.01	1	0	73.83	0.00	0	0	115.93	0.00	37.83	0.00	0.00	227.59	$ -		
II: Reclamation Concurrent with Mining	1000	Lower camp																				$ 15,733	
II: Reclamation Concurrent with Mining	1000		construction camp (modular)																				
II: Reclamation Concurrent with Mining	1000			Crane to dismantle the structure		20	hr	C1.09	1	20	140.63	2812.61	0	0	240.09	4801.83	20.50	347.99	410.00	401.22	$ 8,024		
II: Reclamation Concurrent with Mining	1000			Transport to Fairbanks		5	ea	C5.01	1	5	0.00	0.00	1297	6485.9	0.00	0.00	0.00	0.00	0.00	1297.17	$ 6,486		
II: Reclamation Concurrent with Mining	1000			General Labor		10	hr	C1.08	1	10	122.32	1223.19	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 1,223		
II: Reclamation Concurrent with Mining	1000	Lower camp																				$ 15,733	
II: Reclamation Concurrent with Mining	1000		construction offices (modular)																				
II: Reclamation Concurrent with Mining	1000			Crane to dismantle the structure		20	hr	C1.09	1	20	140.63	2812.61	0	0	240.09	4801.83	20.50	347.99	410.00	401.22	$ 8,024		
II: Reclamation Concurrent with Mining	1000			Transport to Fairbanks		5	ea	C5.01	1	5	0.00	0.00	1297	6485.9	0.00	0.00	0.00	0.00	0.00	1297.17	$ 6,486		
II: Reclamation Concurrent with Mining	1000			General Labor		10	hr	C1.08	1	10	122.32	1223.19	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 1,223		

Phase	Work Area Code	Area	Sub Area	Equipment Description	Status	Quantity	Unit	Cost Code	Unit Mhrs	Total Mhrs	Labor Rate	Labor Cost	Unit Matl	Material Cost	Unit Equip.	Equipment Cost	Unit Fuel	Fuel Consumed (L)	Fuel Cost	Total Unit Cost	Activity Total	Subtotals	Source / Comments
II: Reclamation Concurrent with Mining	1000	Lower camp																				$ 11,842	
II: Reclamation Concurrent with Mining	1000		construction mine dry (modular)																				
II: Reclamation Concurrent with Mining	1000			Crane to dismantle the structure		20	hr	C1.09	1	20	140.63	2812.61	0	0	240.09	4801.83	20.50	347.99	410.00	401.22	$ 8,024		
II: Reclamation Concurrent with Mining	1000			Transport to Fairbanks		2	ea	C5.01	1	2	0.00	0.00	1297	2594.3	0.00	0.00	0.00	0.00	0.00	1297.17	$ 2,594		
II: Reclamation Concurrent with Mining	1000			General Labor		10	hr	C1.08	1	10	122.32	1223.19	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 1,223		
II: Reclamation Concurrent with Mining	1000	Lower camp																				$ 14,214	
II: Reclamation Concurrent with Mining	1000		temporary warehouses																				
II: Reclamation Concurrent with Mining	1000			Crane to dismantle the structure		20	hr	C1.09	1	20	140.63	2812.61	0	0	240.09	4801.83	20.50	347.99	410.00	401.22	$ 8,024		
II: Reclamation Concurrent with Mining	1000			Transport to Fairbanks		1	ea	C5.01	1	1	0.00	0.00	1297	1297.2	0.00	0.00	0.00	0.00	0.00	1297.17	$ 1,297		
II: Reclamation Concurrent with Mining	1000			General Labor		40	hr	C1.08	1	40	122.32	4892.78	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 4,893		
II: Reclamation Concurrent with Mining	1000	Lower camp																				$ 14,214	
II: Reclamation Concurrent with Mining	1000		temporary warehouse																				
II: Reclamation Concurrent with Mining	1000			Crane to dismantle the structure		20	hr	C1.09	1	20	140.63	2812.61	0	0	240.09	4801.83	20.50	347.99	410.00	401.22	$ 8,024		
II: Reclamation Concurrent with Mining	1000			Transport to Fairbanks		1	ea	C5.01	1	1	0.00	0.00	1297	1297.2	0.00	0.00	0.00	0.00	0.00	1297.17	$ 1,297		
II: Reclamation Concurrent with Mining	1000			General Labor		40	hr	C1.08	1	40	122.32	4892.78	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 4,893		
II: Reclamation Concurrent with Mining	1000	Lower camp																				$ 5,824	
II: Reclamation Concurrent with Mining	1000		Potable water treatment plant #1 (complete)																				
II: Reclamation Concurrent with Mining	1000			Crane to load the structure		5	hr	C1.09	1	5	140.63	703.15	0	0	240.09	1200.46	20.50	87.00	102.50	401.22	$ 2,006		
II: Reclamation Concurrent with Mining	1000			Transport to Fairbanks		2	ea	C5.01	1	2	0.00	0.00	1297	2594.3	0.00	0.00	0.00	0.00	0.00	1297.17	$ 2,594		
II: Reclamation Concurrent with Mining	1000			General Labor		10	hr	C1.08	1	10	122.32	1223.19	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 1,223		
II: Reclamation Concurrent with Mining	1000	Lower camp																				$ 18,562	
II: Reclamation Concurrent with Mining	1000		Support sheds																				
II: Reclamation Concurrent with Mining	1000			Excavator: CAT 330 w/ grapple attachment		10	hr	C1.01	1	10	73.83	738.27	0	0	115.93	1159.33	37.83	321.08	378.30	227.59	$ 2,276		
II: Reclamation Concurrent with Mining	1000			Truck: CAT 735		4	hr	C1.04	1	4	73.73	294.92	0	0	106.39	425.57	32.09	108.94	128.36	212.21	$ 849		
II: Reclamation Concurrent with Mining	1000			General Labor		10	hr	C1.08	1	10	122.32	1223.19	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 1,223		
II: Reclamation Concurrent with Mining	1000			Crane to dismantle the structure		20	hr	C1.09	1	20	140.63	2812.61	0	0	240.09	4801.83	20.50	347.99	410.00	401.22	$ 8,024		
II: Reclamation Concurrent with Mining	1000			Transport to Fairbanks		1	ea	C5.01	1	1	0.00	0.00	1297	1297.2	0.00	0.00	0.00	0.00	0.00	1297.17	$ 1,297		
II: Reclamation Concurrent with Mining	1000			General Labor		40	hr	C1.08	1	40	122.32	4892.78	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 4,893		
II: Reclamation Concurrent with Mining	2000	Airport area																				$ -	
II: Reclamation Concurrent with Mining	2000		Batch plant																				
II: Reclamation Concurrent with Mining	2000			General Labor	emolish	0	hr	C1.01	1	0	73.83	0.00	0	0	115.93	0.00	37.83	0.00	0.00	227.59	$ -	$ -	

Phase	Work Area Code	Area	Sub Area	Equipment Description	Status	Quantity	Unit	Cost Code	Unit Mhrs	Total Mhrs	Labor Rate	Labor Cost	Unit Matl	Material Cost	Unit Equip.	Equipment Cost	Unit Fuel	Fuel Consumed (L)	Fuel Cost	Total Unit Cost	Activity Total	Subtotals	Source / Comments
III: Final Reclamation & Closure	1000	Lower camp																				$ 62,732	
III: Final Reclamation & Closure	1000		exploration camp																				
III: Final Reclamation & Closure	1000			Crane to dismantle the structure		100	hr	C1.09	1	100	140.63	14063.07	0	0	240.09	24009.17	20.50	1739.93	2050.00	401.22	$ 40,122		
III: Final Reclamation & Closure	1000			Transport to Fairbanks		8	ea	C5.01	1	8	0.00	0.00	1297	10377	0.00	0.00	0.00	0.00	0.00	1297.17	$ 10,377		
III: Final Reclamation & Closure	1000			General Labor		100	hr	C1.08	1	100	122.32	12231.94	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 12,232		
III: Final Reclamation & Closure	1000	Lower camp																				$ 1,033	
III: Final Reclamation & Closure	1000		environmental lab/ office																				
III: Final Reclamation & Closure	1000			attachment		4	hr	C1.01	1	4	73.83	295.31	0	0	115.93	463.73	37.83	128.43	151.32	227.59	$ 910		
III: Final Reclamation & Closure	1000			General Labor		1	hr	C1.08	1	1	122.32	122.32	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 122		
III: Final Reclamation & Closure	1000	Lower camp																				$ 14,214	
III: Final Reclamation & Closure	1000		incinerator building																				
III: Final Reclamation & Closure	1000			Crane to dismantle the structure		20	hr	C1.09	1	20	140.63	2812.61	0	0	240.09	4801.83	20.50	347.99	410.00	401.22	$ 8,024		
III: Final Reclamation & Closure	1000			Transport to Fairbanks		1	ea	C5.01	1	1	0.00	0.00	1297	1297.2	0.00	0.00	0.00	0.00	0.00	1297.17	$ 1,297		
III: Final Reclamation & Closure	1000			General Labor		40	hr	C1.08	1	40	122.32	4892.78	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 4,893		
III: Final Reclamation & Closure	1000	Lower camp																				$ 14,214	
III: Final Reclamation & Closure	1000		Lower camp ER#25 (pre engineered ATCO)																				
III: Final Reclamation & Closure	1000			Crane to dismantle the structure		20	hr	C1.09	1	20	140.63	2812.61	0	0	240.09	4801.83	20.50	347.99	410.00	401.22	$ 8,024		
III: Final Reclamation & Closure	1000			Transport to Fairbanks		1	ea	C5.01	1	1	0.00	0.00	1297	1297.2	0.00	0.00	0.00	0.00	0.00	1297.17	$ 1,297		
III: Final Reclamation & Closure	1000			General Labor		40	hr	C1.08	1	40	122.32	4892.78	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 4,893		
III: Final Reclamation & Closure	1000	Shop/warehouse																				$ 111,068	
III: Final Reclamation & Closure	1000		Remove shop/warehouse located on 1525 portal pad																				
III: Final Reclamation & Closure	1000			Excavator: CAT 330 w/ hammer attachment		30	hr	C1.02	1	30	73.83	2214.80	0	0	157.47	4724.10	37.83	963.24	1134.90	269.13	$ 8,074		
III: Final Reclamation & Closure	1000			Excavator: CAT 330 w/ shear attachment		100	hr	C1.03	1	100	73.83	7382.67	0	0	139.81	13981.12	37.83	3210.80	3783.00	251.47	$ 25,147		
III: Final Reclamation & Closure	1000			Truck: CAT 735		200	hr	C1.04	1	200	73.73	14746.05	0	0	106.39	21278.37	32.09	5447.24	6418.00	212.21	$ 42,442		
III: Final Reclamation & Closure	1000			Dozer: CAT D9		30	hr	C1.05	1	30	73.83	2214.80	0	0	226.45	6793.64	64.42	1640.28	1932.60	364.70	$ 10,941		
III: Final Reclamation & Closure	1000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
III: Final Reclamation & Closure	1000			Dozer: CAT D7		0	hr	C1.07	1	0	73.83	0.00	0	0	118.43	0.00	38.17	0.00	0.00	230.42	$ -		
III: Final Reclamation & Closure	1000			General Labor		200	hr	C1.08	1	200	122.32	24463.88	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 24,464		
III: Final Reclamation & Closure	1000	1525 Mine ventilation and heater																				$ 41,032	
III: Final Reclamation & Closure	1000		Mine ventilation and heater																				
III: Final Reclamation & Closure	1000			Excavator: CAT 330 w/ grapple attachment		40	hr	C1.01	1	40	73.83	2953.07	0	0	115.93	4637.33	37.83	1284.32	1513.20	227.59	$ 9,104		
III: Final Reclamation & Closure	1000			Excavator: CAT 330 w/ hammer attachment		0	hr	C1.02	1	0	73.83	0.00	0	0	157.47	0.00	37.83	0.00	0.00	269.13	$ -		
III: Final Reclamation & Closure	1000			Excavator: CAT 330 w/ shear attachment		40	hr	C1.03	1	40	73.83	2953.07	0	0	139.81	5592.45	37.83	1284.32	1513.20	251.47	$ 10,059		
III: Final Reclamation & Closure	1000			Truck: CAT 735		80	hr	C1.04	1	80	73.73	5898.42	0	0	106.39	8511.35	32.09	2178.90	2567.20	212.21	$ 16,977		
III: Final Reclamation & Closure	1000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
III: Final Reclamation & Closure	1000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
III: Final Reclamation & Closure	1000			Dozer: CAT D7		0	hr	C1.07	1	0	73.83	0.00	0	0	118.43	0.00	38.17	0.00	0.00	230.42	$ -		
III: Final Reclamation & Closure	1000			General Labor		40	hr	C1.08	1	40	122.32	4892.78	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 4,893		
III: Final Reclamation & Closure	1000	Construction generators MCP #24 ATCO																				$ 6,627	
III: Final Reclamation & Closure	1000		Construction generators MCP #24 ATCO	Excavator: CAT 330 w/ grapple attachment		10	hr	C1.01	1	10	73.83	738.27	0	0	115.93	1159.33	37.83	321.08	378.30	227.59	$ 2,276		
III: Final Reclamation & Closure	1000			Excavator: CAT 330 w/ hammer attachment		0	hr	C1.02	1	0	73.83	0.00	0	0	157.47	0.00	37.83	0.00	0.00	269.13	$ -		
III: Final Reclamation & Closure	1000			Excavator: CAT 330 w/ shear attachment		4	hr	C1.03	1	4	73.83	295.31	0	0	139.81	559.24	37.83	128.43	151.32	251.47	$ 1,006		
III: Final Reclamation & Closure	1000			Truck: CAT 735		10	hr	C1.04	1	10	73.73	737.30	0	0	106.39	1063.92	32.09	272.36	320.90	212.21	$ 2,122		
III: Final Reclamation & Closure	1000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
III: Final Reclamation & Closure	1000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
III: Final Reclamation & Closure	1000			General Labor		10	hr	C1.08	1	10	122.32	1223.19	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 1,223		
III: Final Reclamation & Closure	1000			Dozer: CAT D7		0	hr	C1.07	1	0	73.83	0.00	0	0	118.43	0.00	38.17	0.00	0.00	230.42	$ -		
III: Final Reclamation & Closure	3000	Main Camp																				$ 31,833	
III: Final Reclamation & Closure	3000		1875 Mine support construction shop	Excavator: CAT 330 w/ grapple attachment		50	hr	C1.01	1	50	73.83	3691.33	0	0	115.93	5796.66	37.83	1605.40	1891.50	227.59	$ 11,379		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ hammer attachment		10	hr	C1.02	1	10	73.83	738.27	0	0	157.47	1574.70	37.83	321.08	378.30	269.13	$ 2,691		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ shear attachment		20	hr	C1.03	1	20	73.83	1476.53	0	0	139.81	2796.22	37.83	642.16	756.60	251.47	$ 5,029		
III: Final Reclamation & Closure	3000			Truck: CAT 735		60	hr	C1.04	1	60	73.73	4423.81	0	0	106.39	6383.51	32.09	1634.17	1925.40	212.21	$ 12,733		
III: Final Reclamation & Closure	3000			General Labor		0	hr	C1.08	1	0	122.32	0.00	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ -		

Phase	Work Area Code	Area	Sub Area	Equipment Description	Status	Quantity	Unit	Cost Code	Unit Mhrs	Total Mhrs	Labor Rate	Labor Cost	Unit Matl	Material Cost	Unit Equip.	Equipment Cost	Unit Fuel	Fuel Consumed (L)	Fuel Cost	Total Unit Cost	Activity Total	Subtotals	Source / Comments
III: Final Reclamation & Closure	3000	Main Camp																				$ 167,289	
III: Final Reclamation & Closure	3000		Shop/warehouse	Excavator: CAT 330 w/ grapple attachment		250	hr	C1.01	1	250	73.83	18456.67	0	0	115.93	28983.32	37.83	8027.00	9457.50	227.59	$ 56,897		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ hammer attachment		80	hr	C1.02	1	80	73.83	5906.13	0	0	157.47	12597.61	37.83	2568.64	3026.40	269.13	$ 21,530		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ shear attachment		100	hr	C1.03	1	100	73.83	7382.67	0	0	139.81	13981.12	37.83	3210.80	3783.00	251.47	$ 25,147		
III: Final Reclamation & Closure	3000			Truck: CAT 735		260	hr	C1.04	1	260	73.73	19169.86	0	0	106.39	27661.88	32.09	7081.41	8343.40	212.21	$ 55,175		
III: Final Reclamation & Closure	3000			Dozer: CAT D9		10	hr	C1.05	1	10	73.83	738.27	0	0	226.45	2264.55	64.42	546.76	644.20	364.70	$ 3,647		
III: Final Reclamation & Closure	3000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D7		0	hr	C1.07	1	0	73.83	0.00	0	0	118.43	0.00	38.17	0.00	0.00	230.42	$ -		
III: Final Reclamation & Closure	3000			General Labor		40	hr	C1.08	1	40	122.32	4892.78	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 4,893		
III: Final Reclamation & Closure	3000	Main Camp																				$ 66,644	
III: Final Reclamation & Closure	3000		Camp expansion C wing (50 man)	Excavator: CAT 330 w/ grapple attachment		140	hr	C1.01	1	140	73.83	10335.73	0	0	115.93	16230.66	37.83	4495.12	5296.20	227.59	$ 31,863		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ hammer attachment		0	hr	C1.02	1	0	73.83	0.00	0	0	157.47	0.00	37.83	0.00	0.00	269.13	$ -		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ shear attachment		2	hr	C1.03	1	2	73.83	147.65	0	0	139.81	279.62	37.83	64.22	75.66	251.47	$ 503		
III: Final Reclamation & Closure	3000			Truck: CAT 735		150	hr	C1.04	1	150	73.73	11059.54	0	0	106.39	15958.78	32.09	4085.43	4813.50	212.21	$ 31,832		
III: Final Reclamation & Closure	3000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D7		0	hr	C1.07	1	0	73.83	0.00	0	0	118.43	0.00	38.17	0.00	0.00	230.42	$ -		
III: Final Reclamation & Closure	3000			General Labor		20	hr	C1.08	1	20	122.32	2446.39	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 2,446		
III: Final Reclamation & Closure	3000	Main Camp																				$ 87,042	
III: Final Reclamation & Closure	3000		Main camp 225 man and kitchen	Excavator: CAT 330 w/ grapple attachment		140	hr	C1.01	1	140	73.83	10335.73	0	0	115.93	16230.66	37.83	4495.12	5296.20	227.59	$ 31,863		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ hammer attachment		0	hr	C1.02	1	0	73.83	0.00	0	0	157.47	0.00	37.83	0.00	0.00	269.13	$ -		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ shear attachment		4	hr	C1.03	1	4	73.83	295.31	0	0	139.81	559.24	37.83	128.43	151.32	251.47	$ 1,006		
III: Final Reclamation & Closure	3000			Truck: CAT 735		140	hr	C1.04	1	140	73.73	10322.23	0	0	106.39	14894.86	32.09	3813.07	4492.60	212.21	$ 29,710		
III: Final Reclamation & Closure	3000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D7		0	hr	C1.07	1	0	73.83	0.00	0	0	118.43	0.00	38.17	0.00	0.00	230.42	$ -		
III: Final Reclamation & Closure	3000			General Labor		200	hr	C1.08	1	200	122.32	24463.88	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 24,464		
III: Final Reclamation & Closure	3000	Main Camp																				$ 39,398	
III: Final Reclamation & Closure	3000		Potable water treatment plant #2	Excavator: CAT 330 w/ grapple attachment		50	hr	C1.01	1	50	73.83	3691.33	0	0	115.93	5796.66	37.83	1605.40	1891.50	227.59	$ 11,379		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ hammer attachment		10	hr	C1.02	1	10	73.83	738.27	0	0	157.47	1574.70	37.83	321.08	378.30	269.13	$ 2,691		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ shear attachment		10	hr	C1.03	1	10	73.83	738.27	0	0	139.81	1398.11	37.83	321.08	378.30	251.47	$ 2,515		
III: Final Reclamation & Closure	3000			Truck: CAT 735		60	hr	C1.04	1	60	73.73	4423.81	0	0	106.39	6383.51	32.09	1634.17	1925.40	212.21	$ 12,733		
III: Final Reclamation & Closure	3000			Dozer: CAT D9		10	hr	C1.05	1	10	73.83	738.27	0	0	226.45	2264.55	64.42	546.76	644.20	364.70	$ 3,647		
III: Final Reclamation & Closure	3000			Dozer: CAT D8T		10	hr	C1.06	1	10	73.83	738.27	0	0	167.38	1673.78	49.31	418.52	493.10	290.51	$ 2,905		
III: Final Reclamation & Closure	3000			Dozer: CAT D7		10	hr	C1.07	1	10	73.83	738.27	0	0	118.43	1184.25	38.17	323.97	381.70	230.42	$ 2,304		
III: Final Reclamation & Closure	3000			General Labor		10	hr	C1.08	1	10	122.32	1223.19	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 1,223		
III: Final Reclamation & Closure	3000	Main Camp																				$ 19,179	
III: Final Reclamation & Closure	3000		Fire water pump building	Excavator: CAT 330 w/ grapple attachment		20	hr	C1.01	1	20	73.83	1476.53	0	0	115.93	2318.67	37.83	642.16	756.60	227.59	$ 4,552		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ hammer attachment		10	hr	C1.02	1	10	73.83	738.27	0	0	157.47	1574.70	37.83	321.08	378.30	269.13	$ 2,691		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ shear attachment		25	hr	C1.03	1	25	73.83	1845.67	0	0	139.81	3495.28	37.83	802.70	945.75	251.47	$ 6,287		
III: Final Reclamation & Closure	3000			Truck: CAT 735		10	hr	C1.04	1	10	73.73	737.30	0	0	106.39	1063.92	32.09	272.36	320.90	212.21	$ 2,122		
III: Final Reclamation & Closure	3000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D7		10	hr	C1.07	1	10	73.83	738.27	0	0	118.43	1184.25	38.17	323.97	381.70	230.42	$ 2,304		
III: Final Reclamation & Closure	3000			General Labor		10	hr	C1.08	1	10	122.32	1223.19	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 1,223		

Phase	Work Area Code	Area	Sub Area	Equipment Description	Status	Quantity	Unit	Cost Code	Unit Mhrs	Total Mhrs	Labor Rate	Labor Cost	Unit Matl	Material Cost	Unit Equip.	Equipment Cost	Unit Fuel	Fuel Consumed (L)	Fuel Cost	Total Unit Cost	Activity Total	Subtotals	Source / Comments
III: Final Reclamation & Closure	3000	Main Camp																				$ 10,216	
III: Final Reclamation & Closure	3000		Fire water tank	Excavator: CAT 330 w/ grapple attachment		10	hr	C1.01	1	10	73.83	738.27	0	0	115.93	1159.33	37.83	321.08	378.30	227.59	$ 2,276		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ hammer attachment		10	hr	C1.02	1	10	73.83	738.27	0	0	157.47	1574.70	37.83	321.08	378.30	269.13	$ 2,691		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ shear attachment		10	hr	C1.03	1	10	73.83	738.27	0	0	139.81	1398.11	37.83	321.08	378.30	251.47	$ 2,515		
III: Final Reclamation & Closure	3000			Truck: CAT 735		10	hr	C1.04	1	10	73.73	737.30	0	0	106.39	1063.92	32.09	272.36	320.90	212.21	$ 2,122		
III: Final Reclamation & Closure	3000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D7		0	hr	C1.07	1	0	73.83	0.00	0	0	118.43	0.00	38.17	0.00	0.00	230.42	$ -		
III: Final Reclamation & Closure	3000			General Labor		5	hr	C1.08	1	5	122.32	611.60	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 612		
III: Final Reclamation & Closure	3000	1875 Portal																				$ 8,136	
III: Final Reclamation & Closure	3000		Mine ventilation and heater	Excavator: CAT 330 w/ grapple attachment		10	hr	C1.01	1	10	73.83	738.27	0	0	115.93	1159.33	37.83	321.08	378.30	227.59	$ 2,276		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ hammer attachment		0	hr	C1.02	1	0	73.83	0.00	0	0	157.47	0.00	37.83	0.00	0.00	269.13	$ -		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ shear attachment		10	hr	C1.03	1	10	73.83	738.27	0	0	139.81	1398.11	37.83	321.08	378.30	251.47	$ 2,515		
III: Final Reclamation & Closure	3000			Truck: CAT 735		10	hr	C1.04	1	10	73.73	737.30	0	0	106.39	1063.92	32.09	272.36	320.90	212.21	$ 2,122		
III: Final Reclamation & Closure	3000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D7		0	hr	C1.07	1	0	73.83	0.00	0	0	118.43	0.00	38.17	0.00	0.00	230.42	$ -		
III: Final Reclamation & Closure	3000			General Labor		10	hr	C1.08	1	10	122.32	1223.19	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 1,223		
III: Final Reclamation & Closure	3000	Concentrator																				$ 220,910	
III: Final Reclamation & Closure	3000		Shell/Building	-																			
III: Final Reclamation & Closure	3000			attachment		200	hr	C1.01	1	200	73.83	14765.34	0	0	115.93	23186.66	37.83	6421.60	7566.00	227.59	$ 45,518		
III: Final Reclamation & Closure	3000			attachment		50	hr	C1.02	1	50	73.83	3691.33	0	0	157.47	7873.51	37.83	1605.40	1891.50	269.13	$ 13,456		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ shear attachment		200	hr	C1.03	1	200	73.83	14765.34	0	0	139.81	27962.24	37.83	6421.60	7566.00	251.47	$ 50,294		
III: Final Reclamation & Closure	3000			Truck: CAT 735		400	hr	C1.04	1	400	73.73	29492.10	0	0	106.39	42556.74	32.09	10894.48	12836.00	212.21	$ 84,885		
III: Final Reclamation & Closure	3000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D8T		50	hr	C1.06	1	50	73.83	3691.33	0	0	167.38	8368.91	49.31	2092.58	2465.50	290.51	$ 14,526		
III: Final Reclamation & Closure	3000			Dozer: CAT D7		0	hr	C1.07	1	0	73.83	0.00	0	0	118.43	0.00	38.17	0.00	0.00	230.42	$ -		
III: Final Reclamation & Closure	3000			General Labor		100	hr	C1.08	1	100	122.32	12231.94	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 12,232		
III: Final Reclamation & Closure	3000	Concentrator	mill warehouse																			$ 76,770	
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ grapple attachment		80	hr	C1.01	1	80	73.83	5906.13	0	0	115.93	9274.66	37.83	2568.64	3026.40	227.59	$ 18,207		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ hammer attachment		10	hr	C1.02	1	10	73.83	738.27	0	0	157.47	1574.70	37.83	321.08	378.30	269.13	$ 2,691		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ shear attachment		80	hr	C1.03	1	80	73.83	5906.13	0	0	139.81	11184.90	37.83	2568.64	3026.40	251.47	$ 20,117		
III: Final Reclamation & Closure	3000			Truck: CAT 735		140	hr	C1.04	1	140	73.73	10322.23	0	0	106.39	14894.86	32.09	3813.07	4492.60	212.21	$ 29,710		
III: Final Reclamation & Closure	3000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D7		5	hr	C1.07	1	5	73.83	369.13	0	0	118.43	592.13	38.17	161.98	190.85	230.42	$ 1,152		
III: Final Reclamation & Closure	3000			General Labor		40	hr	C1.08	1	40	122.32	4892.78	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 4,893		
III: Final Reclamation & Closure	3000	Concentrator																				$ 82,053	
III: Final Reclamation & Closure	3000		Coarse Ore bin	Excavator: CAT 330 w/ grapple attachment		10	hr	C1.01	1	10	73.83	738.27	0	0	115.93	1159.33	37.83	321.08	378.30	227.59	$ 2,276		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ hammer attachment		80	hr	C1.02	1	80	73.83	5906.13	0	0	157.47	12597.61	37.83	2568.64	3026.40	269.13	$ 21,530		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ shear attachment		80	hr	C1.03	1	80	73.83	5906.13	0	0	139.81	11184.90	37.83	2568.64	3026.40	251.47	$ 20,117		
III: Final Reclamation & Closure	3000			Truck: CAT 735		140	hr	C1.04	1	140	73.73	10322.23	0	0	106.39	14894.86	32.09	3813.07	4492.60	212.21	$ 29,710		
III: Final Reclamation & Closure	3000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D7		10	hr	C1.07	1	10	73.83	738.27	0	0	118.43	1184.25	38.17	323.97	381.70	230.42	$ 2,304		
III: Final Reclamation & Closure	3000			General Labor		50	hr	C1.08	1	50	122.32	6115.97	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 6,116		
III: Final Reclamation & Closure	3000	Concentrator																				$ 1,297	
III: Final Reclamation & Closure	3000			E-Feeder		1	ea	C5.01	1	1	0.00	0.00	1297	1297.2	0.00	0.00	0.00	0.00	0.00	1297.17	$ 1,297		

Phase	Work Area Code	Area	Sub Area	Equipment Description	Status	Quantity	Unit	Cost Code	Unit Mhrs	Total Mhrs	Labor Rate	Labor Cost	Unit Matl	Material Cost	Unit Equip.	Equipment Cost	Unit Fuel	Fuel Consumed (L)	Fuel Cost	Total Unit Cost	Activity Total	Subtotals	Source / Comments
III: Final Reclamation & Closure	3000	Concentrator																				$ 152,790	
III: Final Reclamation & Closure	3000		Flotation tailings dewatering	Excavator: CAT 330 w/ grapple attachment		140	hr	C1.01	1	140	73.83	10335.73	0	0	115.93	16230.66	37.83	4495.12	5296.20	227.59	$ 31,863		
III: Final Reclamation & Closure	3000			attachment		10	hr	C1.02	1	10	73.83	738.27	0	0	157.47	1574.70	37.83	321.08	378.30	269.13	$ 2,691		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ shear attachment		140	hr	C1.03	1	140	73.83	10335.73	0	0	139.81	19573.57	37.83	4495.12	5296.20	251.47	$ 35,206		
III: Final Reclamation & Closure	3000			Truck: CAT 735		280	hr	C1.04	1	280	73.73	20644.47	0	0	106.39	29789.72	32.09	7626.14	8985.20	212.21	$ 59,419		
III: Final Reclamation & Closure	3000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D7		60	hr	C1.07	1	60	73.83	4429.60	0	0	118.43	7105.50	38.17	1943.79	2290.20	230.42	$ 13,825		
III: Final Reclamation & Closure	3000			General Labor		80	hr	C1.08	1	80	122.32	9785.55	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 9,786		
III: Final Reclamation & Closure	3000	Concentrator																				$ 72,934	
III: Final Reclamation & Closure	3000		Flotation regrind	Excavator: CAT 330 w/ grapple attachment		120	hr	C1.01	1	120	73.83	8859.20	0	0	115.93	13912.00	37.83	3852.96	4539.60	227.59	$ 27,311		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ hammer attachment		40	hr	C1.02	1	40	73.83	2953.07	0	0	157.47	6298.80	37.83	1284.32	1513.20	269.13	$ 10,765		
III: Final Reclamation & Closure	3000	Concentrator	Flotation tailings dewatering	TK-017 Tank - CS Shop Fab 8' x 8'					8	8													
III: Final Reclamation & Closure	3000	Concentrator	Flotation tailings dewatering	TK-067 Tank - CS Shop Fab 10' x 30'					30	10													
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ shear attachment		100	hr	C1.03	1	100	73.83	7382.67	0	0	139.81	13981.12	37.83	3210.80	3783.00	251.47	$ 25,147		
III: Final Reclamation & Closure	3000			Truck: CAT 735		40	hr	C1.04	1	40	73.73	2949.21	0	0	106.39	4255.67	32.09	1089.45	1283.60	212.21	$ 8,488		
III: Final Reclamation & Closure	3000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D7		0	hr	C1.07	1	0	73.83	0.00	0	0	118.43	0.00	38.17	0.00	0.00	230.42	$ -		
III: Final Reclamation & Closure	3000			General Labor		10	hr	C1.08	1	10	122.32	1223.19	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 1,223		
III: Final Reclamation & Closure	3000	Concentrator																				$ 37,135	
III: Final Reclamation & Closure	3000		Gold recovery and Smelting	Excavator: CAT 330 w/ grapple attachment		30	hr	C1.01	1	30	73.83	2214.80	0	0	115.93	3478.00	37.83	963.24	1134.90	227.59	$ 6,828		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ hammer attachment		10	hr	C1.02	1	10	73.83	738.27	0	0	157.47	1574.70	37.83	321.08	378.30	269.13	$ 2,691		
III: Final Reclamation & Closure	3000	Concentrator	Flotation regrind	CV-010 to 013 - 30" x 22' lg				22	30"		0.00		0		0.00		0.00						
III: Final Reclamation & Closure	3000	Concentrator	Flotation regrind	CV-016 - 36" x 158' lg				158	36"		0.00		0		0.00		0.00						
III: Final Reclamation & Closure	3000	Concentrator	Flotation regrind	TH-002 Thickener Deep Cone 40' dia					33	30													
III: Final Reclamation & Closure	3000	Concentrator	Flotation regrind	TH-002 domed structure alum incl doors																			
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ shear attachment		30	hr	C1.03	1	30	73.83	2214.80	0	0	139.81	4194.34	37.83	963.24	1134.90	251.47	$ 7,544		
III: Final Reclamation & Closure	3000			Truck: CAT 735		60	hr	C1.04	1	60	73.73	4423.81	0	0	106.39	6383.51	32.09	1634.17	1925.40	212.21	$ 12,733		
III: Final Reclamation & Closure	3000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D7		0	hr	C1.07	1	0	73.83	0.00	0	0	118.43	0.00	38.17	0.00	0.00	230.42	$ -		
III: Final Reclamation & Closure	3000			General Labor		60	hr	C1.08	1	60	122.32	7339.16	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 7,339		
III: Final Reclamation & Closure	3000	Concentrator																				$ 111,371	
III: Final Reclamation & Closure	3000		Grinding	Excavator: CAT 330 w/ grapple attachment		100	hr	C1.01	1	100	73.83	7382.67	0	0	115.93	11593.33	37.83	3210.80	3783.00	227.59	$ 22,759		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ hammer attachment		50	hr	C1.02	1	50	73.83	3691.33	0	0	157.47	7873.51	37.83	1605.40	1891.50	269.13	$ 13,456		
III: Final Reclamation & Closure	3000	Concentrator	Gold recovery and Smelting	equipment																			
III: Final Reclamation & Closure	3000	Concentrator	Gold recovery and Smelting	VT-001 Vault 8'x8'x10'																			
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ shear attachment		80	hr	C1.03	1	80	73.83	5906.13	0	0	139.81	11184.90	37.83	2568.64	3026.40	251.47	$ 20,117		
III: Final Reclamation & Closure	3000			Truck: CAT 735		180	hr	C1.04	1	180	73.73	13271.44	0	0	106.39	19150.53	32.09	4902.52	5776.20	212.21	$ 38,198		
III: Final Reclamation & Closure	3000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D7		20	hr	C1.07	1	20	73.83	1476.53	0	0	118.43	2368.50	38.17	647.93	763.40	230.42	$ 4,608		
III: Final Reclamation & Closure	3000			General Labor		100	hr	C1.08	1	100	122.32	12231.94	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 12,232		
III: Final Reclamation & Closure	3000			equipment																			
III: Final Reclamation & Closure	3000	Concentrator																				$ 132,330	
III: Final Reclamation & Closure	3000		Ore Transport Conveyor CV-03	Excavator: CAT 330 w/ grapple attachment		100	hr	C1.01	1	100	73.83	7382.67	0	0	115.93	11593.33	37.83	3210.80	3783.00	227.59	$ 22,759		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ hammer attachment		30	hr	C1.02	1	30	73.83	2214.80	0	0	157.47	4724.10	37.83	963.24	1134.90	269.13	$ 8,074		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ shear attachment		150	hr	C1.03	1	150	73.83	11074.00	0	0	139.81	20971.68	37.83	4816.20	5674.50	251.47	$ 37,720		
III: Final Reclamation & Closure	3000			Truck: CAT 735		250	hr	C1.04	1	250	73.73	18432.56	0	0	106.39	26597.96	32.09	6809.05	8022.50	212.21	$ 53,053		
III: Final Reclamation & Closure	3000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D7		20	hr	C1.07	1	20	73.83	1476.53	0	0	118.43	2368.50	38.17	647.93	763.40	230.42	$ 4,608		
III: Final Reclamation & Closure	3000			General Labor		50	hr	C1.08	1	50	122.32	6115.97	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 6,116		

Phase	Work Area Code	Area	Sub Area	Equipment Description	Status	Quantity	Unit	Cost Code	Unit Mhrs	Total Mhrs	Labor Rate	Labor Cost	Unit Matl	Material Cost	Unit Equip.	Equipment Cost	Unit Fuel	Fuel Consumed (L)	Fuel Cost	Total Unit Cost	Activity Total	Subtotals	Source / Comments
III: Final Reclamation & Closure	3000	Concentrator																				$ 89,911	
III: Final Reclamation & Closure	3000		Pre Aeration, Leach, CIP																				
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ grapple attachment		80	hr	C1.01	1	80	73.83	5906.13	0	0	115.93	9274.66	37.83	2568.64	3026.40	227.59	$ 18,207		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ hammer attachment		50	hr	C1.02	1	50	73.83	3691.33	0	0	157.47	7873.51	37.83	1605.40	1891.50	269.13	$ 13,456		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ shear attachment		80	hr	C1.03	1	80	73.83	5906.13	0	0	139.81	11184.90	37.83	2568.64	3026.40	251.47	$ 20,117		
III: Final Reclamation & Closure	3000			Truck: CAT 735		140	hr	C1.04	1	140	73.73	10322.23	0	0	106.39	14894.86	32.09	3813.07	4492.60	212.21	$ 29,710		
III: Final Reclamation & Closure	3000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D7		10	hr	C1.07	1	10	73.83	738.27	0	0	118.43	1184.25	38.17	323.97	381.70	230.42	$ 2,304		
III: Final Reclamation & Closure	3000			General Labor		50	hr	C1.08	1	50	122.32	6115.97	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 6,116		
III: Final Reclamation & Closure	3000	Concentrator																				$ 82,249	
III: Final Reclamation & Closure	3000		Reagents	Excavator: CAT 330 w/ grapple attachment		60	hr	C1.01	1	60	73.83	4429.60	0	0	115.93	6956.00	37.83	1926.48	2269.80	227.59	$ 13,655		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ hammer attachment		20	hr	C1.02	1	20	73.83	1476.53	0	0	157.47	3149.40	37.83	642.16	756.60	269.13	$ 5,383		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ shear attachment		80	hr	C1.03	1	80	73.83	5906.13	0	0	139.81	11184.90	37.83	2568.64	3026.40	251.47	$ 20,117		
III: Final Reclamation & Closure	3000	Concentrator	Pre Aeration, Leach, CIP	NEED TANKS ADDED																			
III: Final Reclamation & Closure	3000			Truck: CAT 735		140	hr	C1.04	1	140	73.73	10322.23	0	0	106.39	14894.86	32.09	3813.07	4492.60	212.21	$ 29,710		
III: Final Reclamation & Closure	3000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D7		5	hr	C1.07	1	5	73.83	369.13	0	0	118.43	592.13	38.17	161.98	190.85	230.42	$ 1,152		
III: Final Reclamation & Closure	3000			General Labor		100	hr	C1.08	1	100	122.32	12231.94	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 12,232		
III: Final Reclamation & Closure	3000	Concentrator																				$ 34,943	
III: Final Reclamation & Closure	3000		Utilidor	Excavator: CAT 330 w/ grapple attachment		30	hr	C1.01	1	30	73.83	2214.80	0	0	115.93	3478.00	37.83	963.24	1134.90	227.59	$ 6,828		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ hammer attachment		1	hr	C1.02	1	1	73.83	73.83	0	0	157.47	157.47	37.83	32.11	37.83	269.13	$ 269		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ shear attachment		30	hr	C1.03	1	30	73.83	2214.80	0	0	139.81	4194.34	37.83	963.24	1134.90	251.47	$ 7,544		
III: Final Reclamation & Closure	3000			Truck: CAT 735		60	hr	C1.04	1	60	73.73	4423.81	0	0	106.39	6383.51	32.09	1634.17	1925.40	212.21	$ 12,733		
III: Final Reclamation & Closure	3000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D7		1	hr	C1.07	1	1	73.83	73.83	0	0	118.43	118.43	38.17	32.40	38.17	230.42	$ 230		
III: Final Reclamation & Closure	3000			General Labor		60	hr	C1.08	1	60	122.32	7339.16	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 7,339		
III: Final Reclamation & Closure	3000	Concentrator																				$ 8,798	
III: Final Reclamation & Closure	3000		Compressor Room	Excavator: CAT 330 w/ grapple attachment		10	hr	C1.01	1	10	73.83	738.27	0	0	115.93	1159.33	37.83	321.08	378.30	227.59	$ 2,276		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ hammer attachment		1	hr	C1.02	1	1	73.83	73.83	0	0	157.47	157.47	37.83	32.11	37.83	269.13	$ 269		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ shear attachment		20	hr	C1.03	1	20	73.83	1476.53	0	0	139.81	2796.22	37.83	642.16	756.60	251.47	$ 5,029		
III: Final Reclamation & Closure	3000			Truck: CAT 735		0	hr	C1.04	1	0	73.73	0.00	0	0	106.39	0.00	32.09	0.00	0.00	212.21	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D7		0	hr	C1.07	1	0	73.83	0.00	0	0	118.43	0.00	38.17	0.00	0.00	230.42	$ -		
III: Final Reclamation & Closure	3000			General Labor		10	hr	C1.08	1	10	122.32	1223.19	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 1,223		
III: Final Reclamation & Closure	3000	Concentrator																				$ 7,019	
III: Final Reclamation & Closure	3000		Electrical Control Module	Excavator: CAT 330 w/ grapple attachment		1	hr	C1.01	1	1	73.83	73.83	0	0	115.93	115.93	37.83	32.11	37.83	227.59	$ 228		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ hammer attachment		0	hr	C1.02	1	0	73.83	0.00	0	0	157.47	0.00	37.83	0.00	0.00	269.13	$ -		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ shear attachment		1	hr	C1.03	1	1	73.83	73.83	0	0	139.81	139.81	37.83	32.11	37.83	251.47	$ 251		
III: Final Reclamation & Closure	3000			Truck: CAT 735		2	hr	C1.04	1	2	73.73	147.46	0	0	106.39	212.78	32.09	54.47	64.18	212.21	$ 424		
III: Final Reclamation & Closure	3000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D7		0	hr	C1.07	1	0	73.83	0.00	0	0	118.43	0.00	38.17	0.00	0.00	230.42	$ -		
III: Final Reclamation & Closure	3000			General Labor		50	hr	C1.08	1	50	122.32	6115.97	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 6,116		

Phase	Work Area Code	Area	Sub Area	Equipment Description	Status	Quantity	Unit	Cost Code	Unit Mhrs	Total Mhrs	Labor Rate	Labor Cost	Unit Matl	Material Cost	Unit Equip.	Equipment Cost	Unit Fuel	Fuel Consumed (L)	Fuel Cost	Total Unit Cost	Activity Total	Subtotals	Source / Comments
III: Final Reclamation & Closure	3000	Concentrator																				$ 27,762	
III: Final Reclamation & Closure	3000		Assay Lab	Excavator: CAT 330 w/ grapple attachment		50	hr	C1.01	1	50	73.83	3691.33	0	0	115.93	5796.66	37.83	1605.40	1891.50	227.59	$ 11,379		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ hammer attachment		2	hr	C1.02	1	2	73.83	147.65	0	0	157.47	314.94	37.83	64.22	75.66	269.13	$ 538		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ shear attachment		2	hr	C1.03	1	2	73.83	147.65	0	0	139.81	279.62	37.83	64.22	75.66	251.47	$ 503		
III: Final Reclamation & Closure	3000			Truck: CAT 735		55	hr	C1.04	1	55	73.73	4055.16	0	0	106.39	5851.55	32.09	1497.99	1764.95	212.21	$ 11,672		
III: Final Reclamation & Closure	3000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D7		0	hr	C1.07	1	0	73.83	0.00	0	0	118.43	0.00	38.17	0.00	0.00	230.42	$ -		
III: Final Reclamation & Closure	3000			General Labor		30	hr	C1.08	1	30	122.32	3669.58	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 3,670		
III: Final Reclamation & Closure	3000	Concentrator																				$ 22,553	
III: Final Reclamation & Closure	3000		ATTCO temporary office	Excavator: CAT 330 w/ grapple attachment		40	hr	C1.01	1	40	73.83	2953.07	0	0	115.93	4637.33	37.83	1284.32	1513.20	227.59	$ 9,104		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ hammer attachment		0	hr	C1.02	1	0	73.83	0.00	0	0	157.47	0.00	37.83	0.00	0.00	269.13	$ -		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ shear attachment		10	hr	C1.03	1	10	73.83	738.27	0	0	139.81	1398.11	37.83	321.08	378.30	251.47	$ 2,515		
III: Final Reclamation & Closure	3000			Truck: CAT 735		40	hr	C1.04	1	40	73.73	2949.21	0	0	106.39	4255.67	32.09	1089.45	1283.60	212.21	$ 8,488		
III: Final Reclamation & Closure	3000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D7		0	hr	C1.07	1	0	73.83	0.00	0	0	118.43	0.00	38.17	0.00	0.00	230.42	$ -		
III: Final Reclamation & Closure	3000			General Labor		20	hr	C1.08	1	20	122.32	2446.39	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 2,446		
III: Final Reclamation & Closure	3000	Filter/Backfill building																				$ 209,026	
III: Final Reclamation & Closure	3000		Shell/Building																				
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ grapple attachment		140	hr	C1.01	1	140	73.83	10335.73	0	0	115.93	16230.66	37.83	4495.12	5296.20	227.59	$ 31,863		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ hammer attachment		140	hr	C1.02	1	140	73.83	10335.73	0	0	157.47	22045.82	37.83	4495.12	5296.20	269.13	$ 37,678		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ shear attachment		400	hr	C1.03	1	400	73.83	29530.67	0	0	139.81	55924.48	37.83	12843.20	15132.00	251.47	$ 100,587		
III: Final Reclamation & Closure	3000			Truck: CAT 735		120	hr	C1.04	1	120	73.73	8847.63	0	0	106.39	12767.02	32.09	3268.34	3850.80	212.21	$ 25,465		
III: Final Reclamation & Closure	3000			Dozer: CAT D9		10	hr	C1.05	1	10	73.83	738.27	0	0	226.45	2264.55	64.42	546.76	644.20	364.70	$ 3,647		
III: Final Reclamation & Closure	3000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D7		0	hr	C1.07	1	0	73.83	0.00	0	0	118.43	0.00	38.17	0.00	0.00	230.42	$ -		
III: Final Reclamation & Closure	3000			General Labor		80	hr	C1.08	1	80	122.32	9785.55	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 9,786		
III: Final Reclamation & Closure	3000			Flyash Silo	not installed																		
III: Final Reclamation & Closure	3000	Filter/Backfill building																				$ 117,756	
III: Final Reclamation & Closure	3000		Backfill Paste plant	Excavator: CAT 330 w/ grapple attachment		10	hr	C1.01	1	10	73.83	738.27	0	0	115.93	1159.33	37.83	321.08	378.30	227.59	$ 2,276		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ hammer attachment		10	hr	C1.02	1	10	73.83	738.27	0	0	157.47	1574.70	37.83	321.08	378.30	269.13	$ 2,691		
III: Final Reclamation & Closure	3000			CV-017 - 36" x 63' lg 15hp incl head chute skirts, stringers				63	36"				0				0.00						
III: Final Reclamation & Closure	3000			CV-018 - 30" x 71' lg 15hp incl head chute skirts, stringers				71	30"				0				0.00						
III: Final Reclamation & Closure	3000			FD-005 - 36" x 12' lg 15hp incl head chute liners skirts stringers				12	36"				0				0.00						
III: Final Reclamation & Closure	3000			CV-004 - 48" x 288' lg 20hp incl chute skirt stringer trusses																			
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ shear attachment		400	hr	C1.03	1	400	73.83	29530.67	0	0	139.81	55924.48	37.83	12843.20	15132.00	251.47	$ 100,587		
III: Final Reclamation & Closure	3000			Truck: CAT 735		10	hr	C1.04	1	10	73.73	737.30	0	0	106.39	1063.92	32.09	272.36	320.90	212.21	$ 2,122		
III: Final Reclamation & Closure	3000			Dozer: CAT D9		10	hr	C1.05	1	10	73.83	738.27	0	0	226.45	2264.55	64.42	546.76	644.20	364.70	$ 3,647		
III: Final Reclamation & Closure	3000			Dozer: CAT D8T		10	hr	C1.06	1	10	73.83	738.27	0	0	167.38	1673.78	49.31	418.52	493.10	290.51	$ 2,905		
III: Final Reclamation & Closure	3000			Dozer: CAT D7		10	hr	C1.07	1	10	73.83	738.27	0	0	118.43	1184.25	38.17	323.97	381.70	230.42	$ 2,304		
III: Final Reclamation & Closure	3000			General Labor		10	hr	C1.08	1	10	122.32	1223.19	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 1,223		

Phase	Work Area Code	Area	Sub Area	Equipment Description	Status	Quantity	Unit	Cost Code	Unit Mhrs	Total Mhrs	Labor Rate	Labor Cost	Unit Matl	Material Cost	Unit Equip.	Equipment Cost	Unit Fuel	Fuel Consumed (L)	Fuel Cost	Total Unit Cost	Activity Total	Subtotals	Source / Comments
III: Final Reclamation & Closure	3000	Filter/Backfill building																				$ 40,924	
III: Final Reclamation & Closure	3000		Filtration Plant	Excavator: CAT 330 w/ grapple attachment		50	hr	C1.01	1	50	73.83	3691.33	0	0	115.93	5796.66	37.83	1605.40	1891.50	227.59	$ 11,379		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ hammer attachment		10	hr	C1.02	1	10	73.83	738.27	0	0	157.47	1574.70	37.83	321.08	378.30	269.13	$ 2,691		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ shear attachment		60	hr	C1.03	1	60	73.83	4429.60	0	0	139.81	8388.67	37.83	1926.48	2269.80	251.47	$ 15,088		
III: Final Reclamation & Closure	3000			Truck: CAT 735		10	hr	C1.04	1	10	73.73	737.30	0	0	106.39	1063.92	32.09	272.36	320.90	212.21	$ 2,122		
III: Final Reclamation & Closure	3000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D7		10	hr	C1.07	1	10	73.83	738.27	0	0	118.43	1184.25	38.17	323.97	381.70	230.42	$ 2,304		
III: Final Reclamation & Closure	3000			General Labor		60	hr	C1.08	1	60	122.32	7339.16	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 7,339		
III: Final Reclamation & Closure	3000	Storm Pond				1																$ 4,645	
III: Final Reclamation & Closure	3000		Control and pump building	Excavator: CAT 330 w/ grapple attachment		5	hr	C1.01	1	5	73.83	369.13	0	0	115.93	579.67	37.83	160.54	189.15	227.59	$ 1,138		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ hammer attachment		0	hr	C1.02	1	0	73.83	0.00	0	0	157.47	0.00	37.83	0.00	0.00	269.13	$ -		
III: Final Reclamation & Closure	3000			Excavator: CAT 330 w/ shear attachment		0	hr	C1.03	1	0	73.83	0.00	0	0	139.81	0.00	37.83	0.00	0.00	251.47	$ -		
III: Final Reclamation & Closure	3000			Truck: CAT 735		5	hr	C1.04	1	5	73.73	368.65	0	0	106.39	531.96	32.09	136.18	160.45	212.21	$ 1,061		
III: Final Reclamation & Closure	3000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
III: Final Reclamation & Closure	3000			Dozer: CAT D7		0	hr	C1.07	1	0	73.83	0.00	0	0	118.43	0.00	38.17	0.00	0.00	230.42	$ -		
III: Final Reclamation & Closure	3000			General Labor		20	hr	C1.08	1	20	122.32	2446.39	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 2,446		

Phase	Work Area Code	Area	Sub Area	Equipment Description	Status	Quantity	Unit	Cost Code	Unit Mhrs	Total Mhrs	Labor Rate	Labor Cost	Unit Matl	Material Cost	Unit Equip.	Equipment Cost	Unit Fuel	Fuel Consumed (L)	Fuel Cost	Total Unit Cost	Activity Total	Subtotals	Source / Comments
IV: Post Closure Reclamation	1000	STP																				$ 208,586	
IV: Post Closure Reclamation	1000		STP: building complete 75000 gpd																				
IV: Post Closure Reclamation	1000			Excavator: CAT 330 w/ grapple attachment		200	hr	C1.01	1	200	73.83	14765.34	0	0	115.93	23186.66	37.83	6421.60	7566.00	227.59	$ 45,518		
IV: Post Closure Reclamation	1000			Excavator: CAT 330 w/ hammer attachment		40	hr	C1.02	1	40	73.83	2953.07	0	0	157.47	6298.80	37.83	1284.32	1513.20	269.13	$ 10,765		
IV: Post Closure Reclamation	1000			Excavator: CAT 330 w/ shear attachment		200	hr	C1.03	1	200	73.83	14765.34	0	0	139.81	27962.24	37.83	6421.60	7566.00	251.47	$ 50,294		
IV: Post Closure Reclamation	1000			Truck: CAT 735		400	hr	C1.04	1	400	73.73	29492.10	0	0	106.39	42556.74	32.09	10894.48	12836.00	212.21	$ 84,885		
IV: Post Closure Reclamation	1000			General Labor		140	hr	C1.08	1	140	122.32	17124.71	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 17,125		
IV: Post Closure Reclamation	1000	Compressor/ER #26/shop																				$ 6,014	
IV: Post Closure Reclamation	1000		Compressor/ER #26/shop																				
IV: Post Closure Reclamation	1000			Excavator: CAT 330 w/ grapple attachment		10	hr	C1.01	1	10	73.83	738.27	0	0	115.93	1159.33	37.83	321.08	378.30	227.59	$ 2,276		
IV: Post Closure Reclamation	1000			Excavator: CAT 330 w/ shear attachment		10	hr	C1.03	1	10	73.83	738.27	0	0	139.81	1398.11	37.83	321.08	378.30	251.47	$ 2,515		
IV: Post Closure Reclamation	1000			General Labor		10	hr	C1.08	1	10	122.32	1223.19	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 1,223		
IV: Post Closure Reclamation	1000	Shop/warehouse																				$ 28,630	
IV: Post Closure Reclamation	1000		Building/Shell																				
IV: Post Closure Reclamation	1000			attachment		40	hr	C1.01	1	40	73.83	2953.07	0	0	115.93	4637.33	37.83	1284.32	1513.20	227.59	$ 9,104		
IV: Post Closure Reclamation	1000			Excavator: CAT 330 w/ hammer attachment		20	hr	C1.02	1	20	73.83	1476.53	0	0	157.47	3149.40	37.83	642.16	756.60	269.13	$ 5,383		
IV: Post Closure Reclamation	1000			Excavator: CAT 330 w/ shear attachment		20	hr	C1.03	1	20	73.83	1476.53	0	0	139.81	2796.22	37.83	642.16	756.60	251.47	$ 5,029		
IV: Post Closure Reclamation	1000			Truck: CAT 735		20	hr	C1.04	1	20	73.73	1474.60	0	0	106.39	2127.84	32.09	544.72	641.80	212.21	$ 4,244		
IV: Post Closure Reclamation	1000			Dozer: CAT D9		10	hr	C1.05	1	10	73.83	738.27	0	0	226.45	2264.55	64.42	546.76	644.20	364.70	$ 3,647		
IV: Post Closure Reclamation	1000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
IV: Post Closure Reclamation	1000			Dozer: CAT D7		0	hr	C1.07	1	0	73.83	0.00	0	0	118.43	0.00	38.17	0.00	0.00	230.42	$ -		
IV: Post Closure Reclamation	1000			General Labor		10	hr	C1.08	1	10	122.32	1223.19	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 1,223		
IV: Post Closure Reclamation	1000	Lower camp										1.00										$ 6,913	
IV: Post Closure Reclamation	1000		MCC's									1.00											
IV: Post Closure Reclamation	1000			Excavator: CAT 330 w/ grapple attachment		10	hr	C1.01	1	10	73.83	738.27	0	0	115.93	1159.33	37.83	321.08	378.30	227.59	$ 2,276		
IV: Post Closure Reclamation	1000			Excavator: CAT 330 w/ hammer attachment		0	hr	C1.02	1	0	73.83	0.00	0	0	157.47	0.00	37.83	0.00	0.00	269.13	$ -		
IV: Post Closure Reclamation	1000	Mine water treatment Plant #11	Thickener 32' dia. x 10' 7.5HP																				
IV: Post Closure Reclamation	1000	Mine water treatment Plant #12	Thickener Cover 32' dia.																				
IV: Post Closure Reclamation	1000			Excavator: CAT 330 w/ shear attachment		10	hr	C1.03	1	10	73.83	738.27	0	0	139.81	1398.11	37.83	321.08	378.30	251.47	$ 2,515		
IV: Post Closure Reclamation	1000			Truck: CAT 735		10	hr	C1.04	1	10	73.73	737.30	0	0	106.39	1063.92	32.09	272.36	320.90	212.21	$ 2,122		
IV: Post Closure Reclamation	1000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
IV: Post Closure Reclamation	1000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
IV: Post Closure Reclamation	1000			Dozer: CAT D7		0	hr	C1.07	1	0	73.83	0.00	0	0	118.43	0.00	38.17	0.00	0.00	230.42	$ -		
IV: Post Closure Reclamation	1000			General Labor		0	hr	C1.08	1	0	122.32	0.00	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ -		

Phase	Work Area Code	Area	Sub Area	Equipment Description	Status	Quantity	Unit	Cost Code	Unit Mhrs	Total Mhrs	Labor Rate	Labor Cost	Unit Matl	Material Cost	Unit Equip.	Equipment Cost	Unit Fuel	Fuel Consumed (L)	Fuel Cost	Total Unit Cost	Activity Total	Subtotals	Source / Comments
IV: Post Closure Reclamation	4000	RTP																				$ 8,102	
IV: Post Closure Reclamation	4000		Warming hut	Excavator: CAT 330 w/ grapple attachment		10	hr	C1.01	1	10	73.83	738.27	0	0	115.93	1159.33	37.83	321.08	378.30	227.59	$ 2,276		
IV: Post Closure Reclamation	4000			Excavator: CAT 330 w/ hammer attachment		0	hr	C1.02	1	0	73.83	0.00	0	0	157.47	0.00	37.83	0.00	0.00	269.13	$ -		
IV: Post Closure Reclamation	4000			Excavator: CAT 330 w/ shear attachment		5	hr	C1.03	1	5	73.83	369.13	0	0	139.81	699.06	37.83	160.54	189.15	251.47	$ 1,257		
IV: Post Closure Reclamation	4000			Truck: CAT 735		10	hr	C1.04	1	10	73.73	737.30	0	0	106.39	1063.92	32.09	272.36	320.90	212.21	$ 2,122		
IV: Post Closure Reclamation	4000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
IV: Post Closure Reclamation	4000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
IV: Post Closure Reclamation	4000			Dozer: CAT D7		0	hr	C1.07	1	0	73.83	0.00	0	0	118.43	0.00	38.17	0.00	0.00	230.42	$ -		
IV: Post Closure Reclamation	4000			General Labor		20	hr	C1.08	1	20	122.32	2446.39	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 2,446		
IV: Post Closure Reclamation	4000	RTP																				$ 8,136	
IV: Post Closure Reclamation	4000		Seepage wells control module	Excavator: CAT 330 w/ grapple attachment		10	hr	C1.01	1	10	73.83	738.27	0	0	115.93	1159.33	37.83	321.08	378.30	227.59	$ 2,276		
IV: Post Closure Reclamation	4000			Excavator: CAT 330 w/ hammer attachment		0	hr	C1.02	1	0	73.83	0.00	0	0	157.47	0.00	37.83	0.00	0.00	269.13	$ -		
IV: Post Closure Reclamation	4000			Excavator: CAT 330 w/ shear attachment		10	hr	C1.03	1	10	73.83	738.27	0	0	139.81	1398.11	37.83	321.08	378.30	251.47	$ 2,515		
IV: Post Closure Reclamation	4000			Truck: CAT 735		10	hr	C1.04	1	10	73.73	737.30	0	0	106.39	1063.92	32.09	272.36	320.90	212.21	$ 2,122		
IV: Post Closure Reclamation	4000			Dozer: CAT D9		0	hr	C1.05	1	0	73.83	0.00	0	0	226.45	0.00	64.42	0.00	0.00	364.70	$ -		
IV: Post Closure Reclamation	4000			Dozer: CAT D8T		0	hr	C1.06	1	0	73.83	0.00	0	0	167.38	0.00	49.31	0.00	0.00	290.51	$ -		
IV: Post Closure Reclamation	4000			Dozer: CAT D7		0	hr	C1.07	1	0	73.83	0.00	0	0	118.43	0.00	38.17	0.00	0.00	230.42	$ -		
IV: Post Closure Reclamation	4000			General Labor		10	hr	C1.08	1	10	122.32	1223.19	0	0	0.00	0.00	0.00	0.00	0.00	122.32	$ 1,223		

Surface Water & Groundwater Post Closure Monitoring

Phase I	Completed

1-year holding period

General Description: Current sampling will be continued.

Current sampling program — Duration: 1 years

Item	Description	Cost (per sample)	Samples per year	estimate of hours	Number of years	Sampling Cost
ORTW	001 and 011	$ 489.00	104	208	1	$ 50,856
	011 quarterly	$ 1,467.00	4	8	1	$ 5,868
STP	002	$ 238.70	52	52	1	$ 12,412
	002 bi-monthly cost	$ 238.70	6	6	1	$ 1,432
	additional monthly cost	$ 132.00	12		1	$ 1,584
RTP	Surface water sample	$ 622.00	0	0	1	$ -
				0	1	$ -
PWTP1	Potable water	$ 52.50	52	104	1	$ 2,730
	Potable water	$ 171.50	12	12	1	$ 2,058
Surface	Surface water samples	$ 622.00	24	48	1	$ 14,928
Wells	Monitoring wells	$ 622.00	16	48	1	$ 9,952
Biological	Fish tissue samples at two site	$ 6,400.00	1	10	1	$ 6,400
WET	001 annually	$ 3,800.00	1	10	1	$ 3,800
				0	1	$ -
Other Costs	Courier cost	$ 37,200.00	1	10	1	$ 37,200
	Helicopter	**$ 2,550.00**	6	0	1	$ 15,300
	Labor		1	516	1	$ -
TOTAL						**$ 164,521**

Phase IV Water Treatment

General Description: WTP is operated for 10 years. Samples will be corrected by WTP operators.

Duration: 1 years

Item	Description	Cost (per sample)	Samples per year	estimate of hours	Number of years	Sampling Cost
ORTW	001 and 011	$ 489.00	87	174	1	$ 42,543
	011 Quarterly	$ 1,467.00	4	8	1	$ 5,868
STP	002	$ 238.70		0	1	$ -
	002 bi-monthly cost	$ 238.70		0	1	$ -
	additional monthly cost	$ 132.00			1	$ -
PWTP1	Potable water	$ 52.50	52	104	1	$ 2,730
	Potable water	$ 171.50	12	12	1	$ 2,058
Surface	Surface water samples	$ 622.00	36	72	1	$ 22,392
Wells	500, 501, 502, 213, 216, & 2 wells between	$ 622.00	28	84	1	$ 17,416
Biological	Fish tissue samples	$ 6,400.00	1	10	1	$ 6,400
Wetlands	Dry Stack - RTP, quarterly	$ 3,000.00	4	40	1	$ 12,000
WET	001 annually	$ 3,800.00	1	10	1	$ 3,800
				0	1	$ -
Other Costs	Courier cost	$ 37,200.00	1	10	1	$ 37,200
	Helicopter	**$ 2,550.00**	6	0	1	$ 15,300
	Labor		1	524	1	$ -
TOTAL						**$ 167,707**

Phase V

General Description: 7 annual monitoring events over a 30 year period after the end of act,

Current sampling program — Duration: 1 years

Item	Description	Cost (per sample)	Samples per year	estimate of hours	Number of years	Sampling Cost
Surface	Below dry stack	$ 622.00	1	3	1	$ 622
Wells	500, 501, 502, 213, 216, & 2 wells between	$ 622.00	7	21	1	$ 4,354
Biological	Fish tissue samples	$ 6,400.00		0	1	$ -
Vegetation	Inspect site for vegetation establishment	$ 1,500.00	1	10	1	$ 1,500
				0	1	$ -
				0	1	$ -
Other Costs	Courier cost	**$ 600.00**	1	0	1	$ 600
	Helicopter	**$ 2,550.00**	1	0	1	$ 2,550
	Labor	**$ 150.00**	1	10	1	$ 1,500
TOTAL				34		**$ 11,126**

Water treatment cost:

Cost code	Description	Reagent cost			electric		Labor			Maintenance	
		gal. per month	$/gal	$/month	$/kWh	$/unit kWh	Mhr/month	Labor Rate/Unit	Labor Cost	$/unit	Total Unit Cost
W.001	Operate Water treatment per month	7,776,000	0.00196	$ 15,246.09	$ 0.156	$ 11,199	345	$ 73.83	$ 25,470.20	$ 2,101.00	**$ 54,017**

Assumptions	
Power consumption	72000 kWh
Plant process rate	180 gpm
maintenance cost (estimated&escalated)	2101.0 $/month
Days in a month	30

Data from the Mill

Reagent	UOI (unit of issue) lbs	UOI (unit of issue) packaging	JDE S/C	Sep-07 Mixed lbs	Sep-07 $/lb	SUMP 5 Water lbs/gallon	SUMP 5 Water $/gallon	Sump 5 + RTP Water lbs/gallon	Sump 5 + RTP Water $/gallon	Oct-07 Mixed lbs	Oct-07 $/lb	SUMP 5 Water lbs/gallon	SUMP 5 Water $/gallon	Sump 5 + RTP Water lbs/gallon	Sump 5 + RTP Water $/gallon	Nov-07 Mixed lbs	Nov-07 $/lb	SUMP 5 Water lbs/gallon	SUMP 5 Water $/gallon	Sump 5 + RTP Water lbs/gallon	Sump 5 + RTP Water $/gallon	Dec-07 Mixed lbs	Dec-07 $/lb	SUMP 5 Water lbs/gallon	SUMP 5 Water $/gallon	Sump 5 + RTP Water lbs/gallon	Sump 5 + RTP Water $/gallon
CALCIUM HYDROXIDE (LIME)	2,000	supersack	11248	8,000	0.260					6,000	0.260					8,000	0.260					4,000	0.270				
CALCIUM HYDROXIDE (LIME)	55	bag	18081	0	0.260					0	0.260					550	0.299					0	0.300				
CALCIUM HYDROXIDE (LIME) (COMBINED)				8,000	0.260	0.00102	0.00027	0.00075	0.00019	6,000	0.260	0.00072	0.00019	0.00068	0.00018	8,550	0.263	0.00132	0.00035	0.00116	0.00030	4,000	0.270	0.00053	0.00014	0.00050	0.00014
FERRIC CHLORIDE 40%	3,500	tote	11237	17,500	0.290					10,500	0.290					17,500	0.290					0	0.290				
FERRIC CHLORIDE 40%	643	drum		0	0.290					0	0.290					0	0.290					5,144	0.290				
FERRIC CHLORIDE 40% (COMBINED)				17,500	0.290	0.00224	0.00065	0.00163	0.00047	10,500	0.290	0.00125	0.00036	0.00119	0.00035	17,500	0.290	0.00270	0.00078	0.00237	0.00069	5,144	0.290	0.00069	0.00020	0.00065	0.00019
POLYCLEAR 2528	55	bag	11247	55	1.670	0.000007	0.000012	0.000005	0.000009	55	1.670	0.000007	0.000011	0.000006	0.000010	55	1.750	0.000008	0.000015	0.000007	0.000013	0	1.750	0.000000	0.000000	0.000000	0.000000
			Total						0.0007						0.0005						0.0010						0.000

DCS data

Month	Sep-07	Oct-07	Nov-07	Dec-07
Sump 5 to MWTP #01 & #02 (gallons)	7,815,827	8,390,316	7,229,636	6,795,872
RTP to MWTP #02 (gallons)	2,905,483	409,196	515,617	530,121
MWTP #01 & #02 Total Feed (gallons)	10,721,310	8,799,512	7,745,253	7,325,993
MWTP #02 to ORTW (gallons)	8,372,912	473,932	1,607	2,774

Data from the Mill

Did not receive MWTP April Reagents yet - requested report - will update as soon as

Reagent	UOI (unit of issue) lbs	UOI (unit of issue) packaging	JDE S/C	Jan-08 Mixed lbs	Jan-08 $/lb	SUMP 5 Water lbs/gallon	SUMP 5 Water $/gallon	Sump 5 + RTP Water lbs/gallon	Sump 5 + RTP Water $/gallon	Feb-08 Mixed lbs	Feb-08 $/lb	SUMP 5 Water lbs/gallon	SUMP 5 Water $/gallon	Sump 5 + RTP Water lbs/gallon	Sump 5 + RTP Water $/gallon	Mar-08 Mixed lbs	Mar-08 $/lb	SUMP 5 Water lbs/gallon	SUMP 5 Water $/gallon	Sump 5 + RTP Water lbs/gallon	Sump 5 + RTP Water $/gallon	Apr-08 Mixed lbs	Apr-08 $/lb	SUMP 5 Water lbs/gallon	SUMP 5 Water $/gallon	Sump 5 + RTP Water lbs/gallon	Sump 5 + RTP Water $/gallon
CALCIUM HYDROXIDE (LIME)	2,000	supersack	11248	6,000	0.280					6,000	0.290					8,000	0.290										
CALCIUM HYDROXIDE (LIME)	55	bag	18081	275	0.300					0	0.300					0	0.300										
CALCIUM HYDROXIDE (LIME) (COMBINED)				6,275	0.281	0.00094	0.00026	0.00074	0.00021	6,000	0.290	0.00093	0.00027	0.00085	0.00025	8,000	0.290	0.00124	0.00036	0.00109	0.00031						
FERRIC CHLORIDE 40%	3,500	tote	11237	7,000	0.290					14,000	0.290					17,500	0.290										
FERRIC CHLORIDE 40%	643	drum		2,572	0.290					0	0.290					0	0.290										
FERRIC CHLORIDE 40% (COMBINED)				9,572	0.290	0.00143	0.00042	0.00112	0.00033	14,000	0.290	0.00217	0.00063	0.00198	0.00057	17,500	0.290	0.00270	0.00078	0.00237	0.00069						
POLYCLEAR 2528	55	bag	11247	0	1.980	0.000000	0.000000	0.000000	0.000000	55	1.980	0.000009	0.000017	0.000008	0.000015	55	1.980	0.000008	0.000017	0.000007	0.000015						
			Total						0.0005						0.0008						0.0010						

DCS data

Month	Jan-08	Feb-08	Mar-08	Apr-08
Sump 5 to MWTP #01 & #02 (gallons)	6,683,373	6,448,247	6,473,114	7,502,530
RTP to MWTP #02 (gallons)	1,831,245	628,424	896,334	422,425
MWTP #01 & #02 Total Feed (gallons)	8,514,618	7,076,671	7,369,448	7,924,955
MWTP #02 to ORTW (gallons)	1,445,785	0	0	0

2007 & 2012 Reagent Rates

Reagent	UOI (unit of issue) lbs	UOI (unit of issue) packaging	Sep-07 $/lb	Mar-08 $/lb	Average $/lb	Feb-12 $/lb	Increase %
CALCIUM HYDROXIDE (LIME)	2,000	supersack	0.26	0.29	0.28	0.63	227
FERRIC CHLORIDE 40%	3,500	tote	0.29	0.29	0.29	0.89	305
POLYCLEAR 2528	55	bag	1.98	1.98	1.98	6.00	303
						Average	**279**

Sludge Disposal Cost

	Unit		Comment
Sludge Generation Rate	ft3/1000 gallon	0.1956	WTP#2 generated 1200 ft3 of sludge within 30 days by treating 142 gpm water.
	cy/1000 gallon	0.0072	
Capacity of Roll-off	cy	25	
Disposal cost per roll-off	$/roll-off	1200	Current contract
Water Treatment Rate at Phase IV	gpm	110	2002 Water Management Plan
Sludge Generation Rate	cy/month	34.4	
Roll-off per month	ea/month	1.38	
Cost per month	$/month	$1,653	

Hydraulic Concrete Plug Installation Cost

A. Grouting

Assumptions
- Grout holes: 2 inch in dia., 25ft long x 16 holes
- Volume of grout: 1 cy (27 ft3) in total
- Drilling Period: 1 shift
- Grouting Period: 1 shift
- Grout Mixture: Water : Cement = 2 : 1

Costs

Materials	Quantity	Unit	Cost per Unit	Cost	Notes
Packer	16	e.a.	$50.00	$800.00	Actual cist
94lbs Cement bag	27	e.a.	$12.75	$344.25	Actual cist
Total				$1,144.25	

Labor	Quantity	Unit	Cost per Unit	Cost	
Jumbo Operator x 1	11.5	hr	$77.16	$887.37	Tunnel Labor Group 3A
Jumbo Assistant x 1	11.5	hr	$68.53	$788.10	Tunnel Labor Group 1
Grout pump operator x 2	23	hr	$70.20	$1,614.52	Tunnel Labor Group 2
Total	46			$3,289.99	

Equipment with fuel					
Jumbo	2	month	$24,000.00	$48,000.00	Quotation from Redpath
LHD	2	month	$30,000.00	$60,000.00	Quotation from Redpath
Grout Pump (incl. setup & demolish)	2	month	$2,300.00	$4,600.00	Quotation from Redpath
Compressor	2	month	$2,300.00	$4,600.00	Quotation from Redpath
Total				$39,066.67	

Grouting Total	**$43,500.91**

B. Barricade

Assumptions
- 8 inch thick Shotcrete Barricade
- Construction period: 1 shift for frame work, 2 shifts for shotcreting

Costs

Materials	Quantity	Unit	Cost per Unit	Cost	Notes
Shotcrete	16	cy	$300.00	$4,800.00	Internal Information
Misc. Hardware	1	ea.	$20.00	$20.00	Internal Information
Geotextile	600	ft2	$0.08	$48.00	Internal Information
4" Screen	530	ft2	$0.12	$63.60	Internal Information
4" Screen Towers	4	ea.	$40.00	$160.00	Internal Information
Breather Pipe	4	ea.	$15.00	$60.00	Internal Information
Total				$5,151.60	

Labor	Quantity	Unit	Cost per Unit	Cost	
Jumbo Operator	34.5	hr	$77.16	$2,662.12	Tunnel Labor Group 3A
LHD Operator	34.5	hr	$71.70	$2,473.50	Tunnel Labor Group 3
Construction Labor x 3	103.5	hr	$70.20	$7,265.33	Tunnel Labor Group 2
Total	172.5			$12,400.94	

Equipment with fuel					
Forklift	34.5	hr	$48.48	$1,672.73	
Utility Truck	34.5	hr	$19.56	$674.87	
Dry Shotcrete Pod	23	hr	$1.74	$40.00	Redpath Contract ($1200/month)
Total				$2,387.60	

Barricade Total	**$19,940.14**

C. Concrete Pour

Assumptions
- Model: 1525 Portal (19 ft plug length)
- Volume of concrete: (19' x 16') x 19' x 1.1 = 6354 ft3 (235.3 cy)
- Pour period: 2 shifts

Costs

Materials	Quantity	Unit	Cost per Unit	Cost	Notes
8" HDPE Pipe	500	ft	$18.00	$9,000.00	Internal Information
Redi-mix concrete with Type F Fly Ash	235.3	cy	$193.00	$45,412.90	Quotation from Delta Concrete
Total				$54,412.90	

Labor	Quantity	Unit	Cost per Unit	Cost	
Construction Labor x 2 x 2 shifts	46	hr	$16.62	$764.65	Tunnel Labor Group 2
Total	46			$764.65	

Equipment with fuel					
Concrete Pump Truck with operator (2 shifts)	23	hr	$185.00	$4,255.00	Quotation from Delta Concrete
Total				$4,255.00	

Concrete Pour Total	**$59,432.55**	
Concrete Pour Unit Cost	**$252.58**	/cy

D. Total Cost for Hydraulic Plug

1525 Portal	Quantity	Unit	Cost per Unit	Cost	
Grouting	1	ea	$43,500.91	$43,500.91	
Barricade	2	ea	$19,940.14	$39,880.28	
Concrete pour	235.3	cy	$252.58	$59,437.23	19 ft long plug
Total Cost - 1525 Portal Hydraulic Plug				**$142,818.42**	

1690 Haulage	Quantity	Unit	Cost per Unit	Cost	
Grouting	1	ea	$43,500.91	$43,500.91	
Barricade	2	ea	$19,940.14	$39,880.28	
Concrete pour	211	cy	$252.58	$53,180.68	17 ft long plug
Total Cost - 1690 Portal Hydraulic Plug				**$136,561.87**	

1875 Portal	Quantity	Unit	Cost per Unit	Cost	
Grouting	1	ea	$43,500.91	$43,500.91	
Barricade	2	ea	$19,940.14	$39,880.28	
Concrete pour	50	cy	$252.58	$12,513.10	4 ft long plug
Total Cost - 1875 Portal Hydraulic Plug				**$95,894.29**	

Total Concrete Plug	**$375,274.57**

E. Total Man.Hour for Hydraulic Plug

1525 Portal	Quantity	Unit	Unit Man.hour	Man.hour	
Grouting	1	ea	46.0	46.0	
Barricade	2	ea	172.5	345.0	
Concrete pour	235.3	cy	0.2	46.0	19 ft long plug
Total Man.Hour - 1525 Portal Hydraulic Plug				**437.0**	

1690 Haulage	Quantity	Unit	Unit Man.hour	Man.hour	
Grouting	1	ea	46.0	46.0	
Barricade	2	ea	172.5	345.0	
Concrete pour	211	cy	0.2	41.2	17 ft long plug
Total Man.Hour - 1690 Portal Hydraulic Plug				**432.2**	

1875 Portal	Quantity	Unit	Unit Man.hour	Man.hour	
Grouting	1	ea	46.0	46.0	
Barricade	2	ea	172.5	345.0	
Concrete pour	50	cy	0.2	9.7	4 ft long plug
Total Man.Hour - 1875 Portal Hydraulic Plug				**400.7**	

Pastefill Cost

Assumptions

Fill Volume

Most of the mining stopes alternate cycle and pastefill cycle month by month.
Thus, it is assumed that the stope volume mined in a month would be remained open when the operation is ceased

- Required fill volume	1,039,856	ft3	Annual fill volume: 12,478,271 ft3 (2010 Bud
- Total length of stopes to be filled (= Paste pipe length)	3,697	ft	Annual footage to be mined: 44,366 ft (2010
- Number of stopes to be filled (= Number of barricade to be constructed)	20	e.a.	Operational information

Paste Plant Operation

- The dry stack is hauled from Dry Stack Tailings Facility.
- The following facilities should be operational to use the Paste Plant:
  - Sizer
  - CV05
  - CV013
  - Cement Silo Blower
  - Cement Rotary Valve
  - Cement Weightometer
  - Cement Screw Feeder
  - Cement Dust Collection
  - Paste Mixer
  - Paste Pump
  - 2 Pumps for water addition (One for backup)
  - Paste Plant Control Room
  - Emergency Flush Pump
- The operational data of Paste Plant follow:

Total power rating of Paste Plant facilities	750	kW	Internal Information
Load Factor	80	%	
Utilization Factor	80	%	Internal Information
Electrical Usage per hour	480	kWh	
Backfill rate	2000	ft3/hr	Average rate
Electrical Usage per ft3 pastefill	0.240	kWh/ft3	
Electric Cost	0.155545611	$/kWh	Dec. 2009 Cost
Paste Plant Operation Cost	**0.037**	$/ft3 pastefilled	

Pastefill Mixture

Solid %	64	%	2010 Plan
Comment Content %	6.5	%	2010 Plan
Dry Stack Content %	57.5	%	
Specific gravity - dry stack	177.0	lbs/ft3	
Specific gravity - cement	197.0	lbs/ft3	
Specific gravity -pastefill	107.1	lbs/ft3	

Dry Stack Transportation

Dry stack required (dry ton)	61.6	dry ton/hr
Dry stack required volume	696.0	ft3/hr
Dry stack required volume	25.8	cy/hr
Haul truck productivity (CAT 740)	68.8	cy/hr
No. of haul truck required	0.4	e.a.

Cost Estimation

A. Barricade

Materials	Quantity	Unit	Cost per Unit	Cost	Notes
Shotcrete	16	cy	$300.00	$4,800.00	Internal information
Misc. Hardware	1	ea.	$20.00	$20.00	
Geotextile	600	ft2	$0.08	$48.00	
4" Screen	530	ft2	$0.12	$63.60	
4" Screen Towers	4	ea.	$40.00	$160.00	
Breather Pipe	4	ea.	$15.00	$60.00	
Total				$5,151.60	

Labor	Quantity	Unit	Cost per Unit	Cost	
Construction Labor x 3 x 3 shifts	103.5	hr	$70.20	$7,265.33	Tunnel Labor Group 2
Total	103.5			$7,265.33	

Equipment with fuel cost	Quantity	Unit	Cost per Unit	Cost	
Forklift	34.5	hr	$86.77	$2,993.57	
Utility Truck	34.5	hr	$80.80	$2,787.63	
Dry Shotcrete pot	23	hr	$1.74	$40.00	Redpath Contract ($1200/month)

Total				$5,821.20	
Barricade Total				**$18,238.13 per ea.**	

B. Paste Pipe Installation (100 ft)

Materials	Quantity	Unit	Cost per Unit	Cost	Notes
8" Paste Pipe	200	ft	$6.15	$1,230.00	Internal information
8" Couplings	2	ea.	$184.96	$369.92	
4" Breather Pipe	440	ft	$1.05	$462.00	
4" Coupling	0	ea.	$99.55	$0.00	
Chain	128	ea.	$1.25	$160.00	
Blast off - Trimtex	1	ea.	$3.47	$3.47	
Blast off - Det Cord	100	ft	$0.14	$14.00	
Total				$2,239.39	

Labor	Quantity	Unit	Cost per Unit	Cost	
Construction Labor x 3 x 8 hr	24	hr	$70.20	$1,684.71	Tunnel Labor Group 2
Total	24			$1,684.71	

Equipment with fuel cost	Quantity	Unit	Cost per Unit	Cost
Forklift	8	hr	$86.77	$694.16
Utility Truck	8	hr	$80.80	$646.41
Total				$1,340.57

Paste Pipe Installation				**$5,264.67 for 100ft**	
				$52.65 per foot	

C. Dry Stack Transportation and Paste Pour (2000ft3)

Materials	Quantity	Unit	Cost per Unit	Cost	Notes
Cement	6.96	ton	$161.00	$1,121.22	
Total				$1,121.22	

Labor	Quantity	Unit	Cost per Unit	Cost	
Loader Operator x 2	2	hr	$76.49	$152.98	Power Equipment Operator Group 1A
Haul Truck Operator x 1	1	hr	$73.73	$73.73	Truck Driver Group 1
Paste Plant Operator x 1	1	hr	$65.65	$65.65	Labor Group 2
Mechanic x 1	1	hr	$71.82	$71.82	Mechanic
Underground Construction Labor x 2	2	hr	$70.20	$140.39	Tunnel Labor Group 2
Total	7			$504.58	

Equipment with fuel cost	Quantity	Unit	Cost per Unit	Cost	
Loader x 2	2	hr	$146.36	$292.72	CAT 980H
Haul Truck x 1	1	hr	$152.13	$152.13	CAT 740
Paste Plant	2000	ft3	$0.04	$74.66	
Total				$519.51	

Dry Stack Transportation and Paste Pour Total				**$2,145.32 per 2000 ft3**	
				$1.07 per ft3	

D. Total Pastefill Cost

Total Pastefill Cost	Quantity	Unit	Cost per Unit	Cost	Notes
Barricade	20	e.a.	$18,238.13	$364,762.54	
Paste Pipeline	3,697	ft	$52.65	$194,643.69	
Paste Pour	1,039,856	ft3	$1.07	$1,115,410.55	
Total				**$1,674,816.78**	

D. Total Man.Hour - Pastefill

Total Pastefill Cost	Quantity	Unit	Unit Man.hour	Man.hour	Notes
Barricade	20	e.a.	103.5	2070.0	
Paste Pipeline	3,697	ft	0.2	887.3	
Paste Pour	1,039,856	ft3	0.004	3639.5	
Total				**6596.8**	

U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS
Western Information Office, 90 7th St., Suite 14-100, San Francisco, CA 94103
Information Staff (415) 625-2270 / Fax (415) 625-2351

http://www.stats.bls.gov/ro9/9221.pdf

Information Staff (415) 625-2270 / Fax (415) 625-2351
ANCHORAGE
2/16/2012 Consumer Price Index, All Items, October 1967=100 for All Urban Consumers (CPI-U)

Year	Annual Average	Inflation
2008	505.794	
2009	511.791	1.19%
2010	520.867	1.77%
2011	537.637	3.22%
Average		**2.06%**

Year	Annual Average	Inflation
2006	473.2	
2007	483.746	2.23%
2008	505.794	4.56%
2009	511.791	1.19%
2010	520.867	1.77%
2011	537.637	3.22%
Average		2.59%

Escalation from 2006 to 2012

Year	Annual Average	Inflation
2006	473.2	
2011	537.637	13.62%

Escalation from 2007 to 2012

Year	Annual Average	Inflation
2007	483.746	
2011	537.637	11.14%

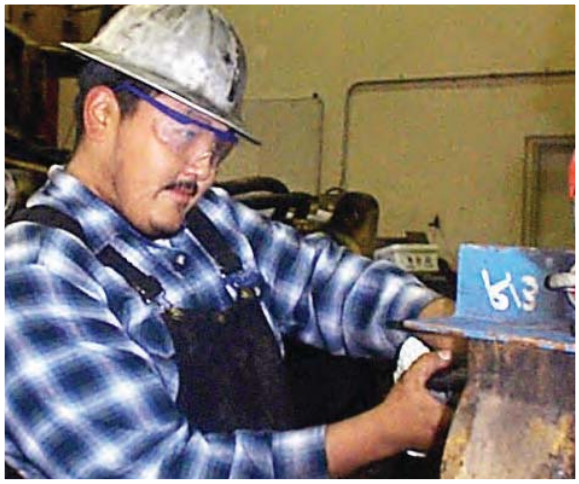
Escalation from 2008 to 2012

Year	Annual Average	Inflation
2008	505.794	
2011	537.637	6.30%

Escalation from 2009 to 2012

Year	Annual Average	Inflation
2009	511.791	
2011	537.637	5.05%

Laborers' & Mechanics' Minimum Rates of Pay



Title 36. Public Contracts
AS 36.05 & AS 36.10
Wage & Hour Administration
Pamphlet No. 600

State of Alaska
Department of Labor
and Workforce Development

Effective September 1, 2011

Issue 23

(Revised November 1, 2011)

ALASKA DEPARTMENT OF LABOR
& WORKFORCE DEVELOPMENT

Jobs are Alaska's Future

STATE OF ALASKA
DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

OFFICE OF THE COMMISSIONER

Sean Parnell, Governor

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Juneau, AK 99811-1149

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October 20, 2011

TO ALL CONTRACTING AGENCIES:

At the Alaska Department of Labor and Workforce Development, our goal is putting Alaskans to work. This pamphlet is designed to help contractors awarded public construction contracts understand the most significant laws of the State of Alaska pertaining to prevailing wage and resident hire requirements.

This pamphlet identifies current prevailing wage rates and resident hire classifications for public construction contracts (any construction projects awarded by the State of Alaska or its political subdivisions, such as local governments and certain non-profit organizations).

Because these rates may change, this publication is printed in the spring and fall of every year, so please be sure you are using the appropriate rates. The rates published in this edition become effective September 1, 2011.

All projects with a final bid date of September 11, 2011, or later, must pay the prevailing wage rates contained in this pamphlet. As the law now provides, these rates will remain stable during the life of a contract or for 24 calendar months, whichever is shorter. **The date the prime contract is awarded is the date from which the 24 months will be counted.** Upon expiration of the initial 24-month period, the latest wage rates issued by the department shall become effective for a subsequent 24-month period or until the original contract is completed, whichever occurs first. This process shall be repeated until the original contract is completed.

The term "original contract", as used herein, means the signed contract that resulted from the original bid and any amendments, including changes of work scope, additions, extensions, change orders, and other instruments agreed to by the parties that have not been subject to subsequent open bid procedures.

If a higher federal rate is required due to partial federal funding or other federal participation, the higher rate must be paid.

For additional copies of this pamphlet, contact the nearest office of the Division of Labor Standards and Safety, Wage and Hour office or visit the Internet site at:

http://labor.state.ak.us/lss/pamp600.htm

For questions regarding prevailing wage or resident hire requirements, please contact the nearest Wage and Hour office. These offices are listed on Page x.

Sincerely,

Clark Bishop

Clark Bishop
Commissioner

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EXCERPTS FROM ALASKA LAW

(The following statute (36.05.005) applies to projects bid on or after October 20, 2011)

Sec. 36.05.005. Applicability.

This chapter applies only to a public construction contract that exceeds $25,000.

Sec. 36.05.010. Wage rates on public construction.

A contractor or subcontractor who performs work on a public construction contract in the state shall pay not less than the current prevailing rate of wages for work of a similar nature in the region in which the work is done. The current prevailing rate of wages is that contained in the latest determination of prevailing rate of wages issued by the Department of Labor and Workforce Development at least 10 days before the final date for submission of bids for the contract. The rate shall remain in effect for the life of the contract or for 24 calendar months, whichever is shorter. At the end of the initial 24-month period, if new wage determinations have been issued by the department, the latest wage determination shall become effective for the next 24-month period or until the contract is completed, whichever occurs first. This process shall be repeated until the contract is completed.

Sec. 36.05.040. Filing schedule of employees, wages paid, and other information.

All contractors or subcontractors who perform work on a public construction contract for the state or for a political subdivision of the state shall, before the Friday of every second week, file with the Department of Labor and Workforce Development a sworn affidavit for the previous reporting period, setting out in detail the number of persons employed, wages paid, job classification of each employee, hours worked each day and week, and other information on a form provided by the Department of Labor and Workforce Development.

Sec. 36.05.045. Notice of work and completion; withholding of payment.

(a) Before commencing work on a public construction contract, the person entering into the contract with a contracting agency shall designate a primary contractor for purposes of this section. Before work commences, the primary contractor shall file a notice of work with the Department of Labor and Workforce Development. The notice of work must list work to be performed under the public construction contract by each contractor who will perform any portion of work on the contract and the contract price being paid to each contractor. The primary contractor shall pay all filing fees for each contractor performing work on the contract, including a filing fee based on the contract price being paid for work performed by the primary contractor's employees. The filing fee payable shall be the sum of all fees calculated for each contractor. The filing fee shall be one percent of each contractor's contract price. The total filing fee payable by the primary contractor under this subsection may not exceed $5,000. In this subsection, "contractor" means an employer who is using employees to perform work on the public construction contract under the contract or a subcontract.

(b) Upon completion of all work on the public construction contract, the primary contractor shall file with the Department of Labor and Workforce Development a notice of completion together with payment of any additional filing fees owed due to increased contract amounts. Within 30 days after the department's receipt of the primary contractor's notice of completion, the department shall inform the contracting agency of the amount, if any, to be withheld from the final payment.

(c) A contracting agency

(1) may release final payment of a public construction contract to the extent that the agency has received verification from the Department of Labor and Workforce Development that

(A) the primary contractor has complied with (a) and (b) of this section;

(B) the Department of Labor and Workforce Development is not conducting an investigation under this title; and

(C) the Department of Labor and Workforce Development has not issued a notice of a violation of this chapter to the primary contractor or any other contractors working on the public construction contract; and

(2) shall withhold from the final payment an amount sufficient to pay the department's estimate of what may be needed to compensate the employees of any contractors under investigation on this construction contract, and any unpaid filing fees.

(d) The notice and filing fee required under (a) of this section may be filed after work has begun if
  (1) The public construction contract is for work undertaken in immediate response to an emergency; and
  (2) The notice and fees are filed not later than 14 days after the work has begun.

(e) A false statement made on a notice required by this section is punishable under AS 11.56.210.

Sec. 36.05.060. Penalty for violation of this chapter.

A contractor who violates this chapter is guilty of a misdemeanor and upon conviction is punishable by a fine of not less than $100 nor more than $1,000, or by imprisonment for not less than 10 days nor more than 90 days, or by both. Each day a violation exists constitutes a separate offense.

Sec. 36.05.070. Wage rates in specifications and contracts for public works.

(a) The advertised specifications for a public construction contract that requires or involves the employment of mechanics, laborers, or field surveyors must contain a provision stating the minimum wages to be paid various classes of laborers, mechanics, or field surveyors and that the rate of wages shall be adjusted to the wage rate under AS 36.05.010.

(b) Repealed by §17 ch 142 SLA 1972.

(c) A public construction contract under (a) of this section must contain provisions that
  (1) the contractor or subcontractors of the contractor shall pay all employees unconditionally and not less than once a week;
  (2) wages may not be less than those stated in the advertised specifications, regardless of the contractual relationship between the contractor or subcontractors and laborers, mechanics, or field surveyors;
  (3) the scale of wages to be paid shall be posted by the contractor in a prominent and easily accessible place at the site of the work;
  (4) the state or a political subdivision shall withhold so much of the accrued payments as is necessary to pay to laborers, mechanics, or field surveyors employed by the contractor or subcontractors the difference between
    (A) the rates of wages required by the contract to be paid laborers, mechanics, or field surveyors on the work; and
    (B) the rates of wages in fact received by laborers, mechanics, or field surveyors.

Sec. 36.05.080. Failure to pay agreed wages.

Every contract within the scope of AS 36.05.070 shall contain a provision that if it is found that a laborer, mechanic, or field surveyor employed by the contractor or subcontractor has been or is being paid a rate of wages less than the rate of wages required by the contract to be paid, the state or its political subdivision may, by written notice to the contractor, terminate the contractor's right to proceed with the work or the part of the work for which there is a failure to pay the required wages and to prosecute the work to completion by contract or otherwise, and the contractor and the contractor's sureties are liable to the state or its political subdivision for excess costs for completing the work.

Sec. 36.05.090. Payment of wages from withheld payments and listing contractors who violate contracts.

(a) The state disbursing officer in the case of a state public construction contract and the local fiscal officer in the case of a political subdivision public construction contract shall pay directly to laborers, mechanics, or field surveyors from accrued payments withheld under the terms of the contract the wages due laborers, mechanics, or field surveyors under AS 36.05.070.

(b) The state disbursing officer or the local fiscal officer shall distribute to all departments of the state government and to all political subdivisions of the state a list giving the names of persons who have disregarded their obligations to employees. A person appearing on this list and a firm, corporation,

partnership, or association in which the person has an interest may not work as a contractor or subcontractor on a public construction contract for the state or a political subdivision of the state until three years after the date of publication of the list. If the accrued payments withheld under the contract are insufficient to reimburse all the laborers, mechanics, or field surveyors with respect to whom there has been a failure to pay the wages required under AS 36.05.070, the laborers, mechanics, or field surveyors have the right of action or intervention or both against the contractor and the contractor's sureties conferred by law upon persons furnishing labor or materials, and in the proceedings it is not a defense that the laborers, mechanics, or field surveyors accepted or agreed to accept less than the required rate of wages or voluntarily made refunds.

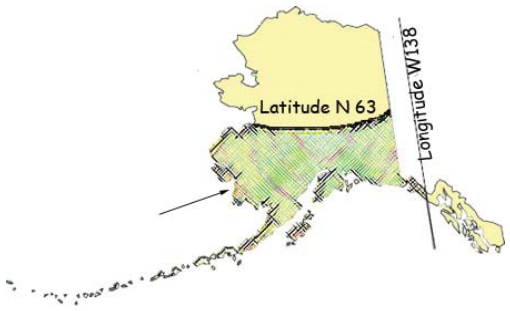
Sec. 36.05.900. Definition.
In this chapter, "contracting agency" means the state or a political subdivision of the state that has entered into a public construction contract with a contractor.

ADDITIONAL INFORMATION

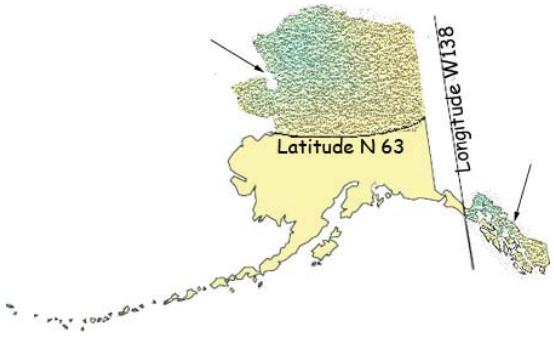
LABORER CLASSIFICATION CLARIFICATION

The laborer rates categorized in class code S1201-S1206 apply in one area of Alaska; the area that is south of N63 latitude and west of W138 Longitude. The laborer rates categorized in class code N1201-N1206 apply in two areas of Alaska; the Alaska areas north of N63 latitude and east of W138 longitude. The following graphic representations should assist with clarifying the applicable wage rate categories:

S1201-S1206



N1201-N1206



ACCOMMODATIONS AND PER DIEM

The Alaska Department of Labor and Workforce Development has adopted a per diem requirement for blocklayers, bricklayers, carpenters, dredgemen, heat & frost insulators/asbestos workers, ironworkers, laborers, operative plasterers & cement masons, painters, piledrivers, power equipment operators, roofers, surveyors, truck

drivers/surveyors, and tunnel workers. This per diem rate creates an allowable alternative to providing board and lodging under the following conditions:

Employer-Provided Camp or Suitable Accommodations

Unless otherwise approved by the Commissioner, the employer shall ensure that a worker who is employed on a project that is 65 road miles or more from the international airport in either Fairbanks, Juneau or Anchorage or is inaccessible by road in a 2-wheel drive vehicle and who is not a domiciled resident of the locality of the project shall receive meals and lodging. Lodging shall be in accordance with all applicable state and federal laws. In cases where the project site is not road accessible, but the employee can reasonably get to the project worksite from their permanent residence within one hour, the Commissioner may waive these requirements for that employee upon a written request from the employer.

The term "domiciled resident" means a person living within 65 road miles of the project, or in the case of a highway project, the mid-point of the project, for at least 12 consecutive months prior to the award of the project. However, if the employer or person provides sufficient evidence to convince the department that a person has established a permanent residence and an intent to remain indefinitely within the distance to be considered a "domiciled resident," the employer shall not be required to provide meals and lodging or pay per diem.

Where the employer provides or furnishes board, lodging or any other facility, the cost or amount thereof shall not be considered or included as part of the required prevailing wage basic hourly rate and cannot be applied to meet other fringe benefit requirements. The taxability of employer provided board and lodging shall be determined by the appropriate taxation enforcement authority.

Per Diem

Employers are encouraged to use commercial facilities and lodges; however, when such facilities are not available, per diem in lieu of meals and lodging must be paid at the basic rate of $75.00 per day, or part thereof, the worker is employed on the project. Per diem shall not be allowed on highway projects west of Livengood on the Elliott Highway, at Mile 0 of the Dalton Highway to the North Slope of Alaska, north of Mile 20 on the Taylor Highway, east of Chicken, Alaska, on the Top of the World Highway and south of Tetlin Junction to the Alaska-Canada border.

The above-listed standards for room and board and per diem only apply to the crafts as identified in Pamphlet 600, *Laborers' and Mechanics' Minimum Rates of Pay*. Other crafts working on public construction projects shall be provided room and board at remote sites based on the department's existing policy guidelines.

APPRENTICE HIRING REQUIREMENTS

On July 24, 2005, Administrative Order No. 226 established a 15 percent goal for hiring apprentices in certain job categories on highway, airport, harbor, dam, tunnel, utility or dredging projects awarded by the Alaska Department of Transportation and Public Facilities that exceed $2.5 million. This Order will apply to all projects in the referenced categories that are advertised after September 1, 2005. On these projects, the hours worked by apprentices will be compared to the hours worked by journeyman level workers to determine if the 15 percent goal has been met. This on-the-job training goal is critical to ensure that the Alaska work force is prepared for the future. For additional details, contact the nearest Wage and Hour office at the address listed on Page ix of this publication. Administrative Order No. 226 may be viewed in its entirety on the Internet at http://www.gov.state.ak.us/admin-orders/226.html or call any Wage and Hour office to receive a faxed copy.

APPRENTICE RATES

Apprentice rates at less than the minimum prevailing rates may be paid to apprentices according to an apprentice program which has been registered and approved by the Commissioner of the Alaska Department of Labor and

Workforce Development in writing, or according to a bona fide apprenticeship program registered with the Employment and Training Administration Office of Apprenticeship and Training, U.S. Department of Labor. **Any employee listed on a payroll at an apprentice wage rate who is not registered as above shall be paid the journeyman prevailing minimum wage in that work classification.** Wage rates are based on prevailing crew makeup practices in Alaska and apply to work performed regardless of either the quality of the work performed by the employee or the titles or classifications which may be assigned to individual employees.

FRINGE BENEFIT PLANS

Contractors/subcontractors may compensate fringe benefits to their employees in any one of three methods. The fringe benefits may be paid into a union trust fund, into an approved benefit plan, or paid directly on the paycheck as gross wages.

Where fringe benefits are paid into approved plans, funds, or programs including union trust funds, the payments must be contributed at least monthly. If contractors submit their own payroll forms and are paying fringe benefits into approved plans, funds, or programs, the employer's certification must include, in addition to those requirements of 8 AAC 30.020(c), a statement that fringe benefit payments have been or will be paid at least monthly. Contractors who pay fringe benefits to a plan must ensure the plan is one approved by the Internal Revenue Service and that the plan meets the requirements of 8 AAC 30.025 (eff. 3/2/08) in order for payments to be credited toward the prevailing wage obligation.

SPECIAL PREVAILING WAGE RATE DETERMINATION

Special prevailing wage rate determinations may be requested for special projects or a special worker classification if the work to be performed does not conform to traditional public construction for which a prevailing wage rate has been established under 8 AAC 30.050(a) of this section. Requests for special wage rate determinations must be in writing and filed with the Commissioner at least 30 days before the award of the contract. An applicant for a special wage rate determination shall have the responsibility to support the necessity for the special rate. An application for a special wage rate determination filed under this section must contain:

(1) a specification of the contract or project on which the special rates will apply and a description of the work to be performed;
(2) a brief narrative explaining why special wage rates are necessary;
(3) the job class or classes involved;
(4) the special wage rates the applicant is requesting, including survey or other relevant wage data to support the requested rates;
(5) the approximate number of employees who would be affected; and
(6) any other information which might be helpful in determining if special wage rates are appropriate.

Requests made pursuant to the above should be addressed to:

Director
Alaska Department of Labor and Workforce Development
Labor Standards & Safety Division
Wage and Hour Administration
P.O. Box 111149
Juneau, AK 99811-1149

-or-

Email: anchorage.lss-wh@alaska.gov

LABOR STANDARDS REGULATIONS
NOTICE REQUEST

If you would like to receive ***notices of proposed changes to regulations*** for Wage and Hour or Mechanical Inspection, please indicate below the programs for which you are interested in receiving such notices, print your name and email or mailing address in the space provided, and send this page to:

Alaska Department of Labor and Workforce Development
Labor Standards & Safety Division
Wage and Hour Administration
3301 Eagle St., Suite 301
Anchorage, AK 99503-4149
Email: anchorage.lss-wh@alaska.gov

For *REGULATIONS* information relating to any of the following:

❒ Wage and Hour Title 23 Employment Practices
❒ Wage and Hour Title 36 Public Works
❒ Employment Agencies
❒ Child Labor
❒ Employment Preference (Local Hire)
❒ Plumbing Code
❒ Electrical Code
❒ Boiler/Pressure Vessel Construction Code
❒ Elevator Code
❒ Certificates of Fitness
❒ Recreational Devices

For information on any of the following *SEMINARS*:

❒ Electrical ❒ Plumbing ❒ Boiler

Request any of the following *PUBLICATIONS* by checking below:

❒ Wage and Hour Title 23 Employment Practices
❒ Minimum Wage & Overtime Poster
❒ Child Labor Poster
❒ Public Construction Pamphlet
❒ Public Construction Wage Rates
❒ Child Labor Pamphlet

PLEASE NOTE: DUE TO INCREASED MAILING AND PRINTING COSTS, ONLY ONE OF EACH PUBLICATION REQUESTED WILL BE MAILED TO YOU. IF YOU WISH TO RECEIVE ADDITIONAL COPIES OR SUBSEQUENT PUBLICATIONS, PLEASE CONTACT OUR OFFICE AT (907) 269-4900.

Name: _____

Mailing Address: _____

_____

_____

_____

Email Address: _____

EMPLOYMENT PREFERENCE INFORMATION

By authority of A.S. 36.10.150 and 8 AAC 30.064, the Commissioner of Labor and Workforce Development has determined the State of Alaska to be a Zone of Underemployment. A Zone of Underemployment requires that Alaska residents who are eligible under AS 36.10.140 be given a minimum of 90 percent employment preference on public works contracts throughout the state in certain job classifications. **This hiring preference applies on a project-by-project, craft-by-craft or occupational basis and must be met each workweek by each contractor/subcontractor.**

The following classifications qualify for a minimum of 90 percent Alaska resident hire preference:

Boilermakers	Foremen & Supervisors	Plumbers and Pipefiters
Bricklayers	Insulation Workers	Roofers
Carpenters	Ironworkers	Sheet Metal Workers
Cement Masons	Laborers	Surveyors
Culinary Workers	Mechanics	Truck Drivers
Electricians	Millwrights	Tug Boat Workers
Engineers and Architects	Painters	Welders
Equipment Operators	Piledriving Occupations	

This determination became effective July 1, 2011, and remains in effect until June 30, 2013.

The first person on a certified payroll in any classification is called the "first worker" and is not required to be an Alaskan resident. However, once the contractor adds any more workers in the classification, then all workers in the classification are counted, and the 90 percent is applied to compute the number of required Alaskans to be in compliance. To compute the number of Alaskan residents required in a workweek in a particular classification, multiply the number of workers in the classification by 90 percent. The result is then rounded down to the nearest whole number to determine the number of Alaskans that must be employed.

If a worker works in more than one classification during a week, the classification in which they spent the most time would be counted for employment preference purposes. If the time is split evenly between two classifications, the worker is counted in both classifications.

If you have difficulty meeting the 90 percent requirement, an approved waiver must be obtained before a non-Alaskan resident is hired who would put the contractor/subcontractor out of compliance (8 AAC 30.081 (e) (f)). The waiver process requires proof of an intensive search for qualified Alaskan workers. To apply for a waiver, contact the nearest Wage and Hour Office for instructions.

Here is an example to apply the 90 percent requirement to four boilermaker workers. Multiply four workers by 90% and drop the fraction (.90 X 4 = 3.6 - .6 = 3). The remaining number is the number of Alaskan resident boilermakers required to be in compliance in that particular classification for that week.

The penalties for being out of compliance are serious. AS 36.10.100 (a) states "A contractor who violates a provision of this chapter shall have deducted from amounts due to the contractor under the contract the prevailing wages which should have been paid to a displaced resident, and these amounts shall be retained by the contracting agency." If a contractor/subcontractor is found to be out of compliance, penalties accumulate until they come into compliance.

If you have difficulty determining whether a worker is an Alaska resident, you should contact the nearest Wage and Hour Office. Contact Wage and Hour in Anchorage at (907) 269-4900, in Fairbanks at (907) 451-2886, or in Juneau at (907) 465-4842.

Alaska Department of Labor and Workforce Development
Labor Standards & Safety Division
Wage and Hour Administration
Web site: http://labor.state.ak.us/lss/home.htm

Anchorage	Juneau	Fairbanks
3301 Eagle St., Suite 301 Anchorage, Alaska 99503-4149 Phone: (907) 269-4900 Email: anchorage.lss-wh@alaska.gov	1111 W. 8th Street, Suite 302 Juneau, Alaska 99801 Phone: (907) 465-4842 Email: juneau.lss-wh@alaska.gov	Regional State Office Building 675 7th Ave., Station J-1 Fairbanks, Alaska 99701-4593 Phone: (907) 451-2886 Email: fairbanks.lss@alaska.gov

DEBARMENT LIST

AS 36.05.090(b) states that "the state disbursing officer or the local fiscal officer shall distribute to all departments of the state government and to all political subdivisions of the state a list giving the names of persons who have disregarded their obligations to employees."

A person appearing on the following debarment list and a firm, corporation, partnership, or association in which the person has an interest may not work as a contractor or subcontractor on a public construction contract for the state or a political subdivision of the state for three years from the date of debarment.

Company Name	Date of Debarment	Debarment Expires

No companies are currently debarred.

Laborers' & Mechanics' Minimum Rates of Pay

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
Boilermakers								
						VAC	**SAF**	
A0101	Boilermaker (journeyman)	42.70	8.57	12.20	0.75	3.00	0.34	67.56
Bricklayers & Blocklayers								
	**See note on last page if remote site							
						L&M		
A0201	Blocklayer	37.39	8.55	8.50	0.55	0.15	0.23	55.37
	Bricklayer							
	Marble or Stone Mason							
	Refractory Worker (Firebrick, Plastic, Castable, and Gunite Refractory Applications)							
	Terrazzo Worker							
	Tile Setter							
						L&M		
A0202	Tuck Pointer Caulker	37.39	8.55	8.50	0.55	0.15	0.23	55.37
	Cleaner (PCC)							
						L&M		
A0203	Marble & Tile Finisher	31.78	8.55	8.50	0.55	0.15	0.23	49.76
	Terrazzo Finisher							
						L&M		
A0204	Torginal Applicator	35.55	8.55	8.50	0.55	0.15	0.23	53.53
Carpenters, Statewide								
	**See note on last page if remote site							
						L&M	**SAF**	
A0301	Carpenter (journeyman)	35.49	8.80	10.78	0.80	0.10	0.15	56.12
	Lather/Drywall/Acoustical							
Cement Masons, Region I (North of N63 latitude)								
	**See note on last page if remote site							
						L&M		
N0401	Group I, including:	34.69	5.41	10.75	0.85	0.10		51.80
	Application of Sealing Compound							
	Application of Underlayment							
	Building, General							
	Cement Mason (journeyman)							
	Concrete							
	Concrete Paving							
	Curb & Gutter, Sidewalk							
	Curing of All Concrete							
	Grouting & Caulking of Tilt-Up Panels							
	Grouting of All Plates							

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; ONT=overnight; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits	THR
Cement Masons, Region I (North of N63 latitude)							
	**See note on last page if remote site						
						L&M	
N0401	Group I, including:	34.69	5.41	10.75	0.85	0.10	51.80
	Patching Concrete						
	Screed Pin Setter						
	Spackling/Skim Coating						
						L&M	
N0402	Group II, including:	34.69	5.41	10.75	0.85	0.10	51.80
	Form Setter						
						L&M	
N0403	Group III, including:	34.69	5.41	10.75	0.85	0.10	51.80
	Concrete Saw (self-powered)						
	Curb & Gutter Machine						
	Floor Grinder						
	Pneumatic Power Tools						
	Power Chipping & Bushing						
	Sand Blasting Architectural Finish						
	Screed & Rodding Machine Operator						
	Troweling Machine Operator						
						L&M	
N0404	Group IV, including:	34.69	5.41	10.75	0.85	0.10	51.80
	Application of All Composition Mastic						
	Application of All Epoxy Material						
	Application of All Plastic Material						
	Finish Colored Concrete						
	Gunite Nozzleman						
	Hand Powered Grinder						
	Tunnel Worker						
						L&M	
N0405	Group V, including:	34.94	5.41	10.75	0.85	0.10	52.05
	Plasterer						
Cement Masons, Region II (South of N63 latitude)							
	**See note on last page if remote site						
						L&M	
S0401	Group I, including:	34.44	5.41	10.75	0.85	0.10	51.55
	Application of Sealing Compound						
	Application of Underlayment						
	Building, General						
	Cement Mason (journeyman)						
	Concrete						
	Concrete Paving						
	Curb & Gutter, Sidewalk						
	Curing of All Concrete						
	Grouting & Caulking of Tilt-Up Panels						

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; ONT=overnight; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits	THR
Cement Masons, Region II (South of N63 latitude)							
	**See note on last page if remote site						
						L&M	
S0401	Group I, including:	34.44	5.41	10.75	0.85	0.10	51.55
	Grouting of All Plates						
	Patching Concrete						
	Screed Pin Setter						
	Spackling/Skim Coating						
						L&M	
S0402	Group II, including:	34.44	5.41	10.75	0.85	0.10	51.55
	Form Setter						
						L&M	
S0403	Group III, including:	34.44	5.41	10.75	0.85	0.10	51.55
	Concrete Saw (self-powered)						
	Curb & Gutter Machine						
	Floor Grinder						
	Pneumatic Power Tools						
	Power Chipping & Bushing						
	Sand Blasting Architectural Finish						
	Screed & Rodding Machine Operator						
	Troweling Machine Operator						
						L&M	
S0404	Group IV, including:	34.44	5.41	10.75	0.85	0.10	51.55
	Application of All Composition Mastic						
	Application of All Epoxy Material						
	Application of All Plastic Material						
	Finish Colored Concrete						
	Gunite Nozzleman						
	Hand Powered Grinder						
	Tunnel Worker						
						L&M	
S0405	Group V, including:	34.69	5.41	10.75	0.85	0.10	51.80
	Plasterer						
Culinary Workers * See note on last page							
						LEG	
A0501	Baker/Cook	24.17	4.20	5.06		0.05	33.48
						LEG	
A0503	General Helper	21.12	4.20	5.06		0.05	30.43
	Housekeeper						
	Janitor						
	Kitchen Helper						
						LEG	
A0504	Head Cook	24.72	4.20	5.06		0.05	34.03

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; ONT=overnight; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits	THR
Culinary Workers * See note on last page							
						LEG	
A0505	Head Housekeeper	21.54	3.78	4.76		0.05	30.13
	Head Kitchen Help						
Dredgemen							
	**See note on last page if remote site						
						L&M	
A0601	Assistant Engineer, including:	36.06	8.70	8.25	1.00	0.10	54.11
	Craneman						
	Electrical Generator Operator (primary pump/power barge/dredge)						
	Engineer						
	Welder						
						L&M	
A0602	Assistant Mate (deckhand)	34.90	8.70	8.25	1.00	0.10	52.95
						L&M	
A0603	Fireman	35.34	8.70	8.25	1.00	0.10	53.39
						L&M	
A0605	Leverman Clamshell	38.59	8.70	8.25	1.00	0.10	56.64
						L&M	
A0606	Leverman Hydraulic	36.83	8.70	8.25	1.00	0.10	54.88
						L&M	
A0607	Mate & Boatman	36.06	8.70	8.25	1.00	0.10	54.11
						L&M	
A0608	Oiler (dredge)	35.34	8.70	8.25	1.00	0.10	53.39
Electricians							
						L&M	**LEG**
A0701	Inside Cable Splicer	39.77	9.15	12.59	0.65	0.20	0.15	62.51
						L&M	**LEG**
A0702	Inside Journeyman Wireman, including:	38.02	9.15	12.54	0.65	0.20	0.15	60.71
	Communications and Technicians						
						L&M	**LEG**
A0703	Power Cable Splicer	48.90	9.15	14.62	0.65	0.20	0.15	73.67
						L&M	**LEG**
A0704	Tele Com Cable Splicer	47.43	9.15	14.57	0.65	0.20	0.15	72.15
						L&M	**LEG**
A0705	Power Journeyman Lineman, including:	47.15	9.15	14.56	0.65	0.20	0.15	71.86
	Power Equipment Operator						
	Technician						
						L&M	**LEG**
A0706	Tele Com Journeyman Lineman, including:	45.68	9.15	14.52	0.65	0.20	0.15	70.35
	Technician						
	Tele Com Equipment Operator						

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
Electricians								
						L&M	**LEG**	
A0707	Straight Line Installer - Repairman	45.68	9.15	14.52	0.65	0.20	0.15	70.35
						L&M	**LEG**	
A0708	Powderman	45.15	9.15	14.50	0.65	0.20	0.15	69.80
						L&M	**LEG**	
A0710	Material Handler	25.62	8.67	4.52	0.15	0.15	0.15	39.26
						L&M	**LEG**	
A0712	Tree Trimmer Groundman	24.73	9.15	9.39	0.15	0.15	0.15	43.72
						L&M	**LEG**	
A0713	Journeyman Tree Trimmer	32.70	9.15	9.63	0.15	0.15	0.15	51.93
						L&M	**LEG**	
A0714	Vegetation Control Sprayer	35.85	9.15	9.73	0.15	0.15	0.15	55.18
Elevator Workers								
						L&M	**VAC**	
A0802	Elevator Constructor	33.52	10.53	10.71	0.55	0.20	2.68	58.19
						L&M	**VAC**	
A0803	Elevator Constructor Mechanic	47.89	10.53	10.71	0.55	0.20	3.83	73.71
Heat & Frost Insulators/Asbestos Workers								
	**See note on last page if remote site							
						SAF		
A0902	Asbestos Abatement-Mechanical Systems	35.98	7.84	6.96	0.60	0.12		51.50
						SAF		
A0903	Asbestos Abatement/General Demolition All Systems	35.98	7.84	6.96	0.60	0.12		51.50
						SAF		
A0904	Insulator, Group II	35.98	7.84	6.96	0.60	0.12		51.50
						SAF		
A0905	Fire Stop	35.98	7.84	6.96	0.60	0.12		51.50
IronWorkers								
	**See note on last page if remote site							
						L&M	**IAF**	
A1101	Ironworkers, including:	33.40	7.21	15.00	0.95	0.43	0.10	57.09
	Bender Operators							
	Bridge & Structural							
	Machinery Mover							
	Ornamental							
	Reinforcing							
	Rigger							
	Sheeter							
	Signalman							
	Stage Rigger							
	Toxic Haz-Mat Work							

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Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
IronWorkers								
	**See note on last page if remote site							
						L&M	**IAF**	
A1101	Ironworkers, including:	33.40	7.21	15.00	0.95	0.43	0.10	57.09
	Welder							
						L&M	**IAF**	
A1102	Helicopter	34.40	7.21	15.00	0.95	0.43	0.10	58.09
	Tower (energy producing windmill type towers to include nacelle and blades)							
						L&M	**IAF**	
A1103	Fence/Barrier Installer	29.90	7.21	14.75	0.95	0.43	0.10	53.34
	Guard Rail Installer							
						L&M	**IAF**	
A1104	Guard Rail Layout Man	30.64	7.21	14.75	0.95	0.43	0.10	54.08
Laborers (The Alaska areas north of N63 latitude and east of W138 longitude)								
	**See note on last page if remote site							
						L&M	**LEG**	
N1201	Group I, including:	29.00	6.42	12.25	1.20	0.20	0.15	49.22
	Asphalt Worker (shovelman, plant crew)							
	Brush Cutter							
	Camp Maintenance Laborer							
	Carpenter Tender or Helper							
	Choke Setter, Hook Tender, Rigger, Signalman							
	Concrete Labor (curb & gutter, chute handler, grouting, curing, screeding)							
	Crusher Plant Laborer							
	Demolition Laborer							
	Ditch Digger							
	Dumpman							
	Environmental Laborer (asbestos, hazard/toxic waste, oil spill)							
	Fence Installer							
	Fire Watch Laborer							
	Flagman							
	Form Stripper							
	General Laborer							
	Guardrail Laborer, Bridge Rail Installer							
	Hydro-seeder Nozzleman							
	Laborer, Building							
	Landscaper or Planter							
	Laying of Mortarless Decorative Block (retaining walls, flowered decorative block 4 feet or less - highway or landscape work)							
	Material Handler							
	Pneumatic or Power Tools							
	Portable or Chemical Toilet Serviceman							
	Pump Man or Mixer Man							
	Railroad Track Laborer							

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; ONT=overnight; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
Laborers (The Alaska areas north of N63 latitude and east of W138 longitude)								
	**See note on last page if remote site							
						L&M	LEG	
N1201	Group I, including:	29.00	6.42	12.25	1.20	0.20	0.15	49.22
	Sandblast, Pot Tender							
	Saw Tender							
	Scaffold Building & Erecting							
	Slurry Work							
	Stake Hopper							
	Steam Cleaner Operator							
	Steam Point or Water Jet Operator							
	Tank Cleaning							
	Utiliwalk & Utilidor Laborer							
	Watchman (construction projects)							
	Window Cleaner							
						L&M	LEG	
N1202	Group II, including:	30.00	6.42	12.25	1.20	0.20	0.15	50.22
	Burning & Cutting Torch							
	Cement or Lime Dumper or Handler (sack or bulk)							
	Choker Splicer							
	Chucktender (wagon, air-track & hydraulic drills)							
	Concrete Laborer (power buggy, concrete saws, pumpcrete nozzleman, vibratorman)							
	Culvert Pipe Laborer							
	Cured Inplace Pipelayer							
	Environmental Laborer (marine work)							
	Foam Gun or Foam Machine Operator							
	Green Cutter (dam work)							
	Gunite Operator							
	Hod Carrier							
	Jackhammer or Pavement Breaker (more than 45 pounds)							
	Laser Instrument Operator							
	Laying of Mortarless Decorative Block (retaining walls, flowered decorative block over 4 feet - highway or landscape work)							
	Mason Tender & Mud Mixer (sewer work)							
	Pilot Car							
	Pipelayer Helper							
	Plasterer, Bricklayer & Cement Finisher Tender							
	Powderman Helper							
	Power Saw Operator							
	Railroad Switch Layout Laborer							
	Sandblaster							
	Sewer Caulker							
	Sewer Plant Maintenance Man							
	Thermal Plastic Applicator							
	Timber Faller, Chainsaw Operator, Filer							

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
Laborers (The Alaska areas north of N63 latitude and east of W138 longitude)								
	**See note on last page if remote site							
						L&M	LEG	
N1202	Group II, including:	30.00	6.42	12.25	1.20	0.20	0.15	50.22
	Timberman							
						L&M	LEG	
N1203	Group III, including:	30.90	6.42	12.25	1.20	0.20	0.15	51.12
	Bit Grinder							
	Camera/Tool/Video Operator							
	Guardrail Machine Operator							
	High Rigger & Tree Topper							
	High Scaler							
	Multiplate							
	Plastic Welding							
	Slurry Seal Squeegee Man							
	Traffic Control Supervisor							
	Welding Certified (in connection with laborer's work)							
						L&M	LEG	
N1204	Group IIIA	34.18	6.42	12.25	1.20	0.20	0.15	54.40
	Asphalt Raker, Asphalt Belly Dump Lay Down							
	Drill Doctor (in the field)							
	Driller (including, but not limited to, wagon drills, air-track drills, hydraulic drills)							
	Licensed Powderman							
	Pioneer Drilling & Drilling Off Tugger (all type drills)							
	Pipelayers							
						L&M	LEG	
N1205	Group IV	18.57	6.42	12.25	1.20	0.20	0.15	38.79
	Final Building Cleanup							
	Permanent Yard Worker							
						L&M	LEG	
N1206	Group IIIB	35.01	6.42	12.25	1.20	0.20	0.15	55.23
	Federally Licensed Powderman (Responsible Person in Charge)							
	Grade Checking (setting or transferring of grade marks, line and grade)							
Laborers (The area that is south of N63 latitude and west of W138 longitude)								
	**See note on last page if remote site							
						L&M	LEG	
S1201	Group I, including:	29.00	6.42	12.25	1.20	0.20	0.15	49.22
	Asphalt Worker (shovelman, plant crew)							
	Brush Cutter							
	Camp Maintenance Laborer							
	Carpenter Tender or Helper							
	Choke Setter, Hook Tender, Rigger, Signalman							
	Concrete Labor (curb & gutter, chute handler, grouting, curing, screeding)							
	Crusher Plant Laborer							

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Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
						L&M	LEG	
Laborers (The area that is south of N63 latitude and west of W138 longitude)								
	**See note on last page if remote site							
S1201	Group I, including:	29.00	6.42	12.25	1.20	0.20	0.15	49.22
	Demolition Laborer							
	Ditch Digger							
	Dumpman							
	Environmental Laborer (asbestos, hazard/toxic waste, oil spill)							
	Fence Installer							
	Fire Watch Laborer							
	Flagman							
	Form Stripper							
	General Laborer							
	Guardrail Laborer, Bridge Rail Installer							
	Hydro-seeder Nozzleman							
	Laborer, Building							
	Landscaper or Planter							
	Laying of Mortarless Decorative Block (retaining walls, flowered decorative block 4 feet or less - highway or landscape work)							
	Material Handler							
	Pneumatic or Power Tools							
	Portable or Chemical Toilet Serviceman							
	Pump Man or Mixer Man							
	Railroad Track Laborer							
	Sandblast, Pot Tender							
	Saw Tender							
	Scaffold Building & Erecting							
	Slurry Work							
	Stake Hopper							
	Steam Cleaner Operator							
	Steam Point or Water Jet Operator							
	Tank Cleaning							
	Utiliwalk & Utilidor Laborer							
	Watchman (construction projects)							
	Window Cleaner							
						L&M	LEG	
S1202	Group II, including:	30.00	6.42	12.25	1.20	0.20	0.15	50.22
	Burning & Cutting Torch							
	Cement or Lime Dumper or Handler (sack or bulk)							
	Choker Splicer							
	Chucktender (wagon, air-track & hydraulic drills)							
	Concrete Laborer (power buggy, concrete saws, pumpcrete nozzleman, vibratorman)							
	Culvert Pipe Laborer							
	Cured Inplace Pipelayer							
	Environmental Laborer (marine work)							

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
Laborers (The area that is south of N63 latitude and west of W138 longitude)								
	**See note on last page if remote site							
						L&M	LEG	
S1202	Group II, including:	30.00	6.42	12.25	1.20	0.20	0.15	50.22
	Foam Gun or Foam Machine Operator							
	Green Cutter (dam work)							
	Gunite Operator							
	Hod Carrier							
	Jackhammer or Pavement Breaker (more than 45 pounds)							
	Laser Instrument Operator							
	Laying of Mortarless Decorative Block (retaining walls, flowered decorative block over 4 feet - highway or landscape work)							
	Mason Tender & Mud Mixer (sewer work)							
	Pilot Car							
	Pipelayer Helper							
	Plasterer, Bricklayer & Cement Finisher Tender							
	Powderman Helper							
	Power Saw Operator							
	Railroad Switch Layout Laborer							
	Sandblaster							
	Sewer Caulker							
	Sewer Plant Maintenance Man							
	Thermal Plastic Applicator							
	Timber Faller, Chainsaw Operator, Filer							
	Timberman							
						L&M	LEG	
S1203	Group III, including:	30.90	6.42	12.25	1.20	0.20	0.15	51.12
	Bit Grinder							
	Camera/Tool/Video Operator							
	Guardrail Machine Operator							
	High Rigger & Tree Topper							
	High Scaler							
	Multiplate							
	Plastic Welding							
	Slurry Seal Squeegee Man							
	Traffic Control Supervisor							
	Welding Certified (in connection with laborer's work)							
						L&M	LEG	
S1204	Group IIIA	34.18	6.42	12.25	1.20	0.20	0.15	54.40
	Asphalt Raker, Asphalt Belly Dump Lay Down							
	Drill Doctor (in the field)							
	Driller (including, but not limited to, wagon drills, air-track drills, hydraulic drills)							
	Licensed Powderman							
	Pioneer Drilling & Drilling Off Tugger (all type drills)							
	Pipelayers							

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Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
Laborers (The area that is south of N63 latitude and west of W138 longitude)								
	**See note on last page if remote site							
						L&M	**LEG**	
S1205	Group IV	18.57	6.42	12.25	1.20	0.20	0.15	38.79
	Final Building Cleanup							
	Permanent Yard Worker							
						L&M	**LEG**	
S1206	Group IIIB	35.01	6.42	12.25	1.20	0.20	0.15	55.23
	Federally Licensed Powderman (Responsible Person in Charge)							
	Grade Checking (setting or transferring of grade marks, line and grade)							
Millwrights								
						L&M		
A1251	Millwright (journeyman)	33.89	8.80	8.43	1.00	0.25	0.15	52.52
						L&M		
A1252	Millwright Welder	34.48	8.80	8.43	1.00	0.25	0.15	53.11
Painters, Region I (North of N63 latitude)								
	**See note on last page if remote site							
						L&M		
N1301	Group I, including:	29.17	6.57	11.10	0.80	0.60		48.24
	Brush							
	General Painter							
	Hand Taping							
	Hazardous Material Handler							
	Lead-Based Paint Abatement							
	Roll							
						L&M		
N1302	Group II, including:	29.67	6.57	11.10	0.80	0.60		48.74
	Bridge Painter							
	Epoxy Applicator							
	General Drywall Finisher							
	Hand/Spray Texturing							
	Industrial Coatings Specialist							
	Machine/Automatic Taping							
	Pot Tender							
	Sandblastimg							
	Specialty Painter							
	Spray							
	Structural Steel Painter							
	Wallpaper/Vinyl Hanger							
N1304	Group IV, including:	34.09	6.57	9.91	0.80	0.30		51.67
	Glazier							
	Storefront/Automatic Door Mechanic							

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Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits	THR
Painters, Region I (North of N63 latitude)							
	**See note on last page if remote site						
N1305	Group V, including:	30.52	6.57	5.02	0.80	0.35	43.26
	Carpet Installer						
	Floor Coverer						
	Heat Weld/Cove Base						
	Linoleum/Soft Tile Installer						
Painters, Region II (South of N63 latitude)							
	**See note on last page if remote site						
						L&M	
S1301	Group I, including :	26.98	6.57	10.85	0.80	1.10	46.30
	Brush						
	General Painter						
	Hand Taping						
	Hazardous Material Handler						
	Lead-Based Paint Abatement						
	Roll						
	Spray						
						L&M	
S1302	Group II, including :	28.18	6.57	10.85	0.80	1.10	47.50
	General Drywall Finisher						
	Hand/Spray Texturing						
	Machine/Automatic Taping						
	Wallpaper/Vinyl Hanger						
						L&M	
S1303	Group III, including :	28.28	6.57	10.85	0.80	1.10	47.60
	Bridge Painter						
	Epoxy Applicator						
	Industrial Coatings Specialist						
	Pot Tender						
	Sandblasting						
	Specialty Painter						
	Structural Steel Painter						
						L&M	
S1304	Group IV, including:	34.09	6.57	9.86	0.80	0.35	51.67
	Glazier						
	Storefront/Automatic Door Mechanic						
						L&M	
S1305	Group V, including:	30.52	6.57	5.02	0.80	0.35	43.26
	Carpet Installer						
	Floor Coverer						
	Heat Weld/Cove Base						
	Linoleum/Soft Tile Installer						

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; ONT=overnight; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
Piledrivers								
	**See note on last page if remote site							
						L&M	IAF	
A1401	Piledriver	35.49	8.80	10.78	0.80	0.10	0.15	56.12
	Assistant Dive Tender							
	Carpenter/Piledriver							
	Rigger							
	Sheet Stabber							
	Skiff Operator							
						L&M	IAF	
A1402	Piledriver-Welder/Toxic Worker	36.49	8.80	10.78	0.80	0.10	0.15	57.12
						L&M	IAF	
A1403	Remotely Operated Vehicle Pilot/Technician	39.80	8.80	10.78	0.80	0.10	0.15	60.43
	Single Atmosphere Suit, Bell or Submersible Pilot							
						L&M	IAF	
A1404	Diver (working) ***See note on last page	79.60	8.80	10.78	0.80	0.10	0.15	100.23
						L&M	IAF	
A1405	Diver (standby) ***See note on last page	39.80	8.80	10.78	0.80	0.10	0.15	60.43
						L&M	IAF	
A1406	Dive Tender ***See note on last page	38.80	8.80	10.78	0.80	0.10	0.15	59.43
						L&M	IAF	
A1407	Welder (American Welding Society, Certified Welding Inspector)	41.05	8.80	10.78	0.80	0.10	0.15	61.68
Plumbers, Region I (North of N63 latitude)								
						L&M	S&L	
N1501	Journeyman Pipefitter	39.71	6.85	10.75	0.85	1.10		59.26
	Plumber							
	Welder							
Plumbers, Region II (South of N63 latitude)								
						L&M		
S1501	Journeyman Pipefitter	36.81	8.32	9.07	1.50	0.20		55.90
	Plumber							
	Welder							
Plumbers, Region IIA (1st Judicial District)								
						L&M		
X1501	Journeyman Pipefitter	36.02	9.97	11.00	2.10	0.24		59.33
	Plumber							
	Welder							
Power Equipment Operators								
	**See note on last page if remote site							

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Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits	THR
Power Equipment Operators							
	**See note on last page if remote site						
						L&M	
A1601	Group I, including:	36.83	8.70	8.25	1.00	0.10	54.88
	Asphalt Roller						
	Back Filler						
	Barrier Machine (Zipper)						
	Batch Plant Operator, (batch & mixer over 200 yards per hour)						
	Beltcrete with Power Pack & similar conveyors						
	Bending Machine						
	Boat Coxswain						
	Bulldozer						
	Cableways, Highlines & Cablecars						
	Cleaning Machine						
	Coating Machine						
	Concrete Hydro Blaster						
	Cranes (45 tons & under or 150 feet of boom & under (including jib & attachments))						
	(a) Backhoes, Excavators (with all attachments), Clamshells, Draglines, Gradalls (3 yards & under), Shovels						
	(b) Hydralifts or Transporters, (all track or truck type)						
	(c) Derricks						
	Crushers						
	Deck Winches, Double Drum						
	Ditching or Trenching Machine (16 inch or over)						
	Drilling Machines, Core, Cable, Rotary and Exploration						
	Finishing Machine Operator, Concrete Paving, Laser Screed, Sidewalk, Curb & Gutter Machine						
	Helicopters						
	Hover Craft, Flex Craft, Loadmaster, Air Cushion, All-Terrain Vehicle, Rollagon, Bargecable, Nodwell, Sno Cat						
	Hydro Ax, Feller Buncher & similar						
	Licensed Line & Grade						
	Loaders:						
	(a) Forklifts (with power boom & swing attachment)						
	(b) Front End & Overhead, (2-1/2 yards through 5 yards)						
	(c) Loaders, (with forks or pipe clamp)						
	(d) Loaders, (elevating belt type, Euclid & similar types)						
	Mechanic, Welder, Bodyman, Electrical, Camp & Maintenance Engineer						
	Micro Tunneling Machine						
	Mixers: Mobile type with hoist combination						
	Motor Patrol Grader						
	Mucking Machine: Mole, Tunnel Drill, Horizontal/Directional Drill Operator and/or Shield						
	Operator on Dredges						
	Piledriver Engineer, L.B. Foster Puller or similar paving breaker						

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits	THR
Power Equipment Operators							
	**See note on last page if remote site						
						L&M	
A1601	Group I, including:	36.83	8.70	8.25	1.00	0.10	54.88
	Power Plant Turbine Operator 200 k.w & over (power plants or combination of power units over 300 k.w.)						
	Remote Controlled Equipment						
	Sauerman-Bagley						
	Scraper (through 40 yards)						
	Service Oiler/Service Engineer						
	Shot Blast Machine						
	Sideboom (under 45 tons)						
	Spreaders, Blaw Knox, Cedarapids, Barber Greene, Slurry Machine						
	Sub Grader (Gurries, C.M.I. & C.M.I. Roto Mills & similar types)						
	Tack Tractor						
	Truck Mounted Concrete Pump, Conveyor & Creter						
	Unlicensed Off-Road Hauler						
	Wate Kote Machine						
						L&M	
A1602	Group IA, including:	38.59	8.70	8.25	1.00	0.10	56.64
	Camera/Tool/Video Operator (Slipline)						
	Certified Welder, Electrical Mechanic, Camp Maintenance Engineer, Mechanic over 10,000 hours						
	Cranes (over 45 tons or 150 feet including jib & attachments)						
	(a) Shovels, Backhoes, Excavators (with all attachments), Draglines, Clamshells (over 3 yards)						
	(b) Tower Cranes						
	Licensed Water/Waste Water Treatment Operator						
	Loaders (over 5 yards)						
	Motor Patrol Grader, Dozer, Grade Tractor (finish: when finishing to final grade and/or to hubs, or for asphalt)						
	Power Plants (1000 k.w. & over)						
	Quad						
	Scrapers (over 40 yards)						
	Screed						
	Sidebooms (over 45 tons)						
	Slip Form Paver, C.M.I. & similar types						
						L&M	
A1603	Group II, including:	36.06	8.70	8.25	1.00	0.10	54.11
	Batch Plant Operator (batch & mixer 200 yards per hour & under)						
	Boiler - Fireman						
	Cement Hogs & Concrete Pump Operator						
	Conveyors (except those listed in Group I)						
	Hoists on Steel Erection, Towermobiles & Air Tuggers						
	Horizontal/Directional Drill Locator						
	Licensed Grade Technician						
	Loaders, Elevating Grader, Dumor & similar						

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits	THR
Power Equipment Operators							
	**See note on last page if remote site						
						L&M	
A1603	Group II, including:	36.06	8.70	8.25	1.00	0.10	54.11
	Locomotives, Rod & Geared Engines						
	Mixers						
	Screening, Washing Plant						
	Sideboom (cradling rock drill, regardless of size)						
	Skidder						
	Trenching Machines (under 16 inches)						
	Water/Waste Water Treatment Operator						
						L&M	
A1604	Group III, including:	35.34	8.70	8.25	1.00	0.10	53.39
	"A" Frame Trucks, Deck Winches						
	Bombardier (tack or tow rig)						
	Boring Machine						
	Brooms, Power						
	Bump Cutter						
	Compressor						
	Farm Tractor						
	Forklift, Industrial Type						
	Gin Truck or Winch Truck (with poles when used for hoisting)						
	Grade Checker & Stake Hopper						
	Hoists, Air Tuggers, Elevators						
	Loaders:						
	(a) Elevating-Athey, Barber Greene & similar types						
	(b) Forklifts or Lumber Carrier (on construction job sites)						
	(c) Forklifts, (with tower)						
	(d) Overhead & Front End, (under 2-l/2 yards)						
	Locomotives: Dinkey (air, steam, gas & electric) Speeders						
	Mechanics, Light Duty						
	Mixers, (concrete mixers & batch 200 yards per hour & under)						
	Oil, Blower Distribution						
	Posthole Digger, Mechanical						
	Pot Fireman (power agitated)						
	Power Plant, Turbine Operator, (under 300 k.w.)						
	Pumps, Water						
	Roller, (other than Plantmix)						
	Saws, Concrete						
	Skid Steer (with all attachments)						
	Straightening Machine						
	Tow Tractor						
						L&M	
A1605	Group IV, including:	29.13	8.70	8.25	1.00	0.10	47.18
	Drill Helper						
	Parts & Equipment Coordinator						

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; ONT=overnight; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
Power Equipment Operators								
	**See note on last page if remote site							
						L&M		
A1605	Group IV, including:	29.13	8.70	8.25	1.00	0.10		47.18
	Rig Oiler/Assistant Engineer (over 85 tons or 100 foot boom)							
	Spotter							
	Steam Cleaner							
	Swamper (on trenching machines or shovel type equipment)							
Roofers								
	**See note on last page if remote site							
						L&M		
A1701	Roofer & Waterproofer	36.95	6.43	4.41	0.81	0.10	0.02	48.72
						L&M		
A1702	Roofer Material Handler	25.87	6.43	4.41	0.81	0.10	0.02	37.64
Sheet Metal Workers, Region I (North of N63 latitude)								
						L&M		
N1801	Sheet Metal Journeyman	42.98	7.50	10.34	1.32	0.25		62.39
	Air Balancing and duct cleaning of HVAC systems							
	Brazing, soldering or welding of metals							
	Demolition of sheet metal HVAC systems							
	Fabrication and installation of exterior wall sheathing, siding, metal roofing, flashing, decking and architectural sheet metal work							
	Fabrication and installation of heating, ventilation and air conditioning ducts and equipment							
	Fabrication and installation of louvers and hoods							
	Fabrication and installation of sheet metal lagging							
	Fabrication and installation of stainless steel commercial or industrial food service equipment							
	Manufacture, fabrication assembly, installation and alteration of all ferrous and nonferrous metal work							
	Metal lavatory partitions							
	Preparation of drawings taken from architectural and engineering plans required for fabrication and erection of sheet metal work							
	Sheet Metal shelving							
	Sheet Metal venting, chimneys and breaching							
	Skylight installation							
Sheet Metal Workers, Region II (South of N63 latitude)								
						L&M		
S1801	Sheet Metal Journeyman	38.84	7.50	10.85	1.10	0.32		58.61
	Air Balancing and duct cleaning of HVAC systems							
	Brazing, soldering or welding of metals							
	Demolition of sheet metal HVAC systems							

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; ONT=overnight; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits	THR
Sheet Metal Workers, Region II (South of N63 latitude)							
						L&M	
S1801	Sheet Metal Journeyman	38.84	7.50	10.85	1.10	0.32	58.61
	Fabrication and installation of exterior wall sheathing, siding, metal roofing, flashing, decking and architectural sheet metal work Fabrication and installation of heating, ventilation and air conditioning ducts and equipment Fabrication and installation of louvers and hoods Fabrication and installation of sheet metal lagging Fabrication and installation of stainless steel commercial or industrial food service equipment Manufacture, fabrication assembly, installation and alteration of all ferrous and nonferrous metal work Metal lavatory partitions Preparation of drawings taken from architectural and engineering plans required for fabrication and erection of sheet metal work Sheet Metal shelving Sheet Metal venting, chimneys and breaching Skylight installation						
Sprinkler Fitters							
						L&M	
A1901	Sprinkler Fitter	41.55	8.10	11.25	0.45	0.25	61.60
Surveyors	**See note on last page if remote site						
						L&M	
A2001	Chief of Parties	40.99	7.03	8.30	1.10	0.10	57.52
						L&M	
A2002	Party Chief	39.40	7.03	8.30	1.10	0.10	55.93
						L&M	
A2003	Line & Grade Technician/Office Technician	38.80	7.03	8.30	1.10	0.10	55.33
						L&M	
A2004	Associate Party Chief (including Instrument Person & Head Chain Person)	36.68	7.03	8.30	1.10	0.10	53.21
						L&M	
A2005	Stake Hop/Grademan	33.75	7.03	8.30	1.10	0.10	50.28
						L&M	
A2006	Chain Person (for crews with more than 2 people)	32.34	7.03	8.30	1.10	0.10	48.87
Truck Drivers	**See note on last page if remote site						
						L&M	
A2101	Group I, including:	37.77	7.03	8.30	1.10	0.10	54.30
	Air/Sea Traffic Controllers Ambulance/Fire Truck Driver (EMT certified)						

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; ONT=overnight; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits	THR
Truck Drivers							
	**See note on last page if remote site						
						L&M	
A2101	Group I, including:	37.77	7.03	8.30	1.10	0.10	54.30
	Boat Coxswain						
	Captains & Pilots (air & water)						
	Deltas, Commanders, Rollagons, & similar equipment (when pulling sleds, trailers or similar equipment)						
	Dump Trucks (including rockbuggy & trucks with pups) over 40 yards up to & including 60 yards						
	Helicopter Transporter						
	Lowboys, including attached trailers & jeeps, up to & including 12 axles (over 12 axles or 150 tons to be negotiated)						
	Material Coordinator and Purchasing Agent						
	Ready-mix (over 12 yards up to & including 15 yards) (over 15 yards to be negotiated)						
	Semi with Double Box Mixer						
	Tireman, Heavy Duty/Fueler						
	Water Wagon (250 Bbls and above)						
						L&M	
A2102	Group 1A including:	39.04	7.03	8.30	1.10	0.10	55.57
	Dump Trucks, including rockbuggy & trucks with pups, over 60 yards up to & including 100 yards (over 100 yards to be negotiated)						
	Jeeps (driver under load)						
						L&M	
A2103	Group II, including:	36.51	7.03	8.30	1.10	0.10	53.04
	All Deltas, Commanders, Rollagons, & similar equipment						
	Construction and Material Safety Technician						
	Dump Trucks (including rockbuggy & trucks with pups) over 20 yards up to & including 40 yards						
	Lowboys (including attached trailers & jeeps up to & including 8 axles)						
	Mechanics						
	Partsman						
	Ready-mix (over 7 yards up to & including 12 yards)						
	Stringing Truck						
	Super Vac Truck/Cacasco Truck/Heat Stress Truck						
	Turn-O-Wagon or DW-10 (not self loading)						
						L&M	
A2104	Group III, including:	35.69	7.03	8.30	1.10	0.10	52.22
	Batch Trucks (8 yards & up)						
	Dump Trucks (including rockbuggy & trucks with pups, over 10 yards up to & including 20 yards)						
	Expeditor (electrical & pipefitting materials)						
	Greaser - Shop						
	Oil Distributor Driver						
	Thermal Plastic Layout Technician						
	Traffic Control Technician						

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits	THR
Truck Drivers							
	**See note on last page if remote site						
						L&M	
A2104	Group III, including:	35.69	7.03	8.30	1.10	0.10	52.22
	Trucks/Jeeps (push or pull)						
						L&M	
A2105	Group IV, including:	35.11	7.03	8.30	1.10	0.10	51.64
	Air Cushion or similar type vehicle						
	All Terrain Vehicle						
	Boom Truck/Knuckle Truck (over 5 tons)						
	Buggymobile						
	Bull Lift & Fork Lift, Fork Lift with Power Boom & Swing Attachment (over 5 tons)						
	Bus Operator (over 30 passengers)						
	Combination Truck-Fuel & Grease						
	Compactor (when pulled by rubber tired equipment)						
	Dump Trucks (including Rockbuggy & trucks with pups up to & including 10 yards)						
	Dumpster						
	Expeditor (general)						
	Fire Truck/Ambulance Driver						
	Flat Beds, Dual Rear Axle						
	Foam Distributor Truck Dual Axle						
	Front End Loader with Fork						
	Gin Pole Truck, Winch Truck, Wrecker (truck mounted "A" frame manufactured rating over 5 tons)						
	Grease Truck						
	Hydro Seeder, Dual Axle						
	Hyster Operators (handling bulk aggregate)						
	Loadmaster (air & water operations)						
	Lumber Carrier						
	Ready-mix, (up to & including 7 yards)						
	Rigger (air/water/oilfield)						
	Semi or Truck & Trailer						
	Tireman, Light Duty						
	Track Truck Equipment						
	Vacuum Truck, Truck Vacuum Sweeper						
	Warehouseperson						
	Water Truck, Dual Axle						
	Water Wagon, Semi						
						L&M	
A2106	Group V, including:	34.35	7.03	8.30	1.10	0.10	50.88
	Batch Truck (up to & including 7 yards)						
	Boom Truck/Knuckle Truck (up to & including 5 tons)						
	Buffer Truck						
	Bull Lifts & Fork Lifts, Fork Lifts with Power Boom & Swing Attachments (up to & including 5 tons)						

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits	THR
Truck Drivers							
	**See note on last page if remote site						
						L&M	
A2106	Group V, including:	34.35	7.03	8.30	1.10	0.10	50.88
	Bus Operator (up to 30 passengers)						
	Farm Type Rubber Tired Tractor (when material handling or pulling wagons on a construction project)						
	Flat Beds, Single Rear Axle						
	Foam Distributor Truck Single Axle						
	Fuel Handler (station/bulk attendant)						
	Gear/Supply Truck						
	Gin Pole Truck, Winch Truck, Wrecker (truck mounted "A" frame manufactured rating 5 tons & under)						
	Gravel Spreader Box Operator on Truck						
	Hydro Seeders, Single axle						
	Pickups (pilot cars & all light-duty vehicles)						
	Rigger/Swamper						
	Tack Truck						
	Team Drivers (horses, mules, & similar equipment)						
	Water Truck (Below 250 Bbls)						
Tunnel Workers, Laborers (The Alaska areas north of N63 latitude and east of W138 longitude)							
	**See note on last page if remote site						
						L&M	LEG
N2201	Group I, including:	31.90	6.42	12.25	1.20	0.20	0.15	52.12
	Brakeman						
	Mucker						
	Nipper						
	Topman & Bull Gang						
	Tunnel Track Laborer						
						L&M	LEG
N2202	Group II, including:	33.00	6.42	12.25	1.20	0.20	0.15	53.22
	Burning & Cutting Torch						
	Concrete Laborer						
	Jackhammer						
	Laser Instrument Operator						
	Nozzlemen, Pumpcrete or Shotcrete						
	Pipelayer Helper						
						L&M	LEG
N2203	Group III, including:	33.99	6.42	12.25	1.20	0.20	0.15	54.21
	Miner						
	Retimberman						
						L&M	LEG
N2204	Group IIIA, including:	37.60	6.42	12.25	1.20	0.20	0.15	57.82
	Asphalt Raker, Asphalt Belly Dump Lay Down						
	Drill Doctor (in the field)						

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; ONT=overnight; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
Tunnel Workers, Laborers (The Alaska areas north of N63 latitude and east of W138 longitude)								
	**See note on last page if remote site							
						L&M	LEG	
N2204	Group IIIA, including:	37.60	6.42	12.25	1.20	0.20	0.15	57.82
	Driller (including, but not limited to wagon drills, air-track drills, hydraulic drills)							
	Licensed Powderman							
	Pioneer Drilling & Drilling Off Tugger (all type drills)							
	Pipelayer							
						L&M	LEG	
N2206	Group IIIB, including:	38.51	6.42	12.25	1.20	0.20	0.15	58.73
	Federally Licensed Powderman (Responsible Person in Charge)							
	Grade Checking (setting or transferring of grade marks, line and grade)							
Tunnel Workers, Laborers (The area that is south of N63 latitude and west of W138 longitude)								
	**See note on last page if remote site							
						L&M	LEG	
S2201	Group I, including:	31.90	6.42	12.25	1.20	0.20	0.15	52.12
	Brakeman							
	Mucker							
	Nipper							
	Topman & Bull Gang							
	Tunnel Track Laborer							
						L&M	LEG	
S2202	Group II, including:	33.00	6.42	12.25	1.20	0.20	0.15	53.22
	Burning & Cutting Torch							
	Concrete Laborer							
	Jackhammer							
	Laser Instrument Operator							
	Nozzlemen, Pumpcrete or Shotcrete							
	Pipelayer Helper							
						L&M	LEG	
S2203	Group III, including:	33.99	6.42	12.25	1.20	0.20	0.15	54.21
	Miner							
	Retimberman							
						L&M	LEG	
S2204	Group IIIA, including:	37.60	6.42	12.25	1.20	0.20	0.15	57.82
	Asphalt Raker, Asphalt Belly Dump Lay Down							
	Drill Doctor (in the field)							
	Driller (including, but not limited to wagon drills, air-track drills, hydraulic drills)							
	Licensed Powderman							
	Pioneer Drilling & Drilling Off Tugger (all type drills)							
	Pipelayer							
						L&M	LEG	
S2206	Group IIIB, including:	38.51	6.42	12.25	1.20	0.20	0.15	58.73
	Federally Licensed Powderman (Responsible Person in Charge)							

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; ONT=overnight; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
Tunnel Workers, Laborers (The area that is south of N63 latitude and west of W138 longitude)								
	**See note on last page if remote site							
						L&M	LEG	
S2206	Group IIIB, including:	38.51	6.42	12.25	1.20	0.20	0.15	58.73
	Grade Checking (setting or transferring of grade marks, line and grade)							
Tunnel Workers, Power Equipment Operators								
	**See note on last page if remote site							
						L&M		
A2207	Group I	40.51	8.70	8.25	1.00	0.10		58.56
						L&M		
A2208	Group IA	42.45	8.70	8.25	1.00	0.10		60.50
						L&M		
A2209	Group II	39.67	8.70	8.25	1.00	0.10		57.72
						L&M		
A2210	Group III	38.87	8.70	8.25	1.00	0.10		56.92
						L&M		
A2211	Group IV	32.04	8.70	8.25	1.00	0.10		50.09

*** A remote site is isolated and relatively distant from the amenities of civilization, and usually far from the employee's home. As a condition of employment, the workers must eat, sleep, and socialize at the worksite and remain there for extended periods.**

**** This classification must receive board and lodging under certain conditions. A per diem option of $75 is an alternative to providing meals and lodging. See Page v for an explanation.**

***** Work in combination of classifications: Employees working in any combination of classifications within the diving crew (working diver, standby diver, and tender) in a shift are paid in the classification with the highest rate for a minimum of 8 hours per shift.**

U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS
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ANCHORAGE

08/17/11 Consumer Price Index, All Items, October 1967=100 for All Urban Consumers (CPI-U)

SEMI-ANNUAL AVERAGES

YEAR	1st Half	2nd Half	ANNUAL AVERAGE
1985	279.4	285.2	282.3
1986	289.0	286.7	287.8
1987	289.2	288.5	288.9
1988	289.4	290.7	290.0
1989	296.1	300.2	298.1
1990	312.0	321.4	316.7
1991	329.0	333.0	331.0
1992	339.9	344.4	342.1
1993	351.0	354.6	352.8
1994	358.4	362.6	360.5
1995	368.9	372.4	370.7
1996	378.5	383.4	380.9
1997	384.8	388.2	386.5
1998	391.7	392.3	392.0
1999	396.7	395.8	396.2
2000	400.2	405.5	402.8
2001	412.1	416.3	414.2
2002	420.4	424.4	422.4
2003	430.1	437.6	433.8
2004	441.9	448.0	444.9
2005	452.5	464.8	458.7
2006	471.6	474.8	473.2
2007	478.827	488.664	483.746
2008	500.889	510.699	505.794
2009	507.221	516.361	511.791
2010	520.039	521.696	520.867
2011	534.571		

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ANCHORAGE

08/17/11 Consumer Price Index, All Items, October 1967=100 for Urban Wage Earners and Clerical Workers (CPI-W)

SEMI-ANNUAL AVERAGES

YEAR	1st Half	2nd Half	ANNUAL AVERAGE
1985	272.6	278.2	275.4
1986	282.0	278.6	280.3
1987	281.0	280.7	280.9
1988	281.3	282.4	281.8
1989	287.5	291.8	289.7
1990	303.4	312.8	308.1
1991	320.2	324.1	322.1
1992	330.6	335.9	333.2
1993	342.0	345.2	343.6
1994	349.2	352.8	351.0
1995	358.7	362.2	360.4
1996	367.9	373.4	370.6
1997	374.8	377.5	376.2
1998	380.3	381.5	380.9
1999	384.6	385.2	384.9
2000	390.4	396.2	393.2
2001	403.2	408.0	405.6
2002	411.8	415.5	413.6
2003	421.5	428.9	425.2
2004	432.7	439.0	435.8
2005	443.0	453.2	448.1
2006	459.7	463.3	461.5
2007	466.165	476.172	471.168
2008	487.725	495.980	491.852
2009	489.715	499.398	494.557
2010	502.979	505.011	503.995
2011	518.085		

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www.taigaventures.com

Date: 03/01/12

To: Carl Tessen, Sumitomo Metal Mining Pogo LLC

Fr: Ron Norman, Taiga Ventures

RE: Camp Proposal

Taiga Ventures is pleased to present Sumitomo Metal Mining Pogo LLC (Sumitomo) the following contract proposal for camp installation and rental of camp shelters in the vicinity of Pogo Mine. All outside service support is based on quotes received plus 10% Taiga markup, rates subject to change.

Camp equipment rental rate for 30 day minimum: $36,700.00

- Camp equipment rental after 30 day minimum $1,223.00/day

One time Charges: $57,095.00

Field Labor: $55,440.00

Total: $149,235.00

Assumptions:

A. Minimum 30 days' notice prior to operational date required to start mobilizing equipment. Cost estimates reflect pricing as of March 1, 2012 and may be subject to change based on availability and actual cost during proposed season.
B. This proposal is based off of occupancy of 44 people.
C. Meals for crew during mob/de-mob, set-up and tear-down operations as necessary is the responsibility of Sumitomo.
D. Setup, teardown, and travel are estimated & dependent on weather; equipment and site preparation; will be billed at actual.
E. Taiga Ventures will provide mattresses, bunky boards, and bed frames. Sumitomo is responsible for all linens and pillows.
F. Sumitomo is responsible for ensuring a prepared level site. Taiga Ventures will acquire freshwater draw and wastewater discharge permits prior to operation.
G. Sumitomo will be responsible for furnishing all fuels for camp operation. Estimate 65gpd for heaters.
H. Rental period begins when camp equipment departs Taiga Ventures dock and ends when equipment is returned to Taiga Ventures dock.
I. Sumitomo will be held liable for any lost, stolen or damaged equipment under any circumstances including natural disasters and will be charged at cost of repair or replacement plus 15%, plus expediting time at $70/hour. Client has the option of repairing or replacing with identical equipment at their cost, subject to Taiga Ventures management approval.
J. Taiga Ventures requires proof of insurance for equipment coverage.
K. Taiga Ventures will require a final contract be signed to signify the agreement to the terms and constituting a contract.

Camp inclusions:

- 11- 12'x20' Divided Sleepers w/floors
- 1- 24'x50' Shower/Laundry/Restroom Facility
- 1- 20'x30' Water Shelter
- 1- Freshwater System
- 1- Wastewater System
- Lighting, heaters, tables, chairs, beds, etc

2700 S. Cushman Street
Fairbanks, AK 99701
Phone: (907) 452-6631
Fax: (907) 451-8632

taiga@taigaventures.com
www.taigaventures.com

One time Charges:

This cost estimate includes one time charges for equipment prep, inspection, clean and restock, freight, and crew transportation.

Shop & Warehouse:

- Equipment prep and loading for transport estimates four (4) crew members, four (4) days.
- Equipment off-load, clean and restock estimates four (4) crew members, six (6) days.

Taiga crew transportation:

- Crew transportation between Fairbanks and Pogo via Taiga Ventures rental vehicle.
- Any hotels, meals and associated travel expenses due to unforeseen delays i.e. weather or equipment delays will be billed at cost plus ten percent.

Freight:

- Transport between Fairbanks and Pogo and return via Lynden Transport.

Field labor rate:

Setup and teardown are estimated & dependent on the weather; equipment and site preparation. Labor will be billed at actual.

A. **Field Travel Wages**: Wages are based on a 10 hr day at a rate of $770/person/day.
- Travel wages for four (4) setup crew.
- Travel wages for four (4) teardown crew.

B. **Set up, & Tear down labor:** Wages are based on a 10 hr day at a rate of $770/person/day.
- **Set-up**: On site estimate four (4) crew members, seven (7) days.
- **Teardown:** On-site estimate four (4) crew members, seven (7) days.

Optional (not included in proposal)

Camp Support Staff:

- Camp manager wages at $450/day for a 10 hour day.
- Switch outs will occur once every 30 days, travel wages will be billed at $70/hr/each.
- Daily duties include freshwater and wastewater operations, maintenance of equipment, waste removal, refueling camp with Sumitomo provided fuels, and cleaning.

Ron Norman

Taiga Ventures, Operations Manager
907-452-6631 office
907-378-9794 cell
contracting@taigaventures.com

Agreed to on behalf of Sumitomo.

_____
Signature Date

_____
Print Name Title

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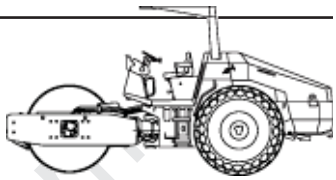
Rental Rate Blue Book®

February 15, 2012

Caterpillar CP-563E (disc. 2008)

Single Drum Vibratory Compactors



Size Class:
8.0 - 11.9 MTons 8.0 - 11.9 MTons
Weight:
24,710 lbs.

Configuration for CP-563E

Power Mode	**Diesel**	Drum Width	**84"**
Drum Type	**Padfoot**	Net Horsepower	**143.0**

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$5,225.00	$1,465.00	$365.00	$55.00	$39.50	$69.19
Adjustments						
Region (Alaska-Central: 116.6%)	$867.35	$243.19	$60.59	$9.13		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$6,092.35**	**$1,708.19**	**$425.59**	**$64.13**	**$39.50**	**$74.12**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	53%	$2,769.25 / mo
Overhaul (ownership)	25%	$1,306.25 / mo
CFC (ownership)	10%	$522.50 / mo
Indirect (ownership)	12%	$627.00 / mo
Fuel (operating) @ $3.79	36%	$14.09 / hr

Revised Date: 1st Half 2012

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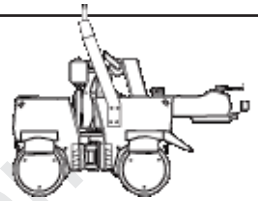
Rental Rate Blue Book®

February 14, 2012

Wacker Neuson RSS800A

Manually Guided Vibratory Compactors

Size Class:
To 899 Kg To 899 Kg
Weight:
1,000 lbs.



Configuration for RSS800A

Power Mode	**Gasoline**	Number of Drums	**1.0**
Net Horsepower	**11.0**	Drum Width	**28.3"**
Drum Type	**Smooth**		

Manufacturer Notes: Refer to WACKER for other models.

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$1,465.00	$410.00	$105.00	$16.00	$7.40	$15.72
Adjustments						
Region (Alaska-Central: 116.6%)	$243.19	$68.06	$17.43	$2.66		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$1,708.19**	**$478.06**	**$122.43**	**$18.66**	**$7.40**	**$17.11**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	35%	$512.75 / mo
Overhaul (ownership)	55%	$805.75 / mo
CFC (ownership)	5%	$73.25 / mo
Indirect (ownership)	5%	$73.25 / mo
Fuel (operating) @ $3.51	35%	$2.61 / hr

Revised Date: 1st Half 2012

EQUIPMENT WATCH

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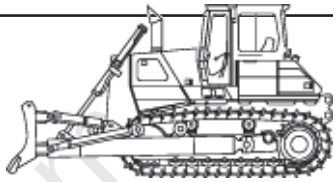
Rental Rate Blue Book®

February 14, 2012

Caterpillar D6N DS LGP

Lgp Crawler Dozers

Size Class:
130 - 159 HP 130 - 159 HP
Weight:
39,112 lbs.



Configuration for D6N DS LGP

Power Mode	**Diesel**	Dozer Type	**VPAT**
Operator Protection	**EROPS**	Net Horsepower	**150.0**

Equipment Notes: Includes dozer blade and operator protection as listed.

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$8,990.00	$2,515.00	$630.00	$95.00	$53.00	$104.08
Adjustments						
Region (Alaska-Central: 124.7%)	$2,220.53	$621.20	$155.61	$23.46		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$11,210.53**	**$3,136.20**	**$785.61**	**$118.46**	**$53.00**	**$116.70**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	32%	$2,876.80 / mo
Overhaul (ownership)	53%	$4,764.70 / mo
CFC (ownership)	7%	$629.30 / mo
Indirect (ownership)	8%	$719.20 / mo
Fuel (operating) @ $4.11	45%	$24.04 / hr

Revised Date: 2nd Half 2011

EQUIPMENT WATCH

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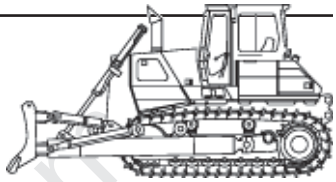
February 14, 2012

Caterpillar D7R DS SERIES II

Standard Crawler Dozers



Size Class:
190 - 259 HP 190 - 259 HP
Weight:
55,786 lbs.

Configuration for D7R DS SERIES II

Power Mode	**Diesel**	Dozer Type	**Semi-U**
Operator Protection	**EROPS**	Net Horsepower	**240.0**

Equipment Notes: Includes dozer blade and operator protection as listed.

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$12,830.00	$3,590.00	$900.00	$135.00	$76.90	$149.80
Adjustments						
Region (Alaska-Central: 124.7%)	$3,169.01	$886.73	$222.30	$33.34		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$15,999.01**	**$4,476.73**	**$1,122.30**	**$168.34**	**$76.90**	**$167.80**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	33%	$4,233.90 / mo
Overhaul (ownership)	52%	$6,671.60 / mo
CFC (ownership)	7%	$898.10 / mo
Indirect (ownership)	8%	$1,026.40 / mo
Fuel (operating) @ $4.11	50%	$38.47 / hr

Revised Date: 2nd Half 2011

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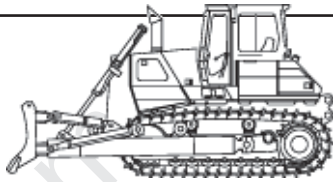
February 14, 2012

Caterpillar D8T

Standard Crawler Dozers

Size Class:
260 - 359 HP 260 - 359 HP
Weight:
75,845 lbs.



Configuration for D8T

Power Mode	**Diesel**	Dozer Type	**Semi-U**
Operator Protection	**EROPS**	Net Horsepower	**310.0**

Equipment Notes: Includes dozer blade and operator protection as listed.

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$18,375.00	$5,145.00	$1,285.00	$195.00	$99.95	$204.35
Adjustments						
Region (Alaska-Central: 124.7%)	$4,538.62	$1,270.82	$317.39	$48.16		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$22,913.62**	**$6,415.82**	**$1,602.39**	**$243.16**	**$99.95**	**$230.14**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	33%	$6,063.75 / mo
Overhaul (ownership)	52%	$9,555.00 / mo
CFC (ownership)	7%	$1,286.25 / mo
Indirect (ownership)	8%	$1,470.00 / mo
Fuel (operating) @ $4.11	47%	$47.14 / hr

Revised Date: 2nd Half 2011

EQUIPMENT WATCH

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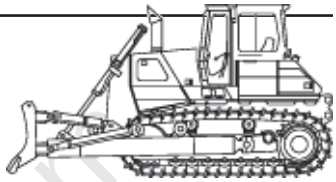
February 14, 2012

Caterpillar D9T

Standard Crawler Dozers

Size Class:
360 - 519 HP 360 - 519 HP
Weight:
105,600 lbs.



Configuration for D9T

Power Mode	**Diesel**	Dozer Type	**Semi-U**
Operator Protection	**EROPS**	Net Horsepower	**405.0**

Equipment Notes: Includes dozer blade and operator protection as listed.

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$24,020.00	$6,725.00	$1,680.00	$250.00	$134.95	$271.43
Adjustments						
Region (Alaska-Central: 124.7%)	$5,932.94	$1,661.07	$414.96	$61.75		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$29,952.94**	**$8,386.07**	**$2,094.96**	**$311.75**	**$134.95**	**$305.14**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	33%	$7,926.60 / mo
Overhaul (ownership)	52%	$12,490.40 / mo
CFC (ownership)	7%	$1,681.40 / mo
Indirect (ownership)	8%	$1,921.60 / mo
Fuel (operating) @ $4.11	43%	$58.26 / hr

Revised Date: 2nd Half 2011

EQUIPMENT WATCH

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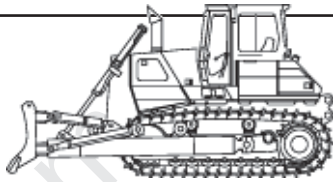
February 15, 2012

Caterpillar D10T

Standard Crawler Dozers

Size Class:
520 HP & Over 520 HP & Over
Weight:
146,500 lbs.



Configuration for D10T

Power Mode	**Diesel**	Dozer Type	**Semi-U**
Operator Protection	**EROPS**	Net Horsepower	**574.0**

Equipment Notes: Includes dozer blade and operator protection as listed.

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$31,230.00	$8,745.00	$2,185.00	$330.00	$173.50	$350.94
Adjustments						
Region (Alaska-Central: 124.7%)	$7,713.81	$2,160.02	$539.69	$81.51		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$38,943.81**	**$10,905.02**	**$2,724.69**	**$411.51**	**$173.50**	**$394.77**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	33%	$10,305.90 / mo
Overhaul (ownership)	52%	$16,239.60 / mo
CFC (ownership)	7%	$2,186.10 / mo
Indirect (ownership)	8%	$2,498.40 / mo
Fuel (operating) @ $4.11	48%	$82.57 / hr

Revised Date: 2nd Half 2011

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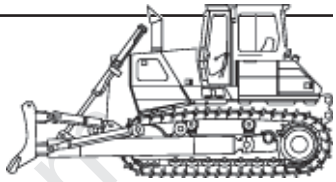
February 14, 2012

Caterpillar D11R (disc. 2007)

Standard Crawler Dozers



Size Class:
520 HP & Over 520 HP & Over
Weight:
202,847 lbs.

Configuration for D11R

Power Mode	**Diesel**	Dozer Type	**U Blade**
Operator Protection	**EROPS**	Net Horsepower	**850.0**

Equipment Notes: Includes dozer blade and operator protection as listed.

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$42,910.00	$12,015.00	$3,005.00	$450.00	$256.95	$500.76
Adjustments						
Region (Alaska-Central: 124.7%)	$10,598.77	$2,967.70	$742.23	$111.15		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$53,508.77**	**$14,982.70**	**$3,747.23**	**$561.15**	**$256.95**	**$560.98**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	33%	$14,160.30 / mo
Overhaul (ownership)	52%	$22,313.20 / mo
CFC (ownership)	7%	$3,003.70 / mo
Indirect (ownership)	8%	$3,432.80 / mo
Fuel (operating) @ $4.11	48%	$122.27 / hr

Revised Date: 2nd Half 2011

EQUIPMENT WATCH

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Rental Rate Blue Book®

February 14, 2012

Caterpillar 330C L (disc. 2006)

Crawler Mounted Hydraulic Excavators

Size Class:
33.1 - 40.0 MTons 33.1 - 40.0 MTons
Weight:
77,400 lbs.

Configuration for 330C L

Power Mode	**Diesel**	Bucket Capacity - Heaped	**2.25 cy**
Operating Weight	**35.1 MT**	Net Horsepower	**244.0**

Equipment Notes: General Purpose bucket included in rate, unless otherwise noted.

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$11,100.00	$3,110.00	$780.00	$115.00	$79.75	$142.82
Adjustments						
Region (Alaska-Central: 118.5%)	$2,053.50	$575.35	$144.30	$21.27		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$13,153.50**	**$3,685.35**	**$924.30**	**$136.27**	**$79.75**	**$154.49**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	41%	$4,551.00 / mo
Overhaul (ownership)	43%	$4,773.00 / mo
CFC (ownership)	8%	$888.00 / mo
Indirect (ownership)	8%	$888.00 / mo
Fuel (operating) @ $4.11	53%	$42.12 / hr

Revised Date: 2nd Half 2011

EQUIPMENT WATCH

www.equipmentwatch.com

Rental Rate Blue Book®

February 14, 2012

Caterpillar 365C L

Crawler Mounted Hydraulic Excavators

Size Class:
66.1 - 90.0 MTons 66.1 - 90.0 MTons
Weight:
151,850 lbs.

Configuration for 365C L

Power Mode	**Diesel**	Bucket Capacity - Heaped	**3.68 cy**
Operating Weight	**68.88 MT**	Net Horsepower	**404.0**

Equipment Notes: General Purpose bucket included in rate, unless otherwise noted.

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$21,915.00	$6,135.00	$1,535.00	$230.00	$146.25	$270.77
Adjustments						
Region (Alaska-Central: 118.5%)	$4,054.27	$1,134.97	$283.97	$42.55		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$25,969.27**	**$7,269.97**	**$1,818.97**	**$272.55**	**$146.25**	**$293.80**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	41%	$8,985.15 / mo
Overhaul (ownership)	43%	$9,423.45 / mo
CFC (ownership)	8%	$1,753.20 / mo
Indirect (ownership)	8%	$1,753.20 / mo
Fuel (operating) @ $4.11	50%	$73.06 / hr

Revised Date: 2nd Half 2011

EQUIPMENT WATCH

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Rental Rate Blue Book®

February 15, 2012

Caterpillar 345C L (disc. 2008)

Crawler Mounted Hydraulic Excavators

Size Class:
40.1 - 50.0 MTons 40.1 - 50.0 MTons
Weight:
100,810 lbs.

Configuration for 345C L

Power Mode	**Diesel**	Bucket Capacity - Heaped	**2.46 cy**
Operating Weight	**45.7 MT**	Net Horsepower	**345.0**

Equipment Notes: General Purpose bucket included in rate, unless otherwise noted.

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$17,775.00	$4,975.00	$1,245.00	$185.00	$113.20	$214.19
Adjustments						
Region (Alaska-Central: 118.5%)	$3,288.37	$920.37	$230.32	$34.22		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$21,063.37**	**$5,895.37**	**$1,475.32**	**$219.22**	**$113.20**	**$232.88**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	41%	$7,287.75 / mo
Overhaul (ownership)	43%	$7,643.25 / mo
CFC (ownership)	8%	$1,422.00 / mo
Indirect (ownership)	8%	$1,422.00 / mo
Fuel (operating) @ $4.11	53%	$59.55 / hr

Revised Date: 2nd Half 2011

EQUIPMENT WATCH

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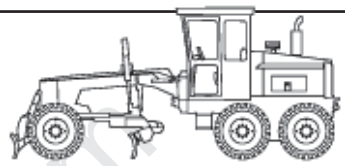
Rental Rate Blue Book®

February 14, 2012

Caterpillar 16H (disc. 2007)

Articulated Frame Graders



Size Class:
250 HP & Over 250 HP & Over
Weight:
54,550 lbs.

Configuration for 16H

Power Mode	**Diesel**	Operator Protection	**EROPS**
Moldboard Size	**16'**	Net Horsepower	**285.0**

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$13,795.00	$3,865.00	$965.00	$145.00	$76.05	$154.43
Adjustments						
Region (Alaska-Central: 124.7%)	$3,407.36	$954.65	$238.35	$35.82		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$17,202.36**	**$4,819.65**	**$1,203.35**	**$180.82**	**$76.05**	**$173.79**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	36%	$4,966.20 / mo
Overhaul (ownership)	42%	$5,793.90 / mo
CFC (ownership)	9%	$1,241.55 / mo
Indirect (ownership)	13%	$1,793.35 / mo
Fuel (operating) @ $4.11	49%	$37.48 / hr

Revised Date: 2nd Half 2011

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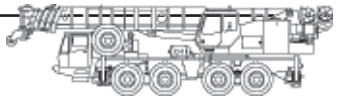
Rental Rate Blue Book®

February 15, 2012



Grove GMK5120B

All Terrain Hydraulic Cranes---Dual Engine

Size Class:
81.0 - 110.9 MTons 81.0 - 110.9 MTons
Weight:
123,115 lbs.

Configuration for GMK5120B

Power Mode	**Diesel**	Axle Configuration	**10 X 6 X 10**
Maximum Boom Length	**167.0 ft**	Maximum Lift Capacity	**108.8 MT**
Net Horsepower	**174.0**		

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$27,535.00	$7,710.00	$1,930.00	$290.00	$109.90	$266.35
Adjustments						
Region (Alaska-Central: 119.5%)	$5,369.33	$1,503.45	$376.35	$56.55		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$32,904.33**	**$9,213.45**	**$2,306.35**	**$346.55**	**$109.90**	**$296.86**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	45%	$12,390.75 / mo
Overhaul (ownership)	35%	$9,637.25 / mo
CFC (ownership)	8%	$2,202.80 / mo
Indirect (ownership)	12%	$3,304.20 / mo
Fuel (operating) @ $3.79	31%	$34.33 / hr

Revised Date: 1st Half 2012

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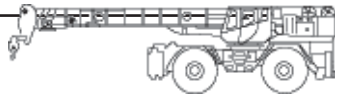
February 15, 2012



Grove RT9130E

Rough Terrain Hydraulic Cranes

Size Class:
111.0 - 139.9 MTons 111.0 - 139.9 MTons
Weight:
175,289 lbs.

Configuration for RT9130E

Power Mode	**Diesel**	Axle Configuration	**4 X 4 X 4**
Maximum Boom Length	**160.0 ft**	Maximum Lift Capacity	**120.00 MT**
Net Horsepower	**300.0**		

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$21,695.00	$6,075.00	$1,520.00	$230.00	$124.25	$247.52
Adjustments						
Region (Alaska-Central: 119.5%)	$4,230.53	$1,184.63	$296.40	$44.85		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$25,925.53**	**$7,259.63**	**$1,816.40**	**$274.85**	**$124.25**	**$271.55**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	40%	$8,678.00 / mo
Overhaul (ownership)	46%	$9,979.70 / mo
CFC (ownership)	7%	$1,518.65 / mo
Indirect (ownership)	7%	$1,518.65 / mo
Fuel (operating) @ $3.79	38%	$46.62 / hr

Revised Date: 1st Half 2012

EQUIPMENT WATCH

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February 15, 2012

Caterpillar 924G (disc. 2008)

4-Wd Articulated Wheel Loaders

Size Class:
120 - 134 HP 120 - 134 HP
Weight:
24,721 lbs.

Configuration for 924G

Power Mode	**Diesel**	Bucket Capacity-Heaped	**2.3 cy**
Net Horsepower	**129.0**	Operator Protection	**EROPS**

Equipment Notes: Includes General Purpose bucket and ROPS, unless otherwise noted.
Configuration Notes: with EROPS

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$3,425.00	$960.00	$240.00	$36.00	$29.00	$48.46
Adjustments						
Region (Alaska-Central: 124.7%)	$845.97	$237.12	$59.28	$8.89		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$4,270.97**	**$1,197.12**	**$299.28**	**$44.89**	**$29.00**	**$53.27**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	45%	$1,541.25 / mo
Overhaul (ownership)	33%	$1,130.25 / mo
CFC (ownership)	10%	$342.50 / mo
Indirect (ownership)	12%	$411.00 / mo
Fuel (operating) @ $4.11	59%	$17.07 / hr

Revised Date: 2nd Half 2011

EQUIPMENT WATCH

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Rental Rate Blue Book®

February 15, 2012

Caterpillar 966H

4-Wd Articulated Wheel Loaders

Size Class:
250 - 274 HP 250 - 274 HP
Weight:
52,254 lbs.

Configuration for 966H

Power Mode	**Diesel**	Bucket Capacity-Heaped	**5.5 cy**
Net Horsepower	**262.0**	Operator Protection	**EROPS**

Equipment Notes: Includes General Purpose bucket and ROPS, unless otherwise noted.
Configuration Notes: with EROPS

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$8,890.00	$2,490.00	$625.00	$94.00	$62.95	$113.46
Adjustments						
Region (Alaska-Central: 124.7%)	$2,195.83	$615.03	$154.37	$23.22		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$11,085.83**	**$3,105.03**	**$779.37**	**$117.22**	**$62.95**	**$125.94**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	45%	$4,000.50 / mo
Overhaul (ownership)	33%	$2,933.70 / mo
CFC (ownership)	10%	$889.00 / mo
Indirect (ownership)	12%	$1,066.80 / mo
Fuel (operating) @ $4.11	55%	$34.46 / hr

Revised Date: 2nd Half 2011

EQUIPMENT WATCH

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Rental Rate Blue Book®

February 15, 2012

Caterpillar 980H

4-Wd Articulated Wheel Loaders

Size Class:
275 - 349 HP 275 - 349 HP
Weight:
67,294 lbs.

Configuration for 980H

Power Mode	**Diesel**	Bucket Capacity-Heaped	**7.5 cy**
Net Horsepower	**315.0**	Operator Protection	**EROPS**

Equipment Notes: Includes General Purpose bucket and ROPS, unless otherwise noted.
Configuration Notes: with EROPS

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$10,935.00	$3,060.00	$765.00	$115.00	$74.70	$136.83
Adjustments						
Region (Alaska-Central: 124.7%)	$2,700.94	$755.82	$188.95	$28.40		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$13,635.94**	**$3,815.82**	**$953.95**	**$143.40**	**$74.70**	**$152.18**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	45%	$4,920.75 / mo
Overhaul (ownership)	33%	$3,608.55 / mo
CFC (ownership)	10%	$1,093.50 / mo
Indirect (ownership)	12%	$1,312.20 / mo
Fuel (operating) @ $4.11	55%	$41.43 / hr

Revised Date: 2nd Half 2011

EQUIPMENT WATCH

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Rental Rate Blue Book®

February 15, 2012

Caterpillar 988H

4-Wd Articulated Wheel Loaders

Size Class:
350 - 499 HP 350 - 499 HP
Weight:
109,230 lbs.

Configuration for 988H

Power Mode	**Diesel**	Bucket Capacity-Heaped	**8.33 cy**
Net Horsepower	**475.0**	Operator Protection	**EROPS**

Equipment Notes: Includes General Purpose bucket and ROPS, unless otherwise noted.
Configuration Notes: with EROPS

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$19,330.00	$5,410.00	$1,355.00	$205.00	$115.70	$225.53
Adjustments						
Region (Alaska-Central: 124.7%)	$4,774.51	$1,336.27	$334.68	$50.63		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$24,104.51**	**$6,746.27**	**$1,689.68**	**$255.63**	**$115.70**	**$252.66**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	45%	$8,698.50 / mo
Overhaul (ownership)	33%	$6,378.90 / mo
CFC (ownership)	10%	$1,933.00 / mo
Indirect (ownership)	12%	$2,319.60 / mo
Fuel (operating) @ $4.11	54%	$62.47 / hr

Revised Date: 2nd Half 2011

EQUIPMENT WATCH

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Rental Rate Blue Book®

February 15, 2012

On-Highway Light Duty Trucks

Miscellaneous Models

Size Class:
100 - 199 HP 100 - 199 HP

Configuration for On-Highway Light Duty Trucks

Power Mode	**Diesel**	Cab Type	**Conventional**
Axle Configuration	**4X2**	Ton Rating	**3/4**
Horsepower	**160.0**		

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$765.00	$215.00	$54.00	$8.00	$10.60	$14.95
Adjustments						
Region (Alaska-Central: 120.3%)	$155.29	$43.64	$10.96	$1.62		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$920.29**	**$258.64**	**$64.96**	**$9.62**	**$10.60**	**$15.83**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	58%	$443.70 / mo
Overhaul (ownership)	27%	$206.55 / mo
CFC (ownership)	5%	$38.25 / mo
Indirect (ownership)	10%	$76.50 / mo
Fuel (operating) @ $4.11	74%	$7.89 / hr

Revised Date: 2nd Half 2011

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February 15, 2012

Caterpillar 735

Articulated Rear Dumps

Size Class:
30 - 34 MTons 30 - 34 MTons
Weight:
69,206 lbs.

Configuration for 735

Power Mode	**Diesel**	Rated Payload	**36.0 MT**
Body Capacity (Struck - Heaped)	**19.2 - 25.8 cy**	Axle Configuration	**6 X 6**
Net Horsepower	**419.0**		

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$12,125.00	$3,395.00	$850.00	$130.00	$67.90	$136.79
Adjustments						
Region (Alaska-Central: 120.3%)	$2,461.37	$689.18	$172.55	$26.39		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$14,586.37**	**$4,084.18**	**$1,022.55**	**$156.39**	**$67.90**	**$150.78**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	39%	$4,728.75 / mo
Overhaul (ownership)	46%	$5,577.50 / mo
CFC (ownership)	7%	$848.75 / mo
Indirect (ownership)	8%	$970.00 / mo
Fuel (operating) @ $4.11	51%	$34.44 / hr

Revised Date: 2nd Half 2011

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Rental Rate Blue Book®

February 15, 2012

Caterpillar 740

Articulated Rear Dumps

Size Class:
35 MTons & Over 35 MTons & Over
Weight:
72,973 lbs.

Configuration for 740

Power Mode	**Diesel**	Rated Payload	**39.5 MT**
Body Capacity (Struck - Heaped)	**24.0 - 31.4 cy**	Axle Configuration	**6 X 6**
Net Horsepower	**453.0**		

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$13,530.00	$3,790.00	$950.00	$145.00	$73.30	$150.18
Adjustments						
Region (Alaska-Central: 120.3%)	$2,746.59	$769.37	$192.85	$29.43		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$16,276.59**	**$4,559.37**	**$1,142.85**	**$174.43**	**$73.30**	**$165.78**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	39%	$5,276.70 / mo
Overhaul (ownership)	46%	$6,223.80 / mo
CFC (ownership)	7%	$947.10 / mo
Indirect (ownership)	8%	$1,082.40 / mo
Fuel (operating) @ $4.11	51%	$37.24 / hr

Revised Date: 2nd Half 2011

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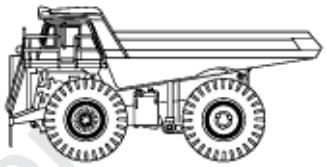
Rental Rate Blue Book®

February 15, 2012

Caterpillar 777D (disc. 2007)

Mechanical Drive Rear Dumps

Size Class:
90 - 104 MTons 90 - 104 MTons
Weight:
153,804 lbs.



Configuration for 777D

Power Mode	**Diesel**	Rated Payload	**90.9 MT**
Body Capacity (Struck - Heaped)	**60.1 - 78.6 cy**	Net Horsepower	**938.0**

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$21,065.00	$5,900.00	$1,475.00	$220.00	$135.85	$255.54
Adjustments						
Region (Alaska-Central: 120.3%)	$4,276.19	$1,197.70	$299.42	$44.66		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$25,341.19**	**$7,097.70**	**$1,774.42**	**$264.66**	**$135.85**	**$279.83**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	40%	$8,426.00 / mo
Overhaul (ownership)	42%	$8,847.30 / mo
CFC (ownership)	8%	$1,685.20 / mo
Indirect (ownership)	10%	$2,106.50 / mo
Fuel (operating) @ $4.11	57%	$77.10 / hr

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February 27, 2012

Bowie VICTOR 1100 (DIESEL)

Seed Sprayers For Truck Mounting

Size Class:
1,001 gal & Over 1,001 gal & Over
Weight:
4,880 lbs.

Configuration for VICTOR 1100 (DIESEL)

Power Mode	**Diesel**	Working Capacity	**1,100 gal**
Horsepower	**50.0**		

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$1,635.00	$460.00	$115.00	$17.00	$12.35	$21.64
Adjustments						
Region (Alaska-Central: 118.6%)	$304.11	$85.56	$21.39	$3.16		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$1,939.11**	**$545.56**	**$136.39**	**$20.16**	**$12.35**	**$23.37**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	44%	$719.40 / mo
Overhaul (ownership)	44%	$719.40 / mo
CFC (ownership)	5%	$81.75 / mo
Indirect (ownership)	7%	$114.45 / mo
Fuel (operating) @ $4.11	60%	$7.38 / hr

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February 27, 2012

On-Highway Truck Tractors

Miscellaneous Models

Size Class:
60,001 GVW & Over 60,001 GVW & Over

Configuration for On-Highway Truck Tractors

Power Mode	**Diesel**	Axle Configuration	**6X6**
Maximum Gross Vehicle Weight	**70,000 lbs**	Horsepower	**450.0**

Equipment Notes: Non-Sleeper Cab

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$4,150.00	$1,160.00	$290.00	$44.00	$63.65	$87.23
Adjustments						
Region (Alaska-Central: 120.3%)	$842.45	$235.48	$58.87	$8.93		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$4,992.45**	**$1,395.48**	**$348.87**	**$52.93**	**$63.65**	**$92.02**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	50%	$2,075.00 / mo
Overhaul (ownership)	32%	$1,328.00 / mo
CFC (ownership)	6%	$249.00 / mo
Indirect (ownership)	12%	$498.00 / mo
Fuel (operating) @ $4.11	71%	$45.31 / hr

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Rental Rate Blue Book®

February 27, 2012

Chemical Spreaders

Miscellaneous Models

Size Class:
All All

Configuration for Chemical Spreaders

Power Mode	**Gasoline**	Capacity	**5.0 cy**
Horsepower	**4.0**		

Manufacturer Notes: Also see "Sand Spreaders" under "Snow Removal Equipment."

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$500.00	$140.00	$35.00	$5.00	$3.40	$6.24
Adjustments						
Region (Alaska-Central: 118.6%)	$93.00	$26.04	$6.51	$0.93		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$593.00**	**$166.04**	**$41.51**	**$5.93**	**$3.40**	**$6.77**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	38%	$190.00 / mo
Overhaul (ownership)	48%	$240.00 / mo
CFC (ownership)	5%	$25.00 / mo
Indirect (ownership)	9%	$45.00 / mo
Fuel (operating) @ $3.84	28%	$0.96 / hr

Revised Date: 2nd Half 2011

Close Window Rental Rate Blue Book

Operating Costs

Hourly Estimated Operating Cost
The Estimated Operating Cost Per Hour includes the following expenses:

- The cost of labor and parts needed for routine, daily servicing of the equipment. This includes repairing and/or replacing small components such as pumps, carburetors, injectors, filters, belts, gaskets, and worn lines.
- The cost of operating expendables. These include fuel, computed in accordance with horsepower, average load factors, and the price of fuel; lubricants, including filters, oil, and grease, as well as the labor and the lube truck involved in lubrication; tires; and ground engaging components, including pads, blades, bucket teeth, etc. Tire costs are calculated by average tire life factors and take into consideration typical discounts from list prices. Electricity costs (where applicable) are calculated according to generally accepted duty cycles for the total motor load.

The Estimated Operating Cost Per Hour assumes that the equipment is in good operating condition. No allowances are made for equipment operating in severe conditions or beyond periodic maintenance services.

The "Estimated Operating Cost Per Hour" in Blue Book may not include all operating expenses. The cost of extraordinary operating expendables, such as certain ground engaging components, such as hammer and drill bits, drill steel, augers, saw blades, and tooth-bits, are normally excluded because of their highly variable wear patterns. It is recommended that these costs be recovered separately.

Operator's wages are not included in the Estimated Operating Cost/Hour.

Whenever operating costs are shown as "N/A," not enough information has been received to justify an estimate.

User-Defined Operating Adjustments

The User-Defined Operating Adjustment is designed to modify the total equipment operating cost by a single user-defined factor.

Although this adjustment can be used for any purpose, it is widely used to address gross job factors such as job severity.

Input a factor (in percent) and click the ?Adjust Rates? button to re-calculate the total operating cost. A blank field means 100% or no adjustment.

In order to automatically adjust the total operating cost for subsequent equipment lookups, a User-Defined Operating Adjustment can be saved on the **Default Settings** page.

Select Service Type	Set kWh	Set kW	
GS-3 Industrial Service	1080000 kWh	500 kW	Go

GVEA Bill Calculator

Customer Charge:	$295.00
Demand Charge: $17.69 x 500kW)	$8,845.00
Utility Charge: $0.02276 x 1080000kWh)	$24,580.80
Fuel and Purchased Power: $0.12737 x 1080000kWh)	$137,559.60
Regulatory Cost Charge: $0.000492 x 1080000kWh)	$531.36
Total Due:	$171,811.76

Dyno Nobel Americas

Dyno Nobel

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2795 East Cottonwood Parkway
Suite 500
Salt Lake City, Utah
84121 USA
Telephone: 801-364-4800
Fax: 801-328-6452
www.dynonobel.com

Date 26 February 2012

Re: Pogo Closure Remediation

Maria:

Dyno Nobel is pleased to provide the following quote for your review. All the prices are FOB Salcha magazine site.

Prices on packaged product and detonators will be held firm throughout 2012. Price sheet is attached. If there is something not on the price sheet that you would like to see please let me know and I will quote it.

Please call or email me with any questions.

Regards,

Matt Budin
Account Manager
Phone: +1 801 328 6537
e-mail: matt.budin@am.dynonobel.com

The following surcharges will apply

- Fuel – Charged at time of shipping
- ERCC (Explosive Regulatory Compliance Charge) – 6%

Delivery:

Product delivery and pickup can be arranged for approximately

- $4.84 per round trip mile for delivery vans.
- $5.82 per round trip mile for tractor trailers.
- Mileage estimate is 100 roundtrip miles.

Standby rates:

- First hour is free and then:
    - $52.00/hr for pick-ups and delivery vans
    - $83.00/hr for tractor trailers

Detonators and packaged product can be returned for credit provided they are in good and saleable condition and in full case lots. A 20% restocking fee will apply to all returns. Any costs associated with delivery and freight will be charged to the customer's account.

Payment will be due within 30 days from shipment of product. Any remaining balance after 30 days will be assessed a 1% charge accrued monthly.

Please allow five business days for standard delivery items and allow four weeks notice for special inventory items.

Dyno Nobel: Fairbanks 2012 Pricelist

Product	Price	UOM	
BLASTEX 2 X 16	$169.52	100	LB
BLASTEX 2 1/2 X 16	$165.36	100	LB
BLASTEX 3 X 16	$162.24	100	LB
BLASTEX 3 1/2 X 16	$157.04	100	LB
TROJAN® SPARTAN 350G	$609.23	100	EA
TROJAN® SPARTAN 450G	$692.58	100	EA
TROJAN® SPARTAN 900G	$993.39	100	EA
TROJAN® NB UNIVERSAL 350G	$683.46	100	EA
TROJAN® NB UNIVERSAL 450G	$822.15	100	EA
UNIMAX 2 X 16 TS	$1,387.93	100	EA
UNIMAX 2 1/2 X 16 TS	$2,102.64	100	EA
UNIMAX 3X16 TS	$2,698.31	100	EA
PRIMACORD 4Y 3.6 G/M (18GR/FT) 4000/CS	$245.62	1000	FT
PRIMACORD 5 (25GR/FT) 1000FT/305M SPOOL	$332.51	1000	FT
PRIMACORD 10 (50GR/FT) 1000FT/305M SPOOL	$447.88	1000	FT
Initiation			
NONEL®EZTL 17MS 12FT/3.7M 180/CS	$504.12	100	EA
NONEL®EZTL 25MS 12FT/3.7M 180/CS	$504.12	100	EA
NONEL®EZTL 33MS 12FT/3.7M 180/CS	$538.33	100	EA
NONEL®EZTL 42MS 12FT/3.7 180/CS	$538.33	100	EA
NONEL®EZTL 17MS 20FT/6.1M 150/CS	$609.22	100	EA
NONEL®EZTL 25MS 20FT/6.1M 150/CS	$609.22	100	EA
NONEL®EZTL 33MS 20FT/6.1M 150/CS	$638.17	100	EA
NONEL®EZTL 42MS 20FT/6.1M 150/CS	$638.17	100	EA
NONEL®EZDET 25/350 30FT/9M 80/CS	$895.65	100	EA
NONEL®EZDET 25/700 30FT/9M 80/CS	$895.65	100	EA
NONEL®EZDET 25/500 30FT/9M 80/CS	$895.65	100	EA
NONEL®EZDET 25/350 40FT/12M 60/CS	$1,102.50	100	EA
NONEL®EZDET 25/700 40FT/12M 60/CS	$1,102.50	100	EA
NONEL®EZDET 25/500 40FT/12M 60/CS	$1,102.50	100	EA
NONEL®EZDET 25/350 50FT/15M 60/CS	$1,320.93	100	EA
NONEL®EZDET 25/700 50FT/15M 60/CS	$1,320.93	100	EA
NONEL®EZDET 25/500 50FT/15M 60/CS	$1,320.93	100	EA
NONEL®MS 350MS 20FT/6M 120/CS 1.4B	$544.37	100	EA
NONEL®MS 350 30FT/9M 80/CS	661.52	100	EA
NONEL®MS 350 40FT/12M 60/CS	828.45	100	EA
NONEL®MS 350 50FT/15M 60/CS PER 11	940.81	100	EA
NONEL®MS 350 60FT/18M 50/CS PER 11	1137.15	100	EA
NONEL®LEADLINE 2500FT/762M 2/CS	$275.63	1	ROLL

TERMS AND CONDITIONS

1. Acceptance by the Buyer of each delivery shall constitute a separate contract with respect to the amount thereof. All amounts payable hereunder shall be paid in cash, or in negotiable paper collectible at its face value in United States funds at location indicated on Seller's invoice, without deduction of exchange fluctuations, customs or other charges which are imposed upon the transaction by or on behalf of or at the instigation of Buyer's government or its agencies. In the event Seller is forced to initiate legal action to recover any sums due here under, Buyers shall be responsible for Seller's reasonable attorneys fees.

2. Unless provided otherwise, Buyer shall pay the amount of any tax or other charge now or hereafter imposed by law, upon, with respect to or measured by the sale, shipment, use or price of any material sold hereunder.

3. In the event the Buyer requests Seller to accept merchandise returns in lieu of payment therefore, Buyer shall, upon approval of Seller, return merchandise to such location as Seller designates, freight prepaid, and agrees to pay current restocking charges.

4. In the event the Buyer fails to fulfill the terms of payment or in case Seller shall have any doubt at any time as to Buyer's financial responsibility, Seller may decline to make further deliveries except upon receipt of cash or satisfactory security.

5. Seller warrants that the materials sold hereunder shall be of Seller's standard quality, but Buyer assumes all risk and liability whatsoever resulting from the possession, use or disposition of such materials, whether used singly or in combination with other substances. Liability of the Seller to Buyer, if any hereunder, for breach of contract, negligence or otherwise, shall in no event exceed in amount the purchase price of the materials sold with respect to which any damages are claimed. Within thirty (30 days after any shipment reaches its destination (but in no event later than ninety (90) days after shipment leaves Seller's plant) the materials shall be examined and tested and promptly thereafter and before the materials are used, Seller shall be notified in writing or by cable in case materials are found defective or short in any respect. Failure to so notify Seller shall constitute a waiver of all claims with respect to the materials, and in any event the use of the materials shall be deemed to mean that the Seller has satisfactorily performed. Seller's specifications are subject to change without notice. SELLER'S WARRANTY OF STANDARD QUALITY IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SELLER NEITHER ASSUMES NOR AUTHORIZES ANY PERSON TO ASSUME FOR IT ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OR USE OF THE MATERIALS SOLD HEREUNDER, AND THERE ARE NO AGREEMENTS OR WARRANTIES, EITHER ORAL OR WRITTEN, COLLATERAL TO OR AFFECTING THIS AGREEMENT. In no event shall Seller be liable for consequential damages or lost profits.

6. Seller shall not be liable for any failure to deliver or for any delay in delivery, and Buyer shall not be liable for any failure to request delivery or for any delay in requesting delivery, when any such failure or delay shall be caused (directly or indirectly) by fires, floods, accidents, explosions, equipment or machinery breakdown, sabotage, strikes or other labor disturbances, civil commotions, riots, invasions, wars, acts, restraints, requisitions, regulations or directions of Government, voluntary or mandatory compliance by Buyer or Seller with any request of the United States Government for purposes of national defense, inability to obtain or delays of transportation facilities, any act of God, or any cause (whether similar or dissimilar to the foregoing) beyond the reasonable control of Buyer or Seller. If by reason of any such causes the Seller's supply of any such materials shall be limited, Seller shall have the exclusive right (without liability) to satisfy its own needs and thereafter to distribute any remaining available supply among all its customers in such manner as shall be determined by Seller. If any such disability shall continue for more than thirty (30) days, the undelivered quantities during such period of disability may be cancelled (without liability) at the option of either party to be exercised by giving written notice to the other party at any time during the period of this Agreement.

7. Each domestic rail shipment shall be inspected at the time of delivery by the carrier; in the event of loss or damage, a statement describing the loss or damage shall be secured from the carrier's agent.

8. Title to and risk of loss on all material sold hereunder shall pass to Buyer upon Seller's delivery to common carrier at point of shipment whether or not Seller pays all or any part of the freight. If Seller provides delivery via its own transportation, title and risk of loss shall pass upon unloading of material at destination.

9. If any law shall fix a maximum price for any material covered by this Agreement below the then current price hereunder, Seller, without liability, may, upon written notice, terminate this Agreement with respect to further shipments of the material affected.

10. Returnable containers shall be returned by Buyer within 3 months from date of shipment. Title to all such containers shall remain in Seller or Seller's supplier if material is not manufactured by Seller. Buyer, in accordance with Seller's container schedule, shall make a deposit for each returnable container, and the amount of such deposit shall be paid by Buyer at the time of payment of the invoice for the material shipped in the container. Each deposit shall be refunded by Seller to Buyer promptly after the container is returned, provided the container is in good condition and has been used only for the storage and delivery of the material sold hereunder.

11. With respect to US Sales, seller certifies that the material sold is produced in compliance with the Fair Labor Standards Act of 1938, as amended, and that the prices charged are not in excess of maximum prices permitted by law.

12. Upon request, the Seller will furnish such technical advice or assistance as it deems appropriate in reference to the use of its products by Buyer; it is expressly understood, however, that all such technical advice or assistance is rendered without compensation and the Seller assumes no obligation or liability for such advice or assistance given or results obtained.

13. On export orders Seller reserves the right to claim any drawback that may apply to this order, and Buyer shall supply Seller with a certified copy of the onboard bill of lading as evidence of exportation from the United States. Unless otherwise expressly provided on the reverse side, if material is sold in CIF terms, Seller shall take out war risk insurance if obtainable as defined by the American Institute of Marine Underwriter and/or the American Cargo War Risk Re-Insurance Exchange, and the entire amount of the premium shall be included in the CIP price set out on the reverse side. Any increase in War Risk Insurance rate over that included in the CIP price shall be charged to Buyer at Seller's option. In addition, any charge in ocean freight from that included in the CIP or C&F price shall be for Buyer's account at Seller's option.

14. If at any time any condition shall arise which shall impede or restrict free exchange of money or goods between the country and/or territory covered by this order and the United States of America, then deliveries hereunder may be suspended during the continuance of any such condition, or this order may be forthwith terminated by either party.

15. If this document covers a free sample, this clause applies in lieu of Seller's warranty of standard quality. ALL FREE SAMPLES ARE FURNISHED "AS IS" and the recipient agrees to assume all risk and liability whatsoever for injury or damage to persons or property or otherwise resulting from the handling or use of the sample. By accepting the sample, the recipient agrees that he will not purchase the material for commercial use until he has first determined that the material is merchantable and fit for the particular purpose for which the material is purchased and that the proposed use is satisfactory within the requirements of all applicable laws.

16. Seller's or Buyer's waiver of any breach or failure to enforce any of the terms or conditions of this contract shall not in any way affect, limit or waive such party's right at any future time to enforce strict compliance with every term and condition hereof.

17. If this order contains a notation that it is placed under a U.S. Government contract or subcontract, then there are also incorporated herein such current Government contract provisions as are required by reason of statute and Executive Order.

18. Sale of goods made subject to the terms and conditions above. Interest shall be charged on past due accounts at the rate of 1½% per month or allowable rate.

19. Dyno Nobel reserves the right to adjust prices if its costs increase materially, such as due to a new or amended law or regulation that results in an increase in the cost of providing services or products.

Groundhogs, LLC.

3670 Worrell Ave
Fairbanks, AK 99709
Phone: (907) 474-HOGS(4647)

Quote

Date	Quote #
2/23/2012	1122

Name / Address
SRK CONSULTING, ING Marija Jurcevic Suite 300, 5250 Neil Road Reno, NV, 89502

Rep
Ken

Description	
RECLAMATION	
HYDROSEED PRICE PER SQUARE FOOT	$.11
FERTILIZER PRICE PER TON	$1,070.00
NATIVE SEED PRICE PER POUND	$3.44
NOTE: PRODUCT PRICE MAY VARY	

We look forward to the possibility of working with you!

ALASKA BASIC INDUSTRIES

Current Cement Market Price February 6, 2012

Fairbanks Terminal

This price will take effect April 1st 2012 is F.O.B. our Fairbanks Terminal, 1510 Well Street, and is subject to market fluctuations. The contact number is 907-479-8661.

Type I/II	**Bulk Portland Cement**	**$161.00 per ton**

Our terms are Net 30 Days.
See attached terms

If you have any questions, please call Xavier Schlee at 349-3333 or on my cell at 240-4024.

STANDARD TERMS AND CONDITIONS OF SALE

1. **ACCEPTANCE OF ORDER/ QUOTE.** All orders and quotes for materials, products, manufactures and goods (collectively "goods") sold hereunder are subject to prior acceptance and approval at Seller's principal business offices at the address shown on the reverse side hereof.

2. **ACCEPTANCE OF GOODS AND PASSAGE OF TITLE.** Buyer shall have the obligation to inspect all goods before delivery thereof shall constitute an unequivocal acceptance of all of the goods. Any failure on the part of Buyer or its carrier to revoke its acceptance of the goods within 24 hours following such acceptance shall constitute an irrevocable waiver of all its rights to subsequently revoke such acceptance. Title to the goods shall pass to Buyer upon their delivery to Buyer or its carrier at the point of shipment. Neither Buyer, its carrier nor any cosignee of the goods shall have the right to divert or reconsign the goods to any destination other than specified herein or in the bill of lading for the goods without the express written permission of Seller.

3. **PAYMENT.** All credit sales of the goods shall be subject to the express prior written approval of Seller's credit department. Seller reserves the right before making any delivery of the goods to require payment in cash or security for payment. If Buyer fails to comply with any such requirement or to make payments in accordance with the terms and conditions hereof, Seller may at its option, withhold and defer all further shipments of the goods without waiving any rights its may hereunder.

4. **DELAYS.** Seller shall not be liable for any failure of or delay in delivery of the goods due to any inability on its part to secure the timely delivery of all or any part of the goods or any materials or components thereof, prior performances of government orders, labor strikes or shortages or failures of raw materials, supplies, fuel power or transportation, breakdowns of equipment, government, governmental regulations and/or orders, or any other causes beyond Seller's reasonable control, whether of a similar or dissimilar nature than those enumerated. **In no event shall seller be liable for any direct, indirect or consequential damages or claims for labor resulting from any failure or delay in delivery whatsoever.**

5. **WARRANTIES.** Seller warrants title to the goods. **Seller makes no other warranties whatsoever, express or implied, and all implied warranties of merchantability and fitness for a particular purpose are expressly disclaimed by seller and excluded from this quotation/ agreement.**

6. **BUYER'S REMEDIES.** Seller's liability hereunder shall be limited exclusively to its obligation to replace that portion of the goods proven to have failed to meet specifications or to have been defective in quality or workmanship at the time of their delivery, or, at Seller's option, to allow a reasonable credit therefore. Seller shall not be liable for any damages, losses, expenses, costs or liabilities which Buyer or any other party may incur or suffer as a result of any defect, insufficiency or failed failure of all or any part of the goods in an amount exceeding the purchase price for the defective, insufficient or failed portion of the goods. **Except as is expressly provided to the contrary herein, Seller shall not be liable for any direct, indirect, or consequential damages arising out or caused by any defect, insufficiency or failure of all or part of the goods.**

7. **PATENTS.** Seller shall indemnify Buyer against reasonable damages awarded against Buyer in any finally adjudicated patent infringement suit brought in a court of competent jurisdiction against Buyer by any third person claiming that the goods infringe any valid and enforceable United States patent; provided, however, that the Buyer gives the Seller prompt notice of any such patent infringement suit, gives Seller an opportunity to defend such suit on behalf of Buyer, and fully cooperates with Seller with respect to such defense. Notwithstanding anything to the contrary herein, if the goods are produced, manufactured or sold by Seller in accordance with materials, designs or specifications required by Buyer, Buyer shall indemnify Seller for any and all liabilities, costs and expenses, including reasonable attorneys' fees, which Seller may incur of suffer in or as a result of any patent infringement suit in which it is claimed that the goods infringe any United States patent.

8. **PERMISSIBLE VARIATIONS.** The goods sold hereunder shall be subject to the Seller's standard manufacturing variations, tolerances and classifications.

9. **TECHNICAL ADVICE.** Seller has given Buyer no technical or engineering advice, and shall not be responsible for the representation of any of its employees with respect to any technical or engineering advice, in connection with the design, manufacture, transportation, installation or use of the goods.

10. **TAXES.** All taxes imposed in respect to the sale of the goods shall be added to and paid to Seller as a part of the purchase price.

11. **EXCLUSIVE JURISDICTION AND VENUE.** In the event that any dispute should arise with respect to any party's rights or obligations hereunder, the exclusive jurisdiction and venue therefore shall lie with the courts for the Third Judicial District for the State of Alaska, at Anchorage, Alaska, or alternatively, at Seller's option, with the United States District Court of the District of Alaska, at Anchorage, Alaska, unless Federal law should require the contrary.

12. **COLLECTION COSTS.** In the event that Seller is required to bring and/ or prosecute any collection claims, proceedings suits or actions to collect all or any part of the contract price for the goods, Buyer shall pay Seller all of the reasonable attorneys' fees and legal costs which Seller incurs in bringing and/ or prosecuting any such claim, proceeding, suit or action.

13. **ENTIRE QUOTE/ AGREEMENT.** This quote/ agreement represents the entire agreement between Seller and Buyer with respect to the subject matter hereof and supercedes all prior or contemporaneous agreements between the parties with respect to such subject matter.

Jurcevic, Marija

Subject: FW: Email Bid# B396603

From: Jason.Trine@Ferguson.com [mailto:Jason.Trine@Ferguson.com]
Sent: Monday, February 20, 2012 12:34 PM
To: Jurcevic, Marija
Cc: jason.trine@ferguson.com
Subject: FW: Email Bid# B396603

Maria,
That you for the oppertuity to quote you these budget numbers. Please let me know if you have any questions.
Thanks,

Jason Trine
Outside Sales- Alaska
Ferguson Industrial Division
a **Wolseley** Industrial Group company

3105 Industrial Ave Fairbanks, AK 99701
T: (907)458-2408 C: (907)590-3851 F: (907)456-8146
E: jason.trine@ferguson.com

From: Jason Trine - 3022 ANCHORAGE [mailto:jason.trine@ferguson.com]
Sent: Monday, February 20, 2012 11:32 AM
To: Trine, Jason [Ferguson] - 3022 Fairbanks
Subject: Email Bid# B396603

Price Quotation # B396603

FEI - FAIRBANKS #3022

3105 INDUSTRIAL AVENUE
FAIRBANKS, AK 99701-4160

Phone : 907-456-1234
Fax : 907-451-6244

Bid No.....: B396603
Bid Date...: 02/20/12
Quoted By: JMT
Customer.: WATERWORKS FBKS QUOTE
3105 INDUSTRIAL AVE
FAIRBANKS, AK 99701

Cust Phone: 907-456-1234
Terms.....: CASH ON DEMAND
Ship To.....: WATERWORKS FBKS QUOTE
3105 INDUSTRIAL AVE
FAIRBANKS, AK 99701

Cust PO#..: POGO MINE HDPE **Job Name.: POGO MINE HDPE**

Item	Description	Quantity	Net Price	UM	Total
SP-AI617IP	6X40 SDR11 INSUL PIPE	3000	62.000	FT	186000.00
	6" SDR11 HDPE PIPE WITH 1" PEX HEAT				
	TRACE TUBE IN A 14" HDPE CASING				
	W/ WATER TIGHT END SEALS AND JOINT				
	KITS IN 40' LENGTHS				
	*3-4 WEEKS LEAD TIME AT THE FACTORY				
	PLUS 2-3 WEEKS FOR SHIPPING TO				
	POGO MINE				
	*PRICE QUOTE GOOD UNTIL 3/20/12				

Net Total: 186000.00
Tax: 0.00
Total: 186000.00

Quoted prices are based upon receipt of the total quantity for immediate shipment (48 hours). SHIPMENTS BEYOND 48 HOURS SHALL BE AT THE PRICE IN EFFECT AT TIME OF SHIPMENT UNLESS NOTED OTHERWISE. Seller not responsible for delays, lack of product or increase of pricing due to causes beyond our control, and/or based upon Local, State and Federal laws governing type of products that can be sold or put into commerce. This Quote is offered contingent upon the Buyer's acceptance of Seller's terms and conditions, which are incorporated by reference and found either following this document, or on the web at http://wolseleyna.com/terms_conditionsSale.html. Govt Buyers: All items quoted are open market unless noted otherwise.

C & R Pipe and Steel, Inc.

401 East Van Horn Road
P.O. Box 70743
Fairbanks Alaska 99707

Phone (907) 456-8386
Fax (907) 456-6875

SALES: •ORDER• QUOTE

Customer Maria

Date: 2/10/12

Address:

Fax:

Phone:

Sales Rep: Robert Demientieff

Ordered By:

P. O#

Shipping Instructions: F.O.B Fairbanks

Quantity	Item Description	Unit Price	Amount
10	6” Schedule 40 Grade A53 x 21’	$378	$3,780

All material quoted is subject to prior sale.

Vertex Insulation, Inc.

P.O. Box 72244
Fairbanks, AK 99707

907 456-7361 907 451-0362 vertex@gci.net

JOB ESTIMATE

Date	Estimate #
2/15/2012	1834

SRK Consulting

Phone	Fax

JOB NAME

mine in Alaska

QUANTITY	JOB DESCRIPTION	RATE	Total
	Insulate the following owner supplied pipe at our facility in Fairbanks		
200	L.F. 6" w/3" polyurethane foam	11.60	2,320.00
300	L.F. 6" HDPE w/3" polyurethane foam and heat trace channel	13.60	4,080.00

This estimate is for completing the job as described above. It does not include material price increases or additional labor and materials which may be required should unforseen problems or adverse weather conditions arise after the work has started.
NOTE: This estimate may be withdrawn by us if not accepted within 30 days.

Total $6,400.00

Job cost estimated by: _____

WOLSELEY
Mechanical Group

Project :

QUOTATION **3474864**

Date 12 FEB 16

Ship To :
CASH SALE CONTRACTOR - BURNABY
5950 KINGSLAND
BURNABY BC
V5B 4W7

WOLSELEY MECHANICAL GROUP - BC REGION
DIVISION OF WOLSELEY CANADA INC.
5950 KINGSLAND DR, BURNABY BC V5B 4W7
PHONE (604) 205-2900 FAX (604) 294-5685

Sold To: 41147
CASH SALE C5 - BURNABY
5950 KINGSLAND
BURNABY BC
V5B 4W7

Special Instructions
***** HST R 866778566 *****
ALL CASH SALES ARE FINAL
****

VIA : P/U BY CUS **TERMS :** CASH

MATERIAL

SEQ	DESCRIPTION		ORD QTY	UM	UNIT PRICE	EXTENSION
001	TYC8XL2CR	R03H30	300	FT	7.53	2,259.00
	779713 8XL2-CR 8WT/FT 208-277V H/T CABLE					
002	TYCAMCF5	S09O40	1	EA	154.50	154.50
	AMC-F5 RAY TSTAT 40F,3'CAP,22A,SPST					
003	TYCHWATECO	S09O50	1	EA	435.08	435.08
	HWAT-ECO TEMP CONTROLLER 240V					
004	TYCRAYCLICE	S09O30	1	EA	16.65	16.65
	805979 CLIC-E RAYCHEM END SEAL KIT					
005	TYC910E1FWLEMR2	S09O70	1	EA	1,346.99	1,346.99
	910*E1FWL*EMR2 DIGITRACE 910 MONITOR					

SUBTOTAL	4,212.22
HST	505.47
TOTAL	**4,717.69**

Prepared by : CHRIS WARDROP

Jurcevic, Marija

From: Mark Sanford <mark.sanford@oitinc.net>
Sent: Friday, February 10, 2012 3:49 PM
To: Jurcevic, Marija
Subject: Soil Quote

Hello Maria,

The price of remediation of POL contaminated soils.

1) $117.57 per ton.

2) Transportation using a 20 yard side dump is $135.00 per hour.

3) Transportation using a 10 yard end dump is $120.00 per hour.

If there is anything else I can help with just let me know.

Thank you,

Mark Sanford

FAIRBANKS NORTH STAR BOROUGH
SOLID WASTE DIVISION
455 Sanduri Street • Fairbanks, Alaska 99701 • (907)459-1482 • FAX 459-1017

FY12 SOLID WASTE USER FEE SCHEDULE

(JULY 1, 2011 – JUNE 30, 2012)

✸ *FEE SCHEDULES AND VARIOUS OTHER SOLID WASTE DIVISION FORMS ARE LOCATED ON THE WEBSITE:* ✸
http://fnsb.us/solidwaste

REGULAR SOLID WASTE	**Residential** - Accepted free of charge. **Commercial** – **$78/ton** (2,000 lbs) **Regular Solid Waste generated outside the FNSB:** 1. Disposal of less than 25 tons per month of solid waste accepted at 200% of **Regular Solid Waste** rate. **($156/ton)** 2. Disposal of more than 25 tons per month of solid waste: Contact the Landfill for an application. Rate for approved projects will be 200% of Regular Solid Waste rate. **($156/ton)**	**RESIDENTIAL:** Loads from a "residence in a passenger vehicle, pick-up truck, or a trailer with two wheels and a single axle will be considered minor loads if the vehicle is not registered in the name of a company or business or used for commercial purposes." (Ordinance 8.12.055A)
BRUSH	**Residential** - All loads accepted free of charge. **Commercial** - Same as **Regular Solid Waste.**	
JUNK AUTOMOBILES ♻	**Residential** - Accepted free of charge **Commercial** - **$30/each**	Must be free of trash or debris. Contact FNSB Landfill for disposal form and requirements.
HOUSEHOLD APPLIANCES ♻ ***(washers, dryers, freezers, stoves, refrigerators, etc.)***	Same as **Regular Solid Waste** **Commercial** -Additional **$20.00** charge per appliance that contains Freon	Certificate of removal required to avoid $20.00 charge.
MOBILE HOMES	Intact - **$200** Pieces - Same as **Regular Solid Waste**	
SCRAP METAL ♻	Same as **Regular Solid Waste**	Metal pipes, etc., must be less than 8 feet in length.
METAL CONTAINERS (drums & tanks) ♻	Same as **Regular Solid Waste**	Must be clean and have one end completely cut out. Metal containers larger than 500 gallons must be cut into sections no larger than a 500 gallon container.
CONSTRUCTION DEBRIS	Same as **Regular Solid Waste**	
LOADER ASSISTANCE	**Residential** - Free of charge. **Commercial - $2.00/minute.**	
ALUMINUM ♻	Accepted free of charge	
ASBESTOS	**Asbestos material generated within the FNSB**, accepted at **$117/ton,** plus **$50 flat rate fee per load** of asbestos brought to the Landfill. **Asbestos material generated outside the FNSB:** 1. Disposal of less than 25 tons per month of asbestos accepted at 200% of Regular Solid Waste rate **($156/ton)**, plus **$50 flat rate fee per load** of asbestos brought to the Landfill. 2. Disposal of more than 25 tons per month of asbestos: Contact the Landfill for an application. Rate for approved projects will be 200% of Regular Solid Waste rate **($156/ton),** plus **$50 flat rate fee per load** of asbestos brought to the Landfill.	Parties interested in disposing asbestos are required to contact the FNSB Landfill for an asbestos packet prior to disposal. Metal pipes, etc., must be less than 8 feet in length.

♻ ***RECYCLED BY THE FAIRBANKS NORTH STAR BOROUGH LANDFILL.***

Jurcevic, Marija

Subject: FW: Budget rates for water treatment chemicals

From: Rick Holland [mailto:Rick.Holland@univarusa.com]
Sent: Tuesday, February 28, 2012 3:46 PM
To: Jurcevic, Marija
Subject: RE: Budget rates for water treatment chemicals

Marija,

Thank you for your call this morning. Budget prices on the products listed below are as follows:

Product	Package	Price
Hydrated Lime	2000 lb supersack	$ 1250.00/ US ton
Quick Lime	50 lb bags	$ 45.00/ Bag
Ferric Chloride	3500 lb totes	$ 3100.00/ Tote
Plus Deposit at $1000.00 per tote		
Polyclear 2528	55 lb bags	$ 330.00/bag

Prices on the first 3 items are accurate based on delivery to the POGO mine east of Fairbanks. Price on the 4 the item is based on supplying a competitive product. Univar does not sell the Polyclear 2528. All the prices listed above are based on providing combination truck load pricing to the mine.
Tote Deposit on the Ferric Chloride is refundable upon the return of the empty tote in reusable condition.
All prices are subject to change without notice.

Rick Holland
Account Manager
Univar
T +1 907-227-8254

Jurcevic, Marija

From: Alan Hoza <ahoza@awe.lynden.com>
Sent: Wednesday, February 29, 2012 10:54 AM
To: Jurcevic, Marija
Subject: Budget price for bulk ULSD

Marija,
A budgetary price for bulk ULSD into POGO mine for a contractor would be at current rates:

Estimated, at current rack pricing, to be $4.46/gallon for #1 ULSD (with transportation and taxes all-in).

This is based on an 8600 gallon load.

This again, is a budgetary estimate only and not an official quote.

ALASKA WEST EXPRESS
Alan Hoza
Office 907-328-4318
Fax 907-456-2266

Jurcevic, Marija

Subject: FW: Haulage rate

From: Steve Willford
Sent: Friday, February 17, 2012 1:30 PM
To: Jurcevic, Marija; Darryl Weide
Subject: RE: Haulage rate

Marija,

Estimate only for diesel and explosives would be $1755 per truckload one way. This cost is estimate for transport only and does not include the cost of the product.
All costs are subject to market at the time of shipment.

To answer your question with regard to inclusion of labor: The costs indicated are for transportation of item to or from with inclusion for the driver, tractor, and trailer for the purpose of getting the load to or from. Under normal circumstances, we allow a 1 hour period on either end for loading and discharging each load. Additional time is subject to standby charges. Generally, this is a reasonable amount of time for this purpose.

However, everything else that may be connected to the means of accomplishing that task, such as forklift, loaders, cranes, etc or the labor to operate such is not included and not in our scope usually as just being the transporter.

Thank you,
Steve

From: Jurcevic, Marija [mailto:mjurcevic@srk.com]
Sent: Friday, February 17, 2012 10:49 AM
To: Darryl Weide
Cc: Steve Willford
Subject: RE: Haulage rate

Just to confirm, are you saying that $1,297.17 per load would be a good budget rate for hauling everything below except explosives and diesel. Would that rate include the labor costs?
Thanks,
Marija

From: Darryl Weide [mailto:DWEIDE@awe.lynden.com]
Sent: Friday, February 17, 2012 11:25 AM
To: Jurcevic, Marija
Cc: Steve Willford
Subject: RE: Haulage rate

I'll let Steve hone in –Initial info I gave you would apply to 99% of below. Steve can comment on the diesel & explosives

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From: Jurcevic, Marija [mailto:mjurcevic@srk.com]
Sent: Friday, February 17, 2012 10:43 AM
To: Darryl Weide

Cc: Steve Willford
Subject: RE: Haulage rate

Darryl,
Items that would be typically hauled from Fairbanks to Pogo would be:

- Construction materials like cement, HDPE & steel pipes, lumber, bentonite, dust suppressant etc.
- Revegetation materials like seeds, seedlings, mulch and fertilizer
- Water treatment chemicals like lime, quick lime, ferric chloride
- Explosives, diesel, etc.
- Camp supplies

Items that would be typically hauled from Pogo would be:

- Hydrocarbon contaminated soils for incineration
- Solid waste for landfill disposal
- Salvaged equipment and materials

People would need to be transported both to and from the work site.
I'm certainly not looking for minimal rates, but rather a reasonable average per load for hauling the above lot, or perhaps separate rates for hauling each group of items if that would be more appropriate.
Thank you,

Marija Jurcevic
Senior Consultant

srk consulting

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From: Darryl Weide [mailto:DWEIDE@awe.lynden.com]
Sent: Friday, February 17, 2012 9:24 AM
To: Jurcevic, Marija
Cc: Steve Willford
Subject: RE: Haulage rate

Well as usual this isn't an easy thing to reply to but can give you some general info. Based on legal (NOT TO EXCEED 48' long, 8' wide, 8' high 44,000#) current price would be $994.00 + fuel surcharges (currently 30 ½% or $303.17) = $1,297.17. Unfortunately you will/would be shipping all kinds of things OTHER THAN aforementioned. The $1,297.17 is/would be considered a MINIMUM per load with ONLY one direction to go and that is upwards. Give me a list of what you're looking at shipping and I'll give you specifics and not theory

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From: Jurcevic, Marija [mailto:mjurcevic@srk.com]
Sent: Friday, February 17, 2012 8:48 AM
To: Darryl Weide
Subject: Haulage rate

Hello Daryl,
We are preparing a reclamation bond cost estimate for the Pogo Mine that assumes that Pogo is no longer operational and the State of Alaska has appointed a civil contractor to reclaim the site.
I'm looking for a budget rate that would be currently available to the civil contractor for haulage of construction material from Fairbanks to Pogo.

Marija Jurcevic
Senior Consultant

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