

CAMECO CORPORATION
CONTACT LAKE OPERATION
FINAL REPORT

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Cameco Gold Inc.

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EXECUTIVE SUMMARY

GENERAL

The purpose of this report is to give a historical review and to provide some insight into the start up, operation, overall finances, and decommissioning of the Contact Lake mine. It is hoped that feasibility decisions on future mines will be made easier as a result of this review.

The Contact Lake gold property lies within the Mineral Exploration Zone of the Lac La Ronge Provincial Park and is located 63 kilometres north of the town of La Ronge via Highway 102. The project was part of the Preview Lake Joint venture property whose ownership was Cameco Corporation two thirds and Uranerz Exploration and Mining Ltd. one third, with Cameco being the operator.

Exploration and Development

In 1984, a small field program was carried out to evaluate an anomalous (30 ppb Au) lake sediment sample taken from Turtle Lake in 1978. Additional sampling confirmed the anomaly. Field programs in 1985 and 1986 outlined a 500m wide bulk till anomaly that extended 2 km northeast to the shore of Contact Lake. In 1987, further field work identified the footwall shears of the Bakos Zone as it outcrops along the base of a steep scarp. In 1988, a diamond drill program returned erratic gold mineralization. In 1989, aided by an IP-Resistivity survey, drill holes intersected significant gold mineralization and began delineating the Contact Lake gold deposit. By the end of July, 1993, 119 diamond drill holes totalling 52,337 m were drilled.

Mineable Reserves, based on surface diamond drilling, were calculated as 1,300,000 tonnes grading 8.0 grams per tonne with a total gold content of 338,000 ounces. Additionally, an estimated 336,000 ounces of Geological Reserves were calculated to be at or near the Contact Lake deposit.

During the summer of 1993, a Phase I Underground Exploration commenced with the portal collared in September of 1993. In January of 1994, a 43-tonne bulk sample was sent to Lakefield Research to determine milling parameters and to confirm sampling results. The gold content of the sample was determined to be 10.30 g/t whereas the grade of the chip samples taken from the face averaged 10.67 g/t. The results of the bulk sample gave strong credibility to the grade determined by chip sampling which supported the favourable comparison between the chip sampling and the reserve estimates from drill holes. No problems were anticipated with current or future grade estimation.

The decision to go ahead with Phase II, i.e. mine development, mill construction and full production, was made on April 7, 1994. Site and mine development commenced by month end.

Construction

Preparation of the mill terrace began in May of 1994. In order to minimize impact to the environment, a "basement" was blasted into the bedrock to lower the mill profile such that it could not be seen from the canoe route on Contact Lake. Clearing of trees along roadways and building sites was also kept to a minimum. In addition, mine ventilation fans were installed underground to limit the noise. All of these efforts were rewarded as a Park User Survey taken in 1996 indicated acceptance by the public of mining in the park.

The construction contractor mobilized to site on August 1 with initial concrete poured on August 12. October and November saw the completion of equipment installation and building construction with construction contractor crews leaving site December 9, 1994.

On December 3, the wet side of the mill was commissioned as well as the tailings and reclaim water lines. On December 14, 1994, crushing of ore began with the grinding circuit commissioned on December 17.

At 5:30 p.m. on December 21, 1994, continuous throughput of ore began.

Total Capital/Development costs for Phase I and II of the project were \$35,565,133. Additional sustaining capital costs from 1995 through 1997 were \$3,450,352 for a total of \$39,015,485. Cameco's share of these costs is \$26,010,321. Decommissioning/Reclamation costs for 1998 and beyond are not shown here.

Mining

The configuration of the orebody, width (3-15 m) and dip (70°), and the projected rock strength, made it suited for longhole stoping. Shrinkage stoping would be used in narrower areas. A mining contractor, Procon Mining and Tunnelling Ltd. of Burnaby, B.C., was used to do both the development and stoping.

Access was via the -15% test phase ramp which was driven 6.0 x 4.0 m to allow for larger haulage trucks in anticipation of production requirements. Levels were driven a little smaller unless they were to serve as a major haulage level, which was every third level. Two ventilation raises (3.0 x 3.0 m) were driven, one at each end of the orebody, to provide fresh air to the workings (160,000 cfm). The ramp was used as the exhaust airway.

Final milled tonnage was calculated at 1,006,673 at a grade of 6.16 g/t. This compares to the feasibility study of 1,312,931 tonnes at a grade of 8.01 g/t. Tonnes of ore hauled from underground are corrected to milled tonnes.

Total Mine Operating cost is \$44,767,118 or \$45.87 per tonne milled. This does not include costs for Phase I development nor tonnes derived from it. It does include both Cameco and Contractor costs. Mining contractor cost for the operating phase is \$32, 096,039 and total Mining Contractor cost for the Contact Lake project is \$40,138,347.

Milling

The Contact Lake Mill began continuously processing ore December 21, 1994, approximately six months after the mill building excavation work was started. The mill was designed to process 700 mtpd of ore with an average head grade of 8.3 g Au/tonne. By May of 1995, the mill was processing 800 tonnes per calendar day and averaged 715 for the year. Throughput in 1996 was 834 t/calendar day; 1997 - 801 t/calendar day; and 1998 - 914 t/calendar with project life throughput averaging 806 t/calendar day. A total of 1,006,673 tonnes of ore with an average head grade of 6.16 g Au/tonne was processed through the mill and 188,185 troy ounces of gold were poured over the operating period. Mill availability and recovery over the life of the project was 93.2% and 95.0% respectively.

The metallurgical balance for the operation was as follows:

•	Input	6,197,470 grams	sample assays and weightometer tonnes.
•	Tailings Losses	311,873 grams	sample assays - calculated volume/density.
•	Gold Shipped	5,853,190 grams	reported gold sent to Johnson Matthey.
•	Other	<u>242</u> grams	pendants as completion bonus.
•	Unaccountable Loss	(32,165 grams)	Unaccountable losses not measured.

Fine carbon waste, sludge, slag, stripped carbon, and other waste collected during operation and final clean up was sent to G.D. Resources of Sparks, Nevada. Gold recovered from the waste product amounted to 59,190 grams bringing the total gold production from the operation to 5,912,402 g or 190,088 troy ounces and the final "unaccountable" is now a gain of 27,025 grams.

If we apply the 27,025 grams to tailings, then the actual tailings loss is now 284,848 g rather than 311,873 g and the overall Recovery would be 95.40% rather than the reported 94.97%. If the 27,025 grams is applied to the Input, the grade would be 6.19 g/t rather than 6.16 g/t and the recovery would have been 94.99%. Either way, the difference is insignificant. The above results show that the sampling and assaying procedures were extremely accurate and is certainly a credit to the dedication and professionalism of mill staff.

Project to date milling costs averaged \$111.47/tr oz Au and \$21.06/tonne milled.

Administration

The function of the administration department at Contact Lake was to provide support to the operation in the areas of health care and safety, human resource services, secretarial services, warehousing, camp administration, and general site services.

In terms of budgeting, all general site costs such as taxes, employee subsidies, employee transport and accommodation, administrative staff, and site maintenance were provided for in this centre.

A total of 20 individuals were severed and two quit. The remainder were transferred to other operations. Severance costs for Contact Lake were over budget at \$657,290.

Cost of Administration per tonne milled for the life of the project averaged \$9.17.

Decommissioning/Reclamation

Decommissioning of the mine, surface and underground, commenced in May of 1998. By June 18, the mining contractor had demobilized and left site. Budget costs were \$256,551 with actual at \$256,972. All work was completed on schedule.

Mill decommissioning in 1998 consisted of winterizing and mothballing equipment and building in anticipation of selling the asset. No mill site reclamation is scheduled until 1999. An agreement was reached in late 1998 for the sale of the mill. Once the mill building and equipment are removed, the basement and available mill terrace area will be filled with waste rock and contoured using available waste rock.

In late 1996 it became apparent that the water level in the TMF would reach the level of the operating limit between June and September, 1997. In February of 1997, a small pilot plant was constructed in the unused Acid Wash building and test work by site personnel was undertaken to determine the optimum process for treatment of the water. A chemical treatment process was chosen, approval was received, engineering and construction was completed, and release to the environment was initiated September 2, 1997. The plant operated as per the design and license requirements until September, 1998.

In late October, 1998 a test was conducted, eliminating ferric sulphate, lime and sulphuric acid from the process and using only coagulant and flocculant. All license parameters were achieved with the revised process. The plant began discharging treated water to the environment using this process on November 1, 1998.

Conclusion

Technically, the Contact Lake gold mining project was successful. Operating costs were reasonable, northern employment was excellent averaging 66% for the life of the project, only two minor spills were recorded, ore dilution was less than 10% using a narrow vein blasthole stoping method, mill recoveries were excellent averaging 95%, metallurgical balance was excellent with a positive difference of 0.44% over 190,000 ounces, and final redeployment of personnel went well with two-thirds transferred to other operations.

Financially, thanks in part to Cameco's treasury group, the project nearly broke even. The high productivity and efficiency of the operation also contributed greatly.

Cameco's share of the capital costs and the proceeds of asset disposal is \$26,010,321 and \$2,222,667, respectively, and of project-to-date decommissioning costs, \$785,239. Remaining assets and future decommissioning costs are estimated to be \$1,739,390. Total operating costs were \$77,350,419 with Cameco's share at \$53,180,808. Revenue realized from the sale of gold, as of the end of December, 1998, was \$69,796,293. Revenues realized from gold recovered from waste products sent to G.D. Resources of Sparks, Nevada is estimated as \$696,240.

•	Ounces sold	127,038
•	Sales Revenue	\$69,796,293
•	Estimated Sales Revenue	\$ 696,240
•	Deferred Revenue	<u>\$ 6,857,886</u>
•	Total Revenue	\$77,350,419
•	Capital Costs	\$26,010,321
•	Operating Costs	\$53,180,808
•	Decommissioning Costs	\$ 785,239
•	Asset Disposal	<u>(\$ 2,222,667)</u>
•	Total Costs	\$77,753,701

Net gain(loss) on project to date (\$403,282)

The above costs and revenue are Cameco's 2/3 share until July 31, 1998 and 100% Cameco after, and are Project-To-Date as of December 31, 1998.

The gold recovered from material sent to G.D. Resources of 1,903 ounces is based on assays of material by both G.D. Resources and Cameco agent, American Assay Labs. An average of those assays and agreed upon weights would provide 1,903 ounces. Seven of the eleven assays had been sent to an umpire with final settlement.

If grades were the predicted 8.0 g/t rather than 6.16 g/t, an additional 1.748 g/t at a 95% recovery could have been recovered at the same operating cost. This calculates to 1,759,664 grams over the 1,006,673 tonnes milled, or an additional 56,574 ounces. Cameco's share would be 37,716 ounces which would mean an additional \$18,000,000 to \$20,000,000 of revenue and would have put the operation in a profitable position.

In any case, the project made an operating profit in every year of its short life and is a credit to the skills and dedication of the crew, both Cameco and contractor.

CONTACT LAKE JOINT VENTURE
Production Statistics and Operating Costs
December 31, 1998

	1993	1994	1995	1996	1997	1998	Project Total to Date
<u>Production Statistics (100%)</u>							
Ore (tonnes)			233,449	294,369	335,677	112,397	975,892
Grade (g/t)			7.870	6.567	6.906	6.220	6.955
Troy ounces			59,068	62,152	74,527	22,476	218,223
<u>Mill</u>							
Ore (tonnes)			268,964	304,294	292,722	140,693	1,006,673
Grade (g/t)			6.200	6.530	6.000	5.700	6.160
			53,612	63,882	56,465	25,782	199,741
Percentage recovery			92.96%	96.23%	95.25%	95.38%	94.97%
Recovered troy ounces			49,837	61,474	53,783	24,591	189,685
Change to incircuit inventory			(2,235)	(912)	(1,190)	4,740	403
Troy ounces poured			47,602	60,562	52,593	29,331	190,088
Project to date			47,602	108,164	160,757	190,088	
<u>Operating Costs (100% dollars)</u>							
Mining			11,029,472	16,384,551	14,895,654	2,457,440	44,767,117
Milling			5,750,335	6,018,720	6,173,227	3,246,411	21,188,693
Site Services			2,672,567	2,793,394	2,225,173	1,536,915	9,228,049
Attributed costs/G&A fee			828,969	1,039,749	1,040,510	295,016	3,204,244
Environment & Safety			81,247	103,324	118,565	64,175	367,311
Engineering & Projects			123,937	54,565	15,624	1,149	195,275
Exploration			2,452	0	0	0	2,452
Expense Projects			1,844	501,432	0	0	503,276
Total Operating Costs	0	0	20,490,823	26,895,735	24,468,753	7,601,106	79,456,417
<u>Unit Costs</u>							
<u>Cost per troy ounce poured</u>							
Mining	0.000	0.000	231.700	270.540	283.230	83.780	235.510
Milling	0.000	0.000	120.800	99.380	117.380	110.680	111.470
Site Services	0.000	0.000	56.140	46.120	42.310	52.400	48.550
Attributed costs/G&A fee	0.000	0.000	17.410	17.170	19.780	10.060	16.860
Environment & Safety	0.000	0.000	1.710	1.710	2.250	2.190	1.930
Engineering & Projects	0.000	0.000	2.600	0.900	0.300	0.040	1.030
Exploration	0.000	0.000	0.050	0.000	0.000	0.000	0.010
Expense Projects	0.000	0.000	0.040	8.280	0.000	0.000	2.650
Total Operating Costs	\$0.000	\$0.000	\$430.450	\$444.100	\$465.250	\$259.150	\$418.000
<u>Cost per tonne milled</u>							
	\$0.000	\$0.000	\$21.360	\$19.770	\$21.090	\$23.070	\$21.050
<u>Cost per tonne mined</u>							
	\$0.000	\$0.000	\$47.250	\$55.660	\$44.380	\$21.860	\$45.870

HISTORICAL SUMMARY

1993

- October The portal was collared on October 4 by Procon Mining, following the completion of the all weather road from highway 102 (5.5 km).
- December Phase I portion of the 5386 level ore drift was completed. A total of 5,903 Tonnes of ore was stockpiled on surface. The decline advanced 481m to-date. The #1 vent raise was completed to surface.

1994

- January A 43 tonne bulk sample was obtained from the 5386 level ore drift for metallurgical testing at Lakefield Research.
- February The decline advanced to the 5350 level cross-cut. The Phase I portion of the 5350/40 level ore drifts were completed. Two exploration ore raises were driven on the 5386 level ore drift.
- Lakefield Research completed their test of the 43 tonne sample. Gold content confirmed site assays and estimates.
- March An exploration raise was driven on the 5340 level ore drift. Phase I development completed. A total of 14,901 tonnes of ore were stockpiled from Phase I.
- April A decision was made to proceed with Phase II of the Contact Lake project. The underground contractor (Procon) began decline development on April 19.
- The mill site area was cleared of timber and Kilborn Engineering was retained for mill design and equipment procurement.
- May The decline reached the 5320 level. The #2 vent raise was started from the decline. Development resumed on the 5386 and 5340 level ore drifts.
- Blasting to level the mill terrace area began on May 9. Work began on the Turtle Lake (waste management area) access road.

June Turtle Lake TMF access road was completed and dewatering of the lake started on June 30.

 Blasting to level the mill terrace area was completed and blasting of the basement began on May 25.

 Construction of the main camp and offices was completed. A shop/warehouse building was erected and work started on the fire pumphouse and improvements to the freshwater pumping system.

July The decline advanced to the 5290 level. Development began on the 5320, 5300 and 5290 levels.

 Blasting of the mill terrace and basement was completed.

 Work began on the tailings pond dam for the tailings management area but was stopped for design revisions and final environmental approvals.

 All bids for all mill equipment were received. An additional 30-person bunkhouse was installed for extra personnel for mill construction.

August Work on the mill construction began on August 3 with the mobilization of the contractor, InterNorth/Graham.

 Concrete was poured for the ball mill, cone crusher, and jaw crusher foundations, the fine ore bin walls and floors, and the south wall grade beam.

 The 5386 level was completed and the decline was extended to accommodate the main sump on 5290 level.

 The extension of #1 FAR to the 5386 level was completed.

September The pump down of Turtle Lake was completed. Reclaim and tailings lines to the TMF were installed as were the poles for overhead power distribution.

 Mill construction progressed with about 80% of concrete work completed. The ball mill was installed and rough set; the jaw and crushers were set in place and grouted, and the fine ore bin was erected in place.

- October The polishing pond dam at Turtle Lake waste management area was completed.
- All concrete work in the mill was completed and all major equipment was installed. The mill cladding was completed and interior steel, piping, and electrical cable was being installed.
- November Installation of four 1,100 kW Caterpillar generator units was completed and units put online November 23.
- The ball mill, jaw crusher, and cone crusher were set, ready for final commissioning. All pumps and agitators were received, installed and being commissioned. Propane unit heaters were installed and commissioned. Tailings and reclaim water line installation was completed.
- Underground lateral development on 5320, 5300 and 5290 levels was completed. The main sumps on 5290 level were completed with the exception of the fresh water sump. A Cubex drill was received and in-the-hole production drilling commenced on 5320 level.
- Hiring of mill maintenance and operating personnel commenced.
- December Completed #1 vent raise from 5290 to 5340 level. Completed #2 vent raise from 5290 to 5320 level.
- Completed a slot raise between 5290 and 5320 level in 481-29 stope.
- All mill operating personnel were hired by December 8. On December 9, construction crews left site and final commissioning of all mill equipment commenced. On December 9, the jaw crusher pitman bearing failed, repaired and reinstalled December 13.
- Reclaim and tailings lines were commissioned on December 3.
- Mill feed was put through the crushing circuit on December 14 and into the grinding circuit on December 17. At 5:30 p.m. on December 21, continuous throughput of ore began. A total of 9,059 tonnes were milled in December with an average head grade of 4.77 g/t Au with gold production remaining in-circuit inventory.
- Construction camp extensions were decommissioned.

1995

- January Started blasting first production stope, 481-29. Development began on the 5420 level.
- Poured first gold bar on January 16.
- Numerous changes were made in the mill during the month, all associated with start-up. These include modifications to chutes, replacement of several drive motors, and modifications to the barren and pregnant solution tanks. Throughput was 688 tpd.
- February The official opening was held on February 22, 1995 with Cameco senior executive, the Premier of Saskatchewan, and other dignitaries in attendance.
- Decline advanced 44 m. Development of the second stope was completed and production drilling began using a Tamrock Solo drill.
- Excessive oil leaking from the cone crusher continued to contribute to low recoveries of 84.6% for the month. Availability was at 93.5% due mainly to cone crusher repairs at mid-month. Throughput was 660 tpd.
- March Completed #1 FAR to 5300 level.
- Recovery was 91.6% and throughput was 722 tpd.
- April Recovery was 94.60% and throughput was 725 tpd.
- The HDPE liner was welded into place at the Turtle Lake TMF dyke.
- May Completed blasting the 491-29 stope. Continued blasting and longhole drilling 481-29 and 471-29 stopes.
- Pipe installation of the new mine dewatering system was in progress and the main fan in #1 FAR was installed and commissioned.
- Recovery was 93.90% and throughput was 801 tpd.
- June Completed ore and access drift development on the 5420 level. Decline advancement resumed.

Additional diamond drilling resulted in a reinterpretation of 471-29 stope which drastically reduced the overall reserves for this block.

Pipe installation of the new mine water discharge line was completed and the main pumps were installed.

Operational problems occurred with the sanding of the CIP tanks with coarse material. The problem was resolved by adding compressed air to help agitate the slurry.

Recovery was 94.0% and throughput was 814 tpd.

July

Continued blasting the 481-29 stope. Continued longhole drilling the 471-29 stope. Decline advancement continued.

Recovery was 92.8% and throughput was 789 tpd.

August

Continued blasting the 481-29 stope. Completed Optech survey of 471-29 stope. Completed ventilation and diamond drill access drift. Completed 481 stope backfill raise from 5420 level to surface. Commissioned fan in # 2 vent raise.

Recovery problems were encountered with the higher feed grade and 800 TPD throughput. It was suspected the retention time was insufficient to properly leach the coarser gold. Recovery was 93.5% and throughput was 743 tpd with grade at 10.16 g/t.

Preparatory work was initiated for the installation of the Knelson Concentrator.

September

Completed blasting the 481-29 stope. Started 471 stope backfill raise from 5390 level to 5340 level. Commenced blasting upper portion of 271-29 stope. Commenced SK-448 shrinkage stope from 5300 level. Commissioned Mather & Platt pumps at 5290 level sumps.

Decline development has been completed for the year to the 5225 elevation.

The Knelson concentrator was installed and commissioned without major problems. However, the flush holes in the bowl of the concentrator blinded off due to scale build-up from using process water. This was switched to fresh water, but some additional work was necessary to improve the system.

As expected, tabling was reduced to about two hours per day with improved security. Recovery was 94.57% and throughput was 668 tpd.

Graham Construction arrived on site to install support steel and rehabilitate the jaw crusher concrete slab. Remedial work was also carried out on the jaw crusher hopper support and on the leach tank agitator support.

The initial 600 m section of tailings and reclaim water lines were wrapped with HDPE as a spill containment measure. Preparatory work was carried out to reroute the reclaim water line to bypass a 500 m section that was not within the Turtle Lake TMF drainage area.

October

Blasting and mucking of 481-29 stope has been completed. An Optech survey of the stope was taken to reconcile tonnes and grade between mine and mill figures. Backfilling with waste from the surface stockpile commenced in late October.

Graham Construction satisfactorily completed all remedial work on the jaw crusher support slab, the jaw crusher hopper and the leach tank agitator support.

The reclaim water line was rerouted to bypass a 500 m section that is not within the Turtle Lake TMF drainage area.

Beaching of tailings at the Turtle Lake TMF dyke was completed with excellent results. Tailings were again discharged below water at the east end of the facility. Recovery was 94.64% and throughput was 752 tpd.

November

Completed blasting the 471-29 and 471-38 stopes. Completed blasting SK448-30 shrinkage stope.

A reconciliation of 481-29 stope indicated a close correlation of tonnes between milled, hauled and the Optech survey. Contained ounces and grade were much lower than anticipated.

The ball mill was thoroughly cleaned to determine gold inventory. A total of 1,667 ounces were determined to have been in the ball mill, with 685 ounces actually poured. The remaining 982 ounces were recycled into the leach circuit. Recovery was 96.02% and throughput was 734 tpd.

Construction of an assay lab and acid wash area commenced during the month with floors poured and assay lab walls erected. The majority of electrical work was completed.

December

Completed mucking the 471-29, 471-38, and 491-29 stopes. Completed blasting 450-38 stope. Completed slot raises for all 475 stopes to 5386 level.

The agitator motors on #1 and #2 leach tanks failed.

With a year-end reconciliation of tonnage, a negative adjustment of 10,264 tonnes was made. Recovery for the month was 94.80% and throughput was 802 tpd.

1996

- January Commenced development in the decline, and on 5244, 5260, and 5230 levels. Commenced longhole drilling in 457-29 stope. Completed slot raises for 455-38 and 475-29 stopes. Completed backfilling 491-29 and 471-29 stopes.
- Plant recovery was 96.14% and throughput was 835 tpd.
- Construction of the assay lab and acid wash continued in January. The acid wash was basically complete with an overall audit and some piping revisions required to ensure safe operating.
- On January 28, there was a spill of about 500 litres of diesel fuel when a day tank overflowed due to a faulty float valve. The majority of the fuel was cleaned up with the remainder to be done in the spring.
- February Completed mucking the 448-30 and 450-38 stopes. Continued blasting 455-30 and 475-29 stopes. Completed slot raises for 455-38 and 475-29 stopes. Completed service raise in SK491-32 shrinkage stope. Completed backfilling 491-29 and 471-29 stopes.
- Recovery was 96.03% and throughput was 841 tpd.
- March Continued longhole drilling in the 455 and 475 stopes. Continued blasting in the 455 and 475 stopes.
- Two remote control LHD's were trapped in separate drawpoints of 455-30 stope during the month. One was trapped for two weeks while the second was retrieved in approximately five days. Only minor damage was sustained to the units.
- The new assay lab was commissioned on March 18 and was fully functional at month end.
- Recovery was 95.16% and throughput was 800 tpd.
- April Completed longhole drilling in the 455-38 and 475-38 stopes. Continued blasting in the 455-34 and 455-38 stopes. Completed 492 stope slot raise from 5320 level to 5386 level.

Tonnage was below forecast primarily due to higher and variable grades causing recovery problems. Problems also developed in the thickener underflow area, again limiting throughput.

All four mill basement sumps and the former acid wash area sump have been lined with steel liners to prevent possible leakage of contaminated water to underground.

May

Completed decline to 5160 level. Commenced #2 vent raise development from 5160 level to 5244 level. Completed blasting in the 455-34, 455-38, and 475-38 stopes. Commenced longhole drilling in 492 stopes. Continued mucking 455-34, 455-38 and 491-32 stopes.

Construction of the new camp roof commenced in May. This is required to prevent leakages in winter and spring that are causing fire hazards.

Forest fire safety at Contact Lake was reviewed by the SERM's La Ronge Forest Fire Centre. Several recommendations relating to clearing of trees were made that go against directives from Parks that restricts the operation from doing any clearing.

Recovery was 97.15% and throughput was 825 tpd.

June

Completed #2 vent raise development from 5160 level to 5244 level. Commenced blasting in the 492 stope. Continued longhole drilling in 492 stopes. Continued mucking 455, 492, and 495 stopes.

During the month, it was discovered that the gear housings on all four leach tank agitator gear boxes were cracked. No. 4 leach tank gear housing was replaced and the tank was put on line with air agitation only. Tonnages were reduced for several days to maintain recoveries.

Recovery was 96.61% and throughput was 810 tpd.

Raising of Turtle Lake TMF dyke started in early June with the earthwork 95% complete by month end.

July

Completed longhole drilling on 5386 level for 492-35 stope. Completed blasting and commenced mucking in 492-32 stope. Commenced blasting in 492-35 stope. Continued backfilling 455 stope.

The escapeway in fresh air raise #2 from 5160 level to 5244 level was completed along with the installation of ventilation bulkheads and fans to complete the ventilation circuit to 5160 level.

The cracked gearbox on #1 leach tank was changed out and the tailings line was rerouted to discharge at the TMF dyke.

Recovery was 96.52% and throughput was 778 tpd.

Raising of the Turtle Lake TMF dyke was completed in early July. Knudson Construction completed the earthworks and Century Mining installed the liner.

Construction of the new camp roof was completed in early July.

August

Completed longhole drilling in 492-35 stope. Continued longhole drilling in 492-32 stope. Continued blasting in 492 and 495 stopes. Continued backfilling 455 stope. Completed 24 m of slot raise.

Recovery was 97.0% and throughput was 900 tpd.

September

Continued decline development. Completed 20 m exploration raise at 5280 level. Completed #1 vent raise from 5230 level to 5300 level. Completed bottom portions of 470-17 and 486-32 slot raises. Commenced longhole drilling in 470-17 stope. Completed blasting 495-35 stope. Continued blasting in 492 stope. Continued backfilling 455 and 475 stopes.

Installed the new mine water discharge line to the mill in order to replace fresh water from Contact Lake. The line was commissioned. Minor modifications are to continue in October.

Recovery was 96.67% and throughput was 879 tpd.

October

Commenced fresh air raise from 5170 level to 5230 level. Completed longhole drilling of upholes from 5200 level in 470-17 stope. Completed blasting 492-32 stope. Continued backfilling 475 stopes.

Contact Lake water was replaced with mine water in the Knelson Concentrator. Some additional repiping was required to use mine water as cone and jaw crusher cooling water.

The mainframe was replaced and clamping cylinders were rebuilt on the cone crusher. This did not result in any downtime in the mill. However, change out of main bearings, shaft and Pitman on the jaw crusher resulted in 56.0 hours of downtime. The main bearings were purchased new whereas the shaft and Pitman were in stock.

Recovery was 96.36% and throughput was 782 tpd.

November

Completed fresh air raise # 1 to 5170 level. Completed slot raises for 470-17, 474-17, and 467-17 stopes. Continued longhole drilling and blasting for the 5170 level stopes.

At mid month, development crews were reduced as forecast advance had been achieved.

Contact Lake water was replaced with mine water in the jaw and cone crusher cooling systems. This was also done for the ball mill bearings. The fresh water consumption in the mill was reduced by about 70%.

Recovery was 95.68% and throughput was 878 tpd.

December

Completed 115 m of slot raises for 467, 474, and 486 stopes. Continued longhole drilling and blasting for the 5170 level stopes. All development crews left site on December 18.

A test was conducted to treat minewater underground. Coagulant and flocculant were added and the water filtered through a backfilled stope on 5320 level and drained on the 5290 level into the main sumps. This treatment system removes over 90% of the suspended solids. The clarified water is used in the mill circuit.

The gold recoveries in the gravity circuit decreased from about 45% to about 35%. It was believed this reduction was caused by grease or similar organic compounds in the minewater.

Recovery was 95.91% and throughput was 818 tpd.

1997

January

Commenced development in the decline, on 5140, 5160, and 5260 levels, and in Diamond drill drift. Completed longhole drilling in 467-17 stope, 5200 level. Continued longhole drilling in 486-32 stope. Commenced longhole drilling in 467-17, 5230 level. Continued blasting 474-20, 467-17 and 486 stopes. Commenced development in shrinkage stope SK452-23.

Revisions were made to the dewatering system to allow for effective flocculation to improve mine water clarity.

The rockbreaker was down for four days due to the outer boom assembly breaking at the butt end.

The installation of equipment for a small pilot plant to test treatment methods of reclaim water was completed during the month. The equipment was setup in the acid wash annex.

Recovery was 96.19% and throughput was 765 tpd.

February

Continued longhole drilling in 467 and 474 stopes on 5170 level. Completed longhole drilling in 474-26 and 486-32 stope. Commenced longhole drilling of upholes in 486 stope from 5386 level.

The pilot plant test for effluent treatment was completed with favourable results from the hydrogen peroxide process. Using reclaim water containing about 10 ppm total cyanide and 5 ppm Cu, effluent containing about 0.3 ppm CN and 0.2 ppm Cu was produced. The limits for cyanide and copper are 1.0 ppm and 0.3 ppm, respectively.

Recovery was 95.11% and throughput was 912 tpd.

March

Commenced ventilation raise from 5110 level. Completed diamond drill drifts at 5100 elevation and on 5244 level. Completed longhole drilling in 486-34 stope on 5386 level. Continued longhole drilling in 474-23 stope on 5260 level. Completed blasting of 467-20 stope. Continued blasting of 486-34 and 486-38 stopes.

Construction of 5140 level pump station continued in March and improvements to the 5290 level minewater clarification system commenced. As a continuation of testing the effluent treatment process, the thickener was

bypassed and used as a clarifier. Cyclone overflow was discharged directly into #1 leach tank at an average density of 49% solids and normal mill throughput. Some problems developed due to rubber and trash particles collecting in the leach tanks and contaminating solid samples. Flocculant has been added to the leach tanks to settle the rubber and trash particles and prevent a build up on the surface of the leach tanks.

Recovery was 94.43% and throughput was 727 tpd.

Downtime in the mill in March was 121.00 hours with 87.25 hours required to repair the pinion gear in the cone crusher.

April

Continued ventilation raise from 5110 level. Completed longhole drilling in 474-26 and 470-26 stopes on 5260 level. Commenced longhole drilling in 470-23 stope on 5260 level. Completed blasting of 474-23 and 474-26 stopes. Continued blasting of 486-34 and 486-38 stopes.

The effluent treatment process test was continued with the thickener bypassed and used as a clarifier. Cyclone overflow was discharged directly into #1 leach tank at an average density of 49% solids with lower than normal mill throughput. Problems continued due to rubber and trash particles collecting in the leach tanks. Testing of the effluent treatment process was discontinued on April 28 and the thickener was put back on line.

Recovery was 92.17% and throughput was 775 tpd.

May

Commenced slot raise development in 460 and M3 stopes. Completed longhole drilling in 470-23 stopes on 5260 level. Commenced longhole drilling in 460-34 stope on 5420 level. Commenced blasting of 470 stope on 5260 level. Completed slot raises in 460 and M3 stopes. Completed longhole drilling in 460-34 stope on 5420 level.

Installation of the mine water clarification system and discharge line for the 5140 level pump station was completed.

Work on the effluent treatment system consisted of; a) completion of design; b) preparation of construction drawings; c) sourcing of equipment; d) installation of 8 inch reclaim water line; e) extension of 6 inch line for discharge of treated water into Scythes Lake; and f) completion of water clarification system underground.

Approvals were received from SERM for discharging of treated TMF water and underground water into Scythes Lake. Discharge period is to be from June 15 to September 15, and October 31 to May 1, annually.

Recovery was 94.79% and throughput was 821 tpd. The thickener was on line for the entire month, which improved recoveries.

June

Access level development for the P0 on 5110 and 5140 levels and for MZ1 zone on 5110 level continued. Blasthole stope development consisted of completing the ore drifts and drawpoints on 5110 level and ore drift on 5140 for the P0 zone. The slot raises in 460 stope and in M3 stope were completed. Development in M1 and M2 stopes commenced.

The Life of Mine plan was updated and presented to the Joint Venture partners. Reserves indicated mining would be completed in May of 1998 and milling in August of 1998.

Installation of the mine water clarification system and discharge line for the 5140 level pump station was completed. Modifications to the chemical addition and water handling systems were completed on 5290 level with initial results showing TSS levels well below allowable for discharge.

The effluent treatment circuit process equipment was ordered (ie. tanks and agitators) with delivery expected the end of July.

Recovery was 95.49% and throughput was 830 tpd.

July

Commenced slot raises in M1 and M2 stopes. Completed longhole drilling in 460-34 stope. Completed blasting between 5290 and 5170 levels. Commenced blasting of 460-34.

The underground diamond drill program was stopped as there were no more reasonable targets and the equipment was demobilized.

In June, installation of the mine water clarification system and discharge line for the 5140 level pump station was completed. The system operated for several days the beginning of July with discharge parameters being met, then on July 8 commenced discharging underground water to Scythes Lake. The average total suspended solids for the month was 13 with the allowable at 25.

On July 3, a piece of wood jammed in the cone crusher causing the drive motor to stall under load. The eccentric bushing was badly scored and cracked and the head was cracked in a number of places and deemed beyond repair. A second hand crusher was purchased for \$120,000. All parts from this used crusher were interchangeable with the unit on site and held as spares. The crusher was back in operation on July 9 and performed satisfactorily.

A number of projects were completed in order to expedite the construction of the effluent treatment plant. These include: a) pouring of the concrete pad; b) by-passing the thickener and installation of a new feedwell to convert the thickener to a clarifier; c) installation of miscellaneous piping and electrics; d) revision to the lime addition system; and e) revision to the reclaim water pump station.

The cooling systems for all equipment in the mill was converted to usage of treated minewater. The cooling water is then recycled through the backfill tank/carbon column to remove any residual impurities, then discharged.

Staff reductions commenced based on the updated Life of Mine plan.

Recovery was 95.18% and throughput was 695 tpd.

August

Continued slot raises in M1, M2, P0, and MZ1 stopes. Continued longhole drilling in M2 stope. Commenced longhole drilling in upper section of P0 stope. Completed blasting of 466 stope on 5386 level. Continued blasting of 460-34 stope. Commenced backfilling of 486 stope from surface waster dump.

Backfilling of 486 stope began on August 29 from the surface waste dump.

The thickener was out of the operating circuit during the entire month with only a minor impact on recoveries. Changes to the cyclone vortex finder and to leach circuit operations improved results. However, as sampling points were necessarily changed, there appeared to be a problem in the metallurgical balance calculations. A thorough study was conducted concerning sampling points and procedures, and assaying procedures in order to determine and correct possible errors.

The effluent treatment plant construction was completed by month end with commissioning commencing on August 31.

Recovery was 95.11% and throughput was 789 tpd.

September

Continued slot raises in M1, M2, and MZ1 stopes. Continued longhole drilling in P0 stope on 5110 level. Continued backfilling of 486 stope.

The effluent treatment plant was commissioned August 31. Treated effluent was discharged to Scythes Lake commencing September 2, for a total of about 30,000 cubic metres. The discharge was suspended as per operating license on September 14. The effluent quality was well below the limits.

Recovery was 96.31% and throughput was 770 tpd.

October

All primary development was completed. Completed slot raises in M1, M2, and MZ1 stopes on 5110 level. Continued longhole drilling in M2 stope. Completed longhole drilling of P0 stope on 5110 level. Continued longhole drilling of P0 stope on 5155 level. Completed blasting of 460-34 and M3 stopes. Completed blasting of P0 stope on 5110 level. Completed backfilling of 486 stope.

Backfilling of 486 stope was completed on October 19. The waste stockpile was cleaned up and recontoured.

The effluent treatment plant was started up on October 28 in order to get it running smoothly before discharging to Scythes Lake November 1.

Investigations continued into reasons for apparent inaccuracies in monthly metallurgical balances. Both leach feed and tails samples were split with one half sent to an outside lab for a check assay. There was a close correlation between the site and offsite labs.

Recovery was 95.71% and throughput was 812 tpd.

November

Completed longhole drilling in M2 stope on 5205 level and 5175 level and in P0 stope on 5155 level. Commenced longhole drilling of M1 stope on 5205 level. Commenced blasting of P0 stope on 5155 level. Commenced blasting of M2 stope.

Mine engineering and geology staff were redeployed as positions become available at other operations.

Cameco and long term contractor employees achieved one year without a lost time accident on November 11.

Recovery was 95.58% and throughput was 851 tpd.

December

Completed slot raises of MZ1 stopes on 5110 level. Commenced longhole drilling in M1 stope on 5205 level and 5110 level. Completed longhole drilling of M2 stope on 5175 level. Completed blasting of P0 stope on 5155 level. Commenced blasting of M2 stope, and MZ1 stopes on 5110 level.

All development, with the exception of some drop raises, was completed in 1997.

Recovery was 95.41% and throughput was 888 tpd.

1998

- January Continued longhole drilling in M1 stope on 5205, 5140, and 5110 levels. Continued longhole drilling in M2 stope on 5205 level. Continued longhole drilling of MZ1 stope on 5140 level. Continued blasting of M1 stope, M2 stope, and MZ1 stopes on 5110 level.
- A booster pump was installed on the discharge line to Scythes Lake and commissioned in January. This was completed in order to increase the amount of reclaim water which could be treated.
- Recovery was 95.31% and throughput was 907 tpd.
- February Completed longhole drilling in MZ1 stope on 5140 and 5110 levels. All scheduled longhole drilling is now complete. Completed longhole blasting in M2 stope on 5110 level. Completed longhole blasting of 464-11 and 469-11 stopes on 5110 level. Continued blasting of M1 stope, and MZ1 stopes on 5140 level.
- On the afternoon of February 11, #1 genset went down due to gear train failure and on February 15, #4 genset went down due to gear train failure. Two rental units were brought to site and wired into the main distribution system. The units were commissioned and the mill was started up the evening of February 19. The mill was down for a total of 115.08 hours because of a lack of sufficient power.
- On February 14, a Procon (Mining Contractor) mechanic was fatally injured while removing a rear wheel from a 35 tonne Toro truck.
- Recovery was 95.38% and throughput was 761 tpd.
- March Continued longhole blasting in M1 stope, and 459-11 stope on 5110 level. Continued blasting of M1 stope, and MZ1 stopes on 5140 level.
- Recovery was 95.77% and throughput was 943 tpd.
- April Longhole drilling and blasting was completed in April. Mucking of M1 and M2 stopes continued to month end.

The effluent treatment plant ran well. A total of 89,908 m³ was treated and released to Scythes Lake in April vs. a budget of 69,120 m³. Discharge to Scythes Lake was suspended April 30, as required by the operating license. Discharge of minewater was discontinued on April 8, however a total of 781 m³ was treated and released.

Recovery was 95.65% and throughput was 963 tpd.

May

All mining was completed the first week of May. Decommissioning of underground facilities was completed as well as 90% of surface facilities. All raises (486 and 481 backfill, #1 FAR and #2 FAR) were filled, capped with concrete, inspected and approved by SERM, and covered. Only office and dry were still operational at month end.

During the first week of May throughput averaged 1,110 mtpd. At the beginning of the second week of May a crack in the Jaw Crusher foundation was discovered. A decision was made to operate the crushing circuit over an extended period of time to minimize any unnecessary stresses on the foundation. This decision necessitated a reduction in mill throughput to approximately 925 mtpd.

The clarifier was drained and readied for the installation of a modified feedwell. Piping changes were initiated to localize the effluent treatment circuit in the mill building. These changes are being completed to facilitate a smooth transition during decommissioning/dismantling of the mill.

Recovery was 95.34% and throughput was 979 tpd.

June

All mine site decommissioning was completed in June. The mining contractor demobilization was completed on June 18.

The mill completed processing ore June 3. Plant recovery and availability over the operating period were 92.86 and 100% respectively. Overall recovery for the month was 86.00% due to losses incurred during clean up of the mill circuits.

The clean up of the mill circuits progressed very well during the month. By month-end the crushing, grinding, gravity and leaching circuits were completed and the stripping of the final batches of the carbon had begun. The electrowinning cell/cathodes were cleaned and the sludge collected was refined. The stripping circuit vessel, lines, heat exchangers and tanks were descaled/desludged and the material was sent off-site for refining and recovery of precious metals. Carbon fines which have been collected over the operating lifetime of the mill, stripped carbon, miscellaneous gold bearing

material, and any slag from recent pours was also sent off-site for refining and recovery of precious metals. GD Resources (Sparks, Nevada) was contracted for the refining of this material.

July

The clean-up of mill circuits progressed well and was completed by month end.

The Cameco workforce at the end of July numbered 13 active, regular filled positions with four temporary positions, for a total of 17 employees. This compares with the manpower budget for the period of 45 regular positions. Nine permanent employees were transferred to other operations and eleven were terminated.

August

The moth-balling/decommissioning/winterizing of the mill and old camp facilities is continuing. Carbon fines, stripped carbon, slag from recent pours and miscellaneous gold bearing material was placed in bags or barrels and was sent to G.D. Resources in Sparks, Nevada, for refining/recovery of precious metals.

The conversion of the assay laboratory to the new camp facilities was completed during the month and is currently the residence of all on-site personnel. The power generation system for the operation was switched over to the 350 Kw gensets. The system previously employed was decommissioned and all associated equipment removed from site. The old camp and mill propane storage tanks were also decommissioned and removed from site.

September

The moth-balling/decommissioning/winterizing of the mill and old camp facilities is complete.

The effluent treatment facility operated normally until September 15 at which time operations were suspended in accordance with operating approvals. Water treatment will recommence on November 1. Subsequent to the 15th, the plant was operated in a closed circuit, i.e. treated effluent discharging back to the TMF, without lime, ferric sulphate and sulphuric acid addition. All effluent discharge parameters were met with coagulant and flocculant addition only. As this test was only over a two day period, additional testing will be done in October.

- October The structure around the water treatment equipment within the mill building is complete.
- G.D. Resources are currently treating carbon fines, sludge and miscellaneous gold bearing material to remove residual gold. Once this is complete, total gold content will be reported.
- The effluent treatment facility operations were suspended in October in accordance with operating approvals. Water treatment will recommence on November 1. From October 22 to October 31, the plant was operated in a closed circuit, i.e. treated effluent discharging back to the TMF, without lime, ferric sulphate and sulphuric acid addition. All effluent discharge parameters were met with coagulant and flocculant addition only. The plant will be operated in this manner in November.
- November Effluent treatment commenced on November 1 with using only coagulant and flocculant. All discharge parameters were met.
- Water treatment was suspended on November 28 and circuits were cleaned out. The property was put on Care & Maintenance as of December 3, 1998.

EXPLORATION AND GEOLOGY

Author: Greg Leniuk

GENERAL

The Contact Lake Gold Project was part of the Preview Lake Joint venture property which covers 9,600 hectares. The ownership was: Cameco Corporation (50%); Uranerz Exploration and Mining Limited (30%) and Westward Explorations Ltd., a wholly owned subsidiary of Windarra Minerals Ltd.(20%), with Cameco as the operator. Subsequent to the decision to proceed with the development and operation of the Contact Lake Gold Project, Westward Explorations Ltd. sold their interest in the project to Cameco and Uranerz with the resulting interest being two thirds Cameco and one third Uranerz, with Cameco remaining as operator.

The gold deposit lies within the Mineral Exploration Zone of the Lac La Ronge Provincial Park and is located 56 kilometres north of the town of La Ronge via Highway 102, plus a six km gravel road to the east.

In 1984, a small field program was carried out to evaluate an anomalous (30 ppb Au) lake sediment sample taken from Turtle Lake in 1978. Additional sampling confirmed the anomaly. Two of five bulk till samples that were taken around the lake also returned anomalous gold grain counts (72 & 81). Follow-up field programs in 1985 and 1986 eventually outlined a 500m wide bulk till anomaly that extended two km northeast to the shore of Contact Lake. In 1987, field work at the head of the bulk till train discovered the footwall shears of the Bakos Zone as it outcrops along the base of a steep scarp. In 1988, a diamond drill program tested a lake covered section of the structure but returned erratic gold mineralization. In 1989, aided by an IP-Resistivity survey, drill holes intersected significant gold mineralization and began delineating the Contact Lake gold deposit (Chapman, 1988). By the end of July 1993, 119 diamond drill holes totalling 52,337m were drilled.

GEOLOGY OF THE DEPOSIT

The property lies within the southern portion of the Proterozoic La Ronge Domain. The area consists of sequences of mafic to felsic volcanics and argillaceous sedimentary rocks. Intrusive rocks vary compositionally from gabbro to granite with granodiorite being the most common.

Most of the southern La Ronge Domain has been subjected to lower amphibolite regional metamorphism. The area also exhibits structurally complex polyphase deformation.

The deposit is hosted by the Little Deer Lake pluton, which intrudes the surrounding supracrustals. The irregular shaped pluton occupies an area approximately 8 km by 6 km with the long axis extending northeast. It is a zoned intrusive with gabbro to diorite at its margins, and granodiorite to granite at its core. Field relationships indicate that the mafic phases are the

oldest and have been intruded by multiple pulses of progressively more felsic magma. The intrusive rocks are typically fine to medium-grained and massive to weakly foliated.

The major shear zones trend northeasterly. The Curry Zone is a 150 m wide shear zone following a granodiorite/quartz diorite contact trending through the middle of Contact Lake. No significant gold showings have been located within this structure. Within the PAP-Preview Zone occurs as broad zones of intense foliation in felsic volcanic rocks and narrow, closely spaced shears in diorite and gabbro. Gold showings such as the PAP-SW deposit occur in the sheared intrusive portion of the structural zone¹. The Bakos Zone, which hosts the Bakos gold deposit, transects all phases of the Little Deer Lake Pluton and extends into the volcanic and sedimentary sequences to the north. The deposit is located near the northwest shore of Contact Lake.

The Bakos Zone is a 15-40 m wide shear zone that trends 060° - 070° and dips 55° - 70° to the southeast. The hanging wall contact is typically abrupt while the footwall contact is more diffuse. Measured offsets show a reverse-oblique slip of approx. 200 m, parallel to a steep southwest stretch lineation².

The Contact Lake gold deposit occurs in the portion of the Bakos Zone that cuts the granite/granodiorite phases of the pluton. Ore shoots are developed primarily near the structural hanging wall. The ore shoots are 3-15 m wide and plunge parallel to the stretch lineation. The orebody is divided into two main shoots, MZ1 (Main Zone 1) and MZ2. Both zones occur at the intersection of a silica-rich felsic phase of the intrusion and the Bakos shear. The Bakos shear hosts four small ore lenses as well (P0, MZ3, M-zones, and BK3).

The geological events forming the Contact Lake gold deposit is interpreted as follows:

- 1) Emplacement of the Little Deer Lake Pluton.
- 2) Development of a penetrative fabric. Dynamic recrystallization of quartz and feldspar during peak metamorphism (lower amphibolite facies).
- 3) Brittle fracturing followed by pervasive silica-sericite, \pm pyrite alteration. Local ductile shearing.
- 4) Continued brittle, brittle-ductile strain. The formation of cm scale stockwork veins in the silica-rich felsic phase and sheeted extensional veins in granite/granodiorite. The veins are composed of quartz, sericite, pyrite, \pm accessory sulphides and contain the bulk of gold mineralization.
- 5) Ductile deformation and the development of pegmatitic shear and extension veins. These cm - m scale veins contain quartz, K-feldspar, biotite, \pm py.

¹ Chapman, R., Curry, G., and Sopuck, V., 1989. The Bakos Deposit Discovery - A Case History. In: Modern Exploration Techniques. Sask. Geol. Society, Special Publ. No. 38. P. 212-220.

² C.B. Lee and R.G. Roberts, Nov 8, 1996. The Structural Setting of Mineralization and Relationships to Alteration in the Contact Lake Gold Deposit: Progress Report.

- 6) Brittle deformation creating replacement and fracture-fill veins. The vein assemblage includes 'green' sericite, pyrite, \pm chalcopyrite, \pm galena, \pm sphalerite, \pm quartz. This vein type may represent a remobilization of the earlier Au-bearing veins. It is often rich in Au but irregularly distributed.
- 7) Late, chlorite filled brittle faults.

Typical ore consists of mm to cm scale pyrite and quartz stringers in moderate to strongly sericitized, and moderate to strongly sheared granite and granodiorite. Accessory minerals include: chalcopyrite, pyrrhotite, galena, sphalerite, molybdenite, chalcocite and bornite. Gold particles are largely enclosed in the silicates. About 10% is contained in sulphides (mainly pyrite). Gold particle size is generally very fine (< 19 microns) but pinhead size flakes are common. Au:Ag ratio is approx. 2:1.

UNDERGROUND EXPLORATION, PHASE I

The purpose of the underground exploration program was to confirm ore grade and continuity on the two main ore shoots, MZ1 and MZ2. Two ore drifts were driven: the 5386 level (MZ2), and the 5340/50 level (MZ1). Chip samples were taken across the face after each round and muck samples collected from the haulage trucks. After drifting was complete, the ore drift walls were diamond drilled (gopher drill holes) to determine the full width of the ore. At each setup, spaced 5 m apart, a +20° and a -20° hole were drilled. The holes averaged about 10 m in length. All the data obtained from the program was forwarded to J.H. Reedman & Associates Ltd. for a comparative analysis between the reserve estimates made from surface drilling and the estimate derived from the chip samples and gopher drill holes. Reedman completed the comparative analysis on the 5386 level on February 17, 1994 and the 5340/50 level on March 17, 1994.

The reserve estimates for the feasibility study from surface drilling were done by an inverse distance squared technique using 10 m x 10 m interpolated blocks on vertical longitudinal sections. To compare with underground data, the reserves were recalculated using 3 m x 3 m blocks. A second estimate was also done using 13 holes that were drilled after the feasibility study. The estimate from underground data involved combining separate computations from face chip samples and the gopher drill holes. A 9 m high panel, 4.5 m above and below centre line of the drift, defined the limits of the estimates. Table 1 shows the results of the comparison.

Table 1**Comparison Between Underground and Surface Reserve Estimates**

	Original Surface Holes	All Surface Holes	Underground Sampling
5386 level	15,050t @ 10.61 g/t	15,000t @ 11.75 g/t	15,100t @ 12.07 g/t
5340/50 level	33,450t @ 9.66 g/t	31,090t @ 9.27 g/t	32,290t @ 8.94 g/t

The results of Reedman's reserve comparison study were very encouraging. There were some differences in the grade distribution between the interpretation from surface drilling and what was encountered underground. The higher variability from underground data could be attributed to the higher sample density. These differences, however, were well within the comfort level of what is expected from gold deposits of this type.

Exploration Raises

Three 20 m long, 1.8 m x 1.8 m raises were driven to test the vertical continuity of the ore. Two raises were on the 5386 level and one on the 5340 level. All three showed excellent vertical continuity of mineralization. The 5340 raise also exposed the structural hanging wall contact and increased confidence for a sharp relatively straight hanging wall limit to the ore.

Muck Samples

Muck samples were taken from each haulage truck. The average grade of each round was compared to the corresponding face averages from chip samples. The results for individual rounds were highly variable, but averages for the entire ore drift compared very closely. The 5386 level averaged 11.30 g/t for mucks compared to 11.06 g/t for chips. The 5340/50 level averaged 11.32 g/t for mucks and 11.61 g/t for chips.

Bulk Sample

In January 1994, a 43-tonne round, taken at the west end of the 5386 level, was sent to Lakefield Research as a bulk sample. The entire sample was processed through a SAG mill and leached with cyanide. The gold content was determined and returned a grade of 10.30 g/t. The grade of the chip samples taken from the equivalent faces averaged 10.67 g/t. The results of the bulk sample gave strong credibility to the grade determined by chip sampling. This in turn supported the favourable comparison between the chip sampling and the reserve estimates from drill holes.

No problems were anticipated with the current or future grade estimation. The decision to go ahead with the next phase of development was made on April 7, 1994.

EXPLORATION DIAMOND DRILLING

After Phase I underground development began on October 4, 1993, the majority of diamond drilling was done from underground. Drill setups included: the decline, decline cutouts, access drifts, and drill drifts driven into the hanging wall. Holes were also drilled into ore drift walls (gopher holes) to aid in slashing of the walls to ore contacts. The drill programs were ongoing and drill locations were utilized as they became available. Midwest Drilling of Flin Flon, Manitoba was awarded the drilling contract for 1994. Boisvenu Drilling of Vancouver, British Columbia was contracted for the 1995 to 1997 programs. Surface drilling programs in 1994 and 1996 came out of Cameco's Preview Lake exploration budget and were supervised by exploration staff. Midwest had the contract in 1994 and Morissette Drilling in 1996.

Surface drilling in April and May, 1994 primarily tested areas adjacent to the mineable reserves. Areas drilled included: west of the 450-30 stope, west of the 470-29 stope, and below the 486-32 stope. Several infill holes were also drilled above the 5400 level (surface elevation is 5440 or about 440 m above sea level). A series of short vertical holes were also drilled to determine overburden thickness above the orebody. Underground drilling tested an area between the MZ1 and MZ2 stopes above the 5350 level as well as some infill drilling and stope delineation. Both surface and underground programs failed to expand the mineable reserve.

The 1995 drilling program was designed to infill and delineate the MZ1 and MZ2 stopes above the 5200 level. Reserves in two areas were modified as the result of the drilling; MZ2 ore to the west of 452-23 stope was substantially reduced due to the erratic distribution of mineralization, and the MZ1 mineable reserves were moderately increased between the 5290 and 5200 levels.

In March of 1996, a surface drill program was proposed to test the MZ1 and MZ2 orebody at depth, and along strike to the west. The first hole was designed to test down plunge of hole 429 at the 4900 m elevation. Unfortunately the hole shallowed more than expected and intersected mineralization at the 5000 m elevation (5.16 g over 2.6 m true width). The second hole was drilled 200 m to the west at the 5020 m elevation and was poorly mineralized (1.39 g over 1.2 m). Two holes drilled the western extension of the Bakos structure at the 5250 elevation. Both holes intersected strongly sheared but poorly altered and mineralized structure. One of the holes (TU-99) intersected a footwall structure grading 13.46 g/1.79 m. Follow up drilling in September with 3 holes failed to encounter any significant intersections.

Exploration underground drilling in 1996 successfully outlined stopes in three areas: down plunge from MZ2 ore (P0 stopes), down plunge from MZ1, and the M-Zones (M1, M2 and M3). The 5244 level access drift allowed detailed infill drilling in the M-Zones and BK3 areas. The

BK3 holes showed that the multiple, narrow high grade intersections indicated by previous drilling did not have good continuity between holes. Five holes tested the Upper Structure, a weakly foliated fracture system southeast of the BK3 zone. The holes failed to confirm the continuity of the high grade intersections from surface holes.

Drilling in 1997 continued with stope delineation of the P0, MZ1, and M-Zones. Additional holes testing the BK3 zone did not improve the poor continuity of the mineralization. The final phase of drilling involved testing down plunge of the P0, MZ1, and M-Zones. The P0 holes outlined a block of mineralization below the current workings, but the additional ramping needed made it uneconomic. No ore grade intercepts in the MZ1 were found. The MZ1 ore bottomed out at the 5110 level. The M-Zone structures were tested to 100 m below the stopes. Holes intersected similar structure but mineralization was erratic. The deepest hole intersected 6.81 g/2.5 m in weakly foliated granodiorite between two shears.

The results of testing the Bakos structure from 100 m - 200 m below the lowest level of the mine was not encouraging. Although the Bakos structure and some sub-economic mineralization was intersected, the potential for economic grade and tonnage needed to justify driving a shaft and further development was poor. Further drilling was not recommended.

TABLE 2

**Diamond Drilling Completed on the Contact Lake Deposit
(total holes/total meterage)**

Year	1988-1993	1994	1995	1996	1997	TOTAL
Surface	119/52,337	67/7,190*		7/2,454		191/61,981
U/G		51/1,740	154/8,716	270/21,659	116/14,391	591/46,506
Gopher		363/3,249	181/1,261	11/240		555/4,750
TOTAL	52,337	12,179	9,977	24,353	14,391	113,237

* Includes 17/326 overburden test holes.

SAMPLING PROCEDURES

Chip Sampling

During the exploration phase, chip samples of the ore face were taken along three horizontal lines: one near the back, one at chest height, and one near the floor. Each line was then subdivided into equal intervals not exceeding 1.0 m in length. For example, a 3.2 m wide face would have four samples, 0.8 m in length. The sample intervals crossed lithological boundaries. Observations from drill core showed that mineralization did not have sharp structural or alteration contacts.

Every ore drift face during the exploration phase was sampled to ensure a representative estimate of the grade. Ore drifts during the development/production phase were sampled when available; at least every second face. Sampling was also reduced to two lines, head height and knee height.

Shrinkage stope sampling for grade control was done on breast faces as the lift progressed. One row of samples was taken across the face. Low angle fracture surfaces usually prevented any back samples to be taken.

Chip samples were assayed by metallic screen assay or the fire assay. If a fire assay returned a value of >3 g/t it would be reassayed by metallic screen assay. The metallic assay procedure was developed to minimize the nugget effect of gold in the sample. The entire sample would be crushed, pulverized and passed through a 100 mesh screen. The entire plus fraction and two subsamples (30 g) from the -100 fraction would then be assayed and the weighted average calculated. Chip samples taken during the exploration phase were cut to 102 g/t before weighting the average grade. Subsequent samples were cut to 40 g/t as recommended by the Mining Resources Group.

Muck sampling

Underground trucks were used to haul broken ore to surface. Every truck was sampled by the operator. A 2-3 kg sample was taken along the back edge of the truck box and consisted of a 50/50 mixture of fine and fist size muck. A tag with a sample number was put in each bag and a corresponding tag indicating date, location and truck size was handed in at the end of each shift. A daily haulage record was kept of the tonnage and grade of ore mucked from each location. The tonnage was estimated by applying a truck factor to each truck. Depending on the size of truck, a factor of 14 or 23.5 tonnes was used. Truck factors were adjusted after a volumetric survey of the stockpiled ore was done.

Metallic assays were done on muck samples during the exploration program. Samples during the production phase of the mine were fire assayed due to necessity. Drill core and chip samples filled up most of the capacity of the lab for mine assaying. Fire assays gave a quicker turn around for results and avoided costly shipping and analysis at an outside lab.

Very soon into production, it was evident that muck samples did not correlate well with mill head grades. The use of mucks to help determine stope production grades proved to be suspect. Mucks were useful only as an indication of grade. As a result, muck sampling was stopped on November 23, 1996. Truck operators continued to fill out a muck ticket for each truck so that tonnages hauled could be recorded.

ORE RESERVES

Cominco Engineering Services (CESL) of Saskatoon subcontracted an independent review of the Contact Lake ore reserves to John H. Reedman & Associates Ltd. Geological and mining reserves estimates were done by Mr. John Reedman. Reserves were calculated using BORSURV software. An inverse distance squared technique was used. Interpolated 10 m x 10 m blocks with a search radius of 50 m were computed and projected onto vertical longitudinal sections.

A re-estimate of the mineable reserves was done in September of 1995. This was prompted by a concern for the poor correlation of estimated mine grade and mill head grade. The two stopes in production at the time, BH481-29 and BH491-29, were returning head grades approximately 20% lower than estimated.

The Mining Resources Group did a re-interpretation of the mineralized zones. SERMINE software was used for the task. Additional drill holes from the 1994 and partial 1995 programs were used in the computations. The undiluted mineable reserves were calculated by cutting diamond drill assays to 40 g/t instead of the 102 g/t used in the feasibility review. Recoverable reserves were then calculated at the mine site after dilution was factored in. The mineable reserves were periodically updated by Mining Resources as development and diamond drilling progressed. Four stopes were not estimated by Mine Resources. The BH495-35, BH-M1, BH-M2 and BH-M3 stopes were estimated by site staff using interpolated blocks with BORSURV software.

COMPARATIVE ANALYSIS OF RESERVES

Table 3 compares the CESL reserve estimate and the Cameco estimate with the actual tonnes and grade milled. The table separates the CESL stopes which were not put in production and additional stopes not included in the original reserves.

The original CESL reserves were significantly reduced by the Cameco re-estimate. The tonnage was reduced by 34% and the grade by 16%. Two main factors affected the tonnage estimate: changes in stope dimensions and the omission of some stopes from the reserves. The difference in the estimated grades was mainly attributed to cutting assays to 40 g/t instead of 102 g/t. The Cameco estimate of the same reserve blocks compared more favourably with the actual milled. The milled

tonnage ended up 6% lower and the grade was 5.5% lower. Total tonnes milled, compared to the equivalent reserves by Cameco, was 8.0% less than estimated and the head grade was 8.3% lower.

The results of the Phase I underground exploration ore drifting on the 5386 and 5340/50 levels showed good ore continuity. The comparison between surface and underground reserve estimates was also encouraging. However, subsequent ore drift development and underground infill drilling in parts of the ore body encountered ore blocks that were less continuous than previously indicated from surface drill holes. Stope dimensions were decreased and as a result, the reserve tonnage compared to CESL was reduced by 25%. Figure 1 illustrates the difference in stope dimensions between the original CESL stope boundaries and what was actually mined. The exclusion of six proposed stopes from the Cameco estimate also reduced the reserves (Figure 2). Infill drilling suggested that the mineralization in those stopes was too erratic to be mined economically.

Some of the differences in tonnage between the Cameco estimate and milled can be attributed to ore being left behind:

- 1) The crown pillar height was increased, this left ore above the 5420 level.
- 2) Stope pillar width was increased to 5 m from 3 m.
- 3) Unblasted ore due to the top of blast hole rings not breaking. Examples of these occurred in the BH486-32 and BH-M3 stopes.

A difference in interpretation of the ore limits (stope size) was also a factor. Information gathered during stope development necessitated a revision to the stope reserves. Stope strike lengths were shortened due to poor mineralization in the ore drifts. This occurred in the BH455-30, BH460-34, and the P0 stopes.

The lower grade in the Cameco estimate compared to the CESL estimate was largely the result of cutting assays to 40 g/t instead of 102 g/t used by CESL. A statistical analysis of the grade distribution by Mining Resources determined that high values should be cut to 60 g/t. To take a more conservative approach and have a better comparison with the mill head grades at the time of the estimate, assays were cut to 40 g/t. The Cameco estimate also incorporated additional holes from infill drilling. Some ore intersections were modified based on the additional drilling, but their impact on the overall grade was minimal.

Despite the closer comparison of the Cameco estimate to mill head grade, a problem still existed in estimating the grade of the deposit. It has been suspected that there was some degree of internal dilution that was not accounted for. Mapping and chip sampling of the stope development indicated that the ore may have had an en echelon orientation for parts of the orebody. An obvious example of this was seen on the 5170 level where three separate lenses occurred. A cross-section (4720E) above this level also showed an en echelon pattern but it was not evident in adjacent sections. En-echelon style mineralization was also encountered in two shrinkage stopes SK491-32 and SK452-32. The ore in the shrinkage stopes was very difficult to follow. Often the ore consisted of

Pods or lenses orientated oblique to the walls of the stope and separated by waste. Both those stopes ended up well below the estimated grade.

On the longhole stope development levels, the full width of ore was well defined. Ore drift walls were drilled off prior to slashing or, if the drift was driven full width, the level was predrilled with closely spaced infill drill holes. Between the levels however, the ore outline, which was based on much wider drill spacings, could be affected by en-echelon mineralization. A continuous ore zone interpreted through an en echelon ore zone would contain areas of waste or internal dilution. In narrow zones (< 5 m), these ore outlines were probably represented on cross-sections as slight kinks between drill holes. The wider zones usually exhibited a fairly straight outline but could have contained multiple narrower zones of mineralization.

TABLE 3

SUMMARY OF CONTACT LAKE RESERVES

Zone	Stope	CESL Estimate			Cameco Estimate			Milled		
		Tonnes	g/t Au	Oz	Tonnes	g/t Au	Oz	Tonnes	g/t Au	Oz
MZ1	BH471-29	85,441	6.16	16,921	50,236	5.65	9,125	56,070	4.76	8,574
MZ1	BH475-29	104,992	8.06	27,206	78,507	6.03	15,220	67,559	7.12	15,453
MZ1	BH481-29	158,940	9.62	49,157	150,949	7.82	37,951	153,160	7.26	35,720
MZ1	BH486-32	135,126	8.21	35,667	90,989	5.89	17,230	73,023	5.71	13,395
MZ1	BH492-32	110,690	6.72	23,914	52,657	6.07	10,276	61,324	5.94	11,702
MZ1	BH467-17							40,473	4.02	5,227
MZ1	BH474-17							56,267	6.40	11,568
MZ1	BH470-17							98,602	6.09	19,291
	<i>block total</i>	184,609	8.46	50,186	169,977	7.97	43,554	195,342	5.75	30,859
MZ2	BH450-38	71,296	7.35	16,847	16,477	8.06	4,270	19,489	5.48	3,431
MZ2	BH455-30	110,756	6.69	23,822	115,441	6.12	22,714	89,305	7.37	21,144
MZ2	BH460-34	89,420	7.76	22,309	77,635	7.31	18,246	49,768	7.08	11,319
MZ2	SK448-30				11,738	5.70	2,151	7,178	6.50	1,499
MZ2	SK452-23				17,897	6.95	3,999	12,236	4.80	1,887
	<i>block total</i>	74,711	9.11	21,882	29,635	6.45	6,150	19,414	5.43	3,386
MZ3	BH491-29							16,808	3.83	2,041
MZ3	SK491-32							3,777	3.39	412
	<i>block total</i>	15,138	4.95	2,409	24,100	5.61	4,347	20,367	3.75	2,453
	subtotal	1,141,119	7.91	290,320	856,603	6.87	189,082	805,039	6.29	162,663
MZ1	SK461-39	9,122	6.07	1,780						
MZ1	SK466-34	15,132	9.70	4,719						
MZ1	BH498-33	16,315	4.65	2,439						
MZ1	SK477-14	13,026	10.55	4,418	14,144	10.05	4,570			
MZ3	BH482-29	17,035	6.54	3,582				898	2.77	80
MZ3	BH487-30	29,889	5.91	5,679						
BK3	SK520-17	71,293	10.96	25,121						
	subtotal	171,812	8.64	47,738	14,144	10.05	4,570	898	2.77	80
MZ1	BH466-38				11,119	4.18	1,494	10,375	4.79	1,597
MZ1	BH495-35				17,894	6.73	3,872	18,196	6.10	3,566
MZ1	BH459-11							1,090	6.06	212
MZ1	BH464-11							10,293	7.62	2,520
MZ1	BH469-11							11,771	5.67	2,144
MZ1	BH474-14							8,353	4.59	1,232
	<i>block total</i>				38,444	6.94	8,578	31,507	6.03	6,108
P0	BH449-11							27,965	6.13	5,507
P0	BH451-16							18,821	5.49	3,319
	<i>block total</i>				73,823	6.63	15,736	46,786	5.87	8,826
M1	BH-M1				52,852	5.48	9,312	53,199	4.98	8,511
M2	BH-M2				29,337	6.45	6,084	31,678	5.80	5,902
M3	BH-M3				16,600	7.07	3,773	8,995	6.91	1,996
	subtotal				240,069	6.33	48,848	200,736	5.66	36,506
	TOTAL	1,312,931	8.01	338,058	1,110,816	6.79	242,499	1,006,673	6.16	199,249



LOCATION MAP

LOCATION MAP FOR
NORTHERN SASKATCHEWAN
CONTACT LAKE MINE SITE



FILENAME: CL10G018 DRAWN BY: JH DATE: 10/23/98

DESIGN AND CONSTRUCTION

GENERAL

In July of 1990, Cameco performed a feasibility study on the Contact Lake project. An addendum was added in May of 1991, and following a drilling program, an updated feasibility study was issued in September, 1992. Additional drilling was completed in January, 1993 and the Geological Reserves were revised to include this information.

Cameco retained CESL Engineering on March 16, 1993 to perform a critical review of their feasibility studies and to update it as required. Following completion of this work, the Feasibility Study was to be a level of accuracy and in a form satisfactory for evaluation by banking institutions for financing purposes. The scope of work included an independent assessment of the geological reserves, review of the minable ore reserves based on the mining method selected, determination of the optimal capacity for the mill based on the mine development requirements, and capital and operating cost estimates for the mine, mill, waste management and other surface facilities.

The Cameco geological database and existing feasibility study documents and updates were used as the basis for the Feasibility Study Review. As a conclusion to this review, an underground exploration program (Phase I) was commissioned.

In January 1994, a 43-tonne round, taken at the west end of the 5386 level, was sent to Lakefield Research as a bulk sample. The entire sample was processed through a SAG mill and leached with cyanide. The gold content was determined and returned a grade of 10.30 g/t. The grade of the chip samples taken from the equivalent faces averaged 10.67 g/t. The results of the bulk sample gave strong credibility to the grade determined by chip sampling. This in turn supported the favourable comparison between the chip sampling and the reserve estimates from drill holes. No problems were anticipated with the current or future grade estimation.

In light of the relative success of the underground exploration program, the decision to go ahead with the next phase of development was made on April 7, 1994. The design of the project was to be consistent with the previous feasibility study.

Mining

The planned mining rate was 700 tpd as it was deemed a higher rate would be difficult to achieve with the known reserves. If deeper reserves could be proven to make a shaft economic, or if additional reserves to the west are discovered, the option to increase the mining rate to 1000 tpd would be considered. In fact, the mine did support a 1000 tpd milling rate the latter part of 1997 and in 1998.

The designed primary mining method was blasthole stoping with some conventional shrinkage for the narrower areas. Ore would be produced through development as well.

Following completion, stopes were to be filled with hydraulically placed cycloned tailings. Actually, most stopes were not filled and those that were had waste rock fill.

Milling

Metallurgical test data indicated the ore was relatively clean and amenable to direct cyanidation. Good gold recoveries were expected with a conventional carbon-in-pulp (CIP) process. The mill was designed for a throughput of 31.5 tonnes/hour based on 94% plant availability for an average production rate of 700 tonnes/day or 255,000 tonnes/year.

Services

Power for the operation was to be provided by four diesel generators. Site heating for building and mine air was designed to be propane and waste heat from the generators.

A camp suitable to accommodate 84 persons would be provided to meet the needs of a seven day in/seven day out rotation schedule. Freshwater would be drawn from Contact Lake, for both the mill and camp. The process was designed to minimize fresh water requirements by recirculation wherever possible.

Waste Management

Turtle Lake was selected as the waste management/tailings storage area, located about 4 km west, south west of the mill site. Up to 50% of the tailings were to be sent to the mine for backfill, thus reducing the load on Turtle Lake. (No tailings were ever sent to the mine).

The impoundment area was expected to have a 4.3 year capacity before water would have to be discharged. Cyanide was expected to degrade naturally to acceptable discharge limits although copper was one area of concern. As chemical reaction can be very complex, the recommendations were that treatment for copper not be established at that time.

Construction

In April of 1994, Kilborn Engineering of Saskatoon was retained to complete a detailed design of the mill and ancillary facilities and to advise on equipment selection and procurement. To provide an overall low profile of the mill and to house the fine ore bin and all conveyors, a basement 11m wide x 60m long x 6m deep was excavated in the rock. This excavation was mainly completed by July 27, although some additional blasting and clean up was required by the construction contractor.

Construction was carried out with the express purpose of minimizing disturbance of natural surroundings. Clearing of trees for road, camp, and site construction was kept to a minimum; siting and design criteria of the mill was established to limit noise and visibility from the canoe

route on Contact Lake; fish removal from a nearby lake by Cameco and contractor employees, while they were on site, was not permitted; all garbage was removed from the site to a location outside the park boundaries; open fires were not permitted on site.

The general contractor for mill construction was Internorth Enterprises Ltd. from Buffalo Narrows. Graham Construction and Engineering (1985) Ltd. from Saskatoon was the sub-contractor. The work was carried out by members of the Saskatchewan Building Trades union directed by InterNorth/Graham. Their area of jurisdiction was the mill site only, marked by battery limits. All other construction activities on site were non-union. There were no jurisdictional disputes nor any incidents between members of the Building Trades Union and other contractors or Cameco employees. In fact, there was excellent cooperation between all parties.

The construction contractor mobilized to site on August 1, 1994 with initial concrete poured on August 12. Considerable rock work was necessary in and around the basement to stabilize the rock walls prior to grade beam, concrete platform, and equipment installation. By the end of September, 1994, 80% of the concrete work was completed, all heavy equipment was installed and rough set, and the mill building steel was being erected. October and November saw the completion of equipment installation and building construction with construction contractor crews leaving site December 9, 1994. The power generation system was commissioned November 23, 1994 with the entire property put on line.

In addition to the primary construction project, a shop/warehouse, the freshwater and fire line systems, and the tailings/reclaim systems were installed. This was all completed by the end of November.

The following northern contractors received contracts to develop the Contact Lake site: Can Am Construction, Knudsen Northland Construction Ltd., Lee's Construction Ltd., Norpro Developments Ltd., NORSASK Explosives Ltd., and Norsask Heavy Equipment Group (comprised of Henry Brown Construction, Knudsen Northland Construction, Lee's Construction Ltd., Nagyl Construction Services Inc., and Snake Lake Construction Ltd.).

On December 3, 1994 the wet side of the mill was commissioned as well as the tailings and reclaim water lines. On December 9, crushing of ore began. The Jaw Crusher pitman bearing immediately began to heat up and failed. The bearing was removed and sent to Saskatoon and rebabbited and the crushing circuit was recommissioned on December 14 with the grinding circuit commissioned on December 17, 1994.

At 5:30 p.m. on December 21, 1994, continuous throughput of ore began.

All environmental approvals were applied for and received to allow scheduled startup of the mill.

Northern employment during construction was excellent, with InterNorth/Graham averaging 47 percent over the entire project. Cameco's recruitment in the north was very successful also, achieving a 65 percent RSN level for the life of the project.

Table 1 shows Capital/Development costs for the life of the project. It should be noted that primary development underground continued through to 1997 but was not capitalized. Depreciation, Decommissioning and Reclamation are not included in the costs.

CONTACT LAKE JOINT VENTURE
Capital/Development Expenditures
December 31, 1998

100% basis

Project Area	Capital Expenditures						Project Total to Date
	1993	1994	1995	1996	1997	1998	
	206,380	716,797	0	54,109	0	0	977,286
and Dry Facilities	21,129	214,412	0	0	0	0	235,541
Sewage Facilities	31,163	41,994	0	0	0	0	73,157
Freshwater Pumphouse & Facilities	19,450	132,519	0	0	0	0	151,969
Electrical Sub-station and O/H Lines	28,531	656,601	0	0	0	0	685,132
Diesel Generation and Powerhouse	115,241	1,914,618	0	0	0	0	2,029,859
Fuel Storage & Distribution	20,519	203,285	0	0	0	0	223,804
Propane Tank Farm	32,291	180,089	0	0	0	0	212,380
Storage Pad Construction	20,513	10,386	0	0	0	0	30,899
Telephone System/Upgrade	0	85,414	0	0	0	0	85,414
Site Mine Water/Waste Water	58,884	6,953	0	0	0	0	65,837
Assay Laboratory	0	37,956	0	0	0	0	37,956
Mobile Equipment	0	85,605	69,323	22,496	17,677	0	195,101
Mine Equipment	0	0	0	109,618	0	0	109,618
Mine Rescue Stations	15,000	73	0	0	0	0	15,073
Mine Support/Intangibles	0	645,916	448,676	0	118,990	0	1,213,582
Mill Shop, Warehouse & Tools	2,834	23,981	133,314	20,051	0	0	180,180
Safety Equipment	0	14,741	17,706	0	0	0	32,447
Vehicle Garage & Workshop	0	33,485	0	0	0	0	33,485
Cold Storage Warehouse	0	78,167	0	0	0	0	78,167
Mill Building	0	9,156,412	264,466	173,697	0	0	9,594,575
Mill Equipment	0	1,155,535	730,534	123,809	795,012	0	2,804,890
Tailings Management	0	0	200,873	0	0	0	200,873
Site Roads	318,477	881,364	0	0	0	0	1,199,841
Development Expenditures							
Mine Development	2,706,858	15,691,560	0	0	0	0	18,398,418
Turtle Lake Habitat	0	0	17,642	118,556	13,803	0	150,001
Total Capital/Development Expenditures	3,597,270	31,967,863	1,882,534	622,336	945,482	0	39,015,485

Proceeds on the Disposal of Assets

Light Vehicle				19,000			19,000
Light Vehicle					12,000		12,000
Optech Boom & Mast						3,000	3,000
U/G pipes/fittings/etc						5,000	5,000
Office and Dry Trailer Units						30,000	30,000
Light Vehicle						15,000	15,000
Generators						300,000	300,000
Mill Facilities (net of commission & cost of disposal)						1,950,000	1,950,000
Grinding balls						25,000	25,000
							0
	0	0	0	19,000	12,000	2,328,000	2,359,000

MILL OPERATIONS

Author: Biman Bharadwaj

GENERAL

The Contact Lake Mill began continuously processing ore December 21, 1994, approximately six months after the mill building excavation work was started. The initial mill flowsheet is illustrated in block diagram form in Figure 1. Over the past four years the mill has undergone a number of process changes. These will be outlined in the circuit reviews. Figure 2 provides a block diagram of the mill flowsheet prior to the shutdown June 3, 1998.

The mill was designed to process 700 mtpd of ore with an average head grade of 8.3 g Au/tonne. The actual ore grade was found to be lower than anticipated (1995: 8.72 budget vs 6.20 actual). This necessitated an increase in the budgeted throughput to 825 mtpd during the second year of operation (ie. 1996). In the latter part of 1997 and during 1998 throughput was generally 1,000 mtpd with a record throughput of 1,162 tonnes occurring May 5, 1998. A total of 1,006,455 tonnes of ore with an average head grade of 6.16 g Au/tonne was processed through the mill and 190,088 troy ounces of gold were poured over the operating period. The operating costs averaged \$21.06/tonne or \$111.50/troy oz Au. Mill availability and recovery over the life of the project were 93.2% and 95.0% respectively.

The selected tailings management facility (TMF, Turtle Lake) was initially expected to have sufficient storage capacity for a period of four years following the start-up of operations. It was decided that if during this period natural degradation was not found to be fully effective in producing effluents within compliance levels an effluent treatment circuit would be installed. In late 1996 it became apparent that the water level in the TMF would reach the level of the operating limit between June and September, 1997, and that water quality objectives would not be satisfied. Test work was undertaken to determine the optimum process route for treatment of the water. A chemical treatment process was chosen, approval was received, engineering and construction was completed, and release to the environment was initiated September 2, 1997.

The mill manpower distribution was relatively stable ranging from 40 to 45 personnel during the first two years of operation (ie. 1995/1996). Manpower was decreased in mid-1997 through attrition and transfers as the closure of the mill was imminent due to the exhaustion of economic ore. Budgeted personnel for 1998 was thirty-nine until August when it was anticipated that the milling of the remaining ore would be completed. The mine plan was accelerated and milling concluded June 3, 1998. Personnel levels dropped to twenty-eight in June 1998 and reached eleven by August, 1998.

Mill Description

Crushing

Run of mine ore was fed with a front-end loader to a 460 x 600 mm grizzly. Oversize was broken using a hydraulic rock breaker (Teledyne TM20XH/TB925X). The ore was stored in a 35 tonne feed hopper. A vibratory feeder discharged to a 760 x 1070 mm jaw crusher (Traylor Type H) set with an opening of 50 to 70 mm. The ore was then conveyed to the feed chute of the cone crusher (Nordberg, Omnicone 1560), the secondary crushing unit, which had an opening of 9.5 mm. An electromagnet and metal detector were employed on the conveyor to remove/detect any tramp metal. The discharge of the cone crusher was conveyed to a 500 tonne live capacity fine ore bin. Two belt feeders located beneath the fine ore bin fed the mill feed conveyor. The mill feed belt weightometer provided a signal to the variable speed drives on both belt feeders in a feedback control loop for mill throughput.

Modifications/Enhancements

- the jaw crusher throw was reduced;
- oil consumption of the cone crusher was >100 litres/day (Jan/95), detrimental impact on recovery, an oil slinger was installed (Feb/95) and recoveries increased substantially;
- side rails were installed on the cone crusher feed conveyor to prevent spillage;
- low friction cassettes were installed to replace low impact idlers on crusher discharge chutes, minimizing fugitive dust emissions from chute belt skirting and belting;
- grizzly was redesigned;
- wear bars were installed on both belt feeders to prevent muck from migrating under the skirting;
- installed belt scrapers on all conveyor head pulleys; and
- initially ran one belt feeder but changed to operating both in parallel, better distribution of fine/coarse muck when bin was in the lower operating range.

Grinding/Gravity

Ore was delivered from the fine ore bin via two variable speed belt feeders to a conveyor belt which travelled to the feed chute of the ball mill (Allis, 3500 mm diameter x 4880 mm, 895 Kw/ 1200 hp). The ball mill was charged to approximately 35% v/v with 76 mm (3") diameter steel balls. The grinding balls were added in one tonne batches to the mill feed chute on a daily basis. Mill throughput was controlled by way of a PID feedback controller as previously mentioned. Initially dry lime was added at the belt feeders to ensure a pH of >11.0 within the grinding/ leaching circuit. The system was changed to the addition of a lime slurry to the ball mill feed chute once the effluent treatment circuit had come on-line in late July, 1997. The addition of lime in the grinding circuit modified the viscosity/settling characteristics of the slurry which proved to

be beneficial with regards to pump wear and pumpbox sanding problems. Process water was added manually in the feed chute to control mill density to 70-75% solids. The mill discharge overflowed from the mill through a trommel to the cyclone feed pumpbox. Any trash discharged from the trommel was collected in steel drums for disposal. The cyclone feed was pumped to one of two 380 mm diameter hydrocyclones.

The hydrocyclone underflow was split in a splitter box with approximately 50% reporting back to the feed end of the mill and the remainder to a mineral jig (Minpro Duplex, 610 x 910 mm). The mineral jig was replaced with a Knelson concentrator in September 1995. The decision was made to replace the jig due to availability and operational problems associated with the unit. Also the acquisition of the concentrator enhanced security and decreased tabling time substantially. The Knelson concentrator has performed extremely well resulting in an increase in coarse gold recovery and a subsequent decrease in cyanide consumption. The underflow splitter remained in the circuit but now the jig feed reported to a Knelson concentrator screen (6.0 x 25 mm mesh). The screen oversize was directed back to the cyclone feed pumpbox and the undersize to the Knelson concentrator (KC-CD20). The Knelson concentrator tails flowed by gravity to the cyclone feed pumpbox while the concentrate was collected in the table hopper over a twenty-four hour period. The concentrate would be tabled over the shaking table (Wilfley #12, 1220 x 2130 mm) every morning. The table concentrate collected would be dried, weighed, sampled and assayed. The table concentrate accounted for roughly 60-65% of the total head grade at the end of the project.

The hydrocyclone overflow at approximately 30% solids and 60% -200 mesh was passed over a vibrating trash screen (W.S. Tyler, Type 300-R, 0.5 x 13 mm mesh) before entering the thickener feed pumpbox. The thickener feed pump initially pumped the slurry to a thickener (13,720 mm diameter x 3,050 mm). Flocculant which was supplied by an automated system (Allied Colloid, MiniFab 180) was mixed with the slurry in the feedwell. The thickener underflow at 50% solids was then fed to the leaching circuit. An automatic composite sampler was installed on the leach feed line to ensure a representative metallurgical sample for the daily balance. When the effluent treatment circuit was commissioned the thickener was converted to a clarifier and hence removed from the grinding circuit. The hydrocyclone overflow was kept between 50-55% solids and fed directly to the leaching circuit from the thickener feed pump. Flocculant was still added to the leach feed. It was found the addition helped in preventing segregation of coarse/fines within the leaching circuit. The circuit ran extremely well with this configuration once the hydrocyclones were changed from the original Krebs Model DS 15 LB to the D15B (primary backfill hydrocyclones) with a 102 mm (4") apex and 114 mm (4.5") vortex finder. The hydrocyclone substitution altered the dynamics of the entire grinding/gravity system. The circulating load increased from 85% to 300%. Short-circuiting of coarse within the original hydrocyclone was evident from the number of drums of trash/coarse collected from the trash screen (up to 5 drums/shift). After the hydrocyclone was replaced the trash drum would contain only wood chips and plastic with very little coarse material (< 1 drum/shift). Recovery could be maintained >95% at

increased throughput (1150 mtpd). This was due to an increase of gold recovered in the Knelson concentrator and a decrease in the amount of coarse gold making its way into the leaching circuit.

Modifications/Enhancements

- replaced the polyurethane trash screen decking with stainless steel: the poly screen plugged off with scale rapidly, the s.s. screen had more available flow area;
- replaced mineral jig with Knelson concentrator;
- installed automatic composite sampler on cyclone O/F, belt sampler was initially used for head grade/moisture determination, moisture sample continued;
- replaced grinding hydrocyclones DS 15 LB's with D15B's;
- replaced thickener feed pump, 6x4 Wilfley with a 3x2 Wilfley. (6x4 was used as a booster pump in the effluent treatment circuit);
- installed a box filled with 3" balls in cyclone feed pumpbox to reduce erosion; and
- purchased a four-idler belt scale to replace a single-idler belt scale on mill feed conveyor.

Leaching/CIP

The cyclone overflow at approximately 50% solids entered into the first of a train of four leach tanks (9,200 mm diameter x 9,200 mm). Each tank was equipped with baffles and an agitator outfitted with a dual turbine impeller. An air distribution plate was located at the bottom of each tank to aid in the even distribution of sparged air throughout the tank. The addition of mixed cyanide solution (~200 g NaCN/l) was generally made in tank #1 but if required could be distributed to any or all of the four tanks. Residence time within the circuit was approximately 40 hours at a throughput of 1,000 mtpd. The pH of the circuit was maintained between 10.5-11.5 with the addition of lime in the grinding circuit. The cyanide levels were checked by titration every two hours to ensure optimum leaching concentrations were held (0.25 g NaCN/l: Tank #1, 0.15 g NaCN/l: Tank#4). The leached pulp then flowed by gravity into the carbon in pulp (CIP) circuit.

The CIP circuit consisted of a cascade of six tanks (3,600 mm diameter x 5,400 mm). Each tank was equipped with baffles and an agitator/single turbine impeller combination. The tanks contained five 20 mesh launder screens whose function was to allow the slurry to pass but retain the 6 x 16 mesh activated carbon in the tank. The screens were kept from blinding with the aid of sparged air (equalized pressure air cleaned, EPAC, launder screens). The target concentration of activated carbon in each tank was 45 g carbon/l. Carbon was transferred ahead when the gold adsorbed on the carbon in CIP #1 reached a value of ~5000 g Au/tonne. The barren pulp discharged from CIP #6 was fed to a vibrating screen with a mesh size of 28 mesh. This safety screen recovered any small carbon particles originating from any carbon breakage occurring in the CIP stages and passing through the EPAC launder screens. The slurry which passed through the safety screen comprised the mill tailings and was directed to the CIP tails pumpbox. An

automatic composite sampler would collect a representative sample of the mill tailings for the daily metallurgical balances.

Modifications/Enhancements

- strengthened all bridgework on the leach tank agitators;
- changed all leach agitator motors from a "y" to delta configuration;
- reinforced all leach agitator gear box bosses;
- it must be noted that the agitation in both the leaching and CIP circuits was minimally acceptable, it was necessary to operate a mobile compressor to aid in mixing; and
- installed porcelain tips on the CIP EPAC spargers, the initial tips corroded and plugged frequently.

Stripping/Refining

The loaded carbon in CIP #1 was removed via a recessed impeller carbon transfer pump. The pump discharged to the loaded carbon screen (W.S. Tyler, Type 110-R, 91 x 183 cm, 28 mesh) and was separated from the slurry. The loaded carbon was collected in the loaded carbon tank (1,600 mm diameter x 2,200 mm) and transferred to the stripping vessel (1,070 mm diameter x 3,990 mm). The carbon in downstream tanks was moved forward to balance the CIP circuit with reactivated carbon being added to #6 CIP. A dilute sodium hydroxide solution (20g NaOH/l) was pre-heated using an immersion heater (30 kW) in the barren strip tank (3,200 mm diameter x 4,500 mm). Once a temperature of approximately 60° C was reached the circulation pump was started and the strip solution flowed through an in-line heater (368 kW). The solution exited the in-line heater at 160° C and fed the strip vessel to strip the gold from the carbon. The strip vessel was operated at 416 kPa (60 psig). A heat exchanger was also employed which would transfer heat from the pregnant solution to the barren prior to entering the in-line heater. The function of which was to reduce power costs associated with the in-line heater.

The pregnant solution flowed from the strip vessel through a pressure reducing valve to the pregnant strip tank (3,200 mm diameter x 4,500 mm). The solution was then pumped through the electrowinning cell, at about 2.5 m³/hr and 80-90° C, where the gold would plate out on the cathodes as a sludge. The electrowinning cell contained fifteen cathodes (polyethylene cages containing stainless steel wool mats)/sixteen anodes (stainless steel punch plate) and was operated at roughly 900 amps and 4.0 volts. The cell discharge was recycled to the pregnant strip tank until assays of the cell discharge solution were <2.5 mg/l Au. At this time the cell discharge was directed to the barren strip tank for the next strip. A small quantity of barren solution would be bled to the CIP circuit after each strip to ensure impurities would not concentrate within the closed-loop stripping circuit. Fresh NaOH solution from the mix tank was added to the barren before the start of each cycle. A titration of the barren solution was completed to ensure the proper strength solution required for an efficient strip.

Once stripping was completed a portion of the carbon (~10%) was transferred to a dewatering screen located above the reactivation kiln hopper. The remainder of the carbon (~90%) was transferred over a sizing screen (1,000 mm diameter 16 mesh) with the oversize reporting to the reactivated carbon tank and the undersize (carbon fines) to the carbon fines tank. The carbon fines tank was periodically emptied into drums for later processing. The kiln (Lochhead Hagg) was indirectly heated with propane and operated at 600° C. The carbon was transferred from the reactivation kiln hopper to the kiln via a screw feeder. It would then be heated to 600° C in the high moisture atmosphere of the kiln to drive off volatile contaminants (ie. oil, flocculants, and other organic compounds). The reactivated carbon discharged the kiln into a quench tank for cooling. It was then pumped over the sizing screen with the oversize reporting to the reactivated carbon tank to join with the carbon which bypassed the kiln and the fines discharging to the carbon fines tank. The carbon was then ready to be added to the CIP circuit during the next stripping transfer.

When the cathodes were loaded with gold sludge they were pulled and cleaned. The cathodes were removed with an overhead crane and suspended over a wash/settling box. The cathode wool was removed from the poly shell and washed with high pressure water. The solids collected were allowed to settle in the wash/settling box. The excess wash solution was decanted. The decanted solids were then placed in pans and put in the propane fired drying oven (Grieve Shelf Oven Model SB350, 9 kW). The solids after drying were weighed and split into a number of furnace charges (based on the total mass). A particular charge of dry cathode sludge (~25 kg) was then mixed with an appropriate mass of flux reagents in an electric mixer. The charge would then be placed in the bullion induction furnace (Inductotherm, 75 kW, 150#) for refining. Table concentrate was charged separately (~ 30 kg) with the appropriate flux mixture.

After a period of time which allowed for the smelting/refining reactions to take place the furnace charge was poured. The molten material was poured into a mold with the dense precious metals being retained in the mold and the slag overflowing to the slag pot. During the operation of the mill the slag which was formed during the smelting of the concentrate and sludge was returned as a recycle to the crushing circuit. When the pouring was completed a sample was withdrawn from the mold employing a vacuum sample tube. The sample was then taken to the lab for the determination of the dore assay. Once the mold had cooled the bar was taken from the mold and cleaned. It was then weighed, stamped with the particular bar number, bagged, sealed and placed in the refinery safe. Brinks Security travelled to site to pick up the bars for delivery to the Johnson Matthey Refinery. All pertinent data from the melt was recorded on a refinery report sheet and kept in the mill office.

Modifications/Enhancements

- a carbon acid wash circuit was a part of the initial mill design, the location was moved from inside the mill proper to an attached building to separate the strong acid and cyanide circuits, the circuit was never commissioned;
- a dewatering screen was installed on top of the kiln hopper;
- a larger motor was installed on the rotary valve of the kiln hopper;
- modified exhaust system on the electrowinning cell; and
- optimizing flux recipe for the table concentrate to ensure adequate gold recovery from the melt.

Tailings

The tailings from the CIP circuit were discharged over a safety screen then flowed by gravity to the CIP tails pump box. An automatic sampler was used to collect a composite sample of the CIP tails over a twenty four hour period for use in the daily metallurgical balance. Lime was added to the CIP tails pumpbox in the latter stages of milling to aid in solids settling in the TMF. The CIP tails was then pumped to the final tails pumpbox to be combined with the sewage from the mill, camp, assay lab, and main office/mine dry facilities. The final tails was then pumped through a 150 mm (6") diameter insulated heat traced polyethylene line to the TMF located approximately 2.1 km from the mill.

The line was equipped with two flowmeters, one located inside the mill building and the other located roughly 100 m from the TMF. The flow readings were compared and a deviation alarm was sounded when there was a flow difference for an extended period of time. The system did not function very well since there was no back pressure on the tailings line (ie. all downhill from the mill) and surging was frequent. The line was also equipped with a leak detection system placed in strategic locations (locations within the Contact Lake watershed). The system consisted of a sheath around the tails line which would collect and direct any leakage occurring from the line to a reservoir. The level in the reservoir would increase and sound an alarm on the annunciator panel, located in the mill coffee room, if a leak occurred.

The tailings line was moved periodically to a new position in the TMF to ensure an equal distribution of the tailings within the facility.

Modifications/Enhancements

- lime was added to the CIP tails pumpbox to aid in settling the tails in the TMF; and
- a second flowmeter was added to the tailings line for flow deviation alarm.

Reclaim Water Treatment

The purpose of the Reclaim Water (Effluent, ET) Treatment Circuit is to remove contaminants (ie. CN (Cyanide), Cu (Copper), TSS (Total Suspended Solids), etc. contained in the reclaim water to acceptable levels before being released to the environment (Scythes Lake). This circuit is expected to operate during the periods allowed, in accordance with the operating license, for another two to three seasons. Figure 3 provides a circuit schematic.

Reclaim water is pumped from the tailings management facility (TMF/Turtle Lake) using two 58 hp Flygt pumps operating in parallel. The pumps are located in a barge pumphouse located just off-shore in the TMF. A 13 hp Flygt is also located in the barge pumphouse. The function of the 13 hp pump is to supply water to the sparger system installed around the barge to prevent the barge from freezing in during the winter months.

The discharge from the 58 hp Flygt pumps flows through an eight inch diameter insulated and heat traced polyethylene pipeline to the Mill building (2.4 km). When the Mill was operating a portion of the water was directed to the process water tank to satisfy the requirements of the milling circuits. The balance is fed directly to the first of a cascade of three reaction tanks in the reclaim water treatment circuit. Each tank is equipped with baffles and an agitator.

A solution of hydrogen peroxide (H_2O_2 , 50% solution) and lime slurry is added to #1 ET tank (3,960 mm diameter x 7,330 mm). The purpose of the lime is to maintain the required pH set-point in the tank. The hydrogen peroxide is added to react with the cyanide in the reclaim water to form cyanate and consequently ammonia, thereby destroying the cyanide.

The hydrogen peroxide will also react with metal-cyanide complexes (eg. $\text{Cu}(\text{CN})_3^{-2}$) and form a metal hydroxide precipitate (fine solid particle) and ammonia. Any excess hydrogen peroxide will decompose to yield oxygen gas and water. Hydrogen peroxide is no longer added to the circuit since the cyanide level in the reclaim water is well below the discharge limits and the copper can be removed with the ferric sulphate.

The solution overflows by gravity from #1 tank and enters near the bottom of #2 ET tank (3,960 mm diameter x 7,330 mm). In this tank ferric sulphate ($\text{Fe}_2(\text{SO}_4)_3$, 45% solution) is added at a pre-determined rate to aid in the removal of arsenic, other metal ions and the TSS. Sulphuric Acid (H_2SO_4 , 93% solution) is also added to this tank and its purpose is to lower the pH of the tank contents to the proper level or set-point.

The solution exits #2 tank and enters #3 tank (2,500 mm diameter x 2,450 mm) where coagulant (Nalco 7888) is added. The function of the coagulant is to bring together the very small solid particles (precipitates) formed in #1 and #2 tanks and the TSS in the reclaim water to form larger particles so the flocculant added downstream will perform more effectively. A flow of dilution water is added to the coagulant to enhance the dispersion of the reagent.

The solution then flows by gravity to the clarifier where flocculant (Nalco 9877) is injected into the clarifier feed line just prior to entering the centre-well. The flocculant is employed to conglomerate the solid particles into larger "flocs" which will settle in the clarifier. The overflow (O/F) flows from the clarifier O/F launder to the clarifier O/F tank where it is pumped to Scythes Lake or the TMF.

The effluent release pumping system consists of two 50 hp 6x4 Warman pumps operating in series. The first pump is located inside the mill building and the second in a pumphouse located approximately halfway between the mill and discharge point. Two valves located near the end of the line allow the water to be directed to the TMF or Scythes Lake.

The clarifier underflow (U/F) is bled periodically by gravity from the U/F cone to the clarifier sump pump. The sump pump discharge reports to the sewage holding tank which when full is discharged into the TMF.

Reagent Systems

The following reagents were employed in the Contact Lake Mill, a number of which are presently being used in the reclaim water treatment circuit.

Sodium Cyanide

Sodium cyanide (NaCN) was received in 1,360 kg flow bins as dry briquettes. The mixing system consisted of a small overhead crane capable of lifting the flow bins, a ventilation system with alarm and a mix tank (2,000 mm diameter x 2,500 mm). Sodium hydroxide (25 kg) was added to the mix tank prior to the addition of the sodium cyanide to prevent the release of hydrocyanic gas. Once a batch was mixed it would be transferred to the holding tank when required. The solution strength was 200 g NaCN/l. The solution was pumped to the leaching circuit at the required rate. A rotameter located in the leaching circuit served as a guide when making flow adjustments.

Lime

Lime is received in ~20 tonne shipments and stored in a 50 tonne capacity silo (4,000 mm diameter x 10,000 mm). Initially the lime was delivered to the grinding circuit dry by way of a rotary valve and screw conveyor which discharged on the mill belt feeders. When the reclaim water treatment circuit was commissioned the lime circuit was changed to a wet system. Also calcium oxide was replaced with calcium hydroxide to facilitate mixing and reagent delivery in the new set-up. The wet system consisted of a mix tank equipped with an agitator and lime supply pumps (ie. one for each grinding and reclaim treatment circuits). A controller is used to control the output of a variable frequency drive for the rotary valve which delivers the dry product to the screw conveyor and hence the mix tank. Timers are set to the cycle (ie. start/stop rotary valve and screw conveyor) at an appropriate interval to ensure proper lime strength in the mix tank. A constant supply of water is being added to the mix tank to balance the usage. A

closed loop was employed for each circuit. Presently the circuit is open looped with a sewage pump supplying the lime to the reclaim water treatment circuit.

Sodium Hydroxide

Sodium hydroxide was received in 22.7 kg bags. The bags were manually emptied into a chute which discharged into the mix tank (2,000 mm diameter x 2,500 mm). The solution was mixed to approximately 100 g NaOH/l. The solution was then pumped as required to the barren strip tank for use as the stripping reagent.

Refinery Flux

Sodium carbonate, silica flour, borax, and sodium nitrate were all received in 22.7 or 25 kg bags. The reagents were kept in 200 litre plastic garbage bins in the refinery and used as required.

Flocculant

Flocculant is received in 22.7 kg bags which are manually fed to a hopper. The flocculant mix system is an automated system supplied by Allied Colloids (Mini-Fab 180). This system automatically mixes flocculant with water to the desired strength when required. Dry flocculant must be added to the storage bin to ensure an adequate supply of flocculant. Presently the flocculant is mixed to a strength of 0.025% w/w. The mix tank and storage tank are roughly the same volume and will hold approximately 800 litres of mixed flocculant.

A variable speed moyno pump was employed to pump the flocculant to the leach feed thickener. Presently it is being used in the reclaim water treatment circuit. When the reclaim water treatment circuit was commissioned and the thickener taken out of the mill circuit flocculant was added to the leach feed with a constant speed moyno. It was found that the addition to leaching was necessary to prevent segregation of coarse/fines in the tanks. The amount of floc delivered to the reclaim water treatment circuit is adjusted to the required amount by adjusting the variable speed drive dial located near the pump.

Coagulant

Coagulant is stored inside the mill building in two 1,450 litre totes. The two totes are stacked on top of each other giving a total storage volume of 2,900 litres. When the top tote has been emptied a drum pump is used to fill it with fresh coagulant from a tote which came from the warehouse.

Coagulant is delivered to the reclaim water treatment circuit using a Pulsatron Metering Pump (model: LE44SA - KPTC1) with a capacity of 6.94 LPH. The pump is operated in manual and adjusted to give the required flowrate. Dilution water is added to the coagulant line to aid in the dispersion of the reagent in the water treatment circuit. A rotameter/valve is used to adjust the flow of dilution water to the desired amount.

Sulphuric Acid

A 3,000 mm I.D. x 2,758 mm carbon steel tank located in front of the process water tank outside the mill stores 93% sulphuric acid for use in the ET circuit. The tank has a storage capacity of 30 tonnes of 93% sulphuric acid and is equipped with a high level alarm. Sulphuric acid is received by truck and unloaded using compressed air.

The sulphuric acid is pumped to the reclaim water treatment circuit using Pulsatron Metering Pumps (model: LPG5SA - PTC3) with a capacity of 14.8 LPH. There are two pumps which supply acid to the circuit. One pump is in automatic control. This pump receives a signal from the pH metre/transmitter located on #2 Tank and its output is adjusted accordingly. The other pump is placed in manual control and is set at a flowrate which allows the auto pump to adjust for disturbances.

Ferric Sulphate

A 2,134 mm I.D. x 2,275 mm FRP tank located inside the mill stores 45% ferric sulphate solution for use in the reclaim water treatment circuit. The tank has a storage capacity of nine tonnes of 45% ferric sulphate and is equipped with a high level alarm. Ferric sulphate solution is received by truck and unloaded using compressed air.

The ferric sulphate solution is pumped to the water treatment circuit employing a Pulsatron Metering Pump (model: LPG5SA - PTC3) with a capacity of 14.8 LPH. The pump is operated in manual and adjusted to give the required flowrate.

Hydrogen Peroxide

A 2,838 mm I.D. x 6,096 mm aluminum alloy (Al 5254) horizontal tank located outside the mill stores 50% hydrogen peroxide solution for use in the ET circuit. The tank has a storage capacity of 26 tonnes of 50% hydrogen peroxide and is equipped with a high level alarm. Hydrogen peroxide is presently not required in the treatment circuit.

A Milton Roy positive displacement pump model, FR 10173, serial number 207-879-001, with a nameplate capacity of 41.6 LPH. The pump is driven by a 1/4 hp motor. The pump is manually adjusted to deliver the required hydrogen peroxide flowrate to the ET circuit.

Activated Carbon

Activated carbon (coconut carbon) 6x16 mesh was received in 454 kg bags and used as required.

Propane

A propane storage tank with a total volume of 68,130 litres was situated east of the mill building. Vaporizers produced propane gas which was required for the kiln operation (carbon regeneration) and general mill building heating.

Grinding Balls

Grinding balls were received in drums containing 940 kg of 76 mm (3") diameter steel balls. The balls were added to the feed chute of the ball mill using a drum lifter/tilter and the 9,000 kg capacity overhead crane.

The attached tables show the reagent consumption rates for each operating year.

Mill Air and Water

The mill air system consisted of three air compressors and one blower. One air compressor (Sullair Model 12-50H, 215 cfm/125psi) was dedicated for plant air for use with air tools and other miscellaneous purposes. The other two compressors (Sullair, Model 16-75LL, 500 cfm/60 psi) supplied process air for the leaching, CIP circuits and other process requirements. The blower (Spencer Turbine, RB50, 350 cfm/15 psi) was dedicated in supplying low pressure air to the EPAC launder screens in the CIP circuit.

The water requirements for the mill operation was supplied by one of two operating 58 hp Flygt pumps. Reclaim water was pumped from the TMF and discharged into the process water tank (6,800 mm diameter x 6,700 mm). One pump was ran until the reclaim water treatment circuit was commissioned when both pumps were required to operate simultaneously in order to provide sufficient water for both the mill and reclaim water treatment circuit. Process water was then pumped from the tank to the various areas of use.

Fresh water was supplied from Contact Lake using a submersible pump (Gould, Model 7CLC 350). The pump discharged into the fresh/fire water tank (4,600 mm diameter x 4,600 mm). The water was then distributed as required. The majority of the use was with the reagent make-up systems.

Modifications/Enhancements

- purchased a mobile compressor to aid in agitation of the leaching and CIP circuits due to insufficient agitation horsepower in these circuits; and
- various piping changes were made to the water system in an effort to reduce fresh water consumption in the mill (ie. Knelson concentrator, compressor cooling water etc... were changed over from fresh to process water).

Mill Power Generation

The power for the mill and site was generated with diesel generators. There were four Cat 3516, 1135 kW gensets . Three operated continuously and the fourth was a stand-by unit. Cycling of the operating gensets ensured an equal distribution of hours on each engine. With the shutdown of the mill three Cummins (Onan) 350 kW gensets were installed to provide the power for the facilities during the operation of the reclaim water treatment circuit.

A power line from the power generation system supplied power to the underground workings and TMF area.

Mobile Equipment

The mill mobile equipment fleet consisted of:

- Terex (72-51B/70C) front-end loader with 4 yd³ bucket
- D85 Komatsu dozer
- Caterpillar (Model 140) grader
- Hiab lift truck (Atlas Crane, AK4003C, 6 t, GMC 7000)
- Lift King (Model LK 8M42) forklift
- two Ford F150 4x4 pick-ups

General service and maintenance was provided by on-site personnel.

Mill Metallurgical Accounting

Metallurgical balances were completed on a daily basis. The data employed in the daily balance included:

- mill feed weightometer totalizer reading (24 hr period);
- % moisture determination from automatic composite mill feed belt sample;
- gold content of hydrocyclone O/F automatic composite sample. A manual composite sample was also collected and analysed for comparison purposes;

- weight and gold assay of the table concentrate; and
- gold content of the CIP tailings automatic composite sample. A manual composite sample was also collected and analysed for comparison purposes.

The data received from the assay laboratory and operations would then be entered into a Lotus 123 spreadsheet. The spreadsheet would calculate daily recovery, various other indicators of metallurgical performance and keep a running tally of all metallurgical parameters over a specific month and year to date (ie. grade, recovery, downtime, gold production, etc.).

In order to ensure the accuracy of the mill feed weightometer a belt scale check was completed on a weekly basis. This involved stopping the belt and weighing the material contained on a 10 m section of the conveyor. Since we knew the speed of the belt we could calculate the feed rate (mtph) and compare this measurement with the actual output from the weightometer.

Inventory calculations were completed at the end of every month as part of the monthly reconciliation. Samples would be collected from the leaching and CIP circuits in order to determine gold inventory. Initially, if there was a change in the inventory or unaccountable it was placed in the ball mill. This method of accounting proved to be a problem. It was then decided to keep the ball mill inventory accounted as a static gold inventory. When a ball mill liner change was completed (November, 1995) all material was assayed and weighed. It was found that a good estimate of the ball mill gold inventory would be 45,000 grams Au. The monthly balances improved.

In late 1997 unaccountable losses seemed to be occurring on a regular basis. A study was undertaken. It was found that the gold in the slag from the table concentrate melts, which was recycled to the jaw crusher, could account for the discrepancies. A factor was then applied to the head grade calculation based on the ratio of gold contained in the table concentrate furnace charge and the actual gold recovered in the melt.

The unaccountable over the life of the project is presently 0.8 %. This will drop to a lower value and may revert to a gain once all mill cleanings from the clean-up phase are refined and accounted for. The attached tables outline the metallurgical data and mechanical availability over the operating periods, a life to date inventory summary is also included.

Modifications/Enhancements

- assay technique on the final tails sample was changed to increase accuracy and precision;
- method of determining in-circuit inventory was modified, ball mill was given a static gold inventory; and
- slag recycle was accounted for in the daily/monthly balances.

Mill Manpower

The mill manpower distribution was relatively stable ranging from 40 to 45 personnel during the first two years of operation (ie. 1995/1996). Manpower was decreased in mid -1997 through attrition and transfers as the closure of the mill was imminent due to the exhaustion of economic ore. Budgeted personnel for 1998 was 39 until August when it was anticipated that the milling of the remaining ore would be completed. The mine plan was accelerated and milling concluded June 3, 1998. Personnel levels dropped to 28 in June, 1998. The attached figure summarizes the typical mill department organizational layout.

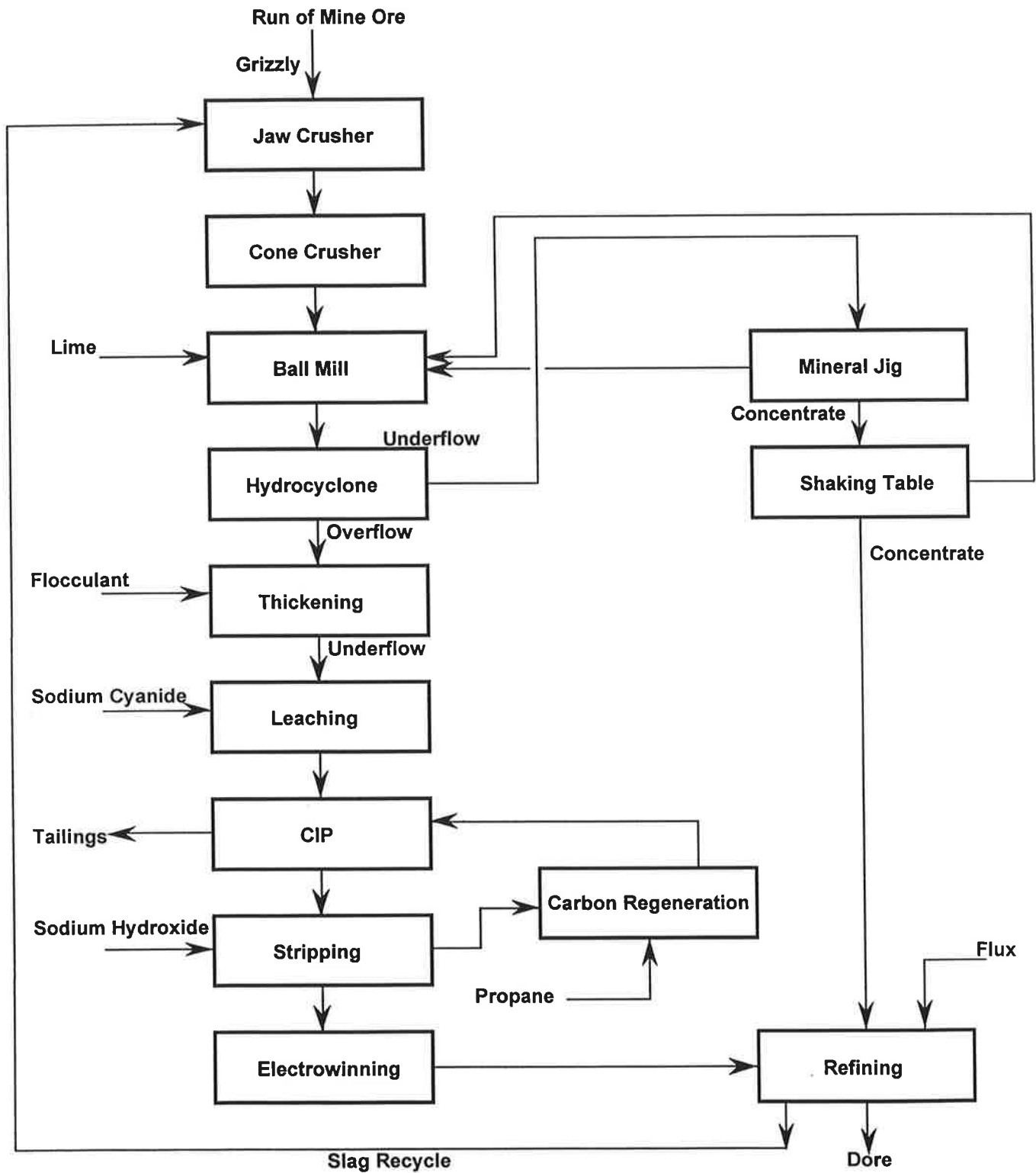
Presently (August/1998) there are ten employees in the mill. Two supervisory and eight operations/maintenance personnel for the operation of the reclaim water treatment circuit.

Milling Costs

The unit milling costs over the operating period are summarized in the attached table. Project to date milling costs averaged \$111.50/troy oz Au or \$ 21.06/tonne.

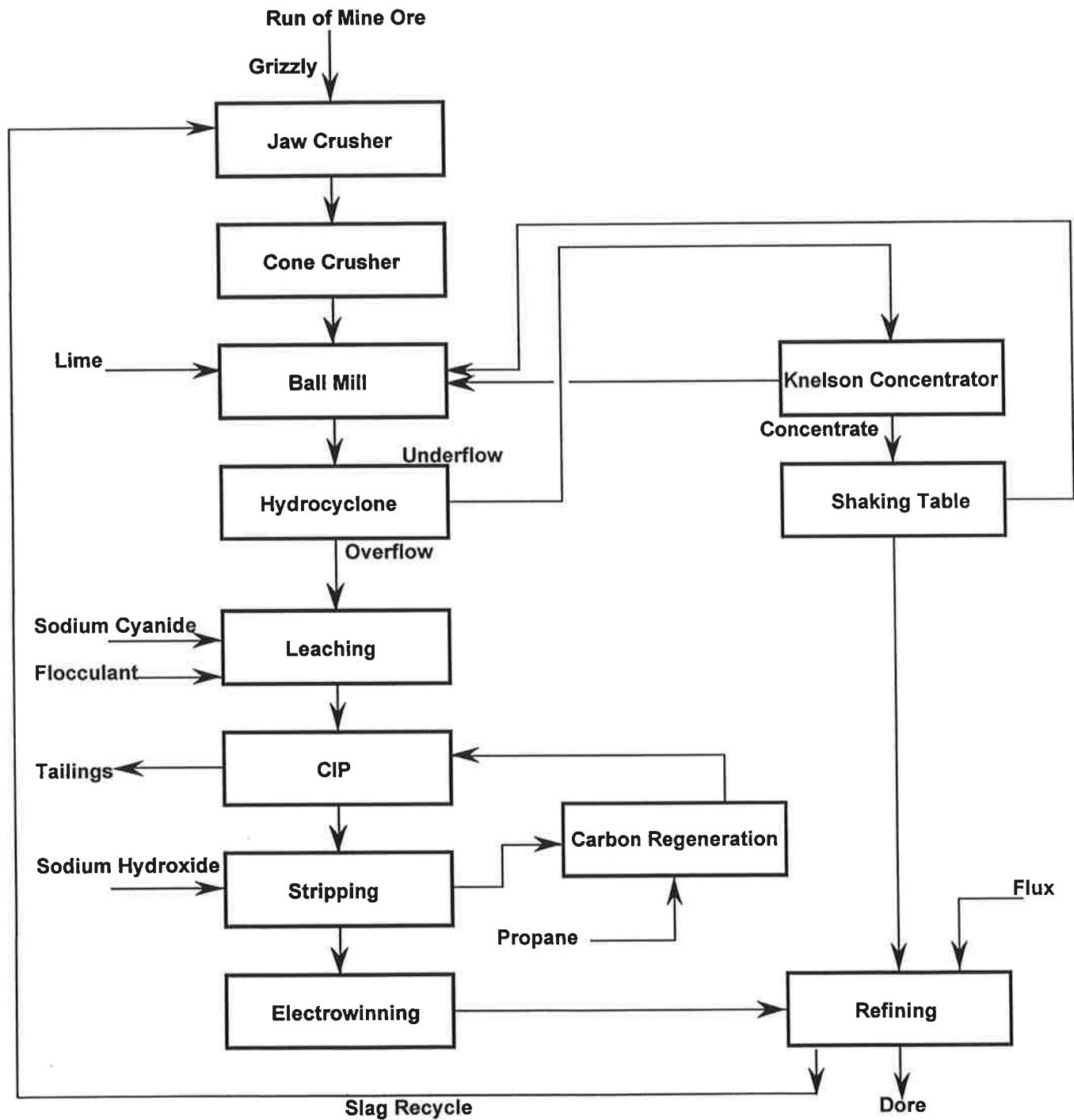
Cameco - Contact Lake Mill Schematic

Figure 1



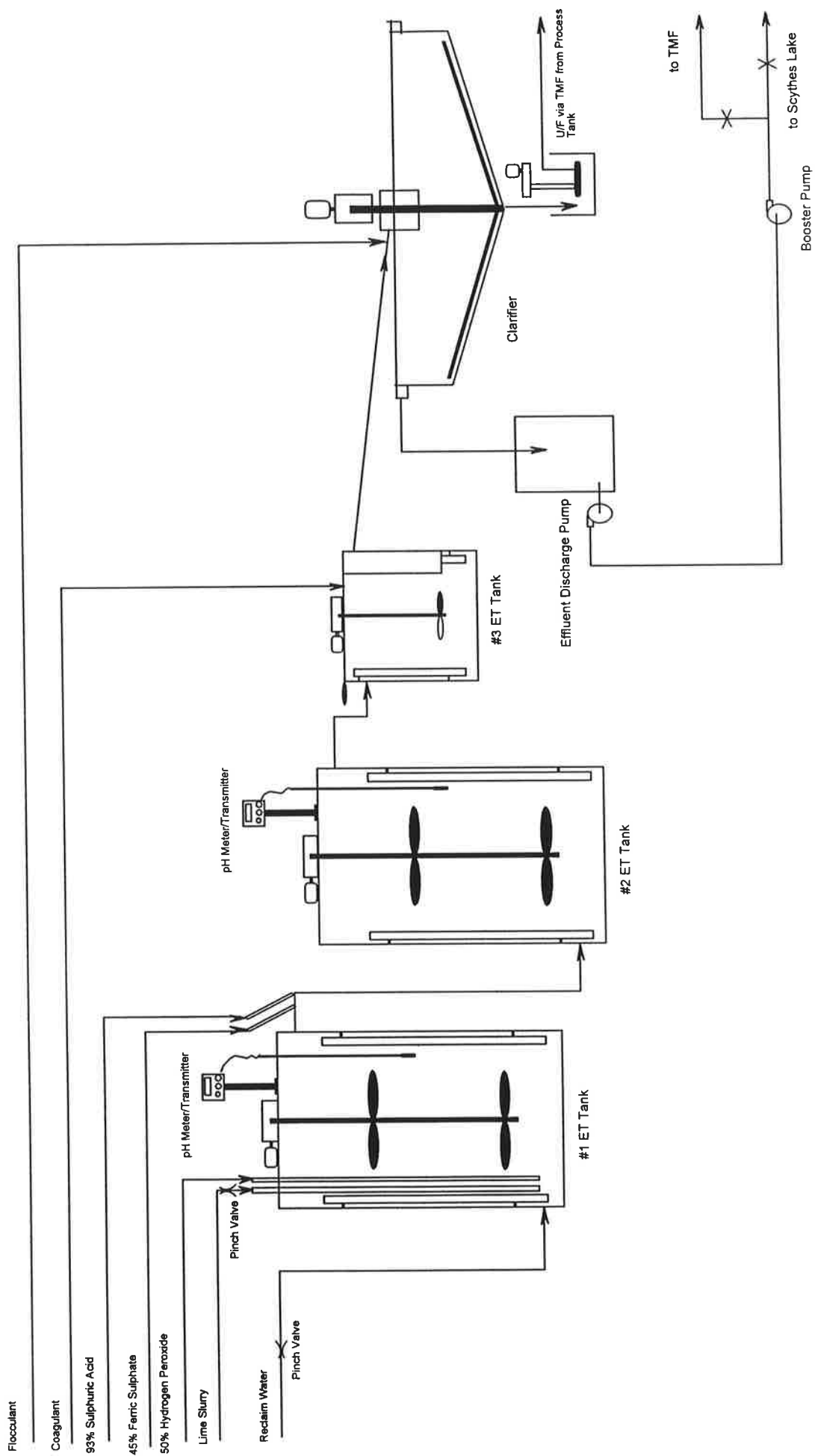
Cameco - Contact Lake Mill Schematic

Figure 2



Reclaim Water Treatment Schematic

Figure 3



Mill Department
Production Report

Year 1998

Consumption of Reagents and Supplies

	Consumption kg / t Mill Feed				Consumption kg/kg Gold Produced				Effluent Treatment - Consumption g/m3 Effluent								
	Grinding Balls	Flocculant	Hydrated Lime	Carbon	Sodium Cyanide	Sodium Hydroxide	Nitric Acid	Silica	Sodium Nitrate	Borax	Carbon	Hydrated Lime	Ferric Sulphate	Sulphuric Acid (93 %)	Coagulant	Flocculant	Hydrogen Peroxide (50 %)
1998																	
Budget	1.25	0.02	0.98	0.03	0.45	0.06	0.00	0.99	0.99	1.98	0.00	283.00	115.00	207.00	40.00	2.00	70.00
January	0.97	0.005	0.57	0.00	0.29	0.04	0.00	0.00	0.91	0.67	0.00	250.50	102.90	181.29	74.87	0.90	20.50
February	1.10	0.005	0.26	0.00	0.38	0.06	0.00	0.54	0.00	0.18	0.00	84.72	74.40	147.97	71.84	0.61	17.01
March	1.07	0.003	0.52	0.00	0.27	0.03	0.00	0.54	0.81	0.00	0.00	223.87	92.82	146.25	47.10	0.55	15.79
April	1.01	0.002	0.46	0.02	0.28	0.09	0.00	0.61	0.76	0.17	0.00	179.75	75.02	150.45	21.13	0.25	16.94
May	0.86	0.002	1.10	0.00	0.36	0.05	0.00	0.00	0.71	0.31	0.00	143.25	102.89	184.76	77.75	0.910	0.00
June	0.34	0.008	0.14	0.00	0.49	0.00	0.00	0.00	1.51	2.32	0.00	258.63	75.48	197.37	46.73	0.819	0.00
July	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
August																	
September																	
October																	
November																	
December																	
YTD	0.30	0.001	0.18	0.00	0.10	0.02	0.00	0.24	0.72	0.44	0.00	198.51	87.36	170.30	54.28	0.67	12.96

Mill Department
Production Report

Year 1997

Consumption of Reagents and Supplies

		Consumption kg / t Mill Feed				Consumption kg/kg Gold Produced					Effluent Treatment - Consumption kg/m3 Effluent							
		Grinding Balls	Flocculant	Lime (CaO equiv.)	Carbon	Sodium Cyanide	Sodium Hydroxide	Nitric Acid	Silica	Sodium Nitrate	Borax	Carbon	Lime (CaO equiv.)	Femic Sulphate	Sulphuric Acid (93 %)	Hydrogen Peroxide (50 %)	Coagulant	Flocculant
1997																		
	Budget	1.30	0.02	0.70	0.05	0.50	0.06	0.03	0.49	0.61	0.95	-	0.283	0.115	0.207	0.070	0.040	0.002
	January	1.37	0.026	0.17	0.02	0.46	0.11	0.00	0.25	0.25	0.00							
	February	1.07	0.023	0.79	0.00	0.32	0.00	0.00	1.92	0.66	1.50							
	March	1.21	0.007	0.53	0.02	0.18	0.06	0.00	0.47	0.00	0.52							
	April	1.08	0.028	0.39	0.02	0.35	0.05	0.00	0.00	1.21	1.78							
	May	1.49	0.022	0.90	0.00	0.48	0.07	0.00	0.00	0.67	0.55							
	June	1.28	0.021	0.56	0.02	0.44	0.06	0.00	0.00	0.66	0.36							
	July	0.83	0.021	0.51	0.04	0.44	0.07	0.00	0.21	1.07	1.88							
	August	1.27	0.046	0.57	0.00	0.50	0.14	0.00	0.15	0.77	0.68							
	September	0.73	0.025	0.33	0.00	0.53	0.09	0.00	0.52	0.65	0.86	0.00	0.13	0.11	0.21	0.06	0.000	
	October	1.00	0.030	0.707*	0.00	0.43	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.002
	November	1.14	0.018	0.36	0.02	0.43	0.06	0.00	0.00	0.39	0.72	0.00	0.17	0.14	0.24	0.02	0.059	
	December	1.16	0.007	0.36	0.00	0.35	0.02	0.00	0.70	0.87	0.58	0.00	0.18	0.13	0.21	0.02	0.057	0.001
YTD		1.14	0.02	0.52	0.01	0.41	0.06	0.00	0.26	0.49	0.70	0.00	0.17	0.13	0.22	0.03	0.047	0.002

* Corrected the Lime consumption for October.

Cameco - Contact Lake Operation

Mill Department

Production Report

Consumption of Reagents and Supplies

Year 1996

1996	Grinding Balls	Consumption kg / t Mill Feed					Consumption kg/kg Gold Produced			
		Flocculant	Lime	Carbon	Sodium Cyanide	Sodium Hydroxide	Nitric Acid	Silica	Sodium Nitrate	Borax
Budget	1.25	0.030	1.00	0.10	1.00	0.10	0.08	1.72	0.68	1.68
January	1.31	0.011	0.70	0.06	0.37	0.00	0.00	0.00	0.87	1.28
February	1.15	0.024	0.74	0.10	0.56	0.06	0.00	0.25	1.76	1.93
March	1.19	0.024	0.73	0.02	0.56	0.06	0.00	0.46	0.46	0.46
April	1.55	0.024	0.82	0.11	0.64	0.06	0.01	0.00	0.93	0.15
May	1.05	0.021	0.66	0.04	0.37	0.16	0.00	0.40	0.66	1.85
June	1.28	0.024	0.54	0.02	0.39	0.06	0.00	0.40	0.80	1.79
July	1.30	0.035	0.70	0.00	0.48	0.06	0.00	0.30	1.22	0.00
August	1.10	0.021	0.62	0.04	0.39	0.05	0.00	0.65	0.97	0.89
September	1.01	0.021	0.47	0.00	0.36	0.05	0.00	0.93	2.20	0.86
October	0.99	0.025	0.89	0.00	0.45	0.06	0.00	0.04	0.03	0.07
November	1.27	0.022	0.49	0.06	0.31	0.05	0.00	0.69	0.69	0.15
December	1.13	0.023	0.55	0.06	0.38	0.07	0.00	0.00	0.53	0.53
YTD	1.19	0.02	0.66	0.04	0.44	0.06	0.00	0.34	0.93	0.83

Cameco - Contact Lake Operation

Mill Department

Production Report

Year 1995

Consumption of Reagents and Supplies

	Grinding Balls	Consumption kg / t Mill Feed					Consumption kg/kg Gold Produced				
		Flocculant	Lime	Carbon	Sodium Cyanide	Sodium Hydroxide	Nitric Acid	Silica	Sodium Nitrate	Borax	
1995											
Budget	1.25	0.030	1.00	0.10	1.00	0.10	0.00	1.52	1.52	1.52	
January	1.70	0.016	1.32	0.07	0.37	0.04	0.00	0.00	1.70	2.00	
February	1.00	0.014	1.33	0.05	0.54	0.05	0.00	0.40	1.30	2.40	
March	1.74	0.017	0.85	0.09	0.58	0.04	0.00	0.00	0.52	0.58	
April	1.31	0.016	0.42	0.00	0.56	0.07	0.00	0.38	1.16	2.78	
May	1.14	0.016	1.25	0.08	0.55	0.08	0.00	0.00	0.67	0.37	
June	1.75	0.015	0.33	0.06	0.73	0.00	0.00	0.44	0.65	0.00	
July	1.34	0.014	0.25	0.12	0.50	0.06	0.00	0.27	0.96	0.30	
August	1.42	0.016	2.06	0.00	1.22	0.04	0.00	0.22	0.34	0.37	
September	2.01	0.015	0.11	0.10	1.02	0.17	0.00	0.20	0.70	0.80	
October	1.36	0.010	0.84	0.09	0.58	0.06	0.00	0.31	0.79	0.17	
November	0.67	0.016	0.73	0.00	0.55	0.00	0.00	0.00	0.52	0.00	
December	1.24	0.013	1.05	0.00	0.45	0.05	0.00	0.64	1.06	1.17	
YTD	1.39	0.015	0.88	0.05	0.64	0.05	0.00	0.24	0.86	0.91	

Metallurgical Plant Performance

1998	MILL FEED			TAILINGS LOSSES			RECOVERY			GOLD PRODUCTION		
	Actual	Tonnes		Actual	g Au/t		Actual	%		Actual	Ounces	
		Budget	Forecast		Budget	Forecast		Budget	Forecast		Budget	Forecast
January	28,129	25,575	25,575	6.03	5.75	169,701	147,056	7,966	7,966	8,823	95.31	95.31
February	21,312	23,100	23,100	5.85	5.88	124,592	131,208	5,780	5,780	7,872	95.38	95.38
March	29,232	25,575	25,575	5.69	5.87	166,256	145,010	7,025	7,025	8,701	95.77	95.77
April	28,882	24,750	24,750	5.55	5.96	160,428	147,510	6,972	6,972	8,851	95.55	95.55
May	30,349	25,575	25,575	5.61	6.07	170,312	155,240	7,928	7,928	9,314	95.34	95.34
June	2,789	24,750	24,750	3.56	6.07	9,940	150,233	1,392	1,392	9,014	85.00	85.00
July	0	25,575	25,575		6.07	0	155,240	0	0	9,314		
August	0	7,078	7,078		6.07	0	42,963	0	0	2,578		
September	0	0	0		0.00	0	0	0	0	0		
October	0	0	0		0.00	0	0	0	0	0		
November	0	0	0		0.00	0	0	0	0	0		
December	0	0	0		0.00	0	0	0	0	0		
YTD	140,693	181,978	181,978	5.70	5.90	801,329	1,074,461	37,043	64,468	95.38	94.00	29,288
Yearend					5.904345				64,468		94.00	94.00
											32,472	32,472
											910,950	910,950
											1,009,993	1,009,993

Mill Department
Production Report

Year 1997 Metallurgical Plant Performance

1997	Mill Feed				Tailings Losses				Recovery				Gold Production								
	Tonnes		g Au/t		g Au		g Au		%		Ounces		Grams								
	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget					
																	Forecast	Forecast	Forecast	Forecast	Forecast
January	23,730	24,807	25,575	7.06	5.86	5.87	167,528	145,367	150,236	6,389	5,815	6,009	96.19	94.54	96.00	5,797	4,418	4,637	180,297	137,430	144,227
February	25,532	22,406	23,100	3.89	5.86	5.99	99,258	131,299	138,378	4,856	5,252	5,535	95.11	94.54	96.00	2,881	3,991	4,271	83,385	124,130	132,843
March	22,534	24,807	25,575	4.79	5.86	6.65	107,851	145,367	169,968	6,012	5,815	6,799	94.43	94.54	96.00	3,100	4,418	5,246	96,435	137,430	163,169
April	23,257	24,007	24,750	4.55	5.86	6.89	105,816	140,678	170,454	8,289	5,627	6,818	92.17	94.54	96.00	3,616	4,276	5,261	112,483	132,997	163,636
May	25,446	24,807	25,575	6.27	5.86	7.02	159,461	145,367	179,526	8,308	5,815	7,181	94.79	94.54	96.00	4,356	4,418	5,541	135,493	137,430	172,344
June	24,900	24,007	24,750	6.07	5.86	6.83	151,062	140,678	169,158	6,816	5,627	6,766	95.49	94.54	96.00	4,427	4,276	5,221	137,708	132,997	162,391
July	21,551	24,807	25,575	5.61	5.86	7.29	120,867	145,367	186,362	5,831	5,815	7,454	95.18	94.54	96.00	3,418	4,418	5,752	106,320	137,430	178,907
August	24,452	24,807	25,575	7.02	5.86	7.55	171,740	145,367	193,230	8,406	5,815	7,729	95.11	94.54	96.00	4,728	4,418	5,964	147,064	137,430	185,501
September	23,112	24,007	24,750	7.46	5.86	7.03	172,378	140,678	173,985	6,362	5,627	6,959	96.31	94.54	96.00	5,656	4,276	5,370	175,925	132,997	167,026
October	25,173	24,807	25,575	6.96	5.86	6.57	175,217	145,367	168,153	7,523	5,815	6,726	95.71	94.54	96.00	5,020	4,418	5,190	156,153	137,430	161,427
November	25,518	24,007	24,750	6.91	5.86	6.69	176,223	140,678	165,594	7,781	5,627	6,824	95.58	94.54	96.00	5,588	4,276	5,111	174,123	132,997	158,970
December	27,517	24,807	25,575	5.39	5.86	6.39	148,404	145,367	163,326	6,810	5,815	6,533	95.41	94.54	96.00	4,194	4,418	5,041	130,438	137,430	156,793
YTD	292,722	292,080	301,125	6.00	5.86	6.74	1,755,805	1,711,581	2,028,370	83,383	68,463	81,133	95.25	94.54	96.00	52,593	52,024	62,605	1,635,824	1,618,128	1,947,234

Mill Department
Production Report

Year 1996

Metallurgical Plant Performance

	Mill Feed						Tailings Losses						Recovery %			Gold Production					
	Tonnes			g Au/t			g Au			g Au						Ounces			Grams		
	Actual	Budget	Forecast	Actual	Budget	Forecast	Actual	Budget	Forecast	Actual	Budget	Forecast	Actual	Budget	Forecast	Budget	Forecast	Budget	Forecast	Budget	Forecast
1996																					
January	25,881	25,575	25,575	6.17	5.88	7.14	159,563	150,367	182,606	6,153	7,518	9,130	96.14	95.00	95.00	5,019	4,593	5,377	156,104	142,849	173,475
February	24,397	23,925	23,925	7.93	5.37	6.93	193,452	129,358	165,800	7,686	6,418	8,290	96.03	95.00	95.00	5,846	3,920	5,064	181,840	121,940	157,510
March	24,800	25,575	25,575	8.27	5.03	6.76	205,204	128,683	172,867	9,932	6,434	8,644	95.16	95.00	95.00	6,286	3,930	5,281	195,510	122,249	164,243
April	23,332	24,750	24,750	7.95	6.51	6.87	185,391	161,083	170,033	7,271	8,054	8,502	96.08	95.00	95.00	5,492	4,920	5,193	170,826	153,029	161,531
May	25,589	25,575	25,575	6.24	6.43	6.87	159,597	164,332	175,700	4,552	8,217	8,785	97.15	95.00	95.00	5,541	5,019	5,366	172,353	158,115	188,915
June	24,310	24,750	24,750	5.34	6.34	6.87	129,868	156,844	170,033	4,400	7,842	8,502	96.61	95.00	95.00	3,600	4,791	5,193	111,981	149,002	161,531
July	25,769	25,575	25,575	5.78	5.85	6.87	148,866	149,560	175,700	5,175	7,478	8,785	96.52	95.00	95.00	4,815	4,568	5,366	149,775	142,082	166,915
August	27,910	25,575	25,575	5.31	6.13	6.87	148,192	156,373	175,700	4,449	7,844	8,785	97.00	95.00	95.00	4,488	4,791	5,366	139,890	149,029	166,915
September	26,372	24,750	24,750	6.08	6.29	6.87	160,274	155,554	170,033	5,338	7,778	8,502	96.67	95.00	95.00	4,686	4,751	5,183	145,746	147,778	161,531
October	24,253	25,575	25,575	5.94	7.27	6.88	144,168	185,930	175,956	5,248	9,296	8,798	96.36	95.00	95.00	3,954	5,679	5,374	122,981	176,633	167,158
November	26,337	24,750	24,750	6.30	7.08	6.87	165,927	175,221	170,033	7,163	8,761	8,502	95.68	95.00	95.00	5,296	5,352	5,193	164,735	166,460	161,531
December	25,344	25,575	25,575	7.31	7.20	6.69	185,273	184,049	171,097	7,585	9,202	8,555	95.91	95.00	95.00	5,528	5,621	5,226	171,937	174,947	162,542
YTD	304,294	301,950	301,950	6.53	6.28	6.87	1,985,775	1,896,855	2,075,576	74,952	94,843	103,779	96.23	95.00	95.00	60,562	57,936	63,395	1,883,678	1,802,012	1,971,797

Mill Department

Production Report

Year 1995

Metallurgical Plant Performance

	Mill Feed				Tailings Losses				Recovery		Gold Production			
	Tonnes		g Au/t		g Au		g Au		%		Ounces		Grams	
	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget
1995														
January	21,336	21,700	4.14	8.70	88,384	188,790	12,722	9,439.5	85.61	95.00	1,169	5,766	36,355	179,350.5
February	18,491	19,600	5.31	8.70	98,126	170,520	15,140	8,526.0	84.57	95.00	2,309	5,208	71,829	161,994.0
March	22,373	21,700	6.64	8.60	148,490	186,620	12,511	9,331.0	91.57	95.00	4,221	5,700	131,286	177,289.0
April	21,741	21,000	5.80	8.50	126,155	178,500	6,842	8,925.0	94.58	95.00	3,761	5,452	116,994	169,575.0
May	24,827	21,700	5.83	8.70	144,643	188,790	8,877	9,439.5	93.86	95.00	4,361	5,766	135,650	179,350.5
June	24,433	21,000	6.80	8.70	166,100	182,700	9,991	9,135.0	93.99	95.00	3,358	5,580	104,454	173,565.0
July	24,451	21,700	5.97	9.30	143,628	201,810	10,322	10,090.5	92.81	95.00	5,309	6,164	165,117	191,719.5
August	22,286	21,700	10.16	9.30	226,508	201,810	14,768	10,090.5	93.48	95.00	6,451	6,164	200,636	191,719.5
September	20,028	21,000	7.60	9.40	152,223	197,400	8,271	9,870.0	94.57	95.00	4,443	6,029	138,191	187,530.0
October	23,308	21,700	6.02	7.50	140,413	162,750	7,523	8,137.5	94.64	95.00	4,621	4,971	143,742	154,612.5
November	22,018	21,000	5.55	8.60	122,200	180,600	4,831	9,030.0	96.05	95.00	4,170	5,516	129,894	171,570.0
December	24,877	21,700	4.78	8.60	118,987	186,620	6,191	9,331.0	94.80	95.00	3,429	5,700	106,643	177,289.0
YTD	270,169	255,500	6.20	8.72	1,675,857	2,226,910	117,989	111,345.5	92.96	95.00	47,602	68,016	1,480,591	2,115,564.5

Corrected November 1995 Production From 129,695 grams to 129,694 grams.

Cameco - Contact Lake Operation

Mill Department
Production Report

Year 1998

Mill Availability

Date	Operating Time		
	Available hrs	Actual Operating hrs	%
to December 1997	26670.5	25280.67	94.79
January 1998	744	715.61	96.18
February	672	514.67	76.59
March	744	708.91	95.28
April	720	688.67	95.65
May	744	744	100.00
June	720	72	10.00
July	744	0	0.00
August			0.00
September			0.00
October			0.00
November			0.00
December			0.00
YTD 1998	5088	3443.86	67.69
Total Life	31758.5	28724.53	90.45

Cameco - Contact Lake Operation

Mill Department
Production Report

Year 1997

Mill Availability

Date	Operating Time		
	Available	Actual Operating	
	hrs	hrs	%
December 1996	17910.5	17120.42	95.59
January 1997	744	696.57	93.63
February	672	665.4	95.60
March	744	622.65	83.69
April	720	707.83	98.31
May	744	727.16	97.74
June	720	686.33	95.32
July	744	590.99	79.43
August	744	696.25	93.58
September	720	658.16	91.41
October	744	700.58	94.16
November	720	681.82	94.70
December	744	726.51	97.65
YTD 1997	8760	8160.25	93.15
Total Life	26670.5	25280.67	94.79

Cameco - Contact Lake Operation

Mill Department
Production Report

Year 1996

Mill Availability

Date	Operating Time		
	Available hrs	Actual Operating hrs	%
December 1995	9126.5	8613.35	94.38
January 1996	744	726.75	97.68
February	696	686.85	98.69
March	744	722.46	97.10
April	720	696.58	96.75
May	744	722.67	97.13
June	720	704.42	97.84
July	744	708.76	95.26
August	744	731.75	98.35
September	720	701.59	97.44
October	744	665.36	89.43
November	720	716.46	99.51
December	744	723.42	97.23
YTD 1996	8784	8507.07	96.85
Total	17910.5	17120.42	95.59

Cameco - Contact Lake Operation

Mill Department
Production Report

Year 1995

Mill Availability

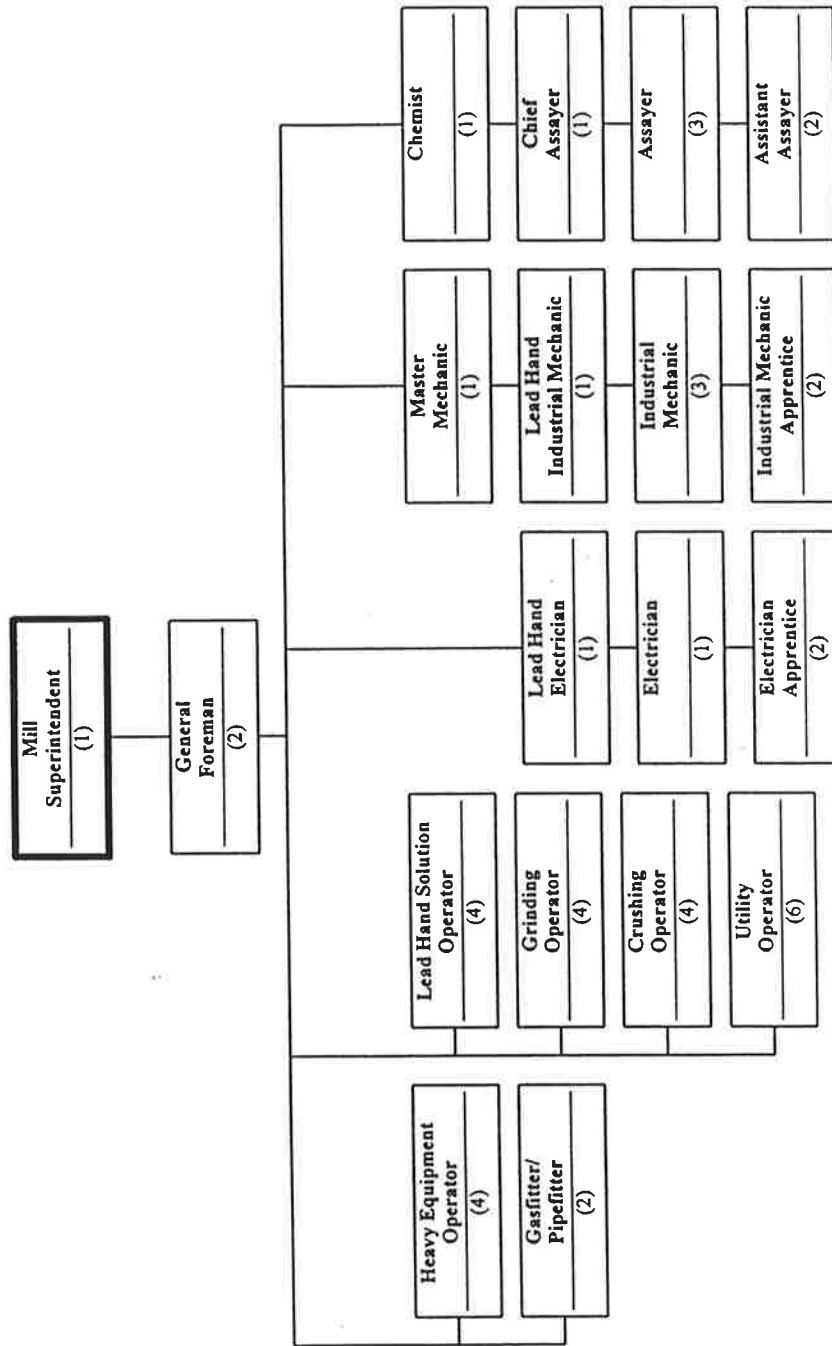
Date	Operating Time		
	Available	Actual	Operating
	hrs	hrs	%
December 1994	366.5	317	86.49
January 1995	744	709.5	95.36
February	672	628.05	93.46
March	744	725.5	97.51
April	720	700.24	97.26
May	744	727.17	97.74
June	720	684.09	95.01
July	744	716.12	96.25
August	744	704.18	94.65
September	720	649.68	90.23
October	744	703.32	94.53
November	720	620.42	86.17
December	744	728.08	97.86
YTD 1995	8760	8296.35	94.71
Total	9126.5	8613.35	94.38

CONTACT LAKE OPERATION
TABLE 5.3
MILL CIRCUIT BALANCE AND INVENTORY 1998

		Input	Tailings	Opening	Change	Closing	Production	Unaccountable Input - Output
To December 1997	g Au	5396141	274830	0	73495	73495	5000093	47723
January 1998	g Au	169701	7966	73495	4330	77825	149894	7511
February	g Au	124692	5760	77825	-2488	75337	124191	-2771
March	g Au	166256	7025	75337	1613	76950	168825	-11207
April	g Au	160428	6972	76950	3722	80672	149980	-246
May	g Au	170312	7928	80672	-6864	73808	160549	8699
June	g Au	9940	709	73808	0	73808	7939	1292
June Inventory Depletion	g Au	0	683	73808	-68006	5802	67456	-133
July Inventory Depletion	g Au	0	0	5802	-5802	0	24263	-18461
GD Resources Inventory								
Depletion (Estimate)	g Au	0	0	0	30643	30643	0	-30643
GD Resources Production								
Reconciliation	g Au			30643	-57853	-27210	57853	-27210
Contact Lake Employee								
Pendants	g Au	0	0	0	0	0	242	-242
Total (Life-to-Date)	g Au	6197470	311873	0	-27210	-27210	5911285	-25688

Cameco Corporation

Contact Lake Operation



CONTACT LAKE JOINT VENTURE
Production Statistics and Operating Costs
December 31, 1998

	1993	1994	1995	1996	1997	1998	Project Total to Date
<u>Production</u>							
Ore (tonnes)			268,964	304,294	292,722	140,693	1,006,673
Grade (g/t)			6,200	6,530	6,000	5,700	6,160
			53,612	63,882	56,465	25,782	199,741
Percentage recovery			92.96%	96.23%	95.25%	95.38%	94.97%
Recovered troy ounces			49,837	61,474	53,783	24,591	189,685
Change to incircuit inventory			(2,235)	(912)	(1,190)	4,740	403
Troy ounces poured			47,602	60,562	52,593	29,331	190,088

Mill Costs

301 Mill Administration			458,146	474,231	435,852	282,764	1,650,993
302 Mill Light Vehicles			6,412	10,158	20,307	23,220	60,097
304 Mill Building Operation			221,970	1,633,282	1,666,852	967,630	4,489,734
305 Assay Lab			398,078	482,153	521,718	206,340	1,608,289
311 Ore Handling (Mill Feed)			374,558	370,476	289,920	124,829	1,159,783
312 Crushing			783,971	683,928	908,216	193,575	2,569,690
313 Grinding			1,421,451	1,039,553	856,652	301,648	3,619,304
314 Gravity Circuit			152,569	99,438	141,340	92,765	486,112
315 Leaching & CIP			861,722	586,276	468,085	210,157	2,126,240
316 Carbon Strip and Refinery			519,589	304,134	307,497	153,173	1,284,393
317 Carbon Wash/Regeneration			139,023	79,151	56,362	43,764	318,300
318 Tailing & Backfill Operation			218,024	168,497	270,198	275,776	932,495
319 Mill Air & Water			194,822	88,834	62,588	32,714	378,958
321 Electrical Shop			0	(148)	80,208	68,989	149,049
322 Mechanical Shop			0	(907)	67,500	20,864	87,457
331 Electrical Generation			0	0	0	182,103	182,103
341 Services Crew			0	(6)	0	78,671	78,665
342 Services Equipment			0	(330)	19,932	(12,571)	7,031
	0	0	5,750,335	6,018,720	6,173,227	3,246,410	21,188,692

per troy ounce poured

301 Mill Administration	0.000	0.000	9.620	7.830	8.290	9.640	8.690
302 Mill Light Vehicles	0.000	0.000	0.130	0.170	0.390	0.790	0.320
304 Mill Building Operation	0.000	0.000	4.660	26.970	31.690	32.990	23.620
305 Assay Lab	0.000	0.000	8.360	7.960	9.920	7.030	8.460
311 Ore Handling (Mill Feed)	0.000	0.000	7.870	6.120	5.510	4.260	6.100
312 Crushing	0.000	0.000	16.460	11.290	17.270	6.600	13.520
313 Grinding	0.000	0.000	29.850	17.160	16.280	10.270	19.060
314 Gravity Circuit	0.000	0.000	3.210	1.640	2.690	3.160	2.560
315 Leaching & CIP	0.000	0.000	18.100	9.680	8.900	7.170	11.190
316 Carbon Strip and Refinery	0.000	0.000	10.920	5.020	5.850	5.220	6.760
317 Carbon Wash/Regeneration	0.000	0.000	2.920	1.310	1.070	1.490	1.670
318 Tailing & Backfill Operation	0.000	0.000	4.580	2.780	5.140	9.400	4.910
319 Mill Air & Water	0.000	0.000	4.090	1.470	1.190	1.120	1.990
321 Electrical Shop	0.000	0.000	0.000	0.000	1.530	2.350	0.780
322 Mechanical Shop	0.000	0.000	0.000	(0.010)	1.280	0.710	0.460
331 Electrical Generation	0.000	0.000	0.000	0.000	0.000	6.210	0.960
341 Services Crew	0.000	0.000	0.000	0.000	0.000	2.680	0.410
342 Services Equipment	0.000	0.000	0.000	(0.010)	0.380	(0.430)	0.040
Cost per troy ounce	\$0.000	\$0.000	\$120.770	\$99.380	\$117.380	\$110.660	\$111.500

Cost per tonne milled

301 Mill Administration	0.000	0.000	1.700	1.560	1.490	2.010	1.640
302 Mill Light Vehicles	0.000	0.000	0.020	0.030	0.070	0.170	0.060
304 Mill Building Operation	0.000	0.000	0.830	5.370	5.690	6.880	4.460
305 Assay Lab	0.000	0.000	1.480	1.580	1.780	1.470	1.600
311 Ore Handling (Mill Feed)	0.000	0.000	1.390	1.220	0.990	0.890	1.150
312 Crushing	0.000	0.000	2.910	2.230	3.120	1.370	2.540
313 Grinding	0.000	0.000	5.280	3.420	2.930	2.140	3.600
314 Gravity Circuit	0.000	0.000	0.570	0.330	0.480	0.660	0.480
315 Leaching & CIP	0.000	0.000	3.200	1.930	1.600	1.490	2.110
316 Carbon Strip and Refinery	0.000	0.000	1.930	1.000	1.050	1.090	1.280
317 Carbon Wash/Regeneration	0.000	0.000	0.520	0.260	0.190	0.310	0.320
318 Tailing & Backfill Operation	0.000	0.000	0.810	0.550	0.920	1.960	0.930
319 Mill Air & Water	0.000	0.000	0.720	0.290	0.210	0.230	0.380
321 Electrical Shop	0.000	0.000	0.000	0.000	0.270	0.490	0.150
322 Mechanical Shop	0.000	0.000	0.000	0.000	0.230	0.150	0.090
331 Electrical Generation	0.000	0.000	0.000	0.000	0.000	1.290	0.180
341 Services Crew	0.000	0.000	0.000	0.000	0.000	0.560	0.080
342 Services Equipment	0.000	0.000	0.000	0.000	0.070	(0.090)	0.010
Cost per tonne	\$0.000	\$0.000	\$21.360	\$19.770	\$21.090	\$23.070	\$21.060

MINING OPERATIONS

Author: G. Alderman & R. Wyka

General

Underground Exploration Development - Phase I began the fall of 1993. Personnel were hired or seconded on a temporary basis to complete the test mining project. This project was to consist of driving a -15% ramp a vertical depth of 90 m, develop two levels in ore, establish a ventilation raise, and possibly mine a test stope if a larger bulk sample was required. Procon Mining and Tunnelling Ltd. was hired as the mining contractor to perform the work under the guidance of Cameco engineers and geologists.

Work first started in mid-August with the construction of a 6 km access road. This road took approximately six weeks to complete. A forty-two person camp was then built to serve the mining contractor and Cameco personnel. Construction of the camp was coincident with commencement of mining.

The ramp was collared on October 4, 1993 in the side of a steep ridge to the north of the orebody. By Christmas the first test level (second level of the mine) at 5386 m elevation was reached. By mid-March, 1994 the decline was driven to the 5350 m elevation and ore drifts driven on the 5386 level and the 5350/40 level. Parts of each level were tested with short horizontal diamond drill holes and then the ore drift was slashed to the ore outline. Three raises were also driven from the two ore drifts to test vertical continuity. These raises were all less than 20 m to avoid the cost of timbering. A short ventilation raise had been driven to help ventilate the ramp which was too long to be ventilated solely with ventilation tubing.

Based on the results of face sampling and muck sampling and their close correlation to the exploration diamond drilling, the decision to proceed with the next stage of development was made on April 7, 1994. This next stage, Phase II, was to bring the project into production.

The width (3-15 m) and dip (70°) of the orebody made it ideally suited for longhole stoping. To reduce capital costs mining contractors would be used to do both the development and stoping. Trackless mining would be used and access would be via the test phase ramp as the orebody was close to surface. If deeper and/or additional reserves could be proven, the economics of developing a shaft would be considered. Initially levels would be driven every 40 vertical metres, however the distance between levels would be lengthened or shortened depending on the conditions encountered and the experience gained during production.

In April of 1994 the mining and diamond drilling contractors remobilized and Phase II development began on April 19. The decline was driven 6.0 x 4.0 m to allow for larger haulage trucks in the future when the mine became deeper. Levels were driven a little smaller unless they

were to serve as a major haulage level, which was every third level. The ore drift was driven 3.5 m x 4.2 m and slashed to ore width before longhole drilling commenced. Two ventilation raises (3.0 x 3.0 m) were driven, one at each end of the orebody, to provide fresh air to the workings (160,000 cfm). The ramp was used as the exhaust airway.

Dewatering

The natural water inflow was measured at 120 gpm (0.55 m³/min.). As mining progressed downward the inflow increased to about 200 gpm (0.9 m³/min). This volume would change slightly depending upon the season. The mine was dewatered by seven-stage 100 hp centrifugal pumps, one located at a main sump on the 5140 level pumping to the 5290 level and two at a main sump on the 5290 level pumping to surface. The pumps were each capable of pumping 500 gpm. On the 5290 level, the two pumps were in parallel, one pump being a back up.

There were several Flygt pumps of various sizes located throughout the mine, plus a number of drain holes, to direct the water to the main sumps in order to keep the water off the ramp and off the main haulage ways.

The suspended solids were settled out on the surface in three ponds arranged in series. This later changed to two ponds when the first pond silted up. This first pond was then covered with waste rock and used as a laydown area. The filtered water then would flow by a circuitous route through muskegs to Turtle Lake.

Later in the mine's life, the mine water was treated with coagulant and flocculent on the 5290 level to reduce the suspended solids to 5-10 ppm. The mine water was then pumped directly to the mill and used as cooling water and process water. This drastically reduced the freshwater usage from Contact Lake and thereby overall water flow into the TMF.

Ventilation

There were two fresh air raises (F.A.R.), one at each end of the mine. F.A.R.#1 was at the west end of the mine and F.A.R.#2 at the east end. Each ventilation raise had a 100 hp fan from Alphair; these fans were identical to minimise the number of spare parts required. In both raises the fans were installed below the surface in order to reduce the noise heard on surface so users of the park would not be disturbed. Both raises were downcast with the air exhausting up the ramp. The air travelled from the raises to the ramp along the levels. The use of ventilation doors and sliding doors allowed the air to be directed to whichever level was active at the time. Development headings were ventilated by 75 to 100 hp auxiliary fans with ventilation ducting delivering fresh air to the face. On occasions a booster fan had to be used to ensure enough air was delivered to the development headings.

The ventilation system was designed such that each main fan would deliver 75,000 cfm at the final mine configuration. In practice they delivered more. Each raise had a 9 MBTU/hr propane mine air heater at the top to keep the air above freezing temperatures during winter months, generally November to April. This was especially important in F.A.R.#1 as the 6" ϕ mine dewatering pipe came up this raise. The Christmas shutdown of two to three weeks helped reduce heating costs as the fans would be turned off and the raises and portal temporarily sealed.

Safety

Safety was of primary importance at the Contact Lake mine and efforts were made to stress safe work habits and mining techniques at all times. During construction there was one serious injury when a blasting contractor was knocked into the mill basement when he was struck by the blasting mat which was being transported by a backhoe. He suffered serious back and internal injuries, but recovered fully.

The mine suffered one fatality and two serious injuries. The fatality, Procon's master mechanic, was the result of a 35 tonne Toro truck rear wheel exploding when the tire/wheel was being demounted. It was found that the flange separated from the wheel assembly due to weld and metal failure and the resulting air "explosion" blew the flange (~30" diameter and weighing ~60 pounds) away from the wheel, striking the mechanic in the chest/torso. Initial investigation indicated a poor design of the system resulted in the weld breaking compounded by an extremely poor repair of the initial crack.

One serious injury occurred when a miner was hit by loose while he was rockbolting, resulting in a broken neck. He recovered fully and returned to work. The other serious injury was when a jumbo miner approached the face with the drills left running and his clothing was caught by the steel, wrapping him around the boom. He suffered cracked ribs and internal bruising. He too fully recovered and returned to work.

The site was equipped with a first aid room with all the standard equipment for dealing with minor injuries and for stabilizing and transporting more serious cases. An ambulance, rented from Procon, was on the site from day one and it was used for transportation of sick or injured personnel to the La Ronge hospital. A nurse or EMT was on the site at all times. In addition many employees were trained in basic or advance first-aid.

Employees from both the mine and the mill were trained in mine rescue by an onsite instructor. A mine rescue room equipped with eight BG174's and standard mine rescue gear was maintained on the site. Arrangements were made with neighbouring mines for assistance, if necessary.

A refuge station/lunch room was constructed on the 5300 level early in the mine life and later a portable refuge station was placed just above the 5140 level to be used in emergencies where smoke or gases would prevent escape from the mine. Both fresh air raises had ladder ways in them to provide an escape route to surface in fresh air.

The compressed air line feeding the underground was equipped with a stench gas warning system for alerting the underground workers of an emergency underground. This system was capable of being initiated by switch from the shifter's office. At the top of each F.A.R. there were compressed stench gas cylinders that could be manually opened into the raise. All underground employees received an orientation course with part of that course describing proper procedures to follow in case of an underground fire or other emergency. Tests of the mine's response to the release of the stench gas system were performed annually.

All vehicles had a W65 self rescuer(s) mounted on them and employees were instructed in their use and limitations. In addition, five W65 units were stored at the entry to each level.

As well as governed by common sense and good judgement, safety at the mine was enforced through the Mine Regulations under the Occupational Health and Safety Act of Saskatchewan and was monitored by an inspector on a regular basis.

Ground Support

For the most part the ground conditions in the development headings were good. Eight foot mechanical rockbolts were installed on a 1.5m x 1.5m basis as a standard. In localized areas screening was also used with additional bolts installed as required, particularly in areas where workers maybe expected to be working out of the protection of a vehicle, such as explosive magazines and the refuge station.

The ground was much blockier in the altered zone surrounding the ore zone. Here, and in the ore drifts, screening and mechanical rockbolts were used extensively. Split sets were also used on occasion as required. Steps were also taken to minimize the number and size of the required workings. One step was to change the mining sequence to a retreat method which reduced the length of the access and haulage drifts. This saved money but at the cost of flexibility. Another step was to not slash the ore drifts to full ore width. A third step was locating as much of the waste development as possible in the hanging wall which was slightly more competent. This was not discovered till the completion of the Phase II development at the end of 1994.

Rib pillars (5 m) were left between the stopes to help support the ground. A large sill pillar (10 m) was left below the 5290 level.

Stoping

A mining plan had been created by the Engineering department with assistance of the Geology department. This plan defined the limits of the various stopes. In general the stope length was limited to 50m on strike and the width defined by the orebody. The highest stope was 135 m. The height was determined by the desire to minimize the number of haulage levels. While 135 m was originally thought to be too high, time showed that the ground was stable enough to support such large openings.

Initially levels were driven every 40 vertical metres, however this was shortened to 30 metres below the 5290 level to improve production drilling accuracy and stope stability, thus reducing dilution. Stope reconciliation subsequent to Optech volume measurements and milled tonnage weights indicated a dilution of approximately 8%. (See attached charts and tables.)

After the ore drift had been driven and slashed, the back was bolted and screened to make it safe during the drilling and blasting sequence. Later in the mine life the ore drift was not slashed to the full ore width. This had two benefits as it reduced development costs and made the drill drift safer. The disadvantages were that it increased stoping costs (overall costs still less) and dilution was increased as holes parallel to the hanging wall and footwall could not be drilled. Holes parallel to the structure are much preferred to reduce the over break caused by blasting.

After the completion of development and bolting/screening, the longhole drills were brought in. Two longhole drills were used; a Cubex drill was used to drill mostly downholes and a Solo drill was used to drill the upholes. The stoping crews consisted of one driller on the Cubex both day and night shift and one driller on the Solo usually on just a single shift. With up to 50 m between levels in some cases the drills would drill 17 m up and 35 m down. This would allow an overlap of 2 m to make sure the tops of the upholes didn't hold back when blasted. The longest holes drilled in the stope were 42 m. Longer holes were drilled for water drain holes in the development headings (60 m). The diameter of holes drilled was 2 $\frac{7}{8}$ " up and 4" down. It was expected that the Cubex drill would drill 50 to 60 m per shift while the Solo drill would drill 90 m per shift. The surveyors would mark up the rings on the wall and the drillers would line up and measure from these marks.

The burden between the toes of the holes on a ring was initially set at 3.0 m and did not change much. However, the distance between rings was increased throughout the mine life in an attempt to optimize drilling and blasting costs. The initial spacing ranged from 1.2m in narrow stopes (3-5m) to 1.5m in wider stopes. The last stopes had a ring spacing of 3.0m, which was too far in stopes less than 6m in width. There were problems with the rock breaking and blasts hanging back. Also the broken rock was far too big and caused problems in the drawpoints and on the mill grizzly as the hydraulic rock breaker could not break the rock. In wider stopes (6 - 10 m), the larger ring spacing was more successful. The practice of leaving the toe of the holes unloaded was unsuccessful as it was thought to have contributed to the large amount of oversize that later sloughed off the stope walls in the M1 stope.

The blasting was not done on a daily basis. It was found that one blaster and a helper could blast enough in five weeks to last the haulage crew eight weeks.

All the underground contractor employees worked ten hour shifts with the exception of the maintenance staff in the surface shop, who worked twelve hour shifts.

Technical Staff

The Contact Lake mine used a bare minimum of technical personnel. The supervision was provided by the Mine Superintendent cross-shifted by the Assistant Mine Superintendent. The engineering department consisted of the Senior Mine Engineer cross-shifted by the Senior Mine Planner and one Senior Surveyor and Junior Surveyor on each rotation. The geology department consisted of a Senior Mine Geologist assisted by a Senior Geological Technician on each rotation. When the geology load was excessively heavy with a diamond drill program, Geological Technicians were hired on a temporary basis. Students registered in technical programs were hired to fill in during the summer holiday season.

The engineering department was responsible for stope design, primary and stope development layouts, drill ring design, blast design, and issuing blast letters. The surveyors were responsible for picking up the advances of the workings, recording the period production, giving the contractor's development headings line and grade, marking up the rings in the stopes, and probing the longholes to determine if they are accurate enough or need redrilling. The geology department was responsible for any diamond drill program (designing holes and logging core), orebody interpretation, ore reserve calculation, marking up and sampling the development headings in ore, putting the ore outlines on the drill layouts, and recording the ore haulage numbers (tonnes and grade) for the period reports. The Mine Superintendent and his assistant were responsible for the activities of the Engineering and Geology departments, direct and indirect supervision of the mining and diamond drilling contractors, and acting as senior supervisor on site, as required.

Most of the junior staff started at the mine with little or no underground mining experience, so another responsibility of the senior people was training the employees in all aspects of their job. The low turnover rate of the staff (a Senior Surveyor, a Senior Mine Engineer and a Junior Surveyor resigned) is a strong testament to the high esprit de corps that existed among the staff.

The business relationship with the mining contractors, Procon, was for the most part excellent. They contributed ideas for both the design and planning of based on their experiences at other mines. The open communications and spirit of cooperation contributed greatly to the smooth running of the operation.

MINING CONTRACTOR (Excerpts from the audit report by Julia Jones, Manager, Internal Audits)

The contract with Procon Mining and Tunnelling Ltd. (Procon), which was effective April 15, 1994, was for the provision of mining services at the Contact Lake mine for Phase II of mining. Demobilization was completed June 18, 1998. The previous contract with Procon was for Phase I of the project and was completed in January, 1994.

For the duration of the latest contract, bi-weekly billings were based on the target price which was calculated using the estimated advance of development headings, volume of stope production, and ground support, multiplied by previously set unit prices. The unit prices included a general and administrative (G&A) fee of 8%. In addition to the target price, a 7% fee for profit was included in the bi-weekly billings. Billings were consistently and thoroughly reviewed by Cameco's Contact Lake site personnel prior to approval for payment.

A target reconciliation was performed every six months by Procon to compare the target price billings to the direct costs incurred. Direct costs were defined as all reasonable input costs incurred directly by Procon to execute the work at Contact Lake. These costs included payroll, maintenance materials, equipment and equipment consumables, supplies, and miscellaneous expenses not normally covered by the G&A fee. The reconciliations included adjustments, whereby Procon received an additional fee for profit of 30% of the underruns (up to a maximum of twice the fee for profit) or incurred a reduction in the fee for profit of 30% of the overruns (up to the maximum of the fee for profit).

Total costs for the Contact Lake project are \$40,138,347. The breakdown by type of cost (dollars and percentage) is shown below.

Total Costs - Procon Contract - Contact Lake Project								
Year	Labour \$	General Expenses			Equipment Rental - Company \$	Equipment Rental - Outside \$	Sub- Contractors \$	Total \$
		Equipment Operating Costs \$	Construction Materials \$	Permanent Materials \$				
Phase I	2,075,302	1,864,343	1,410,556	240,730	1,092,726	9,246	85,122	6,778,025
Phase II	11,296,615	6,750,268	3,397,967	894,154	5,161,706	10,336	398,553	27,909,599
Total	13,371,917	8,614,611	4,808,523	1,134,884	6,254,432	19,582	483,675	34,687,624
Percentage	38.55%	24.84%	13.86%	3.27%	18.03%	0.06%	1.39%	
Total General and Administrative Fee - 8%								2,775,010
Total Profit - 7%								2,428,134
Participation - 30% of Underrun								247,579
Total Costs								40,138,347

LABOUR

Labour costs consist of wages and benefits paid by the employer (including CPP, EI, WCB payments, medical benefits, and accrued holiday pay) for hourly and salaried employees, as well as bonuses for operational staff based on quantities produced. Contact Lake agreed to pay for travel costs of employees of Procon from other parts of Canada, in order to allow Procon to

utilize experienced miners. The cost of fares is under *Supplies & Services*. The shift schedule is such that employees work for six weeks in and three weeks out. Miners lived in areas such as Saskatchewan, Alberta, British Columbia and Newfoundland.

GENERAL EXPENSES

Equipment Operating Costs - operating and maintenance costs incurred by the equipment used to carry out the work, less diesel fuel which was supplied by Contact Lake. Equipment include: pumps and fans; jumbos and drills; scoop trams; trucks and grader; Alimak and misc. equipment; and compressors.

Construction materials - includes drill steel; safety gear; hose and fittings; shop supplies; mobilization supplies; cost plus supplies; office supplies and phone; insurance; crew fares; and freight.

Permanent materials - includes pipe and fittings; vent tubing; electrical materials including cable, electrical switch gear and ground support materials.

EQUIPMENT RENTAL - COMPANY

This includes all equipment to perform the work, such as scoop trams, jumbos, pumps, fans, trucks, ambulance, drills, pneumatic loaders, compressors and shop tools.

EQUIPMENT RENTAL - OUTSIDE

This includes the Toyota man carrier eventually purchased by Contact Lake, blasting mats, cement mixer and shop heater.

SUB-CONTRACTORS

This cost refers to the Diamond Drilling contractor, Boisvenu, during Phase I and the initial stages of Phase II. In the latter stages of Phase II, Contact Lake Operation contracted Boisvenu directly, thus reducing carrying charges through Procon.

EXTRA WORK

Extra work costs (not shown in the above table) were approximately \$1,400,000, excluding G&A and profit, for the entire contract period. This is about 4% of the total cost. This includes the cost of installing the main dewatering system, installing the main power cables and various delays due to Contact Lake requirements.

HISTORY OF THE MINE

DEVELOPMENT												
	Decline (m)		Level (m)		Raise (m)		Ore (t)		Grade (g/t)		Waste (t)	
	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget
1993	481	NA	294	NA	44	NA	5,903	NA	11.26	-	30,912	NA
1994	546	NA	3,618	NA	252	NA	55,132	NA	7.06	-	133,653	NA
1995	362	275	1,032	1,002	770	360	34,941	14,913	7.45	7.38	35,298	47,600
1996	849	403	1,564	1,497	203	243	45,335	21,280	7.54	7.62	71,885	124,844
1997	145	660	2,837	3,483	78	360	31,305	40,472	7.06	6.59	65,661	0
1998	0	0	0	0	0	0	0	0	-	-	0	0
Total	2,383	1,338	9,345	5,982	1,347	963	172,616	76,665	7.41	7.03	337,409	172,444

PRODUCTION												
	Longhole Drilling (m)		Hauled (t)		Grade (g/t)		Backfill (t)		Hauled (t)		Grade (g/t)	
	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget
1993	0	0	0	0	-	-	0	0	0	0	-	-
1994			0	0	-	-	0	0	0	0	-	-
1995	32,402	15,724	198,093	179,588	8.01	8.70	94,590	101,126	415	25,000	7.96	7.00
1996	37,819	40,792	239,549	266,370	6.42	6.29	63,294	188,353	9,485	25,529	5.70	5.18
1997	51,735	37,175	292,785	242,756	6.90	6.75	73,193	106,037	11,587	17,897	6.70	6.95
1998	7,213	8,019	112,397	134,705	6.22	5.83	0	0	0	0	-	-
Total	129,169	101,710	842,824	823,419	6.93	6.88	231,077	395,516	21,487	68,426	6.28	6.31

SHRINKAGE

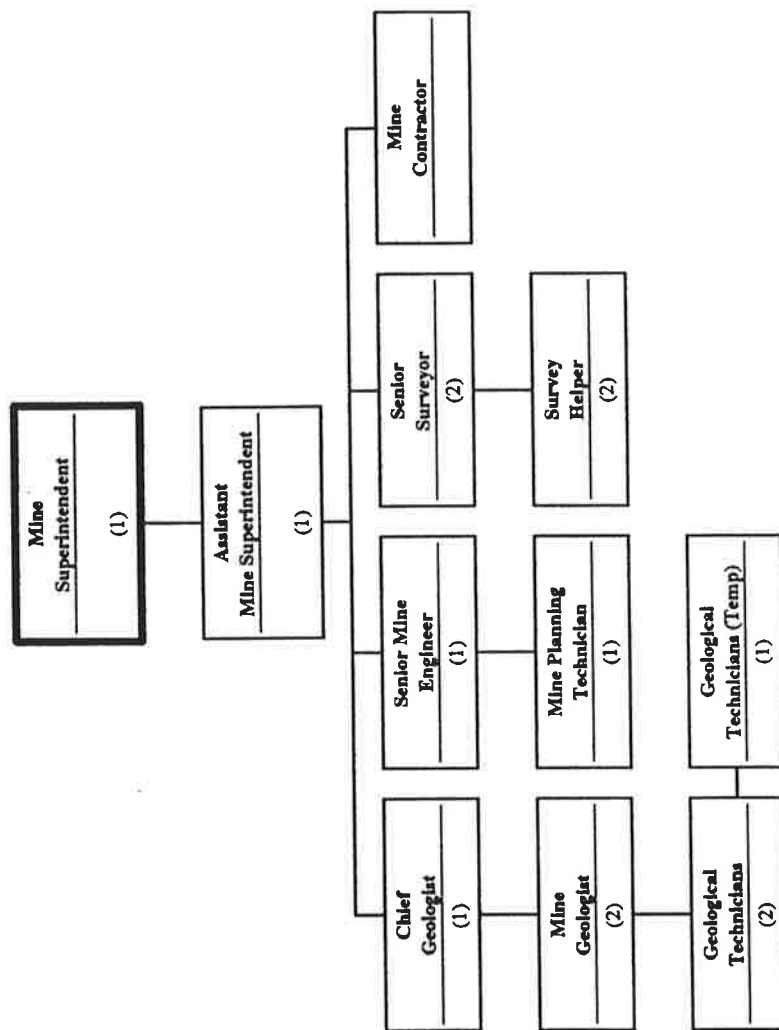
CONTACT LAKE OPERATION

SUMMARY OF BACKFILLED STOPES

STOPE	TONNES MINED	TONNES BACKFILL	DUMP POINT
481-29	153,160	94,590	SURFACE
486-32	73,023	58,292	SURFACE
471-29	56,070	14,135	5340 Lev
491-29	16,808	"	5320 Lev
455-30	89,305	29,541	5420 Lev
475-29	67,559	19,618	5340 Lev
474-17	56,267	10,146	5230 Lev
470-17	98,602	6,566	5230 Lev
TOTAL		232,888	

Cameco Corporation

Contact Lake Operation



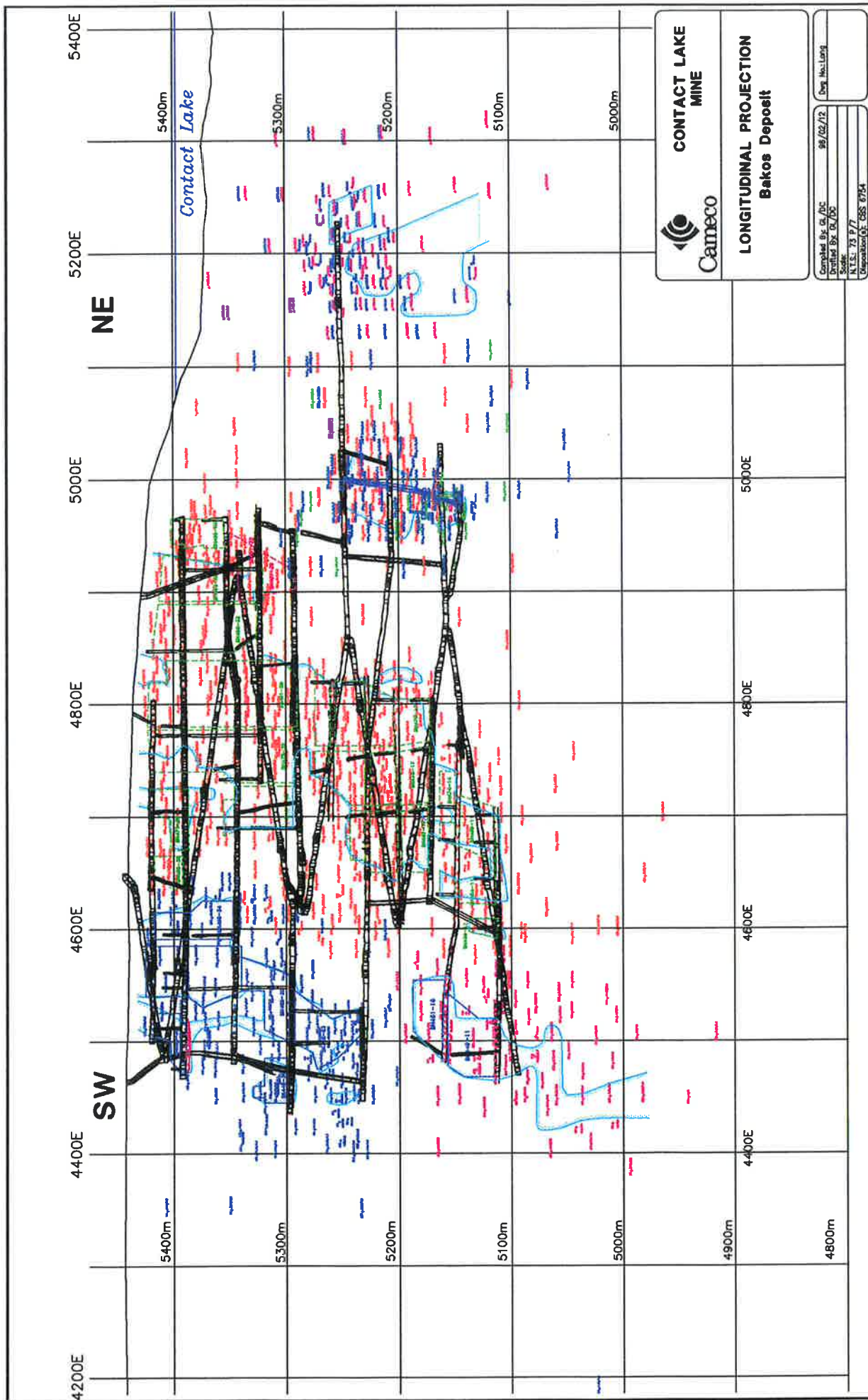
BH - 481 - 29 Stope Reconciliation


12-Oct-96

METHOD	Volume (m3)	Specific Gravity	Undiluted Tonnes	Undiluted Grade (g/t)	Diluted Tonnes	Diluted Grade (g/t)	Dilution Rate	Total Grams Au	Total Ounces Au	Comments
CESL Feasibility Study Table 3.0 & 4.1 (CESL Feasibility)			141,745	10.67	158,940	9.62	12.1%	1,529,003	49,159	
Total CESL Feasibility Study			141,745	10.67	158,940	9.62	12.1%	1,529,003	49,159	
J.F. Chauvet (September 8, 1995)										
Based on 40 gram/tonne cutoff		2.7	150,949	7.82				1,180,421	37,951	Includes unrecovered ore between 5386 L & 5420 L.
Based on 102 gram/tonne cutoff		2.7	151,003	9.08				1,371,107	44,082	Includes unrecovered ore between 5386 L and 5420 L.
Stope Design										
Production estimate from design (102 g/t cutoff)	51,501	2.7	139,053	9.17				1,275,113	40,996	Volume does not include unrecovered ore
Production estimate (Grade based on 40g/t cutoff)	51,501	2.7	139,053	7.82				1,083,795	34,845	between 5386 L & 5420 L
Total Production Forecast (comparison purposes)	51,501	2.7	139,053	9.17				1,275,113	40,996	7.82 g/t grade based on J.F. Chauvet estimate for entire block.
Milled										
Milled Development Ore					17,731	8.45		149,827	4,817	Tonnes and grade from haulage estimate.
Pre - May 21/95 Feed (From Phase II Stockpile)					14,930	4.91		73,306	2,357	Tonnes and grade from haulage estimate.
May 11/95-May 16/95 (Test)					3,630	7.40		26,862	864	Tonnes and grade from mill sheets
May 21/95-Oct 20/95					113,894	7.36	8.0%	838,260	26,951	Tonnes and grade from mill sheets
Total Milled Estimate					150,185	7.25		1,088,255	34,988	Dilution based on designed tonnage.
Gold Poured Plus Inventory Change									25,296	May 21-Oct 20. Inv. increase 843 oz.
										Avg. recovery for period - 93.9%
Haulage Estimate										
Development Ore					17,731	8.45		149,827	4,817	
Phase II Stockpile					14,930	4.91		73,306	2,357	
481-29 Stockpile					120,624	9.28		1,119,391	35,989	
Total Haulage Estimate					153,285	8.76	10.2%	1,342,524	43,163	Dilution based on designed tonnage.
Optech										
Based on sections at 2 m spacing	54,997.4	2.7			148,493					
Total Optech Survey	54,997.4	2.7			148,493		6.8%			Dilution based on designed volume.

455 Mining Block Reconciliation

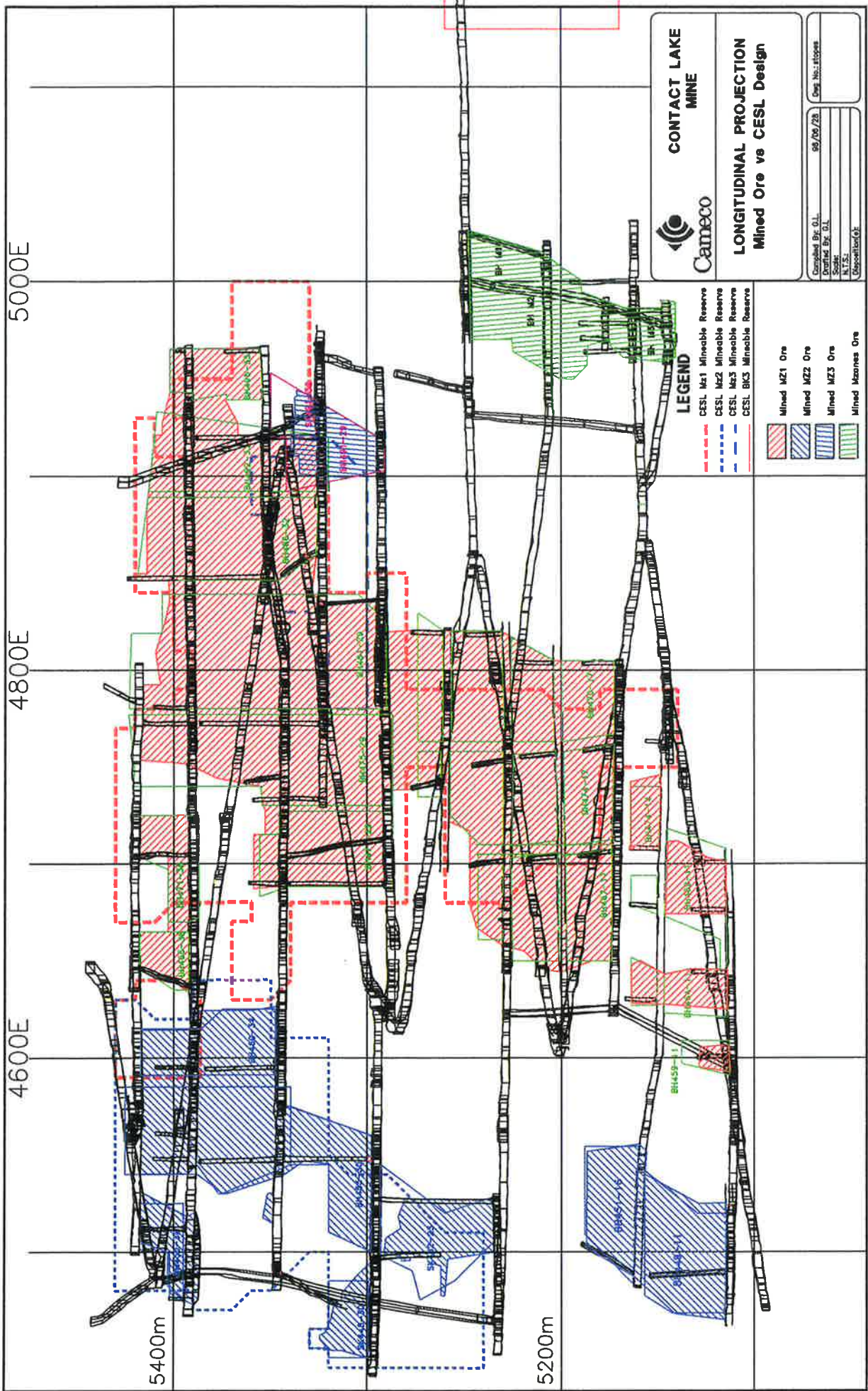
METHOD	TONNAGE	GRADE g/t Au	GRAMS Au	OUNCES Au	COMMENTS
Diluted Minable Reserve (12/30/95)					
BH - 455 - 38	32,431	6.05	196,322	6,312	Includes 12% dilution.
BH - 455 - 34	48,122	6.72	323,535	10,402	Includes 12% dilution.
BH - 455 - 30	34,888	5.35	186,590	5,999	Includes 12% dilution.
Total	115,441	6.12	706,448	22,713	As per Life of Mine Plan (December, 1995)
Mill Throughput					
Development	15,568	6.89	107,264	3,449	Surveyed development tonnage.
Production	74,706	7.27	543,113	17,461	Grades from monthly reconciliations.
Waste boulders	5,000	0.50	2,500	80	
Sub Total	95,274	6.85	652,876	20,990	
Less waste boulders	(5,000)	0.5	(2,500)	(80)	Waste boulders put on waste stockpile.
Total	90,274	7.20	650,376	20,910	
Mine Truck Haulage					
Development	15,568	8.94	139,178	4,475	Surveyed development tonnage.
Production	79,706	9.04	720,542	23,166	Grades from truck sampling.
Total	95,274	9.02	859,720	27,641	
Stope Design					
Development	15,568	n/a	n/a	n/a	Surveyed development tonnage.
Production	71,316	n/a	n/a	n/a	From longhole layouts.
Total	86,884				
Optech					
Based on sections	80,998	n/a	n/a	n/a	Tonnage derived using a density of 2.7 t/m3. Numerous shadows evident resulting in potentially low volume and tonnage.



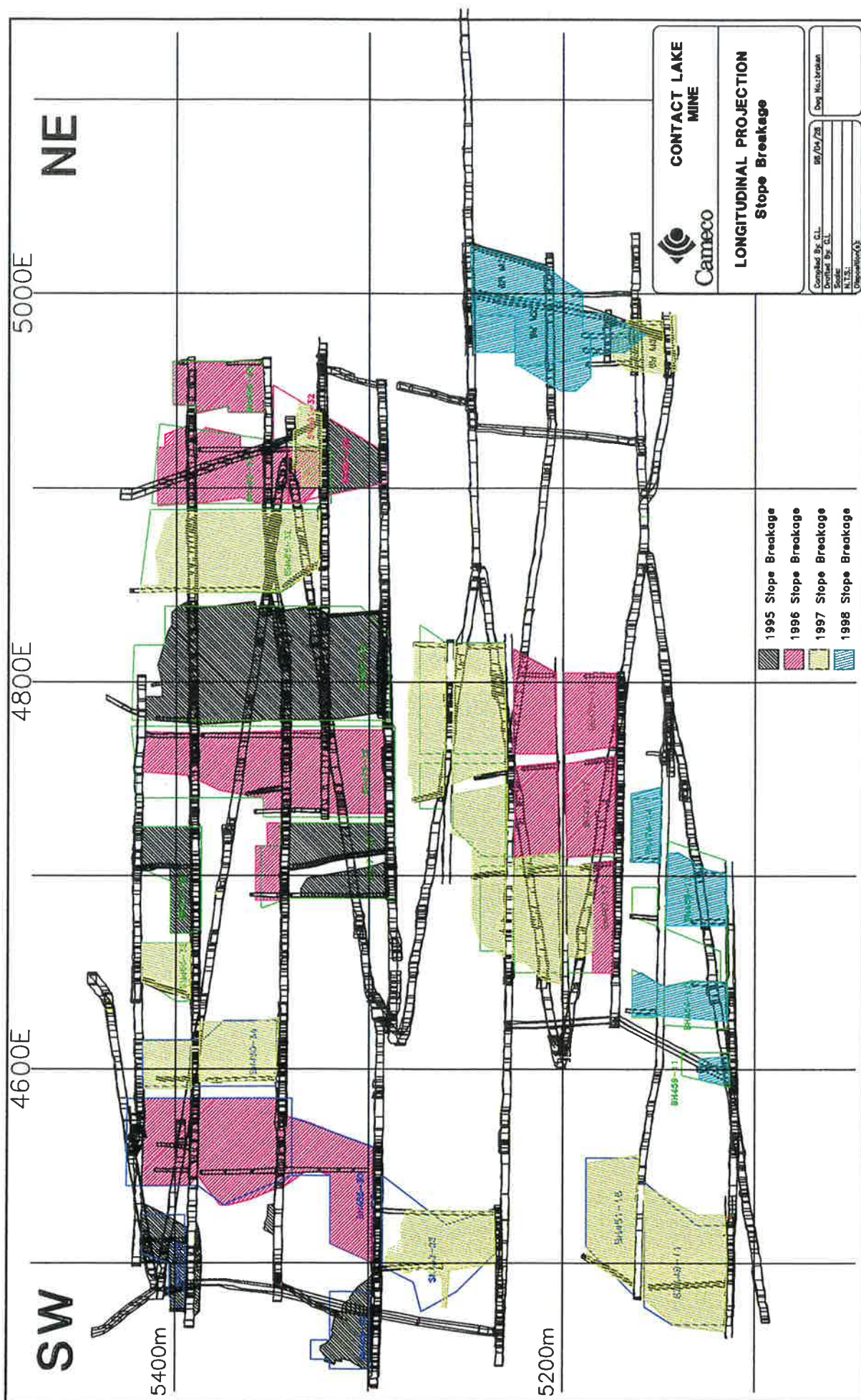
**CONTACT LAKE
MINE**

LONGITUDINAL PROJECTION
Bakos Deposit

Compiled By: G. DC	98/02/12	Drawn: M. Long
Verified By: G. DC		
Scale:		
N.T.S.: 73 P/7		
Mapsheet: 05-055 8754		

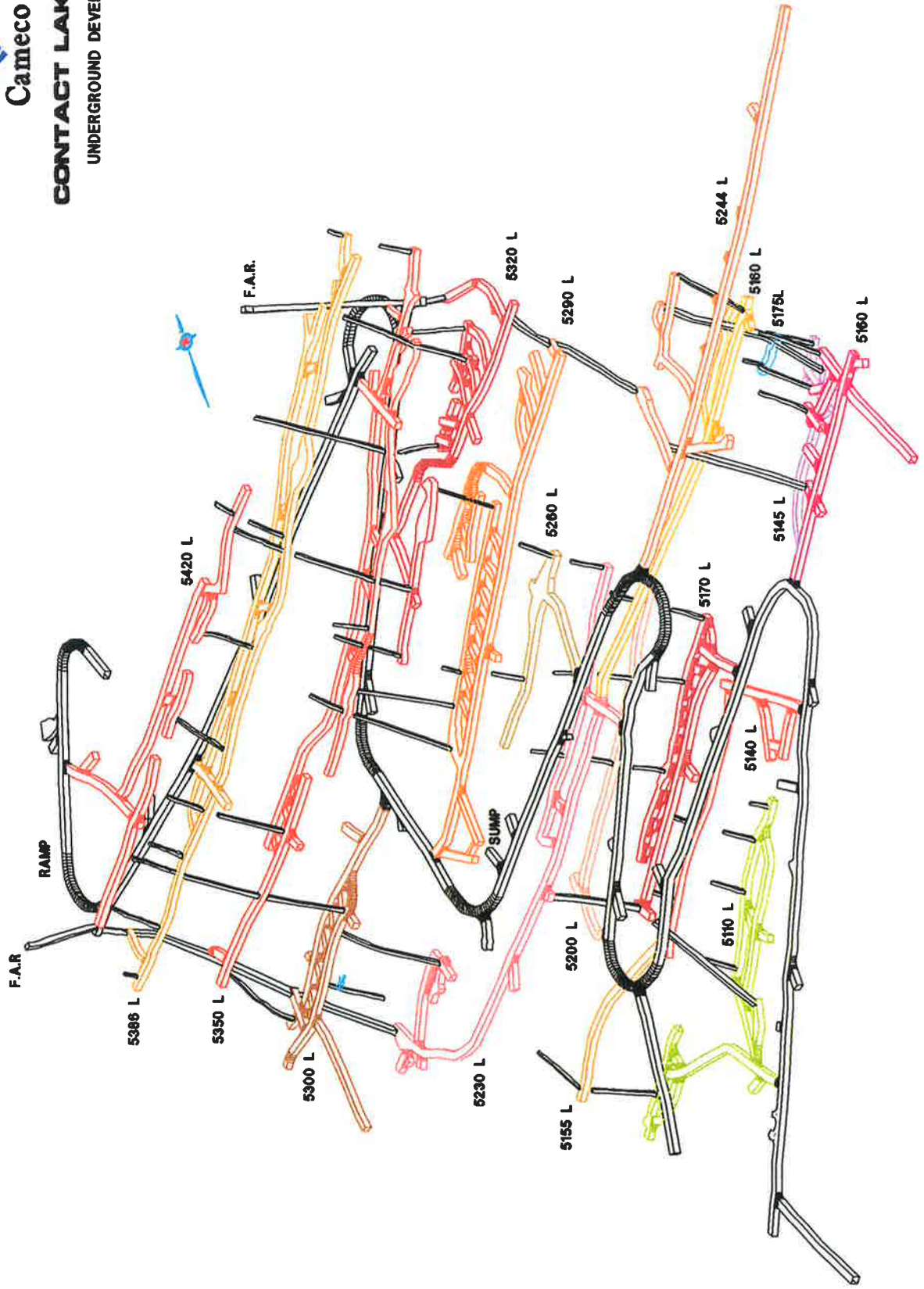


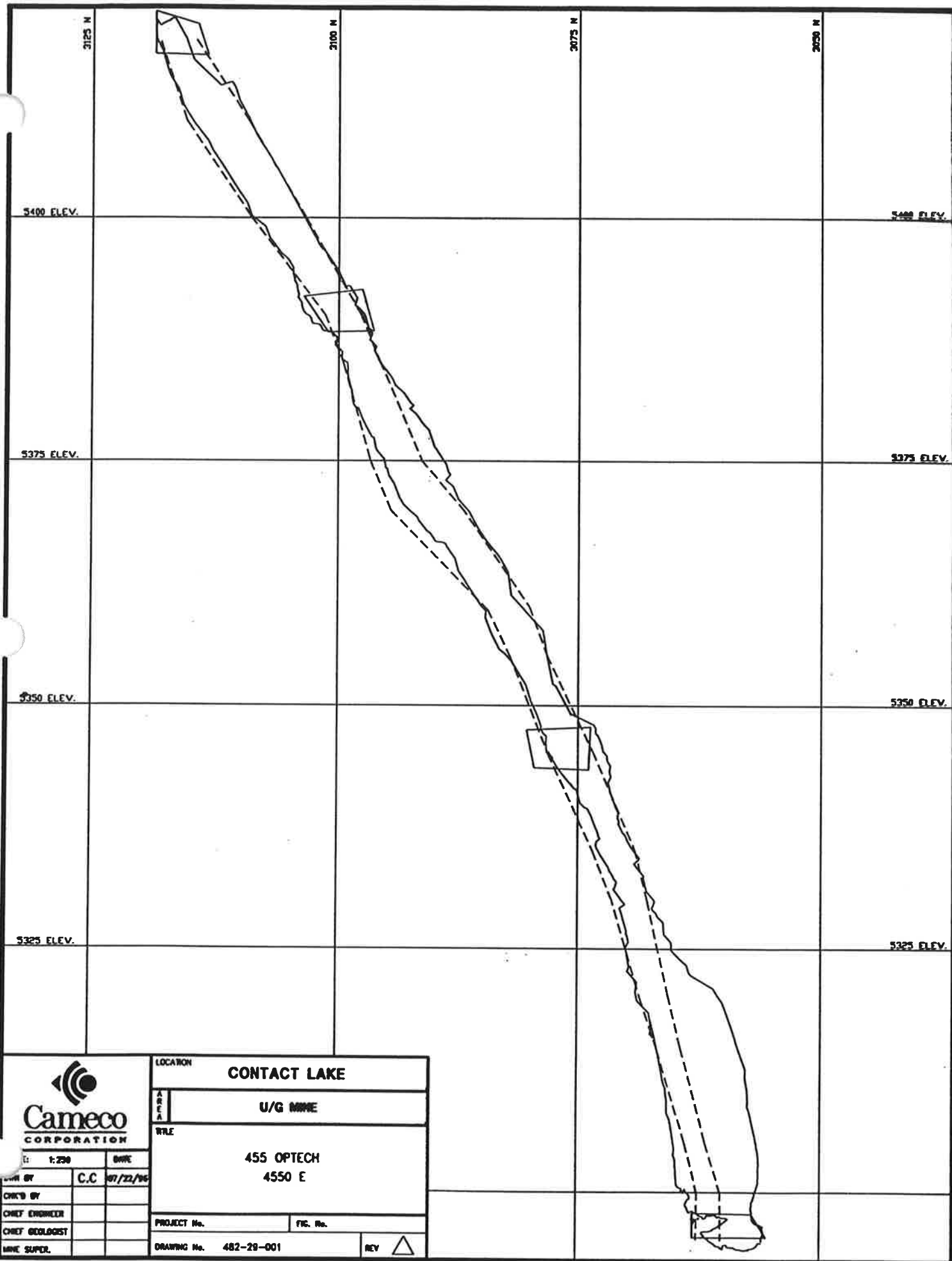






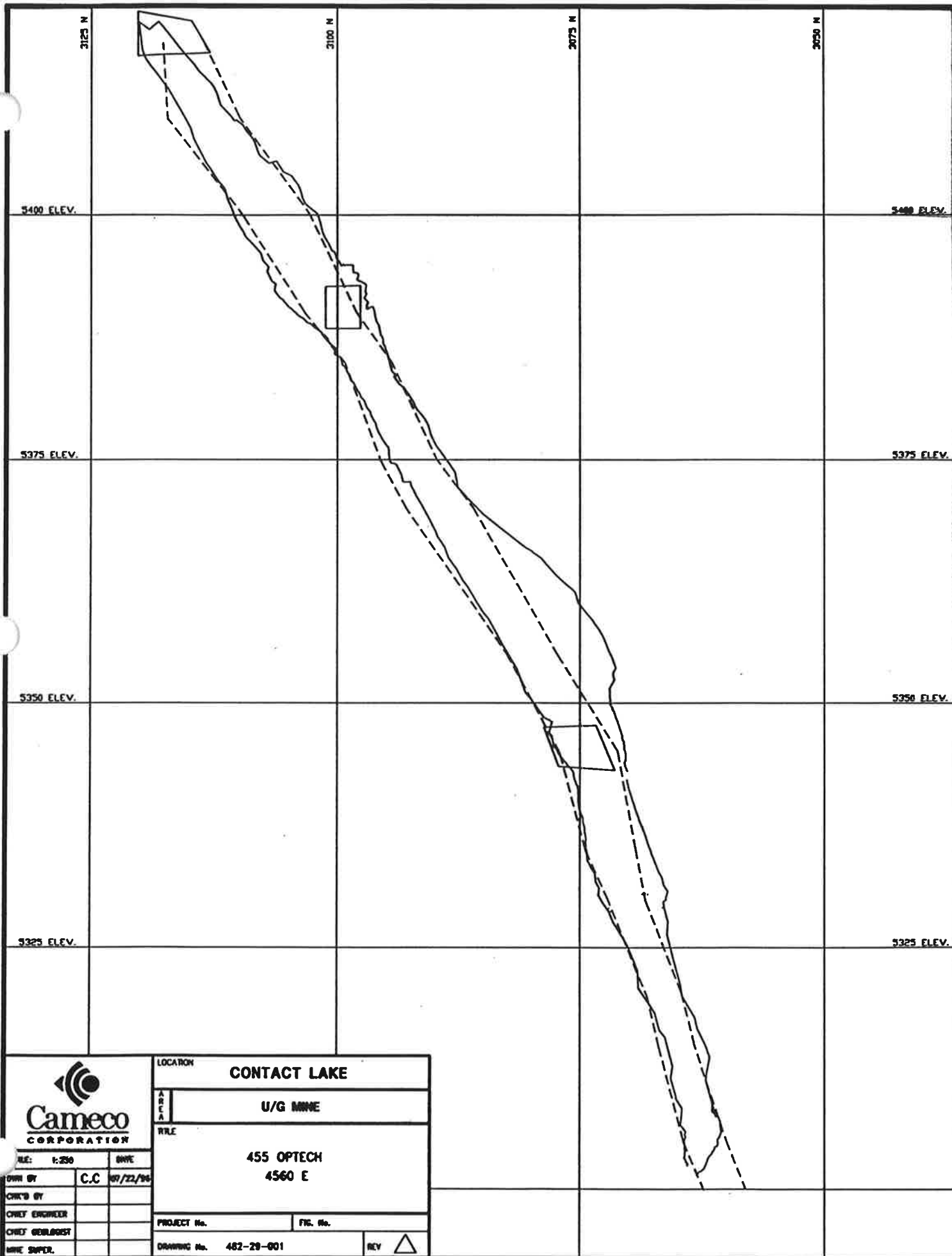
CONTACT LAKE MINE UNDERGROUND DEVELOPMENT





LOCATION		CONTACT LAKE	
AREA	U/G MINE		
WELL	455 OPTECH 4550 E		
PROJECT No.	FIG. No.		
DRAWING No.	482-29-001	REV	△

SCALE	1:250	DATE	01/22/96
CHK'D BY	C.C.		
CHIEF ENGINEER			
CHIEF GEOLOGIST			
MINE SUPER.			



CONTACT LAKE JOINT VENTURE
Production Statistics and Operating Costs
December 31, 1998

	1993	1994	1995	1996	1997	1998	Project Total to Date
Production							
Ore (tonnes)			233,449	294,369	335,677	112,397	975,892
Grade (g/t)			7.870	6.567	6.906	6.220	6.955
Troy ounces mined			59,068	62,152	74,527	22,476	218,223

Mine Costs

201 Mine Administration			204,819	198,662	180,605	78,649	662,735
202 Mine Light Vehicles			10,668	17,278	25,481	85	53,512
205 Mine Engineering			320,176	449,883	343,141	19,667	1,132,867
206 Mine Geology			434,152	653,516	381,726	58,135	1,527,529
211 Contract Administration			3,085,899	5,313,253	4,787,848	539,399	13,726,399
214 Mine Electrical Systems			546,160	1,066,192	892,039	299,231	2,803,622
215 Mine Vent/Heating Systems			134,678	232,036	245,952	68,106	680,772
216 Mine Dewatering Systems			12,752	32,922	154,931	13,826	214,431
231 Decline Development			437,481	1,117,569	253,132	0	1,808,182
232 Level Development			598,845	1,667,835	989,413	0	3,256,093
233 Raise Development			273,685	230,541	88,159	0	592,385
235 In-fill Drilling			472,172	1,166,885	955,976	0	2,595,033
241 Blasthole Stopping: Prep			1,606,752	1,428,089	1,780,154	13,144	4,828,139
242 Blasthole Stopping: Drilling			1,205,635	846,292	947,402	187,029	3,186,358
243 Blasthole Stopping: Blasting			530,912	514,483	642,208	257,908	1,945,511
251 Shrinkage Stopping: Prep			48,176	121,606	146,573	0	316,355
252 Drilling & Blasting			49,696	85,070	184,575	0	319,341
261 Stope Prod: Muck & Haul			912,684	1,164,052	1,775,540	881,569	4,733,845
262 Stope Prod: Backfilling			144,130	78,386	120,799	40,693	384,008
	0	0	11,029,472	16,384,551	14,895,654	2,457,441	44,767,118

Cost per tonne mined

201 Mine Administration	0.000	0.000	0.877	0.675	0.538	0.700	0.679
202 Mine Light Vehicles	0.000	0.000	0.046	0.059	0.076	0.001	0.055
205 Mine Engineering	0.000	0.000	1.372	1.528	1.022	0.175	1.161
206 Mine Geology	0.000	0.000	1.860	2.220	1.137	0.517	1.565
211 Contract Administration	0.000	0.000	13.219	18.050	14.263	4.799	14.065
214 Mine Electrical Systems	0.000	0.000	2.340	3.622	2.657	2.662	2.873
215 Mine Vent/Heating Systems	0.000	0.000	0.577	0.788	0.733	0.606	0.698
216 Mine Dewatering Systems	0.000	0.000	0.055	0.112	0.462	0.123	0.220
231 Decline Development	0.000	0.000	1.874	3.796	0.754	0.000	1.853
232 Level Development	0.000	0.000	2.565	5.666	2.948	0.000	3.337
233 Raise Development	0.000	0.000	1.172	0.783	0.263	0.000	0.607
235 In-fill Drilling	0.000	0.000	2.023	3.964	2.848	0.000	2.659
241 Blasthole Stopping: Prep	0.000	0.000	6.883	4.851	5.303	0.117	4.947
242 Blasthole Stopping: Drilling	0.000	0.000	5.164	2.875	2.822	1.664	3.265
243 Blasthole Stopping: Blasting	0.000	0.000	2.274	1.748	1.913	2.295	1.994
251 Shrinkage Stopping: Prep	0.000	0.000	0.206	0.413	0.437	0.000	0.324
252 Drilling & Blasting	0.000	0.000	0.213	0.289	0.550	0.000	0.327
261 Stope Prod: Muck & Haul	0.000	0.000	3.910	3.954	5.289	7.843	4.851
262 Stope Prod: Backfilling	0.000	0.000	0.617	0.266	0.360	0.362	0.393
Cost per tonne	\$0.000	\$0.000	\$47.247	\$55.659	\$44.375	\$21.864	\$45.873

ADMINISTRATION

GENERAL

The function of the administration department at Contact Lake was to provide support to the operation in the areas of health care and safety, human resource services, secretarial services, warehousing, camp administration, and general site services. A layout of the site is shown on Figure 1.

In terms of budgeting, all general site costs such as taxes, employee subsidies, employee transport and accommodation, administrative staff, and site maintenance were provided for in this centre. Typically, administration costs were between 10% and 12% of the total budget.

The overall site organization is shown on the accompanying charts.

Administrative Staff

The staff consisted of a Site Administrator, Assistant Site Administrator/Secretary, Nurse/Secretary, EMT/Warehouse, and Warehouse/Mine Rescue Trainer. For budget purposes, the Project Manager was also part of the Administration staff. From September of 1995 to October of 1997, an Assistant Manager was assigned to the operation. All worked on a week in, week out basis.

The Site Administrator supervised the activities of all administrative staff, was the senior Human Resources contact, coordinated warehouse activities, and filled in during absences in the warehouse. All the staff had multiple duties and fulfilled those duties extremely well.

Accommodation

Accommodations consisted of two 42 person units, kitchen unit, and two connected trailers used as a dining hall. The trailers were connected by an enclosed walkway, constructed during installation (see attached figure). Subsequently, a recreation hall was constructed with considerable volunteer assistance from members of the employee Social Club. The Social Club also constructed a full deck, again with all volunteer labour.

Catering was provided by Robertson's Trading of La Ronge. This included all cooking and cleaning services and was of excellent quality. The very few problems or complaints registered were handled with satisfactory dispatch.

Office accommodations were provided by both Procon and Cameco. Procon supplied a wash car and dry for the miners, an office trailer occupied by Cameco engineering and geology staff, and

an office trailer containing a first aid room, a board room, and office space for Procon supervision. Cameco supplied a wash car for Cameco staff and female underground employees, office space for administrative staff, and a trailer for a central walkway and storage.

Warehouse facilities were contained within a large (15.3m x 24.5m) metal Quonset, which also doubled as a heavy equipment shop. A mine rescue room and a core logging facility were also contained within the building.

Warehouse inventory consisted of all bulk items such as fuels and reagents, plus some mill maintenance parts. All other items were on a force order basis.

Safety

The site was equipped with a first aid room with all the standard equipment for dealing with minor injuries and for stabilizing and transporting more serious cases. An ambulance, rented from Procon, was on the site from day one and it was used for transportation of sick or injured personnel to the La Ronge hospital. A nurse or EMT was on the site at all times. In addition many employees were trained in basic or advance first-aid.

Weekly tool-box meetings were held by both mine and mill personnel, as well as Procon employees. Property wide Occupational Health and Safety Committee tours and meetings were held on a regular basis.

During the life of the project, Cameco employees suffered five lost time incidents. Two of these accidents were during the construction period in 1994. The other three occurred, one each, in 1995, 1996, and 1998.

Long term contractors suffered nine lost time accidents during the same period, all by Procon. There was one in 1994 during initial development, five in 1995, two in 1996, and one in 1998.

In 1997 the entire property did not have any accidents. The operation went from November, 1996 to February, 1998, a total of 460 days, without a lost time incident.

Lost Time Injuries To Cameco Employees

- 1994 - An injured toe suffered when a log dropped on foot.
 - Strained back muscle when employee turned too fast.
- 1995 - Mill operator suffered a broken thumb when the forks on forklift inadvertently shifted.
- 1996 - Geological technician twisted a knee while dismounting from an Alimak raise climber.
- 1997 - No lost time accidents.
- 1998 - An operator broke an ankle while removing lab equipment during decommissioning.

Lost Time Injuries To Procon Employees

- 1994 - A miner suffered a fractured sternum from a rockfall.
- 1995 - A truck operator suffered a twisted ankle.
- A truck operator had a sore back.
 - A truck operator pulled a chest muscle.
 - A truck operator had a sore back.
 - A miner approached the face with the drills left running and his clothing was caught by the steel, wrapping him around the boom. He suffered cracked ribs.
- 1996 - A truck driver twisted a knee dismounting from a truck.
- A driller crushed a finger while changing a bit on the Solo drill when he inadvertently leaned against the control panel.
- 1997 - No lost time accidents.
- 1998 - A master mechanic was fatally injured when a wheel rim catastrophically failed when it was being dismounted from a 35 tonne Toro truck.

Environment

The Contact Lake operation did not have an environmental group on site. All environmental advice and assistance was provided from the Saskatoon office. Occasionally, sampling was conducted by lab or geology personnel.

There were two environmental incidents during the life of the operation. On January 28, 1996, there was a spill of diesel fuel near the office complex when a high level indicator on a day tank failed to shut off a pump. The spill was cleaned up with no environmental damage.

On January 15, 1998, 5m³ of treated reclaim water spilled at a booster pump installation within the Turtle Lake TMF drainage area. This was reported as a spill as the discharge was over 1m³ and not in the approved location.

All licenses and approvals applied for were issued as required.

Workforce

The Cameco workforce averaged 60 people during operations with over 66% RSN. Procon averaged about 40 people with approximately 43% RSN and Robertson's Trading averaged eleven people with over 95% RSN (see attached table).

During mill construction, Graham/Internorth employed 209 people with a peak of 150; 47% were RSN. Site development required 130 people; 84% were RSN.

CAMECO - CONTACT LAKE OPERATION

ADMINISTRATION DEPARTMENT

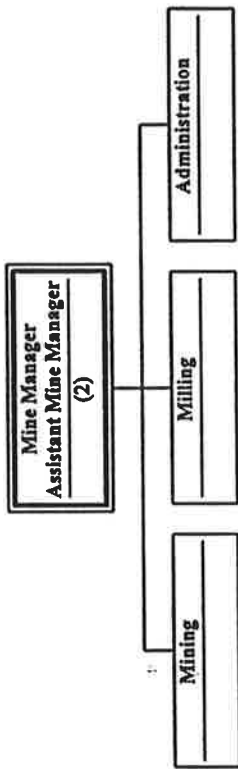
History of Project

RECORD OF EMPLOYMENT

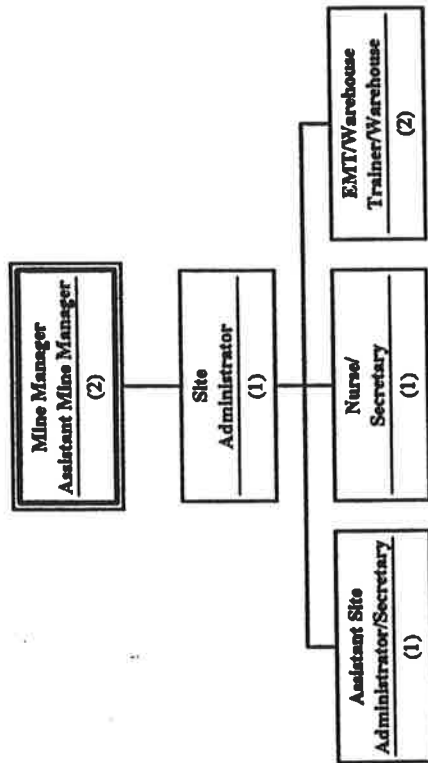
	CAMECO			MINE CONTRACTOR			CATERING CONTRACTOR		
YEAR (Average)	Work Force	RSN	RSN Actual %	Work Force	RSN	RSN Actual %	Work Force	RSN	RSN Actual %
1994	23.1	12.8	55.2	40.0	19.0	47.5	15.0	15.0	100.0
1995	57.0	39.0	69.0	37.0	17.0	46.9	11.0	10.0	91.0
1996	63.0	42.0	66.5	49.0	19.0	39.4	11.0	11.0	96.3
1997	59.3	39.8	67.1	48.8	20.2	42.1	11.0	10.0	90.9
1998 (Jan.-Sept.)	32.3	21.4	66.3	13.9	6.0	43.2	6.2	5.4	87.5
PROJECT AVERAGE	49.4	32.6	66.0	39.7	17.1	43.1	11.4	10.8	94.7

Cameco Corporation

Contact Lake Operation



Cameco Corporation
Contact Lake Operation



Contact Lake Mine Site

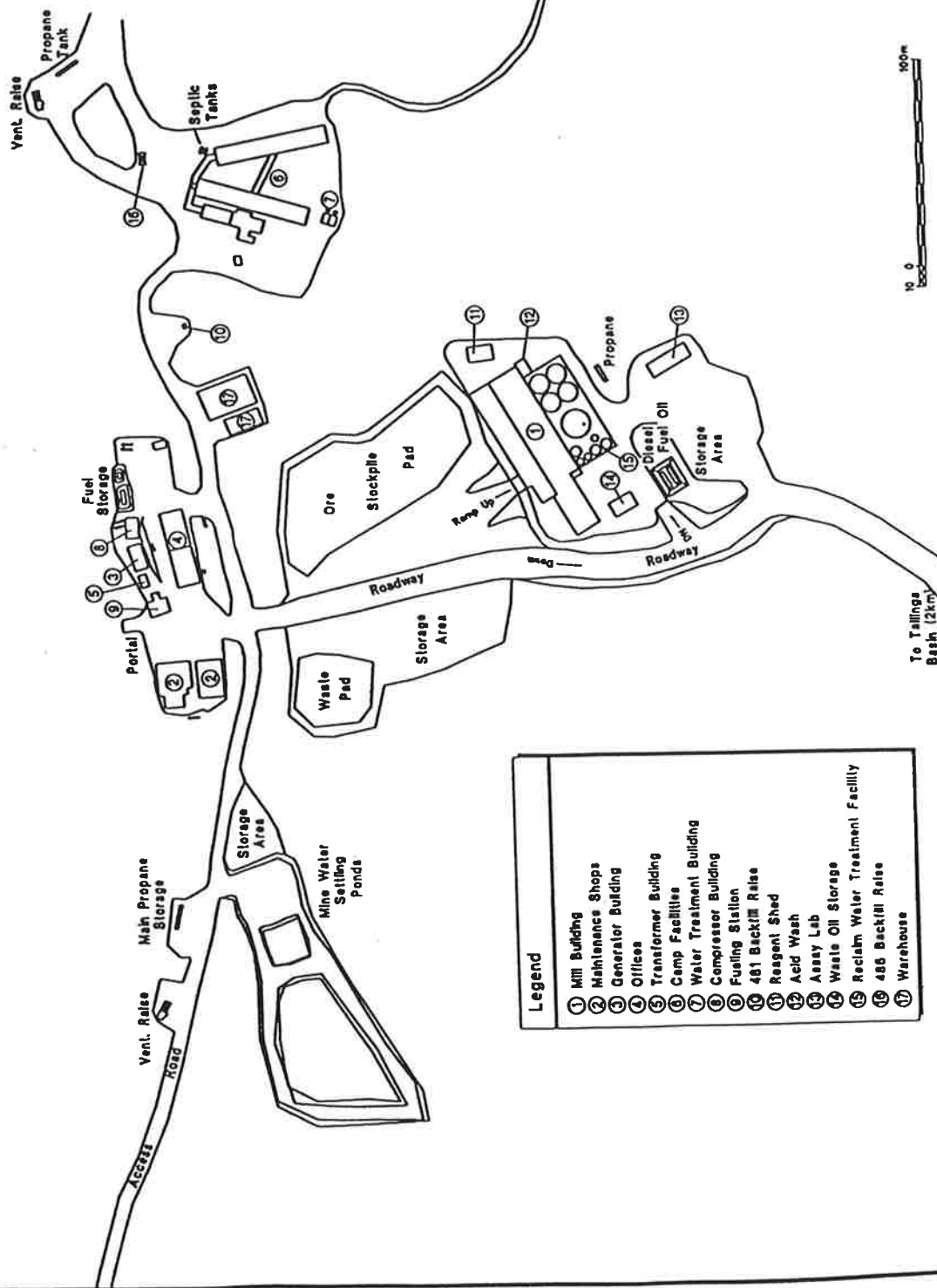
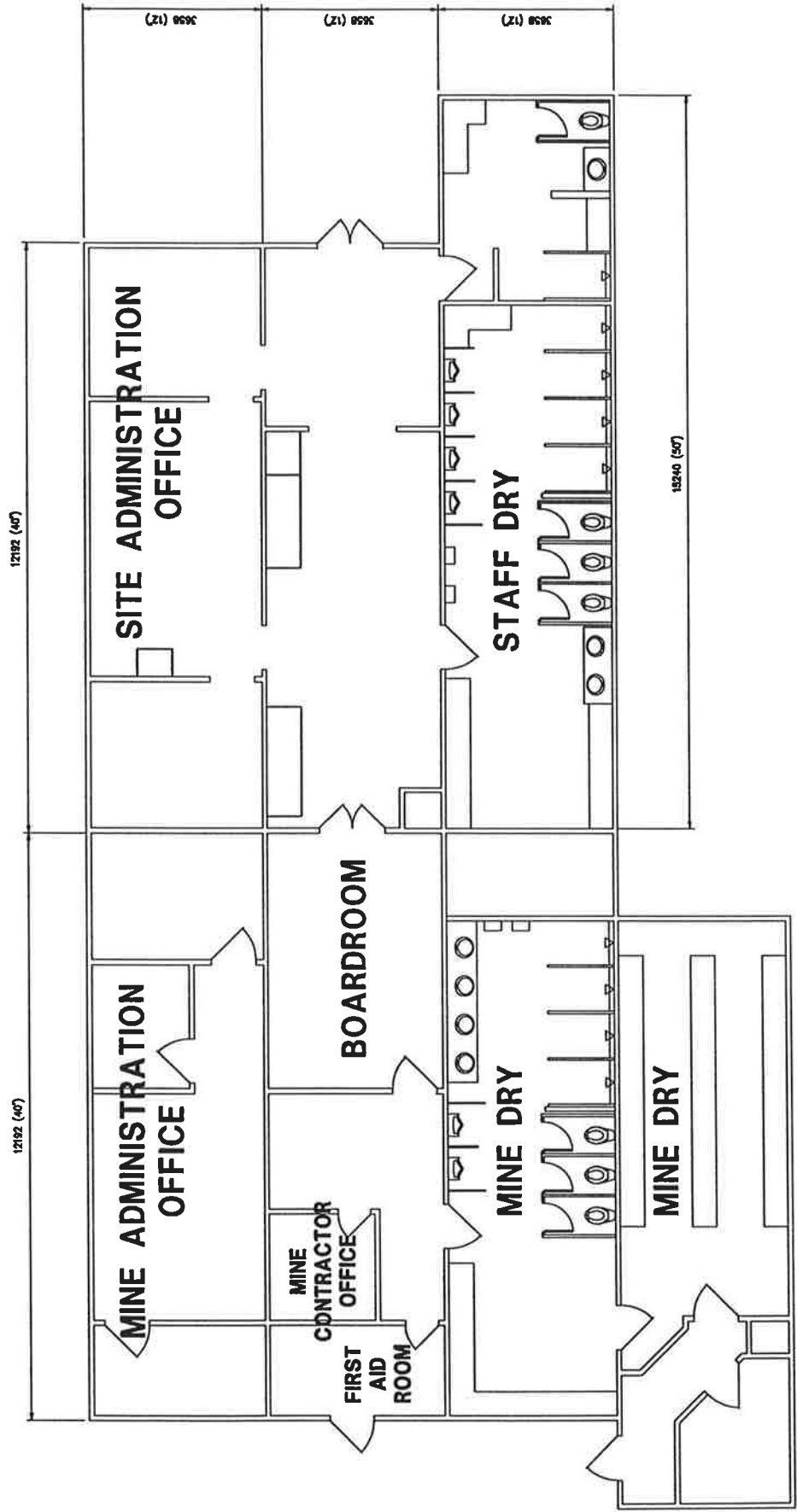


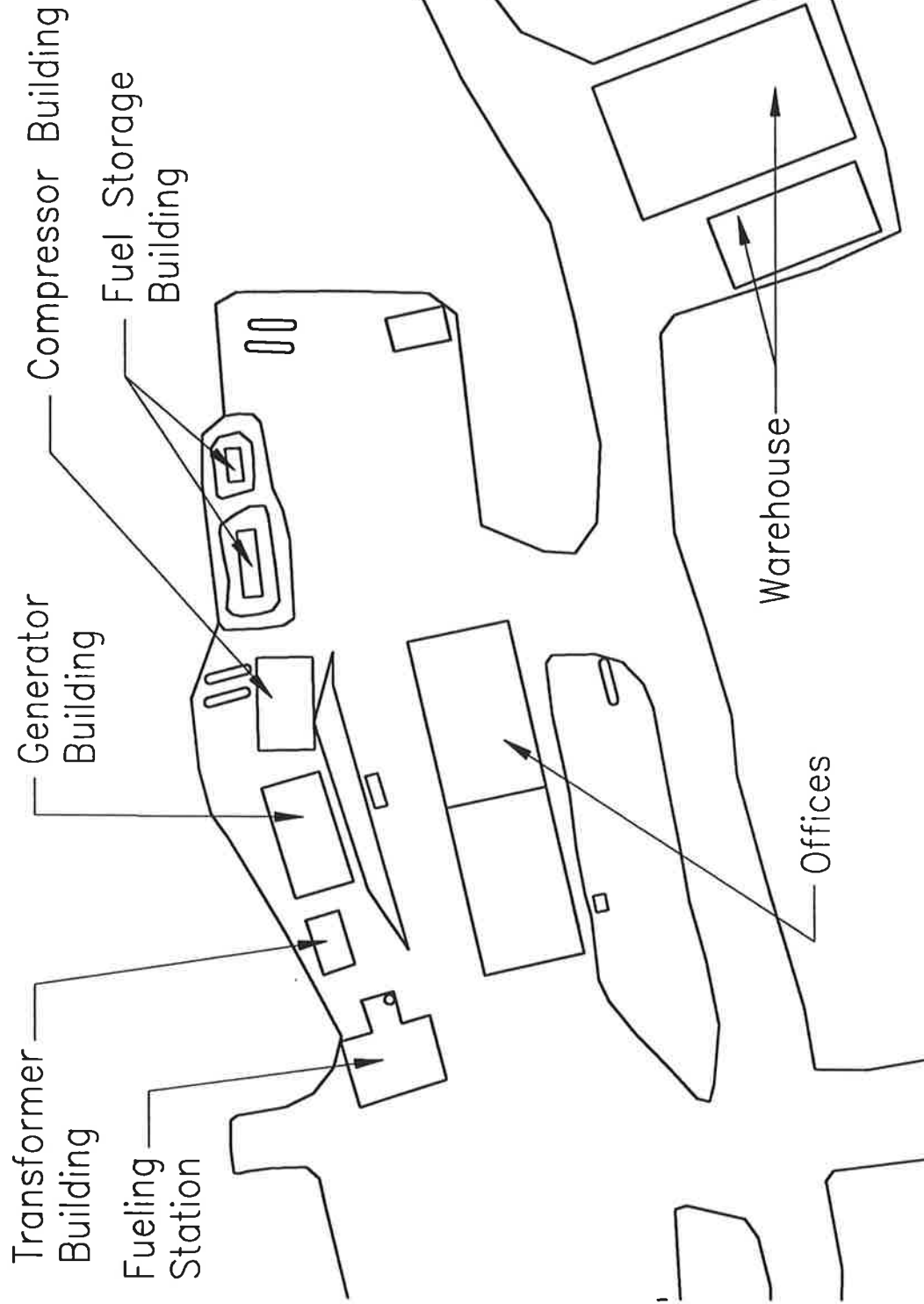
Figure 1

Surveyed by: M. J. M. M.

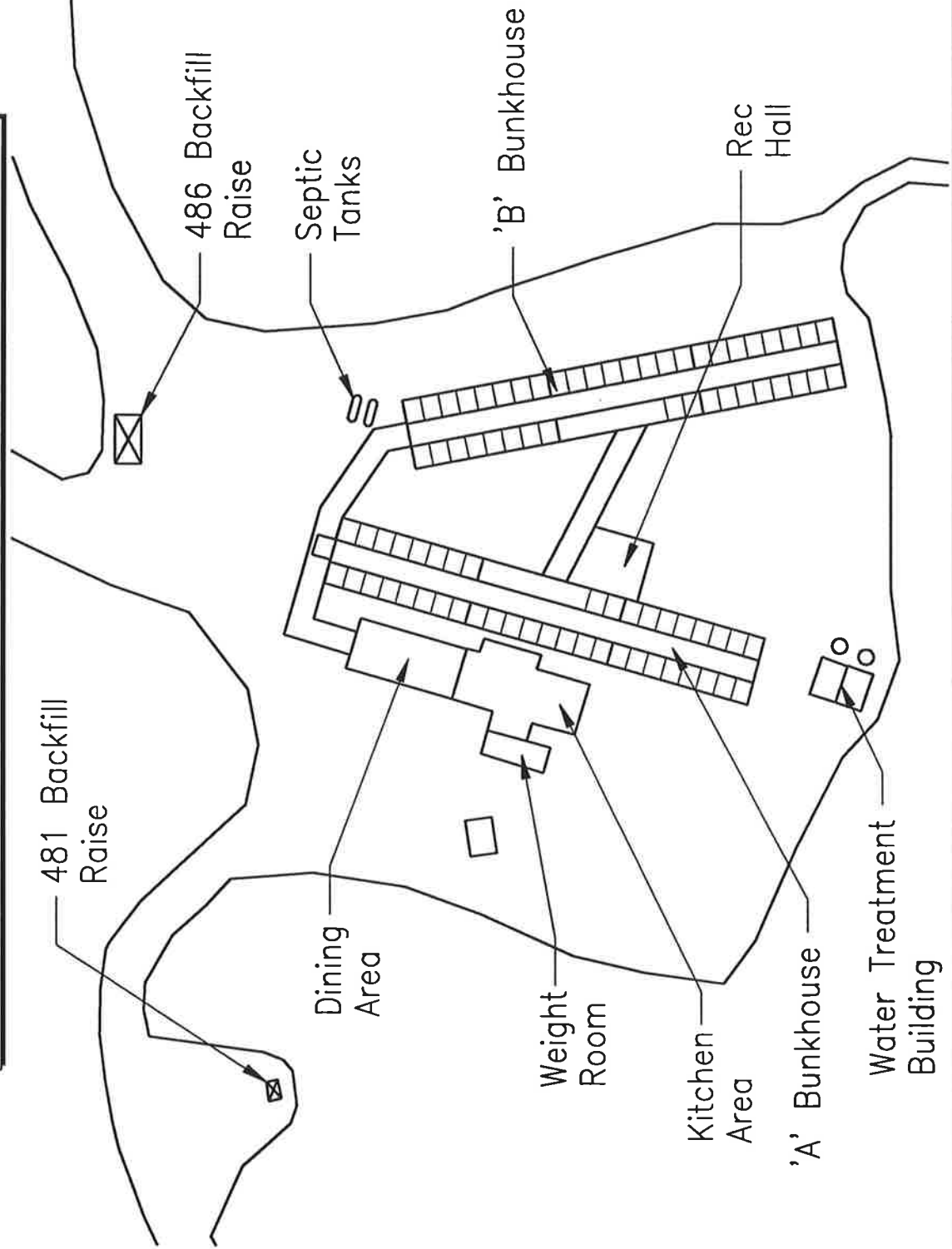
Contact Lake Mine Office Complex



Contact Lake Mine Site - Offices



Contact Lake Mine Site - Camp Facilities



CONTACT LAKE JOINT VENTURE
Production Statistics and Operating Costs
December 31, 1998

	1993	1994	1995	1996	1997	1998	Project Total to Date
<u>Production</u>							
Ore (tonnes)			268,964	304,294	292,722	140,693	1,006,673
Grade (g/t)			6.200	6.530	6.000	5.700	6.160
			53,612	63,882	56,465	25,782	199,741
Percentage recovery			92.96%	96.23%	95.25%	95.38%	94.97%
Recovered troy ounces			49,837	61,474	53,783	24,591	189,685
Change to incircuit inventory			(2,235)	(912)	(1,190)	4,740	403
Troy ounces poured			47,602	60,562	52,593	29,331	190,088
<u>Administration Costs</u>							
401 Site Administration			679,627	864,023	752,809	813,657	3,110,116
402 Light Vehicle Operation			35,711	33,300	9,073	10,530	88,614
404 Lic/Insurance/Leases			422,012	217,840	199,563	342	839,757
411 Commuting			37,625	69,100	90,681	39,042	236,448
412 Camp Accomodation			972,230	1,072,447	990,787	365,883	3,401,347
421 Worker Health & Safety			115,690	105,749	66,251	49,043	336,733
431 Environment			40,769	12,001	12,199	3,335	68,304
441 Warehoues Operation			75,632	92,102	(54,067)	108,045	221,712
461 General Site Services			293,271	326,832	157,877	147,038	925,018
	0	0	2,672,567	2,793,394	2,225,173	1,536,915	9,228,049
<u>Cost per troy ounce poured</u>							
401 Site Administration	0.000	0.000	14.280	14.270	14.310	27.740	16.360
402 Light Vehicle Operation	0.000	0.000	0.750	0.550	0.170	0.360	0.470
404 Lic/Insurance/Leases	0.000	0.000	8.870	3.600	3.790	0.010	4.420
411 Commuting	0.000	0.000	0.790	1.140	1.720	1.330	1.240
412 Camp Accomodation	0.000	0.000	20.420	17.710	18.840	12.470	17.890
421 Worker Health & Safety	0.000	0.000	2.430	1.750	1.260	1.670	1.770
431 Environment	0.000	0.000	0.860	0.200	0.230	0.110	0.360
441 Warehoues Operation	0.000	0.000	1.590	1.520	(1.030)	3.680	1.170
461 General Site Services	0.000	0.000	6.160	5.400	3.000	5.010	4.870
Cost per troy ounce	\$0.000	\$0.000	\$56.150	\$46.140	\$42.290	\$52.380	\$48.550

PROJECT COMPLETION

GENERAL

During the late spring of 1997, subsequent to disappointing results from underground exploration diamond drilling, the Contact Lake operation Life-of-Mine plan was updated. It indicated that mining of known reserves would be completed in May/June of 1998 and milling of ore would be completed in August of 1998. A plan was then developed and embarked upon to complete mining, milling and decommissioning efficiently and cost effectively. Mining plans were revised to complete mining from the lowest levels first to allow flooding of the bottom, thus reducing costs for water treatment and pumping. Inventory levels of all parts and material for both the mine and mill were reviewed and automatic reordering stopped where logical.

By late summer of 1997, all personnel were informed of the planned closure of the operation. At this time, a plan was being developed to relocate valued personnel to other operations. Some individuals were transferred in 1997, as positions became available, with temporary replacements hired to maintain operations.

The workforce went from 60 active, regular filled positions, two inactive and one temporary in January of 1997, to 47 regular filled positions and five temporary in December of 1997. This is a reduction of 11 permanent positions and contributed to lowering production costs in 1997 and severance costs in 1998. Actually, 14 people were transferred to other operations in 1997 (see attached redeployment chart). Out of the original 62 permanent employees on the payroll in January of 1997, 20 were eventually laid off and received severance payment.

Government agencies were informed of the planned closure with approvals obtained as required.

Decommissioning and Reclamation

A conceptual decommissioning plan had been developed by Carl Paton from corporate office Environment & Safety group. Budgets for 1998 were based on this plan. A Mine Decommissioning & Reclamation plan was developed, based on the conceptual plan and presented to SERM for approval. There was some negotiating and clarification required but the plan was approved as presented.

All mining was completed the first week of May, 1998 and decommissioning of underground facilities was completed by the end of the month. Decommissioning of all mine surface facilities was completed in early June with total demobilization of mining contractor by June 18, 1998.

Decommissioning of surface and underground facilities included the following:

- Non-combustible and non-hazardous materials were hauled off site to the landfill in La Ronge.
- All economically salvageable equipment and materials from the mine, as well as fuel, chemicals, explosives and other hazardous substances were removed from the mine. The majority of this was sent to either Rabbit Lake or McArthur River operations. Electrical equipment and cable was sold to the mining contractor on an as-is, where-is basis. The non-salvageable materials in the mine such as vent tubing, air and water pipelines, bulkheads, etc., were left in place.
- All mine surface facilities buildings were removed from their foundations and salvaged or burned. Concrete foundations were broken up and hauled to the underground workings.
- The mine dry and office trailers were removed and the area levelled.
- The mine portal was backfilled to 30m down ramp from the portal entrance. Large boulders were placed first, then waste placed tight to the back to the portal entrance, and finally the area covered with waste to about 2m above the portal and sloped to approximately 3:1.
- Backfill and vent raises were filled with waste to surface, capped with a reinforced concrete cover and then covered with overburden.
- Non-salvageable cone crusher, jaw crusher, and ball mill liners were disposed of underground.
- Planting of a test plot of trees in the area of the mine surface and portal.
- Levelling of mine water settling ponds.
- Remove oil contaminated material and place material on ore stockpile for "farming".

The above work was completed by September of 1998 and inspected and approved by both the Inspection and Parks Branch of SERM.

Decommissioning of the mill and other surface facilities in 1998 included the following:

- Levelling of steep areas of Five Fingers gravel pit.
- Removing of main propane tanks and vaporizers, mothballing of camp facilities and general site clean up.
- Renovating lab facilities to establish living quarters for water treatment and security personnel. Seven bedrooms and a kitchen and living room were established.
- Mothballing/winterizing of mill.
- Construction of an insulated structure around water treatment area within mill building.
- Establish a temporary office in shop/warehouse.

Water Treatment

Treatment of TMF water recommenced on June 15, 1998 and continued through to September 15, as per license approvals. A crew was selected to continue water treatment from November 1 to the end of the year. However, as water levels in the pond are quite low and possible freezing problems in December, the decision was made to stop treating water November 30, 1998. From December 1, 1998 to April 1, 1999, security and fire watch will be required which will consist of one person on site on each shift.

Subsequent to cessation of milling, it was noted that as TSS levels in the tailings pond dropped, copper levels also dropped. Thus, in late October, 1998 a test was conducted, eliminating ferric sulphate, lime and sulphuric acid from the process and using only coagulant and flocculant. The treated water was recycled back to the TMF. From October 22 to October 31, TSS levels were maintained between 10 and 20 ppm with a subsequent reduction of copper level to 0.06 ppm. At this time the levels of TSS and copper in the tailings pond were ~30 ppm and 0.35 ppm, respectively.

With contaminant levels dropping as they are in the TMF, it is possible treatment of water will not be required beyond the end of November, 1998. This will be closely monitored over the winter months as water treatment is not planned until April 1, 1999. If water treatment is not required in 1999, then security and fire watch should not extend beyond October of 1999 unless mill or camp decommissioning is in progress.

Redeployment of Personnel

In 1997, shortly after the Life-of-Mine plan was accepted and it became apparent that Contact Lake operation would cease operations early in 1998, several positions became available at other Cameco operations. Valued employees were encouraged to apply for these positions and with the cooperation of all concerned, Contact Lake personnel were selected. In most cases, temporary employees were hired to replace the transferred people. A total of 14 individuals were redeployed in 1997.

Through the latter part of 1997, Cameco's Human Resources group conducted workforce planning meetings in order to properly coordinate requirements at the various operations. Key Lake and Contact Lake were going to reduce their workforce in 1998 whereas McArthur River and Rabbit Lake were to increase. Proper coordination was required to reduce overall severance costs and to retain personnel with the necessary skills and attitudes.

Subsequent to the meetings, communication and cooperation between the various General Managers and the Human Resources group was very good with the result that an additional 27 employees were transferred prior to final closure of the Contact Lake operation (see attached

redeployment list). A total of 20 individuals were severed and two quit. Severance costs for Contact Lake were under budget at \$435,573.

Gold Production

Attached are tables showing annual gold production as reported by Contact Lake, and final settlement gold as assayed and reported by Johnson Matthey. Total Project gold production is also shown. A separate Table shows Project Gold Production with all assays and variances indicated for each bar. The overall difference between reported and final settlement gold production is -58.50 troy ounces, or 0.03%. Johnson Matthey numbers are based on remelted gold assays and weights. Weight differential is 34,286.79 troy ounces, primarily due to burn off of slag and other impurities during smelting.

The overall gold balance is as follows:

•	Input	6,197,470 grams	sample assays and weightometer tonnes.
•	Tailings Losses	311,873 grams	sample assays - calculated volume/density.
•	Gold Shipped	5,853,190 grams	reported gold sent to Johnson Matthey.
•	Other	<u>242</u> grams	pendants as completion bonus.
•	Unaccountable Loss	(32,165 grams)	Unaccountable losses not measured.

At the cessation of milling in June, 1998, 73,808 grams were in inventory and 50,076 grams were in the "unaccountable" category. From the clean-up of all mill circuits 91,719 grams were recovered and shipped in June and July, 1998. This eliminated the inventory and reduced unaccountable losses by 18,594 g which left 32,165 g.

It was anticipated the above "losses" were contained in fine carbon waste, sludge, slag, carbon, and other waste collected during operation and final clean up. This waste was sent to G.D. Resources of Sparks, Nevada, a refiner of waste gold products, where 59,190 grams of gold were recovered. Total gold production from the operation is now 5,912,402 g or 190,088 troy ounces and the final "unaccountable" is now a gain of 27,025 grams.

If we apply the 27,025 grams to tailings, then the actual tailings loss is now 284,848 g rather than 311,873 g and the overall Recovery would be 95.40% rather than the reported 94.97%. If the 27,025 grams is applied to the Input, the grade would be 6.19 g/t rather than 6.16 g/t and the recovery would have been 94.99%.

Project Costs and Revenue

Capital costs for the project were \$39,015,485. This includes all of the Phase I costs plus sustaining capital spent in 1995, 1996 and 1997, but does not include decommissioning expenditures in 1998. Cameco's share of proceeds from the disposal of assets as of December 31, 1998, are \$2,222,667. The mill sale agreement was signed at the time of writing and the proceeds (\$2,175,000) are included. Major assets left to dispose of are the main camp, water treatment facilities, mobile equipment, remaining inventory of nuts, bolts and other small items and shop/warehouse building.

Cameco's share of the capital costs and the proceeds of asset disposal is \$26,010,321 and \$2,222,667, respectively, and of project-to-date decommissioning costs, \$785,239. Remaining assets and future decommissioning costs are estimated to be \$1,739,390. Total operating costs were \$77,350,419 with Cameco's share at \$53,180,808. Revenue realized from the sale of gold, as of the end of December, 1998, was \$69,796,293. Revenue to be realized from gold recovered from waste products sent to G.D. Resources of Sparks, Nevada is estimated at \$696,240.

The project financial balance as calculated by Pat Wallace, Senior Accountant, is shown on the attached tables and is summarized following:

•	Ounces sold	127,038
•	Sales Revenue	\$69,796,293
•	Estimated Sales Revenue	\$ 696,240
•	Deferred Revenue	\$ <u>6,857,886</u>
•	Total Revenue	\$77,350,419
•	Capital Costs	\$26,010,321
•	Operating Costs	\$53,180,808
•	Decommissioning Costs	\$ 785,239
•	Asset Disposal	<u>(\$ 2,222,667)</u>
•	Total Costs	\$77,753,701

Net gain(loss) on project to date: (\$403,282)

The above costs and revenue are Cameco's 2/3 share until July 31, 1998 and 100% Cameco after, and are Project-To-Date as of December 31, 1998.

MATERIAL TO BE HAULED FROM
SURFACE TO UNDERGROUND FOR
DISPOSAL

Description	Composition	Volume (m ³)
Used cone-crusher liners (2)	Manganese steel	2.7
Used jaw crusher liners (4)	Manganese steel	0.9
Ball mill liners	Rubber with aluminum reinforcing	16.7
Maintenance shop concrete pad	Reinforced concrete	32.9
Mine transformer building concrete pad	Reinforced concrete	7.2
Mine compressor building concrete pad	Reinforced concrete	10.3
Mine generator building concrete pad	Reinforced concrete	11.2
Mine fuelling station concrete pad	Reinforced concrete	11.4
West propane tank pad and supports	Reinforced concrete	20.8
East propane tank pad and supports	Reinforced concrete	2.7
East vent raise intake platform	Reinforced concrete	5.5
West vent raise intake platform	Reinforced concrete	5.1
TOTAL		127.4 m ³

Redeployment at Contact Lake Operation

Employee	Name	Present Position	Position Applied for	
1	500019 McKay	Sam	Mill General Foremen	Foreman - KL 01/99
2	500010 Herzog	Pat	Equipment Operator	Will stay till End
3	510028 McLeod	Antoine	Operator - Crushing and Grinding	Will stay till End Dec/98
4	500004 Merriman	Grant	Equipment Operator	Will stay till End
5	510060 Bilewitch	Ted	Mechanic - Heavy Duty	Will stay till End Dec/98
6	510075 Hicks	Mel	Mechanic - Heavy Duty	Will stay till End Dec/98
7	510080 Cook	Dave	Temporary Employee - Elec	Will stay till End Dec/98
8	510084 Cook	Keith	Temporary Employee - Mill	Will stay till End Dec/98
9	500015 Wyka	Bob	Project Manager	Lay-off Dec

PERSONNEL LAYED OFF

1	500002 Danielson	Ron	Mine General Foreman	Lay Off	June
2	601266 Watt	Al	Warehouse	Lay Off	June
3	510024 Cummings	Clem	Industrial Mechanic	Lay Off	Jan
4	510068 Jacobsen	Ken	Heavy Equipment Operator	Lay-off	July
5	510058 Kolisnek	Merv	Assayer	Lay-off	July
6	510045 Sanderson	Tom	Operator - Crushing and Grinding	Lay-off	July
7	510014 Simpson	Jeff	EMT/Warehouse	Lay-off	July
8	510069 Goudie	Trent	Chemist	Lay-off	July
9	510073 Stomp	Robin	Operator - Crushing and Grinding	Lay-off	July
10	510064 McKenzie	Sampson	Operator - Crushing and Grinding	Lay-off	July
11	510036 Gray	Terry	Plumber	Lay-off	July
12	400968 Williams	Doug	Industrial Mechanic	Lay-off	July
13	306354 Falk	Ken	Chemist	Lay-off	July
14	510021 Lucka	Hank	Operator - Crushing and Grinding	Lay-off	July
15	500017 Kasahoff	Debby	Assistant Site Administrator	Lay-off	July
16	510039 Charles	Noah	Apprentice Industrial Mechanic	Lay-off	July
17	510084 Cook	Keith	Temporary Employee - Mill	Lay-off	July
18	510082 Cook	Solomon	Temporary Employee - Mill	Lay-off	July
19	510087 Cook	Joseph	Temporary Employee - Mill	Lay-off	July
20	500029 Alderman	Geoff	Temporary Employee - Mine Sup't	Lay-off	June
21	510083 McLeod	Andrew	Temporary Employee - Mill	Lay Off	May

PERSONNEL TRANSFERRED OR SEVERED - FROM JANUARY 1st, 1998

1	303256 Chan	Dave	Mine Geologist	Geologist - Saskatoon	Jan
2	510061 Hansen	Gerald	Apprentice Industrial Mechanic	Ind. Mech. - RL	Jan
3	510072 Lariviere	Tom	Operator - Crushing and Grinding	Mill Operator - RL	Feb
4	510067 Long	Toby-Ann	Intermediate Surveyor	Surveyor - RL	Jan
5	510048 Roberts	Jeff	Operator - Crushing and Grinding	Underground Training	Jan
6	510063 Smith	Fernando	Operator - Crushing and Grinding	Mill Operator - RL	Feb
7	510033 Delaney	Shane	Operator - Crushing and Grinding	Mill Operator - RL	Feb
8	510030 Olson	Joanne	Assayer	Plant Protection Officer - RL	Feb
9	510079 Kozan	Emeric	Surveyor - Temporary	Mine Technician - RL	
10	401101 McCallum	Warren	Mill Employee - Temporary	Underground Training	
11	510078 Sanderson	Larry	Mill Employee - Temporary	Underground Training	
12	510004 McKenzie	Larry	Senior Surveyor	Vent/Rad Tech - R.L.	May
13	401036 Hunt	Terry	Operator - Crushing and Grinding	Mill Operator - RL	May
14	601306 Miller	Bill	Mine Geologist	Temp-McA	June
15	510002 Curry	Greg	Mine Geologist/Mill Operator	Cigar Lake - Temp	July
16	510022 Bader	Brent	Solution Operator	Mill Operator - RL	July
17	510027 Favel	Lester	Operator - Solution	Mill Operator - RL	July
18	510026 Hawker	Sidney	Operator - Solution	Mill Operator - RL	July
19	510071 Stomp	Rick	Operator - Crushing and Grinding	Mill Operator - RL	July
20	510062 McDonald	John	Apprentice Industrial Mechanic	Ind. Mech. - RL	July
21	600691 Milde	Wolfgang	Mill Superintendent	McA.	July
22	510001 Leniuk	Greg	Mine Geologist	McA - Temp	July
23	306407 Smith	Walter	Acting Supervisor, Employee Relations	Back to Key Lake	Aug
24	600044 Ulriksen	Terry	Operator - Solution	R.L. - Warehouse	Oct
25	500054 Sarabin	Alex	Maintenance Foreman	McA.	Aug
26	601392 Bharadwaj	Biman	Mill General Foreman	Back to Rabbit Lake	Aug

PERSONNEL WHO QUIT

1	510085 Linklater	Brian	Temporary Employee - Mill	Quit	May
2	510086 Cook	Jerry	Temporary Employee - Mill	Quit	May
3	601395 Haywood	Gary	Mine Superintendent	Australia	Mar
4	510054 Morns	Tracy	Nurse	Edmonton	Jan

PERSONNEL REDEPLOYED IN 1997

1	Bondesen	Jim	Assistant Mine Superintendent	Mine G.F. - McA	
2	Black	Ed	Mill Operator	Mill Operator - R.L.	
3	Buckley	Sheldon	Mill Operator	Mill Operator - R.L.	
4	Ulrich	Rick	Mill Operator	Mill Operator - R.L.	
5	McKenzie	George	Mill Operator	Mill Operator - R.L.	
6	McKenzie	Wayne	Assayer	Lab Tech - R.L.	
7	Wilson	Collin	Assistant Manager	Mine Sup't - R.L.	
8	Caisse	Cam	Senior Surveyor	Sr. Surv. - R.L.	
9	Rings	Jim	Site Administrator	Site Admin - R.L.	
10	Moore	Dave	Senior Surveyor	Sr. Surv. - McA	
11	Graas	Kurt	Assayer	Lab Tech - Cigar Lake	
12	Larsen	Del	Electrician	Electrician	
13	Blakely	Carl	Electrician	Electrician	
14	Herteis	Brian	Senior Engineer	Sr. Engineer - Cigar Lake	

1995 GOLD PRODUCTION

Bar No.	Date	Mine				Johnson Matthey							
		Weight grams	Weight ozs.	Reported Au Fine	Reported Au Cont	Reported Ag Fine	Reported Ag Cont	Weight grams	Weight ozs.	Au Fine	Au Cont	Ag Fine	Ag Cont
CNT 1	Jan 17 95	15,642	502.90	799.66	402.15	159.60	80.26	15613.7	501.99	799.70	401.44	150.87	75.74
CNT 2	Jan 26	33,484	1076.53	712.73	767.28	241.22	259.68	33407.5	1074.08	707.60	760.02	243.05	261.05
CNT 3	Feb 8	31,184	1002.59	699.79	701.60	232.31	232.91	31131.4	1000.90	696.20	696.82	253.51	253.74
CNT 4	Feb 22	27,901	897.04	648.70	581.91	280.54	251.66	27815.6	894.29	643.90	575.83	289.76	259.13
CNT 5	Mar 6	21,938	705.32	714.89	504.23	229.23	161.68	21910.1	704.43	712.10	501.62	233.87	164.74
CNT 6	Mar 6	26,184	841.83	619.66	521.65	304.41	256.26	26000.8	835.94	614.20	513.44	321.82	269.02
CNT 7	Mar 13	0	0.00	690.40	0.00	249.80	0.00	0.00	0.00		0.00		0.00
CNT 8	Mar 13	44,902	1443.63	650.69	939.36	278.78	402.45	44871.5	1442.65	642.50	926.90	285.78	412.28
CNT 9	Mar 20	0	0.00	625.29	0.00	294.65	0.00	0.00	0.00		0.00		0.00
CNT 10	Mar 20	43,870	1410.45	646.61	912.01	268.66	378.93	43764.0	1407.04	639.10	899.24	290.50	408.75
CNT 11	Mar 27	20,150	647.84	669.98	434.04	227.06	147.10	20058.3	644.89	662.70	427.37	229.10	147.74
CNT 12	Mar 27	30,935	994.58	699.98	696.18	218.86	217.67	30902.3	993.53	693.40	688.91	230.60	229.11
CNT 13	Apr 3	15,372	494.22	790.30	390.58	164.71	81.40	15322.4	492.63	787.00	387.70	171.40	84.44
CNT 14	Apr 3	15,723	505.51	645.61	326.36	276.60	139.82	15661.7	503.53	644.10	324.33	286.80	144.41
CNT 15	Apr 3	24,911	800.91	652.24	522.38	274.22	219.62	24799.9	797.33	649.30	517.71	287.80	229.47
CNT 16	Apr 10	14,762	474.61	744.07	353.14	207.33	98.40	14720.7	473.28	740.60	350.51	213.30	100.95
CNT 17	Apr 10	26,920	865.50	665.63	576.10	279.43	241.84	26841.3	862.97	667.10	575.69	282.80	244.05
CNT 18	Apr 17	20,668	664.49	695.67	462.27	223.87	148.76	20594.0	662.11	695.90	460.76	245.90	162.81
CNT 19	Apr 17	15,394	494.93	688.28	340.65	215.18	106.50	15292.3	491.66	677.30	333.00	212.50	104.48
CNT 20	Apr 17	18,661	599.96	698.13	418.85	235.82	141.48	18581.1	597.40	690.70	412.62	248.30	148.33
CNT 21	Apr 23	15,033	483.32	751.97	363.44	197.46	95.44	14973.4	481.41	748.50	360.33	202.50	97.48
CNT 22	Apr 23	22,766	731.94	675.14	494.16	258.65	189.31	22638.6	727.85	671.80	488.97	269.70	196.30
CNT 23	Apr 30	13,198	424.33	718.47	304.87	211.59	89.78	13139.7	422.45	719.50	303.95	211.90	89.52
CNT 24	Apr 30	669.31	669.31	447.98	272.10	182.12	20785.5	668.27	669.10	447.14	447.14	278.30	185.98
CNT 25	May 06	18,288	587.97	757.10	445.16	180.45	106.10	18262.6	587.16	757.20	444.59	178.30	104.69
CNT 26	May 07	15,410	495.44	683.78	338.77	240.08	118.95	15393.4	494.91	689.50	341.24	241.30	119.42
CNT 27	May 14	15,707	504.99	727.17	367.22	220.00	111.10	15699.3	504.74	722.40	364.63	228.80	115.49
CNT 28	MAY 20	21,598	694.39	712.16	494.52	246.43	171.12	21550.60	692.87	713.60	494.43	242.90	168.30
CNT 29	MAY 20	25,266	812.32	682.49	554.40	268.79	218.34	25171.80	809.29	682.50	552.34	266.40	215.60
CNT 30	MAY 21	32,874	1056.92	672.88	711.18	268.46	283.75	32830.20	1055.51	672.90	710.26	270.20	285.20
CNT 31	May 31	18,411	591.93	660.94	391.23	291.41	172.49	18368.10	590.55	665.10	392.77	288.50	170.37
CNT 32	May 31	24,274	780.43	762.48	595.06	216.88	169.26	24228.50	778.96	773.70	602.68	196.10	152.75
CNT 33	June 2	20,431	656.87	705.91	463.69	245.71	161.40	20331.80	653.68	703.60	459.93	238.20	155.71
CNT 34	June 10	21,624	695.23	739.59	514.19	230.45	160.22	21579.00	693.78	740.00	513.40	230.70	160.06
CNT 35	June 15	27,769	892.79	758.66	677.33	185.11	165.26	27749.80	892.18	757.90	676.18	175.70	156.76
CNT 36	June 18	14,505	466.35	703.05	327.87	274.43	127.98	14453.20	464.68	702.80	326.58	279.50	129.88
CNT 37	June 18	19,337	621.70	712.49	442.96	266.96	165.97	19312.30	620.90	714.90	443.88	266.90	165.72
CNT 38	June 20	29,609	951.95	731.72	696.56	195.97	186.56	29551.10	950.09	731.90	695.37	196.40	186.60
CNT 39	June 25	17,013	546.98	740.82	405.21	234.92	128.50	16979.80	545.91	740.50	404.25	235.50	128.56
CNT 40	July 2	12,088	388.64	756.94	294.18	218.47	84.90	11992.50	385.57	757.10	291.91	218.10	84.09
CNT 41	July 6	20,670	664.56	756.89	502.99	184.27	122.46	20442.50	657.24	758.20	498.32	178.50	117.32
CNT 42	July 6	19,529	627.87	741.16	465.35	192.87	121.09	19531.60	627.96	741.20	465.44	194.70	122.26
CNT 43	July 10	19,643	631.54	763.45	482.14	164.75	104.04	19589.90	629.83	763.60	480.94	164.60	103.67
CNT 44	July 15	17,377	558.68	805.16	449.83	178.73	99.85	17340.00	557.49	805.40	449.01	178.50	99.51
CNT 45	July 22	30,985	996.19	813.04	809.94	116.75	116.31	30951.50	995.11	813.10	809.13	117.70	117.12
CNT 46	July 23	22,176	712.97	781.71	557.34	194.08	138.38	22140.30	711.83	782.70	557.15	194.10	138.17
CNT 47	Aug 02	24,913	800.97	801.36	641.86	180.72	144.75	24873.00	799.68	802.50	641.75	176.10	140.82
CNT 48	Aug 04	17,901	575.53	786.41	452.60	142.94	82.27	17873.50	574.65	787.10	452.30	140.90	80.97
CNT 49	Aug 04	16,981	545.95	820.59	448.00	118.34	64.61	16974.60	545.75	816.90	445.82	114.20	62.32
CNT 50	Aug 04	18,853	606.14	822.60	498.61	108.86	65.99	18840.30	605.73	810.10	490.70	122.40	74.14

1995 GOLD PRODUCTION

Bar No.	Date	Mine			Reported			Johnson Matthey			Weight			Ag Cont		
		Weight grams	Weight ozs.	Reported Au Fine	Reported Au Cont	Reported Ag Fine	Reported Ag Cont	Weight grams	Weight ozs.	Au Fine	Au Cont	Ag Fine	Ag Cont	Ag Fine	Ag Cont	Ag Cont
CNT 51	Aug 07	19,149	615.65	777.13	478.44	215.30	132.55	191,214.0	614.77	775.10	476.51	206.00	126.64	206.00	126.64	
CNT 52	Aug 11	25,985	835.44	727.98	608.18	248.44	207.56	258,700.0	831.74	728.00	605.51	247.40	205.77	247.40	205.77	
CNT 53	Aug 15	41,274	1326.99	780.51	1035.73	107.83	143.09	412,723.0	1326.93	780.30	1035.41	106.80	141.72	106.80	141.72	
CNT 54	Aug 19	29,889	960.95	713.81	685.94	268.28	257.80	298,246.0	958.88	712.90	683.59	269.60	258.51	269.60	258.51	
CNT 55	Aug 21	19,175	616.49	696.19	429.20	283.52	174.78	191,708.0	616.36	694.90	428.31	289.30	178.31	289.30	178.31	
CNT 56	Aug 22	34,008	1093.38	782.69	855.78	130.61	142.80	339,388.0	1091.16	783.60	855.03	132.20	144.25	132.20	144.25	
CNT 57	Aug 27	25,343	814.80	758.88	618.34	223.43	182.05	251,196.0	807.61	758.80	612.82	224.70	181.47	224.70	181.47	
CNT 58	Aug 28	31,861	1024.35	701.56	718.64	91.32	93.54	318,725.0	1024.72	704.40	721.82	90.10	92.33	90.10	92.33	
CNT 59	Sept 03	11,665	375.04	758.49	284.46	227.21	85.21	116,164.0	373.48	752.42	281.01	222.40	83.06	222.40	83.06	
CNT 60	Sept 04	24,602	790.97	747.65	591.37	114.47	90.54	244,663.0	786.61	745.32	586.28	89.30	70.24	89.30	70.24	
CNT 61	Sept 05	5,666	182.17	793.09	144.47	198.85	36.22	56,467.0	181.55	763.30	138.57	103.60	18.81	103.60	18.81	
CNT 62	Sept 05	13,560	435.96	760.31	331.47	109.03	47.53	135,280.0	434.93	793.80	345.25	187.50	81.55	187.50	81.55	
CNT 63	Sept 08	11,421	367.19	797.89	292.98	189.80	69.69	113,160.0	363.82	798.30	290.44	160.70	58.47	160.70	58.47	
CNT 64	Sept 10	19,137	615.27	806.03	495.92	83.97	51.66	190,923.0	613.83	809.30	496.77	80.70	49.54	80.70	49.54	
CNT 65	Sept 17	19,884	639.28	749.32	479.03	225.38	144.08	197,875.0	636.18	747.70	475.67	228.30	145.24	228.30	145.24	
CNT 66	Sept 20	32,800	1054.54	782.89	825.59	132.88	140.12	327,949.0	1054.38	782.50	825.05	135.80	143.18	135.80	143.18	
CNT 67	Sept 23	21,889	703.75	702.91	494.67	269.57	189.71	218,363.0	702.05	704.40	494.53	265.80	186.61	265.80	186.61	
CNT 68	Sept 26	23,311	749.47	739.12	553.95	156.55	117.33	233,186.0	749.71	740.50	555.16	151.50	113.58	151.50	113.58	
CNT 69	Sept 29	7,278	233.99	735.36	172.07	218.47	51.12	71,814.0	230.89	738.10	170.42	219.70	50.73	219.70	50.73	
CNT 70	Oct 04	13,172	423.49	763.19	323.20	130.49	55.26	131,204.0	421.83	767.10	323.59	129.70	54.71	129.70	54.71	
CNT 71	Oct 04	18,446	593.05	799.26	474.00	123.15	73.03	183,277.0	589.25	799.80	471.28	124.60	73.42	124.60	73.42	
CNT 72	Oct 07	21,379	687.35	717.79	493.37	249.95	171.81	213,404.0	686.11	718.50	492.97	240.20	164.80	240.20	164.80	
CNT 73	Oct 09	25,593	822.83	784.10	645.19	153.77	126.52	255,511.0	821.49	785.30	645.11	151.10	124.13	151.10	124.13	
CNT 74	Oct 15	18,194	584.95	721.38	421.97	227.81	133.26	181,274.0	582.81	722.05	420.82	228.60	133.23	228.60	133.23	
CNT 75	Oct 17	27,325	878.52	785.41	689.99	139.40	122.47	272,822.0	877.14	783.10	686.89	146.80	128.76	146.80	128.76	
CNT 76	Oct 21	21,865	702.98	678.96	477.29	253.85	178.45	217,240.0	698.44	677.90	473.47	253.50	177.06	253.50	177.06	
CNT 77	Oct 31	15,053	483.96	836.09	404.64	130.96	63.38	149,940.0	482.07	838.60	404.26	133.30	64.26	133.30	64.26	
CNT 78	Oct 31	26,638	856.43	725.88	621.67	192.82	165.14	265,904.0	854.90	725.90	620.57	194.10	165.94	194.10	165.94	
CNT 79	Oct 31	30,504	980.73	697.14	683.70	238.25	233.66	303,959.0	977.25	696.40	680.56	240.70	235.22	240.70	235.22	
CNT 80	Nov 01	8,055	258.97	708.77	183.55	206.75	53.54	79,599.0	255.92	711.50	182.08	200.60	51.34	200.60	51.34	
CNT 81	Nov 09	10,539	338.84	818.69	277.40	140.58	47.63	104,735.0	336.73	815.70	274.67	138.70	46.70	138.70	46.70	
CNT 82	Nov 17	36,983	1189.03	697.58	829.44	245.16	291.50	369,059.0	1186.55	698.50	828.81	248.90	295.33	248.90	295.33	
CNT 83	Nov 18	26,964	866.91	788.14	683.25	176.50	153.01	268,834.0	864.32	793.30	685.67	174.30	150.65	174.30	150.65	
CNT 84	Nov 19	12,745	409.76	784.51	321.46	171.87	70.43	126,898.0	407.99	783.50	319.66	171.50	69.97	171.50	69.97	
CNT 85	Nov 30	14,518	466.76	667.31	311.47	217.20	101.38	144,513.0	464.62	670.70	311.62	216.40	100.54	216.40	100.54	
CNT 86	Nov 30	16,802	540.20	688.23	371.78	203.45	109.90	167,580.0	538.78	690.60	372.08	201.20	108.40	201.20	108.40	
CNT 87	Dec 2	26,533	853.06	680.49	580.50	262.36	223.80	264,845.0	851.50	680.70	579.61	263.80	224.62	263.80	224.62	
CNT 88	Dec 2	29,273	941.15	667.42	628.14	280.72	264.20	291,089.0	935.87	668.10	625.26	282.10	264.01	282.10	264.01	
CNT 89	Dec 2	7,792	250.52	664.03	166.35	223.28	55.94	76,999.0	247.56	673.20	166.66	217.80	53.92	217.80	53.92	
CNT 90	Dec 12	15,916	511.71	647.65	331.41	178.82	91.50	157,265.0	505.62	654.90	331.13	180.90	91.47	180.90	91.47	
CNT 91	Dec 12	15,875	510.39	654.99	334.30	200.79	102.48	157,846.0	507.49	669.20	339.61	198.90	100.94	198.90	100.94	
CNT 92	Dec 15	28,332	910.89	618.22	563.14	308.29	280.82	281,452.0	904.89	618.70	559.85	311.20	281.60	311.20	281.60	
CNT 93	Dec 18	18,711	601.57	670.19	403.17	168.86	101.58	186,333.0	599.07	682.10	408.63	166.30	127.95	166.30	127.95	
CNT 94	Dec 28	24,121	775.51	628.10	487.10	168.69	130.82	239,304.0	769.38	628.40	483.48	166.30	127.95	166.30	127.95	
CNT 95	Jan 03	16,857	541.96	650.08	352.32	282.52	153.12	166,715.0	536.00	658.50	352.96	280.70	150.46	280.70	150.46	
CNT 96	Jan 03	29,270	941.05	633.89	596.52	298.74	281.13	291,254.0	936.40	645.90	604.82	290.40	271.93	290.40	271.93	
CNT 97	Jan 03	16,218	521.42	691.78	360.71	190.37	99.26	161,052.0	517.79	695.10	359.92	187.30	96.98	187.30	96.98	
		2,055,218	66,076.74	47,602.65			14,007.16	2,048,602	65,864.03	47,443.47			14,063.36			

1996 GOLD PRODUCTION

Johnson Matthey													
Bar No.	Date	Mine				Weight				ozs.			
		Weight grams	Weight Reported ozs.	Au Fine	Reported Au Cont	Reported Ag Fine	Reported Ag Cont	Weight grams	Weight ozs.	Au Fine	Au Cont	Ag Fine	Ag Cont
CNT 98	Jan 11	30,029	965.45	580.62	560.56	188.91	182.38	29,878.60	960.62	592.80	569.45	189.60	182.13
CNT 99	Jan 13	19,872	638.90	610.35	389.95	170.35	108.84	19,624.80	630.95	630.20	397.63	172.00	108.52
CNT 100	Jan 13	25,573	822.19	638.01	524.57	319.37	262.59	25,447.20	818.15	638.40	522.30	313.90	256.82
CNT 101	Jan 20	27,363	879.74	672.86	591.94	173.81	152.91	27,194.70	874.33	683.90	597.95	172.90	151.17
CNT 102	Jan 28	27,836	894.95	562.89	503.76	379.75	339.86	27,280.60	877.09	563.80	494.50	378.40	331.89
CNT 103	Jan 28	28,944	930.57	566.24	526.92	383.64	357.01	28,939.60	930.43	567.90	528.39	385.40	358.59
CNT 104	Jan 28	23,179	745.22	678.28	505.47	171.12	127.52	23,084.80	742.19	682.00	506.18	169.40	125.73
CNT 105	Feb 02	24,826	798.17	576.23	459.93	362.00	288.94	24,802.30	797.41	576.90	460.03	368.70	294.01
CNT 106	Feb 02	25,066	805.89	575.43	463.73	363.00	292.54	25,011.60	804.14	576.50	463.59	368.80	296.57
CNT 107	Feb 03	23,520	756.18	650.65	492.01	181.76	137.44	23,333.30	750.18	650.50	487.99	188.60	141.48
CNT 108	Feb 08	22,614	727.06	610.55	443.90	209.97	152.66	22,386.80	719.75	613.10	441.28	208.70	150.21
CNT 109	Feb 11	20,908	672.21	607.52	408.38	217.70	146.34	20,798.90	668.70	618.60	413.66	193.40	129.33
CNT 110	Feb 12	18,618	598.58	529.32	316.84	399.13	238.91	18,454.50	593.33	530.60	314.82	405.70	240.71
CNT 111	Feb 12	18,355	590.13	530.79	313.23	408.31	240.95	18,286.40	587.92	532.70	313.19	414.70	243.81
CNT 112	Feb 16	28,875	928.35	721.36	669.68	178.99	166.17	28,765.00	924.82	723.30	668.92	180.80	167.21
CNT 113	Feb 21	29,653	953.37	740.10	705.58	165.47	157.76	29,539.70	949.72	744.10	706.69	166.90	158.51
CNT 114	Feb 25	18,900	607.65	781.37	474.80	124.53	75.67	18,805.00	604.59	782.20	472.91	122.80	74.24
CNT 115	Mar 01	20,857	670.57	607.10	407.10	329.82	221.17	20,742.20	666.88	606.90	404.73	335.60	223.80
CNT 116	Mar 01	23,636	759.91	616.14	468.22	310.83	236.20	23,575.60	757.97	617.00	467.67	319.50	242.17
CNT 117	Mar 01	24,449	786.05	608.60	478.39	325.68	256.00	24,366.00	783.38	609.10	477.16	318.00	249.12
CNT 118	Mar 01	16,431	528.27	624.93	330.13	315.71	166.78	16,387.30	526.86	625.70	329.66	318.00	167.54
CNT 119	Mar 01	18,164	583.99	621.37	362.87	316.00	184.54	18,137.30	583.13	621.80	362.59	323.70	188.76
CNT 120	Mar 01	20,143	647.61	721.35	467.16	192.85	124.89	20,077.10	645.49	724.10	467.40	197.70	127.61
CNT 121	Mar 09	21,107	678.61	720.81	489.15	177.14	120.21	21,046.70	676.67	721.10	487.94	176.30	119.30
CNT 122	Mar 09	20,855	670.50	695.45	466.30	193.41	129.68	20,732.00	666.55	699.10	465.98	187.60	125.04
CNT 123	Mar 11	21,027	676.03	624.79	422.38	294.93	199.39	20,984.10	674.65	625.20	421.79	299.70	202.19
CNT 124	Mar 11	20,589	661.95	625.90	414.31	294.70	195.08	20,545.00	660.54	626.30	413.69	298.50	197.17
CNT 125	Mar 14	17,912	575.88	756.44	435.62	174.25	100.35	17,847.10	573.80	759.40	435.74	168.80	96.86
CNT 126	Mar 20	13,732	441.49	733.66	323.90	188.48	83.21	13,650.20	438.86	741.60	325.46	186.00	81.63
CNT 127	Mar 20	15,612	501.94	710.92	356.84	194.24	97.50	15,524.80	499.13	718.70	358.73	189.00	94.34
CNT 128	Mar 20	25,399	816.60	582.89	475.99	292.76	239.07	25,303.20	813.52	585.10	475.99	304.20	247.47
CNT 129	Mar 23	24,284	780.75	762.29	595.16	170.17	132.86	24,180.00	777.40	761.80	592.23	168.80	131.23
CNT 130	Mar 29	20,437	657.06	737.55	484.62	199.09	130.82	20,361.60	654.64	738.20	483.26	199.80	130.80
CNT 131	Mar 31	20,794	668.54	631.53	422.21	224.72	150.23	20,744.60	666.95	633.80	422.72	226.30	150.93
CNT 132	Mar 31	18,974	610.03	672.16	410.04	228.53	139.41	18,847.90	605.97	670.60	406.37	228.80	138.65
CNT 133	Mar 31	18,484	594.27	669.13	397.65	237.07	140.89	18,487.20	594.38	667.30	396.63	237.60	141.22
CNT 134	Apr 01	28,127	904.30	654.20	591.59	212.47	192.13	28,028.50	901.14	655.20	590.42	211.10	190.23
CNT 135	Apr 08	23,192	745.64	636.68	474.74	227.15	169.37	23,104.30	742.82	647.30	480.83	217.30	161.41
CNT 136	Apr 13	19,098	614.01	649.17	398.60	258.45	158.69	19,043.00	612.25	650.05	397.99	257.80	157.84
CNT 137	Apr 13	18,666	600.13	627.33	376.47	263.01	157.84	18,581.40	597.41	629.20	375.89	262.20	156.64
CNT 138	Apr 18	30,286	973.72	677.18	659.38	219.68	213.91	30,016.30	965.05	677.60	653.91	224.00	216.17
CNT 139	Apr 18	14,895	478.89	679.85	325.57	230.61	110.43	14,881.50	478.45	679.60	325.16	234.70	112.29
CNT 140	Apr 20	16,907	543.57	662.03	359.86	254.84	138.52	16,878.70	542.66	659.60	357.94	257.80	139.90
CNT 141	Apr 20	17,761	571.03	647.80	369.91	262.23	149.74	17,644.10	567.27	650.70	369.12	265.80	150.78

1996 GOLD PRODUCTION

Johnson Matthey													
Bar No.	Date	Mine				Weight				Weight			
		grams	ozs.	Reported	Au Fine	Reported	Au Fine	Reported	Au Fine	ozs.	Au Cont	Ag Cont	
CNT 142	Apr 27	22,336	718.12	666.00	478.27	244.10	175.29	22,189.10	713.40	667.90	476.48	242.60	173.07
CNT 143	May 01	32,564	1046.96	696.49	729.19	216.69	226.86	32,516.00	1045.41	697.81	729.50	219.30	229.26
CNT 144	May 01	14,074	452.49	697.85	315.77	219.36	99.26	14,070.00	452.36	698.60	316.02	221.50	100.20
CNT 145	May 01	16,861	542.09	698.66	378.74	219.36	118.91	16,851.00	541.77	701.30	379.94	221.10	119.79
CNT 146	May 01	28,621	920.19	679.96	625.69	219.83	202.28	28,515.70	916.80	682.10	625.35	225.20	206.46
CNT 147	May 08	22,635	727.73	674.21	490.65	209.93	152.77	22,575.60	725.82	681.20	494.43	208.20	151.12
CNT 148	May 14	19,694	633.18	738.55	467.63	187.44	118.68	19,615.70	630.66	740.70	467.13	187.20	118.06
CNT 149	May 14	23,512	755.93	665.75	503.26	269.92	204.04	23,478.10	754.84	666.50	503.10	277.30	209.32
CNT 150	May 14	22,724	730.59	672.97	491.67	274.66	200.66	22,681.40	729.22	673.20	490.91	277.90	202.65
CNT 151	May 22	29,527	949.31	680.25	645.77	218.41	207.34	29,367.90	944.20	682.10	644.04	219.80	207.53
CNT 152	May 29	29,920	961.95	642.69	618.23	207.14	199.26	29,828.30	959.00	649.10	622.49	204.50	196.12
CNT 153	Jun 01	17,600	565.85	669.06	378.59	210.49	119.11	17,540.20	563.93	672.90	379.47	209.50	118.14
CNT 154	Jun 01	25,677	825.53	635.80	524.87	303.30	250.38	25,638.70	824.30	636.20	524.42	309.70	255.29
CNT 155	Jun 02	26,281	844.95	630.66	532.87	318.65	269.25	26,227.80	843.24	631.40	532.42	325.30	274.31
CNT 156	Jun 02	20,402	655.94	634.24	416.03	318.24	208.75	20,369.10	654.88	634.80	415.72	321.80	210.74
CNT 157	Jun 02	22,840	734.32	642.37	471.71	309.94	227.60	22,825.70	733.86	642.60	471.58	317.60	233.07
CNT 158	Jun 12	23,597	758.66	662.68	502.75	244.25	185.30	23,477.00	754.80	709.10	535.23	190.00	143.41
CNT 159	Jun 14	17,777	571.54	727.25	415.66	162.64	92.96	17,677.80	568.35	728.60	414.10	171.90	97.70
CNT 160	Jun 25	19,337	621.70	739.72	459.89	158.72	98.68	19,246.60	618.79	739.90	457.84	159.50	98.70
CNT 161	July 01	24,340	782.55	668.95	523.48	161.86	126.66	24,169.50	777.07	678.65	527.36	165.70	128.76
CNT 162	July 02	25,363	815.44	710.28	579.19	234.08	190.88	25,360.90	815.37	710.30	579.16	234.50	191.20
CNT 163	July 02	24,177	777.31	728.12	565.97	225.11	174.98	24,178.10	777.34	728.20	566.06	225.40	175.21
CNT 164	July 02	23,680	761.33	726.83	553.35	226.45	172.40	23,645.60	760.22	727.40	552.99	224.70	170.82
CNT 165	July 10	23,697	761.88	705.74	537.69	162.79	124.03	23,563.60	757.59	711.50	539.02	166.30	125.99
CNT 166	July 13	18,322	589.07	756.79	445.80	194.06	114.31	18,266.10	587.27	757.10	444.62	193.70	113.75
CNT 167	July 13	19,736	634.53	738.08	468.33	177.78	112.80	19,637.10	631.35	739.50	466.88	176.30	111.31
CNT 168	July 21	19,467	625.88	702.70	439.80	186.83	116.93	19,363.00	622.53	708.20	440.88	187.60	116.79
CNT 169	July 25	30,044	965.94	679.03	655.90	184.13	177.86	29,849.80	959.69	682.40	654.89	189.70	182.05
CNT 170	Aug 01	17,095	549.62	713.16	391.96	189.45	104.12	17,009.20	546.86	714.70	390.84	189.20	103.47
CNT 171	Aug 02	26,884	864.34	727.83	629.09	219.74	189.93	26,834.70	862.75	729.90	629.72	219.30	189.20
CNT 172	Aug 02	25,738	827.50	720.07	595.85	224.65	185.90	25,681.40	825.68	722.30	596.39	227.80	188.09
CNT 173	Aug 02	27,586	886.91	733.94	650.94	211.86	187.90	27,541.90	885.49	734.30	650.22	215.10	190.47
CNT 174	Aug 09	20,731	666.52	735.87	490.47	176.08	117.36	20,615.50	662.80	739.80	490.34	177.80	117.85
CNT 175	Aug 18	31,645	1017.41	693.72	705.79	218.37	222.17	31,557.00	1014.58	694.40	704.52	216.00	219.15
CNT 176	Aug 21	20,463	657.90	704.24	463.32	184.04	121.08	20,370.80	654.94	709.00	464.35	180.50	118.22
CNT 177	Aug 27	16,270	523.09	697.88	365.05	183.40	95.93	16,189.10	520.49	701.80	365.28	185.90	96.76
CNT 178	Sep 03	16,166	519.75	679.42	353.13	187.87	97.65	16,045.70	515.88	682.10	351.88	192.80	99.46
CNT 179	Sep 03	26,088	838.75	702.22	588.98	220.77	185.17	26,038.10	837.14	717.40	600.57	238.10	199.32
CNT 180	Sep 03	36,657	1178.55	725.58	855.13	230.79	271.99	36,619.50	1177.34	724.80	853.34	231.60	272.67
CNT 181	Sep 03	29,259	940.70	718.34	675.74	230.77	217.08	29,243.30	940.19	725.70	682.30	224.50	211.07
CNT 182	Sep 10	18,668	600.19	796.10	477.81	134.92	80.98	18,587.10	597.59	793.30	474.07	137.00	81.87
CNT 183	Sep 17	24,265	780.14	739.00	576.52	145.96	113.86	24,258.00	779.91	746.90	582.52	143.70	112.07
CNT 184	Sep 24	21,928	705.00	710.05	500.58	153.97	108.55	21,716.70	698.21	719.10	502.08	154.40	107.80

1996 GOLD PRODUCTION

Mine

Johnson Matthey

Bar No.	Date	Weight grams	Weight ozs.	Reported Au Fine	Reported Au Cont	Reported Ag Fine	Reported Ag Cont	Weight grams	Weight ozs.	Au Fine	Au Cont	Ag Fine	Ag Cont
CNT 185	Oct 02	28,233	907.71	688.74	625.18	275.03	249.65	28,180.90	906.04	691.10	626.16	276.70	250.70
CNT 186	Oct 02	25,895	832.54	700.76	583.41	254.23	211.66	25,853.70	831.22	702.20	583.68	258.30	214.70
CNT 187	Oct 02	27,256	876.30	718.80	629.88	218.30	191.29	27,197.10	874.41	720.30	629.83	219.90	192.28
CNT 188	Oct 02	25,592	822.80	719.78	592.23	217.00	178.54	25,540.20	821.14	721.10	592.12	219.90	180.57
CNT 189	Oct 02	13,912	447.28	769.51	344.19	138.95	62.15	13,866.20	445.81	770.40	343.45	140.40	62.59
CNT 190	Oct 02	14,855	477.60	745.44	356.02	154.17	73.63	14,789.70	475.50	748.10	355.72	154.90	73.65
CNT 191	Oct 11	16,174	520.01	776.54	403.80	143.97	74.86	16,063.10	516.44	790.50	408.25	140.30	72.46
CNT 192	Oct 18	17,567	564.79	752.19	424.83	149.31	84.33	17,501.60	562.69	752.90	423.65	152.60	85.87
CNT 193	Oct 24	15,247	490.20	774.87	379.84	144.37	70.77	15,171.40	487.77	776.10	378.56	147.30	71.85
CNT 194	Oct 31	23,863	767.21	734.29	563.36	191.63	147.02	23,764.30	764.04	736.10	562.41	197.20	150.67
CNT 195	Nov 02	29,330	942.98	653.91	616.63	304.75	287.37	29,259.80	940.72	654.60	615.80	311.70	293.22
CNT 196	Nov 02	27,722	891.28	646.18	575.93	314.42	280.24	27,621.00	888.04	646.70	574.29	319.60	283.82
CNT 197	Nov 03	27,504	884.27	655.14	579.33	307.43	271.85	27,452.70	882.62	656.20	579.18	311.20	274.67
CNT 198	Nov 03	19,280	619.87	661.85	410.26	298.69	185.15	19,246.30	618.78	662.50	409.94	304.00	188.11
CNT 199	Nov 06	12,901	414.78	807.89	335.09	99.73	41.37	12,864.00	413.59	809.90	334.96	100.50	41.57
CNT 200	Nov 13	22,129	711.46	711.21	506.00	144.65	102.91	22,041.00	708.63	716.80	507.95	139.60	98.93
CNT 201	Nov 21	16,021	515.09	709.23	365.31	132.19	68.09	15,942.40	512.56	712.80	365.35	134.60	68.99
CNT 202	Nov 27	15,917	511.74	721.57	369.26	149.75	76.63	15,798.30	507.93	728.00	369.77	151.10	76.75
CNT 203	Dec 2	16,156	519.43	789.93	410.31	125.44	65.16	16,062.30	516.41	784.60	405.18	127.60	65.89
CNT 204	Dec 4	26,386	848.33	619.74	525.75	339.37	287.89	26,332.70	846.62	619.90	524.82	343.80	291.07
CNT 205	Dec 4	24,203	778.14	630.79	490.84	324.67	252.64	24,110.10	775.16	631.50	489.51	327.40	253.79
CNT 206	Dec 4	26,741	859.74	625.73	537.96	335.82	288.72	26,696.10	858.30	627.50	538.58	341.50	293.11
CNT 207	Dec 4	23,225	746.70	631.74	471.72	323.78	241.77	23,153.60	744.40	632.70	470.99	329.10	244.98
CNT 208	Dec 4	23,804	765.32	614.66	470.41	343.97	263.25	23,783.10	764.64	616.80	471.63	348.10	266.17
CNT 209	Dec 4	23,236	747.05	626.34	467.91	331.41	247.58	23,183.20	745.36	628.70	468.61	337.10	251.26
CNT 210	Dec 4	16,976	545.79	633.49	345.75	327.30	178.63	16,968.10	545.54	634.80	346.31	333.30	181.83
CNT 211	Dec 11	16,054	516.15	730.73	377.16	155.32	80.17	15,982.30	513.84	736.20	378.29	156.90	80.62
CNT 212	Dec 15	16,517	531.03	702.20	372.89	174.88	92.87	16,340.60	525.36	700.20	367.86	170.40	89.52
CNT 213	Dec 19	13,537	435.22	660.41	287.43	152.98	66.58	13,361.30	429.58	664.90	285.62	156.80	67.36
CNT 214	Dec 19	28,170	905.69	627.81	568.60	331.14	299.91	28,222.30	907.37	629.50	571.19	341.40	309.78
CNT 215	Dec 24	24,427	785.35	622.35	488.76	336.31	264.12	24,418.50	785.07	620.20	486.90	343.60	269.75
CNT 216	Dec 26	16,492	530.23	641.98	340.40	180.61	95.76	16,316.40	524.58	646.60	339.20	172.40	90.44
CNT 217	Dec 30	12,942	416.09	724.47	301.45	172.30	71.69	12,936.00	415.90	722.30	300.41	174.20	72.45
CNT 218	Jan 03	16,484	529.97	710.29	376.44	187.59	98.41	16,421.60	527.97	710.80	375.28	187.50	98.99
CNT 219	Jan 03	27,744	891.99	578.86	516.33	374.39	333.95	27,702.50	890.66	578.80	515.51	379.90	338.36
CNT 220	Jan 03	27,409	881.22	571.25	503.67	387.25	341.25	27,318.30	878.30	569.50	500.19	394.30	346.31
CNT 221	Jan 03	27,082	870.71	585.36	509.67	370.33	322.45	27,022.50	868.79	585.50	508.68	374.10	325.02
CNT 222	Jan 03	23,735	763.10	603.26	460.34	351.54	268.26	23,695.10	761.81	603.30	459.60	356.00	271.21
CNT 223	Jan 03	22,580	725.96	585.47	425.03	371.55	269.73	22,552.80	725.09	585.50	424.54	375.50	272.27
		2,803,495	90,134.39		60,561.64		21,824.61	2,793,118	89,800.76		60,586.89		21,881.89

1997 GOLD PRODUCTION

Johnson Matthey

Mine				Johnson Matthey									
Bar No.	Date	Weight grams	Weight ozs.	Reported Au Fine	Reported Au Cont	Reported Ag Fine	Reported Ag Cont	Weight grams	Weight ozs.	Au Fine	Au Cont	Ag Fine	Ag Cont
CNT 224	Jan 05	19,833	637.65	598.58	381.68	244.25	155.74	19,676.50	632.61	604.10	382.16	245.00	154.99
CNT 225	Jan 09	22,098	710.47	606.21	430.69	228.19	162.12	21,870.50	703.15	610.50	429.27	223.90	157.44
CNT 226	Jan 12	9,929	319.22	699.50	223.30	166.29	53.08	9,877.00	317.55	717.20	227.75	152.80	48.52
CNT 227	Jan 14	25,489	819.49	517.48	424.07	439.27	359.98	25,408.60	816.90	521.55	426.06	445.20	363.69
CNT 228	Jan 17	14,648	470.94	703.20	331.17	170.39	80.25	14,590.90	469.11	709.50	332.83	164.10	76.98
CNT 229	Jan 20	23,153	744.39	532.93	396.71	413.91	308.11	23,103.30	742.79	532.20	395.31	416.90	309.67
CNT 230	Jan 24	21,482	690.66	652.03	450.33	205.22	141.74	21,170.10	680.63	665.20	452.76	210.50	143.27
CNT 231	Jan 28	17,642	567.20	577.00	327.27	190.48	108.04	17,118.90	550.39	582.60	320.65	188.60	103.80
CNT 232	Jan 29	26,923	865.59	543.14	470.14	410.83	355.61	26,863.20	863.67	544.20	470.01	422.10	364.56
CNT 233	Jan 29	29,664	953.72	539.58	514.61	421.98	402.45	29,651.70	953.32	541.90	516.61	431.20	411.07
CNT 234	Feb 03	27,239	875.75	541.22	473.98	406.30	355.82	27,206.80	874.72	541.90	474.01	410.50	359.07
CNT 235	Feb 03	29,709	955.17	540.12	515.90	407.31	389.04	29,677.20	954.14	540.20	515.43	413.40	394.44
CNT 236	Feb 03	28,836	927.10	548.11	508.15	403.54	374.12	28,759.30	924.63	548.50	507.16	408.90	378.08
CNT 237	Feb 03	20,488	658.70	529.41	348.72	170.06	112.02	20,403.20	655.98	535.10	351.01	172.20	112.96
CNT 238	Feb 09	14,393	462.75	602.81	278.95	177.65	82.21	14,308.50	460.03	601.30	276.62	173.10	79.63
CNT 239	Feb 13	16,477	529.75	524.81	278.02	431.20	228.43	16,415.90	527.78	526.30	277.77	436.60	230.43
CNT 240	Feb 13	12,137	390.21	659.69	257.42	176.38	68.83	12,069.40	388.04	664.40	257.81	176.90	68.64
CNT 241	Feb 20	15,329	492.84	659.59	325.07	194.16	95.69	15,252.00	490.36	663.80	325.50	190.00	93.17
CNT 242	Feb 27	28,588	919.12	577.28	530.59	382.42	351.49	28,544.40	917.72	577.50	325.99	386.20	354.42
CNT 243	Feb 27	14,198	456.48	672.19	306.84	165.42	75.51	14,104.70	453.48	680.30	308.50	169.80	77.00
CNT 244	Mar 03	13,249	425.96	591.15	251.81	196.17	83.56	13,155.10	422.95	598.30	253.05	190.20	80.44
CNT 245	Mar 04	23,841	766.51	589.71	452.02	357.97	274.38	23,815.50	765.69	590.00	451.75	361.80	277.03
CNT 246	Mar 09	18,470	593.82	604.17	358.77	178.37	105.92	18,188.00	584.76	609.20	356.23	181.90	106.37
CNT 247	Mar 13	15,644	502.97	698.66	351.40	141.97	71.41	15,551.80	500.00	708.00	354.00	142.60	71.30
CNT 248	Mar 20	15,186	488.24	660.05	322.26	163.67	79.91	14,894.60	478.87	662.50	317.25	163.60	78.34
CNT 249	Mar 20	29,522	949.15	623.84	592.12	323.41	306.97	29,494.70	948.28	623.90	591.63	330.40	313.31
CNT 250	Mar 27	13,925	447.70	759.05	339.82	138.91	62.19	13,843.90	445.09	761.54	338.95	136.60	60.80
CNT 251	Mar 31	25,994	835.73	597.79	499.59	328.93	274.90	25,947.70	834.24	598.20	499.04	337.10	281.22
CNT 252	Mar 31	20,104	646.36	613.06	396.26	325.38	210.31	20,077.90	645.52	613.40	395.96	333.50	215.28
CNT 253	Apr 02	12,568	404.07	594.48	240.21	311.55	125.89	12,537.70	403.10	596.00	240.25	317.30	127.90
CNT 254	Apr 08	13,794	443.49	698.26	309.67	138.07	61.23	13,676.50	439.71	704.40	309.73	143.80	63.23
CNT 255	Apr 17	17,662	567.85	652.29	370.40	151.71	86.15	17,332.90	557.27	667.10	371.75	149.20	83.14
CNT 256	Apr 22	13,043	419.34	715.53	300.05	152.49	63.95	12,941.80	416.09	718.40	298.92	153.70	63.95
CNT 257	Apr 27	26,944	866.27	634.21	549.39	317.04	274.65	26,900.40	864.87	636.10	550.14	325.30	281.34
CNT 258	Apr 30	18,826	605.27	649.29	393.00	302.54	183.12	18,803.60	604.55	650.70	393.38	306.80	185.48
CNT 259	May 02	21,324	685.58	665.93	456.55	272.83	187.05	21,305.00	684.97	665.70	455.99	277.90	190.35
CNT 260	May 02	20,907	672.18	670.54	450.72	282.57	189.94	20,877.10	671.21	670.30	449.91	285.70	191.77
CNT 261	May 02	18,624	598.78	661.44	396.05	177.20	106.10	18,517.80	595.36	668.40	397.94	183.30	109.13
CNT 262	May 02	18,896	607.52	642.84	390.54	174.90	106.25	18,799.30	604.41	647.30	391.24	187.00	113.02
CNT 263	May 10	19,509	627.23	656.11	411.53	188.39	118.16	19,393.40	623.51	664.30	414.20	192.20	119.84
CNT 264	May 15	21,166	680.50	686.28	467.01	233.86	159.14	21,087.30	677.97	689.20	467.26	240.20	162.85

1997 GOLD PRODUCTION

Bar No.	Date	Mine				Johnson Matthey									
		Weight grams	Weight ozs.	Reported Au Fine	Reported Au Cont	Reported Ag Fine	Reported Ag Cont	Weight grams	Weight ozs.	Au Fine	Au Cont	Ag Fine	Ag Cont		
CNT 265	May 18	23,274	748.28	690.11	516.39	202.15	151.26	23,106.70	742.90	691.60	513.79	203.90	151.48		
CNT 266	May 23	19,969	642.02	656.91	421.75	228.34	146.60	19,899.80	639.79	658.40	421.24	232.90	149.01		
CNT 267	May 24	18,538	596.01	628.95	374.86	259.02	154.38	18,494.00	594.60	628.50	373.70	266.20	158.28		
CNT 268	May 24	16,937	544.54	691.36	376.47	246.01	133.96	16,910.20	543.68	691.30	375.84	247.60	134.61		
CNT 269	May 28	14,577	468.66	632.27	296.32	233.91	109.62	14,520.90	466.86	635.30	296.59	231.80	108.22		
CNT 270	June 02	12,959	416.64	758.14	315.87	127.36	53.06	12,915.10	415.23	758.30	314.87	125.60	52.15		
CNT 271	June 02	29,235	939.93	654.19	614.89	271.47	255.16	29,197.50	938.72	654.70	614.58	274.90	258.05		
CNT 272	June 02	25,855	831.26	674.96	561.06	272.62	226.61	25,803.20	829.59	675.50	560.39	276.80	229.63		
CNT 273	June 10	17,103	549.87	710.04	390.43	161.82	88.98	16,987.50	546.16	710.90	388.27	159.20	86.95		
CNT 274	June 18	16,877	542.61	757.94	411.26	158.54	86.02	16,803.50	540.24	760.60	410.91	158.90	85.84		
CNT 275	June 18	27,585	886.88	705.25	625.47	241.64	214.31	27,543.30	885.54	705.20	624.48	241.10	213.50		
CNT 276	June 24	16,173	519.97	754.94	392.55	158.65	82.49	16,044.10	515.83	753.30	388.57	163.30	84.23		
CNT 277	June 29	25,987	835.50	707.32	590.97	227.12	189.76	25,906.20	832.90	707.70	589.45	226.70	188.82		
CNT 278	July 03	19,652	631.83	649.11	410.12	219.71	138.82	19,525.70	627.77	656.20	411.94	223.00	139.99		
CNT 279	July 03	10,405	334.53	731.04	244.55	168.74	56.45	10,337.00	332.34	733.00	243.61	168.40	55.97		
CNT 280	July 03	19,742	634.72	689.19	437.44	225.60	143.19	19,755.80	635.16	688.90	437.56	228.30	145.01		
CNT 281	July 03	19,920	640.44	697.94	446.99	231.31	148.14	19,815.80	637.09	699.20	445.45	234.00	149.08		
CNT 282	July 03	21,225	682.40	699.87	477.59	226.59	154.63	21,159.70	680.30	700.70	476.69	227.00	154.43		
CNT 283	July 16	25,173	809.33	668.67	541.17	219.01	177.25	25,029.70	804.72	669.80	539.00	218.40	175.75		
CNT 284	July 26	25,053	805.47	726.69	585.33	223.95	180.38	24,970.40	802.82	727.80	584.29	227.40	182.56		
CNT 285	July 27	18,011	579.07	656.95	380.42	218.30	126.41	17,941.10	576.82	661.00	381.28	216.00	124.59		
CNT 286	July 27	15,657	503.38	686.05	345.35	181.17	91.20	15,600.20	501.56	689.50	345.82	181.50	91.03		
CNT 287	Aug 02	20,233	650.51	707.62	460.31	171.33	111.45	20,163.20	648.26	707.40	458.58	173.50	112.47		
CNT 288	Aug 04	19,033	611.92	745.35	456.10	201.94	123.57	19,013.70	611.30	744.20	454.93	204.90	125.26		
CNT 289	Aug 04	27,061	870.03	746.69	649.65	202.29	176.00	27,031.20	869.07	747.20	649.37	203.80	177.12		
CNT 290	Aug 09	16,656	535.50	770.84	412.79	155.61	83.33	16,567.70	532.66	772.10	411.27	156.60	83.42		
CNT 291	Aug 13	17,434	560.52	774.49	434.12	144.06	80.75	17,340.60	557.51	781.10	435.47	143.10	79.78		
CNT 292	Aug 22	24,112	775.22	815.05	631.84	141.49	109.69	24,046.20	773.10	813.20	628.69	144.70	111.87		
CNT 293	Aug 22	26,304	845.69	678.96	574.19	201.30	170.24	26,203.20	842.45	681.10	573.79	204.60	172.37		
CNT 294	Aug 26	15,198	488.63	767.66	375.10	148.70	72.66	15,164.50	487.55	768.60	374.73	150.40	73.33		
CNT 295	Aug 26	20,847	670.25	659.09	441.75	204.35	136.96	20,777.00	668.00	660.50	441.21	207.70	138.74		
CNT 296	Sept 04	23,855	766.96	760.51	583.28	193.77	148.61	23,761.90	763.96	761.90	582.06	194.90	148.90		
CNT 297	Sept 04	23,690	761.65	657.09	500.47	192.65	146.73	23,598.60	758.71	669.00	507.58	190.40	144.46		
CNT 298	Sept 05	21,676	696.90	766.42	534.12	182.25	127.01	21,653.70	696.18	765.80	533.14	185.40	129.07		
CNT 299	Sept 05	9,472	304.53	789.96	240.57	166.98	50.85	9,451.70	303.88	790.50	240.22	169.30	51.45		
CNT 300	Sept 10	24,768	796.31	655.60	522.06	201.99	160.85	24,655.10	792.68	661.20	524.12	202.20	160.28		
CNT 301	Sept 16	22,292	716.70	683.28	489.71	190.74	136.71	22,189.40	713.41	688.80	491.39	187.80	133.98		
CNT 302	Sept 18	18,994	610.67	673.37	411.21	244.34	149.21	18,924.80	608.45	672.70	409.30	241.80	147.12		
CNT 303	Sept 18	14,937	480.24	706.52	339.29	244.86	117.59	14,902.20	479.12	707.20	338.83	246.00	117.86		
CNT 304	Sept 18	16,413	527.69	718.61	379.21	184.17	97.19	16,347.80	525.59	719.40	378.11	185.50	97.50		

1997 GOLD PRODUCTION

Johnson Matthey													
Bar No.	Date	Mine				Weight				Weight			
		grams	ozs.	Reported	Reported	grams	ozs.	Au Fine	Au Cont	grams	ozs.	Au Fine	Au Cont
CNT 305	Sept 23	23,778	764.48	706.35	539.99	193.83	148.18	23,591.90	758.50	711.60	539.75	193.70	146.92
CNT 306	Sept 29	20,887	671.53	723.52	485.87	171.36	115.08	20,835.20	669.87	727.10	487.06	175.40	117.49
CNT 307	Oct 01	18,626	598.84	744.58	445.88	153.22	91.76	18,589.30	597.66	744.20	444.78	156.10	93.29
CNT 308	Oct 03	24,239	779.30	750.67	585.00	197.42	153.85	24,176.60	777.30	751.10	583.83	200.80	156.08
CNT 309	Oct 04	25,564	821.90	741.85	609.73	208.84	171.65	25,509.00	820.13	742.10	608.62	211.00	173.05
CNT 310	Oct 04 *	25,322	814.12	744.63	606.22	208.82	170.01	25,317.60	813.98	744.30	605.84	210.90	171.67
CNT 311	Oct 04	11,218	360.67	668.58	241.13	205.01	73.94	11,149.90	358.48	670.80	240.47	208.10	74.60
CNT 312	Oct 09	15,801	508.01	763.79	388.02	136.44	69.31	15,745.20	506.22	765.60	387.56	135.10	68.39
CNT 313	Oct 09	20,115	646.71	688.08	444.99	173.69	112.33	20,013.10	643.44	693.80	446.42	173.50	111.64
CNT 314	Oct 12	20,312	653.05	721.27	471.02	160.28	104.67	20,210.70	649.79	724.50	470.77	160.20	104.10
CNT 315	Oct 17	19,140	615.36	684.52	421.23	165.46	101.82	19,016.50	611.39	696.60	425.90	167.30	102.29
CNT 316	Oct 18	25,994	835.73	657.78	549.72	277.58	231.98	25,648.40	824.61	656.40	541.28	280.60	231.39
CNT 317	Oct 20	10,830	348.19	846.26	294.66	93.05	32.40	10,754.00	345.75	844.40	291.95	95.70	33.09
CNT 318	Oct 24	20,719	666.13	738.11	491.68	156.02	103.93	20,636.70	663.48	739.90	490.91	152.50	101.18
CNT 319	Oct 30	13,080	420.53	676.82	284.62	260.47	109.53	13,057.40	419.80	676.80	284.12	258.60	108.56
CNT 320	Oct 30	21,858	702.75	702.75	493.86	151.28	106.31	21,776.70	700.14	696.40	487.58	145.50	101.87
CNT 321	Nov 03	16,783	539.59	655.56	353.73	221.34	119.43	16,661.90	535.69	662.30	354.79	225.50	120.80
CNT 322	Nov 03	20,164	648.29	678.55	439.90	278.43	180.50	20,106.60	646.44	679.00	438.93	284.10	183.65
CNT 323	Nov 03	17,731	570.06	679.06	387.11	276.73	157.75	17,705.90	569.26	679.50	386.81	282.30	160.70
CNT 324	Nov 08	22,198	713.68	681.41	486.31	186.98	133.45	22,095.60	710.39	687.30	488.25	185.40	131.71
CNT 325	Nov 13	27,617	887.91	691.16	613.68	193.06	171.42	27,513.40	884.58	696.70	616.28	196.70	174.00
CNT 326	Nov 16	20,218	650.02	700.39	455.27	176.59	114.79	20,091.70	645.96	707.70	457.15	180.40	116.53
CNT 327	Nov 18	28,366	911.99	658.12	600.20	296.94	270.80	28,296.40	909.75	658.90	599.43	302.10	274.84
CNT 328	Nov 22	30,444	978.80	694.67	679.94	202.44	198.15	30,114.50	968.20	694.90	672.80	203.80	197.32
CNT 329	Nov 27	24,062	773.61	722.10	558.62	169.65	131.24	23,963.80	770.45	728.70	561.43	167.30	128.90
CNT 330	Nov 28	22,653	728.31	674.42	491.19	277.76	202.30	22,627.50	727.49	674.50	490.69	281.30	204.64
CNT 331	Dec 01	21,690	697.35	721.89	503.41	156.62	109.22	21,602.70	694.54	729.10	506.39	156.50	108.70
CNT 332	Dec 03	21,007	675.39	660.64	446.19	301.74	203.79	20,972.20	674.27	660.70	445.49	306.10	206.39
CNT 333	Dec 03	19,968	641.99	636.00	408.30	321.15	206.17	19,945.20	641.25	635.90	407.77	325.00	208.41
CNT 334	Dec 03	16,635	534.83	663.84	355.04	193.38	103.43	16,591.20	533.42	663.70	354.03	192.70	102.79
CNT 335	Dec 07	20,963	673.98	715.85	482.47	161.17	108.63	20,876.80	671.20	721.20	484.07	159.60	107.12
CNT 336	Dec 14	20,994	674.97	712.47	480.90	155.36	104.87	20,890.70	671.65	721.60	484.66	150.50	101.08
CNT 337	Dec 25	22,236	714.90	731.22	522.75	163.51	116.90	22,171.00	712.81	736.70	525.13	159.30	113.55
CNT 338	Dec 25	32,541	1046.22	628.72	657.78	331.53	346.86	32,481.10	1044.29	629.90	657.80	335.30	350.15
CNT 339	Dec 27	21,840	702.17	721.32	506.49	164.74	115.68	21,792.40	700.64	728.70	510.56	166.30	116.52
CNT 340	Jan 01	15,944	512.61	732.15	375.31	170.13	87.21	15,865.20	510.08	735.30	375.06	169.50	86.46
CNT 341	Jan 02	10,406	334.56	729.32	244.00	161.39	53.99	10,370.50	333.42	736.10	245.43	158.40	52.81
CNT 342	Jan 04	22,190	713.42	652.43	465.46	297.01	211.89	22,173.90	712.91	652.70	465.31	300.80	214.44
CNT 343	Jan 04	22,476	722.62	634.61	458.58	298.96	216.04	22,442.20	721.53	634.60	457.88	302.50	218.26
		2,436,944	78,349.51		52,592.03		18,260.76		78,018.70		52,569.92		18,357.48

Bar 310 previously reported as 23,522 grams 43.1 ounces additional

1998 GOLD PRODUCTION

Mine				Johnson Matthey									
Bar No.	Date	Weight grams	Weight ozs.	Reported		Reported		Weight grams	Weight ozs.	Au		Ag	
				Au Fine	Au Cont	Ag Fine	Ag Cont			Fine	Cont	Fine	Cont
CNT 344	Jan 10	19,602	630.22	714.92	450.56	184.82	116.48	19,532.90	628.00	723.1	454.10	183.7	115.36
CNT 345	Jan 12	26,453	850.48	658.96	560.43	187.10	159.13	26,315.40	846.06	676.4	572.27	190.2	160.92
CNT 346	Jan 16	20,345	654.11	573.23	374.96	366.75	239.89	20,333.10	653.72	573.20	374.71	373.50	244.17
CNT 347	Jan 19	30,168	969.92	604.74	586.55	169.63	164.53	30,042.90	965.90	607.70	586.98	165.40	159.76
CNT 348	Jan 24	28,981	931.76	655.08	610.38	200.26	186.60	28,855.40	927.72	662.10	614.24	195.80	181.65
CNT 349	Jan 29	25,206	810.39	629.76	510.35	163.71	132.67	25,032.40	804.81	631.20	508.00	166.80	134.24
CNT 350	Jan 29	19,305	620.67	593.77	368.54	340.23	211.17	19,280.90	619.89	593.60	367.97	348.30	215.91
CNT 351	Feb 02	25,259	812.10	686.06	557.14	161.28	130.98	24,967.50	802.72	697.50	559.90	158.70	127.39
CNT 352	Feb 04	21,926	704.94	589.31	415.43	359.45	253.39	21,886.90	703.68	589.50	414.82	366.80	258.11
CNT 353	Feb 04	21,308	685.07	561.82	384.88	322.86	221.18	21,163.50	680.42	569.60	387.57	332.00	225.90
CNT 354	Feb 08	29,303	942.11	596.18	561.67	165.03	155.48	29,078.80	934.90	603.10	563.84	165.50	154.73
CNT 355	Feb 12	23,760	763.90	632.14	482.89	155.11	118.49	23,599.30	758.73	655.50	497.35	151.10	114.64
CNT 356	Feb 19	30,456	979.18	591.83	579.51	371.84	364.10	30,427.00	978.25	591.70	578.83	378.20	369.97
CNT 357	Feb 23	25,826	830.32	663.90	551.25	181.14	150.40	25,610.40	823.39	674.80	555.63	184.20	151.67
CNT 358	Feb 27	18,755	602.99	670.99	404.60	188.82	113.86	18,645.90	599.48	688.90	412.98	190.70	114.32
CNT 359	Mar 02	15,825	508.79	659.87	335.73	171.27	87.14	15,737.90	505.98	685.00	346.60	173.70	87.89
CNT 360	Mar 02	21,024	675.94	700.62	473.57	180.04	121.69	20,957.10	673.79	709.20	477.85	178.80	120.47
CNT 361	Mar 02	30,734	988.12	610.84	603.59	340.94	336.89	30,716.90	987.57	611.60	604.00	344.40	340.12
CNT 362	Mar 06	24,211	778.40	627.84	488.71	197.68	153.87	23,975.50	770.83	642.70	495.41	201.70	155.48
CNT 363	Mar 11	25,090	806.66	620.11	500.22	193.55	156.13	24,909.10	800.85	625.70	501.09	193.60	155.04
CNT 364	Mar 18	24,099	774.80	558.45	432.68	192.60	149.23	23,748.60	763.53	556.60	424.98	195.00	148.89
CNT 365	Mar 19	30,150	969.34	571.17	553.66	389.06	377.13	30,140.80	969.05	571.10	553.42	398.20	385.88
CNT 366	Mar 19	23,782	764.61	587.96	449.56	196.34	150.12	23,641.20	760.08	595.20	452.40	199.20	151.41
CNT 367	Mar 23	25,925	833.51	537.69	448.17	196.54	163.81	25,709.20	826.57	539.70	446.10	201.30	166.39
CNT 368	Mar 31	24,792	797.08	599.89	478.16	187.73	149.64	24,673.70	793.28	600.30	476.20	197.30	156.51
CNT 369	Apr 02	21,724	698.44	612.43	427.75	176.43	123.22	21,595.60	694.31	619.10	429.85	175.60	121.92
CNT 370	Apr 03	25,072	806.08	514.09	414.40	316.33	254.99	24,881.90	799.97	517.70	414.15	318.80	255.03
CNT 371	Apr 03	27,806	893.98	581.35	519.72	384.68	343.90	27,787.70	893.39	581.40	519.42	389.40	347.89
CNT 372	Apr 04	24,014	772.07	575.09	444.01	386.31	298.26	24,014.90	772.10	574.70	443.72	392.10	302.74
CNT 373	Apr 04	14,146	454.80	595.46	270.82	367.83	167.29	14,133.20	454.39	597.00	271.27	366.70	166.63
CNT 374	Apr 07	27,925	897.81	639.82	574.44	161.20	144.73	27,696.40	890.46	647.90	576.93	164.50	146.48
CNT 375	Apr 11	28,664	921.57	621.11	572.39	166.20	153.17	28,476.10	915.53	628.70	575.59	162.60	148.86
CNT 376	Apr 15	23,959	770.30	652.65	502.74	159.62	122.96	23,817.40	765.75	658.00	503.86	163.10	124.89
CNT 377	Apr 22	25,839	830.74	663.06	550.83	157.14	130.54	25,681.50	825.68	673.20	555.85	155.30	128.23
CNT 378	Apr 22	25,194	810.01	563.73	456.62	401.17	324.95	25,159.70	808.90	563.90	456.14	408.00	330.03
CNT 379	Apr 22	25,221	810.87	579.94	470.26	335.41	271.97	24,947.40	802.08	584.30	468.65	341.80	274.15
CNT 380	Apr 29	25,417	817.17	663.53	542.22	155.75	127.28	25,253.70	811.92	670.30	544.23	153.50	124.63
CNT 381	May 02	24,694	793.93	602.83	478.61	166.59	132.26	24,399.80	784.47	616.55	483.67	163.90	128.57
CNT 382	May 05	17,332	557.24	601.61	335.24	359.94	200.57	17,283.70	555.68	602.30	334.69	366.40	203.60
CNT 383	May 05	17,318	556.79	608.16	338.61	352.66	196.36	17,355.70	558.00	607.50	338.98	356.80	199.09
CNT 384	May 05	23,042	740.82	560.05	414.90	303.14	224.57	22,845.90	734.51	561.60	412.50	307.90	226.16

1998 GOLD PRODUCTION

Bar No.	Date	Mine				Johnson Matthey							
		Weight grams	Weight ozs.	Reported Au Fine	Reported Au Cont	Reported Ag Fine	Reported Ag Cont	Weight grams	Weight ozs.	Au Fine	Au Cont	Ag Fine	Ag Cont
CNT 385	May 06	26,374	847.94	582.46	493.89	159.41	135.17	26,215.90	842.86	594.80	501.33	159.30	134.27
CNT 386	May 11	28,234	907.74	591.58	537.00	178.40	161.94	28,002.80	900.31	598.80	539.11	174.10	156.74
CNT 387	May 14	24,218	778.63	642.54	500.30	212.26	165.27	24,062.50	773.63	643.20	497.60	194.20	150.24
CNT 388	May 20	21,686	697.22	667.67	465.52	158.14	110.26	21,529.50	692.19	676.05	467.95	158.10	109.44
CNT 389	May 25	23,523	756.28	612.38	463.13	190.45	144.04	23,419.60	752.96	618.60	465.78	195.70	147.35
CNT 390	May 28	26,835	862.76	604.21	521.29	189.96	163.89	26,755.40	860.21	608.60	523.52	190.20	163.61
CNT 391	June 02	27,942	898.36	588.18	528.39	203.39	182.72	27,678.50	889.88	600.60	534.46	204.60	182.07
CNT 392	June 03	29,510	948.77	618.39	586.71	289.70	274.86	29,453.30	946.94	620.50	587.58	295.50	279.82
CNT 393	June 03	33,292	1070.36	607.82	650.59	284.60	304.62	33,219.20	1068.02	609.80	651.28	290.20	309.94
CNT 394	June 15	19,959	641.70	748.19	480.11	158.06	101.43	19,896.10	639.67	751.10	480.46	158.80	101.58
CNT 395	June 15	25,196	810.07	790.46	640.33	163.71	132.62	25,149.40	808.57	790.60	639.26	165.60	133.90
CNT 396	June 24	17,094	549.58	821.84	451.67	153.36	84.29	17,065.00	548.65	821.90	450.94	152.20	83.50
CNT 397	June 25	11,060	355.59	654.35	232.68	267.02	94.95	11,008.80	353.94	657.30	232.65	268.40	95.00
CNT 398	June 28	31,986	1028.37	602.11	619.19	347.39	357.25	31,915.30	1026.10	602.80	618.53	352.00	361.19
CNT 399	July 15	23,580	758.11	537.40	407.41	406.50	308.17	23,490.20	755.23	537.40	405.86	406.50	307.00
CNT 400	July 15	23,464	754.38	494.00	372.67	425.10	320.69	23,426.20	753.17	494.00	372.07	425.10	320.17
		1,383,605	44,483.90		27,427.60		10,823.16		44,258.70		27,525.13		10,861.56

* Johnson Matthey gold and silver fineness is the same as reported as lab has been decommissioned
Bars No. 394 to 400 have not been check assayed as the lab has been decommissioned

PROJECT GOLD PRODUCTION

Bar No.	Date	Mine				Johnson Matthey							
		Weight grams	Weight ozs.	Reported Au Fine	Reported Ag Cont	Reported Au Fine	Reported Ag Cont	Weight grams	Weight ozs.	Au Fine	Au Cont	Ag Fine	Ag Cont
CNT 1	Jan 17 95	15,642	502.90	799.66	402.15	159.60	80.26	15613.70	501.99	799.70	401.44	150.87	75.74
CNT 2	Jan 26	33,484	1076.53	712.73	767.28	241.22	259.68	33407.50	1074.08	707.60	760.02	243.05	261.05
CNT 3	Feb 8	31,184	1002.59	699.79	701.60	232.31	232.91	31131.37	1000.90	696.20	696.82	253.51	253.74
CNT 4	Feb 22	27,901	897.04	648.70	581.91	280.54	251.66	27815.58	894.29	643.90	575.83	289.76	259.13
CNT 5	Mar 6	21,938	705.32	714.89	504.23	229.23	161.68	21910.10	704.43	712.10	501.62	233.87	164.74
CNT 6	Mar 6	26,184	841.83	619.66	521.65	304.41	256.26	26000.80	835.94	614.20	513.44	321.82	269.02
CNT 7	Mar 13	0	0.00	690.40	0.00	249.80	0.00		0.00		0.00		0.00
CNT 8	Mar 13	44,902	1443.63	650.69	939.36	278.78	402.45	44871.50	1442.65	642.50	926.90	285.78	412.28
CNT 9	Mar 20	0	0.00	625.29	0.00	294.65	0.00		0.00		0.00		0.00
CNT 10	Mar 20	43,870	1410.45	646.61	912.01	268.66	378.93	43763.96	1407.04	639.10	899.24	290.50	408.75
CNT 11	Mar 27	20,150	647.84	669.98	434.04	227.06	147.10	20058.30	644.89	662.70	427.37	229.10	147.74
CNT 12	Mar 27	30,935	994.58	699.98	696.18	218.86	217.67	30902.30	993.53	693.40	688.91	230.60	229.11
CNT 13	Apr 3	15,372	494.22	790.30	390.58	164.71	81.40	15322.40	492.63	787.00	387.70	171.40	84.44
CNT 14	Apr 3	15,723	505.51	645.61	326.36	276.60	139.82	15661.70	503.53	644.10	324.33	286.80	144.41
CNT 15	Apr 3	24,911	800.91	652.24	522.38	274.22	219.62	24799.90	797.33	649.30	517.71	287.80	229.47
CNT 16	Apr 10	14,762	474.61	744.07	353.14	207.33	98.40	14720.70	473.28	740.60	350.51	213.30	100.95
CNT 17	Apr 10	26,920	865.50	665.63	576.10	279.43	241.84	26841.30	862.97	667.10	575.69	282.80	244.05
CNT 18	Apr 17	20,668	664.49	695.67	462.27	223.87	148.76	20594.00	662.11	695.90	460.76	245.90	162.81
CNT 19	Apr 17	15,394	494.93	688.28	340.65	215.18	106.50	15292.30	491.66	677.30	333.00	212.50	104.48
CNT 20	Apr 17	18,661	599.96	698.13	418.85	235.82	141.48	18581.10	597.40	690.70	412.62	248.30	148.33
CNT 21	Apr 23	15,033	483.32	751.97	363.44	197.46	95.44	14973.40	481.41	748.50	360.33	202.50	97.48
CNT 22	Apr 23	22,766	731.94	675.14	494.16	258.65	189.31	22638.60	727.85	671.80	488.97	269.70	196.30
CNT 23	Apr 30	13,198	424.33	718.47	304.87	211.59	89.78	13139.70	422.45	719.50	303.95	211.90	89.52
CNT 24	Apr 30	20,818	669.31	669.31	447.98	272.10	182.12	20785.50	668.27	669.10	447.14	278.30	185.98
CNT 25	May 06	18,288	587.97	757.10	445.16	180.45	106.10	18262.60	587.16	757.20	444.59	178.30	104.69
CNT 26	May 07	15,410	495.44	683.78	338.77	240.08	118.95	15393.40	494.91	689.50	341.24	241.30	119.42
CNT 27	May 14	15,707	504.99	727.17	367.22	220.00	111.10	15699.30	504.74	722.40	364.63	228.80	115.49
CNT 28	MAY 20	21,598	694.39	712.16	494.52	246.43	171.12	21550.60	692.87	713.60	494.43	242.90	168.30
CNT 29	MAY 20	25,266	812.32	682.49	554.40	268.79	218.34	25171.80	809.29	682.50	552.34	266.40	215.60
CNT 30	MAY 21	32,874	1056.92	672.88	711.18	268.46	283.75	32830.20	1055.51	672.90	710.26	270.20	285.20
CNT 31	May 31	18,411	591.93	660.94	391.23	291.41	172.49	18368.10	590.55	665.10	392.77	288.50	170.37
CNT 32	May 31	24,274	780.43	762.48	595.06	216.88	169.26	24228.50	778.96	773.70	602.68	196.10	152.75
CNT 33	June 2	20,431	656.87	705.91	463.69	245.71	161.40	20331.80	653.68	703.60	459.93	238.20	155.71
CNT 34	June 10	21,624	695.23	739.59	514.19	230.45	160.22	21579.00	693.78	740.00	513.40	230.70	160.06
CNT 35	June 15	27,769	892.79	758.66	677.33	185.11	165.26	27749.80	892.18	757.90	676.18	175.70	156.76
CNT 36	June 18	14,505	466.35	703.05	327.87	274.43	127.98	14453.20	464.68	702.80	326.58	279.50	129.88
CNT 37	June 18	19,337	621.70	712.49	442.96	266.96	165.97	19312.30	620.90	714.90	443.88	266.90	165.72
CNT 38	June 20	29,609	951.95	731.72	696.56	195.97	186.56	29551.10	950.09	731.90	695.37	196.40	186.60
CNT 39	June 25	17,013	546.98	740.82	405.21	234.92	128.50	16979.80	545.91	740.50	404.25	235.50	128.56
CNT 40	July 2	12,088	388.64	756.94	294.18	218.47	84.90	11992.50	385.57	757.10	291.91	218.10	84.09
CNT 41	July 6	20,670	664.56	756.89	502.99	184.27	122.46	20442.50	657.24	758.20	498.32	178.50	117.32
CNT 42	July 6	19,529	627.87	741.16	465.35	192.87	121.09	19531.60	627.96	741.20	465.44	194.70	122.26
CNT 43	July 10	19,643	631.54	763.45	482.14	164.75	104.04	19589.90	629.83	763.60	480.94	164.60	103.67
CNT 44	July 15	17,377	558.68	805.16	449.83	178.73	99.85	17340.00	557.49	805.40	449.01	178.50	99.51
CNT 45	July 22	30,985	996.19	813.04	809.94	116.75	116.31	30951.50	995.11	813.10	809.13	117.70	117.12

PROJECT GOLD PRODUCTION

Bar No.	Date	Mine				Johnson Matthey							
		Weight grams	Weight ozs.	Reported Au Fine	Reported Au Cont	Reported Ag Fine	Reported Ag Cont	Weight grams	Weight ozs.	Au Fine	Au Cont	Ag Fine	Ag Cont
CNT 46	July 23	22,176	712.97	781.71	557.34	194.08	138.38	22140.30	711.83	782.70	557.15	194.10	138.17
CNT 47	Aug 02	24,913	800.97	801.36	641.86	180.72	144.75	24873.00	799.68	802.50	641.75	176.10	140.82
CNT 48	Aug 04	17,901	575.53	786.41	452.60	142.94	82.27	17873.50	574.65	787.10	452.30	140.90	80.97
CNT 49	Aug 04	16,981	545.95	820.59	448.00	118.34	64.61	16974.60	545.75	816.90	445.82	114.20	62.32
CNT 50	Aug 04	18,853	606.14	822.60	498.61	108.86	65.99	18840.30	605.73	810.10	490.70	122.40	74.14
CNT 51	Aug 07	19,149	615.65	777.13	478.44	215.30	132.55	19121.40	614.77	775.10	476.51	206.00	126.64
CNT 52	Aug 11	25,985	835.44	727.98	608.18	248.44	207.56	25870.00	831.74	728.00	605.51	247.40	205.77
CNT 53	Aug 15	41,274	1326.99	780.51	1035.73	107.83	143.09	41272.30	1326.93	780.30	1035.41	106.80	141.72
CNT 54	Aug 19	29,889	960.95	713.81	685.94	268.28	257.80	29824.60	958.88	712.90	683.59	269.60	258.51
CNT 55	Aug 21	19,175	616.49	696.19	429.20	283.52	174.78	19170.80	616.36	694.90	428.31	289.30	178.31
CNT 56	Aug 22	34,008	1093.38	782.69	855.78	130.61	142.80	33938.80	1091.16	783.60	855.03	132.20	144.25
CNT 57	Aug 27	25,343	814.80	758.88	618.34	223.43	182.05	25119.60	807.61	758.80	612.82	224.70	181.47
CNT 58	Aug 28	31,861	1024.35	701.56	718.64	91.32	93.54	31872.50	1024.72	704.40	721.82	90.10	92.33
CNT 59	Sept 03	11,665	375.04	758.49	284.46	227.21	85.21	11616.40	373.48	752.42	281.01	222.40	83.06
CNT 60	Sept 04	24,602	790.97	747.65	591.37	114.47	90.54	24466.30	786.61	745.32	586.28	89.30	70.24
CNT 61	Sept 05	5,666	182.17	793.09	144.47	198.85	36.22	5646.70	181.55	763.30	138.57	103.60	18.81
CNT 62	Sept 05	13,560	435.96	760.31	331.47	109.03	47.53	13528.00	434.93	793.80	345.25	187.50	81.55
CNT 63	Sept 08	11,421	367.19	797.89	292.98	189.80	69.69	11316.00	363.82	798.30	290.44	160.70	58.47
CNT 64	Sept 10	19,137	615.27	806.03	495.92	83.97	51.66	19092.30	613.83	809.30	496.77	80.70	49.54
CNT 65	Sept 17	19,884	639.28	749.32	479.03	225.38	144.08	19787.50	636.18	747.70	475.67	228.30	145.24
CNT 66	Sept 20	32,800	1054.54	782.89	825.59	132.88	140.12	32794.90	1054.38	782.50	825.05	135.80	143.18
CNT 67	Sept 23	21,889	703.75	702.91	494.67	269.57	189.71	21836.30	702.05	704.40	494.53	265.80	186.61
CNT 68	Sept 26	23,311	749.47	739.12	553.95	156.55	117.33	23318.60	749.71	740.50	555.16	151.50	113.58
CNT 69	Sept 29	7,278	233.99	735.36	172.07	218.47	51.12	7181.40	230.89	738.10	170.42	219.70	50.73
CNT 70	Oct 04	13,172	423.49	763.19	323.20	130.49	55.26	13120.40	421.83	767.10	323.59	129.70	54.71
CNT 71	Oct 04	18,446	593.05	799.26	474.00	123.15	73.03	18327.70	589.25	799.80	471.28	124.60	73.42
CNT 72	Oct 07	21,379	687.35	717.79	493.37	249.95	171.81	21340.40	686.11	718.50	492.97	240.20	164.80
CNT 73	Oct 09	25,593	822.83	784.10	645.19	153.77	126.52	25551.10	821.49	785.30	645.11	151.10	124.13
CNT 74	Oct 15	18,194	584.95	721.38	421.97	227.81	133.26	18127.40	582.81	722.05	420.82	228.60	133.23
CNT 75	Oct 17	27,325	878.52	785.41	689.99	139.40	122.47	27282.20	877.14	783.10	686.89	146.80	128.76
CNT 76	Oct 21	21,865	702.98	678.96	477.29	253.85	178.45	21724.00	698.44	677.90	473.47	253.50	177.06
CNT 77	Oct 31	15,053	483.96	836.09	404.64	130.96	63.38	14994.00	482.07	838.60	404.26	133.30	64.26
CNT 78	Oct 31	26,638	856.43	725.88	621.67	192.82	165.14	26590.40	854.90	725.90	620.57	194.10	165.94
CNT 79	Oct 31	30,504	980.73	697.14	683.70	238.25	233.66	30395.90	977.25	696.40	680.56	240.70	235.22
CNT 80	Nov 01	8,055	258.97	708.77	183.55	206.75	53.54	7959.90	255.92	711.50	182.08	200.60	51.34
CNT 81	Nov 09	10,539	338.84	818.69	277.40	140.58	47.63	10473.50	336.73	815.70	274.67	138.70	46.70
CNT 82	Nov 17	36,983	1189.03	697.58	829.44	245.16	291.50	36905.90	1186.55	698.50	828.81	248.90	295.33
CNT 83	Nov 18	26,964	866.91	788.14	683.25	176.50	153.01	26883.40	864.32	793.30	685.67	174.30	150.65
CNT 84	Nov 19	12,745	409.76	784.51	321.46	171.87	70.43	12689.80	407.99	783.50	319.66	171.50	69.97
CNT 85	Nov 30	14,518	466.76	667.31	311.47	217.20	101.38	14451.30	464.62	670.70	311.62	216.40	100.54
CNT 86	Nov 30	16,802	540.20	688.23	371.78	203.45	109.90	16758.00	538.78	690.60	372.08	201.20	108.40
CNT 87	Dec 2	26,533	853.06	680.49	580.50	262.36	223.80	26484.50	851.50	680.70	579.61	263.80	224.62
CNT 88	Dec 2	29,273	941.15	667.42	628.14	280.72	264.20	29108.90	935.87	668.10	625.26	282.10	264.01
CNT 89	Dec 2	7,792	250.52	664.03	166.35	223.28	55.94	7699.90	247.56	673.20	166.66	217.80	53.92
CNT 90	Dec 12	15,916	511.71	647.65	331.41	178.82	91.50	15726.50	505.62	654.90	331.13	180.90	91.47

PROJECT GOLD PRODUCTION

Mine

Johnson Matthey

Bar No.	Date	Weight grams	Weight ozs.	Reported		Reported		Weight grams	Weight ozs.	Au Fine	Au Cont	Ag Fine	Ag Cont	Au Fine	Au Cont	Ag Fine	Ag Cont
				Au Fine	Au Cont	Ag Fine	Ag Cont										
CNT 91	Dec 12	15,875	510.39	654.99	334.30	200.79	102.48	15784.60	507.49	669.20	339.61	198.90	339.61	198.90	100.94	100.94	
CNT 92	Dec 15	28,332	910.89	618.22	563.14	308.29	280.82	28145.20	904.89	618.70	559.85	311.20	559.85	311.20	281.60	281.60	
CNT 93	Dec 18	18,711	601.57	670.19	403.17	168.86	101.58	18633.30	599.07	682.10	408.63	166.90	408.63	166.90	99.99	99.99	
CNT 94	Dec 28	24,121	775.51	628.10	487.10	168.69	130.82	23930.40	769.38	628.40	483.48	166.30	483.48	166.30	127.95	127.95	
CNT 95	Jan 03	16,857	541.96	650.08	352.32	282.52	153.12	16671.50	536.00	658.50	352.96	280.70	352.96	280.70	150.46	150.46	
CNT 96	Jan 03	29,270	941.05	633.89	596.52	298.74	281.13	29125.40	936.40	645.90	604.82	290.40	604.82	290.40	271.93	271.93	
CNT 97	Jan 03	16,218	521.42	691.78	360.71	190.37	99.26	16105.20	517.79	695.10	359.92	187.30	359.92	187.30	96.98	96.98	
CNT 98	Jan 11	30,029	965.45	580.62	560.56	188.91	182.38	29878.60	960.62	592.80	569.45	189.60	569.45	189.60	182.13	182.13	
CNT 99	Jan 13	19,872	638.90	610.35	389.95	170.35	108.84	19624.80	630.95	630.20	397.63	172.00	397.63	172.00	108.52	108.52	
CNT 100	Jan 13	25,573	822.19	638.01	524.57	319.37	262.59	25447.20	818.15	638.40	522.30	313.90	522.30	313.90	256.87	256.87	
CNT 101	Jan 20	27,363	879.74	672.86	591.94	173.81	152.91	27194.70	874.33	683.90	597.95	172.90	597.95	172.90	151.17	151.17	
CNT 102	Jan 28	27,836	894.95	562.89	503.76	379.75	339.86	27280.60	877.09	563.80	494.50	378.40	494.50	378.40	331.89	331.89	
CNT 103	Jan 28	28,944	930.57	566.24	526.92	383.64	357.01	28939.60	930.43	567.90	528.39	385.40	528.39	385.40	358.59	358.59	
CNT 104	Jan 28	23,179	745.22	678.28	505.47	171.12	127.52	23084.80	742.19	682.00	506.18	169.40	506.18	169.40	125.73	125.73	
CNT 105	Feb 02	24,826	798.17	576.23	459.93	362.00	288.94	24802.30	797.41	576.90	460.03	368.70	460.03	368.70	294.01	294.01	
CNT 106	Feb 02	25,066	805.89	575.43	463.73	363.00	292.54	25011.60	804.14	576.50	463.59	368.80	463.59	368.80	296.57	296.57	
CNT 107	Feb 03	23,520	756.18	650.65	492.01	181.76	137.44	23333.30	750.18	650.50	487.99	188.60	487.99	188.60	141.48	141.48	
CNT 108	Feb 08	22,614	727.06	610.55	443.90	209.97	152.66	22386.80	719.75	613.10	441.28	208.70	441.28	208.70	150.21	150.21	
CNT 109	Feb 11	20,908	672.21	597.52	408.38	217.70	146.34	20798.90	668.70	618.60	413.66	193.40	413.66	193.40	129.33	129.33	
CNT 110	Feb 12	18,618	598.58	529.32	316.84	399.13	238.91	18454.50	593.33	530.60	314.82	405.70	314.82	405.70	240.71	240.71	
CNT 111	Feb 12	18,355	590.13	530.79	313.23	408.31	240.95	18286.40	587.92	532.70	313.19	414.70	313.19	414.70	243.81	243.81	
CNT 112	Feb 16	28,875	928.35	721.36	669.68	178.99	166.17	28765.00	924.82	723.30	668.92	180.80	668.92	180.80	167.21	167.21	
CNT 113	Feb 21	29,653	953.37	740.10	705.58	165.47	157.76	29539.70	949.72	744.10	706.69	166.90	706.69	166.90	158.51	158.51	
CNT 114	Feb 25	18,900	607.65	781.37	474.80	124.53	75.67	18805.00	604.59	782.20	472.91	122.80	472.91	122.80	74.24	74.24	
CNT 115	Mar 01	20,857	670.57	607.10	407.10	329.82	221.17	20742.20	666.88	606.90	404.73	335.60	404.73	335.60	223.80	223.80	
CNT 116	Mar 01	23,636	759.91	616.14	468.22	310.83	236.20	23575.60	757.97	617.00	467.67	319.50	467.67	319.50	242.17	242.17	
CNT 117	Mar 01	24,449	786.05	608.60	478.39	325.68	256.00	24366.00	783.38	609.10	477.16	318.00	477.16	318.00	249.12	249.12	
CNT 118	Mar 01	16,431	528.27	624.93	330.13	315.71	166.78	16387.30	526.86	625.70	329.66	318.00	329.66	318.00	167.54	167.54	
CNT 119	Mar 01	18,164	583.99	621.37	362.87	316.00	184.54	18137.30	583.13	621.80	362.59	323.70	362.59	323.70	188.76	188.76	
CNT 120	Mar 01	20,143	647.61	721.35	467.16	192.85	124.89	20077.10	645.49	724.10	467.40	197.70	467.40	197.70	127.61	127.61	
CNT 121	Mar 01	21,107	678.61	720.81	489.15	177.14	120.21	21046.70	676.67	721.10	487.94	176.30	487.94	176.30	119.30	119.30	
CNT 122	Mar 09	20,855	670.50	695.45	466.30	193.41	129.68	20732.00	666.55	699.10	465.98	187.60	465.98	187.60	125.04	125.04	
CNT 123	Mar 11	21,027	676.03	624.79	422.38	294.93	199.39	20984.10	674.65	625.20	421.79	299.70	421.79	299.70	202.19	202.19	
CNT 124	Mar 11	20,589	661.95	625.90	414.31	294.70	195.08	20545.00	660.54	626.30	413.69	298.50	413.69	298.50	197.17	197.17	
CNT 125	Mar 14	17,912	575.88	756.44	435.62	174.25	100.35	17847.10	573.80	759.40	435.74	168.80	435.74	168.80	96.86	96.86	
CNT 126	Mar 20	13,732	441.49	733.66	323.90	188.48	83.21	13650.20	438.86	741.60	325.46	186.00	325.46	186.00	81.63	81.63	
CNT 127	Mar 20	15,612	501.94	710.92	356.84	194.24	97.50	15524.80	499.13	718.70	358.73	189.00	358.73	189.00	94.34	94.34	
CNT 128	Mar 20	25,399	816.60	582.89	475.99	292.76	239.07	25303.20	813.52	585.10	475.99	304.20	475.99	304.20	247.47	247.47	
CNT 129	Mar 23	24,284	780.75	762.29	595.16	170.17	132.86	24180.00	777.40	761.80	592.23	168.80	592.23	168.80	131.23	131.23	
CNT 130	Mar 29	20,437	657.06	737.55	484.62	199.09	130.82	20361.60	654.64	738.20	483.26	199.80	483.26	199.80	130.80	130.80	
CNT 131	Mar 31	20,794	668.54	631.53	422.21	224.72	150.23	20744.60	666.95	633.80	422.72	226.30	422.72	226.30	150.93	150.93	
CNT 132	Mar 31	18,974	610.03	672.16	410.04	228.53	139.41	18847.90	605.97	670.60	406.37	228.80	406.37	228.80	138.65	138.65	
CNT 133	Mar 31	18,484	594.27	669.13	397.65	237.07	140.89	18487.20	594.38	667.30	396.63	237.60	396.63	237.60	141.22	141.22	
CNT 134	Apr 01	28,127	904.30	654.20	591.59	212.47	192.13	28028.50	901.14	655.20	590.42	211.10	590.42	211.10	190.23	190.23	
CNT 135	Apr 08	23,192	745.64	636.68	474.74	227.15	169.37	23104.30	742.82	647.30	480.83	217.30	480.83	217.30	161.41	161.41	

PROJECT GOLD PRODUCTION

Bar No.	Date	Mine				Johnson Matthey			
		Weight grams	Weight ozs.	Reported Au Fine	Reported Au Cont	Weight ozs.	Au Fine	Au Cont	Ag Cont
CNT 136	Apr 13	19,098	614.01	649.17	398.60	258.45	158.69	19043.00	157.84
CNT 137	Apr 13	18,666	600.13	627.33	376.47	263.01	157.84	18581.40	156.64
CNT 138	Apr 18	30,286	973.72	677.18	659.38	219.68	213.91	30016.30	216.17
CNT 139	Apr 18	14,895	478.89	679.85	325.57	230.61	110.43	14881.50	112.29
CNT 140	Apr 20	16,907	543.57	662.03	359.86	254.84	138.52	16878.70	139.90
CNT 141	Apr 20	17,761	571.03	647.80	369.91	262.23	149.74	17644.10	150.78
CNT 142	Apr 27	22,336	718.12	666.00	478.27	244.10	175.29	22189.10	173.07
CNT 143	May 01	32,564	1046.96	696.49	729.19	216.69	226.86	32516.00	229.26
CNT 144	May 01	14,074	452.49	697.85	315.77	219.36	99.26	14070.00	100.20
CNT 145	May 01	16,861	542.09	698.66	378.74	219.36	118.91	16851.00	119.79
CNT 146	May 01	28,621	920.19	679.96	625.69	219.83	202.28	28515.70	206.46
CNT 147	May 08	22,635	727.73	674.21	490.65	209.93	152.77	22575.60	151.12
CNT 148	May 14	19,694	633.18	738.55	467.63	187.44	118.68	19615.70	118.06
CNT 149	May 14	23,512	755.93	665.75	503.26	269.92	204.04	23478.10	187.20
CNT 150	May 14	22,724	730.59	672.97	491.67	274.66	200.66	22681.40	209.32
CNT 151	May 22	29,527	949.31	680.25	645.77	218.41	207.34	29367.90	207.53
CNT 152	May 29	29,920	961.95	642.69	618.23	207.14	199.26	29828.30	196.12
CNT 153	Jun 01	17,600	565.85	669.06	378.59	210.49	119.11	17540.20	118.14
CNT 154	Jun 01	25,677	825.53	635.80	524.87	303.30	250.38	25638.70	255.29
CNT 155	Jun 02	26,281	844.95	630.66	532.87	318.65	269.25	26227.80	274.31
CNT 156	Jun 02	20,402	655.94	634.24	416.03	318.24	208.75	20369.10	210.74
CNT 157	Jun 02	22,840	734.32	642.37	471.71	309.94	227.60	22825.70	233.07
CNT 158	Jun 12	23,597	758.66	662.68	502.75	244.25	185.30	23477.00	143.41
CNT 159	Jun 14	17,777	571.54	727.25	415.66	162.64	92.96	17677.80	97.70
CNT 160	Jun 25	19,337	621.70	739.72	459.89	158.72	98.68	19246.60	98.70
CNT 161	July 01	24,340	782.55	668.95	523.48	161.86	126.66	24169.50	128.76
CNT 162	July 02	25,363	815.44	710.28	579.19	234.08	190.88	25360.90	191.20
CNT 163	July 02	24,177	777.31	728.12	565.97	225.11	174.98	24178.10	175.21
CNT 164	July 02	23,680	761.33	726.83	553.35	226.45	172.40	23645.60	170.82
CNT 165	July 10	23,697	761.88	705.74	537.69	162.79	124.03	23563.60	125.99
CNT 166	July 13	18,322	589.07	756.79	445.80	194.06	114.31	18266.10	113.75
CNT 167	July 13	19,736	634.53	738.08	468.33	177.78	112.80	19637.10	111.31
CNT 168	July 21	19,467	625.88	702.70	439.80	186.83	116.93	19363.00	116.79
CNT 169	July 25	30,044	965.94	679.03	655.90	184.13	177.86	29849.80	182.05
CNT 170	Aug 01	17,095	549.62	713.16	391.96	189.45	104.12	17009.20	103.47
CNT 171	Aug 02	26,884	864.34	727.83	629.09	219.74	189.93	26834.70	189.20
CNT 172	Aug 02	25,738	827.50	720.07	595.85	224.65	185.90	25681.40	188.09
CNT 173	Aug 02	27,586	886.91	733.94	650.94	211.86	187.90	27541.90	190.47
CNT 174	Aug 09	20,731	666.52	735.87	490.47	176.08	117.36	20615.50	117.85
CNT 175	Aug 18	31,645	1017.41	693.72	705.79	218.37	222.17	31557.00	219.15
CNT 176	Aug 21	20,463	657.90	704.24	463.32	184.04	121.08	20370.80	118.22
CNT 177	Aug 27	16,270	523.09	697.88	365.05	183.40	95.93	16189.10	96.76
CNT 178	Sep 03	16,166	519.75	679.42	353.13	187.87	97.65	16045.70	99.46
CNT 179	Sep 03	26,088	838.75	702.22	588.98	220.77	185.17	26038.10	199.32
CNT 180	Sep 03	36,657	1178.55	725.58	855.13	230.79	271.99	36619.50	272.67

PROJECT GOLD PRODUCTION

Mine				Johnson Matthey									
Bar No	Date	Weight grams	Weight ozs.	Reported		Reported		Weight grams	Weight ozs.	Au Fine		Ag Cont	
				Au Fine	Au Cont	Ag Fine	Ag Cont			Au Fine	Au Cont	Ag Fine	Ag Cont
CNT 181	Sep 03	29,259	940.70	718.34	675.74	230.77	217.08	29243.30	940.19	725.70	682.30	224.50	211.07
CNT 182	Sep 10	18,668	600.19	796.10	477.81	134.92	80.98	18587.10	597.59	793.30	474.07	137.00	81.87
CNT 183	Sep 17	24,265	780.14	739.00	576.52	145.96	113.86	24258.00	779.91	746.90	582.52	143.70	112.07
CNT 184	Sep 24	21,928	705.00	710.05	500.58	153.97	108.55	21716.70	698.21	719.10	502.08	154.40	107.80
CNT 185	Oct 02	28,233	907.71	688.74	625.18	275.03	249.65	28180.90	906.04	691.10	626.16	276.70	250.70
CNT 186	Oct 02	25,895	832.54	700.76	583.41	254.23	211.66	25853.70	831.22	702.20	583.68	258.30	214.70
CNT 187	Oct 02	27,256	876.30	718.80	629.88	218.30	191.29	27197.10	874.41	720.30	629.83	219.90	192.28
CNT 188	Oct 02	25,592	822.80	719.78	592.23	217.00	178.54	25540.20	821.14	721.10	592.12	219.90	180.57
CNT 189	Oct 02	13,912	447.28	769.51	344.19	138.95	62.15	13866.20	445.81	770.40	343.45	140.40	62.59
CNT 190	Oct 02	14,855	477.60	745.44	356.02	154.17	73.63	14789.70	475.50	748.10	355.72	154.90	73.65
CNT 191	Oct 11	16,174	520.01	776.54	403.80	143.97	74.86	16063.10	516.44	790.50	408.25	140.30	72.46
CNT 192	Oct 18	17,567	564.79	752.19	424.83	149.31	84.33	17501.60	562.69	752.90	423.65	152.60	85.87
CNT 193	Oct 24	15,247	490.20	774.87	379.84	144.37	70.77	15171.40	487.77	776.10	378.56	147.30	71.85
CNT 194	Oct 31	23,863	767.21	734.29	563.36	191.63	147.02	23764.30	764.04	736.10	562.41	197.20	150.67
CNT 195	Nov 02	29,330	942.98	653.91	616.63	304.75	287.37	29259.80	940.72	654.60	615.80	311.70	293.22
CNT 196	Nov 02	27,722	891.28	646.18	575.93	314.42	280.24	27621.00	888.04	646.70	574.29	319.60	283.82
CNT 197	Nov 03	27,504	884.27	655.14	579.33	307.43	271.85	27452.70	882.62	656.20	579.18	311.20	274.67
CNT 198	Nov 03	19,280	619.87	661.85	410.26	298.69	185.15	19246.30	618.78	662.50	409.94	304.00	188.11
CNT 199	Nov 06	12,901	414.78	807.89	335.09	99.73	41.37	12864.00	413.59	809.90	334.96	100.50	41.57
CNT 200	Nov 13	22,129	711.46	711.21	506.00	144.65	102.91	22041.00	708.63	716.80	507.95	139.60	98.93
CNT 201	Nov 21	16,021	515.09	709.23	365.31	132.19	68.09	15942.40	512.56	712.80	365.35	134.60	68.99
CNT 202	Nov 27	15,917	511.74	721.57	369.26	149.75	76.63	15798.30	507.93	728.00	369.77	151.10	76.75
CNT 203	Dec 2	16,156	519.43	789.93	410.31	125.44	65.16	16062.30	516.41	784.60	405.18	127.60	65.89
CNT 204	Dec 4	26,386	848.33	619.74	525.75	339.37	287.89	26332.70	846.62	619.90	524.82	343.80	291.07
CNT 205	Dec 4	24,203	778.14	630.79	490.84	324.67	252.64	24110.10	775.16	631.50	489.51	327.40	253.79
CNT 206	Dec 4	26,741	859.74	625.73	537.96	335.82	288.72	26696.10	858.30	627.50	538.58	341.50	293.11
CNT 207	Dec 4	23,225	746.70	631.74	471.72	323.97	241.77	23153.60	744.40	632.70	470.99	329.10	244.98
CNT 208	Dec 4	23,804	765.32	614.66	470.41	343.98	263.25	23783.10	764.64	616.80	471.63	348.10	266.17
CNT 209	Dec 4	23,236	747.05	626.34	467.91	331.41	247.58	23183.20	745.36	628.70	468.61	337.10	251.26
CNT 210	Dec 4	16,976	545.79	633.49	345.75	327.30	178.63	16968.10	545.54	634.80	346.31	333.30	181.83
CNT 211	Dec 11	16,054	516.15	730.73	377.16	155.32	80.17	15982.30	513.84	736.20	378.29	156.90	80.62
CNT 212	Dec 15	16,517	531.03	702.20	372.89	174.88	92.87	16340.60	525.36	700.20	367.86	170.40	89.52
CNT 213	Dec 19	13,537	435.22	660.41	287.43	152.98	66.58	13361.30	429.58	664.90	285.62	156.80	67.36
CNT 214	Dec 19	28,170	905.69	627.81	568.60	331.14	299.91	28222.30	907.37	629.50	571.19	341.40	309.78
CNT 215	Dec 24	24,427	785.35	622.35	488.76	336.31	264.12	24418.50	785.07	620.20	486.90	343.60	269.75
CNT 216	Dec 26	16,492	530.23	641.98	340.40	180.61	95.76	16316.40	524.58	646.60	339.20	172.40	90.44
CNT 217	Dec 30	12,942	416.09	724.47	301.45	172.30	71.69	12936.00	415.90	722.30	300.41	174.20	72.45
CNT 218	Jan 03	16,484	529.97	710.29	376.44	187.59	99.41	16421.60	527.97	710.80	375.28	187.50	98.99
CNT 219	Jan 03	27,744	891.99	578.86	516.33	374.39	333.95	27702.50	890.66	578.80	515.51	379.90	338.36
CNT 220	Jan 03	27,409	881.22	571.25	503.40	387.25	341.25	27318.30	878.30	569.50	500.19	394.30	346.31
CNT 221	Jan 03	27,082	870.71	585.36	509.67	370.33	322.45	27022.50	868.79	585.50	508.68	374.10	325.02
CNT 222	Jan 03	23,735	763.10	603.26	460.34	351.54	268.26	23695.10	761.81	603.30	459.60	356.00	271.21
CNT 223	Jan 03	22,580	725.96	585.47	425.03	371.55	269.73	22552.80	725.09	585.50	424.54	375.50	272.27
CNT 224	Jan 05	19,833	637.65	598.58	381.68	244.25	155.74	19676.50	632.61	604.10	382.16	245.00	154.99
CNT 225	Jan 09	22,098	710.47	606.21	430.69	228.19	162.12	21870.50	703.15	610.50	429.27	223.90	157.44

PROJECT GOLD PRODUCTION

Mine

Johnson Matthey

Bar No.	Date	Weight grams	Weight ozs.	Reported Au Fine	Reported Au Cont	Reported Ag Fine	Reported Ag Cont	Weight grams	Weight ozs.	Au Fine	Au Cont	Ag Fine	Ag Cont
CNT 226	Jan 12	9,929	319.22	699.50	223.30	166.29	53.08	9877.00	317.55	717.20	227.75	152.80	48.52
CNT 227	Jan 14	25,489	819.49	517.48	424.07	439.27	359.98	25408.60	816.90	521.55	426.06	445.20	363.69
CNT 228	Jan 17	14,648	470.94	703.20	331.17	170.39	80.25	14590.90	469.11	709.50	332.83	164.10	76.98
CNT 229	Jan 20	23,153	744.39	532.93	396.71	413.91	308.11	23103.30	742.79	532.20	395.31	416.90	309.67
CNT 230	Jan 24	21,482	690.66	652.03	450.33	205.22	141.74	21170.10	680.63	665.20	452.76	210.50	143.27
CNT 231	Jan 28	17,642	567.20	577.00	327.27	190.48	108.04	17118.90	550.39	582.60	320.65	188.60	103.80
CNT 232	Jan 29	26,923	865.59	543.14	470.14	410.83	355.61	26863.20	863.67	544.20	470.01	422.10	364.56
CNT 233	Jan 29	29,664	953.72	539.58	514.61	421.98	402.45	29651.70	953.32	541.90	516.61	431.20	411.07
CNT 234	Feb 03	27,239	875.75	541.22	473.98	406.30	355.82	27206.80	874.72	541.90	474.01	410.50	359.07
CNT 235	Feb 03	29,709	955.17	540.12	515.90	407.31	389.04	29677.20	954.14	540.20	515.43	413.40	394.44
CNT 236	Feb 03	28,836	927.10	548.11	508.15	403.54	374.12	28759.30	924.63	548.50	507.16	408.90	378.08
CNT 237	Feb 03	20,488	658.70	529.41	348.72	170.06	112.02	20403.20	655.98	535.10	351.01	172.20	112.96
CNT 238	Feb 09	14,393	462.75	602.81	278.95	177.65	82.21	14308.50	460.03	601.30	276.62	173.10	79.63
CNT 239	Feb 13	16,477	529.75	524.81	278.02	431.20	228.43	16415.90	527.78	526.30	277.77	436.60	230.43
CNT 240	Feb 13	12,137	390.21	659.69	257.42	176.38	68.83	12069.40	388.04	664.40	257.81	176.90	68.64
CNT 241	Feb 20	15,329	492.84	659.59	325.07	194.16	95.69	15252.00	490.36	663.80	325.50	190.00	93.17
CNT 242	Feb 27	28,588	919.12	577.28	530.59	382.42	351.49	28544.40	917.72	577.50	529.99	386.20	354.42
CNT 243	Feb 27	14,198	456.48	672.19	306.84	165.42	75.51	14104.70	453.48	680.30	308.50	169.80	77.00
CNT 244	Mar 03	13,249	425.96	591.15	251.81	196.17	83.56	13155.10	422.95	598.30	253.05	190.20	80.44
CNT 245	Mar 04	23,841	766.51	589.71	452.02	357.97	274.38	23815.50	765.69	590.00	451.75	361.80	277.03
CNT 246	Mar 09	18,470	593.82	604.17	358.77	178.37	105.92	18188.00	584.76	609.20	356.23	181.90	106.37
CNT 247	Mar 13	15,644	502.97	698.66	351.40	141.97	71.41	15551.80	500.00	708.00	354.00	142.60	71.30
CNT 248	Mar 20	15,186	488.24	660.05	322.26	163.67	79.91	14894.60	478.87	662.50	317.25	163.60	78.34
CNT 249	Mar 20	29,522	949.15	623.84	592.12	323.41	306.97	29494.70	948.28	623.90	591.63	330.40	313.31
CNT 250	Mar 27	13,925	447.70	759.05	339.82	138.91	62.19	13843.90	445.09	761.54	338.95	136.60	60.80
CNT 251	Mar 31	25,994	835.73	597.79	499.59	328.93	274.90	25947.70	834.24	598.20	499.04	337.10	281.22
CNT 252	Mar 31	20,104	646.36	613.06	396.26	325.38	210.31	20077.90	645.52	613.40	395.96	333.50	215.28
CNT 253	Apr 02	12,568	404.07	594.48	240.21	311.55	125.89	12537.70	403.10	596.00	240.25	317.30	127.90
CNT 254	Apr 08	13,794	443.49	698.26	309.67	138.07	61.23	13676.50	439.71	704.40	309.73	143.80	63.23
CNT 255	Apr 17	17,662	567.85	652.29	370.40	151.71	86.15	17332.90	557.27	667.10	371.75	149.20	83.14
CNT 256	Apr 22	13,043	419.34	715.53	300.05	152.49	63.95	12941.80	416.09	718.40	298.92	153.70	63.95
CNT 257	Apr 27	26,944	866.27	634.21	549.39	317.04	274.65	26900.40	864.87	636.10	550.14	325.30	281.34
CNT 258	Apr 30	18,826	605.27	649.29	393.00	302.54	183.12	18803.60	604.55	650.70	393.38	306.80	185.48
CNT 259	May 02	21,324	685.58	665.93	456.55	272.83	187.05	21305.00	684.97	665.70	455.99	277.90	190.35
CNT 260	May 02	20,907	672.18	670.54	450.72	282.57	189.94	20877.10	671.21	670.30	449.91	285.70	191.77
CNT 261	May 02	18,624	598.78	661.44	396.05	177.20	106.10	18517.80	595.36	668.40	397.94	183.30	109.13
CNT 262	May 02	18,896	607.52	642.84	390.54	174.90	106.25	18799.30	604.41	647.30	391.24	187.00	113.02
CNT 263	May 10	19,509	627.23	656.11	411.53	188.39	118.16	19393.40	623.51	664.30	414.24	192.20	119.84
CNT 264	May 15	21,166	680.50	686.28	467.01	233.86	159.14	21087.30	677.97	689.20	467.26	240.20	162.85
CNT 265	May 18	23,274	748.28	690.11	516.39	202.15	151.26	23106.70	742.90	691.60	513.79	203.90	151.48
CNT 266	May 23	19,969	642.02	656.91	421.75	228.34	146.60	19899.80	639.79	658.40	421.24	232.90	149.01
CNT 267	May 24	18,538	596.01	628.95	374.86	259.02	153.96	18494.00	594.60	628.50	373.70	266.20	158.28
CNT 268	May 24	16,937	544.54	691.36	376.47	246.01	133.96	16910.20	543.68	691.30	375.84	267.60	134.61
CNT 269	May 28	14,577	468.66	632.27	296.32	233.91	109.62	14520.90	466.86	635.30	296.59	231.80	108.22
CNT 270	June 02	12,959	416.64	758.14	315.87	127.36	53.06	12915.10	415.23	758.30	314.87	125.60	52.15

PROJECT GOLD PRODUCTION

Mine														Johnson Matthey													
Bar No.	Date	Weight grams	Weight		Reported		Reported		Reported		Weight grams	Weight ozs.	Au Fine		Au Cont	Ag Fine	Ag Cont	Au Fine	Au Cont	Ag Fine	Ag Cont						
			ozs.	grams	ozs.	grams	ozs.	grams	ozs.	grams			ozs.	grams													
CNT 271	June 02	29,235	939.93	654.19	614.89	271.47	255.16	29197.50	938.72	654.70	614.58	274.90	258.05					654.70	614.58	274.90	258.05						
CNT 272	June 02	25,855	831.26	674.96	561.06	272.62	226.61	25803.20	829.59	675.50	560.39	276.80	229.63					675.50	560.39	276.80	229.63						
CNT 273	June 10	17,103	549.87	710.04	390.43	161.82	88.98	16987.50	546.16	710.90	388.27	159.20	86.95					710.90	388.27	159.20	86.95						
CNT 274	June 18	16,877	542.61	757.94	411.26	158.54	86.02	16803.50	540.24	760.60	410.91	158.90	85.84					760.60	410.91	158.90	85.84						
CNT 275	June 18	27,585	886.88	705.25	625.47	241.64	214.31	27543.30	885.54	705.20	624.48	241.10	213.50					705.20	624.48	241.10	213.50						
CNT 276	June 24	16,173	519.97	754.94	392.55	158.65	82.49	16044.10	515.83	753.30	388.57	163.30	84.23					753.30	388.57	163.30	84.23						
CNT 277	June 29	25,987	835.50	707.32	590.97	227.12	189.76	25906.20	832.90	707.70	589.45	226.70	188.82					707.70	589.45	226.70	188.82						
CNT 278	July 03	19,652	631.83	649.11	410.12	219.71	138.82	19525.70	627.77	656.20	411.94	223.00	139.99					656.20	411.94	223.00	139.99						
CNT 279	July 03	10,405	334.53	731.04	244.55	168.74	56.45	10337.00	332.34	733.00	243.61	168.40	55.97					733.00	243.61	168.40	55.97						
CNT 280	July 03	19,742	634.72	689.19	437.44	225.60	143.19	19755.80	635.16	688.90	437.56	228.30	145.01					688.90	437.56	228.30	145.01						
CNT 281	July 03	19,920	640.44	697.94	446.99	231.31	148.14	19815.80	637.09	699.20	445.45	234.00	149.08					699.20	445.45	234.00	149.08						
CNT 282	July 03	21,225	682.40	699.87	477.59	226.59	154.63	21159.70	680.30	700.70	476.69	227.00	154.43					700.70	476.69	227.00	154.43						
CNT 283	July 16	25,173	809.33	668.67	541.17	219.01	177.25	25029.70	804.72	669.80	539.00	218.40	175.75					669.80	539.00	218.40	175.75						
CNT 284	July '26	25,053	805.47	726.69	585.33	223.95	180.38	24970.40	802.82	727.80	584.29	227.40	182.56					727.80	584.29	227.40	182.56						
CNT 285	July 27	18,011	579.07	656.95	380.42	218.30	126.41	17941.10	576.82	661.00	381.28	216.00	124.59					661.00	381.28	216.00	124.59						
CNT 286	July 27	15,657	503.38	686.05	345.35	181.17	91.20	15600.20	501.56	689.50	345.82	181.50	91.03					689.50	345.82	181.50	91.03						
CNT 287	Aug 02	20,233	650.51	707.62	460.31	171.33	111.45	20163.20	648.26	707.40	458.58	173.50	112.47					707.40	458.58	173.50	112.47						
CNT 288	Aug 04	19,033	611.92	745.35	456.10	201.94	123.57	19013.70	611.30	744.20	454.93	204.90	125.26					744.20	454.93	204.90	125.26						
CNT 289	Aug 04	27,061	870.03	746.69	649.65	202.29	176.00	27031.20	869.07	747.20	649.37	203.80	177.12					747.20	649.37	203.80	177.12						
CNT 290	Aug 09	16,656	535.50	770.84	412.79	155.61	83.33	16567.70	532.66	772.10	411.27	156.60	83.42					772.10	411.27	156.60	83.42						
CNT 291	Aug 13	17,434	560.52	774.49	434.12	144.06	80.75	17340.60	557.51	781.10	435.47	143.10	79.78					781.10	435.47	143.10	79.78						
CNT 292	Aug 22	24,112	775.22	815.05	631.84	141.49	109.69	24046.20	773.10	813.20	628.69	144.70	111.87					813.20	628.69	144.70	111.87						
CNT 293	Aug 22	26,304	845.69	678.96	574.19	201.30	170.24	26203.20	842.45	681.10	573.79	204.60	172.37					681.10	573.79	204.60	172.37						
CNT 294	Aug 26	15,198	488.63	767.66	375.10	148.70	72.66	15164.50	487.55	768.60	374.73	150.40	73.33					768.60	374.73	150.40	73.33						
CNT 295	Aug 26	20,847	670.25	659.09	441.75	204.35	136.96	20777.00	668.00	660.50	441.21	207.70	138.74					660.50	441.21	207.70	138.74						
CNT 296	Sept 04	23,855	766.96	760.51	583.28	193.77	148.61	23,761.90	763.96	761.90	582.06	194.90	148.90					761.90	582.06	194.90	148.90						
CNT 297	Sept 04	23,690	761.65	657.09	500.47	192.65	146.73	23,598.60	758.71	669.00	507.58	190.40	144.46					669.00	507.58	190.40	144.46						
CNT 298	Sept 05	21,676	696.90	766.42	534.12	182.25	127.01	21,653.70	696.18	765.80	533.14	185.40	129.07					765.80	533.14	185.40	129.07						
CNT 299	Sept 05	9,472	304.53	789.96	240.57	166.98	50.85	9,451.70	303.88	790.50	240.22	169.30	51.45					790.50	240.22	169.30	51.45						
CNT 300	Sept 10	24,768	796.31	655.60	522.06	201.99	160.85	24,655.10	792.68	661.20	524.12	202.20	160.28					661.20	524.12	202.20	160.28						
CNT 301	Sept 16	22,292	716.70	683.28	489.71	190.74	136.71	22,189.40	713.41	688.80	491.39	187.80	133.98					688.80	491.39	187.80	133.98						
CNT 302	Sept 18	18,994	610.67	673.37	411.21	244.34	149.21	18,924.80	608.45	672.70	409.30	241.80	147.12					672.70	409.30	241.80	147.12						
CNT 303	Sept 18	14,937	480.24	706.52	339.29	244.86	117.59	14,902.20	479.12	707.20	338.83	246.00	117.86					707.20	338.83	246.00	117.86						
CNT 304	Sept 18	16,413	527.69	718.61	379.21	184.17	97.19	16,347.80	525.59	719.40	378.11	185.50	97.50					719.40	378.11	185.50	97.50						
CNT 305	Sept 23	23,778	764.48	706.35	539.99	193.83	148.18	23,591.90	758.50	711.60	539.75	193.70	146.92					711.60	539.75	193.70	146.92						
CNT 306	Sept 29	20,887	671.53	723.52	485.87	171.36	115.08	20,835.20	669.87	727.10	487.06	175.40	117.49					727.10	487.06	175.40	117.49						
CNT 307	Oct 01	18,626	598.84	744.58	445.88	153.22	91.76	18,589.30	597.66	744.20	444.78	156.10	93.29					744.20	444.78	156.10	93.29						
CNT 308	Oct 03	24,239	779.30	750.67	585.00	197.42	153.85	24,176.60	777.30	751.10	583.83	200.80	156.08					751.10	583.83	200.80	156.08						
CNT 309	Oct 04	25,564	821.90	741.85	609.73	208.84	171.65	25,509.00	820.13	742.10	608.62	211.00	173.05					742.10	608.62	211.00	173.05						
CNT 310	Oct 04 *	25,322	814.12	744.63	606.22	208.82	170.01	25,317.60	813.98	744.30	605.84	210.90	171.67					744.30	605.84	210.90	171.67						
CNT 311	Oct 04	11,218	360.67	668.58	241.13	205.01	73.94	11,149.90	358.48	670.80	240.47	208.10	74.60					670.80	240.47	208.10	74.60						
CNT 312	Oct 09	15,801	508.01	763.79	388.02	136.44	69.31	15,745.20	506.22	765.60	387.56	135.10	68.39					765.60	387.56	135.10	68.39						
CNT 313	Oct 09	20,115	646.71	688.08	444.99	173.69	112.33	20,013.10	643.44	693.80	446.42	173.50	111.64					693.80	446.42	173.50	111.64						
CNT 314	Oct 12	20,312	653.05	721.27	471.02	160.28	104.67	20,210.70	649.79	724.50	470.77	160.20	104.10					724.50	470.77	160.20	104.10						
CNT 315	Oct 17	19,140	615.36	684.52	421.23	165.46	101.82	19,016.50	611.39	696.60	425.90	167.30	102.29					696.60	425.90	167.30	102.29						

PROJECT GOLD PRODUCTION

Mine

Johnson Matthey

Bar No.	Date	Weight grams	Weight Reported ozs.	Au Fine	Reported Au Cont	Reported Ag Fine	Weight grams	Weight ozs.	Au Fine	Au Cont	Ag Fine	Ag Cont
CNT 316	Oct 18	25,994	835.73	657.78	549.72	277.58	231.98	824.61	656.40	541.28	280.60	231.39
CNT 317	Oct 20	10,830	348.19	846.26	294.66	93.05	32.40	345.75	844.40	291.95	95.70	33.09
CNT 318	Oct 24	20,719	666.13	738.11	491.68	156.02	103.93	663.48	739.90	490.91	152.50	101.18
CNT 319	Oct 30	13,080	420.53	676.82	284.62	260.47	109.53	419.80	676.80	284.12	258.60	108.56
CNT 320	Oct 30	21,858	702.75	702.75	493.86	151.28	106.31	700.14	696.40	487.58	145.50	101.87
CNT 321	Nov 03	16,783	539.59	655.56	353.73	221.34	119.43	535.69	662.30	354.79	225.50	120.80
CNT 322	Nov 03	20,164	648.29	678.55	439.90	278.43	180.50	646.44	679.00	438.93	284.10	183.65
CNT 323	Nov 03	17,731	570.06	679.06	387.11	276.73	157.75	569.26	679.50	386.81	282.30	160.70
CNT 324	Nov 08	22,198	713.68	681.41	486.31	186.98	133.45	710.39	687.30	488.25	185.40	131.71
CNT 325	Nov 13	27,617	887.91	691.16	613.68	193.06	171.42	884.58	696.70	616.28	196.70	174.00
CNT 326	Nov 16	20,218	650.02	700.39	455.27	176.59	114.79	645.96	707.70	457.15	180.40	116.53
CNT 327	Nov 18	28,366	911.99	658.12	600.20	296.94	270.80	909.75	658.90	599.43	302.10	274.84
CNT 328	Nov 22	30,444	978.80	694.67	679.94	202.44	198.15	968.20	694.90	672.80	203.80	197.32
CNT 329	Nov 27	24,062	773.61	722.10	558.62	169.65	131.24	770.45	728.70	561.43	167.30	128.90
CNT 330	Nov 28	22,653	728.31	674.42	491.19	277.76	202.30	727.49	674.50	490.69	281.30	204.64
CNT 331	Dec 01	21,690	697.35	721.89	503.41	156.62	109.22	694.54	729.10	506.39	156.50	108.70
CNT 332	Dec 03	21,007	675.39	660.64	446.19	301.74	203.79	674.27	660.70	445.49	306.10	206.39
CNT 333	Dec 03	19,968	641.99	636.00	408.30	321.15	206.17	641.25	635.90	407.77	325.00	208.41
CNT 334	Dec 03	16,635	534.83	663.84	355.04	193.38	103.43	533.42	663.70	354.03	192.70	102.79
CNT 335	Dec 07	20,963	673.98	715.85	482.47	161.17	108.63	671.20	721.20	484.07	159.60	107.12
CNT 336	Dec 14	20,994	674.97	712.47	480.90	155.36	104.87	671.65	721.60	484.66	150.50	101.08
CNT 337	Dec 25	22,236	714.90	731.22	522.75	163.51	116.90	712.81	736.70	525.13	159.30	113.55
CNT 338	Dec 25	32,541	1046.22	628.72	657.78	331.53	346.86	1044.29	629.90	657.80	335.30	350.15
CNT 339	Dec 27	21,840	702.17	721.32	506.49	164.74	115.68	700.64	728.70	510.56	166.30	116.52
CNT 340	Jan 01	15,944	512.61	732.15	375.31	170.13	87.21	510.08	735.30	375.06	169.50	86.46
CNT 341	Jan 02	10,406	334.56	729.32	244.00	161.39	53.99	333.42	736.10	245.43	158.40	52.81
CNT 342	Jan 04	22,190	713.42	652.43	465.46	297.01	211.89	712.91	652.70	465.31	300.80	214.44
CNT 343	Jan 04	22,476	722.62	634.61	458.58	298.96	216.04	721.53	634.60	457.88	302.50	218.26
CNT 344	Jan 10	19,602	630.22	714.92	450.56	184.82	116.48	628.00	723.10	454.10	183.70	115.36
CNT 345	Jan 12	26,453	850.48	658.96	560.43	187.10	159.13	846.06	676.40	572.27	190.20	160.92
CNT 346	Jan 16	20,345	654.11	573.23	374.96	366.75	239.89	653.72	573.20	374.71	373.50	244.17
CNT 347	Jan 19	30,168	969.92	604.74	586.55	169.63	164.53	965.90	607.70	586.98	165.40	159.76
CNT 348	Jan 24	28,981	931.76	655.08	610.38	200.26	186.60	927.72	662.10	614.24	195.80	181.65
CNT 349	Jan 29	25,206	810.39	629.76	510.35	163.71	132.67	804.81	631.20	508.00	166.80	134.24
CNT 350	Jan 29	19,305	620.67	593.77	368.54	340.23	211.17	619.89	593.60	367.97	348.30	215.91
CNT 351	Feb 02	25,259	812.10	686.06	557.14	161.28	130.98	802.72	697.50	559.90	158.70	127.39
CNT 352	Feb 04	21,926	704.94	589.31	415.43	359.45	253.39	703.68	589.50	414.82	366.80	258.11
CNT 353	Feb 04	21,308	685.07	561.82	384.88	322.86	221.18	680.42	569.60	387.57	332.00	225.90
CNT 354	Feb 08	29,303	942.11	596.18	561.67	165.03	155.48	934.90	603.10	563.84	165.50	154.73
CNT 355	Feb 12	23,760	763.90	632.14	482.89	155.11	118.49	758.73	655.50	497.35	151.10	114.64
CNT 356	Feb 19	30,456	979.18	591.83	579.51	371.84	364.10	978.25	591.70	578.83	378.20	369.97
CNT 357	Feb 23	25,826	830.32	663.90	551.25	181.14	150.40	823.39	674.80	555.63	184.20	151.67
CNT 358	Feb 27	18,755	602.99	670.99	404.60	188.82	113.86	599.48	688.90	412.98	190.70	114.32
CNT 359	Mar 02	15,825	508.79	659.87	335.73	171.27	87.14	505.98	685.00	346.60	173.70	87.89
CNT 360	Mar 02	21,024	675.94	700.62	473.57	180.04	121.69	673.79	709.20	477.85	178.80	120.47

PROJECT GOLD PRODUCTION

Mine				Johnson Matthey															
Bar No.	Date	Weight grams	Weight ozs.	Reported		Reported		Weight grams	Weight ozs.	Au		Ag							
				Au Fine	Au Cont	Ag Fine	Ag Cont			Fine	Cont	Fine	Cont						
CNT 361	Mar 02	30,734	988.12	610.84	603.59	340.94	336.89	30,716.90	987.57	611.60	604.00	344.40	340.12						
CNT 362	Mar 06	24,211	778.40	627.84	488.71	197.68	153.87	23,975.50	770.83	642.70	495.41	201.70	155.48						
CNT 363	Mar 11	25,090	806.66	620.11	500.22	193.55	156.13	24,909.10	800.85	625.70	501.09	193.60	155.04						
CNT 364	Mar 18	24,099	774.80	558.45	432.68	192.60	149.23	23,748.60	763.53	556.60	424.98	195.00	148.89						
CNT 365	Mar 19	30,150	969.34	571.17	553.66	389.06	377.13	30,140.80	969.05	571.10	553.42	398.20	385.88						
CNT 366	Mar 19	23,782	764.61	587.96	449.56	196.34	150.12	23,641.20	760.08	595.20	452.40	199.20	151.41						
CNT 367	Mar 23	25,925	833.51	537.69	448.17	196.54	163.81	25,709.20	826.57	539.70	446.10	201.30	166.39						
CNT 368	Mar 31	24,792	797.08	599.89	478.16	187.73	149.64	24,673.70	793.28	600.30	476.20	197.30	156.51						
CNT 369	Apr 02	21,724	698.44	612.43	427.75	176.43	123.22	21,595.60	694.31	619.10	429.85	175.60	121.92						
CNT 370	Apr 03	25,072	806.08	514.09	414.40	316.33	254.99	24,881.90	799.97	517.70	414.15	318.80	255.03						
CNT 371	Apr 03	27,806	893.98	581.35	519.72	384.68	343.90	27,787.70	893.39	581.40	519.42	389.40	347.89						
CNT 372	Apr 04	24,014	772.07	575.09	444.01	386.31	298.26	24,014.90	772.10	574.70	443.72	392.10	302.74						
CNT 373	Apr 04	14,146	454.80	595.46	270.82	367.83	167.29	14,133.20	454.39	597.00	271.27	366.70	166.63						
CNT 374	Apr 07	27,925	897.81	639.82	574.44	161.20	144.73	27,696.40	890.46	647.90	576.93	164.50	146.48						
CNT 375	Apr 11	28,684	921.57	621.11	572.39	166.20	153.17	28,476.10	915.53	628.70	575.59	162.60	148.86						
CNT 376	Apr 15	23,959	770.30	652.65	502.74	159.62	122.96	23,817.40	765.75	658.00	503.86	163.10	124.89						
CNT 377	Apr 22	25,839	830.74	663.06	550.83	157.14	130.54	25,681.50	825.68	673.20	555.85	155.30	128.23						
CNT 378	Apr 22	25,194	810.01	563.73	456.62	401.17	324.95	25,159.70	808.90	563.90	456.14	408.00	330.03						
CNT 379	Apr 22	25,221	810.87	579.94	470.26	335.41	271.97	24,947.40	802.08	584.30	468.65	341.80	274.15						
CNT 380	Apr 29	25,417	817.17	663.53	542.22	155.75	127.28	25,253.70	811.92	670.30	544.23	153.50	124.63						
CNT 381	May 02	24,694	793.93	602.83	478.61	166.59	132.26	24,399.80	784.47	616.55	483.67	163.90	128.57						
CNT 382	May 05	17,332	557.24	601.61	335.24	359.94	200.57	17,283.70	555.68	602.30	334.69	366.40	203.60						
CNT 383	May 05	17,318	556.79	608.16	338.61	352.66	196.36	17,355.70	558.00	607.50	338.98	356.80	199.09						
CNT 384	May 05	23,042	740.82	560.05	414.90	303.14	224.57	22,845.90	734.51	561.60	412.50	307.90	226.16						
CNT 385	May 06	26,374	847.94	582.46	493.89	159.41	135.17	26,215.90	842.86	594.80	501.33	159.30	134.27						
CNT 386	May 11	28,234	907.74	591.58	537.00	178.40	161.94	28,002.80	900.31	598.80	539.11	174.10	156.74						
CNT 387	May 14	24,218	778.63	642.54	500.30	212.26	165.27	24,062.50	773.63	643.20	497.60	194.20	150.24						
CNT 388	May 20	21,686	697.22	667.67	465.52	158.14	110.26	21,529.50	692.19	676.05	467.95	158.10	109.44						
CNT 389	May 25	23,523	756.28	612.38	463.13	190.45	144.04	23,419.60	752.96	618.60	465.78	195.70	147.35						
CNT 390	May 28	26835	862.76	604.21	521.29	189.96	163.89	26,755.40	860.21	608.60	523.52	190.20	163.61						
CNT 391	June 02	27,942	898.36	588.18	528.39	203.39	182.72	27,678.50	889.88	600.60	534.46	204.60	182.07						
CNT 392	June 03	29,510	948.77	618.39	586.71	289.70	274.86	29,453.30	946.94	620.50	587.58	295.50	279.82						
CNT 393	June 03	33,292	1070.36	607.82	650.59	284.60	304.62	33,219.20	1068.02	609.80	651.28	290.20	309.94						
CNT 394	June 15	19,959	641.70	748.19	480.11	158.06	101.43	19,896.10	639.67	751.10	480.46	158.80	101.58						
CNT 395	June 15	25,196	810.07	790.46	640.33	163.71	132.62	25,149.40	808.57	790.60	639.26	165.60	133.90						
CNT 396	June 24	17,094	549.58	821.84	451.67	153.36	84.29	17,065.00	548.65	821.90	450.94	152.20	83.50						
CNT 397	June 25	11,060	355.59	654.35	232.68	267.02	94.95	11,008.80	353.94	657.30	232.65	268.40	95.00						
CNT 398	June 28	31,986	1028.37	602.11	619.19	347.39	357.25	31,915.30	1026.10	602.80	618.53	352.00	361.19						
CNT 399	July 15	* 23,580	758.11	537.40	407.41	406.50	308.17	23,490.20	755.23	537.40	405.86	406.50	307.00						
CNT 400	July 15	* 23,464	754.38	494.00	372.67	425.10	320.69	23,426.20	753.17	494.00	372.07	425.10	320.17						
				8,679,262		279,044.54		188,183.91		64,915.69		8,644,975		277,942.20		188,125.41		65,164.28	

* Bar 310 previously reported as 23,522 grams

** Johnson Matthey gold and silver fineness is the same as rep 43.1 ounces additional
Bars No. 394 to 400 have not been check assayed as the lab has been decommissioned

PROJECT GOLD PRODUCTION

Bar No.	Date	Mine				Assay of Johnson Matthey sample				Johnson Matthey				Mine vs JM				Mine vs JM			
		Weight grams	Weight ozs.	Reported Au Fine	Reported Ag Fine	Reported Au Cont	Reported Ag Cont	Au Fine	Au Cont	Ag Fine	Ag Cont	Au Fine	Au Cont	Ag Fine	Ag Cont	Var Au	Var Ag	Weight grams	Weight ozs.	Ag Cont	Au Cont
CNT 1	Jan 17 95	15.642	502.90	799.66	402.15	159.60	80.26	806.53	405.61	148.14	74.50	15613.7	501.99	150.87	75.74	-0.71	-4.53	28.30	0.83	75.74	-4.16
CNT 2	Jan 26	33.484	1076.53	712.73	767.23	241.22	259.68	711.68	766.15	243.01	261.61	33407.5	1074.08	243.05	261.05	-7.26	1.36	76.50	2.13	261.05	-6.13
CNT 3	Feb 5	31.194	1002.59	699.79	501.60	232.31	231.96	700.88	702.99	250.62	251.27	31311.4	1000.90	233.51	259.13	-4.78	20.83	52.63	-3.87	259.13	-5.87
CNT 4	Feb 22	27.901	897.04	648.70	581.91	280.54	231.96	644.33	577.99	285.71	255.29	27815.6	899.99	289.56	259.73	-6.07	7.47	85.42	-2.15	259.73	-4.43
CNT 5	Mar 6	21.938	705.32	714.89	504.23	219.68	161.68	724.31	501.87	228.33	161.05	21910.1	704.43	233.87	164.74	-2.61	3.06	27.90	-9.25	164.74	-12.21
CNT 6	Mar 6	28.184	881.83	619.66	521.65	304.41	256.26	623.86	525.18	316.64	269.56	28000.8	835.94	321.82	269.02	-8.21	12.76	183.20	-9.66	269.02	-11.75
CNT 7	Mar 13	0	0.00	690.40	0.00	249.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CNT 8	Mar 13	44.902	1443.63	650.89	939.36	278.78	402.45	646.51	933.32	281.15	405.88	1442.55	642.50	285.78	412.28	-12.45	9.82	30.50	-6.42	412.28	-4.01
CNT 9	Mar 20	0	0.00	625.29	0.00	294.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CNT 10	Mar 20	43.870	1410.45	646.61	912.01	268.66	378.93	649.86	916.59	273.72	368.07	1407.04	639.10	290.50	408.75	-12.77	29.82	106.04	-17.35	408.75	-10.76
CNT 11	Mar 27	20.150	647.84	689.98	434.04	227.08	147.67	688.94	433.37	224.43	145.39	20058.3	644.88	229.10	147.74	-6.67	0.65	91.70	-6.00	147.74	-6.24
CNT 12	Mar 27	30.935	994.58	699.98	390.58	161.71	216.86	695.47	391.70	221.62	220.62	30902.3	993.53	230.60	229.11	-7.27	11.44	32.70	-2.79	229.11	-2.07
CNT 13	Apr 3	15.372	494.22	790.30	390.58	164.71	81.40	790.40	390.63	165.64	81.86	492.63	787.00	236.80	84.44	-2.89	3.03	49.60	-3.40	84.44	-3.61
CNT 14	Apr 3	15.723	505.51	645.61	326.36	276.60	193.82	647.71	327.42	278.40	140.73	15661.7	503.53	286.80	144.41	-2.03	4.59	81.30	-3.10	144.41	-3.89
CNT 15	Apr 3	24.911	800.91	652.24	522.38	274.22	219.62	653.19	523.15	278.02	222.67	24799.9	797.33	287.80	229.47	-4.68	9.85	111.10	-5.44	229.47	-4.88
CNT 16	Apr 10	14.762	474.61	744.07	335.14	207.33	99.40	743.52	352.88	208.34	98.88	14720.7	473.28	213.30	100.95	-2.63	2.55	41.30	-2.37	100.95	-2.92
CNT 17	Apr 10	26.920	865.50	665.63	576.10	279.43	241.84	670.21	560.06	274.56	237.63	26841.3	862.97	262.80	244.05	-0.42	2.21	78.70	-4.38	244.05	-3.11
CNT 18	Apr 17	20.668	664.49	695.67	462.27	223.87	148.76	697.85	463.71	240.72	159.96	20594.0	662.11	245.90	162.81	-1.50	14.06	74.00	-2.95	162.81	-1.95
CNT 19	Apr 17	15.394	494.93	688.28	340.65	215.18	106.50	671.30	332.25	215.85	106.83	15292.3	491.66	212.50	104.48	-7.65	-2.02	101.70	0.75	104.48	-1.95
CNT 20	Apr 17	18.661	589.96	698.13	418.85	235.82	141.48	749.35	462.18	203.84	98.52	14973.4	597.40	248.30	148.33	-6.23	6.85	79.90	-4.31	148.33	-4.23
CNT 21	Apr 23	15.033	483.32	751.97	383.44	197.46	95.44	749.35	462.18	203.84	98.52	14973.4	597.40	248.30	148.33	-6.23	6.85	79.90	-4.31	148.33	-4.23
CNT 22	Apr 23	22.766	731.94	718.47	494.16	236.65	189.31	689.96	460.76	268.22	196.32	22638.6	727.65	269.70	196.30	-5.19	6.99	127.40	-1.40	196.30	-1.84
CNT 23	Apr 30	13.198	424.33	718.47	304.87	121.59	89.78	720.20	305.60	210.51	89.32	13139.7	422.45	211.90	89.52	-0.91	-0.26	59.30	-1.64	89.52	-0.70
CNT 24	Apr 30	20.818	669.31	669.31	447.98	272.10	182.12	671.04	449.14	271.96	182.03	20785.5	668.27	278.30	185.98	-0.84	3.86	32.50	-2.00	185.98	-1.94
CNT 25	May 06	18.288	587.97	757.10	445.16	180.45	106.10	756.33	444.70	179.91	105.78	18262.6	587.16	278.30	104.69	-0.56	-1.41	25.40	-0.87	104.69	-0.87
CNT 26	May 07	15.410	495.44	683.78	338.77	240.08	111.10	723.66	365.44	225.73	113.99	15699.3	494.91	241.30	119.42	2.47	0.47	16.60	-0.62	119.42	-0.51
CNT 27	May 14	15.707	504.99	727.17	367.22	220.00	111.10	723.66	365.44	225.73	113.99	15699.3	494.91	241.30	119.42	2.47	0.47	16.60	-0.62	119.42	-0.51
CNT 28	MAY 20	25.266	812.32	692.49	554.40	268.79	218.34	692.02	554.02	267.88	217.61	21501.80	692.97	242.90	168.30	-0.09	-2.82	47.40	-1.00	168.30	-1.26
CNT 29	MAY 20	32.874	1056.92	672.88	711.18	268.46	172.49	685.99	384.22	283.00	167.51	18368.10	590.55	270.20	285.20	-0.92	1.45	94.20	0.16	285.20	0.14
CNT 30	MAY 21	32.874	1056.92	672.88	711.18	268.46	172.49	685.99	384.22	283.00	167.51	18368.10	590.55	270.20	285.20	-0.92	1.45	94.20	0.16	285.20	0.14
CNT 31	May 31	18.411	581.93	660.94	391.23	231.41	172.49	685.99	384.22	283.00	167.51	18368.10	590.55	270.20	285.20	-0.92	1.45	94.20	0.16	285.20	0.14
CNT 32	May 31	24.274	780.43	762.48	595.06	216.86	165.26	774.94	604.79	194.63	151.89	24228.50	778.86	198.10	152.75	7.62	-16.50	45.50	-2.10	152.75	-1.24
CNT 33	June 2	20.431	656.87	705.91	483.69	245.71	161.40	704.50	482.76	235.87	158.93	20331.80	653.68	238.20	155.71	-3.76	-5.69	99.20	-2.83	155.71	-0.90
CNT 34	June 2	20.431	656.87	705.91	483.69	245.71	161.40	704.50	482.76	235.87	158.93	20331.80	653.68	238.20	155.71	-3.76	-5.69	99.20	-2.83	155.71	-0.90
CNT 35	June 10	12.624	399.59	514.19	230.45	165.22	73.71	512.74	230.45	165.22	73.71	512.74	230.45	165.22	73.71	-1.15	-8.51	19.20	2.37	165.22	2.37
CNT 36	June 10	12.624	399.59	514.19	230.45	165.22	73.71	512.74	230.45	165.22	73.71	512.74	230.45	165.22	73.71	-1.15	-8.51	19.20	2.37	165.22	2.37
CNT 37	June 16	14.505	466.35	703.05	327.87	174.43	129.98	703.34	328.00	274.07	127.81	14453.20	464.68	278.50	129.88	-1.29	1.90	51.80	-1.42	129.88	-0.54
CNT 38	June 16	19.337	617.70	712.49	424.96	266.96	165.97	715.07	444.56	267.73	166.45	19453.20	620.90	266.90	165.72	0.93	-0.25	24.70	-0.67	165.72	-0.17
CNT 39	June 20	25.609	812.32	692.49	554.40	268.79	218.34	692.02	554.02	267.88	217.61	21501.80	692.97	242.90	168.30	-0.09	-2.82	47.40	-1.00	168.30	-1.26
CNT 40	June 25	17.013	546.98	740.82	405.21	234.92	128.50	741.35	405.20	235.80	129.98	16978.90	545.91	235.50	128.56	-0.97	0.06	33.20	-1.25	128.56	-0.85
CNT 41	July 2	12.088	386.64	756.94	294.18	216.47	122.46	756.94	294.18	216.47	122.46	386.64	756.94	294.18	216.47	-2.26	-0.81	95.50	-2.72	216.47	-1.03
CNT 42	July 6	20.670	664.56	756.94	294.18	216.47	122.46	756.94	294.18	216.47	122.46	386.64	756.94	294.18	216.47	-2.26	-0.81	95.50	-2.72	216.47	-1.03
CNT 43	July 6	19.529	627.87	741.16	465.35	182.67	121.09	740.61	465.00	195.51	122.75	19531.60	627.96	194.70	122.26	0.09	1.17	2.60	0.44	122.26	0.44
CNT 44	July 10	19.643	631.54	763.45	482.14	184.75	104.04	762.81	481.74	165.37	105.07	19589.90	629.63	164.60	103.67	-1.21	-0.37	53.10	-0.80	103.67	-0.79
CNT 45	July 15	17.377	558.68	805.16	449.83	178.73	99.85	807.55	451.17	177.14	99.97	17340.00	557.49	178.50	99.51	-0.82	-0.34	37.00	-2.16	99.51	-2.15
CNT 46	July 22	30.985	996.19	813.04	809.94	116.75	116.31	811.53	808.44	113.27	112.84	30951.50	995.11	117.70	117.12	-0.82	0.82	33.50	0.69	117.12	1.57
CNT 47	July 23	22.176	712.97	781.71	557.34	194.08	138.38	784.83	559.56	194.86	138.93	22140.30	711.83	176.10	138.17	-0.20	-0.21	35.70	-2.42	138.17	-2.13
CNT 48	Aug 02	24.913	800.97	801.36	641.86	180.72	144.75	804.32	644.24	175.59	141.45	24873.00	799.68	176.10	140.82	-0.12	-3.93	40.00	-2.49	140.82	-1.82
CNT 49	Aug 04	17.901	575.53	786.41	452.60	182.94	92.27	787.57	453.27	140.17	80.67	17873.50	575.65	176.10	140.82	-0.12	-3.93	40.00	-2.49	140.82	-1.82
CNT 50	Aug 04	16.981	545.95	820.59	448.00	118.34	64.61	817.37	446.24	113.83	62.15	16974.60	545.75	176.10	140.82	-0.12	-3.93	40.00	-2.49	140.82	-1.82
CNT 51	Aug 07	18.853	605.14	822.60	498.61	108.66	65.99	810.04	491.00	123.29	74.73	18840.30	605.73	176.10	140.82						

PROJECT GOLD PRODUCTION

Bar No	Date	Mine				Assay of Johnson Matthey sample				Johnson Matthey				Mine vs JIM				Mine vs JIM			
		Weight grams	Weight ozs	Reported	Reported	Au Fine	Au Cont.	Aq Fine	Aq Cont.	Weight grams	Weight ozs	Au Fine	Au Cont.	Var Au	Ag Cont.	Var Ag	Weight grams	Var Au	Ag Cont.	Var Ag	JM
CNT 71	Oct 04	18 446	593.05	799.26	474.00	123.15	73.03	145.67	88.76	18327.70	589.25	799.80	471.28	-2.72	73.42	0.39	118.30	-2.72	73.42	0.39	0.85
CNT 72	Oct 07	21 379	627.35	717.79	483.37	126.51	71.82	246.97	169.74	21340.40	686.11	718.50	492.97	-0.41	124.20	-7.00	38.60	-0.41	124.20	-7.00	1.33
CNT 73	Oct 09	25 593	822.83	784.10	695.19	153.77	126.82	153.06	129.94	25551.10	821.49	785.30	645.11	-0.07	151.10	-4.00	41.90	-0.07	151.10	-4.00	0.47
CNT 74	Oct 15	18 194	584.95	721.38	421.97	133.26	72.38	230.89	135.06	18127.40	582.81	722.05	420.82	-1.15	133.23	-0.03	68.60	-1.15	133.23	-0.03	-1.42
CNT 75	Oct 17	21 325	782.52	785.41	421.97	133.26	72.38	230.89	135.06	18127.40	582.81	722.05	420.82	-1.15	133.23	-0.03	68.60	-1.15	133.23	-0.03	-1.42
CNT 76	Oct 17	21 865	708.92	768.96	477.29	253.85	178.45	148.50	129.70	27282.20	877.14	783.10	686.98	-3.10	128.76	6.30	42.80	-3.10	128.76	6.30	-0.55
CNT 77	Oct 21	15 053	483.96	836.09	404.64	130.96	83.38	183.59	101.48	14994.00	598.44	677.90	473.47	-3.82	177.06	-1.39	141.00	-3.82	177.06	-1.39	-3.45
CNT 78	Oct 31	26 638	856.43	725.88	621.67	192.82	155.14	193.03	167.03	26590.00	854.90	725.90	620.57	-1.10	134.30	0.88	59.00	-1.10	134.30	0.88	3.01
CNT 79	Oct 31	30 504	890.77	683.70	683.70	238.25	133.66	183.59	101.48	14994.00	598.44	677.90	473.47	-3.82	177.06	-1.39	141.00	-3.82	177.06	-1.39	-3.45
CNT 80	Nov 01	8 055	258.97	708.77	183.55	206.75	53.54	210.31	54.46	7959.90	255.92	711.50	182.08	-1.47	235.22	1.57	108.10	-1.47	235.22	1.57	0.81
CNT 81	Nov 09	10 533	338.84	818.69	277.40	47.63	297.58	136.60	28.90	10473.50	337.73	815.70	274.87	-2.73	200.60	-0.93	95.10	-2.73	200.60	-0.93	1.71
CNT 82	Nov 17	16 983	1189.03	897.58	829.44	145.16	291.50	238.06	136.60	36905.90	1166.55	898.50	828.81	-0.63	295.33	3.63	77.10	-0.63	295.33	3.63	-1.79
CNT 83	Nov 17	26 964	866.91	784.51	321.46	171.87	101.38	223.67	104.50	14451.30	864.52	783.50	695.67	-1.80	174.30	-0.46	55.20	-1.80	174.30	-0.46	-0.91
CNT 84	Nov 19	12 745	409.76	687.31	311.47	217.20	70.43	223.67	104.50	14451.30	864.52	783.50	695.67	-1.80	174.30	-0.46	55.20	-1.80	174.30	-0.46	-0.91
CNT 85	Nov 30	14 518	466.76	687.31	311.47	217.20	70.43	223.67	104.50	14451.30	864.52	783.50	695.67	-1.80	174.30	-0.46	55.20	-1.80	174.30	-0.46	-0.91
CNT 86	Nov 30	16 802	540.20	688.23	371.78	203.45	109.90	223.67	104.50	14451.30	864.52	783.50	695.67	-1.80	174.30	-0.46	55.20	-1.80	174.30	-0.46	-0.91
CNT 87	Dec 2	26 533	853.06	880.49	580.50	282.36	223.80	262.64	224.05	26484.50	951.50	680.70	579.61	-0.89	224.62	0.82	48.50	-0.89	224.62	0.82	0.44
CNT 88	Dec 2	29 273	941.15	667.42	628.14	280.72	264.20	267.72	262.68	29108.90	935.87	688.10	625.26	-2.89	264.01	-0.19	164.10	-2.89	264.01	-0.19	-3.17
CNT 89	Dec 2	7 792	250.52	684.03	166.35	223.28	55.94	226.78	56.81	7699.90	247.56	673.20	166.66	-0.20	217.80	-0.02	92.10	-0.20	217.80	-0.02	-1.04
CNT 90	Dec 12	15 915	511.71	647.65	331.41	178.82	91.50	183.05	93.67	15726.50	505.82	654.90	331.13	-0.28	180.90	-0.04	189.50	-0.28	180.90	-0.04	3.38
CNT 91	Dec 12	15 973	510.39	654.99	334.30	200.79	102.48	102.97	15784.60	507.49	669.20	339.61	339.61	0.00	100.94	5.31	90.40	0.00	100.94	5.31	1.01
CNT 92	Dec 15	29 532	910.89	818.22	583.14	388.29	280.82	168.79	280.51	28145.20	904.89	618.70	559.85	-3.12	281.60	-0.78	186.80	-3.12	281.60	-0.78	0.47
CNT 93	Dec 18	18 711	601.57	628.19	487.10	188.66	101.58	168.63	131.55	23930.40	769.88	628.40	483.48	-3.62	127.95	-2.66	185.50	-3.62	127.95	-2.66	-1.20
CNT 94	Dec 28	24 121	775.51	628.19	487.10	188.66	101.58	168.63	131.55	23930.40	769.88	628.40	483.48	-3.62	127.95	-2.66	185.50	-3.62	127.95	-2.66	-1.20
CNT 95	Jan 03	16 857	541.96	650.08	352.32	282.52	153.12	276.95	150.10	16671.50	535.00	645.90	352.96	-0.15	271.93	-9.20	144.60	-0.15	271.93	-9.20	-0.11
CNT 96	Jan 03	29 270	941.05	633.89	596.52	298.74	281.13	284.72	267.94	29125.40	936.40	645.90	604.82	-0.79	269.98	-0.25	112.80	-0.79	269.98	-0.25	0.45
CNT 97	Jan 03	16 218	521.42	691.78	360.71	190.37	99.26	185.49	96.72	16105.20	517.79	695.10	359.42	-0.25	187.30	-0.28	150.40	-0.25	187.30	-0.28	-1.23
CNT 98	Jan 11	30 029	985.45	580.62	580.56	188.91	182.38	192.18	186.54	29878.60	960.62	592.80	569.45	-0.31	172.20	-0.81	67.70	-0.31	172.20	-0.81	6.57
CNT 99	Jan 13	19 672	638.90	610.35	389.95	170.35	106.84	169.41	108.24	19624.80	630.15	638.40	522.30	-0.31	172.20	-0.81	67.70	-0.31	172.20	-0.81	6.57
CNT 100	Jan 13	25 873	822.19	638.01	524.57	319.37	262.59	310.68	255.44	25447.20	818.15	638.40	522.30	-0.31	172.20	-0.81	67.70	-0.31	172.20	-0.81	6.57
CNT 101	Jan 20	27 363	879.74	672.86	591.94	173.81	152.91	178.35	152.80	27194.70	874.33	693.90	597.95	-0.25	172.90	-0.71	151.70	-0.25	172.90	-0.71	1.53
CNT 102	Jan 28	27 836	894.95	562.89	503.76	379.75	339.66	378.59	338.61	27280.60	877.90	563.80	528.39	-0.25	358.59	-1.58	4.40	-0.25	358.59	-1.58	0.40
CNT 103	Jan 28	28 944	930.57	566.24	528.92	383.64	357.01	382.34	355.98	28939.60	930.43	567.90	528.39	-0.25	358.59	-1.58	4.40	-0.25	358.59	-1.58	0.40
CNT 104	Jan 28	23 179	745.22	678.28	505.47	371.12	321.52	373.40	329.22	23064.80	742.19	682.00	506.18	-0.71	125.73	-1.79	94.20	-0.71	125.73	-1.79	-0.97
CNT 105	Feb 02	24 826	798.17	576.23	459.93	382.00	286.94	360.69	287.69	24602.30	797.41	576.90	480.03	-0.15	284.01	5.07	23.70	-0.15	284.01	5.07	0.60
CNT 106	Feb 02	25 066	805.89	483.73	483.73	383.00	292.54	359.92	290.06	25011.60	804.14	576.50	483.59	-0.15	284.01	5.07	23.70	-0.15	284.01	5.07	0.60
CNT 107	Feb 03	23 520	765.18	650.65	492.01	181.76	137.44	187.60	141.86	23333.30	750.18	680.50	487.99	-4.02	141.48	4.04	186.70	-4.02	141.48	4.04	-1.08
CNT 108	Feb 08	22 614	727.06	610.55	440.38	209.97	152.66	208.72	151.75	22398.80	719.75	613.10	441.28	-2.62	150.21	-2.45	227.20	-2.62	150.21	-2.45	1.86
CNT 109	Feb 11	20 908	672.21	607.52	408.38	217.70	146.36	188.27	126.55	22998.90	668.70	613.60	441.28	-2.62	150.21	-2.45	227.20	-2.62	150.21	-2.45	-0.36
CNT 110	Feb 12	18 618	598.58	529.32	316.84	399.13	240.95	397.92	238.19	18454.50	593.33	530.70	314.82	-0.20	140.71	1.80	163.50	-0.20	140.71	1.80	-0.31
CNT 111	Feb 12	18 355	590.13	530.73	313.23	408.31	240.95	405.36	239.21	18454.50	593.33	530.70	314.82	-0.20	140.71	1.80	163.50	-0.20	140.71	1.80	-0.31
CNT 112	Feb 16	28 875	928.35	721.36	689.68	178.99	167.76	179.25	166.41	28765.00	924.82	724.30	668.92	-0.76	167.21	0.75	113.30	-0.76	167.21	0.75	-1.12
CNT 113	Feb 21	29 653	853.37	740.10	705.58	185.47	157.76	174.47	160.56	29539.70	949.72	744.10	705.69	-1.11	122.80	-1.43	95.00	-1.11	122.80	-1.43	1.70
CNT 114	Feb 21	18 900	607.85	781.37	474.80	124.53	75.67	125.58	76.31	18805.00	604.59	782.20	472.91	-1.88	74.24	2.64	114.80	-1.88	74.24	2.64	0.55
CNT 115	Mar 01	20 857	670.57	607.10	407.10	329.82	221.17	329.82	221.17	329.82	604.59	782.20	472.91	-1.88	74.24	2.64	114.80	-1.88	74.24	2.64	0.55
CNT 116	Mar 01	23 636	759.91	616.14	488.22	310.83	236.20	315.13	239.47	23575.60	757.97	617.00	487.67	-0.55	242.17	5.97	60.40	-0.55	242.17	5.97	0.16
CNT 117	Mar 01	24 449	786.05	608.60	478.39	325.68	256.00	325.15	255.59	24366.00	783.38	609.10	477.16	-1.23	249.12	-0.76	43.70	-1.23	249.12	-0.76	0.61
CNT 118	Mar 01	16 431	528.27	624.93	330.13	315.71	166.78	315.87	166.86	16387.30	528.86	625.70	329.66	-0.47	167.54	0.76	43.70	-0.47	167.54	0.76	-0.59
CNT 119	Mar 01	18 164	593.99	621.37	362.87	316.00	184.54	314.38	183.59	18387.30	583.13	621.80	362.59	-0.28	168.76	4.22	25.70	-0.28	168.76	4.22	1.21
CNT 120	Mar 01	20 143	647.61	721.35	467.16	192.85	124.89	193.72	125.45	20077.10	645.48	724.10	467.40	-0.25	127.61	2.72	65.90	-0.25	127.61	2.72	-0.75
CNT 121	Mar 09	21 107	678.61	720.81	489.15	177.14	120.21	175.02	118.77	21046.70	676.67	721.10	487.94	-							

PROJECT GOLD PRODUCTION

Bar No.	Date	Mine				Assay of Johnson Matthey sample				Johnson Matthey				Mine vs JM				Mine vs JM			
		Weight	Weight/Reported	Reported	Reported	Au Fine	Au Cont.	Au Fine	Ag Cont.	Weight	Weight	Au Fine	Au Cont.	Ag Fine	Ag Cont.	Var.Au	Var.Ag	Weight	Weight	Au Cont.	Au Fine
CNT 141	Apr 20	17.761	571.03	647.80	369.91	262.23	149.74	648.93	370.56	262.10	149.67	650.70	369.12	265.80	150.78	-0.79	1.04	116.90	-1.43	177	1.77
CNT 142	Apr 27	32.336	718.12	666.00	478.27	244.10	175.29	666.69	478.76	242.15	173.89	697.91	476.48	242.60	173.07	-1.79	-2.22	146.90	-2.29	121	1.21
CNT 143	May 01	32.584	1046.96	696.49	729.19	216.69	225.86	694.25	726.86	217.47	227.69	697.81	729.50	219.30	229.26	0.31	2.40	48.00	2.64	3.55	3.55
CNT 144	May 01	14.074	452.49	697.85	315.77	219.36	99.26	697.74	315.72	223.10	100.95	701.30	318.02	221.50	100.20	0.25	0.84	4.00	0.30	0.86	0.86
CNT 145	May 01	16.861	542.09	698.66	315.77	219.36	99.26	697.74	315.72	223.10	100.95	701.30	318.02	221.50	100.20	0.25	0.84	4.00	0.30	0.86	0.86
CNT 146	May 01	16.861	542.09	698.66	315.77	219.36	99.26	697.74	315.72	223.10	100.95	701.30	318.02	221.50	100.20	0.25	0.84	4.00	0.30	0.86	0.86
CNT 147	May 08	22.635	727.73	674.21	490.63	209.93	152.77	678.79	493.97	205.04	153.22	681.20	494.43	208.20	151.12	3.78	-1.85	59.40	0.46	2.42	2.42
CNT 148	May 14	19.694	633.18	738.55	467.63	187.44	118.68	738.46	467.58	180.60	120.68	740.70	467.13	187.20	118.06	-0.50	1.85	78.30	-0.45	2.24	2.24
CNT 149	May 14	23.512	755.93	665.75	503.26	269.92	204.04	665.83	503.32	278.38	203.38	666.50	503.10	277.30	202.62	-0.16	5.28	33.90	-0.22	0.67	0.67
CNT 150	May 14	22.724	730.59	672.97	491.67	274.66	200.66	671.75	490.77	278.38	203.38	672.20	490.91	277.30	202.62	-0.16	5.28	33.90	-0.22	0.67	0.67
CNT 151	May 22	29.527	949.31	660.25	645.77	218.41	207.34	663.29	648.60	202.38	209.21	682.10	644.04	219.40	207.53	-1.73	0.20	159.10	-4.56	-1.13	-1.13
CNT 152	May 29	29.920	961.95	642.69	618.23	207.14	199.26	642.69	618.23	207.14	199.26	642.69	618.23	207.14	199.26	-0.45	4.91	91.70	-3.43	-1.58	-1.58
CNT 153	Jun 01	17.800	565.85	669.06	378.59	210.49	118.11	673.39	381.04	208.26	117.84	673.39	381.04	208.26	117.84	0.88	-0.96	58.80	-1.57	0.49	0.49
CNT 154	Jun 01	25.677	825.53	635.60	524.87	318.65	269.25	630.36	524.87	318.65	269.25	630.36	524.87	318.65	269.25	-0.45	4.91	91.70	-3.43	-1.58	-1.58
CNT 155	Jun 01	26.281	844.95	630.66	532.87	318.65	269.25	630.36	524.87	318.65	269.25	630.36	524.87	318.65	269.25	-0.45	4.91	91.70	-3.43	-1.58	-1.58
CNT 156	Jun 02	20.402	655.94	634.24	416.03	318.24	207.75	634.24	416.03	318.24	207.75	634.24	416.03	318.24	207.75	-0.31	1.99	32.90	-0.57	0.16	0.16
CNT 157	Jun 02	22.840	655.94	634.24	416.03	318.24	207.75	634.24	416.03	318.24	207.75	634.24	416.03	318.24	207.75	-0.31	1.99	32.90	-0.57	0.16	0.16
CNT 158	Jun 12	23.597	758.66	662.88	502.75	244.25	185.30	709.96	538.62	180.54	144.55	709.96	538.62	180.54	144.55	32.48	-41.89	120.00	-3.39	-0.86	-0.86
CNT 159	Jun 14	17.777	571.54	727.25	415.66	162.64	92.96	730.80	417.68	168.60	96.36	728.60	417.68	171.90	97.70	-1.55	4.74	99.20	-3.58	-2.20	-2.20
CNT 160	Jun 25	19.337	821.70	739.72	459.89	158.72	98.68	739.72	459.89	158.72	98.68	739.72	459.89	158.72	98.68	0.02	-2.04	90.40	-2.47	1.60	1.60
CNT 161	Jul 01	24.340	782.55	668.95	523.48	161.86	126.66	677.05	523.48	161.86	126.66	677.05	523.48	161.86	126.66	3.87	2.10	170.50	-2.47	1.60	1.60
CNT 162	Jul 02	25.363	815.44	710.28	579.19	234.08	190.88	709.57	579.19	234.08	190.88	709.57	579.19	234.08	190.88	-0.03	0.33	2.10	0.55	0.73	0.73
CNT 163	Jul 02	24.177	777.31	728.12	565.97	225.11	174.98	727.81	565.97	225.11	174.98	727.81	565.97	225.11	174.98	-0.37	-1.58	34.40	-0.35	0.59	0.59
CNT 164	Jul 02	23.660	761.33	728.63	553.35	228.45	172.40	726.81	553.35	228.45	172.40	726.81	553.35	228.45	172.40	-0.37	-1.58	34.40	-0.35	0.59	0.59
CNT 165	Jul 03	23.697	705.74	705.74	537.69	162.79	124.03	710.50	541.31	170.74	130.08	710.50	541.31	170.74	130.08	1.34	1.96	55.90	-1.50	-0.24	-0.24
CNT 166	Jul 10	18.322	589.07	756.79	445.80	194.06	114.31	757.34	445.80	194.06	114.31	757.34	445.80	194.06	114.31	-1.45	-1.50	98.90	-0.48	2.95	2.95
CNT 167	Jul 13	19.736	634.53	738.08	468.33	177.78	112.80	736.55	467.36	178.54	113.29	736.55	467.36	178.54	113.29	-1.45	-1.50	98.90	-0.48	2.95	2.95
CNT 168	Jul 21	19.467	625.88	702.70	439.80	186.63	116.93	707.72	442.95	192.87	120.71	707.72	442.95	192.87	120.71	1.08	-0.14	104.00	-2.07	0.48	0.48
CNT 169	Jul 25	30.044	965.94	679.03	655.90	184.13	177.86	683.17	659.90	185.46	144.55	683.17	659.90	185.46	144.55	-1.12	-0.86	85.80	-1.59	0.70	0.70
CNT 170	Aug 01	17.095	549.62	713.16	391.96	189.45	104.12	714.00	392.43	181.74	105.38	714.00	392.43	181.74	105.38	-0.86	0.73	49.30	9.53	12.36	12.36
CNT 171	Aug 02	26.884	824.30	720.83	629.09	219.74	189.93	715.54	620.20	230.50	199.23	715.54	620.20	230.50	199.23	0.63	-0.79	56.60	0.26	1.90	1.90
CNT 172	Aug 02	25.736	827.50	720.83	629.09	219.74	189.93	715.54	620.20	230.50	199.23	715.54	620.20	230.50	199.23	0.63	-0.79	56.60	0.26	1.90	1.90
CNT 173	Aug 02	27.586	886.91	733.84	650.94	211.86	187.90	734.64	651.56	210.51	186.70	734.64	651.56	210.51	186.70	-0.72	2.57	44.10	-1.34	-0.34	-0.34
CNT 174	Aug 09	20.731	666.52	735.87	480.47	176.08	117.36	740.43	483.54	178.36	118.88	740.43	483.54	178.36	118.88	-0.13	0.49	115.50	-3.20	-0.68	-0.68
CNT 175	Aug 18	31.645	1017.41	693.72	705.79	216.37	222.17	694.36	706.45	219.29	223.11	694.36	706.45	219.29	223.11	-1.27	-3.02	88.00	-1.93	0.04	0.04
CNT 176	Aug 18	20.463	567.90	704.24	463.32	184.04	121.08	704.24	463.32	184.04	121.08	704.24	463.32	184.04	121.08	1.03	-2.86	92.20	-3.07	-1.47	-1.47
CNT 177	Aug 27	16.270	523.09	697.88	365.05	183.40	95.93	700.64	366.50	187.60	98.13	700.64	366.50	187.60	98.13	0.82	0.82	60.90	-1.22	1.16	1.16
CNT 178	Aug 27	16.166	519.75	679.42	353.13	187.87	97.85	681.36	354.14	190.85	99.19	681.36	354.14	190.85	99.19	1.82	1.82	120.30	-2.25	0.74	0.74
CNT 179	Sep 03	26.088	838.75	702.22	588.98	220.77	185.17	716.45	600.92	236.59	198.44	716.45	600.92	236.59	198.44	11.58	14.15	48.90	-0.35	0.95	0.95
CNT 180	Sep 03	36.657	1178.55	723.58	855.13	230.77	217.99	723.90	863.15	231.43	272.75	723.90	863.15	231.43	272.75	-1.79	0.68	37.50	0.19	0.90	0.90
CNT 181	Sep 03	29.259	940.70	718.34	675.74	230.77	217.99	723.90	863.15	231.43	272.75	723.90	863.15	231.43	272.75	6.66	-6.01	15.70	-0.97	-0.64	-0.64
CNT 182	Sep 10	18.668	600.19	796.10	477.81	134.92	80.98	795.50	477.45	135.47	81.31	795.50	477.45	135.47	81.31	-3.75	0.89	80.90	-3.38	-2.20	-2.20
CNT 183	Sep 17	24.285	780.14	739.00	576.52	145.96	113.86	743.34	579.91	143.66	112.23	743.34	579.91	143.66	112.23	5.99	-1.79	7.00	2.61	3.56	3.56
CNT 184	Sep 24	21.928	705.00	710.05	500.58	153.97	108.55	717.06	505.53	153.94	108.52	717.06	505.53	153.94	108.52	1.50	-0.74	211.30	-3.45	2.04	2.04
CNT 185	Oct 02	26.233	907.71	688.74	625.16	275.03	249.65	691.21	627.42	274.18	249.68	691.21	627.42	274.18	249.68	0.99	1.06	52.10	-1.26	-0.11	-0.11
CNT 186	Oct 02	25.895	832.54	700.76	583.41	254.23	211.66	702.42	584.60	254.62	212.15	702.42	584.60	254.62	212.15	-0.05	3.04	41.30	-1.12	0.22	0.22
CNT 187	Oct 02	27.256	876.30	718.80	629.88	218.30	191.29	719.38	630.40	218.31	191.31	720.30	629.88	219.90	192.28	-0.05	0.99	56.90	-0.56	0.92	0.92
CNT 188	Oct 02	25.592	822.80	719.78	592.23	217.00	178.54	719.88	592.32	218.72	179.96	719.88	592.32	218.72	179.96	0.22	2.02	51.80	-0.19	1.22	1.22
CNT 189	Oct 02	13.912	447.28	769.51	344.19	138.95	62.15	771.55	345.10	140.96	63.05	770.40	343.45	140.40	62.59	-0.73	0.44	45.80	-1.65	-1.15	-1.15
CNT 190	Oct 02	14.855	477.60	745.44	356.02	154.17	73.63	748.28	357.38	154.20	73.65	748.28	357.38	154.20	73.65	-0.30	0.02	65.30	-1.66	-0.18	-0.18
CNT 191	Oct 11	16.174	520.01	776.54	403.80	143.97	74.86	790.67	411.15	139.18	72.37	790.67	411.15	139.18	72.37	4.44	-2.41	110.90	-2.90	-0.17	-0.17
CNT 192																					

PROJECT GOLD PRODUCTION

Bar No	Date	Mine				Assay of Johnson Matthey sample				Johnson Matthey				Mine vs JM				Mine vs JM					
		Weight grams	Reported	Au Fine	Ag Cont.	Reported	Au Fine	Ag Cont.	Au Fine	Au Cont.	Ag Fine	Ag Cont.	Weight grams	Au Fine	Au Cont.	Ag Fine	Ag Cont.	Var Au	Var Ag	Weight grams	Au Cont	Au Fine	JM
CNT 211	Dec 11	16,054	730.73	516.15	377.16	155.32	80.17	735.33	379.54	154.90	79.95	15982.30	513.84	736.20	378.29	156.90	80.62	1.13	0.45	71.70	-1.25	0.87	
CNT 212	Dec 15	16,517	702.20	431.03	372.89	174.66	92.87	699.90	371.67	171.80	91.23	16340.60	525.36	700.20	367.66	170.40	89.52	-5.03	-3.34	176.40	-3.81	0.30	
CNT 213	Dec 19	13,537	435.22	287.43	152.98	86.58	66.58	664.25	289.10	155.35	67.61	13361.30	429.58	664.90	285.62	156.80	87.35	-1.80	0.78	175.70	-3.47	0.66	
CNT 214	Dec 19	28,170	905.69	627.81	588.60	331.14	299.91	627.81	588.60	332.21	300.88	28222.30	907.37	629.50	571.19	341.40	309.78	2.59	9.87	-52.30	2.59	1.69	
CNT 215	Dec 24	24,427	785.35	488.76	336.31	254.12	94.16	622.86	489.15	339.50	286.62	24418.50	785.07	620.20	486.90	339.20	289.75	-1.86	5.63	8.50	-2.25	-2.66	
CNT 216	Dec 26	16,492	530.23	341.98	264.72	180.61	96.76	647.72	343.44	178.59	94.69	16316.40	524.58	646.60	339.20	172.40	90.44	-1.20	-5.33	175.60	-4.24	-1.12	
CNT 217	Dec 30	12,942	416.09	724.47	301.45	172.30	71.69	722.55	300.65	181.47	75.51	12936.00	415.90	722.30	300.41	174.20	72.45	-1.04	0.76	6.00	-0.24	-0.25	
CNT 218	Jan 03	16,484	529.97	710.29	376.44	187.59	99.41	710.87	376.74	194.50	103.08	16421.60	527.97	710.80	375.28	187.50	98.99	-1.16	-0.42	62.40	-1.46	-0.07	
CNT 219	Jan 03	27,744	891.99	578.86	516.33	374.39	333.95	578.02	515.59	374.97	334.47	27702.50	890.66	578.80	515.51	379.90	336.36	-0.82	4.41	41.50	-0.08	0.78	
CNT 220	Jan 03	27,409	881.22	571.25	503.40	387.25	341.25	503.34	387.13	341.15	327.78	27318.30	878.30	503.30	346.31	394.30	346.31	-3.21	5.07	394.70	-3.15	-1.69	
CNT 221	Jan 03	27,082	870.71	585.36	509.67	370.33	322.45	585.15	509.49	369.56	321.78	27022.50	868.79	585.50	508.68	374.10	325.02	-0.99	2.57	59.50	-0.82	0.35	
CNT 222	Jan 03	27,375	763.10	480.34	351.54	268.26	603.51	460.53	460.53	351.39	268.14	23895.10	761.81	803.30	459.80	356.00	271.21	-0.74	2.95	39.90	-0.93	-0.21	
CNT 223	Jan 03	22,580	725.96	425.03	371.55	268.02	370.56	629.02	370.56	269.02	269.02	22552.80	725.96	425.03	371.55	269.02	370.56	-0.49	2.54	272.20	-0.49	0.04	
CNT 224	Jan 05	19,833	637.65	598.58	381.68	224.19	155.74	605.04	385.80	247.82	158.02	19676.70	632.61	604.10	382.16	245.00	154.99	0.48	-0.75	156.50	-3.64	-0.94	
CNT 225	Jan 09	22,098	710.47	606.21	430.69	228.19	162.12	613.13	435.61	230.05	163.44	21870.50	703.15	610.50	429.27	232.90	157.44	-1.42	-4.68	227.50	-6.33	-2.63	
CNT 226	Jan 12	9,929	319.22	699.50	223.30	166.29	53.08	716.92	228.86	152.64	48.73	9877.00	317.55	717.20	227.75	152.80	48.52	4.45	-4.56	52.00	-1.11	0.28	
CNT 227	Jan 14	25,489	819.49	517.48	424.07	359.98	521.71	427.54	439.32	360.01	25408.60	816.90	521.55	426.06	445.20	363.69	1.99	3.71	80.40	-1.48	-0.16		
CNT 228	Jan 17	14,648	470.94	703.20	331.17	170.39	80.25	710.03	334.39	171.49	80.76	14590.90	469.11	709.50	332.83	164.10	76.98	1.67	-3.26	57.10	-1.55	-0.53	
CNT 229	Jan 20	23,153	744.39	532.93	396.71	413.91	308.11	531.88	395.92	412.95	307.39	23103.30	742.79	532.20	395.31	416.90	309.67	-1.40	1.56	49.70	-0.61	0.32	
CNT 230	Jan 24	21,482	690.66	652.03	450.33	205.22	141.74	666.79	460.52	211.84	106.31	21170.10	680.63	665.20	452.76	210.50	143.27	2.42	1.54	311.90	-7.77	-1.59	
CNT 231	Jan 28	17,642	567.20	577.00	407.33	190.48	108.04	585.56	332.13	185.50	105.22	17118.90	550.59	582.60	320.65	188.60	103.80	-6.62	-4.24	523.10	-11.47	-2.96	
CNT 232	Jan 29	26,923	865.59	543.14	470.14	410.83	355.61	544.02	470.90	411.46	356.15	26863.70	863.87	544.20	470.01	422.10	364.56	-0.13	8.94	59.80	-0.89	0.18	
CNT 233	Jan 29	29,664	953.72	539.58	514.61	421.96	402.45	540.18	423.06	403.48	29651.70	953.32	541.90	516.61	431.20	411.07	2.00	8.63	32.30	1.43	1.72		
CNT 234	Feb 03	27,239	875.75	541.22	473.98	406.30	355.82	542.41	475.02	406.69	356.13	27206.80	874.72	541.90	475.01	410.50	359.07	0.03	474.01	410.50	-1.01	-0.51	
CNT 235	Feb 03	29,709	955.17	540.12	515.90	407.31	389.04	540.03	515.82	405.55	387.37	29677.20	954.14	540.20	515.43	410.50	394.44	-0.47	5.40	31.80	-0.39	0.17	
CNT 236	Feb 03	28,896	927.10	548.11	403.54	374.12	546.81	506.95	404.34	374.86	287.59	28759.30	924.63	548.50	507.16	408.90	378.08	0.21	3.96	76.70	0.21	1.69	
CNT 237	Feb 03	20,468	658.70	529.41	348.72	170.06	122.01	546.91	392.40	187.52	110.35	20403.20	655.98	535.10	351.01	172.20	112.96	2.29	0.94	84.80	-1.39	0.11	
CNT 238	Feb 09	14,393	462.75	602.81	278.02	431.20	226.43	525.76	278.52	430.63	80.76	14590.90	469.11	709.50	332.83	164.10	76.98	1.67	-3.26	57.10	-1.55	-0.53	
CNT 239	Feb 13	16,477	529.75	524.81	278.02	431.20	226.43	525.76	278.52	430.63	80.76	14590.90	469.11	709.50	332.83	164.10	76.98	1.67	-3.26	57.10	-1.55	-0.53	
CNT 240	Feb 13	12,137	390.21	659.69	257.42	176.38	95.69	663.24	258.86	178.87	93.86	15252.00	390.21	659.69	257.42	176.38	95.69	0.39	-2.18	67.60	-1.05	1.02	
CNT 241	Feb 20	15,329	482.84	597.28	325.07	194.16	95.69	663.24	328.87	190.45	93.86	15252.00	490.36	663.80	325.50	190.00	93.17	0.43	-2.52	77.00	-1.57	-0.83	
CNT 242	Feb 20	28,588	919.12	577.28	530.59	382.42	351.49	578.33	351.55	380.56	349.78	28544.40	917.72	577.50	529.99	386.20	354.42	0.60	2.93	43.60	-1.57	-0.83	
CNT 243	Feb 27	14,198	456.48	672.19	306.84	165.42	75.51	680.86	310.80	169.59	77.41	14104.70	453.48	680.30	308.80	169.80	77.00	1.66	1.49	93.30	-2.30	-0.56	
CNT 244	Mar 03	13,249	425.96	591.15	251.81	196.17	93.58	590.47	255.31	190.59	81.18	13155.10	422.95	598.30	253.05	190.20	80.44	1.24	-3.12	93.90	-2.28	-1.07	
CNT 245	Mar 04	23,841	766.51	599.71	452.02	337.97	274.36	590.45	452.02	337.97	274.36	23815.50	766.51	599.71	452.02	337.97	274.36	-0.26	2.64	25.50	-0.83	-0.45	
CNT 246	Mar 09	18,470	593.82	604.17	358.77	178.37	105.92	609.46	361.91	180.29	107.06	18188.00	564.76	609.20	356.23	181.90	106.37	-2.54	0.45	282.00	-5.68	-1.26	
CNT 247	Mar 13	15,644	502.97	698.66	351.40	141.97	71.41	706.83	355.51	143.01	71.93	15551.80	500.00	708.00	354.00	142.60	71.30	2.60	-0.11	92.20	-1.51	1.17	
CNT 248	Mar 20	15,166	488.24	680.05	322.26	163.67	79.91	684.55	324.46	163.13	78.65	14894.60	478.87	662.50	317.23	163.80	78.34	-5.01	-1.57	291.40	-7.21	-2.05	
CNT 249	Mar 20	29,522	949.15	623.84	592.12	323.41	306.97	624.60	592.84	325.45	308.90	29494.70	948.28	623.90	591.63	330.40	313.31	-0.49	6.34	27.30	-1.21	-0.70	
CNT 250	Mar 27	13,925	447.70	759.05	339.82	138.91	62.19	761.80	341.05	138.86	62.61	13843.90	445.09	761.54	338.95	136.60	80.80	-0.87	-1.39	81.10	-2.10	-0.70	
CNT 251	Mar 31	25,994	835.73	597.79	499.59	328.93	274.90	596.60															

Table 6

PROJECT GOLD PRODUCTION

Bar No	Date	Mine				Assay of Johnson Matthey sample				Johnson Matthey				Mine vs JM				Mine vs JM			
		Weight grams	Weight ozs	Reported Au Fine	Reported Au Cont	Reported Ag Fine	Reported Ag Cont	Au Fine	Au Cont	Ag Fine	Ag Cont	Weight grams	Weight ozs	Au Fine	Au Cont	Ag Fine	Ag Cont	Var Au	Var Ag	Weight grams	JM Mine vs Au Cont
CNT 281	July 03	19,920	640.44	667.94	446.99	231.31	148.14	699.34	447.89	231.84	148.48	19815.60	637.09	699.20	445.45	234.00	149.08	-1.53	0.94	104.20	-2.43
CNT 282	July 03	21,225	692.40	699.87	477.59	226.59	154.63	700.62	478.10	225.58	153.93	21159.70	680.30	700.70	476.69	227.00	154.43	-0.91	-0.20	55.30	-1.42
CNT 283	July 15	25,173	806.33	688.67	541.17	219.01	177.25	698.28	540.86	221.65	179.39	25029.70	804.72	669.80	539.00	228.40	175.75	-2.17	-1.50	143.30	-1.86
CNT 284	July 15	23,053	805.47	726.69	565.33	223.95	160.36	726.74	565.37	223.29	178.85	24970.40	804.82	727.80	564.29	227.40	175.96	-1.04	2.18	82.60	-1.08
CNT 285	July 27	15,011	579.07	686.95	380.42	181.30	126.41	681.24	380.42	181.52	126.58	17941.10	576.92	661.00	381.28	216.00	182.56	0.86	-1.82	89.90	-1.63
CNT 286	July 27	15,657	530.38	686.05	345.35	181.17	91.20	691.45	348.06	180.72	90.97	15600.20	501.56	689.50	345.92	191.50	91.03	0.48	-0.16	58.80	-2.24
CNT 287	Aug 02	20,233	707.62	680.31	460.31	171.33	111.45	707.62	460.31	173.50	112.86	20163.20	648.26	707.40	458.68	217.50	112.47	-1.73	1.68	99.80	-3.58
CNT 288	Aug 04	19,033	611.92	745.35	456.10	201.94	123.57	744.51	455.59	201.39	123.23	19013.70	611.30	744.20	454.93	204.90	125.26	-1.16	1.02	19.30	-0.65
CNT 289	Aug 09	27,061	730.33	746.89	649.65	202.29	176.00	747.36	649.65	201.39	175.60	27031.20	869.07	747.20	649.37	203.80	177.12	-0.28	1.12	29.80	-0.86
CNT 290	Aug 09	16,656	535.50	770.84	412.79	155.61	83.33	771.40	413.09	155.16	83.09	16667.70	532.66	772.10	411.27	156.80	83.42	-1.52	0.09	88.30	-1.82
CNT 291	Aug 13	17,434	560.52	774.49	434.12	144.06	80.75	779.56	436.96	143.79	80.59	17340.60	557.51	781.10	435.47	143.10	79.78	1.36	-0.97	93.40	-1.48
CNT 292	Aug 22	24,112	775.22	815.05	631.84	211.49	109.69	813.64	630.74	213.50	109.70	24048.20	773.10	813.20	628.69	244.70	111.87	-3.15	2.16	55.80	-2.06
CNT 293	Aug 22	28,304	845.69	678.96	574.19	201.30	170.24	860.16	575.20	203.38	171.98	26203.20	842.45	861.10	573.79	204.60	172.37	-0.39	2.13	100.80	-1.41
CNT 294	Aug 26	15,196	488.63	677.66	375.10	148.70	72.66	679.31	375.91	148.26	72.44	15164.50	487.55	680.80	374.73	150.40	73.33	-0.54	0.67	33.50	-1.18
CNT 295	Aug 26	20,847	678.25	689.09	441.75	204.35	136.96	681.96	443.67	207.19	138.87	20777.00	668.00	660.50	441.21	207.70	138.74	-0.57	1.78	70.00	-1.46
CNT 296	Sept 04	23,855	766.96	760.51	583.28	193.77	148.61	762.72	584.97	192.80	147.87	23761.90	763.96	761.90	582.06	194.90	148.90	-1.21	0.29	91.40	-0.82
CNT 297	Sept 04	23,890	761.65	657.09	500.47	192.65	146.73	667.04	508.05	191.60	145.93	23598.60	758.71	669.00	507.58	190.40	144.46	7.11	-2.27	93.10	-0.47
CNT 298	Sept 05	21,676	696.90	766.42	534.12	182.25	127.01	767.21	534.67	191.15	133.21	21653.70	696.18	765.80	533.14	185.40	129.07	-0.98	2.06	22.30	-1.53
CNT 299	Sept 05	9,472	304.53	799.96	240.57	166.98	50.85	791.29	240.97	167.08	50.88	9451.70	303.88	790.50	240.22	169.30	51.45	-0.35	0.60	20.30	-0.75
CNT 300	Sept 10	24,768	796.31	655.80	522.06	201.99	160.85	660.88	526.27	203.83	162.31	24855.10	792.68	661.20	524.12	202.20	160.28	2.06	-0.57	112.90	-2.15
CNT 301	Sept 18	22,292	716.70	693.28	489.71	190.74	136.71	698.63	483.54	187.66	134.50	22189.40	713.41	688.80	491.39	187.80	133.98	1.68	-2.73	102.60	-2.15
CNT 302	Sept 18	19,594	610.67	673.37	411.21	244.34	149.21	673.25	411.13	241.79	147.65	18924.80	608.45	672.70	409.30	241.80	147.12	-1.91	-2.09	69.20	-1.83
CNT 303	Sept 18	14,937	480.24	706.52	339.29	244.86	117.59	707.46	339.76	243.93	117.14	14902.20	479.12	707.20	338.63	246.00	117.86	-0.46	0.27	34.90	-0.28
CNT 304	Sept 18	16,413	527.69	718.61	379.21	184.17	97.19	720.61	380.26	185.58	98.46	16347.80	525.59	719.40	378.11	185.50	97.50	-1.09	0.31	55.20	-1.21
CNT 305	Sept 23	23,778	764.48	706.35	539.99	193.83	148.18	712.32	544.55	192.30	147.01	23591.90	758.50	711.60	539.75	193.70	146.92	-0.24	-1.26	186.10	-0.81
CNT 306	Sept 23	20,887	671.53	723.52	485.87	171.36	115.08	728.04	488.90	174.13	116.94	20835.20	669.87	727.10	487.06	175.40	117.49	1.19	2.42	51.80	-1.84
CNT 307	Oct 01	18,626	598.84	744.58	445.88	153.22	91.76	743.88	445.46	156.43	93.68	18589.30	597.66	742.40	444.78	156.10	93.29	-1.10	1.54	36.70	-0.69
CNT 308	Oct 03	24,239	779.30	750.67	585.00	197.42	153.85	751.36	585.54	203.44	158.54	24176.60	777.30	751.10	583.83	200.80	156.08	-1.17	2.23	82.40	-1.71
CNT 309	Oct 04	25,584	821.90	741.85	609.73	208.82	171.65	744.31	609.08	215.75	177.32	25309.00	820.13	742.10	608.82	211.00	173.05	-1.11	1.40	55.00	-0.46
CNT 310	Oct 04	25,332	814.12	744.63	605.22	208.82	170.01	744.31	605.96	215.29	175.27	25317.60	813.98	744.30	605.84	210.90	171.67	-0.37	1.65	44.00	-0.12
CNT 311	Oct 04	11,218	380.67	668.58	241.13	205.01	73.94	671.35	242.14	207.89	74.98	11143.90	358.48	670.80	240.47	208.10	74.60	-0.67	0.65	68.10	-1.67
CNT 312	Oct 09	15,801	508.01	668.09	388.02	136.44	69.31	668.18	388.21	139.23	70.73	15145.20	503.22	665.80	387.56	135.10	68.39	-0.46	-0.92	55.80	-0.65
CNT 313	Oct 09	20,115	646.71	668.09	444.99	173.69	112.33	662.60	447.91	178.22	113.96	20015.10	643.44	693.80	446.42	173.50	111.64	1.43	-0.69	101.90	-1.50
CNT 314	Oct 12	20,312	653.05	721.27	471.02	160.28	104.67	725.11	473.53	169.52	110.05	20210.70	649.79	724.50	470.77	160.20	104.10	-0.25	-0.57	101.30	-2.76
CNT 315	Oct 17	19,140	651.36	684.52	421.23	185.46	101.82	695.63	428.07	188.00	54.15	19016.50	611.39	696.60	425.90	167.30	102.29	4.67	0.47	123.50	-2.17
CNT 316	Oct 18	25,994	835.73	657.78	549.72	277.58	231.98	657.61	549.58	277.72	232.10	25848.40	824.81	656.40	541.28	280.60	231.39	-8.45	-0.59	345.60	-8.30
CNT 317	Oct 20	10,830	348.19	846.26	294.66	93.05	32.40	846.57	294.77	93.32	32.49	10754.00	345.75	844.40	291.95	95.70	33.09	-2.71	0.89	76.00	-2.82
CNT 318	Oct 24	19,119	666.13	738.11	491.68	156.02	103.93	740.52	493.28	154.03	102.61	19038.70	663.48	739.80	490.94	152.50	101.18	-0.77	-2.75	82.30	-2.37
CNT 319	Oct 24	13,080	420.53	676.82	284.62	260.47	109.53	675.06	283.88	261.54	109.98	13057.40	419.80	676.80	284.12	258.60	108.56	-0.97	-0.22	22.60	0.24
CNT 320	Oct 30	21,858	702.75	702.75	493.86	211.28	106.31	699.84	491.81	217.48	103.43	21776.70	700.14	696.40	487.58	145.50	101.87	-6.28	-4.44	81.30	-4.24
CNT 321	Nov 03	16,783	539.59	655.56	353.73	221.34	119.43	662.93	357.71	228.43	123.26	16661.90	535.69	662.30	354.79	225.50	120.80	1.06	1.37	121.10	-2.92
CNT 322	Nov 03	20,164	648.28	678.55	439.90	278.43	180.50	679.19	440.31	277.74	180.06	20108.60	646.44	679.00	438.93	284.10	183.65	-0.96	3.15	57.40	-1.38
CNT 323	Nov 03	17,731	570.06	679.06	387.11	276.73	157.75	679.17	387.48	276.10	157.40	17705.90	563.26	679.50	386.81	282.30	160.70	-0.30	2.95	25.10	-0.67
CNT 324	Nov 08	22,198	713.66	691.41	486.31	186.98	133.45	686.03	489.61	184.99	132.03	22095.60	710.39	687.30	488.25	185.40	131.71	1.94	-1.74	102.40	-1.36
CNT 325	Nov 13	27,617	897.91	691.16	613.68	193.06	171.42	696.89	618.77	197.36	175.24	27513.40	884.58	696.70	616.28	196.70	174.00	2.60	2.57	103.60	-2.49
CNT 326	Nov 16	20,216	650.02	700.39	455.27	176.59	114.79	708.90	460.80	179.33	116.57	20091.70	643.96	707.70	457.15	180.40	116.53	1.88	1.75	126.30	-3.65
CNT 327	Nov 18	28,366	911.99	658.12	600.20	286.94	270.80	659.15	601.13	298.10	271.86	28296.40	905.75	658.90	599.43	302.10	274.84	-0.77	4.03	69.60	-1.70
CNT 328	Nov 22	30,444	978.80	694.67	679.94	202.44	188.15	694.78	680.05	206.32	201.94	30114.50	968.20	694.90	672.80	203.80	197.32	-7.13	-0.83	329.50	-7.24
CNT 329	Nov 27	24,062	773.61	722.10	558.62	169.65	131.24	727.12	562.51	170.69	132.05	23963.80	770.45	728.70	561.43	167.30	128.90	2.81	-2.34	98.20	-1.58
CNT 330	Nov 28	22,653	728.31	674.42	491.19	277.75	202.30	675.45	491.94	276.85	201.63	22827.50	727.49								

PROJECT GOLD PRODUCTION

Assay of Johnson Matthey sample

Johnson Matthey

Bar No.	Date	Weight grams	Weight ozs.	Reported		Reported		Ag Cont.	Au Fine	Au Cont.	Ag Cont.	Weight grams	Weight ozs.	Au Fine	Au Cont.	Ag Cont.	Var Au	Var Ag	Weight grams	JM	
				Au Cont.	Ag Cont.	Au Cont.	Ag Cont.													Au Fine	Au Cont.
CNT 351	Feb 02	25.259	812.10	686.06	557.14	161.28	130.98	160.78	130.57	24.967.50	802.72	697.50	559.90	158.70	127.39	2.76	-3.56	291.50	-4.90	2.02	
CNT 352	Feb 04	21.926	704.94	599.31	415.43	359.45	253.39	359.37	253.33	21.866.90	703.68	589.50	414.52	366.60	258.11	-0.61	4.72	39.10	-1.28	-0.77	
CNT 353	Feb 04	21.308	685.07	581.82	384.88	322.86	221.18	384.64	222.40	21.163.50	680.42	569.60	387.57	365.50	225.90	2.69	4.72	144.50	-2.37	0.40	
CNT 354	Feb 08	28.303	942.11	596.18	561.67	165.03	155.48	569.94	162.91	25.078.80	934.90	603.10	563.84	332.00	154.73	-0.75	-0.75	224.20	-6.09	-1.86	
CNT 355	Feb 12	23.760	763.90	635.14	482.89	155.11	118.49	654.51	499.98	15.115.20	758.73	655.50	497.35	351.10	114.64	14.46	-3.85	160.70	-2.63	0.99	
CNT 356	Feb 19	30.456	979.18	591.83	579.51	171.84	364.10	592.09	378.76	30.427.00	978.25	591.70	578.93	378.20	369.97	-0.68	5.88	29.00	-0.93	0.99	
CNT 357	Feb 23	25.826	830.32	663.90	551.25	181.14	150.40	675.02	580.49	180.33	149.73	674.80	555.63	184.20	151.67	4.37	1.27	215.60	-4.86	-0.22	
CNT 358	Feb 27	18.755	602.98	670.99	404.60	188.82	113.86	689.39	415.69	180.10	113.42	688.90	412.98	190.70	114.32	8.38	0.47	109.10	-2.71	3.42	
CNT 359	Mar 02	15.825	508.79	659.87	335.73	171.27	87.14	674.51	343.18	170.06	86.53	685.30	345.80	173.70	87.69	10.87	0.75	87.10	-3.71	10.49	
CNT 360	Mar 02	21.024	675.94	600.62	473.57	180.04	121.69	706.86	477.79	176.85	119.54	709.20	477.85	178.80	120.47	4.27	-1.22	66.90	0.06	2.34	
CNT 361	Mar 02	30.734	988.12	710.84	603.59	340.94	336.89	604.12	342.99	338.92	20.716.90	987.57	611.60	344.40	340.12	0.41	3.23	17.10	-0.12	0.24	
CNT 362	Mar 06	24.211	778.40	627.64	488.71	197.68	153.87	637.98	486.29	202.94	159.41	642.70	495.41	201.70	155.48	6.70	1.60	235.50	-0.88	5.12	
CNT 363	Mar 11	25.090	805.66	620.11	500.22	193.55	156.13	627.97	506.56	197.61	159.41	625.70	501.09	193.60	155.04	0.87	-1.09	180.90	-5.47	-2.27	
CNT 364	Mar 18	24.099	774.80	558.45	432.68	192.60	149.23	560.05	433.93	193.37	148.42	556.60	424.98	195.00	148.89	-0.70	-0.34	350.40	-8.94	-3.45	
CNT 365	Mar 19	30.150	969.34	571.17	553.66	390.06	377.13	553.79	390.23	378.26	20.140.80	969.05	571.10	553.42	398.20	385.88	-0.23	8.74	9.20	-0.36	-0.20
CNT 366	Mar 23	23.782	784.61	597.96	449.56	196.34	150.12	595.27	455.15	199.37	152.44	594.20	452.40	199.20	156.49	2.84	1.29	140.80	-2.75	-0.07	
CNT 367	Mar 23	23.925	833.51	597.69	448.17	196.54	163.81	539.85	460.05	199.10	165.95	539.70	446.10	201.30	166.39	-2.07	2.57	215.60	-3.95	-0.25	
CNT 368	Mar 31	24.792	797.08	599.89	478.16	187.73	149.84	596.80	475.70	193.50	154.23	600.30	476.20	197.30	156.51	-1.96	6.88	118.30	0.51	3.50	
CNT 369	Apr 02	21.724	698.44	612.43	427.75	176.43	123.22	643.78	474.17	121.65	21.598.60	699.31	619.10	429.85	175.60	0.25	-1.30	128.40	-3.93	-0.12	
CNT 370	Apr 03	25.072	806.08	370.49	414.40	316.33	254.99	517.82	417.41	314.28	253.34	24.881.90	517.70	414.15	255.03	-0.10	0.04	190.10	-3.28	-0.12	
CNT 371	Apr 03	27.806	893.98	581.35	519.72	384.68	343.90	581.43	519.79	380.96	340.57	27.787.70	581.40	519.42	389.40	3.99	-0.30	18.30	-0.37	-0.03	
CNT 372	Apr 04	24.014	772.07	575.09	444.01	386.31	298.26	575.06	443.99	383.89	298.39	24.014.90	772.10	574.70	392.10	-0.28	4.48	48.30	-0.26	-0.36	
CNT 373	Apr 04	14.146	454.80	595.46	270.82	367.83	167.29	597.02	271.53	363.61	165.37	14.133.20	454.39	597.00	166.63	0.45	-0.67	12.80	-0.26	-0.02	
CNT 374	Apr 07	27.925	897.81	639.82	574.44	161.20	144.73	647.72	581.53	163.65	146.93	27.898.40	890.46	647.90	146.48	2.49	1.75	228.60	-4.60	0.18	
CNT 375	Apr 11	28.684	921.57	621.11	572.39	166.20	153.17	626.76	577.60	165.67	152.48	28.478.10	915.53	628.70	575.59	3.20	-4.30	187.90	-2.01	1.94	
CNT 376	Apr 15	23.959	770.30	662.65	502.74	159.62	122.96	666.51	505.71	165.47	132.69	25.681.50	628.68	555.85	128.83	5.02	-2.32	157.50	-2.36	1.28	
CNT 377	Apr 22	23.639	830.74	550.83	157.14	130.54	130.54	568.21	157.32	130.69	25.681.50	823.68	563.90	456.14	300.03	-0.46	5.09	34.30	-1.17	-0.68	
CNT 378	Apr 22	25.194	810.01	583.73	456.82	401.17	324.95	584.58	457.31	400.82	324.66	25.159.70	808.90	468.85	274.15	-1.61	2.18	273.60	-5.78	-0.79	
CNT 379	Apr 22	25.221	810.87	579.94	470.26	335.41	271.97	595.09	474.44	335.91	272.38	24.947.40	802.08	584.30	274.15	2.01	-2.85	163.30	-1.80	2.10	
CNT 380	Apr 29	25.417	817.17	683.53	542.22	155.75	127.28	688.20	546.03	157.42	128.64	25.253.70	811.92	670.30	544.23	153.50	2.63	284.20	-5.33	0.62	
CNT 381	May 02	24.694	793.93	602.83	478.61	166.59	132.26	615.93	489.00	162.78	129.24	24.399.80	784.47	616.55	128.57	5.06	-3.69	283.20	-2.76	-1.13	
CNT 382	May 03	17.332	556.79	601.61	335.24	359.94	200.57	335.92	359.42	205.47	17.355.70	555.68	602.30	338.69	203.60	-0.55	3.03	48.30	-1.03	0.31	
CNT 383	May 05	17.318	556.79	608.16	338.61	352.66	196.36	607.19	338.07	350.42	195.11	17.355.70	558.00	338.98	203.60	0.37	2.74	37.70	0.91	-0.17	
CNT 384	May 06	23.042	740.82	590.05	414.90	303.14	224.57	592.57	416.76	300.96	222.96	22.845.90	734.51	561.60	412.50	-2.39	1.59	198.10	-4.26	-0.97	
CNT 385	May 06	26.374	847.84	592.48	493.89	159.41	135.17	596.60	505.88	161.69	137.10	26.215.90	842.86	594.80	501.33	7.44	-0.91	158.10	-4.55	-1.80	
CNT 386	May 11	28.234	907.74	591.58	537.00	178.40	161.94	600.63	545.22	193.38	168.46	28.002.80	900.31	598.80	539.11	2.10	-5.20	231.20	-6.11	-1.83	
CNT 387	May 14	24.218	778.63	667.67	465.52	158.14	110.26	677.37	472.27	154.57	107.77	21.528.50	692.19	467.95	158.10	-2.70	-15.03	155.50	-5.26	-2.63	
CNT 388	May 20	21.686	697.22	687.67	485.52	189.46	144.04	617.52	487.02	193.52	146.35	23.419.60	675.96	465.78	195.70	2.44	-0.63	166.50	-4.32	-1.32	
CNT 389	May 25	23.523	756.28	612.38	180.95	189.46	140.04	616.52	487.02	193.52	146.35	23.419.60	675.96	465.78	195.70	2.44	-0.63	166.50	-4.32	-1.32	
CNT 390	May 28	26.835	862.76	604.21	521.29	189.95	163.89	605.46	523.21	191.66	165.36	26.755.40	860.21	608.60	523.52	2.65	3.32	103.40	-1.24	1.08	
CNT 391	May 28	27.942	898.36	598.18	528.39	203.39	182.72	603.36	542.03	208.16	187.00	27.475.50	898.98	600.50	537.46	2.83	-0.28	79.60	0.31	2.16	
CNT 392	June 03	27.942	948.77	618.39	596.71	299.70	274.86	621.63	589.78	296.73	281.53	29.653.30	945.94	620.60	584.56	2.07	-0.65	263.50	-2.76	-1.76	
CNT 393	June 03	25.510	948.77	618.39	596.71	299.70	274.86	621.63	589.78	296.73	281.53	29.653.30	945.94	620.60	584.56	2.07	-0.65	263.50	-2.76	-1.76	
CNT 394	June 03	33.292	1070.36	607.82	650.59	284.60	304.62	610.68	653.65	286.42	306.57	33.219.20	1068.02	609.80	309.94	0.69	5.32	72.80	-2.37	-0.88	
CNT 395	June 15	19.959	641.70	480.11	158.06	101.43	158.06	481.98	158.00	101.90	19.896.10	633.67	480.46	158.00	101.58	0.35	0.15	62.90	-1.52	0.00	
CNT 396	June 15	25.166	810.07	730.46	640.33	163.71	123.62	730.60	640.44	165.60	134.15	25.148.40	808.57	639.26	165.60	-1.07	1.28	46.60	-1.18	0.00	
CNT 397	June 24	17.094	549.58	821.84	451.67	153.36	84.95	821.90	451.70	152.20	85.45	17.068.00	548.65	821.90	450.94	-0.73	-0.78	29.00	-0.77	0.00	
CNT 398	June 25	11.060	355.59	654.35	232.68	287.02	94.29	657.30	233.73	268.40	93.65	11.008.00	353.94	657.30	232.65	-0.03	0.05	51.20	-1.08	0.00	
CNT 399	June 28	31.986	1028.37	602.11	617.19	347.39	357.25	602.80	619.90	352.00	361.99	31.915.30	1028.10	602.80	361.19	-0.66	3.94	70.70	-1.37	0.00	
CNT 399	July 15	23.580	758.11	537.40	407.41	406.50	308.17	537.40	407.41	406.50	308.17	23.490.20	755.23	537.40	406.50	-1.55	-1.17	89.80	-1.55	0.00	
CNT 400	July 15	23.464	754.58	494.00	372.67	425.10	320.69	494.00	372.67	425.10	320.69	494.00	372.67	425.10	320.69	-0.60	-0.52	37.80	-0.60	0.00	
		8.673.262	279.044.54				64.915.69				65.032.35	8.644.975	277.942.20				-58.50	248.59	34.286.79	-837.91	

Bar 310 previously reported as 23,522 grams

Estimated gold and silver fineness as lab has been decommissioned

Estimated gold and silver interests as has not been decommissioned Bars No. 394 to 400 have not been check assayed as the lab has been decommissioned

CONTACT LAKE JOINT VENTURE
Capital/Development Expenditures
December 31, 1998

100% basis

Project Area	Capital Expenditures						Project Total to Date
	1993	1994	1995	1996	1997	1998	
	206,380	716,797	0	54,109	0	0	977,286
and Dry Facilities	21,129	214,412	0	0	0	0	235,541
Sewage Facilities	31,163	41,994	0	0	0	0	73,157
Freshwater Pumphouse & Facilities	19,450	132,519	0	0	0	0	151,969
Electrical Sub-station and O/H Lines	28,531	656,601	0	0	0	0	685,132
Diesel Generation and Powerhouse	115,241	1,914,618	0	0	0	0	2,029,859
Fuel Storage & Distribution	20,519	203,285	0	0	0	0	223,804
Propane Tank Farm	32,291	180,089	0	0	0	0	212,380
Storage Pad Construction	20,513	10,386	0	0	0	0	30,899
Telephone System/Upgrade	0	85,414	0	0	0	0	85,414
Site Mine Water/Waste Water	58,884	6,953	0	0	0	0	65,837
Assay Laboratory	0	37,956	0	0	0	0	37,956
Mobile Equipment	0	85,605	69,323	22,496	17,677	0	195,101
Mine Equipment	0	0	0	109,618	0	0	109,618
Mine Rescue Stations	15,000	73	0	0	0	0	15,073
Mine Support/Intangibles	0	645,916	448,676	0	118,990	0	1,213,582
Mill Shop, Warehouse & Tools	2,834	23,981	133,314	20,051	0	0	180,180
Safety Equipment	0	14,741	17,706	0	0	0	32,447
Vehicle Garage & Workshop	0	33,485	0	0	0	0	33,485
Cold Storage Warehouse	0	78,167	0	0	0	0	78,167
Mill Building	0	9,156,412	264,466	173,697	0	0	9,594,575
Mill Equipment	0	1,155,535	730,534	123,809	795,012	0	2,804,890
Tailings Management	0	0	200,873	0	0	0	200,873
Site Roads	318,477	881,364	0	0	0	0	1,199,841
Development Expenditures							
Mine Development	2,706,858	15,691,560	0	0	0	0	18,398,418
Turtle Lake Habitat	0	0	17,642	118,556	13,803	0	150,001
Total Capital/Development Expenditures	3,597,270	31,967,863	1,882,534	622,336	945,482	0	39,015,485

Proceeds on the Disposal of Assets

Light Vehicle				19,000			19,000
Light Vehicle					12,000		12,000
Optech Boom & Mast						3,000	3,000
U/G pipes/fittings/etc						5,000	5,000
Office and Dry Trailer Units						30,000	30,000
Light Vehicle						15,000	15,000
Generators						300,000	300,000
Mill Facilities (net of commission & cost of disposal)						1,950,000	1,950,000
Grinding balls						25,000	25,000
							0
	0	0	0	19,000	12,000	2,328,000	2,359,000

CONTACT LAKE JOINT VENTURE
Capital/Development Expenditures
December 31, 1998

100% basis

Project Area	Capital Expenditures						Project Total to Date
	1993	1994	1995	1996	1997	1998	
	206,380	716,797	0	54,109	0	0	977,286
and Dry Facilities	21,129	214,412	0	0	0	0	235,541
Sewage Facilities	31,163	41,994	0	0	0	0	73,157
Freshwater Pumphouse & Facilities	19,450	132,519	0	0	0	0	151,969
Electrical Sub-station and O/H Lines	28,531	656,601	0	0	0	0	685,132
Diesel Generation and Powerhouse	115,241	1,914,618	0	0	0	0	2,029,859
Fuel Storage & Distribution	20,519	203,285	0	0	0	0	223,804
Propane Tank Farm	32,291	180,089	0	0	0	0	212,380
Storage Pad Construction	20,513	10,386	0	0	0	0	30,899
Telephone System/Upgrade	0	85,414	0	0	0	0	85,414
Site Mine Water/Waste Water	58,884	6,953	0	0	0	0	65,837
Assay Laboratory	0	37,956	0	0	0	0	37,956
Mobile Equipment	0	85,605	69,323	22,496	17,677	0	195,101
Mine Equipment	0	0	0	109,618	0	0	109,618
Mine Rescue Stations	15,000	73	0	0	0	0	15,073
Mine Support/Intangibles	0	645,916	448,676	0	118,990	0	1,213,582
Mill Shop, Warehouse & Tools	2,834	23,981	133,314	20,051	0	0	180,180
Safety Equipment	0	14,741	17,706	0	0	0	32,447
Vehicle Garage & Workshop	0	33,485	0	0	0	0	33,485
Cold Storage Warehouse	0	78,167	0	0	0	0	78,167
Mill Building	0	9,156,412	264,466	173,697	0	0	9,594,575
Mill Equipment	0	1,155,535	730,534	123,809	795,012	0	2,804,890
Tailings Management	0	0	200,873	0	0	0	200,873
Site Roads	318,477	881,364	0	0	0	0	1,199,841
Development Expenditures							
Mine Development	2,706,858	15,691,560	0	0	0	0	18,398,418
Turtle Lake Habitat	0	0	17,642	118,556	13,803	0	150,001
Total Capital/Development Expenditures	3,597,270	31,967,863	1,882,534	622,336	945,482	0	39,015,485

Proceeds on the Disposal of Assets

Light Vehicle			19,000				19,000
Light Vehicle				12,000			12,000
Optech Boom & Mast					3,000		3,000
U/G pipes/fittings/etc					5,000		5,000
Office and Dry Trailer Units					30,000		30,000
Light Vehicle					15,000		15,000
Generators					300,000		300,000
Mill Facilities (net of commission & cost of disposal)					1,950,000		1,950,000
Grinding balls					25,000		25,000
							0
	0	0	0	19,000	12,000	2,328,000	2,359,000

CONTACT LAKE JOINT VENTURE
Production Statistics and Operating Costs
December 31, 1998

	1993	1994	1995	1996	1997	1998	Project Total to Date
Production Statistics (Cameco's share)							
Ore							
Ore (tonnes)	0	0	155,633	196,246	223,785	74,931	650,595
Grade (g/t)		0.000	7.870	6.567	6.906	6.220	6.956
Troy ounces	0	0	39,379	41,435	49,685	14,984	145,483
Mill							
Ore (tonnes)	0	0	179,309	202,863	195,148	93,795	671,115
Grade (g/t)	0.000	0.000	6.200	6.530	6.000	5.700	6.172
	0	0	35,741	42,588	37,643	17,188	133,160
Percentage recovery	0.00%	0.00%	92.96%	96.23%	95.25%	95.38%	94.97%
Recovered troy ounces	0	0	33,225	40,983	35,855	16,394	126,457
Change to incircuit inventory	0	0	(1,490)	(608)	(793)	5,020	2,129
Troy ounces poured	0	0	31,735	40,375	35,062	21,414	128,586

Operating Costs (Cameco's share)

Mining	0	0	7,352,981	10,923,034	9,930,436	1,560,194	29,766,645
Milling	0	0	3,833,557	4,012,480	4,115,485	2,242,725	14,204,247
Site Services	0	0	1,781,711	1,862,263	1,483,449	1,234,121	6,361,544
Attributed costs/G&A fee	0	0	552,646	693,166	693,673	196,677	2,136,162
Environment & Safety	0	0	54,165	68,883	79,043	42,783	244,874
Engineering & Projects	0	0	82,625	36,377	10,416	766	130,184
Exploration	0	0	1,635	0	0	0	1,635
Expense Projects	0	0	1,229	334,288	0	0	335,517
Total Operating Costs	0	0	13,660,549	17,930,491	16,312,502	5,277,266	53,180,808

Operating Costs (Cameco's share)

Capital & Development Expenditures	2,398,179	21,311,908	1,255,022	414,890	630,322	0	26,010,321
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(Cameco's share)

Ounces Sold			27,930.50	40,414.10	35,918.00	22,775.08	127,037.68
Sales revenue			14,317,230	21,838,400	20,490,450	13,150,213	69,796,293
Estimated gold sales in 1999 (1,547.2 troy ounces @ \$450.00 Cdn)							696,240
Deferred revenue			1,366,919	1,964,105	2,012,082	1,514,780	6,857,886
Total revenue	0	0	15,684,149	23,802,505	22,502,532	14,664,993	77,350,419

Cameco's share of project to date operating costs	53,180,808
Cameco's share of project to date capital/development costs	26,010,321
Less Cameco's share of proceeds on disposal of assets	(2,222,667)
Cameco's share of project to date decommissioning	785,239
Cameco's share of estimated costs to complete decommissioning	1,739,390
Estimated final gain/(loss)	(2,142,672)