TECHNICAL REPORT ON THE CASA BERARDI PROJECT, QUEBEC, CANADA

PREPARED FOR AURIZON MINES LTD.

NI 43-101 Executive Summary

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1 SUMMARY

EXECUTIVE SUMMARY

Roscoe Postle Associates Inc. (RPA) was retained by Aurizon Mines Ltd. (Aurizon) to prepare an Updated Feasibility Study (UFS) for the Casa Berardi Project (the Project), in the Abitibi region of Quebec. The UFS integrates a feasibility study completed by Met-Chem Canada Inc. (Met-Chem), subsequent updating information from Aurizon, and independent assessment by RPA. Mineral Resources and Mineral Reserves quoted in this UFS conform to NI 43-101 Standards of Disclosure for Mineral Projects. RPA visited the Project in the course of completion of the UFS.

Aurizon is a Canadian gold mining company based in Vancouver, British Columbia, with an administrative office in Val d'Or, Quebec. Aurizon owns one hundred percent (100%) of the Casa Berardi Property.

The Casa Berardi gold deposits are located along a five-kilometre East-West mineralized corridor. They include the East, West, and Principal Mines. Mine production spanned ten years, 1988 to 1997, and totalled 3.5 million tonnes of ore mined. 688,400 ounces of gold were recovered in the ore processing plant.

In September 1998, Aurizon acquired 100% of Casa Berardi's assets from TVX Gold Inc. (TVX). Since 1998, Aurizon has carried out surface and underground drilling programs, re-estimated resources, and formed plans to bring the Project into commercial production as a profitable mining operation. Currently, the major assets and facilities associated with the Project are:

- West Mine Mineral Reserves, including 113, Lower Inter, South West, North West, and 111 Zones.
- Additional Mineral Resources associated with the East, West, and Principal Mines.

- West Mine infrastructure, including surface maintenance facilities, backfill plant, mine dry, construction camp, a decline for underground access, and a shaft (under construction).

- East Mine infrastructure, including a crushing plant, an ore processing plant, a building complex with warehouse, maintenance facilities, a mine dry and offices; an underground decline, a shaft, and a series of ramp-connected levels.

- Facilities providing basic infrastructure to the mine, including: electric power, ventilation, heat, water treatment and supply, and sewage treatment.

- Tailings impoundment facilities.

- Access by highway and gravel roads.

RPA has reviewed the previous feasibility study, updating information from Aurizon, and completed further work necessary to produce the UFS, including a new Mineral Resource estimate of the Lower Inter Zone.

CONCLUSIONS AND RECOMMENDATIONS

In RPA's opinion, the Casa Berardi Project has been advanced by Aurizon in a reasonable and professional manner.

Mineral Resources span a wide range of zones, and were estimated at different times, by different people, using different parameters. In RPA's opinion, there is good potential for further conversion of Mineral Resources to Mineral Reserves. RPA recommends that resources considered for conversion to reserves should first be estimated using parameters similar to those used for the current reserves.

Ground control problems experienced in previous operations have been addressed by measures included in the current plan. Stability of mine development will be increased by locating the major infrastructure on the north side of the Casa Berardi Fault, and by applying ground support in accordance with commonly accepted practice for the anticipated conditions. Stope stability will be enhanced by the use of a smaller typical stope size, conservative sublevel spacing, and application of cemented rock fill.

Past production rate problems in the mine have been addressed by the change from ramp haulage to shaft hoisting. The transverse mining method provides multiple stope accesses, allowing all stages of the stoping cycle to run concurrently.

In RPA's opinion, backfill is the key factor for successful mining at Casa Berardi. Keeping stoping cycle time to a minimum with timely and high-capacity placement of good-quality cemented rock fill and waste fill should contribute to both manageable ground conditions and high production rates.

Proposed increases from past rates of mill throughput are limited by the grinding circuit. Although maintaining the optimum blend of ore types is not required to achieve the proposed production rates, some blending of the harder ores found in 113 Zone will be required. RPA recommends that future adjustment to the mine schedule be undertaken with this factor in mind, as post-mining blending opportunities are limited.

Mill recovery increases from past experience are due to more consistent feed rates, the addition of intensive cyanidation, and increased gravity circuit capacity. In RPA's opinion, this is supported by testwork.

In the opinion of SENES Consultants Ltd. (retained by RPA), environmental issues are manageable, and there should not be significant impediments to obtaining the necessary permitting. Tailings cell construction, and reclamation and closure costs should be updated with more detailed plans in advance of construction.

The Project is most sensitive to external economic criteria – gold price and US/Canadian currency exchange rate.

In conclusion, RPA recommends that Aurizon continue with development of the Casa Berardi Project.

ECONOMIC ANALYSIS

A pre-tax Cash Flow Projection has been generated from the Life of Mine production schedule and capital and operating cost estimates, and is summarized in Table 1-1. A summary of the key criteria is provided below.

REVENUE

- 2,200 tonnes per day mining from underground (803,000 tonnes per year).
- Mill recovery by zone, as indicated by testwork, averaging 91%.
- Reduction in ounces for gold entrained in mill circuit.
- Gold at refinery 99.965% payable.
- Exchange rate US$1.00 = C$1.25.
- Metal price: US$400 per ounce gold.
- Net Smelter Return includes doré refining, transport, and insurance costs.
- Revenue is recognized at the time of production.

COSTS

- Pre-production period: 19 months (April 2005 to October 2006).
- Mine life: 6 years.
- Life of Mine production plan as summarized in Section 8.
- Mine life capital totals $139.6 million.
- Average operating cost over the mine life is $61.92 per tonne milled.

TABLE 1-1 PRE-TAX CASH FLOW SUMMARY
Aurizon Mines Ltd. - Casa Berardi Project

			2005 Total	2006 Total	2007 Total	2008	2009	2010	2011	2012	2013	Total
PRODUCTION	113 Zone Ore	tonnes		78,000	497,000	632,100	553,600	424,000	392,300	352,900	-	2,929,900
	Grade	g/t Au		9.1	11.0	9.8	9.0	8.5	7.6	7.8		9.1
	Lower Inter Zone Ore	tonnes		-	-	43,200	205,100	359,000	347,200	235,300	-	1,189,800
	Grade	g/t Au		-	-	4.3	6.6	6.6	5.8	5.6	-	6.1
	South West Zone Ore	tonnes		-	60,000	91,800	23,300	-	50,500	96,000	-	321,600
	Grade	g/t Au		-	4.2	4.1	4.1	-	4.2	4.4	-	4.2
	North West Zone Ore	tonnes		36,300	116,200	9,100	-	-	-	-	-	161,600
	Grade	g/t Au		5.8	6.1	5.7	-	-	-	-	-	6.0
	111 Zone Ore	tonnes		-	-	-	-	-	-	112,200	-	112,200
	Grade	g/t Au		-	-	-	-	-	-	6.2	-	6.2
	Low-Grade Development Ore	tonnes		1,000	5,000	29,000	21,000	20,000	13,000			89,000
		g/t Au		3.9	3.9	3.9	3.9	3.9	3.9			3.9
	Stockpile (cumulative)	tonnes										
	Grade	g/t Au										
	Mill Feed	tonnes		115,300	678,200	805,200	803,000	803,000	803,000	796,400	-	4,804,100
	Grade	g/t Au		8.0	9.5	8.6	8.1	7.5	6.6	6.5		7.8
REVENUE	Contained Gold	kg		926	6,452	6,925	6,485	6,042	5,277	5,175	-	37,283
		ounces		29,772	207,450	222,640	208,506	194,265	169,647	166,391	-	1,198,672
	Mill Recovery			92%	90%	91%	91%	92%	92%	91%		91%
	Recovered Gold	ounces		27,539	186,620	201,981	190,557	179,006	155,658	150,757	-	1,092,119
	Less Gold in Mill Circuit	ounces		(3,905)	(1,958)						5,863	-
	Payable Gold	ounces		23,627	184,597	201,910	190,490	178,944	155,604	150,704	5,861	1,091,738
	Exchange Rate	US$/C$		1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
	Metal Price	US$/oz		400	400	400	400	400	400	400	400	400
	Gross Revenue	C$ '000s		11,813	92,299	100,955	95,245	89,472	77,802	75,352	2,930	545,869
	Refining Charge	C$ '000s		25	198	216	204	191	166	161	6	1,168
	Transportation	C$ '000s		7	36	39	39	39	39	39	1	240
	Insurance	C$ '000s		6	45	49	47	44	38	37	1	267
	NSR	C$ '000s		11,775	92,020	100,651	94,956	89,198	77,558	75,115	2,921	544,194
		C$/tonne		102	136	125	118	111	97	94		113
		US$/tonne		82	109	100	95	89	77	75		91
OPERATING COSTS	Mine Production	C$ '000s		3,033	15,234	16,642	17,649	17,382	17,795	16,331	-	104,066
	Services	C$ '000s		3,187	13,469	13,878	13,829	13,830	13,864	13,860	-	85,916
	Mill	C$ '000s		2,023	10,534	11,229	11,209	11,209	11,209	11,149	-	68,562
	Administration	C$ '000s		1,557	6,230	6,230	6,230	6,230	6,230	6,230	-	38,936
	Total	C$ '000s		9,801	45,466	47,978	48,916	48,651	49,097	47,570	-	297,480
	Production	C$/tonne		26.31	22.46	20.67	21.98	21.65	22.16	20.51		21.66
	Services	C$/tonne		27.64	19.86	17.24	17.22	17.22	17.27	17.40		17.88
	Mill	C$/tonne		17.55	15.53	13.95	13.96	13.96	13.96	14.00		14.27
	Administration	C$/tonne		13.51	9.19	7.74	7.76	7.76	7.76	7.82		8.10
	Total	C$/tonne		85.00	67.04	59.59	60.92	60.59	61.14	59.73		61.92
	Operating Cash Flow	C$ '000s		1,974	46,554	52,672	46,040	40,547	28,461	27,545	2,921	246,714
CAPITAL COSTS	Mine Development	C$ '000s	16,994	22,967								39,960
	Plant & Infrastructure	C$ '000s	13,836	19,394								33,230
	Contingency	C$ '000s	2,439	3,904								6,343
	Indirect	C$ '000s	7,893	10,047								17,940
	Sustaining	C$ '000s	75	6,310	12,001	9,045	5,586	5,612	1,761	200	1,486	42,076
	Total	C$ '000s	41,237	62,621	12,001	9,045	5,586	5,612	1,761	200	1,486	139,550
	Pre-Production Total	C$ '000s		102,621								
CASH FLOW	Net Cash Flow	C$ '000s	(41,237)	(60,647)	34,553	43,628	40,453	34,935	26,700	27,345	1,435	107,164
	Cumulative	C$ '000s	(41,237)	(98,618)	(64,065)	(20,437)	20,016	54,951	81,650	108,995	110,430	
	Total Cash Cost	US$/oz		333	198	191	207	219	254	254	1	219
	Capital Cost	US$/oz										102
	Total Production Cost	US$/oz										321
	Net Present Value	$ '000s									5%	67,632
		$ '000s									10%	40,053
	Internal Rate of Return	%										23%

CASH FLOW ANALYSIS

Considering the Project on a stand-alone basis, the undiscounted pre-tax cash flow totals $107.2 million over the mine life, and simple payback occurs near the mid-point of 2009 (32 months from start of production).

The Total Cash Cost is US$219 per ounce of gold. The mine life capital unit cost is US$102 per ounce, for a Total Production Cost of US$321 per ounce of gold. Average annual gold production during operation is 177,000 ounces per year.

Net Present Value (NPV) at a 5% discount rate is $67.6 million, and the Internal Rate of Return (IRR) is 23%. A detailed Cash Flow Projection is available in the Appendix to this Report.

Aurizon notes that the Project has accumulated approximately $150 million in tax-deductible exploration, development, and capital cost.

RISK REVIEW

Project risks can be identified in both economic and non-economic terms. Key economic risks were examined by running cash flow sensitivities:

- Gold price
- Exchange rate
- Head Grade
- Operating costs (Total Cash Cost)
- Pre-production capital costs
- Mine Life

IRR sensitivity over the base case has been calculated for -20% to +20% variations. The sensitivities are shown in Figure 1-1 and Table 1-2.

FIGURE 1-1 SENSITIVITY ANALYSIS

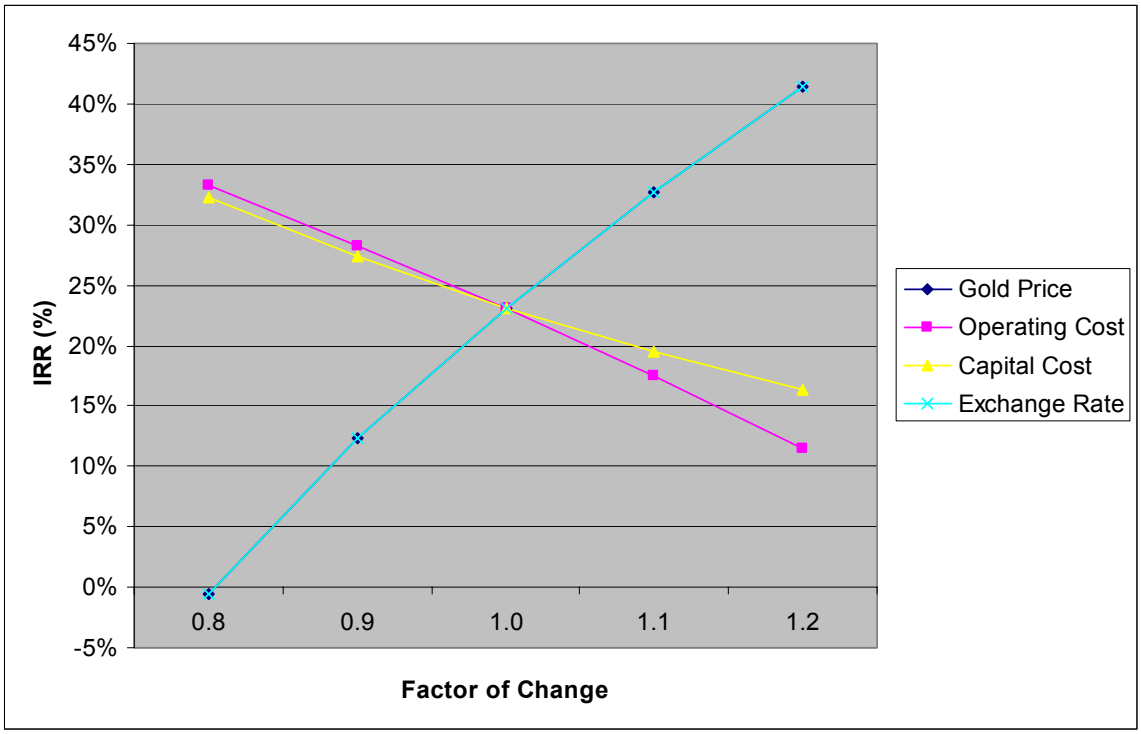

TABLE 1-2 SENSITIVITY ANALYSES

Aurizon Mines Ltd. – Casa Berardi Project

Parameter Variables	Units	-20%	-10%	Base	+10%	+20%
Gold Price	US$/oz	320	360	400	440	480
Exchange Rate	US$/C$	1.00	1.13	1.25	1.38	1.50
Head Grade	g/t	6.2	7.0	7.8	8.6	9.4
Total Cash Cost	US$/oz	176	197	219	241	263
PPD Capital Cost	$millions	82.1	92.4	102.6	112.9	123.1

IRR	Units	-20%	-10%	Base	+10%	+20%
Gold Price	%	-1%	12%	23%	33%	41%
Exchange Rate	%	-1%	12%	23%	33%	41%
Head Grade	%	-1%	12%	23%	33%	41%
Total Cash Cost	%	33%	28%	23%	18%	11%
PPD Capital Cost	%	32%	27%	23%	19%	16%

Gold price, exchange rate, and head grade impact the cash flow in the same proportion, as they affect revenues in the same way.

The Project is most sensitive to external economic criteria related to the gold price (spot price and C$:US$ exchange rate). Any further rise in the Canadian dollar will have a direct impact since costs are almost entirely in C$ and revenues are in US$. The September 20, 2005 spot gold price was US$463 per ounce and the exchange rate was US$0.857 = C$1.00, which represents a favourable factor of change of 1.08 compared to the Project base case.

Head grade should not change significantly from present estimates, unless there is increased dilution. Geomechanics testwork and dilution allowances suggest that this is unlikely, especially during primary stope extraction. Should grades fall during secondary stope mining, adjustments to operating practices such as drilling patterns and ground support installations should be sufficient to reduce dilution.

Capital and operating costs. These costs have been calculated from first principles using firm price quotations and known manpower and equipment productivities. The Project is not particularly sensitive to capital cost overruns. Rises in consumable costs (fuel, power, steel) could increase unit operating costs. Taking diesel cost as an example, current bulk prices are approximately 40% higher than Aurizon's current supply price contract (used in the UFS), which would flow through to a $0.40 per tonne increase in operating costs. It is unlikely such cost rises would seriously endanger Project viability unless they were combined with adverse changes in other variables such as exchange rates and gold price.

TABLE 1-3 BREAK EVEN SENSITIVITY
Aurizon Mines Ltd. – Casa Berardi Project

Item	Unit	Base Case value	Value at 5% NPV=0	% change in variable over Base Case
Gold price	US$/oz	400	336	- 16
Exchange rate	US$/C$	1.25	1.05	- 16
Head grade	g/t Au	7.8	6.6	- 15
Total Cash Cost	US$/oz	219	284	+ 30
PPD Capital cost	$ millions	102.6	174.5	+ 70
Mine Life	Mt	4.8	2.4	- 50

The break-even Mine Life is equal to the undiscounted payback period of 32 months from production start up. This is the point at which production could cease and the mine would be in a nominal breakeven situation in terms of base case assumptions. Aurizon has enjoyed good success generating new resources, and converting resources to reserves. There is potential to increase the Mine Life.

The Project has a rapid simple payback, which minimizes the chance for adverse changes in underlying fundamental variables to have a significant effect on overall Project viability.

Non-economic risk elements have been identified for the Project and a qualitative estimate has been made of their relative significance. Non-economic risks are generally low.

TABLE 1-4 NON-ECONOMIC RISK CRITERIA

Aurizon Mines Ltd. – Casa Berardi Project

Risk Component	Risk Assessment	Commentary
Geology	Low	While in a complex geological setting, the mine site has been carefully studied since Aurizon's acquisition of the property in 1998.
Ownership	Very low	Well established mining operation covered by Mining Leases, with contiguous exploration claims.
Permitting	Low	All required permitting is in hand or pending renewal.
Royalties, Taxes	Very low	No royalties, approximately $150 million in tax-deductible exploration and capital expenses.
Mineralized Zones	Low	Mineral Resource database of more than 4,000 diamond drillholes, totalling over 600,000 m has provided a comprehensive understanding of the mineral deposit upon which to calculate mineral resources Drill hole spacing in zones used for mineral reserves is on the order of 15 m.
Resource Estimations	Low to medium	Conform to NI 43-101 guidelines. Estimation parameters vary across zones not included in mineral reserves.
Geotechnical	Medium	Previously experienced ground problems emphasize the need for adjustments to operations detailed in the current plan. Diligent operator application of ground support protocols should address potential ground instability in development workings and stopes.
Groundwater	Low	Surface drainage wells provide a relatively dry environment underground.
Mine Design	Low	Stope size is conservative for the selected mining methods. Access to levels above active stopes will provide options for dealing with any stope stability problems that occur.
Mine Access	Low	No difficulties foreseen in ramp access and shaft sinking.
Dilution	Medium	Low cohesion in hangingwall faults will cause dilution, as indicated by geomechanical modeling. Small stope size and rapid cycle times should provide early feedback on optimum drilling patterns, blasting sequence, and fill quality to minimize dilution.
Mineral Reserve Extraction	Medium	Mineral Reserves include no allowance for pillars, and extraction rates are in the high end of the range for the selected mining methods. Some resources, however, particularly in the SW Zone, could easily be added to reserves by mine planning.
Pre-production Development	Low	Contractors have mobilized to site and development is in progress, achieving planned productivities. Development scheduled for the last three months of the pre-production period is not required for production start-up – it provides additional lead-time for stope access.

Table 1-4 Continued:

Risk Component	Risk Assessment	Comment
Mine Production Capability	Low	Sufficient spare capacity has been built into operating productivities. An inventory of 20-25 active stopes in various stages of production, and timely backfill will ensure production targets can be met.
Mill Recovery	Low	Recoveries from various ore types, using the current process flowsheet, are supported by testwork.
Mill Throughput	Medium	Experience will show the optimum balance between SAG and Ball mills in the grinding circuit. Blending of ore types to optimize grinding throughput is possible only at the stope sequencing stage – no provision has been made for blending mill feed on surface.
Environment	Low	The underground mine has a small surface footprint. Existing tailings show no sign of acid generation. Some costs will require more detailed estimation closer to the closure date.

It is concluded that the non-economic risk factors that could affect timely completion of the pre-production schedule are manageable. Operating risks are similarly low.

TECHNICAL SUMMARY

PROPERTY DESCRIPTION AND LOCATION

The Casa Berardi property is located in the Province of Quebec, approximately 95 km north of the town of La Sarre, in the James Bay municipality.

LAND TENURE

Aurizon owns a 100% interest in the Casa Berardi property. The transfer of the mining rights regarding titles registered for the property was completed on September 15, 1998.

INFRASTRUCTURE

Surface infrastructure at the East Mine includes a crushing plant, a 2,200 tpd ore processing plant, a tailings pond, and a two-storey administrative building with offices, shops, and a warehouse. Underground infrastructure includes a 379 m deep shaft, a decline, and a series of ramp-connected levels.

Surface infrastructure at the West Mine includes a backfill plant, a dry house with offices, shops, and warehouses; a camp to accommodate construction crews, core racks, and a gate house. Underground infrastructure includes a decline and a shaft and headframe under construction.

There is no infrastructure related to the Principal Mine. A five-kilometre track drift joins the East and West Mines and provides access to the Principal Mine.

HISTORY

Before 1974, the Casa Berardi area was explored for base metal and iron formations. In 1974, the first 13 claims were staked by Inco Gold Ltd. (Inco Gold), and the discovery hole was drilled in 1981. A joint venture agreement was reached between Inco Gold and Golden Knight Resources Inc. (Golden Knight), and 1988 marked the official opening of the East Mine, followed two years later by the West Mine.

In 1991, TVX Gold Inc. (TVX) acquired Inco Gold's 60% interest in the Project.

The total combined production for the period from 1988 to 1997 was 3.5 million tonnes at an average grade of 7.1 g/t. The total gold recovered during the operating years was 688,400 ounces, with a mill gold recovery rate averaging 87%. Although average statistics are not readily available for daily production, it appears that during the life of operation, the average production rate of the mill was less than 1,800 tpd.

The maximum annual production of over 550,000 tonnes was achieved in 1994. In the following years, the figures fell below 500,000 tonnes. In January 1997, TVX announced the closure of the East Mine due to ground control problems. Two months later, the West Mine was closed.

In September 1998, Aurizon completed the acquisition of all Casa Berardi assets and mining rights. An exploration diamond-drilling program totalling more than 76,000 m resulted in the discovery of 113 Zone and other, smaller mineralized bodies.

In the spring of 2003, Aurizon initiated an underground exploration program to confirm the results of the surface program and to increase the confidence level of the identified resources of 113 Zone.

After raising additional financing in 2004, Aurizon commissioned Met-Chem to prepare a feasibility study. Aurizon proceeded with the implementation and construction of the West Mine Project infrastructure. A shaft was collared, and underground development (ramps, raises, and drifts) begun by contractors.

GEOLOGY

The Project is located in the Northern part of the Abitibi Subprovince, a sub-division of the Superior Province, the Archean core of the Canadian Shield. The Project area belongs to the Harricana-Turgeon Belt, which is a part of the North Volcanic Zone.

More specifically, the regional geology is characterized by a mixed assemblage of mafic volcanics, flysch-type sedimentary iron formations, and graphitic mudrocks that are limited by a large granodioritic to granitic batholith.

Structurally, the property is enclosed in the Casa Berardi Tectonic Zone, a 15 km wide corridor that can be traced over 200 km. A network of East-West to East-South-East and West-North-West ductile high strain zones mainly follows the lithological contacts.

The Casa Berardi Fault is defined by a stratigraphic contact between a graphite-rich sediment sequence, northern continuous mafic fragmentary volcanic units, and a southern polymictic conglomerate unit. On the north side of the fault, a thick sequence of very homogeneous wacke and volcanites is observed. The fault strikes east-west and dips 80° to the south. Inside the fault zone, ductile deformation intensity is heterogeneous. Foliation is uniform in larger competent rock units, such as mafic volcanites and conglomerates.

The Casa Berardi gold deposit can be classified as an Archean sedimentary-hosted lode gold deposit. Gold mainly occurs south of the Casa Berardi Fault, and sometimes is found on both sides of the fault. Mineralization is found in large low-sulphide quartz veins and low-grade stockworks. Gold is fine-grained.

Mineralized zones of the West Mine, such as Lower Inter, Inter, and North West (NW), show weak or no plunge, a moderate south dip (30°), and have extensions which branch off from the fault at 130°. On the east side of the mine, the mineralized zones, such as Zones 111 and 113, show a steeper plunge (> 50°) with a dip varying between 70° south and 70° north, similar to the Casa Berardi Fault.

The 113 Zone is a 20 m to 70 m wide mineralized corridor, with an east-west strike, subvertical, adjacent to the Casa Berardi Fault. The width of the zone along holes varies from 5 m to 20 m. The zone extends vertically for over 650 metres, the top being at the 250 m level. Lateral extension decreases from 300 m at the 600 m level to 150 m at the 700 m level.

In plan view the SW and SE zones can be interpreted as a dome which is cut by the South Fault and by the subsidiary Auxiliary Fault. The mineralized system extends 200 m laterally and 300 m along dip, from surface to the 300 m level.

The Lower Inter Zone is located between the 375 m and 475 m levels, dips at 25° to 45° south, and plunges to the west at 15°. It is controlled by the Casa Berardi and Lower Inter Faults. The Casa Berardi Fault dips steeply north, while the Lower Inter Fault dips 40° to 45° to the south, joining with the South Fault. Thickness varies from 4 m to 50 m, with the maximum observed just below the contact of the two faults, and thinner sections observed down-dip along the Lower Inter Fault. The mineralized zone extends for 200 m.

MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

MINERAL RESOURCES

Mineral Resource estimates for the Project are summarized in Table 1-5. Total Indicated Resources, which include the portion of undiluted resources that have been converted into Mineral Reserves, are 6,834,000 tonnes at 7.56 g/t Au. Of this total, an amount of 4,113,000 tonnes at 9.19 g/t Au has been converted into Mineral Reserves. Inferred Resources total 5,649,000 tonnes at 6.52 g/t Au.

Mineral Resources are classified based on density of drill hole data, and continuity of the auriferous zones. The classification complies with the "Canadian Institute of Mining, Metallurgy and Petroleum Standards on Mineral Resources and Mineral Reserves Definition Guidelines". Resources that are classified as indicated are based on:

- Drill hole spacing, which ranges between 15 to 25 m.
- Ranges of variograms, which are between 10 to 50 m.

Indicated Resources not converted into reserves total 2,721,000 tonnes at 5.11 g/t Au, by simple subtraction. In the case of the low-grade SW Zone, resources were converted to reserves only as required; more tonnage at or near the cut-off grade is readily available. Drilling is ongoing in 111 Zone, and future updates may change the proportion of resources converted to reserves for this zone.

TABLE 1-5 MINERAL RESOURCES

Aurizon Mines Ltd. – Casa Berardi Project

Location	Indicated Resources		Inferred Resources	
	Tonnes	g/t Au	Tonnes	g/t Au
West Mine				
113	2,874,000	9.94		
Lower Inter	1,185,000	7.27		
111	307,000	5.61		
North West	174,000	7.03		
South West	688,000	4.70		
Inter	124,000	4.43		
104			115,000	6.62
109			125,000	9.11
117-123			1,704,000	6.10
Principal (surf. pillar)	339,000	5.51	1,647,000	6.43
Principal (below pillar)	316,000	7.01	1,316,000	6.50
Total West	**6,007,000**	**7.00**	**4,907,000**	**6.41**
East Mine				
Crown Pillar	827,000	4.47	81,000	7.48
North			193,000	10.10
Cherty			225,000	6.80
160			243,000	5.40
Total East	**827,000**	**4.47**	**742.000**	**7.27**
Grand TOTAL	**6,834,000**	**7.56**	**5,649,000**	**6.52**

Notes:

1. CIM definitions were followed for Mineral Resources.
2. Mineral Resources are estimated at cutoff grades of 4 g/t Au for 113, Lower Inter, 111, NW, and SW zones, 1.3 g/t Au for the East Mine Crown Pillar (open pit), 4.31 g/t Au for the rest of the East Mine, and 3 g/t Au for all other zones.
3. Mineral Resources are estimated using an average long-term gold price of US$400 per ounce, and a US$/C$ exchange rate of 1:1.25.
4. Minimum mining widths of two to three metres were used.
5. Indicated Mineral Resources are inclusive of Mineral Reserves.

The resource estimates of the different mineralized zones at Casa Berardi have been undertaken by several parties. Carried out at different times and based on different parameters, methodologies, and cut-off grades, all of the estimates incorporated into the current Mineral Resource estimate use the Project drill hole database and geological interpretation. RPA estimated resources for the Lower Inter Zone at the West mine, and audited resource estimates for the other zones. In RPA's opinion, the estimations are valid and representative of the geological context.

ESTIMATION PARAMETERS

The parameters considered in the various resource estimates are presented below.

A density of 2.77 t/m^3 in was used for Mineral Resource and Mineral Reserve estimates for all zones, except 113 Zone (2.70 t/m^3), Zones 117 to 123 (2.74 t/m^3), the Principal Zone (2.95 t/m^3), and the Sulph-D Zone (3.00 t/m^3). Minimum mining widths vary between two and three metres. RPA believes that the impact of variable widths on resource figures is negligible.

Several cut-off grades have been used for resource estimation, detailed in Table 1-6.

TABLE 1-6 CUT-OFF GRADE FOR RESOURCE CALCULATION
Aurizon Mines Ltd. – Casa Berardi Project

Period	Cut-off grade g/t Au	Zone
TVX 1996	4.31	East Mine: North Zone below 650m L, Zone 160E, Cherty West Mine : 113, 111, Lower Inter, Inter, NW, SW, 104 and 109 Zone
Aurizon FS 2000	3.0	Principal Zone: 22-6, 24-1, 24-2, 25-3, 25-4, 25-8, 26-5, 26-6, 27-1 East Mine: North and South Crown Pillars
SRK 2003	3.0	West Mine: 117-123, Sulph-D
Geostat 2005	1.3	East Mine: Crown pillar open pit
Met-Chem FS 2005	4.0	West Mine: 113 Upper Part, Lower Inter
RPA UFS 2005	4.0	West Mine: 113, Lower Inter, 111, NW, SW

Mineral Resources have been estimated using 2D polygonal methods and 3D block models. The following zones were estimated by the polygonal method:

- West Mine: 111, Inter, NW, SW, 104, 109,
- Principal Mine: 22-6, 24-1, 24-2, 25-3, 25-4, 25-8, 26-5, 26-6, 27-1,
- East Mine: 160E, Cherty, North Zone (below 650 m Level).

The following zones were estimated by 3D block models:

- West Mine: 113, Lower Inter, 117-123,
- East Mine: North Crown Pillar, South Crown Pillar.

MINERAL RESERVES

Mineral Reserves for the Project are estimated for five separate zones: 113, Lower Inter, SW, NW, and 111 (in order of size). These areas have the best potential for economic extraction due to size, grade, and proximity to existing workings and infrastructure.

TABLE 1-7 MINERAL RESERVES
Aurizon Mines Ltd. – Casa Berardi Project

Zone	Category	Tonnes	Grade (g/t Au)	Contained Ounces
113	Probable	2,935,000	9.11	859,900
Lower Inter	Probable	1,190,000	6.08	232,600
South West	Probable	420,000	4.12	55,600
North West	Probable	162,000	5.99	31,200
111	Probable	112,000	6.19	22,400
Low-Grade Dev.	Probable	89,000	3.88	11,100
Total		4,908,000	7.69	1,212,800

Notes:
1. CIM definitions were followed for Mineral Reserves.
2. Mineral Reserves are estimated at a cutoff grade of 4 g/t Au.
3. Mineral Reserves are estimated using an average long-term gold price of US$400 per ounce, and a US$/C$ exchange rate of 1:1.25.
4. A minimum mining width of three metres was used.
5. Bulk density is 2.70 t/m^3 for 113 Zone, 2.77 t/m^3 for other zones.

Mineral Reserves were estimated for a longhole open stoping mining method without pillars, mined in a primary-secondary or longitudinal retreat sequence. Stopes will be backfilled after mining using cemented rock fill or unconsolidated waste rock.

A 97% mining extraction was applied to stopes in all zones.

Dilution was estimated using results from geomechanical modelling of hangingwall and footwall stability. An allowance was added for backfill dilution. Across all mining zones, dilution averages 14%.

MINING

Previous mining was developed as a trackless operation, with all material transported to surface via ramp. The maximum depth was 400 m, which was considered to be the economic limit for ramp haulage to surface. In 1995, a track drift and a shaft were completed to connect both mines.

The proposed mining plan for the UFS involves development of the West Mine by contractor, including shaft-sinking to 790 m level and ramp and level development to access mining zones, followed by Aurizon production from 113, Lower Inter, SW, NW, and 111 Zones.

GEOMECHANICS

A history of ground instability and related incidents (including fatalities) points to the importance of addressing rock mechanics issues when considering mining at Casa Berardi. Past incidents include wedge failures in development openings, and hangingwall deterioration in open stopes.

Ground instability is mainly restricted to the Casa Berardi fault system, where graphitic fault rocks are found in the hangingwall and footwall of the ore zones. The rock environment south of the Casa Berardi fault is composed of relatively weak sediments with a frequent occurrence of schistose and graphitic rocks exhibiting weak contacts. It is

prone to develop wedge forms, due to frequent unstable joint formations, flat-lying gouge, or graphite-filled joints above mine openings.

RECOMMENDATIONS

A ground condition assessment was carried out, based on the experience of the past producers. Aurizon and Met-Chem have proposed measures to address concerns related to safety and stability of mine openings, including the following recommendations:

- Reduce open stope time to a minimum - mucking out should be followed immediately by backfilling. During previous operations, the seasonal sand fill plant was plagued by supply problems. Current plans include a cemented rock fill plant operating year-round.

- Reduce stope size and hangingwall exposure. Stope size selection has been determined by geomechanical modelling (15 m strike length, 20 m high, and up to 20 m thick), and is significantly smaller than past practice (up to 40 m strike lengths, and 25 m to 30 m heights).

- Apply tight fill. The stope sequence is from the bottom towards the top of each zone, leaving no voids.

- Water control and drainage measures should be undertaken to avoid water infiltration into the fault system. A network of drainage holes outside the ore zones has been established. Low rates of water inflow to underground workings (350 gallons per minute) confirm the effectiveness of the system.

- Locate permanent infrastructure in more stable ground. The mine infrastructure will be located in massive volcanic rocks, north of the Casa Berardi fault.

- Maintain access to the level above the drilling base to allow measures to stop unravelling by cementing or backfilling if such is required.

- Where underground excavations intersect badly faulted ground, screen and shotcrete should be applied, and, if required, reinforcement with cable bolts.

- Pillars should be temporarily kept in place in those longitudinal retreat sectors where a low in-situ pressure is observed. Maintaining confinement by using this approach will increase fault cohesion and could be crucial in areas where mining retreats westward.

- Be conservative when mining near surface. Although crown pillars are part of Mineral Resources, current plans do not include mining near surface.

In RPA's opinion, the proposed location of the major orebody infrastructure on the north side of the Casa Berardi Fault is the most appropriate to address previous experience with ground problems in development openings. The proposed ground support measures to maintain drift stability are in accordance with commonly accepted practice for the anticipated conditions. The selected typical stope size and sublevel spacing are conservative and should help in maintaining hangingwall stability and minimizing dilution. Stope hangingwalls and footwalls have a provision for cablebolting to prevent them from unravelling and causing ground or dilution problems.

MINING METHOD

Current reserves at Casa Berardi comprise five zones spread over a moderate horizontal distance from each other and located at different elevations. The 113 and Lower Inter zones comprise the bulk of the deposit tonnage. The zones are of varying thickness, ranging from over 50 m to less than three metres, which is the minimum mining width. Most of the hangingwalls are subvertical (55º to 85º) and exhibit similar wall characteristics, with the exception of the Lower Inter Zone, which in a number of places has relatively shallow hangingwall configurations (less than 45º).

Two mining methods were selected for the Casa Berardi mining scenario to provide a production rate of 2,200 tpd. These are transverse and longitudinal blasthole open stoping methods with cemented backfill. In both methods, timely supply of backfill will play a crucial role in controlling dilution and maintaining a short stoping cycle. These methods satisfy all of the geotechnical requirements and constraints and, as non-entry mining methods, have proven to be safe and reliable in similar operations.

TRANSVERSE METHOD

The transverse mining method will be used in areas with wide mineralization (10 m wide or more) and good access from nearby development. In thicker areas (greater than 20 m), stopes will be subdivided into smaller panels and mined in sequence from the hangingwall to the footwall.

Stopes are nominally 15 metres long by 20 metres high (floor to floor), oriented in a transverse manner to the strike of the ore, and alternating in a primary and secondary extraction scenario. Overcut and undercut drifts will be driven to provide access to the top and bottom of the stope. Cable bolts will be installed in the hangingwall. Ring drilling will take place from the overcut drift, using a production 100 mm top hammer longhole drill. It will include a drop raise to create a free face into which the blast holes break. The drill pattern is designed to minimize dilution by using techniques such as pre-shearing.

After blasting, the broken ore will be removed from the stope through the undercut drift, using a remote-controlled scooptram, and hauled to an ore pass. When mining is complete, the stope will be backfilled from the overcut, with cemented rock fill for primary stopes, and with unconsolidated waste rock for secondary stopes. Stope sequencing generally proceeds from the bottom of a zone to the top.

The transverse method allows a variety of mining activities to take place in a series of closely grouped primary and secondary stopes at the same time. The stopes will be in different stages of the cycle, from production drilling, blasting, and mucking through to the final backfill placement.

LONGITUDINAL METHOD

The blasthole longitudinal mining method, will be used in areas with narrow mineralization, or long distances from development infrastructure. Oriented along strike, longitudinal stoping is initiated at the end of a selected area and then retreated back towards the access. Once a stope is mined, it is backfilled with cemented rock fill until the fill reaches the overcut drift; the back half of the void, which will not be exposed by subsequent mining, is then tight-filled with unconsolidated waste.

Development requirements for the longitudinal method are lower than that for the transverse method, as accesses are within the ore on each level, and serve as overcuts and drawpoints for subsequent stopes. Productivity per level, however, is much lower, as only one stope can be active at a time.

LIFE OF MINE PLAN

The mine and mill complex are designed to produce and process 803,000 tonnes of ore per year at a rate of 2,200 tpd. A total of 4.8 million tonnes of ore reserves grading 7.8 g/t Au will be mined from 113, Lower Inter, SW, NW, and 111 Zones. During the pre-production phase, ore from level development and initial stoping will be stockpiled for processing during the initial production period.

Production and development have been scheduled for the complete Mine Life, including the pre-production period from April 2005 to October 2006, and six years of operations from November 2006 to the end of 2012.

Development was compiled by individual heading, measured from conceptual mine plans, and scheduled monthly. Mine Life development rates average 13.4 m/day, peaking in 2007 at 20.8 m/day, and declining to 8.8 m/day in 2012.

Production, starting at a rate of 1,600 tpd and ramping up to 2,200 tpd, was compiled by stope, and scheduled quarterly by zone. The majority of the production tonnage will come from the transverse mining method utilizing the primary and secondary extraction scenario. This method provides a high concentration of production in a given area of the mining zone.

The average size of 113 Zone production stopes is 9,000-10,000 tonnes. The full production cycle for a typical stope, from the start of production drilling to the completion of backfilling, will last less then one month, followed by 30 days curing time for stopes with cemented rock fill. During mine operation, ore production will come from two to three zones at the same time, with four to six stopes available for mucking. 15-20 stopes at a time will be active in the preparation stages of the production cycle, ranging from production drilling through to slot blasting and mucking.

TABLE 1-8 LIFE OF MINE PLAN
Aurizon Mines Ltd. - Casa Berardi Project

		2006		2007				2008				2009				2010				2011				2012				
SUMMARY SCHEDULE		**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Total**
Days		60	61	90	91	92	92	91	91	92	92	90	91	92	92	90	91	92	92	90	91	92	92	90	91	90	91	2,674
113 Zone Ore 470 to 690 tonnes		7,500	42,700	74,250	86,450	87,400	96,600	109,200	109,200	110,400	101,200	99,000	106,470	92,000	92,000	72,000	63,700	64,400	64,400	63,000	63,700	64,400	64,400	63,000	63,700	54,000	54,600	1,969,670
tpd		125	700	825	950	950	1,050	1,200	1,200	1,200	1,100	1,100	1170	1000	1000	800	700	700	700	700	700	700	700	700	700	600	600	
Grade g/t Au		7.5	9.6	10.7	8.7	8.3	8.5	9.1	9.2	7.9	7.8	6.7	8.4	7.2	7.3	6.0	7.7	7.4	6.8	5.6	6.2	5.9	4.8	4.6	5.6	5.5	5.2	7.4
Mill Recovery %	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	
113 Zone Ore 710 to 730 tonnes		6,000	21,875	32,750	33,125	33,500	27,600	28,210	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	183,060
tpd		100	359	364	364	364	300	310																				
Grade g/t Au		6.8	9.4	16.6	12.4	13.6	19.0	17.2																				14.6
Mill Recovery %	95%	95%	95%	95%	95%	95%	95%	95%																				
113 Zone Ore 750 to 890 tonnes		-	-	-	-	11,500	13,800	36,400	45,500	46,000	46,000	45,000	45,500	46,000	27,600	45,000	40,950	41,400	32,200	36,000	36,400	32,200	32,200	31,500	31,850	31,500	22,750	777,250
tpd		-	-	-	-	125	150	400	500	500	500	500	500	500	300	500	450	450	350	400	400	350	350	350	350	350	250	
Grade g/t Au						17.2	18.0	10.4	15.7	10.8	10.2	11.0	10.2	15.6	14.1	11.0	13.8	7.3	12.6	10.2	12.1	9.6	13.5	14.4	11.7	13.4	11.6	12.1
Mill Recovery %	95%					95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	
Lower Inter Zone Ore tonnes			-	-	-	-	-	-	11,200	11,400	20,600	24,690	43,230	59,400	77,800	76,000	90,550	91,600	100,800	95,000	88,000	84,400	79,800	58,500	59,150	58,500	59,150	1,189,770
tpd									123	124	224	274	475	646	846	844	995	996	1,096	1,056	967	917	867	650	650	650	650	
Grade g/t Au									3.9	4.1	4.6	4.2	6.6	6.8	7.2	6.6	6.9	5.6	7.2	5.4	5.9	6.7	5.3	6.6	5.0	5.3	5.5	6.1
Mill Recovery %	93%								93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	
South West Zone Ore tonnes			-	-	13,650	20,700	25,600	9,290	27,300	27,600	27,600	23,310	-	-	-	-	-	-	-	-	9,100	18,400	23,000	22,500	19,110	22,500	31,850	321,510
tpd					150	225	278	102	300	300	300	259									100	200	250	250	210	250	350	
Grade g/t Au					4.7	4.1	4.1	4.1	4.1	4.1	4.1	4.1									4.1	4.2	4.3	4.4	4.0	4.5	4.5	4.2
Mill Recovery %	87%				87%	87%	87%	87%	87%	87%	87%	87%									87%	87%	87%	87%	87%	87%	87%	
North West Zone Ore tonnes		18,000	18,300	38,250	27,300	23,000	27,600	9,100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	161,550
tpd		300	300	425	300	250	300	100																				
Grade g/t Au		6.5	5.1	5.7	6.0	6.9	6.0	5.7																				6.0
Mill Recovery %	87%	87%	87%	87%	87%	87%	87%	87%																				
111 Zone Ore tonnes			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22,500	26,390	31,500	31,850	112,240
tpd																								250	290	350	350	
Grade g/t Au																								6.5	6.7	6.9	4.8	6.2
Mill Recovery %	87%																							87%	87%	87%	87%	
Low-Grade Development Ore tonnes			1,000	1,000	1,000	1,000	2,000	8,000	7,000	7,000	7,000	6,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	4,000	3,000	3,000	3,000					89,000
tpd			16	11	11	11	22	88	77	76	76	67	55	54	54	56	55	54	54	44	33	33	33					
Grade g/t Au	3.9		3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9					3.9
Mill Recovery %	93%		93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%					
Stockpile tonnes		31,500																										
tpd		525																										
Grade g/t Au		6.8																										
Mill Recovery %		89%																										
Mill Feed tonnes		-	115,375	146,250	161,525	177,100	193,200	200,200	200,200	202,400	202,400	198,000	200,200	202,400	202,400	198,000	200,200	202,400	202,400	198,000	200,200	202,400	202,400	198,000	200,200	198,000	200,200	4,804,050
tpd			1,891	1,625	1,775	1,925	2,100	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	
Grade g/t Au			8.0	10.7	8.7	9.2	9.7	9.9	9.5	7.7	7.4	7.0	8.3	8.9	8.1	7.3	8.5	6.5	7.8	6.3	7.0	6.7	6.3	6.9	6.4	6.8	5.8	7.8
Mill Recovery %			92%	90%	90%	90%	90%	91%	91%	91%	91%	91%	91%	92%	92%	92%	92%	92%	92%	92%	92%	92%	91%	91%	91%	91%	90%	91.2%
Backfill tonnes		21,000	55,000	97,000	107,000	117,000	128,000	128,000	129,000	130,000	130,000	128,000	130,000	132,000	132,000	129,000	130,000	132,000	132,000	129,000	132,000	133,000	133,000	132,000	134,000	132,000	134,000	3,146,000

BACKFILL

Backfill will be required for maximum ore extraction and for maintaining the stability of the stope walls during the mining process. Maximization of ore extraction and stoping productivities requires that primary stopes be backfilled with a consolidated fill strong enough to stand up to blasting and exposure. Secondary stopes require unconsolidated fill to contribute to regional stability.

Timely backfilling of mined out stopes is key to the success of the operation. The West Mine sand fill plant will be modified to allow the production of cement slurry in batches, which will be transferred to distribution tanks underground via a series of boreholes and lateral piping. Rock for the backfill will come from underground development waste, surface stockpiles, and, later in the mine life, an open pit on surface. Transport of the rock fill to the stopes will be by means of LHDs or trucks.

The binder content of the cemented rock fill (4% cement by weight) was determined based on the required uniaxial compressive strength (UCS). RPA notes that potential cost savings may be realized through the use of lower cement content in the cemented rock fill. Cautious experimentation in the normal course of operations, using successful fill exposures as a guide, should indicate whether lower cement contents may achieve acceptable results.

Initially, waste rock for backfill will be provided from shaft and development waste, and current surface stockpiles. Consumption of this material will outstrip replenishment from mine development, and by 2009, another source will be required as a supplement.

A quarry located east of the Mill-Administration building will supply the balance of the required waste. The quarry will be operated by a contractor. Ore haulage trucks, on backhaul from the mill, will pick up waste from the quarry and deliver it to the fill raise located at the West Mine.

MINE INFRASTRUCTURE & SERVICES

WEST MINE SHAFT

A new shaft will be sunk at the West Mine to meet production requirements of the mine on a consistent basis. The 5.5 m diameter circular shaft will be sunk to the 790 m level, with enough space at the bottom to install a bulkhead and continue shaft deepening, if required in future. The shaft will be concrete-lined, and contain four compartments. Two compartments are allocated for the 11-tonne skips, each with a cage at the top. The third compartment is dedicated to a future service cage for men and material transportation. The fourth compartment consists of a manway and a service area for pipes and electrical cables. The design hoisting capacity is 300 tonnes per hour of ore or waste loaded at the 720 m level.

In 2004, Aurizon excavated a 2.4 m by 2.4 m pilot raise from the 550 m level up to the bottom of the shaft collar, with shaft stations at the 280 m and 550 m levels. The pilot raise provided valuable information in regard to the rock conditions and water infiltration in this portion of the shaft. The ground is very good and without any significant presence of water.

MINERAL PROCESSING AND METALLURGICAL TESTING

Metallurgical testwork was oriented toward the use of the existing mill for processing. Aurizon identified three primary ore types, designated “Lower Inter”, “Quartz” (found throughout 113 Zone), and “Sediments” (found in the upper portion of 113 Zone).

Grinding tests indicate that the Sediments and Lower Inter samples are “moderately” resistant to impact breakage and the quartz is medium (less) resistant to breakage. The parameters measured in the tests were used in simulation exercises, which show that the projected power draw for the grinding circuit is, on average, 13% greater than that predicted by calculations based on the Bond ball mill work index. This projected inefficiency is higher than would be expected, but can still be accommodated by the existing grinding circuit at the current planned production rate of 2,200 average tonnes per day. The limitation in the circuit is the ball mill capacity, and at the above tonnage and a finished product of 77 microns (P80), a nominal ball mill feed size (F80) of

between 550 and 750 microns will be required. Thus the SAG mill will have to provide a finer size than normal, and the screens on the SAG circuit will have to split at this finer size. The existing screen is unlikely to provide sufficient area to reach design throughput – a larger screen will be installed.

Considerable testwork was conducted to establish the "maximum" recovery of gold by gravity means (GRG) for the three ore types. Simulations based on the results of these tests using the planned grinding area flowsheet and ore makeup yielded gravity recovery of gold ranging from 50% to 55%.

Quartz and Lower Inter material behave similarly, and a gravity gold recovery of approximately 40% at a weight recovery of 0.04% is expected. Sediments respond poorly to gravity concentration, and a recovery of only 10% is expected. At a weight recovery of 0.04%, the planned intensive cyanidation equipment will have adequate material processing capacity.

Direct cyanidation and parallel CIL tests show that all ore types contain active carbon. The potential losses of gold due to preg-robbing ranged from 3.4% for Quartz to 10.5% for Sediments. Thus, the current flowsheet, which incorporates CIL processing, is appropriate for all of the ore types of the deposit.

The projected CIL extractions for the three ore types based on the testwork and the proposed Casa Berardi circuit are shown in Table 1-9. In this table, extraction of gravity recovered gold is assumed at 98% for Quartz and LWI ores and 93% for Sediments. Head grades are taken from the current planned production grades.

TABLE 1-9 GOLD EXTRACTION SUMMARY
Aurizon Mines Ltd. – Casa Berardi Project

Ore Type	Head Grade g/t	Gravity Recovery %	Overall Extraction %
Quartz above 690	8.3	40	93.5
Quartz below 690	12.9	40	95.5
LWI	6.0	40	93.5
Sediments	4.5	10	74.5

ORE PROCESSING

The Casa Berardi ore processing plant was in operation from September 1988 to May 1997. Since closure, the facility has been on care and maintenance. The mill equipment and building generally are in good condition.

Based on the current mining plan, the mill facilities will process 2,200 tonnes per day with an equipment availability of 95% to provide a SAG Mill feed rate of 98.6 tonnes per hour.

Ore will be hauled by truck from the West Mine headframe complex to the crusher The ore will be crushed to approximately 5.5" (140 mm) at a rate of 226 tph. The ore will be fed into a SAG mill, operating in closed circuit with a sizing screen and cyclones. SAG mill product will be returned for further grinding to a ball mill.

A fraction of the primary cyclone underflow will be diverted to two parallel gravity circuits. Each circuit comprises of a vibrating screen and a Knelson gravity concentrator. The gravity concentrates will be leached in an intensive cyanidation reactor (ILR). The pregnant solution from the ILR unit will report to the electrowinning circuit for gold recovery, and the tail will report to the #1 CIL tank.

Gravity tails will be pumped to a 34 m diameter conventional thickener. Thickener underflow, at 45% solids density, will be pumped to the first CIL tank, and subsequently through the #2, 3, 4, 5, 6, and 7 CIL tanks.

Loaded carbon will be transferred to the acid wash vessel and treated with a hydrochloric acid solution. After acid treatment, the loaded carbon will be neutralized with a caustic solution and transferred to the stripping vessel. Hot barren solution will be pumped through the stripping vessel to remove the gold from the carbon. The solution exiting the top of the stripping vessel is defined as a pregnant solution containing gold in solution.

Pregnant solution from the CIL circuit, along with pregnant solution from the ILR unit, is fed to two electrowinning cells for gold removal. The gold extracted from the solution is deposited on cathode plates. The gold is removed from the plates, dried and smelted in an induction furnace. The refined gold will be poured into gold bullion moulds to form doré bars. These bars are shipped to a refiner for further upgrading.

PROCESS DEVELOPMENT

In developing the modified flowsheet for the reopening plan, the existing equipment was used to the maximum possible extent. The circuit will be modified to achieve an appropriate grind for optimum gold liberation and to put an emphasis on gravity concentration to meet metallurgical recovery goals. The proposed process flow sheet is generally the same as the previous flow sheet but with the replacement and addition of some equipment to ensure a production rate of 2,200 tpd.

The metallurgical goals can be met by optimising grind size, better SAG mill product classification, equipment additions to the gravity recovery circuit, more efficient ‘in-tank’ carbon screens in the CIL circuit, and minor improvements throughout the processing facility. The capacity of the pumps and piping has been evaluated for the revised operating conditions.

ENVIRONMENT/WASTE DISPOSAL

The following section was prepared for RPA by SENES Consultants Limited (SENES), and addresses key points related to environmental control and waste disposal at the Project.

The primary mine wastes produced at the site will be tailings and waste rock.

The site includes an existing tailings pond with three tailings cells, a polishing pond for settling iron arsenate precipitates, and a process water pond. The system has undergone regulatory review and permitting for the historic Casa Berardi mine, and permits remain in place for use in mine water management and operation of the tailings basin. The existing tailings pond can be expanded to contain approximately 1.45 million m^3 of future production. The system is reported to have performed well during previous operations and continues to function well to remove iron arsenic precipitates from the treated mine water discharge.

For future development, a new cell has been proposed to contain the future production once the existing cells are filled, which will occur in Q3 2007 under the current production schedule. A modified, or new, permit will be required. The new basin conditions and design are similar to the existing cells, and approval for construction is not expected to be problematic.

Tailings are non-acid producing and have not presented any material issue over the past years.

Waste rock from the previous mining operations has been characterized, is not acid generating, and is unlikely to represent a material concern. Waste rock will be returned underground for use as backfill.

POTENTIAL COSTS

In the review of the Project, there were a number of areas where costs may increase, including:

- A 50% increase in the costs for the additional tailings cell.
- A potential requirement for the construction of a new pipeline to discharge effluent to a larger receiver.
- Additional mine closure costs would include:
  - Reclamation of the new cell at closure, at a cost of $500,000.
  - A provision for interim treatment of the tailings discharge after closure to reduce arsenic levels to <0.2 mg/L.
  - Revegetation tests on tailings to assess whether soil cover is required to allow for a healthy self-sustaining vegetative cover on the tailings.

MINE CLOSURE

Aurizon has a preliminary mine closure plan that will need to be updated and submitted to reflect the current plans and proposals as developed for the UFS. The plan as outlined was previously submitted and approved in 2000, and as such is likely to be acceptable for the reopened mine. The plan will need to be updated to reflect the addition of the new tailings cell.

For the UFS, the payment schedule and total cost from the preliminary closure plan was adjusted to include reclamation of Cell #4. An allowance for long term water treatment was added (10 years, at $100,000 per year). As part of the closure planning studies, vegetation plots and testing should be completed to assess whether cover will be required (included in costs at a rate of $10,000 per year for five years). An allowance for a pH reduction circuit in the mill was also included.

Reclamation costs for the UFS total $2.4 million.

CAPITAL COST ESTIMATE

PRE-PRODUCTION CAPITAL

The capital cost estimate of $102.6 million covers the work required to bring the Project into production, including underground development, construction of infrastructure on surface and underground, processing plant rehabilitation and modification, and installation of services to support the mine site. The estimate includes all costs incurred from April 2005 to October 2006.

The estimate includes direct costs of equipment, materials, and labour, as well as indirect costs such as engineering, procurement, and construction management (EPCM); temporary construction services, camp lodging, owner's costs, and contingencies.

In RPA's opinion, many costs have been estimated with a greater level of confidence than is normal for a Feasibility Study, due to the advanced status of the Project. Most contracts have been tendered, bid upon, and awarded; significant progress has been made on some. Purchase orders have been placed for many equipment items. Aurizon manpower is near production levels, and department heads have estimated future spending based on current costs. Actual costs were used for April to June 2005.

SUSTAINING CAPITAL

Sustaining capital costs of $36.9 million include contractor mine development, extension of the mine communications network, tailings management (including construction of the new tailings cell), repayment of government loans, and mine reclamation & closure costs. Costs are scheduled from the start of production in Q4 2006, through to the end of the mine life, currently projected to 2012, and into 2013 for reclamation and closure.

TABLE 1-10 PRE-PRODUCTION CAPITAL COST SUMMARY

Aurizon Mines Ltd. – Casa Berardi Project

Item	Units	2005	2006	Total
Mine Development				
Shaft	$ ‘000s	8,566	7,500	16,066
UG Development	$ ‘000s	8,203	15,490	3,693
PPD Operations	$ ‘000s	225	4,266	4,491
Subtotal	$ ‘000s	16,994	27,256	44,250
Plant & Infrastructure				
Surface	$ ‘000s	7,482	5,177	12,659
UG	$ ‘000s	1,864	9,322	11,186
Electrical	$ ‘000s	1,767	2,413	4,180
Water Management	$ ‘000s	964	323	1,287
Mill	$ ‘000s	1,834	2,940	4,774
Subtotal	$ ‘000s	13,911	20,175	34,086
Contingency	**$ ‘000s**	**2,439**	**3,904**	**6,343**
		8%	9%	9%
Indirects				
EPCM	$ ‘000s	391	353	744
Power/Fuel	$ ‘000s	1,061	1,380	2,441
Aurizon Labour	$ ‘000s	3,922	4,626	8,548
Owner’s Costs	$ ‘000s	2,519	3,689	6,208
Subtotal	$ ‘000s	7,893	10,048	17,941
Total	**$ ‘000s**	**41,237**	**61,384**	**102,621**

TABLE 1-11 SUSTAINING CAPITAL
Aurizon Mines Ltd. – Casa Berardi Project

Item	2006	2007	2008	2009	2010	2011	2012	2013	Total
Mine Development	1,218	9,086	8,116	4,472	4,352	771	-	-	28,015
Communications	-	100	100	100	-	-	-	-	300
Tailings Management	-	2,683	601	240	240	240	-	-	4,004
Loan Repayments	-	-	-	450	600	750	200	200	2,200
Reclamation & Closure	20	132	228	324	419	-	-	1,286	2,409
Total	**1,238**	**12,001**	**9,045**	**5,586**	**5,611**	**1,761**	**200**	**1,486**	**36,928**

OPERATING COST ESTIMATE

Operating costs, averaging $47.9 million per year, are presented in Table 1-12:

TABLE 1-12 UNIT OPERATING COSTS
Aurizon Mines Ltd. – Casa Berardi Project

Item	Units	LOMP Average
Mine Production	$/t milled	21.66
Services	$/t milled	17.88
Mill	$/t milled	14.27
Administration	$/t milled	8.10
Total	$/t milled	61.92

The manpower for the Casa Berardi Mine-Mill complex was estimated at 200 employees. This number includes staff and hourly employees. It does not include the contractor workforce required for construction, mine development, diamond drilling, quarrying, and site security.

RPA made a comparison of key hourly rates by benchmarking them against August 2005 rates from a similar operation in the Province of Quebec. In RPA's opinion, Project labour costs compare reasonably, or even conservatively, with actual rates.

RPA has undertaken a desk top review from published and in-house data on relevant Canadian operating mines to provide a comparison with the estimated operating costs in the UFS. Unit operating costs for Casa Berardi are in the high range of the mines surveyed.