Project Proposal

Jolu Central Mill Gold Project

for

Saskatchewan Environment Assessment Branch

Submitted by

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EXECUTIVE SUMMARY

Golden Band Resources ("Golden Band") is a junior gold exploration company based in Saskatoon, Saskatchewan. Golden Band owns gold deposits and a licensed gold processing facility in the La Ronge gold belt in northern Saskatchewan. Golden Band’s processing facility includes the Jolu gold mill and the Mallard Tailings Management Facility (Mallard TMF) which are both located within the company’s Surface Lease with the Government of Saskatchewan.

Golden Band is proposing the development of mining operations based on the concept of a centrally located mill and satellite mines to economically extract and process gold ores from a number of its deposits. The anticipated life of the project is four years with a total amount of ore processed of approximately 910,000 tonnes.

The centre of operations will be the Jolu mill site. Golden Band intends to reduce bottlenecking and improve the mill capacity to allow the processing of lower grade ore from its deposits to provide a base load for a long term sustainable operation. Additional high grade ore from smaller deposits will be fed to the mill to increase the average mill grade.

The plant capacity will be increased from the original average daily milling rate of 400 tpd to approximately 700 tpd. The process flow sheet will follow the original concept of an industry standard carbon-in-pulp flowsheet with a gravity separation circuit.

The mill will be fed from five deposits: two open pit mines and up to three underground mines. The open pit mines are the Komis/EP mine; with the small EP deposit as part of the Komis mine operations. Bingo will be mined as a small high grade underground deposit in the first two years of the operation. The Bingo ore stream may be replaced by ore from the Decade and/or Jolu deposit in year three or four if further exploration activities indicate that further redevelopment of these deposits is warranted.

Golden Band Resources will utilize the existing haul roads from Komis to Brabant and from Highway 102 to Jolu, as well as Highway 102.

Limited amounts of waste rock will be generated by the mining of these deposits with the majority being produced at the open pit mine sites of EP, Komis and Jolu in the event it is mined by open pit methods. All waste rock produced will be stored according to good industry practices. Tailings from mill processing will be generated at the Jolu site and will be deposited in the Mallard TMF. The Mallard TMF will be expanded to accommodate the anticipated amount of tailings requiring the raising of existing dams and construction of freshwater diversion dams.

Golden Band Resources will develop site infrastructure including camps, offices, maintenance facilities, supplies and waste storage at the mine and mill sites, depending on the operating needs. The focus will be to centralize operations around the Jolu mill site and involve the local communities as much as possible in the economic opportunities.
Golden Band Resources will develop closure and decommissioning plans for all its sites that are in line with good industry practice and compliant with all regulations.
INTRODUCTION

Golden Band Resources Inc. ("Golden Band") is a Saskatchewan based gold exploration company proposing to develop its mineral resources and to re-start gold production in the La Ronge gold belt. Golden Band overall activities extend for approximately 100 km adjacent to provincial Highway 102, between the communities of Missinippi and Brabant.

Golden Band’s development strategy is to use a central milling facility to process gold ores from nearby satellite deposits. Each deposit is, in itself, too small to support a stand alone mine and mill. Golden Band Resources proposes to establish a Centralized Milling Operation of sufficient size to allow the economic processing of lower grade ores (< 5 grams per metric tonne (g/t) Au) in parallel with processing of higher grade ores from other deposits (> 5 gpt Au). The Jolu mill will be the centre component of the Central Milling Operation.

Golden Band Resources owns 100% of mine gold deposits in various stages of exploration all located in northern Saskatchewan’s "La Ronge goldbelt". Four of those deposits will collectively provide the total mill feed for this proposed project. Golden Band also owns 100% of the Jolu gold processing plant and the Mallard Tailings Management Facility (Mallard TMF), both of which are currently regulated by the Ministry of Environment’s Approval To Operate Pollutant Control Facilities (Approval No. IO-221) issued pursuant to Saskatchewan’s Environmental Management and Protection Act, 2002.

The ores from the Komis, EP, Bingo and Jolu/Decade deposits will be milled at the Jolu plant and the tailings will be managed in the Mallard TMF.

The current production plan being proposed to Saskatchewan Environment consists of mining the following quantities of ore from these resources (diluted to mining grades):

<table>
<thead>
<tr>
<th></th>
<th>Ore tonnes</th>
<th>Waste tonnes</th>
<th>Stripping Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Open Pit</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Komis</td>
<td>633,000</td>
<td>7,257,000</td>
<td>11.46:1</td>
</tr>
<tr>
<td>EP</td>
<td>38,000</td>
<td>553,000</td>
<td>14.5:1</td>
</tr>
<tr>
<td><strong>Underground Mine</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bingo</td>
<td>190,000</td>
<td>121,000</td>
<td>n.a.</td>
</tr>
<tr>
<td>Jolu/Decade</td>
<td>50,000*</td>
<td>n.d.</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>911,000</td>
<td>7,931,000</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

Notes: n/a – not applicable, n.d. – not determined
* Preliminary estimate only, not an inferred resource. Further delineation of the deposits will be conducted in the future.
It should be noted that these resources contain Inferred resources. Inferred resources are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that value from such resources will be realized either in whole or in part.

PROPERTY LOCATION AND DESCRIPTION

The Jolu Central Mill Project includes the Bingo, Komis, EP, Jolu and Decade gold deposits, the Jolu gold processing plant and the Mallard TMF. Golden Band also owns the Tower East, Golden Heart, Memorial and Birch Crossing gold deposits with known mineral resources, as well as the promising Greywacke deposit, and numerous other gold showings on its La Ronge Gold Belt claims. The development of these additional deposits is not included in the Jolu Central Mill project as defined in this Project Proposal. As shown on the following property map the EP and Komis deposits are very close together, about 75 road kilometres north of Jolu and 15 km north-west of the village of Brabant on Highway 102. The Bingo deposit is located about 55 road kilometres south of Jolu and 3 km west of Highway 102. Map 1 shows the location of the Jolu mill site and Golden Band’s satellite deposits. The map entitled “La Ronge Gold Belt Gold Deposit” within Appendix I shows the existing access roads and trails to the mill site and satellite deposits as well as approximate road distances.
The Bingo Gold Deposit

The Bingo property is located approximately 3 km west of Highway 102, 15 km north of the community of Missinippi (Otter Lake), 100 road kilometres north of La Ronge and 55 road kilometres south of the Jolu mill. A short 3.5 km truck driveable road provides access to the Bingo property. The Bingo Property is entirely contained within mineral disposition S-104955 in Group # 45579. This disposition is fully owned by Golden Band and is in good standing. The project area covers 2,154 hectares in the La Ronge Mining District of northern Saskatchewan, centered at 104° 45´ W longitude and 55° 43´ N latitude (UTM: 6,172,900 N, 515,700 E, NAD 83 datum) and spans two adjacent NTS map sheets: 73 P/10 and 15. Figure 1 shows the Bingo property.

Gold mineralization in the Bingo deposit is primarily hosted by an intensely mylonitized, quartz-rich zone of shearing, averaging about 2.5 m wide, within intermediate volcanic rocks. The gold in the Bingo deposit is, in part, very coarse, resulting in a significant ‘nugget’ effect. The Bingo deposit is estimated to contain a Measured + Indicated Mineral Resource of 97,109 tonnes grading 14.1 g/t gold at a cut-off of 5.0 g/t gold over a minimum width of 2.0 metres. An additional 136,560 tonnes averaging 14.03 g/t gold is classified as an Inferred Resource.

In June 2007 Golden Band received approval from Saskatchewan’s Ministry of Environment to proceed with an underground exploration program at the Bingo deposit. As part of this program a ramp is being driven from surface to allow underground access to the 1325 and 1275 Levels (85 and 135 metres below surface respectively). The total Bingo potentially mineable portion of the resource is estimated at 190,000 tonnes with an average gold grade of 15.35 g/t.

The Komis Gold Deposit

The Komis property is located approximately 200 road kilometres north-northwest of La Ronge and one kilometre west of Upper Waddy Lake in northern Saskatchewan. The project area is accessible by road from the community of Brabant Lake, located adjacent to Highway 102. An all-weather access road links Brabant Lake with the Komis and EP properties 16 kilometres to the northwest. The Property contains the Komis gold mine that was operated by the previous owner as an underground test mine from November, 1993 to April, 1994 and again as a producing mine from 1996 to 1997. A total of 120,565 tonnes of Komis ore was produced and processed at the Jolu mill, yielding 835,395 grams of gold and 104,693 grams of silver. The final mill head grade was projected to be 6.9 g/t (0.20 oz/ton) gold. Final gold recovery was 88.0%.
Komis gold mineralization occurs as fine disseminations of native gold (<1.0 mm) and as coarse flakes (up to 5.0 mm) in quartz veins and as fine disseminations associated with pyrite in hydrothermal alteration halos. Individual quartz veins range from one millimetre to more than one metre but seldom exceed 0.2 metres in width. Previous mining operations concentrated on small high-grade (plus 5 g/t Au) zones of gold mineralization. For the proposed development, a block model with 5x5x5 metre blocks was built using the historical drilling and underground development data. At a nominal 1.0 g/t Au cut-off, the model contains a Measured + Indicated resource of 990,000 tonnes with an average grade of 3.81 g/t Au plus an Inferred resource of 94,000 tonnes at 2.98 g/t, excluding all material known to have been mined from the previous underground operation.

A designed open pit, based on a Whittle 4X optimization resulted in a potentially mineable portion of resources of 633,000 tonnes with an average gold grade of 4.31 g/t and a 11.46:1 stripping ratio. Komis waste material will be classified and stockpiled separately as low grade mineralized material and barren waste rock. The conceptual
design and location for the Komis open pit and waste rock stockpile are shown on Figure 2.

The pit shell was used as a guide in designing a practical pit with an access ramp, 21 m wide at a gradient of 10%, and wall slopes of 50° in rock and 26.5° (1 vertical in 2 horizontal) in the overburden. It should be noted that these are assumed, typical wall slopes because rock mechanics studies initiated have not yet been completed.

The EP Gold Deposit

The property is located adjacent to the proposed Komis open pit mine. The Komis property saw production as an underground mine from 1996 to 1997 by a previous owner. It is on the mineral claim, S-108305 (689 ha) which is fully owned by Golden Band. The Eric Partridge ("EP") gold deposit is located approximately 200 km by road north of La Ronge, Saskatchewan and is about 15 km northwest of the small community of Brabant Lake.

The unusual mineralogy and geometry of the EP deposit points to a supergene origin for the gold mineralization. The EP deposit is estimated to contain an Indicated Mineral
Resource of 22,700 tonnes grading 7.18 g/t gold at a cut-off of 1 g/t gold. An additional 62,600 tonnes averaging 3.84 g/t gold is classified as an Inferred Resource. A designed pit shell for the EP deposit contains a potentially mineable portion of resources of 38,000 tonnes with an average grade of 6.73 g/t Au.

The pit shell was used as a guide in designing a practical pit with an access ramp, 21 m wide at a gradient of 10%, and wall slopes of 50° in rock and 26.5° (1 vertical in 2 horizontal) in the overburden. It should be noted that these are assumed, typical wall slopes because rock mechanics studies initiated have not yet been completed. Figure 2 shows the location of the open pit and waste rock storage area.

Jolu and Decade Deposits

The former Jolu and Decade mines are located within the Jolu mill’s surface lease and are in close proximity to the existing mill (Figure 3). The Decade mine is southeast of the Mallard Tailings Management Facility. The Decade mine and a 50 ton per day concentrator were operated from 1973 to 1975. Tailings from the concentrator were placed on the shoreline of Mallard Lake, prior to it being converted to a tailings management facility. During the operation of the Jolu mine and mill during the Jolu Project (1988-1991) the mine was dewatered and redeveloped. The mine is relatively small and was developed to a maximum depth of 50 m with a longitudinal extent of approximately 100 m. Ore obtained from the mine during the Jolu Project was processed at the Jolu mill. Further delineation of the deposit is being conducted at the present time to determine whether further development of the mine is warranted during the project life.

The Jolu mine was operated from October 1988 to August 1991 as part of the Jolu Project. Mine workings were established to a depth of approximately 400 m and an estimated 150,000 tonnes of waste rock was generated. In addition to a designated waste rock pile in close proximity to the adit the rock was used for site development work, including the construction of roads. During the Komis Project (1996 to 1997) the underground workings were partially drained in anticipation of using the workings to store tailings generated during the milling of ore from the Komis deposit. However, due to technical difficulties the underground workings were not utilized. Further exploration work is planned to determined whether it is warranted to mine near surface mineralization utilizing a small and shallow open pit or redeveloping a portion of the underground workings.

As noted previously, additional work will be required to determine whether the redevelopment of these former mines is feasible. These deposits offer a number of benefits in that they are located in very close proximity to the mill, past testwork has shown that the waste rock is benign, there is existing ground stability information and groundwater quality and inflow rate information for the Jolu mine, and there are existing facilities to support mining activities.
Open Pit Mining Methods

The Komis and EP deposits will be mined as open pits using a conventional truck and excavator combination. The equipment size will be in the 50 tonne class for trucks and in the 85 tonne weight class for the excavator. The operations are expected to operate year round. Except for some small portions of the EP ore all ore and waste material will be drilled and blasted using conventional drills and industrial explosives such as ANFO (ammonia nitrate fuel oil). An explosives factory, as defined in the Explosives Act, will not be required for the production of explosives.

The following Pit Design Physical Parameters were used for basic pit designs:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>EP Rock</th>
<th>2.75 t/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tonnage Factors</td>
<td>EP Overburden</td>
<td>2.00 t/m³</td>
</tr>
<tr>
<td></td>
<td>Komis Rock</td>
<td>2.80 t/m³</td>
</tr>
<tr>
<td>Bench Height</td>
<td>5 m</td>
<td></td>
</tr>
<tr>
<td>Haulage Ramps</td>
<td>Gradient</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Width</td>
<td>21 m</td>
</tr>
<tr>
<td>Wall Slopes</td>
<td>Assumed</td>
<td>45°</td>
</tr>
</tbody>
</table>
Mined ore will be transported out of the pits with off-highway trucks and stockpiled on site for transportation to the processing plant. Material re-handling with a wheel loader loading the on highway haul trucks will be required.

**Bingo Underground Mine**

The Bingo deposit is within a narrow, steeply dipping structure, traced on surface for a strike length of some 400m and currently diamond drilled to a depth of only 200m.

The primary form of mining at Bingo will be an underground mining method known as longhole open stope mining. Alternatively and in addition to the start of an operation Golden Band may consider mining a small near surface portion of the ore in a small scale surface pit, conceptually 5 m in width at pit bottom and up to 15 m in depth. Figure 4 shows the preliminary longitudinal section for the underground mine.

![Figure 4: Preliminary Bingo Longitudinal Section](image)

Considering the relatively high grade and narrow width of the deposit, the selected mining method will permit access to each face after blasting for sampling and grade control.

Based on a long hole open stope operation, a production rate of 350 tpd is estimated. One possible mine design and primary development is shown in the following longitudinal section and in the model view below. Note that this preliminary planning has
not had the benefit of rock mechanics studies, however, this is included as part of the underground exploration program.

Production Schedule

The overall production rate is governed by the sustainable throughput capacity of the refurbished Jolu gold processing plant, estimated at 242,725 tonnes per year based on a nominal 700 tonnes per day mill capacity at 95% availability.

It is Golden Band Resources’ operating strategy to utilize a base load of lower grade material that is readily available from the Komis and EP deposits. These lower grade deposits will be supplemented with the higher grades of the Bingo deposit and may also be combined with ore from the Jolu and Decade deposits.

Combined Potentially Mineable Portion of Resources

The operation will start with production from two deposits, Komis and Bingo, with the Komis open pit mine production keeping the Jolu plant fed to capacity. The small EP pit is mined to replace the Bingo ore feed, once depleted. The Jolu and Decade mines may be used to augment the final two years of the Komis ore.

The proposed overall mine development and production schedule for this project application is summarized in Table 1.

MILLING PROJECT DESCRIPTION

The Jolu Processing Plant

The Jolu mill was operated at an average daily milling rate of approximately 400 tpd. Golden Band’s economic analysis of the project identified a capacity expansion of the Jolu mill to 700 tpd is necessary for the project to be economically viable. Process improvements include upgrades in the gravity circuit by installing an intensive leach reactor, upgrades in water and effluent treatment, upgrades to plant process control and instrumentation.
Table 1: Proposed Production Schedule

<table>
<thead>
<tr>
<th>Deposit</th>
<th>Material</th>
<th>Year</th>
<th>Pre Prod</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Daily Mining Rate (t/d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP (Open Pit)</td>
<td>Waste</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>439,000</td>
<td>114,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ore</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,400</td>
<td>36,600</td>
<td>116</td>
</tr>
<tr>
<td>Komis (Open Pit)</td>
<td>Waste</td>
<td>650,000</td>
<td>2,507,000</td>
<td>2,445,000</td>
<td>1,486,000</td>
<td>169,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ore</td>
<td>9,400</td>
<td>133,600</td>
<td>195,000</td>
<td>209,000</td>
<td>86,000</td>
<td>481</td>
<td></td>
</tr>
<tr>
<td>Bingo (Underground)</td>
<td>Waste</td>
<td>106,000</td>
<td>10,000</td>
<td>5,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ore</td>
<td>121,000</td>
<td>69,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>220</td>
</tr>
<tr>
<td>Decade &amp; Jolu (Underground)</td>
<td>Waste</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TBD</td>
</tr>
<tr>
<td></td>
<td>Ore</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50,000</td>
<td>145</td>
<td></td>
</tr>
<tr>
<td>Total Ore Mined (t)</td>
<td></td>
<td>9,400</td>
<td>254,600</td>
<td>264,000</td>
<td>210,400</td>
<td>172,600</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: 1 Based on milling rate of 700 tonnes/day (t/d)
2 Preliminary ore estimate only, not an inferred resource. Further delineation of deposits will be required
3 Mining method for Jolu to be confirmed, small started open pit may be considered
4 Daily Mining Rate based on quantity of ore removed and life of development, including preproduction
TBD - to be determined

It should be noted that the above resources contain Inferred Resources. Inferred resources are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that value from such resources will be realized either in whole or in part.

Preliminary laboratory test work was undertaken at SGS Lakefield Research (Lakefield) on composite samples of drill core from the project’s deposits in 2005, 2006 and 2007. The work included grindability, flotation, gravity, and cyanidation tests. The Bingo and Komis deposits both contain some relatively coarse free gold that can be readily recovered by gravity concentration. The presence of this coarse gold adversely affected cyanidation test reproducibility and precision, but the test work nevertheless showed that relatively high extractions of gold can be obtained by 48 hour conventional cyanidation preceded by gravity concentration. Combined results from Bingo samples ranged from 97.3% to 98.2% recovery while Komis tests indicated an average 93.2%. The project’s economic assessment study assumed an overall average recovery of 95% of contained gold.

The addition to the existing gravity circuit of the processing plant of an intensive leach reactor will increase the recovery of the coarse free gold. This reactor is designed to increase recovery of the coarse gold fraction of the ore. Testwork is currently being
conducted to determine leachability and reactor performance for detailed process flow design.

The complete mill circuit proposed is consistent with a typical gold mill. For comparison purposes, the original mill circuit is shown in Figure 5. Figure 6 includes the addition of the intensive cyanide leach reactor and reverse osmosis effluent treatment plant.

Figure 5: Original Jolu Mill Flow Sheet

The following describes the circuits of the processing plant. Crushed ore will be ground in a single or dual stage ball mill capable of processing at least 700 t/d at a limiting grind of 80% passing 120 microns. The mill will operate in closed circuit with cyclones, with the underflow passing through a Knelson concentrator for coarse gold recovery. The concentrate will be leached in an intensive cyanide leach reactor to produce a final pregnant solution for electrowinning, with the reactor tailings returning to the mill.
Cyclone overflow will report to a conventional thickener from which the overflow is recycled as process water and underflow is pumped to the leach circuit where cyanide will be added at solution strength of 20% sodium cyanide to the first two leach tanks. The leach circuit consists of four leach tanks each equipped with a mechanical agitator.

Leach discharge from the last leach tank will flow to a six stage carbon in pulp (CIP) circuit where gold is adsorbed onto activated carbon. The carbon moves counter current to the slurry so that higher grade slurry contacts higher loaded carbon. Average carbon concentration in the CIP slurry is 20-25 g/L. Slurry from the last CIP tank will be pumped to the Mallard TMF.

Loaded carbon containing gold will be removed from the first CIP tank and washed with nitric acid and neutralized with caustic before being transferred to an elution column. Stripping of gold is accomplished by heating the pregnant solution and the addition of sodium hydroxide and sodium cyanide. The pregnant solution is then directed to the electrowinning cell for recovery of gold. Gold sludge from the electrowinning cell is recovered on mild steel wool then dried and transferred to a propane fired furnace to produce a doré product in bars.
INFRASTRUCTURE AND ANCILLIARY FACILITIES

Project Infrastructure

The Jolu Central Mill project has minimal additional infrastructure requirements. The existing road from highway 102 to the existing Jolu processing plant will require minimal upgrading. The power demands of the project will be provided by and purchased from the Saskatchewan Power Corporation. In the event that grid power is not available at project startup implementation of a contingency plan which involved the use of genset power will be required. The Komis deposit and adjacent EP deposit are also serviced by an existing road needing minimal upgrading. The access road to the Bingo deposit will require upgrades to allow for the safe transport of ore to the processing plant. No new stream crossings will be required.

Tailings Management

Tailings from the CIP process will be pumped to the licensed (IO-221) Mallard TMF. In accordance with the facility’s design and previous operating history the tailings slurry will initially be pumped into Cell B. The existing facility has capacity for the storage of approximately 450,000 tonnes of tailings, while maintaining a 1 m water cover. As production moves into the second year of operation it will be necessary to increase the holding capacity of the TMF to a total storage capacity of approximately 910,000 tonnes. Approximately 861,000 tonnes of tailings will be generated from treatment of Bingo, Komis and EP ores with an additional 50,000 tonnes from the Jolu and Decade deposits, should they be mined. The TMF expansion will be accomplished by increasing the height of the existing dams. It will not be necessary to expand the facility outside of its currently licensed footprint. The as–built design of the Mallard TMF is shown on Figure 7.

The design of the TMF expansion will be done by a qualified and experienced engineering firm. Local construction material and sterile waste rock from the previous mining at Jolu will be utilized to reduce any unnecessary environmental impact.

Treatment of the TMF reclaim water will be conducted using a reverse osmosis treatment plant located within the mill to ensure that effluent quality is acceptable prior to any discharge to the environment.

Golden Band Resources will develop reclamation and decommissioning plans for the tailings management facility that are consistent with current industry best practice and in compliance with all applicable government regulations.
Due to the nature of the satellite mines and milling operation, waste rock storage areas will be required at all three locations. Waste rock areas will be designed, built and decommissioned so as to minimize long-term impact on the environment. Other waste materials will be recycled (e.g. spent lubricants) and/or disposed of in accordance with all applicable regulations. Prior to the design of waste dumps the acid generating potential of the waste material will be evaluated with industry standard testing procedures. All potentially acid generating waste rock will be managed appropriately.

Site Water Management

All proposed sites will require a water source and waste water disposal system. Water usage and waste water quantities will depend on the type of operation.
**Site**

<table>
<thead>
<tr>
<th>Site</th>
<th>main water use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Komis/EP open pit mine</td>
<td>utility / maintenance</td>
</tr>
<tr>
<td>Bingo underground mine</td>
<td>drilling / utility / maintenance</td>
</tr>
<tr>
<td>Jolu Central Mill</td>
<td>process water / utility / maintenance</td>
</tr>
</tbody>
</table>

Site water use will be recovered from ground water and/or surface water sources depending on the availability of sources. Wherever possible Golden Band Resources will recycle and reuse as much of the process water as possible. This will particularly affect the Jolu Mill site where process water will be recovered from the tailings management facility and re-circulated back to the process circuit.

Any mine effluent water will be collected in suitable containment structures. Effluent quality will be monitored according to an approved monitoring program and treatment processes for a mine will be utilized if required.

The Jolu mill has an existing fresh water supply system with water being supplied from Jojay Lake and pumped to the mill. A water recycling system from the Mallard TMF will also be utilized.

Domestic sewage generated from the Jolu site will be directed to the Mallard TMF for treatment. The preferred sewage disposal facilities for the Komis/EP and Bingo sites are currently being evaluated, however, the proposed system will comply with all provincial and federal guidelines applicable to the handling of domestic wastes.

**Power and Energy Supply**

An existing 138 kV power transmission line, linking Sask Power’s Island Falls hydro-electric station with uranium mines and Points North Landing in the Athabasca Basin, crosses Highway 102 approximately 8 km south of the community of Brabant. Golden Band has negotiated with SaskPower to have power provided to the Jolu mill at 25 kV from a substation at Lindsay Lake. The power line will follow the existing Highway 102 to the Jolu access road turnoff, then follow the access road to the site. Sask Power will require brush clearing along Highway 102 and the Jolu access road to enable the installation of power poles and highline power cables. Sask Power will retain ownership of the line and will be responsible for its maintenance.

A contingency plan in the initial stages of the project will include the use of diesel generators on the mill site in the event that grid power does not meet the mill start up schedule. Stand-by power generation will be installed to provide emergency power for the plant in case of a power outage.

The Komis/EP and Bingo mine sites will be supplied with electricity from diesel generators. Dual walled diesel storage tanks will be provided to feed the diesel generators.
All sites will also have local stand-alone tanks to fuel small trucks and utility vehicles. Propane will be used to heat the buildings, underground and other facilities.

**Hazardous Materials Storage**

Storage facilities for materials such as fuel, explosives, and process chemicals have not been detailed. All operating sites will require approved hazardous material storage facilities primarily for fuel, oils & grease, propane, explosives and lubricants.

The Jolu mill site will also require storage of process chemicals such as

- Sodium cyanide
- Activated carbon
- Lime
- Miscellaneous process reagents inc. sodium hydroxide, nitric acid and glycol

All hazardous substances and waste dangerous goods will be stored in approved facilities constructed and operated in accordance with all applicable federal and provincial legislation.

**Haul Roads and Site Access Road**

The nature of the central mill concept requires mass material movement of ore from the mine sites to the Central Mill at Jolu. Golden Band Resources proposes to haul ore from the mine sites to the Jolu mill stockpile using on-highway tractor-trailer units (6 axle B-trains) via existing non-public haul roads and the public Highway 102. The ore haulage operation will most likely be outsourced to a qualified transportation contractor. It is planned to use payloads of up to 45 tonnes per truck with the permission of the Department of Transportation, for an estimated daily truck frequency of approximately 15 trucks. Golden Band Resources will enter into a Transportation Agreement with the Saskatchewan Department of Highways to allow for the use of higher payload transportation over public highways.

**Road Portion Highway 102 to Jolu and Brabant Lake to Komis Roads**

Minor haul road repairs are required for the sections of road linking the Komis and EP mine to Highway 102 (app. 15 km) and the Jolu Site to Highway 102 (app. 14 km). These roads were used to haul ore to the Jolu mill in the past. Upgrading required to improve drivability and safety will include the clearing of overgrown vegetation, development of pullouts and resurfacing of the road bed. The road upgrades are necessary to allow economic and safe trucking speeds and personnel access to sites.
For the short haul road linking the Bingo site with Highway 102, pull outs will be installed at every 2 km and upgrades will be required to establish a minimum road width of 4.5 m.

Maximum haul road grades of no more than 8% and cleared right-of-way will be maintained. Haul road improvements will be conducted using locally available building materials and any suitable sterile mine waste rock. Gravel pits along the Jolu access road and the current waste rock stockpile on site will be used to repair and improve the 15 km of access road to the mill.

No new stream crossings will be required along any of the access roads and existing culverts will be evaluated in 2008 to determine whether any repairs are required.

**Personnel Sources and Personnel Transportation**

Golden Band Resources will undertake to employ as many personnel as possible from the local labour force, especially from northern communities. While at work, all employees will be housed in a Golden Band facility or under Golden Band arrangements.

It is presently assumed that all site employees will be employed on a rotational basis. Transportation will be provided to and from La Ronge, Prince Albert, and Saskatoon. It is envisioned that transportation to and from the sites will involve a combination of air transport and bus service.

**Camps**

Golden Band Resources will consolidate housing of personnel as much as possible at the centrally located Jolu processing plant. This site will be the regional centre of operations and support the satellite mines with office space and personnel, warehousing, purchasing and other support functions such as engineering.

It is anticipated that the Jolu mill site will have a permanent site camp for up to 49 people. It is expected that employees working at Komis/EP will be housed within the community of Brabant. Bingo site personnel will be housed in the nearby community of Missinippi or Grandmother’s Bay.

**Maintenance Facilities and Supply Chain Management**

The Jolu processing plant has an existing maintenance workshop constructed during previous mining campaigns associated with the facility. This workshop will act as a regional base for maintenance and spare parts inventory. It will also provide maintenance to the mill and infrastructure at Jolu.
The Komis/EP site will have building structures for maintenance of the mobile equipment fleet. These facilities will be designed and built to allow easy relocation and dismantling.

Supply chain management and warehousing will be centralized at Jolu with small local warehouses at each of the satellite mines. Supplies will likely be consolidated for shipment from Saskatoon, Prince Albert and La Ronge and transferred to the Jolu site for further distribution.

ENVIRONMENTAL CONSIDERATIONS

The project involves the development and operation of two open pits and up to three underground mines, road haulage, and centralized mineral processing at the Jolu mill. It also includes the installation of associated surface facilities including camp accommodations, fuel storage, waste rock storage, and office areas.

The project will require the expansion of the existing Mallard TMF within the existing licensed footprint.

Environmental Baseline Studies

Canada North Environmental Services (CanNorth) has completed environmental baseline studies in the Greater Waddy Lake area that includes the Komis/EP Deposits. The area of the Jolu Mill (Mallard TMF and Yew Lake) is also included in the baseline study although the area has been studied in the past prior to production in 1986 to 1988. The Komis area was also studied in 1993 to 1995 in support of the Komis Project underground development.

The environmental baseline study conducted over the course of 2006 and 2007 consisted of terrestrial and aquatic habitat evaluations including the following detailed studies:

- Aquatic environment
  - Spring fish spawning
  - Summer fish and plankton community structure, fish habitat assessment, water and fish chemistry survey, lake morphometry and stream crossing assessments
  - Fall Spawning, sediment benthic invertebrate survey
  - Desktop hydrology study including regional streamflow analysis, flood frequency and magnitude, low flow frequency and magnitude, flow durations, etc.

- Terrestrial environment
  - Winter wildlife tracking survey
- Spring raptor survey
- Spring ungulate pellet group/browse survey, habitat mapping and development of a caribou mitigation/protection plan
- Summer vegetation / rare plant survey
- Ungulate pellet group survey

This work adds to the existing environmental baseline data which includes work initiated by the Terrestrial and Aquatic Environmental Managers (TAEM) now known as Canada North Environmental Services (CanNorth). TAEM carried out environmental field work in 1988 which involved lake morphometry, fish community, and fish habitat assessments in Tower Lake, Island Lake, Bead Lake, Middle Lake and Unnamed Lake. TAEM also conducted a comprehensive study of the Komis project area in 1994 and 1995 that included aquatic and terrestrial assessments. More recently, CanNorth (2005) conducted an aquatic and terrestrial baseline investigation in the Bingo gold project area.

The report summarizing the 2006 and 2007 baseline investigations is being finalized and this information, along with the previous environmental data will form part of the EIS for the proposed Jolu Central Mill Gold Project.

As part of the baseline investigations conducted in 2006, fish were observed within the Mallard TMF. The Mallard TMF was created in 1988 when the Mallard Lake basin was converted to an engineered TMF. The process involved draining the basin, relocation of the fish population, and the construction of dams and flow diversion structures. The project was subject to an environmental assessment and the removal of fish was authorized by the Province. The Mallard TMF has remained licensed since being converted to a TMF and has remained in care in maintenance mode since 1998.

Fisheries and Oceans Canada (DFO) are presently determining whether the TMF may be classed as fish habitat due to the fish observed within the facility in 2007. Should the TMF be classed as fish habitat Golden Band has been advised that an authorization will be required from DFO prior to re-activating the facility from its current care and maintenance status to an active operating status.

**Mine Development, Operation and Closure**

Environmental protection has been incorporated into the conceptual design and estimated costs for the project, where the open pits would be developed and operated with the following key environmental controls in place.

- **Fuel storage and equipment re-fuelling:** Each mine would be equipped with a re-fuelling station comprised of a double wall above-ground diesel fuel storage tank; dispenser, fire extinguishers, spill kits and relevant signage. Existing fuel storage facilities at the Jolu processing facility will be inspected and repaired, as required, to meet regulatory standards;
• **Hazardous materials:** Hazardous materials would be stored and used in accordance with regulatory requirements. Spill kits will be strategically located and readily available for use. At closure, unused and/or waste materials such as but not limited to, unused lubricants, fuel, explosives, blasting agents and used oil would be removed from the mine site and recycled or disposed of in accordance with regulatory requirements;

• **Waste management:** Liquid and solid hazardous wastes would be managed, recycled or disposed of in accordance with regulatory requirements. Solid non-hazardous wastes would be recycled or disposed of in approved solid waste landfills;

• **Mine waste rock:** Mine waste rock would be placed in designated waste rock management areas. At closure, the slopes of the open pits and waste rock management areas would be re-contoured for long-term physical stability. The roads to, and surfaces of, the waste rock management areas would be scarified to encourage natural re-vegetation.

Waste rock and ore characterization, including acid base accounting test work and humidity cell test work is being undertaken. The results of these tests will be included in the proposed project’s EIS. Should acid rock drainage and metals leaching be identified as an issue management plans will be developed using current industry standards. These management plans would be implemented in order to mitigate any potential environmental impacts.

Site roads and yards will be constructed using clean waste rock that has been tested and demonstrated to have minimal (within regulatory limits) potential for acid generation or metal leaching. The locations of mine infrastructure and mine waste management areas will be selected to mitigate potential impacts on wildlife and other land uses;

• **Mine water quality:** Mine effluent quality will be regularly monitored to assure compliance with effluent discharge criteria including non-toxic effluent requirements. The water monitoring program will also include the collection of water samples from upstream and downstream stations in receiving water courses;

• The open pits will be allowed to naturally flood at closure, and pit benches located above the flooded pit water level will be re-sloped for safety purposes and, where possible, mined out open pits e.g. EP would be backfilled

• The Bingo underground mine will be allowed to flood at closure. The ramp portal and access to the underground workings will be blocked using clean waste rock, and the mine ventilation raise will be capped using an engineered reinforced concrete bulkhead.
Jolu Mill Operation and Closure

The existing Jolu mill and Mallard TMF will be reactivated to operate in a similar manner to previous operations. The capacity of the existing tailings area will be increased within the existing approved footprint, in the second year of the project.

Consistent with previous operating phases of the processing facility, JoJay Lake is proposed as the fresh water source for the mill. The final point of control for any effluent discharge is the permanent control structure at the outflow of Cell C of the Mallard TMF.

Water from the TMF will be treated using a reverse osmosis treatment plant prior to discharge to the environment. The quality of the final effluent will be regularly monitored and tested to assure compliance with effluent discharge criteria including non-toxic effluent requirements under the federal Metal Mining Effluent Regulations.

Once the open pits and the underground mine cease operations, the Jolu mill would either be again placed in a care and maintenance phase for further use or maintained in operational phase awaiting for environmental assessment and regulatory approvals to process additional satellite deposits identified in the immediate area.

It is anticipated and expected by Golden Band Resources that ongoing resource development and exploration in the La Ronge Gold Belt will allow a continued operation of the Jolu mill past the proposed 4 year project life.
REFERENCES


AMEC, 2004. Draft - Application for Underground Exploration Permit, West Dickens Lake Project Bingo Exploration Decline, Saskatchewan, Project # 146332, September


Technical Report and Preliminary Economic Assessment on the Waddy Lake – Jolu Central Mill Project La Ronge Gold Belt, Northern Saskatchewan, Canada for Golden Band Resources Inc. by P&E Mining Consultants Inc., June 1, 2007
APPENDIX I

Project Locations and Distances
### Resources

Ranges by In Situ Ounces (Meas. + Ind.)

- **Less than 100 000**
- **100 000 to 200 000**
- **Greater than 200 000**

* Bingo and Memorial Indicated+Inferred
** SIR 2005 Reserves t x oz/t

### Diagram Labels

- **Potential Road/Approximate Location of Existing Road**
- **Mine Road**
- **Truck Drivable Trails**
- **Winter Road**
- **Sampling Trails (ATV Drivable)**
- **Sampling Traverses (Buldozers Only)**
- **Gold Occurences**

### Distance Table

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### Notes

- From...To...Distance__km_
  - Bingo Highway 102: 3.02 km
  - Bingo Jolu Turn off along Highway 1: 35.06 km
  - Greywacke Highway 102: 8.3 km (approx.)
  - Jolu Mill: 12.66 km
  - Jolu Trail: 2.5 km
  - Tower Lake Camp Jolu Mill: 32.81 km
  - Memorial Tower Lake Camp: 5.1 km
  - Tower Camp Birch Crossing: 4.46 km
  - Tower Camp Kaslo: 4.5 km
  - Tower Camp Neko: 7.6 km
  - Tower Camp Komis Road: 16.45 km
  - Tower Camp Corner Lake: 13 km
  - Corner Lake Komis Road: 4 km
  - Jolu Turn off Brabant along Highway 102: 48.1 km
  - Brabant Komis Mine: 16.5 km
  - Brabant Waddy Camp: 13 km
  - Brabant Tower Landing: 12.2 km
  - Tower Landing Komis Mine: 4.5 km
  - Komis Charlie Eye Crossing: 1.1 km
  - Bingo Jolu Mill: 52.18 km
  - Komis Mine via Hipway 1 Jolu Mill: 74.26 km
  - Komis Mine via Tower Jolu Mill: 53.78 km
  - Tower Camp Komis Mine: 20.97 km
  - Golden Heart Highway 102: 12 km
  - Golden Heart turn-off Brabant along Highway 102: 11.5 km
  - Golden Heart via Waddy Tower Landing: 8 km

**Legend**

- Potential Road/Approximate Location of Existing Road
- Mine Road
- Truck Drivable Trails
- Winter Road
- Sampling Trails (ATV Drivable)
- Sampling Traverses (Buldozers Only)
- Gold Occurences

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- **Decade Mine**
- **Jolu Mill**
- **Jolu Mine**
- **Rush Lake Mine**
- **Star Lake Mine**
- **Quarry 500465**
- **Tamar Deposit**
- **Quarry 500464**

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- **Golden Band Resources Inc.**
- **La Ronge Gold Belt**
- **Gold Deposits**

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- **From**
  - **To**
  - **Distance_Km**
  - **Approximate Location of Power Line**

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- **Author:** MBA
- **Office:** Saskatoon
- **Drawing:**
- **Date:** 15/11/2006
- **Scale:** 1:300000
- **Projection:** UTM Zone 13 (NAD 83)