

## Processing Overview

During the first nine months of the 2007/2008 financial year, Arenal provided 85% of plant feed with the remainder from high grade veins in and around the existing operations.

### 2007/2008 (9 month to date) Ore Feed to Process Plant

Feed Source	Tonnes	Grade (g/t)
Arenal	794,798	2.58
Veins (Vetas)	139,163	2.18
Total Feed	933,961	2.52

The average throughput rate for this period was 151 tonnes per hour, representing a 29% increase over the plant's nameplate capacity. Metallurgical recovery of gold was 92.3% with plant availability of 93.8%.

## Mining Method and Equipment

Mining is by conventional drill and blast, load and haul open pit methods using 6m benches excavated in two 3m.flitches. Mining equipment includes:

- 1 PC1250 6.7m<sup>3</sup> capacity excavator
- 8 50t payload dump trucks
- 1 4.7 m<sup>3</sup> capacity front end loader
- 3 Pantera 1500 drill rigs

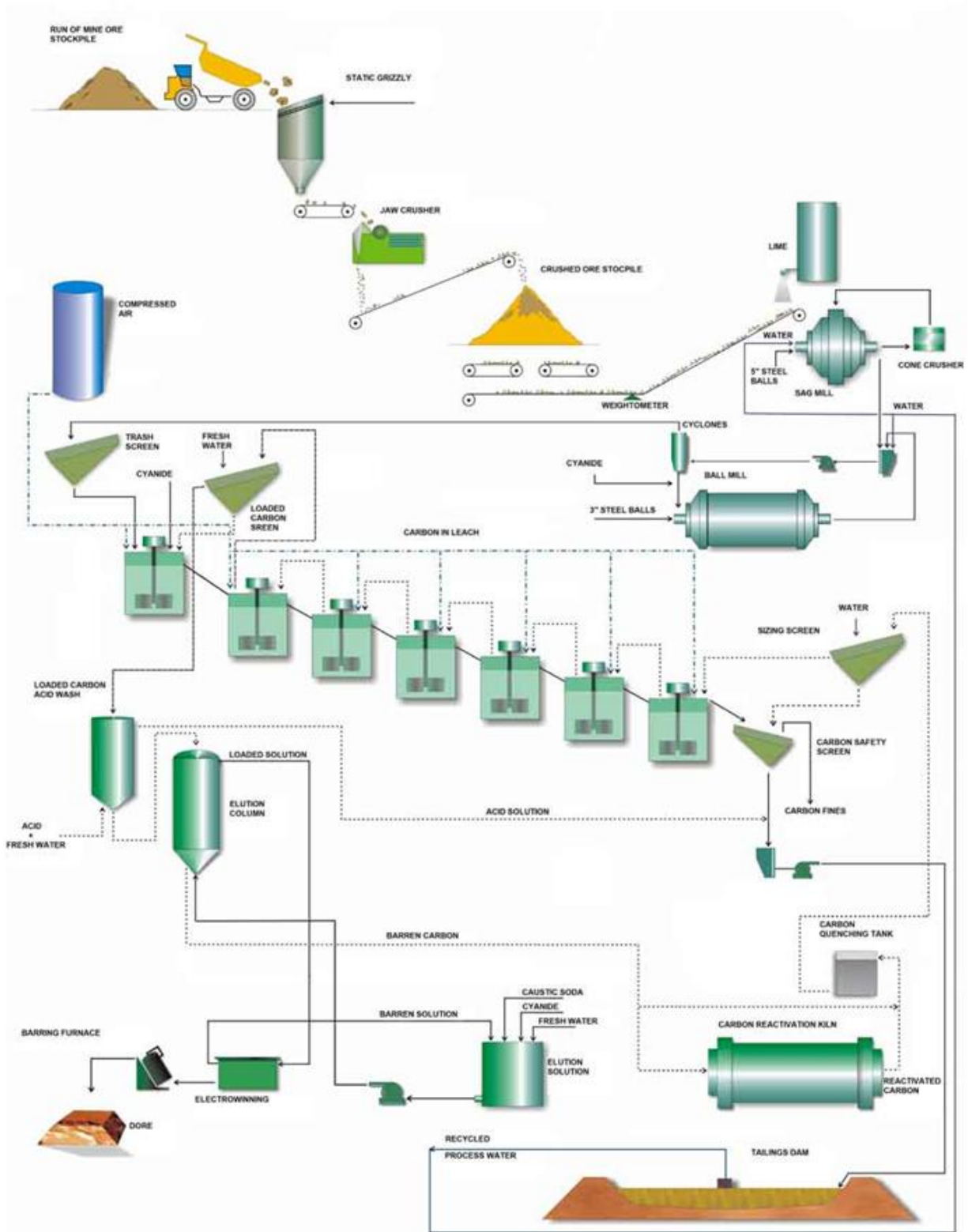
Mining of satellite pits and pre-strip is performed using contractors with smaller equipment. Ore from satellite pits is trucked to the process plant using road trucks.

## Process Flowsheet

The ore treatment plant is a conventional carbon in leach (CIL) plant built by Minproc in 1996 and commissioned in January 1997. The plant, with a nominal throughput of 1.1Mtpa, comprises a single stage primary crushing circuit using a 500mm aperture grizzly and a jaw crusher fed using a Front End Loader (FEL). The nominal crushed ore size is 100% passing 150mm. The crushed ore is conveyed to a surge stockpile with a nominal live capacity of 1,200t. Up to 2,000t of crushed ore are maintained on an adjacent stockpile to cater for extended primary crusher stoppage.

The crushed ore is reclaimed from the main stockpile using ore feeders and fed into a SAG/ball mill circuit using a conveyor. SAG mill scats are crushed in a 2-stage secondary crushing circuit using cone crushers, to prevent build-up of critical size material in the SAG mill. The ball mill runs in closed circuit, utilizing cyclones for product size control. The grinding circuit nominal product size is 80% passing 150µm.

# Process Flowchart



**Infrastructure and Services**

Power is supplied from the national grid, and some 3,400,000kW/hr of power are purchased from the grid each month to supply overall power consumption on the project of 4,800kW per operating hour. A backup power plant sufficient to run the leach plant is available.

Water is supplied from a raw water dam upstream from the tailings store facility. The dam captures the local catchments and has provided sufficient capacity to date.

A causeway has been constructed across the Arroyo Corrales to haul ore directly to the ore treatment plant at San Gregorio. At times flooding will prevent the causeway from being used, however flood durations are low, and not expected to be a significant issue.

**Laboratory**

Gold and silver samples for exploration, mine and the process plant are analyzed at the Company's onsite Laboratory.

The laboratory processes around 7,000 samples per month or approximately 12,000 analyses. Of the total 25% are for the plant, 35% for exploration and 40% for the mine.