ZEEHAN ZINC LIMITED

COMSTOCK MINE DEVELOPMENT

Summary of Mining Operations 1-7-01 to 30-6-02

1. **Production/Mine Operations**
   No mining of ore or waste removal has been carried out during construction of the Gravity Treatment Plant, with earthmoving operations being directed at rehabilitation of the Central Waste Rock Dump (CWRD). This work has been carried out in accordance with permit conditions and as outlined in the Development Proposal and Environment Management Plan (DPEMP).

   Our Geologist Paul Heath has completed drawing up the new mining plan, with the assistance of consultants, Coffey Geosciences Pty Ltd. This Mine Plan will provide a basis for negotiation of a mining contract to cover the next stage of open cut development, which will involve the relocation of Trial Harbour Road where Allison's Lode intersects the Balstrup Fault.

2. **Waste mined or Stripped**
   Approximately 14,000 t of waste has been moved in total, 4000 t from the top and eastern side of the CWRD and 10,000 t from the Gravity Plant location. All waste has been transported to the Swansea Waste Rock Dump (SWRD) and compacted and contoured as outlined in the permits conditions.

3. **Personnel at year end 30-6-02**

Management	2
Geologists (employees)	3
Geologists (contractors)	2
Environmental (employees)	1
Environmental (contractors)	1
Administration	6
Onsite employees (plant installation)	1
Onsite contractors (plant installation)	23
Laboratories	4
Engineers (contractors)	4
Transport	1
Metallurgy	2
Computer Data interpretation	1
Surveying	1
Power installation	7
Offsite plant installation	8
Total	**67**

Note: Includes full time, part time, casual and temporary workers

4. Rehabilitation

A clay pit has been opened up north of the old Comstock Tramway after completion of an extensive investigation and analysis of test pit clay samples. Environmental Manager Shane Bartel has developed a rehabilitation plan for the CWRD and clay material has been used to seal the re-contoured batter slopes of the waste dump prior to the placing of topsoil (Figure 3). At present, the CWRD is partially capped, and will be finished before ore extraction continues. The active Swansea Tramway Waste Rock Dump (STWRD) will be modified to accommodate the proposed co-disposal tailings dam.

5. Reserve/Resources

Zeehan Zinc is currently reviewing all work completed by Renison Goldfields Consolidated (RGC) and Western Metals which calculated resources along the Balstrup Fault of 6Mt @ 5.5%Zn, 3.3%Pb and 40g/t Ag and 5.1Mt @ 4%Zn and 2.3%Pb (non-JORC compliant) respectively. Zeehan Zinc geologists and an external consultant are currently reviewing these calculations to meet the Australian Code for Reporting of Mineral Resources and Ore Reserves (JORC).

Zeehan Zinc (through its subsidiary company ZZ Exploration) has currently applied for two exploration licences ETA 566 and 577 in April and June 2002, respectively, within the Zeehan area. If the company is successful upon application, it expects to increase its estimated resource by an additional 2.5 Mt (Oceana Mine).

6. Major Projects

Gravity Plant Design

A decision was taken in January to add a further stage for gravity separation of lead/silver concentrates to the circuit, so that this material can be sold directly to Port Pirie smelters (or other buyers) without the added cost of grinding and flotation. Fines will also be separated for flotation of a bulk concentrate, which can be sold directly to imperial smelters. A report outlining these changes has been received from our consulting metallurgist Nick Moony. Three Russell Jigs have been purchased from Mancala for this circuit, and have been refurbished ready for installation. A small floatation plant has also been purchased from Mancala. Plant layout details were finalised during site visits in February and the plans have been drawn up to show the additional plant and extended concrete slab area.

The other major plant design issue currently being finalised is filtration of lead and zinc concentrates. The current proposal is to use bulka bags for drainage of lead/silver concentrates and bulk lead/zinc concentrates, with the coarser zinc pre-con being drained in concrete bins. Final design of concrete retaining walls and bins was completed in August 2002.

Plant Installation

Most major plant items are now on site (Figures 5-10), with conveyors assembled and platforms and walkways installed. Safety fences and railings have been erected, and the coarse ore bin approach slab completed. Electrical switchgear has been installed, and the electrical control room is in place. Cables are now being run to each drive.

A Ball Mill has been purchased but will not be installed until a decision has been made on stage two flotation of zinc concentrate.

Tailings and Waste Rock Disposal

Consulting Engineers Thompson & Brett Pty Ltd were commissioned to design a combined waste rock and tailings co-disposal facility, including provision of a water treatment area prior to the discharge of water back into Comstock Creek. Progressive rehabilitation of the completed batters will occur to reduce the visual impact from Trial Harbour Road. This plan has been submitted to DPIWE and West Coast Council for approval.

Offices and Workshops

The site office has been set up and Telstra has installed a satellite telephone service.

A large workshop, offices, store yard and ablution facilities has been purchased in Main Street, Zeehan. This will be used for repair and maintenance of small plant, receipt of stores and also as a geological core store and sample preparation area.

Power Supply

Aurora Energy have installed a 5km 22KV transmission line from Zeehan, with the work awarded and completed by Tas Pole Renewals (Figure 2). As there is a 3 month delay in delivery of the 1000 KVA substation transformer, the initial installation will use a 500 KVA pole-mounted transformer for commissioning of the plant. Connection of power to the site was completed in late April.

Water Supply

The water supply dam above the ROM pad has been completed, and a 20,000 litre header tank has been installed on the hill above to provide a fire fighting reserve. A large centrifugal pump has been purchased to lift water from main adit discharge point to the Gravity Plant. Water from the adit will be treated with liquid caustic for pH correction prior to use in the plant.

7. Capital Expenditure

Comstock Gravity Plant Installation

Plant Equipment and Capital Assets	**$327,225**
Administration	**$23,352**
Engineering and Project Management	**$193,302**
Site works	**$206,263**
Water Supply	**$3,698**
Plant Establishment	**$706,735**
Electrical	**$75,182**
Miscellaneous	**$28,461**
Ball Mill	**$29,155**
Total	**$1,593,373**

Figure 1. Plant Control Shed and Gravity Plant, Zeehan, Tasmaina.

Figure 2. Assembly of one of the power poles near the gravity plant, Comstock Mine, Zeehan

Figure 3. Rehabilitation of the Central Waste Dump (CWD). Clay is covered and compacted over acid producing material. Photograph taken looking to the NW.

Figure 4. View looking over Comstock Mine (Photograph taken looking to the SE).
Background: Mt Zeehan; Centre: Gravity Plant; Left: Allison's Pit; Right: South Comstock Open Pit.

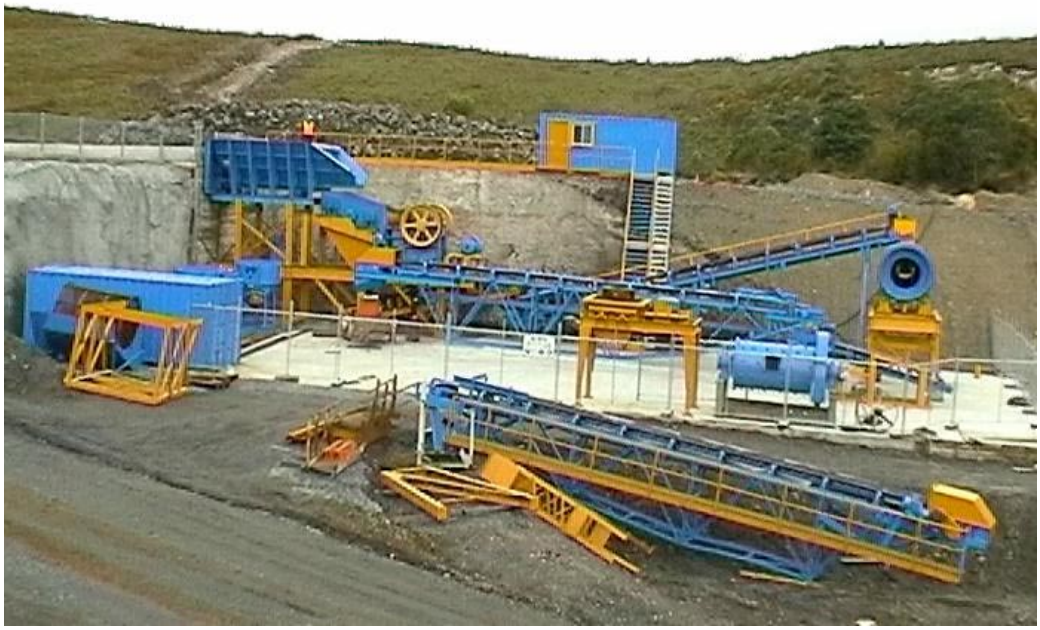

Figure 5. Comstock Gravity Plant, Zeehan, Tasmania.

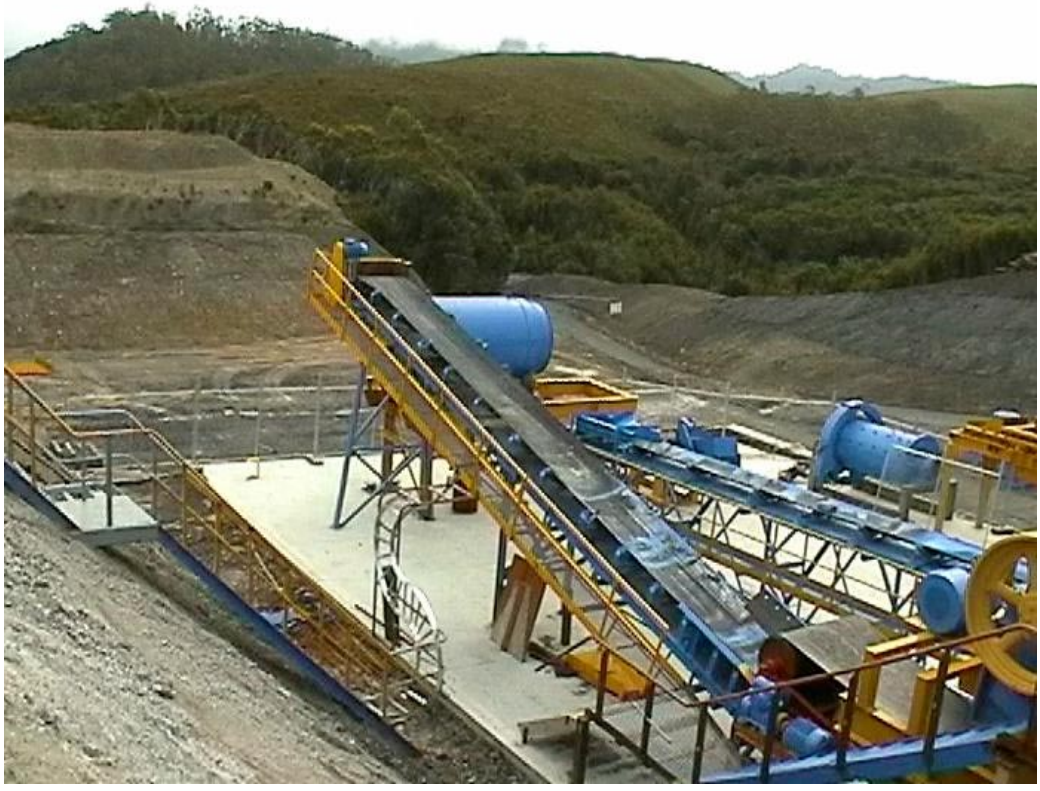

Figure 6. Primary Jaw Crusher (right), Conveyor (centre) that feeds into Trommel.

Figure 7. Primary Jaw Crusher (right), weightometer, conveyor.

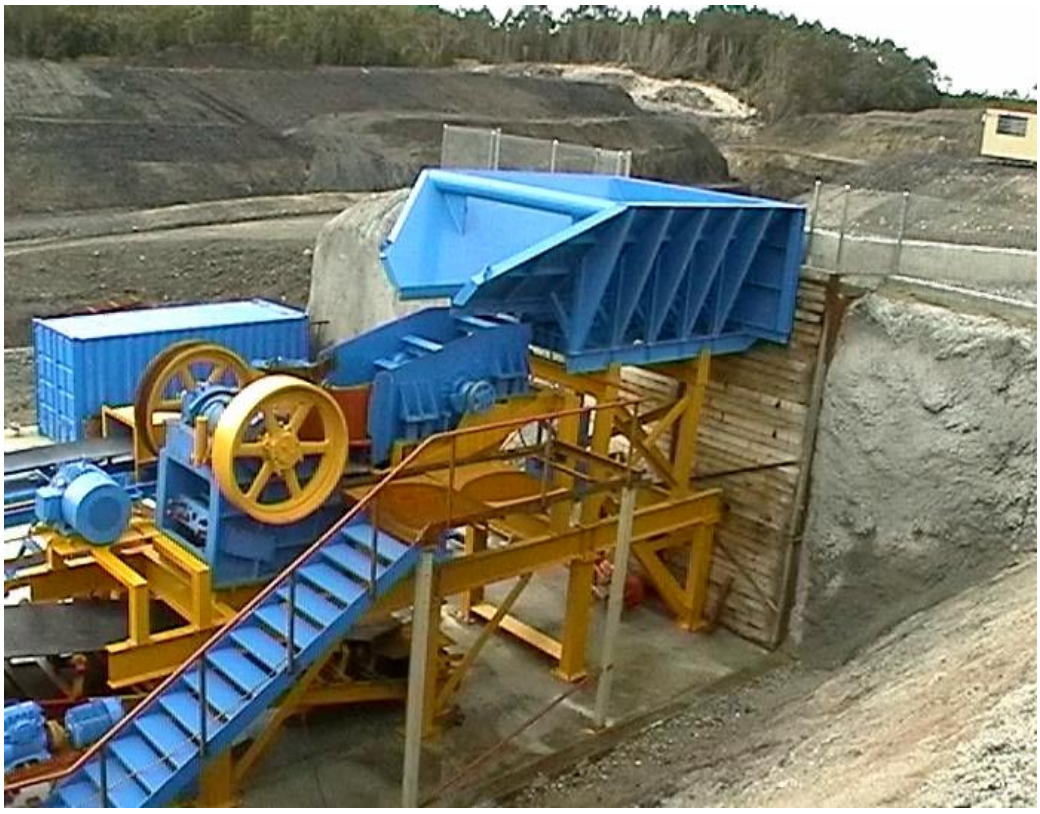

Figure 8. Coarse Ore Bin & Primary Jaw Crusher

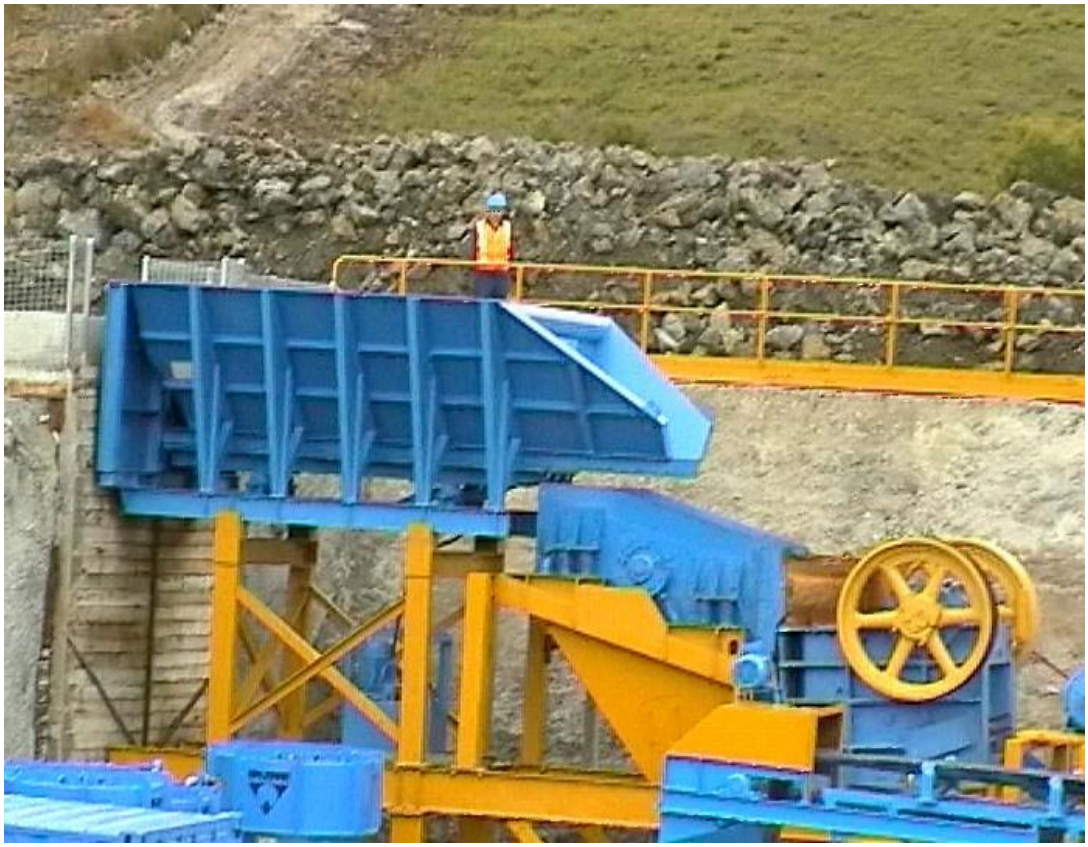

Figure 9. Coarse ore bin feeding into Primary jaw crusher with 10, 000 tonne high grade ore stock pile in background (20% zinc, 10% lead).

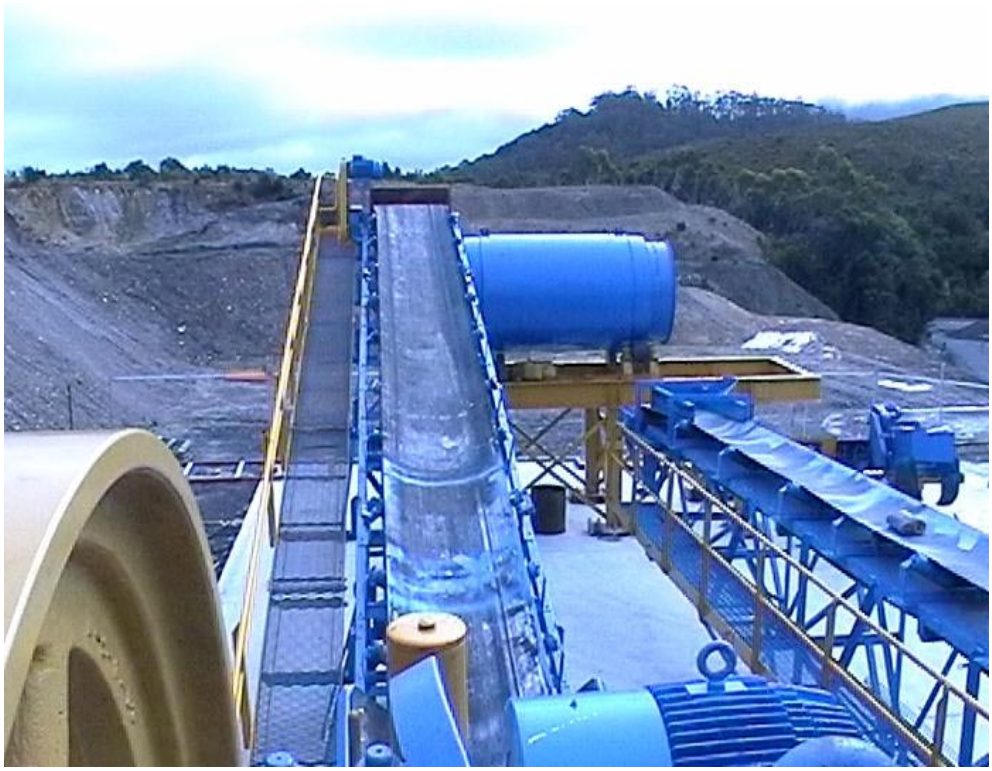

Figure 10. Photograph taken from Primary Jaw Crusher looking west along No.1 Conveyor that feeds into Trommel.