DRAFT

INTERIM ABANDONMENT AND RESTORATION PLAN

WATER LICENCE NWB2ULU9700

ULU PROJECT, NT

ECHO BAY MINES LTD.

Prepared: August 20, 1998

List of Figures and Photos

Table of Contents

1.0 INTRODUCTION

1.1 Requirement of an Abandonment and Restoration Plan

Echo Bay Mines Ltd., Lupin Operations applied for and received a Water Licence for the Ulu Project located approximately 150 km north of Lupin. Given the size and type of project perceived the water licence was obtained only as a contingency in the event that water would be produced within the underground operations and require disposal to surface waters during operation. All other aspects of the projects were small in scale and did not trigger any water licencing criteria components.

Within the Licence, Part I, Item 1 requires that an "Interim Abandonment and Restoration Plan" be submitted for approval within six months of issuance of the Licence. An extension to the submission date was provided by letter July 6, 1998 requiring submission by the 1st of September, 1998. This submission has been prepared for Approval by the Board.

1.2 Objectives of the Abandonment and Restoration Plan

The Plan has been prepared to indicate to the Board the direction and procedures that Echo Bay Mines Ltd. intends to implement to fulfil obligations with regard to abandonment and restoration at the Ulu Project. The objective of the plan, following the NWT Water Board's "Guidelines For Abandonment and Restoration Planning for Mines in the Northwest Territories" and Part I, Item 2 of the Licence, is to comply with current government regulations to ensure once abandonment and restoration has been completed;

- that there is no danger to public health or safety;
- that the requirement for long term maintenance and monitoring associated with all of the mine facilities is minimized;
- that contaminant loadings to the environment from the closed facilities which may be related to continued leaching of contaminants from tailings/waste rock areas (ore stockpiles), development of acid rock drainage and abandoned areas of chemical/materials storage are minimized or prevented;
- that the cumulative degradation of abandoned areas affected by the mining activities are prevented and to enhance the natural recovery, where appropriate, of disturbed lands, and;
- that the affected areas will be returned to a condition that is compatible with the surrounding, original undisturbed area with respect to its future potential/productivity uses.

The Ulu Project has been estimated to contain approximately 1.6 million tonnes of mineable reserves or the equivalent of 7 years production at 590 tonnes per day. All mine production is scheduled to be transported during the winter months to supplement the Lupin mill, therefor no other processing facilities are on site. Mine production is anticipated to carry through at the planned rate until reserves are exhausted. With this in mind, the approach taken to restore the site will be put into effect after mine production ceases and the facilities are no longer required.

1.3 Ulu Background

Echo Bay Mines Ltd. purchased the Ulu site lease from BHP in 1995 with plans to develop the property into a satellite mine for additional mill feed to the Lupin mill. An underground development, diamond drilling and bulk sample program was initiated in 1996 to provide infill geological information.

The Ulu Project is situated in the Northwest Territories (Nunavut) with the underground exploration site at 100° 58' W longitude and 66° 54' N latitude (Ulu location map and site area map, appendix) . The site is located in the treeless arctic tundra where rock and glacial features dominate the landscape. Located about 12 km north of the Hood River and 150 km north of the Lupin Mine, the site is accessible year round only by aircraft. Bulk items were brought on site via winter road and day to day supplies are flown to the camp. The area is characterized by severe winter climate and mild summers with an overall temperature range of -50° to +30° Celsius. Permafrost in this area typically extends to several hundred metres.

1.4 Geology

The Ulu deposit is in an Archaean epigenetic lode-gold occurrence located within the High Lake greenstone belt of the north-central Slave Province. Gold mineralization is hosted by discordant quartz veins in mafic metavolcanics and, less commonly in metagabro and metasediments.

The Flood Zone can be traced on surface for 400 metres in a northwest direction near the core of the anticline. The two to five metre thick mineralized zone dips steeply at 70° to 80° to the southwest and has been intersected by diamond drilling to depths of about 600 metres. Areas of local thickening up to 10 metres correspond to flexure points along the roughly tabular body. Mineralization is comprised of an intensely silicified zone with arsenopyrite contained in fractures and dilatancies within basalts.

1.5 Site Facilities

The facilities at the Ulu Project consist of consist of a 60 man "Weatherhaven" camp with sleeping, dining and recreation quarters, a vehicle repair shop, power house, warehouse, cold storage, office and change rooms. Also at the site are a fuel storage tank farm, fresh water and sewage systems, garbage incinerator and an ore storage area (see photos appendix). The main fuel staging area and explosives magazines are located approximately 12 km away near Camp 3.

2.0 Abandonment Strategies

The decision for closure or abandonment of the Project area is influenced by several factors, most of which are out of the operators control. These may include, but are not limited to 1) the presence (of lack) of economic ore reserves; 2) the market value of the final product (gold); 3) the costs of producing the product (changing with costs of operation ie: fuel/supplies), and 4) the success of any ongoing exploration programs of both the owner/operator as well as that of other organizations working within a reasonable range of the current operation.

The closure, abandonment and restoration of a site is the final stage in the life cycle of a viable mining operation and the decision for final closure comes after careful consideration of all other options available. The costs associated with the removal of equipment and materials and restoration of the area is most often considerably greater than that for initial construction.

Three scenarios are suggested by the *guidelines* and are contingent on the circumstances of the shutdown. They range from short term/temporary to final abandonment of the site and are described below.

2.1 Planned Shutdown

A planned shutdown is considered a short term event and the result of economic, operational or regulatory requirements. It is expected that in this type of situation the time frame is temporary and there is every intention to resume the operations in the near future. In this situation, all facilities would be maintained through a planned care and maintenance program whereby equipment and materials are stored appropriately. Monitoring and administrative activities would continue with regard to maintenance of all leases, licences and permits where applicable.

2.2 Long Term Shutdown

A long term shutdown would take place when, for a number of reasons, the mining of the Ulu deposit is not considered economic or even possible. Lower ore grades than expected or temporary shutdown of the supporting mine are two circumstances which would result in a long term shut down of the project. Moving into the final abandonment stage is not considered due to the possibility of utilizing the infrastructure/camp facilities for third party use or possible sale.

The facilities would be placed in a state of suspended operation whereby all potential hazards are removed. Most supplies (explosives and petroleum products) inventories would be brought to a minimum through scheduled use, reducing the risk of long term storage at the site.

A salvage program may be initiated, where appropriate, to begin the process of restoration that would normally occur during the final abandonment stage.

A modified monitoring program would be recommended for maintenance of the Water Licence as discharges from the facility would cease. Due to the relatively small footprint of the Ulu Project, very little progressive reclamation is possible. Minor reclamation work would commence in any area not previously restored and not in use. Administrative duties would continue with regard to applicable leases, licences and permits.

2.3 Final Abandonment

Final abandonment would proceed in the event that the project has been competed or economic ore reserves have been exhausted. A formal notice of abandonment would be filed during the final stages of mining, or in the event of a long term shut down, once a decision for final abandonment had been made.

Decommissioning of the site would take place during the next available construction season with removal of camp components and equipment during the following winter's ice and snow road. The entire Ulu complex (with the exception of constructed pads, roads and runway) is considered a component type system whereby removal from site for sale or re-use is practical.

Post closure monitoring during the reclamation activities would be followed by approximately three years of specific monitoring with regard to the ore storage pad and the potential for acid rock drainage from the materials.

The detailed specific abandonment and restoration activities for the Ulu Project are discussed in the following section which describes the facility, areas of concern and the appropriate action that would be undertaken in the event of final closure.

3.0 Abandonment and Restoration Planned Activities

The facilities and specific disturbed areas of concern with regard to the Ulu Project that require abandonment/restoration activities are covered in the following section. The goal of specific restoration practices is to minimize or preferably eliminated further degradation of disturbed areas and to initiate, encourage and accelerate the natural recovery of the area.

Conducting reclamation activities concurrent with the mining operations is not practical (or possible) at Ulu due to the limited amount of disturbance at the site and the continued use of all areas (camp, roads, airstrip, ore storage) during the mining period. An area that is addressed on a continual basis is the quarry site where road fill materials are obtained. This area is continually re-contoured after quarry operations are complete to minimize erosion and further disturbance of the esker. As there is no operating land-fill at the Ulu Project, all non-burnable refuse and materials is expected to be transported to Lupin for disposal or re-use/recycling.

No additional quarry materials are expected to be required for closure activities as there are no process or infilling requirements that cannot be met through excavation of roads/pads already present.

An inventory list of materials currently at the site is included in the appendix for reference which itemizes all equipment and materials in storage.

3.1 Buildings and Contents

All buildings at the permanent Ulu Project camp are considered collapsable and are designed to be dismantled at closure and removed for use at another site or sale. These structures include the main Ulu camp and vehicle repair shop. All other buildings, if not salvaged or sold, having their contents removed will be taken from surface and hauled to the underground workings for disposal prior to sealing off the access.

3.2 Infrastructure Support

The Ulu Project relies on other infrastructure support for its day to day operations which include freshwater intake and associated piping; camp sewage treatment and effluent discharge piping; Ulu fuel tank farm (5 x 14,000 usg) containing both P40 and P50 fuel; associated all weather roads, a 1,200 m airstrip; main fuel tank farm at Reno Lake esker (2 x 350,000 usg and 6 x 14,000 usg); explosives magazine and detonator magazine.

3.2.1 Fresh Water Intake

West Lake is the fresh water source for the camp and exploration operations. A seven horsepower submersible electric pump, installed on a floating dock supplies water to the camp via an insulated two inch pipeline approximately 680 metres in length. Two storage tanks are present at the site; a 27,000 litre tank for general water use and a 63,000 litre tank for fire water storage. Water consumption is expected to be less than 50 m^3/day.

During a temporary or short term shut down scenario, all water lines supplying the camp and underground will be disconnected, flushed with air/drained to prevent freezing and left in place. The electric pump at the lake is to be removed for storage until needed and the floating dock system will remain.

Upon closure, the floating dock, all pumps, piping and associated support structures will be removed for shipment to Lupin for use or salvage/disposal. Any non-salvage, burnable material (timber cribbing) will be disposed of at site through burning.

3.2.2 Sewage Disposal Facilities

Sanitary sewage and camp greywater is treated prior to release to the environment. Treatment is carried out with a package facility employing a rotating biological contactor (RBC). Once treated, the effluent is released to East Lake via a 550 metre, insulated two inch pipeline. Sludge is removed from the treatment plant on a semi-annual basis and will be spread within the site disturbance area and capped with waste rock.

During a temporary or short term shut down scenario, all associated piping to the treatment plant and through to the discharge point will be drained and disconnected to prevent freezing. The treatment plant, once drained, will have the solids removed for disposal and flushed clean.

Upon closure, the treatment plant, piping and all associated support structures will be removed for shipment to Lupin for use or salvage/disposal. Any non-salvage, burnable material (timber cribbing) will be disposed of at site through burning.

3.2.3 Roads and Airstrip

There is approximately 14 kilometres of roads (including the airstrip) at the Ulu Project. These connect the Ulu Camp with other ancillary locations in the area including the Camp 3 fuel tank farm, the explosives magazine, the detonator magazine, esker quarry, the fresh water pump dock, the camp accesses including shops, seacan storage, Ulu fuel tank farm and the underground access ramp.

The roadways and the included airstrip make up the most prominent land disturbance feature aside from the pad for the camp and the ore storage pad (incomplete). The roads utilize culverts to provide unrestricted flow to the drainage courses during spring melt and precipitation events. There is also some site runoff collection between areas of the camp pad which collect water and provide controlled drainage from the site.

During a temporary or short term shut down scenario, the roads, airstrip along with associated culvert installations would be left in place and monitored for erosion or ponding after spring melt has subsided. Inspections would take place again prior to freeze up to ensure free flow through the culverts.

Upon closure, all roads (and the airstrip) would be regraded with the shoulder slopes flattened to reduce erosion. All culverts would be removed and the drainage opened up to allow natural flow though the crossing. In order to promote natural ingrowth of vegetation, the road and airstrip surfaces would be ripped/scarified to provide the needed microclimate sites for seed deposition.

3.2.4 Fuel Storage

Fuel storage for the Ulu Project is divided into two tank farms. The tank farm at Camp 3 or main staging area, consists of two 350k usg tanks and six 14,000 usg tanks. At the Ulu site, fuel is stored in five 14,000 usg tanks. Both tank farms store P40 and P50 grade fuels. The fuel is stored in the remote tank farm at Camp 3 until required at the Ulu camp at which time it is transferred via tanker. Both tank farms are constructed within dyked areas and designed to hold 110% of the largest tank. A high density polyethylene liner is installed within each tank farm to prevent release of any spilled material through exfiltration. There is also liner material placed alongside the tank farm at the loading/unloading aprons to prevent any spillage from entering the ground and potentially contaminating the water supplies.

During a temporary or short term shut down scenario, fuel tanks would remain in place and all piping/valves locked out. Regular inspections would ensure that the components were all in good condition and no risk of fuel spillage was present.

Upon closure, it is expected that the fuel inventory would be depleted during normal operations with a single 14,000 usg tank remaining in service to provide fuel for completion of all necessary decommissioning and reclamation work. Any remaining fuel will be transferred to smaller (500usg) tanks for use in the hauling of remaining materials off site. Larger quantities of fuel may require aircraft transfer to Lupin for general consumption. Fuel tanks would be removed from service as they are emptied and dismantled for removal off site.

The bermed containment area of each tank farm is expected to contain some fuel contaminated ground (esker sand) from normal transfer procedures. If timing permits, this material will be subjected to in-situ land farming to facilitate the removal of residual hydrocarbon. Any richly laden soils may be ignited prior to disposal. The final disposal of the soils from the tank farms will be in the form of back fill within the mine or ramp/portal area or used for general site grading. The HDPE liner material used in the tank farm and loading apron areas will either be disposed of within the underground workings prior to backfilling, or if practical packaged up and removed from the site for disposal.

3.2.5 Explosive Magazine

The explosive and detonator magazines are located to the southwest of the Ulu Camp, west of the Reno Lake esker. These magazines consist of seacan storage containers enclosed in a chain link fence. During a short term suspension of operations the explosives will remain on site securely locked. For an indefinite temporary shut down or permanent closure the remaining inventory will be shipped off site either by winter road or via air depending on the timing of closure.

Upon closure, fencing will be removed and the sea containers utilized for shipment of materials south to Lupin.

3.2.6 Quarry Use

The quarry used for the road, airstrip and final grade on the camp pad is located near Camp 3 at Reno Lake. A number of conditions and clauses are contained within the quarry permit which restrict the areas and use of the esker burrow. As a result, the alteration to the esker is kept to a minimum and the resulting erosion and silting within the run off is kept to a minimum. Silt fences were also strategically place to control erosion as transport of fines until conditions on the excavated areas stabilized.

General standard practice at the esker quarry includes the contouring of disturbed areas as soon as possible after completion of quarry activities. A final inspection is completed at the end of the summer construction season and any final grading is completed at that time. There should not be any additional work to be carried out at this site upon short term shut down or long term closure. Prior to final closure and abandonment, it is expected that a final inspection by regulatory authorities followed by recommendations for additional work, if any, would be completed at that time.

3.3 Underground Development

The Ulu Project underground exploration program has been developed via a portal and ramp to a depth of 155 metres over a distance of approximately 1,762 metres. Ore accesses are currently developed on the 25, 50, 75, 95, 115 and 135 metre levels. A fresh air vent raise is present for ventilation of the underground workings. No permanent equipment or facilities are present underground. There is, however a mine sump system to remove excess water to the lined, surface sump located outside the portal. All repairs and regular maintenance are completed at the surface shop.

During a temporary or short term shut down scenario, all materials will be removed from the underground and placed into storage on surface, either in the maintenance shop or within the numerous sea-containers. The ventilation raise and the portal will have access restricted by installing bulk heads and placement of berms or fencing. These will only be of a temporary nature (timbers) to facilitate an efficient start up. The main receiving sump on surface, outside the portal, will be left in tact and available for pumping of mine water during start-up and subsequent continued exploration activity.

Upon closure, all equipment and materials will be moved from the underground and salvaged where possible. The combustible, non-salvage materials will be burned on site. All equipment will be transported to Lupin for later use or salvage. As a final measure (after disposal of any accumulated potentially acid generating materials) the portal, fresh air raise and any other entrances to the underground mine will be sealed using engineered concrete plugs and caps to prevent future access. The area immediately in front of the portal will be re-contoured to approximate grade and covered with esker material. The mine ventilation raises will be covered with esker material to meet the adjacent topography.

3.4 Waste Rock

Waste rock is produced during the initial development of the decline at the portal and ramp access and during the decline advance. The rock produced from the initial portal excavation ramping was used to prepare a level pad area for construction of the camp facilities at the site. From there, waste rock produced was then placed in the location of the proposed ore storage pad for grading. Once completed, these pads are capped with a thin layer of esker material to provide final base for construction/laydown. After completion of these two areas, waste rock production from underground development would be either placed on surface for storage (waste rock dump) or used underground as backfill in mined out areas.

Acid rock drainage potential of all rock types from the Ulu exploration site had been investigated prior to the property purchase. In 1996, additional investigation work was completed to specifically address the ARD characteristics of the ore and waste rock. Findings indicated that the neutralizing potential (NP) of the samples as a group have a relatively uniform paste pH and NP, very low sulphate-S and low to very low carbonate-NP contents. The acid generation potential (AP) of a sample was calculated as attributable to the sulphide present (total sulphur minus the sulphate-sulphur) or SAP.

Most of the NP in these samples are due to non-carbonated minerals. Because of the low carbonate in the samples, the sulphide content becomes the most important parameter determining the outcome of the NNP (net neutralizing potential) and the Nuetralizing Potential Ratio, or NPR (NP/AP ratio) of a sample. Variable results were obtained with the 1996 study and indicated that a threshold of 0.9 weight percent sulphur should be used as a discriminator (any rock containing more than approximately 2.5% pyrrhotite or 2.0% pyrite or 4.5% arsenopyrite by volume or their combined equivalents) when defining PAG (potentially acid generating) or non PAG material.

Samples collected during the most recent testwork indicate that some PAG material was present at the north ramp. In volume however, this PAG rock constitutes only a small proportion of the total material present as a composite sample gave a NPR of 10.6. The overall paucity of PAG-material along with the slow weathering process associated with the region suggest that, with well mixed materials, acid drainage is not expected to be generated from the waste stockpile and waste rock used as construction materials. Kinetic testwork is being conducted to further define the extent of PAG of the waste rock and ore generated at the Ulu Project.

Upon closure, all high sulphide content waste rock isolated and stockpiled on the ore storage pad will be transferred back within the underground workings for disposal. This will be an ongoing process whereby any material placed in the stockpile will be moved underground when the need for backfill is required, removing the PAG material from surface.

3.5 Ore Stockpile

An ore storage pad, constructed of development waste rock, is located (currently incomplete) adjacent to the Ulu portal. During the operational phase of the Ulu Project, this stockpile will hold the mine production during periods when transport to Lupin is not possible (approximately mid-April through to December) due to transportation restraints. At peak production, the stockpile is expected to reach near 165,000 tonnes of ore waiting transport to Lupin.

The ore pad has been designed in such a way that, upon completion, collection ponds will be located at the low points around the perimeter to facilitate accumulation of any precipitation/ spring melt water prior to being released to the local environment. At these locations, water will be tested for pH and TSS prior to being released. If the pH is unexpectedly low, then a provision to add lime for pH adjustment is available prior to release.

Upon closure it is expected that the ore stockpile will be depleted through normal shipping operations of material to the Lupin Mine. Any remaining ore on the storage pad is to be recovered and placed in the underground prior to further closure of the mine facilities. Once all ore has been removed, the ore storage pad (being constructed of waste rock) will be graded to conform more to the natural topography of the area and to lessen the slope on the outer edges in order to allow easier access by local wildlife.

3.6 Revegetation

The Ulu Project is situated in the treeless arctic tundra where rock and glacial features dominate the landscape. The site is located on a glacially modified bedrock outcrop . The surrounding terrain is rugged, consisting of exposed bedrock, some modification by frost action into blocky, angular boulders, relocated boulders and occasional glacial erratics.

This upland, rocky tundra is dominated by vegetation adapted to the harsh habitat which includes Dwarf Birch, Labrador tea and Heather. In vegetation surveys undertaken in 1996, these species occurred with a frequency of about 5-6.5 % whereas bare ground was also found with a frequency of 6.5 % and rock 51.5%. Willow, Crowberry, Blueberry, Sedge and Cranberry were other notable plant species however, occurring with frequencies of less than 5% each.

Revegetation of disturbed areas at the Ulu Project will focus on the enhancement of the ground surfaces to promote natural re-introduction of native species while reducing the opportunity for erosion.

Scarifying of hard packed surfaces to open up the ground provides the required microclimate for natural plant growth enhancing seed entrapment, moisture retention and wind protection. This will be carried out on all roads, pads and the airstrip. The roads, currently raised above the natural topography, will be reduced in height and contoured prior to scarifying.

3.7 Post Closure Monitoring

Post closure monitoring of the Ulu site will take place in a number of areas, mainly dealing with water quality and soil contamination. The components of concern are the fuel storage areas (Ulu and Camp 3 tank farms), the maintenance areas, the ore and waste rock storage pads and the esker used for construction materials.

Water Quality

Post closure would result in the continued exposure to environmental elements of the camp pad, ore/waste rock storage pad and the laydown area. Although kinetic acid rock drainage testing has indicated that the waste rock is non-acid generating, it is expected that monitoring of the runoff from these areas would be continued on a seasonal basis for three to five years based on previous data and results of the on-going program.

All run off from the ore storage pad, portal laydown area and main camp pad is naturally directed to a collection point known as East Lake. Effluent from the package sewage treatment plant has also been directed to the small lake during exploration/development activities. This location serves as an ideal sampling point prior to water from the camp entering a major water system, starting with Ulu Lake.

Monitoring of the stability of closed roads, airstrip and the used esker area is to be included in the annual monitoring, checking for areas requiring proper grade control and stability. As very little material would be required from the esker after the initial construction phase, it is expected that upon closure, all areas of concern with regard to erosion have been corrected.

Post closure monitoring of the sewage effluent receiving stream should not be required as the only component of the waste that was released is camp grey water. This same water body however, would be monitored under the above planned ore storage pad monitoring as they both are within the same drainage basin.

Soil Contamination

All areas of hydrocarbon storage will be tested prior to final closure. If land farming is chosen as an option to disposal then ongoing monitoring will take place to determine the effectiveness of the practice. Monitoring would continue until acceptable levels of hydrocarbons have been achieved.

4.0 List of Studies Undertaken

Ulu Project: Preliminary Assessment of Acid Rock Drainage Potential, Klohn-Crippen Consultants Ltd., October 1996.

Fisheries Assessment of Streams and Lakes in the Ulu Project Area, RL&L Environmental Services Ltd., November 1996.

Notes on Wildlife in the Vicinity of the Echo Bay Mines Ulu Project and Associated Transportation Corridor, Hubert and Associates and Canamera Geological Ltd., August 1996.

Wildlife and Wildlife Habitat Assessment, Canamera Geological Ltd., Environmental Resources Division, November 1996.

Ulu Mine Project Archaeological Impact Assessment: Phase I, Quaternary Consultants Ltd., July 1996.

Ulu Mine Project Archaeological Impact Assessment: Phase II, Quaternary Consultants Ltd., September 1996.

Land-Cover and Vegetation of the Ulu Site and Ulu/Lupin Winter Road, Nunavut, Canada, Institute for Advanced Field Education Ltd., January 1998.

Vegetation and Soils in the Vicinity of the Ulu Mining Project and along the Hood River Riparian Corridor, Nunavut, Canada, January 1998.

Kenetic Testing of Sulfide-Rich Material From Ulu, Klohn-Crippen Consultants Ltd., April 1998.

Baseline Aquatic Studies Program in the Ulu Project Area, Nunavut, RL&L Environmental Services Ltd., May 1998.

References

Echo Bay Mines Ltd., Lupin Operations: Interim Abandonment and Restoration Plan, January 1996.

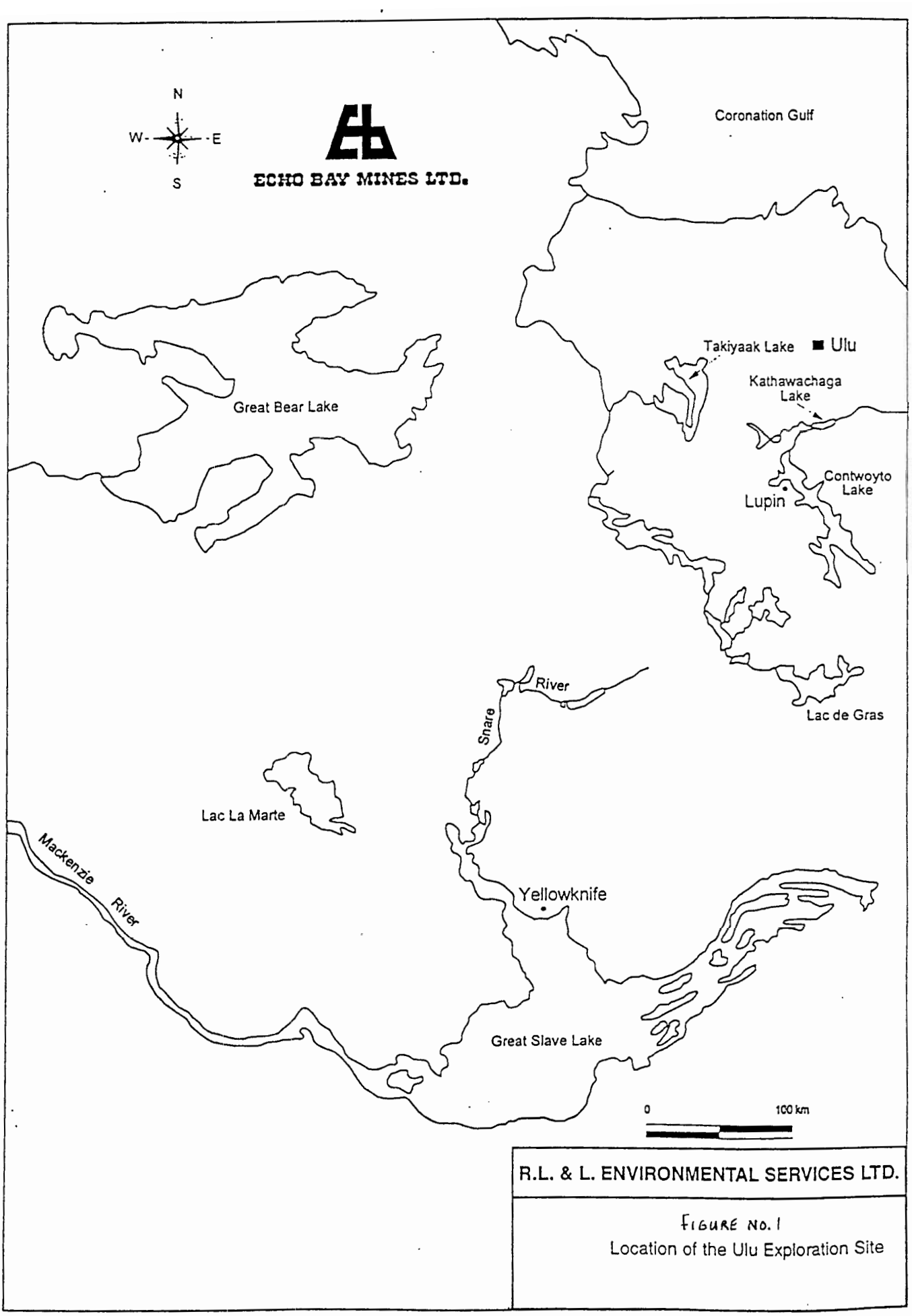
Northwest Territories Water Board; Guidelines For Abandonment And Restoration Planning in the Northwest Territories, September 1990.

Klohn-Crippen Consultants Ltd., Ulu Project: Preliminary Assessment of Acid Rock Drainage Potential, October 1996.

Klohn-Crippen Consultants Ltd., Kinetic Testing of Sulfide-Rich Material From Ulu, April 1998.

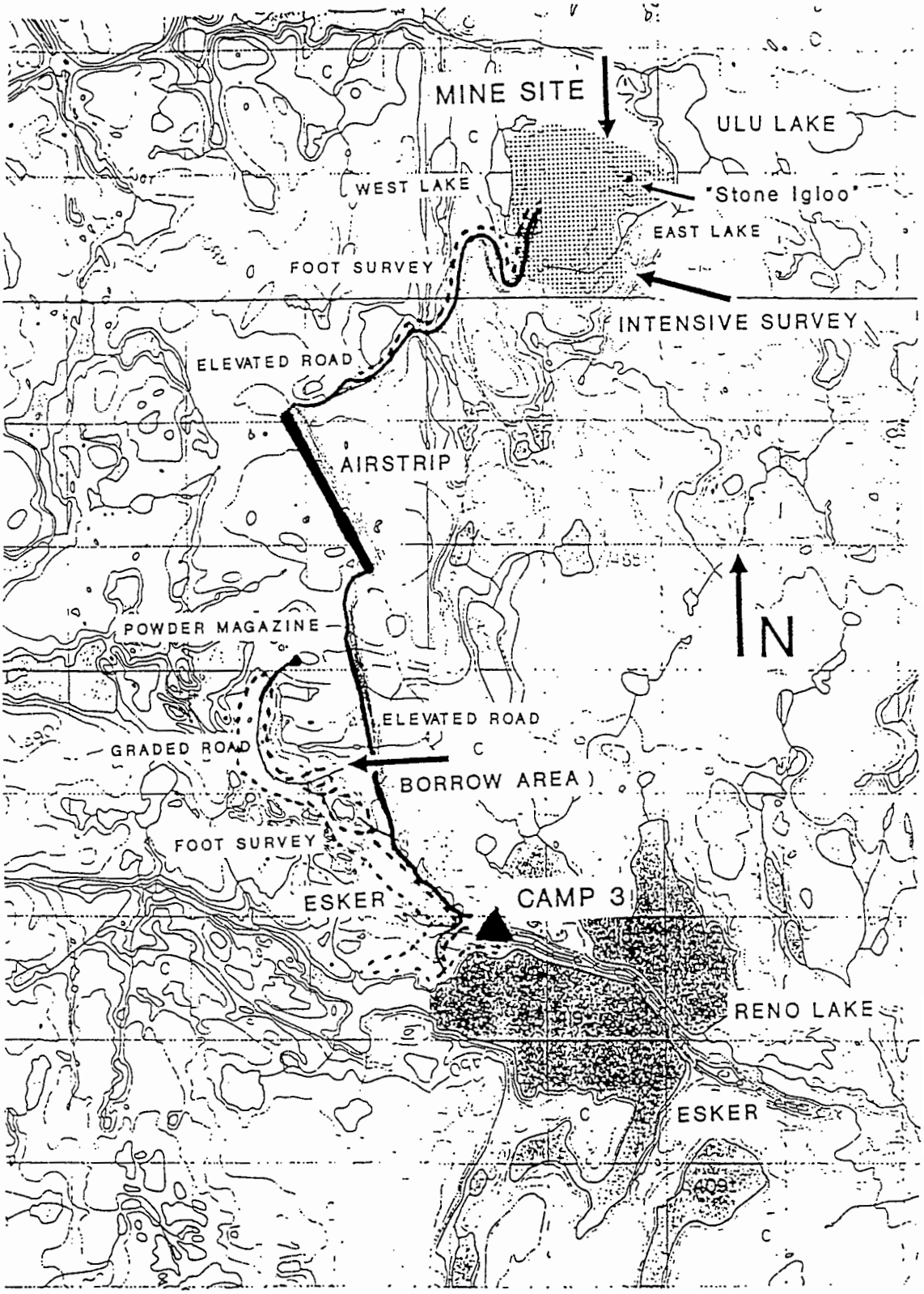
Appendix

Maps, Photos, Materials Inventory



R.L. & L. ENVIRONMENTAL SERVICES LTD.

FIGURE NO. 1
Location of the Ulu Exploration Site



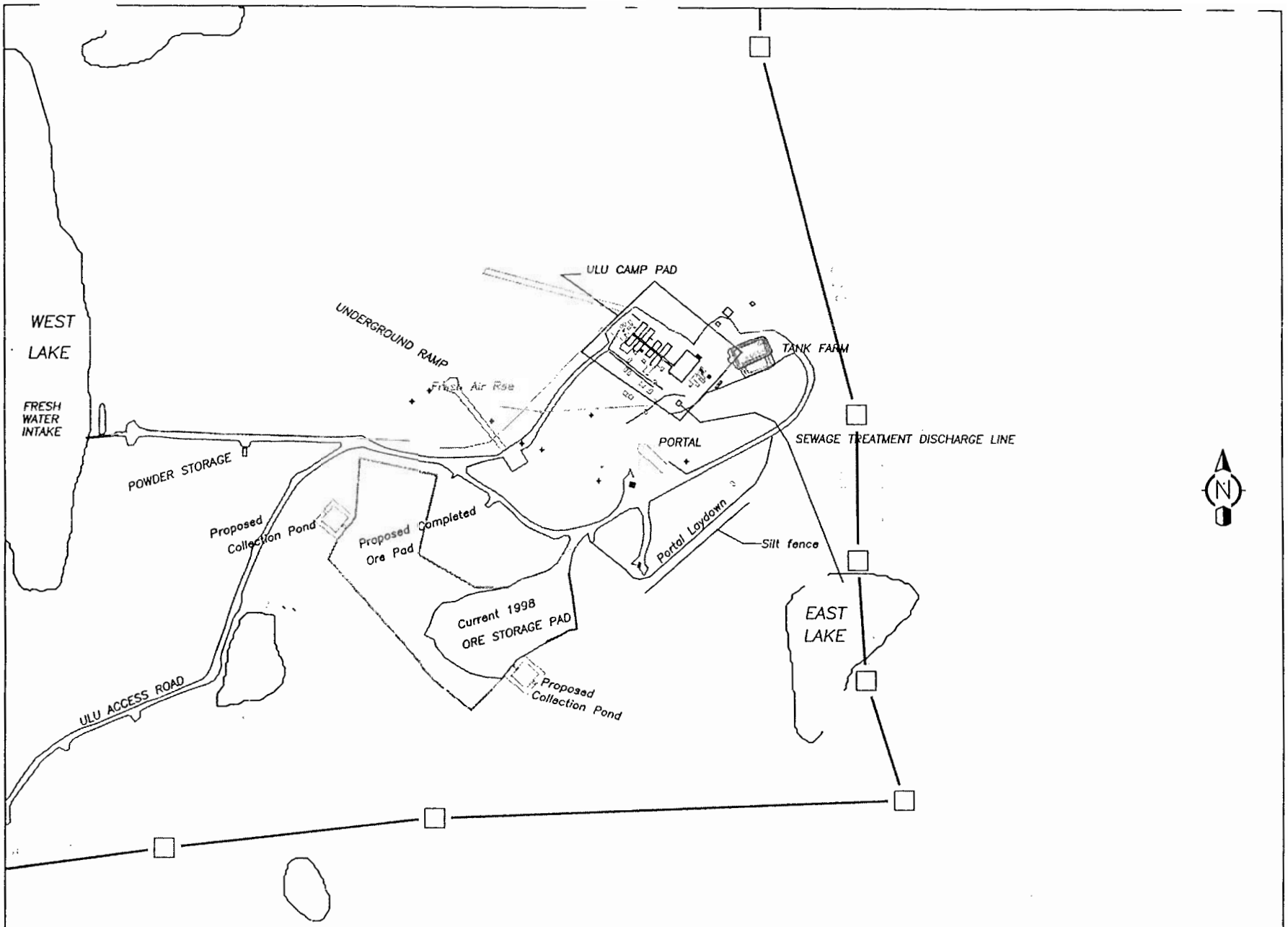
Ulu Site Area (Scale 1:50,000)

FIGURE NO. 2

ECHO BAY MINES LTD.

Road

• • • • Foot Survey



ULU #11

MAP SCALE	FIGURE NO. 3	REVISIONS	ECHO BAY MINES LTD.	ULU MINESITE AS SURVEYED
0 50 100 200 METERS			LUPIN / DEVELOPMENT	SCALE 1:2,000

NO.	DATE	MADE BY	DESCRIPTION
1	FEB/94	S.B.L.	TO BUILD
2	JAN/94	S.B.L.	COORDINATES OUR UTM
3	OCT/94	S.B.L.	UPDATE TO AUGUST
4			
5			
6			

DATE	DRAWN BY	CHECKED	APPROVED
	S.B.LOVE		

Echo Bay Mobile Equipment

1	Atlas Copco Twin-boom Jumbo	Ulu shop, inside	40,785
1	Tamrock Twin-boom Jumbo	Ulu shop, inside	
1	Tamrock Single-boom Jumbo	Ulu shop, inside	
1	Getman Scissor Lift	Ulu shop, inside	
1	Wagner 3.5 cu. yd. Scooptram	Ulu shop, inside	
1	Wagner 2 cu. yd. Scooptram	Ulu shop, inside	
1	JCB Zoom-boom Forklift	Ulu shop, inside	
1	CAT 988B FEL - 10kV Honda generator in bucket	Ulu shop, inside	
1	CAT 930 FEL	Ulu shop, inside	
1	Wagner 44 ton Truck	Ulu shop, outside	
1	JDT 26 ton Truck	Ulu shop, outside	
1	Elphinstone 7.5 cu. yd. Scooptram	Ulu shop, outside	80,000
1	Wagner 7.5 cu. yd. Scooptram	Ulu shop, outside	82,000
1	CAT 120G Grader	Ulu shop, outside	
1	Kubota Tractor	Ulu shop, outside	
1	Kenworth water truck	Ulu shop, outside	
1	Mack fuel truck	Ulu shop, outside	
1	CAT Road Packer	Ulu shop, outside	
1	48 seat schoolbus	Ulu shop, outside	
1	CAT 311 backhoe	Ulu shop, outside	
1	Ford F-350 pickup truck	Ulu shop, outside	
1	Foremost Commander	Ulu shop, outside	
1	Ford 3-ton flat deck, with Hiab crane	Ulu shop, outside	
1	CAT 824C rubber tire dozer	Ulu shop, outside	
1	Gilson cement mixer	Ulu shop, outside	
1	Ford F-350 pickup truck - Skidoo in back	Airstrip, south end	

ULU INVENTORY LIST

Sea Containers

No.	General Contents	Loc'n	Weight lbs
1	Bits, steel, hose, chain, drilling supplies, rock bolts...	Portal	
2	Clamps, tee's, elbows, loading sticks, valves, hose, steel, J bolts, signs, small tools...	Portal	
3	Elbows, vic clamps, drill steel, blasting cable...	Portal	
4	Plastic sleds, microwave ovens,sleeping bag, water bkts, oxygen candle, Rescueair emergency kit, chain...	Portal	
5	Phone sets, electrical supplies, plugs, fixtures, fuses, breakers, runway lights, wire cones, strobes...	Elec Office	
6	Heaters, flourescent fixtures, , bear fence supplies, fire pump, fire alarm cable, fire alarm panel, cble hangers, light bulbs...	Receiving	
7	Metal halide light fixtures, rolls heat trace, air strip bulbs, 5hp motor...	Cummins	
8	Various lubes, grease, oils, antifreeze, fuel cans...	Tank Farm	
9	Emergency Spill Kit		
10	Life vests, vapor barrier, roof sealing tape, ducting, wire, bed frames, nails, plumbing fittings...	Weatherhaven	
11	Carpentry supplies, small tools, ABS & copper tubing...	Carpenter Shop	
12	Boxes of testers, repair kits, power packs, pumps, asstd tools, jacks, Honda generator, water pump, outboard motor, welding supl, tool boxes	Mechanical	
13	Quad, ice augers, gas water pumps, unleaded gas	Berm	
14	Gas water pump, hoses	Incinerator	
15	Sleeping bags, emergency survival kits...	Kitchen	
16	empty	Powder Mag	
17	empty	Powder Mag	
18	empty	Powder Mag	
19	empty	Powder Mag	

Nuna Equipment

3	CAT 769 Trucks (1 burned)	Camp 3
1	CAT D8N Dozer	Camp 3
1	CAT D6H Dozer	Camp 3
1	CAT 966D Loader	Camp 3
1	CAT 14G Grader	Camp 3
1	Volvo water truck	Camp 3
1	Peterbilt Tractor, with lowboy trailer	Camp 3
2	Ford F-250 pickups	Camp 3
1	Lincoln Welder	Camp 3
1	Shop Building	Camp 3
	Numerous boxes of parts	Camp 3

Stationary Equipment, Misc.

1	Sullair air compressor, 700cfm	
1	Gardiner Denver air compressor, 825cfm	
1	Leroi air compressor, 375cfm	
1	?? air compressor, 800cfm (from Procon)	
2	Cummins generators (A & B), 500kw, mounted in single trailer	
2	CAT generators (C & D), 600kw	
2	Detroit Diesel generators, 250kw	
1	Reed Shotcrete machine	
1	Incinerator	
1	Sewage treatment station	
?	Sea containers scrap metal	Incinerator area
??	1 tonne bags of salt	Ore pad
1	6,000 gallon water tank	NW end of camp
1	14,000 gallon water tank (fire control)	NW end of camp
2	2,500 gallon brine tanks (fibreglass)	Mech. shop
lots	furniture from accomodations and offices	

Fuel, Oil, Lubes

2	350,000 gal tanks of fuel oil (567,504 litres P-40)	Camp 3 tank farm
6	14,000 gal tanks of fuel oil (102,428 litres P-50)	Camp 3 tank farm
5	14,000 gal tanks of fuel oil (110,004 litres P-40; 116,145 litres P-50)	Ulu tank farm
19	cubes of various lubes (full)	Ulu tank farm
3	cubes of used oil (full)	Ulu tank farm
7	cubes - empty	Ulu tank farm
106	barrels of various oil, gas, avgas, antifreeze	Ulu tank farm
?	barrels - empty	Ulu tank farm

Laydown Area

2	Portable Mine Rescue Stations	Laydown
6	Pallets 42" vent tube	Laydown
5	Pallets 48" vent tube	Laydown
3	Pallet 48" corrigated vent tubing	Laydown
25	rolls chain link screen	Laydown
700	+ drill steel, various lengths	Laydown
	5ft X 10ft screen	Laydown
1000	+ rock bolts, various lengths	Laydown
	scaling bars	Laydown
13	pails of chain	Laydown
	J-bolts, pipe hangers, rock bolt plates, scaling bars, air and water hoses, air receivers, rock bolt straps	Laydown