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B.Y.G. NATURAL RESOURCES INC.

MOUNT NANSEN PROJECT

CARMACKS AREA - YUKON TERRITORY

PROJECT OVERVIEW

June , 1994

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EXECUTIVE SUMMARY

B.Y.G. Natural Resources Inc.(BYG) plan to bring the gold oxide portion of their Mount Nansen deposit to production in early 1995.

BYG now owns 100 % of the project, which was formerly held in partnership with Chevron Minerals Ltd. The project was the subject of environmental and technical study during the period 1985 to 1990, and certain of the reports were submitted to Northern Affairs and members of the Regional Environmental Review Committee for comment as part of the Environmental Assessment and Review Process (EARP).

BYG plan to mine 300,000 tonnes of gold oxide ore using open pit mining methods. The existing mill would be retrofitted for cyanidation of the ore, using the CIP process at a production rate of 300 Metric Tonnes per day. The mill would incorporate cyanide destruction to reduce the cyanide levels in the tailings pond to acceptable levels.

The expected project life would be about 4 years, including 1 year of preproduction work. The open pit would operate for 8 months of the year and employ about 15 personnel. The mill would operate 12 months of the year and employ 23 personnel. Management and support workforce would be 11. Total personnel would be 50, with 30 on a year around basis.

The following document provides an overview of the proposed project, as required by EARP. The current plan is very similar to that proposed in 1989, but has incorporated some modifications in response to the comments and concerns raised by the R.E.R.C. in 1989. BYG recognizes that additional studies may be required prior to final approvals. However, BYG believe that a good foundation has been prepared for completion of an Initial Environmental Evaluation, based on existing information.

It is our hope that the 3 year operating life of this project can be extended by the discovery of additional reserves. This extension could evolve from the discovery of additional oxide reserves, or from the development of an economic recovery method for the gold sulphide zones previously developed for mining. In regards to processing sulphide, it is not possible to address all future environmental concerns, until such a viable recovery method has been identified. However, the design of the waste handling facilities will make allowances for disposal of wastes from the sulphide reserves in an environmentally sound manner.

In addition to the technical study and work addressed in this report, BYG will also initiate a program of contact and information with the local population, and with First Nation representatives.

B.Y.G. NATURAL RESOURCES INC.

MOUNT NANSEN PROJECT

CARMACKS AREA - YUKON TERRITORY

June 1, 1994

1.0 Introduction

1.1 Company Description - B.Y.G. Natural Resources Inc. (BYG)

BYG is a public company owning various mining properties, all located in the Yukon Territory. Shares of the Company are listed on the Toronto Stock Exchange. A recent re-organization has resulted in the appointment of a well known mining engineer and executive, J.M. Slack, as President and C.E.O.

Mr. Slack has put together an experienced team of professionals, with the objective of guiding the Mount Nansen deposit through to production.

1.2 Project Description

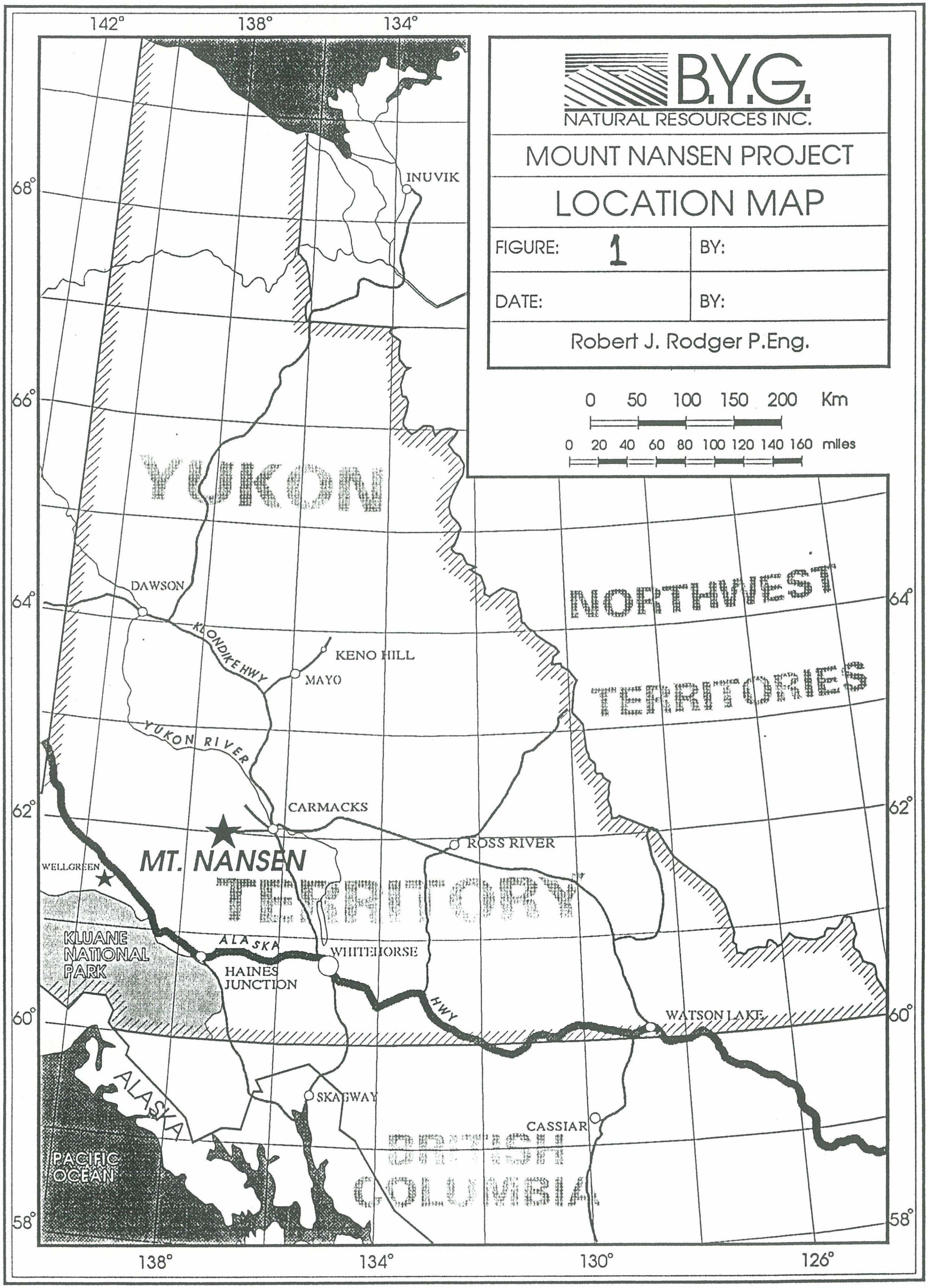
The Mount Nansen project is located approximately 60 kilometres west of Carmacks, and is accessible via a government maintained gravel road. More specifically, the location is on NTS mapsheet 1151/3 at latitude 62-05′ North, and longitude 137-08′ West.(See Figures 1) It lies within the boundaries of the Little Salmon/Carmacks First Nations Band.

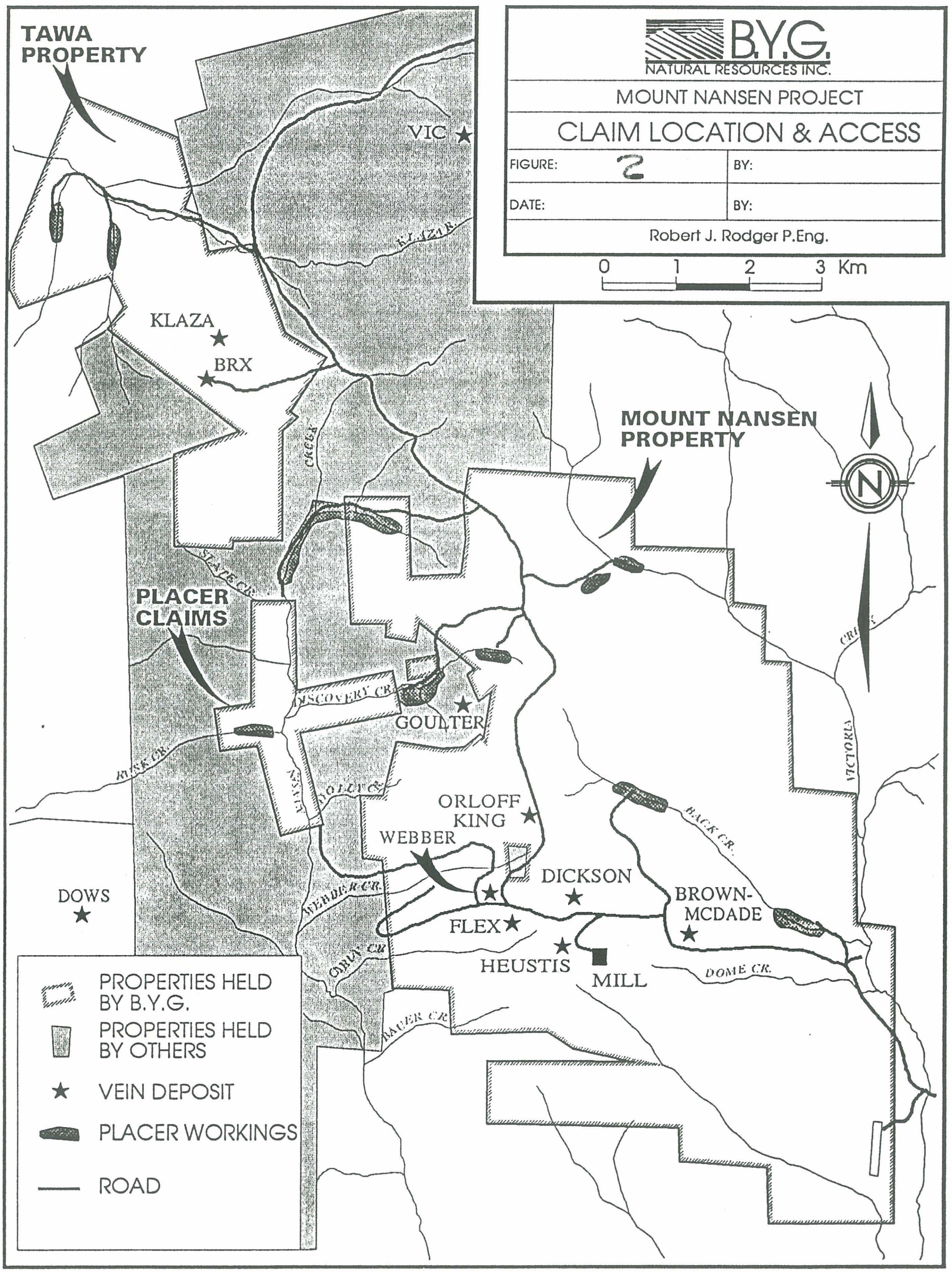
The primary property, known as the Mount Nansen claim group, is comprised of 257 mineral claims, and 30 mineral leases. Total area is 5,299 hectares(13,095 acres). (See Figure 2)

Mining activities have occurred on this claim group since the turn of the century. Most creeks have been mined for placer gold, or are currently being placer mined.

Three separate vein systems on the property (Fig. 3)have been explored and developed to varying degrees. The mine produced gold from one of these systems (Huestis), which was processed in an on-site flotation mill. This mill was constructed in 1967, and operated in 1968 and 1969 as well as in 1976. The mill and much of the support plant remains intact on site. Two other systems (Webber and Brown-McDade) were subjected to underground exploration programs, but have not produced gold.

All of the previous mining work focused on quartz-sulphide veins. Two small tailings ponds containing the waste from the


B.Y.G.
NATURAL RESOURCES INC.
MOUNT NANSEN PROJECT
LOCATION MAP
FIGURE: 1
BY:
DATE:
BY:
Robert J. Rodger P.Eng.
0 50 100 150 200 Km
0 20 40 60 80 100 120 140 160 miles
142°
138°
134°
130°
126°
68°
66°
64°
62°
60°
58°
INUVIK
YUKON
NORTHWEST
TERRITORIES
TERRITORY
DAWSON
KLONDIKE HWY
KENO HILL
MAYO
YUKON RIVER
CARMACKS
ROSS RIVER
MT. NANSEN
WELLGREEN
KLUANE NATIONAL PARK
ALASKA HWY
WHITEHORSE
HAINES JUNCTION
WATSON LAKE
ALASKA
SKAGWAY
CASSIAR
PACIFIC OCEAN
BRITISH
COLUMBIA


B.Y.G.
NATURAL RESOURCES INC.
MOUNT NANSEN PROJECT
CLAIM LOCATION & ACCESS
FIGURE: 2
BY:
DATE:
BY:
Robert J. Rodger P.Eng.
0 1 2 3 Km
TAWA PROPERTY
VIC
KLAZA
KLAZA
BRX
CREEK
MOUNT NANSEN PROPERTY
N
SLATE CR.
PLACER CLAIMS
DISCOVERY CR.
GOULTER
RISK CR.
NANSEN
DOLLY CR.
ORLOFF KING
WEBBER
DICKSON
BROWN-MCDADE
CREEK
VICTORIA
BACK CR.
DOWS
WEBBER CR.
FLEX
HEUSTIS
MILL
DOME CR.
BAUER CR.
PROPERTIES HELD BY B.Y.G.
PROPERTIES HELD BY OTHERS
VEIN DEPOSIT
PLACER WORKINGS
ROAD

production activities remain intact on site. Approximately 25,000 tons of tailings were impounded.

An exploration program was conducted on the claim group by BYG in conjunction with Chevron Minerals during the period 1985 to 1988. This effort resulted in the discovery and definition of a mineable gold oxide deposit of commercial stature. This deposit was located above the sulphide portion of the Brown-McDade zone, and in fact is simply the oxidized upper part of the same zone.(Figure 3)

Activities directed at providing environmental background for the operation started in 1986. Discussions with the various regulatory agencies commenced in 1988, and several background reports were submitted to members of the R.E.R.C. The project was essentially shelved in 1989, because of metal prices. Since that time, BYG has become the 100 % owner of the property and its assets.

The Brown-McDade ore zone, proposed tailings pond and plant and mill site, drain to two small creeks, Dome and Pony, which in turn flow to Victoria Creek and ultimately the Nisling River.(Fig.3)

1.3 General Project Objectives

BYG plans to bring the Mount Nansen mine into production by preparing the recently discovered gold oxide ore zone for mining by open pit means. The ore would be processed in the on-site mill, which will be retro-fitted for cyanidation.

The key project objective is to have all approvals in place to allow milling operations to commence by May 1, 1995.

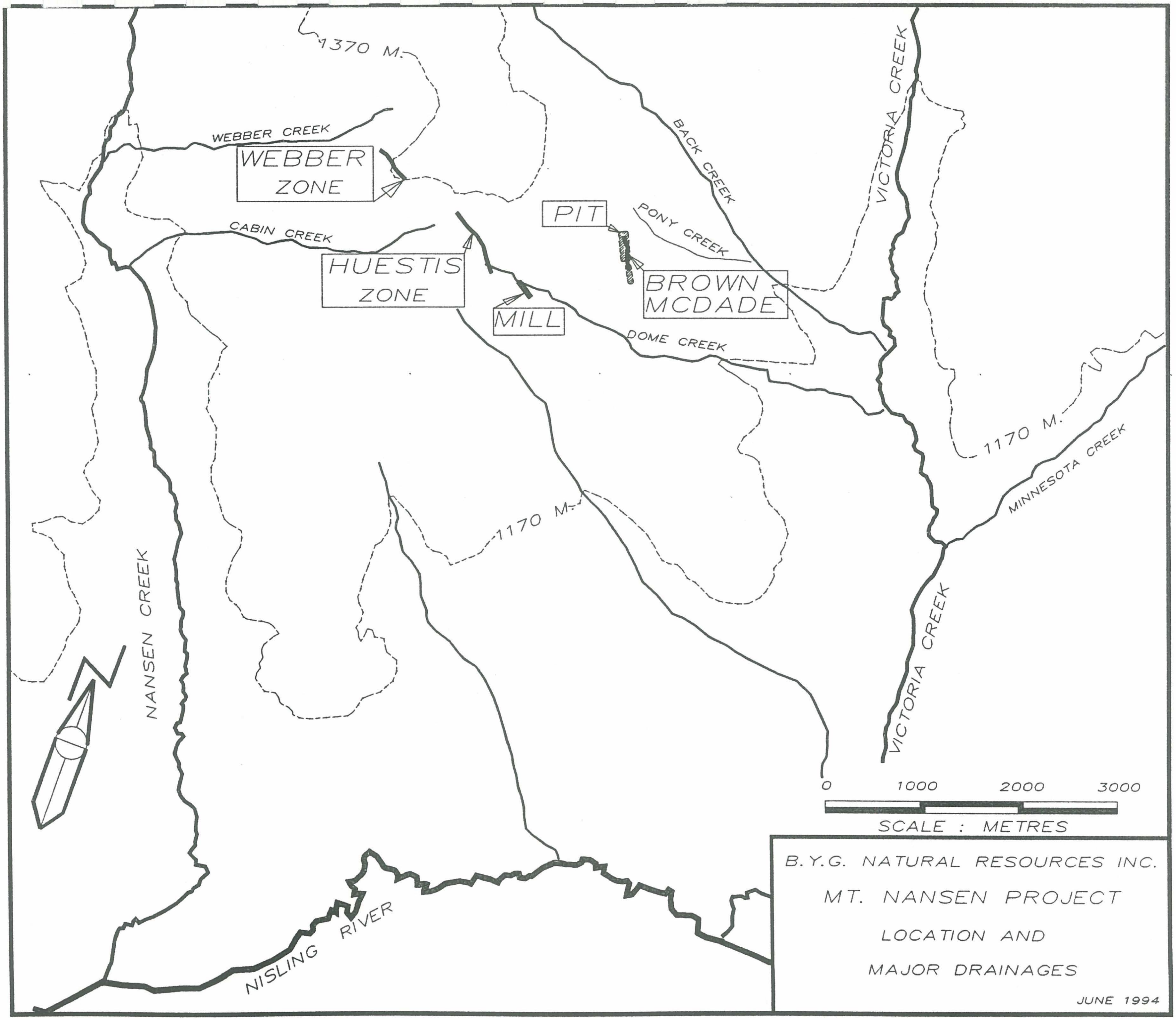
1.4 Project Planning Objectives

BYG's approach to bringing the oxide ore from the Brown-McDade zone into production,is to complete the following tasks:

i) Respond to a letter dated May 9, 1990 from Indian and Northern Affairs. This letter summarized regulatory comments to various project reports submitted by Chevron and BYG in support of the project.

- ii) Initiate monitoring program in response to RERC requirements to provide environmental background information for both the EARP process and a Water License Application

- iii) Conduct necessary laboratory work required to answer concerns raised in i) above.



B.Y.G. NATURAL RESOURCES INC.

MT. NANSEN PROJECT

LOCATION AND

MAJOR DRAINAGES

JUNE 1994

FIGURE 3

- iv) Complete engineering to provide detailed designs for tailings dam construction, open pit development and waste storage facilities, road access improvements, site accommodation, power and water, etc.

- v) Initiate contact with the local population and the First Nations representatives.

- vi) Prepare and submit an Initial Environmental Evaluation Report.

- vii) Complete financing arrangements to carry out necessary construction and development.

1.5 Baseline Studies

A significant amount of background data has been collected on the project site, by company consultants and Environment Canada.

General summary of work completed (see Norecol, 1989):

- Water Quality, sampling on record from 1976 to 1989
- Stream Sediment, two studies in 1986 & 1988
- Hydrology & climate, 4 efforts in 1988
- Hydrogeological, piezometers set in 1989
- Benthic invertebrates, work in 1976,1977 & 1988
- Fisheries, 1977 and 1989
- Acid Base Accounting, three sets of samples, last two focus on Brown-McDade
- Wildlife, aerial survey and camp notes
- Fisheries, field survey on Victoria, Nansen and Nisling

Proposed additional baseline study:

- Additional evaluation of the proposed tailings and effluent disposal systems.
- Additional engineering to select optimum tailings dam location.
- Review Ford Crossing of Victoria Creek
- Initiate Discussions with Local and First Nations Reps

2.0 Proposed Project

2.1 General Project Description

BYG proposes to carry out the following development and operating scenario:

- Retrofit the existing flotation mill, to a cyanide circuit capable of processing 300 tonnes Per Day of oxide ore from the Brown-McDade ore zone.

- Construct a tailings dam capable of containing approximately 300,000 tonnes of oxide tailings.

- Rehabilitate water line from Victoria Creek, re-establish wells, provide power and pumps.

- Provide diesel power plant capable of providing mill and plant power and heat. (About 2,000 Kilowatt capability)

- Establish a 30 man kitchen-bunkhouse complex to accommodate work crews.

- Develop an open pit operation on the Brown-McDade zone. Approximately 300,000 tonnes of oxide ore will be removed for treatment in the CIP mill, and 620,000 tonnes of waste removed and stored.

- Conduct further exploration for oxide ores on site. Carry on metallurgical study for possible extraction and treatment of the sulphide ores currently identified from previous work.

2.2 Schedule and Timetable

In general, BYG are working on a schedule that would see a production start-up in the early summer of 1995. (see Fig.9) The general items to be addressed are as follows:

- Restart permitting activities by means of this overview, June 1

- Complete economic evaluation, continue financing actions, July 1 to October 31

- Submit Initial Environmental Evaluation, August 1

- Continue metallurgical investigations, complete design of mill retrofit. June 1 to August 31

OVERSKED

B.Y.G. Natural Resources Inc.
MOUNT NANSEN PROJECT SCHEDULE

JUNE 1,1994

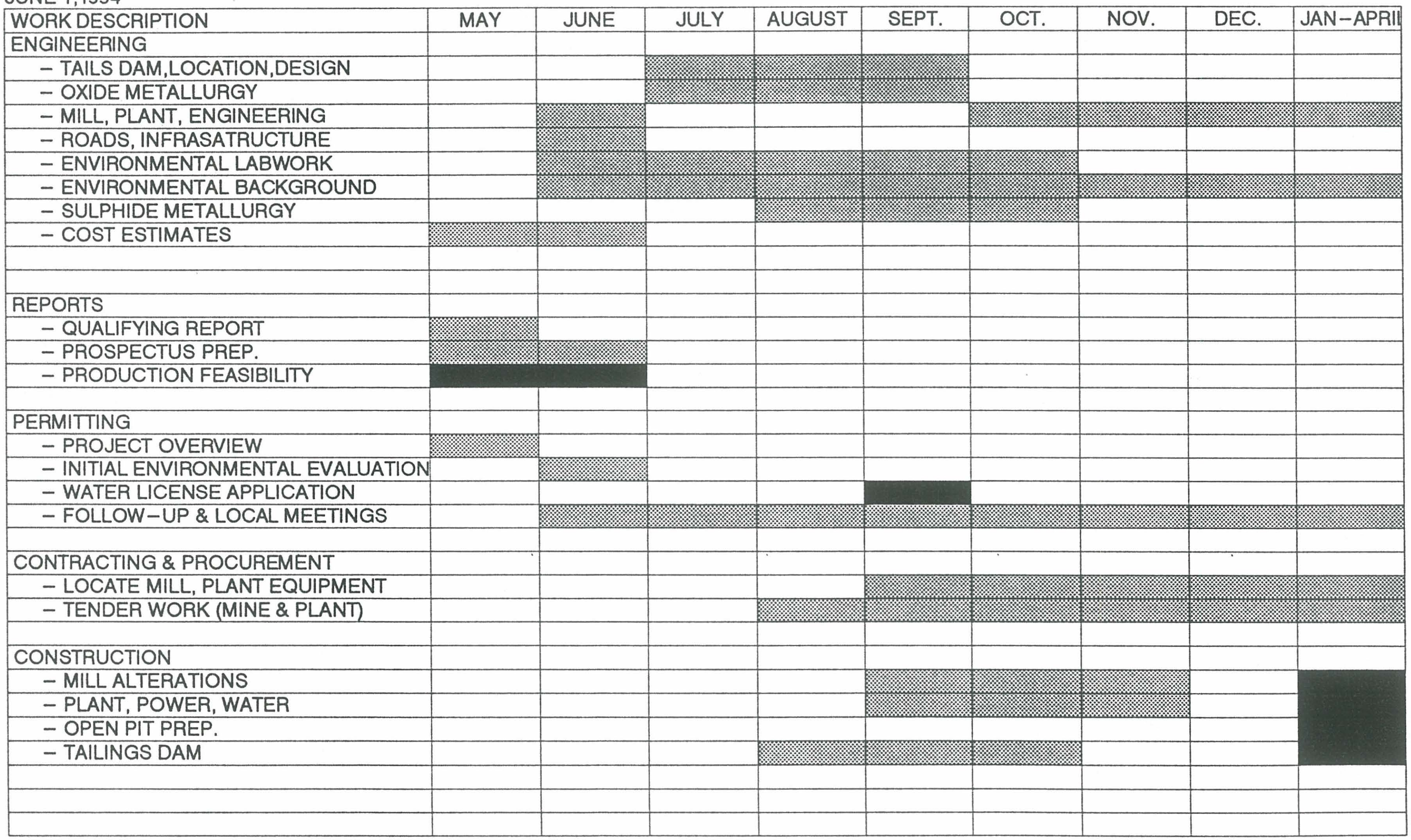


FIGURE 9

- Complete all engineering design by August 31

- Make Water License Application, Sept. 1

- Construct tailings dam, August 15 to October 1

- Begin mill modifications in September, complete by April 1, 1995

- Commence production May 1, 1995. Operate 2.5 years on oxide ore. Explore for additional oxide reserves. Examine methods to mine and treat the currently defined sulphide mineral inventory.

- Carry out reclamation work as dictated by an approved Reclamation Plan.

2.3 Geology and Ore Reserves

2.3.1 Geology (see Fig. 4)

The Mount Nansen property is underlain by highly deformed Upper Palaeozoic or older gneiss and schists that are intruded by Upper Triassic and Jurassic granodiorite and syenite batholiths, which are in turn intruded or overlain by Mid- to Late Cretaceous, mafic to felsic stocks, dykes, volcanic flows and pyroclastic rocks related to the Coast Plutonic Complex. A series of subparallel anastomosing veins occur in a 6 km long by 2.5 km wide belt (see Fig.5) extending the length of the property. The veins strike northwesterly, and exhibit steep northeasterly to moderate southeasterly dips and cut all rock types.

The Brown-McDade Zone lies at the southeasterly end of the belt.(Fig.6) It is 500 metres long by 200 metres wide and consists of quartz veins and associated feldspar porphyry dykes developed in the hanging wall of a strong fault (Footwall Fault), which strikes 160 Degrees and dips 50 to 70 degrees to the southwest. The fault cuts obliquely across a contact between granodiorite and metamorphic rocks and is best mineralized where granodiorite forms both walls. Footwall rocks are relatively massive and unaltered, while hanging wall rocks are fractured and clay altered.

The strongest veins occur in a 3 to 40 metre wide band directly adjacent to the Footwall Fault, while weaker subsidiary structures are common further out on the hanging wall. The highest assays are normally found within the quartz veins, and adjacent fractured or gougy wall rocks are often weakly to moderately mineralized. Supergene weathering has converted near surface sulphide minerals to limonite and other oxides. The oxidation gradually diminishes with increasing depth and depth of total oxidation ranges from 5

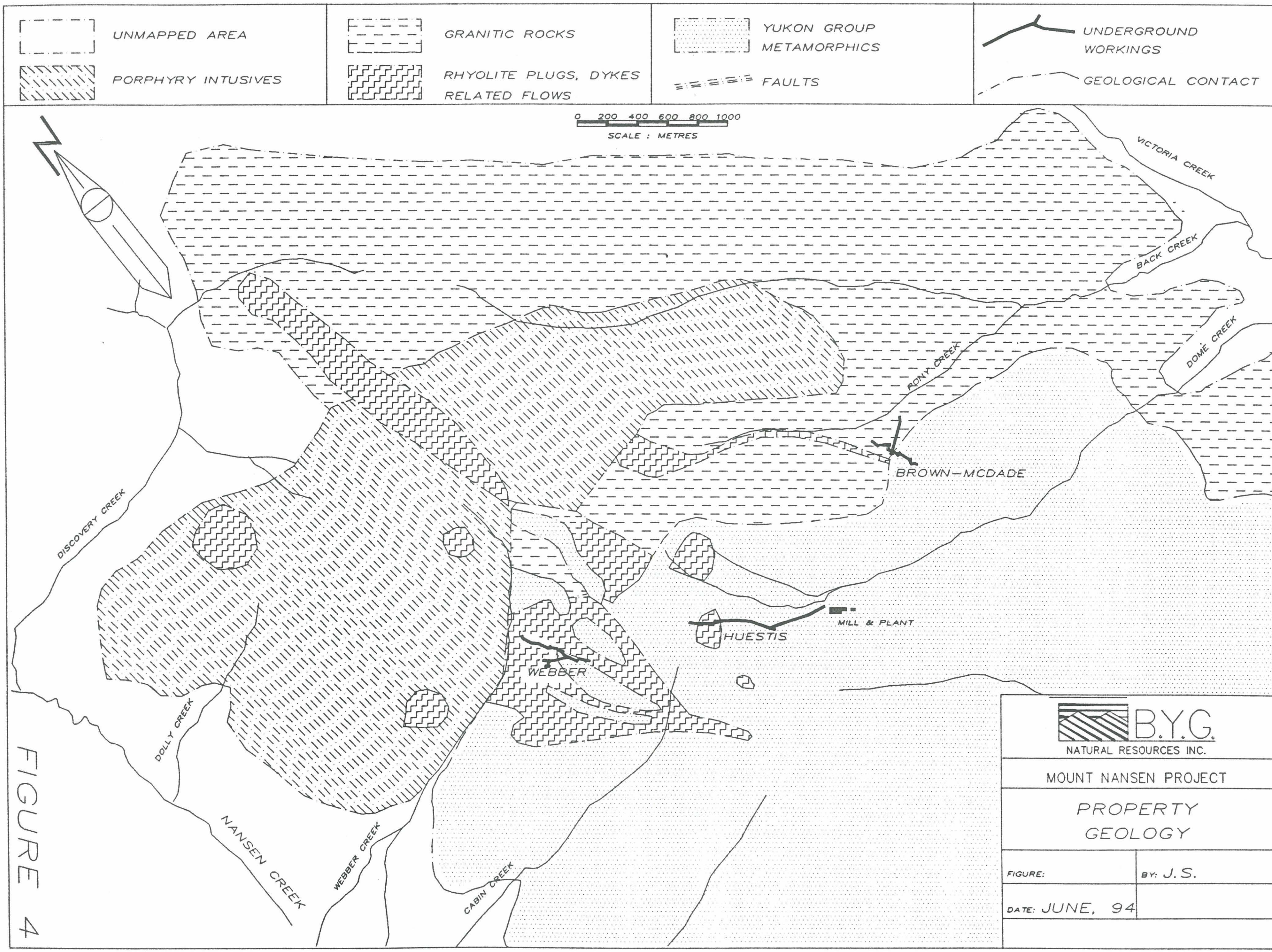
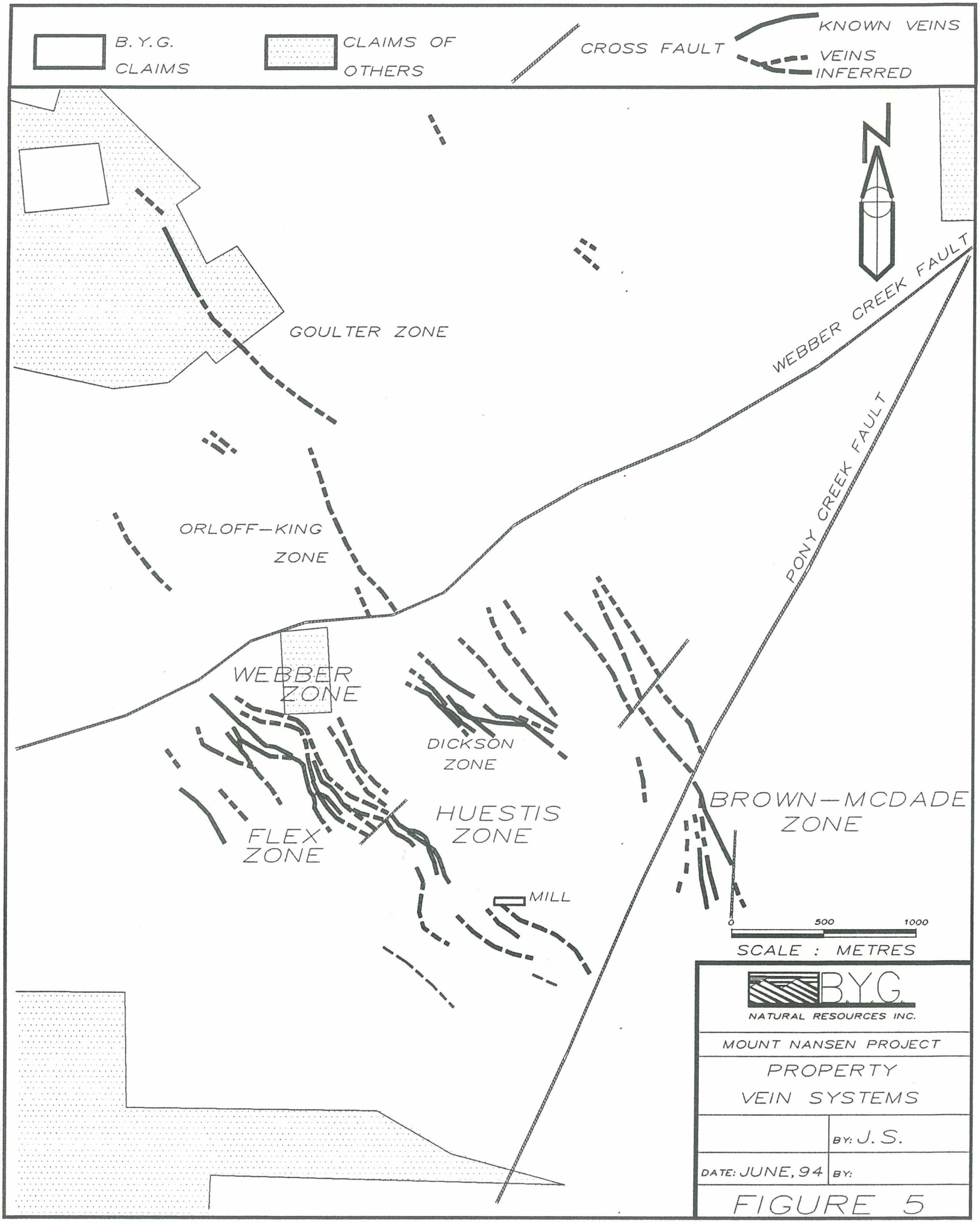

UNMAPPED AREA
PORPHYRY INTUSIVES
GRANITIC ROCKS
RHYOLITE PLUGS, DYKES
RELATED FLOWS
YUKON GROUP
METAMORPHICS
FAULTS
UNDERGROUND
WORKINGS
GEOLOGICAL CONTACT
0 200 400 600 800 1000
SCALE : METRES
VICTORIA CREEK
BACK CREEK
DOME CREEK
RONY CREEK
BROWN–MCDADE
DISCOVERY CREEK
MILL & PLANT
HUESTIS
WEBBER
DOLLY CREEK
NANSEN CREEK
WEBBER CREEK
CABIN CREEK
B.Y.G.
NATURAL RESOURCES INC.
MOUNT NANSEN PROJECT
PROPERTY
GEOLOGY
FIGURE:
BY: J.S.
DATE: JUNE, 94

FIGURE 4


B.Y.G. CLAIMS
CLAIMS OF OTHERS
CROSS FAULT
KNOWN VEINS
VEINS INFERRED
GOULTER ZONE
WEBBER CREEK FAULT
ORLOFF-KING ZONE
PONY CREEK FAULT
WEBBER ZONE
DICKSON ZONE
HUESTIS ZONE
BROWN-MCDADE ZONE
FLEX ZONE
MILL
0
500
1000
SCALE : METRES
B.Y.G.
NATURAL RESOURCES INC.
MOUNT NANSEN PROJECT
PROPERTY
VEIN SYSTEMS
BY: J.S.
DATE: JUNE, 94
BY:
FIGURE 5

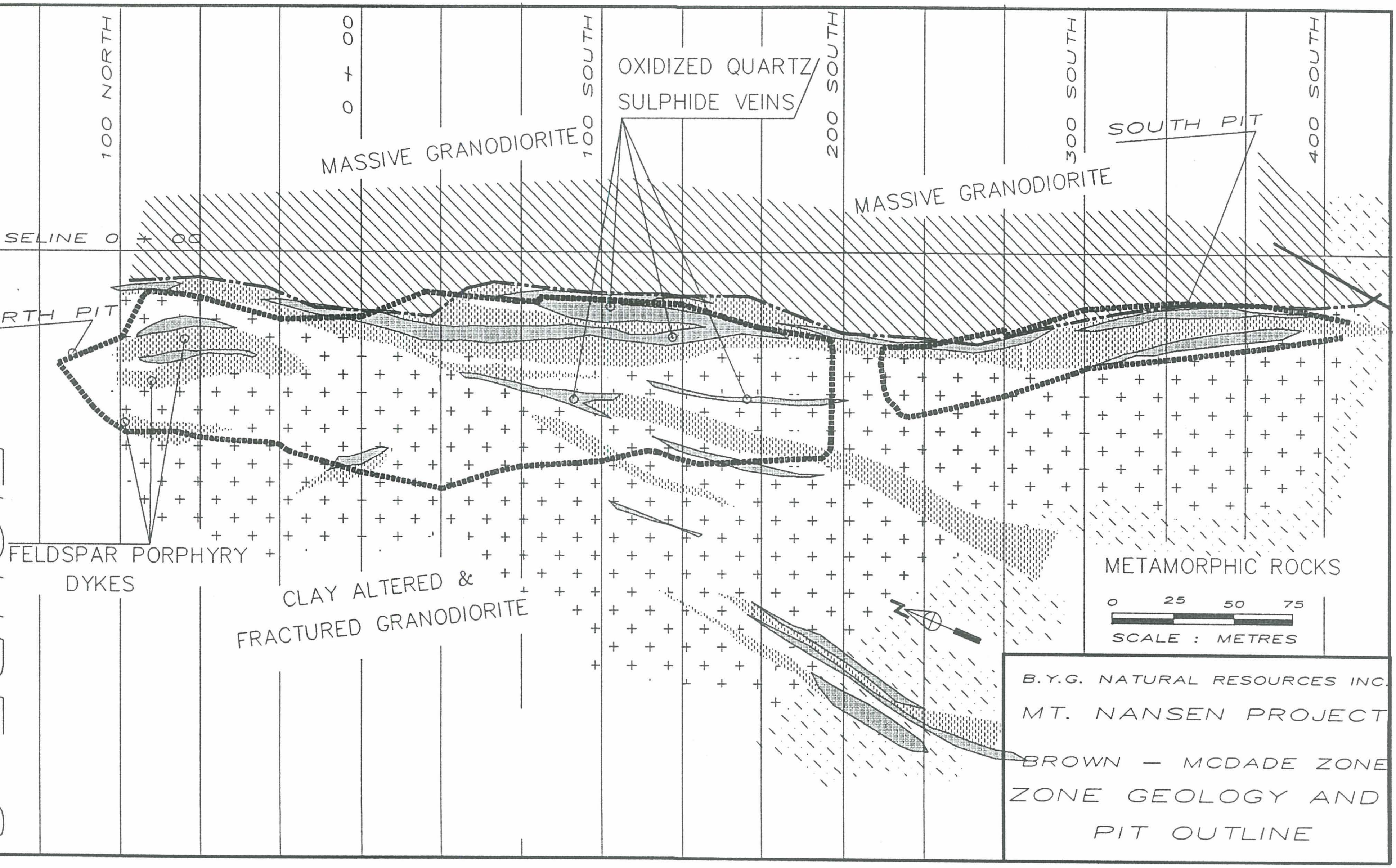

100 NORTH
0 + 00
100 SOUTH
200 SOUTH
300 SOUTH
400 SOUTH
OXIDIZED QUARTZ SULPHIDE VEINS
MASSIVE GRANODIORITE
SOUTH PIT
MASSIVE GRANODIORITE
BASELINE 0 + 00
NORTH PIT
FELDSPAR PORPHYRY DYKES
CLAY ALTERED & FRACTURED GRANODIORITE
METAMORPHIC ROCKS
0 25 50 75
SCALE : METRES
B.Y.G. NATURAL RESOURCES INC.
MT. NANSEN PROJECT
BROWN – MCDADE ZONE
ZONE GEOLOGY AND
PIT OUTLINE

FIGURE 6

metres at the north end of the zone to at least 75 metres at the south end.

2.3.2 Mineral Inventory and Ore Reserves

2.3.2.1 Mineral Inventory

A report prepared by Archer-Cathro in February 1989 provided the following mineral inventory calculations.

Oxide ore -	370,190 tonnes @	5.76 GMT Au & 77 GMT Ag
Sulphide ore -	391,000 tonnes @	12.92 GMT Au & 232 GMT Ag
TOTAL ore -	761,190 tonnes @	9.43 GMT Au & 161 GMT Ag

ii) Ore Reserves

For purposes of economic evaluation and for reference in this report, the term "ore reserves" shall apply only to material that has been confirmed as proven by diamond drilling or other means, and demonstrates that it can be economically mined and processed. Under these guidelines, the following reserve is comprised of oxide ore, available for open pit mining, from the Brown-McDade ore zone.

2.3.2.2 Mineable Ore Reserves

Zone	- Brown-McDade
Tonnes	- 295,000
Grade - Gold	- 5.80 GMT
- Silver	- 55 GMT

The above mineable reserve was calculated by Mr. Chris Armstrong, P. Eng. and Consulting Engineer.

2.4 Mining Plan

The oxide portion of the Brown-McDade zone will be extracted by means of an open pit. (Fig.7)The open pit plan was developed to provide a reasonable basis for calculating waste removal requirements, low grade reserves that would be excavated during removal of the "milling" ore, and a production schedule to provide a means for estimating Pre-production costs.(See Appendix A for Bench plans)

Planning Parameters

- Minimum berm to berm slope of 45 Deg. anywhere in the altered granodiorite.

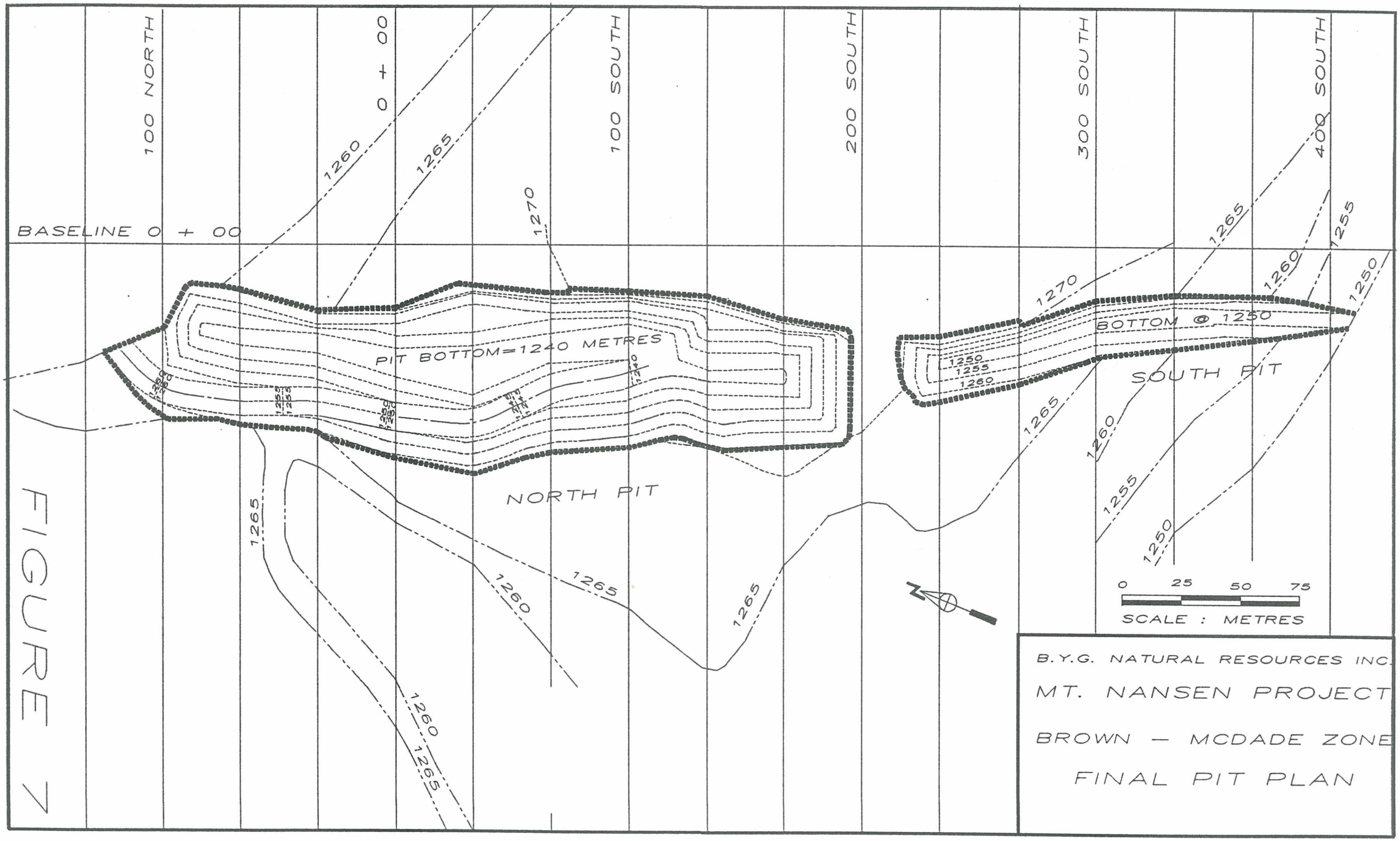

100 NORTH
0 + 00
100 SOUTH
200 SOUTH
300 SOUTH
400 SOUTH
BASELINE 0 + 00
1260
1265
1270
1255
1250
PIT BOTTOM=1240 METRES
BOTTOM @ 1250
SOUTH PIT
NORTH PIT
0 25 50 75
SCALE : METRES
B.Y.G. NATURAL RESOURCES INC.
MT. NANSEN PROJECT
BROWN — MCDADE ZONE
FINAL PIT PLAN

FIGURE 7

- Minimum overall slope of 55 Deg. in the footwall granodiorite.

- Pit Ramp 12 meters wide, and maximum grade of 10 %.

- Used 5 meter benches (triple bench in the footwall)

- The Armstrong "milling ore" outlines were used to initiate excavation lines. Low grade material which is excavated within these outlines would be milled at current gold prices.

The following "recoverable, mineable" reserves have been developed by applying the above pit design parameters to the Armstrong reserve calculation.

Tonnes Ore	-	295,000
Grade gold	-	5.80
Grade silver	-	55
Tonnes Waste	-	621,000
Waste/Ore Ratio	-	2.1

The resulting open pit, would have a length of 450 metres, a width of 70 metres and a maximum depth of 20 metres.

2.5 Metallurgy and Milling

2.5.1 Metallurgy

A significant amount of metallurgical test-work has been completed on the oxide ore of the Brown-McDade zone. Test-work reports are available from Hazen Research(1986), Coastech Research Inc.(1989), and Lakefield Research(1988 & 1989)

The Melis Engineering 1989 report summarizes all of this work, and develops a flow sheet to process the ore in the existing mill, retrofitted for cyanidation.

2.5.2 Milling

Oxide ore from the open pit, will be trucked to the coarse bin dump, crushed to minus 2 cm., ground at the rate of 300 TPD to minus 74 micron particle size. The process would then to leach the gold into solution , recover the gold from solution onto carbon in C.I.P. tanks, strip the gold from the carbon and recover using the Merrill Crowe system of zinc precipitation, and pour a dore bar of gold and silver on site.

2.5.3 Tailings and Water Management

Fresh water will be supplied via a refurbished steel water line from Victoria Creek. A maximum of 6.1 L/S will be required to supply the fresh water requirements.Reclaim water from the tailings pond will be used in the mill to the maximum degree possible.

A tailings dam will be constructed 300 metres northwest and 60 metres uphill of the mill. The dam will cover 150 metres by 250 metres, with a capacity to hold 300,000 tonnes of tailings. The reservoir will be partially excavated into bedrock and lined with either a bentonite-sand liner or a claymax liner. Seepage has been estimated at 2 to 0.2 L/S(Klohn-Leonoff, 1988 & 1989)depending on liner selected. A seepage collection pond will be added to the previous proposal, recycling all the seepage back to the tailings pond. Monitoring wells will be located downhill from the tailings dam to monitor groundwater. The proposed pond has a small natural catchment area which will be further reduced reduced by a system of cutoff ditches that will divert water around it.

Tailings will be treated using the SO2/air process to reduce cyanide levels prior to discharg to the tailings pond. Treatment will be accomplished by mixing the tailings slurry in the presence of copper sulfate, sodium metabisulfite and air using lime for pH control (Melis 1989)

2.5.4 Alternatives Being Considered

Some lab-work was carried to test the amenability of the oxide ore to heap leach technology. Results were encouraging enough that some additional test-work will be conducted this year.

Geotechnical fieldwork was conducted by Klohn-Leonoff to evaluate other areas for the potential to store tailings. More work will be done this year (1994), in an attempt to locate a more optimum tailings pond site.

2.6 Site Development Plans

There will be no major changes to the plant site as it currently exists. (See Fig. 8) Certain of the old trailer buildings will be dismantled and removed. In summary the work will be as follows:

i) Refurbish existing mill building structure as needed, replace flotation equipment, with cyanidation equipment, generally within the existing structure.

ii) Refurbish existing power house and warehouse structure as required, install new diesel generating units.

iii) Remove old bunkhouse trailers, and install new units, capable of holding 30 personnel.

iv) Provide bermed storage for 50,000 litres of diesel fuel.

v) Rehabilitate water line and wells previously used to supply the operation, located 4.3 km east of the mill in the valley of Victoria Creek.

vi) Construct tailings pond as described in Section 2.5.3

vii) Develop Brown-McDade zone for open pit mining. Waste storage area will be prepared south-east of the pit, and near the ridge separating Dome and Pony Creeks.

viii) Improve road access to a degree that ensures safe transport of operating crews and supplies.

2.6.1 Alternatives

The alternatives considered were the same as in Section 2.5, ie different tailings pond location, and possibility of heap leach process.

2.7 Construction Schedule, Temporary Facilities

2.7.1 Schedule

The following bar chart(Fig.9), illustrates the expected schedule to production for the Brown-McDade oxide ore. It presumes that the review process does not encounter any concerns that could ultimately prevent a production decision.

2.7.2 Temporary Facilities

Construction activity will utilize the existing buildings to a large extent. Accommodation for the work crews will be provided in some combination of existing site trailers, additional trailer bunkhouses, and use of Carmacks accommodation.

Some temporary diesel power arrangements would be made for 1994, including properly designed fuel storage tanks.

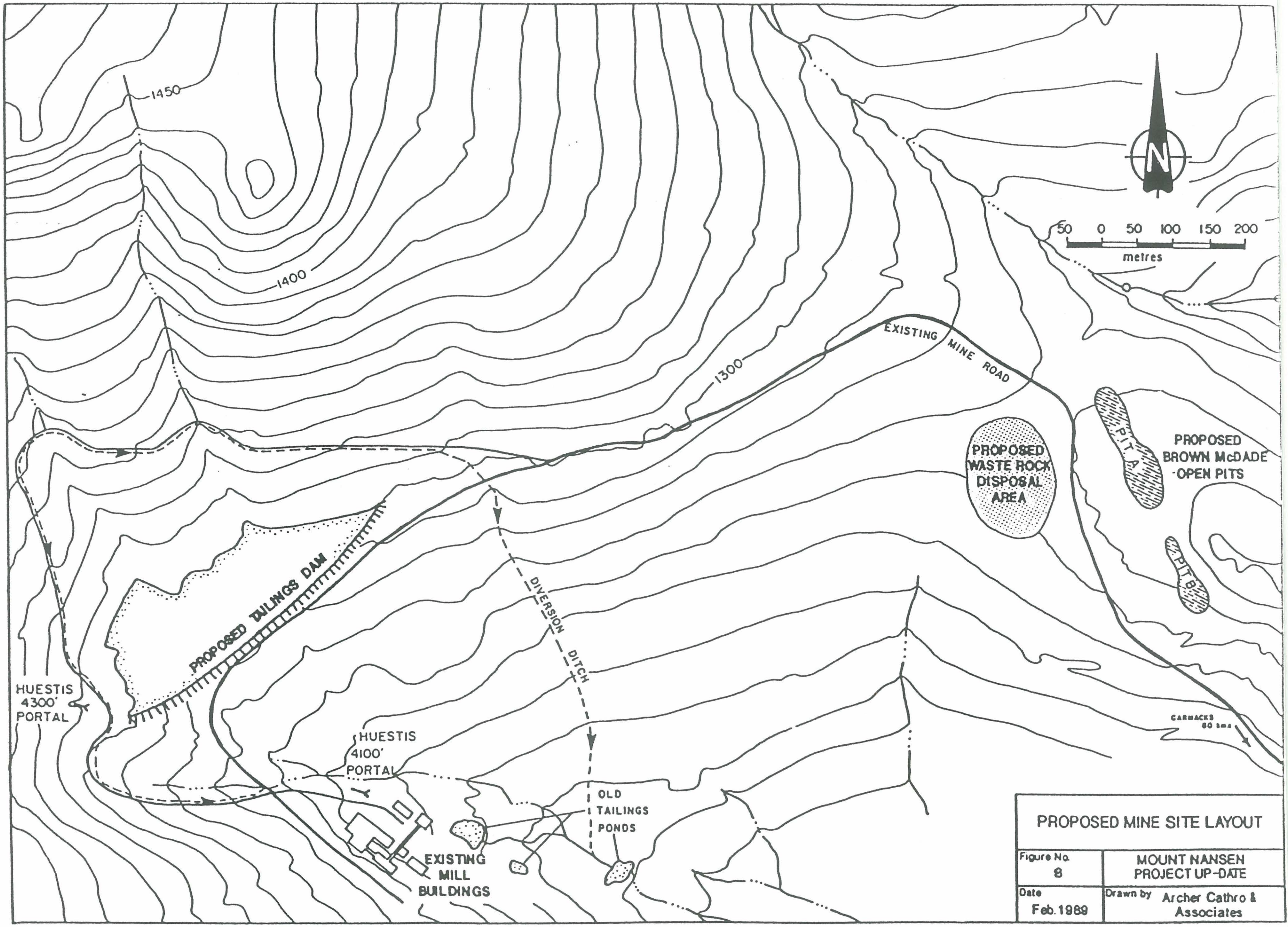

1450
1400
1300
EXISTING MINE ROAD
N
50 0 50 100 150 200
metres
PROPOSED WASTE ROCK DISPOSAL AREA
PIT A
PIT B
PROPOSED BROWN McDADE OPEN PITS
PROPOSED TAILINGS DAM
DIVERSION DITCH
HUESTIS 4300' PORTAL
HUESTIS 4100' PORTAL
OLD TAILINGS PONDS
EXISTING MILL BUILDINGS
CARMACKS
PROPOSED MINE SITE LAYOUT
Figure No. 8
MOUNT NANSEN PROJECT UP-DATE
Date Feb. 1989
Drawn by Archer Cathro & Associates

FIG. 6

3.0 Environment

3.1 Introduction

Norecol Environmental Consultants of Vancouver, prepared an Environmental Up-date Report on the project in February 1989. This report was distributed to Indian and Northern Affairs Canada, Dept. of Renewable Resources and to the Regional Environmental Review Committee.

A number of responses were received by BYG on this submission, and some follow-up work was completed in 1990.

The introduction, environmental setting, and status of environmental studies are reproduced from the Norecol Report (1989)in the next Section (3.2) Additional information on the environmental aspects of the project are provided in the Norecol (1989) report.

The BYG response to R.E.R.C. concerns (Letter of May 1990, from Louis Craig, Director of Renewable Resources, Indian and Northern Affairs) is included in Section 3.3

Section 3.2 Introduction, Setting and Status

Reproduced from Norecol 1989 Report

3.2.1 Introduction

A brief review of the environmental data collected by Norecol is given in this section. Data collected by government agencies and others is referenced.

Preliminary environmental studies, including collection of baseline data, have been undertaken by Norecol Environmental Consultants Ltd.(Norecol) since the fall of 1985. These have been summarized in two reports (Norecol 1985; 1987) Additional on-site data have been collected by Archer-Cathro and Associates, who have been responsible for overall coordination of activities on the project. Indian and Northern Affairs Canada, Water Resources Division have also been collecting water quality data for the site since the previous mining operation.

Initial discussions have been held with government agencies to inform them of the proposed development and to identify environmental data and permitting and approval requirements. These meetings have been coordinated with the Regional Environmental Review Committee (RERC) and have included Fisheries and Oceans Canada, the Northern Affairs Program of Indian and Northern Affairs Canada, Economic Development, the Yukon Water Board and the Yukon Conservation Society. Initial review with government agencies included the possible construction of a heap leach pad. However, present plans exclude heap leaching of ore.

3.2.2 Environmental Setting

The Mount Nansen claims are located in the Dawson Range at elevations ranging between 945 and 1525 m. The area is drained by the Nisling River, which empties into the Yukon River via the Donjek and White rivers. Drainage from the property flows into two moderate sized tributaries of the Nisling River, Nansen Creek to the west and Victoria Creek to the east. Back and Dome Creeks are tributaries of Victoria Creek which drain the east side of the property, while Webber and Cabin Creeks are tributaries of Nansen Creek which drain the west side of the property.

Average monthly temperatures in the Mount Nansen area range from about 15 degrees C. in July to about -15 in January. Frost is rare from late May to early September. Annual precipitation averages about 25 cm, most of which falls as rain in the summer months. Late winter snow pack is normally 30 to 40 cm deep.

The property lies in the Dawson Range Ecosystem with vegetation characteristics described by Oswald and Senyk(1977). Open stands of black spruce (Picea mariana) and white spruce (Picea glauca) occur in the valley along Victoria Creek and Nansen Creek; black spruce is predominant on wetter sites. Stunted black spruce and trembling aspen (Populus tremuloides) occur on the lower slopes while the upper slopes and ridges are largely devoid of trees. Birch (Betula spp.) and willow shrubs form extensive cover from valley bottom to above treeline. Labrador tea (Ledum groenlandicum), mosses and lichens are dominant in the understorey.

Preliminary geotechnical and permafrost information was gathered in the project area by Klohn Leonoff Consulting Engineers (1985). In general, the ridge tops and steeper hillsides have either no tree cover and bedrock outcropping or there is a cover of 1 to 3 m of weathered rock over intact bedrock. Extensive deposits of grey-brown sand occur in the valley bottoms and in the benchland near Dome Creek. Permafrost is evident at the shallow depths (about 0.4 m) where the rock has an organic or moss cover, but where cover has been removed the permafrost layer occurs at greater depths (about 5.0 m). The permafrost layer in this region is 30 to 60 m thick. Mean annual temperature at the site is approximately -3 degrees C.

3.2.3 Status of Environmental Studies

Some environmental information was collected in relation to earlier mining activity in the area. The Environmental Protection Service (1979) examined water chemistry and biological conditions in the Victoria Creek watershed in 1976 and 1977. EPS found that the tributary receiving mine decant water had reduced bottom fauna, but there was little impact on the bottom fauna and fish populations in Victoria Creek.

During 1982, EPS conducted leaching experiments on tailings from the Mount Nansen mine to determine oxidation potential (Davidge 1984). It was found that the tailings remained alkaline, did not oxidize appreciably, and leaching bacteria were prevented from becoming established due to acid consuming properties of the tailings.

Water quality monitoring was carried out by the Water Resources Division, Northern Affairs Program (Indian and Northern Affairs Canada) and some of these data have been reviewed. Their sampling was done to monitor operational mines or active exploration areas and their data for 986, 1987 and 1988 are available from the Whitehorse Office.

Environmental Protection instituted a sampling program in the Mount Nansen project area in 1988. Samples of water quality were taken at 12 sites along with stream flow of most of these sites in July and August 1988. Benthic invertebrate sampling was also carried out in August, 1988.

Norecol's environmental studies were initiated in 1985 and consisted of seasonal sampling of water quality of a network of sites. Initial acid-base accounting and reconnaissance level wildlife studies were also carried out. A program of hydrologic studies was initiated in June 1988 and limited data were collected to September 1988.

Section 3.3 - Response to R.E.R.C. Concerns - May 1990

3.3.1 - Design of tailings and reclaim water treatment system.

The system used to treat tailings prior to release to the tailings pond, will be the SO2/air system of cyanide destruction. Design of this system will be supplied when detailed engineering is complete. The flow sheet is illustrated in the Melis Report.

Treatment of the reclaim water is not anticipated, as reclaim water is simply pumped back to the mill and reused.

Should it become necessary to release tailings pond effluent to the environment, this water would be treated if necessary, before release. Testing to this point indicates that arsenic levels will be acceptable, but further work is required to confirm. } how

ADDITIONAL TEST-WORK WILL BE COMPLETED IN 1994 TO PROVIDE THE BASIS FOR DESIGN OF TREATMENT SYSTEMS

3.3.2 - Water and Seepage from Brown McDade Open Pit

It is currently believed that the open pit excavation will be completed by ripping and loading the material, and that very little blasthole drilling will be required. There will therefore be very little water used, and very little to dispose. Should an excess of water develop and require release to the environment, it will be either pumped to the tailings pond, or, ponded and tested and treated before release.

The final walls of this pit excavation will be almost entirely composed of acid consuming rocks, and therefore will preclude the long term development of acidic mine waters.

3.3.3 Assessment of Acid Mine Drainage Potential

All information to this point suggests that neither the ore nor the waste rock from the Brown-McDade oxide zone will produce acid. In fact, they will consume acid. Additional ABA testing was carried out on these rocks, and the test results included in a report by Norecol, dated October 20, 1989. (See Appendix B)

3.3.4 Suitability of Proposed Tailings Site

There were two sites reviewed by Klohn-Leonoff during the period 1988 to 1990.Most effort to this point was aimed at developing a low seepage operation, assuming that tailings would be <u>untreated</u> before release from the mill.

The treatment of tailings will reduce cyanide levels before release to the tailings pond, and therefore reduce seepage concerns. Capture of the seepage, and recycle to the pond will also reduce downstream environmental impact. As the tailings will not be acid generating, long term seepage will not be a concern.

BYG PLAN ADDITIONAL ENGINEERING AND SITE INVESTIGATION IN 1994 IN ORDER TO ENSURE THE OPTIMUM SITE IS SELECTED

3.3.5 Development of Other Reserves on Project Site

The potential for development of reserves in addition to the Brown-McDade oxide reserves, can be listed in the following expected chronological order:

i) Additional oxide reserves - exploration effort to locate additional oxide ore will focus on the Flex Zone. We would expect that any additional reserves confirmed will have very similar characteristics to the Brown-McDade oxide, and will therefore require similar treatment and reclamation.

Some testing has been conducted on the potential to "heap leach" the oxide ore. Further testing will be conducted in 1994 in order to develop a method to treat lower grade oxide ores which could be identified with exploration effort. Should this work prove successful, means and methods to control and reclaim heaps will be addressed.

ii) Sulphide Ore - The current mineral inventory of the project includes nearly 400,000 Tonnes of gold bearing sulphide rock. BYG does not categorize any of it as "ore", because it is not currently economic. Previous operations processed approximately 25,000 Tons of this material. Additional test-work has been conducted, and during the course of the next few years, we will be attempting to develop an appropriate recovery method.

It is therefore too early to make predictions of environmental impact before the metallurgical process has been defined. However, from a waste control standpoint, the use of the Brown-McDade open pit excavation to contain tailings from any process which could develop, seems to be an obvious answer. **IT IS NOT THE INTENTION OF BYG TO USE THE CURRENTLY PROPOSED TAILINGS IMPOUNDMENT TO STORE TAILINGS FROM ANY FUTURE SULPHIDE ORES.**

It is worth drawing attention to the 25,000 tons of tailings remaining on site from the previous operations, all sulphide flotation tailings. The material has been contained in the ponds for periods ranging from 18 to 26 years, and to this point in time shows no indication of acid generation.

iii) Tawa Property - This property has received only a very preliminary exploration look, there is at this time no mineral inventory assigned to it. It is therefore much too early to address environmental impact of future operations.

3.3.6 Wildlife and Fisheries

i) The company will enthusiastically establish a policy of no hunting or use of ATVs' on our site, in conjunction with the Fish and Wildlife Branch.

ii) A fisheries survey was carried out by Norecol on Nansen and Victoria Creeks, and the Nisling River. The results of this work is included in Norecol report, dated Sept.8,1989. (Append. C)

iii) A substantial amount of work has been completed by the Yukon government on the access road from Carmacks to the mine site, during the last 5 years.

BYG WILL INITIATE A REVIEW OF THE FORD CROSSING AT VICTORIA CREEK, WITH A VIEW TO DEVELOPING AN IMPROVED CROSSING.

3.3.7 Traditional and Current Native Use and Concerns

BYG maintained some contact with native representatives until 1991, when all project effort slackened off.

BYG WILL RESTART DISCUSSIONS WITH FIRST NATIONS REPRESENTATIVES IN JUNE OF 1994.

3.3.8 Socio-economic Concerns

i) A manpower chart is included in Appendix D

ii) Due to the relatively short project life, training will only address site specific work requirements. BYG will however make every effort to employ local residents, and provide the necessary training to conduct specific site work.

iii) BYG will provide local suppliers with their expected material and supply requirements prior to production, to permit them the opportunity to bid competitively.

3.3.9 Hazardous Materials

i) Provision will be made in the planning stages to incorporate containment plans for potential spills on the operating mill and plant site. This will include containment within the mill proper, and by ditching and dykes downstream of the mill.

ii) Shipment of hazardous materials into the site will be closely monitored with the truckers, and prior notice of expected arrival will be a condition of purchase and acceptance. Late arrival will initiate a response to locate and identify any potential problem.

iii) All site personnel will receive training for a spill contingency plan, whether on site or on the road to the mine.

3.3.10 Abandonment and Reclamation

THE OBJECTIVES OF THE RECLAMATION PLAN ARE TO RETURN DISTURBED LANDS TO THEIR ORIGINAL USE AND CAPABILITY

i) A program of environmental monitoring will be initiated during the pre-production period, and maintained continuously through the operating years.

ii) All potentially contaminated waters will be collected by diversion or other means during the operating years, and either recycled or treated before release to the environment.

iii) A program of regular monitoring of the tailings dam for seepage will be maintained during the operating years. Seepage will be collected in a downstream seepage pond and recycled back to the tailings pond, or to the mill. Seepage will also be monitored using piezometers. Tailings pond levels will be routinely gauged during operating years.

iv) An emergency response program will be implemented in the event of an un-controlled discharge of effluent.

v) Open pit waste will be stockpiled in a location, and in a manner ensuring long term stability.

vi) A program of reclaiming current impacts, such as trenches, old access roads, waste piles from previous underground activities, etc., will be started during the first operating year. This work will generally involve backfilling, re-contouring, removal of culverts and re-establishing drainages, and test programs for revegetation.

vii) On final abandonment, old adit portals will be backfilled and sealed, buildings removed to ground level, trenches and roads reclaimed, and in general return the disturbed land to a form consistent with the surrounding terrain.

4.0 References

R-1 and R-2 , reference data as of completion of Norecol Report (1989)

R-3 , additional reference data subsequent to the Norecol (1989) Report

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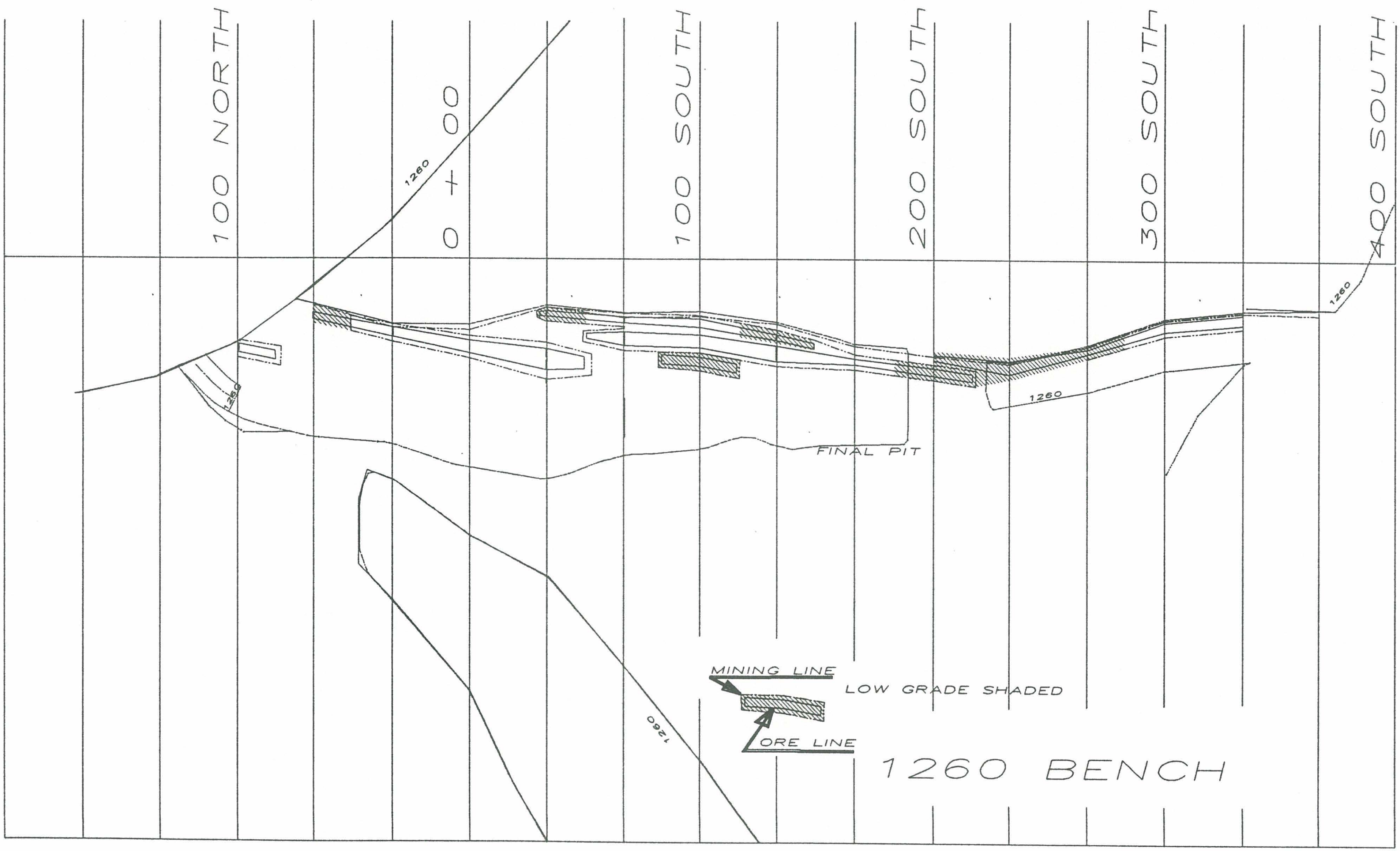
Norecol Environmental Consultants Ltd. October 1989. Additional acid base accounting for Brown-McDade ore and waste zones.

Norecol Environmental Consultants Ltd. Sept. 1989. Mount Nansen Fisheries and Hydrology Trip Report. Nisling River, Victoria Creek, and Nansen Creek.

APPENDIX "A"

Open Pit Bench Plans

Brown-McDade Zone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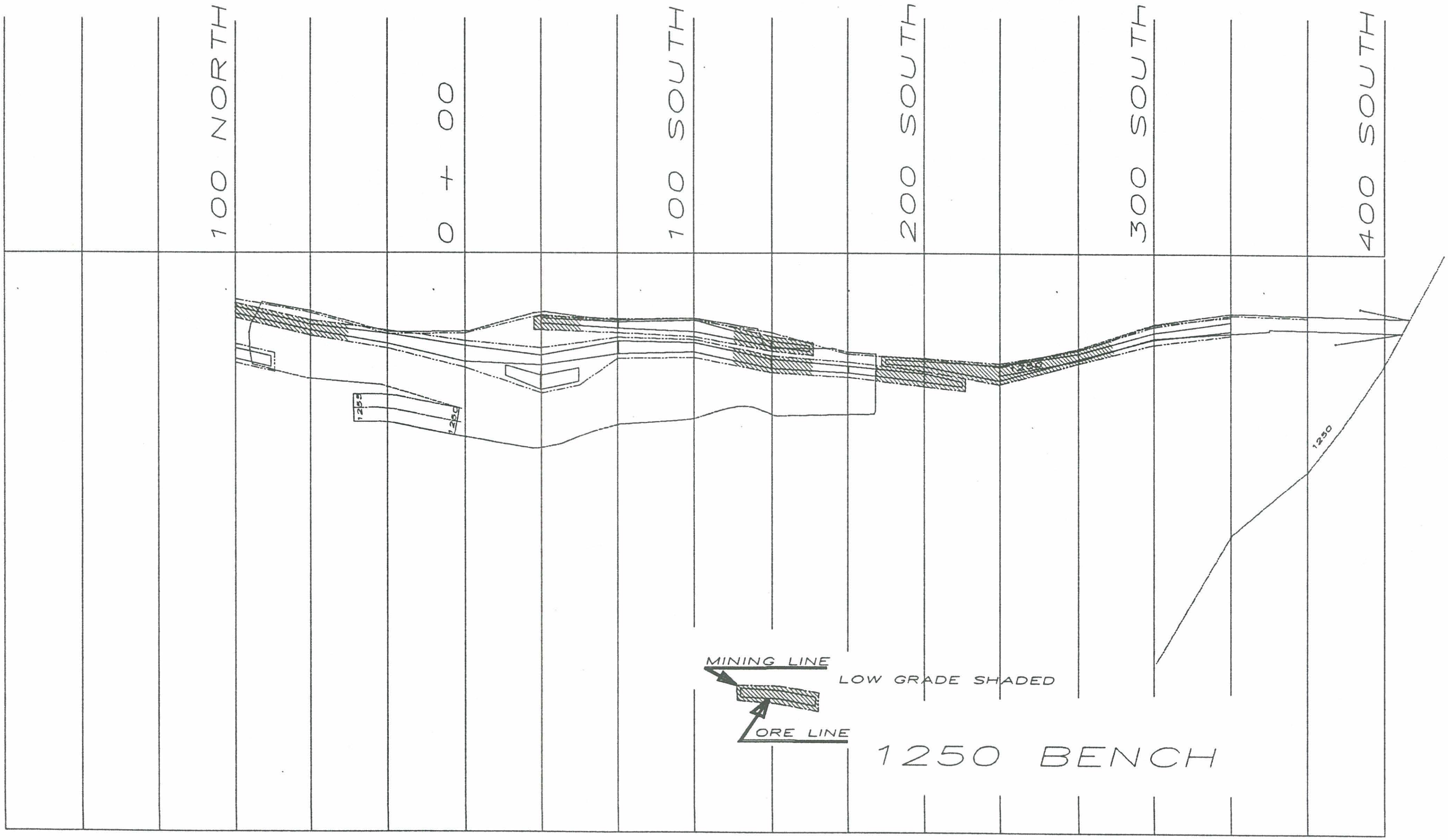
0 + 00
100 SOUTH
200 SOUTH
300 SOUTH
400 SOUTH
1260
FINAL PIT
MINING LINE
LOW GRADE SHADED
ORE LINE
1260 BENCH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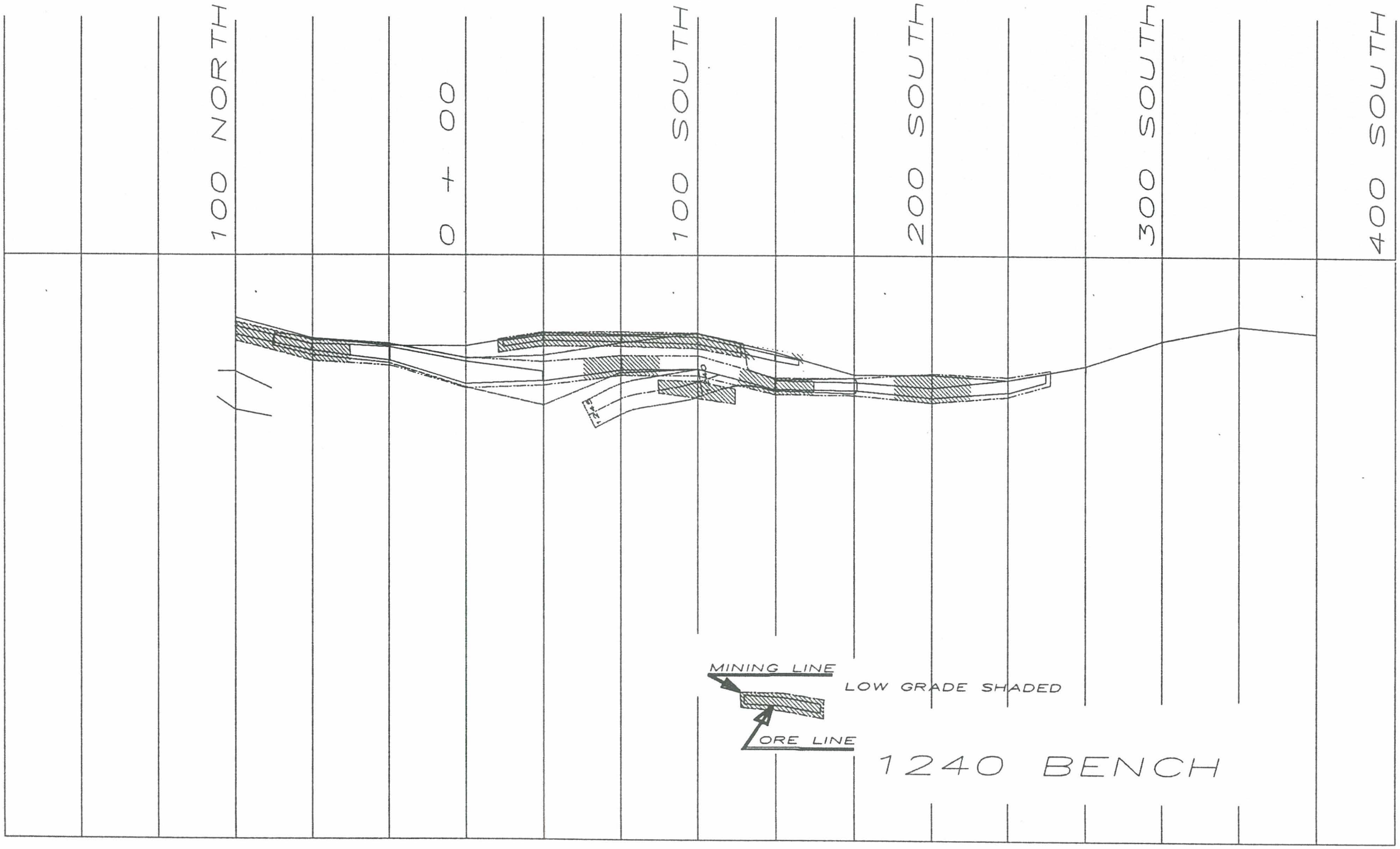
0 + 00
100 SOUTH
200 SOUTH
300 SOUTH
400 SOUTH
1250
MINING LINE
LOW GRADE SHADED
ORE LINE
1250 BENCH


100 NORTH
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100 SOUTH
200 SOUTH
300 SOUTH
400 SOUTH
MINING LINE
LOW GRADE SHADED
ORE LINE
1240 BENCH

APPENDIX "B"

Additional ABA Test-Work for Brown McDade Zone

Norecol

MEMORANDUM

October 20, 1989
File: 1-231-01.05

TO: Bruce Ott

FROM: Stephen Day

SUBJECT: ACID BASE ACCOUNTING FOR BYG NATURAL RESOURCES' BROWN-MCDADE ZONE

Acid-base accounting (ABA) has been completed for 11 representative rock samples from BYG Natural Resources' Brown-McDade zone. This memorandum describes the background to this analytical work, the testing carried out and the potential for acid generation in the samples.

BACKGROUND TO ACID-BASE ACCOUNTING

Acid rock drainage requires two conditions to occur. First the presence of sulphides exposed to air (or water containing oxygen) and, second, insufficient carbonate minerals to neutralize the acid produced. Prediction of the potential for rock to produce acid therefore involves measuring the amount of sulphides and carbonates present. The conventional way to arrive at this acid-base accounting is to determine the total amount of sulphur present by crushing and heating a sample in a furnace to 600°C and to determine the neutralizing potential by adding acid to the sample and measuring the amount of base required to bring the pH back to neutral.

There are several problems with this approach. First, not all sulphides are reactive and therefore the potential acidity is over estimated to the extent that non-reactive, or oxidized sulphur, is present. Second, the method of measuring neutralization potential includes minerals such as feldspars which will only neutralize to pH 4 or 5 and not 7, or neutral pH.

Because of these considerations, a modified acid-base accounting was used in the tests reported here. Reactive sulphur was measured, as well as total sulphur, and inorganic carbonate (measured as inorganic CO_2) was measured as well as the amount of base required to neutralize an acidified sample. A detailed description of the analysis used is included as an appendix.

KEY TO ABBREVIATIONS

MPA	Maximum potential acidity
PA(s)	Potential acidity for sulphur forms
NP	Neutralization potential
NP(s)	Neutralization potential for carbonates
NNP	Net neutralization potential
NNP(s)	Net neutralization potential for carbonates

MPA, NP and NNP are measures used in conventional acid-base accounting; PA(s), NP(s) and NNP(s) are measures used taking into account only reactive sulphur forms and carbonates as neutralizing agents.

BROWN-MCDADE ZONE SAMPLING PROGRAM

The sampling program at the Brown-McDade zone was designed to provide a representation of geological variability using the number of samples suggested for this size of deposit as recommended by the British Columbia Acid Mine Drainage Task Force. This approach to sampling will allow planning of waste rock disposal strategies, should these be required, based on recognizable lithological types.

Geological variability in the Brown-McDade zone results from:

- primary lithological variability;
- hydrothermal alteration; and
- recent deep bedrock weathering due to the lack of continental glaciation in the region.

To this end, eleven samples were analyzed to represent four distinct rock types (vein material, hydrothermally-altered granodiorite, hydrothermally altered feldspar porphyry dykes, and unaltered granodiorite), at depths of 3 to 28 metres below the surface (Figure 1, Table 1). Hydrothermal alteration for the most part is argillic in the altered granodiorite and dykes, and propylitic in the relatively unaltered granodiorite, therefore samples specific to lithology are also specific to alteration type.

ANALYTICAL WORK

Eleven previously-prepared rock pulps were submitted for ABA. Samples were analyzed for total sulphur, neutralization potential, paste pH, bromine and concentrated nitric acid leachable sulphide, weak hydrochloric acid leachable sulphate and inorganic CO_2.

RESULTS

Effect of Depth

Depth provides the strongest overall effect on sulphur geochemistry and therefore the potential for acid generation. Except in the case of the unaltered granodiorite, which is not intensely affected by the mineralizing fluids, total sulphur concentrations increase with depth. This trend is consistent with the deep supergene weathering processes which results in oxidation and leaching of metals and sulphur near the surface and subsequent re-precipitation at depth.

As a result, reactive sulphides should be virtually absent in the oxidised zone. This is readily apparent in the altered granodiorite and altered dykes; here sulphide sulphur concentrations are very low (less than equal to the detection limit of 0.01%) and total sulphur can be accounted for by sulphur in sulphate minerals (probably gypsum), given experimental errors at the low levels involved and the probable presence of resistant sulphates such as barite.

By comparison, neutralization potentials do not show a clear relationship with depth. This results from the probable presence of aluminum and iron hydroxides and silicates which may contribute to NP but are not simply related to the distance from surface. Inorganic CO_2 determinations are more reliable as these provide an indication of the concentration of calcium and magnesium carbonates. Generally, CO_2 concentrations are at or below detection limit, indicating that carbonates were consumed by acid generated naturally from the oxidation of sulphides near the surface. In isolated cases, excess carbonate apparently remains in the surface rocks even after all sulphide has been oxidized.

Paste pH provides an indication of the natural products of acidity liberated by water from the crushed rock. Where pH is greater than 8.0, the presence of hydrolysis or dissolution of minerals results in liberation of alkalinity (for example, carbonates and many silicates). Where pH is low, sulphide oxidation prior to sampling is indicated. Paste pH generally decreases with depth suggesting that the acidic products of sulphide oxidation have been removed by downward percolation of water, but at depth these still remain.

As a result of the natural oxidation of sulphides and the complexities of the NP determination, the conventional NNP is misleading and indicates uncertainty in prediction of realistic potential for acid generation (that is, NNP ~ 0) with depth. The determination of species indicates that rocks to the depth of the proposed pit are essentially inert (NNP≈0), due to the natural removal of reactive sulphides and the dissolution of carbonates. Potential for environmentally significant acid generation is negligible in near surface waste rocks. In some rocks, carbonate is present which may create an alkaline environment if it is in a reactive form (for example, fine grained, freshly-exposed surfaces).

Effect of Lithology and Hydrothermal Alteration Type

The effect of lithology is for the most part overprinted by the effect of depth, however gross trends are still evident. The greatest sulphur and sulphide content occurs in the vein material. In this case, sulphide sulphur is still present (though potentially in a massive, poorly reactive form) but NP and inorganic CO_2 are negligible leading to highly negative NNP and NNP(s) values. Natural oxidation may have proceeded to completion in the vein material but mining will produce fresh sulphide which shows a high potential to generate net acidity. Long term stockpiles of this material are potentially net acid generating.

Intermediate total sulphur contents are present in the unaltered (propylticaily-altered) granodiorite, and unoxidized sulphide, as well as sulphate, apparently remains. However, there is a good relationship between NP and NP(s) indicating that the primary neutralizing agent is calcite at concentrations of 1.1 to 3.2%. Based on two samples this material is net acid-consuming (NNP(s)>9).

Lowest sulphur contents are present in the altered granodiorite and dykes, though as described above, this material is strongly oxidised, and is essentially inert in the context of acid generation.

CONCLUSIONS

Based on the assumption that mining in the Brown-McDade zone does not take place below the strongly oxidized region, the following conclusions can be drawn regarding potential for acid generation in waste rock and ore stockpiles in the Brown-McDade Zone.

- Altered material (granodiorite and dyke) in the pit has negligible to undetectable sulphide content indicating a negligible potential to generate net acidity in ore or waste stockpiles, and pit walls. Excess acid neutralization potential, as carbonate in some samples indicates a potential to create a neutral to alkaline environment in the waste dumps and pit walls.

- Propylitically-altered granodiorite in the fault footwall has excess carbonate (NNP(s)>0) and is potentially acid consuming.

- Despite natural sulphide oxidation, vein material contains unoxidized sulphide which could potentially generate acid in stockpiles when fresh mineral surfaces are exposed during blasting.

SJD/sip

TABLE 1

BYG NATURAL RESOURCES - MT. NANSEN PROJECT

BROWN-MCDADE ZONE ACID-BASE ACCOUNTING RESULTS

DDH (m)	INTERVAL APPROX. DEPTH (m)	ORIGINAL SAMPLE NUMBER	TOTAL SULPHUR (%)	PASTE pH	MPA[1]	NP[2]	NNP[3]	INORGANIC CO_2 (%)	HCl SOLUBLE SULPHATE (%)	SULPHUR AS SULPHATE (%)	HNO3 SOLUBLE SULPHIDE (%)	NP(S)[4]	MPA(S)[5]	NNP(S)[6]
					(kg $CaCO_3$/t of rock)							(kg CaCO3/tonne of rock)		
Altered Granodiorite														
88-68	10.06	T-2755	0.028	8.6	1	7	6	0.2	0.05	0.02	0.01	4.5	0.31	4
88-68	24.38	T-2768	0.063	8.1	2	8	6	0.2	0.21	0.07	0.01	4.5	0.31	4
88-61	36.58	T-0217	0.112	8.2	4	54	51	4.4	0.09	0.03	0.01	100.0	0.31	100
Feldspar Porphyry Dykes														
88-55	4.27	T-0284	0.299	8.7	9	59	50	4.1	0.01	0.00	0.02	93.2	0.63	93
88-55	27.74	T-0207	0.508	4.2	16	1	-15	0.2	1.63	0.54	0.01	4.5	0.31	4
88-55	41.76	S-01192	0.542	4.1	17	-6	-23	0.2	1.65	0.55	0.01	4.5	0.31	4
Unaltered Granodiorite														
88-60	23.40	S-01334	1.350	7.9	42	32	-10	1.4	1.57	0.52	0.42	31.8	13.13	19
88-66	30.48	S-01826	0.302	8.1	9	17	8	0.5	0.89	0.30	0.07	11.4	2.19	9
Vein														
88-54A	6.10	S-01159	0.033	6.4	1	-3	-4	0.2	0.15	0.05	0.01	4.5	0.31	4
88-54A	21.34	S-01177	2.770	5.6	87	4	-83	0.3	3.58	1.19	1.05	6.8	32.81	-26
88-55	37.19	S-01188	14.600	3.0	456	-7	-463	0.2	2.45	0.82	13.08	4.5	408.75	-404

NOTES:

MPA = maximum potential acidity
NP = neutralization potential
NNP = net neutralization potential
MPA(s) = maximum potential acidity from sulphide
NP(s) = neutralization potential from CO2
NNP(s) = net neutralization potential from NP(s) and MPA(s)

APPENDIX "C"

Fisheries Survey - Sept. 8, 1989 - Norecol Report

BYG MOUNT NANSEN FISHERIES AND HYDROLOGY TRIP REPORT August 21 to 22, 1989

OBJECTIVES

- To evaluate the fisheries resources in Nansen and Victoria creeks and the Nisling River.
- To measure stream flow in Dome and Victoria creeks.
- To flag drill sites for groundwater tests in the potential tailings area on Dome Creek.

SUMMARY

All objectives were met except fisheries work on the Nisling River could not be conducted due to lack of access. Victoria and Nansen creeks both contain moderate densities of Arctic grayling and both have moderate to good habitat potential, although the overall potential of Victoria Creek may be diminished by high sediment loads from placer mining. Seasonal use by other species needs to be studied. Fish sampling sites are shown on the attached figure and fish specimens are listed in Table 1.

TRIP DETAILS

August 21

Goff Longworth flew to Whitehorse by Canadian Airlines arriving at 1100 h. Rented a 4 x 4 pickup truck from Norcan Rentals and picked up the fisheries equipment from the Canadian Airlines air freight office.

Drove to Carmacks and checked into the Carmacks Hotel. Drove to the Mount Nansen project area arriving at 1530 h.

Two sites were flagged for groundwater test drilling on Dome Creek just upstream of the existing road to the old mill site.

Stream flow on Dome Creek was measured at 0.017 m^3/s using a pygmy gurley meter.

Electroshocked Dome Creek for about 100 m and 364s downstream of the camp access road (Site F1). No fish were captured in moderate to good fish habitat suggesting Dome Creek does not contain fish.

Between 1700 h and 1845 h attempted to find road access to the Nisling River, but was unsuccessful.

Set a 2 inch stretch mesh gill net and two gee (minnow traps) baited with roe in Victoria Creek about 100 m upstream of main road ford (Site F2) at 1850 h.

August 22

Telephoned Bruce Ott at Norecol to discuss lack of access to the Nisling River. It was decided to conduct fish sampling on accessible portions of Nansen and Victoria creeks, but for safety reasons (working alone) hiking a long distance to the Nisling was not advisable.

Stopped in at the Yukon Lands and Forest Service at 0800 h to discuss road access to the Nisling River. I was told that the road down to the river is a winter trail only and is impassible other than during the winter.

Retrieved the gill net and gee traps from Victoria Creek at 0940 h. Captured one Arctic grayling 264 mm in length in the gill net. Water temperature was 8.0°C at this site and water was very turbid from upstream placer mining activity.

Electroshocked Site F2 on Victoria Creek for 583s and captured 7 Arctic grayling ranging in size from 139 mm to 171 mm. The high sediment load made shocking difficult, but fish densities appeared moderate, which is surprising given the high sediment load.

Measured stream flow on Victoria Creek at the staff gauge. The measured flow with a pygmy gurley was 0.248 m^3/s and the staff gauge read 0.335 m.

Victoria Creek has moderate to good fish habitat capabilities, but may be limited to some extent by placer activity. The channel is about 6 m wide, with a wetted width of 5 m; pool-riffle-glide sequences are well established; gradient is about 1%; pools are numerous to 1 m deep; substrate is mostly gravel which is highly sedimented from placer activity (reduction of spawning potential); willow provide about 5% cover to the stream; bars up to 5 m wide are numerous; cut banks, overhang and pools provide most fish cover.

Electroshocked Nansen Creek about 1 km upstream of Webber Creek (Site F3) for 479s and captured 8 Arctic grayling ranging in size from 72 mm to 172 mm. The stream in this area is only slightly turbid and appears to support spawning and rearing of Arctic grayling. The fish habitat characteristics are similar to Victoria Creek, except there is more side channeling and gravels are more suitable for spawning.

Electroshocked Victoria Creek downstream of the road ford (Site F4) for 685s and captured 8 Arctic grayling ranging in size from 134 mm to 187 mm.

Returned to Whitehorse and sent freight by Canadian Freightways. Stayed overnight in Whitehorse and conducted water quality and hydrology work at Windy Craggy before returning to Vancouver on August 24.

GRL/sip

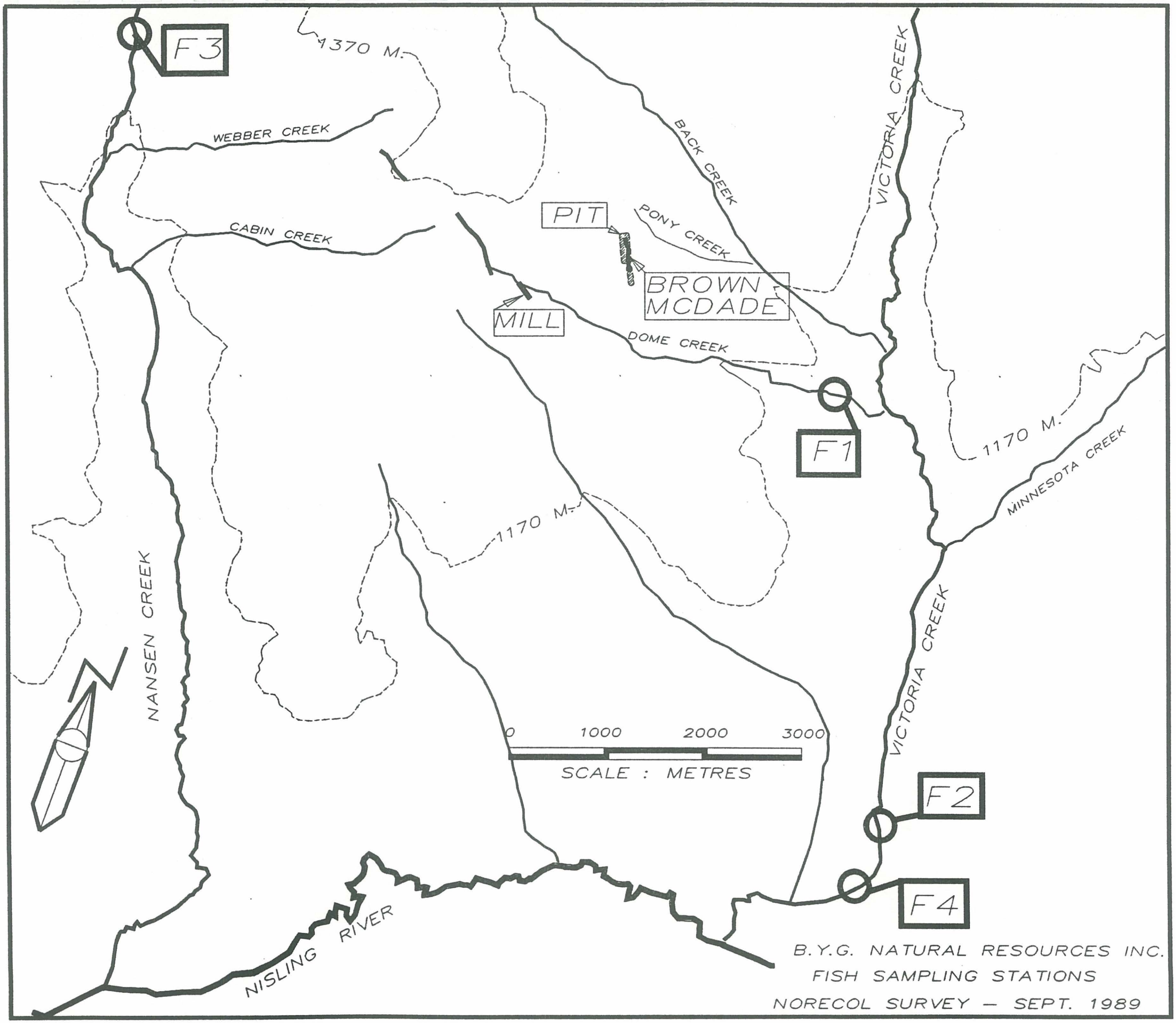
Norecol

TABLE 1

FISH SPECIMENS CAPTURED AT THE
MOUNT NANSEN PROJECT
AUGUST 21 TO 22, 1989

SITE	SPECIES	LENGTH (mm)	WEIGHT (g)	GEAR[1]	DURATION
F2	Arctic grayling	264	172.0	GN(2") GT(2)	15 h
F2	Arctic grayling	169	40.4	ES	583s
		155	37.2		
		153	31.8		
		139	23.0		
		137	21.4		
		165	39.9		
		171	41.3		
F3	Arctic grayling	145		ES	479s
		133			
		150			
		132			
		158			
		139			
		72			
		172			
F4	Arctic grayling	187		ES	685s
		145			
		167			
		156			
		158			
		139			
		183			
		134			

1 ES - Electroshocker
GN - gill net (2 inch)
GT - gee traps (No. of traps)



B.Y.G. NATURAL RESOURCES INC.
FISH SAMPLING STATIONS
NORECOL SURVEY – SEPT. 1989

APPENDIX "D"

Manpower Forecast

Mount Nansen Project

BYG RESOURCES – MOUNT NANSEN PROJECT

MANPOWER PROJECTION – MINING OF BROWN–MCDADE OXIDE ZONE

	YEAR 1	YEAR 2	YEAR 3	YEAR 4
	CONSTRUCTION			
OPEN PIT MINING CREW				
– DRILL & RIP		4	4	4
– LOADER		2	2	2
– TRUCK HAUL		4	4	4
– MECHANICS		3	3	3
– FOREMEN		2	2	2
MILLING CREW				
– OPERATORS		12	12	12
– LABOURERS		2	2	2
– TRADESMEN		4	4	4
– TECHNICIANS		3	3	3
– FOREMEN		2	2	2
PLANT SUPPORT				
– MINING TECHNICIANS	3	4	4	4
– ADMINSTRATION	2	2	2	2
– PLANT LABOUR	2	2	2	2
– PLANT TRADES	1	1	1	1
– MANAGEMENT	2	2	2	2
CONSTRUCTION LABOUR	25			
TOTAL WORKFORCE	35	49	49	49