



#592

## YEAR END REPORT

### MEADOWBANK PROJECT

## Introduction

The Meadowbank Gold project is located 70 km north of the Hamlet of Baker Lake, Nunavut. The project includes four gold deposits hosted in magnetite rich iron formations. Resource calculations completed in early 1999 by independent mining engineers, MRDI Canada, outlined 1.73 million ounces gold (cut) of which 70% falls within the measured and indicated classifications. Resource classification is supported by 364 diamond drill holes.

Exploration since 1995 has included over 50,000 m of definition and exploratory drilling. Project expenditures have exceeded \$13 million during this time, and include \$3.2 million expended in 1999, making the project one of the largest exploration initiatives in Canada.

Pre-feasibility continued across 1999 to identify mining, metallurgical, and infrastructure parameters necessary to support economic production at Meadowbank. Currently the company is studying the economics of combined open pit and underground production at the site using winter road access and rotating staff on a bi-weekly basis. These studies are expected to be completed in 2000.

## Drilling and Trenching Programs

The 1999 exploration program incorporated 5,999 meters of diamond drilling completed by Boart Longyear of Saskatoon. Most of the 61 drill holes were collared on the ice and were directed at portions of the ore zones located beneath Third Portage Lake. The program should result in increased tonnage and grade for several of the deposits and improved classification of ore.

In early August the company received approval from N.I.R.B., N.W.B. and the K.I.A. to commence with a planned surface excavation program to expose the ore-zone at the Third Portage deposit. Six trenches were excavated successfully exposing the ore zones, and of those six, four were successfully cleaned and sampled. Total surface disturbance including trenching, waste piles and vehicle disturbance was 15,216 m<sup>2</sup>. Results will include improved classification of ore reserves and the ability to access bulk sample material necessary for feasibility studies. Completion of an additional 3 trenches is proposed for 2000.

## Camp Facilities

Improvements to the camp facilities included installation of bulk fuel systems, upgrading of fuel transportation systems and installation of a large incinerator. The 5 double-walled fuel vaults were installed to secure bulk storage of diesel fuel with minimal ground disturbance. Three are in use with an additional two on standby for extra safety. Westeel "Tidy Tanks", offering safer and more secure containment, are now being used for on-site fuel distribution. Fuel is being transported from Baker Lake via a bulk tanker locally owned and operated by Peters Expediting of Baker Lake. The winter haulage route has been successfully used without incident over the past five years. The above systems have been implemented to further reduce environmental risk.

No additional buildings were constructed during 1999.

## Safety

The Meadowbank project achieved a remarkable safety record in 1999 with incidents limited to minor cuts and bruises treated by on-site first aid attendants. Considering increased use of heavy equipment during the year the company is very proud of the safety performance.

One fuel spill of less than 5 liters resulted from a single barrel tipping over during the spring thaw and was quickly cleaned up.

## Local Employment and Training

Eight employees from Baker Lake supplemented project staff with a total of eleven local personnel including contractors. Duties ranged from cook's helper to survey technicians and heavy equipment operators. Local training programs included Transportation of Dangerous Goods courses completed by staff from Peters Expediting and Cumberland Resources.

## Environmental Programs

### *Previous Environmental Studies*

**1996** – Preliminary aquatic baseline study

**1997** – Aquatic baseline studies for water and sediment quality, and lower trophic level populations

**1998** – Reconnaissance survey for hydrology studies, aquatic baseline studies for water and sediment quality, and low trophic level populations, review of wildlife literature, collection of traditional use information, reconnaissance for waste characterization studies

### **1999 Field Season**

Work continued on the collection of baseline data necessary for an environmental assessment. Studies were completed in hydrology, aquatic ecology, fisheries, vegetation, wildlife, acid rock drainage and archaeology. Continuous atmospheric monitoring and upgrading of measurements to include snowfall and thermal radiation was also completed.

### **Hydrology**

Nunavut Environmental Ltd. and Agra Earth and Environmental undertook snow level surveys at the Meadowbank Property between May 3 and 11, 1999 to accumulate seasonal snow level data. Water level data was collected in July and September, as part of other aquatic studies, to be used for future water balance analysis.

### **Water Quality and Aquatic Ecology**

Nunavut Environmental Ltd. and EVS Environment Consultants undertook limited aquatic ecology studies between June 28 and July 21, 1999 to collect additional baseline and seasonal data from lower trophic level populations, including zooplankton and benthos. Samples were collected at nine stations in both study and reference lakes and have been archived for future analysis.

In August, a water quality monitoring program was developed as part of the trenching program in the event that active discharge became necessary from the associated sump. The program followed amendments to the Water Board permit and a site visit by the Department of Fisheries and Oceans. No active discharge occurred.

### **Fisheries**

Nunavut Environmental Ltd. and EVS Environment Consultants conducted fisheries studies between June 28 and July 21, 1999 to acquire important spring fisheries baseline data, including fish population and tagging information. Minnow traps and mesh gill nets were used to collect fish from areas potentially affected by the development and from nearby reference lakes (Third Portage, Second Portage, Tehek Lake, John Lake and Inuggugayualik Lake). This data provided information on species composition and early life history. Additional limited sampling of fish tissue, stomach contents and otoliths were archived for future analysis. Fish tagging facilitated monitoring of growth and movement.

### **Vegetation**

Nunavut Environmental Ltd. and Outcrop undertook reconnaissance vegetation studies between August 13 and 16, 1999 to investigate typical vegetation communities in the area around the mine site. A ground reconnaissance was completed of the local study area, including Third Portage, the island around the camp, the proposed plant site and the peninsula to the southeast of the proposed airstrip. An aerial reconnaissance included the northwest end of Third Portage Lake and the adjacent mainland, the southern peninsula and islands to the south of the deposit area. Four phenology plots were established southeast of the camp to facilitate long-term monitoring of plants. A local employee assisted in these surveys.

### **Wildlife**

Nunavut Environmental Ltd. conducted baseline wildlife studies between May 24 and June 4, 1999 to begin gathering seasonal baseline data for wildlife within the local and regional area. The studies included a summary and review of the 1996 – 1998 wildlife logs available from the camp, surveys at the height of land in the local area, aerial reconnaissance within the regional area and waypoint surveys at significant or interesting wildlife areas. Nine species of mammals and seventeen species of birds were confirmed to utilize the area in and around the Meadowbank property.

### **Acid Rock Drainage**

Nunavut Environmental Ltd. and Watermark Consulting Inc. undertook limited analyses in 1999 to further quantify and characterize acid rock drainage issues and open pit design in the event that full-scale mining takes place.

### **Traditional Use/Archaeology**

Nunavut Environmental Ltd. and Webster Heritage Consulting completed a baseline archaeology field program between July 21 and 28, 1999 to begin surveys of archaeological and traditional use sites around the mine site and the winter road. No historical sites have been located within the mine area. One traditional use area has been located near the south end of the winter road.

### **Public Meetings**

Two meetings were held in Baker Lake in 1999. The first, in the Town Hall, included the mayor, councilors, H.T.O. representation, K.I.A. representation and members of the general public. The second, held in the Igloo Hotel included Nunavut's MLAs. A trip to the mine site was attended by Premier Paul Okalik and Ministers Jack Anawak, Peter Kilabuk and Kelvin Ng. The objectives of these meetings were to update the public on the mine development, discuss public and governmental concerns and to promote good relations.

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