

**Newfoundland Branch Canadian Institute of Mining
Annual Meeting
Oct. 31-Nov.1, 2003
St. John's, Newfoundland and Labrador**

Dimension Stone Session Program

Friday Morning, Oct. 31, 2003

*Session Chair: Mr. Kirk Tilley, Dept. of Industry, Trade and Rural
Development*

9:00 *Welcome*

9:10 ***The Newfoundland and Labrador Dimension Stone Industry***
Speaker: D.T.W. Evans

9:30 ***Stone Trends 2003***
Speaker: Vincent Marazita

10:30 *Coffee*

10:45 ***Torngait Ujaganniavingit Corporation***
Speaker: Fred Hall

11:15 ***Geological Parameters of Potential Dimension Stone Quarries***
Speaker: Sherry Dunsworth and Jamie Meyer*

The Newfoundland and Labrador Dimension Stone Industry

D.T.W. Evans

Dimension Stone Sector Specialist, Dept. of Industry, Trade and Rural Development

Dimension Stone is any naturally occurring stone which is shaped either manually or mechanically for a specified purpose.

The emerging Newfoundland and Labrador dimension stone industry has excellent growth potential. Our stone products are widely recognized for both uniqueness and exceptional quality. The province has three dimension stone producers and two landscaping stone operations. Newfoundland and Labrador stone is exported to national and international markets and used in a growing local market.

There are tremendous opportunities for the Newfoundland and Labrador dimension stone industry. The province is successfully producing and exporting high-end/high-quality stone products from remote areas. The province has a tremendous, largely unknown, stone resource. However, the industry faces many challenges including: identifying and developing new sources of stone, attracting investment, developing infrastructure, gaining international awareness and recognition of the province's stone products and recognizing new opportunities by undertaking market intelligence. It is the role of the Dimension Stone Sector Specialist to work with industry and government personnel to address these issues and develop initiatives and strategies to help grow the industry.

Dave Evans M.Sc. P.Geo.

Dave Evans is the Dimension Stone Sector Specialist with the Dept. of Industry, Trade and Rural Development. Dave is a graduate of Memorial University with an M.Sc. in Economic Geology. He has over 20 years experience and worked previously as a project geologist with the Dept. of Mines and Energy. Dave has worked extensively throughout the province completing deposit level studies of gold and base metal mineralization, regional geological mapping, and he has authored numerous publications and maps. In 2001, he joined the Dept. of Industry, Trade and Rural Development as a sector specialist responsible for implementing a provincial dimension stone strategy. Dave is member of the Association of Professional Engineers and Geoscientists of Newfoundland and Labrador and the Newfoundland Branch of the Canadian Institute of Mining.

STONE TRENDS 2003

Vincent Marazita
Owner, Marazita and Associates

Vince Marazita, the National Education Director of the Marble Institute of America and International Stone Industry Speaker, will present a statistical overview of the main market segments in the Natural Stone Industry around the world, with emphasis on the stone market in North America. During this seminar, the main supplying countries will be identified as well as the principal channels of distribution in North America.

Mr. Marazita will provide a global look at new trends in materials, standards, delivery, design and marketing of Natural Stone Materials. This presentation will have a look at understanding today's international block market, identify new competitors and point to some interesting opportunities for stone producers who are interested in exploring new markets.

Finally, Mr. Marazita will point out a new MEGA-TREND in the Materials & Construction Industry: Educational Marketing to the DESIGN PROFESSIONALS. If you'd like to become a recognized industry educator, you won't want to miss this special marketing section!! Come and learn about the various education programs of the AIA, CSI, NKBA, ASID and how you can become an "education provider". Over the past 10 years, this approach to marketing has become one of the best relationship management tools on the market.

Vincent Marazita

Vincent Marazita is a frequent speaker at stone industry gatherings and a contributing editor for Stone Magazine. He has been involved in the natural stone industry for more than two decades. After graduating from Harvard University in 1981, he spent five years at the University of Genoa in Italy as an architecture student, English lecturer, and translator/interpreter for architectural texts and conferences. During his 12 years as a Senior Trade Analyst with the Italian Trade Commission in Los Angeles he developed and implemented promotional campaigns for the natural stone industry. Most recently, Marazita has provided integrated marketing and sales services to clients in the natural stone and other fields through Marazita & Associates of Canoga Park, CA. Mr. Marazita is a member of the CSI (Construction Specifications Institute) and the MIA (Marble Institute of America).

In 2002 Mr. Marazita was appointed Education Director for the Marble Institute of America, Inc. (MIA), a key staff position at the international trade association serving the natural stone industry. As Education Director Mr. Marazita coordinates the MIA Seminar programs – including the Cornerstone Forum Seminar Program presented at StonExpo, the industry's annual trade show – and expanded educational programming for architects and construction specifiers on the use of natural stone. He is also responsible for revising and maintaining MIA Technical Modules, writing a monthly column for MIA's *Through The Ages* newsletter, and overseeing other education-related activities in which MIA may become involved.

Torngait Ujaganniavingit Corporation

Fred Hall

Managing Director, Labrador Inuit Development Corporation

Torngait Ujaganniavingit Corporation (TUC), which is involved in the production of dimension stone, is 100% owned by LIDC, with revenues of approximately \$3.6 million and assets valued in excess of \$13 million. TUC was set up in 1990 and commenced dimension stone production at its Ten Mile Bay quarry in 1992. The Ten Mile Bay quarry has completed its 10th full year of operation. During the 1994 operating year, more than 500 cubic metres (m³) of trimmed, salable block were produced, and since then, production has steadily increased to its current production rate of 1000 cubic metres per operation year. Work crews and supervisors are well trained and experienced by virtue of the past ten years of development and operation and, during that time, practical experience has also been developed in equipment procurement, equipment maintenance and logistics. The extracted raw stone is shipped to Italy and then sold to various processing plants all over the world. In 2001 a second quarry was developed at Iggiak Bay, Labrador approximately 40 kilometres from Nain. This quarry produced similar material to that quarried at Ten Mile Bay. The Iggiak stone, however is a different colour, brownish granite with multi-coloured crystals while at Ten Mile Bay the stone is grey with dark blue crystals. In 2002, two hundred and fifty blocks were quarried at the Iggiak Bay site but only 60 were shipped to Italy.

The 2002 season production was down due to veins at the Ten Mile quarry and cracks at the Iggiak quarry. Total production at Ten Mile Bay was approximately 800 cubic metres.

The ongoing success of the Ten Mile Bay quarry has led to the development of four additional projects, employing a total of 110 people in quarrying, manufacturing, construction, marine, catering services and marketing. Those new projects are listed below.

Tunnet Inc.

The LIDC is the majority owner of Tunnet Inc. a North American marketing company headquartered in Nain, Labrador. The mandate of this company is to market, the various TUC supplied dimension stone throughout the world.

Hopedale Stone Processing Plant

The LIDC has constructed a 6200 sq.ft. Stone processing plant in the town of Hopedale, Labrador and commenced production in September, 2002. The plant uses 2nd choice blocks of rock from the Ten Mile Bay and Iggiak quarries to process stone slabs for the furniture market. The plant will employ 8-10 workers on a full-time seasonal basis. This year over 70 headstones and 30 table tops were cut and polished.

Ten Mile Bay North Shore Processing Plant

The LIDC has constructed a 3200 sq.ft. Stone processing plant at Ten Mile Bay, Labrador and commenced production in September, 2001. The plant uses 2nd choice blocks from Ten Mile and Iggiak quarries to process unpolished stone strips for the tile and countertop markets. The plant employs 8-10 full-time workers on a seasonal basis. This year approximately 4500 sq. metres of strips were produced.

Iggiak

LIDC owns 100% of the Iggiak quarry, which is approximately 40 kilometres from Nain. We project to produce 500 cubic metres of stone at the Iggiak quarry per year.

Fred Hall

Fred Hall was born in Chicago, Illinois in 1947, he immigrated to Canada in 1974 and worked for the school board at Springdale, Newfoundland for three years as a Language Arts Consultant. In 1977 he moved to Makkovik on the north coast of Labrador where he was principal for seven years of an all-grade school.

Between 1984 and 1988 he worked as both Special Assistant to the President and Executive Director of the Labrador Inuit Association (LIA). Responsibilities while with the LIA were mainly focused on social programs, such as those dealing with education, health and housing.

In 1988, he moved from a career in social development into the area of economic development when he became Managing Director of the Labrador Inuit Development Corporation (LIDC). In his position, the corporation has formed, and presently operates nine subsidiary companies, that employ approximately 500 people. Mr. Hall is Vice-President of Nasittuq, a director of Pikalugak Fisheries and Chairman of Torngait Services Inc.

Geological Parameters of Potential Dimension Stone Quarries

Sherry Dunsworth* and Jamie Meyer
Meyer Dunsworth Geological Consulting

There is a huge global market for dimension stone - but it is fiercely competitive. The largest consumer of dimension stone is the United States, with their imports dominated by stone from Brazil, Italy, India, China, and Spain. The largest market segment of this industry is currently for counter-tops, typically granite. This market requires large gangsaw blocks that are cut into slabs ($\geq 60 \text{ cm} \times \geq 240 \text{ cm}$ per slab) to yield 2 counter-tops and matching back splashes per slab.

Exploration for dimension stone quarries requires a rigorous geological evaluation to be carried out concurrent with a market evaluation. The stone must be of suitable quality and have a unique appeal to compete in the international market place in an economical price range. Failure to follow this approach puts private and/or public investors at financial risk

The consistency of the visual and esthetic features (i.e. color, tone, textures and grain size) of the stone are of primary importance. The jointing and fracture densities and patterns, as well as potential stone flaws (i.e. xenoliths, sporadic banding and veining structures, unusual mineral clusters or gas

cavities etc.) are determined during detailed mapping and diamond core drilling. An understanding of the stone's technical features, including mineralogy, petrology, and physical-mechanical properties, determines the suitability of a stone for specific applications.

A stable, even if limited, supply of suitable-sized, uniform block material is critical for maintaining confidence in the marketplace. The development of a dimension stone quarry, like any other successful business venture, requires careful planning, scientific analysis, and ongoing economic and market evaluation. The exploration and evaluation of dimension stone prospects is as difficult a task as looking for base metal deposits, and the marketing is subject to highly demanding and ever changing market trends.

Sherry Dunsworth, MSc, PGeo

Sherry Dunsworth is a structural geologist with over 25 years of experience, working extensively in dimension stone as well as base metals. Sherry has carried out resource evaluation (including prospecting, drilling, reserve calculations and quarry development) of 'black granite' in Central Newfoundland over the last 7 years. She has traveled the world as a granite block buyer for a Newfoundland-based granite fabricator, and worked intimately with their salespeople in determining the selection of materials.

Jamie Meyer, BSc, PGeo

Jamie Meyer carried out industrial mineral studies for the government of Newfoundland and Labrador for 14 years. In the past 8 years Jamie has prospected for unique dimension stone properties, and he opened a small stone fabrication shop under the name of Meyer's Minerals. Meyer Dunsworth Geological Consulting carries out industrial mineral, base metal and precious metal consulting work.