Alistair MacDonald

From: David Swisher [dswisher@centurymining.com]
Sent: Friday, July 28, 2006 1:29 PM
To: starlingw@inac.gc.ca
Cc: dswisher@centurymining.com; Alistair MacDonald
Subject: TAM response to comments 6-21-06

Wayne,

Please see response document and supporting attachments to comments you submitted to the Mackenzie Valley Land and Water Board June, 21st. I hope this will serve to alleviate any concerns you may have concerning our advanced exploration project.

If you have any further questions or comments, please don't hesitate to call me.

Thank you,

David Swisher

Tamerlane Ventures Inc.
Senior Project Manager
360.332.4653

Tamerlane
VENTURES INC.

July 28, 2006

Wayne B. Starling
Water Resources Officer
Indian and Northern Affairs Canada
Fort Smith Sub-District
P.O. Box 658
Fort Smith, NT
X0E 0P0

RE: Response to MVLWB comments June 21, 2006
Tamerlane Ventures Inc. – Water License MV2006L2-0003

Dear Wayne,

Thank you for the comments you submitted to the Mackenzie Valley Land and Water Board June 21st. I would like to take the opportunity to respond to your comments in hopes of alleviating your concerns.

2.8.1 Waste Rock Storage

Q1. The waste rock should be dry when it reaches the surface, so if it is covered there should be no reason to line the facility as there will not be any drainage.

R1. Although we will be freezing a perimeter around the main deposit that will also encompass all underground workings, we anticipate there will still be residual moisture in the ground creating a moist or wet product. Tamerlane Ventures wants to ensure that if this is the case, we will capture any seepage from the moist material and introduce into the DMS circuit.

2.8.2 DMS Discharge

Q2. The report does not describe the form in which the DMS Discharge will exist – Solid, Liquid, Slurry, etc. Water usage in this circuit is projected to be 293 million litres, or about 800 cubic meters per day, so the numbers would suggest a slurry – or at least significant moisture content. What volume are we looking at here, and if this "Seepage" is going to be discharged to the Infiltration Basin there is really no difference than just having it soak into the ground right there? Additional details are required to assess the handling and potential treatment of this waste.

R2. Tamerlane Ventures Inc. has obtained an independent contractor, Mr. Godfrey McDonald, to conduct detailed analysis of the R-190 deposit ores to maximize

recovery for a direct shipped product while eliminating solids to allow a clean water discharge into the infiltration basin. Testing is currently in progress. Please see attached testing proposal "CMS R190 test outline" and CV "GM CV" submitted by Godfrey McDonald.

Tamerlane Ventures Inc. is committed to the highest level of Environmental, Health and Safety (EHS) standards. It is our intention not to allow seepage anywhere in the facility that could create slip/trip or fall hazards but to account for and manage any seepage from the DMS circuit.

2.9.2 Water Balance

Q3. Well water through most of that area is high in sulphides and not suitable for potable use unless distilled or treated with reverse osmosis etc. – and even then is poor.

R3. As outlined in this section of the Project Description Report, potable water will be supplied by either an approved and tested on-site well or an external supplier.

Q4. Will waste discharged from the DMS circuit be filtered / clarified, or contain high volumes of suspended solids?

R4. In addition to **R2**, we anticipate the use of a filter press to capture the remaining fines in the circuit before discharge into the infiltration basin.

Q5. Surface sketches did not show the infiltration basin.

R5. Please refer to figure 1.4-1 of the Project Description Report. The proposed Infiltration Basin is an exhausted rock quarry located ~400 meters southeast from the R-190 deposit or N 6734000, E 602800.

2.9.3 Water Releases

Q6. What assurance do we have to support Tamerlane's claim that water released from the Infiltration Basin will meet MVLWB criteria.

R6. Tamerlane will comply with the water license criteria for recycling, treatment (if necessary) discharge to ground/groundwater and monitoring/testing. Tamerlane intends to regularly test all discharge into the infiltration basin.

2.9.3 Explosive Storage

Q7. The section does not suggest what type of explosives will be utilized. If it is a "fertilizer" mixture we have seen elevated levels of nitrates downstream in the process. This may or may not be a concern depending on where the waste water eventually ends up.

R7. Tamerlane is still exploring the economics of using either Emulsion or ANFO. Tamerlane intends to monitor all underground water discharged to the Infiltration Basin during the life of the project. There are no surface streams or lakes in the

immediate project area. Existing groundwater quality is strongly influenced by local geological conditions including sulfurous springs and salts-enriched hard water.

5.2 Groundwater Effects

Q8. Blast impacted water fed through the recovery process is ultimately destined for the Infiltration Basin i.e. soaking into the ground. As noted above, elevated levels of nitrates (particularly ammonia), have been observed in waste water at other projects when certain types and mixtures of explosive are used. Monitoring of the aquifer is not an acceptable technique for determining whether or not corrective action is required – but will be necessary to measure whether or not impacts have occurred.

R8. As referenced in **R7**, Tamerlane intends to monitor all underground water discharged to the infiltration Basin during the life of the project. The potential introduction of nitrates into the relatively poor quality (non potable) groundwater found in the project area is not expected to pose an environmental concern.

General Comments

Q9. Nervous about the freeze wall in that the frozen wall may not fully develop and / or may not act as an impermeable barrier.

R9. Freezing technology is proven throughout North America. Tamerlane is currently consulting with Layne Christianson Company (www.groundfreezing.com), which have 16 proven freeze projects and Thyssen Mining which has utilized freezing to sink ~80 shafts. In addition, Thyssen Mining successfully used freezing in 1985 to raisebore a ventilation shaft at the Y-65N deposit. Please see attached file "Thyssen experience at Pine Point".

Q10. Concerned that a failure of the freeze wall during production could become catastrophic.

R10. Tamerlane is currently designing the underground operations to account for minimal impacts to the freeze curtain. In addition, Tamerlane is sizing pumping capacity to allow for unexpected water inflows due to catastrophic failures. Please see attached "TAM dewatering plan".

Should you have any questions concerning Tamerlane's responses, please do not hesitate to contact me.

Sincerely,

David Swisher
Tamerlane Ventures Inc.
Senior Project Manager
(360) 332-4653

CONFIDENTIAL METALLURGICAL SERVICES
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TAMERLANE VENTURES INC.

PINE POINT PROJECT

METALLURGICAL PROCESSING

The **R190 mineral deposit** in the Pine Point Project is a Mississippi Valley Type geological deposit that was formed by epigenetic solutions of lead and zinc sulphides filling open-space cavity and local replacement of internal sediments in carbonate strata. The sulphides have a specific gravity range of 4.0 to 7.5 and the carbonate strata has a specific gravity of 2.7. This significant difference in specific gravity and the zoned deposition of the sulphide mineralization in the carbonate (limestone and dolomite) host rock will be taken advantage of to affect a separation and produce a "Direct Shipment Ore" (DSO) for subsequent selective flotation/milling and smelting of the resultant concentrates; this additional processing will be done at an offsite domestic or foreign location(s).

Preliminary laboratory Dense Media Separation (DMS) testwork has indicated that run-of-mine (ROM) ore could be significantly upgraded to the mid/upper-forty percent range. To improve the overall mineral recovery, laboratory testwork will be done to determine how the pre-screened, -28 mesh screen fraction (range from 10 to 18% of the crushed ROM ore) can be processed so it can also be upgraded and then combined with the DMS "Sink" product for shipment from the site as DSO.

The deposits are located in an area that already has some very necessary infrastructure for a developing mine project. There is electric power, a highway to a railway and two, towns (Hay River and Fort Resolution) in the vicinity which can accommodate the employees, all available to this project.

The DMS process which is proven and conventional technology that includes the following operating stages: first, the ROM ore has to be coarse crushed so there is maximum release (liberation) of the host rock from virtually all of the mineralization. The crushed ore is pre-screened to remove the -28 mesh fines which could contaminate the dense media and thereby increase dense media losses as well as modify the DMS feed, slurry viscosity which will directly affect the specific gravity separation. The +28 mesh screen fraction is mixed with the dense media (ferrosilicon) to a cut-point specific gravity of 2.75 to 2.95 and then pumped to a DMS cyclone. In the cyclone the mineral particles (free and middling with the host rock) which are heavier than the cut-point specific gravity are recovered from the cyclone in the underflow as the "Sink" product and the host rock with minimal sulphides reports to the cyclone overflow as the "Float"

reject product. The dense media and water are recovered in the product (Sink and Float) dewatering screen underflows. The recovered ferrosilicon is recycled to the DMS separation circuit after it's specific gravity has been corrected to the cut-point setting.

The -28 mesh screen fines will be dewatered for direct shipment as part of the DSO or post-treated by gravity separation or flotation to upgrade the -38 mesh fines for subsequent shipment as part of the DSO. The -38 mesh post-treatment fines, tailings will be thickened and mixed with cement and DMS "Float" reject for deposition as backfill in the underground mined-out areas.

The goal of the testwork is to produce a Direct Shipment Ore that has a combined grade of +45 %.

Proposed Process Development Testwork to attain this goal will be done on diamond-drill core increments that represent the main mineralized, lower zone:

Process Concept No. 1, **Single Stage DMS only**:
The ROM ore will be crushed to -5/8 inch; pre-screened at 28 mesh to remove the fines which will be weighed and assayed. The +28 mesh screen fraction will be subjected to a DMS separation at a specific gravity of 2.95. The "Sink" product and the "Float" reject will be weighed and assayed. A metallurgical balance will be calculated for the test. The Direct Shipment Ore will comprise the "Sink" product and the -28 mesh pre-screen fines. The final deposition of the "Float" reject will be underground as backfill.

Process Concept No. 2, **Double Stage DMS only**:
The ROM ore will be crushed to -5/8 inch; pre-screened at 28 mesh to remove the fines (-28 mesh) which will be weighed and assayed. The +28 mesh screen fraction will be subjected to a DMS separation at a specific gravity of 2.95. The "Sink" product and the "Float" reject will be weighed and assayed. This "Float" reject will be re-crushed to -1/4 inch; re-screened on 28 mesh screen. The -28 mesh re-screen fines will be weighed and assay for the metallurgical balance. Fines from the -28 mesh re-screen will be combined with the coarse crush pre-screen fines. The +28 mesh re-screen fraction will be subjected to a second, DMS separation at a specific gravity of 2.75. The "Sink" product and the "Float" reject will be weighed and assayed. The DSO will comprise the two "Sink" products and the combines -28 mesh screen fines. The final deposition of the "Float" reject will be underground as backfill.

Process Concept No.3, **Single Stage DMS and Flotation of the -28 mesh Pre-Screen Fines**:
The Single Stage DMS test will be the same a Process Concept No. 1, except the DMS circuit specific gravity cut-point will be 2.85. The -28 mesh pre-screen fines will be conditioned with flotation reagents (lime, copper sulphate, xanthate and a frother) and will be subjected to "Flash" flotation to recover a bulk lead/zinc sulphide concentrate.

The bulk sulphide concentrate and the flotation tailings will be weighed and assayed. Then the metallurgical balance for the test will be calculated. The flotation tailings will be dewatered (thickened) and then mixed with cement and the DMS "Float" reject for deposition underground as backfill. The DSO will comprise the DMS "Sink" product and the bulk sulphide concentrate.

Process Concept No. 4, **Single Stage DMS and Secondary Crushing of the -28 mesh Pre-Screen Fines to -70 mesh**:
The Single Stage DMS test will be the same a Process Concept No. 3. The -28 mesh pre-screen fines will be crushed in a Rolls type crusher to -70 mesh and then conditioned with flotation reagents (lime, copper sulphate, xanthate and frother) and will be subjected to "Flash" flotation to recover a bulk lead/zinc sulphide concentrate. The bulk sulphide concentrate and the flotation tailings will be weighed and assayed. Then the metallurgical balance for the test will be calculated. The flotation tailings will be dewatered (thickened) and then mixed with cement and the DMS "Float" reject for deposition underground as backfill. The DSO will comprise the DMS "Sink" product and the bulk sulphide concentrate.

Process Concept No. 5, **Single Stage DMS and Gravity Separation of the -28 mesh Pre-Screen**

The Single Stage DMS test will be the same a Process Concept No. 3. The-28 mesh pre-screen fines will be subject to various Gravity Separation techniques (spirals, cyclone with natural specific gravity media, centrifuges, jigs, blanks, etc.) to produce an upgraded mineral product while rejecting the host rock as a tailings. The Gravity Separation mineral product and tailings will be weighed and assayed. Then the metallurgical balance for the tests will be calculated. The Gravity Separation tailings will be dewatered (equipment selected to accommodate the type of Gravity Separation employed) and then mixed with cement and the DMS "Float" reject for deposition underground as backfill. The DSO will comprise the DMS "Sink" product and the Gravity Separation mineral product.

General Notes:

Dewatering the tailings by thickening will probably be employed. A clear, environmentally acceptable overflow water quality should be produced that can be recycled to the process and/or pumped directly to the infiltration basin. The proposed testwork and evaluation of the thickening process will be tested employing proven flocculent reagents. The exact water quality analysis will be determined at that time.

The tailings solids volume for the fine and coarse particles from the processing of the ROM ore will be less than the total volume of the voids (stopes/development) available underground so final deposition of all the process tailings (DMS "Float" reject and -28 mesh screen secondary processing tailings) should be accommodated underground.

Consumables:

The DMS circuits (Single and Double) will employ ferrosilicon as the media and very little is loss from the process circuit (very expensive). Ferrosilicon is an inert material that is currently used in the diamond processing circuits in Canada.

The reagents to be tested for the flotation of a bulk sulphide concentrate are: Lime (pH modifier), Copper Sulphate (activate the surface of sphalerite particles so they can be recovered by flotation techniques), Isopropyl and/or Amyl Xanthate (attaches to the surface of galena and activated sphalerite particles so they can be recovered by flotation techniques) and Methyl Isobutyl Carbinol (used to stabilize the surface of the water/slurry in a flotation cell during the flotation process).

None of the consumables are considered hazardous in transporting, storage and for operating conditions. They are all relatively expense to purchase so care in handling and use is an operating norm that everyone receives training about; it is a direct operation cost concern.

Delivery and Storage:

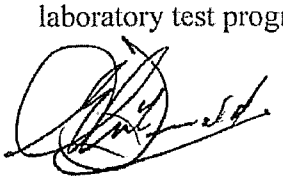
Ferrosilicon is usually shipped in tote bags (one/two tonnes) and/or steel drums. It can be stored outside as long as it is in a secure area (cost concern). It is an inert physical and chemical material.

Copper Sulphate is usually shipped in sealed plastic bags and should be stored in a covered area or under a tarp so it can easily be retrieved when needed in the process. Copper Sulphate is a chemical that is used to kill algae in water and should be handled carefully, no spills. The solution tanks should be in a safety basin in the plant.

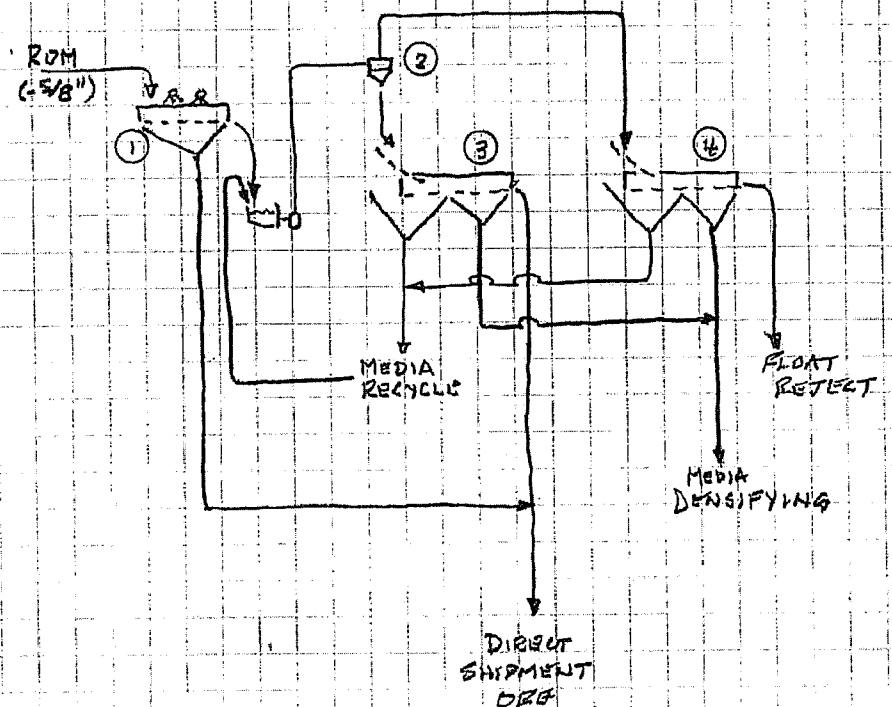
Xanthate is usually shipped in sealed plastic bags or totes and should be stored and handled like Copper Sulphate.

Methyl Isobutyl Carbinol is usually shipped in drums and is distributed in the flotation circuit directly from the drum with metering pump(s). It should be stored in a warm area with spill protection.

The only consumable that will be stored at the site in a volume will be the ferrosilicon (because it may come from South Africa). All the other consumables will be purchased in a monthly consumable quantity (small requirement that will be determined during the laboratory test program) as they can all be purchased in Canada.

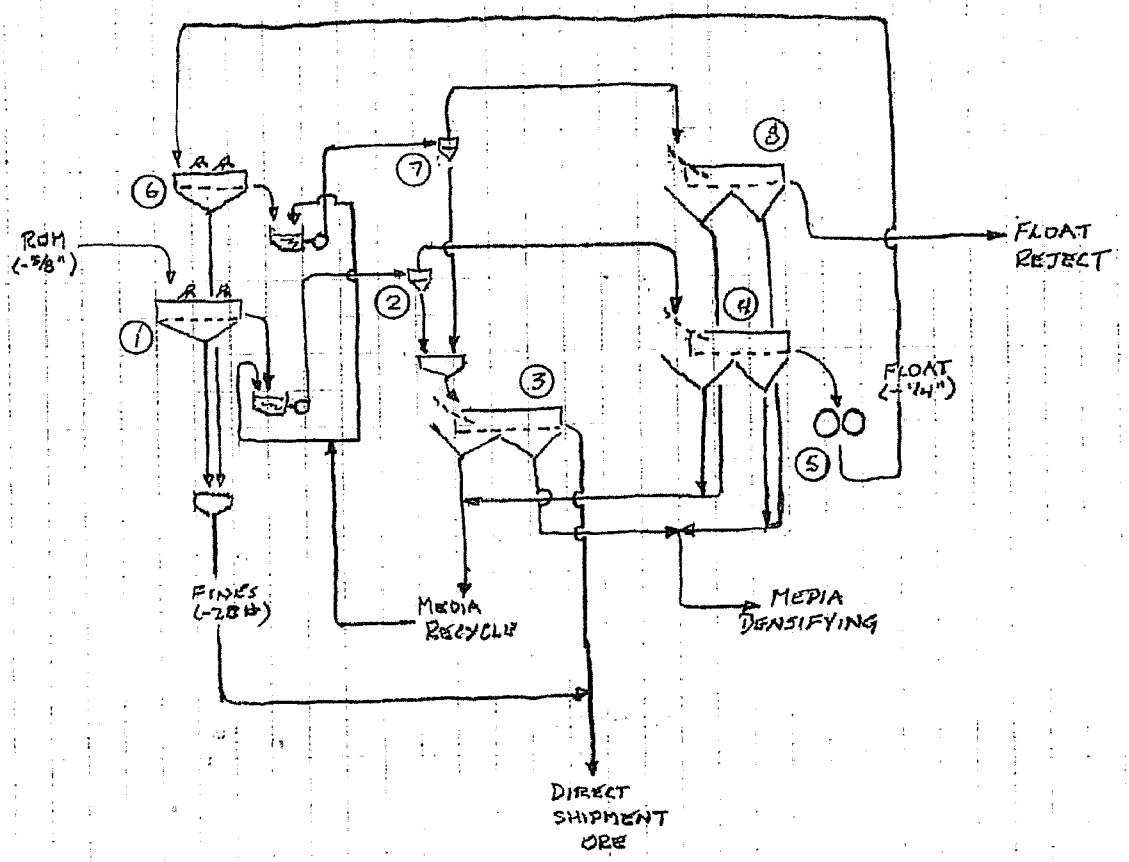


TAMERLANE VENTURES INC.
POINT POINT PROJECT
SINGLE DMS CIRCUIT



MAJOR EQUIPMENT
1. PRE-SCREEN
2. DMS CYCLONE
3. "SINK" DEWATERING SCREEN
4. "FLOAT" DEWATERING SCREEN

TAMERLANE VENTURES INC.
PINE POINT PROJECT
DOUBLE DMS CIRCUIT



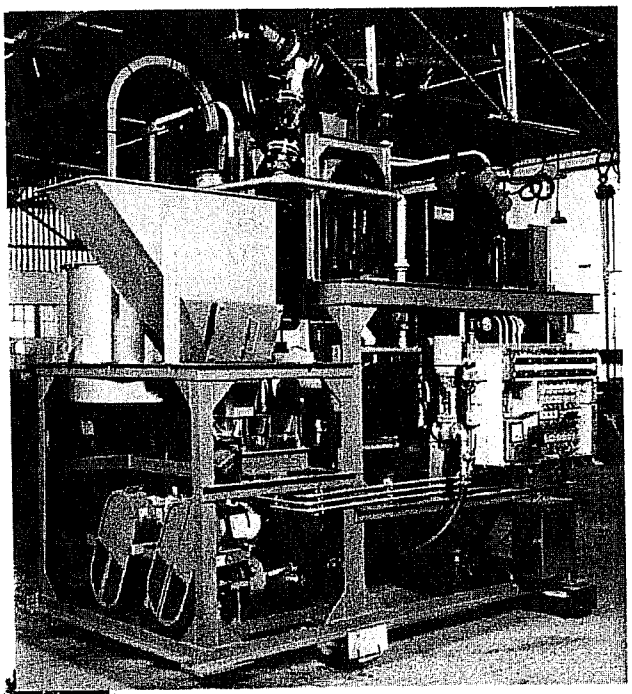
MAJOR EQUIPMENT

1. PRE-SCREEN
2. DMS CYCLONE (1ST STAGE)
3. "SINK" DEWATERING SCREEN (1ST and 2ND STAGE)
4. "FLOAT" DEWATERING SCREEN (1ST STAGE)
5. ROLLS TYPE CRUSHER
6. RE-SCREEN (2ND STAGE)
7. DMS CYCLONE (2ND STAGE)
8. "FLOAT" DEWATERING SCREEN (2ND STAGE)

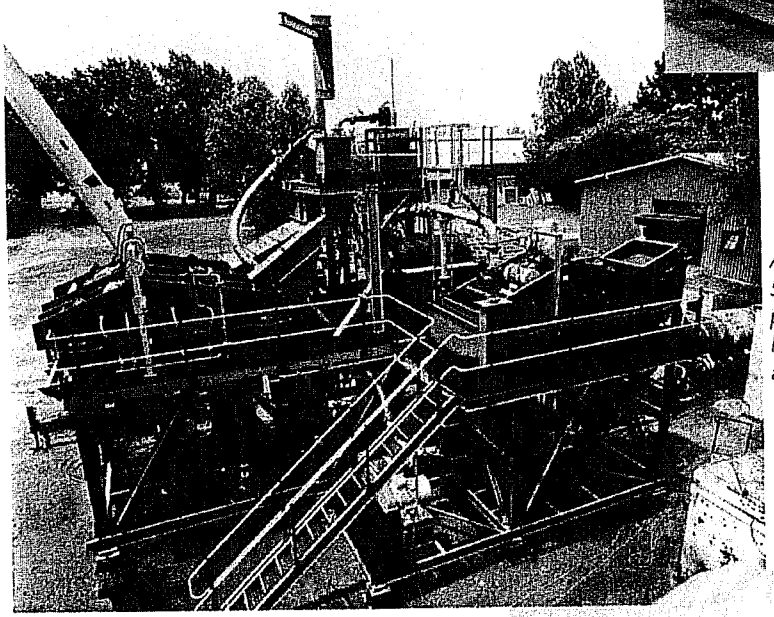
Commitment

We, in BATEMAN's Modular Plants business line, are totally committed to:

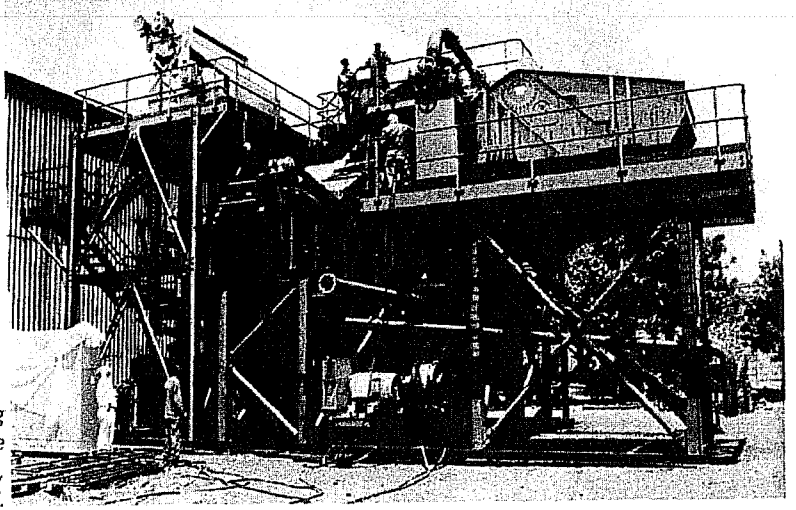
- Providing our clients with value for money plants, products and services.
- Building plants which meet environmental requirements.
- Providing our clients with service excellence in all their dealings with BATEMAN.
- Supporting our products with spares and technical advice.
- Meeting or exceeding safety standards set by our clients and the authorities in the countries where our plants operate.
- Providing our shareholders with a fair return on their investment.



A typical BATEMAN 1 t/h transportable DMS module, ready for delivery.



A typical BATEMAN 50 t/h modular DMS plant for processing kimberlite, fully erected at the factory.



The 150 t/h BATEMAN DMS plant featuring two cyclones fully erected at the fabricator's site before transport to MIBA, Mbujimayi, DRC.

Godfrey McDonald **July 17, 2006**
3696 Loyalist Dr.
Mississauga, Ontario
L5L 4S9
Tel/Fax No. (905) 820 7534
Email >gsmcdonald@sympatico.ca

Professional Qualifications in Brief:

Forty years experience in the mineral processing industry in all sectors of operations, liaising with engineering companies and project management and executive head office co-ordination.

Proven managerial capabilities and personnel development and leadership skills: worked within staff and unionized operating environments, coordinated professional/technical staff groups, engineering groups and consultants. Unique experience of guiding company and regulatory agencies in mining projects development and permitting processes.

Recipient of the "Canadian Milling Man of the Year" award in 2002. This was a selection by my professional piers.

Employment History:

1997 to 2002* **Breakwater Resources Ltd. and Black Hawk Inc. – Vice-President, Metallurgy and Environment**

- Responsible to the Chief Operating Officer and President of each corporation for the Milling operations and Site Environmental compliance (budget/forecast production preparation, capital and operating cost, annual environmental audit, research and technical knowledge transfer, and all process economic improvements).
- Team member of the company's Due Diligency Team that critiqued other mining operations/projects for acquisition purposes.
- National and International experience in metallurgical and environmental activities.
- Proposed testwork, reviewed test results, evaluated activities/proposals for economic justification.
- Training personnel and commissioning mill changes in processing and the overall operation.

supervision and motivation of key division personnel who decide on work methods/processes to be used in new and existing operations (metallurgical processing, plant engineering and maintenance and engineering services).
- Assist BP personnel in the international theatre on engineering, technical and human resource matters.
- Make presentations on specific projects to senor company officials and the Board of Directors.

1975 to 1981 **Selco Mining Corporation – Senior Corporate Metallurgist**

1971 to 1975 **Selco Mining Corporation – South Bay Division, Mill Superintendent**

1968 to 1971 **New Imperial Mines – Mill Metallurgist/ Assistant Mill Superintendent**

1963 to 1968 **Cominco - Sullivan Mill - Metallurgical Technician/Training EIT**

*** Retired from full employment with Breakwater Resources Ltd., in mid-2002.**

Professional and Technical Affiliations:

Member of the CIM
- Chairman of CMP, Toronto District 1982, 1983 and 1984
- National Chairman CMP, 1987-1988

Member of AIME
Member of Engineers Club, Toronto
Member of MEND Subcommittees
Member of CAMIRO Working Committee

Education :

University of British Columbia – Arts and Science

Godfrey W. McDonald
President,
Confidential Metallurgical Services

From: Rene Scheepers [mailto:RScheepers@thyssenmining.com]
Sent: Thursday, July 06, 2006 1:18 PM
To: David Swisher
Cc: Andrew Goode
Subject: RE: freeze drilling experience

David,

According to our records, Thyssen used ground freezing to stabilize the collar of a ventilation shaft at Pine Point in 1985. It appears that the ground was frozen to a depth of 23m and the shaft then raisebored to a total depth of approximately 58m. I'm not sure how accurate these figures are but I'll try and find out a little more. The project was completed successfully and it was a world first to raisebore through frozen ground. We don't know of any shafts since that were raisebored like this either.

Regards,

Rene

Tamerlane
VENTURES INC.

Pine Point Pilot Project Mine Dewatering Overview

The main components of the system are:

- All mine run-off water and any seepage water will be channelled into a series of sumps on the 550 foot level (174 meter) which will then be pumped to the main sump near the main shaft.
- All underground drifts will be mined at an incline of 1:100 so that any water can be controlled. The Main shaft will be the lowest point on any level.
- The main mine level will be at 550 feet (168 meter).
- The top of the main sump will be at 550 feet (168 meters) and the bottom at 570 feet (174 meter) which will enable a positive suction head for the pumps at the main pumping station.
- The main pumping station will be on the 570 foot level (174 meter).
- The main pumping station will consist of four 2,500 gallon per minute (9.5 m^3 per min or 160 l/s) multistage electric pumps running in parallel. Each pump can be run independently. The total capacity of the mine dewatering system is 10,000 gallons per minute (38 m^3 per minute) which is the maximum inflow rate calculated by the hydrogeological consultants.
- The riser pipes to the surface will be two 10 inch (250 mm) diameter steel pipes installed in the main shaft. Each riser will have non-return valves fitted downstream of each pump.
- The discharge water will be used in the DMS circuit and any overflow water will be discharged into the infiltration basin.