



To: all staff

January 22, 1987

885751

Re: MEG MEETING - Jan. 21, 1987

MT. WASHINGTON - Better Resources

Speaker: Brian Hall

Introduction: Cliff Rennie

- previous work by Esso and Noranda (1951-1961)

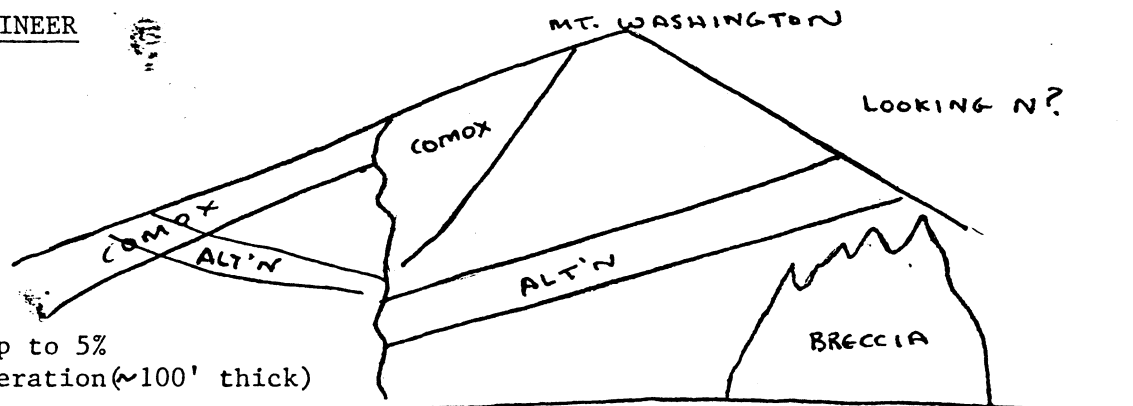
- 199 metric unit claims
- first discovery in 1940
- 1983 - Better Resources agreement
- 2 km long (Esso) As anomaly
- Karmutsen u/c overlain Comox Fmn. seds + Tertiary Quartz Diorite + Bx. Pipes (Murray, Glacier, Washington, Quarry, Murex)
- 'younger' chlorite-actinolite-magnetite veinlets and matrix filling

MUREX BX. - 42' of .22 Au

- Karmutsen volcanics and Quartz diorite - py, po, cpy

LAKEVIEW - DOMINEER

LOG NO: 87.01.26.13
ACTION: <i>dit</i> → DG's. + return
FILE NO: WASHINGTON



- As content up to 5%
- kaolinite alteration (~100' thick)

- 1 'main' horizon 2' to 15' thick zone
- realgar in vugs
- ZnS and PbS associated with Au content

Theories of Formation

- 1. Bx delamination
- 2. Caulder subsidence
- 3. Thrust faulting

NEW RESERVES:

Lakeview (drill) - 194,000 st @ .23 Au (@ .1 cut off)

Domineer (drill) - 41,000 st @ .21 Au and 1.49 Ag

235,900 st @ .23 Au and 1.15 Ag

NEW RESERVES CONT'D

West Grid (drill) 123,800 st @ .07 Au and .45 Ag

Central (between Domineer and Lakeview)

-inferred based on 1 drill hole

485,700 st @ .18 Au and .39 Ag

TOTAL 845,400 st @ .18 Au and .61 Ag

Problem: - arsenic! and/or recovery

- Au in native form
- Ag in telluride form

Thanks by Giles Peatfield
- any vertical controls?

Tom Schroeter
Senior Regional Geologist

TGS/cl



Province of
British Columbia

NEWS RELEASE

MINISTRY OF ENERGY, MINES
AND PETROLEUM RESOURCES

FOR IMMEDIATE RELEASE

1990:40

July 20, 1990

EMPR COMMITTED TO MINE RECLAMATION

Victoria, B.C. - Work is continuing on the project to control acid drainage from the long-abandoned Mount Washington copper mine, located northwest of Courtenay.

To date the major rock dump at the old mine has been capped with a clay blanket to exclude air and water to minimize acid mine drainage. A pilot cleaning of waste from the pit floor will be done this summer to determine the degree of improvement provided by this simple and cost-effective procedure. Further instrumentation will be installed in the waste, and monitoring will continue into this fall and winter.

"We are committed to reducing acid drainage into the Tsolum River," said Mines Minister Jack Davis. "This project is an example of British Columbia's leadership in safeguarding the environment by developing solutions for the environmental impacts of mining."

"Work begun on this project marks the turning point for improved water quality in the river," stated Stan Hagen, Comox MLA and Minister of Regional and Economic Development. "A potentially serious problem is being addressed and will be monitored on an ongoing basis."

A program to study and recommend methods to control acid mine drainage is also beginning at the old Britannia copper mine, on Howe Sound.

LOG NO:	JUL 20 1990	VAN	7
ACTION:			
FILE NO:	330-20/News Rel.		

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"Funds to begin research and a review of the existing system of control will be available through the Sustainable Environment Fund," stated John Reynolds, MLA for West Vancouver-Howe Sound and Minister of Environment. "The program, monitored by the B.C. Acid Mine Drainage Task Force, will also seek possible long-term solutions to reduce or eliminate acid drainage."

"Ongoing reclamation programs, some of which are in mine areas developed and closed prior to mine reclamation legislation, continue to demonstrate government's commitment to protecting the environment," noted Davis.

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For further information contact:

Irwin Henderson, Director
Communications and Public Affairs
(604) 387-5178



Province of
British Columbia

Ron

MEMORANDUM

TO:

Greg McKillop
Manager, MDA

FROM:

Paul Wilton
District Geologist, Victoria

SUBJECT:

Mt. Washington Project - MDA # 11335

DATE:

6 June 88

FILE:

- For Your Information
- Please O.K. and Return
- Please Discuss With Me
- For Your Request
- For Your Signature
- Please Process
- Return With More Details
- Investigate and Report
- Please Answer
- For Your File

The researcher for the Mt. Washington project has now been identified. He is Richard Dahl, Ph.D., a post-doctoral research associate of Prof. David Watkinson at Carleton University. He'll be available to start field work early in August. The additional support needed will come from Watkinson's own research grant(s).

Dr. Watkinson will be on Vancouver Island early in July. I'll meet with him then to discuss operational and financial details. Some guidance in regard to dispersal of funds, etc. would be appreciated.

Paul.

REPLY:

WRS → [Signature]

WRITE YOUR REPLY AND RETURN THIS SHEET
REMOVE THIS SHEET AND FORWARD BALANCE OF SET

(OP 4036)

ISLAND BUSINESS FORMS LTD.

LOG NO: 06.06 T 9

ACTION: WRS → Bill → Tom

TOS

FILE

FILE NO:

File → Mt. Washington



TO: John Errington, P.Eng.,
Senior Reclamation Engineer,
Engineering and Inspection Branch

March 11, 1988

RE: MT. WASHINGTON - C.C. RENNIE LETTER TO MINISTER (MARCH 4, 1988)

In his most recent letter to the Minister, Cliff Rennie refers to a meeting of affected parties on the Mt. Washington site to be called by our Ministry. I would appreciate being advised of the date and location of that meeting when it is set and also would appreciate an opportunity to attend the meeting as an observer or even to offer geological comment if appropriate in regard to Cliff's point re sterilization of mineral rights. As you are aware we have been monitoring exploration developments closely at Mt. Washington and have been engaged in an MDA-funded project to study the unique geology there. Furthermore, we are presently setting up a new MDA-sponsored university thesis project which will involve an in-depth geological study of the Mt. Washington mineral deposits, including those at the old mine site. I therefore feel that the Geological Survey Branch qualifies as an "affected party" and also may be able to contribute to any further discussions about long-term acid drainage abatement alternatives.

I also endorse Cliff's suggestion that all affected parties be permitted to see the Steffan Robertson Kirsten report prior to any final decisions. I have not yet seen either the report nor its executive summary, but we are frequently being approached for information or comment on the issue. Could you please forward a copy to the Geological Survey Branch to my attention or inform as to where a copy can be obtained or examined.

H. Paul Wilton, P.Eng.,
District Geologist,
Geological Survey Branch

HPW:pl

cc: C.C. Rennie, Better Resources

LOG NO: MAR 17 1988	VAN 4
ACTION:	
TCS	
FILE NO: Mt. Washington	

LOG NO: 0314	T1
ACTION: WRS → Tom S	F-1
FILE NO:	

Better Resources Ltd.

March 4, 1988

The Honourable Jack Davis
Minister of Energy Mines & Petroleum Resources
Parliament Buildings
Victoria, B.C.

Dear Sir:

I attended the February 24th Seminar on the Mining Development Review Process in Vancouver and was delighted to hear the announcement that funding had been approved for acid drainage abatement at Mt. Washington. I was also delighted that MEMPR will be the responsible agency for this work. I believe we agree that MEMPR should be responsible for all activities related to mines past, present and future.

I was also pleased to read your letter in the February 10, 1988 Victoria Times-Colonist stating clearly that action was being taken and that old sites were legally the responsibility of the Crown. Your comment that a successful cleanup at the Duthie Mine was effected for a modest \$60,000 was also very interesting.

We have been advised that a meeting of affected parties on the Mt. Washington site will be called by your Ministry. In this regard I asked John Errington to supply a copy of the Steffan Robertson Kirsten report to the meeting participants well in advance of the meeting so that we can all comment on the proposal.

We understand that the funding approved is sufficient to carry out the preferred option in the SRK report which calls for working over the north dump and covering it with up to a meter of compacted glacial till. As you are aware from our previous correspondence, Better Resources Limited have major concerns with this proposal which I will reiterate:

1. Covering the north dump with till will effectively sterilize ten acres of mineral rights. As yet the value of the dumps and underlying mineralized rock is not defined. Despite comments from environmentalists that the old pits are unproductive eyesores they really should be viewed as mineral land in fallow. If a farmer wants to leave his land in fallow there is seldom any comment made.

Consider what could have been missed if the old Phoenix Mine near Grand Forks or the old Copper Mountain mine near Princeton had been covered with clay and sterilized from future harvesting of resources.

2. Covering the dumps with clay will not have an immediate affect on copper levels in Murex Creek. To start with, the work could not be completed until the summer of 1988 after the dumps are saturated with snow meltwater. Any percolation through the cover and ground water seepages will continue to carry copper down Pyrrhotite Creek, possibly for years.
3. Clay cover over dumps is not a proven technique for acid mine drainage abatement. We believe that the Mt. Washington situation is politically too sensitive an area to be used as a test case for the technique, particularly at the costs estimated.
4. In order to cover the north pit area with clay a new pit will have to be excavated. Unless an area of exceptionally deep till is found, the clay pit if 2 meters deep will be 5 acres in area. This will then have to be reclaimed.
5. As a taxpayer I am concerned about the high immediate cost of the proposal to cover the dumps with clay particularly when there is no assurance that it will be a one shot cure. Even the SRK report states that if the method is not successful that it could be followed by further treatment (at additional expense).
6. As miners, we view the proposal to cover the dumps with clay as a bad precedent. Once done it will have to be defended to the public. Once accepted by the public as a process of reclamation of mining land it will eventually become a requirement of all mines, unless resisted. Let us return to the concept of mineral land in fallow.
7. The proposed total cost of \$1,500,000 for the clay cover, if all spent, will be viewed by the general taxpaying public as a large expense to reclaim mining activity and will result in general objection to future mining in the general area or pressure for unreasonable restrictions or onerous reclamation bonds.

As recommended in previous correspondence, we believe that the copper bearing acid drainage can be controlled for a fraction of the cost by limestone injection. We urge an immediate full scale test of this method, followed by careful monitoring. The clay covering should be held in abeyance until this direct positive abatement is evaluated.

Yours truly,
BETTER RESOURCES LIMITED

C.C. Rennie, P.Eng., Director/
Chairman of Board

cc: The Honourable B. Strachan
The Honourable S. Hagan
Dr. John Errington