Endako 882692

| From: | Wojdak, Paul EM:EX Friday March 05, 2004 11:04 AM |
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| Sent: | Friday, March 05, 2004 11:04 AM |
| To: | Bruce Graff; Doug Flynn; Bob Lane; Mike Cathro |
| Cc: | Alldrick, Dani EM:EX; Bellefontaine, Kim EM:EX; Dave Lefebure; Duane Anderson; Errington, John EM:EX; Grant, Brian EM:EX; Guthrie, Shelley EM:EX; Hayes, Mark EM:EX; Lewis, Jim E |
| | EM:EX; Mihalynuk, Mitch EM:EX; Morii, Sachie EM:EX; Nelson, JoAnne EM:EX; Newell, Chris J. EM:EX; Rick Conte; Schroeter, Tom EM:EX; Simandl, George EM:EX; Webster, Ian |
| | EM:EX; Wuschke, Steven EM:EX |
| Subject: | Northwest Geology, March 6 2004 |

Eskay Creek - 2003 production (supplied by Ted Mahoney, chief geologist)

- Direct shipping ore 134,850 tonnes @ 67.5 g/t gold, 3141.45 g/t silver
- Mill ore 115,052 tonnes @ 24.3 g/t gold, 1213.04 g/t silver
- Total recovered 10,950.57 kg Au and 527,775 kg Ag

Total Reserves (smelter and mill, on Dec 31, 2003) - 840,895 tonnes at 34.81 g/t Au, 1604 g/t Ag

Huckleberry - 2003 production was 32,780 tonnes of copper from milling of 6,999,100 tonnes grading 0.542% Cu and a strip ratio of 2.28:1 and copper recovery of 86.5%. About 1.4 million tonnes of low grade ore, 0.26-0.35% Cu, is forecast to be stockpiled in 2004, in addition to nearly 0.5 million tonnes that was stockpiled in 2003. John Lovering came out of retirement to be new mine manager (ex-manager at Nickel Plate).

Endako - Mine management requested that EMBC not report accurate molybdenum production data.

Nak - Imperial Metals has reduced its claim units to 48 units. Fourteen units covering the Joss'alun showing will revert to Copper Ridge Explorations Inc. Imperial will continue exploration of untested targets on its own claims. This is the copper discovery made by BCGS south of Atlin in 2002.

Rock & Roll - Conquest Resources Limited and Newcastle Minerals Ltd. have optioned this 169 unit VMS prospect near Snip mine from the Forrest Syndicate. Inferred resource of 675,000 tonnes at 1.75 g/t Au, 234 g/t Ag, 2.2% Zn, 0.5% Pb, 0.4% Cu.

Titan - Kobex Resources Ltd. has optioned this new high-grade moly prospect west of Atlin from Eagle Plains Resources. Drilling anticipated in July.

Kalum - Airborne survey in progress 35-40 km north of Terrace; information supplied for Skeena MLA.

Rock Talk (Feb 24) - Attended by about 52 people with an additional 10 people from Titles and Gold Commissioner's office for Mineral Titles Online presentation. Event organized by Gary Thompson (president SmExGrp) and Rob Boyce. About 15 people took in Huckleberry mine tour on Feb 25.

Minerals North - Technical program (see attached) is fairly much set for April 14-16 annual meeting in Smithers. Great organizing committee, it will be an excellent event.



Proposed program 2004.doc

Exploration and Mining in BC - Complete Foreword for the volume (reviewed by Communications) and complete final additions and edits to Northwest summary.

Paul

Paul Wojdak, P.Geo. Regional Geologist, Smithers BC Ministry of Energy and Mines



General - DWF in Calgary attending to family illness.

BCYCM delegation (led to Dan Jepsen) met with broad cross section of exploration and mining industry (on July 13, about 12-15 people) to discuss "branding" of the Chamber. Preliminary discussion with Skeena RMC and BCYCM of mineral exploration/ mining workshop with Wetsuwet'en probably to be held in second half of Sept. Laptop computer serviced by Ministry of ?? - 14 viruses removed!!

Environmental Assessment

Davidson - Blue Pearl's pre-application report has been accepted. Mine site is 9 km northwest of Smithers. Propose 2000 tonne per day underground moly mine, with an <u>underground crusher</u>. Crushed ore will be trucked or railed either to Endako (213 km) or Huckleberry (180 km) for milling and other processing. First order of business is to consider whether issues around off-site milling need be included in EA (tailings capacity, added environmental risk/ impact etc).

Kutcho Western Keltic is very close to submission of pre-application (thereby entering EA) for an open pit copper-zinc mine east of Dease Lake.

Ruby Ck - EAO trying to coordinate site visit.

Morrison -New management team for Pacific Booker Minerals introduced themselves to Smithers office, and refreshed their intent to advance the Morrison copper-(gold) project.

Klappan - Fortune Minerals has added a new access road from Bell II (on Hwy 37) up the Bell-Irving River to the site.

Galore Ck - received various documents, no time to review.

Permitting

a) Notices received week of July 4-8: Mineral 6, Coal 0, Placer 1, Sand & Gravel 0.

b) Notices received week of July 11-15: none

Total Approvals/ Permits issued to July 15:

- Mineral 95
- Coal 1
- Placer 54
- Sand & Gravel 7

(NOTE- The higher numbers that appeared in the last report, represented the number received to date, not the number of permits issued. Sorry for the confusion to those who are tracking the numbers)

Davidson - NoW received for opening up exploration road, adit and underground workings.

Klappan - Discussed complaints of excessive red tape in permitting process with Robin Goad, head of Fortune Minerals: (a) need to specify locations for ddh sites, (b) amount of security and (c) drinking water standards.

Regional Geology

Terrace Project (GSB) - Frances Sharpe worked with Terrace project July 5-7 incl.

Endako May stockpile low grade ore, 0.05% to 0.07% Mo. Milling to be deferred so that Mo output can be maximized during current high price. Subject to Mo price, future processing could extend mine life to 2013 (from current 2011).

Kinaskan (GJ) - Respond to Canadian Gold Hunter's concerns regarding their Tahltan consultation program viz a viz

From: Sent: To: Subject: Schroeter, Tom EM:EX Friday, January 09, 2004 10:46 AM Wojdak, Paul EM:EX RE: Northwest Region Jan 9 2004

1) Is the Barrick drilling on the 22 zone public knowledge? I would like to refer to at Roundup, but have been 'cautioned' by Barrick to say much.

-> Fordale

2) Minerals North: I plan on attending. If you get stuck on speakers, I could volunteer up something.

Tom

Tom Schroeter, P.Eng./P.Geo. Senior Regional Geologist Geological Survey and Development Branch Mining and Minerals Division Ministry of Energy and Mines

Direct Telephone 604 660-2812 Messages & Enquiries 604 660-2708 Facsimile 604 775-0313 email tom.schroeter@gems6.gov.bc.ca Autotel 604 662-9091

| Original Message | | |
|---|---|--|
| From: | Wojdak, Paul EM:EX | |
| Sent: | Friday, January 09, 2004 10:41 AM | |
| To: | Bruce Graff; Doug Flynn; Bob Lane; Mike Cathro; Terry, David EM:EX | |
| Cc: | Alldrick, Dani EM:EX; Bellefontaine, Kim EM:EX; Dave Lefebure; Duane Anderson; Errington, John EM:EX; Grant, Brian EM:EX; Guthrie, Shelley EM:EX; Hayes, Mark EM:EX; Hermann, Fred EM:EX; Lewis, Jim E EM:EX; Marshall, James EM:EX; Mihalynuk, Mitch EM:EX; Morii, Sachie EM:EX; Nelson, JoAnne EM:EX; Newell, Chris J. EM:EX; Rick Conte; Schroeter, Tom EM:EX; Simandl, George EM:EX; Webster, Ian EM:EX; Wuschke, Steven EM:EX | |
| Subject: | Northwest Region Jan 9 2004 | |
| | | |
| Endak - Drilling of about 5-6 holes is in progress on two targets located east and west of the Endako pit. | | |

Eskay Creek - Surface drilling of the 22 zone proposed to begin in February. The 22 zone is 2.25 km southwest of the 21 zone portal (or about 0.5 km WSW of the old exploration camp).

New Polaris - Canarc Resources disclosed results of it 3-hole, 1560 meter drilling program. However, the best intercepts of this "deep" drilling are at shallow depth -

- 9.26 g/t Au over 5.7 m beginning at 104.7 m in P03-2
- 17.48 g/t Au over 7.4 m beginning at 24.1 m in P03-3

Taurus - Navasota has dropped its option on this bulk tonnage gold target near Cassiar.

Diamonds? <u>Patrician Diamonds</u> issued news releases in November that it has found 10 microdiamonds in 4 separate alluvial (esker and stream) samples in Yukon. The company is reputed to have staked small blocks of claims on aeromag anomalies to keep the location is secret. Rumours range from the Dawson area to (more strongly) the Rancherica area, near the BC border. However, a check of recent staking in 1040 and 104P does not reveal any suspect claims in BC. The diamonds occur with very abundant blue and pink sapphires and kimberlite indicator minerals, and are believed to be close to source. Kimberlite indicators include G9 pyrope, chrome diopside, Mg-chromite, picroilmenite and forsteritic olivine, all identified by microprobe. There is a scientific rationale for the presence of diamonds in what is traditionally regarded as a geologically unfavourable area- the Yukon crust under is thicker and cooler than other mobile belts, and might approach conditions associated with Archean cratons where most of the world's diamonds formed.

Minerals North - Participate in planning meeting on Jan 9. Recruiting presenters for technical program.

GSB Catch the Wave - Participated in meetings with Copper Ridge and Rimfire on Jan 6, brainstorming exploration targets.

Paul

| From: | Wojdak, Paul EM:EX |
|----------|---|
| Sent: | Friday, March 14, 2003 2:36 PM |
| То: | Bob Lane; Jacques Houle; Mike Cathro; Terry, David EM:EX |
| Cc: | Bergen, Wally EM:EX; Bill Price; Bruce Graff; Daryl Hanson; Doug Flynn; Elaine Konschuh; Gleason, Nancy EM:EX; Jill Pardoe; Van Zalingen, Sylvia EM:EX; Wesley Kennedy; Dave Lefebure; Duane Anderson; Errington, John EM:EX; Gib McArthur; Grant, Brian EM:EX; Guthrie, Shelley EM:EX; Malott, Mary Lou SRM:EX; Marshall, James EM:EX; Mihalynuk, Mitch EM:EX; Nelson, JoAnne EM:EX; Rick Conte; Tom Schroeter |
| Subject: | Northwest Geology March 15, 2003 |

Huckleberry - Reserves are

36,365,000 tonnes at 0.496% Cu, 0.014% Mo (on Dec 31 2002). Cut off grade is 0.26% Cu. Optimization of the East pit resulted in 10.6 million tonnes being dropped from reserves. At the current mining rate of about 7.4 million tonnes per year, Huckleberry is expected to cease production at the end of 2007.

Endako - will probably drill six 400-700 ft horizontal holes from the floor of the pit (decision is imminent) to drain water impounded behind the South Basalt fault. Ground movement last year on the South wall restricted the area that can be mined within the pit and interrupted benching back the pit wall. Endako is on a <u>critical time-line to strip waste overlying</u> approximately 4 years of reserves. The drain holes are expected to stabilize the South wall.

French (93M 014) - Porphyry copper property 65 km north of Smithers optioned by Ellesmere Minerals Ltd. from prospector Robin Day. The company anticipates a drill program to focus on untested gold potential (best intercept of 6 holes drilled in 1971 was 0.2% Cu over 36.5 m).

Paul

Paul Wojdak, P.Geo. Regional Geologist, Smithers BC Ministry of Energy and Mines

FAINAD)

From: Sent: To: Subject: Schroeter, Tom EM:EX Monday, December 08, 2003 4:09 PM Cathro, Mike EM:EX; Wojdak, Paul EM:EX RE: Revised Endako mine data

Importance:

The Table goes in with the 'Final' Draft to Brian Grant tomorrow. We have until Dec. 31st to make the 'absolute' final revision.

Tom

Tom Schroeter, P.Eng./P.Geo. Senior Regional Geologist Resource Development Division Ministry of Energy and Mines

Direct Telephone 604 660-2812 Messages & Enquiries 604 660-2708 Facsimile 604 775-0313 email tom.schroeter@gems6.gov.bc.ca Autotel 604 662-9091

 -----Original Message----

 From:
 Cathro, Mike EM:EX

 Sent:
 Monday, December 08, 2003 2:49 PM

 To:
 Wojdak, Paul EM:EX; Schroeter, Tom EM:EX

 Subject:
 RE: Revised Endako mine data

High

thanks Paul, Tom, when will you be wanteing a final final production table for the publication?

Mike

Mike Cathro, P.Geo Regional Geologist, Mining Operations Branch B.C. Ministry of Energy and Mines 162 Oriole Rd., Kamloops, B.C. V2C 4N7

tel 250 371-6069 cel 250 318-4202 fax 250 371-6070

> -----Original Message-----From: Wojdak, Paul EM:EX Sent: December 08, 2003 2:40 PM To: Schroeter, Tom EM:EX; Cathro, Mike EM:EX Subject: Revised Endako mine data

<< File: 2003 forecast mine prod - PW.xls >>

I've received updated reserve data for Endako, as shown in the table. I have also revised downward the estimated Mo production at the request of the mine. I trust these revisions are in time for the publication of MER.

Paul

Paul Wojdak, P.Geo. Regional Geologist, Smithers BC Ministry of Energy and Mines

| | | | | | | P L |
|----|--|---|--|---|---|--|
| | | | | ····· | | |
| | Mine | Operator | Deposit Type / Commodity | Forecast Production in 2003 | Proven and Probable Reserves (at Jan. 1, 2003) | Reference for Reserves |
| Ic | Endako | Thompson Creek Mining Ltd. / Nissho Iwai Moly Resources Inc. | Porphyry Mo | 4600 tonnes Mo | Endako Pit - 38 200 000 tonnes at 0.072% Mo, Denak Pit - 22 700 000 tonnes at 0.069% Mo, Surface stockpiles - 26 300 000 tonnes at 0.048% Mo (Oct. 1, 2003) | Alan Morrish, Mine Manager, written communication, Dec. 5, 2003 |
| | Eskay Creek | Barrick Gold Corp. | Transitional Epithermal-VMS | 11 000 kg Au, 475 000 kg Ag | Shipping ore: 494 907 tonnes at 51.81 g/t Au, 2604 g/t Ag. Milling Ore: 805 343 tonnes at 23.38 g/t Au, 918 g/t Ag | Jim Rogers, Chief Geologist, written communication, Feb. 11, 2003 |
| | Highland Valley Copper Huckleberry | Teck Cominco Limited / BHP Billiton Ltd. / Highmont Mining Co. Imperial Metals Corporation | Calc-Alkalic Porphyry Cu-Mo Calc-Alkalic | 170 000 tonnes Cu, 3200 tonnes Mo, 500 kg Au, 70 000 kg Ag 30 000 tonnes Cu, 150 tonnes | 309 million tonnes at 0.41% Cu 36 719 000 tonnes at 0.489% Cu, 0.013% Mo, | Production and reserves extrapolated from Teck Cominco Ltd. 2003 3rd quarter and 2002 annual report Clay Craig, Imperial Metals website |
| | | | Porphyry Cu-Mo | Мо | 0.056 g/t Au | |
| | Kemess South | Kemess Mines Ltd. (Northgate Exploration Ltd.) | Calc-Alkalic Porphyry Cu-Au | 8550 kg Au, 31 800 tonnes Cu | 132.6 million tonnes grading 0.704 g/t Au and 0.233% Cu | Northgate Exploration Ltd. 2001 Annual Report |
| | Myra Falls Operation | Boliden-Westmin (Canada) Limited | VMS Cu-Zn-Pb- Au-Ag | 11,000 tonnes Cu, 53,000 tonnes Zn, 900 kg Au, 22,000 kg Ag | Est 7.4 mt, (similar grade) at Jan 2004 vs. 2002 figure of 8 385 073 tonnes diluted mining reserve (proven and probable) @ 1.4 g/t Au, 45.5 g/t Ag, 1.28% Cu, 0.54% Pb, 6 99% Zn | Production extrapolated from Boliden 2003 3rd quarter report. Reserves from Finley Bakker, Chief Mine Geologist, Myra Falls Operation - personnel |
| nc | lustrial Minerals | | | | | communication, November, 2002 |
| | 4J Ashcroft | Georgia Pacific IG Machine and Fiber Ltd. (IKO Industries Ltd.) | Gypsum Basalt Roofing Granules | | | |
| | | IMASCO Minerals Inc. | Limestone | | | |
| | Black Crystal Blubber Bay | Crystal Graphite Corporation Ashgrove Cement Corporation | Graphite Limestone | | | |
| | Bud | Western Industrial Clay Products Ltd. | Bentonite | | | |
| | Buse Lake | Lafarge Canada Inc. | Volcanic Ash (alumina-silica) | | | |
| | Craigmont Crawford Bay | Craigmont Mines Joint Venture IMASCO Minerals Inc. | Magnetite Tailings Dolomite | | | |
| | Elkhorn | Westroc Inc. | Gypsum | | | |
| | Falkland | Lafarge Canada Inc. | Gypsum | | | |
| | Fireside Fox Island | Fireside Minerals Inc. Quadra Stone | Barite Granite | | | |
| | Hardy Island Gillies Bay | Texada Quarrying Ltd. | Andesite Limestone | | | |
| | Giscome | Pacific Lime Products Ltd. | Limestone | | | |
| | Harper Ranch | Lafarge Canada Inc. | Limestone | | | |
| | Kootenay Lime Creek Moberly | Kootenay Stone Centre IMASCO Minerals Inc. Dynatec Inc. | Flagstone Limestone Silica sandstone | | | |
| | Monteith Bay Mount | Monteith Bay Resources Ltd. Baymag Mines Co. Ltd. | Hotspring Silica Magnesite | 49,000 tonnes | | |
| | Mount Meager | Great Pacific Pumice Inc. | Pumice, Pozzolan | | | |
| | Nazko Pavilion | Canada Pumice Corp. Greymont Western Canada Inc. | Lava Rock Limestone | | | |
| | Red Lake | Greymont Western Canada Inc. Western Industrial Clay Products Ltd. | | | | |
| | Rock Creek | Mighty White Dolomite Ltd | Dolomite | | | |
| | Rocky Mountain Slate | Rocky Mountain Slate | Flagstone | | | |
| | Rocky Mountain Tufa | Alan Wolfenden | Tufa | | | |
| | Sirdar | IMASCO Minerals Inc. | Crushed granite | | | |
| | Sumas Mountain & Clayburn | Clayburn Industries Ltd. / Lafarge Canada Inc. / Tilbury Cement Ltd. | Shale, Sandstone, Clay, Fireclay | | | |
| _ | Swansea Ridge | CPR | Railroad Ballast | | | |
| | Van Anda | Imperial Limestone Co. Ltd. | Limestone | | | |
| | Winner Z-1 | Roxul (West) Inc. Dynatec Inc. | Diorite Zeolite | | | |
| | Z-2 | Industrial Minerals Processors | Zeolite | | | |
| Co | al | | - | | | |
| | Basin (Tulameen) | Compliance Energy Corp. | Thermal coal | 20,000 tonnes | | |
| | Bullmoose | Bullmoose Operating Corp. (Teck Cominco Ltd.) | Metallurgical Coal | | will close April, 2003 | News release |
| | Coal Mountain | Elk Valley Coal Partnership | Metallugical coal | 2.1 million tonnes | 1 | 1 |
| | Elkview | Elk Valley Coal Partnership | Metallugical coal | 5.6 million tonnes | | |

| From: | Wojdak, Paul EM:EX |
|----------|--|
| Sent: | Friday, March 14, 2003 2:36 PM |
| То: | Bob Lane; Jacques Houle; Mike Cathro; Terry, David EM:EX |
| Cc: | Bergen, Wally EM:EX; Bill Price; Bruce Graff; Daryl Hanson; Doug Flynn; Elaine Konschuh; |
| | Gleason, Nancy EM:EX; Jill Pardoe; Van Zalingen, Sylvia EM:EX; Wesley Kennedy; Dave |
| | Lefebure; Duane Anderson; Errington, John EM:EX; Gib McArthur; Grant, Brian EM:EX; |
| | Guthrie, Shelley EM:EX; Malott, Mary Lou SRM:EX; Marshall, James EM:EX; Mihalynuk, |
| | Mitch EM:EX; Nelson, JoAnne EM:EX; Rick Conte; Tom Schroeter |
| Subject: | Northwest Geology March 15, 2003 |

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impounded behind the South Basalt fault. Ground movement last year on the South wall restricted the area that can be mined within the pit and interrupted benching back the pit wall. Endako is on a <u>critical time-line to strip waste overlying</u> approximately 4 years of reserves. The drain holes are expected to stabilize the South wall.

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Paul Paul Wojdak, P.Geo. Regional Geologist, Smithers BC Ministry of Energy and Mines

| From: | |
|-------|--|
| Sent: | |
| To: | |

Bergen, Wally EM:EX

Friday, November 01, 2002 2:17 PM Al Hoffman; Andrew Whale; Bill Phelan; Chris Carr; Duane Anderson; Ed Beswick; EM MB Smithers DL; Finvers, Maija SRM:EX; Fred Hermann; Gerald German; Greg McKillop; Gregg Stewart; John Errington; Linda Stewart; McLaren, Graeme SRM:EX; Pat Cheetham; Patrick O'Rourke; Puggioni, Giovanni EM:EX; Richard Booth; Rick Adams; Rick Conte; Ross Curtis; Sharon Jorgensen; Shelley Guthrie; Smyth, Ron EM:EX; Ted Hall; Tom Schroeter; Wesley Kennedy

Subject:

NW Region Report to November 1, 2002

MINING

Endako - On 02/10/30 Endako Mine announced that it will be closed temporarily for 2 weeks from November 4 to November 20, 2002. The closure is a result of falling prices and poor demand leading to increased inventory on the mine site. Roaster mechanical problems and shipping problems associated with labour disruptions in U.S. west coast ports are also cited as part of the cause for the shut down.

Kwinitsa Quarry - Situated approximately 60 km west of Terrace. As a result of a site inspection following up on a complaint from a sport fisher, a cease and desist order was placed on a portion of the CNR owned rock quarry. A contractor to the CNR set off a blast which blew large pieces of rock several hundred metres onto and across Highway 16. The Highway was closed for the blast and there were no damages to travellers. A sport fisher, who was fishing on the other side of the highway in the Skeena River, was not warned of the blast and was showered with large pieces of rock. The contractor subsequently left a large area of quarry face unstable with a large area of hanging wall. The quarry is not secure and is adjacent to a public highway.

NWMDRC - A series of NWMDRC meetings has been scheduled for late November.

| November 26 - Bell and Granisle | 9:00 a.m ? |
|--|---|
| November 27 - Snip and Eskay | 8:30 a.m 2:00 p.m. |
| November 27 - Johnny Mountain | 2:00 p.m 5:00 p.m. |
| November 28 - Premier Gold | 8:30 a.m ? |
| and share at a second | distant and a second |

Updates and discussion regarding various activities and concerns to be completed.

EXPLORATION

New Claims - Paul reports that:

- Some 960 units have been staked in the past month in a 40 km long by 5 km wide belt in the vicinity of Teuton Resources' Del Norte project. About 330 is by Teuton, the balance is speculative, in hope of developing an area play. The claimed area lies north and south of the Bear Pass (Hwy 37), extending from Willoughby Ck (NTS 103P-083, 093) to Mt Patullo (NTS 104A-4) and covers Salmon River Formation.
- Strong rumour of extensive additional staking in the Iskut district by Heritage Resources, "from Eskay Creek to the U.S. border!"

Silver Sleeper - Claims south of Houston optioned by Northair Group from prospectors Ed and Gerry Westgarde and Barry Hofsink. Trenching and drilling program proposed. Tetrahedrite, with high silver values, is exposed on a logging road and was explored 10 years ago by Equity Silver Mines as the Eric property.

Turnagain Nickel (104I 014) - Canadian Metals Exploration began drilling 65 km east of Dease Lake.

Big Bulk - Canadian Empire Exploration Corp. has entered into an option/JV agreement with TeckCominco to acquire 80% interest in this 351 claim property near Kitsault Lake. The property is a few km SE of Homestake Ridge where TeckCominco carried out a drill program earlier this year. TeckCominco did preliminary work (geology, geochem) on the Big Bulk claims, which has numerous showings including Cu-Au porphyry (Big Bulk, 103P 016) and Eskay-type(?) VMS (Leftover, 103P 047). TeckCominco has the right to back-in for 60.8% interest after a pre-feasibility study.

Eagle Plains Resources - has looked at targets in the Smithers-Terrace area, worked up by independent prospector Bernie Kreft using facilities in Smithers MEM office. Some claims were staked.

Kinross Gold Corp. - will provide up to \$500,000 for Heritage Explorations drill program in the Eskay Creek area for up to a 5% interest in the property. Appears to be in addition to \$1.1 million already budgeted. Drilling program believed to be nearly done.

| From: | Wojdak, Paul EM:EX |
|----------|---|
| Sent: | Friday, July 05, 2002 7:48 AM |
| То: | Bob Lane; Jacques Houle; Mike Cathro; Terry, David EM:EX; Bergen, Wally EM:EX; Bill |
| | Price; Bruce Graff; Daryl Hanson; Doug Flynn; Elaine Konschuh; Gleason, Nancy EM:EX; Jill |
| | Pardoe; Van Zalingen, Sylvia EM:EX; Wesley Kennedy |
| Cc: | Dave Lefebure; Duane Anderson; Gib McArthur; Grant, Brian EM:EX; Guthrie, Shelley |
| | EM:EX; Logan, Jim EM:EX; MacIntyre, Don EM:EX; Malott, Mary Lou SRM:EX; Mihalynuk, |
| | Mitch EM:EX; Nelson, JoAnne EM:EX; Rick Conte; Tom Schroeter |
| Subject: | Northwest Geology to July 5, 2002 |

University of Vienna Mine and Geology Tour - Led group of 4 professors and 12 students for 1 week of a 3 week western Canada trip. Visited Fireside Barite, Silvertip Ag-Pb-Zn, McDame Ck placer-gold (Scott Jamieson operation), Cassiar chrysotile and jade, Eskay Creek, Huckleberry and Endako between June 21-28. Plus geology stops ranging from Coast Belt eclogite to the Aiyansh lava flow. The group was led by Dr. Leopold Weber, a geologist and Director of Minerals Policy, Geology and Geotechnics for the Austrian Ministry of Economy and Labour. Relating to MEM structure, Weber's responsibility appears to span the range from Chief Geologist to Chief Mines Inspector, and Mine Permitting/Reclamation. He is also affiliated with the university, teaching mining geology. His questions ranged from ore deposit models and RGS analytic methods to inspection frequency of mines and determination of mine discharge criteria. Austria has an 80,000 sample RGS database, many small industrial mineral and aggregate producers but only one remaining metal mine - Mitersill, the world's largest tungsten producer outside of China. A silver-lead-zinc and an antimony mine closed 10 years ago, the former had been in production since the 1600's.

In Smithers, the Austrian group toured the Mines office and a wine/cheese reception was put on for them by Dennis MacKay, Bulkley-Stikine MLA, and Brian Northup, Smithers mayor.

Fireside - Fireside Minerals plan to mine a "<u>flat</u>" barite vein in the East Bear pit this season, an offshoot of the two parallel steep veins mined last year. This flat vein was not evident from my examination, but is said to be indicated by drilling. The West Bear pit, slightly lower in elevation, is flooded. Barite remaining from last year's mining was ground and bagged in May-June and sold to finance this year's start-up, scheduled for early July. Dr. Weber stated the quality of Fireside barite was such that it could be used in higher value products than drill mud, such as additive for specialized paper and glass (the latter because of low Sr content).

Endako - Mine engineering staff continue to work hard on pit design and costing scenarios in hope of winning Thompson Creek head office approval for the capital expenditure required for the South Wall push back. (Endako is in competition with Thompson Creek's other Mo-mine in the western US for development dollars). The longevity of the recent surge in Mo price, from less than \$3/pound 6 weeks ago to \$6.03 on June 27, is uncertain although Thompson Creek recognize a World supply deficit. The push back decision is rendered even more urgent by the recent Southeast slide which has alienated some of the in-pit ore reserve. The Southeast slide is on the south wall of the Endako pit, at the intersection of the South Basalt fault and a ENE cross fault. Interestingly, the area beneath the slide was the subject of a just-completed ore microscopy study, to determine why Mo-recovery from good grade ore was only 60% (vs normal 78%). The study provided the first evidence at Endako of finely disseminated moly mineralization, versus fracture-vein molybdenite mined to date. (Item for next visit- what intrusive phase hosts this disseminated moly??).

Reviewed exploration <u>drill core</u> from <u>December 2001 program</u> with <u>Ian Thompson</u> (mine engineer with responsibility for geology). Two (of 4) holes 1.5 km northeast of the <u>Endako pit encountered modest quartz-moly</u> stockwork in <u>Endako quartz monzonite</u> and Casey alaskite, strongly overprinted by kaolinite (clay) alteration. This area is not supposed to be mineralized but may represent a continuation of "Vein System 4" (the locus of most intense kaolinite alteration) defined in the Endako pit. <u>One hole drilled 1.5 km southeast of the pit encountered pyrite halo</u> identical to the South Wall. Follow-up IP is planned, to locate the northern edge of the pyrite zone and, hopefully, a new moly ore zone. Historic condemnation drilling in this area (by Placer ca. 1965) relied on visual estimates of Mo-grade(!) and the drill logs are lost.

Table Mountain - Cusac Gold Mines plans exploration drilling, primarily on the <u>Gap area</u>, near the mine workings. Alas, no holes are slated east of the Erickson fault where the extension of the principal veins (a prime exploration target) is hidden beneath a dip slope of capping argillite. This is probably the area of <u>best potential</u> for a "dramatic" discovery required to renew production.

New Claims - Iskut district (104B) busiest in BC during past 2 months, with 1017 units out of provincial total of 6051.

• 527 units by Watershed Resources (Gracey claims) likely acquired on behalf of Heritage Expl Ltd.

| From: | Wojdak, Paul EM:EX |
|----------|--|
| Sent: | Thursday, June 13, 2002 4:22 PM |
| To: | Bergen, Wally EM:EX; Bill Price; Bruce Graff; Daryl Hanson; Doug Flynn; Elaine Konschuh; |
| | Gleason, Nancy EM:EX; Jill Pardoe; Van Zalingen, Sylvia EM:EX; Wesley Kennedy; Bob |
| | Lane; Jacques Houle; Mike Cathro; Terry, David EM:EX |
| Cc: | Dave Lefebure; Duane Anderson; Gib McArthur; Grant, Brian EM:EX; Guthrie, Shelley |
| | EM:EX; Logan, Jim EM:EX; MacIntyre, Don EM:EX; Malott, Mary Lou SRM:EX; Mihalynuk, |
| | Mitch EM:EX; Nelson, JoAnne EM:EX; Rick Conte; Tom Schroeter |
| Subject: | Report to June 14, 2002 |

Klappan - Meeting (June 8) with Robin Goad, president and CEO of Fortune Minerals Ltd. In due diligence period leading to acquisition of the Klappan anthracite coal property. Goad was headed to Klappan, Iskut (to meet Tahltan) and Stewart (port facilities) accompanied by Larry Pituley (ex-Gulf Klappan project manager, now with Marston Mining Engineers and Consultants). I contributed background information about

- Omineca-Stewart road (linked with Duane Anderson)
- local Aboriginal issues and politics
- local environmental and wildlife concerns
- back-country recreation tenure
- Stewart port and town politics

 status of local mineral deposits (primarily Red Chris) that might benefit from coal-fired electrical power and provided contact info as necessary. Key to development of Klappan is shorter road haul to Stewart. Goad is keen on government assistance for a road link from Klappan to Bell II, but connection to Omineca-Stewart road might be also be favourable (longer route but sooner to approval and completion).

Rupert - Smithers Field Trip - Organized by Hans Smit as part of Northwest College Field School, and led by Glenn Woodsworth (Geologic Survey of Canada emeritus) and Tom Richards (ex GSC). Excellent trip, specially to upgrade my knowledge of tectonics in Coast Plutonic belt.

Huckleberry - Operational problems dominated my visit on June 4. Two shovels were down, one permanently and will be replaced, the other for about 2 weeks. Considerable water was flowing into the East pit (half ? full) from spring run-off from the high wall (Huckleberry Mtn) but will soon be pumped clear as work is in progress on the diversion ditch. The first few benches of the expanded East Pit have encountered more oxide copper (malachite, azurite) than expected, with consequent loss in mill recovery. The problem is partially offset by copper grade that is 30-40% better than the reserve model (0.5-0.6% Cu vs 0.4% Cu). The 150 fault, which causes right lateral displacement of the ore zone, is evident in the pit.

Endako - Stability problem of the South Wall has been assessed by the mine's geotechnical consultant and revised pit design is under consideration. Recent skyrocketing of Mo price will make dealing with this problem a lot easier. South wall ore is also mineralogically difficult, with lower Mo recovery.

Heritage Resources - Attend presentation by Fractal Graphics (Nick Archibald) on Eskay area geological/ geochem/ geophys/ topographic digital compilation. Cost of compilation - \$600,000, involved up to 20 geologists in Perth Australia. The value of data aggregated and made available by the MEM was strongly stated. Source of data: ARIS (50%), BCGS (15%), JV partners (10%), MDRU (10%), Heritage (5%), GSC (1%) others (balance). Rationalization of numerous geologic legends by Peter Lewis, but we were not shown the geology map product. Structural control (as opposed to stratigraphic) believed to be important, two "significant" NNE trending corridors are identified. Western belt includes Eskay Creek, SIB, Bonsai and Noot. Eastern belt includes Lance, AP, Unuk, Coul and TV zones. Targets are based on soil/rock geochem anomalies, drill intercepts, favourable geology etc. As reported previously, a \$2 million dollar program in 2002 will validate and priortize these targets.

Meeting was hosted by Glenn Laing, audience included Fred Christiansen, Lou Starck, Dino Cremonese, Dick Billingsley and others. Suggest several field geologists for summer program - experienced field people beginning to be scarce.

U of Vienna Geo-tour - In Northwest region June 21 (Fireside barite) to June 28 (Endako) with lots of geology and a few mines inbetween. Assist with arranging mine visits and planning highway stops. Thanks to JoAnne Nelson for great material in Cassiar area, and to Carol Evenchick (GSC) for some Bowser Lake Group info.

APEGBC - Geoscience Committee meeting on June 10.

VOS Kog Mái Bergen, Wally EM:EX From: Monday, June 03, 2002 11:22 AM Sent: Al Hoffman; Andrew Whale; Bill Phelan; Chris Carr; Denis Lieutard; Duane Anderson; Ed To: Beswick: EM MB Smithers DL: Fred Hermann: Gerald German: Graeme McLaren: Grea McKillop; Gregg Stewart; John Errington; Linda Stewart; Maija Finvers; Martin, Sandra M EM:EX: Pat Cheetham: Patrick O'Rourke: Richard Booth: Rick Adams: Rick Conte: Ross Curtis; Sharon Jorgensen; Shelley Guthrie; Smyth, Ron EM:EX; Ted Hall; Tom Schroeter; Wesley Kennedy NW Region Report to June 2, 2002 Subject:

MINING

Endako - Continuing instability of the central portion of the pit south wall has caused Thompson Creek Mining to revise their mine plan in order to continue with the current daily production rate. The geotechnical consultant reviewing the problem has made draft recommendations to the company which are currently being reviewed. The company is also faced with the shortening time frame for a decision on a set back to the south wall. Current Moly prices are favourable but longevity of the current elevated prices is a concern. Due to required lead time for equipment repairs, planning and manpower adjustments the decision has to be made soon in order to avoid a shortage of ore and mill shut down next year.

Eskay Creek - Mine underground development budget of \$1.5 million, plus \$1.5 million of ore definition and exploration drilling, totalling 26,000 metres. This is a step-up in activity to meet Barrick's production targets. This is in addition to the surface ("regional") exploration budget of \$3 million reported below under exploration.

Huckleberry Approximately 600.000 tonnes of ore in the bottom of the Main zone Pit has been abandoned in the move to the East pit. A combination of pit wall failure and flooding from spring run-off (following very high winter snow pack) is the cause. Start-up ore from the second phase of the East Pit contains more secondary copper than expected, resulting in unacceptably low copper recovery in the mill. First phase mining did not cross this fault, this is a new geologic setting. Oxidation extends to 70 feet (20+ m) into bedrock. Once deeper ore is mined recoveries should improve.

EXPLORATION

Spectrum Property - This property is located along the eastern flank of Mount Edziza Provincial Park and was held out of the park by the Iskut Stikine LRMP table and the park boundary was revised to allow access. Rod Salfinger, an Australian promoter and holder of the mineral tenures, is currently starting into the process to raise funding and receive approvals to commence mine development. As a part of raising funds Salfinger is soliciting various sources. On May 15 Doug Stewart from Rothschild's Australian Golden Arrow Fund (global mining investors) met with Graeme McLaren, David Johns, John Errington, Duane Anderson, Trent Jonson and Bob Hart to discuss the mining climate in BC and changes in perception on investing here. Mr. Stewart apparently indicated at the end of the meeting that he was "enthused" with the results of the meeting. Maybe a new mine.

Heritage Resources - Will merge with Glenfred Holdings Inc. thereby consolidating 2202 claim units (47,239 hectares) in the Eskay mine area, extending from the Iskut River to Treaty Creek. Glenfred is a private company owned by Glenn Laing and Fred Christiansen through St Andrew Goldfields Ltd (50%), Zebrex Holdings Inc (37.5%) and Dolly Varden Resources Inc (12.5%). St Andrew will hold 45% of Heritage and appears to be the controlling player. A report to be filed on SEDAR details claims staked, purchased and option agreements. At Treaty Creek and Bonsai, a minimum of \$100,000 is to be spent on each property. Glenn Laing and Fred Billingsley (of Heritage) state that \$2 million will be expended on the merged companies' claims this year, in a variety of early-stage and drilling programs. The work is driven by high-computer-tech geological modeling of the Eskay area by Fractal Graphics (of Red Lake, Goldcorp Challenge fame).

Kinaskan (104G 033, 160, 161, 166, 167) - Consolidated Earth Stewards Inc. will acquire the QC claims (ca 538 units) staked recently by Vicerov (see April 5 report). The claims cover satellite intrusions north of the early Jurassic Groat stock, emplaced into Stuhini and Hazelton Group strata. Mineral potential includes both copper-gold porphyry similar to Red Chris and Eskay-style VMS associated with Jurassic felsic volcanics and felsite intrusions.

Tommy Jack (94D 031) - Gold City Industries Ltd. has optioned part of this intrusion-related/ vein gold prospect from Al

| From: | Wojdak, Paul EM:EX |
|----------|--|
| Sent: | Friday, April 19, 2002 9:01 AM |
| To: | Bergen, Wally EM:EX; Bill Price; Bruce Graff; Daryl Hanson; Doug Flynn; Elaine Konschuh; |
| | Gleason, Nancy EM:EX; Jill Pardoe; Van Zalingen, Sylvia EM:EX; Wesley Kennedy; Bob |
| | Lane; Jacques Houle; Mike Cathro; Terry, David EM:EX |
| Cc: | Dave Lefebure; Duane Anderson; Gib McArthur; MacIntyre, Don EM:EX; Malott, Mary Lou SRM:EX; Mihalynuk, Mitch EM:EX; Nelson, JoAnne EM:EX; Rick Conte; Tom Schroeter |
| | |
| Subject: | Northwest Report to April 19, 2002 |

Treaty (104B 078, 280) & Bonsai (104B 383) - St Andrew Goldfields (through Glenfred Holdings Inc.) has an option to acquire 50% of these important Iskut district claim groups from Teuton Resources. Apparently St Andrew's claims in the Stewart-Iskut camp now total about 2500 units - a major ground position indeed! Bonsai is 6 km west of Eskay Creek and covers the Eskay horizon across the Coulter Creek syncline from the mine. Five holes were drilled by Prime Resources (subsequently Homestake and now Barrick) in 1995, and the property reappraised last year by Barrick. Treaty, 20 km east of Eskay, is a high sulfidation epithermal gold-silver prospect with \$2.5 million in past expenditure.

Telegraph - Iskut More staking by <u>Dave Mehner and Adam Travis (follow up to previous weekly report)</u>. The Tahltan track record of supporting mine development is an important consideration for their (and their backers) decision to acquire mineral title in this area.

Foremore (104G 148) - Roca Mines Inc. has acquired this Iskut-area VMS prospect from prospector Lorne Warren. The agreement has not been announced and terms are unknown. John Mirko (Warren's partner) has joined Roca Mines. \$250,000 will be spent on exploration this season.

Santa Maria (93L 063) - Peregrine Syndicate (operated by Discovery Consultants) has determined a mid-Jurassic age for rhyolite which is associated with Cu-Ag veins and stockwork. The date, done by zircon U-Pb done at U of A, is either 178.7 or 170 Ma. This means the rhyolite is part of the enclosing Hazelton Group succession (Eskay Creek age!) and not a late Cretaceous-Eocene plug, as previously thought. The property is 37 km SSW of Smithers.

Endako - Visit on April 8, en route to KEG. Exploration drill core still under snow. Interesting results were obtained from a hole drilled last December southeast of the Endako Pit, that will probably be followed up by a few lines of IP and (perhaps) more drilling. Instead, I viewed some core from 5 pit definition holes drilled in Jan and March 2002 in the lower North Wall and in the South Basalt fault area of the South Wall.

KEG - Follow-up on information requests.

CIM/Minerals North - informed that Minister will not attend.

Kaska Dene Energy and Mining Forum (Lower Post, April 23-25)- prepare presentation. Thanks to JoAnne Nelson, Denis Lieutard, Rick Conte, Doug Flynn, Daryl Hanson

Paul

Paul Wojdak, P.Geo. Regional Geologist, Smithers BC Ministry of Energy and Mines

| From: | Wojdak, Paul EM:EX ->milher |
|----------|---|
| Sent: | Friday, February 22, 2002 8:28 AM |
| To: | Bob Lane; Jacques Houle; Mike Cathro; Terry, David EM:EX; Bergen, Wally EM:EX; Bill |
| | Price; Bruce Graff; Bryan Good; Daryl Hanson; Doug Flynn; Elaine Konschuh; Gleason, |
| | Nancy EM:EX; Jill Pardoe; Van Zalingen, Sylvia EM:EX; Wesley Kennedy |
| Cc: | Dave Lefebure; deleted - 020117 - Malott, Mary Lou MSRM:EX; Derek Brown; Duane |
| | Anderson; Gib McArthur; Rick Conte; Tom Schroeter |
| Subject: | 2-Week Report, Feb 22 2002 |
| | |

North Coast LRMP - New land planning process got underway at Feb 1-3 meeting in Prince Ruper. Hans Smit local geological consultant and director of BC-Yukon Chamber of Mines, will represent the mining and mineral exploration industry,

Eskay Creek - 2001 production of 320,784 oz (9977 kg) of gold and 15.45 million oz (480,685 kg) of silver. Reserves at beginning of 2002 were,

- Shipping ore, 584,942 tonnes at 66.3 g/t Au, 3119 g/t Ag .
- Mill ore, 708.668 tonnes at 23.2 g/t Au, 910 g/t Ag

Mill ore, 708,668 tonnes at 23.2 g/t Au, 910 g/t Ag Resource, 626,000 tonnes at 10 g/t Au, 310 g/t Ag - 522,000 @ 17,39/H.Au'; 3679/H.Ag, Production goal for 2002 is 366,000 oz of gold and 16 million oz of silver.

Huckleberry - 2001 production of 36,397,770 kg of Cu, 888,380 kg of Mo, 330 kg Au and 9052 kg of Ag from 7.4 million tonnes of ore milled. (The mine has also moved 27 feet of snowfall this winter!) Reserves at the beginning of 2002 were,

- Main pit 2,774,000 tonnes at 0.517% Cu, 0.014% Mo
- East pit 51.610.000 tonnes at 0.478% Cu. 0.013% Mo

Mining goal for 2002 is 8.1 million tonnes at 0.478% Cu, from a combined total of remaining Main Pit and East pit ores.

Endako 2001 production of 5,565,499 kg of Mo from 9.5 million tonnes of ore milled. Reserves (as of Oct 1, 2002) were.

- Endako pit, 55.4 million tonnes at 0.072% Mo •
- Denak pit, 1.5 million tonnes at 0.075% Mo
- Stockpile, 26.5 million tonnes at 0.047% Mo

Prospector Assistance - reviewed the last 2001 report: Peter Ross followed up of Ta-Sn-W RGS anomaly in Surprise Lake (specialty granite) batholith, near Atlin. RGS anomaly could not be duplicated, target evolved to intrusion-related (Ft Knox) gold.

Kemess North presentation to Smithers Ex Grp by Mike Hibbitts (chief geologist, Kemess mine) attracted 26 people, including one town councillor and MLA's riding office representative.

Powerpoint for prospectors (workshop on Feb 15) - Preparation for Rock Talk, scan photos and make geology maps from Map Place.

Rock Talk (Feb 26) - Organization help from Daryl Hanson and Hans Smit. (Frantically) preparing presentation on "North Coast to Iskut" geology and mineral deposits. Thank you to Jim Logan, Mitch Mihalynuk and Bob Anderson for corel files. BC Securities course (Feb 27) has 16 registrants.

Paul

Paul Wojdak, P.Geo. Regional Geologist, Smithers BC Ministry of Energy and Mines

| From: | Wojdak, Paul EM:EX |
|----------|--|
| Sent: | Friday, March 01, 2002 11:02 AM |
| To: | Bergen, Wally EM:EX; Bill Price; Bruce Graff; Daryl Hanson; Doug Flynn; Elaine Konschuh; |
| | Gleason, Nancy EM:EX; Jill Pardoe; Van Zalingen, Sylvia EM:EX; Wesley Kennedy; Bob |
| | Lane; Jacques Houle; Mike Cathro; Terry, David EM:EX |
| Cc: | Dave Lefebure; deleted - 020117 - Malott, Mary Lou MSRM:EX; Derek Brown; Duane |
| | Anderson; Gib McArthur; Rick Conte; Tom Schroeter |
| Subject: | Report to March 1, 2002 |
| • | |

Map Staking - A spirited discussion by 36 attendees to a Feb 25 Smithers meeting of local prospectors with Denis Lieutard and Rick Conte.

Rock Talk - Excellent meeting, 46 particpants. About an equal mix of Vancouver-based and local explorationists. Thanks to all participants, especially JoAnne Nelson and Larry Diakow for well-planned and executed presentations. Thanks to Daryl Hanson for adept handling of multi-media and overcoming periodic technical problems.

Mineral Property Reporting requirements by the BC Securities Commission - a course on the new laws under article 43-101. Attended by 16.

Endako - beginning to receive moly concentrate from Los Pelambres (South American mine) for custom roasting. Endako has benefited from timely increase in Mo-price (\$2.30 in 4th quarter 2001 to \$2.80 in Feb 2002) because the mine, as of January, is once again paying regular BC Hydro rates. Power cost reductions negotiated 14 months ago under the Job Protection Commission are no longer in effect.

Queen Charlotte Islands fossils - Parks Canada has contracted Geological Survey of Canada to inventory all fossil localities on the islands and to prepare a management plan. Concern by a local entrepreneur that this will lead to more No Staking Reserves. Ironically, many fossil localities are in the innumerable logging road quarries. The fossils can be blasted and spread over miles as roadfill but not collected for sale to augment tourism. Information on some 50,000 QCI fossil specimens, stored by the GSC in Calgary, could not even be obtained by the museum in Skidegate (under freedom of information request), demonstrating the paranoia surrounding this issue.

Hydrocarbon Potential in Southern Bowser Basin - Poster by Jim Haggart related to an unsuccessful (in 2001) Geological Survey of Canada project proposal to evaluate oil and gas potential is on display in Smithers office. Provided some contacts/links within MEM and Gitksan for a <u>reconsideration</u> of the proposal in light of increased interest by the Province in Bowser Basin oil and gas. O&G companies in Calgary are other potential participants. Any interest by MEM in a partnership program with the GSC may benefit current joint programs at Bella Coola and Atlin.

Other New Office Posters - B.C. Geological Survey 2001 field projects

- Beale Lake (NE of Dease Lake) area by JoAnne Nelson
- Nakina (Atlin) area by Mitch Mihalynuk et al (joint with GSC)
- Bella Coola area by Larry Diakow et al (joint with GSC)
- Platinum in Gold Placers by Vic Levson
- Ecstall area by Dani Alldrick
- Anyox-Georgie River area by Carol Evenchick (GSC)

Paul

Paul Wojdak, P.Geo. Regional Geologist, Smithers BC Ministry of Energy and Mines

78 -> Key. Mgr Dr Topx

From: Pow, David EM:EX Sent: Friday, January 25, 2002 10:18 AM

Sent: deleted - 011214 - Blackwell, Romona MSRM:EX; Ed Beswick (E-mail); Lane, Bob EM:EX; To: MacDonald, Ken EM:EX; McBride, Brian EM:EX; McGrath, Brian EM:EX; Morgan, David EM:EX; Pittman, Ed EM:EX; Rivers, Jan EM:EX; Wick, Patricia EM:EX; Wood, Nancy EM:EX Adams, Rick EM:EX; Anderson, Duane EM:EX; Beckett, Carla EM:EX; Bergen, Wally Cc: EM:EX; Brown, Derek EM:EX; Cheetham, Pat EM:EX; Conte, Rick EM:EX; Curtis, Ross EM:EX; Emington, John EM:EX; German, Gerald EM:EX; Guthrie, Shelley EM:EX; Hall, Ted EM:EX; Hermann, Fred EM:EX; Jorgensen, Sharon EM:EX; Kennedy, Wesley EM:EX; Lefebure, Dave EM:EX; Lieutard, Denis EM:EX; McArthur, Gib EM:EX; McLaren, Graeme EM:EX; Murphy, Maureen EM:EX; O'Rourke, Patrick EM:EX; Phelan, Bill EM:EX; Rennie, Lorna EM:EX; Ringstad, Norm EAO:EX; Schmitt, Rolf EM:EX; Schroeter, Tom EM:EX; Smyth, Ron EM:EX; Stewart, Linda EM:EX; Whale, Andrew EM:EX; White, Don CSE:EX; Lane, Bob EM:EX; MacDonald, Ken EM:EX; McBride, Brian EM:EX; McGrath, Brian EM:EX; McIntyre, Ken EM:EX; Morgan, David EM:EX; XT:EM Pardy, Jamie; Pittman, Ed EM:EX; Pow, David EM:EX; Rivers, Jan EM:EX; Wick, Patricia EM:EX; Wood, Nancy EM:EX PG WEEKLY JAN 25/02 Subject:

GIBRALTAR Land fill proposal for Gibraltar has received the go ahead and request to amend their permit should be received shortly.

ENDAKO In pit diamond drilling to extend reserves

PINE VALLEY North American on site doing mining for the 100,000 tonne bulk sample

KEMESS Powerline deactivation plans received, work is progressing with some spot seeding required as well as culvert salvage and disposal of waste to be completed..

PLACER DFO is pushing for a 15m leave strip vs. the current 10m and will be wanting to go to the FPC setbacks. Possibility for problems as it has been agreed in the past to have a 10m leave strip and the placer miners have been working with the policy for years. As the DFO is a higher level of government there may be problems this summer, clarification is required. We will be approving work using the 10m leave strip and if DFO has concerns in specific areas we will be notifying our clients or putting a warning note in their approval letters.

Receiving inquiries from clients as to the need to have permits or reclamation security, they have heard that there may be upcoming changes. Some clarification as to the future plans are needed in order to answer questions. Right now operating on the premise that it is business as usual.

ROUNDUP Beswick, Lane and McGrath in attendance

COPING WITH CHANGE Most personnel have attended the sessions with mixed feelings as to the value of this one day course.

FUNDAMENTALS OF SUPERVISION Excellent course that should be mandatory for all people in a supervisory role.

| From: | Wojdak, Paul EM:EX |
|----------|--|
| Sent: | Friday, January 11, 2002 9:30 AM |
| То: | Bergen, Wally EM:EX; Bill Price; Bruce Graff; Bryan Good; Daryl Hanson; Doug Flynn; Elaine Konschuh; Gleason, Nancy EM:EX; Jill Pardoe; Van Zalingen, Sylvia EM:EX; Wesley Kennedy; Bob Lane; Jacques Houle; Mike Cathro; Terry, David EM:EX |
| Cc: | Dave Lefebure; Derek Brown; Duane Anderson; Gib McArthur; Malott, Mary Lou MSRM:EX; Rick Conte; Tom Schroeter |
| Subject: | Report to Jan 11, 2002 |
| | |

5-) KG

Endako - Brian Good reports that toll roasting contracts are now firm, to process moly concentrates from Highland Valley Copper and a Chilean mine. Good news, a small step to continuing operation at Endako.

RDN - Newmont returned property to Rimfire, despite some encouraging drill results.

Ecstall claims - Provide comments to Lindsay Bottomer (Southern Rio Resources) on Bell and Dani VMS properties of Shawn Turford (PAP project) and Ralph Keefe.

Exploration and Mining Review 2001 - Preliminary version completed and copied for Roundup distribution. Thanks to Nancy Gleason for formatting. Editing by Bill McMillan already completed!, changes to be incorporated into final version.

Roundup Poster - Completed with 4 days of dedicated work by Daryl Hanson. Glossy paper scammed from MSRM, printer glitches being overcome....

Rock Talk (Feb 25-27) - Planning event. Flyer in prep for Roundup marketing effort.

Firestorm Opal - Begin to draft map for report for Exploration and Mining in BC.

Paul

Paul Wojdak, P.Geo. Regional Geologist, Smithers BC Ministry of Energy and Mines

| From: | Wojdak, Paul EM:EX |
|----------|--|
| Sent: | Friday, December 07, 2001 1:51 PM |
| То: | Bob Lane; Jacques Houle; Mike Cathro; Terry, David EM:EX; Bergen, Wally EM:EX; Bill |
| | Price; Bruce Graff; Bryan Good; Daryl Hanson; Doug Flynn; Elaine Konschuh; Jill Pardoe; Van Zalingen, Sylvia EM:EX; Wesley Kennedy |
| Cc: | Dave Lefebure; Derek Brown; Duane Anderson; Gib McArthur; Malott, Mary Lou MSRM:EX; Rick Conte; Tom Schroeter |
| Subject: | Report to Dec 6/01 |

Copper Star - Doublestar Resources announced drill results on this porphyry copper property 60 km south of Smithers. Four IP anomalies were tested. Only the hole angled beneath the main showing (and the strongest IP anomaly) intersected significant copper, within a <u>Bulkley granodiorite stock - 0.26%</u> Cu over 122.9 m. This hole, # 7 of the program, was the next one after my Oct 12 visit (see Oct 19 weekly). Complex geological relationships are evident between Hazelton(?) volcanics, Skeena Group sediments, the Bulkley stock and Cretaceous(?)/Tertiary felsic and mafic volcanics. I may follow up with review of the core next season. Doublestar has terminated its earn-in agreement with Continental Minerals Corp. (a Hunter Dickinson company).

Endako- grilling program reported last week may be postponed until January.

Eskay Creek- Attend NWMDRC presentation by Homestake. Prompted by soon-to-be new owner (vote on Barrick merger on Dec 14), Eskay has applied to increase mining rate to 750 tpd from current (officially) 565 tpd. Actual output appears to be more like 590 tpd. In 2002, the company expects to achieve 670 tpd (300 tpd mill ore + 370 tpd direct shipping ore). As the mill is already operating at 300 tpd this increase will consist entirely of direct shipping ore, to 370 tpd. The company is considering viability of mill expansion to 360 tpd. Consideration of the rate of depletion of the two ore types is critical, mill ore is not viable without the cash flow of direct shipping ore. And clearly, it is easier to find more mill ore than direct shipping.

Northwest Exploration and Mine Review - begin to prepare write-up for Roundup distribution.

Exploration Property file and Roundup Poster - Material from prospectors trickling in, being compiled by Elaine Konschuh. Daryl doing prelim work for poster.

Paul

Paul Wojdak, P.Geo. Regional Geologist, Smithers BC Ministry of Energy and Mines

| From: | Wojdak, Paul EM:EX |
|----------|---|
| Sent: | Thursday, November 29, 2001 1:45 PM |
| To: | Bob Lane; Jacques Houle; Mike Cathro; Terry, David EM:EX; Bergen, Wally EM:EX; Bill |
| | Price; Bruce Graff; Bryan Good; Daryl Hanson; Doug Flynn; Elaine Konschuh; Jill Pardoe; |
| | Van Zalingen, Sylvia EM:EX; Wesley Kennedy |
| Cc: | Dave Lefebure; Derek Brown; Duane Anderson; Gib McArthur; Malott, Mary Lou MSRM:EX; |
| | Rick Conte; Tom Schroeter |
| Subject: | report to Nov 30, 2001 |
| | |

Yukon Geoscience Forum- Nearly 200 people attended, fewer industry participants than previous years. NWBC presentation on Nov 19, with suggestion of uptum in exploration, was well received.

RG Victoria review- Similar presentation given on Nov 22 as above.

Northwest Community College- Meet with Tracey Strong of NWCC about giving a course on "Rocks, Minerals, Geology of Bulkley Valley" to be part of Northwest Field School, 2002.

Statistics and summaries of exploration activity (spending, drilling, work done on major projects) and forecast mine production forwarded for Provincial compilation by Schroeter.

Imperial Metals- filed for bankruptcy protection and separated business activities into mining and oil & gas

Endako- Small exploration drilling program to proceed in early December to investigate two untested molybdenum anomalies within the mine property. One hole near Southeast dump whre a water seep has high moly values that cannot be explained by surface runoff. Four holes planned on the Water Tank zone, between Endako pit and #1 tailings pond, to follow up a coincident soil anomaly and previous percussion hole intersection.

Barrick/Homestake - Strong rumour that Barrick will centralize offices to Toronto. Vancouver (admin and exploration), Reno (exploration) and Walnut Park, Ca. will all close.

Cordilleran Roundup - Poster planning begun with Daryl Hanson, assistance from GSB (Don MacIntyre). Smithers booth (loan from Smithers Chamber of Commerce) being organized by Roy Fowler (funding) and Bruce Graff (logistics, display). Hawk Air donated two Vancouver-Smithers tickets for booth contest (to attend exploration golf tournament).

Smithers Exploration Group - Information meeting to be held Friday Nov 30. Expected attendance 35.

Paul

Paul Wojdak, P.Geo. Regional Geologist, Smithers BC Ministry of Energy and Mines

| From: | Wojdak, Paul EM:EX |
|----------|---|
| Sent: | Thursday, November 29, 2001 1:45 PM |
| То: | Bob Lane; Jacques Houle; Mike Cathro; Terry, David EM:EX; Bergen, Wally EM:EX; Bill |
| | Price; Bruce Graff; Bryan Good; Daryl Hanson; Doug Flynn; Elaine Konschuh; Jill Pardoe; |
| | Van Zalingen, Sylvia EM:EX; Wesley Kennedy |
| Cc: | Dave Lefebure; Derek Brown; Duane Anderson; Gib McArthur; Malott, Mary Lou MSRM:EX; |
| | Rick Conte; Tom Schroeter |
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Paul

Paul Wojdak, P.Geo. Regional Geologist, Smithers BC Ministry of Energy and Mines

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| From: | Wojdak, Paul EM:EX |
|----------|---|
| Sent: | Friday, November 02, 2001 9:20 AM |
| To: | Bob Lane; Jacques Houle; Mike Cathro; Terry, David EM:EX; Bergen, Wally EM:EX; Bill |
| | Price; Bruce Graff; Bryan Good; Daryl Hanson; Doug Flynn; Elaine Konschuh; Jill Pardoe; |
| | Van Zalingen, Sylvia EM:EX; Wesley Kennedy |
| Cc: | Dave Lefebure; Derek Brown; Duane Anderson; Gib McArthur; Malott, Mary Lou MSRM:EX; |
| | Rick Conte; Tom Schroeter |
| Subject: | 2-week report to Nov 2, 2001 |
| | |

Exploration Summary - Estimate \$7.14 million (up from \$6.5 million in 2000) and 39,500 metres of drilling (31,735 m in 2000). Data includes projected figures for Morrison which is still active (see below).

Morrison (93M 007) - Drilling resumed, expected to continue to end of Nov. Assays from five more holes on this Babine copper-gold porphyry have been released. Good intercepts though some (cynics) say no better than what was left in the pit at Bell Copper. Revised resource estimate by Kilborn, expected in spring 2002, awaited with interest. Other work that is necessary to advance the Morrison project to development stage is not being done; minimal base line environmental, no tailings site investigation, no ARD work.

| DDH | From | То | Interval | Cu% | Au g/t | Area |
|-----|------|-----|------------|------|--------|------------|
| 39 | 96 | 160 | 64 metres | 0.26 | 0.16 | East fault |
| | 169 | 248 | 79 metres | 0.30 | 0.24 | |
| 40 | 44 | 151 | 107 metres | 0.39 | 0.28 | East fault |
| | 178 | 400 | 222 metres | 0.50 | 0.24 | |
| 41 | 17 | 236 | 219 metres | 0.39 | 0.15 | Southeast |
| 42 | 93 | 297 | 204 metres | 0.47 | 0.20 | Southeast |
| 43 | 4 | 72 | 68 metres | 0.48 | 0.19 | Southeast |
| | 93 | 160 | 67 metres | 0.46 | 0.16 | |

Eskay - 3rd quarter financial report shows that cost of production has increased to \$60/oz compared with \$33 a year ago, as more ore comes from smaller and lower grade stopes. Eskay is now in the mid-years of its life. Water Tower zone discovered by summer drilling. A modest zone, in footwall rhyolite, perhaps related to, but separate from 21C zone. Continued drilling planned next year.

Endako Visited on Oct 25, discussions with Al Morrish, mine manager and lan Thompson, mine engineer. Outcome of twice-delayed meeting with Japanese/American co-owners (on Nov 2) to set mine budget for new fiscal year is important to future of Endako mine. Stripping waste rock on the <u>south wall</u> of the Endako pit must resume in the new year (Oct 1-Sept 30 fiscal year at Endako) in order to avoid a future 4 month shutdown to catch up. Uncertainty is increased by recent dip in Mo price to \$2.30/pound range. Endako's cost of production is believed to be about \$2 per pound (due to success of in-pit crusher and no stripping of waste) but the end of power savings (in January?) arranged by the Job Protection Commission will increase costs by \$0.20 per pound. The south ramp is being mined out, the ore is hauled down to the in-pit crusher. Pit access is maintained by north ramp. Mining of the ramp was haulted briefly during the summer by sudden 1.5 metre sub-horizontal movement of the ramp. Water infiltration into the upper benches alor. J the steep dipping South Basalt fault intersected moly-shear veins that dip 20 degrees north, into the pit. Failure occurred along the moly gouge zones, the problem was easily solved by diverting runoff water away from the South Basalt fault. Continued mining will diminish the load, no further probems anticipated.

Omineca-Stewart road - presentation to Omineca Road Committee on mineral/energy activity and potential in vicinity of proposed Omineca-Stewart connector.

Adanac (104N 052) near Atlin- Stirrup Creek Gold Ltd acquired this 70 Ma porphyry deposit (152 million tonnes of 0.063% Mo) by staking. Resource estimate based on 32,000 metres of drilling and 1100 metres of underground development. Placer Development considered mine development in 1981. The Adanac deposit area includes 11 other Minfile listings with significant tungsten (as scheelite and wolframite) and interesting amounts of tin (as cassiterite), gold and fluorite. Stirrup plans to evaluate the best targets for tungsten and gold.

Banks Island platinum-palladium target (103G 039) staked by Santoy Resources (72 units acquired). Suggest North Coast continuation of Alaskan-type zoned ultramafites as a new GSB project.

Keg. 119 Cmithet

From:Bergen, Wally EM:EXSent:Friday, April 06, 2001 1:55 PMTo:Al Hoffman; Andrew Whale; Bill Phelan; Brian Braidwood; Chris Carr; Denis Lieutard; Duane
Anderson; Ed Beswick; EM MB Smithers DL; Fred Hermann; Gerald German; Graeme McLaren;
Greg McKillop; Gregg Stewart; Joan Hesketh; John Errington; Kerry Readshaw; Linda Stewart;
Maija Finvers; Marlene Cochrane; Pat Cheetham; Patrick O'Rourke; Richard Booth; Rick Adams;
Rick Conte; Ross Curtis; Sandra Kilmartin; Sharon Jorgensen; Shelley Guthrie; Ted Hall; Terri
Starkes; Tom Carter; Tom Schroeter; Wesley KennedySubject:NW RegionReport to April 6, 2001

MINING

Golden Bear crews are back on site and starting to clear some of the snow off the mine access roads. Heap leach operations at the Ursa not expected to start until May.

The NWMDRC will be meeting on April 10 and 11. Topics to include updates and discussions with Huckleberry regarding their tailings impoundment, an update from Eskay creek regarding the work to date and summer work on the tailings line to Tom McKay Lake, an update and discussions with Golden Bear regarding their site reclamation plan and an update from Premier regarding reclamation planning and the tailings impoundment. All meetings are scheduled for Smithers in the Court House conference room.

Meetings occurred on March 28-30 in Vancouver with the EAO regarding the Tulsequah mine project. Nothing positive to report other than it seems that the parties are moving towards an agreement of how to disagree on several issues. A few things have been clarified and the there may be solutions but they do not take the parties to overall agreement. The EAO and the Taku River Tlingit will be seeking an meeting with the proponent to review the work to date and to ascertain the proponents response.

Endako mine continues to loose it's workforce as employees are successful in seeking employment elsewhere in <u>anticipation</u> that the mine may close. The company has a proposal from the JPC which it is reviewing.

No word yet on the outcome of the Cassiar fire insurance claim. As claim was filed on or about February 13 and the insurance company's response is due any day now.

Eskay Creek: On March 20 a malfunctioning furnace which provided heat to the kitchen and dining room was detected to be also providing 12 PPM of CO to the areas noted. The furnace was shut down and electric baseboard heaters turned on until the problem was resolved. Awaiting report from company.

GENERAL

Doug Flynn and Jill Pardoe attended the Rock Slope Stability for Mining workshop conducted by Chuck Brawner in Vancouver and found the course to be informative and useful.

Wally Bergen Ministry of Energy and Mines Regional Manager Northwest Region Telephone: 250 847-7385 Facsimile: 250 847-7603

From:Bergen, Wally EM:EXSent:Sunday, February 04, 2001 9:23 PMTo:Al Hoffman; Andrew Whale; Bill Phelan; Brian Braidwood; Chris Carr; Denis Lieutard; Duane
Anderson; Ed Beswick; EM MB Smithers DL; Fred Hermann; Gerald German; Graeme McLaren;
Greg McKillop; Gregg Stewart; Joan Hesketh; John Errington; Kerry Readshaw; Linda Stewart;
Maija Finvers; Marlene Cochrane; Pat Cheetham; Patrick O'Rourke; Richard Booth; Rick Adams;
Rick Conte; Ross Curtis; Sandra Kilmartin; Sharon Jorgensen; Shelley Guthrie; Ted Hall; Terri
Starkes; Tom Carter; Tom Schroeter; Wesley KennedySubject:NW RegionWeekly Report to February 4, 2001

MINING

Endako Mine: The mine announced that they will remain in operation until May 4 and continue to look for means to stay open longer. The company has been able reach agreements with suppliers and with the Job Protection Commission which enables them to stay in operation in anticipation of improved moly prices and possible further JPC relief.

Huckleberry Mine has acquired major, larger equipment. The parts for a P&H 2100 shovel are anticipated to be completely on site by February 8. Due to the size of some of the parts they are being shipped by rail to Houston and then transported to the mine site by road during times when logging trucks are not active. Four Cat 785 haulage trucks have also been purchased and one is now in service and assembly of the second unit is nearly complete.

Eskay Creek had preliminary discussions with MELP, DFO and MEM regarding a proposal to construct a dam on Big Tom McKay Lake to divert water to a hydroelectric generator on Ketchum Creek. The company was considering this option as a means of offsetting rising fuel costs. They have subsequently announced that further evaluation indicates that economics of the project are not viable and they will remain with fuel purchase and hauling.

PLACER

Scott Jamieson (placer miner) constructed a bridge across McDame Creek without approvals from Water Management, DFO or Coast Guard. He has since filed a Notice of Work and is in the process of submitting a Navigable Waters application. The construction is being investigated by the CO Service in Dease Lake.

FIRST NATIONS

Eleven delegates from northwest First Nations were invited to Roundup. All who were contacted over the 4 days of the conference were impressed by the size, scope and variety of things that were happening. More specific comments were in relation to the international nature of the conference, the number of different companies, the complexity of the exploration, development and mining processes and the amount of networking and contacts that are made.

Daryl Hanson and I were approached by an exploration geologist who had worked in the Northwest Region and had complained about the amount of regulation he had to experience. He indicated that he is now working in the North West Territories and that the menu of regulations is far greater there and takes much more time. He indicated that he did not realize how good things were in B.C. and how prompt responses to applications were.

GENERAL

On January 30 and 31 Richard Booth visited the office and spent the bulk of the time with MMS users doing a combination of training and debugging on the system. Staff learnt about various aspects of MMS and Richard has a much better understanding of the various frustrations. Hopefully with ongoing debugging and the training which is being set-up we will be well on the way to a more workable system.

A parting thought:

| From: | Bergen, Wally EM:EX |
|----------|--|
| Sent: | Monday, November 13, 2000 10:55 PM |
| То: | Al Hoffman; Andrew Whale; Bill Phelan; Brian Braidwood; Chris Carr; Denis Lieutard; Duane Anderson; Ed Beswick; EM MB Smithers DL; Fred Hermann; Gerald German; Graeme McLaren; |
| | Greg McKillop; Gregg Stewart; Joan Hesketh; John Errington; Kerry Readshaw; Linda Stewart; Maija Finvers; Marlene Cochrane; Pat Cheetham; Richard Booth; Rick Adams; Rick Conte; Ross Curtis; Sharon Jorgensen; Shelley Guthrie; Ted Hall; Terri Starkes; Tom Carter; Tom Schroeter; |
| | Wesley Kennedy |
| Subject: | NW Region Weekly Report to November 10, 2000 |

MINING

Endako Mine is experiencing major financial difficulties at the current price of moly. The mine has gone onto a <u>12 week lay-off notice for all employees</u>. The mine is going to be working with the <u>Job Protection Commission</u> to try and find relief until moly prices improve. The mine has just competed installation of an in pit crusher and conveyor belt to try and reduce haul costs. If the lay-off proceeds 218 employees will be affected.

Premier Gold: Rock falls into Cascade Creek Diversion have been cleaned up as much as possible for this year. More work to do next spring during low water flow period. Considerably more work to do on slope stabilization if diversion to be accepted for long term.

Golden Bear Final mucking of Kodiak B ore completed November 8th. Underground stood up much better than expected. Underground development was extended into the small Kodiak C deposit during mining of Kodiak B. Testing determined narrow widths and poor gold leach recovery and it was determined not to mine Kodiak C. This means that oxide reserves at Golden Bear are exhausted. Leaching of ore mined this year will continue in 2001 but gold production will be much less than the 95,000 ounces produced this year Tonnage and grade were almost exactly to predicted values. Production this year was in excess of 96,000 ounces gold. A'l employees are to leave site Nov. 11 except for watchmen.

Cassiar. Resumed production Wed. Nov. 8th after a three week shutdown. Cassiar is experiencing some marketing problems which have resulted in high on site inventories of certain length fiber stocks. Mill has been re-tooled to produce a fiber length in demand by Mexico. Mill may close for a period over the Christmas-January, 2001 period.

Eskay Creek Tailings pipeline construction has stopped for this year. Pipeline is about 95% complete. Drop section into Tom Mackay Lake still to be completed and liner to be installed in pipeline. Homestake expects pipeline to be operational in July of 2001.

D/O in mine last week resulted from an employee traveling into a heading that had high levels of carbon dioxice gas build-up. Employee was able to leave area and after being checked out by the first aid went back to work. Employee had turned on ventilation fan but did not wait long enough for gas to be expelled.

RECLAMATION

M^{IC} The <u>Premier Power Corporation</u>, who propose to construct a <u>hydro electric generation</u> plant at <u>Long lake in</u> the vicinity of the Premier Mine, has indicated that the company has <u>submitted their proposal to B.C.</u> Hydro and the preliminary feedback is that Hydro is definitely interested in the power. Among the options being examined is one that would provide Stewart/Hyder, Aiyansh and the Nass Valley, etc. with power independently in the event of a major outage on the main line to Terrace and Stewart. Premier Power is negotiating the specifics of an agreement with Boliden to use specific structures and tenures on the Premier site.

Skyline Gold Corp. A small group of company personnel and contractors flew into site in September and started the clean-up and reclamation of this property. Less work than anticipated was accomplished this year due to the late snow melt. Company is expecting to continue next year as early as snow melt permits.

| From: | Bergen, Wally EM:EX |
|----------|--|
| Sent: | Sunday, June 11, 2000 5:30 PM |
| То: | Al Hoffman; Andrew Whale; Bill Phelan; Brian Braidwood; Denis Lieutard; Duane Anderson; Ed Beswick; EM MB Smithers DL; Fred Hermann; Gerald German; Grace Harris; Graeme McLaren; Greg McKillop; Gregg Stewart; Joan Hesketh; John Clancy; John Errington; Kerry Readshaw; Linda Stewart; Maija Finvers; Marlene Cochrane; Pat Cheetham; Richard Booth; Rick Adams; Rick Conte; Ross Curtis; Sharon Jorgensen; Shelley Guthrie; Ted Hall; Terri Starkes; Tom |
| | Carter; Tom Schroeter; Wesley Kennedy |
| Subject: | NW Region Weekly Report to June 11, 2000 |

MINING

Recommendation for issuance of a EA project certificate for Eskay Creek and Tom MacKay Lake tailings and waste rock disposal moving to consensus from review agencies. On May 31 EAO representatives, proponent and representatives of MELP and MEM met with Alaskan representatives in Ketchikan to present project. Meeting resolved many of Alaska's concerns. At last EA Project Committee meeting held on June 1 in Smithers general agreement that most questions resolved and that there should be sufficient assurance to recommend certification by next meeting, to be held on June 16 in Vancouver. MEM regional office late in submitting text for EA certification document. Evening and weekend work happening to get submitted.

MELP has ongoing concerns regarding placer activity in the Atlin area. During last years freshet pluming of water high in suspended solids was detectable into Atlin Lake from deregulated creeks with placer activity. Some residents were concerned that this may impact on drinking water drawn from Atlin Lake. No water sampling performed to see if any impact. Some residents have complained to MELP that drinking water is being impacted. At meeting with MELP staff in Smithers Regional Manager indicated intent to work to phase out deregulated creeks and have all creeks in Atlin area revert to normal Water Management regulatory regime. Briefing Note being prepared summarizing MELP position.

EMIER

Representatives of Wheaton River/Red Mountain were in Regional office on June 7 reviewing information The presentatives of wheaton River/Red Mountain were in Regional office on June 7 reviewing information (F) Minoregarding the Premier mine site. Red Mountain is considering hauling ore from Red Mountain to Premier and processing it there. Red Mountain reviewing files and information regarding Premier site prior to proceeding further.

Huckleberry- After a recent tour of the mine Paul Wojdak reports that the mill has been running at a slightly lower rate over the past few months than last year. 18 000 tod compared to 20 500 tod. Work on the 10% mill expansion is in progress. Mining has progressed several benches into the Main zone pit with a pleasant surprise at the north end. Upper 2 benches that were expected to produce 40,000 tonnes yielded 400,000 tonnes of better-than-average-grade ore. This area was not re-drilled in the 1990's, reserves were determined from 1970era holes that did not show ore-grade copper for unknown reasons (poor recovery?, lab problem?). The bonus ore is in the north wall of the pit, so if the ore continues to depth there will be a modification to the present pit design. Exploration drilling will commence soon (6-10 holes, 60 m deep), after the current 8-hole program on three targets peripheral to the East zone pit. This work is 2/3rd complete without significant success. Basal till for dam construction is being excavated from a pit immediately west of the granodiorite stock, which is also west of the Main zone. The basal till contains abundant angular cobbles of mineralized granodiorite, strong evidence of westerly directed ice flow. Huckleberry is performing a systematic count of cobble types as there is important implications for exploration in the area. An overburden rotary drilling program will begin soon. Vic Levson (GSB) will be studying this, and samples from Huckleberry's previous overburden drilling.

Fireside-Barite production in 2000 is uncertain. Company is doing a market study before making a decision. Some product remains unsold from last year's mining.

Endako-Paul Wojdak reports that Endako re-commenced recovery of stockpile ore (on May 15, after 3 month hiatus) and ceased mining South Wall, where pit stability is a concern. South wall is still ravelling from wedge

failure (intersection of two structures) on April 4, despite 3 weeks of scaling. The crusher is nearly ready for installation next month. It must be moved past the slide area to reach its in-pit destination. Ore from Denak West pit has been pleasant surprise, Pb content not as high as anticipated. Raises question why Placer stopped mining Denak West, mine manager reports no clear indication from mine-site files.

Red Chris- Don Barker continues to evaluate Red Chris property. Don has been invited to present proposed mine plan to Ministry staff. Has indicated not yet ready although very appreciative of interest expressed by Ministry. May be passing through Smithers in next two weeks and if so would like to discuss project informally with Smithers staff. Do indicated that he is looking forward to more formal presentation of project later in year.

EXPLORATION

This year saw 27 Prospector Assistant Program grant applications in the NW Region. Twelve were successful in either full or partial grants.

Staking interest continues but Notices of Work are slow to appear. Expenditure outlook is low, forecast at \$4.2 million.



LAND USE

<u>Cassiar Iskut/Stikine LRMP</u> is moving to completion. On May 30 the Table ratified the recommended plan and forwarded it to government for further consideration and approval. There seems to be a <u>major</u> effort by some agencies to have <u>mining access roads designated under the Higher Level Plan process as the LRMP is</u> implemented. This raises major concerns and is being discussed to resolve.

GENERAL

In the interest of trying to present exploration and mining as a <u>realistic way of life</u> in the NW, Regional staff have made themselves available to make presentation to various schools over the last school year. During this time 19 presentations were made and two field trips with 3 classes were made to Huckleberry Mine. Thanks to Jill, Daryl, Bruce and Paul for their efforts.

On June 7 and 8 W. Bergen took the 2 day Occupational Health and Safety course for office OHS committees. Some very useful information, but could be condensed into 1 day.

Doug Flynn and Bryan Good attended the Mine Rescue competitions.

The <u>Smithers Exploration Group</u> is commencing planning for the annual Fall field trips, presentations and golf tournament. This year planning is under way for a field trip to Golden Bear on September 13 and a field trip to Morrison Cu on September 14 with a golf tournament and banquet on September 15. Watch for more details or contact Paul Wojdak.

Wally Bergen

W\$, June 11/00

Regional Manager, Northwest Region Ministry of Energy and Mines, Mines Branch Phone (250) 847-7385 Fax (250) 847-7603 mailto:wally.bergen@gems4.gov.bc.ca

VBS-SKer. Myr - Smithers

| From: | Bergen, Wally EM:EX |
|----------|--|
| Sent: | Friday, May 19, 2000 3:54 PM |
| To: | Al Hoffman; Andrew Whale; Bill Phelan; Brian Braidwood; Denis Lieutard; Duane Anderson; Ed |
| | Beswick; EM MB Smithers DL; Fred Hermann; Gerald German; Grace Harris; Graeme McLaren; |
| | Greg McKillop; Gregg Stewart; Joan Hesketh; John Clancy; John Errington; Kerry Readshaw; |
| | Linda Stewart; Maija Finvers; Marlene Cochrane; Pat Cheetham; Richard Booth; Rick Adams; |
| | Rick Conte; Ross Curtis; Sharon Jorgensen; Shelley Guthrie; Ted Hall; Terri Starkes; Tom |
| | Carter; Tom Schroeter; Wesley Kennedy |
| Subject: | NW Region Weekly Report to May 19, 2000 |

MINING

Golden Bear mining on schedule. Kodiak B decline has advanced 150 metres and first sub-level development in ore has began. Gold grade up to expectation. No problems with snow in the Ursa pit. Some waste rock has been removed and first ore blast of the season has occurred.

Endako mine proceeding with installation of in-pit conveyor, with movement of the crusher in to the pit planned for early July. Probably not operative until end of August.

Cassiar is up and running again after maintenance and modification shutdown. Modifications to recover short fibre have been completed to the circuit. Still some work to do but plant can produce now. Outstanding permit conditions are to be addressed over the next month. Company has changed name again. Now called Cassiar Magnesium.

Huckleberry reports increased tonnage and ore grade in the north east corner of the main zone pit. Diamond drilling active on the site to define pit limits and check other areas. Construction underway for 10% increase in mill capacity. Completion by late summer.

EXPLORATION

Morrison drilling program visited May 3 by Paul Wojdak. Hole 99-4 has been deepened from 300 to 454 metres and 2000-5 was approaching 300 m target depth. Falcon is doing the work, on a 1-shift basis. Current drilling specifically targeted areas of better copper grade, as determined from old Noranda drill sections. Some sections suggest copper diminishes at depth, and these are avoided. All contractors on site (drill, excavator, geologists) are working (primarily) for Pacific Booker stock.

LAND USE

Graeme McLaren, Rolf Schmitt, Ed Beswick, David Morgan, Mary Lou Malott and Wally Bergen met in Vancouver on May 12 to identify problems associated with LRMP formulation. Several topic areas identified including sector representation at tables, abstention and when does "no" mean no, role of economics in processes, "value" placed on mineral concerns versus other sectors, etc. Graeme drafting paper from discussions and to circulate for review.

Cassiar Iskut/Stikine LRMP moving closer to completion with Public Open House meetings held in Telegraph Creek, Iskut, Dease Lake and Smithers to review table recommendations. Plan now goes back to LRMP table to consider comments and then to make recommendation to IAMC. Anticipate recommendations to June 15 IAMC meeting. Any comments regarding LRMP should be submitted to LRMP process ASAP.

Work is commencing on a scoping exercise for a North Coast LRMP. This is at the initial stages and is intended to provide information to LUCO regarding the logistics to complete a process in a timely manner. This LRMP is moving ahead in response to concerns regarding forest industry and environmental groups seeking to make agreements outside of government processes to resolve forestry certification issues.

Wally Bergen is now the chair of the Prince Rupert IAMC and joins with Andrew, who is the chair of the Kootenay

| From: Sent: | Bergen, Wally EM:EX Friday, April 14, 2000 2:06 PM |
|----------------|--|
| To: | Al Hoffman; Andrew Whale; Bill Phelan; Brian Braidwood; Denis Lieutard; Duane Anderson; Ed |
| 10. | Beswick; EM MB Smithers DL; Fred Hermann; Gerald German; Grace Harris; Graeme McLaren; Greg McKillop; Gregg Stewart; Joan Hesketh; John Clancy; John Errington; Kerry Readshaw; |
| | Linda Stewart; Maija Finvers; Marlene Cochrane; Pat Cheetham; Richard Booth; Rick Adams; |
| | Rick Conte; Ross Curtis; Sharon Jorgensen; Shelley Guthrie; Ted Hall; Terri Starkes; Tom |
| | Carter; Tom Schroeter; Wesley Kennedy |
| Subject: | NW Region Weekly Report to April 14, 2000 |

VGS-> Key, Mgr. - Smithers

Enlako MINING

On April 4 a slide occurred on the "southeast slide" of the Endako mine pit. The slide was identified in advance and there were no injuries and only minor damage. Approximately 10,000 tonnes dropped. Further evaluation has shown that the slide is more significant than initial impression. At the pit rim the arc of the failure zone is about 250 feet across and the surface dropped about 30 feet. Endako has brought in B.A.T construction (Rock scalers from Kamloops used last year on the north wall to ensure it was safe) to scale and stabilize this failure. It is expected this may take two weeks.

Further to Endako, is understood Steve Moonie (Owner of Thompson Creek) is wanting to sell the company. This may be confidential information although Endako employees are aware of the state

Golden Bear has opened the road into the mine site and is working on site after the winter closure. Work has commenced on development of the Kodiak "BI' decline) The heading has advanced about 26 m to date. Conditions at site are still quite cold so it is a struggle for all concerned. Snow clearing in the Ursa pit is scheduled to start shortly. Estimate is at least 4 m of snow in pit bottom. Roads are all open but wind and blowing snow create constant necessity for clearing. Totem Creek recovery plant survived the winter with only minor structural damage to structure. This area is subject to some very high wind loads.

Cassiar is producing fibre at a lower rate than hoped... Target is 50 tonnes per day, current rate is between 35-40 on a monthly average. Still some bottle necks in system. Ore stockpiles at mill are dwindling but company is confident that <u>new reserves</u> can be accessed before the second payroll. Correction from last report: Cassiar is a dry mill process. confident that new reserves can be accessed before reserves at mill are depleted. Currently 58 workers on the

OHS

In relation to the hydraulic rams that failed at Huckleberry and were reported in the last weekly report, testing has indicated that the failures were likely due to problems associated with the metallurgy of the ram cylinder which may have been compounded by welding as a part of manufacturing. Also, concerns identified in relation to pressure controls and the process for directing pressure to the 4 rams which were being used. Further follow-up to occur.

EXPLORATION

Prospector Assistance- Paul has been responding to numerous inquiries and has commenced to review applications.

Smither Exploration Group is giving an Intermediate level prospecting course for members on deposit models being planned for April 30-May 7 (weekends and 1 evening). To be seminar style, with prospectors to research and give hands-on presentations, using deposit suite rock collections.

The Geological Society of America annual meeting is in Vancouver this year on April 27 to 29. The ministry is considering releasing the Queen Charlotte Islands regional geochemical survey data at the meeting. This should help to give more exposure to the Northwest.

Wally Bergen

| VB->key, Mgr -Smithet |
|--------------------------|
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| From: | Bergen, Wally EM:EX |
|----------|--|
| Sent: | Friday, March 17, 2000 4:20 PM |
| То: | Al Hoffman; Andrew Whale; Bill Phelan; Brian Braidwood; Denis Lieutard; Duane Anderson; Ed Beswick; EM MB Smithers DL; Fred Hermann; Gerald German; Grace Harris; Graeme McLaren; Greg McKillop; Gregg Stewart; Joan Hesketh; John Clancy; John Errington; Kerry Readshaw; Linda Stewart; Maija Finvers; Marlene Cochrane; Pat Cheetham; Richard Booth; Rick Adams; Rick Conte; Ross Curtis; Sharon Jorgensen; Shelley Guthrie; Ted Hall; Terri Starkes; Tom |
| | |
| | Carter; Tom Schroeter; Wesley Kennedy |
| Subject: | NW Region Weekly Report to March 17, 2000 |

MINING

Endako: Handling problems with Denak West ore has led to re-allocating mine equipment away from construction of the conveyor ramp for the in-pit crusher to exposing higher grade in the south wall of the Endako pit. This will delay start-up of the in-pit crusher by one month. Depressed moly price continues to be a concern.

During a site visit to Huckleberry Mine as a part of Rock Talk the following information was conveyed to the delegates.

- Mill expansion to 21,000 tpd (from current 19,000) approved by Imperial Metals board of directors.
- Current reserves sufficient for mine life to 2008, based on long term copper price of \$1 per pound.
- Main zone will be mined out in 2 years.
- Total costs (before debt repayment) is \$0.68 per pound of Cu. which includes transportation and smelting.
- Cutoff grade is 0.35% Cu.
- Copper concentrate is 26-27% Cu.
- Mill performance has improved steadily since mine opening.
- Revenue is 90% Cu, 4% Mo, 4% Au and 2% Ag.
- Exploration program approved for 2000.

Luscar, in a recent newspaper article in the Interior News, has indicated that due to depressed coal prices they are not placing a priority on the Telkwa coal project. No indication is made if and when they will submit the EA project report. Bad news for a community that is still trying to recover from forestry cutbacks.

The second batch of drill results has been released from Silvertip. The extent and size of ore bearing tubes and pipes requires further work before a production decision can be made.

Femiles

Over the last 2 weeks transport trucks from Kemess loaded with concentrate have been passing through Smithers on the way to Stewart. Apparently during the BCR lockout a quantity of concentrate was not shipped and was frozen where it sat. This material is being hauled to stewart for shipment rather by normal routes to Vancouver. There is no indication if Kemess will continue hauling by this route, although the trucks raised a lot of speculation along Highways 16 and 37.

LAND USE PLANNING

After some major negotiation and reconsideration by the LRMP Table of several areas of concern the ministry voted in favor of consensus for the Cassiar Iskut/Stikine LRMP to go to a public review prior to being forwarded to government for approval. At the final Table meeting, held on March 9 to 11 in Dease Lake, the ministry had 8 outstanding concerns that had been either glossed over, ignored or moved forward without ministry agreement. As a result of a mediated conflict resolution process the outstanding concerns were resolved to the satisfaction of the ministry executive. This led to agreement by the ministry for consensus approval of the plan. The ministry executive was very supportive to Mary Lou and Wally in providing direction by phone from Victoria to Dease Lake in resolving the concerns.

FIRST NATIONS

| YG9->_ | Rey Mar Smith 05 |
|--------|---------------------|
| Y' (5) | Smith 05 |

| From: | Bergen, Wally EM:EX |
|----------|---|
| Sent: | Friday, December 10, 1999 1:56 PM |
| To: | Adams, Rick; Anderson, Duane; Beswick, Ed; Booth, Richard; Braidwood, Brian; Carter, Tom; Cheetham, Pat; Clancy, John; Curtis, Ross; EM MB Smithers DL; Errington, John; Finvers, Maija; German, Gerald; Hall, Ted; Hermann, Fred; Hesketh, Joan; Hoffman, Al; Jorgensen, Sharon; Lieutard, Denis; McKillop, Greg; McLaren, Graeme; Phelan, Bill; Readshaw, Kerry; |
| Subject: | Schroeter, Tom; Starkes, Terri; Stewart, Gregg; Stewart, Linda; Whale, Andrew NW Region Weekly Report to December 10, 1999 |

MINING

Wheaton River Minerals Ltd. and Kit Resources Ltd. announced approval in principal to a business combination of the two companies pursuant to which they will merge by way of a court approved plan of arrangement. This may assist Wheaton Rivers efforts to acquire properties in the Northwest to move onto as Golden Bear reaches depletion.

Cassiar Mines and Metals Inc. are putting the finishing touches to the revamped dry mill. Production will be about 30 tonnes/Hr through the mill. The company is hoping to be in production by January 1st. Ore stockpiles on surface are estimated to total 4 million tonnes with a recovery grade of 5% fiber. At a planned production rate of 720 tpd (360,000 tonnes/yr) this represents an 11 year life to the operation with a planned workforce of 44. The new plant is 1/5 the size of the old plant. They already have an order to fill from Iran. The latest news release [Vancouver Sun; Saturday, Dec. 4th] suggests that the company and the Aluminum Co. of Korea are planning a magnesium plant for Cassiar at a cost of \$733 million. News item suggests plant could be up and running by 2003.

Endako- Work is progressing on the in-pit-crusher project. The crusher assembly is <u>nearly complete</u> and development of the conveyor drive station is complete. It is expected about 1300 feet of conveyor will be in place before year end. Project is not expected to be completed before late next spring. Mining of low grade stockpiles continues to provide about half the mine production.

An front page article in the Smithers Interior News indicated that the Telkwa Coal Project is majorly behind schedule. Allan Flemming is quoted as indicated that the project report will not be competed early in the new year, as forecast, but may be available later in the year. Declining coal demand, amalgamation of Manalta and Luscar, weak coal prices and financial losses experienced by Luscar are sited as possible causes for the delay.

Huckleberry has <u>completed mining in the east zone</u> pit and are now producing <u>exclusively from the Main zone</u>. It is understood the company is also looking at an increase in <u>capacity</u> of about 10% in the mill through some relatively inexpensive additional equipment. Tercon and North American have completed work on the dams for this year.

EXPLORATION

The Silvertip project has had to delay their underground drill program to the new year due to unexpected higher deterioration of the existing ground support. The area to be drilled has to be totally resupported due to existing screening and split set bolts rusting so bad to be of no use for ground support. Underground program budget increased from \$1.1 million to \$1.4 million. Also, the concept of an open pit mine leading to an underground operation is being re-evaluated. Concerns that an open pit would act as a funnel for water into underground workings.

FIRST NATIONS

The provincial proposal for settlement of the Gitanyow land claim was tabled with the Gitanyow First Nation. The proposal sought to identify settlement lands in each of the Gitanyow territories, rather than a central land settlement. Initial indications are that the Gitanyow were not satisfied with the proposal.

To:

GG- KF From: Wojdak, Paul EM:EX Sent: Friday, October 08, 1999 11:49 AM Bergen, Wally EM:EX; Cathro, Mike; Lane, Bob; Pinsent, Robert; Schroeter, Tom; Wilton, Paul Subject: Weekly Report. Oct 8, 1999

Rimfire Minerals announced results from its 9-hole program at RDN, an Eskay Creek target. An Eskay stratigraphic setting was confirmed by holes in the Marcasite Gossan (submarine felsic dome cut by sulphide stockwork and overlain by mudstone with clastic sulphide) but there were no exciting intersections that could lead to a 100 hole program next year, as suggested in a local radio broadcast. Two holes in the Jungle gold-arsenic soil geochem anomaly, located along strike of the Marcasite Gossan, were lost well short of target depth (best assay- 5 g/t Au over 1 m).

Silvertip Mining plan a \$1.1 million program, scheduled from October to early 2000, to de-water the exploration decline and conduct diamond drilling from the existing workings to explore the Silver Creek South area. A prime target is follow-up of the 31.4 m intercept drilled in early September that graded 331 g/t Ag, 8.65% Zn, 5.53% Pb.

Visited Endako with Bob Lane on Oct 4. The mine is relying on mill feed from its low grade stockpile to lower its mining costs during this period of low moly price, until the in-pit crusher is installed in 2000. The stockpile grades about 0.056% Mo and is blended/upgraded with pit ore grading 0.078% Mo. Pit ore with low haulage cost is being supplied from a small pocket of ore on the upper benches at the northeast corner of the Endako pit (very close to the mill). In early 2000 pit ore will come from the long-inactive Denak West pit, despite its higher Pb and Bi content. Work on the in-pit crusher and conveyor ramp continues.

Freeport Copper drilled 6 holes on the Zymo porphyry copper prospect, and are assessing results to determine if more drilling will occur next year. Frank Nelson wrote a very nice letter complimenting Ministry staff and stating "contrary to negative rumors and recent gloomy press statements concerning expected delays and impossible red-tape in trying to conduct mineral exploration in B.C. I found a very positive welcome from all of you and from the general public in Smithers."

Mansfield Minerals will begin a 5-hole, \$100,000 drilling program on the Fireweed silver-zinc-lead prospect northeast of Smithers on Oct. 15.

Paul Wojdak

Regional Geologist Mines Branch. Smithers Ph: 250-846-7391 Fax: 250-847-7603 paul.wojdak@gems5.gov.bc.ca

Bergen, Wally EM:EX From:

Friday, June 25, 1999 1:26 PM Sent:

To: Adams, Rick; Anderson, Duane; Beswick, Ed; Booth, Richard; Braidwood, Brian; Carter, Tom; Castillo, Talitha: Cheetham, Pat; EM MB Smithers DL: Errington, John; Finvers, Maiia: German, Gerald: Hall. Ted: Hermann. Fred: Hesketh. Joan: Hoffman. Al: Jorgensen. Sharon: Lunam. Charene; McKillop, Greg; McLaren, Graeme; Phelan, Bill; Ross, Paul; Schroeter, Tom; Starkes, Terri; Stewart, Gregg; Stewart, Linda; Whale, Andrew NW Region Weekly Report to June 25, 1999

Subject:

MINING

Endako mine will be closed from June 30 to August 2, 1999, for annual leave, maintenance and inventory reduction. Approximately 25 people will be on site performing maintenance. This temporary closure was a part of the Job Protection package.

On June 18,1999, the NWMDRC received a presentation from Eskay Creek mine regarding moving sub-aqueous disposal of mine tailings from Albino Lake to Tom MaKay Lake. The mine has identified sufficient ore reserves to extend the mine life until the end of 2008. With expanded ore reserves and increased milling production it is anticipated that Albino Lake does not have sufficient capacity for the volume of material to be disposed of subaqueously. The application to amend the EA certificate will be coordinated by Norm Ringstad and it is anticipated that it will proceed in a timely manner, as did the application for Albino Lake.

Silvertip Mining Corporation has announced that they are putting their application to the EAO for certification for the Silvertip Mine on hold antil metal prices improve.

At the NWMDRC meeting held on June 17, 1999, the Committee agreed to recommend to the EAO that the EA certificate for Larado Limestone on Aristazabal Island be extended for 3 years.

Emile Brokx has announced that he is retiring as General Manager for Huckleberry Mine. A replacement has yet to be announced.

Verdstone and Molycor (John Chapman) indicated that Thompson Creek Mining - Endako Mine were not interested in pursuing involvement in the Unity moly proposal on Hudson Bay mountain. Discussions are still underway with imperial Metals to see if they are interested in accepting between 500 and 1000 tons per day of Yorke-Hardy ore to Huckleberry.

EXPLORATION

The Harmony Project by Misty mountain Gold, part of the Hunter Dickinson Group of companies, is on hold with the project for sale. Testing of alternative methods for gold recovery were not able to identify practical gold recovery processes. Environmental concerns could not be eliminated; ARD from waste rock, mercury would still be issues.

RECLAMATION

On June 17, 1999, the NWMDRC met with representatives from Silver Standard Resources Inc. to discuss ongoing reclamation of the Duthie Mine site on the backside of Hudson Bay Mountain. The company is proposing to install perimeter diversion drainage ditches to direct ground water away from the historic tailings and to seal and cap the tailings to minimize surface water from passing through the tailings. The proposal is in the final stages of evaluation and work on the tailings clean-up may commence late summer.

Noranda Minestis addressing concerns regarding soil and water quality associated with the loading yards for the now closed Bell Copper Mine. The transhipment point form truck to rail was used for several years and there are concerns that sufficient concentrate was spilled to lead to copper drainage into the upper Bulkley River. Noranda has hired Morrow Consultants to replace an earlier consultant, who had not commenced work on the evaluation.

| From: | Wojdak, Paul EM:EX |
|----------|---|
| Sent: | Friday, March 05, 1999 9:30 AM |
| То: | Cathro, Mike; Lane, Bob; Pinsent, Robert; Schroeter, Tom; Wilton, Paul; Bergen, Wally; |
| | Burchett, Esther; Daniel, Catherine; Ennis, Sandee; Flynn, Doug; Good, Bryan; Graff, Bruce; |
| | Hanson, Daryl; Konschuh, Elaine; Malott, Mary Lou; Pardoe, Jill; Price, Bill |
| Cc: | Anderson, Duane; Brown, Derek; Lefebure, Dave; McMillan, Bill |
| Subject: | Weekly report, March 5, 1999 |

Eskay Creek plans to produce <u>95,000</u> tonnes of direct shipping ore and <u>60,000</u> tonnes of milling ore this year. Metal production is estimated at <u>291,950 oz of gold and <u>10,756,000 oz of silver</u>. The company is considering expansion of the mill. This would lower production cost and enable mining of <u>lower grade</u> ore, such as <u>21C zone</u>. 21C is to be evaluated by a bulk sample and detailed drilling from underground development now in progress.</u>

Yorke-Hardy moly deposit (Hudson Bay Mtn)- Development as a <u>high grading operation being considered by</u> Verdstone and Molycor, by direct <u>shipping</u> to Endako at a proposed 2,000 tons per day.

Endako milled ore from the low-grade stockpile during December and January, supplementing pit ore and lowering production cost. Milling is about 70% pit ore and 30% stockpile. Stockpile grade is better than expected and averages about 0.057% Mo. Recovery is also better than expected.

Trimetals Resources propose to drill the Owl Lake moly showing northwest of Endako.

Sent "Volcanogenic Massive Sulphide Deposits in the Hazelton Group, Babine Range" to Bob Lane for publication in *Exploration in B.C.* after editing by John Newell. Thank you Daryl Hanson and Bruce Madu for work on diagrams. Proofed final layout of Northwest Region mine and exploration review (1998). Good work Bob!

Notices of Work: Mineral 4, Placer 16. Number of mineral notices is very low.

2.1

VGS-7 Endako

| From: | Schroeter, Tom EM:EX |
|----------|-------------------------------------|
| Sent: | Tuesday, November 10, 1998 10:45 AM |
| To: | 'Glenn Johnson' |
| Subject: | RE: 1998 Review - Endako |

Glenn, thanks very much - that's fine. Ready for winter - brrrr?! Cheers, Tom.

| From: | Glenn Johnson[SMTP:Glenn_Johnson@endakomines.com] |
|-----------|---|
| Reply To: | Glenn Johnson |
| Sent: | Tuesday, November 10, 1998 9:21 AM |
| To: | Schroeter, Tom EM:EX |
| Subject: | Re: 1998 Review - Endako |

Tom;

I hope the following will be satisfactory. Hope this finds you well.

Glenn

Endako Mines produced approximately six million kg's of MoS2 in fiscal 1997-98. MoS2 concentrate is processed into both Molybdic Oxide and Ultrapure Sulfide products. Mining took place in the Endako Pit and included stripping for a new layback on the south wall of the pit and exploitation of a high-grade satellitic zone north of the crusher. Decreasing commodity prices in the last guarter resulted in a 20% decrease in production and consequent personnel layoffs in the last quarter of 1998.

Future productivity is expected to increase as a result of the purchase of a semi-portable in-pit crusher from Island Copper. The crusher and conveyor are scheduled to be installed late next year following completion of conveyor way and crusher pocket mining.

Exploration and development activities included 5,500 m of diamond drilling. Drilling focused on expanding resources on the south and southwest periphery of the Endako Pit and delineation of reserves. Several reconnaissance drillholes were drilled along strike to test for extensions of known mineralization.

_ Reply Separator

Subject: 1998 Review - Endako Author: Tom.Schroeter@gems6.gov.bc.ca at EIC Date: 10/16/98 9:59 AM

COSCI anounced Moo.12H anounced Moo.12H anounced 5/98 Glenn: Howdy! I will soon begin my compilation and writing for the Annual Review ("British Columbia's Mineral Exploration Review 1998") of the mining industry in BC. In order to assist me with this daunting task and to "get things right", I wonder if you could provide me with some key (highlight), summary points about BOTH the mining operation at ENDAKO, as well as any

ile - Keq. Mar -Smitheri

| From: | Bergen, Wally EM:EX |
|----------|---|
| Sent: | Friday, October 30, 1998 4:21 PM |
| То: | Beswick, Ed; Booth, Richard; Braidwood, Brian; Carter, Tom; Cheetham, Pat; EM MB Smithers DL; Errington, John; Finvers, Maija: German, Gerald; Hall, Ted; Hermann, Fred; Hesketh, Joan; Hoffman, Al; Jorgensen, Sharon; Marsman, Talitha; McKillop, Greg; McLaren, Graeme; Meyers, Rick; Phelan, Bill; Ross, Paul; Schroeter, Tom; Starkes, Terri; Stewart, Gregg; Stewart, Linda; |
| | Whale, Andrew |
| Cc: | Clancy, John EM:EX; Stewart, Linda EM:EX |
| Subject: | NW Region Weekly Report to October 30, 1998 |

MINES

Wheaton River Minerals Ltd., owners of Golden Bear Mine, indicated that production for the 1998 season will be approximately 35,900 ounces, which is up from the projected production of 32,000. The total cost of production this year was US\$149 per ounce, well below earlier projections and last year's costs. Gold recovery rates from the heap leech has been higher than projected and production in 1999 is expected to be 45,000 ounces.

Layoffs at Endako amounted to 39. The result is a 20% reduction in production through the mill. Contractors working on the in-pit crusher have been terminated and the work will be completed by Endako employees. The in-pit crusher completion will likely be pushed back to next summer or fall instead of the spring.

A diesel fuel spill occurred at the Snip Mine on Thursday, October 22. A filler hose blew off it's connection and the pump started. Estimate of fuel spilt not available yet but the containment berm overflowed and fuel ran out onto the ground. All contaminated soil has been retrieved and a report is forthcoming.

EXPLORATION

Paul Wojdak and Doug Flynn examined the <u>Silver Standard mine</u> workings and waste rock dump on October 20. Initial indications are that there is sufficient neutralizing potential that there should be no ARD risk from this old mine site.

Paul provided a presentation to 12 students/mining trainees at Houston Skills Center (a cooperative program with Huckleberry Mine) on October 20. Topic: Mines in Northwestern B.C. Overview of NWBC Mines Office.

Paul visited Teck and placer Dome offices in Kamloops (Oct26). Teck are encouraged with results of surface sampling for gold on the Jake and Kit properties. Continued low level exploration programs anticipated in 1999. Placer Dome are looking for outright sale of the Kerr (Cu-Au porphyry) and Sulphurets gold properties in the Iskut region.

Imperial Metals optioned Ed Westgarde's (Houston prospector) Star Claims near Chisolm Lake 45 km southwest of Houston and then staked a block of 200 units. This is an interesting new porphyry copper showing found as a result of logging road construction. The company hopes to do a geochem survey before winter and some percussion holes using existing roads.

LAND USE PLANNING

Ministry staff (John Clancy, Bruce Graff, Catherine Daniel and Mary Lou Malott) provided a presentation to the Iskut/Stikine LRMP table on October 24 in Telegraph Creek. The presentation focused on exploration, access, permitting and reclamation. It was intended to give the table a better understand on mining and the role of our ministry. A particular focus of the presentation was the Mineral Exploration Code. All indications are that the presentation was well received and that it should help to give a better understanding to developing final scenarios and strategies for the Table. Special thanks are in order to John, Bruce, Catherine and Mary Lou for traveling long distances, in winter weather over the weekend to give this presentation.

From:Wojdak, Paul EM:EXSent:Friday, October 16, 1998 10:39 AMTo:Bergen, Wally; Cathro, Mike; Lane, Bob; Schroeter, Tom; Wilton, PaulCc:Burchett, Esther; Daniel, Catherine; Ennis, Sandee; Flynn, Doug; Good, Bryan; Graff, Bruce;
Hanson, Daryl; Konschuh, Elaine; Malott, Mary Lou; Pardoe, Jill; Price, BillSubject:Weekly Report, October 16, 1999

Thompson Creek Mining will cut production at Endako moly mine and reduce the number of employees from 242 to about 187 (reduction of 50-60 people). In the longer term, the in-pit crusher purchased from Island Copper stands to extend mine life by reducing operating costs, when installation is complete in the spring, 1999.

Discuss/ promote NWBC base metal properties with Doublestar Resources (Allan Savage) and also Spokane Resources (Kirk Hancock). The latter have some \$ and want to position themselves for the coming market turnaround.

Todd Creek gold prospect near Stewart is <u>subject of a second examination by an unidentified major company</u> (Homestake?). Property is owned by Island Arc Resources.

From:Bergen, Wally EM:EXSent:Thursday, October 15, 1998 10:06 PMTo:Beswick, Ed; Booth, Richard; Braidwood, Brian; Carter, Tom; Cheetham, Pat; EM MB Smithers
DL; Errington, John; Finvers, Maija; German, Gerald; Hall, Ted; Hermann, Fred; Hesketh, Joan;
Hoffman, Al; Jorgensen, Sharon; Marsman, Talitha; McKillop, Greg; McLaren, Graeme; Meyers,
Rick; Phelan, Bill; Ross, Paul; Schroeter, Tom; Starkes, Terri; Stewart, Gregg; Stewart, Linda;
Whale, AndrewSubject:NW RegionWeekly Report to October 15, 1998

MINES

Thompson Creek Mines, Endako Operations, announced that due to low Moly prices and demand that they are cutting back production and laying off 50 to 60 employees. Thompson Creek has already cut back at their other operating mine in the U.S. The mine will remain in operation 5 days a week with a work force of 180.

Minroc Mines, owners of the previous Cassiar Asbestos operation, announced that they have a distribution agreement with a Japanese marketing company, Kakiuchi, for distribution of asbestos fibber in Asia and India. Minroc also has a distribution agreement with Hegler & Sohne GMBH of Germany for distribution in Europe, the Middle East and Africa. The company is also investigating recovery of magnesium from the tailings.

Cusac Gold, Table Mountain, has completed a small pit extraction of 800 oz of gold from the east side of the Erickson fault. This may lead to other prospects in the area. The company has also acquired the Taurus property and will be evaluating mining options.

Coeur Alaska, Coeur d'Alene Mines, is looking at the Premier mill to barge mill concentrate from the Kensington deposit in Alaska for recovery at Premier. The company considers permitting a cyanide plant near its Juneau site beyond reasonable hope/time frame.

RECLAMATION

Noranda's <u>Bell Mine</u> closure plan was the focus of discussion for a NWMDRC meeting on October 15. Representatives of the company, Lake Babine First Nation and government agencies met to recommence the mine closure and reclamation plan review. <u>October 16 meeting to include a field trip to the mine site</u> and an open house presentation for the public and First Nations in Granisle.

LAND USE PLANNING

Efforts to bring MEM's and the mining industry's concerns into the Cassiar Iskut/Stikine LRMP continue. As result of the last IAMC meeting commitments have been made to provide more direction to the table regarding workable scenarios, management objectives and the overall process. This situation will be monitored closely and further discussions regarding implementable products may be required.

Wally Bergen

Regional Manager, Northwest Region Ministry of Energy and Mines, Mines Branch Phone (250) 847-7385 Fax (250) 847-7603 mailto:wally.bergen@gems4.gov.bc.ca