

Silver Tip

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1040/16W 1040038

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MIDWAY

*Geology and mineral deposits at the Midway prospect (1040 038, 1.19 million tonnes at 410 g/t Ag, 7.0% Pb, 9.6% Zn) was studied on June 21-24. Pat McAndless and Steve Robertson of Imperial Metals were gracious hosts as they employed a broad range of expertise to bring the company "up to speed" and develop new targets. JoAnne Nelson, Geological Survey Branch, provided an excellent review of regional geology and mineralization. Peter Lewis (structural consultant) and manto expert (Jim Lang- Mineral Deposit Research Unit at UBC) also participated. Midway was discovered by accident in 1982 during exploration of the Earn basinal shale/siltstone for a sedex zinc-lead deposit. Silver-lead-zinc manto and chimney deposits are developed in the underlying mid-Devonian McDame limestone, in association with karsting, below an unconformity overlain by the Earn group. Mineralization, dated at 70 Ma, is believed to be derived from a poorly exposed intrusive suite along the eastern margin of the Cassiar batholith. Midway lies on a well defined 15 km northwest trend of vein, skarn and porphyry showings, part of the Rancheria district that extends into southern Yukon. An intrusion is postulated to underlie a gossan zone (2000 m X 400 m) and coincident magnetic anomaly (800 m X 200 m) centred on "Brinco Hill" located 1.5 km southwest of the Silver Creek and Discovery deposits. The Silver Creek zone averages 10 m thick by 80 m width and is a more attractive target than the Discovery zone which is 2-4 m thick by 150 m wide. Drilling within the \$2 million program aims to expand known ore zones and explore for new deposits:

- Silver Creek North- 7 holes proposed (two completed)
- Silver Creek South- 9 holes proposed (one completed, a 15 m massive sulphide intercept, best ever at Midway!)
- Discovery North- 2 holes proposed
- Silvertip Ridge- 5 widely spaced holes to follow up two ore grade intercepts
- Brinco Hill- 5 widely spaced holes proposed.

An innovative seismic reflection technique developed at UBC looks promising (from 2 test lines) to locate the Earn/McDame unconformity and sulphide zones at the unconformity or within the McDame. More seismic lines will be run. Controls of mineralization and shape of rich chimney and manto pods is obscure. Karst breccias may be well mineralized or barren.

Showings in the area were examined and prioritized during my visit: Nancy (1040 013), Berg (1040 015), Army (1040 004) Silverknife (1040 048) and Silvertip (1040 003). Others were to be examined by Rad Pesalj of Imperial Metals. Silvertip, part of the Midway property, appears the most promising.

Kutcho
Ck. (West)

*Kutcho project was visited with Rob Wilson and Gary Belik of Atna Resources on June 25. About 30 km of UTEM had been completed and the first drill hole was underway. An anticline-syncline pair has been traced west from the Kutcho Creek VMS deposit (14.3 million tonnes at 1.76% Cu, 2.54% Zn, 35 g/t Ag, 0.37 g/t Au) onto Atna's property. The thick, felsic dominated volcanic sequence is thought to be Permian to lower Triassic. Three rhyolite flow/dome to pyroclastic events are recognized, with the exploration target being stratigraphic breaks marked by overlying argillite or chert-pyrite exhalite. UTEM utilizes too wide a spacing to resolve whether sulphides are present near graphitic argillite and a MaxMin EM survey is being run. The property has an impressive thickness of quartz porphyritic rhyolite, but no evidence (yet) of significant sericite alteration such as was observed in an inspection of Kutcho Creek core.

*Visited Robin Day, prospector on P.A. program on June 27. His target is a copper-gold porphyry associated with an altered felsic stock (Nanika or Bulkley?) inferred to be 1.5 by 2 km in size. Abundant pyrite and traces of chalcopyrite occur as disseminations and less common fracture fillings. Two northeasterly breccia dikes were observed. Silts are anomalous in Cu, Pb, Zn and Au.

Wojdak - June '97 MR

I N T E R O F F I C E M E M O R A N D U M

Created: 15-Dec-1997 07:34pm PST
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From: Wallace Bergen of EI
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JGS → Reg. Mgr.
-Smithers

TO: See Below

Subject: NW Region Weekly Report to December 12/97

MINES

On December 10, Imperial Metals provided an overview to the NWMDRC of their proposed Silvertip property which is the site of the previous Midway property. Silvertip is located 80km west of Watson Lake and 25km south of the Alaska Highway. The company owns 54 claims and 26 fractional claims and proposes underground mining of Ag-Pb-Zn deposits. The company has applied for a 10,000 tonne bulk sample during 1998 and anticipates entering into the EA process as further definition occurs. The company anticipates further presentations to the NWMDRC as their project takes shape.

On December 11 the Tulsequah ML/ARD Committee met in Smithers with the proponent to further clarify and refine the ARD mitigation component of the EA review. The session went well with clarification occurring during the meeting as well as the proponent committing to followup regarding outstanding concerns.

On December 12 the Telkwa Coal Project Committee met in Telkwa to receive an update from the proponent regarding progress in responding to the Project Specifications Report and to provide an update regarding modifications to the proposed mine plan. The proponent has engaged consultants and is working to gather and analyze the information needs identified. As a result of field work during the summer the proponent now proposes a 1.5 million tonnes of coal per year mine over a span of 23 years with a workforce of 211. The "Helps" pit has now been deleted and alternate tailings pond, access road route and coal loading are being evaluated.

At the December 10 NWMDRC meeting there was discussion regarding the priority for receiving comments on mine closure/reclamation plans that are sent out for referral. Generally there are more projects that staff to respond and priorities are being set to address the most critical first. The list of priorities will be reviewed by the committee.

FIRST NATIONS

On December 11 a delegation of Tahltan leaders visited the office. It was indicated that there is agreement in principle with the draft MOU regarding consultation between the Ministry and the Tahltan people and that a few minor concerns need to be resolved. The Tahltan are

TGS → Reg. Mgr.
- Smithers

I N T E R O F F I C E M E M O R A N D U M

Created: 27-Feb-1998 01:28pm PST
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From: Wallace Bergen of EI
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TO: See Below

Subject: NW region Weekly Report to February 27, 1998

MINES

The Tulsequah EA process is wrapping up towards a recommendation from the Project Committee. The Issues Tracking document is undergoing final review to ensure that all outstanding issues have been resolved or addressed, with sign off by Tuesday March 3, end of day. The Project Committee recommendation report is to be available for review on March 2, with final sign off by Wednesday, March 4, 4:40 pm. The final project recommendation should occur shortly thereafter.

Prime Resources Group Inc. recorded record production in 1997. The Eskay Creek and Snip mines contributed to this success. Prime is one of the largest silver producers in the world, with Eskay Creek producing 11.9 million ounces of silver and 244,722 ounces of gold in 1997. Snip mine produced 115,644 ounces of gold during 1997. Exploration expenditures were \$8.7 million in 1997, with 82% of this spent in the Eskay and Snip areas, with reserves of 395,000 ounces of gold and 18 million ounces of silver identified. Discussions are under way in relation to reclamation of the Snip mine site, based on an anticipated closure in 14 months on exhaustion of known reserves.

A dangerous occurrence at Endako Mine is under investigation. Two overhead cranes are operated on the same runway and one crane was moved into the second crane while the second crane was being used to support a load, leading to the breaking of slings supporting the load. No one was injured, although the potential for a double fatality was significant.

MIDWAY

Silvertip Mining Corporation is moving towards entering the EA process. Work is underway refining the proposal, with the intent of entering the EA process in April or May.

ADMIN

Ron Johnston from the Information Management Branch, Technical and Network Services Section, visited our office for 2.5 days and upgraded, loaded and trouble-shot our computer systems. Sure made a difference. Thanks to Rod for coming and to Bob for sending.

Wally Bergen
RM Smithers

TOS → Reg. Mgr
- Smithers

INTEROFFICE MEMORANDUM

Created: 19-Apr-1998 09:59pm PDT
Sent: 19-Apr-1998 10:44pm PDT
From: Wallace Bergen of EI
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Dept: Ministry of Energy & Mines
Tel No: 847-7385

TO: See Below

Subject: NW Region Weekly Report to April 19, 1998

Silvertip
(Midway)

MINES

On April 7 Imperial Metals Corporation filed an application with the EAO to enter the Silvertip Mine into the EA process for certification. On April 14, after discussion with resource agencies and review by the EAO, the EAO returned the application to Imperial Metals with a request for improvements to information regarding wildlife values, First Nations, public involvement, transboundary concerns associated with the Yukon and the projects relationship the CEA.

Huckleberry Mine continues to improve production as start up is completed. The moly circuit is now operational and daily processing through the mill has gone as high as 22,000 t. The initial production target for the mill was 18,000 tpd. There has been no lost time accidents and Bryan indicated good OHS standards from his last visit.

Tulsequah is commencing into the permitting process with the SUP process for road access commencing in May and mine permitting commencing in the last week of April. The EAO is continuing discussions with various groups that have concerns regarding the mine and have been meeting with representatives of the U.S. Department of the Interior in Washington D.C. last week.

LAND USE PLANNING

The Bulkley-Nechako Regional District is commencing the review of the Houston-Topley-Granisle Official Community Plan. Bruce and I attended an initial meeting with BNRD staff and MELP to commence the review process. The Regional District was open to comments about consideration of mineral values and recognised the need for sand and gravel extraction.

MISCELLANEA

Bruce is coordinating the presentation of the MX Code to government staff and industry in NW Region. Current plans call for government staff to receive a presentation during the morning of April 29 and for the Smithers Exploration Group to receive a presentation during the afternoon.

Paul, Mary Lou and Jill attended (KEG) and the planners workshop in Kamloops.

Silvertip Mining Corporation' Silvertip Project application to EA has been accepted. Formal reviews, project committee selection expected to start in the near future.

Midway

B.C. Chrysotile Corp. now called Cassiar Mining, have been working on wet mill process refinements. Markets have been established for project. Twist to this project involves Magnesium extraction as well as asbestos. Magnesium makes up 21% of pile and management feels an extraction process similiar to Noranda's Magnolia project may be feasible. This would involve a much larger project than which exists now.

Cusac Gold Mine remains on a care and maintenance basis. Gold price and reserves major factors here.

Table Mtn.

International Taurus Resources property still closed. Company is severely behind on closure plan submission and mill clean-up. Reagents found on site during inspection in July may involve some enforcement action if company not cooperative in removing same from property.

Golden Bear Mine has started leaching Kodiak "A" ore. Company has deferred completing Ursa heap leach pad for this year. They will do some of the mining and lining of the events pond but recovery plant (Totem Facility) will not be installed this season. Kodiak "A" pit will be mined out by end of month-early September. All systems appear to be operating well. Tonnage on Fleece Bowl pad was increased to 623,000 tonnes.

Isk Wollastinite Project appears to have stalled. No word from company on start-up of 1998 field season.

Telkwa Coal drilling 6 inch core. Recoveries are excellant. Coal recovered from this drilling used for testing purposes.

Staff:

Wally and Bryan on annual leave until August 11.

Paul and Daryl in Atlin

Flynn, Aug. 7/98

DWFlynn
Smithers

I N T E R O F F I C E M E M O R A N D U M

Created: 28-Jun-1998 09:47pm PDT
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Title.
Dept:
Tel No:

TO: See Below

Subject: NW Region Weekly Report to June 26, 1998

ISK
MINES

Meeting held on June 17 with Isk Wollastonite proponents in Vancouver between proponent, Federal and Provincial agency representatives. Meeting to discuss CEAA and EA requirements for EA process, cumulative effects and alternatives assessment and appropriate level of pre-application public and First Nation consultation. Project still moving towards formal EA application in 3rd quarter. Follow-up meeting to further resolve above points scheduled for Smithers for July 8, 1998.

MIDWAY
On June 22, Kim Bellafontaine, Catherine Daniel and Wally Bergen attended a mine review/familiarization field trip to the proposed Silvertip Mine site (previously Midway). The trip was very informative and helped to put the site, project and issues into perspective. The proponent anticipates resubmitting an application to the EAO within the next 2 months. Driving 13 hours either way, partway through the Yukon, makes one appreciate how large the NW Region and the Province are!

CASSIAR
While driving to Silvertip visited BC Chrysotile (previously Cassiar Asbestos) and toured the test wet mill for reprocessing chrysotile asbestos fibre from the tailings pile. The company plans to produce 4,000 tonnes of asbestos for test marketing this year and if things go well are considering expanding their production to 50,000 tonnes.

ENDAKO
Endako Mines have purchased the in-pit crusher from Island Copper and have commenced to move it to the Endako site. This should improve their mine economics and allow for the mining of additional reserves. Consideration is being given to expanding to north and west of the existing crusher and a revised mine plan will be submitted.

At Eskay Creek a shiftboss drove his vehicle into an area of high CO2 as a result of a power outage that affected the ventilation. The employee vacated the area before any harm. Situation being investigated by the Safety Committee.

On June 19 WB and Bill Phelan met with representatives of the Taku River Tlingit First Nation to present the ministry's mine application, permitting and reclamation process. The meeting included presentations from MOF and MELP and was intended to provide information to the TRTFN to address some of their outstanding permitting concerns in relation to the EA Certificate which Redfern was issued for the Tulsequah Chief project. The TRTFN are to respond with proposals for their role in consultation regarding permitting and reclamation.

FIRST NATIONS

The Wet'suwet'en First Nation has participated in the preparation of 6 pilot study Landscape Unit Plans in the Lakes Forest District. On June 25 a formal

situations e.g. measuring the relative intensity of a (magnetite-destructive) hydrothermal alteration envelope can provide a vector towards the heat source / mineralisation.

- Ash has return from holiday and leaves for the field next week to set up the mapping program in the Gibraltar open pit. He will then return to the office to complete the remaining edits to his Ophiolite-Associated Gold bulletin
- Massey has completed the text component for his upcoming publication on Potential for Gold-Rich VMS deposits in BC. He will continue to improve the map and figures while the text receives peer review. *GS to review*
- Alldrick and Gallagher are incorporating edits to the Anyox geology map, preparing material and equipment for fieldwork in the Ecstall VMS belt and preparing figures and base maps for planned Ecstall reports & maps. Departure for the field is scheduled for August 5. Initial work will be a joint regional reconnaissance/overview with Arne Birkeland who has several years exploration experience in the belt, followed by mapping of the extensive logging road network in the northern 1/3 of the belt.
- Trygve Hoy's field season has been postponed due to deep snowpack. *(+ Fournier)*
- Ryan, Simandl and Payie are in the field now
- Brown, Jones, Owsiacski and Wilcox are on holiday

Industry News

*Silvertip
Lustdust*
U.S.-based consultant Dr. Peter Megaw has been busy in BC working at both the Midway Ag-Pb-Zn manto deposit and will be starting work at the Lustdust manto/skam deposits for Alpha Gold Corp

- Bishop Resources is planning a more modest exploration program (no drilling this year) in the Ecstall VMS belt southeast of Prince Rupert. Work will include additional sampling at established showings, evaluation of 4 new showings discovered during preliminary follow-up of stream geochem survey data near the end of last season, and follow-up of the next lower priority rank of stream geochem anomalies (all this work - and several discoveries - generated from their 1997 geochem survey in this belt). Elsewhere in the region, they will follow up BC RGS anomalies in the database that are associated with 'favourable' bedrock geology, and which show no signs of previous investigations. These "regional" targets have been on their "things-to-do list" since they were first spotted during the Mineral Potential Workshops of the early 1990s. The demands of the on-property work of the past several years have not permitted time for investigation of these remote, regional geochem targets.

Section and Branch Issues for Managers & Staff

- One for the 'Bring-Forward File' - for April 1, 2000: Lack of our traditional second person ("helper") in the warehouse has led to a (more) chaotic start to the season. We feel that through the June-July period this is always a two-person job. The crews impacted most were those that left their equipment checking/preparations/loading until the final one to two days before departure. Lots of anecdotes on this matter. If this was a cost-saving measure, we have spent more than the wages required to hire an assistant in lost staff time and other costs. (This is not a criticism of the sole warehouseman.)
- "Uneasy Rider" or "The Truck Stops Here.....Then Again, Maybe Not": A reminder to everyone that your first step upon collection of every ministry truck must be a thorough (mechanics) inspection before leaving for the field. If you are uncertain who is really responsible for ensuring that these trucks are in good working order - you're it! Expect to find problems. Assume that the last operator will not have bothered to undertake obvious necessary repairs (Case 1: The completely disconnected gearshift lever is still my all-time favourite. How did they manage to get that truck into the parking bay? And why would anyone walk away and leave it like that? Case 2: Luckily, brakes worn down beyond usefulness were discovered and reported by the mechanic during a recent tune-up & mechanical inspection just prior to departure for the field, but review of the truck service records revealed that the brakes were specified as dangerously worn / overdue for

Silvertip (104O 038, Ag-Zn-Pb prospect near the Yukon border)- completed 10 km AMT survey (electromagnetic) in search of mantoes in the McDame limestone (or underlying Sandpile Formation) in the area between the portal and the camp. This is a deeper stratigraphic target than previous exploration which focused on the Earn-McDame unconformity. No anomalies that warrant drilling were found. Imperial Metals has lowered its maintenance costs for the property by building a log cabin for the summer caretaker, to eliminate diesel for heat and power for the entire trailer camp.

Ruby Creek Placer (placer gold mine, 20 km east of Atlin) - has partnered with Pelly Construction, using Pelly's blast hole drill released from Golden Bear, to strip 20 metres of Quaternary basalt (plus 6-12 metres of till) to expose well-indurated, Pleistocene boulder gravel. Cal Klippert explained they will sluice 16,000 cubic metres at a 4:1 strip ratio. Some concern that the gravel has been found to thin from about 9 to 6 metres. Ruby Creek is one of only two or three significant placer mines in the Atlin district this year. Ruby Creek's coarse gold supports a substantial mark-up (average sale price \$320 per ounce) for nugget jewellery. Drift miners worked the area, but not intensively and the pay-gravel is rich. Also, the current pit intersects a 300-metre long bedrock drain, hand-driven in weathered granite below the basalt in 1926, and still open. This means no pumping is required, reducing cost of mining.

Kitsault & Homestake Ridge (Eskay-VMS reconnaissance, 25-35 km SE of Stewart)- Teck's claim holdings total about 580 units and estimated expenditure is \$500,000. Teck is also evaluating mineral properties held by Dolly Varden Mines and Fayz Yacoub (PAP, 2000). Two horizons are of interest: a) rhyolite below the Salmon River mudstone (as Homestake Ridge), correlative stratigraphy to Eskay Creek and b) sericite alteration in Betty Creek (lower in the section) perhaps without felsic rocks but with anomalous Hg, As, Sb, Cu, Pb, Zn (as at the Sault and Leftover showings).

Praxis (8 person camp in Georgie River area, 25 km south of Stewart) - CSS Exploration (private company led by geophysicist Grant Hendrickson) is exploring this 325 unit property for Eskay-VMS mineralization (1 week into a 4-week program). Stratigraphic recognition derives from GSC work (Carol Evenchick). Two Eskay-age rhyolite flow domes apparently overlie pillow basalt and are capped by Salmon River mudstone. Toured one of the target areas with Charlie Greig (contract geologist, ex-GSB) while Grant Hendrickson was ground-truthing airborne conductors. Other geologists are Darwin Green and Peter Daubeny. Dacite and rhyolite peperite(?) breccia occurs at the mudstone contact but no mineralization other than pyrite-(pyrrhotite) was seen. Silt in streams draining the key stratigraphy is anomalous in a broad suite of base and precious metals. Vein mineralization is reported (103O 016) but had not been located yet. Prospector Frank Renaudat (PAP in southern BC) is also part of the crew.

Mobile prospect (103P 069, 5 km NW of Stewart) - assist local prospector, Lloyd Rodway who is drilling with a custom-made aluminum "Prospector" drill. Quick-log core from 3 holes, examine mineralization in the drill area and recommend a contract geologist to better direct his efforts. Setting is Hazelton volcanics and sediments hornfelsed by Hyder granite with abundant pyrrhotite (disseminated and veins), but there are also fault-controlled polymetallic vein(s) with significant Au and Ag.

Other Exploration Activity

Dease Lake RGS - Zah claims (40 units) staked a multi-sample Ta - REE anomaly near head of Beatty Creek in the Quaternary Level Mountain volcanic complex. Minfile (104J 062, Hg occurrence) describes spectacular alteration zones developed in rhyolite and trachyte in this unusual setting for REE. The Adsit (18 units) and Tuya (18 units) cover anomalies in the northeast corner of the sheet that might be derived from VMS mineralization. Roy Woolverton heads a (private?) syndicate who hope to raise money to explore the properties.

Huckleberry Mine - completed drilling of three targets near the Main and East pits. Not enough copper mineralization to warrant more work. Winter drilling may result from IP survey between Tahtsa Reach and East pit, or from two lines of recce IP on the Wee (93E 086) north of the mine, near Sweeney Lake. With copper at \$0.66 Huckleberry is losing money, current production cost is about \$0.70

Port claims staked by prospector/placer miner Ed Asp, on the Kalum gold prospect (aka Portland, 103I 019) north of Terrace. Asp says there is a Pt "hit" in (unmapped) ultramafic rocks.

American Boy - Drill mobilized to this Ag-Zn-Pb-barite vein on American Creek, near Stewart. Cream Minerals (Frank Lang) has optioned adjoining (Crown-grant?) claims from Frank Kamarc. Rumoured to be exploring for barite to supply off-shore oil & gas drilling !!??

Prospector Assistance Program

John Hope (visited on July 19 and 23) reports that Trio Gold Ltd (of Calgary) optioned 3 small claim groups near the north end of Dease Lake: Vowel claims (6 units, 1999 PAP project), Northwest claims (4 units, 2000 PAP program) and 4 placer leases on Thibert Creek close to the Vowel claims. The target is PGE's which were a significant by-product of placer gold mining, and presumably derived from ultramafic rocks along the terrane-bounding Thibert fault or possibly