

TGS Aug. '94 1.9

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PRAXIS -  
Ashwood  
- 'Geology'

At least 3 phases of intrusion have now been recognized related to the 202 Ma Goldslide Intrusion. This years' work has shown that the mineralization is hosted primarily in a brecciated zone(s), both within hornblende-feldspar porphyry and sedimentary rocks. Mineralization, as currently known, is contained within a 10 to 180m thick area of brecciation with grades from 0.5 to 1.5 g/t Au. As fluids rose quickly from the underlying Goldslide Intrusion they quickly lost their hydrostatic pressure (damping by a quartz porphyry dyke and or 'channelling' into favourable host rocks (i.e. breccia). The result was the creation of a 50m to 250m halo of quartz-sericite - pyrite alteration. The top of this QSP zone or 'horizon' has been traced by drilling over a strike length of greater than 700m with grades ranging from 0.3 to 3 to 5 g/t Au.

The Marc zone is 235m long, up to 150m high and 3 to 30m in thickness. The average ore grade is 12 g/t Au; the cut-off used is 3 g/t over 3m. The best drill assay intersection on the property has been 200 g/t Au over 22.6m (cut from a single high of 1462 g/t Au, or 42.64 opt Au). The Ag: Au ratio is 3:1, but decreases in the AV zone. Mineralization is almost entirely in altered and brecciated hornblende porphyry.

The AV zone consists of brecciated and altered intrusive rocks 'bounded' by a quartz porphyry dyke. The best drill intersection has been 15.64 g/t Au over 22.6m.

The JW zone has now been traced by drilling over a strike length of 200m and is open. An example of ore intersection is 12.82 g/t Au over 5m. Geochemically, Red Mountain is characterized by a strong As, Sb, Cu, and Zn signature, as well as Na depletion and strong K-spar (note: still uncertain how much is primary vs secondary).

We examined core in the Lac office, focusing on the alteration and mineralization. In the afternoon, we were toured underground by Rob McLeod and David Rhys. We examined in detail the 1295 cross-cut in the Marc zone, as well as other exposures down to the bottom of the decline. David Rhys (MDRU study on Snip deposit) pointed out a narrow banded calcite-pyrite "Snip-like" vein cutting mineralized intrusive rocks (i.e. potential for "higher" grade Snip-like mineralization). Lac hopes to enter the MDAP in earnest this fall. With all the attention provided by the takeover scenario, all ears are on this project.

### GSC - REGIONAL

Unfortunately, at the time of our visit, Charlie Greig was off on a week's break. Lac indicated that Charlie is now wondering if some or all of the country rocks (other than intrusions) might be as old as upper Triassic (cf. early to mid-Jurassic).

### ASHWOOD - [MI-?]

On August 20th I visited the Ashwood property located 18 km south of Stewart. Ron Smyth, Dani Alldrick and Paul Wojdak from EMPR were also on the trip. 'Hosts' included John Kerr (Managing Director, Exploration for Aquaterre Mineral Development Ltd. (owner), Ron McMillan (Consulting Geologist for Aquaterre), and Scott Weeks (geologist with Pamicon-in charge of upcoming drill program). The property is the target of exploration for both VMS-style polymetallic and epithermal-style gold-silver mineralization in what is mapped as "pendant" of Hazelton Group strata. We traversed over the "1100" and "Ridge" gold zones, and part of the "N" zinc rich zone. The 1100 gold geochemical soil anomaly is more than 300m long (values up to 0.14 opt Au) occurring near felsic intrusive Porphyries in a (company) suspected epithermal environment [TGS disagrees]. The "N" zone and the "Tat" zone between felsic volcanic rocks and sedimentary rocks which has been traced for 6km along strike. Float samples returned assays up to 10.5% Zn. Aquaterre plans to drill 1900 metres to test these zones this fall. Unfortunately, they may have to fight the weather to complete the program as proposed.

### MM100

On August 20th Paul Wojdak and I visited the KRL's field office in Stewart and had a "Show and Tell" by John Nicholson and Andris?, contractors to Prime Equities Int'l Corp. who have an option on a large group of claims (200 contiguous units) surrounding the MM100 claim group, located 10km NE of Stewart. A total of 12 main showings or mineralized areas are known on the property. Of these 7 have been explored by underground and 3 have shipped ore. The main targets this season are the Stewart Central highly altered contact zone between sedimentary rocks on the east and volcanic rocks on the west containing >10% po plus minor cpy, and the showings in the vicinity of the MM100

**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).

~~Atlin~~ **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 Daubeney. 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 homfelsed 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 Kamaric. 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

Sept. 18/02

The first hole on the Brenda property, located approximately 19 kilometres north of Kemess North was collared on September, 8, 2002 and results are still pending. The Brenda property, under option from Canasil Resources Inc., has both porphyry type gold-copper and epithermal type gold-silver targets.

#### Praxis Property

Two diamond drill holes have been completed on the Praxis Property, under option from Praxis Goldfields Inc., located near Stewart, BC and assay results are pending. Two additional holes are planned in the coming weeks. Drilling is targeted toward Eskay Creek style deposits in a volcanogenic massive sulphide environment.

Drill core assays for Northgate's 2002 exploration program have been performed by ALS Chemex in North Vancouver. The 2002 drill program at Kemess North was designed and managed by staff at the Kemess Mine, headed by Mike Hibbitts, Chief Geologist and Project Coordinator.

Northgate is in the business of mining and exploring for gold and copper, with a focus on opportunities in North and South America. The Corporation's principal assets are the 275,000 ounce per year Kemess South mine in north-central British Columbia and the adjacent Kemess North Project where a significant exploration discovery was made in 2001. Significant growth potential exists at Kemess North, which contains an inferred resource of 5.7 million ounces of gold. A

\$5 million 34,000 metre diamond drilling program commenced in early June.

This news release contains certain forward-looking statements that reflect the current views and/or expectations of Northgate Exploration Limited with respect to its performance, business and future events. Such statements are subject to a number of risks, uncertainties and assumptions. Actual results and events may vary significantly.

#### KEMESS NORTH PROJECT 2002 Exploration Program Summary of Drilling Results

Location	Hole	Interval (m)**	Length (m)	Cu (%)	Au (gmt)
Kemess North	KN-12-12B	509.0-634.0	125.0	0.236	0.419
	Including	509.0-540.0	31.0	0.362	0.675
	KN-12-17B	597.9-640.0	42.1	0.263	0.359
	KN-02-01	170.6-566.0	395.4	0.291	0.528
	Including	407.4-561.6	154.2	0.464	0.887
	Including	422.8-482.0	59.2	0.542	1.049
	KN-02-02	Hole lost before intersecting target			
	KN-02-03	353.2-714.4	361.2	0.237	0.413
	Including	447.1-526.9	79.8	0.297	0.809
	KN-02-04	264.0-375.4	111.4	0.368	0.841
	Including	321.6-375.4	53.8	0.408	1.186
	KN-02-05	224.6-544.4	330.8	0.294	0.570
	Including	409.7-508.2	98.5	0.435	0.959
	KN-02-06	228.0-496.0	268.0	0.224	0.406
	KN-02-07	478.3-517.7	39.4	0.300	0.430
		587.4-619.4	32.0	0.270	0.541
	KN-02-08	284.8-404	119.2	0.212	0.547

# Northgate Exploration Limited: New Zone Discovered at Nugget; Kemess North Resource Confirmed by Continued Drilling

September 18, 2002

TGS → KEMESS NORTH  
 → BRUDA  
 → PRAXIS

VANCOUVER, BRITISH COLUMBIA—Northgate Exploration Limited (TSX: NGX - News) is pleased to announce assay results for a further twelve diamond drill holes from its 2002 exploration program including the first results from drilling at the Nugget target where thick intersections of gold-copper porphyry mineralization have been newly discovered. Drilling on Kemess North continues to intersect substantial mineralization, confirming the geological model of the deposit and the 5.7 million ounce resource previously defined. The Company also reports that its regional exploration program has commenced with drilling on two properties outside Northgate's extensive land position.

## Highlights

- \* Results from the first hole at the Nugget Zone, located one kilometre west of the proposed pit outline at Kemess North, included three intervals each between 50-60 metres in width with grades of up to 0.2% copper and 0.55 gmt gold.
- \* Drilling completed on 35 holes at Kemess North representing 70% of this year's program has further delineated the high-grade porphyry dome with grades greater than 1 gmt gold equivalent. The broad dimensions of the dome are now estimated to be 700 meters by 400 metres with a maximum thickness of 370 metres. Grades continue to increase with depth.
- \* Two holes have been completed at Kemess East with partial assays available from one hole.
- \* Regional exploration drilling at the Canasil and Praxis properties has commenced.

Ken Stowe, President & CEO stated that, "We have received assay results back on approximately half of the 2002 exploration program. This intersection at Nugget opens up the potential for a thick zone of gold-copper mineralization to occur at shallower depth than at Kemess North and even closer to Kemess South in a previously untested area. These results in particular confirm our opinion that the region surrounding Kemess South, including both Kemess North and now, the Nugget represent a substantial gold-copper porphyry camp in British Columbia."

## 2002 EXPLORATION PROGRAM REVIEW

### Nugget Discovery

The Company recently started drilling the Nugget target located one kilometre to the west of the Kemess North pit outline. Three holes are complete but assays are available only on two holes (KN-02-23 and KN-02-30). KN-02-23 intersected three zones of gold-copper mineralization in both the Takla Group volcanic rocks and the quartz-monzonite intrusive rocks, geology similar to Kemess North. This confirms a much larger continuous porphyry system than was previously known. Further drilling is planned to be completed during the current field season. Highlights from hole KN-02-23 include:

Hole	Intersected Width (metres)	Gold (gmt)	Copper (%)
KN-02-23	56.4	0.451	0.198
	62.0	0.550	0.134
	54.0	0.374	0.186

## Kemess North Project

Continued drilling in the east and central cirque area of Kemess North has defined additional intersections. Of particular note, is the further refining of the high-grade porphyry dome first discovered in 2001. This zone has now been confirmed both in terms of grade continuity and plan dimensions (approximately 700 metres east-west by 400 metres north-south) with thicknesses of up to 370 metres at 1 gram per tonne gold equivalent.

A deeper zone has also been intersected in the Central cirque area. This area was the focus of previous diamond drilling in 1992 but these older holes were terminated at much shallower depths. These new results should positively impact the 5.7 million ounce gold resource previously calculated by Northgate in 2001.

Drill highlights from the 2002 Kemess North program are found below and a complete summary of drilling results is found in the attachments:

Hole	Intersected Width (metres)	Gold (gmt)	Copper (%)
KN-02-01*	154.2	0.89	0.46
KN-02-03*	79.8	0.81	0.30
KN-02-03*	111.4	0.84	0.37
KN-02-04*	98.5	0.96	0.44
KN-02-09*	105.4	0.71	0.37
KN-02-13*	200.2	0.61	0.30
KN-02-16	206.0	0.54	0.29
KN-02-24	71.0	0.89	0.44

\*Assay results for these holes were previously released on August 7, 2002.

## Kemess East

The porphyry system at Kemess North is characterized by an extensive surface gossan, 3.5 kilometres in strike length, which still remains open in several directions. Exploration drilling in 2001 confirmed the existence of a north-south trending fault, which appeared to bound the mineralization on the east. Drilling at Kemess East, a target 750 metres southeast of Kemess North is looking for the faulted-off extension of the deposit on the other side of this structure.

Two holes have been completed at Kemess East in the 2002 program, with partial assay results available on one of the holes (KN-02-32) including a 15.5 metre intersection of 1.17 gmt gold.

## 2002 Regional Exploration

### Brenda Property