

ASSESSMENT REPORT  
on

GEOLOGIC MAPPING & ROCK GEOCHEMISTRY

**HOT SAUSAGE & HS CLAIMS**

Perry Creek Area

FORT STEELE MINING DIVISION

TRIM MAP 82F.050

Latitude 49° 27' N  
Longitude 116° 09' W

UTM 5479300 N. 562800 E

By

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&

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**GEOLOGICAL SURVEY BRANCH**  
ASSESSMENT REPORT

27,025

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## 1.00 INTRODUCTION

### 1.10 Location and Access

The HS group of claims are centered near 5,479,300 N, 562,800 E (49° 27' N latitude, 116° 09' W longitude) on TRIM map sheet 82F.050, approximately 27.5 km west of Cranbrook and 17 km south of St Mary Lake (Fig.1). Access to the property is gained by traveling west of Cranbrook on the Hospital Creek road and then approximately 11 km on the Perry Creek Forest Service Road and then 17 km on the Sawmill Creek road to the property boundary.

### 1.20 Physiography

The HS property is located within the Moyie Range of the Purcell Mountains, in moderately rugged mountainous terrain between the southeastern slopes of Grassy Mountain and Perry Creek. Elevations range from 1460 to 2240 meters. The property is bounded to the south by Shorty Creek and to the north by Manchester Creek, two east-flowing tributaries of Perry Creek. Forest cover is a mixture of lodgepole pine, spruce, Douglas fir and larch with balsam fir and alpine larch at higher elevations. North facing slopes tend to be covered with thick underbrush consisting of Rhododendron and False Azalea with south facing aspects covered primarily by dwarf Huckleberry bushes. Parts of the property have been recently clear-cut logged.

### 1.30 Property

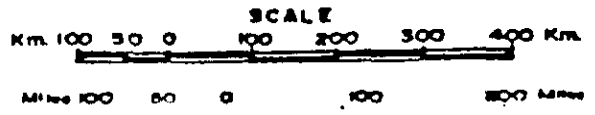
The HS group of claims is a contiguous block of 14 two post mineral claims owned by Super Group Holdings Ltd. of Cranbrook, B.C. (Fig.2).

### 1.40 History of Previous Exploration

Following the discovery of placer gold in the drainage of Perry Creek in the late 1800's, varied levels of exploration activity have been carried out sporadically over the years to locate lode gold sources. Many well documented historic workings including the Homestake and Shakespear showings are located near the HS claim group. These showings consist of erratic levels of gold mineralization within large to small bull quartz veins and/or ledges of quartz flooding and brecciation. Associated mineralization includes pyrite and minor galena and chalcopyrite. The presence of pyrite results in limonitic weathering at surface. Many of the lode gold showings were found early in the exploration history of the area and subsequent work over the years has focused primarily on the evaluation of these older showings with only minor work done to locate and evaluate new occurrences. Numerous old exploration pits and trenches were discovered on the HS claim group but no reference to these workings has been found in the historical literature.



Figure 1.  
HS CLAIMS  
PROPERTY LOCATION MAP





## 1.50 Purpose of Work

The purpose of the 2001 / 2002 rock geochemistry program was to identify auriferous zones in bedrock. Subsequent geologic mapping began an evaluation of the newly discovered gold-mineralized zones.

## 2.00 GEOLOGY

### 2.10 Regional geology

The area of the HS and Hot Sausage claims is underlain by the Mesoproterozoic Purcell Supergroup, a thick succession of fine grained clastic and carbonate sedimentary rocks exposed in the core of the Purcell Anticlinorium in southeast British Columbia. The Purcell basin was formed by block faulting in an intracratonic setting on the western margin of the ancient North American Craton.

The oldest known member of the Purcell Supergroup is the Aldridge Formation, a thick sequence of fine-grained siliciclastic rocks deposited largely by turbidity currents. The Aldridge Formation is gradationally overlain by shallower-water deltaic clastics of the Creston Formation. The Creston Formation is in turn overlain by predominantly dolomitic siltstones of the Kitchener Formation.

The Purcell Anticlinorium is transected by a number of steep transverse and longitudinal faults. The transverse faults appear to have been syndepositional (Lis and Price, 1976) and Hoy (1982) suggests a possible genetic link between Precambrian age base metal mineralization and syndepositional faulting. Longitudinal faults which more closely parallel the direction of basin growth faults may have played a similar role. Gold mineralization, most of which is believed Cretaceous in age, appears to be related to felsic intrusive activity and controlled by fault or shear structures. The Grassy Mountain Stock, a Cretaceous granitic plug, outcrops east of Hellroaring Creek about 3 kilometers north of the HS claims.

### 2.20 Property Geology

The HS property is underlain entirely by rocks of the Creston and Kitchener Formations (Fig. 3). On the property, the Creston Formation consists mainly of shallow water laminated and thin bedded argillites, medium thick bedded siltstones and medium and thicker bedded quartzites. The lithologic character can vary extensively over a short distance, making it difficult to block out separate map-units.

Argillaceous and silty beds are vari-colored with shades of green, gray, blue-gray, purple and tan brown. Quartzites and siltstones are white, light purple to pink, and shades of light brown and gray. Thicker quartzite and silty quartzite beds are commonly graded or have cross-bedding and

/ or internal laminations. Mud-chip breccias are not uncommon; these are usually less than one meter in thickness and composed of argillite rip-up clasts in a coarse clean white or purple (hematite-altered) quartzite matrix and are usually developed within the middle and upper part of the Formation. Green argillite is dominant near the base and top of the Creston Formation with thin dolomitic sections also developed near the top of the sequence. Many argillite beds display mud cracks, attesting to the shallow water depositional regime. Extensive quartz veining is present over the property but varies considerably in intensity from place to place.

The Kitchener Formation is comprised mainly of thin-bedded green to khaki-buff weathering dolomitic siltstone and argillite. Occasional molar tooth or algal mat horizons were also noted.

Bedding on the property generally strikes northeast with moderate to steeper northwest dips. Cleavage strikes sub-parallel to bedding but dips more steeply to the northwest.

The only intrusive encountered on the property to date is an argillically altered gabbro or diorite dike which trends about 080° azimuth and may be within a fault structure. Relatively unaltered gabbro / diorite float material was found at a number of locations on the property.

Numerous faults cross the HS claim block with the largest displacement structure being the Perry Creek Fault, which marks the eastern boundary of the 'Perry Creek Graben'. Kitchener Formation rocks to the east of the structure are dropped down alongside lower Creston Formation rocks to the west. (A similar fault further east and off the HS property juxtaposes western Kitchener Fm on eastern Creston Fm and forms the eastern edge of the graben). Although not directly observed at any locality, this fault can be fairly precisely defined in a few places and the adjacent Creston and Kitchener Fm rocks show little evidence of alteration or silicification. Thus on the HS claims the Perry Creek Fault is narrow, probably less than a few meters wide and, based on the lack of proximal alteration, was evidently not a factor in the gold-mineralizing process. The Perry Creek Fault is offset on the HS claims by a north-striking fault structure that is well defined in the field with Creston rocks and float to the west and Kitchener rocks to the east. Abundant quartz float associated with this north-striking fault indicates it hosts quartz veining, some of which is strongly pyritic. Two samples of float material (ZR 518 & ZR 519) returned only low anomalous gold values (19 & 13 ppb Au). Float material at the intersection of the Perry Creek Fault and the north-striking fault is of large quartz boulders indicating the presence of a quartz flooded zone.

Just south of the claim block, the mapped location of the north-striking fault indicates this structure is offset in a right lateral manner by a cross-cutting structure which occurs in the vicinity of Shorty Creek (Fig. 3). The orientation of the cross-cutting structure is unknown; it may be parallel to the Perry Creek Fault or possibly parallel to Shorty Creek (?).

A number of north-northeast striking fault structures were recognized during traverses along the ridges, on the HS claim block and a short distance to the west. These faults are commonly associated with minor drag folding and some quartz and quartz-carbonate veining. These faults typically dip steeply to the west and where drag folding is present, the sense of movement is west side up, indicating high-angle thrusting. The quartz and quartz-carbonate veining is commonly as a breccia matrix. Much of the quartz weathers a medium orange color probably due to the presence of dolomite. These veins tend to be weakly anomalous in gold (eg. HS 13, 56 ppb Au, HS14, 132 ppb Au). West of the claims, minor quartz veins associated with minor folding in one of the NNE faults also returned weak gold (HS 310, 35 ppb Au, HS 311, 117 ppb Au). Although the sampled quartz within these NNE fault zones carries only minor gold, the structures may be an important part of the structural control for better gold-mineralized zones on the property.

Another style of structure on the claim block is a northeast-trending shear zone that is poorly exposed in a recently logged clear cut near 5.479,800 N, 563,150 E. Bedrock that can be observed looks like a composite shear zone with a series of narrow (up to 15 cm wide) quartz veins within sheared sediments. Three rock samples (HTSM 1, 2 & 3) from this zone returned gold values of 332, 1953 and 5368 ppb. Further work is warranted to evaluate this poorly exposed gold-mineralized zone.

Three main styles of quartz veining are present on the HS claims:

- massive to brecciated, northeast-trending lenses or 'ledges' of quartz flooding
- narrow stockwork veins which are bedding and / or cleavage -parallel and which carry the most consistent high gold values ("Zinger Zones")
- northwest-striking 'barren', and presumably late, veins up to 2 meters wide, usually with proximal chlorite alteration and commonly with specular hematite.

#### 1. Northeast-trending quartz lenses or ledges ('Quartz Flooded Zones')

Quartz ledges or quartz flooded zones are northeast-striking (parallel to the Perry Creek Fault) but dip more steeply to the west than their host Creston Fm sediments. A suite of these massive quartz lenses occur on the broad ridge between Shorty Creek and Liverpool Creek. Some of the quartz flooded zones appear to be entirely exposed at surface; others are only partially exposed or indicated by local concentrations of massive quartz rubble. They are up to 5 meters wide and can be followed for up to 200 meters along strike. They include massive milky white bull quartz, internally brecciated quartz and some marginal brecciated host sediments. Locally, abundant pyrite can be present, along with minor galena and chalcopyrite, although generally the sulfide content is low. Argillite and siltstone bands along the contacts tend to be phyllic and sericitically altered. The numerous quartz lenses mapped to date on the property are all parallel-trending, with a northeast strike. They are parallel to the strike of the Perry Creek Fault. They appear to be tension gash fillings and thus may be oblique to their causative structures. The presence of generally weak gold mineralization within these quartz lenses indicates they were developed during the gold-mineralizing event. Gold values tend to be low, commonly less than



100 ppb although selected grab samples (eg. HS 55, of brecciated sediments and quartz near a contact) have up to 1707 ppb Au (Figs. 3 & 4).

Similar lensoid quartz flooded zones are present elsewhere in the district, in the vicinity of known placer and lode gold occurrences. Much of the historic trenching that has taken place in the district looking for lode gold has been on these quartz flooded zones. On the HS claims, a number of old trenches are present on quartz flooded zones.

## 2. Gold-enriched stockwork veins (Zinger Zones)

Small stockworks of thin sulfide-enriched auriferous quartz veins are developed at a number of localities on the HS property. The thin quartz veins are typically only a few millimeters wide, rarely getting over 2 or 3 centimeters in width. Pyrite is common and galena and / or chalcopyrite are present locally. The presence of iron sulfide results in a limonitic weathered character to the zones. On flatter bedrock surfaces the stockwork veins appear to be developed parallel to bedding or cleavage. On small cliff exposures these zones are developed in local sub-horizontal kink folds which dip eastward at about 25°. Silicification and sericite alteration usually accompany the quartz stockworks. Individual zones that have been observed to date are small, usually less than one meter in thickness and a few tens of meters in strike length. As only two dimensions are usually seen in the field, it is not certain what the actual size of individual zones can be. Most of the higher gold values obtained on the rock geochemistry survey are from these zones. This style of gold mineralization was first recognized on the Zinger claims to the south and these zones have thus been referred to as "Zinger Zones".

## 3. Northwest quartz veins

Northwest-striking, near-vertical quartz veins that range up to one meter in thickness are common across the HS claim group. These veins are usually barren of sulfides and the few analyses that the authors are aware of within the district have returned only very low gold values. These veins commonly carry some specular hematite and minor chlorite. Stronger chlorite alteration can be developed proximal to these veins. To date, the impression is that the northwest-trending quartz veins and chlorite alteration are probably both developed later than the gold mineralization.

Chlorite and hematite alteration are common on the property. Both range in intensity from weak to quite intense. Hematite appears to be earlier; where it is intensely developed, bedding features are preserved. Chlorite appears to be a late feature and can be correlated with some of the northwest striking quartz veins. Where chlorite is intensely developed, internal bedding features are obliterated. Both chlorite and hematite alteration were influenced by bedding as commonly the contact between the two types of alteration can be defined as a bedding plane. Both styles of alteration were also controlled by ENE striking faults. In a few places these structures form a

sharp contact between the two alterations, with chlorite on the north side of the fault and hematite on the south side.

### 3.00 ROCK GEOCHEMISTRY

Rock samples were collected from the HS claims in the late summer of 2001 and in 2002. This allowed some follow-up work on the original sampling. In addition, some rock samples were also taken during the follow-up geologic mapping. A total of 104 rock samples was collected. These are mostly from bedrock but a few are of subcropping float material. Location of the samples is shown in Figures 3 & 4 with brief descriptions of the rock samples in Appendix 1. Rock samples were shipped to Acme Analytical Laboratories Ltd. at 852 East Hastings Street, Vancouver, B.C., and analyzed for a 30 element ICP package and geochemical gold by standard analytical techniques. Complete geochemical analyses are provided in Appendix 2.

Rock sampling was concentrated along zones of silicification and quartz veining with iron sulfides, hosted by Creston and Kitchener Formation sedimentary rocks. Two styles of quartz veining were sampled: large quartz veins or quartz flooded zones (up to 5 meters wide and 200 meters long) and discrete zones of narrow (1 mm to 1 cm in width) quartz stringer stockwork zones. Both of these styles of veining trend northeast, roughly parallel to the general strike of bedding. The larger quartz flooded zones are up to 200 meters long while the stockwork zones form relatively erratic concentrations, commonly as wide as they are long. Within both styles of veining, pyrite and the resulting limonite are common with some visible base metal mineralization including galena and rare chalcopyrite and sphalerite. Visible gold was found within the stockwork breccia zones in and along the margins of black limonite and rotted out vugs within the quartz. No visible gold was noted in the field within the larger quartz flooded zones.

The rock geochemistry analyses support the field observations, as the highest value for gold from the quartz flooded zones is 1707 ppb with only 3 other samples returning values over 100 ppb Au. The quartz stringer zones (or Zinger Zones) however, are all anomalous in gold with values under 100 ppb Au being rare and multi-gram values quite common. The highest analysis of more than 100 grams / tonne Au was obtained from a narrow bedding-parallel quartz vein with limonite and visible gold. The results for lead are on the average similar within both styles of quartz veining with values greater than 100 ppm Pb being fairly common. The highest lead value of 2375 ppm Pb is from one of the quartz flooded zones.

Analyses from the large quartz flooded zones are an order of magnitude higher in arsenic with values over 20 ppm common, and some values over 200 ppm As. No values greater than 5 ppm As were obtained from the stockwork zones. The highest results for antimony (37 ppm) and cobalt (583 ppm) are also from the large quartz flooded zones. Weakly anomalous values for molybdenum and tungsten are present within both styles of quartz veining, with values up to 19 and 20 ppm respectively.

## 4.00 CONCLUSIONS

1. Widespread gold is present on the HS group of claims, associated with pyrite and minor base metals (PbS, Cpy and ZnS). Gold is structurally controlled and usually with thin quartz veins in bedding and / or cleavage -parallel zones or in thin quartz veins developed within gently east-dipping kink folds.
2. The two styles of gold-mineralized quartz vein systems on the property have different trace element geochemistry. Although both styles of quartz contain similar base metal values, arsenic is significantly higher within the large quartz flooded zones.
3. North-south faults contain quartz and quartz-carbonate veins which, where sampled, carry weak anomalous gold mineralization. These fault structures may be part of the structural control for the better gold-mineralized zones seen elsewhere on the property.
4. The NE striking Perry Creek Fault is a narrow structure with little or no silicification or alteration but it trends parallel to a suite of elongate lensey quartz flooded zones that appear to be tension gash features. Generally only weak gold is associated with the quartz flooded zones.
5. Chlorite and hematite alteration are widespread but are not obviously closely related to gold mineralization. Field relationships demonstrate that alteration was controlled by bedding (ie lithology) and by ENE striking fault structures.
6. Further work on the property is warranted to delineate the known gold mineralized zones through trenching and diamond drilling. In addition, favorable structures should be explored along their strike length to search for new zones of gold mineralization.

## 5.00 STATEMENT OF EXPENDITURES

Rock geochemistry and prospecting	
20 man days @ \$250.00 / day	\$5000.00
4X4 vehicle 10 days @ \$75.00 / day	750.00
Analyses 104 samples @ \$16.00 / sample	1664.00
Geologic mapping 8 days @ 300.00 / day	2400.00
4X4 vehicle 8 days @ \$75.00 / day	600.00
Drafting and Report 3 days @ \$300.00 / day	900.00
Base map preparation	120.00
Total Expenditure	<u>\$11,434.00</u>

6.00 REFERENCES

- Hoy, T., 1982           The Purcell Supergroup in southeastern British Columbia: sedimentation, tectonics and stratiform lead-zinc deposits. In : Precambrian sulphide deposits; H.S. Robinson Memorial Volume (R.W Hutchison, C.D. Spence, and J.M. Franklin, Eds.) Geol. Assoc. Can. Special Paper 25.
- Lis, M.G. and           Large scale block faulting during deposition of the Windermere  
Price, R.A., 1976       Supergroup (Hadrynian) in southeastern British Columbia: Geol. Surv.  
Can. Paper 76-1A, p135-136.

## 7.00 AUTHOR'S QUALIFICATIONS

As author of this report I, Tom Kennedy, certify that:

1. I am an independent prospector residing at 2290 DeWolfe Ave., Kimberley, B.C.
2. I have been actively prospecting in the East Kootenay district of B.C. for the past 14 years, and have made my living by prospecting for the past 11 years.
3. I have been employed as a professional prospector by major and junior mineral exploration companies.
4. I own and maintain mineral claims in B.C. and have optioned numerous claims to various exploration companies.

Dated at Kimberley, British Columbia, this 18<sup>th</sup> day of December, 2002.

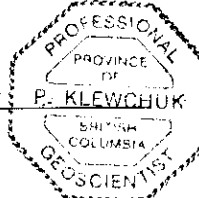
Tom Kennedy  
Tom Kennedy

As author of this report I, Peter Klewchuk, certify that:

1. I am an independent consulting geologist with offices at 246 Moyie Street, Kimberley, B.C.
2. I am a graduate geologist with a B.Sc. degree (1969) from the University of British Columbia and an M.Sc. degree (1972) from the University of Calgary.
3. I am a Fellow of the Geological Association of Canada and a member of the Association of Professional Engineers and Geoscientists of British Columbia.
4. I have been actively involved in mining and exploration geology, primarily in the province of British Columbia, for the past 26 years.
5. I have been employed by major mining companies and provincial government geological departments.

Dated at Kimberley, British Columbia, this 18<sup>th</sup> day of December, 2002.

Peter Klewchuk  
Peter Klewchuk



Sample No.	Description
HS-2	Footwall of gabbro vein (grab). Limonite and pyrite.
HS-3	Quartz with limonite wad out of old pits.
HS-4	Pod of Zinger style silicification and narrow limonite-rich quartz veinlets.
HS-5	1.5 m wide zone of liesegange banded sediments with two 2 cm wide quartz veins roughly bedding-parallel.
HS-6	Zinger style zone quartz breccia. Silicified seds, limonitic quartz veinlets.
HS-7	15 cm wide bedding-parallel quartz vein breccia trends 014° / 50° W.
HS-8	1 m wide bedding-parallel quartz breccia zone. Limonite in quartz in footwall of vein.
HS-9	Zinger style zone of quartz veinlets. Pyrite / limonite. Sericitic seds.
HS-10	Zinger style zone 1.5 to 2 m wide with py, PbS in narrow veinlets.
HS-11	15 cm wide quartz vein with limonite in sheared seds. Trends ~ 020°.
HS-12	30 cm wide Zinger Zone with 5 cm wide limonite-rich quartz veinlets.
HS-13	5 m wide fault zone trending northerly: cleavage at 011° / 85° E. Limonite-rich quartz veinlets. Irregular quartz vein breccia zone associated with fault. Limonitic, chloritic quartz within pastel phyllitic argillites.
HS-14	Zinger style quartz brecciation. Limonite in quartz veinlets.
HS-15	2 m wide quartz vein with limonite. Trends 238° / 56° NW.
HS-16	Quartz vein on edge of structure. 3 cm wide with limonite, Pbs, visible gold.
HS-17	010° trending structure, 4 m wide; limonitic breccia with quartz.
HS-18	5 cm wide quartz vein with Cpy, py, limonite in 2 m wide quartzite unit, 15° dip.
HS-19	2 cm wide bedding-parallel quartz vein with limonite. Trends 020° / 38° W.
HS-20	Big Ledge zone Shorty Ridge. Quartz with lots of dissem pyrite.

HS-21	Zinger Zone - 1 m wide vuggy quartz. alteration over 7 m. 030° trending zone.
HS-22	30 cm wide Zinger Zone. Silicified seds. limonite. pyrite. Slickenside plane 18° dip.
HS-23	Limonitic quartz in sheared seds - feldspars in quartz?
HS-24	10 cm wide bedding-parallel quartz vein with pyrite, PbS. Runs into Zinger Zone. On fold hinge.
HS-25	Old working. Quartz breccia with limonite wad.
HS-26	Float from breccia zone beside big vein with Cpy, py, PbS, visible gold.
HS-27	Big vein by quartz breccia zone with limonitic pyrite ~ 2-3 m wide
HS-28	Quartz from big vein with limonite.
HS-50	5 cm wide quartz vein with vugs - some limonite / pyrite - within zone of argillic altered seds. ~ 030° strike.
HS-51	12-15 cm wide quartz vein with limonite / pyrite and argillic altered clasts.
HS-52	Quartz vein material with limonite wad in argillic altered seds. Brecciated.
HS-53	Quartz material in ditch line of road - composite of more limonite-rich material.
HS-54	Old working. Quartz breccia zone. ~020° strike. Narrow veinlets with limonite / pyrite, limonitic altered seds.
HS-55	Old working. Dump material of quartz breccia and limonite-altered seds.
HS-56	Old working. Pyrite-rich material (silicified seds?) Brecciated with dissem py.
HS-57	Quartz breccia zone above old working (sample 55, 56). Vuggy quartz. silicified seds with py. 025° strike.
HS-58	Old workings on same structure as above. Very pyrite-rich material with some PbS (like Homestake).
	Samples HS-59, 60, 61 are from one 5 m wide zone.
HS-59	Upper large quartz breccia zone - quartz vein with orange-brown limonite and argillic clasts.

- HS-60 Upper large quartz breccia zone - quartz breccia with limonite / pyrite in narrow quartz veinlets.
- HS-61 Upper large quartz breccia zone - quartz breccia with limonite / pyrite in quartz veinlets and altered seds.
- HS-62 Same as above zone (59, 60, 61) - quartz breccia with limonite / pyrite in vuggy quartz with reddish oxide and quartz crystal vugs.
- HS-63 Same structure as above - footwall material of limonite-rich quartz veinlets in argillic / sericitic seds.
- HS-64 Quartz breccia blocks in skid trail - friable white milky quartz with orange-brown weathering limonite / pyrite.
- HS-65 Quartz vein / breccia in limonitic / argillic altered seds - some limonite and quartz crystal vugs - on road.
- HS-66 Quartz breccia zone. Zinger style on edge of 2 m wide quartz vein - some limonite in seds and veinlets.
- HS-67 Weak Zinger style zone. Some limonite / pyrite in veinlets.
- HS-68 Narrow quartz vein (1 cm wide) ~bedding-parallel with rotted limonite vugs - visible gold?
- HS-69 Series of veinlets with rotted pyrite / limonite (chalcopyrite).
- HS-70 Series of veinlets with rotted pyrite / limonite - visible gold?
- HS-71 Series of quartz veinlets with limonite / pyrite - visible gold.
- HS-72 Old working - vuggy limonite-rich quartz breccia.
- HS-73 Same site - punky altered seds / intrusive? Cu stain? - 040° strike to structure.
- HS-74 Narrow quartz veinlets ~ 040° strike on edge of large breccia zone. Some pyrite / limonite in veinlets.
- HS-75 5 m wide quartz breccia / silicified zone with pyrite / limonite crossing zone with more vuggy quartz material with limonite.
- HS-76 Same as above zone - more veinlets in sericitic / limonitic altered seds.



Sample No.	Description
HS-77	2-4 m wide quartz breccia zone - sample of more vuggy quartz vein material with pyrite / limonite.
HS-78	Quartz veinlets in seds with lots of limonite. Seds sericitic, limonitic altered.
HS-79	Sheared seds with limonitic quartz veinlets - vuggy, orange colored.
HS-80	Zinger style zone with limonite / pyrite -rich quartz veinlets and silicified seds.
HS-81	Same as 80.
HS-82	Same as above samples - with some PbS.
HS-83	Bedding-parallel quartz vein 5-15 cm wide with lots of limonite / pyrite on contacts. Some carbonate?
HS-84	Large quartz breccia zone - flat-lying quartz veins cutting breccia zone with pyrite / limonite. quartz crystal vugs (ladder veins).
HS-85	Zone of quartz veinlets with sheared seds . with pyrite / limonite. 030° strike - same structure as above.
HS-86	Same breccia zone as above - flat-lying zone of quartz veins with limonite wad in vugs with quartz crystals.
HS-87	Same breccia zone as above - Footwall contact - orange stained quartz veinlets with limonite / pyrite.
HS-88	Same breccia zone as above - flat-lying zone ~1.5 m wide with more limonite / pyrite - orange weathering quartz.
HS-89	Zone in breccia near hangingwall contact of sericitically altered seds with limonite / pyrite -rich quartz veinlets.
HS-90	Similar to above sample - narrow limonitic veinlets in altered seds - middle of large breccia zone.
HS-91	Same breccia zone as above - 130° striking limonite wad breccia cutting the 'large breccia zone'. with fresh pyrite.
HS-92	Big breccia zone - quartz float with ribboned material (green tourmaline needles?), limonite / pyrite.

- HS-93 Same breccia zone as HS-91 - quartz vein with brown-weathering limonite / pyrite.
- HS-94 Quartz float with PbS, some limonite / pyrite.
- HS-95 Large quartz breccia zone (HS-84 to 92) - some limonite-rich quartz veinlet breccia material. Footwall contact.
- HS-96 On a small fold. Limonite appears restricted to immediate hinge area.
- HS-301 to 307 are from ditch rubble on landing in Kitchener Fm.
- HS-301 Cm scale quartz veins in seds - part of QV breccia. Fine dissem pyrite in QV, partly oxidized.
- HS-302 Coarse white quartz with irregular bands of medium grained pyrite. mostly oxidized.
- HS-303 Banded quartz with abundant fine and medium grained pyrite. Mostly quartz but some sheared, limonitic, pyritic seds (argillite and siltstone). Seds are phyllitic.
- HS-304 Thin (up to 3 cm) wavy, irregular, vuggy pyritic quartz veins in pastel green argillic-altered seds. QV breccia: sampled mostly QV, some phyllitic seds.
- HS-305 QV breccia / shear zone. Wavy banded lensey quartz veins and limonitic seds in ~ equal amounts. Vuggy with abundant rounded pits, possibly oxidized sulfides.
- HS-306 Semi-massive limonite / oxidized pyrite. Coarse blebs of pyrite. minor quartz.
- HS-307 Sheared quartzite and argillite. Wavy-banded, thin irregular quartz veins. moderate pyrite, fairly evenly distributed. Argillite is yellow-brown argillic / limonitic. Quartzite is fine-grained, silicified with phyllitic argillaceous partings and, where massive, has dissem fine-grained fresh pyrite.
- HS-308 Bedrock sample from NE edge of exposed zone. QV breccia. Mostly quartz with some included phyllitic seds. Moderately limonitic.
- HS-309 Weakly limonitic quartz vein breccia. From within a fairly wide flatter bedded zone (fold flexure?) and within fairly thick bedded silty quartzites.
- HS-310 Axial plane cleavage quartz veins in synclinal hinge. ~ 10 m below ridge in steep draw eroded on probable fault zone in syncline axis.

Sample No. Description

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HS-311 Bedding-parallel limonitic quartz veins on west side of syncline.

HTSM 1, 2 & 3 Zinger style quartz blow-out in subcrop vein / breccia over 7 m by 10 m area. Limonite and pyrite abundant. Possible visible gold.

ZR-518 Orange-brown limonitic float quartz with abundant fine to medium-grained partially leached pyrite.

ZR-519 Float quartz in clear cut. Darker orange-brown limonitic quartz, 12-15 cm wide. Abundant dissem oxidized pyrite and considerable medium brown-orange 'clay' material -altered argillite? Overall texture is a breccia.

GEOCHEMICAL ANALYSIS CERTIFICATE

AA *Hot sausage*

Super Group Holdings Ltd. File # A200525 Page 1  
1805 - 13th Ave South, Cranbrook BC V1C 5Y1 Submitted by: T. Kennedy

AA

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	
SI	.6	.1	<.1	<.1	<.1	.2	<.1	1	.02	<.5	<.1	.5	<.1	1	<.1	<.1	<.1	1	.05	<.001	<.1	4.1	<.01	1	<.001	<.1	<.01	205	<.01	1	<.01	<.1	<.1	<.05	<.1	
HS-2	4.5	12.9	32.4	8	.3	42.3	269.4	42	4.00	17.4	.1	14.8	1	4	<.1	1.4	5	.01	.003	1	110.2	.06	17	.001	2	.07	.011	.01	1.6	<.01	.2	<.1	2.45	<.1		
HS-3	2.5	12.6	35.5	99	.6	93.3	32.1	180	10.53	105.4	3.4	3837.2	1.5	2	6	1.1	1.7	7	<.01	.021	1	78.9	.03	90	.001	2	.12	.005	.07	1.3	.01	.9	<.1	1.31	<.1	
HS-4	1.9	2.1	50.3	10	.1	2.0	1.2	18	.67	8.6	1.6	180.8	10.1	10	.1	.1	.3	2	<.01	.023	22	36.4	.02	1002	.001	1	.34	.009	.26	.5	<.01	.4	<.1	.07	<.1	
HS-5	1.9	6.1	26.5	13	.1	8.4	4.7	74	1.21	12.5	4.7	377.9	6.0	3	.1	.1	.2	5	.04	.039	19	83.2	.02	60	.001	2	.28	.008	.19	.4	<.01	.7	<.1	<.05	<.1	
HS-6	1.7	4.4	7.4	10	.3	3.3	2.0	43	.99	.5	.8	227.5	6.5	2	<.1	.1	.1	2	<.01	.014	22	40.0	.02	38	.001	1	.25	.004	.18	.5	<.01	.3	<.1	<.05	<.1	
HS-7	4.1	10.8	272.8	228	.3	6.2	1.6	565	2.15	.8	.5	408.3	4.9	2	.9	.1	.3	6	<.01	.009	16	110.1	.01	101	.001	1	.22	.005	.16	.4	.05	.6	<.1	.07	<.1	
HS-8	13.7	3.2	17.3	31	.1	16.7	10.2	68	2.21	3.3	2.9	106.1	1.5	1	<.1	.1	.7	4	<.01	.011	3	104.4	.01	48	<.001	3	.09	.002	.06	1.3	.01	1.0	<.1	<.05	<.1	
HS-9	3.7	5.5	22.4	8	<.1	4.2	.7	25	.65	<.5	.3	309.2	7.7	2	<.1	.2	.1	4	<.01	.007	19	83.1	.02	65	.001	2	.28	.003	.23	.6	<.01	.3	<.1	<.05	<.1	
HS-10	2.8	638.4	5540.6	3	11.3	2.0	.5	17	.96	<.5	.4	860.4	4.8	3	.2	.2	26.1	3	<.01	.006	12	61.9	.02	145	.001	<.1	.23	.004	.19	1.0	.02	.2	<.1	.16	<.1	
HS-11	2.1	19.9	645.0	26	1.5	13.2	7.7	366	2.66	1.3	1.6	282.7	2.1	1	.1	.2	6.0	5	<.01	.016	7	119.6	.08	113	.001	2	.23	.004	.12	.5	<.01	.4	<.1	<.05	<.1	
HS-12	3.7	11.7	84.8	8	.1	6.5	5.8	289	.94	6	1.3	89.5	5.6	1	<.1	.1	1.0	5	<.01	.007	18	102.9	.02	62	<.001	<.1	.24	.004	.18	.8	<.01	.6	<.1	<.05	<.1	
HS-13	2.7	9.9	255.4	13	1.7	8.4	3.2	76	2.58	6.5	1.0	56.1	1.9	<.1	<.1	3	19.5	5	<.01	.016	7	129.4	.02	13	.001	1	.11	.003	.07	.7	<.01	.5	<.1	<.05	<.1	
HS-14	2.9	3.9	16.2	5	<.1	2.3	.3	20	.50	<.5	.7	132.3	6.9	1	<.1	.1	.7	3	<.01	.008	20	72.1	.02	26	.001	1	.27	.002	.19	.8	<.01	.2	<.1	<.05	<.1	
HS-15	4.1	11.9	23.5	9	<.1	10.4	7.5	45	1.11	.7	.4	18.8	.3	1	<.1	.1	.7	6	<.01	.010	2	133.3	<.01	7	<.001	<.1	.05	.005	.03	.6	<.01	.2	<.1	<.05	<.1	
RE HS-15	4.1	11.2	22.2	9	<.1	10.1	7.9	45	1.11	1.0	.4	27.4	.3	1	<.1	.1	.6	5	<.01	.010	2	124.9	<.01	7	<.001	1	.05	.005	.02	.7	<.01	.2	<.1	<.05	<.1	
HS-16	3.9	48.9	14429.3	31	12.5	10.1	10.5	183	2.30	2.2	12.9	1105.3	7.7	8	1.9	4	37.7	7	.01	.056	26	82.3	.03	60	.001	2	.28	.002	.20	.8	.01	.3	<.1	.09	<.1	
HS-17	2.0	8.7	207.9	16	.3	8.6	4.0	523	.69	<.5	2.4	19.0	2.8	2	.2	.2	1.0	5	<.01	.007	11	117.0	.02	110	<.001	2	.15	.003	.10	.6	.01	.3	<.1	<.05	<.1	
HS-18	3.5	2129.6	142.1	16	2.6	5.7	3.4	148	.95	2.7	1.2	182.9	6.9	2	<.1	4	41.5	3	<.01	.017	17	82.4	.02	195	<.001	<.1	.22	.004	.17	.7	<.01	.6	<.1	<.05	<.1	
HS-19	5.5	112.5	704.1	11	2.0	7.8	3.5	56	1.09	.9	4.4	1827.7	5.9	2	<.1	.3	8.4	5	<.01	.011	20	112.0	.03	160	.001	<.1	.18	.004	.14	.5	.02	.5	<.1	<.05	<.1	
HS-20	4.8	30.5	101.8	10	1.2	27.7	167.3	26	3.90	84.1	.6	132.0	.2	3	.1	1.8	3.0	4	<.01	.007	1	111.6	<.01	47	<.001	<.1	.07	.004	.05	1.3	<.01	.2	<.1	2.31	<.1	
HS-21	1.2	5.2	10.5	3	.2	3.1	1.0	27	.83	1.8	.5	753.8	4.1	2	<.1	.1	1.2	4	<.01	.090	9	62.8	.02	60	.002	1	.28	.004	.20	.4	<.01	.4	<.1	<.05	<.1	
HS-22	3.3	3.9	21.5	6	.2	2.5	.8	20	.98	.6	.6	1109.6	7.5	5	<.1	<.1	.7	3	<.01	.023	18	74.2	.02	124	.001	1	.26	.007	.21	.7	<.01	.3	<.1	.07	<.1	
HS-23	1.3	4.0	44.7	7	.4	4.9	2.2	93	.99	<.5	.5	221.0	11.9	11	<.1	.1	1.5	4	.02	.025	27	75.1	.02	1875	.001	<.1	.30	.013	.20	.2	.01	.4	<.1	.06	<.1	
HS-24	4.0	3.4	260.9	14	1.3	6.6	6.6	206	1.14	1.0	2.0	53.8	3.1	4	.1	.1	3.7	4	.04	.028	8	104.3	.02	283	.001	1	.15	.005	.09	1.0	.01	.6	<.1	<.05	<.1	
HS-25	66.2	55.2	349.8	85	.1	17.0	9.0	17	19.46	15.4	13.5	142.2	4.4	2	.8	.3	.5	6	<.01	.100	13	42.7	.04	42	.001	<.1	.30	.004	.19	.3	.01	.6	<.1	<.05	<.1	
HS-26	2.4	1247.4	2502.3	19	9.7	3.2	2.3	147	.65	<.5	1.7	3826.3	6.0	5	.2	.6	5.9	4	.02	.021	18	68.1	.02	577	.001	<.1	.30	.012	.16	.7	<.01	.4	<.1	<.05	<.1	
HS-27	5.0	26.3	94.9	22	.3	36.2	30.4	93	1.90	2.7	1.9	23.9	1.7	5	<.1	.2	1.1	5	<.01	.055	10	114.0	.01	101	.001	16	.11	.010	.07	.4	<.01	.7	<.1	<.05	<.1	
HS-28	4.5	14.4	45.5	8	.1	27.2	44.9	101	1.37	2.8	2.6	11.2	.2	2	<.1	.3	5.1	6	<.01	.010	<.1	105.2	.01	20	<.001	1	.07	.011	.02	1.1	<.01	1.6	<.1	<.05	<.1	
HTSM-1	1.6	6.6	287.6	37	.1	5.0	1.0	51	1.76	3.7	1.5	332.2	5.4	<.1	.1	.1	<.1	4	<.01	.022	9	91.7	.01	27	.001	1	.25	.004	.18	.4	<.01	.6	<.1	<.05	<.1	
HTSM-2	3.1	6.1	114.6	120	.4	4.7	1.8	33	4.54	6.5	1.3	1952.8	5.0	<.1	.1	.1	<.1	3	<.01	.041	8	65.6	.01	21	.001	<.1	.23	.003	.15	.8	<.01	.6	<.1	<.05	<.1	
HTSM-3	1.6	12.2	68.2	61	.9	10.6	8.8	48	14.03	18.1	.6	5367.6	8.1	1	.1	.1	1.3	4	<.01	.074	11	58.6	.01	53	.002	<.1	.25	.003	.16	.4	.01	.7	<.1	.06	<.1	
GAR-12	21.0	2.4	7.2	7	.1	2.8	.7	72	1.25	.5	.4	92.1	5.1	4	<.1	.1	2.0	5	<.01	.019	20	95.0	.03	67	.002	2	.24	.008	.18	.8	.01	.2	<.1	<.05	<.1	
GAR-13	19.1	3.8	2.9	4	.1	12.3	8.6	29	5.70	7.0	5.6	106.9	3.0	6	<.1	.4	.6	8	<.01	.074	7	96.2	.06	34	.001	<.1	.15	.006	.07	3.5	<.01	.1	<.1	<.05	1	
STANDARD DS3	9.2	125.4	38.0	150	.3	36.8	11.6	790	3.20	30.2	5.9	23.5	3.9	27	5.8	5.2	6.0	80	.54	.094	16	182.2	.60	147	.090	2	1.73	.031	.17	4.2	.25	3.0	1.1	<.05	6	

Appendix 2. Rock Geochem Anal

GEOCHEMICAL ANALYSIS CERTIFICATE

*Hot SPUSAGE*

National Gold Corporation File # A202001

Page 1

600 - 890 W. Pender St., Vancouver BC V6C 1K4 Submitted by: T. Kennedy



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb
SI	1	2	<3	1	<.3	<1	<1	12	.02	<2	<8	<2	<2	2	<.5	<3	<3	<1	.09	.001	1	3	<.01	1	<.01	<3	.04	.36	<.01	<2	.2
HS-50	5	6	<3	4	<.3	8	2	75	.54	<2	<8	<2	3	<1	<.5	<3	<3	2	<.01	.004	8	40	.01	15	<.01	<3	.19	.01	.05	11	2.8
HS-51	2	9	<3	12	<.3	9	4	64	.98	8	<8	<2	2	1	<.5	<3	<3	6	.01	.006	3	96	.01	7	<.01	4	.12	<.01	.04	3	7.5
HS-52	7	5	48	110	<.3	26	11	129	11.85	284	20	<2	34	1	<.5	<3	4	4	.01	.121	17	23	.01	27	<.01	<3	.44	.01	.12	6	3.1
HS-53	4	7	53	73	.3	22	18	78	9.55	199	13	<2	66	3	.5	<3	5	6	.01	.098	9	67	.01	60	<.01	<3	.31	.01	.17	4	116.1
HS-54	3	32	128	23	4.9	6	11	66	1.01	17	<8	<2	7	1	<.5	<3	<3	1	.01	.010	16	26	.12	25	<.01	<3	.32	.01	.15	8	13.1
HS-55	5	155	2375	57	5.4	11	11	33	7.22	79	<8	3	6	2	<.5	11	36	3	<.01	.114	15	41	.01	31	<.01	<3	.47	<.01	.17	<2	1707.2
HS-56	5	16	617	9	6.2	8	21	45	1.37	22	<8	<2	2	1	<.5	3	<3	1	.01	.017	3	37	<.01	69	<.01	<3	.08	.01	.03	13	24.0
HS-57	2	11	185	8	2.6	5	6	41	2.23	42	<8	<2	<2	2	<.5	3	<3	2	<.01	.009	3	84	<.01	26	<.01	<3	.07	.01	.04	3	151.0
HS-58	6	8	863	80	2.9	40	583	55	5.27	5	<8	<2	<2	2	1.3	5	6	1	<.01	<.001	2	42	<.01	9	<.01	<3	.05	.01	.03	16	38.0
HS-59	2	7	15	14	.4	7	7	46	1.05	14	<8	<2	2	2	<.5	<3	<3	5	<.01	.011	2	100	.01	12	<.01	<3	.14	.01	.08	3	4.8
HS-60	3	5	16	6	.4	6	4	27	1.03	7	<8	<2	2	1	<.5	<3	3	1	<.01	.009	2	28	.01	19	.01	<3	.20	<.01	.12	8	1.3
RE HS-60	3	4	16	7	<.3	4	4	30	1.03	7	<8	<2	2	1	<.5	<3	<3	1	<.01	.009	3	25	.01	17	<.01	<3	.18	<.01	.12	7	21.0
HS-61	5	7	5	5	<.3	4	1	25	.99	9	<8	<2	2	11	<.5	<3	<3	3	.01	.016	4	63	.01	61	<.01	<3	.21	<.01	.11	<2	5.5
HS-62	5	9	68	14	.5	8	12	80	1.25	17	<8	<2	<2	2	<.5	<3	<3	1	.01	.009	4	45	<.01	12	<.01	<3	.13	<.01	.06	13	30.0
HS-63	2	23	197	23	.9	5	20	39	3.91	34	9	<2	5	3	<.5	3	<3	4	.01	.019	16	55	.01	74	<.01	<3	.39	<.01	.24	<2	62.6
HS-64	5	15	82	67	1.0	16	72	56	1.98	24	<8	<2	2	2	<.5	5	<3	1	.01	.006	3	40	<.01	23	<.01	<3	.05	.01	.02	15	16.3
HS-65	1	7	7	11	<.3	5	15	148	.61	7	<8	<2	2	1	<.5	<3	<3	4	.01	.011	2	69	.01	15	<.01	<3	.18	.01	.08	2	3.1
HS-66	2	9	3	6	<.3	6	1	46	.42	<2	<8	<2	10	2	<.5	<3	<3	2	.01	.009	36	18	.02	36	<.01	<3	.28	<.01	.20	3	13.4
HS-67	1	3	3	18	<.3	4	4	113	.91	2	<8	<2	8	8	<.5	<3	<3	5	.03	.017	25	36	.04	1163	<.01	<3	.43	.02	.24	<2	180.8
HS-68	4	83	751	68	2.4	13	11	637	2.91	4	<8	2	9	4	<.5	<3	14	4	.01	.031	30	24	.05	156	.01	<3	.32	<.01	.21	7	3248.6
HS-69	1	176	721	31	1.2	6	4	235	1.17	<2	<8	<2	7	4	<.5	<3	3	4	<.01	.014	20	68	.04	74	<.01	<3	.33	<.01	.16	<2	2091.5
HS-70	4	39	57	28	<.3	5	2	100	1.04	<2	<8	<2	6	1	<.5	<3	<3	1	<.01	.009	16	26	.02	50	<.01	<3	.27	.01	.18	8	1099.8
HS-71	1	67	753	15	3.0	7	3	114	.71	2	8	4	7	3	<.5	<3	10	4	.04	.025	18	65	.05	48	<.01	<3	.40	<.01	.21	<2	5774.5
HS-72	5	19	54	18	<.3	25	8	57	1.33	26	<8	<2	3	1	<.5	<3	<3	7	<.01	.022	4	41	.01	7	<.01	<3	.19	.01	.09	11	16.0
HS-73	2	11	152	18	.3	16	8	39	1.00	16	<8	<2	14	14	<.5	<3	<3	20	.02	.034	11	59	.03	28	.01	<3	.68	.02	.30	<2	11.0
HS-74	3	5	6	10	<.3	12	16	38	1.18	<2	<8	<2	7	2	<.5	<3	<3	2	<.01	.009	21	17	.24	24	<.01	<3	.49	<.01	.18	4	2.9
HS-75	1	30	224	16	5.5	6	36	43	2.05	65	<8	<2	<2	1	<.5	22	<3	2	<.01	.009	1	76	<.01	2	.01	<3	.05	<.01	.02	2	24.6
HS-76	2	13	128	5	<.3	4	1	19	.66	37	<8	<2	5	1	<.5	4	<3	2	<.01	.006	11	21	.01	20	.01	<3	.35	<.01	.20	4	2.4
HS-77	1	18	40	18	<.3	7	7	25	1.53	30	<8	<2	3	1	<.5	<3	<3	4	<.01	.010	6	82	<.01	8	.01	<3	.10	<.01	.08	2	24.0
HS-78	2	22	101	11	.3	5	15	31	1.70	34	<8	<2	9	1	<.5	<3	<3	2	<.01	.012	34	19	.01	17	<.01	<3	.25	<.01	.17	4	4.6
HS-79	1	21	17	20	<.3	7	3	27	.85	15	<8	<2	3	1	<.5	6	<3	3	<.01	.005	8	62	.01	30	<.01	<3	.27	<.01	.18	<2	2.8
HS-80	5	8	45	9	<.3	9	5	49	2.25	3	<8	<2	2	7	<.5	<3	<3	<1	<.01	.013	9	42	.02	836	<.01	<3	.19	<.01	.14	10	376.8
HS-81	5	8	33	13	<.3	8	7	36	1.66	<2	<8	<2	7	6	<.5	<3	<3	5	<.01	.013	27	54	.02	1614	.01	<3	.32	<.01	.25	<2	254.5
STANDARD DS3	11	127	31	156	.4	36	11	794	3.33	31	<8	<2	6	30	5.9	6	5	83	.57	.089	18	189	.59	144	.08	<3	1.84	.03	.16	5	20.0

GROUP 10 - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.  
 UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.  
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
 - SAMPLE TYPE: ROCK R150 60C AU\* IGNITION BY ACID LEACHED, ANALYZE BY ICP-MS. (10 gm)  
 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

*Sampler T. KENNEDY*

DATE RECEIVED: JUL 2 2002 DATE REPORT MAILED: *July 10/02* SIGNED BY: *C.P.* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppm	ppb
HS-82	3	7	196	20	.3	6	1	218	1.22	3	<8	<2	5	3	<.5	<3	4	2	.01	.011	16	26	.02	185	.01	<3	.23	.01	.20	8	135.6
HS-83	19	9	215	80	1.0	6	4	105	1.76	6	<8	<2	8	1	<.5	<3	4	5	<.01	.012	18	75	.02	55	<.01	<3	.27	.02	.20	<2	689.9
HS-84	8	62	284	52	1.3	10	25	50	3.99	57	<8	<2	2	3	<.5	20	<3	3	<.01	.050	4	29	.01	13	<.01	<3	.09	.01	.02	13	16.0
HS-85	1	13	43	10	.6	3	3	34	1.14	15	<8	<2	2	2	<.5	3	<3	6	<.01	.012	9	74	.01	14	.01	<3	.16	.01	.10	2	2.6
HS-86	9	75	1327	101	.5	10	10	161	6.72	108	8	<2	4	4	<.5	37	3	5	<.01	.133	8	31	.01	25	.01	<3	.24	<.01	.07	13	7.1
HS-87	3	15	135	25	.5	5	3	33	1.89	33	<8	<2	2	3	<.5	3	<3	6	<.01	.023	15	78	.01	18	.01	<3	.21	.01	.13	3	1.5
HS-88	9	22	184	44	.7	11	11	54	2.24	34	<8	<2	3	2	<.5	6	<3	2	.01	.034	3	31	<.01	19	.01	<3	.13	.01	.06	14	3.9
HS-89	1	10	37	136	<.3	17	10	17	4.25	18	<8	<2	2	2	<.5	<3	4	4	.01	.062	4	38	.01	21	.01	<3	.26	.01	.17	<2	.6
HS-90	3	9	61	10	.5	6	4	39	1.28	18	<8	<2	2	2	<.5	3	<3	1	<.01	.015	3	28	.01	29	<.01	<3	.22	.02	.16	8	2.0
HS-91	5	4	28	58	.4	65	122	66	10.14	55	<8	<2	5	2	.5	5	3	7	.02	.146	7	38	.01	113	<.01	<3	.33	.01	.19	3	12.5
HS-92	4	7	43	11	.6	6	4	59	.99	5	<8	<2	<2	1	<.5	<3	<3	1	<.01	.008	1	36	<.01	23	<.01	4	.06	<.01	.03	12	5.7
HS-93	2	7	10	24	<.3	14	17	31	2.46	25	<8	<2	<2	1	<.5	<3	<3	3	.01	.019	2	81	<.01	7	<.01	<3	.08	.01	.04	3	25.4
HS-94	6	144	11116	14	33.0	9	1	61	.76	11	<8	<2	<2	1	1.8	35	7	1	<.01	.011	1	45	<.01	19	<.01	<3	.04	.01	.03	20	72.6
HS-95	3	7	55	29	<.3	21	39	48	3.31	33	<8	<2	2	2	<.5	<3	<3	5	<.01	.030	5	87	.01	7	<.01	4	.11	<.01	.05	3	18.4

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppm	ppb
95A HS 95A	1	4	13	19	<.3	5	8	486	1.06	4	<8	<2	13	6	.6	<3	<3	4	.11	.069	44	36	.03	154	<.01	<3	.37	<.01	.28	<2	148.0
96 HS 96	2	7	87	20	7.4	4	3	72	5.58	3	<8	69	14	2	<.5	<3	7	3	<.01	.038	(74)	14	.02	77	<.01	<3	.33	<.01	.24	4	83273.8

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppm	ppb
HS-97	1	6	20	7	<.3	4	3	47	1.51	<2	<8	2	8	5	<.5	<3	<3	1	<.01	.019	9	33	.03	670	<.01	<3	.33	<.01	.27	<2	2541.7
HS-98	7	38	1085	169	.5	9	5	1062	1.99	3	<8	<2	8	4	<.5	<3	11	1	.03	.045	26	20	.09	218	<.01	<3	.34	<.01	.19	46	200.0
HS-99	3	83	279	81	1.0	12	9	381	3.70	<2	<8	3	5	3	<.5	<3	3	3	.01	.016	10	65	.03	149	<.01	<3	.26	<.01	.21	4	1979.6
HS-100	5	116	42	25	<.3	9	7	3111	2.57	2	<8	<2	9	10	<.5	<3	<3	<1	<.01	.025	27	21	.02	1907	<.01	<3	.27	<.01	.22	7	280.0
HS-101	2	61	339	72	.7	3	1	48	.75	<2	<8	<2	2	1	<.5	<3	<3	1	<.01	.009	6	70	.01	36	<.01	<3	.17	.01	.09	3	217.0
HS-102	3	63	1370	44	.4	5	1	109	.47	<2	<8	<2	6	1	<.5	<3	<3	<1	.01	.017	6	26	.01	155	<.01	<3	.16	<.01	.12	9	55.0
HS-103	1	25	616	108	<.3	5	7	756	.95	3	<8	<2	13	3	.5	<3	<3	2	.01	.017	44	48	.03	136	<.01	<3	.29	<.01	.25	2	2927.2
HS-104	3	135	851	16	21.1	6	3	45	1.98	<2	<8	<2	7	3	<.5	<3	39	<1	<.01	.013	17	21	.02	599	<.01	<3	.23	<.01	.20	9	1308.0
HS-105	2	37	672	64	3.6	4	5	243	1.41	<2	<8	2	5	3	<.5	<3	13	1	<.01	.012	21	55	.02	462	<.01	<3	.24	<.01	.20	2	3339.4
HS-106	1	32	31	9	.5	6	5	28	1.88	2	<8	3	17	5	<.5	<3	<3	1	.06	.034	31	12	.03	821	<.01	<3	.32	<.01	.26	3	4830.5
RE HS-106	1	32	31	9	.4	7	5	28	1.88	2	<8	4	17	5	<.5	<3	<3	1	.04	.035	31	13	.03	816	<.01	<3	.32	<.01	.26	3	4059.2
HS-107	10	93	1060	19	6.5	26	25	66	13.93	7	<8	118	<2	8	<.5	<3	12	1	<.01	.047	3	47	.03	483	<.01	<3	.07	<.01	.06	3	99999.0
HS-108	2	4	24	11	<.3	6	3	110	1.00	3	<8	<2	7	3	<.5	<3	<3	<1	.03	.024	16	17	.02	318	<.01	<3	.28	.05	.10	5	427.0
HS-109	6	18	82	30	2.6	10	9	181	2.15	3	<8	<2	4	3	<.5	<3	18	2	<.01	.008	11	63	.02	917	<.01	<3	.20	.01	.13	3	2538.7
HS-110	3	3	4	11	<.3	6	2	88	.68	2	<8	<2	6	1	<.5	<3	<3	<1	.02	.012	15	26	.04	37	<.01	<3	.29	.01	.13	9	28.0
HS-111	2	12	157	14	.3	9	6	245	1.88	2	<8	<2	8	3	<.5	<3	<3	2	.01	.030	34	67	.02	51	<.01	<3	.25	<.01	.19	3	743.6
STANDARD DS3	9	129	32	160	.3	36	12	795	3.01	30	<8	<2	4	27	6.0	5	6	71	.54	.089	17	175	.56	143	.09	3	1.67	.03	.15	3	21.0
HS-112	3	5	480	8	.4	3	1	279	.59	<2	<8	<2	3	7	<.5	<3	<3	<1	.05	.020	18	12	.02	210	<.01	<3	.15	.01	.13	<2	30.1

P. 03/03

FHA

LHD



National Gold Corporation FILE # A202942

Page 2



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppb
HS-301	3	26	23	8	.3	35	181	42	9.37	311	<8	<2	5	1	<.5	5	6	8	.01	.036	10	27	.74	61	<.01	5	.68	<.01	.03	8	167.8
HS-302	5	6	4	3	<.3	16	121	73	4.88	17	<8	<2	<2	1	<.5	<3	<3	1	.01	.011	4	39	.02	33	<.01	<3	.05	<.01	.02	16	22.7
HS-303	5	4	7	16	<.3	22	154	27	8.58	32	<8	<2	8	2	<.5	<3	4	8	.01	.046	28	25	.87	155	<.01	<3	.91	<.01	.05	8	16.7
HS-304	4	15	16	7	<.3	26	132	37	7.29	220	<8	<2	4	1	<.5	4	5	9	.01	.030	6	30	1.10	128	<.01	<3	.90	<.01	.02	7	17.7
HS-305	5	15	22	11	<.3	55	217	42	8.97	122	<8	<2	9	1	<.5	<3	3	7	<.01	.079	47	18	.51	79	<.01	3	.71	.01	.10	4	21.2
HS-306	10	23	139	23	.5	649	1679	66	26.25	695	<8	<2	14	2	.5	7	12	13	.01	.235	58	15	.12	39	<.01	26	.38	<.01	.05	<2	54.1
HS-307	5	4	5	7	<.3	22	45	33	2.00	28	<8	<2	2	2	<.5	<3	<3	4	.01	.013	11	18	.19	481	<.01	<3	.33	<.01	.11	6	7.4
HS-308	5	4	3	10	<.3	14	40	59	2.32	29	<8	<2	4	1	<.5	<3	<3	7	.01	.023	2	26	.96	11	<.01	<3	.98	.01	.03	8	3.7

ACME ANALYTICAL LABORATORIES LTD. (ISO 9002 Accredited Co.)

852 E. HASTINGS ST. VANCOUVER BC V6A 1R6

PHONE (604) 253-3158 FAX (604) 253-1716



GEOCHEMICAL ANALYSIS CERTIFICATE

National Gold Corporation File # A202654

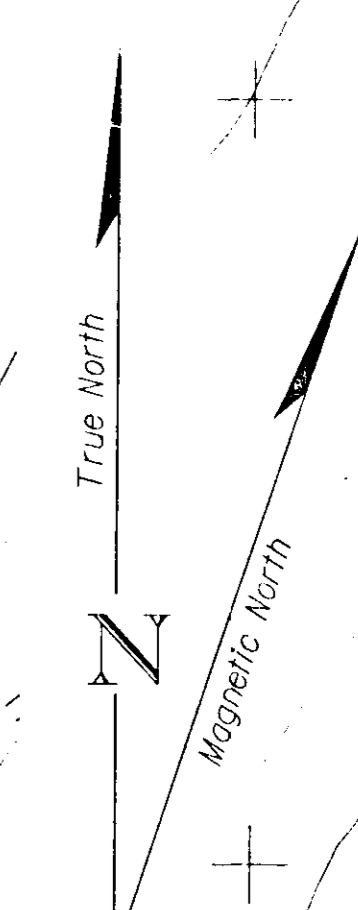
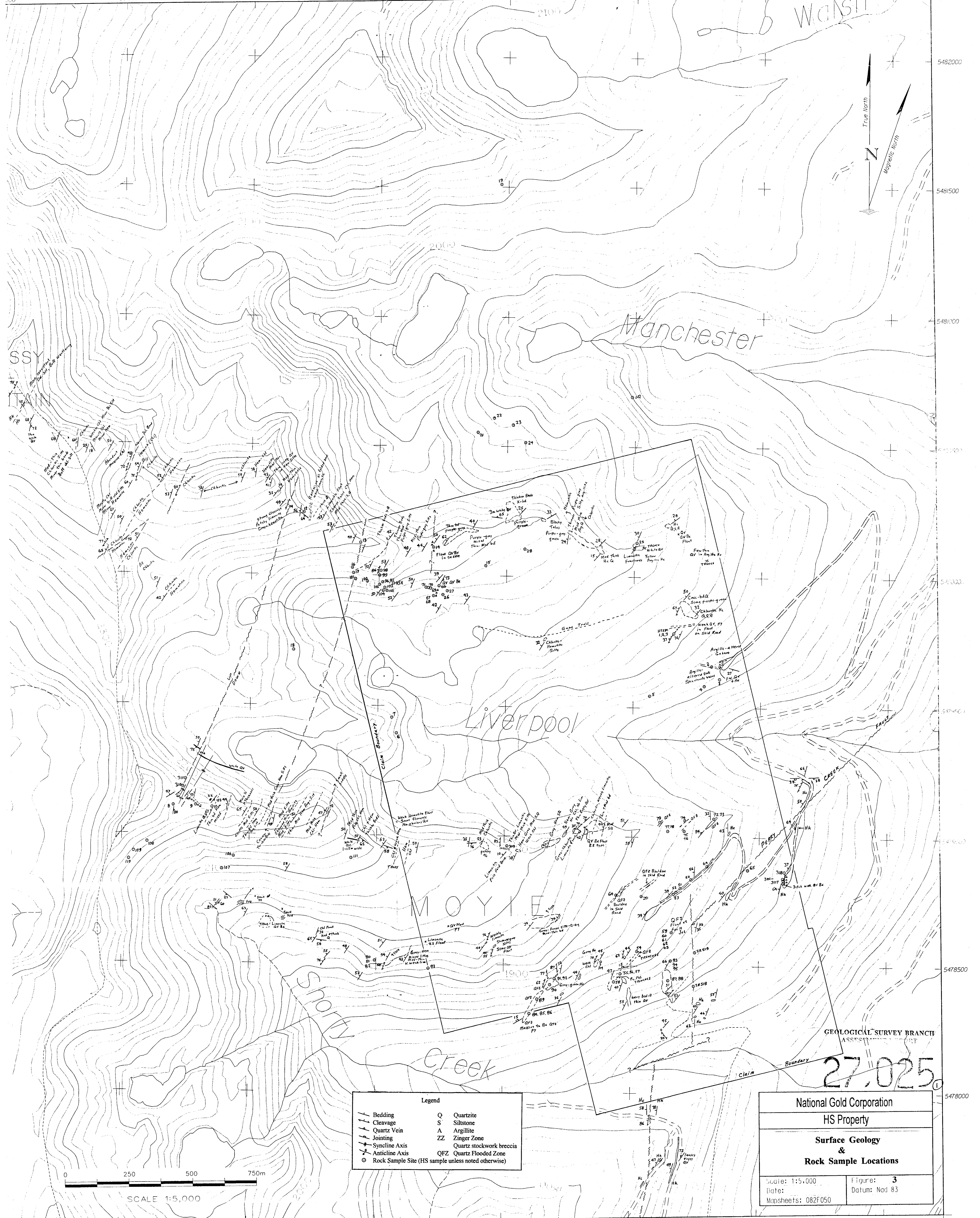
Page 1

600 - 890 W. Pender St., Vancouver BC V6C 1K4



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppb
HS-309	1	51	202	15	5.2	10	17	86	1.00	74	<8	<2	5	3	1.1	50	3	2	.01	.012	19	17	.09	36	<.01	<3	.24	<.01	.12	5	45.0
HS-310	6	19	100	33	2.8	23	11	496	2.39	59	13	<2	4	1	<.5	26	<3	5	<.01	.023	5	29	.05	60	<.01	3	.12	<.01	.07	6	35.0
HS-311	2	13	35	15	.7	5	2	60	1.17	14	<8	<2	4	9	<.5	7	<3	3	<.01	.029	21	19	.02	58	<.01	<3	.22	.01	.19	7	116.9
STANDARD DS3	9	131	32	163	<.3	37	14	765	3.18	30	8	<2	3	28	6.1	4	5	76	.55	.087	18	182	.58	140	.09	4	1.76	.03	.16	5	20.0
ZR-518	2	11	5	3	.3	7	102	41	5.89	15	<8	<2	3	1	<.5	<3	<3	3	<.01	.048	4	18	.02	44	<.01	<3	.14	.01	.07	9	18.5
ZR-519	4	10	335	43	.5	8	33	73	2.43	12	<8	<2	<2	1	<.5	<3	<3	1	<.01	.021	3	24	.01	21	<.01	4	.13	.01	.08	11	13.4





SS

Manchester

Liverpool

MOYIE

SNOW

Creek

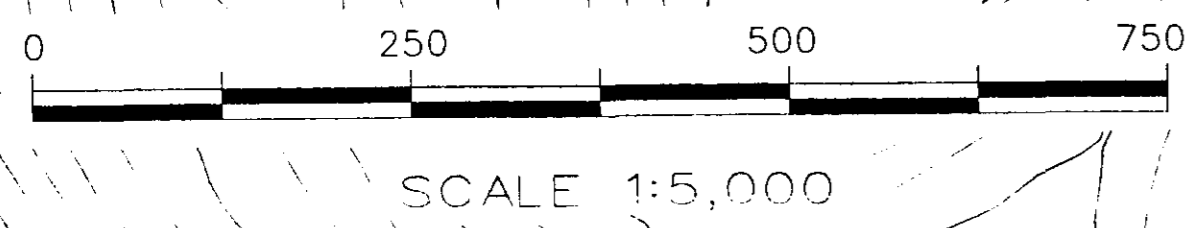
GEOLOGICAL SURVEY BRANCH  
ASSISTANT SURVEYOR

27.025

Legend

	Q	Quartzite
	S	Siltstone
	A	Argillite
	ZZ	Zinger Zone
		Quartz stockwork breccia
	QFZ	Quartz Flooded Zone
		Rock Sample Site (HS sample unless noted otherwise)

National Gold Corporation	
HS Property	
Surface Geology & Rock Sample Locations	
Scale: 1:5,000	Figure: 3
Date:	Datum: Nad 83
Map sheets: 082F050	





561000

561500

562000

562500

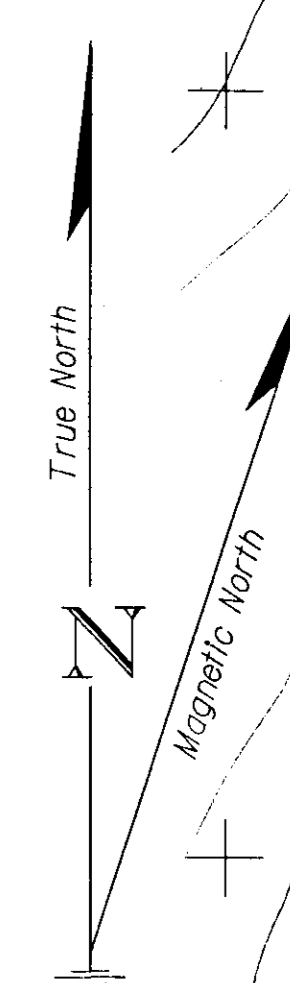
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563500

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Walsley



5482000

5481500

5481000

5480500

5480000

5479500

5479000

5478500

5478000

SSY  
TAIN

Manchester

Liverpool

MOYIE

Creek

Claim Boundary

Claim Boundary

GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORT

27,025

National Gold Corporation  
HS Property

Rock Sample Locations  
&  
Gold Values in PPB

Scale: 1:5,000  
Date:

Figure: 4  
Datum: Nad 83

Mapsheets: 082F050



SCALE 1:5,000

561000

561500

562000

562500

563000

563500

564000

49,26,  
116,06,