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ASSESSMENT REPORT

PROSPECTING AND GEOCHEMICAL SURVEYS

BEN 1-6 (YC07997) JI 1-16 (YC08728)

MINERAL CLAIMS

WHITEHORSE MINING DISTRICT

YUKON TERRITORY

NTS 105 D 06

LATITUDE: 60 19' LONGITUDE: 135 15'

June 29 to July 13 1998

**For: Side Hill Enterprises Ltd.
Box 5745 Whitehorse, Yukon
D. Sufady**

By: M. Glynn

TABLE OF CONTENTS

	<u>Page</u>
Location	1
Access	1
Physiography	1
Property Location Map	2
Claim Ownership and Status	3
Claim Map	4
History	5
Previous Exploration	5
Geology	6
Regional Geology Plan	7
Regional Geology Cross Section	8
Mineralization	9
Geochemistry	9
Prospecting	10
Conclusions	11
Recommendations	12
References	13
Statement of Qualifications	14
Statement of Expenditures	15
Rock Sample Descriptions	Appendix I
Sample Location Plan	Appendix I
Analytical Methodology	Appendix I
Assay Results	Appendix I

LOCATION

The Ben/Ji property is located in the southern Yukon, approximately 45 kilometres southwest of Whitehorse. Latitude 60 10' Longitude 135 15'. The claims are bordered by the Watson River to the northwest and lie 2 kilometres directly west of Mount Hodnett. The area is commonly referred to as The Wheaton District.

ACCESS

From June to October the property is accessible by a 16 kilometre long 4X4 road (Red Ridge Road) departing kilometre 12 on the Annie Lake Road. From this point an ATV is required to travel southwest, across the alpine, a distance of 3.5 kilometres. Total travel time from Whitehorse to the property is approximately 2.5 hours. Helicopter access is possible from Whitehorse, 45 kilometres to the northeast.

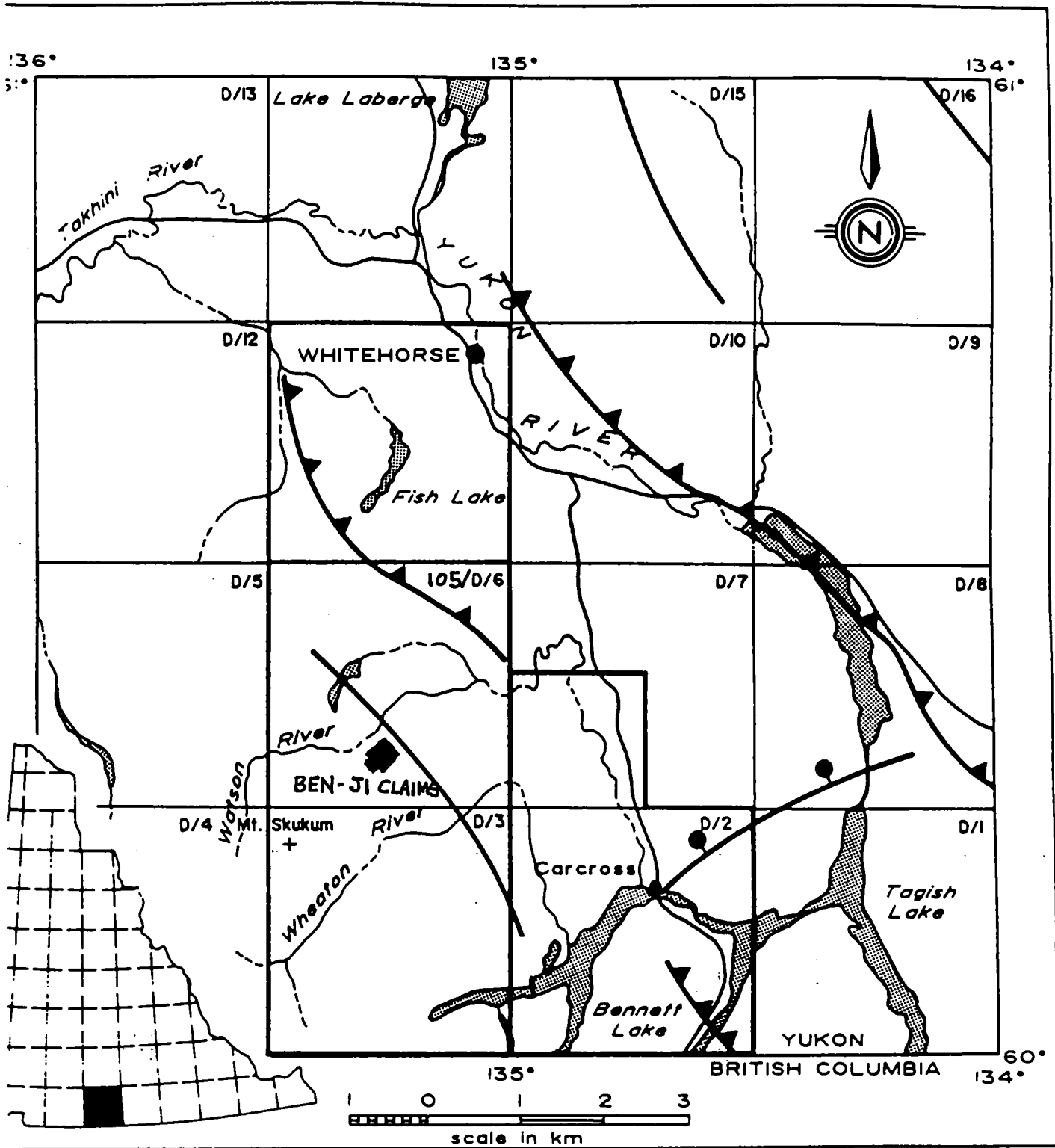
PHYSIOGRAPHY

The property lies entirely above tree line at elevations of 4500 to 5600 feet. With the exception of a un-vegetated, steep northwest talus slope to the Watson River, elevations generally rise moderately. Vegetation consists of alpine sedges and grasses with patches of dwarf alpine buck brush and stunted willows at the lower elevations.

Outcrops are largely limited to the top and shoulders of the northeast striking ridge and its northwest talus slope. The remainder of the property is covered by thin, locally derived soils, talus fines, and/or felsenmeer. Organic soils are rare and restricted to areas adjacent to lower portions of the unnamed south flowing creek. Permafrost has not been encountered on the property.

Pleistocene glaciation advanced in a west-northwesterly direction approximately 30,000 years ago. Paleoshore and glacial strand lines near Hodnett Lakes, and to the northwest, across the Watson River lie at elevations of 3800 feet. The Ben/Ji claims were not covered or scoured by this ice sheet however, in some areas elevations below approximately 5400 feet show affects of localized alpine glaciation.

Snow normally covers the property from mid September until late June. The majority of annual precipitation occurs as rain, during the summer months. Summer temperatures range between 3 and 30 degrees C, and winter lows of -40 degrees are common.



PROPERTY

The Ben / Ji property consists of 22 contiguous, unsurveyed, two post staked, mineral claims held in accordance with the Yukon Quartz Mining Act. The property covers approximately 445 hectares. The claims are located in the Whitehorse Mining District and are shown on claim sheet map 105-D-06.

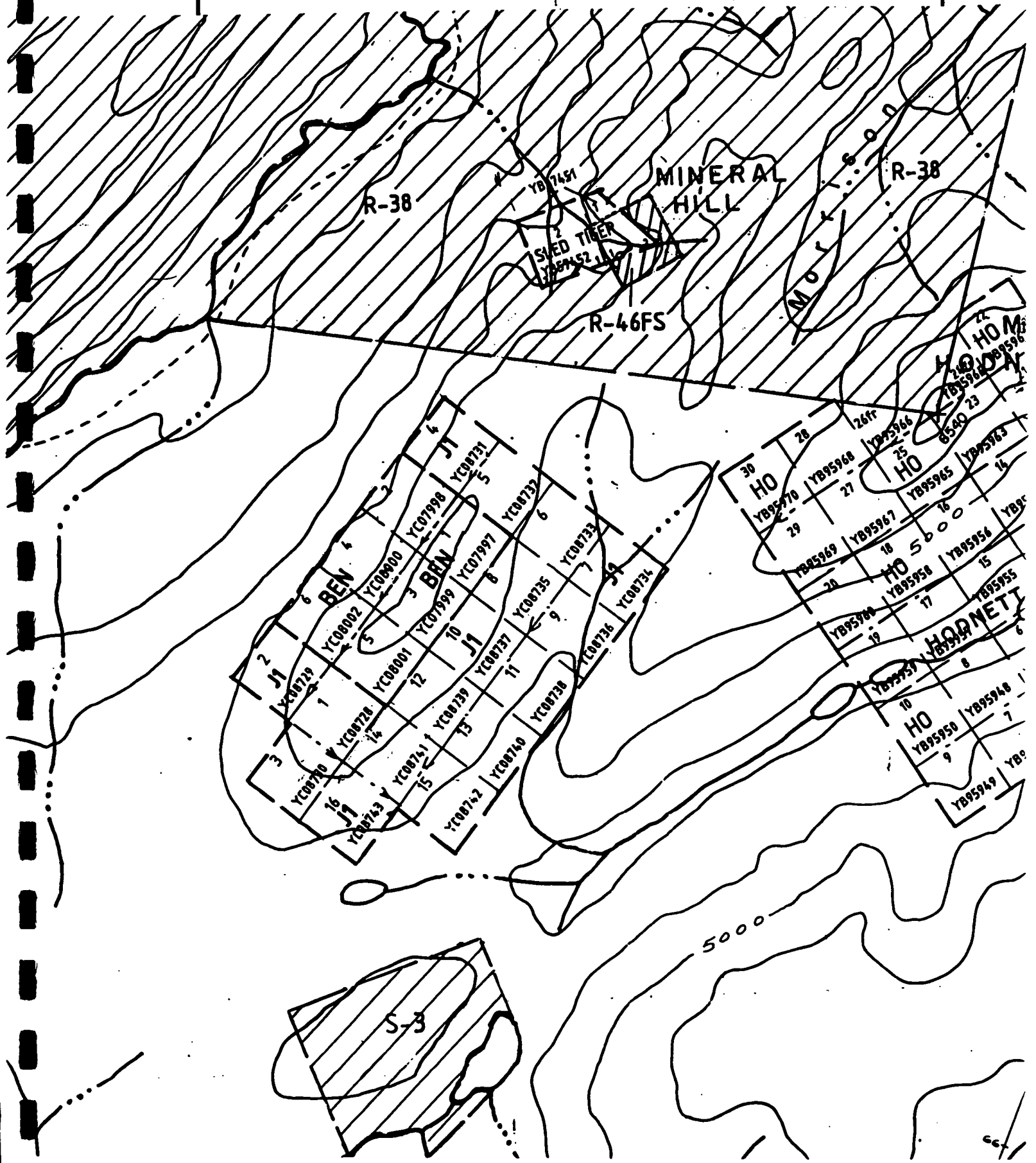
CLAIM OWNERSHIP AND STATUS

<u>CLAIM NAME</u>	<u>GRANT NO.</u>	<u>EXPIRY DATE *</u>	<u>OWNER</u>
BEN 1 - 6	YC07997-YC08002	2003/07/29	SIDE HILL ENT. LTD. 100%
JI 1 - 3	YC08728-YC08730	2002/04/27	D. SUFADY 50% SIDE HILL ENT. LTD. 50%
JI 4 - 13	YC08731-YC08740	2004/04/27	D. SUFADY 50% SIDE HILL ENT. LTD. 50%
JI 14 - 16	YC08741-YC08743	2002/04/27	D. SUFADY 50% SIDE HILL ENT. LTD.

* subject to acceptance and filling of assessment credits described in this report.

SHEET 105 D-6

4



HISTORY

The first recorded staking in the Wheaton River District occurred in 1893 when Frank Corwin and Thomas Rickman located several claims on Chiefton Hill, Carbon Hill, Idaho Hill and possibly Gold Hill. In 1906 the Legal Tender Vein was discovered and staked by J. Perkins.

A 100 foot drift was driven into the vein at that time and gold/silver ore values were reported to be \$30 to \$40 per ton (Cairnes, 1912 - Au = \$20/ounce, Ag = \$0.50/ounce). These claims were re-staked several times between 1925 and 1974.

During the 1920's numerous underground hand mining operations high-graded the area's mesothermal gold/silver veins.

In 1981 AGIP Canada discovered gold bearing quartz-carbonate veins in the Mt. Skukum volcanic complex. The project became the site of the Mount Skukum Gold Mine which mined 223,439 tons of ore and recovered 77,796 ounces of gold by underground methods from 1986 to 1988. This deposit still contains mineable reserves of 98,885 tonnes grading 14.7 grams/tonne.

In 1985, Omni Resources Inc. reported geological reserves of 745,000 tonnes grading 7.9 grams/tonne gold and 305 grams/tonne silver on their adjacent Skukum Creek property.

Other notable workings/showings in the vicinity of the Ben/Ji property include: Gold Hill (8 Km southeast) and Omni resources conducted a drill program on their HO property (4 Km east) in 1996.

Exploration of the Wheaton District, focusing on epi/mesothermal gold/silver mineralization, by Omni Resources, Trumpeter Gold, Arkona Resources and 276 Taurus Ventures is on going.

PREVIOUS EXPLORATION

The area now covered by the Ben/Ji claims was previously held by Havilah Gold Mines Ltd. as the Laf claims (1986) and by Skukum Gold Inc. as the Net and Vin claims (1987).

In 1988 Skukum Gold conducted a preliminary examination of the area with reconnaissance talus fines/soil sampling. In 1989 geological mapping, grid establishment and a 540 soil sampling program were executed resulting in the discovery of visible gold in quartz veins (2.076 oz/ton) and a 1300 X 175 metre gold in soils anomaly. Further sampling and a geophysical survey were recommended.

Aurum Geological Consultants Inc. collected 12 talus fines and 44 rock samples on the Laf claims in 1986. Chip and Grab samples of the Legal Tender vein returned values of 0.406, 0.131, 0.474 and

0.731 ounce/ton gold and up to 12.4 ounce/ton silver. A program of trenching, sampling and detailed mapping/prospecting was recommended.

GEOLOGY

The Ben/Ji claims lie along the eastern margin of the allocthonous Palaeozoic Nisling terrane and are underlain by igneous rocks of the Coast Plutonic Complex. Leucocratic granodiorite, of the mid Cretaceous Whitehorse Plutonic Suite, is the dominate rock type. Northeast striking swarms of rhyolite dykes and flow domes associated with the Eocene Mt. Skukum Volcanic Complex intrude the granodiorite. To the northeast these rhyolite dykes terminate within the Tally Ho Shear Zone thus defining the eastern limit of Mt. Skukum volcanic events.

The northwest trending Tally Ho Shear Zone is the major structural feature of the region. This Zone is composed of steeply dipping, highly strained, volcanic and sedimentary rocks of the Lewes River Group, 1 - 4 kilometres wide, and traceable for over 40 kilometres. Metamorphic grades within this shear zone are mostly greenschist facies. The Tally Ho Shear Zone forms a boundary between Nisling terrane, in the west and the Lewes River Arc, in the east. Movement along the shear is complex and involves two or three stages, at least one of which is, related to the Llewellyn fault. In the vicinity of the Ben/Ji claims, granitic rocks adjacent to the west margin of the shear zone display brittle faulting trending northeast. The gold, silver and antimony deposits in the area are related to Tertiary faulting and the emplacement of Eocene rhyolite dykes associated with Skukum Group volcanism.

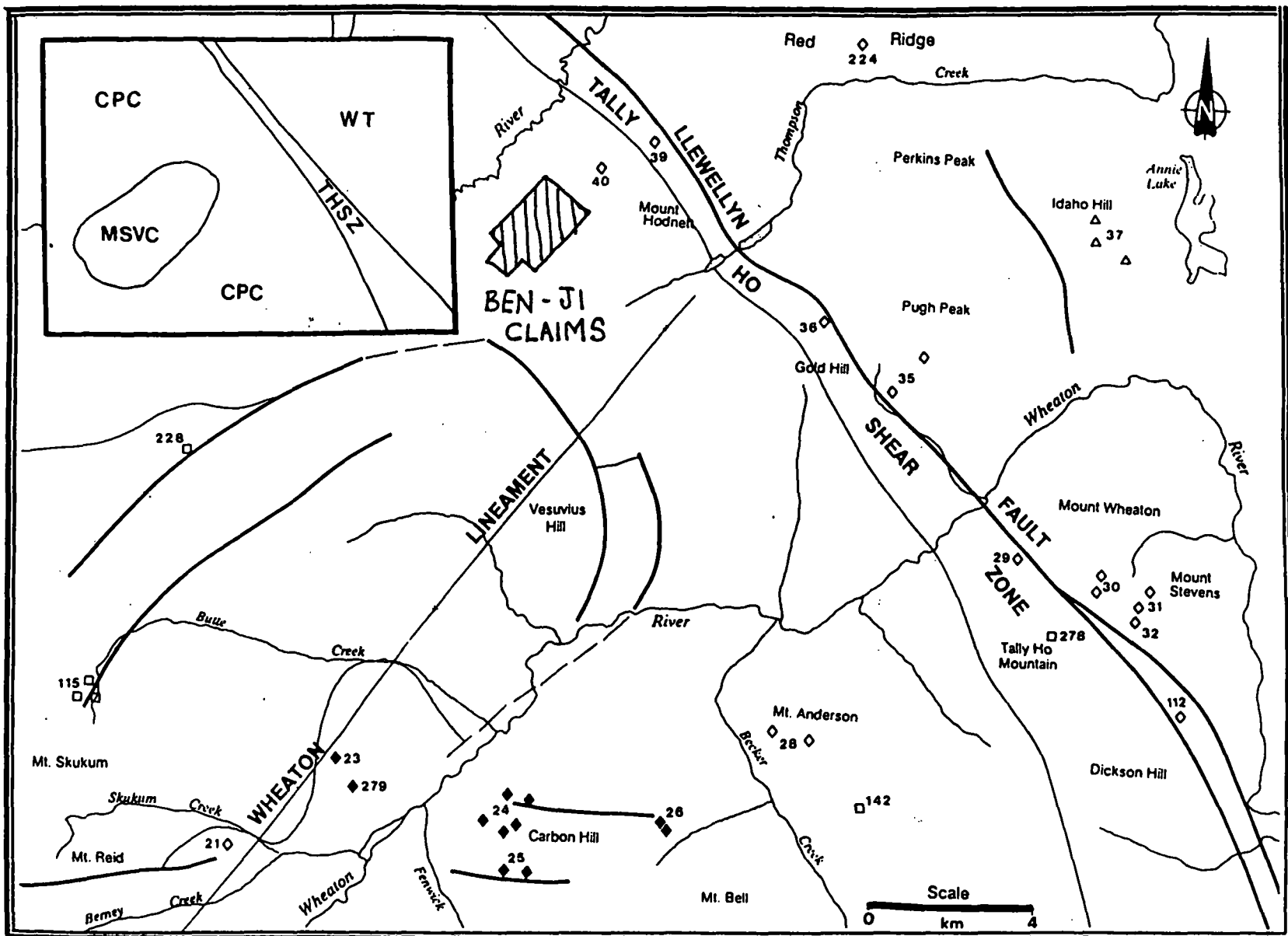


Figure 26: Distribution of vein occurrences in the Wheaton River District. Solid diamonds - Stibnite-rich veins; open diamonds - Galena-rich veins; open triangles - Arsenopyrite-rich veins; open squares - epithermal veins. Note proximity of stibnite veins with east-trending structures and Wheaton Lineament, and galen veins with Llewellyn Fault. Numbers are those used in Yukon Exploration volumes. CPC-Coast Plutonic Complex, WT-Whitehorse Trough, MSVC-Mount Skukum Volcanic Complex.

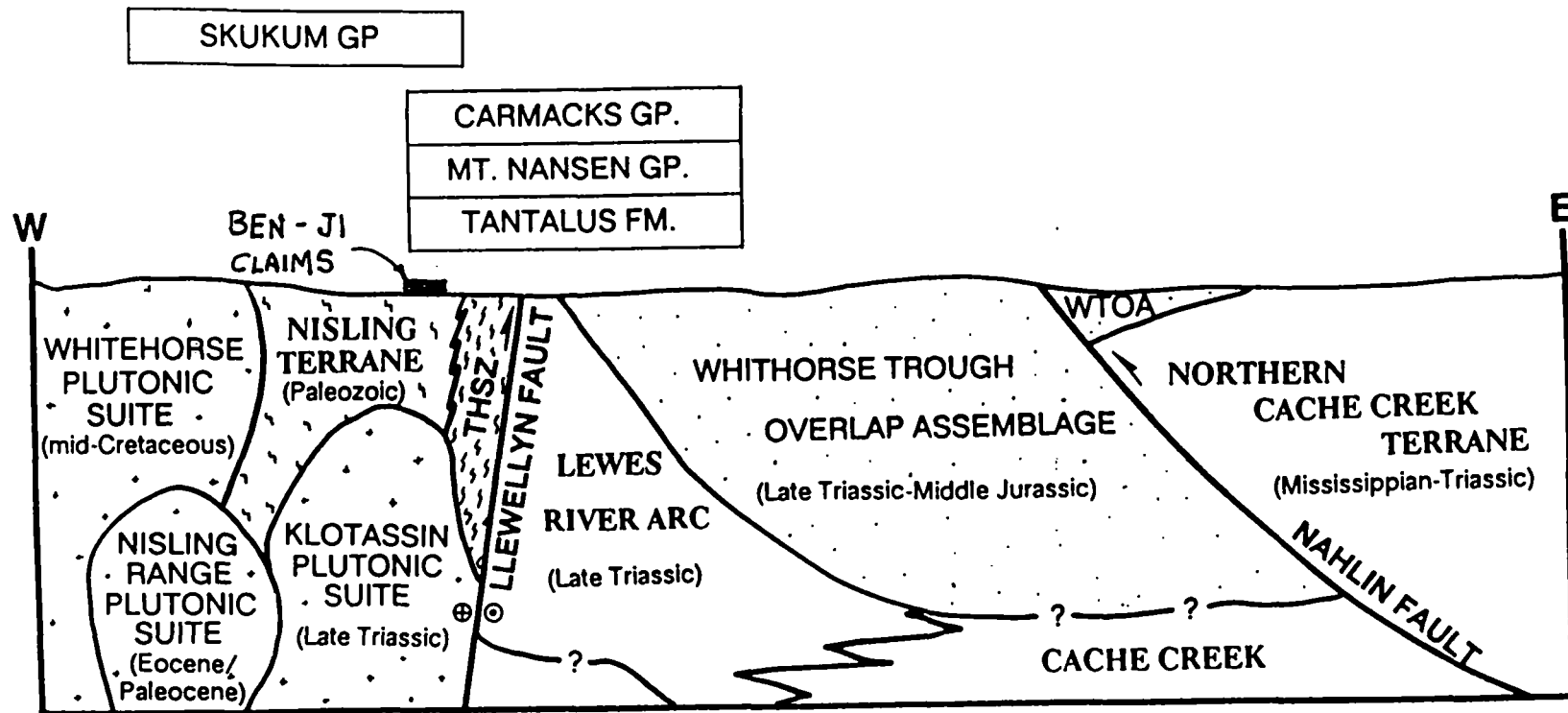


Figure 3: Generalized cross-section across the project showing relations of major tectonic building blocks. Whitehorse Trough overlap assemblage (WTOA) consists of Laberge Group and sedimentary portion (Aksala Fm.) of Lewes River Group. Whitehorse Trough sedimentary rocks unconformably overlie Nisling Terrane in northernmost B.C.. Tantalus Fm., Mt. Nansen Gp., Carmacks Gp. and Skukum Gp. occur as a Late Mesozoic/Early Cenozoic overlap assemblage. THSZ = Tally Ho shear zone.

MINERALIZATION

All visible gold, silver, lead and copper mineralization observed to date on the Ben /Ji claims are spatially related to; (1) Eocene felsic to intermediate dykes and/or (2) Tertiary brittle faulting in granodiorite.

(1) Northeast trending felsic to intermediate dykes, related to Skukum Group volcanism, cuts all rock types and preexisting mineralization on the property. These 1 - 25 metre wide dykes consist mainly of rhyolite and dacite however, andesite, feldspar/quartz feldspar porphyries and rare basalt are also present. Quartz, calcite and chalcedony veins and veinlets cutting dykes and altered granodiorite frequently contain galena, limonite, copper carbonates, chalcopyrite, pyrite, and sometimes visible gold. Granodiorite adjacent to approximately 40% of the felsic dykes displays argillic and propylitic alteration. In some such locations altered granodiorite contains partially dissolved pyrite cubes and rust lined voids. Some of these structures appear to post date the emplacement/flows of rhyolite and show evidence of reactivation or multiple stages of fluid activities. Considering these facts and the presence of spherulitic rhyolite dykes this type of mineralization is believed to be from a epithermal system.

(2) 1cm - 1 metre wide sulphide bearing quartz veins occur in granodiorite. Contact aureoles surrounding these quartz veins display sericitic and chloritic alteration similar to the Legal Tender vein 1500 metres to the northeast. This system of (mesothermal?) mineralization predates Skukum Group volcanism, occurring in shears and brittle faulting in the granodiorite related to the Tally Ho Shear Zone.

GEOCHEMISTRY

A total of 41 soil samples were collected from the southeast slope of the central ridge on the claims. Assay results are included in appendix I of this report. This area of anomalous gold in soils was previously identified by a grid soil sampling program conducted by Skukum Gold Inc. in 1989 (H. MacKinnon 1990).

Portions of the 1989 grid were re-established to locate previous sample locations and to provide control for mapping. Two soil sampling lines were run, with compass and hip chain, along LN 200E from 1350 S to 200S and along LN300E from 1350S to 550S. All of the soil samples were taken at depths of 10 cm to 30 cm, from B or C soil horizons with the aid of a mattock and placed in gusseted

kraft paper soil sample bags. The sample sites were flagged and marked with the 1989 grid line and station co-ordinates. In areas where the soils were poorly developed or nonexistent talus fines were collected instead.

Samples were collected at intervals of 50 metres along the lines, therefore every second sample taken can be considered as duplicating samples gathered during Skukum Gold's 1989 program. All of the soil/talus fines samples collected were submitted for 30 element ICP (Au-Aqua Regia/MIBK extract, GF/AA finnish) analyses by Acme Analytical Labs Ltd. of Vancouver.

Ten rock samples were collected, eight of which were submitted for assay by Northern Analytical Laboratories Ltd. of Whitehorse, Yukon.

The rock samples were analyzed for gold, silver, copper, lead, zinc, arsenic, and antimony. As a control measure pulps of the five samples which assayed below 0.001 oz/ton gold were sent to Acme Analytical Labs for 30 element geochemical analyses. Silver, copper, lead, zinc, arsenic and antimony values show minimal deviation from N.A.L.'s results. Rock sample descriptions and assay certificates can be found in appendix I.

PROSPECTING

Two hand trenches, with the aid of explosives, were dug on top of the central ridge. Trench #1 was dug to investigate the source of large pieces of bull quartz float, lying on the ridge top 50 metres northeast of post # 1 for Ben #3 and #4. Trench dimensions are as follows: length - 11m, width - 75cm, depth - 60cm. Rusty weathering granodiorite showing slight alteration was encountered. Neither rhyolite nor quartz were observed.

Trench #2 was dug 15 metres southwest of the ridge crest approximately half way along the claim location line of Ben #3 and #4. This trench was dug to further investigate mineralized quartz float found in the immediate area (BJR 98-09). Trench dimensions are as follows: length - 14m, width - 75cm, depth - 65cm. This trench cuts through a near vertical, northeast trending, rusty rhyolite dyke at an obtuse angle. Adjacent granodiorite is very bleached within 15cm of the rhyolite, yet remains competent. No mineralization or quartz were observed.

A total of six person days were spent on the steep northwest talus slope facing the Watson River. Attempts to further delineate known gold bearing quartz veins in this vicinity were thwarted by constant sloughing of hand trenches. The average angle of repose for these talus materials is 42 degrees. Once trenches exceed 75cm in depth the back wall fails and sloughing occurs. Any further trenching work will require timbers to stabilize the slope.

CONCLUSIONS

Two distinct styles of hydrothermal gold mineralization occur on the Ben/Ji claims. Gold and galena values in quartz veins occurring within shears and brittle faulting of granodiorite, though not as high grade as the neighbouring Legal Tender Vein, were likely emplaced by the same mesothermal system. Wall rock alteration, vein geochemistry, and structural trends are similar. This style of mineralization predates the emplacement of felsic dykes related to Eocene Skukum Group volcanism.

A second multistage, gold bearing epithermal system active during and postdating regional Eocene volcanic activity is evident on the property. The presence of spherulitic rhyolite in dykes and as float, argillic alteration of granodiorite, quartz and chalcedony veins cutting both felsic dykes and host rock, all indicate multiple mineralizing events.

Granodiorite on the claims has been subjected to faulting related to movement along the Tally Ho Shear Zone. These shearing forces have created favourable zones for sulphide/gold bearing fluids to surface in, and provided conduits for meteoric waters to percolate through. Similar environments in the Wheaton District host economic deposits/grades of both mesothermal and epithermal hosted precious metal mineralization.

Work conducted on the Ben/Ji claims to date has been at a grassroots level. A gold in soils anomaly existing on Ji #1 has been further delineated. Attempts at trenching along the steep talus slope above the Watson River were unsuccessful due to unstable slope conditions and therefore failed to locate an extension of the high grade, gold bearing quartz veins previously identified in the area. A lack of outcrop on portions of claims Ji #5 - Ji #10 has hampered a full evaluation of those areas. Approximately 30% of the area now covered by the Ben/Ji claims has yet to be explored by soil sampling. Numerous gold in soil anomalies identified by previous work require further exploration to fully evaluate the potential of this property.

RECOMMENDATIONS

1. A geochemical survey program consisting of 400 soil samples collected from portions of claims Ji # 2, 5, 6, and 7 including up to eight "mini grids" to further explore previously identified gold in soil anomalies. Such work will require extending the existing grid. In areas not covered by previous work the samples should be collected at 50 metre intervals along lines spaced no further than 100 metres apart. A follow up of known gold in soil anomalies requires closer spacing of sample sites. 25 metre X 25 metre "mini grids" are recommended at such locations.
2. Additional hand/blast trenching and collecting rock samples to further investigate gold in soil anomalies. Explosives should be used sparingly until the nature and structure of localized mineralization is understood.
3. Future hand/blast trenching on the talus slope above the Watson River will require timbers to provide slope stabilization. The entire property lies above tree line, therefore it is recommended to stake additional claims, on the west side of the property, to cover stands of timber growing there. A helicopter could then sling stock piled timbers directly to the trenching areas.
4. Detailed geological mapping of the property, at a scale of 1:5000, to assist with the interpretation of results from the recommended geochemical survey.
5. Compile and evaluate all data from the recommended work programs and in consultation with a Geologist and Geophysicist, familiar with the Wheaton District, determine if the property warrants further exploration by excavator trenching and/or geophysical surveys.

REFERENCES

- BASSNETT, R. 1989 - Epithermal Gold Veins Of The Mount Skukum Gold Mine, Southwestern Yukon Territory: Alaska Miners Association, Abstracts Of Professional Papers, 1989
- CAIRNES, D.D. 1912 - Wheaton River District, Yukon Territory, Geological Survey Of Canada, Memoir # 31.
- DOHERTY, R.A. and HART, C.J.R. 1988 - Preliminary Geology Of Fenwick Creek (105/D/03) and Alligator Lake (105/D/06) Map Areas, Indian and Northern Affairs Canada, Yukon Region Open File 1988-2.
- GARAGAN, T. 1987 - Assessment Report Geological Mapping and Geochemical Sampling LAF 1-20 Claims, Whitehorse Mining District, 105/D/06 for Havilah Gold Mines Ltd. by Aurum Geological consultants Inc.
- HART, C.J.R. and RADLOFF, J.K. 1990 - Geology Of Whitehorse, Alligator Lake, Fenwick Creek, Carcross, and part of Robinson Map Areas (105/11, 6, 3, 2, 7) Indian And Northern Affairs Canada, Yukon Region, Open File 1990-4
- INAC, 1988 - Yukon Mining And Exploration Overview 1987, Exploration and Geological Services Indian And Northern Affairs Canada, Yukon Region.
- MACKINNON, H. F. 1990 - Geological Report On The NET 1-78, VIN 3-109, VIN 112-115 Mineral Claims, Whitehorse Mining District, 105/D/06. for Skukum Gold Inc.
- PRIDE, M.J. 1986 - Description Of The Mount Skukum Volcanic Complex, 105/D/3, 4, 5, 6: in Yukon Geology v. 1, Exploration and Geological Services Division, Yukon, Indian And Northern Affairs Canada.
- YUKON TERRITORIAL GOVERNMENT, Oct 24, 1997 - Yukon Mineral Property Update, Mineral Resources Branch, Department Of Economic Development.

STATEMENT OF QUALIFICATIONS

I, Michael D. Glynn of P.O. Box #5745 Whitehorse, Yukon certify that:

1. I completed the Northwest Territories Prospectors Licence Course in Yellowknife, N.W.T. in 1973.
2. I completed the Yukon Chamber of Mines Advanced Prospectors Course in 1989.
3. I have been engaged in mining exploration as a prospector for eighteen years since 1973.
4. I personally supervised the exploration program on the Ben and Ji claims during June and July 1998 and that I am the author of this report.
5. I am a Director and Officer of Side Hill Enterprises Ltd.



Michael D. Glynn

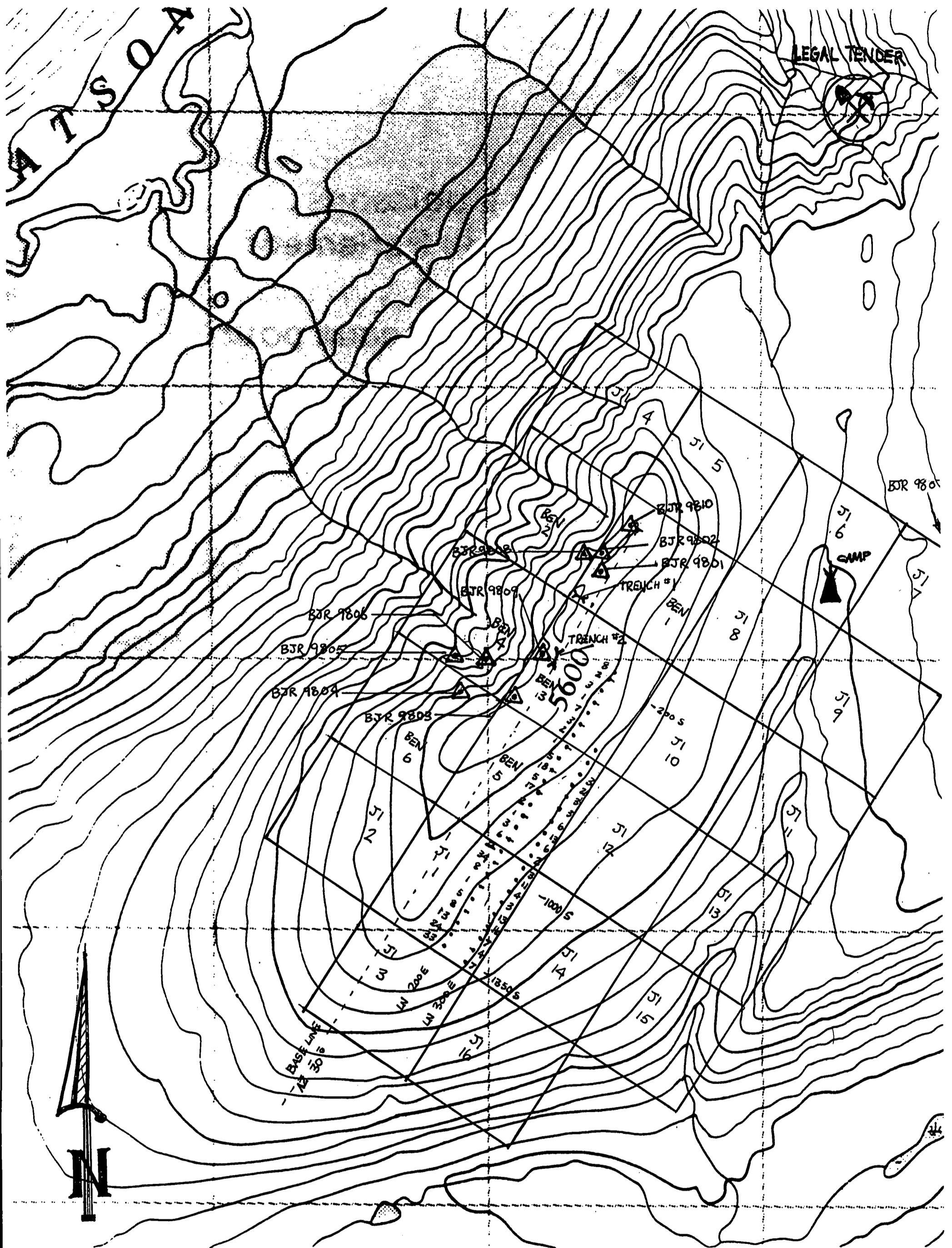
STATEMENT OF EXPENDITURES

Road travel:	Whse. - Morrision Ck. - Whse.		
	Trip #1	Jun 29 - Jul 03	240 KM
	Trip #2	Jul 07 - Jul 13	240 KM
		480 KM X .42/KM	201.60
Food and consumables:	12 days X 2 persons X \$35/day		840.00
	(includes fuel, flagging, sample bags, toposil ect.)		
Explosives:	Yukon Explosives ticket # 307634		525.30
Quad rental:	Power Sport Rentals		693.81
Contract Prospectors:	D.Sufady	12 days X \$250/day	3000.00
	M.Glynn	12 days X \$250/day	3000.00
Assays:	Northern Analytical Laboratories Ltd.		
		WO # 05520	226.84
	Acme Analytical Laboratories Ltd.		
		File # 9900066/9900067	689.72
	Shipping: Greyhound busbill # 71497234465		39.99
Report preparation and duplication:	(estimated)		845.00
	ACTUAL		<u>830.13</u>
	TOTAL EXPENDITURES		\$10,062.26
			\$ 10,047.49

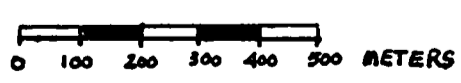
APPENDIX I

ROCK SAMPLE DESCRIPTIONS

- BJR 98-01 Felsenmeer/float from between Rhy. dyke and G.D. altered bleached competent granodiorite. Much Qz. some fresh Qz. eyes, limonitic staining and coating in voids, weathered out? dissolved sulphides, Mn, Py, with Chpy sheen.
- BJR 98-02 Felsenmeer/float much the same as BJR 98-01 with sugary textured Qz.
- BJR 98-03 O/C from margin of G.D. grading to Rhy. dyke. Altered bleached G.D. thin chalcedony veins, Py, rare Cu carbonate staining.
- BJR 98-04 O/C 40 cm chip sample. From margin of G.D. and Pink weathered Rhy dyke. Argillic felsic (G.D.?) material near spherulitic Rhy.
- BJR 98-05 O/C green spherulitic rhyolite with chalcedony veinlets, some weathered out? dissolved sulphides.
- BJR 98-06 O/C same as BJR 98-05
- BJR 98-07 O/C limonitic, altered zone within faulted G.D. fresh sugary textured Qz.
- BJR 98-08 Felsenmeer/float (ridge top) fine grained Qz. with Chyp, limonite, minor malachite staining.
- BJR 98-09 Felsenmeer/float (ridge top) Qz. with Py., Chpy coated? few hornfels of mafic? minerals.
- BJR 98-10 Felsenmeer/float (ridge top) Qz. much Mn., some limonitic zones, Chpy. coating?



SCALE = 1:12500



1998 SAMPLE LOCATION PLAN		
△	BJR #	ROCK SAMPLE SITE AND SAMPLE NUMBER
●	16	SOIL SAMPLE SITE WITH PPB GOLD VALUE
BEN/JI CLAIMS NTS 105/D/06 SIDE HILL ENTERPRISES LTD.		

NAL
Northern
Analytical
Laboratories Ltd.

105 Copper Road
Whitehorse, Yukon
Y1A 2Z7

Ph: (867) 668-4988

Fax: (867) 668-4890

E-mail: NAL@hypertech.yk.ca

SAMPLE PREPARATION

Sample preparation is the most important step of the analytical process: If samples are mixed up at this stage or are not prepared properly so as to produce a pulp that is representative of the original sample, then it will be impossible to produce satisfactory analyses. Therefore, although this is simple manual work, we consider proper sample preparation a high priority.

Sample submissions first are sorted and checked against the submittal sheet, if one is provided. At every stage of the preparation process sample labels are cross-checked to guard against mix-ups. Compressed air is used liberally to clean all pieces of equipment between samples to prevent cross contamination. Work stations are kept as clean as practicable and dust collection systems control airborne dust.

SOILS & SEDIMENTS:

Samples are dried at 65°C (maximum) in their original paper soil bags, or after transferring to such bags if necessary. They are sieved through an 80 mesh screen, if necessary breaking down agglomerated material but not stones or vegetation. (Other sieve sizes can be used on request.) If there is insufficient -80 mesh material, a separate -40 mesh fraction is prepared. The oversize is returned to the original soil bag and stored for 30 days.

ROCKS and DRILL CORE:

Overweight samples are weighed and wet samples are dried at 65°C (maximum). Each sample is put through a primary jaw crusher and then a cone crusher set to produce at least 50% -10 mesh. Then it is split through a riffle until a final split of approximately 250 grams is obtained. This split is pulverized to at least 95% -100 mesh with a ring pulverizer. Barren rock is processed through the crushers and pulverizing pots after samples that are believed to be high grade or whenever sample material sticks to the equipment. The crushed sample rejects are returned to their original sample bags and stored for 30 days.



Northern
Analytical
Laboratories Ltd.

105 Copper Road
Whitehorse, Yukon
Y1A 2Z7

Ph: (867) 668-4868

Fax: (867) 668-4890

E-mail: NAL@hypertech.yk.ca

GEOCHEMICAL ANALYSIS BY ATOMIC ABSORPTION (AAS)

0.50 grams of sample pulp is weighed into new disposable test tubes. Three duplicates (checks) and an in-house standard pulp are included along with each set of 20 samples.

The samples are digested in a hot water bath above 80°C with aqua regia (1 part HNO₃ to 3 parts HCl), first with only HNO₃ (nitric acid) for 30 minutes, then with added HCl (hydrochloric acid) for another hour and a half. The samples are bulked up to volume with deionized water and mixed thoroughly using a vortex mixer. The final acid concentration is 10% HNO₃, 30% HCl.

The samples are analysed by atomic absorption, with the instrument calibrated to an appropriate series of standard solutions which contain the same acid matrix as the sample solutions. At least 3 standards are used to calibrate each concentration range. The calibration and baseline zero are checked at least every 12 sample solutions and recalibrated as necessary. Deionized water with some added HCl is aspirated after each sample to prevent carry over from one sample to the next. Background correction is used for those elements which otherwise are liable to be affected by non-atomic absorption from the sample matrix. Elements which may be unstable in solution are analysed within an appropriate time period. Samples containing element concentrations above the satisfactory calibration range of the instrument are diluted while maintaining the same acid matrix.



Northern
Analytical
Laboratories Ltd.

105 Copper Road
Whitehorse, Yukon
Y1A 2Z7

Ph: (867) 668-4868

Fax: (867) 668-4888

E-mail: NAL@hypertech.yk.ca

GOLD BY AAS AFTER FIRE ASSAY

The dore bead is placed in a new disposable test tube. 0.3 mls of nitric acid is added and the test tubes are placed in a hot water bath above 85C for one hour to part out the silver. 0.7 mls of hydrochloric acid is added to form aqua regia, which dissolves the gold. The test tubes are briefly returned to the hot water bath, carefully shaken and left for one hour to ensure complete dissolution of the gold. The volume is made up to 4 mls with deionized water and the samples are mixed on a vortex mixer. They are analysed with an atomic absorption spectrophotometer, calibrated with an appropriate set of standard solutions containing the same aqua regia matrix as the samples.

Any samples are re-fired if the gold bead does not dissolve or if silver chloride precipitate does not form in the solution.



105 Copper Road
Whitehorse, Yuko
Y1A 2Z

Ph: (867) 668-496

Fax: (867) 668-489

E-mail: NAL@hypertech.yk.c

FIRE ASSAY

The purpose of fire assay is to quantitatively extract the precious metals from geological samples using a process known as "lead collection".

The sample pulp (15 or 30 grams for geochemical analysis or one assay ton -29.166 grams for assay) is mixed with a litharge based flux in a crucible. Flux components are added in quantities appropriate to the nature of each individual sample, determined by an experienced fire assayer, in order to produce a proper fusion. Silver is added to help collect the gold and to facilitate later dissolution of the gold. If a gravimetric silver assay is being done an "inquart" containing a consistent, precise amount of silver is used. Standard pulps and blanks are included with the sample sets as well as 10% to 15% duplicate samples (checks) except in cases where there is insufficient sample for checks, which often occurs with soils and concentrates.

The samples are fused in a furnace at 1900F for 40 to 60 minutes until fusion is complete. The contents of each crucible is poured into a mould and allowed to cool, then the slag is broken off and discarded. If the melt is of poor consistency or lumpy, or the slag sticks to the lead button or the button is not a suitable size, then a new sample portion is fused with appropriately adjusted flux components.

The lead button is pounded into a cube and placed into a bone ash cupel which has been preheated to 1800F. When the lead is completely molten, the temperature is dropped to 1750F. The dampers are opened to allow air inside the furnace. The cupels are removed from the furnace when they have absorbed all the lead. A dore bead consisting of silver, gold and any other precious metals is the remaining product.

Throughout the procedure the samples in crucibles and cupels are placed in a standard, consistent arrangement to keep them in order and prevent mix-ups.

To prevent contamination of subsequent samples, fusion crucibles are discarded if samples contain over 500ppb gold (geochem). Sufficient sets of marked crucibles are cycled so that this can be determined before a set of crucibles is reused.

If standards and/or blanks do not produce satisfactory results, then entire sets of samples are refired.

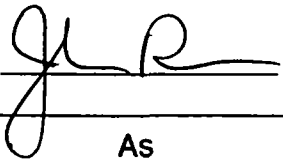
08/07/98

Assay Certificate

Page 1

Michael Glynn

WO# 05520

Certified by 

Sample #	Au oz/ton	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm
BJR - 98 - 1	0.008	1.5	10	343	74	267	5
BJR - 98 - 2	<0.001	0.4	5	141	25	43	<2
BJR - 98 - 3	<0.001	0.6	9	156	49	41	<2
BJR - 98 - 4	<0.001	0.2	7	94	48	21	<2
BJR - 98 - 5	<0.001	0.5	7	148	56	80	<2
BJR - 98 - 6	<0.001	0.2	6	106	15	18	<2
BJR - 98 - 7	0.001	0.3	8	106	24	23	<2
BJR - 98 - 9	0.012	0.3	7	84	18	26	<2



GEOCHEMICAL ANALYSIS CERTIFICATE



Side Hill Enterprises File # 9900067 Page 1
Box 5745, Whitehorse YT Y1M 5L5 Submitted by: Michael Blynn

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
L200E 200S	1	11	12	52	<.3	7	6	468	1.95	2	<8	<2	4	14	<.2	<3	<3	35	.21	.070	23	15	.40	111	.05	3	1.37	.01	.09	<2	8
L200E 250S	2	10	8	47	<.3	5	5	410	1.51	<2	<8	<2	<2	11	<.2	<3	<3	29	.13	.079	12	7	.31	60	.03	4	1.17	.01	.06	<2	2
L200E 300S	<1	7	10	47	<.3	5	5	324	1.97	<2	<8	<2	5	15	<.2	<3	<3	36	.21	.071	14	12	.40	74	.05	7	1.01	.01	.09	<2	3
L200E 350S	1	8	7	47	<.3	6	5	337	1.94	<2	<8	<2	2	11	<.2	<3	<3	34	.18	.073	15	14	.40	64	.04	6	1.21	.01	.07	<2	1
L200E 400S	1	8	5	56	<.3	7	5	300	2.06	2	<8	<2	2	14	.2	<3	<3	36	.16	.068	16	13	.43	81	.04	3	1.29	.01	.08	<2	7
L200E 450S	<1	8	8	58	<.3	6	5	436	1.88	<2	<8	<2	3	19	.3	<3	<3	34	.21	.066	13	11	.38	100	.06	3	1.01	.01	.13	<2	3
L200E 500S	2	8	21	47	<.3	7	4	419	1.87	4	<8	<2	<2	16	.2	<3	<3	38	.09	.052	11	17	.20	93	.03	<3	1.21	.01	.08	<2	2
L200E 550S	1	8	11	62	<.3	8	6	610	2.01	2	<8	<2	5	16	.2	<3	<3	36	.18	.049	15	15	.42	93	.06	4	1.14	.01	.10	<2	1
L200E 600S	<1	8	8	57	<.3	8	6	318	1.99	2	<8	<2	3	14	.2	<3	<3	38	.18	.058	13	12	.45	88	.05	<3	1.37	.01	.12	<2	5
L200E 650S	1	11	10	52	<.3	8	7	360	1.94	<2	<8	<2	2	13	<.2	<3	<3	36	.24	.085	21	19	.52	72	.03	<3	1.38	.01	.07	<2	18
L200E 700S	1	8	8	46	<.3	5	5	276	1.81	3	<8	<2	2	12	.2	<3	<3	36	.09	.035	10	12	.29	80	.05	<3	1.20	.01	.07	<2	5
L200E 750S	2	10	15	59	<.3	7	6	1096	1.94	2	<8	<2	<2	12	.4	<3	<3	35	.12	.063	16	14	.36	100	.03	3	1.46	.01	.06	<2	17
L200E 800S	<1	9	14	67	<.3	8	6	429	2.13	2	<8	<2	<2	13	.3	<3	<3	38	.12	.043	19	18	.45	121	.04	3	1.56	.01	.08	<2	2
L200E 850S	1	9	14	54	<.3	7	5	303	2.12	3	<8	<2	3	13	<.2	<3	<3	37	.18	.056	16	11	.41	75	.05	<3	1.28	.01	.08	<2	1
L200E 900S	<1	8	11	71	<.3	5	4	340	1.59	2	<8	<2	<2	10	.3	<3	<3	27	.16	.084	16	10	.33	69	.01	<3	1.22	.01	.07	<2	3
L200E 950S	<1	8	9	64	<.3	6	4	412	1.74	<2	<8	<2	<2	13	.4	<3	<3	31	.12	.066	13	10	.34	89	.03	<3	1.24	.01	.08	<2	6
L200E 1000S	1	8	10	63	<.3	6	5	353	2.09	3	<8	<2	4	14	<.2	<3	<3	34	.13	.042	14	14	.43	106	.05	<3	1.32	.01	.09	<2	2
L200E 1050S	2	8	14	59	<.3	5	5	505	1.92	4	<8	<2	<2	10	<.2	<3	<3	30	.11	.059	14	11	.38	77	.02	<3	1.46	.01	.06	<2	34
L200E 1100S	1	10	15	65	<.3	7	5	420	2.17	3	<8	<2	<2	12	.2	<3	<3	37	.09	.052	14	14	.40	87	.03	<3	1.85	.01	.07	<2	8
L200E 1150S	1	7	6	56	<.3	5	4	311	1.48	<2	<8	<2	<2	15	.2	<3	<3	27	.11	.032	9	10	.24	107	.05	<3	.75	.01	.10	<2	1
L200E 1200S	1	9	10	80	<.3	6	5	1092	1.59	3	<8	<2	<2	21	.7	<3	<3	28	.14	.047	9	9	.26	172	.03	<3	.84	.01	.10	<2	5
L200E 1250S	<1	8	12	62	<.3	5	4	311	1.66	3	<8	<2	<2	16	<.2	<3	<3	27	.17	.048	16	9	.33	109	.03	<3	1.04	.01	.07	<2	8
L200E 1300S	1	8	9	56	<.3	4	5	654	1.58	<2	<8	<2	<2	14	.2	<3	<3	26	.11	.035	13	11	.29	134	.03	<3	.88	.01	.08	<2	13
L200E 1350S	1	9	5	62	<.3	6	5	326	1.79	3	<8	<2	<2	15	.2	<3	<3	27	.20	.058	19	9	.41	128	.03	<3	1.09	.01	.09	<2	24
RE L200E 1350S	2	10	10	62	<.3	5	5	329	1.82	<2	<8	<2	<2	15	.2	<3	<3	28	.20	.060	20	12	.41	130	.03	3	1.10	.01	.08	<2	33
LN300E 550S	2	14	12	62	.3	9	6	469	2.10	3	<8	<2	<2	21	.3	<3	<3	40	.20	.058	25	19	.47	158	.04	<3	1.68	.02	.09	<2	3
LN300E 600S	2	15	13	64	<.3	7	6	764	2.04	2	<8	<2	<2	16	.2	<3	<3	40	.14	.068	29	13	.42	135	.03	<3	1.59	.01	.06	<2	2
LN300E 650S	1	10	12	69	<.3	7	7	433	2.21	<2	<8	<2	2	12	.2	<3	<3	37	.14	.067	13	15	.50	95	.05	<3	1.77	.01	.13	<2	3
LN300E 700S	2	9	15	64	<.3	7	6	820	1.90	2	<8	<2	<2	15	.3	<3	<3	35	.11	.043	10	11	.31	90	.04	<3	1.23	.01	.08	<2	3
LN300E 750S	1	7	11	57	<.3	5	5	556	1.69	2	<8	<2	3	17	.2	<3	<3	30	.16	.045	12	10	.31	88	.04	<3	1.00	.01	.08	<2	6
LN300E 800S	2	9	3	57	<.3	5	5	451	1.90	<2	<8	<2	<2	13	.2	<3	<3	35	.14	.072	14	10	.39	89	.03	<3	1.30	.01	.07	<2	13
LN300E 850S	1	9	4	47	<.3	5	5	493	1.73	<2	<8	<2	4	15	<.2	<3	<3	32	.11	.028	9	10	.37	129	.06	<3	1.05	.01	.05	<2	6
LN300E 900S	1	7	4	43	<.3	4	5	272	1.88	<2	<8	<2	3	10	<.2	<3	<3	33	.14	.058	12	13	.33	59	.05	<3	1.23	.01	.07	<2	2
LN300E 950S	2	7	9	63	<.3	5	5	568	1.77	<2	<8	<2	<2	12	.4	<3	<3	29	.14	.074	12	11	.31	85	.03	<3	1.22	.01	.08	<2	3
LN300E 1000S	1	8	8	66	<.3	6	5	440	1.85	2	<8	<2	4	12	.3	<3	<3	31	.10	.036	11	13	.36	81	.05	<3	1.12	.01	.09	<2	11
STANDARD C3/AU-S	25	62	33	162	5.3	35	13	772	3.28	54	16	<2	20	27	23.6	12	18	75	.55	.088	17	159	.58	146	.08	23	1.80	.04	.16	14	42
STANDARD G-2	2	2	<3	40	<.3	8	5	549	2.08	<2	<8	<2	3	68	<.2	<3	<3	40	.63	.098	7	77	.58	231	.13	4	.94	.07	.47	2	<1

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.

THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND MASSIVE SULFIDE AND LIMITED FOR NA K AND AL.

- SAMPLE TYPE: SOIL AU* - AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED.(10 GM)

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JAN 7 1999 DATE REPORT MAILED: Jan 19/99 SIGNED BY: C. Leong D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.

Data FA



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
LN300E 1050S	1	9	12	54	<.3	6	5	305	2.06	2	<8	<2	6	11	.2	<3	<3	32	.14	.054	11	11	.44	68	.04	<3	1.44	.01	.07	<2	4
LN300E 1100S	2	9	11	61	<.3	6	4	314	1.83	<2	<8	<2	2	11	.3	<3	<3	33	.08	.046	11	12	.34	94	.03	<3	1.43	.01	.08	<2	3
LN300E 1150S	2	9	13	61	<.3	6	5	343	1.95	<2	<8	<2	2	9	.3	<3	<3	31	.11	.053	14	14	.43	75	.02	3	1.58	.01	.07	<2	13
LN300E 1200S	2	10	10	60	<.3	6	6	515	2.23	<2	<8	<2	7	9	.2	<3	<3	35	.09	.035	11	9	.52	69	.05	<3	1.26	.01	.09	<2	16
LN300E 1250S	1	10	12	65	<.3	6	6	378	2.01	<2	<8	<2	2	13	.2	<3	<3	31	.21	.092	15	13	.50	73	.04	3	1.33	.01	.09	<2	7
RE LN300E 1250S	1	10	15	67	<.3	6	6	383	2.07	<2	<8	<2	3	13	.3	<3	<3	33	.21	.091	15	10	.51	75	.04	3	1.36	.01	.09	<2	7
LN300E 1300S	1	11	13	77	<.3	7	6	752	2.08	<2	<8	<2	4	17	.4	<3	<3	32	.19	.058	46	14	.44	122	.04	4	1.34	.01	.10	<2	4
LN300E 1350S	2	9	8	72	<.3	6	5	376	1.61	<2	<8	<2	4	19	.2	<3	<3	25	.21	.068	29	10	.45	132	.03	4	1.16	.01	.09	<2	7
STANDARD C3/AU-S	26	61	32	156	5.0	33	12	738	3.11	51	20	<2	19	27	23.2	14	18	73	.53	.083	17	159	.58	143	.08	22	1.73	.04	.15	15	42
STANDARD G-2	2	2	<3	40	<.3	7	5	518	1.89	<2	<8	<2	3	64	<.2	<3	<3	36	.58	.092	6	73	.57	215	.12	<3	.88	.07	.44	3	<1

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



GEOCHEMICAL ANALYSIS CERTIFICATE



Side Hill Enterprises File # 9900066
Box 5745, Whitehorse YT Y1M 5L5 Submitted by: Michael Blynn

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au** ppb
BJR-98-2	1	6	122	25	<.3	3	<1	352	.64	35	<8	<2	17	4	<.2	<3	<3	1	.04	.004	3	83	.01	59	<.01	5	.30	.05	.16	<2	6
BJR-98-3	<1	10	147	48	.7	2	1	503	.80	40	<8	<2	9	46	.2	3	<3	5	.61	.020	33	99	.03	74	<.01	<3	.32	.03	.15	<2	2
BJR-98-4	<1	9	84	45	.3	<1	2	685	.69	19	<8	<2	13	16	.6	<3	<3	3	.12	.014	52	52	.03	98	<.01	<3	.37	.01	.29	<2	<2
BJR-98-5	<1	1	129	52	.4	2	<1	506	.50	76	<8	<2	7	70	.5	<3	<3	<1	3.17	.001	37	61	.01	22	<.01	3	.44	.01	.36	<2	<2
BJR-98-6	<1	8	85	13	<.3	2	<1	329	.14	15	<8	<2	4	33	.3	<3	<3	<1	1.31	.001	24	58	.01	6	<.01	<3	.29	<.01	.28	<2	<2
RE BJR-98-6	1	7	90	14	<.3	<1	<1	324	.14	15	<8	<2	5	33	.4	<3	<3	<1	1.30	.001	24	60	.01	6	<.01	<3	.29	<.01	.28	<2	<2

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND MASSIVE SULFIDE AND LIMITED FOR NA K AND AL.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK PULP AU** ANALYSIS BY FA/ICP FROM 30 GM SAMPLE.
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JAN 7 1999 DATE REPORT MAILED: *Jan 19/99* SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS