GEOLOGICAL AND GEOCHEMICAL REPORT

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SYRUP 1 AND 2 MINERAL CLAIMS

NICOLA AND VERNON MINING DISTRICTS

# NTS 82E/13

Lat.49° 57' N. Long. 119° 47' W

By

W. A. Howell, B.Sc. consulting geologist 15294 96 A Avenue Surrey B.C. V3R-8P5

and

Guinet Management Corp. 305 - 850 W. Hastings St. Vancouver B.C. V6C-1E1

on behalf of

VERDSTONE GOLD CORP. 536-999 Canada Place Vancouver, B.C.

November 25, 1989

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#### SUMMARY

The Syrup property is located 22km west of the city of Kelowna, in the Vernon mining district. The current work program consisted of prospecting, soil sampling and geological mapping in order to understand the distribution of rock types. Mapping and sampling control was provided by an extensive road network, servicing the logging industry, and maps available from the B.C. Forest Service. A total of 383 soil samples, 3 silt samples and 44 rock samples were collected and subjected to multi-element geochemical analysis. a total of 20,600 metres of sample line were flagged and sampled and 1400 metres of baseline flagged and stationed every 50 metres.

Sampling is widely spaced and of a reconnaissance nature. Although precious metal values so far detected are generally low, some areas warrant further exploration.

The property is underlain by Pennsylvanian to Permian volcanics and sediments of the Thompson assemblage (formerly Cache Creek Group) and/or the Upper Triassic Nicola Group and granitoid intrusive rocks believed to be of Upper Jurassic to Cretaceous age. The Thompson/Nicola rocks strike generally northwest to southeast and dip moderately to the southwest. They have also been intruded by the Old Dave ultra basic intrusions which are pre-Late Triassic in age. Brenda Mine, a large, operating copper-molybdenum mine, is located about 20 km to the south in felsic intrusive rocks believed to be of Late Jurassic age.

# INTRODUCTION

### Location, Access, Topography.

The property is located on the west side of the Okanagan valley about 22 km west of the city of Kelowna B.C. (figure 1) and just east of the height of land between the Okanagan Valley and the Nicola Valley to the north west. Access is by paved road from Westbank or Vernon along the west side of Okanagan Lake, then by the Bear Lake Main and the Horseshoe Lake Main, gravel logging roads to the property. Access within the property is provided by a network of spur roads and haul roads over much of the claim area. The property is centred on approximately latitude 49° 57'N and longitude 119° 47'W on NTS map area 82 E/13. Several small lakes are located nearby, most of which provide water to local irrigation districts in both the Nicola and the Okanagan Valleys. They also provide recreational camping and fishing areas for the general public. Topography on the claims is gentle to moderate with elevations averaging approximately 1350 m (4500 ft). About 25% of the property has been logged in the past and vegetation comprises locally mature stands of spruce, balsam and pine with immature second growth in the previously logged areas.

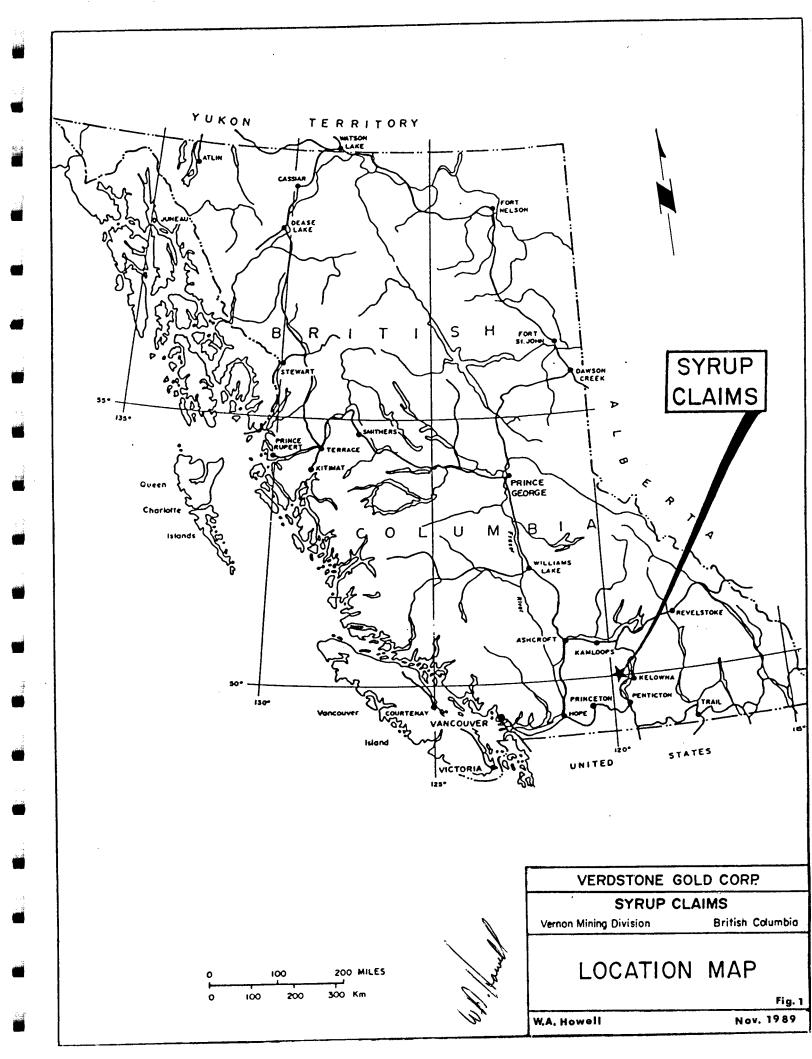
# Property Definition

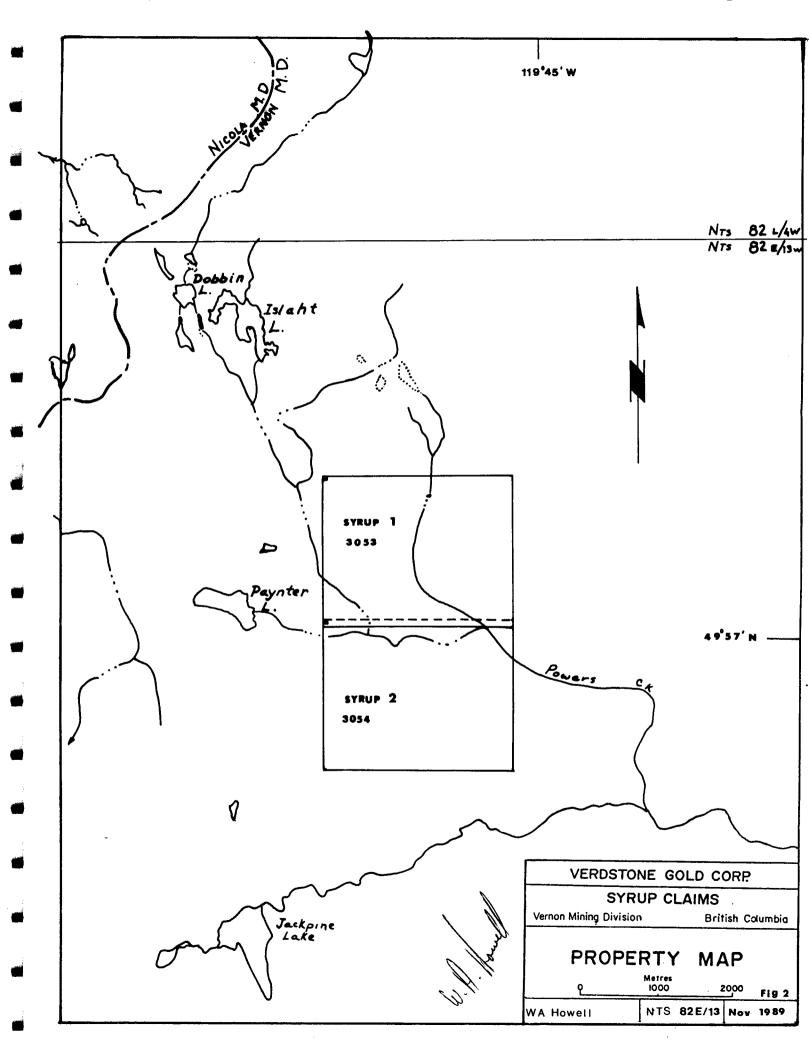
The Syrup Property consists of two (2) metric grid system mineral claims totalling 40 units located in the Vernon Mining District of British Columbia. (Table 1, Figure 2).

### TABLE 1

<u>Claim Name</u>	<u>Units</u>	Record No.	Record Date
Syrup 1	20	3053	November 20 1988
Syrup 2	20	3054	November 21 1988

The claims are currently owned by Verdstone Gold Corp. subject to a 2% net smelter royalty payable to the vendors. The author has examined the claims in the field and is of the opinion that they were staked in accordance with regulations.





#### History

The area west of Okanagan Lake has received the attention of prospectors since at least the turn of the century and probably prior to that time also. A.J.Schmidt, has summarized the history of the area very well. Much of the following is taken from his 1989 report.

The Blue Hawk and White Elephant gold-silver prospects were located and explored in the 1920's. The active Brenda Mine (producing 30,000 tons /day), developed in 1965/68, has been in almost constant production since 1969. It is reputed to be the lowest grade porphyry copper-molybdenum mine in the world (present reserve grade 0.15% Cu, 0.03% Mo). The entire district was vigorously explored for similar deposits during 1960-1975, during which time several prospects were located. The same area was again explored for its uranium potential during a shorter flurry of activity, about 1970-78.

The discovery, by Huntington Resources, on the Brett property about 33 km to the north-northeast of the SYRUP claims, of high grade gold mineralization in 1988, has led to the present exploration activity in the area. The recent activity has seen almost the entire west side of Okanagan Lake completely covered by mineral claims. Within the area, gold mineralization has been found in 1988 on the FLAP claims 7 kms to the north; in 1980 on the NOGAN (now Jubilation) claims 4 kms to the east; and on the ZUMAR claims in 1979 from which a 60 ton shipment, grading 0.139 opt Au and 1.23 opt Ag., was made in 1980 to the Trail Smelter.

The Location of the various mines and prospects is presented on Figure 3 which has been adapted from A.J. Schmidt's 1989 report to Verdstone Gold Corp. Chevron Minerals completed a prospecting/geological & geochemical program on the FLIP claim during 1988, and reported the presence of copper values to 2000 ppm and the presence of gold values to 200 ppb. The claim is situated 2km to the north of the SYRUP claims.

Kerr Addison Mines completed a geological and geochemical program during 1988 on the LAMB claims immediately to the east of the JACK 4 and the FLIP claims. They reported only erratic mineralization from small quartz veins and disappointing results from garnet diopside skarn development.

#### Current Work Program

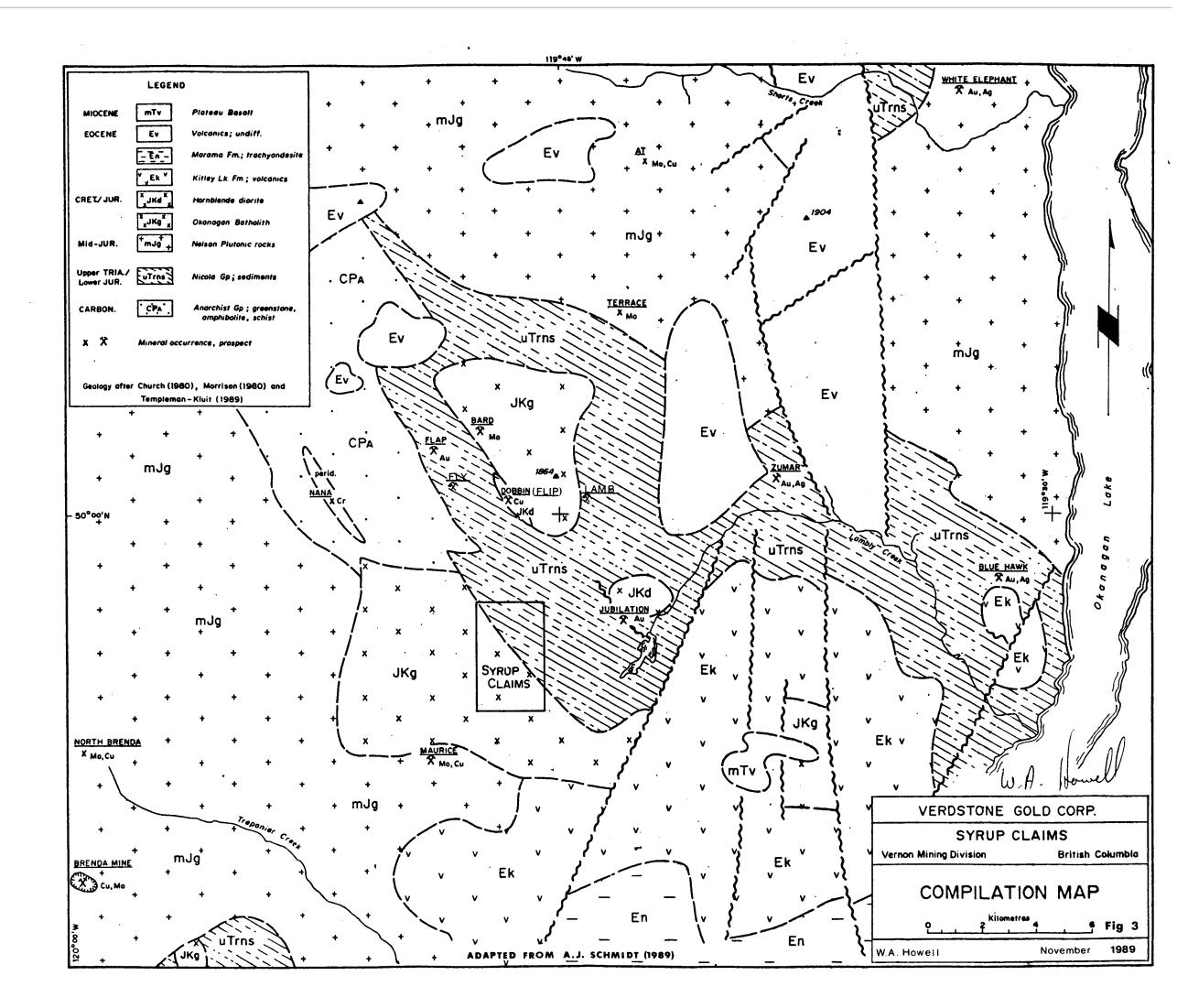
The field phase of the current work program was undertaken on September 10, 1989 and completed on October 7, 1989. Not all the time during this period was spent on the SYRUP claims. Two prospectors, P. Newman and J. Boutwell prospected and conducted reconnaissance style mapping and sampling. Several lines across the claims were sampled and prospected. The network of logging roads afforded a good means of mapping and sampling control and often provide a source of outcropping bedrock otherwise not always common. W.A. Howell, geologist, reviewed the prospecting results and conducted preliminary mapping and rock sampling. During the field phase of the program, Victor Guinet was present and contributed to prospecting and geological mapping for two days on the SYRUP claims. G. Medford, PhD. was also present and made a similar contribution for one day on the SYRUP claims.

#### GEOLOGY

#### Regional Aspects

The SYRUP property is located within a north westerly trending belt of lower grade Carboniferous to Triassic metasedimentary and metavolcanic rocks island arc and oceanic derivation. Metamorphism has proceeded to o£ greenschist facies. Regionally, the rocks are intruded by granitoid plutonic rocks of the middle Jurassic Nelson suite and the Jura-Cretaceous Valhalla suite. Ultramafic rocks of undeterminable age or genesis occur as small masses throughout the Thompson-Okanagan-Shuswap area, Only the Old Dave Intrusions (northwest of the syrup claims) are known to be pre-Late Triassic in age and suspected to be of intrusive origin. Tertiary (Eocene) volcanic rocks unconformably overlay all the older formations, and are generally unmetamorphosed.

The Okanagan Valley is believed to mark the location of a major crustal break or fault separating the lower grade metamorphic assemblages on the west from higher grade metamorphic rocks to the east.



Faulting is ubiquitous throughout the region. Drainage patterns and air photo linear features commonly reflect underlying faults or fault controlled structures. This is particularly evident in the area of, and surrounding, the SYRUP claims.

#### Syrup Property

Reconnaissance mapping has shown volcanic rocks and sediments of the Thompson assemblage (formerly Cache Creek Group) and possibly Nicola Group to underlay the northeast portion of the SYRUP No.1 claim (Figure 4). The southwestern portion of the SYRUP No.1 and almost all of the SYRUP NO.2 are underlain by uniform, massively textured, hornblende / biotite quartz-diorite.

The sediments are observed in faulted contact with the intrusive rocks along the Bear Main in the vicinity of Km 30. The road cut exposes siltstones and shaley members of ? Nicola sediments with the quartz-diorite along a faulted surface trending  $130^{\circ}/80^{\circ}E$ .

Reconnaissance mapping has shown volcanic rock and sediments of the Thompson assemblage and/or Nicola Group to lay in a northwesterly to southeasterly trend across the northeastern portion of the SYRUP claims. The southwestern portion of the claims is underlain by intrusive rocks of the Jura-Cretaceous Okanagan batholith (Figure 4.) In the vicinity of the SYRUP claims, the intrusive rocks are very homogeneous, medium to coarse-grained, biotite-hornblende quartz diorite. They weather very massive and blocky. The intrusives are relatively unfractured and show little variation in alteration except for diagenetic effects. The volcanics and sediments are poorly exposed and the sediments, particularly, weather recessively. The volcanics commonly are metamorphosed to greenschist facies. They are well-fractured and blocky in nature, foliated in a NW to SE trend and are occasionally fractured with quartz veins. Sulphide mineralization is variably present, usually in quartz veins, or as an accessory or minor constituent. Within the quartz veins, pyrite content is generally greater than pyrrhotite which is greater than chalcopyrite. Within the black shales, pyrrhotite is ubiquitous along bedding planes and parting planes, and is by far the dominant sulphide mineral. The

pyrrhotite, in the black shale environment, is believed to be syngenetic in origin.

The intrusive rocks have been observed along the Bear Main (logging road) in fault contact with the older volcanics and sediments. The primary contact is along a faulted surface trending 130°/80°E. This direction has been offset left laterally in a series of step-like patterns along 030°/90°.

The black shales occasionally have limy and silty interbeds. These offer some potential as marker horizons for future mapping. The shales outcropping near the eastern side of the property do not appear to have endured the same degree of metamorphism as sediments outcropping regionally farther north and west. The former may be members of the Upper Triassic - Lower Jurassic Nicola group, while the latter, members of the earlier Carboniferous assemblages.

Major faults are postulated in a northwesterly trend and appear to be offset in a secondary northeasterly direction. This pattern has been observed in the intrusive - sediment contact mentioned above, along the Bear Main, and is reflected in the regional drainage patterns, an example of which is the "zig-zag" course of Powers Creek as it traverces the SYRUP claims. Numerous air photo linear features are undoubtedly fault related, several of them are continuous for several kilometres without visible offset, despite the relative abundance of the northeasterly trending linear features. Rejuvenation or repeated episodes of faulting along pre-existing structures may allow the presence of such unbroken lineations. In any case, the geology of both the property and the region will be complicated to some degree by fault controlled structures.

# MINERALIZATION AND GEOCHEMISTRY

### Regional Aspects

Exploration for gold and other metals has occurred in cyclical fashion within the Okanagan area, as it has done throughout British Columbia, since the arrival of the first prospectors and settlers prior to the turn of the last century. In the 1920's, work was done on the Blue Hawk and White Elephant gold-silver prospects. Some minor placer gold production from Trepanier Creek

and lode copper exploration at the head of that drainage through to the 1940's led porphyry copper explorationists to develop the operating Brenda Mine which went into production in 1969. In more recent years the discovery of gold on the Brett Property by Huntington Resources, about 33 km northeast of the SYRUP claims has spurred renewed interest in the region.

Adjacent or nearby the SYRUP claims, gold exploration work has been carried out by several operators. Chevron Minerals has reported anomalous gold values to 200 ppb, and copper values to 2000 ppm on the FLIP claims during 1988. Kerr Addison also performed an exploration program on their LAMB Claims in 1988. They apparently had a gold skarn model in mind and cited numerous features to substantiate the idea. They reported very low values for gold from skarns and sporadic values from small quartz veins. To the north, on the regional strike direction of foliation and bedding from the SYRUP claims, gold was discovered on the FLAP claim during 1988. The gold occurs in narrow quartz veins along northwesterly trending pyritic stringer zones (Schmidt, 1989). Schmidt also has drawn a comparison between the FLAP claim and the Jubilation gold prospect (NOGAN), where low concentrations of gold occur in pyrite bearing narrow quartz veinlets within brecciated and altered limy argillite.

### Syrup property

Forty-four rock samples, three silt samples and three hundred eightythree soil samples were collected from the SYRUP property.

Samples were analyzed by I.C.P. techniques for 10 elements including: Mo; Cu; Pb; Zn; Ag; Ni; Co; As; Sb; and Ba. Gold was determined by acid leach followed by atomic adsorption analysis using a 10 gram sample. All samples were analyzed by Acme Analytical Laboratories Ltd. 852 E. Hastings St. Vancouver B.C. V6A 1R6.

The data is presented in the appendix to this report. Au, Ag, and As values are also illustrated on Figure 4.

<u>Molybdenum</u> - Molybdenite mineralization was not observed in any of the samples collected. Geochemical values ranged from a background of 1 to 5 ppm to a high of 325 ppm (sample JS-6-R) from an area of very rusty argillaceous metasediments near the contact with intrusive rocks. the same area gave a result of 30 ppm for an adjacent sample (JS-5-R). A sample from greenstone collected near the intrusive contact in the southeast corner of Syrup 1 (89-BS-32R), produced a value of 63 ppm. Within soils, all values were below 10ppm.

- <u>Copper</u> Copper values in soils ranged from a low of 6 ppm to a high of 152 ppm. The high value and the adjacent sample, 109 ppm, are located in the southeastern part of syrup 1 within the area underlain by sediments (samples 44+50S , 16+00E and 16+50E). Copper values within rocks were more variable, ranging from a low of 7 ppm to a high of 535 ppm from an area of hornfelsed sediments with minor clay-silica alteration on fractures (Sample JS-12-R).
- Lead Lead values in soils ranged from 2 ppm to 75 ppm. Nine samples were 15 ppm or greater. Within rock samples, the range was 3 ppm to 41 ppm. with seven samples 15 ppm or greater.
- <u>Zinc</u> Zinc values from soils were highly variable, as is common for that metal, ranging from a low of 22 ppm to a high of 448 ppm. Values, within rocks, ranged from 4 ppm to 762 ppm. The higher values within rocks occur near the northern edge of the property from an outcropping of limy rusty black shale alongside a road connecting the Horseshoe Main with the Lambly Main along the eastern side of the property.
- <u>Silver</u> Silver values are all low, ranging from .1 to 1.1 ppm within soil and from .1 to 1.5 within rock samples. The upper end of the range is only marginally anomalous for soils generally and within normal background ranges for rock samples. Results for silver are presented on Figure 4.
- <u>Nickel</u> Nickel values from soil samples range from 6 ppm to 138 ppm. The high value was collected adjacent to samples which yielded anomalous values for copper. The coincidence of the values may be significant geologically in light of the anomalous copper associated with mafic and ultramafic rocks (gabbro and peridotite) reported from the FLIP claim

about 3km to the north.

- <u>Cobalt</u> Cobalt values in soils and rocks ranged from 4 ppm to 92 ppm and are not considered significant.
- <u>Arsenic</u> Arsenic values in soil ranged from 2 ppm to 25 ppm with 20 samples over 10 ppm. The range is considered restricted, the cause may be simply due to a lack of arsenic, or other factors, unknown at this time. Arsenic values from rock samples ranged from 2 ppm to 1199 ppm. Six samples were greater than 20 ppm. Sample 89-BS-38 yielded a result of 1199 ppm, the sample was collected from an angular, rusty quartz rich boulder apparently ripped up during the construction of a local skid road. The boulder is in the vicinity of the intrusive-sediment contact. A value of 95 ppb Au was returned from the same sample. No other analyses are considered anomalous for this sample. Results for arsenic are presented on Figure 4.
- <u>Antimony</u> Antimony values ranged from 2 ppm to 4 ppm. Antimony is clearly not a significant component in any of the samples collected.
- <u>Barium</u> Barium undergoes only a partial leach using the digestion techniques employed. The results tend to reflect barium bound in forms other than sulphate (ie. baritic feldspar), to a greater degree than the more common barium sulphate (barite). Rock sample results ranged from 3 ppm to 342 ppm (sample 89-BS-42). The soils responded with results ranging from 3 ppm to 347 ppm. The interpretation of the results for barium is indeterminate at this time.
- <u>Gold</u> Gold results derived from rock samples ranged from 1 ppb to 161 ppb. values derived from soils ranged from 1 to 213 ppb. Sixteen samples were 10 ppb or greater. Threshold anomalous values are arbitrarily considered to be between 10 ppb and 19 ppb. Seven samples yielded results 20 ppb or greater. The results for gold are presented on Figure 4. A list of rock sample descriptions is appended to this report.

#### CONCLUSIONS

The Syrup property is underlain by sedimentary and volcanic rocks of the Triassic to upper Jurassic Nicola Group and/or Carboniferous Thompson assemblage and by intrusive rocks believed to be part of the Jura-Cretaceous Okanagan Batholith. The rocks are cut by large and small faults in a variety of attitudes but dominated by a strong northwesterly trending set and a northeasterly trending set. these faults may have been repeatedly activated throughout the geological history of the area. Anomalous geochemical values for gold, copper, lead, zinc and arsenic have been detected from an area extending from the north central boundary of the property to the southeast corner of the SYRUP 1 claim. This area is underlain by pyritic and rusty sediments and volcanics in contact with quartz-diorite. The area is geologically similar to the zones of mineralization discovered on the FLAP claims (Medford 1989, pers. comm.) The geochemical values in soils (up to 213ppb Au) compares very favourably with the geochemical expression obtained from soils surrounding the quartz vein discovery and volcanic exhalative horizon on the FLAP property. Much of the geology on the SYRUP is covered by widespread, generally thin, overburden. The Area from the north central boundary to the southeast corner of the SYRUP 1 claim requires further exploration and a more detailed examination using geological mapping, soil sampling and geophysical techniques.

# RECOMMENDATIONS

Continued exploration of the SYRUP property is recommended to test for gold mineralization related to pyritic quartz veins and to test for base metal horizons within the volcanic and sedimentary horizons (the two types may not be mutually exclusive).

The survey grid should be extended for continuing geochemical sampling and conducting geophysical studies. Line spacing should be 100 m apart with station spacing every 25 m. along the lines. The grid and survey area can be restricted to include only that portion of the claim underlain by the volcanic and sedimentary units. Overburden depths are not expected to be excessive and shouldn't place undue interpretation difficulties on the soil geochemical surveys. Initially, magnetometer and VLF-EM surveys should be done in conjunction with the geochemical surveys and detailed mapping. The surveys can be expanded to fill-in lines or additional surveys such as I.P.surveys may be performed as required. An excavator may readily be employed because of the excellent road access and minimal overburden cover, to evaluate any anomalous areas defined. Future diamond drilling programs will be contingent on the preceeding results.

W.A. Howell

W.A. Howell, B.Sc. Consulting Geologist

November 25 1989 Surrey, B.C.

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## Appendix I

Statement of Qualifications

I, William A. Howell, hereby certify that:

- 1. I am a Geologist and reside at 15294 96A Avenue, Surrey, B.C. V3R 8P5
- 2. I am a graduate of the University of British Columbia with a degree of Bachelor of Science in Geology (1971).
- 3. I am a member of the Geological Association of Canada.
- 4. I have practised my profession as a geologist since 1971, having worked as an employee and/or consultant for several International Mining Corporations and Junior Resource Companies.
- 5. This report is based upon field work undertaken on the property September 23rd to October 5, 1989.
- 6. I have no direct or indirect interest, nor do I expect to receive any interest directly or indirectly in the property or securities of Verdstone Gold Corp.

W.A. Howell

November 25, 1989. Surrey, B.C.

William A. Howell, B.Sc. Consulting Geologist

APPENDIX II

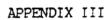
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# APPENDIX II : COST STATEMENT

# PERSONNEL:

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J. Boutwell (Prospector) P. Newman (Prospector) V. Guinet (Prospector) W. Howell (Geologist) G. Medford (Consultant)	19 days @ \$225.00/day 6 Days @ 225.00/day 2 Days @ 225.00/day 7 Days @ 300.00/day 1.5 Day @ 375.00/day Plus: Disbursements of	\$ 4,275.00 1,350.00 450.00 2,100.00 562.50 89.51
DISBURSMENTS:		
Assays Soils 386 x \$1 Rocks 44 x 1 Shipping	•	0
Gas and oil Drafting Materials and supplies Air Travel Base Maps Miscellaneous	336.5 306.0 96.3 471.5 231.6 75.3 ST 6,332.12	D 5 7 5 4
RENTALS:		
4 x 4 truck rental Room and Board	16 days @ \$ 60.00/day 34 Man Days @ 50.00/day	\$ 960.00 1,700.00
<b>REPORTING:</b> Binding, copies, word proces	sing	2,000.00 180.87
	TOTAL	<u>\$ 20,000.00</u>



Sample	Description
JS-1R	Grab sample of siliceous pyritic amphibolite, mineralization appears to be associated with quartz veining.
JS-2R	Grab sample from quartz vein, 3 cm. wide with fine grained pyrite.
JS-3R	Same location as above, quartz with 60% wall rock.
JS-4R	Grab sample from quartz vein containing wall rock plus some pyrite, same location as above.
JS-5R	Grab sample of silicified pyritic rock from gossanous zone along logging road.
JS-6R	Grab sample from 2 cm. wide quartz vein, very pyritic, 10 m. from above sample.
JS-7R	Grab sample of pyritic, schistose, mafic volcanic from a 1.5 m. wide shear zone.
JS-8R	Pyritic crumbly schist from same location as JS-7R.
JS-9R	Same location as above two samples with hematite and more pyrite.
JS-10R	Grab sample from 6 cm. wide quartz vein with minor pyrite.
JS-11R	Grab sample from 3 cm. wide quartz vein, rusty and vuggy.
JS-12R	Same location as above sample, with 15% pyrite.
JS-13R	Quartz stringers in calc silicate rock.
JS-14R	Grab sample of sheared siliceous volcanic rock with fine grained pyrite.
JS-15R	Grab sample of rusty banded calc silicates.
JS-16R	Grab sample of fine grained siliceous andesitic rock with fine grained sulphides.

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Sample #	Description
89-BS 5	Qtz veins with pyrite. obs. in coarse roadside rubble but not in outcrop. local outcrop is limey interbeded fine sandy tuffsand argillites with local thickening and crossbedding. Rx are locally rusty but not silicified. Located across the road from the "Horseshoe lake recreational site."
89-BS 6	4cm qtz vein in small re-entrant bi qtz diorite on west side of road at the south end of horseshoe lake.
89-BS 7	<pre>lcm qtz vein in diorite contains pyrite and chalcopyrite. vein is uncommon, lies 090/10S total sulphide is 15% with no moly. py/cpy = 3/1 or more. Sample is "high- graded."</pre>
89-BS 8	Rusty pyritic fractures in contact phase f.g. diorite. ?trace cpy present.
89-BS 9	Flat E-W strike, 10S dip qtz vein/orthoclase,muscovite pegmatite. very little sulphide present. Old Cat stripping in this area looks like exploration dating to about 18 years ago. (c.1971)
89-BJ 10 89-BJ 11 89-BJ 12	chip samples across 2m each, of high sulphide, siliceous sintery black shale in "nose" of road along the south side of logging slash near the southeast boundary of the Jack claims.
89 BJ 13	Fine gr. grey heavy rock, o/c has 15% diss. f.g. sulphides in f.g.qtz/ser Matrix within the black shales.
89-BJ 14	Very hard siliceous & pyritic nubbin in the road bed. Difficult to sample properly. Rock is probably a siliceous tuff.
89-BS 23	Sintery grey vertically bedded fine sandy seds. v.f.g. sulphides possibly po. old sampling here is "TLE 88-83" sample is on a N-S yellow flag line with white tags and is located on the Bear Main adj. to km 28.
89-B 24	200m up spur road at 24km on the lambly creek road. The sample is off the property. the sample is of strongly quartz-carbonate altered sediments exposed in the road bed and the ditch over several tens of meters.
89-BS 27	Hfls/pyritic greenstone fract. py and occasional

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clay/silica alteration. Old trenching in this area is probably 10-14 years old.

- 89-BS 28 Greenstone breccia cemented with f.g. qtz/carb.
- 89-BS 29 Qtz vein in rusty hornfelsed blocky greenstone.
- 89-BS 30 Silt from well developed drainage. Sample is highly organically contaminated very fine silt.
- 89-BS 31 Pyritic hornfelsed tuff or fine sediment.
- 89-BS 32 Rusty, pyritic/pyrrhotitic hornfels and argillaceous tuffs. very minor qtz.
- 89-BS 33 Rusty, hard, hornfelsed fine grained greenstone. contains py&po.
- 89-BS 34 Sintery boxwork of fine silica stringers in a buff to khaki green v.f.g. volcanic matrix. The stringers are commonly composed of terminated quartz enclosing very smallvugs and open spaces.
- 89-BS 35 Highly broken, leached, rusty, ?tuff? or greenstone. In bank of old skid trail.
- 89-BS 36 Pyritic silica/sericitic alt'd greenstone in bank of old skid trail.
- 89-BS 37 Intrusive, not typical, the quartz diorite comtains minor (2mm) qtz. vein with limonitic fractures and exhibits about 30% alteration to sericite. very minor possible MoS<sub>2</sub> in qtz.
- 89-BS 38 Float boulder, about 200 lb. Silicified, Qtz veined volcanic breccia. Vuggy qtz veins up to 2 cm wide with abundant limomite & fine grained disseminated pyrite. boulder is in the road bed and is highly angular as if ripped out by a cat while building the road. There is no evidence of glacial rounding or smoothing.
- 89-BS 39 no record
- 89-BS 40Quartz vein in hornfelsed greenstone with secondary89-BS 41Biotite. (both samples)
- 89-BS 42 Hornfelsed greenstone contains 1%py and possible cpy. weathers very rusty.

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# APPENDIX IV

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852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

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

# GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 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 LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: SILT/ROCK AU\* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

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SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Aq PPM	Ni PPM	CO PPM	As PPM	Sb PPM	Ba PPM	Au* PPB
89-BS-30 P-S-R-1 P-S-R-2 89-BS-7R 89-BS-8R	3 11 2 4 1	81 37 10 195 50	15 13 3 6 7	103 10 4 53 58	.7 .5 .1 .4 .6	34 7 5 4	9 4 92 7	4 2 2 2 2	2 2 2 2 2 2 2	219 16 3 7 29	3 4 1 2 3
89-BS-9R 89-BS-23R 89-BS-24R 89-BS-25R 89-BS-27R	4 6 1 2	7 7 34 64 49	8 16 41 9 21	14 4 103 92 43	1.5 .1 .3 .1	9 6 34 26	3 1 29 10	2 27 8 5 25	2 2 2 3 2	15 176 21 50 80	3 73 4 3 1
89-BS-28R 89-BS-29R 89-BS-31R 89-BS-32R 89-BS-33R	1 2 63 9	20 16 65 64 60	3 3 14 4 6	23 4 127 675 49	.1 .1 .4 .3	13 8 77 65 48	5 5 13 9 16	2 2 2 5 3	2222	192 26 48 45 91	1 2 3 7 3
89-BS-34R 89-BS-35R 89-BS-36R 89-BS-37R 89-BS-38R	1 2 3 8 3	8 48 56 24	13 5 9 5	16 37 25 13 67	.2 .1 .3 .1 .2	15 9 38 5 103	6 5 13 5 18	5 2 5 1199	2 2 2 2 2 2 2 2	98 51 43 55 178	56 3 161 2 95
89-BS-40R 89-BS-41R 89-BS-42R STD C/AU-R	1 1 1 18	17 91 64 58	2 3 8 38	44 58 151 132	.1 .2 .2 7.2	62 76 24 67	15 18 21 30	5 13 2 42	2 2 15	17 342 129 175	1 4 2 495

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SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Aq PPM	Ni PPM	Co PPM	As PPM	Sb PPM	Ba PPM	Au* PPB
JS-1-R JS-2-R JS-3-R JS-4-R JS-5-R	1 4 2 2 30	84 107 227 175 61	10 5 2 14	49 15 26 44 97	13616	46 10 10 9 21	22 10 38 24 22	52 22 15 10 2	2 2 2 2 2 2 2 2 2	137 12 25 55 38	4 1 2 1 2
JS-6-R JS-7-R JS-8-R JS-9-R JS-10-R	325 1 2 1'	137 204 273 288 13	10 6 5 6 2	36 226 375 299 14	1.2	28 9 11 1 5	17 19 24 21 2	2 2 2 2 3	222222	59 17 79 112 24	12 4 2 1 5
JS-11-R JS-12-R JS-13-R JS-14-R JS-15-R	2 10 1 4 6	36 535 118 110 92	2 3 2 6 5	6 29 14 131 18	.1 .4 .1 .3 .2	5 8 154 97 43	2 27 19 26 11	2 4 16 3 4	2 2 2 2 2 2 2	.9 12 60 92 12	2 1 1 1
JS-16-R	26	<u>70</u>	1 <u>2</u>	13 <u>8</u>	.4	<b>§</b> 9	13	8	5	26	1

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SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Aq PPM	Ni PPM	Co PPM	As PPM	Sb PPM	Ba PPM	Au* PPB
48S 12+50E 48S 13+00E 48S 13+50E 48S 14+00E 48S 14+50E	6 1 2 1	73 26 20 25 21	12 9 7 11 10	174 120 80 80 76	•5 •4 •3 •3	83 24 19 30 22	12 10 9 10 10	16 5 4 5	2 2 2 2 2 2	256 111 91 136 126	4 2 7 4 1
48S 15+00E 48S 15+50E 48S 16+00E 48S 16+50E 48S 17+00E	4 3 1 2	38 35 35 38 24	11 9 13 15 14	167 165 117 122 133	·1 ·2 ·1 ·3 ·2	40 55 34 36 42	13 12 12 13 15	7 6 10 7 8	2 3 2 2 2	148 177 131 152 203	2 1 12 2 1
48S 17+50E 48S 18+00E 48S 18+50E 48S 19+00E 48S 19+50E	1 2 2 2 1	34 26 30 27 31	12 8 12 12 10	111 167 176 109 106	.2 .1 .1 .1 .1	34 39 33 36 28	13 14 14 13 11	9 11 8 3 4	2 2 2 2 2 2	194 139 121 109 116	3 1 5 4 5
48S 20+00E 48S 20+04E SILT 48S 20+50E 48S 21+00E 48S 21+50E	2 1 1 1	49 45 65 32 18	18 7 14 11 7	107 55 130 131 74	.3 .26 .1 .1	39 27 55 33 22	11 5 12 14 9	7 4 7 2	2 2 2 2 2 2 2 2	149 121 154 137 87	4 2 2 1
48S 22+00E 48S 22+50E 48S 23+00E 48S 23+50E 48S 24+50E	2 2 3 1 2	21 29 73 24 29	10 8 9 11 8	109 106 107 157 173	.32521	23 25 41 21 34	10 11 9 11 12	86659	222222	110 213 201 117 169	1 2 3 2 4
48S 25+00E STD C/AU-S	2 19	69 62	14 40	184 132	.5 6.5	65 65	11 31	7 40	2 15	172 176	2 53

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	Guinet	Manager	nent	FIL	E # 8	9-403	7			
SAMPLE#	Mo C PPM PP	u Pb M PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	As PPM	Sb PPM	Ba PPM	Au* PPB
47S 18+50S 47S 19+00S 47S 19+50S 47S 20+00S 47S 20+50S	1 1 1 2 3 3 2 3 4 4	1 8 0 9 2 10	92 121 245 174 236	.1 .1 .2 .2	20 27 55 50 72	10 11 15 15 19	3 6 11 7 15	2 2 2 2 2 2 2	130 127 121 166 170	2 4 3 1 2
47S 21+00S 47S 21+50S 47S 22+00S 47S 22+50S 47S 23+00S	1 2 1 1 2 2 1 5 1 7	0 7 9 11 1 10 8 10 0 10	100 117 121 116 134	.2 .3 .1 .2 .1	31 28 26 44 44	11 11 15 15	6 5 8 11 10	2 2 2 2 2 2 2 2	110 142 139 206 264	2 1 3 4
48S 0+00E 48S 0+50E 48S 1+00E 48S 1+50E 48S 2+00E	2 4 5 3 2 3	7 9 3 9 6 14 0 13 1 15	120 138 132 146 105	.1 .2 .1 .2 .3	34 31 40 35 25	13 17 13 14 16	3 4 6 9 3	2 2 2 2 2 2 2 2	168 211 113 98 193	1 6 1 3 1
48S 2+50E 48S 3+00E 48S 3+50E 48S 4+00E 48S 4+50E	$\begin{array}{ccc}1&2\\1&2\\2&4\end{array}$	0 8 0 9 3 8 6 4 9 8	146 82 114 91 88	.22 .33 .22 .22	49 25 27 44 26	20 10 10 13 11	7 8 9 5 7	2 2 2 2 2 3	182 109 129 98 115	1 2 3 2 3
48S 5+00E 48S 5+50E 48S 6+00E 48S 6+50E 48S 7+00E		6 14 8 8 1 11 2 10 6 10	92 94 328 182 99	.2 .5 .1 .3	30 27 42 19 30	12 10 13 10 12	85959 5959	22222	132 135 237 107 153	8 6 4 3
48S 7+50E 48S 8+00E 48S 8+05E SILT 48S 8+50E 48S 9+00E	1 1 2 5 1 1	8 13 7 9 2 13 9 4 9 15	78 114 354 80 100		25 20 23 23 32	10 10 11 10 11	7 5 7 2 4	2 2 2 2 3	110 107 143 116 167	2 1 5 18 1
48S 9+50E 48S 10+00E 48S 10+50E 48S 11+00E 48S 11+50E		8 11 8 13 2 7 8 11 2 11	114 111 79 127 87	• 3 • 2 • 4 • 3 • 2	28 25 27 28 22	11 11 11 11 11	4 7 6 5 4	2 2 2 2 2 2 2	133 92 113 151 181	4 3 21 3 3
48S 12+00E STD C/AU-S	1 18	3 13 0 45	115 133	7:2	18 67	11 31	9 40	3 16	126 175	5 49

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SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Aq PPM	Ni PPM	Co PPM	As PPM	Sb PPM	Ba PPM	Au* PPB		
46S 26+ 46S 27+ 46S 27+ 46S 27+ 46S 28+ 47S 1+0	00E 1 50E 2 00E 1	44 34 44 23 15	8 9 10 6 7	146 145 159 127 92	.2 .3 .2 .2 .1	42 31 48 22 13	14 11 14 12 9	8 9 8 5	2 2 2 2 2 2	157 133 178 158 89	1 4 2 3 1		
47S 1+5 47S 2+0 47S 2+5 47S 3+0 47S 3+5	0E 1 0E 1 0E 1	41 46 32 35	9 13 5 9 8	196 155 116 134 247	.2 .1 .3 .2	38 36 26 25 17	16 14 16 13 20	5 9 7 10 6	2 2 2 4 2	231 155 209 169 145	6 3 1 2 1		
47S 4+0 47S 4+5 47S 5+0 47S 5+5 47S 6+0	0E 6 0E 1 0E 2	51 32 33 31 34	7 9 10 9	150 291 115 103 69	.3 .1 .1 .1	51 49 34 34 20	16 21 13 13 9	8596 6	2 2 2 2 2 2 2 2 2 2	118 88 143 106 71	1 1 1 2		
47S 6+5 47S 7+5 47S 8+0 47S 8+5 47S 9+0	0E 2 0E 1 0E 1	31 28 29 22 18	9 9 11 9	110 96 119 80 109	.3 .4 .1 .1	26 27 34 22 27	13 11 12 10 11	15 10 13 8 9	2 2 2 2 2 2 2 2	121 206 148 98 122	2 1 5 1 1		
47S 9+5 47S 10+ 47S 11+ 47S 11+ 47S 11+ 47S 12+	50E 1 00E 2 50E 1	30 17 51 28 22	7 7 13 13 5	80 74 111 100 135	.2 .1 .4 .1 .1	28 21 43 32 28	11 10 13 11 12	7 5 10 8 7	2 2 2 2 3	157 111 239 187 119	53222 222		
47S 12+ 47S 13+ 47S 13+ 47S 13+ 47S 14+ 47S 14+	00E 1 50E 1 00E 1	21 17 16 17 32	10 6 7 5 11	101 81 91 115 127	•4 •1 •2 •3	23 25 22 31 28	12 11 10 12 14	96559	3 2 2 4 2	136 108 105 204 156	5 1 1 4		
47S 15+ 47S 15+ 47S 16+ 47S 17+ 47S 17+ 47S 17+	50E 1 50E 2 00E 1	22	7 10 10 12 8	111 100 110 101 126	.1 .2 .2 .2	22 24 26 26 27	13 13 12 12 10	7 10 7 6 5	2 2 2 2 3	118 160 149 102 90	1 20 4 1		1
47S 18+ STD C/A	-00E 1 U-S 18	17 59	10 36	98 132	7:1	25 68	10 31	4 39	2 15	$117\\173$	1 48		

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SAMF	PLE#		Mo PPM	Cu PPM	Pb PPM	Zn PPM	Aq PPM	Ni PPM	CO PPM	As PPM	Sb PPM	Ba PPM	Au* PPB
46S 46S 46S 46S 46S	9+00E 9+50E 10+00E 10+50E 11+00E		1 1 1 1	25 17 20 25 15	9 6 9 7 9	123 110 106 96 156	:2 :1 :1 :2 :1	35 31 26 24	11 10 10 10 10	8 8 12 11 7	2 2 3 2 2	120 134 115 111 130	3 1 9 1 1
46S 46S 46S 46S 46S	11+28E 11+50E 12+00E 12+50E 13+00E	SILT	2 1 1 2 1	58 29 27 36 16	5 8 13 11 9	448 296 177 188 147	.4 .1 .1 .2 .2	31 14 24 35 21	13 10 12 12 11	8 11 12 14 8	2 2 2 2 2 2 2	227 92 108 121 100	2 1 7 4 1
46S 46S 46S 46S 46S	13+50E 14+00E 14+50E 15+00E 15+50E		2 1 1 1 1	27 25 19 23 15	8 3 8 4 9	119 86 91 105 82	.1 .1 .1 .1 .1	33 24 22 31 14	12 12 10 13 11	13 9 7 14 6	2 2 2 2 2 2 2	169 120 97 80 86	1 1 2 1
46S 46S 46S 46S 46S	16+00E 16+50E 17+00E 17+50E 18+00E		1 1 1 1	28 27 18 17 18	6 8 11 75 8	111 115 124 145 103	.1 .1 .1 .4 .2	23 24 17 22 24	15 14 11 13 10	10 10 5 7 3	2 2 2 2 2 2 2 2 2	96 87 99 104 87	1 1 1 1
46S 46S 46S 46S 46S	18+50E 19+00E 19+50E 20+00E 20+50E		1 2 2 1 1	17 29 19 31 23	7 9 11 11	97 141 84 160 161	.1 .1 .1 .3	21 27 19 33 25	11 13 12 14 13	. 4 7 10 7 5	22222	106 128 85 175 145	5 1 2 9 4
46S 46S 46S 46S 46S	21+00E 21+50E 22+00E 22+50E 23+00E		1 1 1 1	18 18 17 12 21	12 10 7 9 9	94 60 89 68 131	.1 .5 .1 .3	24 21 31 20 28	11 10 11 9 12	4 5 2 4 3	2 2 2 2 2 2 2 2 2	115 99 101 99 123	65 1 2 1
46S 46S 46S 46S 46S	23+50E 24+00E 24+50E 25+00E 25+50E		1 1 1 1	20 21 42 22 21	9 12 13 11 6	125 135 167 92 85	.1 .2 .2 .1 .3	22 32 58 36 28	11 13 15 13 11	6 10 5 6	2 2 2 2 2 2 2	102 100 204 92 95	2 2 2 4 6
46S STD	26+00E C/AU-S		1 18	22 60	12 38	117 132	6.5	28 65	13 31	6 40	2 15	141 174	2 51

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SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Aq PPM	Ni PPM	Co PPM	As PPM	Sb PPM	Ba PPM	Au* PPB	
45S 28+00E 45S 28+50E 45S 29+00E 45S 29+50E 45S 30+00E	2 1 1 4 1	36 41 37 62 27	13 8 8 17 11	171 121 227 214 141	.1 .1 .4 .3	47 31 61 65 23	17 17 15 14 13	3 4 4 6 4	22222	196 148 139 249 112	1 1 2 1 1	
45S 30+50E 45S 31+00E 45S 31+50E 45S 32+00E 45S 32+50E	1 1 2 1 2	30 20 29 23 22	14 10 14 9 10	129 152 137 119 92	.1 .14 .2 .6	31 25 28 23 22	15 12 13 12 14	4 3 4 2 3	22222	120 110 131 92 95	3 3 1 1 1	
45S 33+00E 45S 33+50E 45S 34+00E 45S 34+50E 45S 34+50E 45S 35+00E		33 28 32 24 27	15 7 12 9 10	131 121 234 131 132	.4 .2 .1 .2	46 32 51 30 27	14 12 16 12 11	26 32 5	2 2 2 2 2 2 2 2 2	317 199 190 125 161	4 1 4 3	
45S 35+50E 45S 36+00E 45S 36+50E 45S 37+00E 45S 37+50E	2 1 2 1 1	34 35 43 30 31	13 9 9 10 10	139 92 172 139 130	.3 .4 .1 .4 .4	38 29 66 27 31	14 14 20 13 13	6 3 15 4 5	2 3 2 2 2 2	122 127 216 123 131	1 3 1 2 2	
45S 38+00E 45S 38+50E 46S 2+00E 46S 2+50E 46S 3+00E	2 1 2 1 2	73 73 39 45 43	9 11 12 10 7	123 155 146 134 111	.1 .2 .1 .1	46 53 32 38 37	18 20 15 13 15	10 6 5 2	22222	243 188 127 347 117	5 1 4 5 1	
46S 3+50E 46S 4+00E 46S 4+50E 46S 5+00E 46S 5+50E	1 3 1 2	28 35 28 21 30	11 6 10 9 7	140 139 107 119 85	.1 .4 .2 .2	33 52 32 28 38	12 14 12 10 11	2 6 2 4 3	2 2 2 2 2 2 2	121 98 115 93 111	1 3 1 3 1	
46S 6+00E 46S 6+50E 46S 7+00E 46S 7+50E 46S 8+00E	1 3 2 1 1	25 32 45 25 24	10 12 11 4 6	126 86 79 103 86	.1 .3 .7 .3 .2	22 32 45 35 28	12 12 12 13 12	4 6 15 7 6	2 2 2 2 2 2 2	96 120 214 131 111	31 1 8 3	
46S 8+50E STD C/AU-S	1 18	37 63	9 35	103 132	6. <sup>3</sup>	40 66	12 31	5 38	2 15	125 172	2 49	

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SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Aq PPM	Ni PPM	CO PPM	As PPM	Sb PPM	Ba PPM	Au* PPB	
45S 9+00E 45S 9+50E 45S 10+00E 45S 10+50E 45S 11+00E	1 1 2 1	21 23 21 20 32	7 8 7 11 8	83 84 65 72 133	.1 .2 .1 .3	23 29 22 20 45	9 11 10 7 11	2 4 2 4	22222	126 104 104 100 122	2 3 1 1 1	
45S 11+50E 45S 12+00E 45S 12+50E 45S 13+00E 45S 13+50E	1 1 1 1	16 20 26 23	8 7 5 7 6	94 103 89 313 127	.1 .3 .1 .4 .1	22 24 24 26 21	9 11 9 14 11	4 3 6 8 4	2 3 2 2 2 2	91 79 120 143 115	1 2 1 13	
45S 14+00E 45S 14+50E 45S 15+00E 45S 15+50E 45S 16+00E	1 1 2 1	42 24 21 15 24	7 11 7 8 12	123 113 164 75 91	.22 .22 .22 .22	32 27 29 18 23	15 11 14 10 13	8 5 3 3 3	2 2 2 2 2 2 2 2	208 133 121 83 97	1 2 2 1 2	
45S 16+50E 45S 17+00E 45S 17+50E 45S 18+00E 45S 19+50E	2 1 3 3 1	27 13 24 15 24	12 6 9 7 7	91 58 77 83 215	.3 .1 .1 .1	24 16 16 15 20	13 8 10 7 12	45253	2 2 2 2 2 2 2 2 2	98 77 43 154	1 2 1 1	
45S 20+00E 45S 20+50E 45S 21+00E 45S 21+50E 45S 22+00E	1 2 1 1	20 44 38 28 28	11 13 6 15	168 101 116 112 88	.3 .4 .4 .1 .3	20 26 24 20 23	12 12 13 11 12	4 7 9 6 5	2 2 2 2 2 2 2 2	175 150 155 78 113	1 2 2 1 2	
45S 22+50E 45S 23+00E 45S 23+50E 45S 24+00E 45S 24+50E	1 1 1 1	40 26 19 45 22	8 9 10 11 7	115 86 106 120 101	•1 •4 •1 •1	21 23 19 24 11	16 12 13 16 11	4 5 5 3 6	2 2 2 2 2 2 2 2	108 102 130 128 121	2 2 1 1	
45S 25+00E 45S 25+50E 45S 26+00E 45S 26+50E 45S 27+00E	1 1 1 1	26 21 20 45 30	11 8 9 5 12	108 102 120 81 115	.1 .1 .3 .1 .1	25 25 29 28 22	13 11 11 15 13	46646	2 2 2 2 2 2 2 2 2	158 114 140 95 154	5 1 213 5	
45S 27+50E STD C/AU-S	1 18	21 61	9 38	99 132	6.5	24 67	12 30	4 39	3 15	155 175	47 47	

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Radellee Blattan. Bl. 6	Gu	inet	Manag		FI	LE #	89-40	<b>3</b> 7	<b>.</b>	<b>.</b>	<b>B</b>
SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Aq PPM	Ni PPM	Co PPM	As PPM	Sb PPM	Ba PPM	Au* PPB
44S 25+00E 44S 25+50E 44S 26+00E 44S 26+50E 44S 27+00E	2 2 1 1 1	35 30 19 22 21	6 8 4 8 7	145 87 100 169 87	.1 .3 .1 .3 .2	39 35 27 31 21	14 12 10 11 10	5 5 5 4 5	2 2 2 2 2 2 2	138 151 85 91 98	3 22 22 7
44S 27+50E 44S 28+00E 44+50S 14+00E 44+50S 14+50E 44+50S 15+00E	3 4 1 1 1	31 33 23 22 40	11 6 8 9 11	157 235 90 111 22	.2 .3 .2 .1 1.4	34 52 21 26 28	11 12 10 11 4	56556	2 2 2 2 2 2 2	131 111 95 151 100	1 4 1 1 1
44+50S 15+50E 44+50S 16+00E 44+50S 16+50E 44+50S 17+00E 44+50S 17+50E	2 3 4 1	36 109 152 26 30	6 10 7 8 10	297 140 131 216 149		45 96 138 30 50	17 15 13 12 13	3 11 12 6 5	2 2 2 2 2 2 2 2	154 201 175 120 163	2 5 3 1 4
44+50S 18+00E 44+50S 18+50E 44+50S 19+00E 44+50S 19+50E 44+50S 20+00E	1 1 2 1	18 15 12 38 16	6266 6	89 52 74 56 79	.2 .2 .1 .3 .3	30 16 17 41 28	9 9 8 9 9	2 2 2 2 2 2 2 2 2 2	2 2 2 2 2 2 2	132 79 110 251 113	1 2 1 1
44+50S 20+50E 44+50S 21+00E 44+50S 21+50E 45S 2+50E 45S 3+00E	1 2 1 1 2	18 49 20 19 34	9 6 2 7 11	74 57 75 107 98	.3 .3 .3 .2 .2	20 34 20 15 37	9 7 8 9 11	2 2 2 4 3	3 2 2 2 2 2	60 154 105 82 118	3 2 1 1
45S 3+50E 45S 4+00E 45S 4+50E 45S 5+00E 45S 5+50E	1 1 1 1	34 30 23 25 28	3 10 8 7 8	86 94 77 86 93	.2 .3 .3 .1	42 31 22 22 28	13 13 9 10 10	4 2 2 2 2	2 2 2 2 2 2 2 2 2	100 157 123 114 105	1 2 3 1
45S 6+00E 45S 6+50E 45S 7+00E 45S 7+50E 45S 8+00E	2 1 1 1	32 25 29 24 52	6 6 3 5 2	114 101 105 95 129	.4 .2 .4 .3 .3	39 27 28 27 39	11 11 10 10 18	5 4 7 9	2 2 2 2 2 2 2 2 2	101 98 153 96 115	5 1 11 2
45S 8+50E STD C/AU-S	18 18	21 63	6 38	97 132	.2 6.8	22 67	9 30	. <b>2</b>	2 14	64 172	1 52

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SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Aq PPM	Ni PPM	Co PPM	As PPM	Sb PPM	Ba PPM	Au* PPB
44S 7+00E 44S 7+50E 44S 8+00E 44S 8+50E 44S 9+00E	5 3 1 2	26 14 24 15 26	4 5 9 10 13	58 84 75 75 64	.4 .3 .2 .3 .3	20 16 28 23 39	6 8 10 9 10	2 2 4 2 2	2 2 2 2 2 2 2	119 113 155 134 165	1 4 1 1
44S 9+50E 44S 10+00E 44S 10+50E 44S 11+00E 44S 11+50E	3 1 1 1 1	48 18 16 12 18	8 10 6 13 10	51 69 91 93 82		27 23 25 14 17	8 7 10 8 9	3 2 4 2 2	2 2 2 2 2 2 2	177 133 107 85 87	4 13 2 5 2
44S 12+00E 44S 12+50E 44S 13+00E 44S 13+50E 44S 14+00E	1 1 3 2 1	22 14 19 28 14	56579	73 66 59 82 72	.2 .4 .2 .2 .3	15 11 23 15 10	8 8 7 9 6	7 2 9 3 4	2 2 2 2 2 2	105 91 74 99 82	1 12 4 1
44S 14+50E 44S 15+00E 44S 15+50E 44S 16+00E 44S 16+50E	1 1 2 2 2	12 11 55 22 28	13 10 6 11 9	101 73 97 92 97	.2 .2 .3 .3 .3 .2	15 12 38 17 22	8 6 15 9 11	6 5 10 5 2	22222	108 76 145 78 111	1 2 1 1 2
44S 17+00E 44S 17+50E 44S 18+00E 44S 18+50E 44S 19+00E	2 2 2 2 2 3	23 22 29 51 46	9 7 5 7 6	121 87 97 112 113	.2 .3 .4 .3 .2	22 16 19 37 42	10 9 16 13	7 5 4 7	22222	86 57 72 148 151	1 3 4 3 1
44S 19+50E 44S 20+00E 44S 20+50E 44S 21+00E 44S 21+50E	2 2 2 3 2	29 25 42 28 21	62885	109 62 172 105 62	.32 .32 .1	34 26 65 53 27	13 10 17 13 10	9 8 9 13 6	3 2 2 2 2 2	108 98 170 117 131	18 5 1 2
44S 22+00E 44S 22+50E 44S 23+00E 44S 23+50E 44S 23+50E 44S 24+00E	2 6 8 3 3	58 62 32 40 35	9 11 8 10 5	104 287 246 159 96	.2 .2 .3 .2 .2	68 71 42 40 35	21 17 11 13 11	25 5 7 4	2 2 2 2 2 2 2 2	100 139 116 131 116	5 2 1 1
44S 24+50E STD C/AU-S	2 19	33 62	4 36	72 132	•2 6.7	29 67	12 31	8 38	2 15	139 172	5 51

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Si Si	AMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Aq PPM	Ni PPM	Co PPM	As PPM	Sb PPM	Ba PPM	Au* PPB
4 4 4	2S 5+50E 2S 6+00E 2S 6+50E 2S 7+00E 2S 7+50E	1 1 1 1	13 14 13 25 19	5 8 5 11 10	83 98 81 73 81	.1 .1 .4 .1	15 17 20 37 25	7 8 7 7 9	2 2 2 2 2 5	2 2 2 2 2 2 2	118 112 123 198 121	1 4 1 2 1
4 4 4	2S 8+00E 2S 8+50E 2S 9+00E 2S 9+50E 2S 10+00E	1 1 1 2	14 11 9 21 30	10 5 8 13 69	85 102 69 96 81	.1 .1 .3 .3	21 12 12 31 12	7 6 5 9 3	2 3 2 3 4	2 2 2 2 2 2 2	116 89 98 271 194	1 2 4 1 5
4 4 4	2S 10+50E 2S 11+00E 2S 11+50E 2S 12+00E 2S 12+50E	2 1 1 1	30 11 28 14 7	11 7 17 11 9	83 79 61 61 62	.5 .14 .1	14 17 50 17 6	3 8 9 8 6	6 2 6 4 2	2 2 2 2 2 2 2	246 71 199 105 40	2 1 2 1 1
4 4 4	2S 13+00E 2S 13+50E 2S 14+00E 2S 14+50E 2S 15+00E	1 1 1 1	14 14 10 16 11	6 6 10 10 5	78 68 119 81 86	.1 .3 .2 .1	15 14 12 15 10	8 7 6 8 6	3 3 4 3 5	2 2 2 2 2 2 2	132 119 147 127 104	1 1 1 2
4 4 4	2S 15+50E 2S 16+00E 4S 0+00E 4S 0+50E 4S 1+00E	1 1 1 1	8 17 21 17 16	10 13 7 7 8	73 75 88 87 72	.1 .3 .22 .2	7 13 29 31 23	5 7 10 9 8	6 3 4 6 3	2222 2222 2222	61 93 107 96 91	3 1 2 1 1
4 4 4	4S 1+50E 4S 2+00E 4S 2+50E 4S 3+00E 4S 3+50E	1 1 1 1	17 19 18 23 20	11 8 7 5 9	78 92 70 79 78	.1 .4 .1 .3	21 24 21 26 25	9 9 8 10 9	4 5 3 5 4	22223	113 131 105 134 127	2 2 3 1 2
4	4S 4+00E 4S 4+50E 4S 5+00E 4S 5+50E 4S 6+00E	1 1 1 1	29 28 14 16 15	15 11 8 8 10	89 89 79 58 56	.23 .32 .22 .1	37 59 27 23 20	11 11 9 7	3 7 4 5 3	2 2 2 2 2 2 2 2 2	151 180 78 88 130	4 1 3 4 2
4 S	4S 6+50E TD C/AU-S	1 18	21 61	21 36	115 132	6.3 6.5	18 67	8 30	6 41	2 15	163 174	3 48

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Guinet Management FILE # 89-4037

	G	uinet	Mana	gemen	it F	ILE #	89-4	037			
SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Aq PPM	Ni PPM	Co PPM	As PPM	Sb PPM	Ba PPM	Au* PPB
40S 13+00E 40S 13+50E 40S 14+00E 40S 14+50E 40S 15+00E	1 1 3 1	14 10 10 38 11	14 10 10 13 6	89 82 108 82 69	;1 ;1 1:1 ;1	21 13 14 27 16	8 7 8 11 7	2 3 7 8 3	2 2 2 3 2 2	163 85 128 258 101	1 3 74 1
40S 15+50E 40S 16+00E 42S 9+00W 42S 8+50W 42S 8+50W	1 1 1 1	15 11 16 20 26	16 8 7 13	119 66 82 79 79	.1 .1 .1 .2	15 15 37 41 34	7 7 8 10 10	24255 5	2 2 2 2 2 2 2	152 123 116 144 147	2 2 10 5 3
42S 7+50W 42S 7+00W 42S 6+50W 42S 6+00W 42S 5+50W	1 1 2. 1	19 19 15 23 18	14 10 11 13 8	60 63 56 72 82	.1 .3 .1 .2	45 43 33 43 34	9 9 11 10	27 455	2 2 2 2 2 2 2 2 2	188 115 71 104 87	1 2 7 1 2
42S 5+00W 42S 4+50W 42S 4+00W 42S 3+50W 42S 3+50W	1 1 1 1	21 23 48 48 15	10 12 7 9	92 102 68 60 66	.2 .3 .6 .4 .2	42 52 54 29	10 10 8 7 9	6 3 5 3 3	2 2 3 2 2	103 162 191 208 106	5 1 1 1
42S 2+50W 42S 2+00W 42S 1+50W 42S 1+00W 42S 0+50W	2 1 1 2 2	62 22 18 28 16	15 10 11 10 4	53 69 65 67 54	.9 .42 .24 .2	98 43 30 49 23	10 11 8 11 7	65 862	52 32 22	384 198 118 251 142	10 1 1 2
42S 0+00E 42S 0+50E 42S 1+00E 42S 1+50E 42S 2+00E	1 2 1 1 1	33 17 18 19 18	7 12 10 11 13	55 56 57 79 77	.25423	34 30 31 28 27	11 8 9 9 8	4 5 5 2 4	2 2 2 2 2 2 2 2 2	149 82 102 100 72	1 1 1 1
42S 2+50E 42S 3+00E 42S 3+50E 42S 4+00E 42S 4+50E	1 2 1 1 1	12 30 19 22 16	11 17 11 9 16	62 66 71 68 52	.1 .4 .4 .2 .3	13 39 24 29 24	7 12 8 9 8	6 4 7 2 5	2 3 2 2 2 2	52 139 86 129 85	2 1 1 1
42S 5+00E STD C/AU-S	1 18	21 62	11 41	84 132	6.7	23 67	9 30	4 43	2 15	124 176	2 47

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852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

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

#### GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HN03-H20 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 LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. AU\* ANALYSIS BY ACID LEACH/AA FROM 10 GH SAMPLE - SAMPLE TYPE: P1-P13 SOIL P14 ROCK

ct 6/87 SIGNED BY. DATE RECEIVED: OCI 2 1989 DATE REPORT MAILED: Page 1

Guinet Management File # 89-4037

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Aq PPM	Ni PPM	Co PPM	As PPM	Sb PPM	Ba PPM	Au* PPB
405 5+00W 405 4+50W 405 4+00W 405 3+50W 405 3+50W	1 1 1 1 1	59 48 32 18 19	12 16 16 8 9	39 68 113 68 82	.43 .33 .22	64 94 54 33 46	4 10 14 9 9	3 7 6 5 4	2 2 2 2 2 2 2	381 222 144 106 141	45623
40S 2+50W 40S 2+00W 40S 1+50W 40S 1+00W 40S 0+50W	1 1 1 3	18 11 27 33 23	8 6 13 11	49 70 105 51 44	.1 .3 .3 .4	34 13 47 35 38	9 6 12 6 13	2 2 8 3 7	2 2 3 2 2	162 132 227 127 191	1 1 4 1 3
40S 0+00E 40A 0+50E 40A 1+00E 40S 1+50E 40S 2+00E	111111	21 26 25 20 23	6 18 6 13 12	46 93 63 62 40	.1 .2 .1	29 31 31 26 27	8 11 9 7	2 5 5 4 4	222222222	143 146 96 87 153	1 1 1 1
40S 2+50E 40S 3+00E 40S 3+50E 40S 4+00E 40S 4+50E	1 1 1 1	21 13 18 15 17	7 7 9 7 10	64 58 55 58 67	.2 :1 :1 :1	28 15 24 22 27	10 6 8 7 8	2 2 5 2 4	22222	117 59 96 87 130	2 1 1 1
40S 5+00E 40S 5+50E 40S 6+00E 40S 6+50E 40S 7+00E	1 1 1 2	15 13 13 11 18	10 9 13 14	109 42 62 126 62	.3 .1 .1 .2	27 24 21 15 25	10 6 7 6 8	52225	22222 22222	105 81 89 283 152	1 1 1 2
40S 7+50E 40S 8+00E 40S 8+50E 40S 9+00E 40S 9+50E	1 1 1 1	22 17 11 26 13	9 6 8 10	88 85 88 57 63	.2 .2 .2 .3 .2	24 18 22 31 17	9 8 6 8 7	6 8 2 5 3	2 2 3 2 2 2	141 146 113 140 65	3 1 1 1 1
40S 10+00E 40S 10+50E 40S 11+00E 40S 11+50E 40S 12+00E	1 1 2 1	15 16 33 22 14	10 10 10 7 9	48 85 75 88 61	.1 .2 .3 .1	25 19 32 29 22	8 9 8 10 8	7 2 7 8 4	2 2 2 2 3 3	184 129 251 155 94	1 1 1 1
40S 12+50E STD C/AU-S	1 19	18 62	7 40	80 132	7:0	20 69	8 31	2 45	2 14	125 174	1 49

GEOCHEMICAL ANALYSIS CERTIFICATE ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 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 LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. AU\* ANALYSIS BY ACID LEACH/AA FROM 10 GN SAMPLE. - SAMPLE TYPE: P1-P3 ROCK P4 SOIL DATE RECEIVED: OCI 6 1989 DATE REPORT MAILED: File # 89-4131 Page 1 Guinet Management PROJECT Ba Au\* PPM PPB Ni PPM CO PPM As PPM Pb Zn PPM PPM Sb SAMPLE# Cu PPM Aq PPM Mo PPM PPM

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ACMINIALY L L LATO S L

89-BJ-10R 89-BJ-11R 89-BJ-12R 89-BJ-13R	70 45 34 3	107 88 110 63	20 22 21 13	762 304 596 86	.6 .7 .5	374 187 211 103	11 17 16 20	8 18 83 15	2 2 2 2 2	153 109 72 130	2 8 3 2
89-BJ-14R	10	40	6	276	.1	57	7	2	2	178	5

